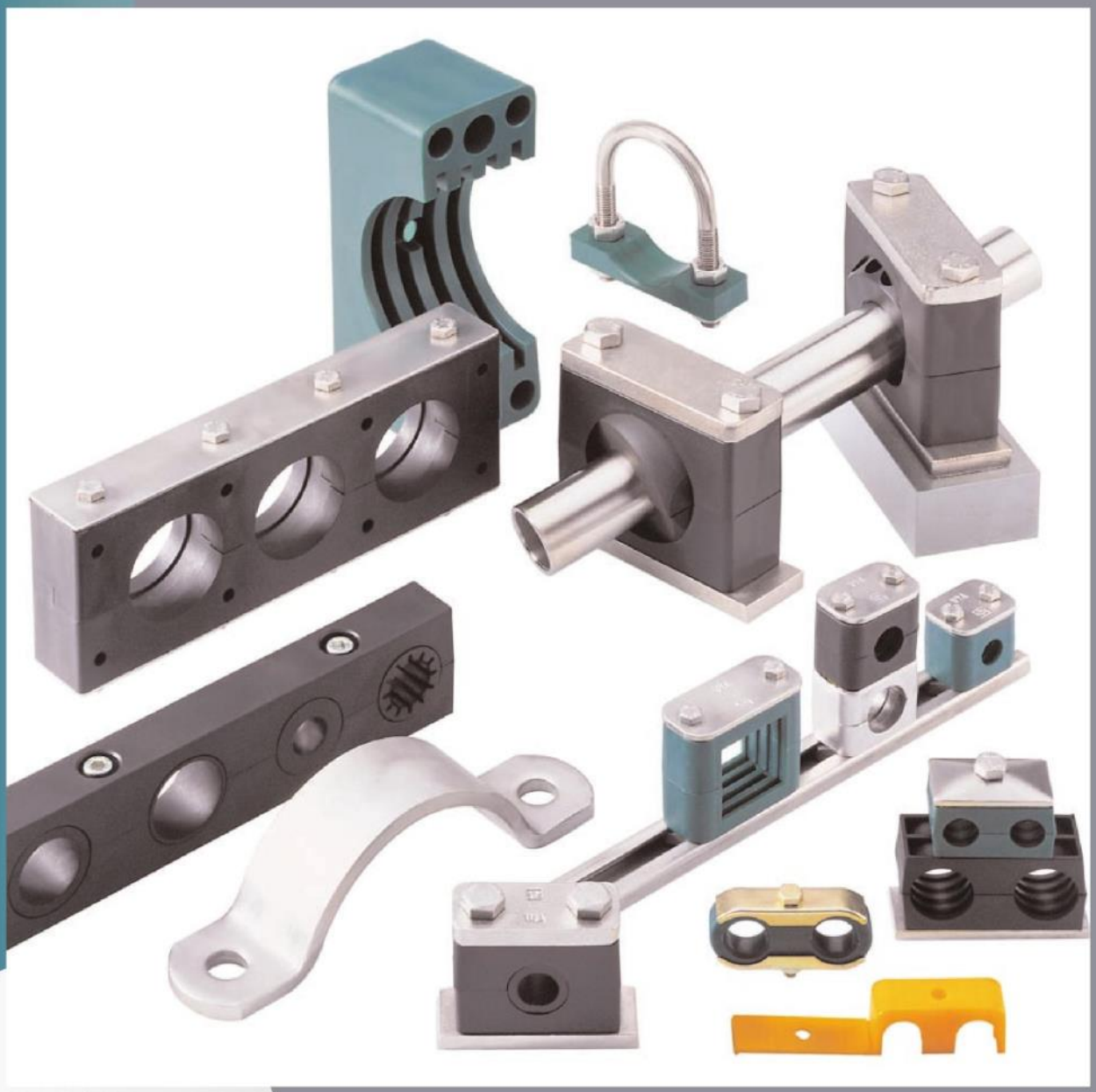
STAUFF®

Clamps



Quality and Service Worldwide





acc. to DIN 3015, Part 1

DESIGN OPTIONS

- Metric Threaded Components
- Stainless Steel Components Available 304/316
- Special Materials Available Upon Request
- Special Diameters and Profiles to Order
- Rubber Insert Clamps Available
- Bushing Adaptor



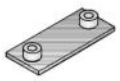
GROUP 1



GROUP 1 A – 8



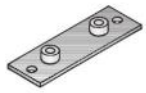
GROUP 1



GROUP 1 A – 8



GROUP 1

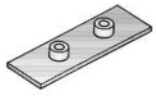
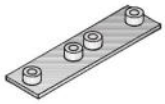
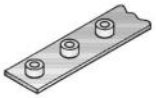
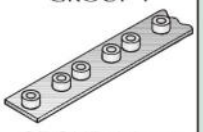
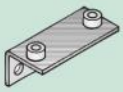
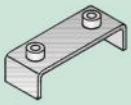
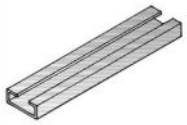


GROUP 1 A – 8

Surface Finish of Metal Parts						–	–	–
STAUFF Group	DIN Group	mm O.D.	Pipe Nominal Bore	Tube Inch O.D.	Hose	Clamp Body (2 halves) (**xxx** – see material code)	Single Weld Plate **SP**	Elongated Weld Plate **SPV**
1	**0**	6				**1060** xxx	SP 1	SPV 1
		6.4		1/4		**1064** xxx		
		8		5/16		**1080** xxx		
		9.5		3/8		**1095** xxx		
		10	1/8			**1100** xxx		
		12				**1120** xxx		
1 A	**1**	6				**1060 A** xxx	SP 1 A	SPV 1 A
		6.4		1/4		**1064 A** xxx		
		8		5/16		**1080 A** xxx		
		9.5		3/8		**1095 A** xxx		
		10	1/8			**1100 A** xxx		
		12				**1120 A** xxx		
2	**2**	12.7		1/2		**2127** xxx	SP 2	SPV 2
		13.7	1/4			**2137** xxx		
		14				**2140** xxx		
		15				**2150** xxx		
		16		5/8		**2160** xxx		
		17.1	3/8			**2171** xxx		
		18				**2180** xxx		
3	**3**	13.4			1/4	**3134** xxH	SP 3	SPV 3
		17.4			3/8	**3174** xxH		
		19		3/4		**3190** xxx		
		20				**3200** xxx		
		20.5			1/2	**3205** xxH		
		21.3	1/2			**3213** xxx		
		22.2		7/8		**3222** xxx		
		23.9			5/8	**3239** xxH		
		25.4		1		**3254** xxx		
4	**4**	26.6	3/4			**4266** xxx	SP 4	SPV 4
		28				**4280** xxx		
		30				**4300** xxx		
5	**5**	27.8			3/4	**5278** xxH	SP 5	SPV 5
		32		1 1/4		**5320** xxx		
		33.4	1			**5334** xxx		
		35				**5350** xxx		
		35.7			1	**5357** xxH		
		38.1		1 1/2		**5381** xxx		
		40				**5400** xxx		
		42.2	1 1/4			**5422** xxx		
		43.8			1 1/4	**5438** xxH		
6	**6**	44.5		1 3/4		**6445** xxx	SP 6	SPV 6
		48.3	1 1/2			**6483** xxx		
		50.8		2		**6508** xxx		
7	**7**	57.2		2 1/4		**7572** xxx	SP 7	SPV 7
		60.3	2			**7603** xxx		
		63.5		2 1/2		**7635** xxx		
		70		2 3/4		**7700** xxx		
		73				**7730** xxx		
		76.2	2 1/2	3		**7762** xxx		
8	**8**	88.9	3			**8889** xxx	SP 8	SPV 8
		102		4		**8102** xxx		

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acc. to DIN 3015, Part 1

 GROUP 1  GROUP 1 A – 6	 GROUP 1  GROUP 1 A – 6	 GROUP 1  GROUP 1 A – 6	 GROUP 1 A – 6	 TS	 CRA	 GROUP 1 – 8
-	-	-	-	-	Fe/Zn 8B	-
Twin Weld Plate **DSP**	Group Weld Plate **RAP**	Weld Plate, angled **WSP**	Bridge Weld Plate **BSP**	Mounting Rail **TS**	Channel Rail Adaptor **CRA**	Rail Nut **SM**
DSP 1/40 (Pipe center spacing (mm))	RAP 1/30/10 (Pipe center spacing (mm); Number of clamps)	WSP 1		1M/3.28' long TS 11/3 TS 14/3 TS 30/3 2M/6.56' long TS 11/6 TS 14/6 TS 30/6	CRA1-8 (C Channel Rail Strut) Refer to Pg. 28 for Dimensions	SM1-8 (Stauff TS Rail)
DSP 1 A/37	RAP 1 A/37/10	WSP 1 A	BSP 1 A			
DSP 2/44	RAP 2/44/10	WSP 2	BSP 2			
DSP 3/52	RAP 3/52/10	WSP 3	BSP 3			
DSP 4/60	RAP 4/60/5	WSP 4	BSP 4			
DSP 5/75	RAP 5/75/5	WSP 5	BSP 5			
DSP 6/90	RAP 6/90/5	WSP 6	BSP 6			
-	-	-	-			
-	-	-	-			

*Shaded Components Special

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STAUFF®

STANDARD-SERIES
Order Code-Components

acc. to DIN 3015, Part 1

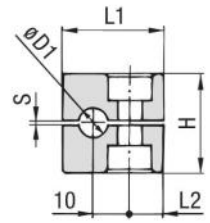
 GROUP 1  GROUP 1 A – 8					 GROUP 1  GROUP 1A – 8	  GROUP 1 – 8
DIN 50961 Fe/Zn 8 B						
Cover Plate **DP**	Hexagon Head Bolt **AS**	Socket Head Cap Screw **IS**	Hexagon Headbolt (No Coverplate) (For use with E Insert)	Stacking Bolt **AF**	Safety Locking Plate **SIG**	Hex Head Bolt Lock **HHL**
DP 1	ASDP 1-1A 1/4"-20UNC x 1 1/4"	IS 1-1 A	ASE 1-1 A	AF 1-1A	SIG 1	 HHL 1-8
DP 1 A					SIG 1 A	
DP 2	ASDP 2 1/4"-20UNC x 1 3/8"	IS 2	ASE 2	AF 2	SIG 2	Only For Hexagon Head Bolts as DIN 931/933
DP 3	ASDP 3 1/4"-20UNC x 1 1/2"	IS 3	ASE 3	AF 3	SIG 3	
DP 4	ASDP 4 1/4"-20UNC x 1 7/8"	IS 4	ASE 4	AF 4	SIG 4	 E Insert ES (steel) EP (plastic)
DP 5	ASDP 5 1/4"-20UNC x 2 1/2"	IS 5	ASE 5	AF 5	SIG 5	
DP 6	ASDP 6 1/4"-20UNC x 2 3/4"	IS 6	ASE 6	AF 6	SIG 6	
DP 7	ASDP 7 1/4"-20UNC x 4"	-	ASE 7	AF 7	SIG 7	
DP 8	ASDP 8 1/4"-20UNC x 4 7/8"	-	ASE 8	AF 8	SIG 8	

3/00

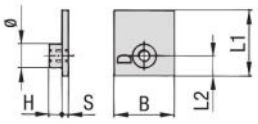
acc. to DIN 3015, Part 1

DESIGN OPTIONS

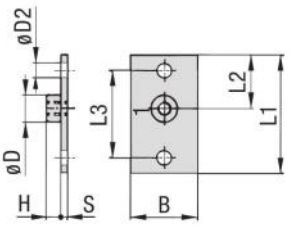
- Metric Threaded Components
- Stainless Steel Components Available 304/316
- Special Materials Available Upon Request
- Special Diameters and Profiles to Order
- Rubber Insert Clamps Available
- Bushing Adaptor



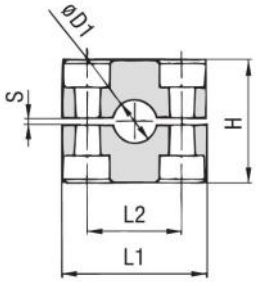
GROUP 1



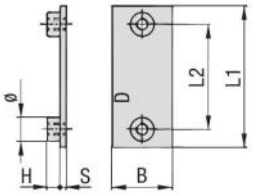
GROUP 1



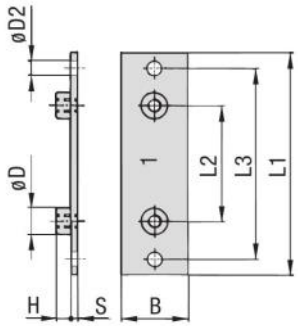
GROUP 1



GROUP 1 A – 8



GROUP 1 A – 8



GROUP 1 A – 8

Surface finishing (see also techn. appendix) — — —

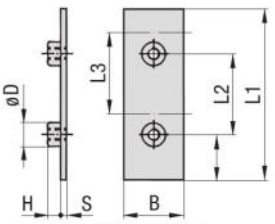
STAUFF Group	DIN Group	Pipe-O.D. Ø D1 (mm)	Pipe-O.D. Ø D1 (in)	Clamp Body (2 halves) L1	Clamp Body (2 halves) L2	Inside surface profiled H	Inside surface profiled S(min.)	Inside surface smooth H	Width	Single Weld Plate SP L1	L2	B	S	H	øD	Elongated Weld Plate SPV L1	L2	L3	B	S	H	øD1	øD2
1	0	6 TO 12	.23" TO .47"	28 / 1.02"	9.5 / .37"	27 / 1.06"	0.4 / .01"	26 / 1.02"	30 / 1.18"	31.5 / 1.25"	10 / .39"	30 / 1.18"	3 / .11"	6.5 / .25"	12 / .47"	58 / 2.28"	24.5 / .96"	44 / 1.73"	30 / 1.18"	3 / .11"	6.5 / .25"	12 / .47"	6.5 / .25"
1 A	1	6 TO 12	.23" TO .47"	37 / 1.45"	20 / .78"	27 / 1.06"	0.4 / .01"	26 / 1.02"	30 / 1.18"	36 / 1.41"	20 / .78"	30 / 1.18"	3 / .11"	6.5 / .25"	12 / .47"	64 / 2.51"	20 / .78"	50 / 1.96"	30 / 1.18"	3 / .11"	6.5 / .25"	12 / .47"	6.5 / .25"
2	2	12.7 TO 18	.50" TO .70"	42 / 1.65"	26 / 1.02"	33 / 1.29"	0.6 / .01"	32 / 1.25"	30 / 1.18"	42 / 1.65"	26 / 1.02"	30 / 1.18"	3 / .11"	6.5 / .25"	12 / .47"	70 / 2.75"	26 / 1.02"	56 / 2.70"	30 / 1.18"	3 / .11"	6.5 / .25"	12 / .47"	6.5 / .25"
3	3	19 TO 25	.74" TO .98"	50 / 1.96"	33 / 1.29"	36 / 1.41"	0.6 / .01"	35.5 / 1.40"	30 / 1.18"	50 / 1.96"	33 / 1.29"	30 / 1.18"	3 / .11"	6.5 / .25"	12 / .47"	78 / 3.07"	33 / 1.29"	64 / 2.51"	30 / 1.18"	3 / .11"	6.5 / .25"	12 / .47"	6.5 / .25"
4	4	26.9 TO 30	1.06" TO 1.18"	59 / 2.32"	40 / 1.57"	42 / 1.65"	0.6 / .01"	41.5 / 1.62"	30 / 1.18"	60 / 2.36"	40 / 1.57"	30 / 1.18"	3 / .11"	6.5 / .25"	12 / .47"	87 / 3.42"	40 / 1.57"	73 / 2.87"	30 / 1.18"	3 / .11"	6.5 / .25"	12 / .47"	6.5 / .25"
5	5	32 TO 42	1.25" TO 1.65"	71 / 2.79"	52 / 2.04"	58 / 2.28"	0.8 / .03"	56.5 / 2.221"	30 / 1.18"	71 / 2.79"	52 / 2.04"	30 / 1.18"	3 / .11"	6.5 / .25"	12 / .47"	100 / 3.93"	52 / 2.04"	86 / 3.38"	30 / 1.18"	3 / .11"	6.5 / .25"	12 / .47"	6.5 / .25"
6	6	44.5 TO 50.8	1.75" TO 1.96"	86 / 3.38"	66 / 2.59"	66 / 2.59"	0.8 / .03"	64.5 / 2.53"	30 / 1.18"	88 / 3.46"	66 / 2.59"	30 / 1.18"	3 / .11"	6.5 / .25"	12 / .47"	115 / 4.52"	66 / 2.59"	100 / 3.93"	30 / 1.18"	3 / .11"	6.5 / .25"	12 / .47"	6.5 / .25"
7	7	57.2 TO 76.1	2.25" TO 2.99"	121 / 4.75"	94 / 3.70"	93 / 3.66"	0.8 / .03"	92 / 3.62"	30 / 1.18"	122 / 4.81"	94 / 3.70"	30 / 1.18"	5 / .19"	6.5 / .25"	12 / .47"	150 / 5.90"	94 / 3.70"	136 / 5.25"	30 / 1.18"	5 / .19"	6.5 / .25"	12 / .47"	6.5 / .25"
8	8	88.9 TO 102	3.50" TO 4.00"	147 / 5.75"	120 / 4.72"	118 / 4.68"	0.8 / .03"	116 / 4.56"	30 / 1.18"	148 / 5.75"	120 / 4.72"	30 / 1.18"	5 / .19"	6.5 / .25"	12 / .47"	178 / 7.0"	120 / 4.72"	162 / 6.29"	30 / 1.18"	5 / .19"	6.5 / .25"	12 / .47"	6.5 / .25"

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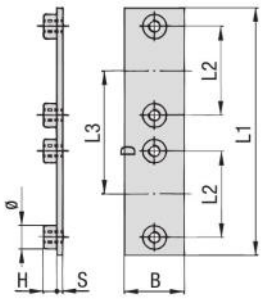
STAUFF®

STANDARD-SERIES
Dimension Table-Components

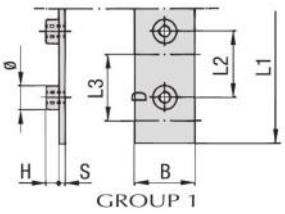
acc. to DIN 3015, Part 1



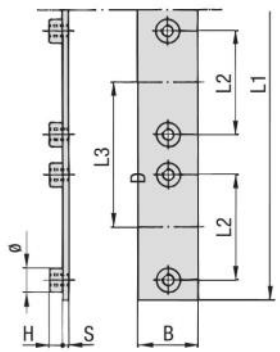
GROUP 1



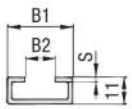
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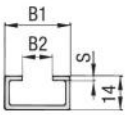
GROUP 1



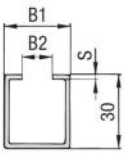
GROUP 1 A – 6



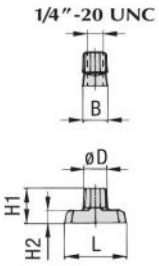
TS 11



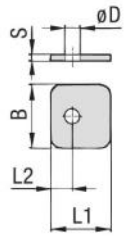
TS 14



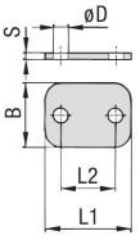
TS 30



GROUP 1 – 8



GROUP 1

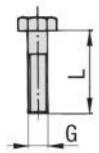


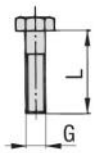
GROUP 1 A–8

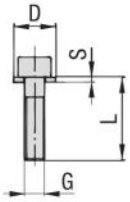
–							–							–			Fe/Zn					Fe/Zn				
Twin Weld Plate **DSP**							Group Weld Plate **RAP**							Mounting Rail **TS**			Hexagon Rail Nut **SM**					Cover Plate **DP**				
L1	L2	L3	B	S	H	øD	L1	L2	L3	B	S	H	øD	B1	B2	S	L	B	H1	H2	øD	L1	L2	B	S	øD
87	40	40	30	3	6.5	12	315	31	30	30	4	6.5	12									28	9.5	30	3	7
3.42″	1.57″	1.57″	1.18″	.11″	.26″	.47″	12.40″	1.22″	1.18″	1.18″	.15″	.26″	.47″									1.10″	.37″	1.18″	.11″	.27″
77	20	37	30	3	6.5	12	373	20	37	30	4	6.5	12									34	20	30	3	7
3.03″	.78″	1.45″	1.18″	.11″	.26″	.47″	14.69″	.78″	1.45″	1.18″	.15″	.26″	.47″									1.33″	.78″	1.18″	.11″	.27″
86	26	44	30	3	6.5	12	442	26	44	30	4	6.5	12									40.5	26	30	3	7
3.38″	1.02″	1.73″	1.18″	.11″	.26″	.47″	17.40″	1.02″	1.73″	1.18″	.15″	.26″	.47″									1.59″	1.02″	1.18″	.11″	.27″
102	33	52	30	3	6.5	12	521	33	52	30	4	6.5	12									48	33	30	3	7
4.02″	1.29″	2.04″	1.18″	.11″	.26″	.47″	20.51″	1.29″	2.04″	1.18″	.15″	.26″	.47″									1.88″	1.29″	1.18″	.11″	.27″
120	40	60	30	3	6.5	12	300	40	60	30	4	6.5	12	28	11	2	25.4	10.4	13	5	12	57	40	30	3	7
4.72″	1.57″	1.18″	.11″	.11″	.26″	.47″	11.81″	1.57″	2.36″	1.18″	.15″	.26″	.47″	1.10″	.43″	.07″	1.00″	.41″	.51″	.19″	.47″	2.24″	1.57″	1.18″	.11″	.27″
145	52	75	30	3	6.5	12	378	52	75	30	4	6.5	12									70	52	30	3	7
5.71″	2.04″	2.95″	1.18″	.11″	.26″	.47″	14.88″	2.04″	2.95″	1.18″	.15″	.26″	.47″									2.75″	2.04″	1.18″	.11″	.27″
178	66	90	30	3	6.5	12	452	66	90	30	4	6.5	12									86	66	30	3	7
7.01″	2.59″	3.54″	1.18″	.11	.26	.47	17.80″	2.59″	3.54″	1.18″	.15″	.26″	.47″									3.38″	2.59″	1.18″	.11″	.27″
-	-	-	-	-	-	-	-	-	-	-	-	-	-									118	94	30	5	7
																						4.65″	3.70″	1.18″	.19″	.27″
-	-	-	-	-	-	-	-	-	-	-	-	-	-									144	120	30	5	7
																						5.67″	4.72″	1.18″	.19″	.27″

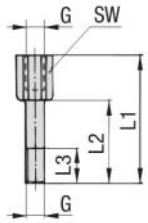
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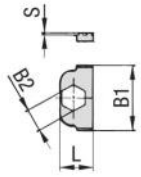
acc. to DIN 3015, Part 1



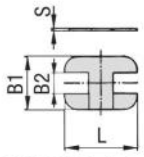








GROUP 1



GROUP 1 A–8



GROUP 1 – 8

Fe/Zn

Hexagon Head Bolt **ASDP**	Hexagon Head Bolt **ASE**	Socket Head Cap Screw **IS**			Stacking Bolt **AF**					Safety Locking Plate **SIG**				Hex Head Bolt Lock **HHL**
G x L	G x L	G x L	D	S	G	L1	L2	L3	SW	L	B1	B2	S	øD
1/4"-20UNC x 1 1/4"	1/4"-20UNC x 1 1/8"	1/4"-20UNC x 3/4"	11 .43"	0.8 .03"	1/4"-20UNC	34 1.33"	20 .78"	12 min. .47"	11 .43"	17 .66"	32 1.26"	11.1 .44"	1 .03"	6.4 .25"
1/4"-20UNC x 1 1/4"	1/4"-20UNC x 1 1/8"	1/4"-20UNC x 3/4"	11 .43"	0.8 .03"		34 1.33"	20 .78"	12 min. .47"	11 .43"	34 1.33"	28 1.10"	11.1 .44"	1 .03"	
1/4"-20UNC x 1 3/8"	1/4"-20UNC x 1 3/8"	1/4"-20UNC x 1"	11 .43"	0.8 .03"		38 1.50"	25.4 1.00"	15.2 min. 0.6"	11 .43"	40 1.57"	28 1.10"	11.1 .44"	1 .03"	
1/4"-20UNC x 1 1/2"	1/4"-20UNC x 1 3/8"	1/4"-20UNC x 1 1/8"	11 .43"	0.8 .03"		44 1.73"	30 1.18"	12 min. .47"	11 .43"	47 1.85"	28 1.10"	11.1 .44"	1 .03"	
1/4"-20UNC x 1 7/8"	1/4"-20UNC x 1 5/8"	1/4"-20UNC x 1 3/8"	11 .43"	0.8 .03"		48 1.88"	35 1.37"	12 min. .47"	11 .43"	56 2.20"	28 1.10"	11.1 .44"	1 .03"	
1/4"-20UNC x 2 1/2"	1/4"-20UNC x 2 3/8"	1/4"-20UNC x 2"	11 .43"	0.8 .03"		64 2.51"	50 1.96"	12.7 min. .50"	11 .43"	69 2.71"	28 1.10"	11.1 .44"	1 .03"	
1/4"-20UNC x 2 3/4"	1/4"-20UNC x 2 3/4"	1/4"-20UNC x 2 3/8"	11 .43"	0.8 .03"		73 2.87"	60 2.36"	12 min. .47"	11 .43"	85 3.34"	28 1.10"	11.1 .44"	1 .03"	
1/4"-20UNC x 4"	1/4"-20UNC x 4"	1/4"-20UNC x 3 3/8"	11 .43"	0.8 .03"		99 3.89"	85 3.34"	12 min. .47"	11 .43"	117 4.61"	28 1.10"	11.1 .44"	1 .03"	
1/4"-20UNC x 47/8"	1/4"-20UNC x 4 3/4"	1/4"-20UNC x 4 3/8"	11 .43"	0.8 .03"		124 4.88"	110 4.33"	12 min. .47"	11 .43"	143 5.63"	28 1.10"	11.1 .44"	1 .03"	

3/00

STANDARD-SERIES
ORDER CODES - COMPLETE CLAMPS

acc. to DIN 3015, Part 1

MATERIAL CODE

Materials and designs of clamp bodies	**XXX**
Polypropylene, profiled inside, with tension clearance	**– PP**
Polypropylene, smooth inside, without tension clearance	**– PPH**
Polyamide, profiled inside, with tension clearance	**– PA**
Polyamide, smooth inside, without tension clearance	**– PAH**
Aluminum, profiled inside, with tension clearance (AL group 1 A – 6 only)	**– AL**

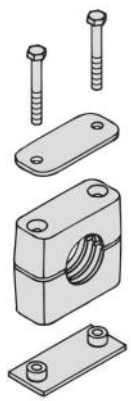
Other thermoplastics and O.D. on request.

STAUFF Group	DIN Group	mm	Nominal Bore	Inch O.D.	Hose	Clamp Body (2 halves) (**xxx** – see material code)
		6				**1060** xxx
		6.4		1/4		**1064** xxx
1	**0**	8		5/16		**1080** xxx
		9.5		3/8		**1095** xxx
		10	1/8			**1100** xxx
		12				**1120** xxx
		6				**1060 A** xxx
		6.4		1/4		**1064 A** xxx
		8		5/16		**1080 A** xxx
1 A	**1**	9.5		3/8		**1095 A** xxx
		10	1/8			**1100 A** xxx
		12				**1120 A** xxx
		12.7		1/2		**2127** xxx
		13.7	1/4			**2137** xxx
		14				**2140** xxx
2	**2**	15				**2150** xxx
		16		5/8		**2160** xxx
		17.1	3/8			**2171** xxx
		18				**2180** xxx
		13.4			1/4	**3134** xxH
		17.4			3/8	**3174** xxH
		19		3/4		**3190** xxx
		20				**3200** xxx
3	**3**	20.5			1/2	**3205** xxH
		21.3	1/2			**3213** xxx
		22.2		7/8		**3222** xxx
		23.9			5/8	**3239** xxH
		25.4		1		**3254** xxx
		26.6	3/4			**4266** xxx
4	**4**	28				**4280** xxx
		30				**4300** xxx
		27.8			3/4	**5278** xxH
		32		1 1/4		**5320** xxx
		33.4	1			**5334** xxx
		35				**5350** xxx
5	**5**	35.7			1	**5357** xxH
		38.1		1 1/2		**5381** xxx
		40				**5400** xxx
		42.2	1 1/4			**5422** xxx
		43.8			1 1/4	**5438** xxH
		44.5		1 3/4		**6445** xxx
6	**6**	48.3	1 1/2			**6483** xxx
		50.8		2		**6508** xxx
		57.2		2 1/4		**7572** xxx
		60.3	2			**7603** xxx
7	**7**	63.5		2 1/2		**7635** xxx
		70		2 3/4		**7700** xxx
		73				**7730** xxx
		76.2	2 1/2	3		**7762** xxx
8	**8**	88.9	3			**8889** xxx
		102		4		**8102** xxx

3/00

acc. to DIN 3015, Part 1

ORDER EXAMPLE

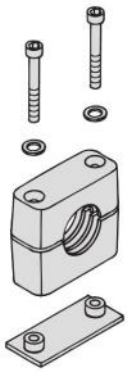


SP ∗ **,∗ xxx DPAS

- Material and design of clamp body
- Pipe-O.D.
- STAUFF Group

Clamp consisting of:
1 x Single Weld Plate
1 x Clamp Body (2 halves)
1 x Cover Plate
2 x Hexagon Head Bolt DIN 931/933

ORDER EXAMPLE

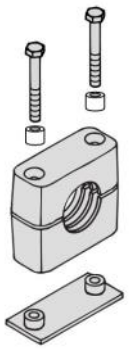


SP ∗ **,∗ xxx IS

- Material and design of clamp body
- Pipe-O.D.
- STAUFF Group

Clamp consisting of:
1 x Single Weld Plate
1 x Clamp Body (2 halves)
2 x Socket Cap Screw DIN 912 with washer

ORDER EXAMPLE

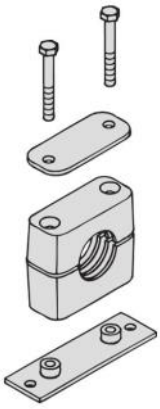


SP ∗ **,∗ xxx ASE

- Material and design of clamp body
- Pipe-O.D.
- STAUFF Group

Clamp consisting of:
1 x Single Weld Plate
1 x Clamp Body (2 halves)
2 x Hexagon Head Bolt DIN 931/933 with insert

ORDER EXAMPLE

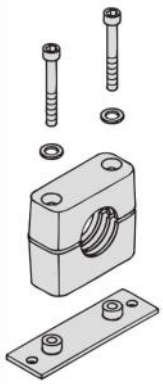


SPV∗ **,∗ xxx DPAS

- Material and design of clamp body
- Pipe-O.D.
- STAUFF Group

Clamp consisting of:
1 x Elongated Weld Plate
1 x Clamp Body (2 halves)
1 x Cover Plate
2 x Hexagon Head Bolt DIN 931/933

ORDER EXAMPLE

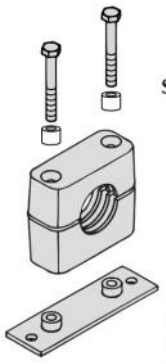


SPV∗ **,∗ xxx IS

- Material and design of clamp body
- Pipe-O.D.
- STAUFF Group

Clamp consisting of:
1 x Elongated Weld Plate
1 x Clamp Body (2 halves)
2 x Socket Cap Screw DIN 912 with washer

ORDER EXAMPLE

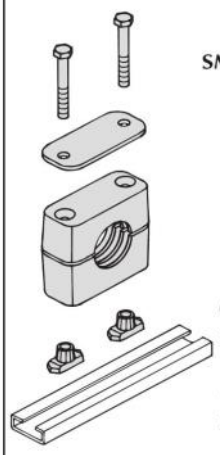


SPV ∗ **,∗ xxx ASE

- Material and design of clamp body
- Pipe-O.D.
- STAUFF Group

Clamp consisting of:
1 x Elongated Weld Plate
1 x Clamp Body (2 halves)
2 x Hexagon Head Bolt DIN 931/933 with insert

ORDER EXAMPLE

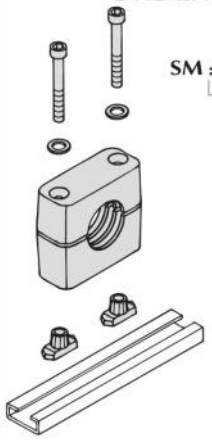


SM∗ **,∗ xxx DPAS

- Material and design of clamp body
- Pipe-O.D.
- STAUFF Group

Clamp consisting of:
2 x Hexagon Rail Nut
1 x Clamp Body (2 halves)
1 x Cover Plate
2 x Hexagon Head Bolt DIN 931/933

ORDER EXAMPLE

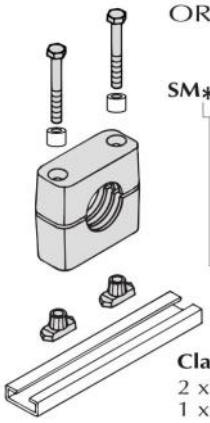


SM ∗ **,∗ xxx IS

- Material and design of clamp body
- Pipe-O.D.
- STAUFF Group

Clamp consisting of:
2 x Hexagon Rail Nut
1 x Clamp Body (2 halves)
2 x Socket Cap ScrewDIN 912 with washer

ORDER EXAMPLE



SM∗ **,∗ xxx ASE

- Material and design of clamp body
- Pipe-O.D.
- STAUFF Group

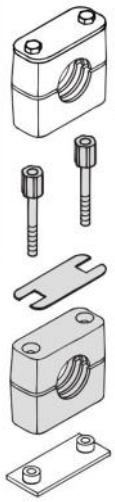
Clamp consisting of:
2 x Hexagon Rail Nut
1 x Clamp Body (2 halves)
2 x Hexagon Head Bolt DIN 931/933 with insert

3/00

STANDARD-SERIES
Order Codes - Complete Clamps

acc. to DIN 3015. Part 1

ORDER EXAMPLE

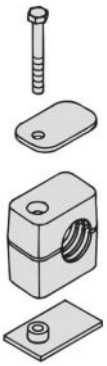


AF∗ ∗∗,∗ xxx SIG

- Material and design of clamp body
- Pipe-O.D.
- STAUFF Group

Clamp consisting of:
1 x Clamp Body (2 halves)
1 x Safety Locking Plate
2 x Stacking Bolt

ORDER EXAMPLE GROUP 1



SP 1 ∗∗,∗ xxx DPAS

- Material and design of clamp body
- Pipe-O.D.
- STAUFF Group

Clamp consisting of:
1 x Single Weld Plate
1 x Clamp Body (2 halves)
1 x Cover Plate
1 x Hexagon Head Bolt DIN 931/933

ORDER EXAMPLE GROUP 1

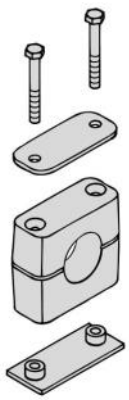


AF 1 ∗∗,∗ xxx SI

- Material and design of clamp body
- Pipe-O.D.
- STAUFF Group

Clamp consisting of:
1 x Clamp Body (2 halves)
1 x Safety Locking Plate
1 x Stacking Bolt

ORDER EXAMPLE



SP ∗ ∗∗,∗ xxH DPAS

- Material and design of clamp body
- Pipe-O.D.
- STAUFF Group

Clamp consisting of:
1 x Single Weld Plate
1 x Clamp Body (2 halves) profiled for hose
1 x Cover Plate
2 x Hexagon Head Bolt DIN 931/933

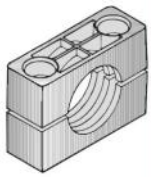
Metric Threaded Components and Stainless Steel Components are available

3/00

acc. to DIN 3015, Part 2

DESIGN OPTIONS

- Metric Threaded Components
- Stainless Steel Components Available 304/316
- Special Materials Available Upon Request
- Special Diameters and Profiles to Order
- Rubber Insert Clamps Available
- Bushing Adaptor

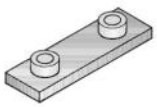
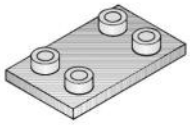


Surface finishing (see also technical appendix) –

Stauff Group	DIN Group	mm O.D.	Pipe Nominal Bore	Inch O.D.	Hose	Clamp Body (2 halves) (**xxx** – see material code)
3 S	**1**	6				**3060S** xxx
		6.4		1/4		**3064S** xxx
		8				**3080S** xxx
		9.5		3/8		**3095S** xxx
		10	1/8			**3100S** xxx
		12				**3120S** xxx
		12.7		1/2		**3127S** xxx
		13.7	1/4			**3137S** xxx
		14				**3140S** xxx
		15				**3150S** xxx
		16		5/8		**3160S** xxx
		17.1	3/8			**3171S** xxx
		18				**3180S** xxx
4 S	**2**	15			1/4	**4150S** xxH
		19		3/4		**4190S** xxx
		19.8			3/8	**4198S** xxH
		20				**4200S** xxx
		21.3	1/2			**4213S** xxx
		22.1			1/2	**4221S** xxH
		22.2		7/8		**4222S** xxx
		25.1			5/8	**4251S** xxH
		25.4		1		**4254S** xxH
		26.7	3/4			**4267S** xxx
		29.2			3/4	**4292S** xxH
5 S	**3**	32		1 1/4		**5320S** xxx
		33.4	1			**5334S** xxx
		38		1 1/2		**5381S** xxx
		40				**5400S** xxx
		42.2	1 1/4			**5422S** xxx
6 S	**4**	37.8			1	**6378S** xxH
		42.2	1 1/4			**6422S** xxx
		44.5		1 3/4		**6445S** xxx
		48.3	1 1/2			**6483S** xxx
		48.4			1 1/4	**6484S** xxH
		50.8			2	**6508S** xxx
		54.4			1 1/2	**6544S** xxH
		57.2		2 1/4		**6572S** xxx
		60.3	2			**6603S** xxx
		63.5		2 1/2		**6635S** xxx
		70				**6700S** xxx
7 S	**5**	70		2 3/4		**7700S** xxx
		73	2 1/2*			**7730S** xxx
		76.2	2 1/2**	3		**7762S** xxx
		88.9	3	3 1/2		**7889S** xxx
8 S	**6**	88.9	3	3 1/2		**8889S** xxx
		102	3 1/2	4		**8102S** xxx
		114	4	4 1/2		**8114S** xxx
		127		5		**8127S** xxx
9 S	**7**	127		5		**9127S** xxx
		133		5 1/4		**9133S** xxx
		140	5			**9141S** xxx
		152		6		**9152S** xxx
		168	6			**9168S** xxx
10 S	**8**	168	6			**10168S** xxx
		203		8		**10203S** xxx
		219	8			**10219S** xxx
11 S	**9**	219	8			**11219S** xxx
		273	10			**11273S** xxx
		324	12			**11324S** xxx
12 S	**10**	356	14			**12356S** xxx
		406	16			**12406S** xxx

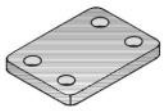
*ANSI B 36-10 **Other standards

acc. to DIN 3015, Part 2

		 UP TO GROUP 6S ONLY	 UP TO GROUP 6S ONLY	 CRA	
–	–	–	Fe/Zn	Fe/Zn	Fe/Zn
Weld Plate for Single Clamps **SPAL**	Weld Plate for Double Clamps **SPAS**	Mounting Rail **STSV**	Rail Nut **GMV**	Channel Rail Adaptor **CRA**	Cover Plate for Single Clamps **DPAL**
SPAL 3 S	SPAS 3 S	STSV 100/3 1m/3.28' STSV 100/6 2m/6.56'	GMV 3-5S (For Stauff STSV 100 RAIL)	Note: Special length bolts required. Supplied by Stauff when ordered as kits CRA 3-5S (For C Channel Rail, customer supplied)	DPAL 3 S
SPAL 4 S	SPAS 4 S				DPAL 4 S
SPAL 5 S	SPAS 5 S				DPAL 5 S
SPAL 6 S	SPAS 6 S		GMV 6S	CRA 6S	DPAL 6 S
SPAL 7 S	SPAS 7 S	-	-	-	DPAL 7 S
SPAL 8 S	SPAS 8 S	-	-	-	DPAL 8 S
SPAL 9 S	SPAS 9 S	-	-	-	DPAL 9 S *
SPAL 10 S	SPAS 10 S	-	-	-	DPAL 10 S *
SPAL 11 S	SPAS 11 S	-	-	-	DPAL 11 S *
SPAL 12 S	SPAS 12 S	-	-	-	DPAL 12 S *

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		 GROUP 3S – 10S	 GROUP 3S – 10S	Only for Hexagon Head Bolts AS DIN 931/933 
		Fe/Zn		
Cover Plate for Double Clamps **DPAS**	Hexagon Head Bolt **AS**	Stacking Bolt **AF** DIN 931/933	Safety Locking Plate **SIP** DIN 912	Safety Washer **HHL** DIN 93
DPAS 3 S	ASS 3 S $3/8$"-16 x $1\,3/4$" ($1\,1/2$" for CRA)	AFS 3 S	SIP 3 S	HHL 3-5S
DPAS 4 S	ASS 4 S $3/8$"-16 x $2\,1/4$" (2" for CRA)	AFS 4 S	SIP 4 S	
DPAS 5 S	ASS 5 S $3/8$"-16 x $2\,3/4$" ($2\,1/2$" for CRA)	AFS 5 S	SIP 5 S	
DPAS 6 S	ASS 6 S $7/16$"-14 x 4"	AFS 6 S	SIP 6 S	HHL 6S
DPAS 7 S	ASS 7 S $5/8$"-11 x $5\,1/4$"	AFS 7 S	SIP 7 S	HHL 7S
DPAS 8 S	ASS 8 S $3/4$"-10 x $7\,1/2$"	AFS 8 S	SIP 8 S	HHL 8S
DPAS 9 S *	ASS 9 S * $7/8$"-9 x $8\,3/4$"	AFS 9 S *	SIP 9 S *	HHL 9S
DPAS 10 S *	ASS 10 S * $1\,1/8$"-7x12"	AFS 10 S *	SIP 10 S *	HHL 10S
DPAS 11 S *	ASS 11 S * $1\,1/4$" -7x$17\,1/2$"	*	-	HHL 11-12S
DPAS 12 S *	ASS 12 S * $1\,1/4$" -7x22"	*	-	

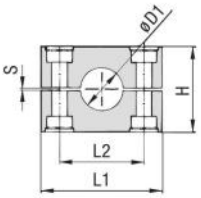
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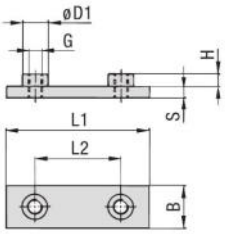
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acc. to DIN 3015, Part 2

DESIGN OPTIONS

- Metric Threaded Components
- Stainless Steel Components Available 304/316
- Special Materials Available Upon Request
- Special Diameters and Profiles to Order
- Rubber Insert Clamps Available
- Bushing Adaptor



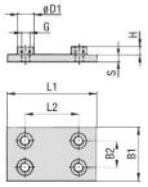


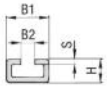
Surface finishing (see also technical appendix) – –

Stauff Group	DIN Group	Pipe-Outside Diameter		Clamp Body (2 halves)							Weld Plate for Single Clamps **SPAL**						
				L1		L2	Inside surface profiled		smooth	Width							
		mm Bore	Inch O.D.	PP/PA	AL		H	S (min.)	H		L1	L2	B	S	H	G	øD1
3 S	**1**	6	1/4	55	56	33	32	0.6	30.5	30.5	73	33	30	8	8	3/8"-16	18
		TO	TO														
		18	5/8	2.16"	2.20"	1.29"	1.25"	.02"	1.20"	1.20"	2.87"	1.29"	1.18"	.31"	.31"		.70"
4S	**2**	19	3/4	70	70	45	48	0.6	46.5	30.5	85	45	30	8	8	3/8"-16	18
		TO	TO														
		26.9	7/8	2.75"	2.75"	1.77"	1.88"	.02"	1.83"	1.20"	3.35"	1.77"	1.18"	.31"	.31"		.70"
5S	**3**	32	1 1/4	85	85	60	60	0.6	58	30.5	100	60	30	8	8	3/8"-16	18
		TO	TO														
		42	1 1/2	3.34"	3.34"	2.36"	2.36"	.02"	2.28"	1.20"	3.94"	2.36"	1.18"	.31"	.31"		.70"
6S	**4**	42	1 3/4	115	120	90	89	2	87	45	140	90	45	10	8	7/16"-14	20
		TO	TO														
		70	2 3/4	4.52"	4.72"	3.54"	3.50"	.07"	3.42"	1.77"	5.51"	3.54"	1.77"	.39"	.31"		.78"
7S	**5**	70	2 3/4	152	150	122	120	2		60	180	122	60	10	12	5/8"-11	24
		TO	TO						-								
		88.9	3 1/2	5.98"	5.90"	4.80"	4.72"	.07"		2.36"	7.09"	4.80"	2.36"	.39"	.47"		.94"
8S	**6**	88.9	3 1/2	206	208	168	167	2		80	225	168	80	15	18	3/4"-10	30
		TO	TO						-								
		127	5	8.11"	8.19"	6.61"	6.57"	.07"		3.14"	8.86"	6.61"	3.14"	.59"	.70"		1.18"
9S	**7**	127	5	251	255	205	200	3		91	270	205	90	15	21	7/8"-9	35
		TO	TO						-								
		168	6	9.88"	10.04"	8.07"	7.87"	.11"		3.58"	10.63"	8.07"	3.54"	.59"	.82"		1.37"
10S	**8**	168	6	336	326	265	270	3		120	340	265	120	25	21	1 1/8"-7	45
		TO	TO						-								
		219	8	13.23"	12.83"	10.43"	10.63"	.11"		4.72"	13.39"	10.43"	4.72"	.98"	.82"		1.77"
11S	**9**	219	8	470	470	395	410	8		162	520	395	160	30	38	1 1/4"-7	50
		TO	TO						-								
		324	12	18.50"	18.50"	15.55"	16.14"	.31"		6.38"	20.47"	15.55"	6.30"	1.18"	1.46"		1.96"
12S	**10**	356	14	630	630	534	530	20		182	680	534	180	30	38	1 1/4"-7	50
		TO	TO						-								
		406	16	24.80"	24.80"	21.02"	20.87"	.78"		7.17"	26.77"	21.02"	7.09"	1.18"	1.46"		1.96"

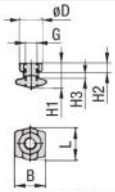
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acc. to DIN 3015, Part 2

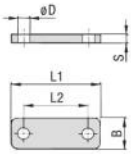




UP TO GROUP 6S ONLY



UP TO GROUP 6S ONLY



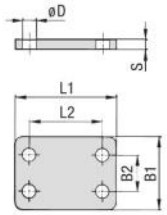
–	–	Fe/Zn 8B *	

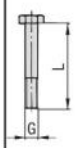
Weld Plate for Double Clamps **SPAS**								Mounting Rail **STSV**				Mounting Rail Nut **GMV**							Cover Plate for Single Clamps **DPAL**				
L1	L2	B1	B2	S	H	G	øD1	B1	B2	H	S	L	B	H1	H2	H3	G	øD	L1	L2	B	S	øD
73	33	60	30.5	8	8	3/8"-16	18	40	14	22	5	26	23	19	6	6	M 10	18	56	33	30	8	11
2.87"	1.29"	2.36"	1.20"	.31"	.31"		.70"	1.57"	.55"	.86"	.19"	1.02"	.90"	.74"	.23"	.23"	3/8-16"	.70"	2.16"	1.29"	1.18"	.31"	.43"
85	45	60	30.5	8	8	3/8"-16	18												70	45	30	8	11
3.35"	1.77"	2.36"	1.20"	.31"	.31"		.70"												2.75"	1.77"	1.18"	.31"	.43"
100	60	60	30.5	8	8	3/8"-16	18												85	60	30	8	11
3.94"	2.36"	2.36"	1.20"	.31"	.31"		.70"												3.34"	2.36"	1.18"	.31"	.43"
140	90	90	46	10	8	7/16"-14	20					26	23	22	7.5	6	M 12	20	115	90	45	10	14
5.51"	3.54"	3.54"	1.81"	.39"	.31"		.78"					1.02"	.90"	.86"	.30"	.23"	7/16-14"	.78"	4.52"	3.54"	1.77"	.39"	.55"
180	122	120	61	10	12	5/8"-11	24												152	122	60	10	19
7.09"	4.80"	4.72"	2.40"	.39"	.47"		.94"												5.98"	4.80"	2.36"	.30"	.74"
225	168	160	81	15	18	3/4"-10	30												206	168	80	15	22
8.86"	6.61"	6.29"	3.18"	.59"	.70"		1.18"												8.11"	6.61"	3.14"	.59"	.86"
270	205	180	91	15	21	7/8"-9	35												251	205	90	15	26
10.63"	8.07"	7.06"	3.58"	.59"	.82"		1.37"												9.88"	8.07"	3.54"	.59"	1.02"
340	265	240	121	25	21	1 1/8"-7	45												320	265	120	25	38
13.39"	10.43"	9.44"	4.76"	.98"	.82"		1.77"												12.60"	10.43"	4.72"	.98"	1.5"
520	395	324	166	30	38	1 1/4"-7	50												470	395	160	30	38
20.47"	15.55"	12.76"	6.54"	1.18"	1.46"		1.96"												18.50"	15.55"	6.29"	1.18"	1.5"
680	534	364	186	30	38	1 1/4"-7	50												630	534	180	30	38
26.77"	21.02"	14.33"	7.32"	1.18"	1.46"		1.96"												24.80"	21.02"	7.06"	1.18"	1.5"

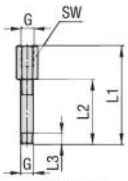
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SUPPORTS

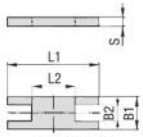
acc. to DIN 3015, Part 2







GROUP
3 S – 10S



GROUP
3 S – 10S



DIN 50961 Fe/Zn 8 B

Fe/Zn 8B *

Cover Plate for Double Clamps **DPAS**						Hexagon Head Bolt **AS**	Stacking Bolt **AF**					Safety Locking Plate **SIP**					Safety Washer **HHL** DIN 93
L1	L2	B1	B2	S	øD	G x L	G	L1	L2	L3	SW	L1	L2	B1	B2	S	øD
56	33	60	30	8	11	3/8"-16 x 1 3/4" (1 1/2" for CRA)	3/8"-16	52	26	15	15	56	13	30	15	8	10.5
2.20"	1.29"	2.36"	1.18"	.31"	.43"			2.05"	1.02"	.59"	.59"	2.20"	.51"	1.18"	.59"	.31"	.41"
70	45	60	30	8	11	3/8"-16 x 2 1/4" (2" for CRA)	3/8"-16	67	41	15	15	70	26	30	15	8	10.5
2.75"	1.77"	2.36"	1.18"	.31"	.43"			2.64"	1.61"	.59"	.59"	2.75"	1.02"	1.18"	.59"	.31"	.41"
84	60	60	30	8	11	3/8"-16 x 2 3/4" (2 1/2" for CRA)	3/8"-16	78	52	15	15	85	40	30	15	8	10.5
3.30"	2.36"	2.36"	1.18"	.39"	.55"			3.07"	2.01"	.59"	.59"	3.34"	1.57"	1.18"	.59"	.31"	.41"
116	90	90	46	10	14	7/16"-14 x 4"	7/16"-14	110	83	18	17	116	69	45	17	10	13
4.57"	3.54"	3.54"	1.81"	.31"	.43"			4.33"	3.27"	.70"	.69"	4.57"	2.71"	1.77"	.66"	.39"	.51"
153	122	120	61	10	19	5/8"-11 x 5 1/4"	5/8"-11	146	110	24	21	153	97	60	22	10	17
6.02"	4.80"	4.72"	240"	.39"	.74"			5.75"	4.33"	.94"	.82"	6.02"	3.81"	2.36"	.86"	.39"	.66"
206	168	160	81	15	22	3/4"-10 x 7 1/2"	3/4"-10	200	150	30	25	206	130	80	28	15	21
8.11"	6.61"	6.29"	3.18"	.59"	.86"			7.87"	5.90"	1.18"	1.00"	8.11"	5.11"	3.14"	1.10"	.59"	.82"
251	205	180	91	15	26	7/8"-9 x 8 3/4"	7/8"-9	240	180	50	30	251	166	90	31	15	25
9.88"	8.07"	7.06"	3.58"	.59"	1.02"			9.45"	7.06"	1.96"	1.18"	9.88"	6.54"	3.54"	1.22"	.59"	.98"
320	265	240	120	25	35	1 1/8"-7 x 12"	1 1/8"-7	331	256	62	46	317	205	120	49	25	31
12.60"	10.43"	9.45"	4.72"	.98"	1.37"			13.03"	10.08"	2.44"	1.81"	12.48"	8.07"	4.72"	1.92"	.98"	1.22"
470	395	321	166	30	38	1 1/4"-7 x 17 1/2"	1 1/4"-7	-	-	-	-	-	-	-	-	-	31
18.50"	15.55"	12.64"	6.29"	1.18"	1.5"												1.22"
630	534	361	186	30	38	1 1/4"-7 x 22"	1 1/4"-7	-	-	-	-	-	-	-	-	-	31
24.80"	21.02"	14.21"	7.32"	1.18"	1.5"												1.22"

*Plating on group 3-8 only

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acc. to DIN 3015, Part 2

MATERIAL CODE

Materials and designs of clamps bodies XXX

Polypropylene, profiled inside, with tension clearance	**– PP**
Polypropylene, smooth inside, without tension clearance	**– PPH** (up to Gr. 6 S)
Polyamide, profiled inside, with tension clearance	**– PA**
Polyamide, smooth inside, without tension clearance	**– PAH** (up to Gr. 6 S)
Aluminum, profiled inside, with tension clearance	**– AL**

Other thermoplastics and O.D. on request.

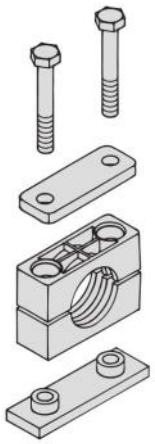
Stauff Group	DIN Group	O.D. mm	Pipe Nominal Bore	Inch O.D.	Hose	Clamp Body (2 halves) (**xxx** – see material code)
3 S	**1**	6				**3060S** xxx
		6.4		1/4		**3064S** xxx
		8				**3080S** xxx
		9.5		3/8		**3095S** xxx
		10	1/8			**3100S** xxx
		12				**3120S** xxx
		12.7		1/2		**3127S** xxx
		13.5	1/4			**3137S** xxx
		14				**3140S** xxx
		15				**3150S** xxx
		16		5/8		**3160S** xxx
		17.1	3/8			**3171S** xxx
		18				**3180S** xxx
4 S	**2**	15			1/4	**4150S** xxH
		19		3/4		**4190S** xxx
		19.8			3/8	**4198S** xxH
		20				**4200S** xxx
		21.3	1/2			**4213S** xxx
		22.1			1/2	**4221S** xxH
		22.2		7/8		**4222S** xxx
		25.1			5/8	**4251S** xxH
		25.4		1		**4254S** xxH
		26.7	3/4			**4267S** xxx
		26.7			3/4	**4292S** xxH
5 S	**3**	32		1 1/4		**5320S** xxx
		33.4	1			**5334S** xxx
		38.1		1 1/2		**5381S** xxx
		40				**5400S** xxx
		42.2	1 1/4			**5422S** xxx
6 S	**4**	37.8			1	**6378S** xxH
		42.2	1 1/4			**6422S** xxx
		44.5		1 3/4		**6445S** xxx
		48.3	1 1/2			**6483S** xxx
		48.4			1 1/4	**6484S** xxH
		50.8		2		**6508S** xxx
		54.4			1 1/2	**6544S** xxH
		57.2		2 1/4		**6572S** xxx
		60.3	2			**6603S** xxx
		63.5		2 1/2		**6635S** xxx
		70		2 3/4		**6700S** xxx
7 S	**5**	70		2 3/4		**7700S** xxx
		73	2 1/2*			**7730S** xxx
		76.2	2 1/2**	3		**7762S** xxx
		88.9	3	3 1/2		**7889S** xxx
8 S	**6**	88.9	3	3 1/2		**8889S** xxx
		102	3 1/2	4		**8102S** xxx
		114	4	4 1/2		**8114S** xxx
		127		5		**8127S** xxx
9 S	**7**	127		5		**9127S** xxx
		133		5 1/4		**9133S** xxx
		140	5			**9141S** xxx
		152		6		**9152S** xxx
		168	6			**9168S** xxx
10 S	**8**	168	6			**10168S** xxx
		203		8		**10203S** xxx
		219	8			**10219S** xxx
11 S	**9**	219	8			**11219S** xxx
		273	10			**11273S** xxx
		324	12			**11324S** xxx
12 S	**10**	356	14			**12356S** xxx
		406	16			**12406S** xxx

*ANSI B 36-10 **Other standards

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acc. to DIN 3015, Part 2

ORDER EXAMPLE



SPAL ******,* **xxx** **DPAL-AS**

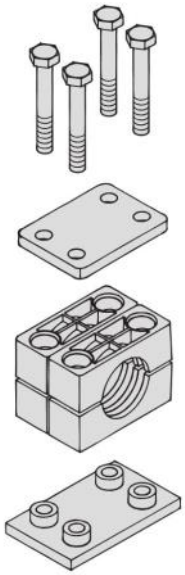
Material and design of clamp body

Order Code

Clamp consisting of:

1 x Weld Plate for Single Clamp
1 x Clamp Body (2 halves)
1 x Cover Plate for Single Clamp
2 x Hexagon Head Bolt
DIN 931/933

ORDER EXAMPLE



SPAS ******,* **xxx** **DPAS-AS**

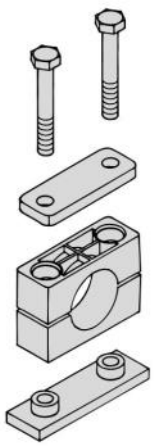
Material and design of clamp body

Order Code

Clamp consisting of:

1 x Weld Plate for Double Clamp
2 x Clamp Body (2 halves)
1 x Cover Plate for Double Clamp
4 x Hexagon Head Bolt
DIN 931/933

ORDER EXAMPLE



SPAL ******,* **xxH** **DPAL-AS**

Material and design of clamp body

Order Code

Clamp consisting of:

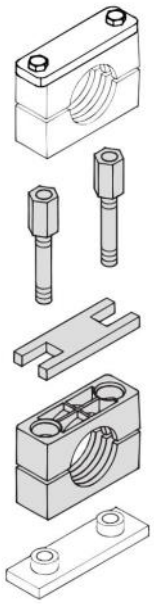
1 x Weld Plate for Single Clamp
1 x Clamp Body (2 halves)
Profiled for Hose
1 x Cover Plate for Single Clamp
2 x Hexagon Head Bolt
DIN 931/933

Design of clamp bodies see technical appendix, page 46.
Design and order codes for clamps with rubber insert RI see page 26 – Clamp Accessories –.

3/00

acc. to DIN 3015. Part 2

ORDER EXAMPLE



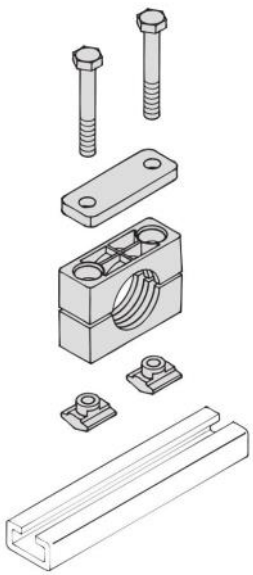
AF ***,* xxx SIP**

- Material and design of clamp body
- Pipe-O.D.
- STAUFF Group

Clamp consisting of:

1 x Clamp Body (2 halves)
1 x Safety Locking Plate
2 x Stacking Bolt

ORDER EXAMPLE



GMV ***,* xxx DPAL-AS**

- Material and design of clamp body
- Pipe-O.D.
- STAUFF Group

Clamp consisting of:

2 x Mounting Rail Nut
1 x Clamp Body (2 halves)
1 x Cover Plate for Single Clamp
2 x Hexagon Head Bolt DIN 931/933

DESIGN OPTIONS

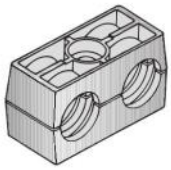
- Metric Threaded Components
- Stainless Steel Components Available 304/316
- Special Materials Available Upon Request
- Special Diameters and Profiles to Order
- Rubber Insert Clamps Available
- Bushing Adaptor

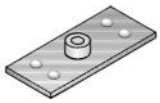
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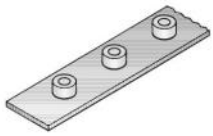
acc. to DIN 3015, Part 3

DESIGN OPTIONS

- Metric Threaded Components
- Stainless Steel Components Available 304/316
- Special Materials Available Upon Request
- Special Diameters and Profiles to Order
- Rubber Insert Clamps Available
- Bushing Adaptor







Surface finishing (see also technical appendix)						–	–	–
Stauff Group	DIN Group	mm O.D.	Pipe Nominal Bore	Inch O.D.	Hose	Clamp Body (2 halves) (**xxx** – see material code)	Single Weld Plate **SP**	Group Weld Plate **RAP**
1 D	**1**	6				**1060/060D** xxx	SP 1-D	RAP 1-D/40/5
		6.4		1/4		**1064/064D** xxx		
		8				**1080/080D** xxx		
		9.5		3/8		**1095/095D** xxx		
		10	1/8			**1102/102D** xxx		
		12				**1120/120D** xxx		
2 D	**2**	12.7		1/2		**2127/127D** xxx	SP 2-D	RAP 2-D/58/5
		13.7	1/4			**2137/137D** xxx		
		14				**2140/140D** xxx		
		15				**2150/150D** xxx		
		16		5/8		**2160/160D** xxx		
		17.1	3/8			**2171/171D** xxx		
		18				**2180/180D** xxx		
3 D	**3**	19		3/4		**3190/190D** xxx	SP 3-D	RAP 3-D/72/5
		20				**3200/200D** xxx		
		21.3	1/2			**3213/213D** xxx		
		22.2		7/8		**3222/222D** xxx		
		25.4		1		**3254/254D** xxx		
4 D	**4**	26.6	3/4			**4266/266D** xxx	SP 4-D	RAP 4-D/90/5
		28.5				**4285/285D** xxx		
5 D	**5**	32		1 1/4		**5320/320D** xxx	SP 5-D	RAP 5-D/112/5
		33.4	1			**5334/334D** xxx		
		38.1		1 1/2		**5381/381D** xxx		
		42.2	1 1/4			**5422/422D** xxx		

3/00

acc. to DIN 3015, Part 3

							for multi-level-assembly, prevents upper clamp from turning
–	Fe/Zn	-	DIN 50961	Fe/Zn 8 B	Fe/Zn	Fe/Zn	Fe/Zn 8 B
Mounting Rail	Channel Rail Adaptor	Hexagon Rail Nut	Cover Plate	Hexagon Head Bolt	Stacking Bolt	Safety Locking Plate	Safety Locking Plate
TS	**CRA**	**SM**	**GD**	**AS**	**AF**	**SI**	**SIV**
1M 3.28′ Length TS 11/3 TS 14/3 TS 30/3 2M 6.56′ Length TS 11/6 TS 14/6 TS 30/6	CRA1-8	SM1-8	GD-1D	AS 1-D	AF 1-D	SI 1-D	SIV 1-D
	CRA 2-3D	SM2-5D	GD-2D	AS 2-D	AF 2-D	SI 2-5D	SIV 2-3D
			GD-3D	AS 3-D	AF 3-D		
	CRA 4-5D		GD-4D	AS 4-D	AF 4-D		
			GD-5D	AS 5-D	AF 5-D		

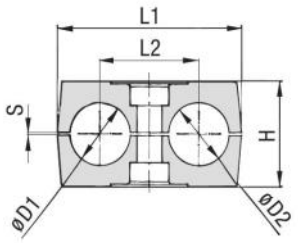
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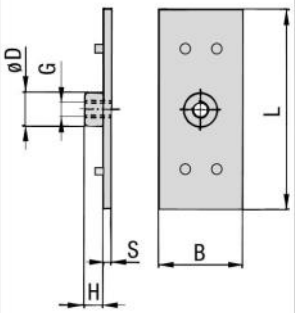
TWIN-SERIES
DIMENSION TABLE - COMPONENTS

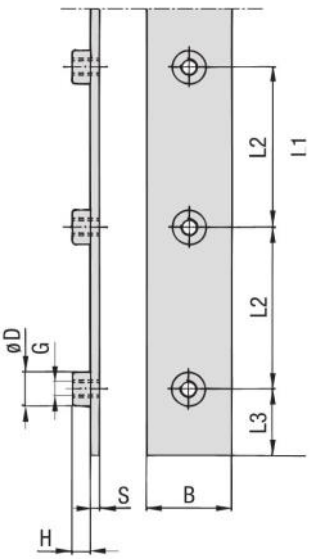
acc. to DIN 3015, Part 3

DESIGN OPTIONS

- Metric Threaded Components
- Stainless Steel Components Available 304/316
- Special Materials Available Upon Request
- Special Diameters and Profiles to Order
- Rubber Insert Clamps Available
- Bushing Adaptor





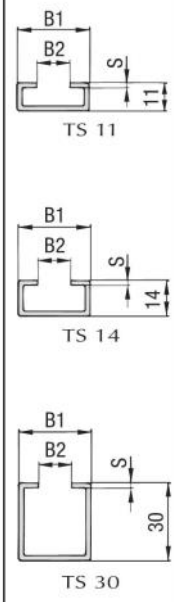


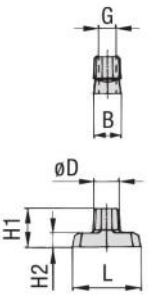
Surface finishing (see also techn. appendix) – – –

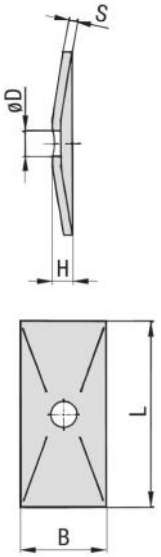
STAUFF Group	DIN Group	Pipe-O.D. Ø D1/D2 [mm]	Clamp Body (2 halves)						Single Weld Plate SP						Group Weld Plate RAP							
			L1	L2	Inside surface profiled H	Inside surface profiled S	Inside surface smooth H	Width	L	B	S	H	øD	G	L1	L2	L3	B	S	H	øD	G
1 D	1	6	36	20	27	0.6	26.5	30	37	30	3	6.5	12	M6	196	40	18	30	3	6.5	12	M6
		TO				min.																
		12	1.41″	.78″	1.06″	.02″	1.04″	1.18″	1.45″	1.18″	.11″	.26″	.47″	1/4-20″	7.71″	1.57″	.70″	1.18″	.11″	.26″	.47″	1/4-20″
2 D	2	12.7	53	29	27	0.7	26.5	30	55	30	5	6	14	M8	288	58	28	30	5	6	14	M8
		TO				min.																
		18	2.08″	1.14″	1.06″	.03″	1.04″	1.18″	2.16″	1.18″	.19″	.23″	.55″	5/16-18″	11.34″	2.28″	1.10″	1.18″	.19″	.23″	.55″	5/16-18″
3 D	3	19	67	36	37	0.7	36.5	30	70	30	5	6	14	M8	358	72	35	30	5	6	14	M8
		TO				min.																
		25	2.63″	1.41″	1.45″	.03″	1.44″	1.18″	2.75″	1.18″	.18″	.23″	.55″	5/16-18″	14.09″	2.83″	1.37″	1.18″	.19″	.23″	.55	5/16-18″
4 D	4	26.9	80	45	40	0.7	38	30	85	30	5	6	14	M8	445	90	42	30	5	6	14	M8
		TO				min.																
		28.5	3.14″	1.77″	1.57″	.03″	1.46″	1.18″	3.34″	1.18″	.19″	.23″	.55″	5/16-18″	17.52″	3.54″	1.65″	1.18″	.19″	.23″	.55″	5/16-18″
5 D	5	32	106	56	53	0.7	52	30	110	30	5	6	14	M8	558	112	55	30	5	6	14	M8
		TO				min.																
		42	4.17″	2.20″	2.08″	.03″	2.04″	1.18″	4.33″	1.18″	.19″	.23″	.55″	5/16-18″	21.97″	4.41″	2.16″	1.18″	.19″	.23″	.55″	5/16-18″

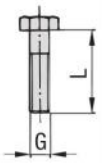
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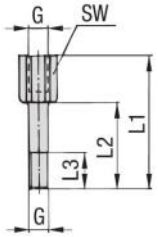
acc. to DIN 3015, Part 3

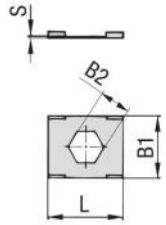




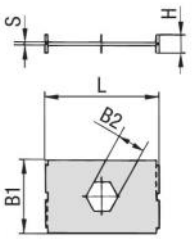








for multi-level-assembly, prevents upper clamp from turning



–	–	DIN 50961 Fe/Zn 8 B																						
Mounting Rail **TS**				Hexagon Rail Nut **SM**						Cover Plate **GD**					Hexagon Head Bolt **AS** DIN 931/933	Stacking Bolt **AF**					Safety Locking Plate **SI**				Safety Locking Plate **SIV**				
Size	B1	B2	S	L	B	H1	H2	øD	G	L	B	H	S	øD	G x L	G	L1	L2	L3	SW	L	B1	B2	S	L	B1	B2	S	H
TS 11 TS 14 TS 30	28	11	2	25.4 1.00″	10.4 .41″	13 .51″	5 .19″	12 .47″	M6 1/4-20″	34 1.33″	30 1.18″	7 .27″	3 .11″	7 .27″	1/4″-20 X 1 3/8″	M6 1/4-20″	34 1.33″	20 .78″	12 min. .47″	11 .43″	27 1.06″	22 .86″	12.1 .48″	0.5 .02″	27 1.06″	28 1.10″	11.1 .44″	1 .03″	7 .27″
										52 2.04″	30 1.18″	7 .27″	3 .11″	9 .35″	5/16″-18″ X 1 3/8″	M8 5/16-18″	33 1.29″	20 .78″	12 min. .47″	12 .47″									
				25.4 1.00″	10.4 .41″	13 .51″	5 .19″	14 .55″	M8 5/16-18″	65 2.55″	30 1.18″	7 .27″	3 .11″	9 .35″	5/16″-18″ X 1 3/4″	M8 5/16-18″	44 1.73″	29 1.14″	12 min. .47″	12 .47″					45 1.77″	28 1.10″	12.1 .48″	1 .03″	7 .27″
TS 11 TS 14 TS 30	1.10″	.43″	.07″							79 3.11″	30 1.18″	7 .27″	3 .11″	9 .35	5/16″-18″ X 2″	M8 5/16-18″	49 1.92″	34 1.33″	12 min. .47″	12 .47″									
										102 4.02″	30 1.18″	7 .27″	3 .11″	9 .35″	5/16″-18″ X 2 1/2″	M8 5/16-18″	61 2.40″	46 1.81″	12 min. .47″	12 .47″									

3/00

acc. to DIN 3015, Part 3

MATERIAL CODE

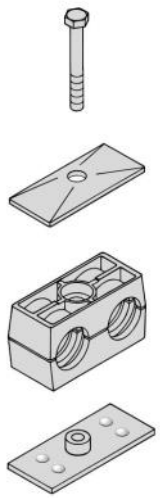
Materials and designs of clamps bodies	**XXX**
Polypropylene, profiled inside, with tension clearance	**– PP**
Polypropylene, smooth inside, without tension clearance	**– PPH**
Polyamide, profiled inside, with tension clearance	**– PA**
Polyamide, smooth inside, without tension clearance	**– PAH**

Other thermoplastics and O.D. on request.

STAUFF Group	DIN Group	mm O.D.	Pipe Nominal Bore	Inch O.D.	Hose O.D.	Clamp Body (2 halves) (**xxx** – see material code)
1 D	**1**	6				**1060/060D** xxx
		6.4		1/4		**1064/064D** xxx
		8				**1080/080D** xxx
		9.5		3/8		**1095/095D** xxx
		10.2	1/8			**1102/102D** xxx
		12				**1120/120D** xxx
2 D	**2**	12.7		1/2		**2127/127D** xxx
		13.7	1/4			**2137/137D** xxx
		14				**2140/140D** xxx
		15				**2150/150D** xxx
		16		5/8		**2160/160D** xxx
		17.1	3/8			**2171/171D** xxx
		18				**2180/180D** xxx
3 D	**3**	19		3/4		**3190/190D** xxx
		20				**3200/200D** xxx
		21.3	1/2			**3213/213D** xxx
		22.2		7/8		**3222/222D** xxx
		25.4		1		**3254/254D**.xxx
4 D	**4**	26.6	3/4			**4266/266D** xxx
		28.5				**4285/285D** xxx
5 D	**5**	32		1 1/4		**5320/320D** xxx
		33.4	1			**5334/334D** xxx
		38.1		1 1/2		**5381/381D** xxx
		42.2	1 1/4			**5422/422D** xxx

3/00

acc. to DIN 3015, Part 3



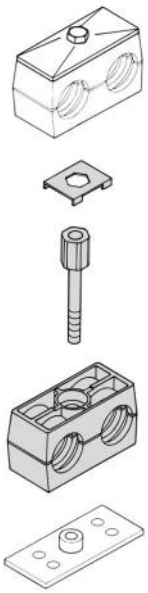
ORDER EXAMPLE

SP∗∗∗∗/∗∗∗ Dxxx GD-AS

- Material and design of clamp body
- Pipe-O.D. 2
- Pipe-O.D. 1
- STAUFF Group

Clamp consisting of:

1 x Single Weld Plate
1 x Clamp Body (2 halves)
1 x Cover Plate
1 x Hexagon Head Bolt DIN 931/933



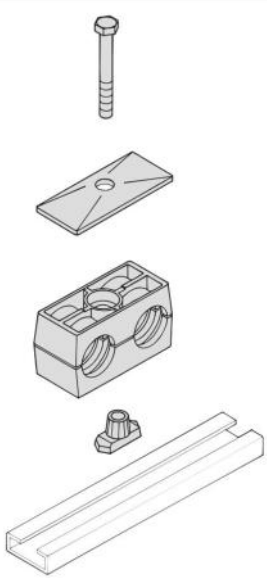
ORDER EXAMPLE

AF∗∗∗∗/∗∗∗ Dxxx SI

- Material and design of clamp body
- Pipe-O.D. 2
- Pipe-O.D. 1
- STAUFF Group

Clamp consisting of:

1 x Clamp Body (2 halves)
1 x Stacking Bolt
1 x Safety Locking Plate



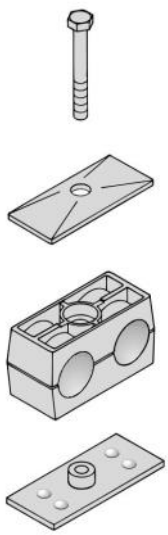
ORDER EXAMPLE

SM∗∗∗∗/∗∗∗ Dxxx GD-AS

- Material and design of clamp body
- Pipe-O.D. 2
- Pipe-O.D. 1
- STAUFF Group

Clamp consisting of:

1 x Hexagon Rail Nut
1 x Clamp Body (2 halves)
1 x Cover Plate
1 x Hexagon Head Bolt DIN 931/933



ORDER EXAMPLE

SP∗∗∗∗/∗∗∗ DxxH GD-AS

- Material and design of clamp body
- Pipe-O.D. 2
- Pipe-O.D. 1
- STAUFF Group

Clamp consisting of:

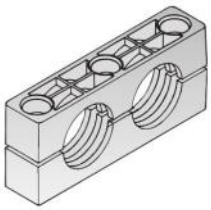
1 x Single Weld Plate
1 x Clamp Body (2 halves) profiled for hose
1 x Cover Plate
1 x Hexagon Head Bolt DIN 931/933

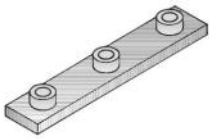
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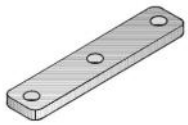
Twin Design – Heavy-Series

Order Code – Components

MATERIAL CODE
Materials and designs of clamp bodies – XX
Polypropylene profiled inside with tension clearance – **PP**
Polyamide profiled inside with tension clearance – **PA**







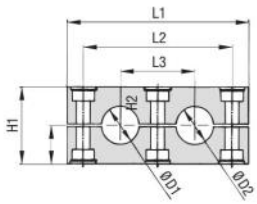


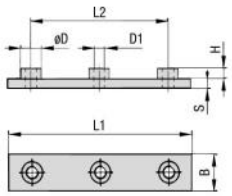
Surface finishing (see also technical appendix)				–	–	Fe/Zn	Fe/Zn
STAUFF Group	Pipe-O.D. ØD1/D2 mm	Nominal Bore	Inch O.D.	Clamp Body (2 halves) (**xx** – see material code)	Weld Plate **SPAD**	Cover Plate **DPAD**	Hexagon Head Bolts **AS** DIN 931/933
4S-D	19/19		3/4 /3/4	**4190/190S xx**	SPAD 4S	DPAD 4S	AS 4S
	20/20			**4200/200S xx**			
	21.3/21.3	1/2 /1/2		**4213/213S xx**			
	22/22		7/8 /7/8	**4222/222S xx**			
	25.4/25.4			**4254/254S xx**			
	26.7/26.7	3/4 /3/4		**4267/267S xx**			
5S-D	32/32		1 1/4 /1 1/4	**5320/320S xx**	SPAD 5S	DPAD 5S	AS 5S
	33.4/33.4	1/1		**5334/334S xx**			
	38/38		1 1/2 /1 1/2	**5381/381S xx**			
	40/40			**5400/400S xx**			
	42/42	1 1/4 /1 1/4		**5422/422S xx**			

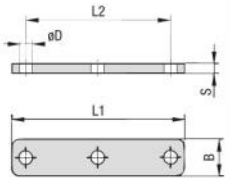
Twin Design – Heavy-Series

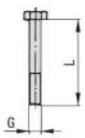
Dimension Table

MATERIAL CODE
Materials and designs of clamp bodies – XX
Polypropylene profiled inside with tension clearance – **PP**
Polyamide profiled inside with tension clearance – **PA**







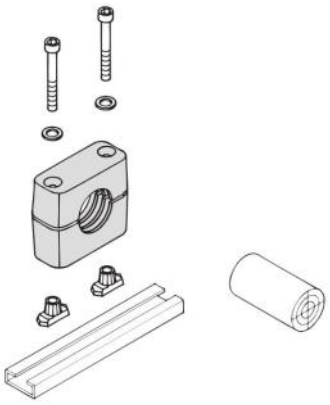


Surface finishing (see also technical appendix)		–						–						Fe/Zn					Fe/Zn
STAUFF Group	Pipe-O.D. ØD1/D2 mm	Clamp Body (2 halves)						Weld Plate **SPAD**							Cover Plate **DPAD**					Hexagon Head Bolts **AS** DIN 931/933
	D1/D2	L1	L2	L3	H1	H2	Width	L1	L2	B	S	Hø	D	D1	L1	L2	B	S	øD	G x L
4S-D	19/19	115	90	45	48	24	30	130	90	30	8	8.5	18	3/8" -16 UNC	115	90	30	8	11	3/8" - 16 x 2 1/4"
	20/20																			
	21.3/21.3																			
	22/22																			
	25.4/25.4	4.51"	3.54"	1.77"	1.88"	.94"	1.18"	5.11"	3.54"	1.18"	.31"	.33"	.70"		4.52"	3.54"	1.18"	.31"	.43"	
	26.9/26.9																			
5S-D	32/32	144	120	60	60	30	30	160	120	30	8	8.5	18	3/8" -16 UNC	144	120	30	8	11	3/8" - 10 x 2 3/4"
	33.7/33.7																			
	38/38																			
	40/40	5.75"	4.72"	2.36"	2.36"	1.18"	1.18"	6.29"	4.72"	1.18"	.31"	.33"	.70"		5.75"	4.72"	1.18"	.31"	.43"	
	42/42																			

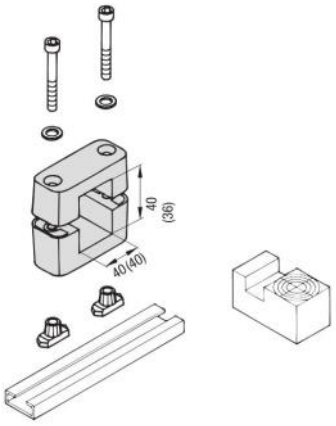
3/00

*Stacking Components Available

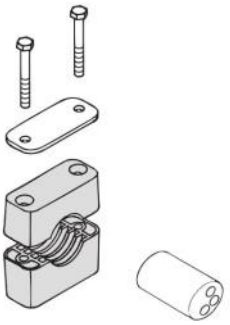
Industrial Controls



For proximity switches acc. to
EN 50008/50036/50040 or similar
Proximity switch – **round** construction, 30 mm dia.-fastened with a Group 4 Standard-Series clamp mounted on rail with hexagon rail nuts.
Loosening of the bolts provides **axial and horizontal position adjustment.**

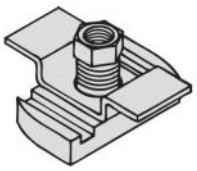


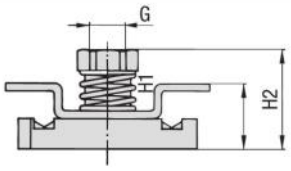
For proximity switches acc. to
EN 50025/50037
Proximity switch – **rectangular** construction, 40 mm square-fastened with Group 5 Standard Duty clamp mounted on rail with hexagon rail nuts.
Loosening of the bolts provides **axial and horizontal position adjustment.**

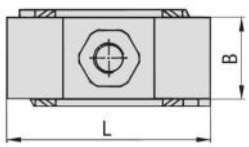


For clamping of Electrical cables: STAUFF-Oval Clamps
Group 6 Standard-Series for cable diameters between 20 and 50 mm.
Group 6 S Heavy-Series for cable diameters between 40 and 72 mm.
Bolt types:
Hexagon Head Bolt in conjunction with cover plate. For varying cable diameters only the bolt length needs to be changed.

CRA Channel-Rail-Adaptor







STAUFF	STAUFF	Thread G	Dimensions								Length of Bolts (for clamps with cover plates)
			L		B		H1		H2		
Series	Group	UNC	mm	in	mm	in	mm	in	mm	in	UNC
Standard	**CRA 1 – 8**	1/4″	35	1.37″	19	.74″	13	.51″	19.5	.77″	see Standard-Series
Heavy	**CRA 3 S**	3/8″	35	1.37″	22	.86″	18.5	.73″	27.5	1.08″	3/8 x 1 1/2 UNC
	CRA 4 S										3/8 x 2 UNC
	CRA 5 S										3/8 x 2 1/2 UNC
	CRA 6S	7/16″	45	1.77	25	.98	17	.67	27.5	1.08	7/16 x 3 3/4 UNC
Twin	**CRA 1-8**	1/4″	35	1.37″	19	.74″	13	.51″	19.5	.77″	1/4 x 1 UNC
	CRA 2/3D	5/16″	38	1.46″	53	2.09″	18.5	.73″	27.5	1.08″	5/16 x 1 3/8 UNC
					53	2.09″					5/16 x 1 3/4 UNC
	CRA 4/5D	5/16″	38	1.46″	80	3.15″					5/16 x 2 UNC
					80	3.15″					5/16 x 2 1/2 UNC

Material: Carbon Steel, zinc plated (Fe/Zn 8 B), Stainless Steel on request.

Information
The CHANNEL RAIL-ADAPTOR Type CRA is suitable for most strut type rails.

Order Code
CRA xx x

- Thread G
  – M – metric
  – U – UNC
- STAUFF Group
- Channel Rail-Adaptor

3/00

Junction Adaptor Clamps (Steel Fitting)

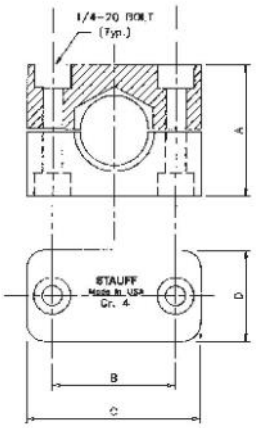
STANDARD-SERIES

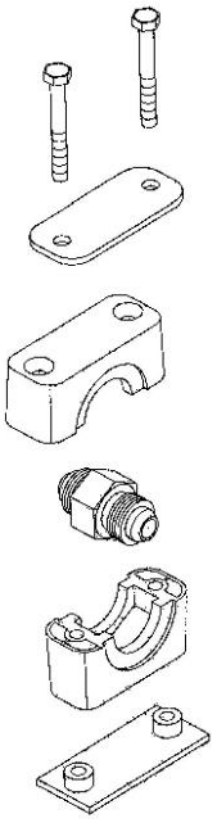
For Use With Hydro- Craft®
MALE JUNCTION ADAPTER - B SERIES
FEMALE JUNCTION ADAPTER - BSAE SERIES
MALE JUNCTION ADAPTER-PIPE - BFM SERIES
O-RING FACE SEAL - MALE JUNCTION ADAPTER
FB SERIES
LFB SERIES

PART NUMBER	STAUFF GROUP	Hydro-Craft® SERIES
4BA10PP	4	10
5BA16 PP	5	16

DIMENSIONAL COMPARISON CHART

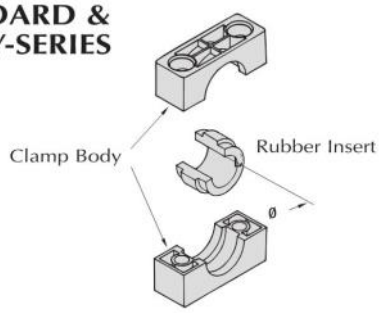
GROUP	A		B		C		D	
	S	HC	S	HC	S	HC	S	HC
4	40	38	40	38	58	55.5	30	26.6
5	59	51	52	51	69	67	30	27
7	93	76	94	76	118	102	30	38





RI-Clamps (Clamps with Rubber Insert)

STANDARD & HEAVY-SERIES



STAUFF Group	Pipe-O.D. ØD [mm]	Pipe-O.D. ØD [in]	Order Code Rubber Insert	Clamp Body STD	Clamp Body HVY
4	12.7	1/2"	4127SRI		
	14.0	9/16"	4140SRI		
	15.0		4150SRI	RI4PP	RI4SPP
	16.0	5/8"	4160SRI	RI4PA	RI4SPA
4S	17.1		4171SRI		
	18.0		4180SRI		
	19.0	3/4"	4190SRI		
6	20.0		5200SRI		
	21.3		5213SRI		
	22.2	7/8"	5222SRI	RI6PP	RI5SPP
	25.4	1"	5254SRI	RI6PA	RI5SPA
	26.7		5267SRI		
5S	28.0	1 1/8"	5280SRI		
	28.6		5286SRI		
	30.0		5300SRI		
	32.0	1 1/4"	5320SRI		
6S	32.0	1 1/4"	6320SRI		
	33.4		6334SRI		
	35.0		6350SRI		
	38.1	1 1/2"	6381SRI		
	40.0		6400SRI		
	42.2		6422SRI		RI6SPP
	44.5	1 3/4"	6445SRI		RI6SPA
	45.5		6455SRI		
	48.3		6483SRI		
	50.8	2"	6508SRI		
	53.4		6534SRI		
	56.4		6564SRI		
	57.2	2 1/4"	6572SRI		
7S	57-77	2.24"-3.00"	Specify Diam		
			in MM		RI7SPP
			7XXXSRI		RI7SPA
8S	80-102	3.15"-4.00"	Specify Diam		RI8SPP
			in MM		
			8XXXSRI		RI8SPA

Other O.D.'s on request.

Clamp Body	Material XX
Polypropylene	**PP**
Polyamide	**PA**
Rubber Insert	Material
Elastomer	**Thermoplastic Elastomer (TPE) 70° Shore A**

Attention!
For RI-clamps the relationship between the diameter and the group is not the same as in the Profile- or H-clamp.

3/00

Truck Clamp Type TC for Brake Lines

Size Range:
1/4″ - 7/8″

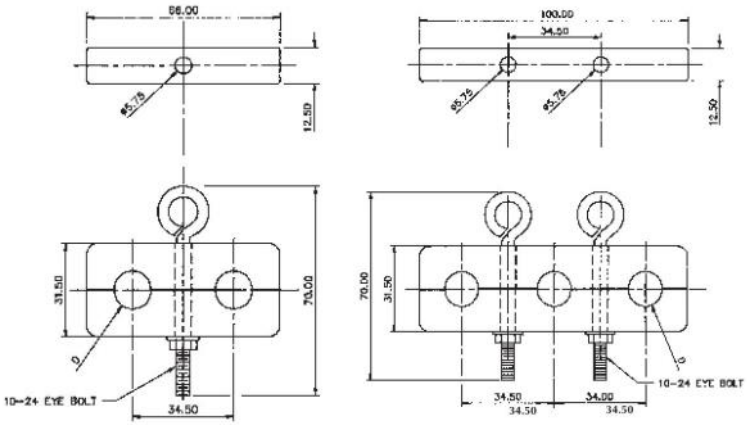
Notes:
Material: PP
Color: Green

Part Number Plastic Only	Line Size D	Part Number Complete Assembly
2TC064PP	1/4″	2TC064
2TC095PP	3/8″	2TC095
2TC127PP	1/2″	2TC127
2TC160PP	5/8″	2TC160
2TC190PP	3/4″	2TC190
2TC222PP	7/8″	2TC222
3TC064PP	1/4″	3TC064
3TC095PP	3/8″	3TC095
3TC127PP	1/2″	3TC127
3TC160PP	5/8″	3TC160
3TC190PP	3/4″	3TC190
3TC222PP	7/8″	3TC222

Complete assembly comprises 2 plastic halves and 1or 2 bolts and 1 or 2 nuts.



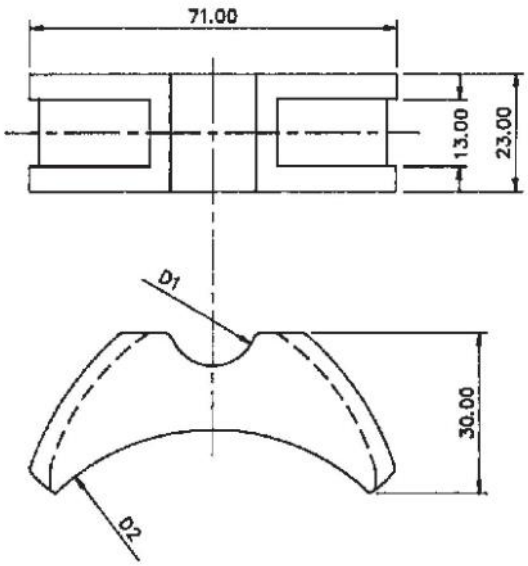
3TC 2TC



Saddle Clamp Type ZR for Cylinder Supply Lines

Notes:
Material: Flexible Thermoplastic
Color: Green
Temperature: 170°F





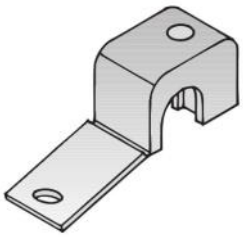
D1: 3/8″ - 7/8″ O.D.
D2: 2″ - 7″ O.D.

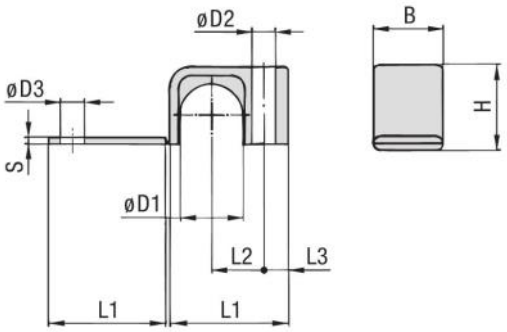
Saddle Support ZR518

3/00

Applications: Pneumatics, Instrumentation, Automotive, Machine Tool and Lubrication.

Type LB





Stauff Group	Pipe-outside Diameter ø D1 mm	Nominal bore	Inch O.D.	L1	L2	L3	B	H	S	øD2	øD3	Clamp Material XX	Color
1	**03.2**		1/8″	22 .86″	9 .35″	6.5 .25″	12 .47″	10.5 .41″	2 .07″	6.8 .27″	7 .27″	**PP** **PA**	Black Yellow
	06.0												
	06.4		1/4″										
	07.9		5/16″										
	08.0												
2	**09.5**		3/8″	27 1.06″	11 .43″	7 .27″	16 .62″	15 .59″	2 .07″	6.8 .27″	7 .27″	**PP** **PA**	Black Yellow
	10.0	1/8″											
	11.1		7/16″										
	12.0												
3	**12.7**		1/2″	34 1.33″	15 .59″	7 .27″	20 .78″	22.5 .89″	2 .07″	6.8 .27″	7 .27″	**PP** **PA**	Black Yellow
	13.7	1/4″											
	14.3		9/16″										
	15.0												
	16.0		5/8″										
	17.2	3/8″											
	18.0												
4	**19.0**		3/4″	42 1.65″	19 .74″	7 .27″	20 .78″	30 1.18″	2 .07″	6.8 .27″	7 .27″	**PP** **PA**	Black Yellow
	20.0												
	21.3	1/2″											
	22.0												
	25.4		1″										

Order Code

LB ** XX**

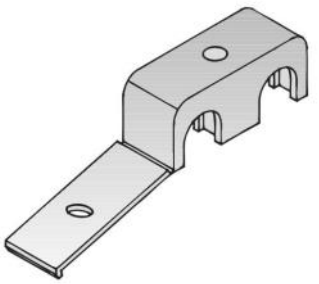
- XX → Clamp Material
- **** → Pipe-O.D. Dia D1 (mm - without the decimal point)
- LB → STAUFF Group

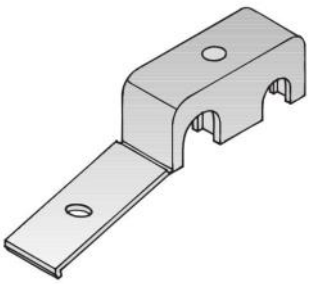
Other thermoplastics and O.D. on request.

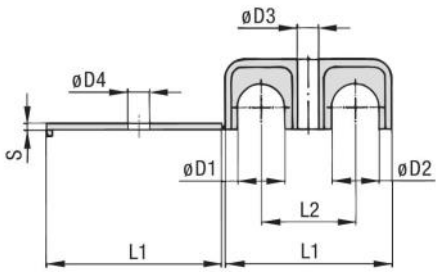
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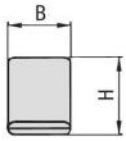
Applications: Pneumatics, Instrumentation, Automotive, Machine Tool and Lubrication.

Type LBG (identical diameters) · **Type LBU** (different diameters)









Stauff Group	Pipe-Outside Diameter Ø D1/D2 mm	Nominal Bore	Inch O.D.	L1	L2	B	H	S	øD3	øD4	Clamp Material XX	Color
1	**03.2**		1/8″	31 1.22″	18 .79″	12 .47″	10.5 .41″	2 .07″	6.8 .27″	7 .27″	**PP** **PA**	Black Yellow
	06.0											
	06.4		1/4″									
	07.9		5/16″									
	08.0											
2	**09.5**		3/8″	9 1.53″	22 .86″	16 .62″	14.5 .57″	2 .07″	6.8 .27″	7 .27″	**PP** **PA**	Black Yellow
	10.0	1/8″										
	11.1		7/16″									
	12.0											
3	**12.7**		1/2″	53 2.06″	30 1.18″	20 .78″	22.5 .89″	2 .07″	6.8 .27″	7 .27″	**PP** **PA**	Black Yellow
	13.7	1/4″										
	14.3		9/16″									
	15.0											
	16.0		5/8″									
	17.2	3/8″										
	18.0											
4	**19.0**		3/4″	70 2.75″	38 1.46″	20 .78″	30.5 1.20″	2 .07″	6.8 .27″	7 .27″	**PP** **PA**	Black Yellow
	20.0											
	21.3	1/2″										
	22.2		7/8″									
	25.4		1″									

Order Code

LBx * */*** xx**

- Clamp Material
- Pipe-O.D. Dia D2 (mm - without the decimal point)
- Pipe-O.D. Dia D1 (mm - without the decimal point)
- STAUFF Group
- **LBG** = identical diameters
  LBU = different diameters

Type

LBG Double pipe clamp for two identical diameters

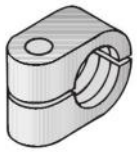
LBU Double pipe clamp for two different diameters (consult factory)

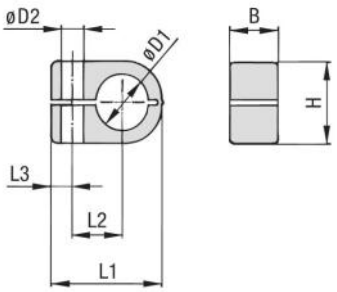
Other thermoplastics and O.D. on request.

3/00

Applications: Pneumatics, Instrumentation, Automotive, Machine Tool and Lubrication.

Type LN





Stauff Group	Pipe-Outside Diameter Ø D1 mm	Nominal Bore	Inch O.D.	L1	L2	L3	B	H	øD2	Clamp Material XX	Colour
1	06.0			22 .86″	9 .35″	7 .27″	14.5 .57″	13.5 .53″	6.8 .27″	PP PA	Green Black
	06.4		1/4″								
	08.0										
2	08.0			27 1.06″	11 .43″	7 .27″	14.5 .57″	18.5 .73″	6.8 .27″	PP PA	Green Black
	09.5		3/8″								
	10.2	1/8″									
	12.0										
	12.7		1/2″								
3	10.0	1/8″		33 1.29″	15 .59″	7 .27″	14.5 .57″	23.5 .93″	6.8 .27″	PP PA	Green Black
	12.0										
	12.7		1/2″								
	13.7	1/4″									
	14.0										
	15.0										
	16.0		5/8″								
4	14.0			40 1.57″	19 .74″	7 .27″	14.5 .57″	30.5 1.20″	6.8 .27″	PP PA	Green Black
	15.0										
	16.0		5/8″								
	17.2	3/8″									
	18.0										
	19.0		3/4″								
	20.0										
	21.3	1/2″									
	22.0										

Order Code

LN ** XX**

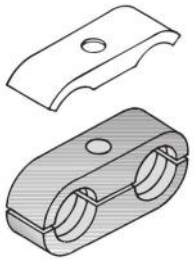
- XX → Clamp Material
- **** → Pipe-O.D. Ø D1 (mm - without the decimal point)
- LN → STAUFF Group

Other thermoplastics and O.D. on request.

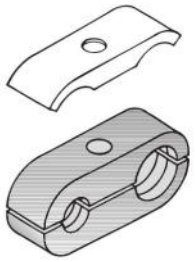
3/00

Applications: Pneumatics, Instrumentation, Automotive, Machine Tool and Lubrication.

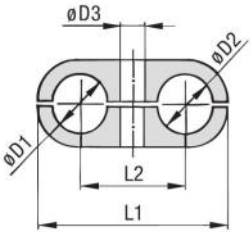
Type LNG
(identical diameters)

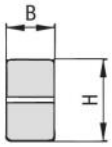


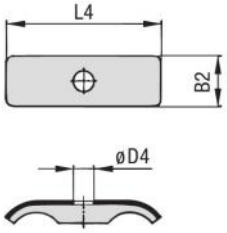
Type LNU
(different diameters)



DPL







Stauff Group	Pipe-Outside Diameter Ø D1/D2 mm	Nominal Bore	Inch O.D.	L1	L2	B	H	øD3	L4	B2	øD4	Clamp Material XX	Color	Cover Plate
	06.0/06.0											**PP**	Green	
1	**06.4/06.4**		1/4 / 1/4	32	18	14.5	13.5	6.8	29.5	15.5	6.8	**PA**	Black	**DPL 1**
	08.0/08.0			1.25″	.70″	.57″	.53″	.27″	1.16″	.61″	.27″			
	08.0/08.0													
	09.5/09.5		3/8 / 3/8	41	22	14.5	18.5	6.8	37.5	15.5	6.8	**PP**	Green	
2	**10.2/10.2**	1/8 / 1/8										**PA**	Black	**DPL 2**
	12.0/12.0			1.61″	.86″	.57″	.73″	.27″	1.40″	.61″	.27″			
	12.7/12.7		1/2 / 1/2											
	10.0/10.0	1/8 / 1/8												
	12.0/12.0													
	12.7/12.7		1/2 / 1/2	54	30	14.5	23.5	6.8	49.5	16.5	6.8			
3	**13.7/13.7**	1/4 / 1/4										**PP**	Green	
	14.0/14.0											**PA**	Black	**DPL 3**
	15.0/15.0			2.12″	1.18″	.57″	.93″	.27″	1.95″	.65″	.27″			
	16.0/16.0		5/8 / 5/8											
	14.0/14.0													
	15.0/15.0													
	16.0/16.0		5/8 / 5/8	70	38	14.5	30.5	6.8	62.5	16.5	6.8			
	17.2/17.2	3/8 / 3/8										**PP**	Green	
4	**18.0/18.0**											**PA**	Black	**DPL 4**
	19.0/19.0		3/4 / 3/4											
	20.0/20.0			2.75″	1.46″	.57″	1.20″	.27″	2.46″	.65″	.27″			
	21.3/21.3	1/2 / 1/2												
	22.0/22.0													

Order Code

LNx * * /*** xx**

- Clamp Material
- Pipe-O.D. Dia D2 (mm - without the decimal point)
- Pipe-O.D. Dia D1 (mm - without the decimal point)
- STAUFF Group
- **LNG** = identical diameters
  LNU = different diameters

Other thermoplastics and O.D. on request.

Type

LNG Double pipe clamp for two identical diameters

LNU Double pipe clamp for two different diameters (on request only)

Accessories

Cover Plate DPL
Steel Zinc Plated

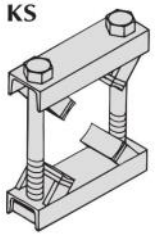
Information

Max. Tightening Torque: 2,5 Nm

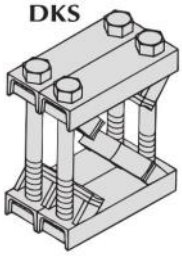
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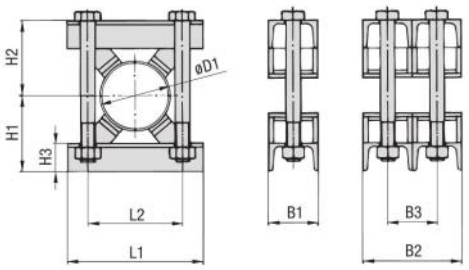
Two-part weld-construction with plastic pads

KS



DKS





Pipe-O.D. Ø D1 mm inches	L1	L2	H1	H2	H3	B1	B2	B3	Hexagon Head Bolt	Number of plastic pads
220 TO 275	420	330	220	220	60	140	280	140	M30 x 420	4
8.66 TO 10.85	16.54″	12.99″	8.66″	8.66″	2.36″	5.51″	11.02″	5.51″		
276 TO 325	460	370	240	240	60	140	280	140	M30 x 460	4
10.87 TO 12.80	18.11″	14.57″	9.44″	9.44″	2.36″	5.51″	11.02″	5.51″		
326 TO 370	510	420	260	260	60	140	280	140	M30 x 500	4
12.83 TO 14.57	20.08″	16.54″	10.23″	10.23″	2.36″	5.51″	11.02″	5.51″		
371 TO 425	570	480	290	290	60	140	280	140	M30 x 560	4
14.61 TO 16.73	22.44″	18.90″	11.41″	11.41″	2.36″	5.51″	11.02″	5.51″		
426 TO 485	620	530	305	305	60	140	280	140	M30 x 590	4
16.77 TO 19.09	24.41″	20.87″	12.01″	12.01″	2.36″	5.51″	11.02″	5.51″		
486 TO 550	680	590	370	370	60	140	280	140	M30 x 720	5
19.13 TO 21.65	26.77″	23.23″	14.57″	14.57″	2.36″	5.51″	11.02″	5.51″		
551 TO 630	760	670	410	410	60	140	280	140	M30 x 800	5
21.69 TO 24.80	29.92″	26.38″	16.14″	16.14″	2.36″	5.51″	11.02″	5.51″		
631 TO 715	845	755	452	452	60	140	280	140	M30 x 884	5
24.84 TO 28.15	33.27″	29.72″	17.80″	17.80″	2.36″	5.51″	11.02″	5.51″		
716 TO 800	940	850	495	495	60	140	280	140	M30 x 970	5
28.19 TO 31.50	37.01″	33.46″	19.49″	19.49″	2.36″	5.51″	11.02″	5.51″		

Order Code

KS x ** xx**

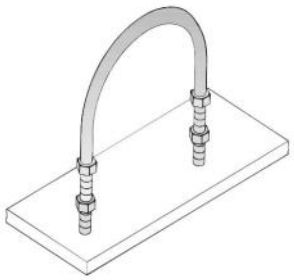
- Plastic pads Polypropylene – **PP**
  Plastic pads Polyamide – **PA**
- **Pipe-O.D. Ø D1 (please indicate exact Ø D1)**
- **Type**
  Normal design – no further information required

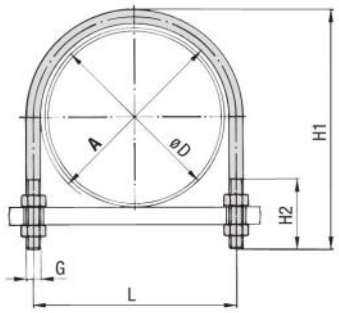
DKS x ** xx**

- Plastic pads Polypropylene – **PP**
  Plastic pads Polyamide – **PA**
- **Pipe-O.D. Ø D1 (please indicate exact Ø D1)**
- **Type**
  Normal design – no further information required

Other materials and O.D. on request.

3/00





Pipe-O.D. Ø D		Round Steel U-Bolt UBC									
mm	Nominal Bore	A mm	A in	L mm	L in	H1 mm	H1 in	H2 mm	H2 in	G mm	G in
25		**30**	**1.18″**	40	1.57″	70	2.75″	40	1.57″	M10	3/8″-16
26.9	3/4″										
30		**38**	**1.46″**	48	1.88″	76	2.99″				
33.4	1″										
38		**46**	**1.81″**	56	2.20″	86	3.38″	50	1.96″		
42.2	1 1/4″										
44.5		**52**	**2.04″**	62	2.44″	92	3.62″				
48.3	1 1/2″										
57		**64**	**2.51″**	76	2.99″	109	4.29″			M12	7/16″-14
60.3	2″										
73	2 1/2″	**82**	**3.22″**	94	3.70″	125	4.92″				
88.9	3″	**94**	**3.70″**	106	4.13″	138	5.43″				
108		**120**	**4.72″**	136	5.35″	171	6.73″	60	2.36″	M16	5/8″-11
114.3	4″										
133		**148**	**5.83″**	164	6.46″	191	7.52″				
141.3	5″										
159		**176**	**6.93″**	192	7.56″	217	8.54″				
168.3	6″										
193.7		**202**	**7.95″**	218	8.58″	249	9.80″				
216		**228**	**8.98″**	248	9.76″	283	11.14″	70	2.75″	M20	3/4″-10
219	8″										
267		**282**	**11.10″**	302	11.89″	334	13.15″				
273	10″										
318		**332**	**13.07″**	352	13.86″	385	15.16″				
324	12″										
356	14″	**378**	**14.88″**	402	15.83″	435	17.13″			M24	7/8″-9
368											
406	16″	**428**	**16.85″**	452	17.80″	487	19.17″				
419											
508		**530**	**20.87″**	554	21.81″	589	23.19″				
521											

ORDER CODE

UBC xxxx ***

→ **Dimension A**

→ **Material**

St 37 no surface finishing – no further information required

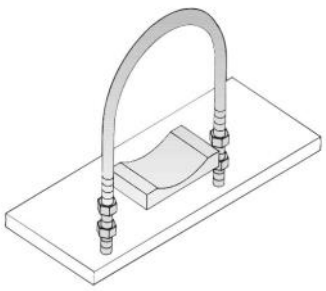
St 37 Fe/Zn 8 B – **ZINC**

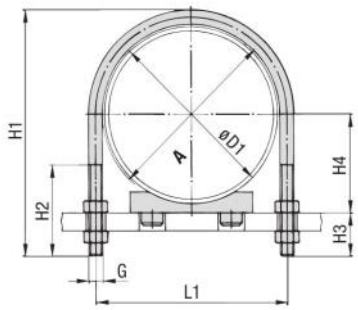
Assembly consisting of:
1 x Round Steel U-Bolt
4 x Nuts DIN 934

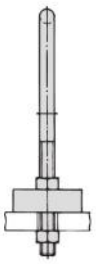
Other materials and surface finishings on request.

3/00

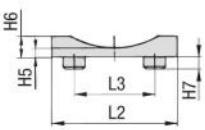
with plastic pipe saddle – short – RUK

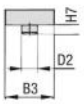






RUK
DN 20 – DN 40 dimension
L3 is 90° staggered





DN	Pipe-O.D. ØD1		Round Steel U-Bolt UBC												Plastic Pipe Saddle RUK													
	mm	Nominal Bore	A	L1 mm	L1 in	H1 mm	H1 in	H2 mm	H2 in	H3 mm	H3 in	H4 mm	H4 in	G mm	G in	L2 mm	L2 in	L3 mm	L3 in	B mm	B in	H5 mm	H5 in	H6 mm	H6 in	H7 mm	H7 in	D2 mm	D2 in
20	25		30	40	1.57″	73.5	2.89″	46	1.81″	30	1.18″	17.5	.69″	M10	3/8-16″	24	.94″	25	.98″	35	1.37″	5	.19″	8	.31″	5	.19″	8	.31″
	26.9	3/4″										18.5	.73″																
25	30		38	48	1.88″	81	3.18″	50	1.96″			20	.78″																
	33.7	1″										22	.86″																
32	38		46	56	2.20″	89	3.50″					24	.94″																
	42.4	1 1/4″										26.2	1.03″																
40	44.5		52	62	2.44″	100	3.93″	55	2.16″	35	1.37″	27.2	1.07″																
	48.3	1 1/2″										29	1.14″																
50	57		64	76	2.99″	118	4.65″	63	2.48″	39	1.53″	33.5	1.32″	M12	7/16-11″	38	1.46″			50	1.96″			10	.39″	6	.23″	10	.39″
	60.3	2″										35.2	1.39″																
65	76.1	2 1/2″	82	94	3.70″	135	5.31″	77	3.03″			43	1.69″																
80	88.9	3″	94	106	4.13″	152	5.98″	82	3.22″	41	1.61″	52.5	2.07″																
100	108		120	136	5.35″	190	7.48″	105	4.13″	49	1.92″	62	2.44″	M16	5/8-11″	75	2.95″	40	1.57″	70	2.75″			17	.66″			15	.59″
	114.3	4″										65	2.55″																
125	133		148	164	6.46″	217	8.54″					74.5	2.93″																
	139.7	5″										78	3.07″																
150	159		176	192	7.56″	247	9.72″			51	2.00″	87.5	3.44″			140	5.51″	90	3.54″	75	2.95″	8	.31″	26	1.02″	10	.39″	25	.98″
	168.3	6″										92	3.62″																
175	193.7		202	218	8.58″	273	10.75″					105	4.13″																
200	216		228	248	9.76″	311	12.24″	125	4.92″	59	2.32″	116	4.57″	M20	3/4-10″														
	219.1	8″										117.5	4.63″																
250	267		282	302	11.89″	364	14.33″					141.5	5.57″																
	273	10″										144.5	5.69″																
300	318		332	352	13.86″	418	16.46″			62	2.44″	167	6.57″																
	323.9	12″										170	6.69″																
350	355.6	14″	378	402	15.83″	475	18.70″	145	5.71″	70	2.75″	186	7.32″	M24	7/8-9″	220	8.66″	150	5.90″					32	1.25″			30	1.18″
	368											192	7.56″																
400	406.4	16″	428	452	17.80″	526	20.71″					211	8.31″																
	419											217.5	8.56″																
500	508	20″	530	554	21.81″	627	24.69″					262	10.31″																
	521											269	10.59″																

ORDER CODE

Round Steel U-Bolt
UBC xxxx ***
→ **Dimension A**

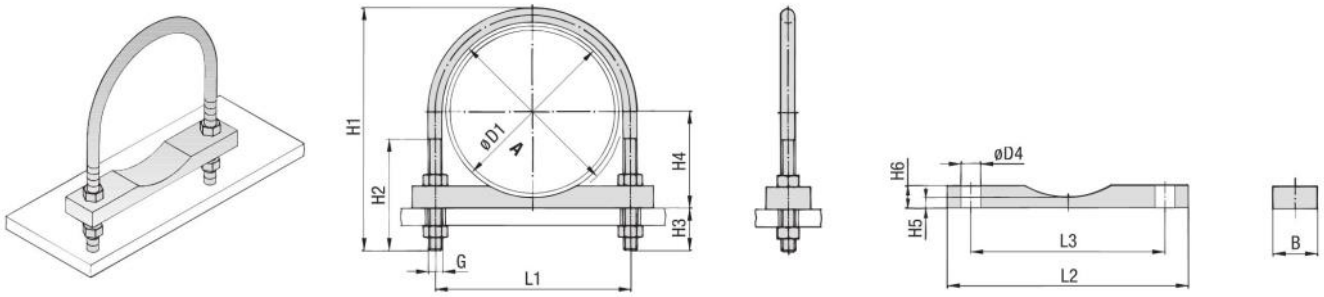
Clamp consisting of:
1 x Round Steel U-Bolt
4 x Nuts DIN 934
(2 bolts up to DN 25)

Plastic Pipe Saddle
RUK ***,*xx
→ **PP** – Polypropylene
PA – Polyamide
→ **Pipe -O.D. ØD1** (mm)

Other materials and surface finishings on request.

3/00

with plastic pipe saddle – long – RUL



DN	Pipe-O.D. ØD1 mm	Nominal Bore	Round Steel U-Bolt UBC A	A in	L1 mm	L1 in	H1 mm	H1 in	H2 mm	H2 in	H3 mm	H3 in	H4 mm	H4 in	G	G in	Plastic Pipe Saddle RUL L2 mm	L2 in	L3 mm	L3 in	B mm	B in	H5 mm	H5 in	H6 mm	H6 in	øD4 mm	øD4 in
20	25		**30**	1.18″	40	1.57″	73.5	2.88″	46	1.81″			17.5	.69″			75	2.95″	40	1.57″								
	26.9	3/4											18.5	.73″														
25	30		**38**	1.46″	48	1.88″	81	3.18″	50	1.96″	30	1.18″	20	.78″	M10	3/8-16″	80	3.14″	48	1.88″	30	1.18″			12	.47″	11	.43″
	33.7	1											22	.86″														
32	38		**46**	1.81″	56	2.20″	89	3.50″					24	.94″			90	3.54″	56	2.20″			5	.19″				
	42.4	1 1/4											26.2	1.04″														
40	44.5		**52**	2.04″	62	2.44″	100	3.93″	55	2.16″	35	1.37″	27.2	1.07″			95	3.74″	62	2.44″					15	.59″		
	48.3	1 1/2											29	1.14″														
50	57		**64**	2.51″	76	2.99″	118	4.65″	63	2.48″	39	1.53″	33.5	1.32″	M12	7/16-11″	110	4.33″	76	2.99″	35	1.37″					14	.55″
	60.3	2											35.2	1.39″														
65	76.1	2 1/2	**82**	3.22″	94	3.70″	135	5.31″	77	3.03″			43	1.69″			135	5.31″	94	3.70″								
80	88.9	3	**94**	3.70″	106	4.13″	152	5.98″	82	3.22″			54.5	2.15″			145	5.71″	106	4.13″								
100	108		**120**	4.72″	136	5.35″	190	7.48″	105	4.13″	47	1.85″	64	2.51″	M16	5/8-11″	190	7.48″	136	5.35″	40	1.57″	10	.39″	20	.78″	18	.70″
	114.3	4											67	2.63″														
125	133		**148**	5.83″	164	6.46″	217	8.54″					76.5	3.01″			220	8.66″	164	6.46″								
	139.7	5											80	3.14″														
150	159		**176**	6.93″	192	7.56″	247	9.72″					91.5	3.60″			250	9.84″	192	7.56″	50	1.96″	12	.47″	25	.98″		
	168.3	6											96	3.77″														
175	193.7		**202**	7.95″	218	8.58″	273	10.75″					109	4.29″			270	10.63″	218	8.58″								
200	216		**228**	8.98″	248	9.76″	311	12.24″	125	4.92″	55	2.16″	120	4.72″	M20	3/4-10″	315	12.40″	248	9.76″							22	.86″
	219.1	8											121.5	4.78″														
250	267		**282**	11.10″	302	11.89″	364	14.33″					145.5	5.73″			370	14.57″	302	11.89″								
	273	10											148.5	5.85″														
300	318		**332**	13.07″	352	13.86″	418	16.46″					174	6.85″			420	16.54″	352	13.86″								
	323.9	12											177	6.97″														
350	355.6	14	**378**	14.88″	402	15.83″	475	18.70″	145	5.71″	63	2.48″	193	7.60″	M24	7/8-9″	480	18.90″	402	15.83″	60	2.36″	15	.59″	30	1.18″	26	1.02″
	368												199	7.83″														
400	406.4	16	**428**	16.85″	452	17.80″	526	20.71″					218	8.58″			540	21.26″	452	17.80″								
	419												224.5	8.84″														
500	508		**530**	20.87″	554	21.81″	627	24.69″					269	10.59″			640	25.20″	554	21.81″								
	521												276	10.87″														

ORDER CODE

Round Steel U-Bolt
UBC xxxx ***
→ **Dimension A**

Plastic Pipe Saddle
RUL ***,* xx**
→ **PP** – Polypropylene
PA – Polyamide
→ **Pipe-O.D. ØD1** (mm)

Clamp consisting of:
1 x Round Steel U-Bolt
4 x Nuts DIN 934
(2 bolts up to DN25)

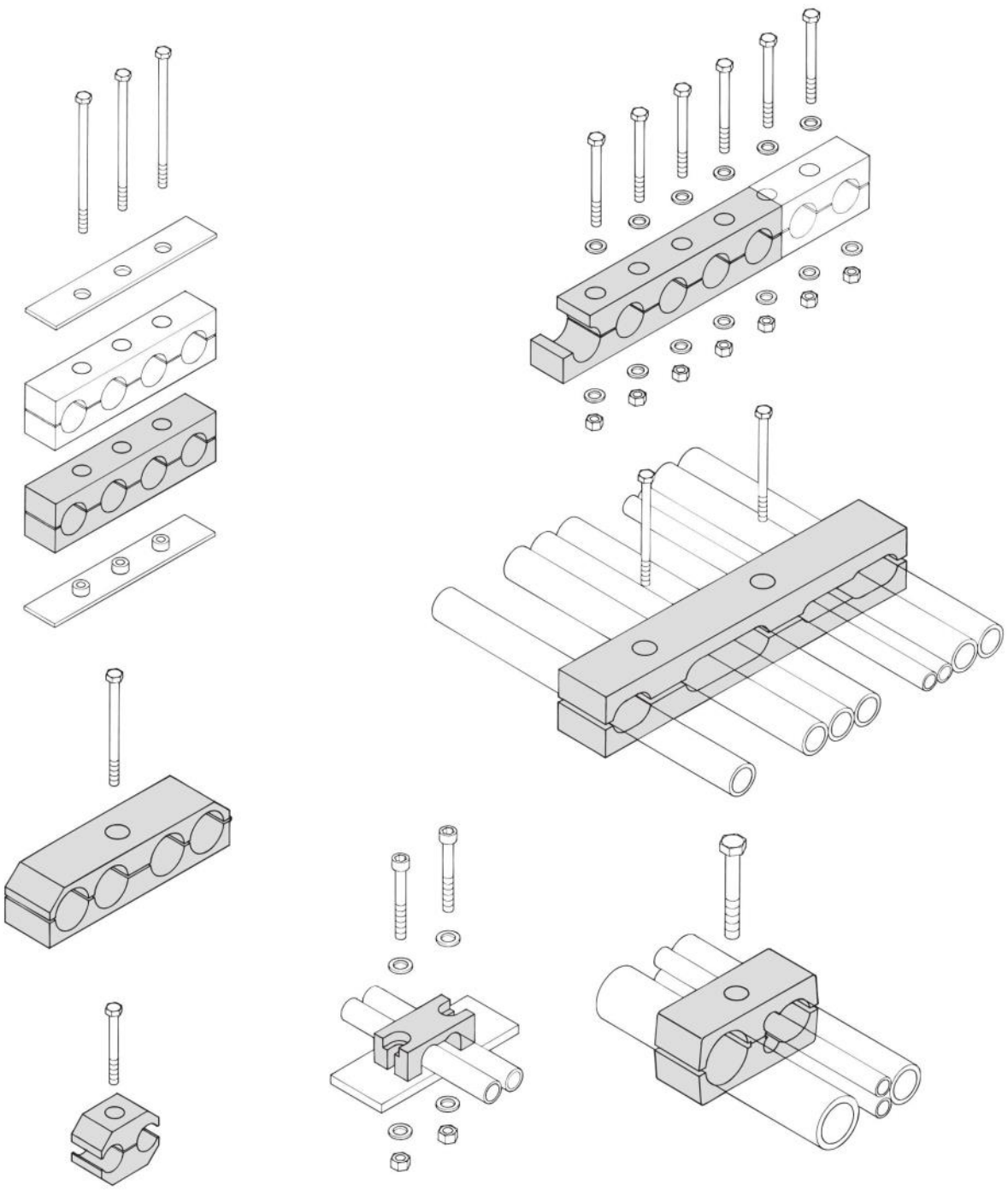
Other materials and surface finishings on request.

3/00

Custom designed according to customer's specifications or based on STAUFF developments.

Machined Versions

Dimensions and designs acc. to customer's specifications.



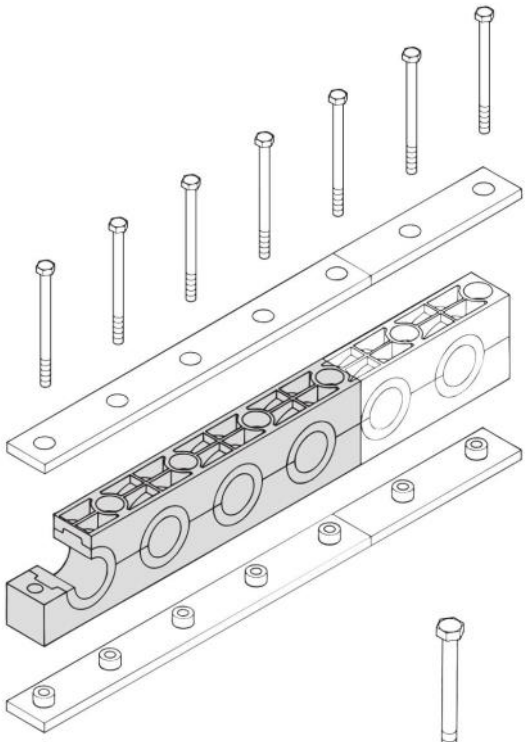
Accessories including weld plates, cover plates, bolts and rubber inserts are available on request.

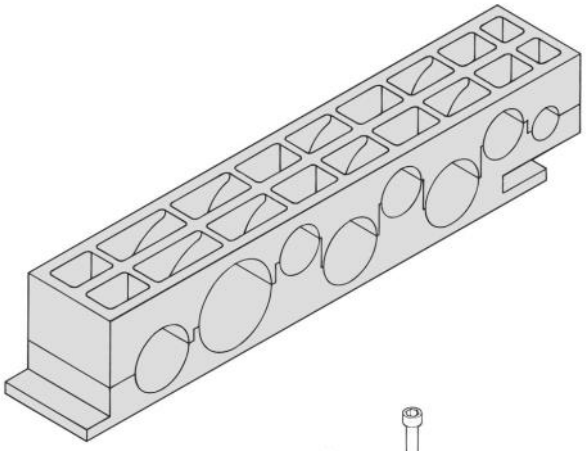
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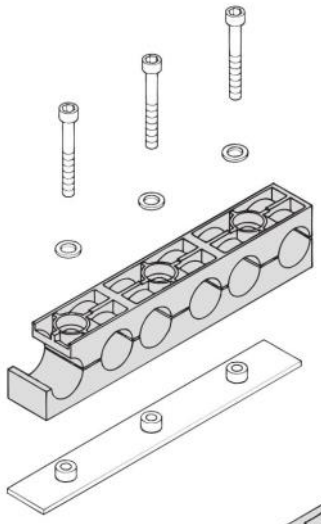
Custom designed for OEM production according to customer's specifications or based on STAUFF developments.

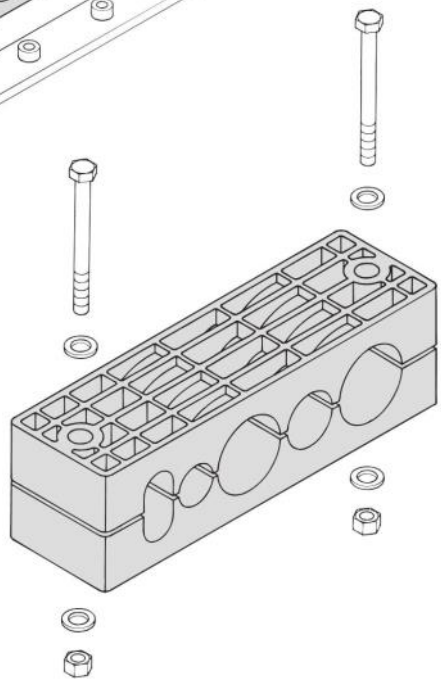
Injection Molded Flexi-Clamp

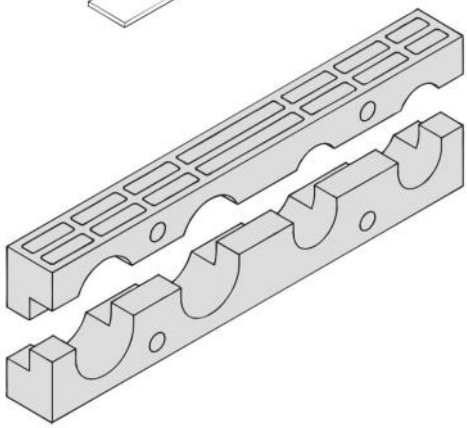
Max. dimensions: Length 650 mm · Height 80 mm · Width 70 mm
Materials: Polypropylene, Polyamide
Other thermoplastics on request.









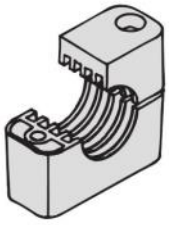


Accessories including weld plates, cover plates, bolts and rubber inserts are available on request.

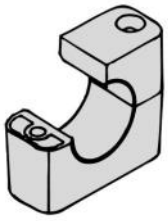
3/00

Design of Clamp Bodies

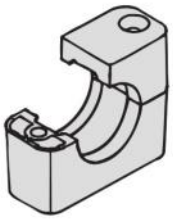
STANDARD-SERIES



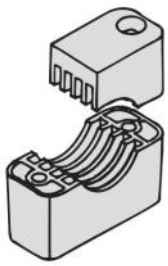
Standard design – profiled inside



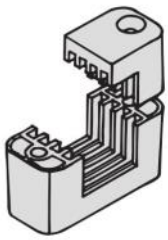
H-design – smooth inside
(recommended for hoses)



RI-design
for rubber inserts

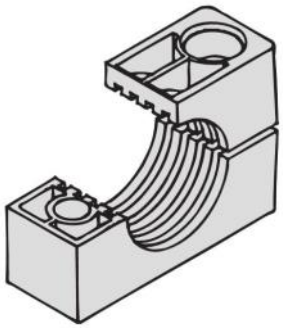


Oval-design
(Special Order)

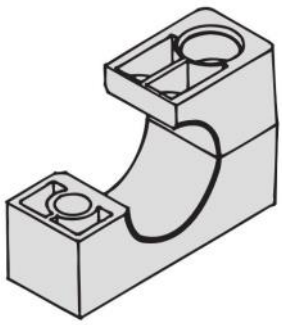


Rectangular-design
(Special Order)

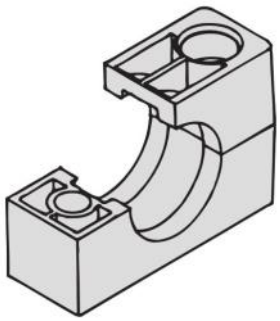
HEAVY-SERIES



Standard design – profiled inside

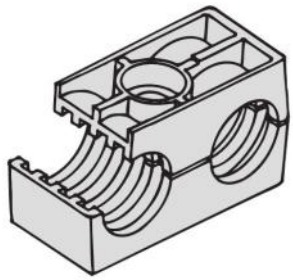


H-design – smooth inside
(recommended for hoses)

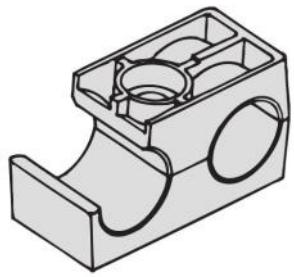


RI-design
for rubber inserts

TWIN-SERIES



Standard design – profiled inside



H-design – smooth inside
(recommended for hoses)

3/00

Materials, Material Properties, Technical Data

Clamp Body Materials

Clamp Body Material Properties	Polypropylene PP Color: Green	Polyamide PA Color: Black	Aluminum AlSi12	Santoprene SA Color: Black
Mechanical Properties				
Flexural Deflection	36 N/mm²	130 . . . 200 N/mm²		
Impact Resistance	no failure	60 KJ/m²		
Compressive Strength	90 N/mm²	120 N/mm²	60 – 80 HB 5/250	Hardness: 73 – 87° Shore A
Modulus of Elasticity	1150 N/mm²	3000 N/mm²	70.000 N/mm²	3.5 – 6.9 N/mm²
Tensile Stress	28 N/mm²	140 N/mm²	220 – 300 N/mm²	8.5 – 15.5 N/mm²
Thermal Properties				
Max. Temperature (Brief Exposure)	– 30° to + 215° F – 30° to + 102° C	– 40° to + 356° F – 40° to + 180° C	– 40° to 752° F – 40° to 400° C	– 40° to + 425° F – 40° to + 210° C
Operating Temperature (Continuous Exposure)	– 22° to + 194° F – 30° to + 90° C	– 40° to + 284° F – 40° to + 140° C	– 40° to 500° F – 40° to 260° C	– 40° to + 248° F – 40° to + 120° C
Chemical Properties				
Weak acids, solvents	cond. consistent	cond. consistent	cond. consistent	consistent
Benzine, mineral oils	cond. consistent	consistent	consistent	cond. consistent
Alcohol, other oils, seawater	consistent	consistent	consistent	consistent

Other thermoplastics and materials for clamp bodies on request.

Metal Parts

– Surface finishing

In addition to the standard surface finish, alternative finishes are available on request (e.g. Fe/Zn 12 C)

– All metal parts made of mild carbon steel St 37 (see order code – components)

– Stainless Steel Metal Parts

All metal parts are also **available ex stock** in two different stainless steel qualities:

– Noncorrodible Stainless Steel A2 - 1.4301/1.4305 (AISI 304)

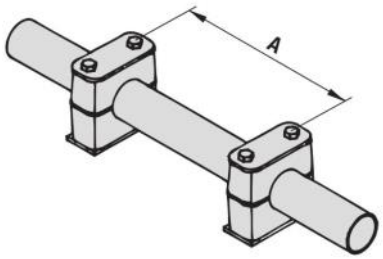
– Noncorrodible and acid resistant Stainless Steel A4 - 1.4401/1.4571 (AISI 316/316Ti)

– Threads

All threaded parts are available with metric threads on request.
(see thread-chart page 42)

3/00

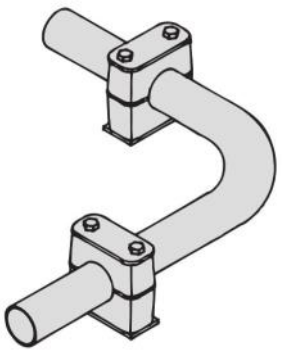
Spacings for Clamps



The recommended spacings for clamps stated below are standard values and are valid for static loads.

Pipe-O.D.		Spacing A	
mm	in	m	ft
6.0 – 12.7	.23″ - .50″	1.0	3.3
12.7 – 22.0	.50″ - .86″	1.2	4.0
22.0 – 32.0	.86″ - 1.25″	1.5	5.0
32.0 – 38.0	1.25″ - 1.50″	2.0	6.5
38.0 – 57.0	1.5″ - 2.25″	2.7	8.8
57.0 – 75.0	2.25″ - 2.95″	3.0	9.8
75.0 – 76.1	2.95″ - 3.0″	3.5	11.5
76.1 – 88.9	3.0″ - 3.50″	3.7	12.0
88.9 – 102.0	3.50″ - 4.0″	4.0	13.0
102.0 – 114.0	4.0″ - 4.50″	4.5	14.7
114.0 – 168.0	4.50″ - 6.6″	5.0	16.5
168.0 – 219.0	6.6″ - 8.6″	6.0	19.6
219.0 – 324.0	8.6″ - 12.7″	6.7	22.0
324.0 – 356.0	12.7″ - 14.00″	7.0	23.0
356.0 – 406.0	14.00″ - 16.00″	7.5	24.6
406.0 – 419.0	16.00″ - 16.50″	8.2	26.9
419.0 – 508.0	16.50″ - 20.00″	8.5	27.9
508.0 – 521.0	20.00″ - 20.50″	9.0	29.5
521.0 – 558.0	20.50″ - 22.00″	10.0	32.8
558.0 – 800.0	22.00″ - 31.50″	12.5	41.0

Pipe Bend Installation



Pipe bends should be supported by STAUFF clamps as near to the bends as possible.
Furthermore, it is recommended to design these clamps as fixed point clamps.

Thread Chart

Metric Thread/UNC Threads

STANDARD-SERIES

STAUFF Group	Metric Thread	UNC Thread
1	M 6	1/4 – 20 UNC
1A		
2		
3		
4		
5		
6		
7		
8		

HEAVY-SERIES

STAUFF Group	Metric Thread	UNC Thread
3S	M 10	3/8 –16 UNC
4S		
5S		
6S	M 12	7/16–14 UNC
7S	M 16	5/8 –11 UNC
8S	M 20	3/4 –10 UNC
9S	M 24	1 1/8 – 7 UNC
10S	M 30	1 1/4 – 7 UNC
11S		
12S		

TWIN-SERIES

STAUFF Group	Metric Thread	UNC Thread
1D	M 6	1/4 –20 UNC
2D	M 8	5/16–18 UNC
3D		
4D		
5D		

3/00

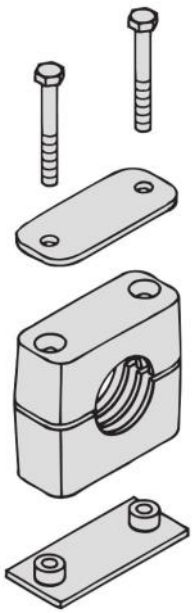
Installation Information

Installation on Weld Plates

STAUFF weld plates are available for the following Series:

– Standard-Series
– Heavy-Series
– Twin-Series
– Special Clamps

For best alignment of STAUFF clamps it is recommended to mark their location first. Weld plates, push on bottom half of clamp, install pipe, mount top half of clamp and cover plate and bolt unit together.
In order to avoid damage to the clamp bodies it is recommended to mount the plastic clamp bodies after having welded the weld plates.

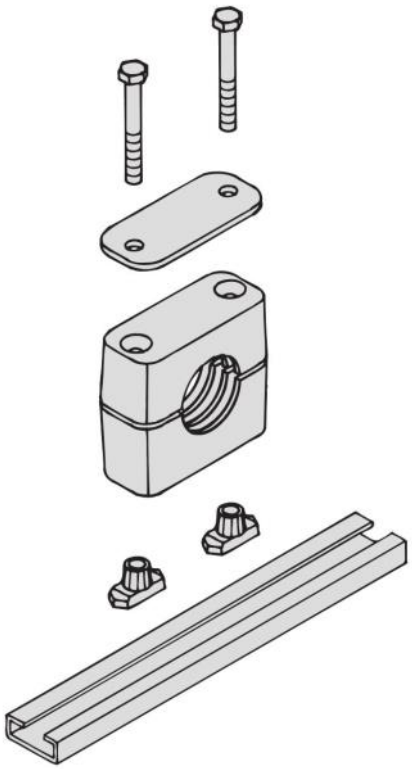


Installation on Mounting Rails

STAUFF mounting rails can be used with the following Series:

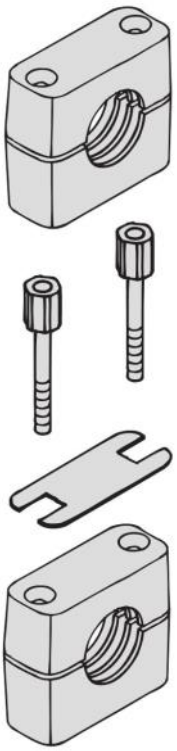
– Standard-Series
– Heavy-Series (Group 3S – 6S)
– Twin-Series
– Special Clamps

STAUFF mounting rails are available in four different height sizes.
The rails are either welded or bolted to the supporting construction.
For Standard- and Twin-Series insert hexagon rail nut and turn to lock.
For Heavy-Series slide in rail nut.
Push on bottom half of clamp. install pipe, mount top half of clamp and cover plate and bolt unit together.
Clamp units can be adjusted before being firmly bolted.

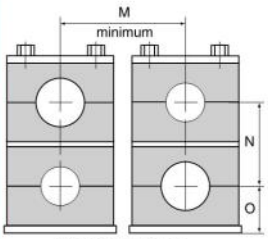


Multi-Level Assembly

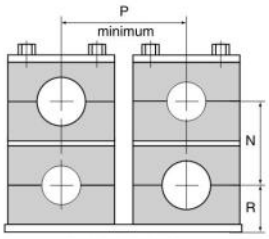
STAUFF multi-level pipe clamps permit easy stacking of several tubes or pipes of the same group.
(Twin-Clamps group 2 – 5 allow stacking of different group sizes.)
The clamps are connected by stacking bolts (AF).
Safety plates (SIG/SIP/SI) inserted between the clamps prevent stacking bolts from turning.
STAUFF stacking assembly can be fitted to weld plates or to rails.



3/00

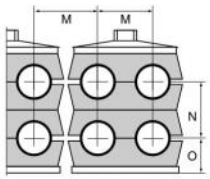


WITH WELD PLATE
ALLOWING FOR WELD BEAD

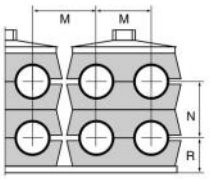


RAIL MOUNTING

Group Code		Size Range Ø d Inch	Installation Dimensions in Inches							WEIGHT
			M	P	N	O	R With Rail Type: TS11	TS14	TS30	
1	in	1/4 to 3/8	1 15/16	1 3/16	1 3/16	5/8	15/16	1 1/16	1 11/16	.16 lbs
	mm	6 to 10.2	33	30	30	16.5	24.5	27.5	43.5	.07 kg
1a	in	1/4 to 3/8	1 7/16		1 1/8	5/8	15/16	1 1/16	1 11/16	.16 lbs
	mm	6 to 10.2	36		29	16	24	27	43	.07 kg
2	in	1/4 to 5/8	1 11/16		1 7/16	3/4	1 1/16	1 3/16	1 13/16	.18 lbs
	mm	6.4 to 18/0	42		36	19.5	27.5	30.5	46.5	.08 kg
3	in	3/8 to 1	2		1 1/2	13/16	1 1/8	1 1/4	1 7/8	.20 lbs
	mm	6.4 to 25.4	50		38	20.5	28.5	31.5	47.5	.09 kg
4	in	1/2 to 3/4 P	2 3/8		1 3/4	15/16	1 1/4	1 3/8	2	.25 lbs
	mm	12.7 to 30.0	60		45	24	32	35	51	.12 kg
5	in	1/2 to 1 1/4 P	2 13/16		2 3/8	1 1/4	1 9/16	1 11/16	2 5/16	.34 lbs
	mm	12.7 to 42.1	70		61	32	40	43	59	.15 kg
6	in	3/4 P to 2 T	3 1/2		2 11/16	1 7/16	1 3/4	1 7/8	2 1/2	.42 lbs
	mm	26.6 to 50.8	88		69	36	44	47	63	.19 kg
7	in	2 1/4 to 3	4 13/16		3 3/4	2	2 1/4	2 1/4	3	.74 lbs
	mm	57.3 to 76.2	122		97	50.8	57	60	76	.33 kg
8	in	3 to 4	5 7/8		4 3/4	2 7/16	2 3/4	2 7/8	3 1/2	.85 lbs
	mm	88.9 to 102.0	148		121	61.5	69	72	88	.38 kg

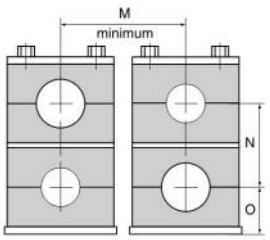


WITH WELD PLATE

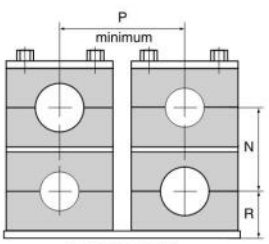


RAIL MOUNTING

Group Code		Size Range Ø d Inch	Installation Dimensions in Inches						WEIGHT
			M	N	O	R With Rail Size TS11	TS14	TS30	
1	in	1/4 to 3/8	13/16	13/16	9/16	13/16	15/16	1 9/16	.18 lbs
	mm	6.4 to 10.2	20	20	15	21	24	40	.08 kg
2	in	1/2 to 5/8	1 1/8	1	11/16	15/16	1 1/16	1 11/16	.30 lbs
	mm	12.7 to 17.1	29	26	18	24	27	43	.14 kg
3	in	3/4 to 1	1 7/16	1 7/16	15/16	1 3/16	1 5/16	1 15/16	.38 lbs
	mm	19 to 25.4	36	37	23.5	29.5	32.5	48.5	.17 kg
4	in	1 1/8	1 3/4	1 11/16	1	1 1/4	1 3/8	2	.47 lbs
	mm	28	45	42	26	32	35	51	.21 kg
5	in	1 1/4 to 1 1/2	2 3/16	2 1/8	1 1/4	1 1/2	1 5/8	2 1/4	.64 lbs
	mm	31.8 to 42.1	56	54	32	38	41	57	.29 kg



WITH WELD PLATE



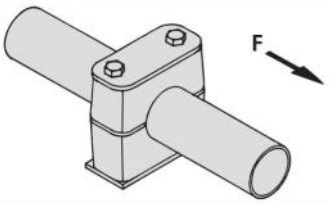
RAIL MOUNTING

Group Code		Size Range Ø d Inch	Installation Dimensions M	N	O	P	R	WEIGHT
3S	in	7/32 - 23/32	2 15/16	1 9/16	15/16	2 5/16	1 1/2	.73 lbs
	mm	6 - 18	74	40	24	58	38	.33 kg
4S	in	3/4 - 1 3/16	3 1/2	2 3/16	1 1/4	2 7/8	1 13/16	.92 lbs
	mm	19 - 30	89	56	32	73	46	.42 kg
5S	in	1 3/16 - 1 37/64	4 1/16	2 11/16	1 1/2	3 7/16	2 1/16	1.12 lbs
	mm	30 - 40	103	68	38	87	52	.51 kg
6S	in	1 1/2 - 2 3/4	5 7/8	3 7/8	2 1/8	4 5/8	2 5/8	2.86 lbs
	mm	38 - 70	150	98	54	118	66	1.30 kg
7S	in	2 9/16 - 3 1/2	7 1/8	5 1/16	2 3/4			5.35 lbs
	mm	65 - 88.9	180	129	69			2.43 kg
8S	in	3 1/2 - 5 15/64	10 5/8	7 1/16	3 13/16			13.11 lbs
	mm	88.9 - 133	270	180	96			5.96 kg
9S	in	5 15/64-6 5/8	11 1/8	8 3/8	4 7/16			17.16 lbs
	mm	133 - 168	282	213	113			7.80 kg
10S	in	6 5/8 - 8 5/8	13 7/8	11 3/8	6 1/16			46.20lbs
	mm	168 - 219	352	289	154			21.00kg
11S	in	8 5/8 - 12 3/4	21 1/16	17 1/8	9 1/16			108.90lbs
	mm	219 - 324	535	435	230			49.50 kg
12S	in	14 1/64 - 15 63/64	27 3/8	21 7/8	11 7/16			148.50 lbs
	mm	356 - 406	695	555	290			67.50 kg

Rail Mounting not available Sizes 7s through 12s

3/00

Tightening Torques and Maximum Loads In Pipe Direction



All tightening torques and maximum loads in pipe direction refer to clamps with cover plates and hexagon head bolts acc. to DIN 931/933.

The max. load in pipe direction (acc. to DIN 3015, part 10) is an average value, determined by three tests at 23° C with a steel pipe acc. to DIN 2448, St 37 taking static friction into consideration.

Sliding starts when the shown values **(F)** are reached.

STANDARD-SERIES (acc. to DIN 3015, part 1)

STAUFF Group	Hexagon Head Bolt	Polypropylene		Polyamide		Aluminum	
		Tightening torque [Nm]	Max. load in pipe direction F [kN]	Tightening torque [Nm]	Max. load in pipe direction F [kN]	Tightening torque [Nm]	Max. load in pipe direction F [kN]
1	M 6 1/4-20 UNC	8	0.6	10	0.6	12	3.5
1 A		8	1.1	10	0.7	12	4.2
2		8	1.3	10	0.8	12	4.3
3		8	1.4	10	1.6	12	4.9
4		8	1.5	10	1.7	12	5.0
5		8	1.9	10	2.0	12	7.3
6		8	2.0	10	2.5	12	8.9

HEAVY-SERIES (acc. to DIN 3015, part 2)

STAUFF Group	Hexagon Head Bolt DIN 931/933		Polypropylene		Polyamide		Aluminum	
			Tightening torque [Nm]	Max. load in pipe direction F [kN]	Tightening torque [Nm]	Max. load in pipe direction F [kN]	Tightening torque [Nm]	Max. load in pipe direction F [kN]
3 S	M 10	3/8″-16	12	1.6	20	4.2	30	12.1
4 S			12	2.9	20	4.5	30	15.1
5 S			15	3.3	25	5.1	35	15.5
6 S	M 12	7/16″-14	30	8.2	40	9.3	55	29.4
7 S	M 16	5/8″-11	45	11.0	55	25.8	120	34.9
8 S	M 20	3/4″-10	80	14.0	150	21.0	220	70.6
9 S	M 24	7/8″-9	110	28.0	200	32.0	250	50.0
10 S	M 30	1 1/8″-7	180	40.0	350	48.0	500	84.5
11 S		1 1/4″-7	200	119.0	370	125.0	500	181.5
12 S			270	168.0	450	180.0	600	244.5

TWIN-SERIES (acc. to DIN 3015, part 3)

STAUFF Group	Hexagon Head Bolt DIN 931/933		Polypropylene or Polyamide	
			Tightening torque [Nm]	Max. load in pipe direction F [kN]
1 D	M 6	1/4″-20	5	0.45
2 D	M 8	5/16″-8	12	1.05
3 D			12	1.05
4 D			12	1.35
5 D			8	1.35

3/00

STAUFF®

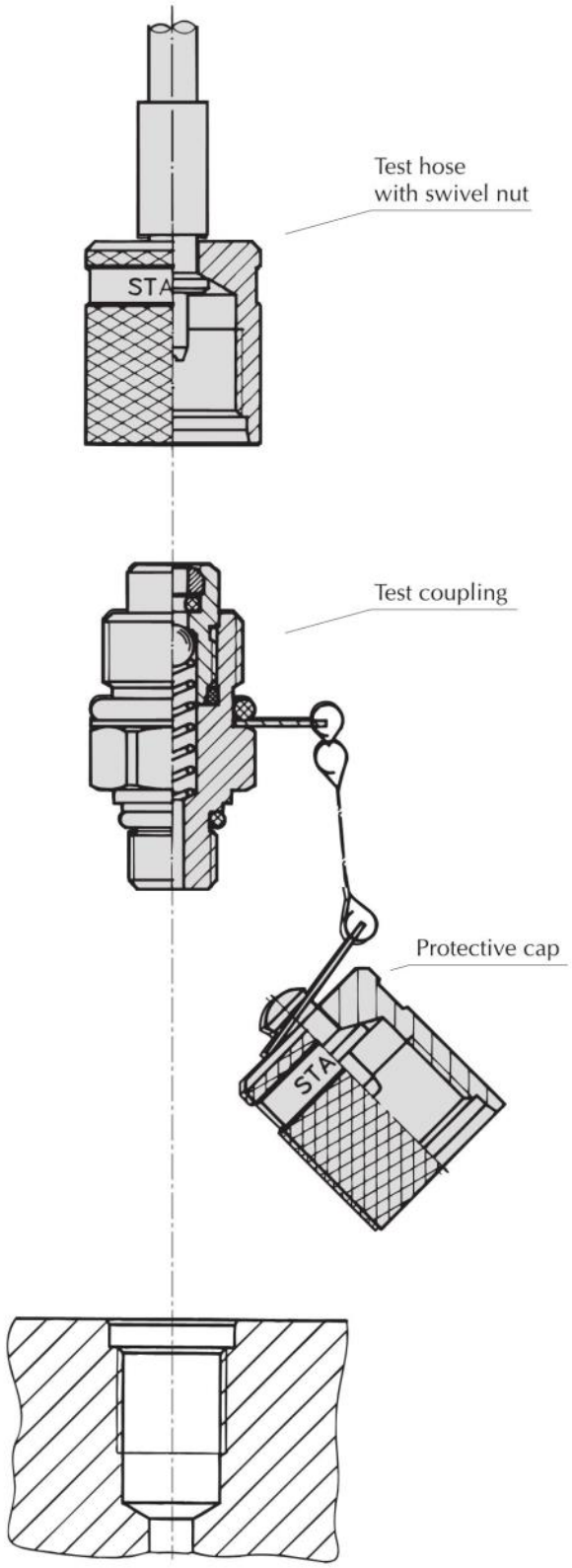
Test



Quality and Service Worldwide







FAST COUPLING FOR:

- Monitoring and control of pressure
- Venting
- Sampling

ADVANTAGES:

- Test system at working pressure
- Connection is leakproof before **ball check** is open
- Simple connection to measurement, control and switching devices
- Self locking metal protective cap
- Minimizes introduction of contamination into hydraulic systems

WORKING PRESSURE:

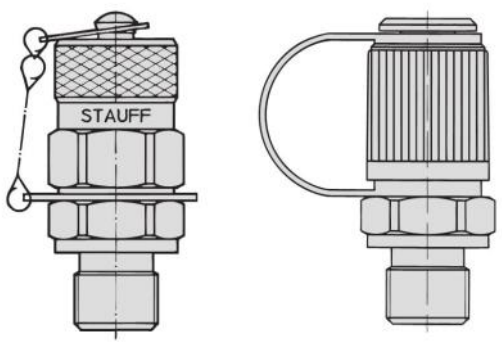
- Max. working pressure 9000 Psi (630 bar)
  For SMK style G, K and S the recommended working pressure of fitting manufacturer should be noted
- Connection under pressure up to 5800 Psi (400 bar) max.

MATERIALS:

- Metal parts: Steel, Stainless Steel on request
- Ball: Stainless Steel
- Seals:
  P = NBR-BUNA Temperature range – 4°F to +195°F (– 20° C to +90° C)
  V = FPM-VITON Temperature range – 4°F to +392°F (– 20° C to +200° C)
  E = EPDM Ethylene Propylene (for Brake Fluid) Temperature range – 40°F to +302°F (– 40° C to + 150° C)
- Hose: Polyamide Temperature range –31°F to +212°F (–35° C to +100° C)

MEDIA:

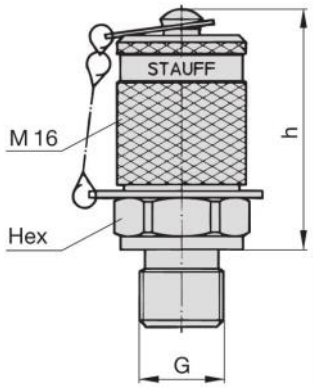
- Suitable for hydraulic oils and other mineral oil based fluids (Check compatibility of seal material)
- For use with other liquid media please consult STAUFF for availability of alternate seals

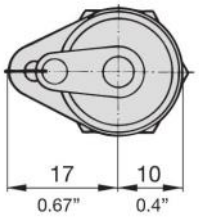


The complete STAUFF-TEST-20-Type-SMK range is also available with hexagonal protection cap made of steel or plastic protection cap

3/00

TEST COUPLING WITH PROTECTIVE CAP SMK (formerly TCM)



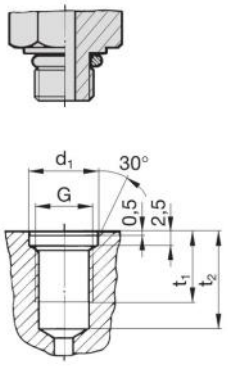


Thread G	h mm / in	Hex mm / in	Order No. NBR (BUNA)	Order No. FPM (VITON)	Seal Type (see below)
M8 x 1	37 / 1.46	17 / 0.67	SMK 20 – M8 x 1 – PA	SMK 20 – M8 x 1 – VA	O-Ring Type A
M10 x 1	37 / 1.46	17 / 0.67	SMK 20 – M10 x 1 – PA	SMK 20 – M10 x 1 – VA	O-Ring Type A
M12 x 1.5	37 / 1.46	17 / 0.67	SMK 20 – M12 x 1.5 – PC	SMK 20 – M12 x 1.5 – VC	O-Ring Type C
M14 x 1.5	37 / 1.46	19 / 0.75	SMK 20 – M14 x 1.5 – PB	SMK 20 – M14 x 1.5 – VB	Metal joint Type B
M16 x 1.5	37 / 1.46	22 / 0.87	SMK 20 – M16 x 1.5 – PB	SMK 20 – M16 x 1.5 – VB	Metal joint Type B
G 1/8	39 / 1.54	17 / 0.67	SMK 20 – G 1/8 – PC	SMK 20 – G 1/8 – VC	O-Ring Type C
G 1/4	37 / 1.46	19 / 0.75	SMK 20 – G 1/4 – PB	SMK 20 – G 1/4 – VB	Metal joint Type B
G 1/4	37 / 1.46	19 / 0.75	SMK 20 – G 1/4 – PC	SMK 20 – G 1/4 – VC	O-Ring Type C
G 3/8	37 / 1.46	22 / 0.87	SMK 20 – G 3/8 – PB	SMK 20 – G 3/8 – VB	Metal joint Type B
R 1/8 taper	37 / 1.46	17 / 0.67	SMK 20 – R 1/8 K-PD	SMK 20 – R 1/8 K-VD	Taper Type D
R 1/4 taper	36 / 1.42	17 / 0.67	SMK 20 – R 1/4 K-PD	SMK 20 – R 1/4 K-VD	Taper Type D
1/8 NPT	36 / 1.42	17 / 0.67	SMK 20 – 1/8 NPT-PD	SMK 20 – 1/8 NPT-VD	Taper Type D
1/4 NPT	35 / 1.38	17 / 0.67	SMK 20 – 1/4 NPT-PD	SMK 20 – 1/4 NPT-VD	Taper Type D
5/16 – 24 UNF	38 / 1.50	17 / 0.67	SMK 20 – 5/16 UNF-PE	SMK 20 – 5/16 UNF-VE	O-Ring Type E
7/16 – 20 UNF	38 / 1.50	17 / 0.67	SMK 20 – 7/16 UNF-PE	SMK 20 – 7/16 UNF-VE	O-Ring Type E
1/2 – 20 UNF	38 / 1.50	17 / 0.67	SMK 20 – 1/2 UNF-PE	SMK 20 – 1/2 UNF-VE	O-Ring Type E
9/16 – 18 UNF	37 / 1.46	19 / 0.75	SMK 20 – 9/16 UNF-PE	SMK 20 – 9/16 UNF-VE	O-Ring Type E

Other port connections and seals on request.

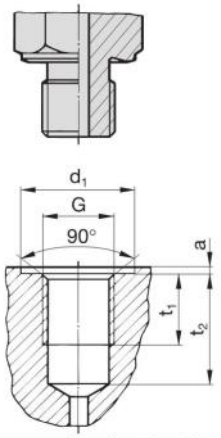
PORT CONNECTIONS AND SEALS

Type A



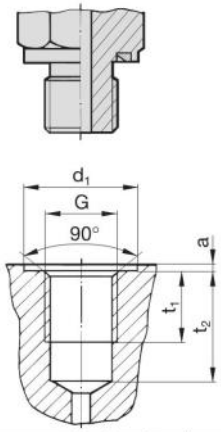
G	d1 mm / in	t1 mm / in	t2 mm / in
M8 x 1	9,5 + 0,1 / 0.37	11 / 0.43	15,5 / 0.61
M10 x 1	11,5 + 0,1 / 0.45	12 / 0.47	16,5 / 0.65

Type B



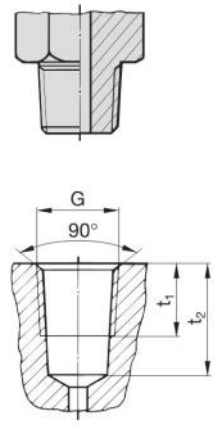
G	d1 mm / in	t1 mm / in	t2 mm / in	a mm / in
M14 x 1,5	20 / 0.79	12 / 0.47	18,5 / 0.73	1,5 / 0.06
M16 x 1,5	22 / 0.87	12 / 0.47	18,5 / 0.73	1,5 / 0.06
G 1/4	19 / 0.75	12 / 0.47	18,5 / 0.73	1,5 / 0.06
G 3/8	23 / 0.91	12 / 0.47	18,5 / 0.73	2 / 0.08

Type C



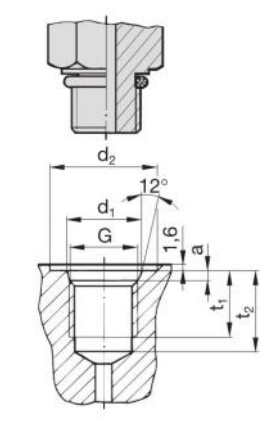
G	d1 mm / in	t1 mm / in	t2 mm / in	a mm / in
M12 x 1,5	18 / 0.71	12 / 0.47	18,5 / 0.73	1,5 / 0.06
G 1/8	15 / 0.59	8 / 0.31	13 / 0.51	1,0 / 0.04
G 1/4	19 / 0.75	12 / 0.47	18,5 / 0.73	1,5 / 0.06

Type D



G	t1 mm / in	t2 mm / in
R 1/8 taper	5,5 / 0.22	9,5 / 0.37
R 1/4 taper	8,5 / 0.33	13,5 / 0.53
1/8 NPT	6,9 / 0.27	11,6 / 0.46
1/4 NPT	10 / 0.39	16,4 / 0.65

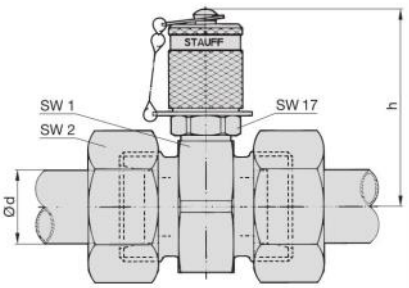
Type E



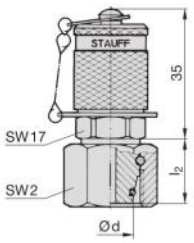
G	d1 mm / in	d2 mm / in	t1 mm / in	t2 mm / in	a mm / in
5/16 – 24 UNF	9,1 / 0.36	17 / 0.67	10 / 0.39	12 / 0.47	1,9 / 0.07
7/16 – 20 UNF	12,4 / 0.49	21 / 0.83	11,5 / 0.45	14 / 0.55	2,4 / 0.09
1/2 – 20 UNF	14 / 0.55	23 / 0.91	11,5 / 0.45	14 / 0.55	2,4 / 0.09
9/16 – 18 UNF	15,6 / 0.61	25 / 0.98	12,7 / 0.50	15,5 / 0.61	2,5 / 0.10

3/00

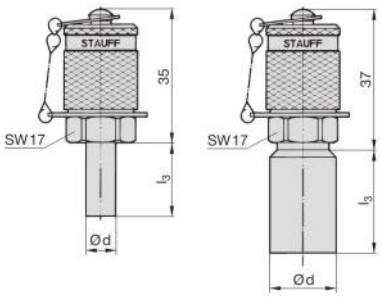
TEST COUPLING SMK (COMPRESSION RING FITTINGS ACC. TO DIN 2353)



Type G Test coupling complete with straight fitting



Type K Test coupling for 24° cone fittings



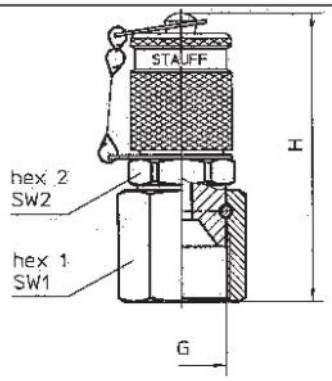
Type S Test coupling for compression ring assembly (not to be used for new constructions)

Series	PN	Pipe Ød	l_2 mm / in	l_3 mm / in	h mm / in	SW 1 mm / in	SW 2 mm / in	Order No.* Type G	Type K	Type S
L	315	6	15,5 / 0.61	20 / 0.79	49 / 1.93	24 / 0.94	14 / 0.55	SMK 20 – 6L–PG	SMK 20 – 6L–PK	SMK 20 – 6–PS
		8	15,5 / 0.61	20 / 0.79	49 / 1.93	24 / 0.94	17 / 0.67	SMK 20 – 8L–PG	SMK 20 – 8L–PK	SMK 20 – 8–PS
		10	16,5 / 0.65	22 / 0.87	49 / 1.93	24 / 0.94	19 / 0.75	SMK 20 – 10L–PG	SMK 20 – 10L–PK	SMK 20 – 10–PS
		12	17,5 / 0.69	22 / 0.87	50,5 / 1.99	27 / 1.06	22 / 0.87	SMK 20 – 12L–PG	SMK 20 – 12L–PK	SMK 20 – 12–PS
		15	21 / 0.83	25 / 0.98	52 / 2.05	30 / 1.18	27 / 1.06	SMK 20 – 15L–PG	SMK 20 – 15L–PK	SMK 20 – 15–PS
		18	19,5 / 0.77	28 / 1.10	53 / 2.09	32 / 1.26	32 / 1.26	SMK 20 – 18L–PG	SMK 20 – 18L–PK	SMK 20 – 18–PS
	160	22	20,5 / 0.81	30 / 1.18	55 / 2.17	36 / 1.42	36 / 1.42	SMK 20 – 22L–PG	SMK 20 – 22L–PK	SMK 20 – 22–PS
		28	25 / 0.98	32 / 1.26	57,5 / 2.26	41 / 1.61	41 / 1.61	SMK 20 – 28L–PG	SMK 20 – 28L–PK	SMK 20 – 28–PS
		35	30 / 1.18	42 / 1.65	60 / 2.36	46 / 1.81	50 / 1.97	SMK 20 – 35L–PG	SMK 20 – 35L–PK	SMK 20 – 35–PS
		42	31 / 1.22	45 / 1.77	64,5 / 2.54	55 / 2.17	60 / 2.36	SMK 20 – 42L–PG	SMK 20 – 42L–PK	SMK 20 – 42–PS
S	630	6	14,5 / 0.57	20 / 0.79	49 / 1.93	24 / 0.94	17 / 0.67	SMK 20 – 6S–PG	SMK 20 – 6S–PK	SMK 20 – 6–PS
		8	16,5 / 0.65	20 / 0.79	49 / 1.93	24 / 0.94	19 / 0.75	SMK 20 – 8S–PG	SMK 20 – 8S–PK	SMK 20 – 8–PS
		10	16,5 / 0.65	22 / 0.87	49 / 1.93	24 / 0.94	22 / 0.87	SMK 20 – 10S–PG	SMK 20 – 10S–PK	SMK 20 – 10–PS
		12	17,5 / 0.69	22 / 0.87	49 / 1.93	24 / 0.94	24 / 0.94	SMK 20 – 12S–PG	SMK 20 – 12S–PK	SMK 20 – 12–PS
		14	19,5 / 0.77	22 / 0.87	50,5 / 1.99	27 / 1.06	27 / 1.06	SMK 20 – 14S–PG	SMK 20 – 14S–PK	SMK 20 – 14–PS
	400	16	18 / 0.71	28 / 1.10	52 / 2.05	30 / 1.18	30 / 1.18	SMK 20 – 16S–PG	SMK 20 – 16S–PK	SMK 20 – 16–PS
		20	24 / 0.94	30 / 1.18	55 / 2.17	36 / 1.42	36 / 1.42	SMK 20 – 20S–PG	SMK 20 – 20S–PK	SMK 20 – 20–PS
		25	26 / 1.02	36 / 1.42	57,5 / 2.26	41 / 1.61	46 / 1.81	SMK 20 – 25S–PG	SMK 20 – 25S–PK	SMK 20 – 25–PS
		30	30 / 1.18	41 / 1.61	60 / 2.36	46 / 1.81	50 / 1.97	SMK 20 – 30S–PG	SMK 20 – 30S–PK	SMK 20 – 30–PS
	315	38	34 / 1.34	48 / 1.89	64,5 / 2.54	55 / 2.17	60 / 2.36	SMK 20 – 38S–PG	SMK 20 – 38S–PK	SMK 20 – 38–PS

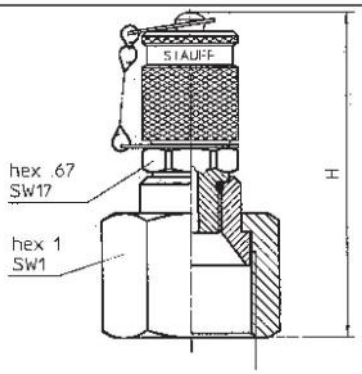
* For ordering VITON seals please replace "P" with "V"
* For EPDM seals replace "P" with "E"

3/00

TEST COUPLING SMK – JIC CONNECTION

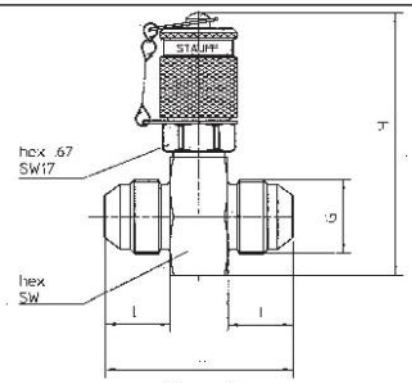


Type 1



Type 2

Pipe Size inch	JIC Size	G UNF	H mm	H inch	hex SW 1	hex SW 2	Type	Order No.
1/4"	– 4	7/16" – 20	52	2.047	17	17	1	SMK20-JIC1/4-VK
5/16"	– 5	1/2" – 20	53	2.087	17	17	1	SMK20-JIC5/16-VK
3/8"	– 6	9/16" – 18	55	2.165	19	17	1	SMK20-JIC3/8-VK
1/2"	– 8	3/4" – 16	56	2.205	22	19	1	SMK20-JIC1/2-VK
5/8"	– 10	7/8" – 14	59	2.323	27	22	1	SMK20-JIC1/4-VK
3/4"	– 12	1–1/16" – 12	70	2.756	32		2	SMK20-JIC5/8-VK
1"	– 16	1–5/16" – 12	69	2.716	38		2	SMK20-JIC3/4-VK
1 1/4"	– 20	1–5/8" – 12	72	2.835	50		2	SMK20-JIC1-VK
1 1/2"	– 24	1–7/8" – 12	75	2.953	60		2	SMK20-JIC1-1/4-VK



Type 1

Pipe Nenngröβe inch	JIC Size	G UNF	H mm	H inch	hex SW	L	l	Order No.
1/4"	– 4	7/16" – 20	61	2.401	24	43	14	SMK20-JIC1/4-VG
5/16"	– 5	1/2" – 20	61	2.401	24	43	14	SMK20-JIC5/16-VG
3/8"	– 6	9/16" – 18	61	2.401	24	43.2	14.1	SMK20-JIC3/8-VG
1/2"	– 8	3/4" – 16	67	2.638	30	48.4	16.7	SMK20-JIC1/2-VG
5/8"	– 10	7/8" – 14	67	2.638	30	53.6	19.3	SMK20-JIC1/4-VG
3/4"	– 12	1–1/16" – 12	73	2.874	36	58.8	21.9	SMK20-JIC5/8-VG
1"	– 16	1–5/16" – 12	78	3.071	41	61.2	23.1	SMK20-JIC3/4-VG
1 1/4"	– 20	1–5/8" – 12	83	3.268	46	65.6	24.3	SMK20-JIC1-VG
1 1/2"	– 24	1–7/8" – 12	92	3.622	55	72	27.5	SMK20-JIC1-1/4-VG

3/00 * For EPDM seals replace "P" with "E"

TEST HOSE SMS (formerly HFF)(for gaseous media Specify Type **SGS**)

Max. working pressure 5800 Psi (400 bar)

Test hose:
Nominal bore 0.08″ (2 mm)

Minimum bending radius 0.75″ (20 mm)

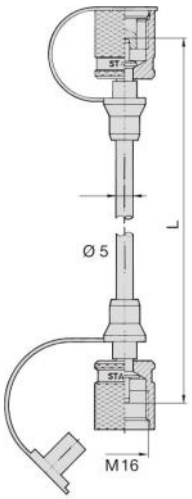
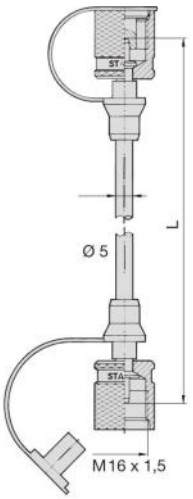
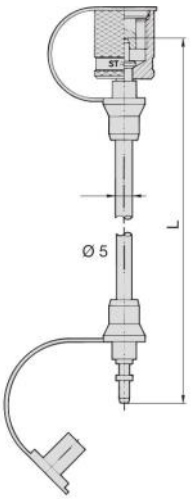
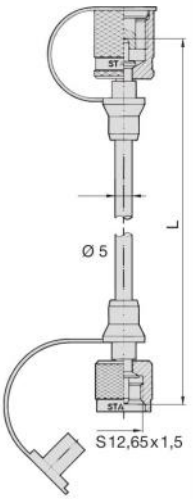
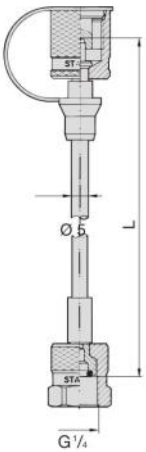
Nominal bore 0.16″ 4 mm also available

Pressure/t° factor:
to 0°C 122 %
at 30°C 110 %
at 50°C 100 %
at 80°C 86 %
at 100°C 77 %

Hose construction:
Hose-core and -cover PA

Reinforcement:
Synthetic fibre

Bursting pressure:
15,950 Psi (1100 bar)

	Stauff-Test 20/20	Stauff-Test 15/20	Stauff-Test 10/20	Stauff-Test 12/20 [2]	Stauff-Test 20/G1/4
	STAUFF-TEST 20	STAUFF-TEST 20	STAUFF-TEST 20	STAUFF-TEST 20	STAUFF-TEST 20
					
	STAUFF-TEST 20	STAUFF-TEST 15	STAUFF-TEST 10	STAUFF-TEST 12	GAUGE ADAPTOR
Length L [1]	Order No.				
12″	SMS-20 – 012-A	SMS-15/20 – 012-A	SMS-10/20 – 012-A	SMS-12/20 – 012-A	SMS-20/M1/4-P-OR – 012-A
24″	SMS-20 – 024-A	SMS-15/20 – 024-A	SMS-10/20 – 024-A	SMS-12/20 – 024-A	SMS-20/M1/4-P-OR – 024-A
36″	SMS-20 – 036-A	SMS-15/20 – 036-A	SMS-10/20 – 036-A	SMS-12/20 – 036-A	SMS-20/M1/4-P-OR – 036-A
48″	SMS-20 – 048-A	SMS-15/20 – 048-A	SMS-10/20 – 048-A	SMS-12/20 – 048-A	SMS-20/M1/4-P-OR – 048-A
60″	SMS-20 – 060-A	SMS-15/20 – 060-A	SMS-10/20 – 060-A	SMS-12/20 – 060-A	SMS-20/M1/4-P-OR – 060-A
72″	SMS-20 – 072-A	SMS-15/20 – 072-A	SMS-10/20 – 072-A	SMS-12/20 – 072-A	SMS-20/M1/4-P-OR – 072-A
96″	SMS-20 – 096-A	SMS-15/20 – 096-A	SMS-10/20 – 096-A	SMS-12/20 – 096-A	SMS-20/M1/4-P-OR – 096-A
120″	SMS-20 – 120-A	SMS-15/20 – 120-A	SMS-10/20 – 120-A	SMS-12/20 – 120-A	SMS-20/M1/4-P-OR – 120-A

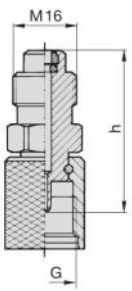
Custom lengths available on request

[1] Bending protection and other lengths on request

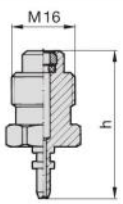
[2] Special thread: buttress thread S12,65 x 1,5

[3] Gauge adaptor 1/4 NPT, G 1/2 and 1/2 NPT on request

TRANSITION ADAPTOR SAD



Type A



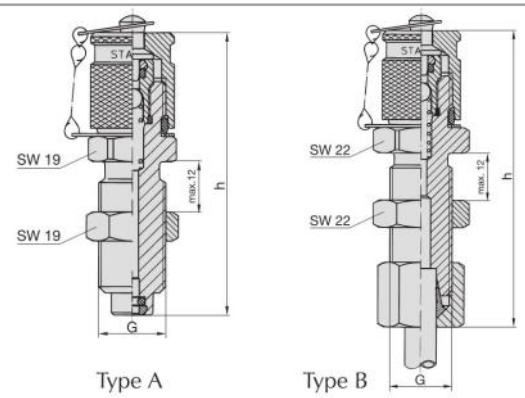
Type B

G	h in / mm	Type	Order No. NBR (BUNA)	Order No. FPM (VITON)
M16 x 1,5	1.53 / 39	A	SAD 20/15-P	SAD 20/15-V
plug in	1.45 / 37	B	SAD 20/10-P	SAD 20/10-V
S12 [1]	1.53 / 39	A	SAD 20/12-P	SAD 20/12-V

[1] Special thread: buttress thread S12,65 x 1,5

3/00

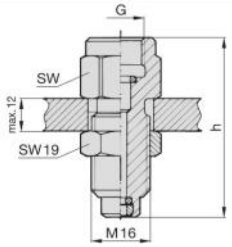
BULKHEAD SSK (for gaseous medium Type SSK)



G	h mm / in	Type	Order No. NBR (BUNA)	Order No. FPM (VITON)
M16	72 / 2.8	A	SSK 20–P	SSK 20–V
M16 x 1,5 [1]	72 / 2.8	B	SSK 20/08 S–P	SSK 20/08 S–V
M18 x 1,5 [1]	72 / 2.8	B	SSK 20/12 L–P	SSK 20/12 L–V
7/16 UNF (– 4 JIC)	63 / 2.48	A	N/A	SSK20– 7/16 JIC–MV

[1] Compression ring assembly 8 S/12 L acc. to DIN 2353

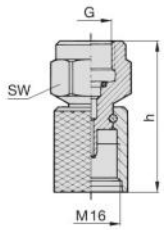
GAUGE ADAPTOR SMA



Through-hole Ø 18

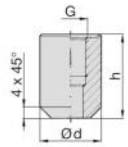
G	h mm / in	SW mm / in	Order No. NBR (BUNA)	Order No. FPM (VITON)
G 1/4	54 / 2.12	19 / .75	SMA 20 – G 1/4 – P-OR	SMA 20 – G 1/4 – V-OR
G 1/2	64 / 2.52	27 / 1.06	SMA 20 – G 1/2 – P-OR	SMA 20 – G 1/2 – V-OR
1/4 NPT	54 / 2.12	19 / .75	SMA 20 – 1/4 NPT–P	SMA 20 – 1/4 NPT–V
1/2 NPT	64 / 2.52	27 / 1.06	SMA 20 – 1/2 NPT–P	SMA 20 – 1/2 NPT–V
Damping element on request				

DIRECT GAUGE ADAPTOR SMD



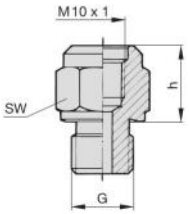
G	h mm / in	SW mm / in	Order No. NBR (BUNA)	Order No. FPM (VITON)
G 1/4	41 / 1.61	19 / .75	SMD 20 – G 1/4 – P-OR	SMD 20 – G 1/4 – V-OR
G 1/2	51 / 2.0	27 / 1.06	SMD 20 – G 1/2 – P-OR	SMD 20 – G 1/2 – V-OR
1/4 NPT	41 / 1.61	19 / .75	SMD 20 – 1/4 NPT–P	SMD 20 – 1/4 NPT–V
1/2 NPT	51 / 2.0	27 / 1.06	SMD 20 – 1/2 NPT–P	SMD 20 – 1/2 NPT–V
Damping element on request				

WELDING ADAPTOR SAS



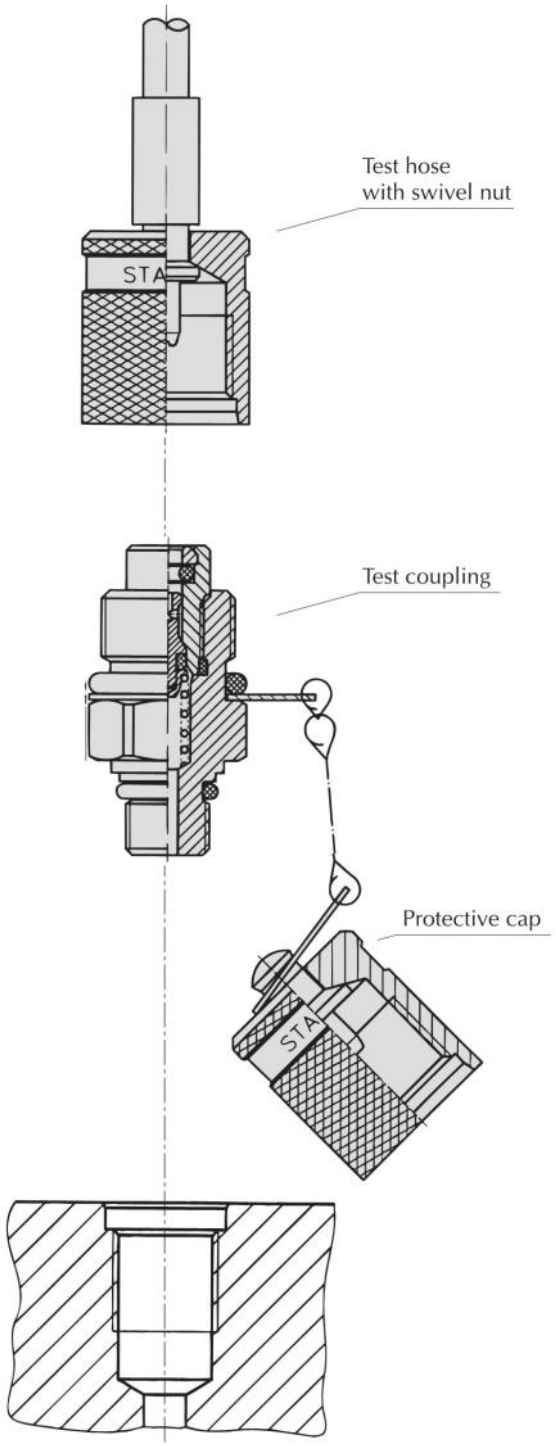
Coupling thread G	h mm / in	Ø d mm / in	Order No.
M10 x 1	25 / .98	20 / .78	SAS – M10 x 1
G 1/4	30 / 1.18	22 / .86	SAS – G 1/4
Material: St 37			

THREAD ADAPTOR SRS



Thread G	h mm / in	SW mm / in	Order No.	Seal
M16 x 1,5	8 / .31	22 / .86	SRS 20 – M16 x 1,5-B	Metal joint DIN 3852 Type B
G 1/8	15,5 / .61	17 / .67	SRS 20 – G 1/8-B	
G 3/8	10,5 / .41	22 / .86	SRS 20 – G 3/8-B	
G 1/2	10,5 / .41	27 / 1.06	SRS 20 – G 1/2-B	
R 1/4 taper	13 / .51	17 / .67	SRS 20 – R 1/4 K-D	Port Connection Type D

3/00



FAST COUPLING FOR:

- Monitoring and control of pressure
- Venting
- Sampling

ADVANTAGES:

- Coupling at system pressure level
- Connection is leakproof before **piston valve** is open
- Simple connection to measurement, control and switching devices
- Self locking metal protective cap
- Minimizes introduction of contamination to hydraulic systems

WORKING PRESSURE:

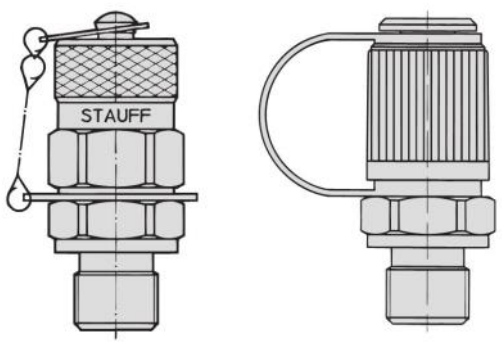
- Max. working pressure 9000 Psi (630 bar)
  For SKK type G, K and S the recommended working pressure of fitting manufacturer should be noted
- Connection under pressure up to 5800 Psi (400 bar) max.

MATERIALS:

- Metal parts: Steel, Stainless Steel on request
- Seals:
  P = NBR-BUNA Temperature range – 4°F to +195°F (– 20° C to +90° C)
  V = FPM-VITON Temperature range – 4°F to +392°F (– 20° C to +200° C)
  E = EPDM Ethylene Propylene (for Brake Fluid) Temperature range – 40°F to +302°F (– 40° C to + 150° C)
- Hose: Polyamide Temperature range –31°F to +212°F (–35° C to +100° C)

MEDIA:

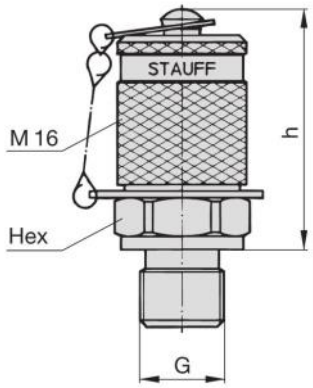
- Suitable for hydraulic oils and other mineral oil based fluids (Check compatibility of seal material)
- For use with other liquid or gaseous media please consult STAUFF for availability of alternate seals

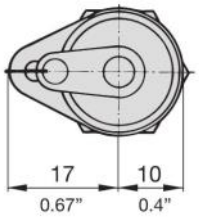


The complete STAUFF-TEST-20-Type-SKK range is also available with hexagonal protection cap made of steel or plastic protection cap

3/00

TEST COUPLING WITH PROTECTIVE CAP SKK



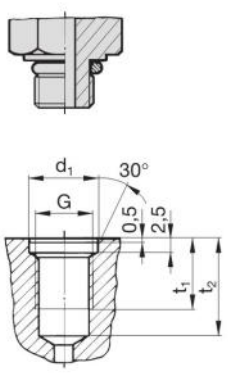


Thread G	h mm / in	Hex mm / in	Order No. NBR (BUNA)	Order No. FPM (VITON)	Seal Type (see below)
M8 x 1	37 / 1.45	17 / .67	SKK 20 – M8 x 1 – PA	SKK 20 – M8 x 1 – VA	O-Ring Type A
M10 x 1	37 / 1.45	17 / .67	SKK 20 – M10 x 1 – PA	SKK 20 – M10 x 1 – VA	O-Ring Type A
M12 x 1,5	37 / 1.45	17 / .67	SKK 20 – M12 x 1,5 – PC	SKK 20 – M12 x 1,5 – VC	O-Ring Type C
M14 x 1,5	37 / 1.45	19 / .75	SKK 20 – M14 x 1,5 – PB	SKK 20 – M14 x 1,5 – VB	Metal joint Type B
M16 x 1,5	37 / 1.45	22 / .87	SKK 20 – M16 x 1,5 – PB	SKK 20 – M16 x 1,5 – VB	Metal joint Type B
G 1/8	39 / 1.53	17 / .67	SKK 20 – G 1/8 – PC	SKK 20 – G 1/8 – VC	O-Ring Type C
G 1/4	37 / 1.45	19 / .75	SKK 20 – G 1/4 – PB	SKK 20 – G 1/4 – VB	Metal joint Type B
G 1/4	37 / 1.45	19 / .75	SKK 20 – G 1/4 – PC	SKK 20 – G 1/4 – VC	O-Ring Type C
G 3/8	37 / 1.45	22 / .87	SKK 20 – G 3/8 – PB	SKK 20 – G 3/8 – VB	Metal joint Type B
R 1/8 taper	37 / 1.45	17 / .67	SKK 20 – R 1/8 K-PD	SKK 20 – R 1/8 K-VD	Taper Type D
R 1/4 taper	36 / 1.41	17 / .67	SKK 20 – R 1/4 K-PD	SKK 20 – R 1/4 K-VD	Taper Type D
1/8 NPT	36 / 1.41	17 / .67	SKK 20 – 1/8 NPT-PD	SKK 20 – 1/8 NPT-VD	Taper Type D
1/4 NPT	35 / 1.38	17 / .67	SKK 20 – 1/4 NPT-PD	SKK 20 – 1/4 NPT-VD	Taper Type D
5/16 – 24 UNF	38 / 1.50	17 / .67	SKK 20 – 5/16 UNF-PE	SKK 20 – 5/16 UNF-VE	O-Ring Type E
7/16 – 20 UNF	38 / 1.50	17 / .67	SKK 20 – 7/16 UNF-PE	SKK 20 – 7/16 UNF-VE	O-Ring Type E
1/2 – 20 UNF	38 / 1.50	17 / .67	SKK 20 – 1/2 UNF-PE	SKK 20 – 1/2 UNF-VE	O-Ring Type E
9/16 – 18 UNF	37 / 1.45	19 / .75	SKK 20 – 9/16 UNF-PE	SKK 20 – 9/16 UNF-VE	O-Ring Type E

Other port connections and seals on request.

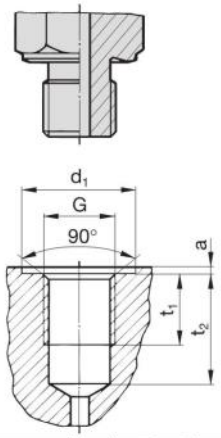
PORT CONNECTIONS AND SEALS

Type A



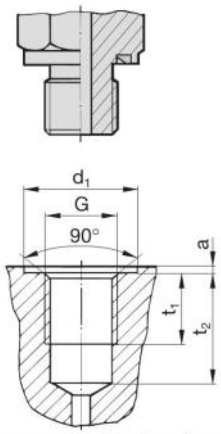
G	d1 mm / in	t1 mm / in	t2 mm / in
M8 x 1	9,5 + 0,1 / 0.37	11 / 0.43	15,5 / 0.61
M10 x 1	11,5 + 0,1 / 0.45	12 / 0.47	16,5 / 0.65

Type B



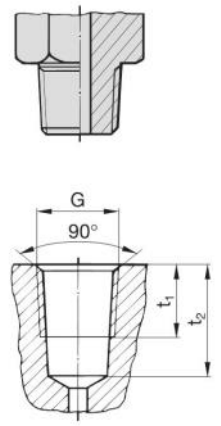
G	d1 mm / in	t1 mm / in	t2 mm / in	a mm / in
M14 x 1,5	20 / 0.79	12 / 0.47	18,5 / 0.73	1,5 / 0.06
M16 x 1,5	22 / 0.87	12 / 0.47	18,5 / 0.73	1,5 / 0.06
G 1/4	19 / 0.75	12 / 0.47	18,5 / 0.73	1,5 / 0.06
G 3/8	23 / 0.91	12 / 0.47	18,5 / 0.73	1,5 / 0.06

Type C



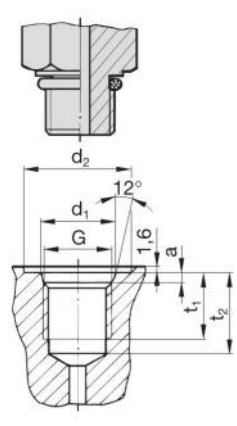
G	d1 mm / in	t1 mm / in	t2 mm / in	a mm / in
M12 x 1,5	18 / 0.71	12 / 0.47	18,5 / 0.73	1,5 / 0.06
G 1/8	15 / 0.59	8 / 0.31	13 / 0.51	1,0 / 0.04
G 1/4	19 / 0.75	12 / 0.47	18,5 / 0.73	1,5 / 0.06

Type D



G	t1 mm / in	t2 mm / in
R 1/8 taper	5,5 / 0.22	9,5 / 0.37
R 1/4 taper	8,5 / 0.33	13,5 / 0.53
1/8 NPT	6,9 / 0.27	11,6 / 0.46
1/4 NPT	10 / 0.39	16,4 / 0.65

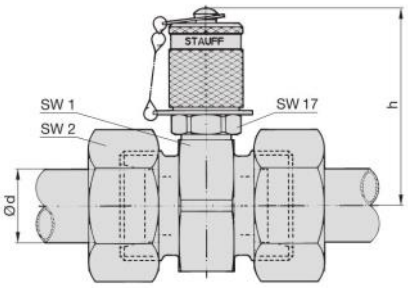
Type E



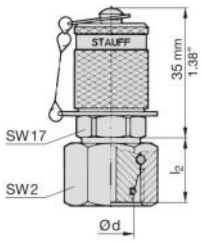
G	d1 mm / in	d2 mm / in	t1 mm / in	t2 mm / in	a mm / in
5/16 – 24 UNF	9,1 / 0.36	17 / 0.67	10 / 0.39	12 / 0.47	1,9 / 0.07
7/16 – 20 UNF	12,4 / 0.49	21 / 0.83	11,5 / 0.45	14 / 0.55	2,4 / 0.09
1/2 – 20 UNF	14 / 0.55	23 / 0.91	11,5 / 0.45	14 / 0.55	2,4 / 0.09
9/16 – 18 UNF	15,6 / 0.61	25 / 0.98	12,7 / 0.50	15,5 / 0.61	2,5 / 0.10

3/00

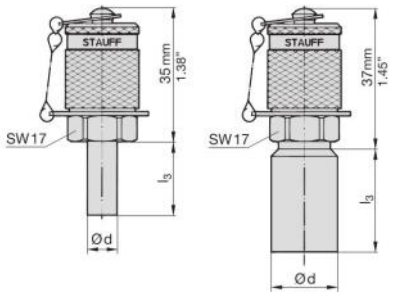
TEST COUPLING SKK (compression ring fittings acc. to DIN 2353)



Type G Test coupling complete with straight fitting



Type K Test coupling for 24° cone fittings

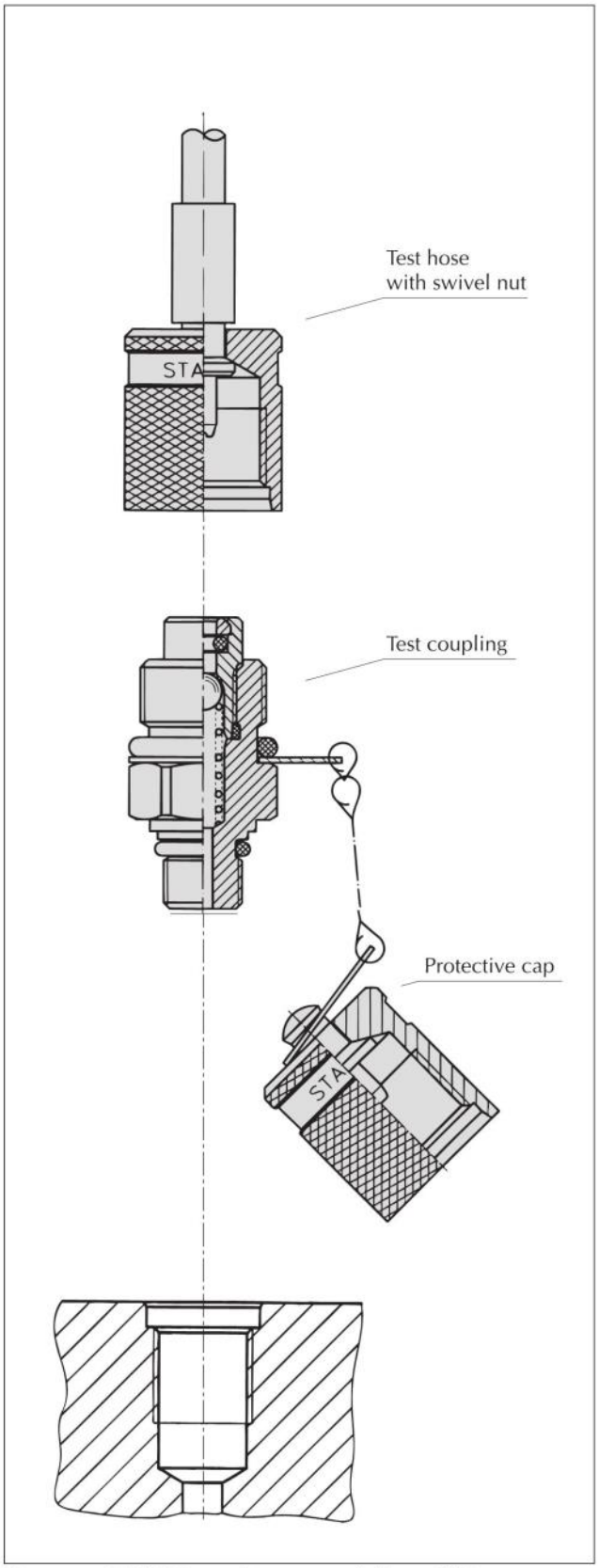


Type S Test coupling for compression ring assembly

Series	PN Psi (Bar)	Pipe Ød	l_2 mm / in	l_3 mm / in	h mm / in	SW 1 mm / in	SW 2 mm / in	Order No.* Type G	Type K	Type S
L	4500 (315)	6	15,5 / 0.61	20 / 0.79	49 / 1.93	24 / 0.94	14 / 0.55	SKK 20 – 6L–PG	SKK 20 – 6L–PK	SKK 20 – 6–PS
		8	15,5 / 0.61	20 / 0.79	49 / 1.93	24 / 0.94	17 / 0.67	SKK 20 – 8L–PG	SKK 20 – 8L–PK	SKK 20 – 8–PS
		10	16,5 / 0.65	22 / 0.87	49 / 1.93	24 / 0.94	19 / 0.75	SKK 20 – 10L–PG	SKK 20 – 10L–PK	SKK 20 – 10–PS
		12	17,5 / 0.69	22 / 0.87	50 / 1.97	27 / 1.06	22 / 0.87	SKK 20 – 12L–PG	SKK 20 – 12L–PK	SKK 20 – 12–PS
		15	21 / 0.83	25 / 0.98	52 / 2.05	30 / 1.18	27 / 1.06	SKK 20 – 15L–PG	SKK 20 – 15L–PK	SKK 20 – 15–PS
		18	19,5 / 0.77	28 / 1.10	53 / 2.09	32 / 1.26	32 / 1.26	SKK 20 – 18L–PG	SKK 20 – 18L–PK	SKK 20 – 18–PS
	2300 (160)	22	20,5 / 0.81	30 / 1.18	55 / 2.17	36 / 1.42	36 / 1.42	SKK 20 – 22L–PG	SKK 20 – 22L–PK	SKK 20 – 22–PS
		28	25 / 0.98	32 / 1.26	57,5 / 2.26	41 / 1.61	41 / 1.61	SKK 20 – 28L–PG	SKK 20 – 28L–PK	SKK 20 – 28–PS
		35	30 / 1.18	42 / 1.65	60 / 2.36	46 / 1.81	50 / 1.97	SKK 20 – 35L–PG	SKK 20 – 35L–PK	SKK 20 – 35–PS
		42	31 / 1.22	45 / 1.77	64,5 / 2.54	55 / 2.17	60 / 2.36	SKK 20 – 42L–PG	SKK 20 – 42L–PK	SKK 20 – 42–PS
S	9100 (630)	6	14,5 / 0.57	20 / 0.79	49 / 1.93	24 / 0.94	17 / 0.67	SKK 20 – 6S–PG	SKK 20 – 6S–PK	SKK 20 – 6–PS
		8	16,5 / 0.65	20 / 0.79	49 / 1.93	24 / 0.94	19 / 0.75	SKK 20 – 8S–PG	SKK 20 – 8S–PK	SKK 20 – 8–PS
		10	16,5 / 0.65	22 / 0.87	49 / 1.93	24 / 0.94	22 / 0.87	SKK 20 – 10S–PG	SKK 20 – 10S–PK	SKK 20 – 10–PS
		12	17,5 / 0.69	22 / 0.87	49 / 1.93	24 / 0.94	24 / 0.94	SKK 20 – 12S–PG	SKK 20 – 12S–PK	SKK 20 – 12–PS
		14	19,5 / 0.77	22 / 0.87	50,5 / 1.99	27 / 1.06	27 / 1.06	SKK 20 – 14S–PG	SKK 20 – 14S–PK	SKK 20 – 14–PS
	5800 (400)	16	18 / 0.71	28 / 1.10	52 / 2.05	30 / 1.18	30 / 1.18	SKK 20 – 16S–PG	SKK 20 – 16S–PK	SKK 20 – 16–PS
		20	24 / 0.94	30 / 1.18	55 / 2.17	36 / 1.42	36 / 1.42	SKK 20 – 20S–PG	SKK 20 – 20S–PK	SKK 20 – 20–PS
		25	26 / 1.02	36 / 1.42	57,5 / 2.26	41 / 1.61	46 / 1.81	SKK 20 – 25S–PG	SKK 20 – 25S–PK	SKK 20 – 25–PS
		30	30 / 1.18	41 / 1.61	60 / 2.36	46 / 1.81	50 / 1.97	SKK 20 – 30S–PG	SKK 20 – 30S–PK	SKK 20 – 30–PS
	4500 315	38	34 / 1.34	48 / 1.89	64,5 / 2.54	55 / 2.17	60 / 2.36	SKK 20 – 38S–PG	SKK 20 – 38S–PK	SKK 20 – 38–PS

* For ordering FPM seals please replace "P" with "V"
* For EPDM seals replace "P" with "E"

3/00



3/00 On request TEST 15 couplings are available as SKK-type

FAST COUPLING FOR:

- Monitoring and control of pressure
- Venting
- Sampling

ADVANTAGES:

- Coupling at system pressure level
- Connection is leakproof before **ball valve** is open
- Simple connection to measurement, control and switching devices
- Self locking metal protective cap

WORKING PRESSURE:

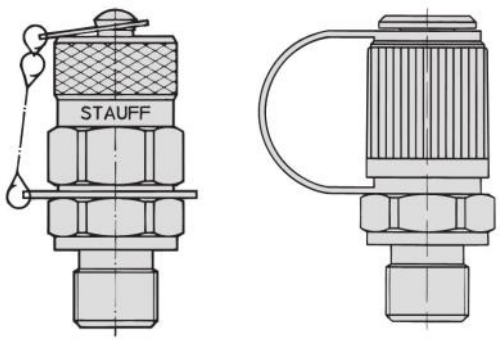
- Max. working pressure 9000 Psi (630 bar)
  For SMK type G, K and S the recommended working pressure of fitting manufacturer should be noted
- Connection under pressure up to 9000 Psi (630 bar) max.

MATERIALS:

- Metal parts: Steel, Stainless Steel on request
- Ball: Stainless Steel
- Seals:
  P = NBR-BUNA Temperature range – 4°F to +195°F (– 20° C to +90° C)
  V = FPM-VITON Temperature range – 4°F to +392°F (– 20° C to +200° C)
  E = EPDM Ethylene Propylene (for Brake Fluid) Temperature range – 40°F to +302°F (– 40° C to + 150° C)
- Hose: Polyamide Temperature range –31°F to +212°F (–35° C to +100° C)

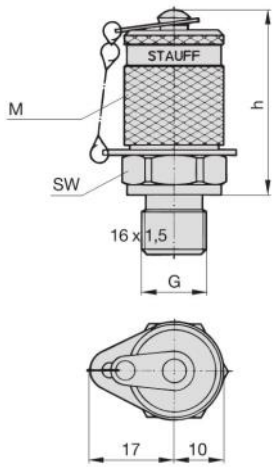
MEDIA:

- Suitable for hydraulic oils and other mineral oil based fluids (check compatibility of seal material)
- For use with other liquid media please consult STAUFF for availability of alternate seals



The complete STAUFF-TEST-15-Type-SMK range is also available with hexagonal protection cap made of steel or plastic protection cap

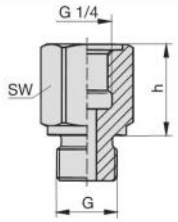
TEST COUPLING WITH PROTECTIVE CAP SMK (formerly TCM)



Thread G	h mm / in	SW mm / in	Order No. NBR (BUNA)	Order No. FPM (VITON)	Seal
M10 x 1	37 / 1.46	17 / 0.67	SMK 15 – M10 x 1 – PA	SMK 15 – M10 x 1 – VA	O-Ring Type A
M14 x 1,5	37 / 1.46	19 / 0.75	SMK 15 – M14 x 1,5 – PB	SMK 15 – M14 x 1,5 – VB	Metal joint Type B
M16 x 1,5	37 / 1.46	22 / 0.87	SMK 15 – M16 x 1,5 – PB	SMK 15 – M16 x 1,5 – VB	Metal joint Type B
G 1/4	37 / 1.46	19 / 0.75	SMK 15 – G 1/4 – PB	SMK 15 – G 1/4 – VB	Metal joint Type B
G 1/4	37 / 1.46	19 / 0.75	SMK 15 – G 1/4 – PC	SMK 15 – G 1/4 – VC	O-Ring Type C
G 3/8	37 / 1.46	22 / 0.87	SMK 15 – G 3/8 – PB	SMK 15 – G 3/8 – VB	Metal joint Type B
R 1/4 taper	36 / 1.42	17 / 0.67	SMK 15 – R 1/4 K-PD	SMK 15 – R 1/4 K-VD	Taper Type D
1/4 NPT	35 / 1.38	17 / 0.67	SMK 15 – 1/4 NPT-PD	SMK 15 – 1/4 NPT-VD	Taper Type D
9/16 – 18 UNF	37 / 1.46	19 / 0.75	SMK 15 – 9/16 UNF-PE	SMK 15 – 9/16 UNF-VE	O-Ring Type E

Other port connections and seals on request.

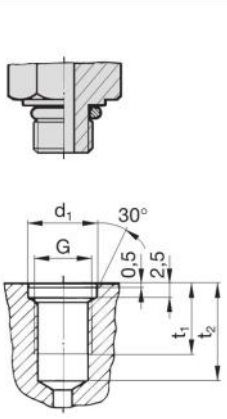
THREAD ADAPTOR SRS



Thread G	h mm / in	SW mm / in	Order No.	Seal
M18 x 1,5	24 / 0.94	24 / 0.94	SRS 15 – M18 x 1,5-B	Metal joint DIN 3852 Type B
M20 x 1,5	10,5 / 0.41	27 / 1.06	SRS 15 – M20 x 1,5-B	
G 3/8	24 / 0.94	22 / 0.87	SRS 15 – G 3/8-B	
G 1/2	10,5 / 0.41	27 / 1.06	SRS 15 – G 1/2-B	

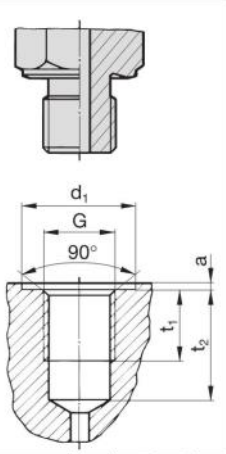
PORT CONNECTIONS AND SEALS

Type A



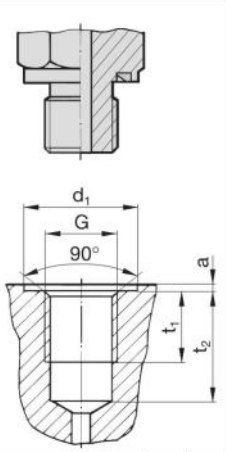
G	d_1 mm / in	t_1 mm / in	t_2 mm / in
M10 x 1	11,5 +0,1 / 0.45	12 / 0.47	16,5 / 0.65

Type B



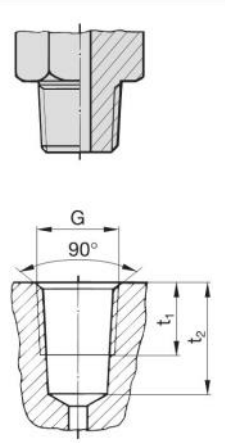
G	d_1 mm / in	t_1 mm / in	t_2 mm / in	a mm / in
M14 x 1,5	20 / 0.79	12 / 0.47	18,5 / 0.73	1,5 / 0.06
M16 x 1,5	22 / 0.87	12 / 0.47	18,5 / 0.73	1,5 / 0.06
G 1/4	19 / 0.75	12 / 0.47	18,5 / 0.73	1,5 / 0.06
G 3/8	23 / 0.91	12 / 0.47	18,5 / 0.73	2,0 / 0.08

Type C



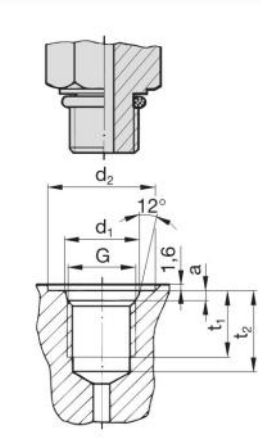
G	d_1 mm / in	t_1 mm / in	t_2 mm / in	a mm / in
G 1/4	19 / 0.75	12 / 0.47	18,5 / 0.73	1,5 / 0.06

Type D



G	t_1 mm / in	t_2 mm / in
R 1/4 taper	8,5 / 0.33	13,5 / 0.53
1/4 NPT	10 / 0.39	16,4 / 0.65

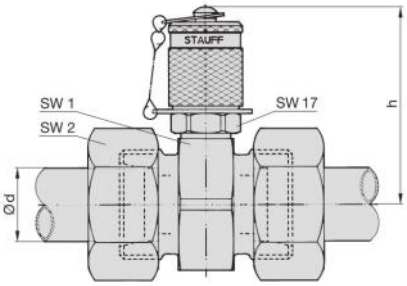
Type E



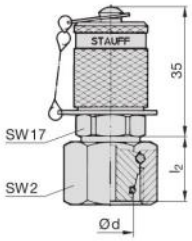
G	d_1 mm / in	d_2 mm / in	t_1 mm / in	t_2 mm / in	a mm / in
9/16 – 18 UNF	15,6 / 0.61	25 / 0.98	12,7 / 0.50	15,5 / 0.61	2,5 / 0.10

3/00

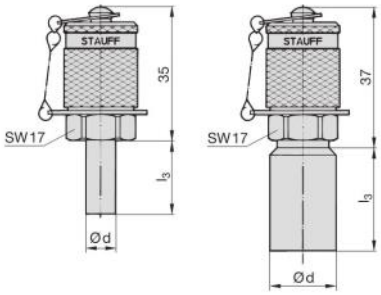
TEST COUPLING SMK (compression ring fittings acc. to DIN 2353)



Type G Test coupling complete with straight fitting



Type K Test coupling for 24° cone fittings



Type S Test coupling for compression ring assembly

Series	PN* Psi (Bar)	Pipe Ød	l_2 mm / in	l_3 mm / in	h mm / in	SW 1 mm / in	SW 2 mm / in	Order No.* Type G	Type K	Type S
L	4500 (315)	6	15,5 / 0.61	20 / 0.79	49 / 1.93	24 / 0.94	14 / 0.55	SMK 15 – 6L–PG	SMK 15 – 6L–PK	SMK 15 – 6–PS
		8	15,5 / 0.61	20 / 0.79	49 / 1.93	24 / 0.94	17 / 0.67	SMK 15 – 8L–PG	SMK 15 – 8L–PK	SMK 15 – 8–PS
		10	16,5 / 0.65	22 / 0.87	49 / 1.93	24 / 0.94	19 / 0.75	SMK 15 – 10L–PG	SMK 15 – 10L–PK	SMK 15 – 10–PS
		12	17,5 / 0.69	22 / 0.87	50,5 / 1.99	27 / 1.06	22 / 0.87	SMK 15 – 12L–PG	SMK 15 – 12L–PK	SMK 15 – 12–PS
		15	21 / 0.83	25 / 0.98	52 / 2.05	30 / 1.18	27 / 1.06	SMK 15 – 15L–PG	SMK 15 – 15L–PK	SMK 15 – 15–PS
		18	19,5 / 0.77	28 / 1.10	53 / 2.09	32 / 1.26	32 / 1.26	SMK 15 – 18L–PG	SMK 15 – 18L–PK	SMK 15 – 18–PS
	2300 (160)	22	20,5 / 0.81	30 / 1.18	55 / 2.17	36 / 1.42	36 / 1.42	SMK 15 – 22L–PG	SMK 15 – 22L–PK	SMK 15 – 22–PS
		28	25 / 0.98	32 / 1.26	57,5 / 2.26	41 / 1.61	41 / 1.61	SMK 15 – 28L–PG	SMK 15 – 28L–PK	SMK 15 – 28–PS
		35	30 / 1.18	42 / 1.65	60 / 2.36	46 / 1.81	50 / 1.97	SMK 15 – 35L–PG	SMK 15 – 35L–PK	SMK 15 – 35–PS
		42	31 / 1.22	45 / 1.77	64,5 / 2.54	55 / 2.17	60 / 2.36	SMK 15 – 42L–PG	SMK 15 – 42L–PK	SMK 15 – 42–PS
S	9000 (630)	6	14,5 / 0.57	20 / 0.79	49 / 1.93	24 / 0.94	17 / 0.67	SMK 15 – 6S–PG	SMK 15 – 6S–PK	SMK 15 – 6–PS
		8	16,5 / 0.65	20 / 0.79	49 / 1.93	24 / 0.94	19 / 0.75	SMK 15 – 8S–PG	SMK 15 – 8S–PK	SMK 15 – 8–PS
		10	16,5 / 0.65	22 / 0.87	49 / 1.93	24 / 0.94	22 / 0.87	SMK 15 – 10S–PG	SMK 15 – 10S–PK	SMK 15 – 10–PS
		12	17,5 / 0.69	22 / 0.87	49 / 1.93	24 / 0.94	24 / 0.94	SMK 15 – 12S–PG	SMK 15 – 12S–PK	SMK 15 – 12–PS
		14	19,5 / 0.77	22 / 0.87	50,5 / 1.99	27 / 1.06	27 / 1.06	SMK 15 – 14S–PG	SMK 15 – 14S–PK	SMK 15 – 14–PS
	5800 (400)	16	18 / 0.71	28 / 1.10	52 / 2.05	30 / 1.18	30 / 1.18	SMK 15 – 16S–PG	SMK 15 – 16S–PK	SMK 15 – 16–PS
		20	24 / 0.94	30 / 1.18	55 / 2.17	36 / 1.42	36 / 1.42	SMK 15 – 20S–PG	SMK 15 – 20S–PK	SMK 15 – 20–PS
		25	26 / 1.02	36 / 1.42	57,5 / 2.26	41 / 1.61	46 / 1.81	SMK 15 – 25S–PG	SMK 15 – 25S–PK	SMK 15 – 25–PS
		30	30 / 1.18	41 / 1.61	60 / in	46 / in	50 / in	SMK 15 – 30S–PG	SMK 15 – 30S–PK	SMK 15 – 30–PS
	4500 315	38	34 / 1.34	48 / 1.89	64,5 / 2.54	55 / 2.17	60 / 2.36	SMK 15 – 38S–PG	SMK 15 – 38S–PK	SMK 15 – 38–PS

* Working pressure
* For ordering FPM seals please replace "P" with "V"
* For EPDM seals replace "P" with "E"

3/00

TEST HOSE SMS (formerly HFF) (for gaseous media Specify Type **SGS**)

Max. working pressure 9000 Psi (630 bar)

Test hose:
Nominal bore 0.08″ (2 mm)

Minimum bending radius 0.75″ (20 mm)

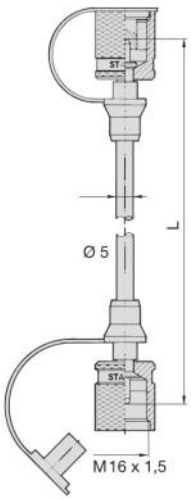
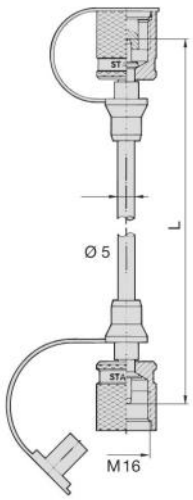
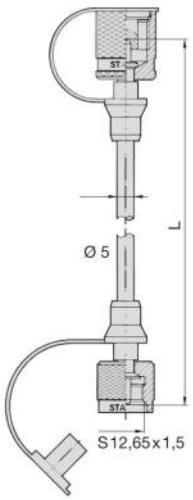
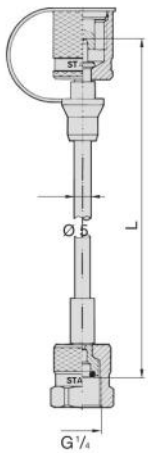
Pressure/t° factor:

to 0°C	122 %
at 30°C	110 %
at 50°C	100 %
at 80°C	86 %
at 100°C	77 %

Hose construction:
Hose-core and -cover PA

Reinforcement:
Synthetic fibre

Bursting pressure:
27,000 Psi (1900 bar)

Stauff-Test 15/15	Stauff-Test 15/20	Stauff-Test 12/15 [2]	Stauff-Test 15/ 1/4″F
STAUFF-TEST 15	STAUFF-TEST 15	STAUFF-TEST 15	STAUFF-TEST 15
			
STAUFF-TEST 15	STAUFF-TEST 20	STAUFF-TEST 12	GAUGE ADAPTOR

Length L [1]	Order No.			
12″	SMS-15-12-B	SMS-15/20-12-B	SMS-12/15-12-B	SMS-15/M1/4-P-OR-12
24″	SMS-15-24-B	SMS-15/20-24-B	SMS-12/15-24-B	SMS-15/M1/4-P-OR-24
36″	SMS-15-36-B	SMS-15/20-36-B	SMS-12/15-36-B	SMS-15/M1/4-P-OR-36
48″	SMS-15-48-B	SMS-15/20-48-B	SMS-12/15-48-B	SMS-15/M1/4-P-OR-48
60″	SMS-15-60-B	SMS-15/20-60-B	SMS-12/15-60-B	SMS-15/M1/4-P-OR-60
72″	SMS-15-72-B	SMS-15/20-72-B	SMS-12/15-72-B	SMS-15/M1/4-P-OR-72
96″	SMS-15-96-B	SMS-15/20-96-B	SMS-12/15-96-B	SMS-15/M1/4-P-OR-96
120″	SMS-15-120-B	SMS-15/20-120-B	SMS-12/15-120-B	SMS-15/M1/4-P-OR-120

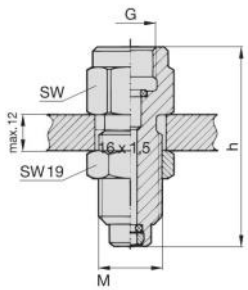
Custom lengths available on request

[1] Bending protection and other lengths on request

[2] Special thread: buttress thread S12,65 x 1,5

[3] Gauge adaptor 1/4 NPT, G 1/2 and 1/2 NPT on request

GAUGE ADAPTOR SMA (formerly GAH)



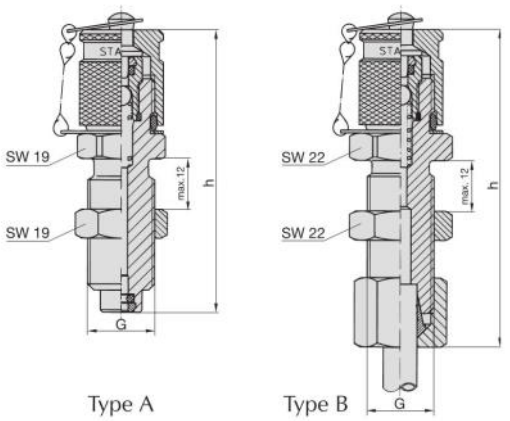
Through-hole Ø 18

G	h mm / in	SW mm / in	Order No. NBR	Order No. FPM
G 1/4	54 / 2.13	19 / 0.75	SMA 15 – G 1/4 – P-OR	SMA 15 – G 1/4 – V-OR
G 1/2	64 / 2.52	27 / 1.06	SMA 15 – G 1/2 – P-OR	SMA 15 – G 1/2 – V-OR
1/4 NPT	54 / 2.13	19 / 0.75	SMA 15 – 1/4 NPT–P	SMA 15 – 1/4 NPT–V
1/2 NPT	64 / 2.52	27 / 1.06	SMA 15 – 1/2 NPT–P	SMA 15 – 1/2 NPT–V

Damping element on request

3/00

BULKHEAD SSK (for gaseous media use Type SKK)

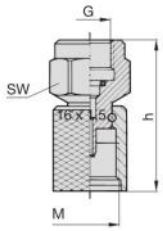


Type A Type B

G	h mm / in	Type	Order No. NBR	Order No. FPM
M16 x 1,5	72 / 2.83	A	SSK 15–P	SSK 15–V
M16 x 1,5[1]	72 / 2.83	B	SSK 15/08 S–P	SSK 15/08 S–V

[1] Compression ring assembly 8 S acc. to DIN 2353

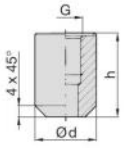
DIRECT GAUGE ADAPTOR SMD (formerly DGA)



G	h mm / in	SW mm / in	Order No. NBR	Order No. FPM
G 1/4	41 / 1.61	19 / 0.75	SMD 15 – G 1/4 – P-OR	SMD 15 – G 1/4 – V-OR
G 1/2	51 / 2.01	27 / 1.06	SMD 15 – G 1/2 – P-OR	SMD 15 – G 1/2 – V-OR
1/4 NPT	41 / 1.61	19 / 0.75	SMD 15 – 1/4 NPT–P	SMD 15 – 1/4 NPT–V
1/2 NPT	51 / 2.01	27 / 1.06	SMD 15 – 1/2 NPT–P	SMD 15 – 1/2 NPT–V

Damping element on request

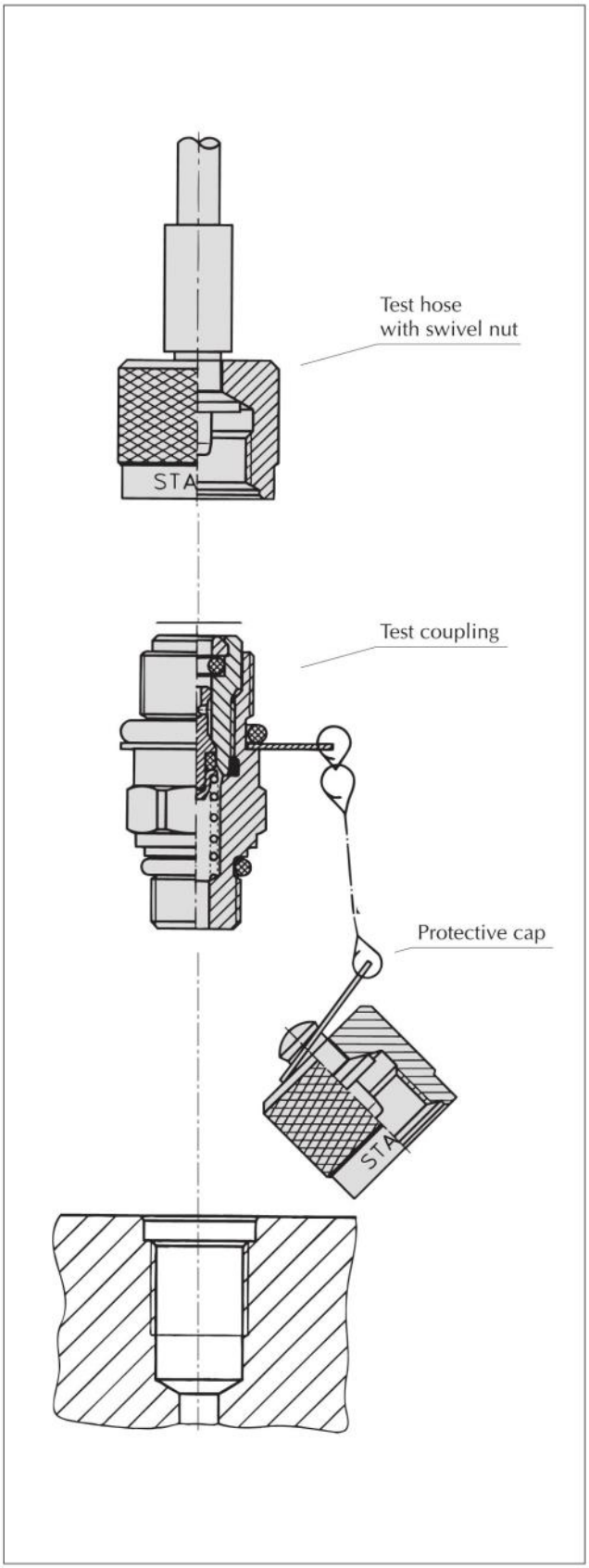
WELDING ADAPTOR SAS



Thread G	h mm / in	Ø d mm / in	Order No.
M10 x 1	25 / 0.98	20 / 0.79	SAS – M10 x 1
G 1/4	30 / 1.18	22 / 0.87	SAS – G 1/4

Material: St 37

3/00



FAST COUPLING FOR:

- Monitoring and control of pressure
- Venting
- Sampling

ADVANTAGES:

- Coupling at system pressure level
- Connection is leakproof before **piston valve** is open
- Simple connection to measement, control and switching devices
- Self locking metal protective cap

WORKING PRESSURE:

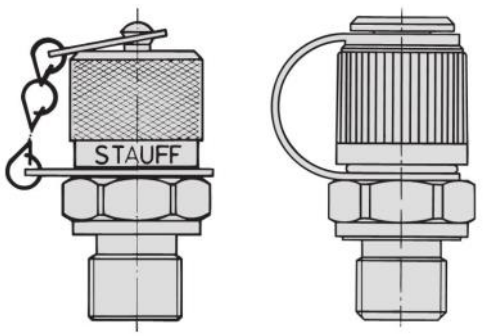
- Max. working pressure 9000 Psi (630 bar)
  For SKK type G, K and S the recommended working pressure of fitting manufacturer should be noted
- Connection under pressure up to 5800 Psi (400 bar) max.

MATERIALS:

- Metal parts: Steel, Stainless Steel on request
- Seals:
  P = NBR-BUNA Temperature range – 4°F to +195°F (– 20° C to +90° C)
  V = FPM-VITON Temperature range – 4°F to +392°F (– 20° C to +200° C)
  E = EPDM Ethylene Propylene (for Brake Fluid) Temperature range – 40°F to +302°F (– 40° C to + 150° C)
- Hose: Polyamide Temperature range –31°F to +212°F (–35° C to +100° C)

MEDIA:

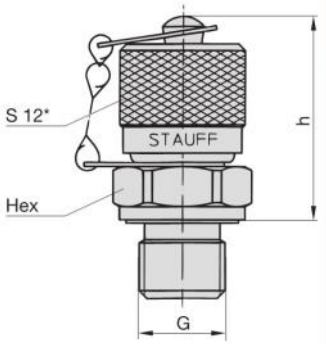
- Suitable for hydraulic oils and other mineral oil based fluids (check compatibility of seal material)
- For use with other liquid media please consult STAUFF for availability of alternate seals

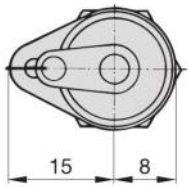


The complete STAUFF-TEST-12-Type-SKK range is also available with plastic protection cap

3/00

TEST COUPLING WITH PROTECTIVE CAP SKK (formerly SMK)





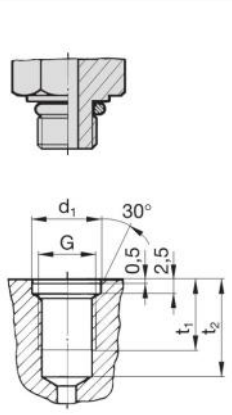
*** Special thread:**
buttress thread S12,65 x 1,5

Thread G	h mm / in	Hex mm / in	Order No. NBR (BUNA)	Order No. FPM (VITON)	Seal
M8 x 1	37 / 1.46	14 / 0.55	SKK 12 – M8 x 1 – PA	SKK 12 – M8 x 1 – VA	O-Ring Type A
M10 x 1	34 / 1.34	14 / 0.55	SKK 12 – M10 x 1 – PA	SKK 12 – M10 x 1 – VA	O-Ring Type A
M12 x 1,5	31 / 1.22	17 / 0.67	SKK 12 – M12 x 1,5 – PC	SKK 12 – M12 x 1,5 – VC	O-Ring Type C
M14 x 1,5	31 / 1.22	19 / 0.75	SKK 12 – M14 x 1,5 – PB	SKK 12 – M14 x 1,5 – VB	Metal joint Type B
M16 x 1,5	31 / 1.22	22 / 0.87	SKK 12 – M16 x 1,5 – PB	SKK 12 – M16 x 1,5 – VB	Metal joint Type B
G 1/8	40 / 1.57	14 / 0.55	SKK 12 – G 1/8 – PC	SKK 12 – G 1/8 – VC	O-Ring Type C
G 1/4	31 / 1.22	19 / 0.75	SKK 12 – G 1/4 – PB	SKK 12 – G 1/4 – VB	Metal joint Type B
G 1/4	31 / 1.22	19 / 0.75	SKK 12 – G 1/4 – PC	SKK 12 – G 1/4 – VC	O-Ring Type C
G 3/8	31 / 1.22	22 / 0.87	SKK 12 – G 3/8 – PB	SKK 12 – G 3/8 – VB	Metal joint Type B
R 1/8 taper	33 / 1.30	14 / 0.55	SKK 12 – R 1/8 K-PD	SKK 12 – R 1/8 K-VD	Taper Type D
R 1/4 taper	30 / 1.18	14 / 0.55	SKK 12 – R 1/4 K-PD	SKK 12 – R 1/4 K-VD	Taper Type D
1/8 NPT	33 / 1.30	14 / 0.55	SKK 12 – 1/8 NPT-PD	SKK 12 – 1/8 NPT-VD	Taper Type D
1/4 NPT	28 / 1.10	14 / 0.55	SKK 12 – 1/4 NPT-PD	SKK 12 – 1/4 NPT-VD	Taper Type D
5/16 – 24 UNF	34,5 / 1.36	17 / 0.67	SKK 12 – 5/16 UNF-PE	SKK 12 – 5/16 UNF-VE	O-Ring Type E
7/16 – 20 UNF	33 / 1.30	17 / 0.67	SKK 12 – 7/16 UNF-PE	SKK 12 – 7/16 UNF-VE	O-Ring Type E
1/2 – 20 UNF	32 / 1.26	17 / 0.67	SKK 12 – 1/2 UNF-PE	SKK 12 – 1/2 UNF-VE	O-Ring Type E
9/16 – 18 UNF	32 / 1.26	19 / 0.75	SKK 12 – 9/16 UNF-PE	SKK 12 – 9/16 UNF-VE	O-Ring Type E

Other port connections and seals on request.

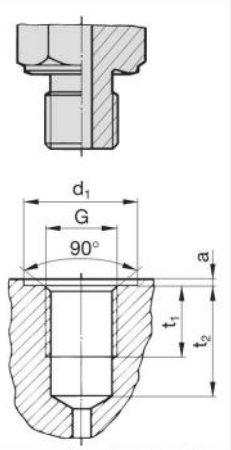
PORT CONNECTIONS AND SEALS

Type A



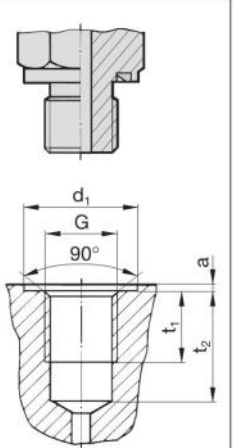
G	d_1 mm / in	t_1 mm / in	t_2 mm / in
M8 x 1	9,5 + 0,1 / 0.37	11 / 0.43	15,5 / 0.61
M10 x 1	11,5 + 0,1 / 0.45	12 / 0.47	16,5 / 0.65

Type B



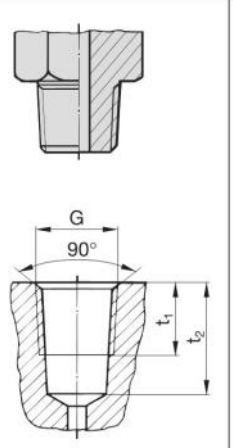
G	d_1 mm / in	t_1 mm / in	t_2 mm / in	a mm / in
M14 x 1,5	20 / 0.79	12 / 0.47	18,5 / 0.73	1,5 / 0.06
M16 x 1,5	22 / 0.87	12 / 0.47	18,5 / 0.73	1,5 / 0.06
G 1/4	19 / 0.75	12 / 0.47	18,5 / 0.73	1,5 / 0.06
G 3/8	23 / 0.91	12 / 0.47	18,5 / 0.73	2 / 0.08

Type C



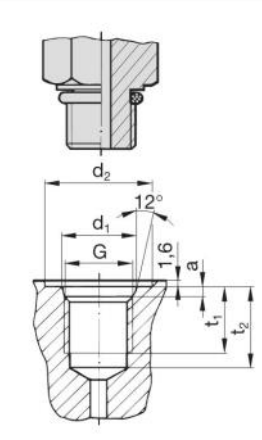
G	d_1 mm / in	t_1 mm / in	t_2 mm / in	a mm / in
M12 x 1,5	18 / 0.71	12 / 0.47	18,5 / 0.73	1,5 / 0.06
G 1/8	15 / 0.59	8 / 0.31	13 / 0.51	1,0 / 0.04
G 1/4	19 / 0.75	12 / 0.47	18,5 / 0.73	1,5 / 0.06

Type D



G	t_1 mm / in	t_2 mm / in
R 1/8 taper	5,5 / 0.22	9,5 / 0.37
R 1/4 taper	8,5 / 0.33	13,5 / 0.53
1/8 NPT	6,9 / 0.27	11,6 / 0.46
1/4 NPT	10 / 0.39	16,4 / 0.65

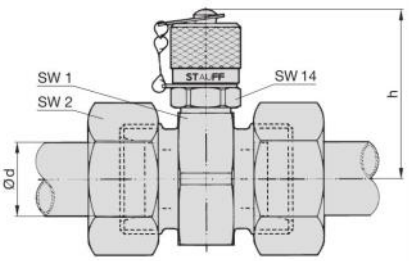
Type E



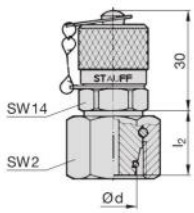
G	d_1 mm / in	d_2 mm / in	t_1 mm / in	t_2 mm / in	a mm / in
5/16 – 24 UNF	9,1 / 0.36	17 / 0.67	10 / 0.39	12 / 0.47	1,9 / 0.07
7/16 – 20 UNF	12,4 / 0.49	21 / 0.83	11,5 / 0.45	14 / 0.55	2,4 / 0.09
1/2 – 20 UNF	14 / 0.55	23 / 0.91	11,5 / 0.45	14 / 0.55	2,4 / 0.09
9/16 – 18 UNF	15,6 / 0.61	25 / 0.98	12,7 / 0.50	15,5 / 0.61	2,5 / 0.10

3/00

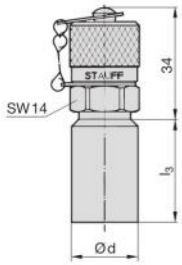
TEST COUPLING SKK (compression ring fittings acc. to DIN 2353)



Type G Test coupling complete with straight fitting



Type K Test coupling for 24° cone fittings



Type S Test coupling for compression ring assembly

Series	PN	Pipe Ød	l_2 mm / in	l_3 mm / in	h mm / in	SW 1 mm / in	SW 2 mm / in	Order No.* Type G	Type K	Type S
L	315	6	15,5 / 0.61	20 / 0.79	46 / 1.81	24 / 0.94	14 / 0.55	SKK 12 – 6L–PG	SKK 12 – 6L–PK	SKK 12 – 6–PS
		8	15,5 / 0.61	20 / 0.79	46 / 1.81	24 / 0.94	17 / 0.67	SKK 12 – 8L–PG	SKK 12 – 8L–PK	SKK 12 – 8–PS
		10	16,5 / 0.65	22 / 0.87	46 / 1.81	24 / 0.94	19 / 0.75	SKK 12 – 10L–PG	SKK 12 – 10L–PK	SKK 12 – 10–PS
		12	17,5 / 0.69	22 / 0.87	47,5 / 1.87	27 / 1.06	22 / 0.87	SKK 12 – 12L–PG	SKK 12 – 12L–PK	SKK 12 – 12–PS
		15	21 / 0.83	25 / 0.98	49 / 1.93	30 / 1.18	27 / 1.06	SKK 12 – 15L–PG	SKK 12 – 15L–PK	SKK 12 – 15–PS
		18	19,5 / 0.77	28 / 1.10	50 / 1.97	32 / 1.26	32 / 1.26	SKK 12 – 18L–PG	SKK 12 – 18L–PK	SKK 12 – 18–PS
	160	22	20,5 / 0.81	30 / 1.18	52 / 2.05	36 / 1.42	36 / 1.42	SKK 12 – 22L–PG	SKK 12 – 22L–PK	SKK 12 – 22–PS
		28	25 / 0.98	32 / 1.26	54,5 / 2.15	41 / 1.61	41 / 1.61	SKK 12 – 28L–PG	SKK 12 – 28L–PK	SKK 12 – 28–PS
		35	30 / 1.18	42 / 1.65	57 / 2.24	46 / 1.81	50 / 1.97	SKK 12 – 35L–PG	SKK 12 – 35L–PK	SKK 12 – 35–PS
		42	31 / 1.22	45 / 1.77	61,5 / 2.42	55 / 2.17	60 / 2.36	SKK 12 – 42L–PG	SKK 12 – 42L–PK	SKK 12 – 42–PS
S	630	6	14,5 / 0.57	20 / 0.79	46 / 1.81	24 / 0.94	17 / 0.67	SKK 12 – 6S–PG	SKK 12 – 6S–PK	SKK 12 – 6–PS
		8	16,5 / 0.65	20 / 0.79	46 / 1.81	24 / 0.94	19 / 0.75	SKK 12 – 8S–PG	SKK 12 – 8S–PK	SKK 12 – 8–PS
		10	16,5 / 0.65	22 / 0.87	46 / 1.81	24 / 0.94	22 / 0.87	SKK 12 – 10S–PG	SKK 12 – 10S–PK	SKK 12 – 10–PS
		12	17,5 / 0.69	22 / 0.87	46 / 1.81	24 / 0.94	24 / 0.94	SKK 12 – 12S–PG	SKK 12 – 12S–PK	SKK 12 – 12–PS
		14	19,5 / 0.77	22 / 0.87	47,5 / 1.87	27 / 1.06	27 / 1.06	SKK 12 – 14S–PG	SKK 12 – 14S–PK	SKK 12 – 14–PS
	400	16	18 / 0.71	28 / 1.10	49 / 1.93	30 / 1.18	30 / 1.18	SKK 12 – 16S–PG	SKK 12 – 16S–PK	SKK 12 – 16–PS
		20	24 / 0.94	30 / 1.18	52 / 2.05	36 / 1.42	36 / 1.42	SKK 12 – 20S–PG	SKK 12 – 20S–PK	SKK 12 – 20–PS
		25	26 / 1.02	36 / 1.42	54,5 / 2.15	41 / 1.61	46 / 1.81	SKK 12 – 25S–PG	SKK 12 – 25S–PK	SKK 12 – 25–PS
		30	30 / 1.18	41 / 1.61	57 / 2.24	46 / 1.81	50 / 1.97	SKK 12 – 30S–PG	SKK 12 – 30S–PK	SKK 12 – 30–PS
	315	38	34 / 1.34	48 / 1.89	61.5 / 2.42	55 / 2.17	60 / 2.36	SKK 12 – 38S–PG	SKK 12 – 38S–PK	SKK 12 – 38–PS

* For ordering FPM seals please replace "P" with "V"
* For EPDM seals replace "P" with "E"

3/00

TEST HOSE SMS (for gaseous media Specify Type **SGS**) (formerly HFF)

Max. working pressure 5800 Psi (400 bar)

Test hose:
Nominal bore 0.08″ (2 mm)

Minimum bending radius 0.75″ (20 mm)

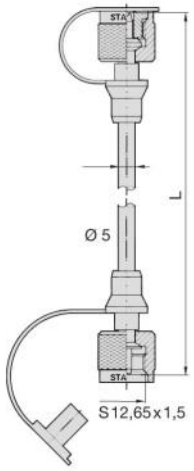
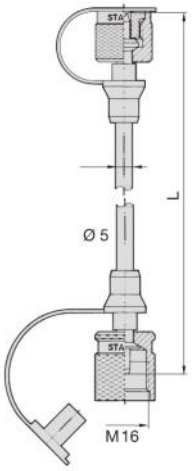
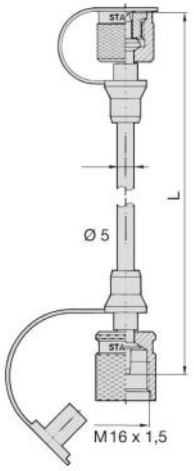
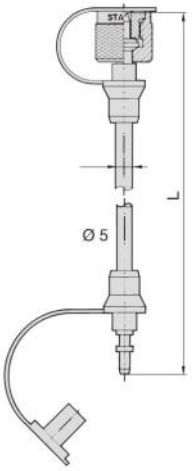
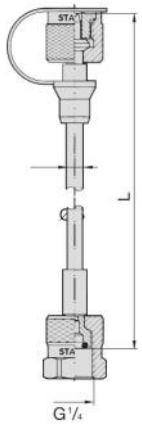
Nominal bore 0.16″ (4 mm) also available

Pressure/t° factor:
to 0°C 122 %
at 30°C 110 %
at 50°C 100 %
at 80°C 86 %
at 100°C 77 %

Hose construction:
Hose-core and -cover PA 11/12

Reinforcement:
Synthetic fibre

Bursting pressure:
15,950 Psi (1100 bar)

Stauff-Test 12/12 [2]	Stauff-Test 12/20	Stauff-Test 12/15	Stauff-Test 10/12	Stauff-Test 12/M¼-P-OR [3]
STAUFF-TEST 12	STAUFF-TEST 12	STAUFF-TEST 12	STAUFF-TEST 12	STAUFF-TEST 12
				
STAUFF-TEST 12	STAUFF-TEST 20	STAUFF-TEST 15	STAUFF-TEST 10	GAUGE ADAPTOR

Length L [1]	Order No.				
12″	SMS-12-12-A	SMS-12/20-12-A	SMS-12/15-12-A	SMS-10/12-12-A	SMS-12/M¼-P-OR-12
24″	SMS-12-24-A	SMS-12/20-24-A	SMS-12/15-24-A	SMS-10/12-24-A	SMS-12/M¼-P-OR-24
36″	SMS-12-36-A	SMS-12/20-36-A	SMS-12/15-36-A	SMS-10/12-36-A	SMS-12/M¼-P-OR-36
48″	SMS-12-48-A	SMS-12/20-48-A	SMS-12/15-48-A	SMS-10/12-48-A	SMS-12/M¼-P-OR-48
60″	SMS-12-60-A	SMS-12/20-60-A	SMS-12/15-60-A	SMS-10/12-60-A	SMS-12/M¼-P-OR-60
72″	SMS-12-72-A	SMS-12/20-72-A	SMS-12/15-72-A	SMS-10/12-72-A	SMS-12/M¼-P-OR-72
96″	SMS-12-96-A	SMS-12/20-96-A	SMS-12/15-96-A	SMS-10/12-96-A	SMS-12/M¼-P-OR-96
120″	SMS-12-120-A	SMS-12/20-120-A	SMS-12/15-120-A	SMS-10/12-120-A	SMS-12/M¼-P-OR-120

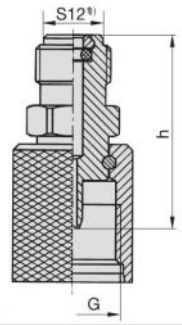
Custom lengths available on request

[1] Bending protection and other lengths on request

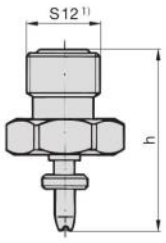
[2] Special thread: buttress thread S12,65 x 1,5

[3] Gauge adaptor ¼ NPT, G ½ and ½ NPT on request

ADAPTOR SAD



Type A



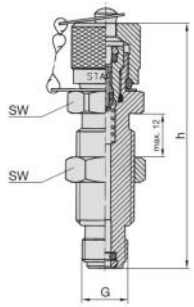
Type B

G	h mm / in	Type	Order No. NBR (BUNA)	Order No. FPM (VITON)
M16 x 1,5	33 / 1.30	A	SAD 12/15-P	SAD 12/15-V
plug in	31 / 1.22	B	SAD 12/10-P	SAD 12/10-V
M16 x 2	33 / 1.30	A	SAD 12/20-P	SAD 12/20-V

[1] Special thread: buttress thread S12,65 x 1,5

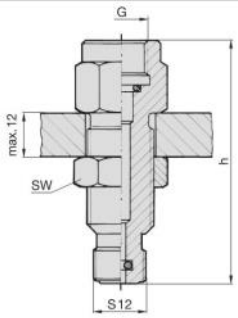
3/00

BULKHEAD SSKK (formerly SSK)



G	h mm / in	SW mm / in	Order No. NBR	Order No. FPM
S12	63 / 2.48	19 / 0.75	SSKK 12–P	SSKK 12–V

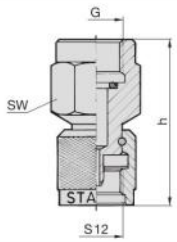
GAUGE ADAPTOR SMA (formerly GAH 12)



Through-hole Ø 18

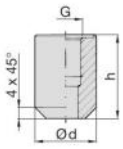
G	h mm / in	SW mm / in	Order No. NBR	Order No. FPM
G 1/4	51 / 2.00	19 / 0.75	SMA 12 – G 1/4 – P-OR	SMA 12 – G 1/4 – V-OR
G 1/2	61 / 2.40	27 / 1.06	SMA 12 – G 1/2 – P-OR	SMA 12 – G 1/2 – V-OR
1/4 NPT	51 / 2.00	19 / 0.75	SMA 12 – 1/4 NPT–P	SMA 12 – 1/4 NPT–V
1/2 NPT	61 / 2.40	27 / 1.06	SMA 12 – 1/2 NPT–P	SMA 12 – 1/2 NPT–V
Damping element on request				

DIRECT GAUGE ADAPTOR SMD (formerly DGA 12)



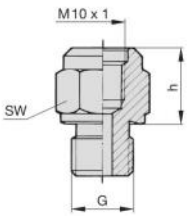
G	h mm / in	SW mm / in	Order No. NBR	Order No. FPM
G 1/4	35 / 1.38	19 / 0.75	SMD 12 – G 1/4 – P-OR	SMD 12 – G 1/4 – V-OR
G 1/2	45 / 1.77	27 / 1.06	SMD 12 – G 1/2 – P-OR	SMD 12 – G 1/2 – V-OR
1/4 NPT	35 / 1.38	19 / 0.75	SMD 12 – 1/4 NPT–P	SMD 12 – 1/4 NPT–V
1/2 NPT	45 / 1.77	27 / 1.06	SMD 12 – 1/2 NPT–P	SMD 12 – 1/2 NPT–V
Damping element on request				

WELDING ADAPTOR SAS



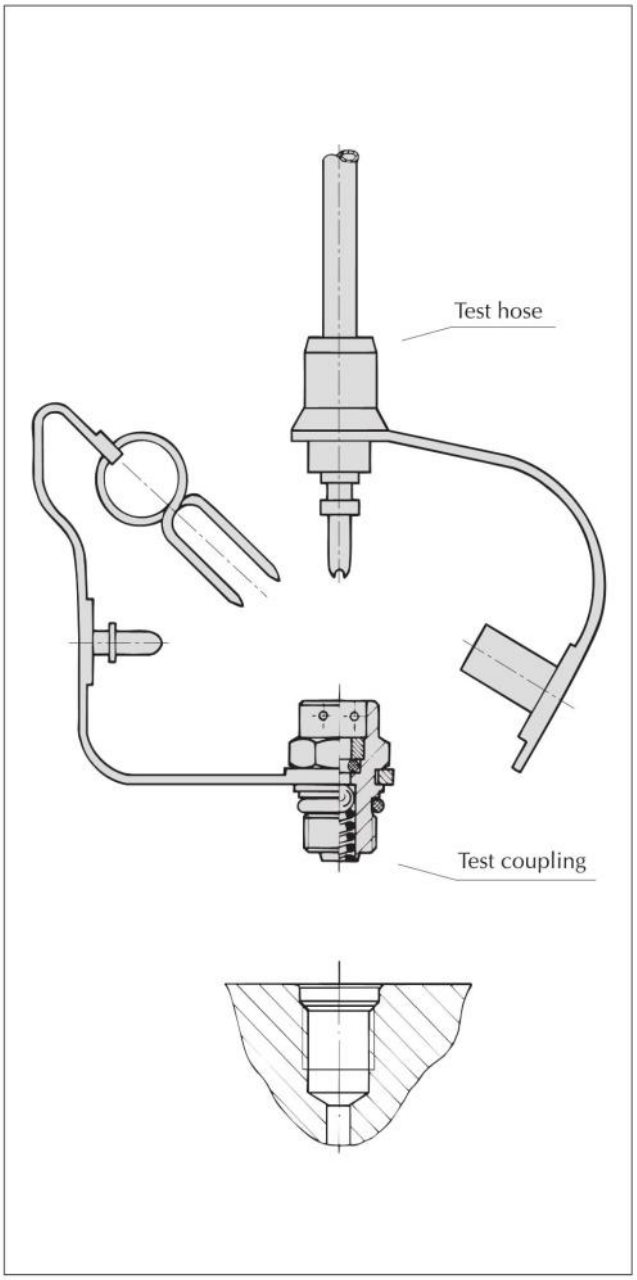
Coupling thread G	h mm / in	Ød mm / in	Order No.
M10 x 1	25 / 0.98	20 / 0.79	SAS – M10 x 1
G 1/4	30 / 1.18	22 / 0.87	SAS – G 1/4

THREAD ADAPTOR SRS



Thread G	h mm / in	SW mm / in	Order No.	Seal
M16 x 1,5	8 / 0.31	22 / 0.87	SRS 20 – M16 x 1,5-B	Metal joint DIN 3852 Type B
G 1/8	15,5 / 0.61	17 / 0.67	SRS 20 – G 1/8-B	
G 3/8	10,5 / 0.41	22 / 0.87	SRS 20 – G 3/8-B	
G 1/2	10,5 / 0.41	27 / 1.06	SRS 20 – G 1/2-B	
R 1/4 taper	13 / 0.51	19 / 0.75	SRS 20 – R 1/4 K-D	Port Connection Type D

3/00



FAST COUPLING FOR:

- Monitoring and control of pressure
- Venting
- Sampling

ADVANTAGES:

- Coupling at system pressure level
- Connection is leakproof before **ball valve** is open
- Simple connection to measurement, control and switching devices

WORKING PRESSURE:

- Max. working pressure 5800 Psi (400 bar)
  For SMK Type G, K and S the recommended working pressure of fitting manufacturer should be noted

MATERIALS:

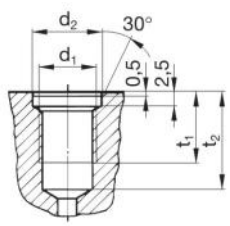
- Metal parts: Steel, Stainless Steel on request
- Ball: Stainless Steel
- Seals:
  P = NBR-BUNA Temperature range – 4°F to +195°F (– 20° C to +90° C)
  V = FPM-VITON Temperature range – 4°F to +392°F (– 20° C to +200° C)
  E = EPDM Ethylene Propylene (for Brake Fluid) Temperature range – 40°F to +302°F (– 40° C to + 150° C)
- Hose: Polyamide Temperature range –31°F to +212°F (–35° C to +100° C)

MEDIA:

- Suitable for hydraulic oils and other mineral oil based fluids (check compatibility of seal material)
- For use with other liquid media please consult STAUFF for availability of alternate seals

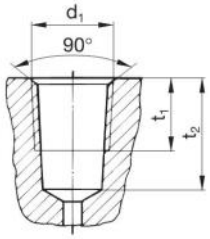
Port connections

Type A



d_1 (G)	d_2 mm / in	t_1 mm / in	t_2 mm / in
M 8 x 1	9,5 + 0,1 / 0.37	11 / 0.43	15,5 / 0.61
M10 x 1	11,5 + 0,1 / 0.45	12 / 0.47	16,5 / 0.65

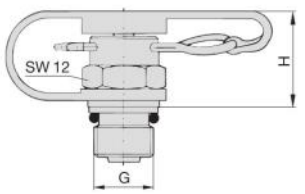
Type D



d_1 (G)	t_1 mm / in	t_2 mm / in
R 1/8 0 taper	5,5 / 0.22	9,5 / 0.37

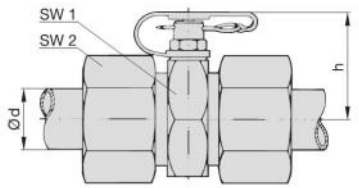
3/00

TEST COUPLING WITH PROTECTIVE CAP SMK

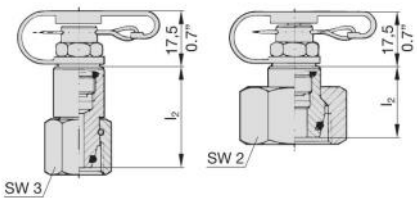


Thread G	H	Order No.		Seal
		NBR (BUNA)	FPM (VITON)	
M8 x 1	17,5 / 0.69	SMK 10 – M8 x 1 – PA	SMK 10 – M8 x 1 – VA	O-Ring Type A
M10 x 1	17,5 / 0.69	SMK 10 – M10 x 1 – PA	SMK 10 – M10 x 1 – VA	O-Ring Type A
R 1/8 0 taper	17,5 / 0.69	SMK 10 – R 1/8 0 K-PD	SMK 10 – R 1/8 0 K-VD	Taper Type D

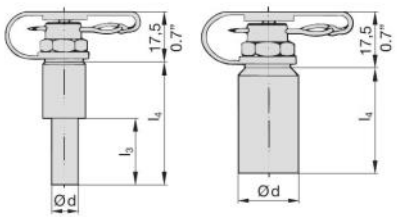
TEST COUPLING SMK (compression ring fittings acc. to DIN 2353)



Type G Test coupling complete with straight fitting



Type K Test coupling for 24° cone fittings



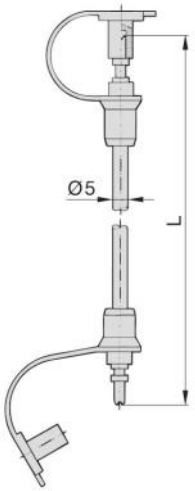
Type S Test coupling for compression ring assembly (not to be used for new constructions)

Series	PN	Pipe Ø d	l_2	l_3	l_4	h	SW 1	SW 2	SW 3	Order No.*		
			mm / in	mm / in	mm / in	mm / in	mm / in	mm / in	mm / in	Type G	Type K	Type S
L	315	6	30,5 / 1.20	20 / 0.79	36 / 1.42	29,5 / 1.16	24 / 0.94		14 / 0.55	SMK 10 – 6L–PG	SMK 10 – 6L–PK	SMK 10 – 6–PS
		8	30,5 / 1.20	20 / 0.79	36 / 1.42	29,5 / 1.16	24 / 0.94		17 / 0.67	SMK 10 – 8L–PG	SMK 10 – 8L–PK	SMK 10 – 8–PS
		10	31,5 / 1.24	22 / 0.87	38 / 1.50	29,5 / 1.16	24 / 0.94		19 / 0.75	SMK 10 – 10L–PG	SMK 10 – 10L–PK	SMK 10 – 10–PS
		12	32,5 / 1.28	22 / 0.87	38 / 1.50	31 / 1.22	27 / 1.06		22 / 0.87	SMK 10 – 12L–PG	SMK 10 – 12L–PK	SMK 10 – 12–PS
		15	21 / 0.83		28 / 1.10	32,5 / 1.28	30 / 1.18	27 / 1.06		SMK 10 – 15L–PG	SMK 10 – 15L–PK	SMK 10 – 15–PS
		18	19,5 / 0.77		28 / 1.10	33,5 / 1.32	32 / 1.26	32 / 1.26		SMK 10 – 18L–PG	SMK 10 – 18L–PK	SMK 10 – 18–PS
	160	22	20,5 / 0.81		30 / 1.18	35,5 / 1.40	36 / 1.42	36 / 1.42		SMK 10 – 22L–PG	SMK 10 – 22L–PK	SMK 10 – 22–PS
		28	25 / 0.98		32 / 1.26	38 / 1.50	41 / 1.61	41 / 1.61		SMK 10 – 28L–PG	SMK 10 – 28L–PK	SMK 10 – 28–PS
		35	30 / 1.18		42 / 1.65	40,5 / 1.59	46 / 1.81	50 / 1.97		SMK 10 – 35L–PG	SMK 10 – 35L–PK	SMK 10 – 35–PS
		42	31 / 1.22		45 / 1.77	45 / 1.77	55 / 2.17	60 / 2.36		SMK 10 – 42L–PG	SMK 10 – 42L–PK	SMK 10 – 42–PS
S	630	6	29,5 / 1.16	20 / 0.79	36 / 1.42	29,5 / 1.16	24 / 0.94		17 / 0.67	SMK 10 – 6S–PG	SMK 10 – 6S–PK	SMK 10 – 6–PS
		8	31,5 / 1.24	20 / 0.79	36 / 1.42	29,5 / 1.16	24 / 0.94		19 / 0.75	SMK 10 – 8S–PG	SMK 10 – 8S–PK	SMK 10 – 8–PS
		10	31,5 / 1.24	22 / 0.87	38 / 1.50	29,5 / 1.16	24 / 0.94		22 / 0.87	SMK 10 – 10S–PG	SMK 10 – 10S–PK	SMK 10 – 10–PS
		12	32,5 / 1.28	22 / 0.87	38 / 1.50	29,5 / 1.16	24 / 0.94		24 / 0.94	SMK 10 – 12S–PG	SMK 10 – 12S–PK	SMK 10 – 12–PS
		14	19,5 / 0.77	22 / 0.87	38 / 1.50	31 / 1.22	27 / 1.06	27 / 1.06		SMK 10 – 14S–PG	SMK 10 – 14S–PK	SMK 10 – 14–PS
	400	16	28 / 1.10		28 / 1.10	32,5 / 1.28	30 / 1.18	30 / 1.18		SMK 10 – 16S–PG	SMK 10 – 16S–PK	SMK 10 – 16–PS
		20	24 / 0.94		30 / 1.18	35,5 / 1.40	36 / 1.42	36 / 1.42		SMK 10 – 20S–PG	SMK 10 – 20S–PK	SMK 10 – 20–PS
		25	26 / 1.02		36 / 1.42	38 / 1.50	41 / 1.61	46 / 1.81		SMK 10 – 25S–PG	SMK 10 – 25S–PK	SMK 10 – 25–PS
		30	30 / 1.18		41 / 1.61	40,5 / 1.59	46 / 1.81	50 / 1.97		SMK 10 – 30S–PG	SMK 10 – 30S–PK	SMK 10 – 30–PS
	315	38	34 / 1.34		48 / 1.89	45 / 1.77	55 / 2.17	60 / 2.36		SMK 10 – 38S–PG	SMK 10 – 38S–PK	SMK 10 – 38–PS

* For ordering FPM seals please replace "P" with "V"
* For EPDM seals replace "P" with "E"

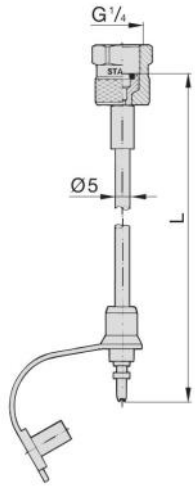
3/00

TEST HOSE SMS (formerly HFF)



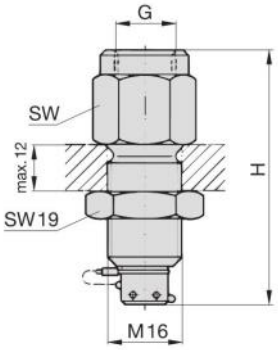
Length L	Order No.	Notice
12″	SMS-10-12-A	**Nominal bore 0.08″ (2 mm)**
24″	SMS-10-24-A	Minimum bending radius 0.75″ (20 mm)
36″	SMS-10-36-A	Pressure/t° factor to 0° C 122 % at 30° C 110 % at 50° C 100 % at 80° C 86 % at 100° C 77 %
48″	SMS-10-48-A	
60″	SMS-10-60-A	
72″	SMS-10-72-A	
96″	SMS-10-96-A	Bending protection and other lengths on request.
120″	SMS-10-120-A	

TEST HOSE SMS for direct gauge adaptor



Length L	Order No.	Notice
12″	SMS-10/M¼-P-OR-12	**Nominal bore 0.08″ (2 mm)**
24″	SMS-10/M¼-P-OR-24	Minimum bending radius 0.75″ 20 mm
36″	SMS-10/M¼-P-OR-36	Pressure/t° factor to 0° C 122 % at 30° C 110 % at 50° C 100 % at 80° C 86 % at 100° C 77 %
48″	SMS-10/M¼-P-OR-48	
60″	SMS-10/M¼-P-OR-60	
72″	SMS-10/M¼-P-OR-72	
96″	SMS-10/M¼-P-OR-96	Bending protection and other lengths on request.
120″	SMS-10/M¼-P-OR-120	

GAUGE ADAPTOR SMA (formerly GAH 10)



Through-hole Ø 18

G	H mm / in	SW mm / in	Order No. NBR	Order No. FPM
G ¼	57 / 2.24	19 / 0.75	SMA 10 – G ¼ – P-OR	SMA 10 – G ¼ – V-OR
G ½	67 / 2.64	27 / 1.06	SMA 10 – G ½ – P-OR	SMA 10 – G ½ – V-OR
¼ NPT	57 / 2.24	19 / 0.75	SMA 10 – ¼ NPT – P	SMA 10 – ¼ NPT – V
½ NPT	67 / 2.64	27 / 1.06	SMA 10 – ½ NPT – P	SMA 10 – ¼ NPT – V
Damping element on request				

3/00

SPECIFICATIONS

- Copper Alloy Bourden Tube
- Dual Scales
- Built in Relief Valve
- Operating Temperatures
  Ambient -4°F to 140°F (-20°C to 60°C)
  Media 140°F (+60°C)
- Acrylic Lens
- Accuracy + 1.5% of Full Scale
- Built in Snubber

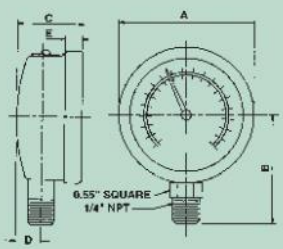
OPTIONS

- 2 1/2" or 4" Diameter Available
- Forged Brass Case Available in 2 1/2" Version.
- Stainless Steel Case Available in 2 1/2" and 4" Version.
- Front Flange
- Custom Dials & Pressure Gauges Available on Special Request.



DIMENSIONS

WPG SERIES

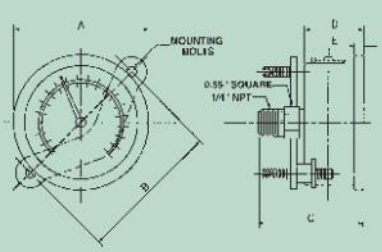


STEM

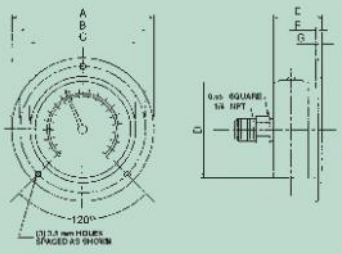


STEM

SPG-63 - XXXX SERIES

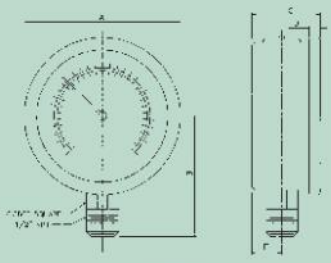


PANEL MOUNT - U BOLT

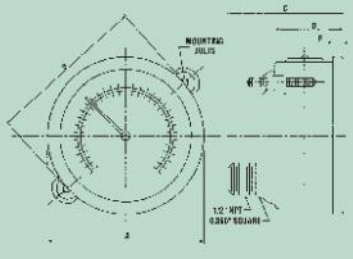


PANEL MOUNT - FRONT FLANGE

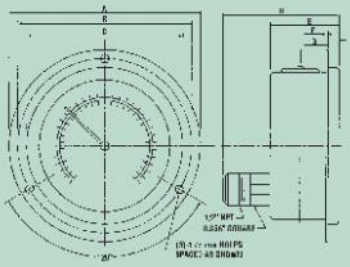
SPG-100 - XXXX SERIES



STEM



PANEL MOUNT - U BOLT



PANEL MOUNT - FRONT FLANGE

3/00

STANDARD STOCK PRESSURE RANGES

	SPG 63 SERIES STEM	SPG 63 SERIES PANEL	SPG 100 SERIES STEM	SPG 100 SERIES PANEL	WPG 63 SERIES STEM
30″ Hg - 0 psi	•	•			
15″ Hg - 30 psi					•
30″ Hg - 30 psi	•	•			
0 - 30 psi					•
0 - 60 psi	•	•			•
0 - 160 psi	•	•			•
0 - 300 psi	•	•	•	•	
0 - 600 psi	•	•	•	•	•
0 - 1000 psi	•	•	•	•	•
0 - 1500 psi	•	•	•	•	•
0 - 2000 psi	•	•	•	•	
0 - 3000 psi	•	•	•	•	•
0 - 5000 psi	•	•	•	•	•
0 - 6000 psi					•
0 - 7500 psi					•
0 - 10000 psi	•	•	•	•	

SERIES	STYLE	SIZE		A	B	C	D	E	F	G
SPG	STEM MOUNT	2 1/2″	in	2.5	2.1	1.2	0.51	0.26	-	-
			mm	63	53	31	13	6.5	-	-
	PANEL MOUNT U-BOLT	2 1/2″	in	2.5	2.8	2.4	1.2	0.26	-	-
			mm	63	72	62	31	6.5	-	-
	PANEL MOUNT FRONT FLANGE	2 1/2″	in	3.3	2.9	2.5	2.44	1.2	0.08	0.08
			mm	85	75	63	62	31	2	2
	STEM MOUNT	4″	in	4.2	3.4	1.85	0.3	0.64	-	-
			mm	107	86	47	7.5	16.3	-	-
	PANEL MOUNT U-BOLT	4″	in	4.2	4.25	3.15	1.85	0.3	-	-
			mm	107	108	80	47	7.5	-	-
	PANEL MOUNT FRONT FLANGE	2 1/2″	in	5.2	4.7	4.2	3.15	1.85	0.05	0.3
			mm	132	118	107	80	47	1.25	7.5
WPG	STEM MOUNT	2 1/2″	in	2.5	2.13	1.5	0.44	0.50	-	-
			mm	63.5	54	38	11	12.2	-	-

ORDERING INFORMATION

SPG 63 1500 S -

CASE TYPE

SPG - STAINLESS STEEL
WPG - FORGED BRONZE

DIAL SIZE

63 - 2 1/2"
100 - 4"

PRESSURE RANGE	ORDER CODE
-30" HG-30	3030
0-30	0030
0-60	0060
0-160*	0160
0-300	0300
0-600*	0600
0-1000*	1000
0-1500*	1500
0-2000*	2000
0-3000*	3000
0-5000*	5000
0-6000	6000
0-7500	7500
0-10,000	10000

ATTACHMENT

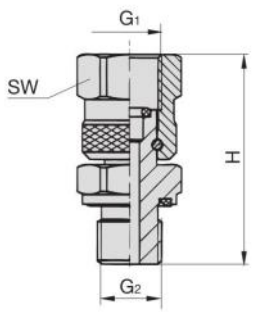
-	NONE
U	U - BOLT
FF	FRONT FLANGE

MOUNTING

S	STEM – NPT
P	PANEL – NPT
SU	STEM – 7/16-20 UNF
PU	PANEL – 7/16-20 UNF

* UNF only available in these ranges

ADJUSTABLE GAUGE FITTING EMV



G_1	G_2	H	SW	Order No. NBR	Order No. FPM
G1/4	G1/4	42	19	EMV-G1/4-P-OR-PC	EMV-G1/4-V-OR-VC
G1/4	G1/2	47	19	EMV-G1/4/G1/2-P-OR-PC	EMV-G1/4/G1/2-V-OR-VC
G1/2	G1/4	51	27	EMV-G1/2/G1/4-P-OR-PC	EMV-G1/2/G1/4-V-OR-VC
G1/2	G1/2	55,5	27	EMV-G1/2-P-OR-PC	EMV-G1/2-V-OR-VC

3/00

Complete Kits

Stauff-Test pressure monitoring kits are available pre-assembled with an assortment of our most popular components. everything required for instant pressure checking is included in one rugged box. Gauges are safely nestled in the Ethafoam® cushion and hoses fit neatly in the lid.



SINGLE GAUGE KIT A1

1 60 inch Hose Assembly	SMS20-060-A
1 Direct Gauge Adaptor	SMD20-1/4 NPT-V
1 Union	SSV20/20
1 7500 psi Gauge	WPG 7500-1/4 NPT-VD
2 1/8 NPT Pressure Test Coupling	SMK20-1/8 NPT-VD
3 1/4 NPT Pressure Test Coupling	SMK20-1/4 NPT-VD
2 7/16 UNF Pressure Test Coupling	SMK20-7/16 UNF-VE
2 9/16 UNF Pressure Test Coupling	SMK20-9/16 UNF-VE



DOUBLE GAUGE KIT B1

1 60 inch Hose Assembly	SMS20-060-A
2 Direct Gauge Adaptor	SMD20-1/4 NPT-V
1 Union	SSV20/20
1 7500 psi Gauge	WPG 7500-1/4 NPT
1 1000 psi Gauge	WPG 1000-1/4 NPT
2 1/8 NPT Pressure Test Coupling	SMK20-1/8 NPT-VD
2 1/4 NPT Pressure Test Coupling	SMK20-1/4 NPT-VD
1 7/16 UNF Pressure Test Coupling	SMK20-7/16 UNF-VE
1 9/16 UNF Pressure Test Coupling	SMK20-9/16 UNF-VE



TRIPLE GAUGE KIT C1

2 60 inch Hose Assembly	SMS20-060-A
3 Direct Gauge Adaptor	SMD20-1/4 NPT-V
2 Union	SSV20/20
1 –15" Hg-0-30 psi Gauge	WPG 1530-1/4 NPT
1 7500 psi Gauge	WPG 7500-1/4 NPT
1 1000 psi Gauge	WPG 1000-1/4 NPT
2 1/8 NPT Pressure Test Coupling	SMK20-1/8 NPT-VD
2 1/4 NPT Pressure Test Coupling	SMK20-1/4 NPT-VD
1 7/16 UNF Pressure Test Coupling	SMK20-7/16 UNF-VE
1 9/16 UNF Pressure Test Coupling	SMK20-9/16 UNF-VE

Custom Kits are easily supplied tailor made to your specific needs. OEMs in particular find this convenient for factory – trained technicians and as an aftermarket service tool. Custom labels. foaminserts and boxes are available in quantity.

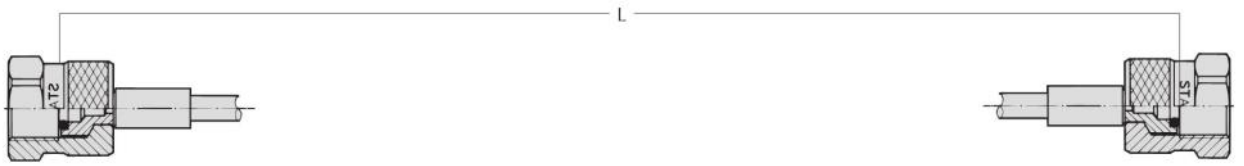
3/00

TECHNICAL DATA FOR TEST-HOSES

Ordering code			A	B	C
Nominal bore (DN)		(mm)	DN 2	DN 2	DN 4
max. working pressure (PN)		Psi/(bar)	6000 (400)	9100 (630)	4900 (340)
min. bursting pressure		Psi/(bar)	15,950 (1100)	27,550 (1900)	12,325 (850)
Testing pressure		Psi/(bar)	8700 (600)	13,775 (950)	8265 (570)
Pressure rating in bar at indicated temperature	at 0° C	Psi/(bar)	6500 (488)	11,136 (768)	6713 (463)
	at 30° C	Psi/(bar)	6380 (440)	10,048 (693)	6061 (418)
	at 50° C	Psi/(bar)	5800 (400)	9138 (630)	5510 (380)
	at 80° C	Psi/(bar)	4988 (344)	7859 (542)	4741 (327)
	at 100° C	Psi/(bar)	446 (308)	7032 (485)	4248 (293)
Working temperature		°F (° C)	-31° F ... 212° F (-35° C ... 100° C)		
Inside diameter		inch (mm)	0.08″ (2)	0.08″ (2)	0.16″ (4)
Outside diameter		inch (mm)	0.2″ (5)	0.2″ (5)	0.34″ (8,6)
Bending radius	at working pressure	inch (mm)	0.79″ (20)	0.79″ (20)	1.57″ (40)
	at – 20° C	inch (mm)	1.18″ (30)	1.18″ (30)	2.36″ (60)
max. coil length		ft. (m)	325′ (100)	325′ (100)	325′ (100)
Weight/m		oz. (g)	0.5 (16)	0.5 (16)	1.35 (42)
Inner/outer tube			PA	PA	PA
Reinforcement			Synthetic fiber	Synthetic fiber	Synthetic fiber

Hose ends made of 9 S Mn Pb 28 (1.0718), zinc plated and chromated	Stainless steel on request

ORDERING CODE



SMS	20	/ M . . .	—	24	—	A

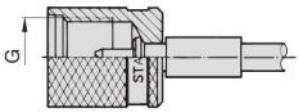
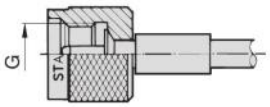
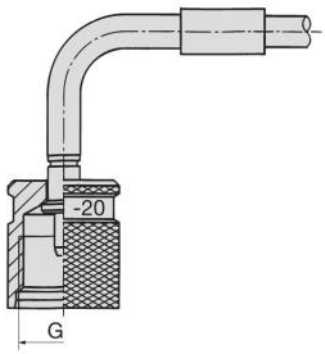
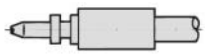
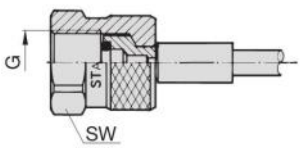
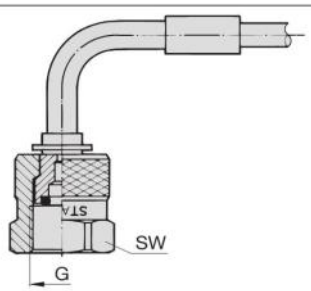
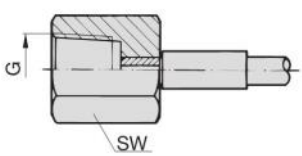
Hose End 1 (see Type page 74 - 77)		
20	A	J . . . .
15	S	D . . . .
12	K	B . . . .
10	L	U . . . .
M	G	P . . . .
N	F	
W	C	

Hose End 2 (see Type page 74 - 77)
only specify when 2 different hose ends are required

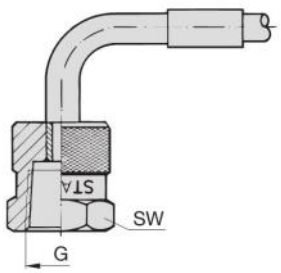
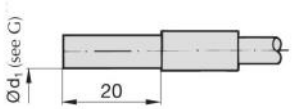
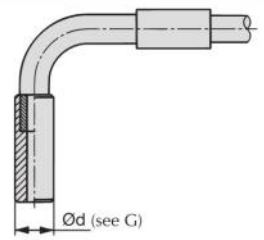
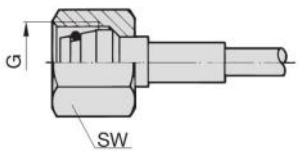
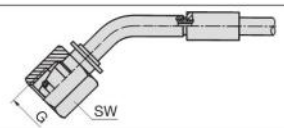
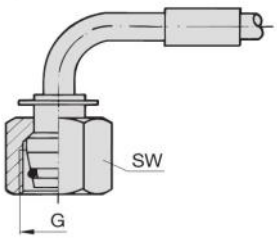
Length
Length inches (mm) (see L above)

	Nominal bore
A	= DN 2 400 bar – 6000 Psi
B	= DN 2 630 bar – 9100 Psi
C	= DN 4 340 bar – 4900 Psi

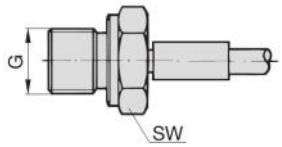
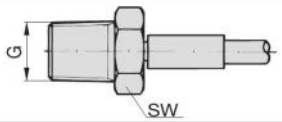
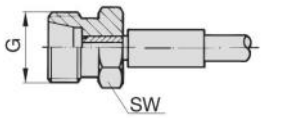
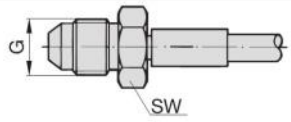
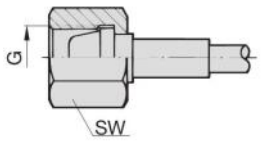
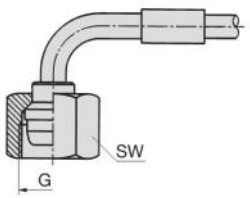
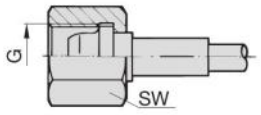
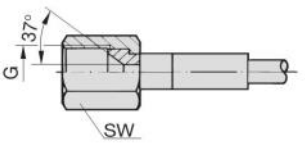
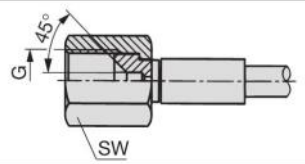
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Description	Hose end	Type		G	SW mm / in	DN
STAUFF-TEST Screw-type Suitable for test points	 Typ 20 + 15  Typ 12		**20**	M16 x 2		2 and 4
			15	M16 x 1,5		
			12	S 12,65 x 1,5		
STAUFF-TEST Screw-type 90° elbow Suitable for test points		O	**20**	M16 x 2		2
			15	M16 x 1,5		
			12	S 12,65 x 1,5		
STAUFF-TEST Plug in-type			**10**	Plug in system		2
Gauge adapter BSP-thread for G 3/8 and G 1/2 BSP is similar to swivel nut type N		M	1/4	G 1/4	19 / 0.75	2 and 4
			1/2	G 1/2	27 / 1.06	
			3/8	G 3/8	22 / 0.87	2
90° elbow gauge adapter BSP-thread for G 3/8 and G 1/2 is similar to swivel nut type N		W W	1/4	G 1/4	19 / 0.75	2 and 4
			1/4	G 1/4	27 / 1.06	
			1/2	G 1/2		
Gauge adapter NPT-thread for 1/4 NPT is similar to swivel nut type M		N	1/4	1/4 NPT	19 / 0.75	2
			1/2	1/2 NPT	27 / 1.06	

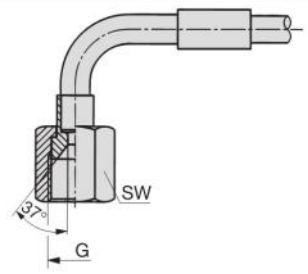
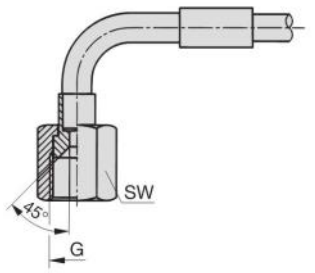
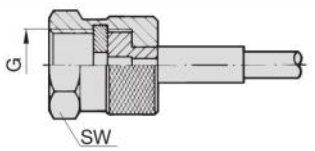
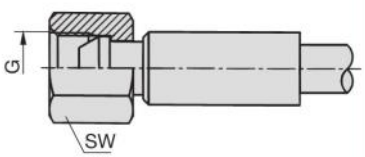
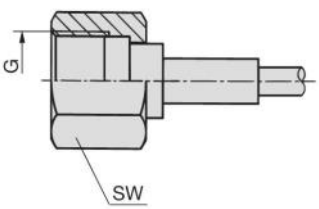
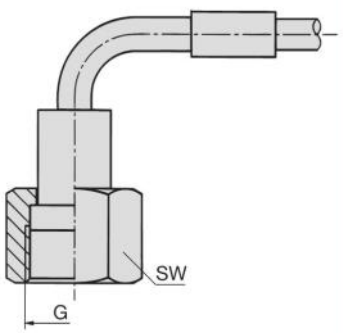
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Description	Hose end	Type		G	SW mm / in	DN
90° elbow gauge adapter NPT-thread for 1/4 NPT swivel nut like type M		A	1/4	1/4 NPT	19 / 0.75	2 and 4
			1/2	1/2 NPT	27 / 1.06	
Standpipe according to DIN 2353		S	4	4 LL		2
			6	6 L – 6 S		2/4
			8	8 L – 8 S		2/4
			10	10 L – 10 S		2/4
			12	12 L – 12 S		2
			15	15 L		2
			1/4	1/40		2/4
Standpipe according to DIN 2353 90° elbow		on request				2 and 4
Seal with O-ring for 24° cone fitting according to DIN 2353 c/w swivel nut		K	6 LL	M10 x 1,0	12 / 0.47	4
			6 L	M12 x 1,5	14 / 0.55	2/4
			8 L	M14 x 1,5	17 / 0.67	2/4
			10 L	M16 x 1,5	19 / 0.75	2/4
			12 L	M18 x 1,5	22 / 0.87	2/4
			6 S	M14 x 1,5	17 / 0.67	2/4
			8 S	M16 x 1,5	19 / 0.75	2/4
			10 S	M18 x 1,5	22 / 0.87	2/4
			12 S	M20 x 1,5	24 / 0.94	2/4
Seal with O-ring for 24° cone fitting according to DIN 2353 c/w swivel nut 45° elbow		R	6 S	M14 x 1,5	17 / 0.67	
Seal with O-ring for 24° cone fitting according to DIN 2353 c/w swivel nut 90° elbow		L	6 L	M12 x 1,5	14 / 0.55	2 and 4
			8 L	M14 x 1,5	17 / 0.67	
			10 L	M16 x 1,5	19 / 0.75	
			6 S	M14 x 1,5	17 / 0.67	
			8 S	M16 x 1,5	19 / 0.75	
			10 S	M18 x 1,5	24 / 0.95	

3/00

Description	Hose end	Type		G	SW mm / in	DN
Male thread according to DIN 3852		G	12	M12 x 1,5	17 / 0.67	2 and 4
			1/8	G 1/8	14 / 0.55	
			1/4	G 1/4	19 / 0.75	
			1/2	G 1/2	27 / 1.06	
Male thread NPT according to ANSI-Norm		F	1/8	1/8 NPT	13 / 0.51	
			1/4	1/4 NPT	17 / 0.67	
Male thread for 24° cone fitting according to DIN 3852		C	6 L	M12 x 1,5	14 / 0.55	
			8 L	M14 x 1,5	17 / 0.67	
			6 S	M14 x 1,5	17 / 0.67	
			8 S	M16 x 1,5	17 / 0.67	
Male thread according to SAE J 514		J	1/4	7/16 – UNF	14 / 0.55	
			5/16	1/2 – UNF	14 / 0.55	
			3/8	9/16 – UNF	17 / 0.67	
Universal sealing head with swivel nut for 24° cone fitting according to DIN 2353		D	6 L	M12 x 1,5	14 / 0.55	
			8 L	M14 x 1,5	17 / 0.67	
			10 L	M16 x 1,5	19 / 0.75	
			12 L	M18 x 1,5	22 / 0.87	
			6 S	M14 x 1,5	17 / 0.67	
			8 S	M16 x 1,5	19 / 0.75	
			10 S	M18 x 1,5	22 / 0.87	
			12 S	M20 x 1,5	24 / 0.94	
Universal sealing head with swivel nut for 24° cone fitting according to DIN 2353 90° elbow		Q	10 L	M16 x 1,5	19 / 0.75	
			10 S	M18 x 1,5	22 / 0.87	
Sealing head with swivel nut for cone fitting according to DIN 8542		B	1/4	G 1/4	17 / 0.67	
Sealing head with swivel nut according to SAE J 514 37° cone		U	1/4	7/16 – 20 UNF	14 / 0.55	
			5/16	1/2 – 20 UNF	17 / 0.67	
			3/8	9/16 – 18 UNF	19 / 0.75	
Sealing head with swivel nut according to SAE J 514 f 45° cone		UR	1/4	7/16 – 20 UNF	14 / 0.55	2

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Description	Hose end	Type		G	SW mm / in	DN
Sealing head with swivel nut according to SAE J 514 37° cone 90° elbow		E	1/4	7/16 – 20 UNF	14 / 0.55	
Sealing head with swivel nut according to SAE J 514 f 45° cone 90° elbow		ER	1/4	7/16 – 20 UNF	14 / 0.55	2
Test hose for air brake systems		P	2	M 16 x 1,5	19 / 0.75	
Sealing head with swivel nut 60° cone		H	1/4	G 1/4	17 / 0.67	4
Screw-type ORS according to SAE J 1453		T	11/16	11/16 – 16 UN	21 / 0.83	2
Screw-type ORS according to SAE J 1453 90° elbow		V	11/16	11/16 – 16 UN	21 / 0.83	2 and 4

3/00

HAND-HELD MEASURING UNIT IDEAL FOR MAINTENANCE, SERVICE AND COMMISSIONING OF HYDRAULIC SYSTEMS

Today's hydraulic systems require a precise, quick and uncomplicated way of measuring important hydraulic parameters. For this purpose STAUFF offers the ideal solution: The PPC 04.

The mobile measuring device PPC 04 is controlled by its 8 buttons enabling the user of the device to easily obtain data on working pressure, peak pressure, differential pressure, temperature, flow and rotational speed. This results in a wide range of applications in the areas of:

- **Industrial Hydraulics**
- **Mobile and Agricultural Hydraulics**
- **Marine and Offshore Hydraulics**
- **Chemical and Petrochemical Industry**
- **Energy and Aircondition Industry**
- **Sanitary Industry**

The PPC 04 provides two separate sensor inputs which automatically recognize the sensors connected to it and displays the unit and scale for the corresponding sensor. The unit and scale can be changed during use.

Data can be output to the optional Thermo-Printer or a PC using the appropriate cables and adaptors.

The PPC04 is insensitive to dirt and is designed to be used wherever hydraulic control and components are in use. The heavy duty rubber cover protects the unit from damage during use in extreme conditions. The PPC04 is powered either by a standard 9v battery (PPC04 B), or by an integrated rechargeable battery (PPC04 AP). Operation for an extended period of time is supported with the use of the AC power adaptor.

Note! Not all output features are supported by the non-rechargeable unit (PPC04 B).

PPC04 Kits are supplied complete with adaptors to connect the unit to Stauff Test 20/15/12 and Stauff Test 10 test points, even under pressure. Temperature and Flow measurement is possible using Temperature Sensor TS04 or SFM flow turbines mounted in the hydraulic line. Rotational speed can be measured using the Stauff SDS-04 rotational speed sensor.

In order to measure differential pressure two transducers of the same pressure range have to be used.

EMC compatibility acc. to:
Interference emission DIN/EN 50081-1 (VDE 0839 part 81-1)
Resistance to jamming DIN/EN 50082-2 (DVE 0839 part 82-6)

HAND-HELD UNIT PPC 04 - B AND PPC 04 - AP

Measures:

• Pressure	in bar and psi
• Temperature	in °C and °F
• Flow	in l/min and GPM (US)
• Rotational speed	in RPM

PPC 04 - AP hand-held unit with rechargeable battery and data output

- 4-digit LCD-display, character height: 13 mm
- Automatic recognition of sensors connected
- Optical data transmission to transfer values measured to thermoprinter or PC (PPC 04 - AP only)
- Plastic housing made of ABS Protective rubber cover with integrated stand and carrying straps
- Auto power off after 15 minutes (except autoprint function)

Power supply:
9 V block battery IEC 6F 22 (PPC 04 - B)
Rechargeable battery - or by external power supply
Supply voltage 9 V (PPC 04 - AP)
12-bit-A/D-converter

Scanning rate	≤ 2 ms
Accuracy	< 0,3%± 2 Digit

Two 4-pin round plug inputs 0, l...3,3 V, RE = 470 kΩ

Temperature range 0...+50°C	32°F...122°F
Storage Temperature -20...+60°C	-4°F...140°F
Rel. Humidity < 85%	

Dimensions l/w/h 145 x 70 x 40mm	5.7" x 2.75" x 1.57"
Weight approx. 340 g	0.75 lbs.

Protection level DIN 40050/IP 54



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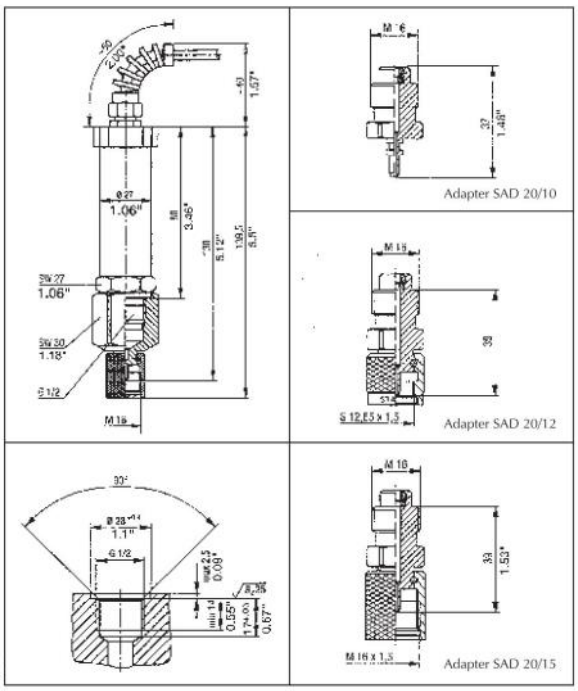
PRESSURE TRANSDUCER PTD

Type	PTD 015	PTD 063	PTD 630
Pressure range	-15...210 psi -1...15 bar	0...900 psi 0...63 bar	0...9000 psi 0...630 bar
Overload capacity	290 psi 20 bar	2175 psi 150 bar	14,500 psi 1000 bar
Burst pressure	650 psi 45 bar	7250 psi 500 bar	26,000 psi 1800 bar
Output signal	+0,1...+3,3 V	+0,3...+3,3 V	+0,3...+3,3 V
Reproducibility	<±0, 15% FS*	<±0. 18% FS*	<±0. 15% FS*

Test system	piezoresistive
Temperature deviation	<±0,03 % FS*
Characteristic curve deviation	<±0,5 % FS*
Long-time stability	<0,5 % FS/a
Response time	< 1 ms
Vibration resistance	IEC 68-2-6 AT 10...500 Hz
Max. shock-load	to IEC 68 part 2 to 29
Peak pressure increase	21,000psi/sec 15,000 bar/s
Supply voltage	+7V...+15V DC
Current consumption	≤ 5 mA
Media-temperature range	-13...221°F -25...+105°C
Ambient temperature range	-4...185°F -20...+85°C
Compensated temperature range	32...185°F 0...+85°C
Storage temperature range	-40...257°F -40...+125°C
Endurance	10 Million cycles
Media application	gas,fluids (for use with aggressive media please consult STAUFF)
Transducer connection 20 (M16 x 2) (without adapter G 1/2 A)	with adapter STAUFF Test
Material of housing	stainless steel 1.4301
Sealing material	FPM
Weight	approx. 200 g (0.44 lbs.)
Protection level	DIN 40050 - IP 65

78" (2 mtr.) -cable connected with transducer, round plug series 712

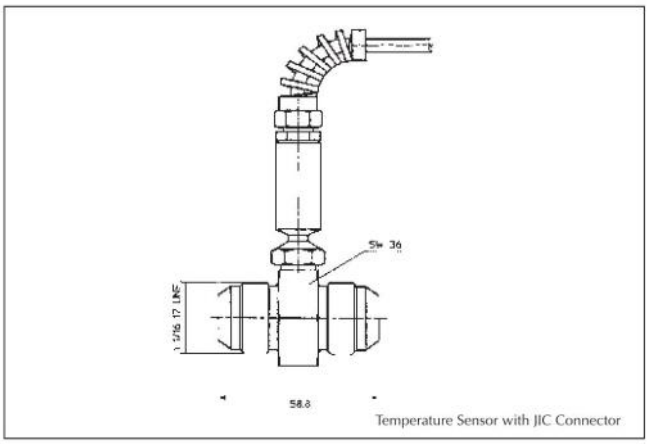
* FS = Full Scale

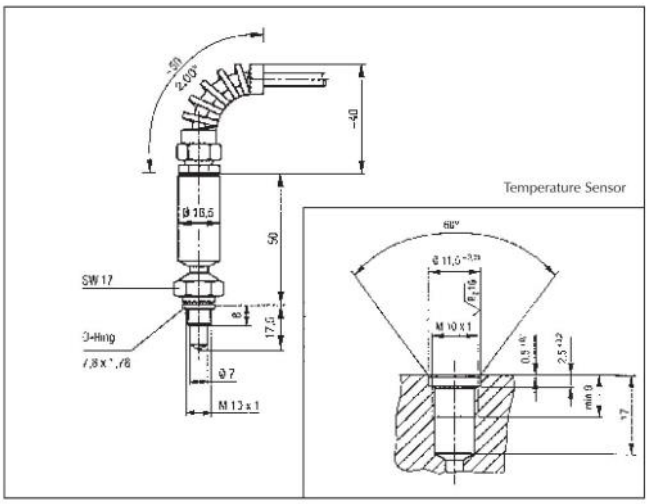


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TEMPERATURE SENSOR TS 04

Probe system	Silicon Chip
Measuring range	-13...257°F -25...+125°C
Accuracy	± 1.5 % FS*
Response time T 0,9	approx. 7 s
Supply voltage	+7...+15 V DC
Current consumption	≤ 3 mA
Outage voltage	+0,25...+1,75 V
Max. working pressure	9000psi 630 bar
Ambient temperature range	32...158°F 0...+70°C
Media-temperature range	-13...257°F -25...+125°C
Storage temperature range	-13...176°F -25...+80°C
Cable length	78" (2m), round plug
Sensor connection	a) STAUFF-Test-straight fitting SGV-16-S-G for in-line installation b) Port Connection M10 x 1
Material	Steel 9SMnPb28k
Surface treatment	zinc plated, yellow chromated
Sealing	FPM
Protection level	DIN 40050 - IP 65





TEST

FLOW-TURBINES SFM

Type		SFM-015	SFM-060	SFM-300	SFM-600
Measuring range	(GPM)	0.26-3.9	1.95-15.6	3.9-78	7.8-156
	(LPM)	1-15	7.5-60	15-300	25-600
Pressure range	(PSI)	5800	5800	5800	5800
	(Bar)	400	400	400	350
Characteristic curve deviation (≤%FS)		1	1	1	1
Pressure drop	(PSI)	2.03			
	(Bar)	0.14	0.28	2.0	1.7
Port Connection (BSP)	G	1/2"	3/4"	1"	1 1/4"
Port Connection (SAE)	G	3/4"-16	1 1/16"-12	1 5/16"-12	1 5/8"-12
Weight		1.4 lbs.	1.6 lbs.	2.6 lbs.	4 lbs.

Media-temperature range	-4...302°F -20...+150°C
Response time	approx. 200 ms
Reproducibility	± 0,2 % Full Scale
Calibration viscosity	30 mm 2/s (+30 cST)
Material of housing	Aluminum
Surface treatment	black anodized
Test point SMK 20 (M16 x 2)	
Additional connection	M10x1 (standard): screw-plug

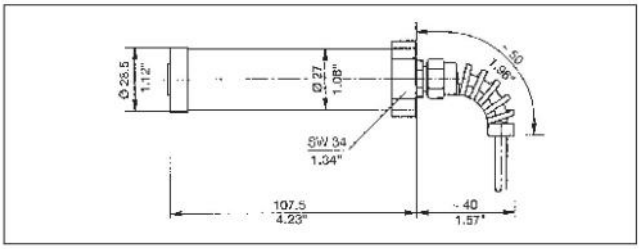
DIM \ SIZE		SFM -015	SFM -060	SFM -300	SFM -600
A	in	0.88	1.04	1.20	1.30
	mm	22.5	26.5	30.5	33
B	in	1.24	1.50	1.97	2.46
	mm	31.5	38	50	62.5
D	in	2.3	2.26	2.26	2.26
	mm	58.5	57.5	57.5	57.5
L	in	4.72	5.08	5.86	6.81
	mm	120	129	149	173
H	in	1.47	1.81	2.20	2.5
	mm	37.5	46	56	63.5

SIGNAL CONVERTER

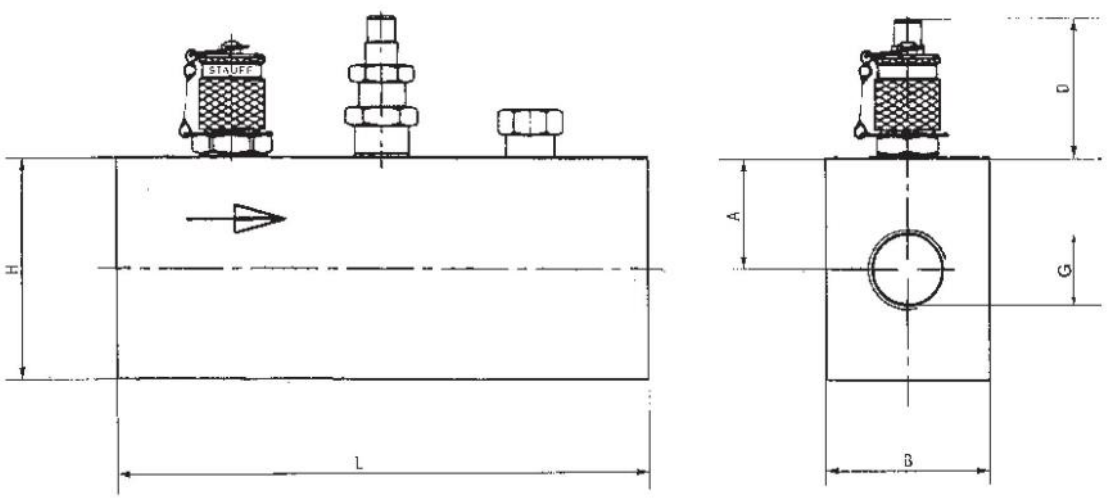
To be used when using flow-turbines in conjunction with PPC 04. (Signal converter is supplied with the flow turbine)

Input	10...2000 Hz, 10...100 mVss
Output	0...3 V and sensor recognition
Accuracy	≤ 0,3 % Full Scale
Response time	approx. 200 ms
Working temperature	0...+60°C 32...140°F
Storage Temperature	-20...+80°C -4...176°F
Supply voltage	+7...+15 V DC
Current consumption	approx. 8 mA
Electrical connection	Turbine end: cable 16" (0.4 m) connected to signal converter with 5 pin plug connection to hand-held unit: cable SFM 78" (2m)
Material of housing	stainless steel 1.4301
Weight	approx. 200 g (0.44 lbs.)

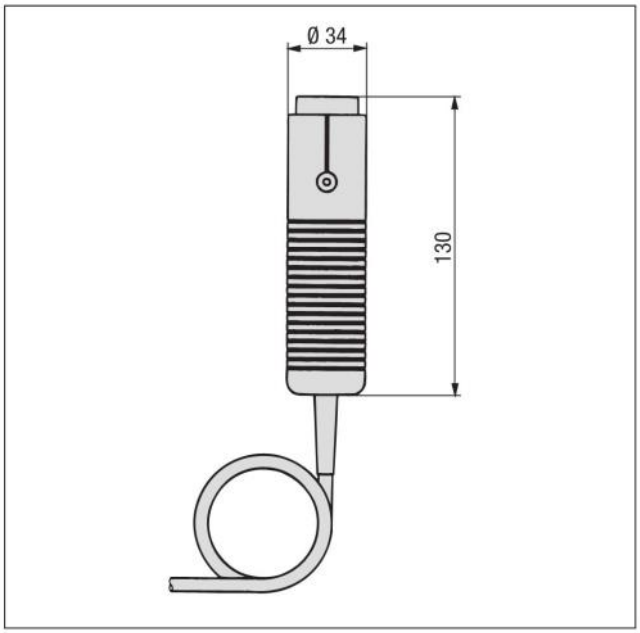
SIGNAL CONVERTER



NOTE: The flow turbine and the signal converter are matched units.



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ROTATIONAL SPEED SENSOR SDS-04

Rotational speed measurement (RPM) is made possible with the use of the SDS 04 non-contact sensor. Speed measured using a photoelectric cell which counts revolutions via a reflecting strip or marking on the rotating surface resulting in a high level of accuracy.

Additionally a contact sensor is available. A mechanical contact adaptor is connected to the speed sensor, which is held onto the rotating surface during measurement.

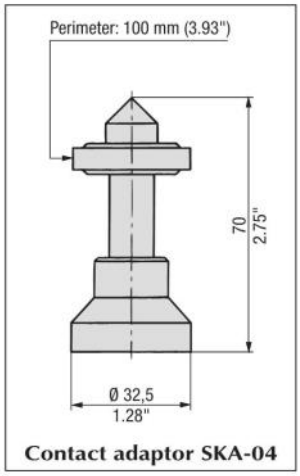
When used with particularly small surfaces, accuracy may be improved by using a special focusing adaptor.

Lengthening of the SVK 04 cable could result in inaccurate speed measurement and should be avoided. The standard cable length of 3 m, fixed to the sensor should not be altered for best results.

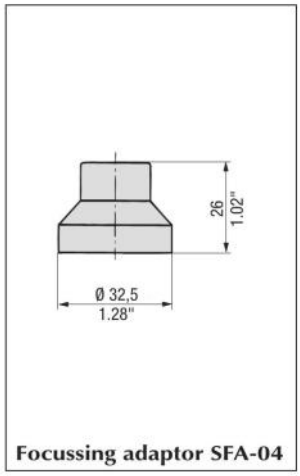
TECHNICAL DATA

Input	
Measuring range	20...10.000 RPM
Measuring distance	25...600 mm (1"-24")
Measuring angle	±45°
Measurement	optical, red LED
Output	
Output signal	0...3 V DC=0...10.000 RPM
Accuracy	<0.5%
Resolution	±5 RPM
Supply voltage	7...9 V DC (of the PPC 04)
Electrical connection	
Cable connected to the sensor	length 3 m, round plug (extension cable not recommended)
General	
Material	ABS
Dimension	D=Ø 34 (1.34"), L=130 mm (5.1") (without adaptor)
Weight	approx. 230 g (0.5 lb.)

ACCESSORIES

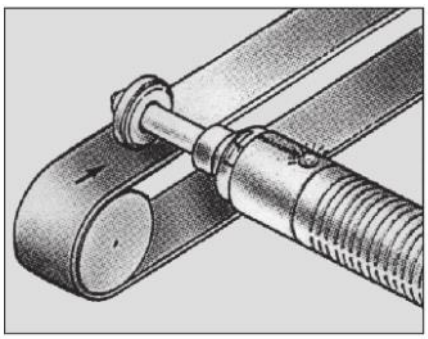


Contact adaptor SKA-04

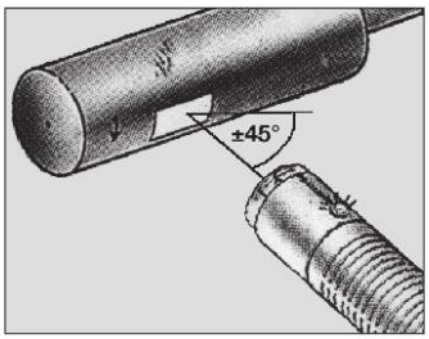


Focussing adaptor SFA-04

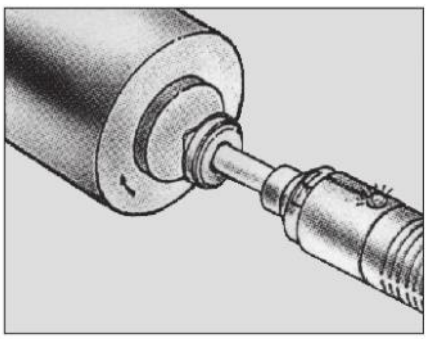
APPLICATIONS



App. 1 – rotating shaft non-contact RPM



App. 2 – RPM with contact adaptor using perimiter



App. 3 – RPM with contact adaptor using point

3/00

THERMOPRINTER PR PPC (FOR PPC 04 - AP ONLY)

The thermoprinter PR PPC provides the possibility to record most of the important hydraulic parameters like maximum, minimum and current values, following a preset transmission interval from 1 to 100 seconds.
The power-off mode of the PPC 04 is disabled during long-periods of measurement. The thermoprinter PR PPC is powered by an external power supply KNG PR PPC to which the PPC 04 - AP can be connected as well.
All data measured by the PPC 04 AP is transferred by a dirt-insensitive optical data transmission in conjunction with a fiber optic cable supplied with the printer.

PRINTER PR PPC



PC-CONNECTION (PPC 04 - AP)

The PPC 04 - AP can also be connected to any PC by using the fiber optic cable (SDK - 04) and an auxiliary adapter (SPA - 04). Standard software installed on most computers is suitable to evaluate data transferred.

PPC 04 COMPLETE KITS



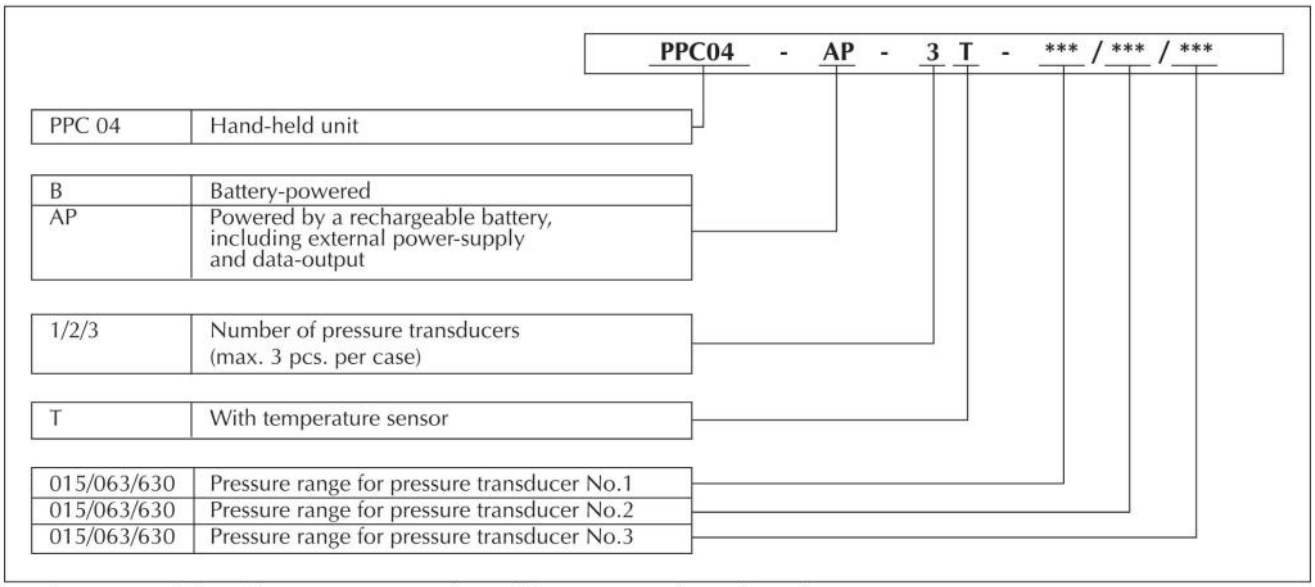
PPC 04 kits are supplied with a plastic case including foam inserts which provides room for the following components:

1 hand-held unit
1 external power supply
3 pressure transducers c/w STAUFF Test 20 adapters
1 temperature sensor with straight fitting SGV-16 S-G
3 adapters for STAUFF Test 15 / 12 / 10 (are supplied with each PPC 04 kit)

Kits can be tailored according to customer requirements.

3/00

ORDER CODE FOR PPC 04 KITS



In order to measure differential pressure two (2) transducers of the same pressure have to be used.

COMPONENTS

Description	Order Code
Hand-held unit with block battery	HAG PPC 04 - B
Hand-held unit with rechargeable battery and data output	HAG PPC 04 - AP
External power supply ... input voltage 220 V or 110 V	KNG 04 - *** V
Rechargeable battery for PPC 04 - AP	Akku - 9V
Pressure transducer connection G 1/2 A *** = pressure range 015,063 or 630 (bar)	PTD ***
Pressure transducer c/w STAUFF Test 20 adapter *** = pressure range 015, 063 or 630 (bar)	PTD *** -SDA
STAUFF Test 20 adapter for pressure transducer	SDA 20 - G 1/2
STAUFF Test 20 / STAUFF Test 15 adapter	SAD 20/15 - P
STAUFF Test 20 / STAUFF Test 12 adapter	SAD 20/12 - P
STAUFF Test 20 / STAUFF Test 10 adapter	SAD 20/10 - P
Temperature sensor (w/o straight fitting)	TS 04
Straight fitting 16 S with M 10 x 1 port connection for temp. sensor (Other dimensions on request)	SGV - 16S - G
Plastic case c/w foam inserts	case PPC 04
Flow-turbine c/w signal converter *** = flow rate 015, 060, 300 or 600 (l/min)	SFM - ***
Connecting cable PPC 04 - signal converter	cable SFM -04
Thermoprinter	PR PPC
External power supply for thermoprinter PR PPC (110 V / 220 V change-over switch)	KNG PR PPC
Glassfiber cable PPC 04 - thermoprinter / PC	SDK - 04
PC-adapter to connect glassfiber cable to PC	SPA - 04
Paper for thermoprinter PR PPC	SPR PR PPC
Plastic case with foam inserts	case PR PPC

Because of technical advances, data given is subject to change without notification

3/00

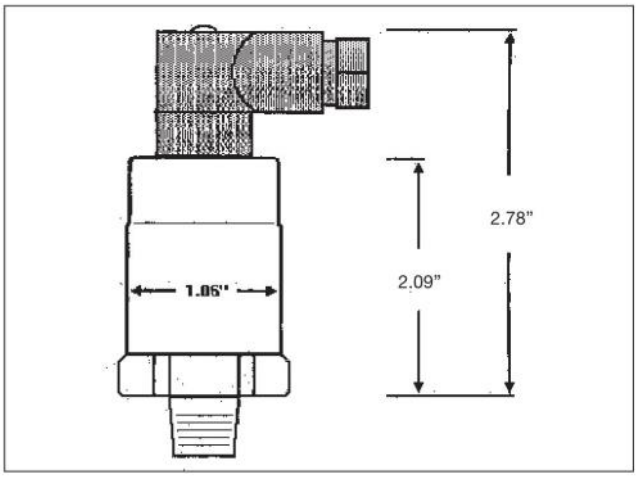
STAUFF pressure transmitters are specifically designed to meet price and performance requirements of Original Equipment Manufacturers. The SPT pressure transmitters use a thin film sensor for pressure ranges 300 PSI to 15,000 PSI.

The model features a highly stable, temperature compensated, conditioned output signal. As an option for additional reliability, 3-wire votage current output circuits are protected from electromagnetic interference as specified by international standard IEC 801.

With a stainless steel case and compact design, STAUFF SPT pressure transmitters provide a high performance sensor package featuring excellent vibration resistance and long service life. OEM applications include hydraulics, pneumatics HVAC compressor control, machine tools, robotics and off road equipment.

Note: * Maximum pressure, causing no permanent changes in specifications but may lead to zero and span shifts.
** Burst pressure, leading to permanent changes in specifications (i.e. zero offsets) or destruction of the transmitter.





ORDERING CODES

SPT-XXXX-N04-420-MD

SPT:	Stauff Pressure Transmitter
XXXX:	Pressure Range
N04:	1/4" NPT – B04: 1/4" BSP – S: SAE 7/16-20
420:	4-20mA Output 2-wire
MD:	Mini DIN Plug

Example:
SPT-1500-N04-420-MD

STANDARD RANGES MODEL SPT SERIES*

Range	Maximum	Burst**
0-300 PSIG	725 PSI	3625 PSI
0-400 PSIG	725 PSI	3625 PSI
0-500 PSIG	1160 PSI	5800 PSI
0-600 PSIG	1160 PSI	5800 PSI
0-1000 PSIG	1740 PSI	7975 PSI
0-1500 PSIG	2900 PSI	11,600 PSI
0-2000 PSIG	2900 PSI	11,600 PSI
0-3000 PSIG	7250 PSI	17,400 PSI
0-5000 PSIG	11,600 PSI	24,650 PSI
0-7500 PSIG	17,400 PSI	34,800 PSI
0-10,000 PSIG	17,400 PSI	34,800 PSI
0-15,000 PSIG	21,750 PSI	43,500 PSI

Note: * Shaded ranges are stock

3/00

STAUFF®

Filters



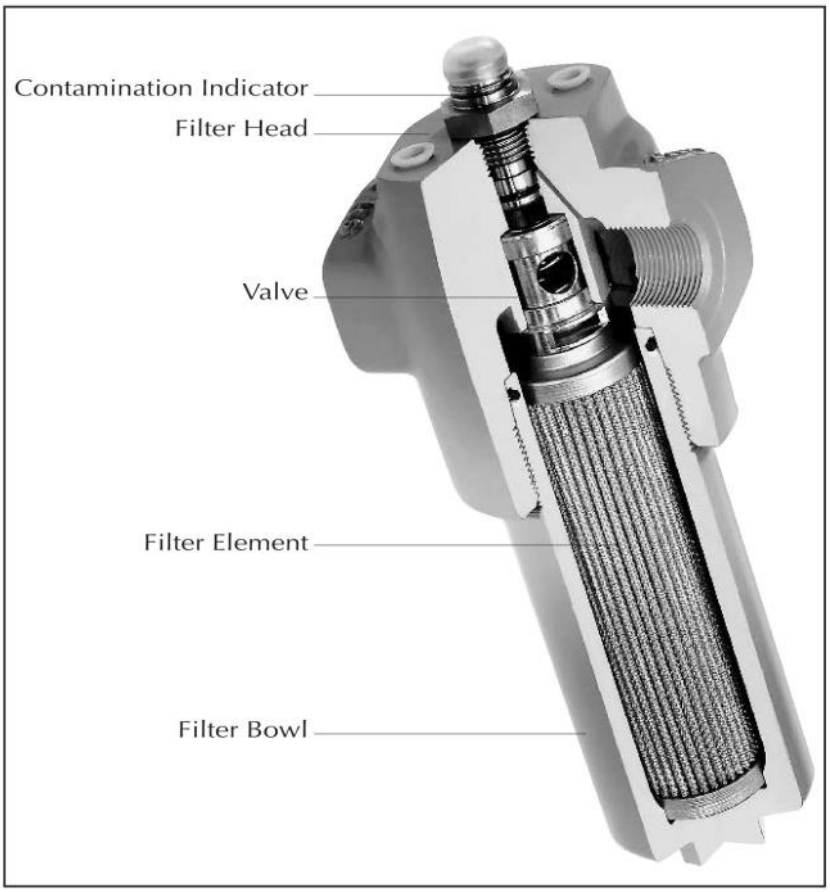
Quality and Service Worldwide





TECHNICAL DATA

STAUFF high pressure filters are designed for in-line hydraulic applications, with a maximum operating pressure of 6000 psi (420 bar). Used together with STAUFF filter elements, a high efficiency of contaminant removal is assured. The high dirt holding capacity of the elements ensures long service life and, as a result, reduced maintenance.



TECHNICAL SPECIFICATIONS/OPTIONS

Construction	– In-line assembly, with threaded mounting holes on top of head
Filter head	– Spheroidal graphite cast iron
Filter bowl	– Cold drawn steel
Seals	– O-Rings NBR (Buna-N), FPM (Viton), EPDM (Ethylene-propylene), Support ring PTFE
Port connection	– NPT, SAE "O"-Ring thread, SAE Code 61 & 62 flange
Operating press. max.	– 6000 psi (420 bar)
Proof pressure	– 9000 psi (630 bar)
Burst pressure	– >18000 psi (1260 bar)
Temperature range	– -10°C up to +100°C 14°F to 212°F
Bypass valve	– Allows unfiltered oil to bypass the contaminated element once the opening pressure of 87 psi +7 psi (6 bar + 0.5 bar) has been reached
Reverse flow valve	– Allows reverse flow through the filter head without back flushing the element
Non-return valve	– Prevents draining of the delivery line during element change – Note: System Pressure must be relieved before element change out
Multi-function valve	– Forward bypass, reverse flow capability, and non return valve (opening pressure 87 psi ±7 psi (6±0.5 bar) Δp all in one valve
Contamination indicators	– Visual, 72 psi±7 psi (5±0.5 bar) Δp actuating pressure – Electrical, 72 psi±7 psi (5±0.5 bar) Δp Visual/electric, 72 psi±7 psi (5±0.5 bar) Δp (12 V, 24 V, 110 V, 220 V versions)
Filter elements	– Filter material specification, B, D, E, G, N, S. low collapse; rating 430 psi (30 bar) Δp – Filter material specification, A, C, F, H, T, W. high collapse; rating 3000 psi (210 bar) Δp
Media	– Mineral oils; other fluids on request

3/00

VALVE OPTIONS

The optional valves are fitted as an insert in the filter head and incorporate the spigot on which the element seals. The valve is selected to suit the filter application.

HV - O **Non-bypass standard insert** with no valve function. High collapse elements 3000 psi (210 bar Δp) are normally used with this valve.

HV - B **Bypass valve** which allows oil to bypass the element when the differential pressure across the element reaches 87 psi +7 psi (6+0.5 bar). (Other pressure settings available on request). The opening pressure should be higher than the Δp setting of an optional contamination indicator. Low collapse 430 psi (30 bar Δp) elements are normally used with this valve.

HV - R **Reverse flow valve** is used in systems where there is flow in reverse through the filter. It allows reverse flow without back-flushing the element but does not filter in the reverse direction. High collapse elements 3000 psi (210 bar Δp) are normally used with this valve.

HV - N **Non-return valve** This valve prevents the oil in the delivery line from draining out while the filter is being serviced. High collapse elements 3000 psi (210 bar Δp) are normally used with this valve.

HV - M **Multi-function valve** This valve combines the by-pass, the reverse flow, and the non-return functions in one unit. The by-pass opening pressure is 87 psi +7psi (6+0.5 bar) Δp with other opening pressures available on request. The opening pressure should be higher than the Δp setting of an optional contamination indicator.

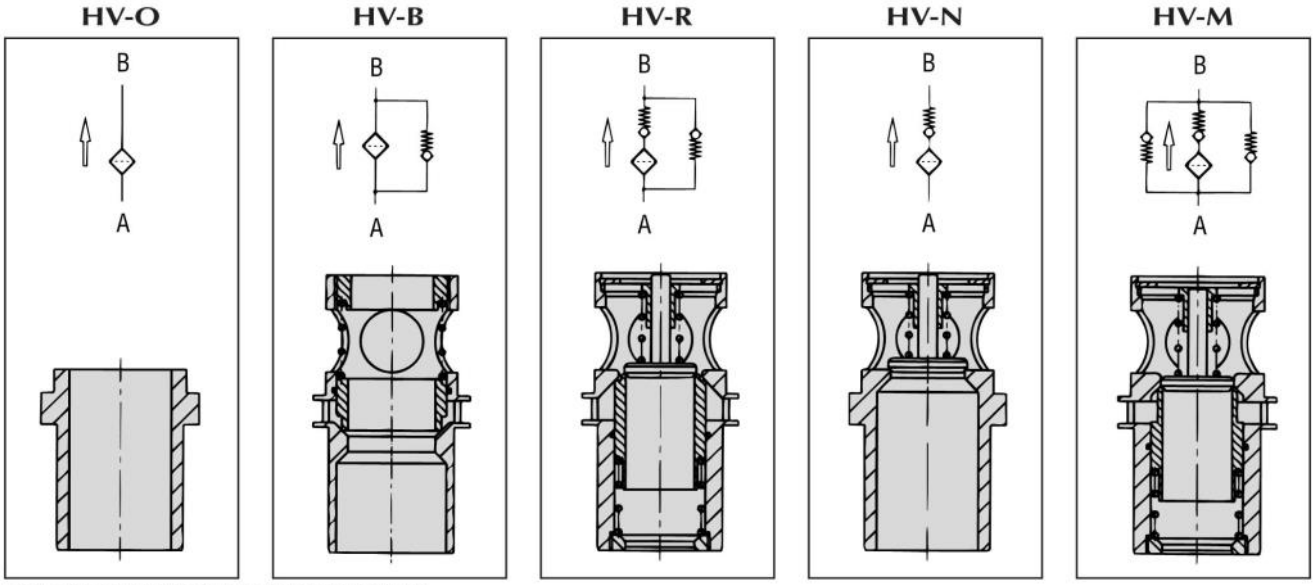
ORDERING INFORMATION

HV - M - 045/070

PRODUCT TYPE
HV–Valve

CODE	VALVE TYPE
O	Non-bypass standard insert without any valve
B	Bypass Valve
R	Reverse Flow Valve
N	Non Return Valve
M	Multi-Function Valve

FILTER GROUP
014/030
045/070
090/160



3/00

Flow characteristics of the valves see page 91.

CONTAMINATION INDICATORS

STAUFF pressure filters have a range of contamination indicators available as an option. If no indicator is specified, the port is sealed by a plug (HI-O). The contamination indicators are actuated by the differential pressure (Δp) across the element and the special piston design minimizes the effects of peak pressures in the system. An optional thermostatic lockout (thermo-stop) is available to prevent false indication under cold start conditions. Fluid temperature must be at least 68°F (20°C) for the indicator to function.

TECHNICAL SPECIFICATION

Body	Stainless steel
Seals	NBR, FPM, EPDM 18.5 x 23.9 x 2mm 15.5 x 1.5mm
Thread	½" BSP
Differential pressure setting	72 psi±7 psi (5±0.5 bar) (other settings on request)
Electrical	Standard DIN appliance plug Screwed cable gland PG 11 Protection rating (DIN 40050) IP65 Both NO and NC contacts are available in the switch Rated capacity: see chart below

Visual contamination indicators are available in the following configurations:

Manual reset The indicator continues to display contamination even through the Δp may have fallen. Pressing the plastic cover down will reset the indicator.

Automatic reset The contamination signal will disappear when the Δp drops below the setting for the indicator.

Note: Electrical and Visual-Electrical contamination indicators are only available with automatic reset.

ORDERING INFORMATION

HI - P T - 220 B

PRODUCT TYPE	
HI	Contamination Indicator

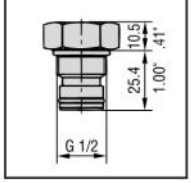
CODE	EXECUTION
O	PLUG
A	VISUAL, AUTOMATIC RESET
V	VISUAL, MANUAL RESET
E	ELECTRICAL
P	VISUAL ELECTRICAL

THERMOSTOP	
	WITHOUT THERMOSTOP
T	WITH THERMOSTOP

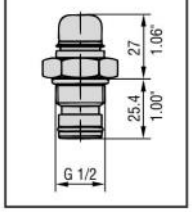
SEALING MATERIAL	
B	NBR - Buna -N
V	FPM - Viton
E	EPDM

VOLTAGE (ONLY FOR CODE P)	
12	12V
24	24V
110	110V
220	220V

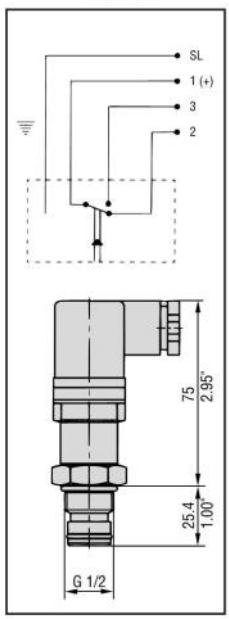
HI-O



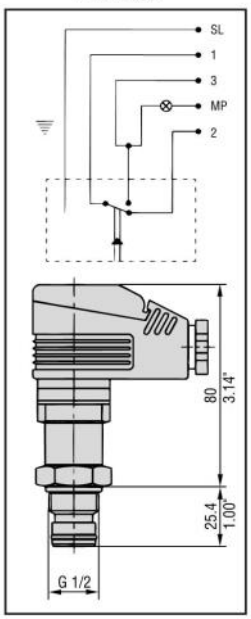
HI-A HI-V



HI-E



HI-P...



Rated Capacity HI-E and HI-P

Alternating Current 250V AC 5 Amps

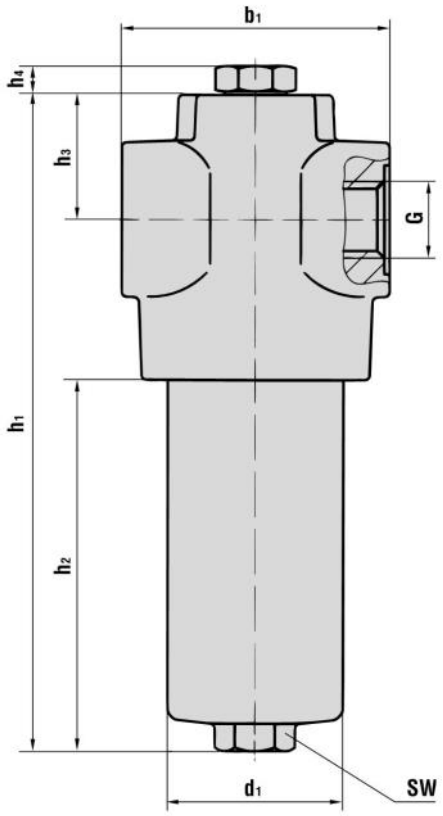
Direct Current: see table below

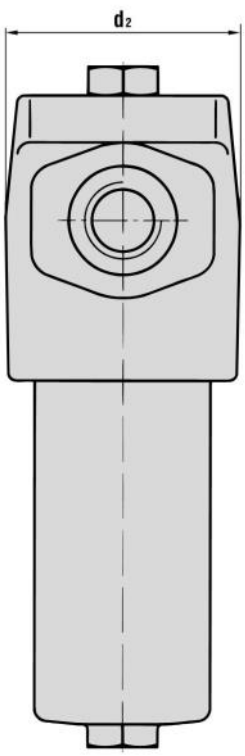
Voltage V	Resistive Load Amps	Inductive Load Amps
12	15.00	15.00
24	8.00	7.00
110	0.50	0.20
220	0.25	0.10

Note: High voltage peaks occur when inductive loads are switched off. Protective circuitry should be employed to reduce contact burnout.

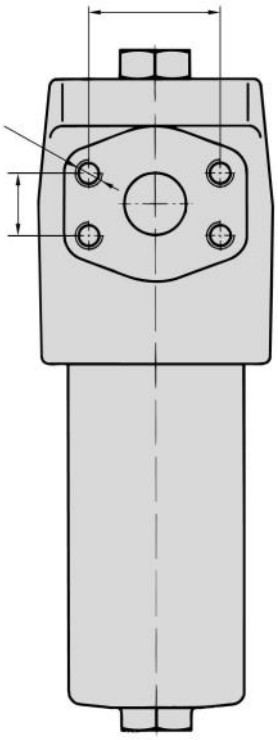
3/00

DIMENSIONS



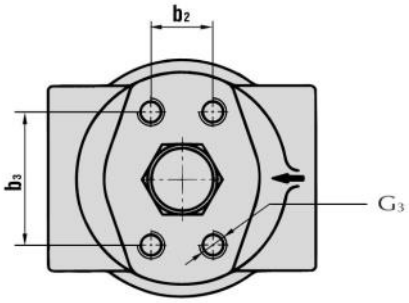


Threaded connection



Code 62
Flange connection

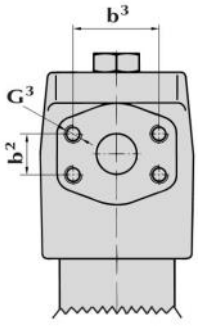
Mounting Hole Dimensions



Note: Mounting holes match Code 62 connection for that size

CODE 61 FLANGE CONNECTION

	b²		b³		G³
SF014/30	7/8"	22.2	1 7/8"	46.6	3/8"-16
SF045/70	1 3/16"	30.2	2 5/16"	58.7	7/16"-14
SF090/100	1 13/32"	35.6	2 3/4"	69.8	1/2"-13



DIMENSIONS PRESSURE FILTERS

FILTER SIZE	STANDARD THREADED CONNECTION		SAE FLANGE	b1		b2		b3		d1		d2		h1		h2		h3		h4		g3	SW		WEIGHT INCLUDING ELEMENT	
	NPT	SAE O-RING	CODE 62	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inches	inch	mm	lbs	kgs
SF014	3/4"	1 1/16"-12	3/4"	4.09	104	0.94	23.8	2.0	50.8	2.68	68	3.27	83	7.4	188	3.07	78	1.89	48			3/8"- 16 UNC	1.06	27	11	5
SF030														10.0	254	5.67	144								13	6
SF045	1 1/4"	1 5/8"-12	1 1/4"	5.51	140	1.24	31.6	2.63	66.7	3.74	95	4.57	116	9.4	240	4.06	103	1.95	49.5	0.49	12.5	1/2"- 13 UNC	1.06	27	26	12
SF070														11.7	298	6.34	161								28	13
SF090	1 1/2"	1 7/8"-12	1 1/2"	7.01	178	1.44	36.7	3.13	79.4	5.12	130	6.26	159	12.7	323	5.83	148	2.83	72			5/8"- 11 UNC	1.42	36	65	29.5
SF160														19.5	495	12.56	319								81	37
	CONNECTION G																									

3/00

ORDERING CODE FILTER HOUSINGS

SF 014 G10 V – T B / B P T 220

Filter type	SF

GROUP		
SIZE	NOMINAL FLOW*	
	L/MIN	GPM
014	60	14
030	110	30
045	160	45
070	240	70
090	330	90
160	660	160

***Note:** Exact flow will depend on filter element selected. Consult Technical Data on pages 91, 92 & 93.

FOR COMPLETE FILTERS:
identification filter material + micron rating code (see ordering code filter elements below)

SEAL MATERIAL	
B	NBR - Buna-N
V	FPM - Viton
E	EPDM
other seal materials on request	

MOUNTING STYLE	
T	– In Line (straight)

VOLTAGE (ONLY FOR CODE P)	
12	12 V
24	24 V
110	110 V
220	220 V

THERMOSTOP	
0	without Thermostop
T	with Thermostop

CONTAMINATION INDICATOR	
O	without contamination indic.
A	visual, with autom. reset
V	visual, with manual reset
E	electrical
P	visual/electrical

VALVE	
O	without valve
B	Bypass valve
R	Reverse flow valve
N	Non return valve
M	Multi-function valve

PORT STYLE		GROUP					
CODE	CONNECTION STYLE	014	030	045	070	090	160
N	**NPT**	¾″		1¼″		1½″	
U	SAE-"O"-Ring thread	1 1/16 – 12 UNF		1 5/8 – 12 UNF		1 7/8 – 12 UNF	
G	**SAE-flange (6000 psi)**	¾″		1¼″		1½″	
F	**SAE-flange (3000 psi)**	¾″		1¼″		1½″	
B	**BSP**	G ¾″		G 1¼″		G 1½″	
other port connections on request							

ORDERING CODE FILTER ELEMENTS

SE 014 G 10 V

SERIES	SE

GROUP
according to filter housing

FILTER MATERIAL			MICRON RATINGS AVAILABLE
Code	Material	Δp max	
A	Stainless fiber	3000 psi (210 bar)	03, 05, 10, 20
C	Polyester fiber	3000 psi (210 bar)	
N, D	Paper	430 psi (30 bar)	
G, E	Inorganic glass fiber	430 psi (30 bar)	
H, F	Inorganic glass fiber	3000 psi (210 bar)	
B, **S**	Stainless mesh	430 psi (30 bar)	25, 40, 60, 100
T, **W**	Stainless mesh	3000 psi (210 bar)	

Bold type identifies preferred material

SEAL MATERIAL	
B	NBR - Buna-N
V	FPM - Viton
E	EPDM
other seal materials on request	

MICRON RATING	
03	3 µm
05	5 µm
10	10 µm
20	20 µm
25	25 µm
40	40 µm
60	60 µm
100	100 µm
other micron ratings on request	

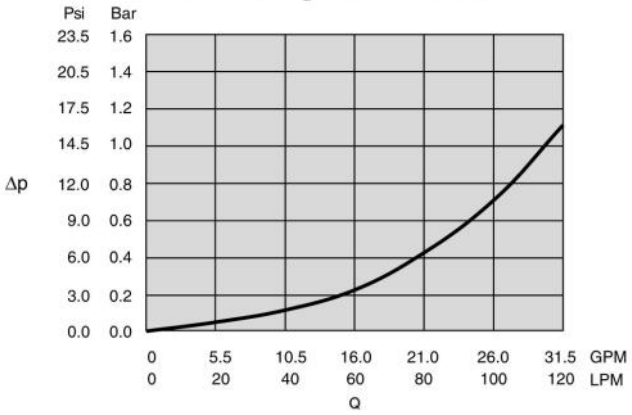
3/00

FLOW CHARACTERISTICS OF PRESSURE FILTERS

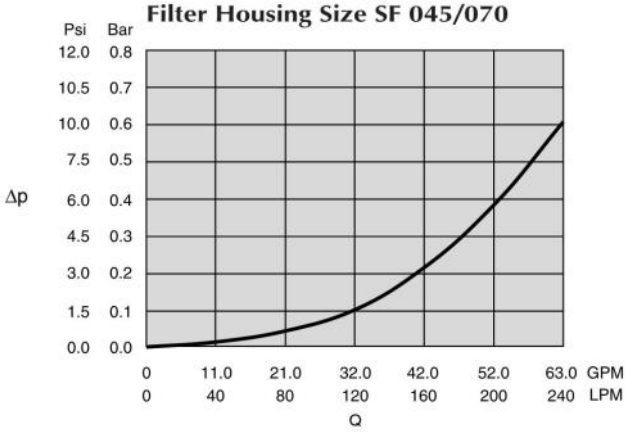
The following flow characteristics are valid for mineral oils with a specific gravity of 0.85 and the kinematic viscosity of 141 SSU (30 cSt). The characteristics have been determined in accordance to ISO 3968.

Housing Characteristics SF Filter Size

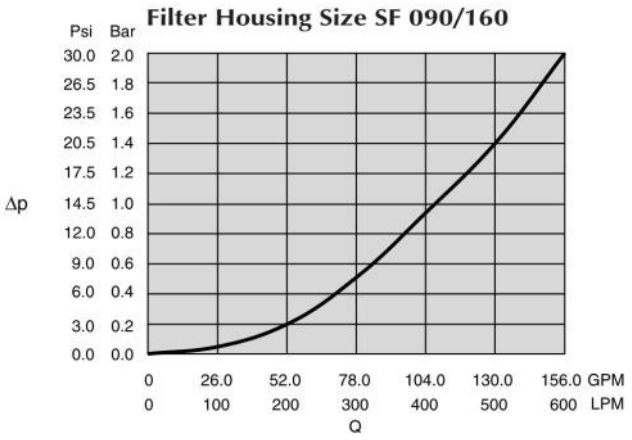
Filter Housing Size SF 014/030



Filter Housing Size SF 045/070

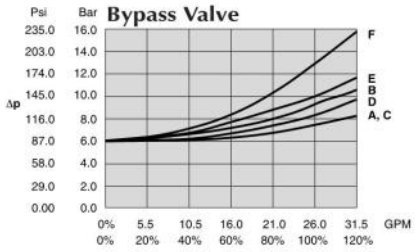


Filter Housing Size SF 090/160



Bypass Valve Flow Characteristics

(incl. housing resistance, without element)



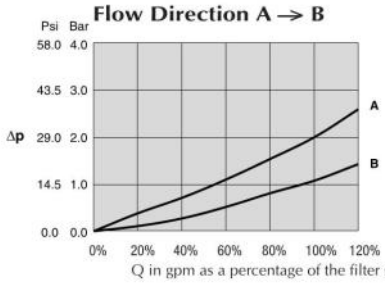
Q in gpm as a percentage of the filter size

Filter Size SF 014: A
Filter Size SF 030: B
Filter Size SF 045: C
Filter Size SF 070: D
Filter Size SF 090: E
Filter Size SF 160: F

Characteristics of the multi-function valve are approximately 5% higher than those of the bypass valve

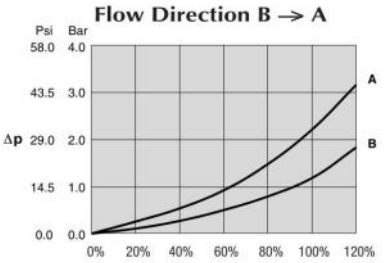
Reverse Flow Valve

Flow Direction A → B



Q in gpm as a percentage of the filter size

Flow Direction B → A



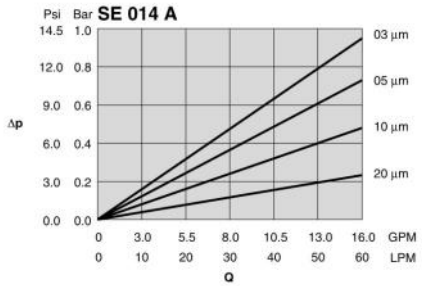
Q in gpm as a percentage of the filter size

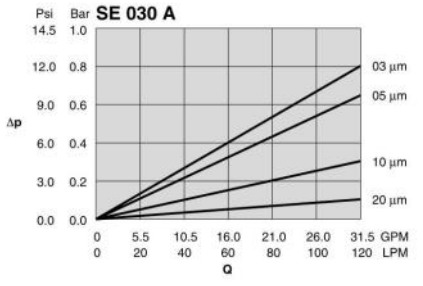
A: Filter Size SF 030 / SF 070 / SF 160
B: Filter Size SF 014 / SF 045 / SF 090

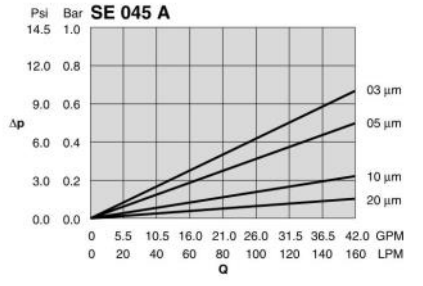
Characteristics of the multi-function valve are approximately 15% higher than those of the bypass valve.

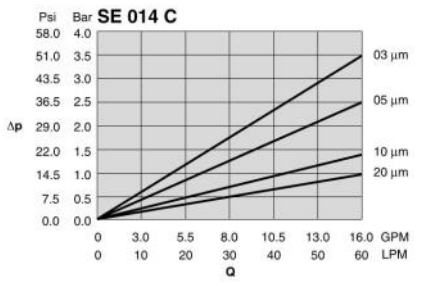
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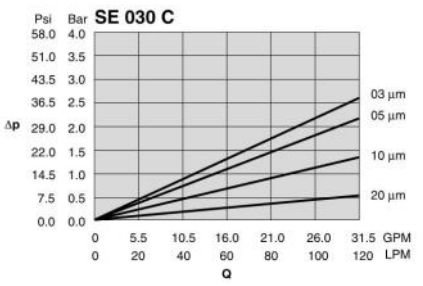
ELEMENT FLOW CHARACTERISTICS

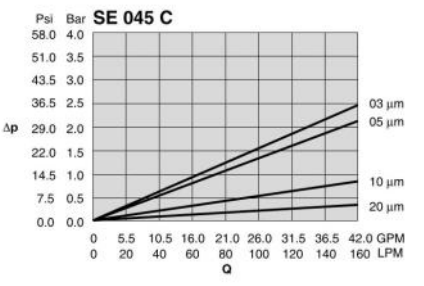


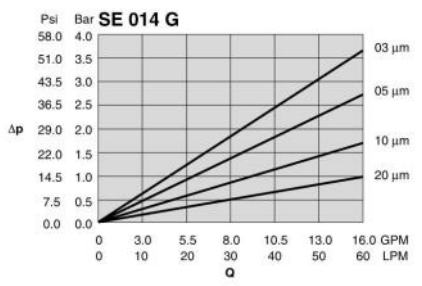


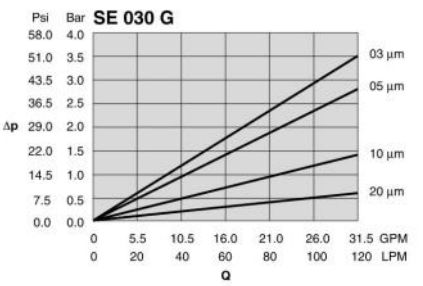


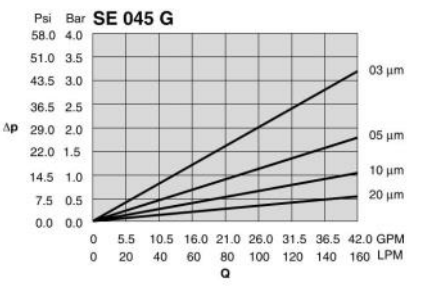


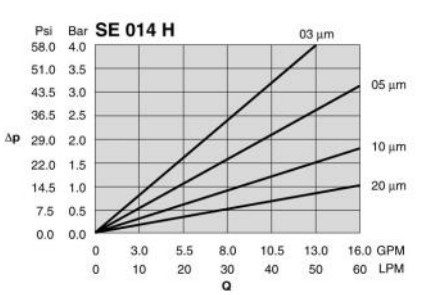


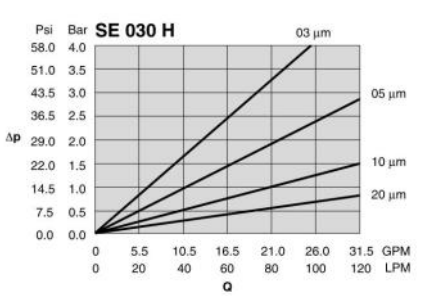


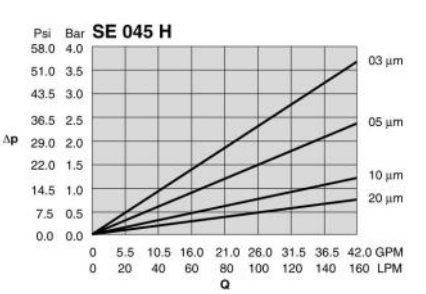






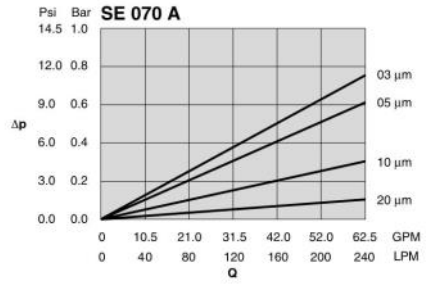


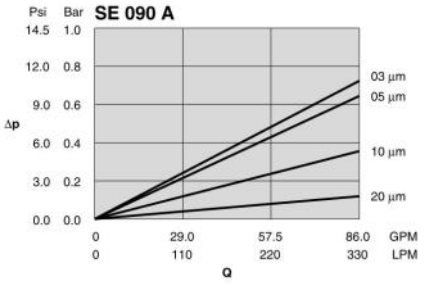


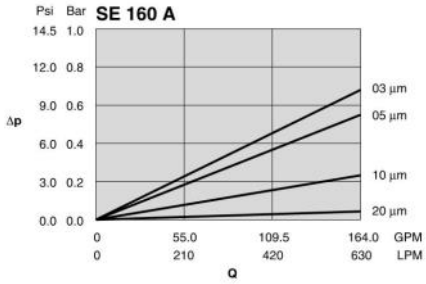


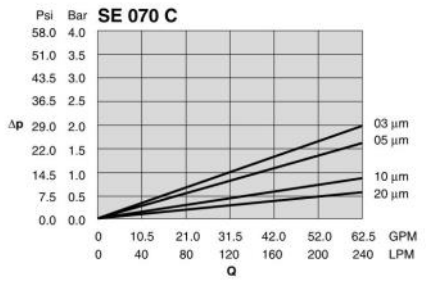
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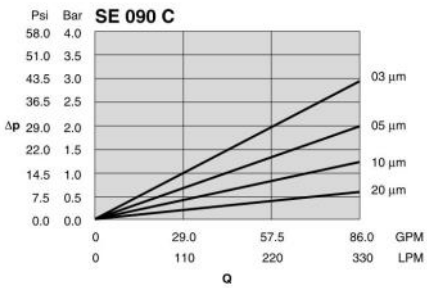
ELEMENT FLOW CHARACTERISTICS

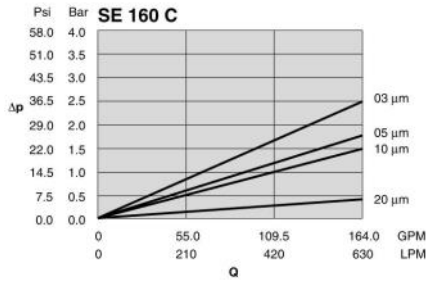


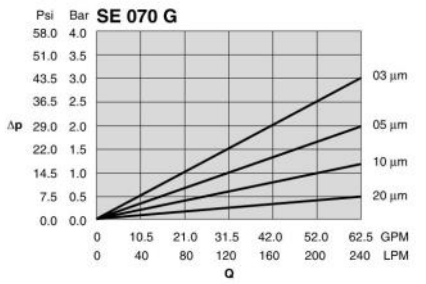


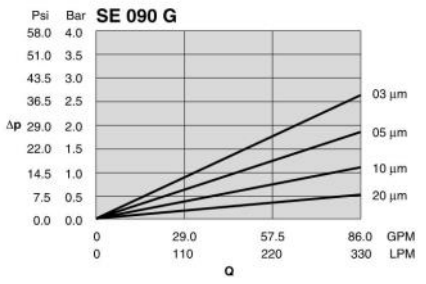


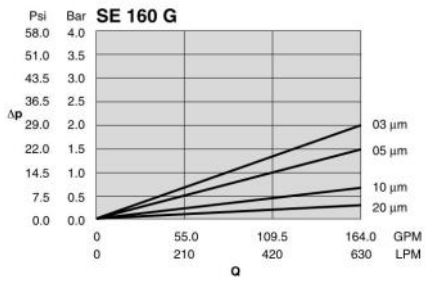


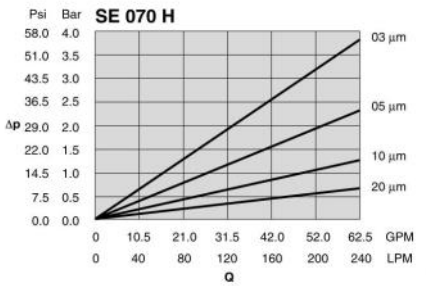


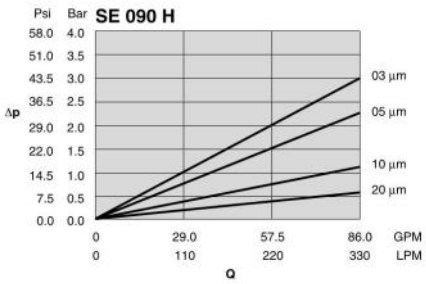


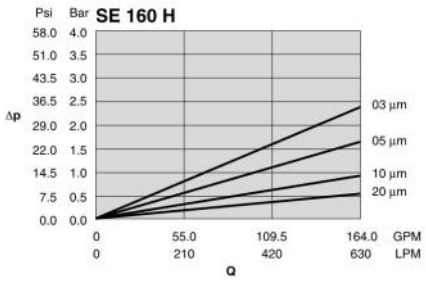




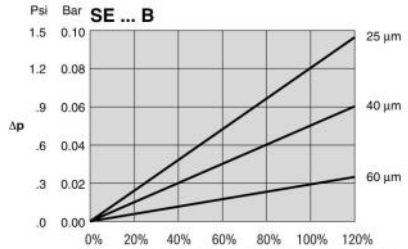






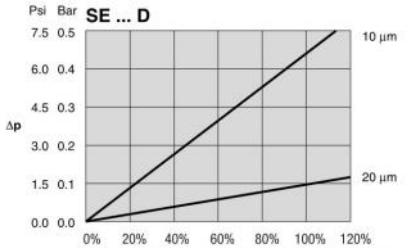


Pressure Filter Elements with Filter Material "B"



Q in gpm as a percentage of the nominal flow

Pressure Filter Elements with Filter Material "D"

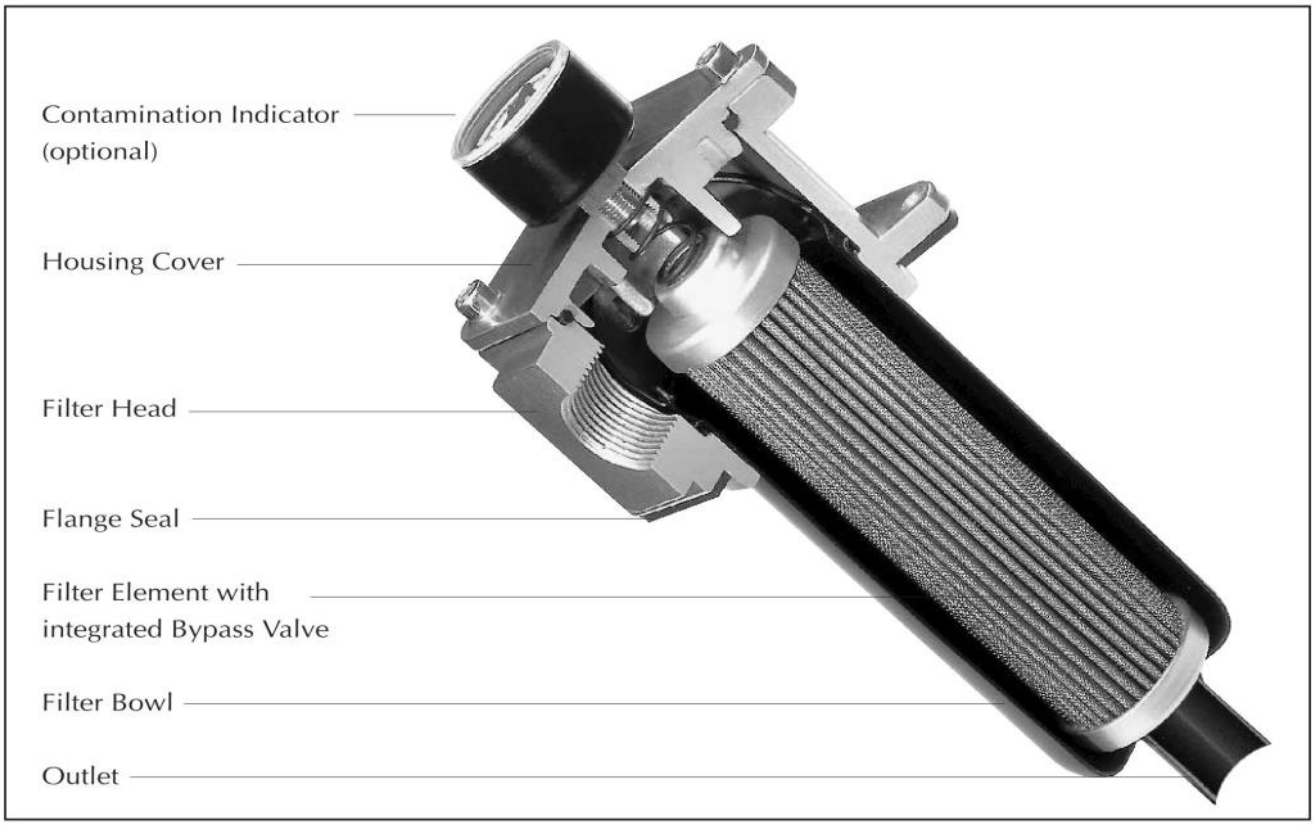


Q in gpm as a percentage of the nominal flow

3/00

TECHNICAL DATA

STAUFF RF return line filters are designed as tank top filters. They are mounted directly on the tank top and if 100% of the system oil is filtered, they provide the optimum removal of contaminant from the system. This provides the pump with clean oil thus reducing contaminant generated wear. The filter bowl is designed to return oil beneath the tank oil surface thus preventing the entrainment of air by the returning oil.



TECHNICAL SPECIFICATIONS/OPTIONS

Construction	– Tank Top flange mounting
Filter head	– Aluminum
Filter bowl	– Steel
Seals	– NBR Buna-N, FPM (Viton) or EPDM (Ethylene-Propylene)
Threaded connection	– NPT- and – SAE-"O"-Ring thread – SAE-flange (3000 psi)
Max. Operating press.	– 230 psi (16 bar)
Proof pressure	– 350 psi (24 bar)
Temperature Range	– -10°C up to +100°C 14°F to 212°
Bypass valve (integrated in the filter element)	– Opening pressure 43 psi ± 4 psi (3 bar ± 0.3 bar) – Other pressures available on request
Contamination indicator	– Gauge indicator 0-58 psi (0-4 bar) with colored segments – Electrical switch, setting 36 psi (2.5 bar)
Filter elements	– Filter material specification A, B, G, S: Collapse rating per ISO 2941 430 psi (30 bar) Δp – Filter material specification D, N: Collapse rating per ISO 2941 230 psi (16 bar) Δp
Media	– Mineral oils – Other fluids on request

3/00

OPTIONS

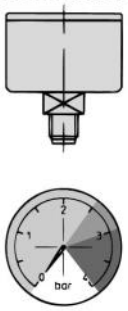
1. Visual contamination indicator

The gauge displays the degree of contamination of the element. The colored segments allow quick visual checking.

green	0 -36 psi (0.0-2.5 bar)	Element has service life left
yellow	36-43 psi (2.5-3.0 bar)	Element is contaminated and should be changed
red	>43 psi (>3.0 bar)	Bypass valve open, unfiltered oil passing to tank

The contamination indicator can be mounted on the top or on the side of the filter head (see drawing on page 96).

Visual contamination indicator

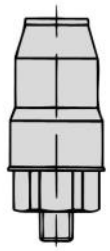


2. Electrical contamination switch

The switch is used where an electrical signal is needed to indicate when the element needs changing. The switch can turn on a light, or shut the machine down, or any other function controled by an electric signal. The switching pressure is 36 psi (2.5 bar) and this allows the element to be changed before the bypass setting of 43 psi (3.0 bar) is reached.

Maximum Voltage	Switch Type
24 V	G 24V
110 V	G 110
220 V	G 220

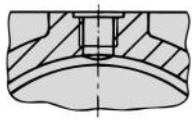
Electrical contamination switch



3. Leakage oil connection

Seal or case drain lines can be connected to the filter through either of the contamination indicator ports providing that the leakage oil can accept a pressure of 43 psi (3.0 bar.) It ensures that no un-filtered oil returns to the reservoir.

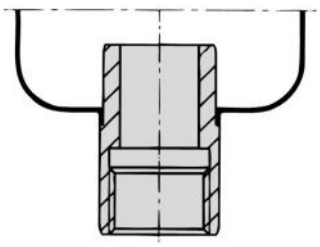
Leakage oil connection



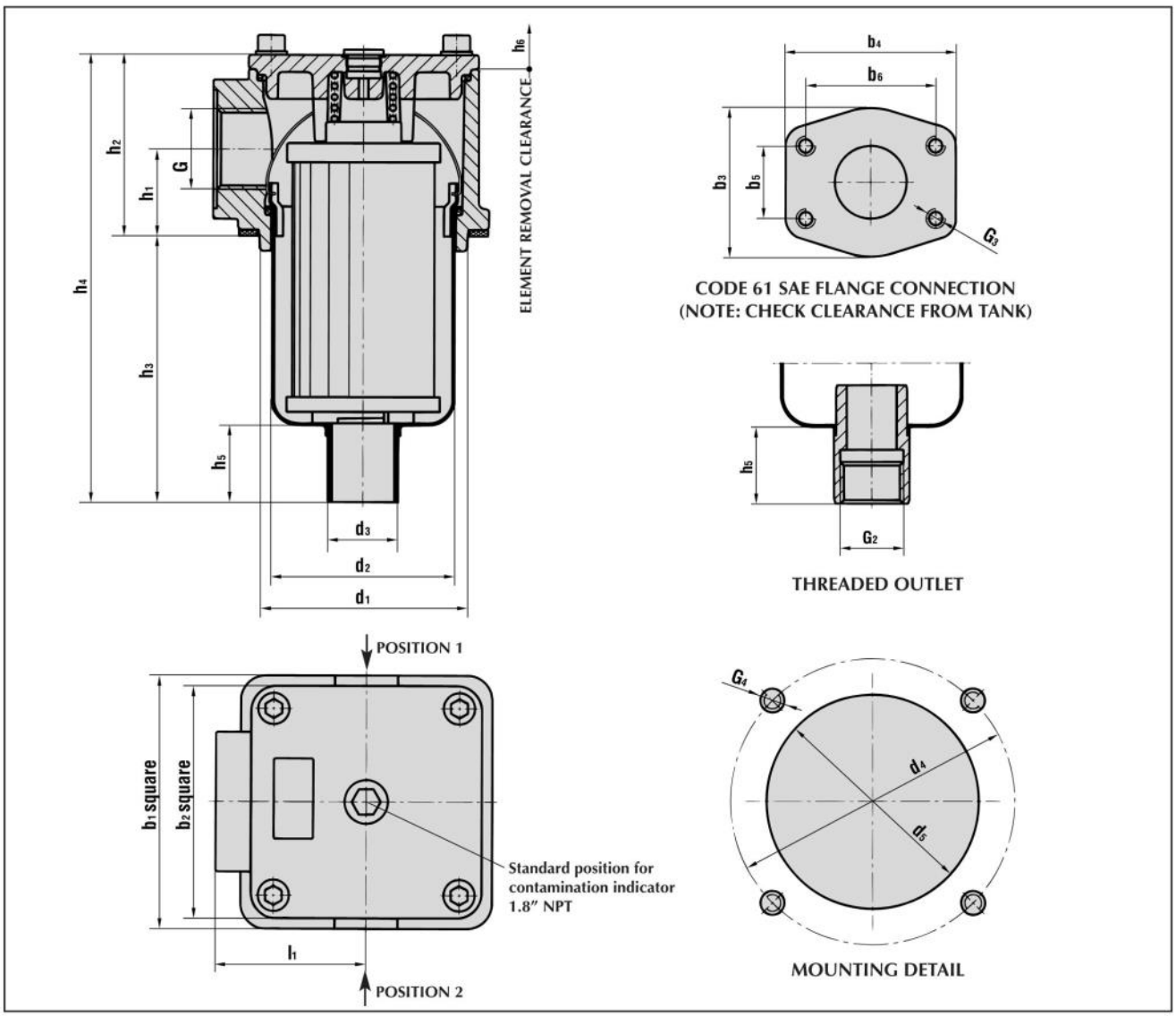
4. Filter bowl with threaded connection

Under some circumstances such as a tall reservoir or one with oil levels which vary greatly during operation, it is necessary to extend the filter bowl so that the returning oil returns beneath the surface and no air enters during the process. The optional bowl with a female thread allows an extension to be fitted quite simply.

Threaded outlet



DIMENSIONS



DIMENSIONS RETURN LINE FILTERS

Filter Size	NPT G	SAE-"O" Ring Port	SAE-flange		Dimensions																				Wt.	
					b_1	b_2	b_3	b_4	b_5	b_6	d_1	d_2	d_3	d_4	d_5	h_1	h_2	h_3	h_4	h_5	h_6	l_1	G_2	G_3	G_4	lbs.	kg.
RF 014	3/4"	1 1/16"-12 UNF	–	mm.	89	80	–	–	–	–	73	60	22	100	78	33	66	94	155	30	140	48	1"		1/4"	2.0	.9
RF 030	1"	1 5/16"-12 UNF	–	in.	3.50	3.15	–	–	–	–	2.87	2.36	0.87	3.94	3.07	1.3	2.6	3.70	6.10	1.2	5.51	1.89	NPT		UNC	2.40	1.09
RF 045	1 1/4"	1 5/8"-12 UNF	–	mm.	120	110	–	–	–	–	100	87	34	135	105	41	86	161.5	222.5	25	210	66	1 1/2"		5/16"	4.55	2.06
RF 070	1 1/2"	1 7/8"-12 UNF	–	in.	4.72	4.33	–	–	–	–	3.94	3.43	1.34	5.31	4.13	1.61	3.39	6.36	8.76	1.0	8.27	2.6	NPT		UNC	5.10	2.30
RF 090	2"	1 7/8"-12 UNF	2"	mm.	150	135	88	102	42.9	77.8	126	113	48.3	170	131	47	98	179	265	34	240	85	2"	1/2"	3/8"	8.45	3.80
RF 130	2"	1 7/8"-12 UNF	2"	in.	5.91	5.31	3.46	4.02	1.69	3.06	4.96	4.45	1.90	6.69	5.16	1.85	3.86	7.05	10.43	1.3	9.45	3.35	NPT	UNC	UNC	9.50	4.30
																		255	353		315						
																		10.04	13.90		12.40						

3/00

ORDERING CODE FILTER HOUSINGS

RF 090 G10 B / N M2 L1

Filter type	RF

Group		
SIZE	NOMINAL FLOW*	
	L/MIN	GPM
014	60	14
030	110	30
045	160	45
070	240	70
090	330	90
130	500	130

Note: Exact flow will depend on filter element selected. Consult Technical Data on page 98 and 99.

ADDITIONAL FEATURES		Pos.*	
L	Drain line connection	1	2
G	Threaded outlet		

* position of leakage oil connection see page 96
without any code: assembly in the middle of the filter cover

CONTAMINATION INDICATOR		Pos.*	
M	Pressure gauge	1	2
G 24	Electrical switch 24 V		
G 110	Electrical switch 110 V		
G 220	Electrical switch 220 V		

* position of contamination indicator see page 96
without any code: assembly in the middle of the filter cover

FOR COMPLETE FILTERS:
identification filter material + micron rating code (see ordering code filter elements below)

SEAL MATERIAL	
B	NBR - Buna-N
V	FPM - Viton
E	EPDM
other seal material on request	

CONNECTION STYLE		GROUP					
Code	Connection style	014	030	045	070	090	130
N	NPT	3/4"	1"	1 1/4"	1 1/2"	2"	2"
N 1	NPT	1"	3/4"	1 1/2"	1 1/4"	1 1/2"	1 1/2"
U	SAE-"O"-Ring thread	1 1/16"	1 5/16"	1 5/8"	1 7/8"	1 7/8"	1 7/8"
U 1	SAE-"O"-Ring thread	1 5/16"	1 1/16"	1 7/8"	1 5/8"	1 5/8"	1 5/8"
F	SAE-flange (3000 psi)	–	–	–	–	2"	2"

ORDERING CODE FILTER ELEMENTS

RE 090 G 10 B

SERIES	RE

GROUP
according to filter housing

Filter material			Micron ratings available
Code	Material	Δp max	
A	Stainless fiber	430 psi (30 bar)	03, 05, 10, 20
N, D	Paper	230 psi (16 bar)	
G, E	Inorganic glass fiber	430 psi (30 bar)	
S, B	Stainless mesh	430 psi (30 bar)	25, 40, 60, 100

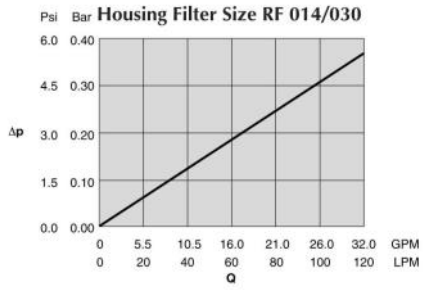
Bold type identifies preferred material.

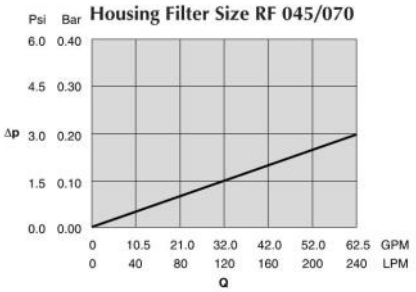
Seal material	
B	NBR - Buna-N
V	FPM - Viton
E	EPDM
other seal materials on request	

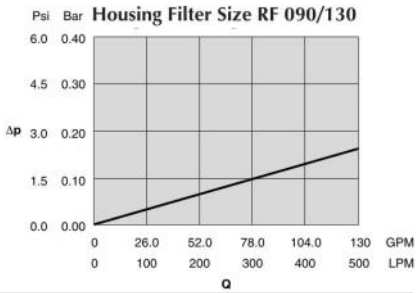
Micron rating	
03	3 µm
05	5 µm
10	10 µm
20	20 µm
25	25 µm
40	40 µm
60	60 µm
100	100 µm
other micron ratings on request	

FLOW CHARACTERISTICS OF RETURN LINE FILTERS

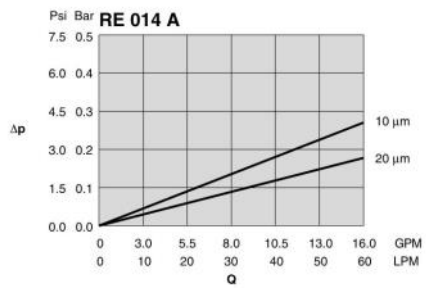
The following flow characteristics are valid for mineral oils with a specific gravity of 0.85 and the kinematic viscosity of 141 SSU (30 cSt). The characteristics have been determined in accordance to ISO 3968.

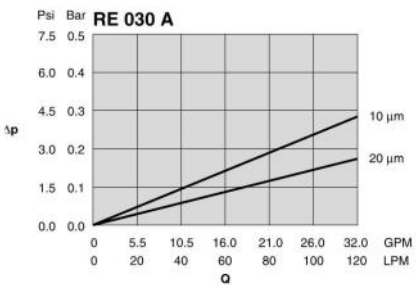


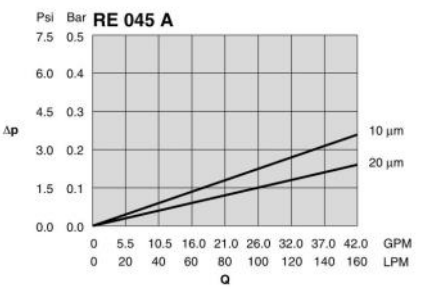


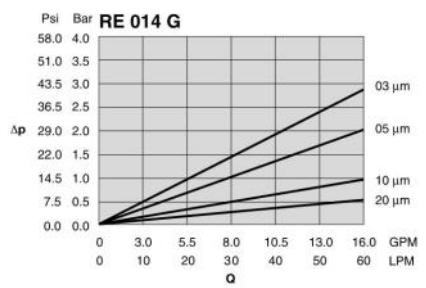


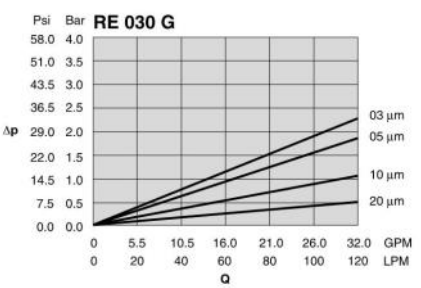
ELEMENT FLOW CHARACTERISTICS

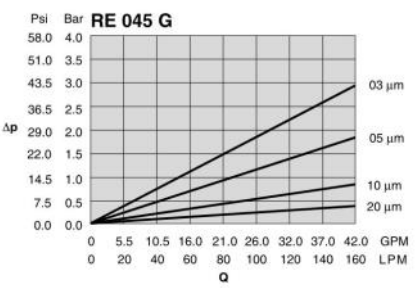


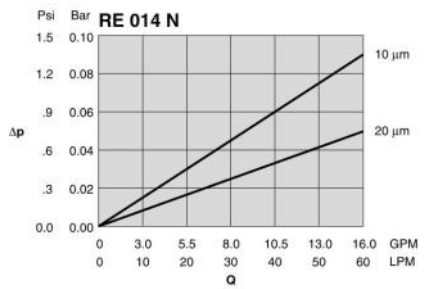


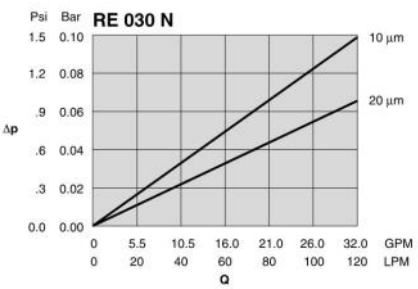


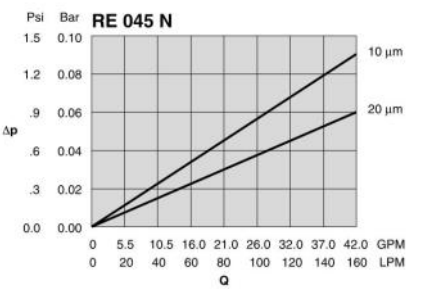


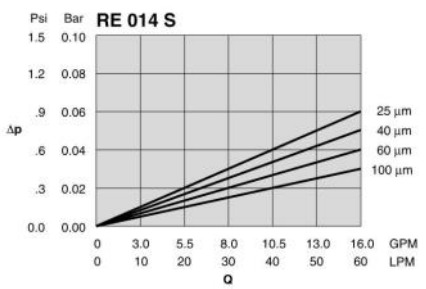


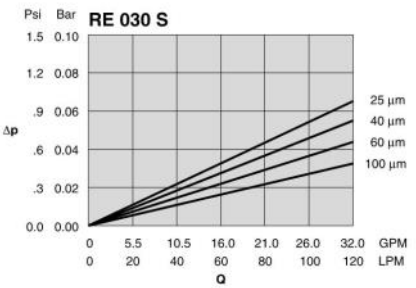


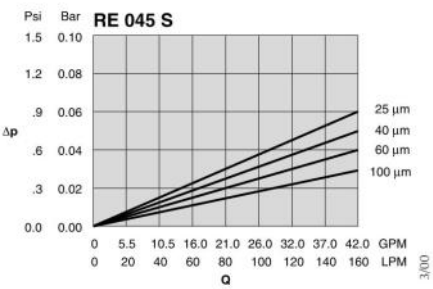






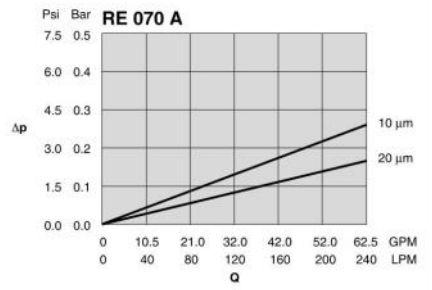


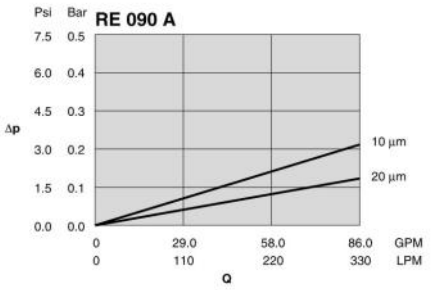


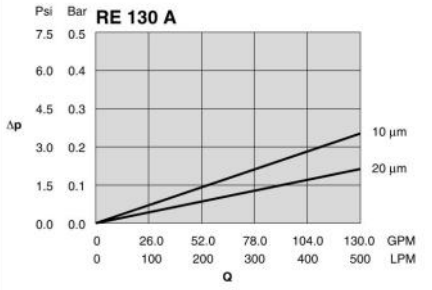


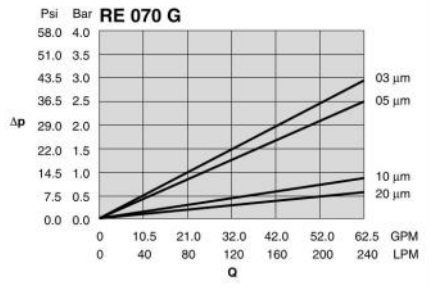
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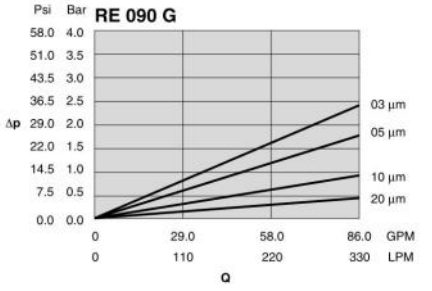
ELEMENT FLOW CHARACTERISTICS

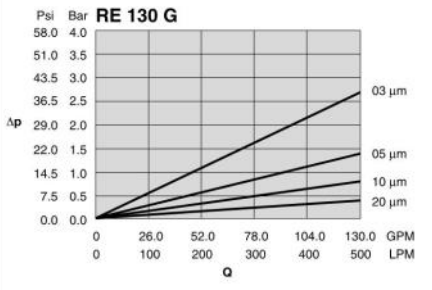


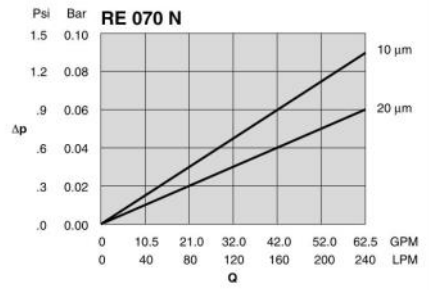


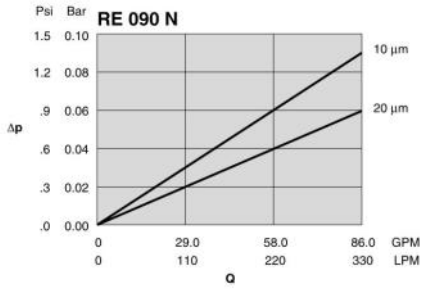


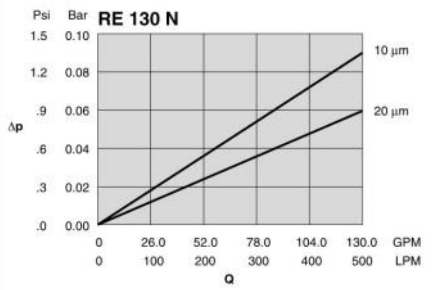


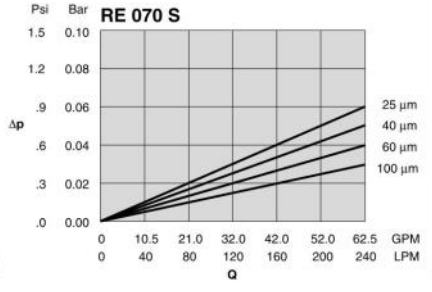


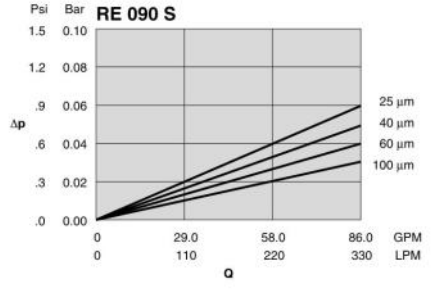


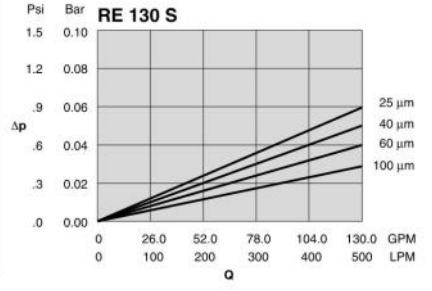












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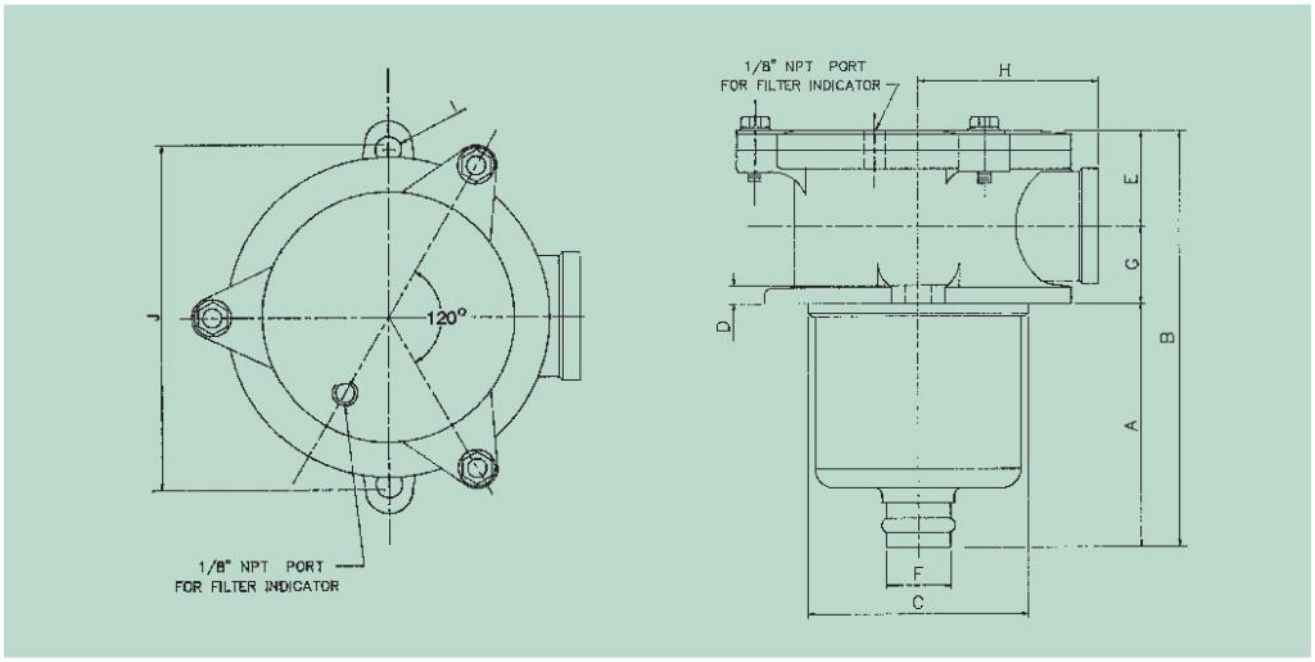
SPECIFICATIONS

- Flows to 25 gpm
- Working Pressure
  RTF10–50 psi (3.4 bar)
  RTF 25–100 psi (6.9 bar)
- For use with mineral and petroleum based fluids only
- By-Pass in element 25 psi (1.6 bar)
- Operating temperature
  -13°F to 212°F
  -25°C to 100°C
- Aluminum die casting
- Buna-N seals

OPTIONS

- For RTF25 series
- 10 or 25 micron paper elements
  10 micron inorganic fiber $ß_{10} \geq 75$
- For RTF10 series, 20µm paper element available only
- Visual and Electrical indicators
- Two bowl lengths for RTF25
- Special threads/special bowl lengths/special elements available on request

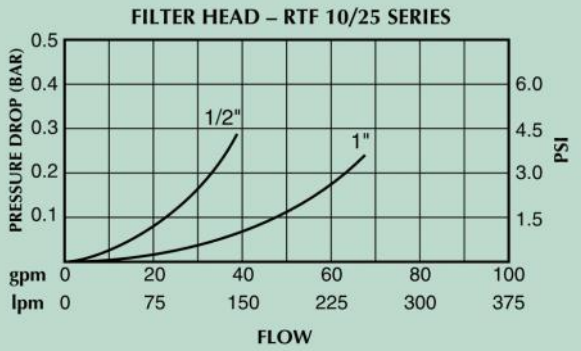
DIMENSIONS

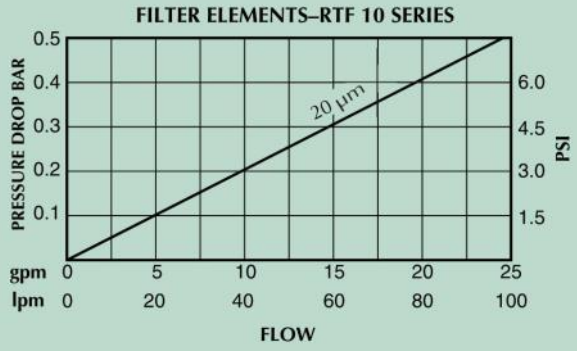


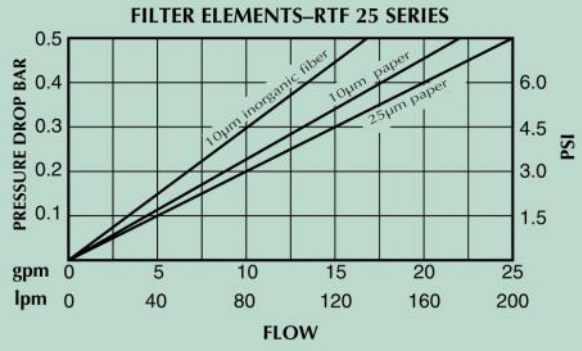
TYPE	INLET PORT	BOWL LENGTH		A	B	C	D	E	F	G	H	I	J	Weight lbs.	Weight kgs.
RTF 10	1/2" NPT	S1	in	3.2	5.08	2.6	0.3	1.02	0.94	0.83	1.97	0.28	3.54	1.0	0.45
			mm	82	129	66	8	26	24	21	50	7	90		
RTF 25	1" NPT or 1 5/16" SAE	S1	in	3.6	6.1	3.4	0.4	1.34	1.1	1.14	2.63	0.35	4.52	2.0	0.9
			mm	92	155	86	10	34	28	29	67	9	115	2.2	1.0
		S2	in	5.4	7.9										
			mm	137	200										

3/00

PRESSURE DROP RTF 10/25







All curves on 141 SSU (30 cts) viscosity oil @ 100°F

ORDERING INFORMATION

RTF 25N xxx B S2 V

FILTER TYPE

RTF

PORT SIZE

10N	½" NPT
25N	1" NPT
25S	1 5/16"-12 SAE

INDICATOR

N	None
V	CI-20 Visual Indicator
E	EPS-1 Electrical Indicator

BOWL LENGTH

S1	Bowl length 1
S2	Bowl length 2

SEAL MATERIAL

B	Buna-N

ORDERING CODE - FILTER ELEMENTS

RTE10 D 20 B / S1	20 Micron nominal paper
RTE25 D 10 B / S1	10 Micron nominal paper / S1 bowl length
RTE25 D 10 B / S2	10 Micron nominal paper / S2 bowl length
RTE25 D 25 B / S2	25 Micron nominal paper / S2 bowl length
RTE25 G 10 B / S2	10 Micron (ß10 ≥,75) Inorganic fiber / S2 bowl length

3/00 See page 136 for more details on the Indicator options.



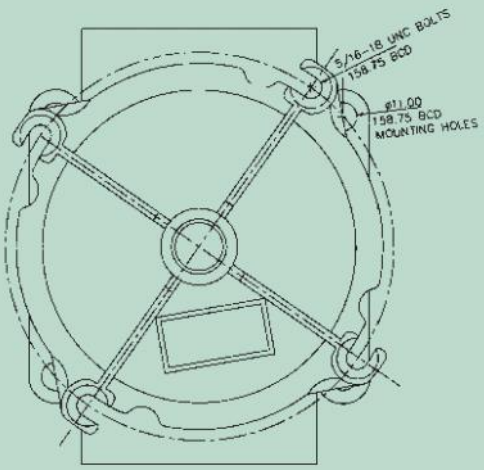
SPECIFICATIONS

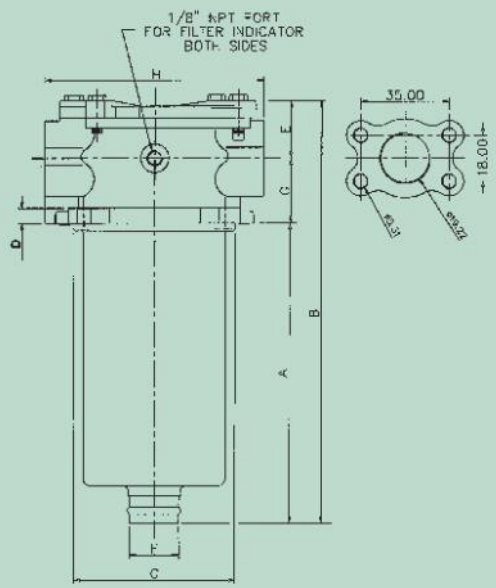
- Flows to 55 gpm
- Working Pressure 100 psi (6.9 bar)
- For use with mineral and petroleum based fluids only
- By-Pass in element 25 psi (1.6 bar)
- Operating temperature
  -13°F to 212°F
  -25°C to 100°C
- Aluminum die casting
- Buna-N seals
- 1 1/4" NPT / 1 1/2" SAE 4 bolt flange part

OPTIONS

- Elements
  -10 micron paper $ß_{10} \geq 2$
  -10 micron inorganic fiber $ß_{10} \geq 75$
- Special threads and bowl length available on request.

DIMENSIONS

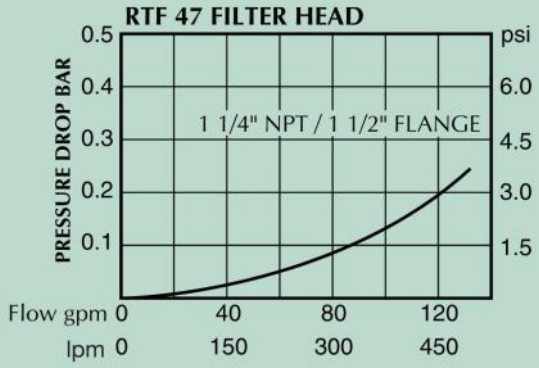


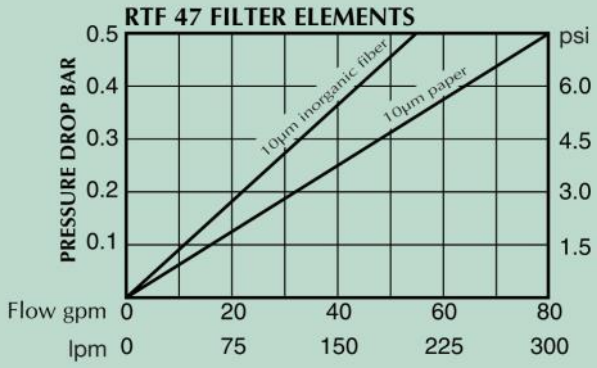


	A	B	C	D	E	F	G	H	WEIGHT
IN	9.3	11.9	4.4	0.45	1.9	1.6	1.9	6.7	5.9 Lbs
MM	236	302	112	11.4	48	41	48	170	2.6 kg

3/00

PRESSURE DROP/FLOW RTF 47 SERIES





ORDERING INFORMATION

RTF 47N xxx B S1 V

FILTER TYPE

RTF

PORT SIZE

47N	1 1/4" NPT / 1 1/2"SAE FLANGE

ORDERING CODE - FILTER ELEMENTS

RTE47 D 10 B / S1	10 Micron nominal paper, (ß10 ≥ 2) S1 bowl length
RTE47 G 10 B / S1	10 Micron Inorganic fiber, (ß10 ≥ 75) S1 bowl length

SEAL MATERIAL

B	Buna-N

BOWL LENGTH

S1	Bowl length 1

INDICATOR

N	None
V	CI-20 Visual Indicator
E	EPS-1 Electrical Indicator

See page 136 for more details on the Indicator options.



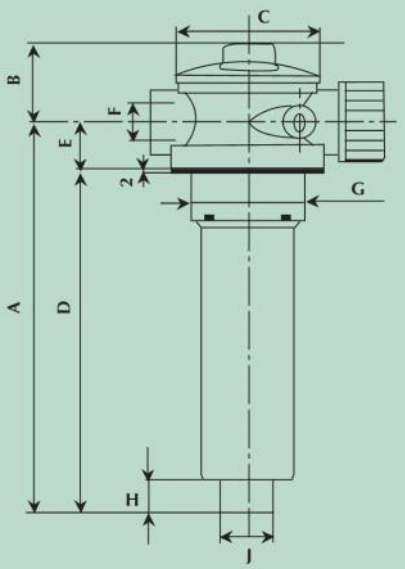
SPECIFICATIONS

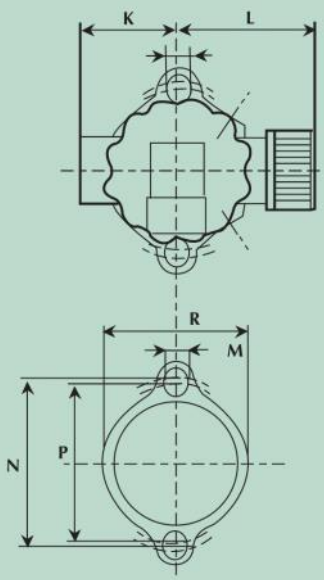
- Flows up to 30 gpm (110 lpm)
- Die-cast aluminum head with a polyamid screw-on cap and bowl
- Combination filter, breather and filler
- Maximum working pressure 145 psi (10 bar)
- For use with mineral and petroleum based fluids only
- By-pass in element 25 psi (1.6 bar)
- Operating Temperature -13°F to 212°F
  -25°C to 100°C
- 10µ filler breather
- Buna - N Seals
- Filter Element Collapse rating 75psi (5 bar)

OPTIONS

- ½" NPT, ¾" NPT, -8 SAE, -12 SAE Ports
- Elements 10µ Paper
  6µ inorganic glass fiber
  10µ inorganic glass fiber
  20µ inorganic glass fiber
- Electrical or Visual indicators available
- Dipstick Available
- 40µ paper breather element
- Special elements available on request

DIMENSIONAL INFORMATION

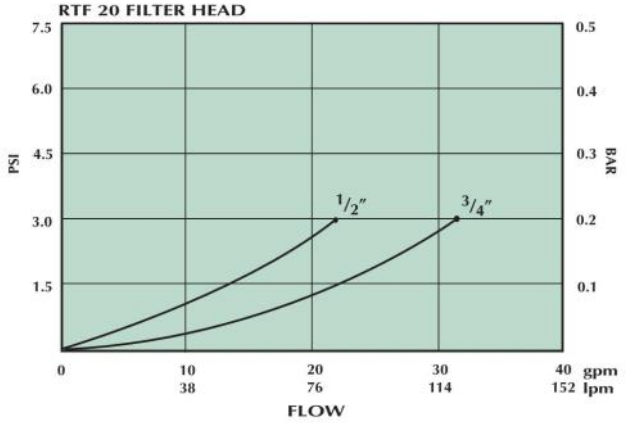




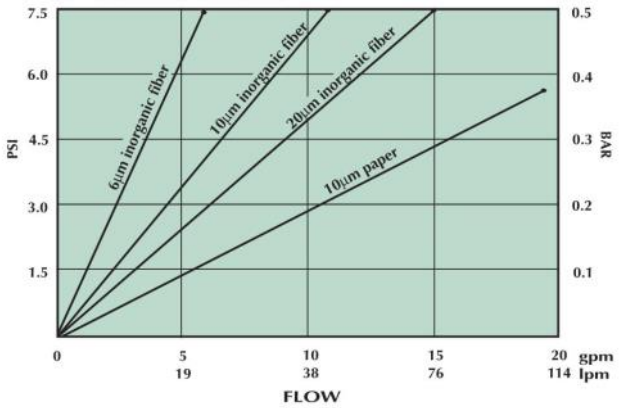
		A	B	C	D	E	F	G	H	J	K	L	M	N	P	R
RF20	in	7.95	1.61	2.95	7.01	0.94	¼" NPT	min 2.36" max 2.48"	0.63	1.1	1.97	2.76	0.43	3.46	3.23	3.03
	mm	202	41	75	178	24	or SAE	min 60mm max 63mm	16	28	50	70	11	88	82	77

3000

RTF 20 FILTER HEAD



RTF 20 FILTER ELEMENTS



VISCOSITY - 141 SSU (30 CS). TEMPERATURE - 100°F (38°C)

FLOW RATES FOR FILLER BREATHER CARTRIDGE

Δp		10µm	40µm
0.7 psi	gpm	30.0	42
0.05 bar	lpm	114	160
1.4 psi	gpm	50	66
0.10 psi	lpm	190	250

FILTRATION AREA (cm²)

	RTF20	BETA RATIO
10µm paper	870	$B_{10} \geq 2$
6µm glass fiber	710	$B_6 \geq 75$
10µm glass fiber	710	$B_{10} \geq 75$
20µm glass fiber	710	$B_{20} \geq 75$

DIRT HOLDING CAPACITY

ACFTD DHC (gms) Δp = 1.3 BAR (19 psi)	
6µm glass fiber	5
10µm glass fiber	6
20µm glass fiber	7

ORDERING INFORMATION-COMPLETE FILTER

RTF20 N1 G 10 B V B 40 D

FILTER TYPE
RTF 20

THREAD TYPE	
N1	½" NPT
N2	¾" NPT
S1	¾"- 16 SAE
S2	1 1/16"-12 SAE

BREATHER	
B10	10 micron
B40	40 micron

DIPSTICK	
-	No Dipstick
D	Dipstick

INDICATOR	
N	No Indicator
N1	No Indicator - Hole Drilled
V	Visual Indicator
E	EPS-1 Electrical Indicator

ORDERING CODE-FILTER ELEMENT

RTE20 G 10 B

FILTER TYPE
RTE 20

FILTER MEDIA	
D	Paper
G	Inorganic glass fiber

MICRON RATING	
6	6 micron
10	10 micron
20	20 micron

SEAL	
B	Buna-N
V	Viton

See page 136 for more details on the Indicator options.

3/00

SPECIFICATIONS

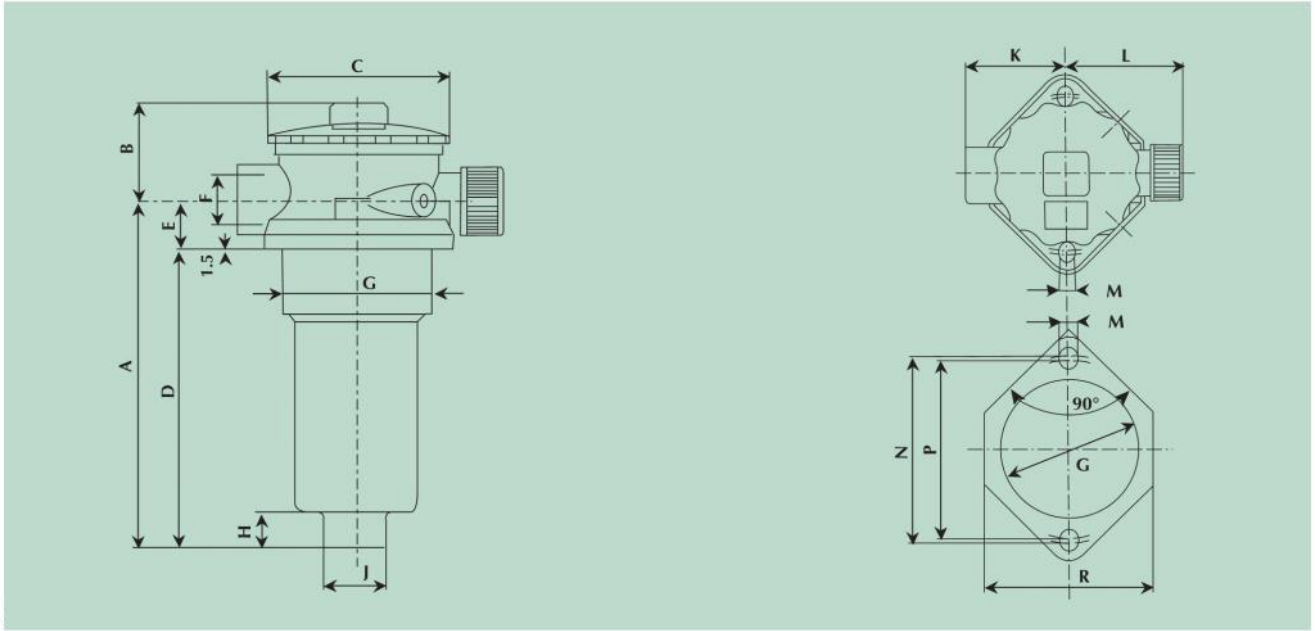
- Flows up to 40 gpm (152 lpm)
- Die-cast aluminum head with a polyamid screw-on cap and bowl
- Combination filter, breather and filler
- Maximum working pressure 145 psi (10 bar)
- For use with mineral and petroleum based fluids only
- By-pass in element 25 psi (1.6 bar)
- Operating Temperature -13°F to 212°F
  -25°C to 100°C
- 10µ filler breather
- Buna - N Seals
- Filter Element Collapse rating 75psi (5 bar)



OPTIONS

- 3/4" NPT, 1" NPT, -12 SAE, -16 SAE Ports
- 3 Bowl lengths 4.33 in (110mm)
  6.9 in (175mm)
  10.8 in (275mm)
- 4 Elements 10µm paper
  6µm inorganic fiber
  10µm inorganic fiber
  20µm inorganic fiber
- Electrical or Visual Indicators available
- Dipstick available
- 40µ paper filler breather element
- Special elements available on request.

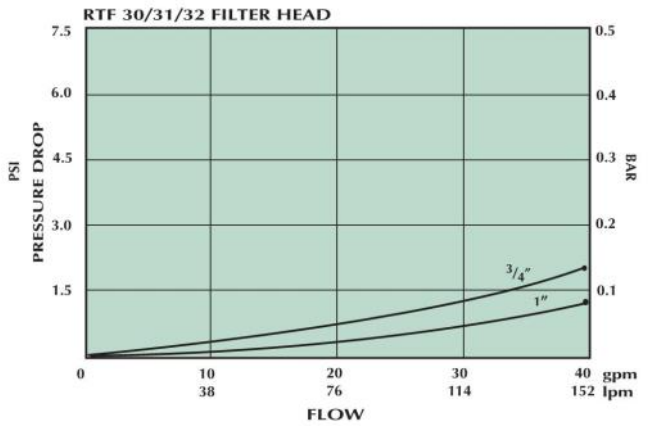
DIMENSIONAL INFORMATION

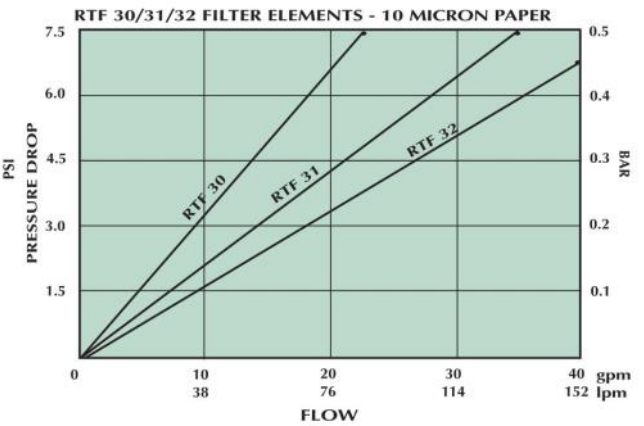


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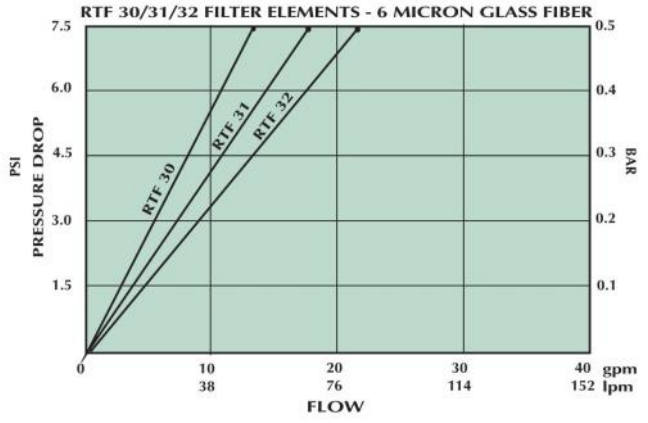
STAUFF®

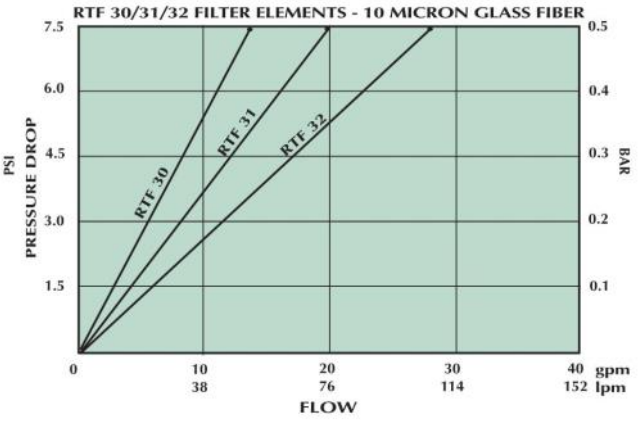
		A	B	C	D	E	F	G	H	J	K	L	M	N	P	R
RTF30	in	5.51	2.36	4.09	4.33	1.18	3/4"		0.87	1.42	2.76	3.27	0.43	4.53	4.33	4.06
	mm	140	60	104	110	30	or 1"	min. 3.43"	22	36	70	83	11	115	110	103
RTF31	in	8.07	2.36	4.09	6.89	1.18	3/4"	max. 3.58"	0.87	1.42	2.76	3.27	0.43	4.53	4.33	4.06
	mm	205	60	104	175	30	or 1"	min. 87mm	22	36	70	83	11	115	110	103
RTF32	in	12.01	2.36	4.09	10.83	1.18	3/4"	max. 91mm	0.87	1.42	2.76	3.27	0.43	4.53	4.33	4.06
	mm	305	60	104	275	30	or 1"		22	36	70	83	11	115	110	103

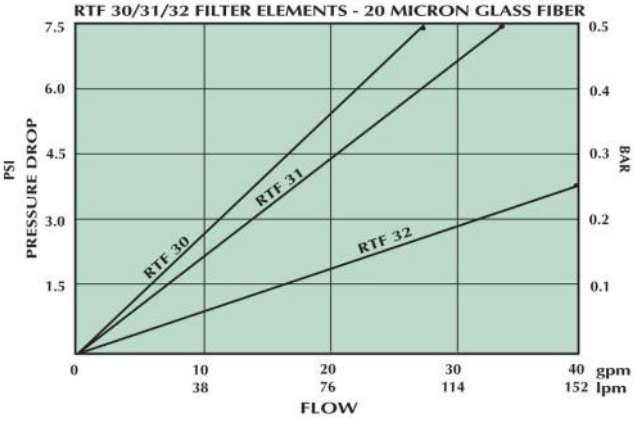




VISCOSITY - 141 SSU (30 CS). TEMPERATURE - 100°F (38°C).







3/00

FLOW RATES FOR FILLER BREATHER CARTRIDGE

Δp		10µ	40µ
0.7psi	gpm	30.0	42.1
0.05bar	lpm	114	160
1.4psi	gpm	50.0	66
0.10bar	lpm	190	250

FILTRATION AREA (CM²)

	RTF 30	RTF31	RTF32	Beta Ratio
10µm paper	940	1500	1850	$B_{10} \geq 2$
6µm fiber	670	1020	1670	$B_6 \geq 75$
10µm fiber	670	1020	1670	$B_{10} \geq 75$
20µm fiber	670	1020	1670	$B_{20} \geq 75$

DIRT HOLDING CAPACITY

ACFTD DHC (gms) at Δp = 1.3 BAR (19 psi)			
	RTF30	RTF31	RTF32
6µm glass fiber	5	7	11
10µm glass fiber	6	9	15
20µm glass fiber	7	11	17

ORDERING INFORMATION-COMPLETE FILTER

RTF31 N2 G 10 B V B 40 D

FILTER TYPE

RTF 30	Bowl length 4.33″
RTF 31	Bowl length 6.89″
RTF 32	Bowl length 10.83″

DIPSTICK

-	No Dipstick
D	Dipstick

BREATHER

B10	10 micron
B40	40 micron

THREAD TYPE

N1	¾" NPT
N2	1" NPT
S1	1 1/16-12 SAE
S2	1 5/16-12 SAE

INDICATOR

N	No Indicator
N1	No Indicator - Hole Drilled
V	Visual Indicator
E	EPS - 1Electrical Indicator

ORDERING CODE-FILTER ELEMENT

RTE 31 G 10 B

SERIES

RTE

SEAL

B	Buna-N
V	Viton

FILTER GROUP

30	Bowl Lengths 4.33″
31	Bowl Lengths 6.9″
32	Bowl Lengths 10.8″

MICRON RATING

6	6 micron
10	10 micron
20	20 micron

FILTER MATERIAL

D	Paper
G	Inorganic Glass fiber

3/00 See page 136 for more details on the Indicator options.



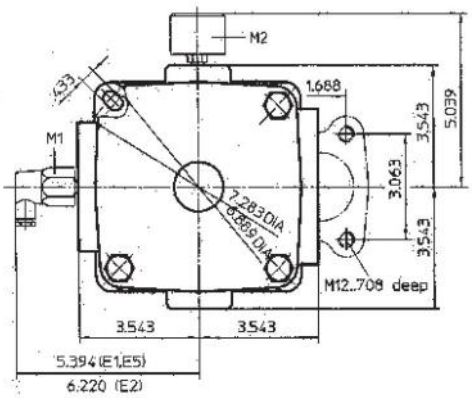
SPECIFICATIONS

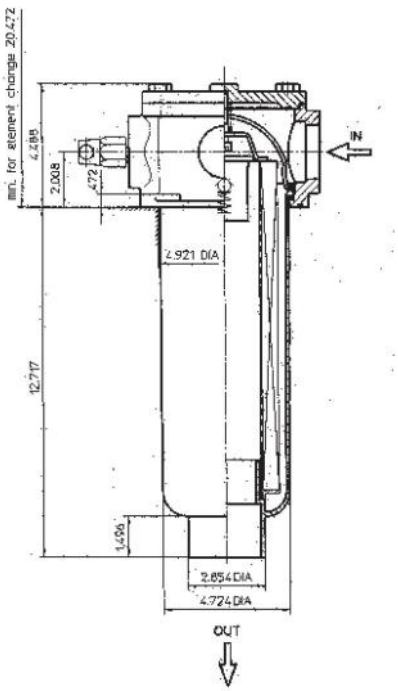
- Flows to 165 gpm (625 lpm)
- 2" SAE Flange (3000 psi) Port Connection
- Working Pressure 145 psi (10 bar)
- All elements are β200 rated
- By-Pass in filter element 29 psi (2 bar)
- Glass fiber reinforced polyamid bowl
- Normal operating temperature -14°F to 176°F (-25°C to 80°C)

OPTIONS

- 3, 10, 25 Micron glass fiber elements
- Stainless steel mesh available on special request
- Buna-N or Viton Seals
- Visual and Electrical Indicators available

DIMENSIONS





ORDERING INFORMATION

TEF 625 10VG16 S P V

FILTER TYPE

TEF	IN TANK RETURN

NOMINAL FLOW

625	625 LPM-165 GPM

CLOGGING INDICATOR

V	VISUAL
E1	ELECTRICAL

SEAL MATERIAL

P	Buna-N
V	Viton

ORDERING CODE - FILTER ELEMENTS

01.E 631.3VG.16 S P	3 Micron inorganic fiber
01.E 631.10VG.16 S P	10 Micron inorganic fiber
01.E 631.25VG.16 S P	25 Micron inorganic fiber

3/00

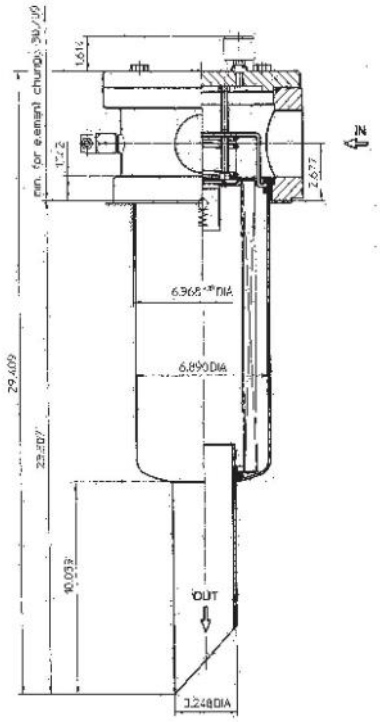
SPECIFICATIONS

- Flows to 250 gpm (950 lpm)
- 3″ SAE Flange (3000 psi) Port Connection
- Working Pressure 145 psi (10 bar)
- All elements are β200 rated
- Steel bowl
- By-Pass in filter element 29 psi (2 bar)
- Normal operating temperature -14°F to 176°F (-25°C to 80°C)

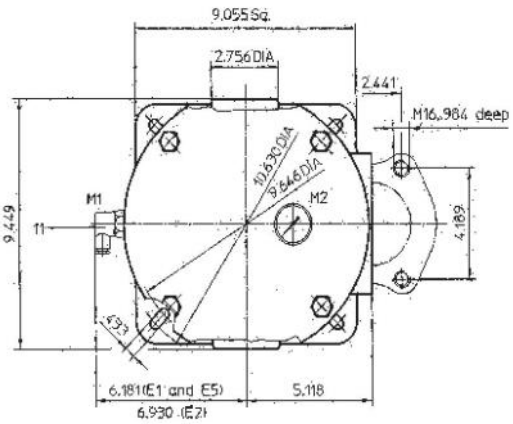
OPTIONS

- 3, 10, 25 Micron glass fiber elements
- Stainless steel mesh available on special request
- Buna-N or Viton Seals
- Visual and Electrical Indicators available





DIMENSIONS



ORDERING INFORMATION

TEF 951 10VG10 S P V

FILTER TYPE
TEF - IN TANK RETURN

NOMINAL FLOW	
950	950 LPM-250 GPM

CLOGGING INDICATOR	
V	VISUAL
E1	ELECTRICAL

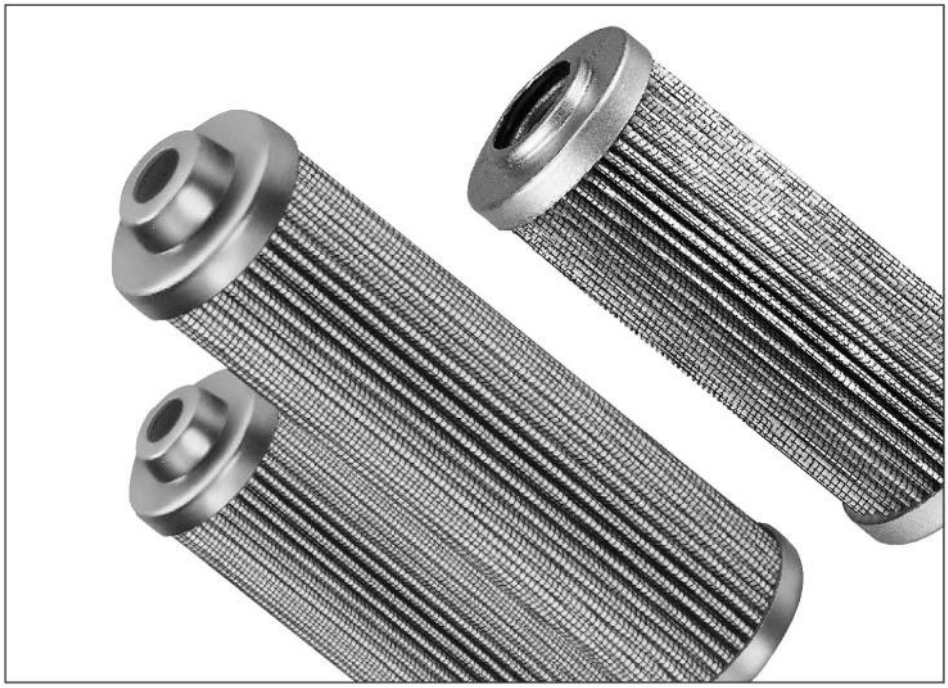
SEAL MATERIAL	
P	Buna-N
V	Viton

ORDERING CODE - FILTER ELEMENTS	
01.E 950.3VG.10 S P	3 Micron inorganic fiber
01.E 950.10VG.10 S P	10 Micron inorganic fiber
01.E 950.25VG.10 S P	25 Micron inorganic fiber

3/00

REPLACEMENT FILTER ELEMENTS FOR SF AND RF SERIES

STAUFF replacement filter elements for SF and RF series filters are manufactured in the common filter materials such as stainless fiber, stainless mesh, polyester fiber, paper, and inorganic glass fiber. All replacement elements made by STAUFF comply with quality specifications in accordance with international standards.



ORDERING CODE FILTER ELEMENTS

SE 014 G 10 V

Series	
SE	for pressure filters SF
RE	for return line filters RF

Group
according to filter housing

Seal material	
B	NBR - Buna-N
V	FPM - Viton
E	EPDM
other seal materials on request	

Micron rating	
03	3 µm
05	5 µm
10	10 µm
20	20 µm
25	25 µm
40	40 µm
60	60 µm
100	100 µm
other micron rating on request	

Filter material		SE	RE	Micron ratings available
Code	Material	Δp_{max}	Δp_{max}	
A	Stainless fiber	3000 psi (210 bar)	430 psi (30 bar)	03, 05, 10, 20
C	Polyester fiber	3000 psi (210 bar)	–	
N, D	Paper	430 psi (30 bar)	230 psi (16 bar)	
G, E	Inorganic glass fiber	430 psi (30 bar)	430 psi (30 bar)	
H, F	Inorganic glass fiber	3000 psi (210 bar)	–	
B, **S**	Stainless mesh	430 psi (30 bar)	430 psi (30 bar)	25, 40, 60, 100
T, **W**	Stainless mesh	3000 psi (210 bar)	–	

Bold type identifies preferred material

3/00

INTERCHANGE FILTER ELEMENTS

STAUFF manufactures interchange filter elements for a wide range of filter manufacturers. They meet the technical requirements with regard to quality and dimensions and consequently can be used with confidence in the installations.



Continuing research and development of filter materials used by STAUFF, and observance of strict Quality Assurance procedures together with the relevant international standards, ensures consistently high performance of our filter elements.

STAUFF manufacturing and stocking policies are designed to give our customers ready access to a wide range of filter elements from one source.

Consult www.stauffusa.com for a complete interchange guide.

Interchange filter elements are available to suit housings of the following manufacturers:

- **Argo**
- **Eppensteiner**
- **Internormen**
- **Hydac/Hycon**
- **Mahle**
- **Pall**
- **Fairey**
- **MP Filtri**

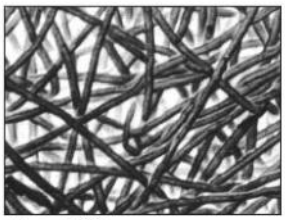
Special elements are available on request. Please consult factory.

FILTER MATERIAL SPECIFICATIONS

Stainless Metal fiber

Material specification A
collapse/burst resistance as per ISO 2941: 3000 psi (210 bar) (Pressure filters)
collapse/burst resistance as per ISO 2941: 430 psi (30 bar) (Return line filters)

- Sintered stainless metal fiber with a three dimensional labyrinth structure for depth filtration.
- Low flow resistance with a high dirt holding capacity.
- Excellent chemical and thermal resistance.


Metal fiber

Stainless wire mesh

Material specification B, **S** collapse/burst resistance as per ISO 2941: 430 psi (30 bar)
Material specification **W**, T collapse/burst resistance as per ISO 2941: 3000 psi (210 bar)

- Woven stainless steel wire in 1.4301/1.4404 grade with a square mesh or double milled twill lace weave.
- Low flow resistance.
- Surface filtration. Excellent chemical and thermal resistance.


Stainless wire mesh

Polyester fiber

Material specification C collapse/burst resistance as per ISO 2941: 3000 psi (210 bar)

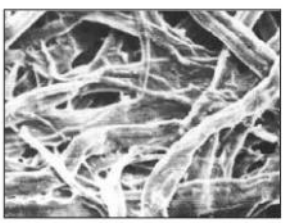
- 100% polyester fiber with fibers thermally bonded creating a tearproof material with no electrostatic charging.
- Exceptional shear strength.
- Depth filtration gives large dirt holding capacity with low flow resistance.
- Good chemical resistance.
- High filtration efficiency even on small particle sizes.


Polyester fiber

Paper

Material specification D, **N**
collapse/burst resistance as per ISO 2941: 430 psi (30 bar) (Pressure filters)
collapse/burst resistance as per ISO 2941: 230 psi (16 bar) (Return line filters)

- Filter material made from impregnated cellulose paper.
- Low cost design with good dirt holding capacity.
- Not suitable for use with any water based fluids.


Paper

Inorganic glass fiber

Material specification **G**, E collapse/burst resistance as per ISO 2941: 430 psi (30 bar)
Material specification **H**, F collapse/burst resistance as per ISO 2941: 3000 psi (210 bar)

- Non-woven glass fiber material with acrylic resin bond.
- High dirt holding capacity.
- High filtration efficiency, even on small particle sizes, achieved by the depth filtration produced by the three dimensional labyrinth structure of the material.
- Excellent cost effectiveness.

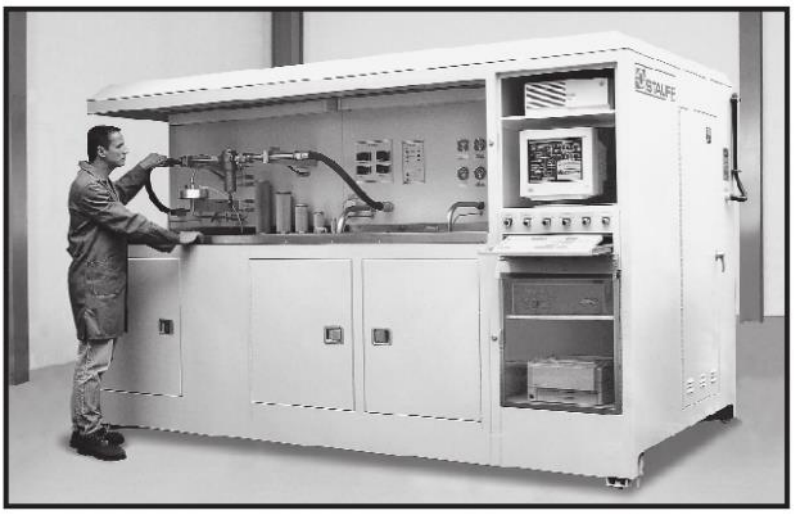

Inorganic glass fiber

Material specifications **G** and **H** are the updated high performance elements and should be selected for new applications.

3/00

STAUFF FILTER ELEMENTS are tested according to

- ISO 2943
  Compatibility with hydraulic fluids
- ISO 3968
  Flow characteristics
- ISO/DIN 3724
  Flow fatigue characteristics
- ISO/DIN 4572
  Filter performance test (Multi-pass test)
- ISO 2942
  Proof of integrity and quality (Bubble point test)
- ISO 3723
  Verification of the end cap stress
- ISO 2941
  Collapse / burst pressure verification



Multi-pass-test stand

Multi Pass Testing (Beta Ratio)

The Beta Ratio (βx) is considered one of the most important criteria in assessing the capability of a filter to remove contaminant particles. This value is determined by means of the multi-pass test, according to ISO/DIN 4572.

Definition: The Beta Ratio is the ratio of the number of particles, greater than a given size, upstream of the filter to the number of particles, greater than the same size, downstream of the filter in the same size fluid sample.

$$\beta_x = \frac{\text{Number of particles} > x\mu m \text{ upstream}}{\text{Number of particles} > x\mu m \text{ downstream}} \quad (x = \text{particle size})$$

The Beta Ratio can be used to calculate the Filter Efficiency Rating by the following formula.

$$E_x = \frac{\beta_x - 1}{\beta_x} \times 100 \qquad E_x = \% \text{ efficiency}$$

Example for a given particle size of 10 µm

$$\beta_{10} = \frac{9360}{45} = 208 \qquad E_{10} = \frac{208 - 1}{208} \times 100 = 99.52\ \%$$

β Ratio vs Efficiency	
β Ratio	**Efficiency**
1	0
2	50%
20	95%
50	98.00%
75	98.67
100	99.00%
200	99.50
1.000	99.90%
10.000	99.99%

3/00 **NOTE: All STAUFF inorganic glass fiber filter elements have a Beta Ratio > 200 at their rated micron rating.**

CHOICE OF FILTERS

Choice of a suitable micron rating

Generally, the type of components incorporated in the hydraulic system will determine the micron rating required. It has been clearly demonstrated that system components will operate reliably for years if a specific minimum oil cleanliness grade is maintained. Frequently the choice will be determined by the most sensitive component in the system.

a) Operating filter

The following chart is a general guide but the final result should be checked by oil analysis. Apart from the specific flow rate (gpm/in² of filter area), other factors such as operating environment and condition of seals and breathers can have an effect on the cleanliness grade which can actually be achieved.

Oil cleanliness grade as per ISO 4406	Micron rating	Area of Application
13/10	3 µm	servo valve hydraulics
16/13	5 µm	proportional hydraulics
18/15	10 µm	standard hydraulics >100 bar
19/16	20 µm	standard hydraulics <100 bar

b) Protective filter

Occasionally, protective filters are fitted downstream of major components, eg., the pump, to collect the debris in case of a catastrophic failure. This avoids total stripping and flushing of the system. For economic reasons, protective filters are normally one grade coarser than the operating filters since they do not significantly contribute to the cleaning of the system and this extends filter service intervals.

Choice of the optimum filter

In selecting the filter, the following information must be considered:

- maximum flow volume (Q_{max}) through the filter including surge flows
- kinematic viscosity (υ) of the fluid in SSU at cold start temperature and operating temperature
- micron rating (µm): see table
- filter material

The aim is to choose a filter whose total differential pressure (Δp) is no greater than Δp_{max} = 14.5 psi (1.0 bar) for pressure filters or Δp_{max} = 7.5 psi (0.5 bar) for return line filters, in a clean state at the normal operating temperature. These values have been proven in practice to give the optimum service life for the element.

The nominal flow volume of the filter is the obvious reference value for pre-selection and this should be larger than the flow to be filtered.

$$Q_{nom} > Q_{max}$$

Calculations based on the filter data will verify whether the pre-selected filter meets the requirements, at operating temperatures:

Δp_{max} < 14.5 psi (1.0 bar) (for pressure filter)
Δp_{max} < 7 psi (0.5 bar) (for return line filter)

The total differential pressure is the sum of the differential pressure values of the empty housing and the filter element. They are calculated from the flow characteristics tables.

$$\Delta p_{total} = \Delta p_{hous} + \Delta p_{elem}$$

The flow characteristic tables are based on a kinematic viscosity of 30 centistokes (141 SSU). For different viscosities, a correction factor (K) based on the following formula must be applied to the figure calculated at 30 centistokes (141 SSU).

$$K = \frac{\frac{\upsilon}{141} + \sqrt{\frac{\upsilon}{141}}}{2}$$

The operating differential pressure is then calculated by the following formula:

$$\Delta p_{operating} = \Delta p_{nom} + K \times \Delta p_{elem}$$

The filter size is suitable if the $\Delta p_{operating} < \Delta p_{max}$.
If the calculated $\Delta p_{operating}$ is greater than Δp_{max}, select the next larger filter size and re-calculate until a satisfactory solution is found.

The following two examples explain the procedure.

3/00

EXAMPLES OF CALCULATION

Example 1: Selection of a pressure filter

System Information. A pressure filter with an inorganic glass fiber element is required immediately after the pump. The system has standard components and is operating at pressures up to 3000 PSI (200 bar). The filter shall be fitted with a bypass valve and a visual contamination indicator.

Data given: Q_{max} = 45 gpm (170 lpm)
$\upsilon_{operating}$ = 213 SSU (46 cSt)
Micron rating 10 µm (see table on page 8&9)

First Step

Pre-selection: Size SF 070, $Q_{nominal}$ = 70 gpm > Q_{max}

Pressure drop values at viscosity of 141 SSU (30 cSt) from the flow characteristics:

$\Delta p_{hous\,-}$ = 3.6 psi (0.25 bar) (SF 070 –, see page 7)
$\Delta p_{elem\,-}$ = 12 psi (0.8 bar) (SE 070 G 10 B, see page 9)

Determination of the correction factor (see page 9)

centistokes
$$K = \frac{\frac{46}{30} + \sqrt{\frac{46}{30}}}{2} = 1.39$$

SSU
$$K = \frac{\frac{213}{141} + \sqrt{\frac{213}{141}}}{2} = 1.39$$

Determination of the actual pressure drop:

$\Delta p_{actual} = \Delta p_{hous} + K \cdot \Delta p_{elem}$ = 0.25 bar + 1.39 x 0.80 bar = 1.36 bar > Δp_{max} = 1.0 bar
3.62 psi + 1.39 x 11.6 psi = 19.7 psi > Δp_{max} = 14.5 psi

Since the actual pressure drop is larger than the allowed pressure drop, a larger filter has to be chosen.

Second Step

Selection of the next larger filter size; SF 090, $Q_{nominal}$ = 90 gpm > Q_{max}

Δp_{hous} = 2.1 psi (0.15 bar) (SF 090 –, see page 7)
Δp_{elem} = 8.7 psi (0.6 bar) (SE 090 G 10 B, see page 9)

Actual pressure drop $\Delta p_{act} = \Delta p_{hous} + K \cdot \Delta p_{elem}$ = 0.15 bar + 1.39 x 0.6 bar = 0.99 bar ≤ Δp_{max} = 1.0 bar
or = 2.1 psi + 1.39 x 8.1 psi = 13.4 psi ≤ Δp_{max} = 14.5 psi

In a clean state, this filter fulfills the requirements and is suitable for the application.
The correct filter designation is: **SF090G10BTB/BV**

Example 2: Selection of a return line filter

System Information. A return line filter with a paper element is required to clean the oil.
No contamination indicator is required.

N. B. If the system incorporates either accumulators or cylinders, the return flow can dramatically exceed pump flow and the maximum surge flow should be the flow used to calculate the pressure drop through the filter.

Data given: Q_{max} = 24 gpm (90 lpm)
$\upsilon_{operating}$ = 150 SSU (32 cSt)
Micron rating 20 µm (see table page 14)

First Step

Pre-selection: Size RF 030, $Q_{nominal}$ = 30 gpm > Q_{max} (29 gpm)

Pressure drop values at viscosity of 141 SSU (30 cSt) from the flow characteristics:

Δp_{hous} = 4 psi (0.27 bar) (RF 030 –, page 14)
Δp_{elem} = 0.6 psi (0.04 bar) (RE 030 N 20 B, page 14)

Determination of the correction factor (see page 14)

centistokes
$$K = \frac{\frac{32}{30} + \sqrt{\frac{32}{30}}}{2} = 1.05$$

SSU
$$K = \frac{\frac{150}{141} + \sqrt{\frac{150}{141}}}{2} = 1.05$$

Determination of the actual pressure drop:

$\Delta p_{actual} = \Delta p_{hous} + K \cdot \Delta p_{elem}$ = 0.27 bar + 1.05 x 0.04 bar = 0.31 bar < Δp_{max} = 0.5 bar
or = 4 psi + 1.05 x 0.6 psi = 4.6 psi ≤ Δp_{max} = 7.5 psi

In a clean state, this filter fulfills the requirements and is suitable for the application. No further calculation is necessary.
The correct filter designation is: **RF030N20B/B**

3/00 Consult factory for the Stauff Filter Specification and Sizing Diskette for both SF and RF filters.

STAUFF®

Hydraulic Accessories



Quality and Service Worldwide







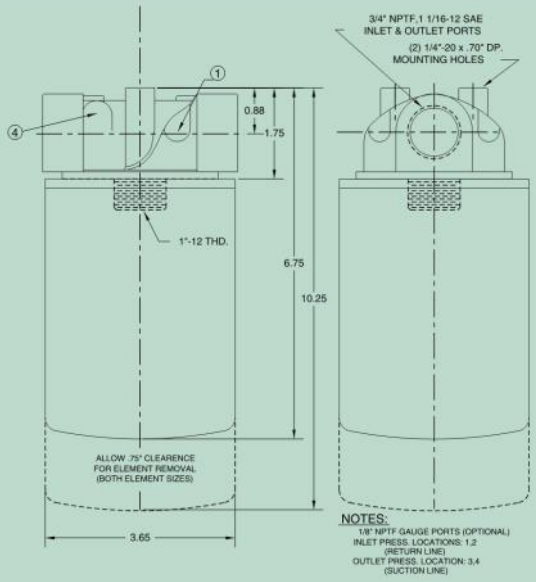
SPECIFICATIONS

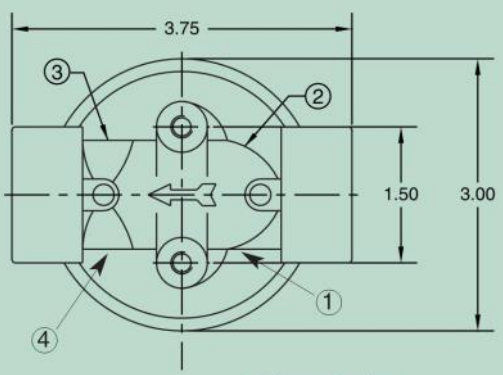
- Flows to 25gpm (90 lpm) for Return Line and 6gpm (23 lpm) for Suction Line Applications
- Working Pressure–200psi (14 bar)
- Maximum Pressure Differential of 80psi (5.5 bar) for any Applications with no By-Pass Valve
- For Use With Petroleum Based Fluids Only
- Die Cast Aluminum Head
- Buna-N Seals
- Operating Temperatures From -25°F to 212° (-32°C to 100°C)

OPTIONS

- NPT or SAE Ports Available
- Gauge Indicator Ports
- Visual and Electrical Indicators Available
- By-Pass Available For Both Suction and Return Line Applications

DIMENSIONS





Indicator Option 1
– # 1 & 2 Gauge Ports Drilled – Return

Indicator Option 2
– # 3 & 4 Gauge Ports Drilled – Suction

Indicator Option 4
– # 1, 2, 3 & 4 Gauge Ports Drilled

ORDERING INFORMATION

SAF	07	25	0

PORT OPTIONS	
07	3/4" NPT
11	1 1/16" -12 SAE

BY-PASS OPTIONS	
00	No By-Pass
03	3psi (0.2 bar)
05	5psi (0.33 bar)
15	15psi (1 bar)
25	25psi (1.7 bar)

INDICATOR OPTIONS	
0	No Gauge Port
1	Gauge Ports Drilled – Return
2	Gauge Ports Drilled – Suction
4	All Gauge Ports Drilled
9	Special

See Page 136 for Indicator Options Available.

3/00

SPECIFICATIONS

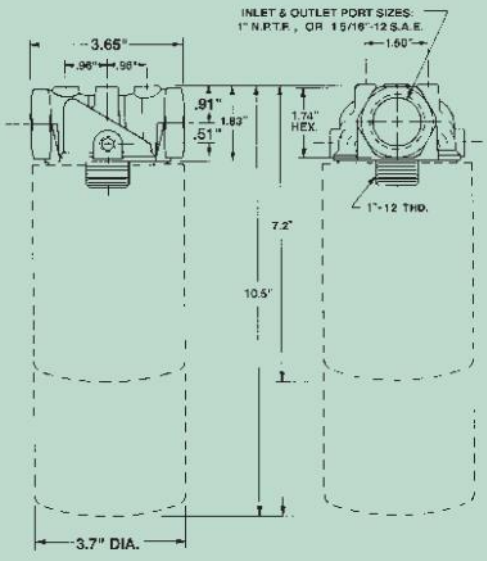
- Flows to 34gpm (128 lpm) for Return Line and 8gpm (30 lpm) for Suction Line Applications
- Working Pressure–200psi (14 bar)
- Maximum Pressure Differential of 80psi (5.5 bar) on Filters With No By-Pass Option
- For Use With Petroleum Based Fluids Only
- Die Cast Aluminum Head
- Buna-N Seals
- Operating Temperatures From -25°F to 212°F (-32°C to 100°C)

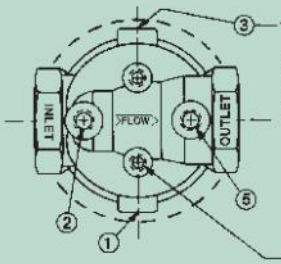


OPTIONS

- NPT or SAE Ports Available
- Gauge Indicator Ports
- Visual and Electrical Indicators Available
- By-Pass Available For Both Suction and Return Line Applications

DIMENSIONS





③ 1/8" N.P.T.F. GAUGE PORTS (OPTIONAL)
INLET PRESSURE LOCATIONS:
①②③ (RETURN LINE)
OUTLET PRESSURE LOCATION:
⑤ (SUCTION LINE)

(2) 1/4"-20 x 5/16" DP. MTG. HOLES

Indicator Option 1
– #'s 1 & 3 Gauge Ports Drilled 1/8" NPT – Return

Indicator Option 2
– # 5 Gauge Ports Drilled – Suction

Indicator Option 4
– #'s 1, 3 & 5 Gauge Ports Drilled

ORDERING INFORMATION

SAF	10	25	1

PORT OPTIONS	
10	1" NPT
13	1 5/16" -12 SAE

BY-PASS OPTIONS	
00	No By-Pass
03	3psi (0.2 bar)
05	5psi (0.33 bar)
15	15psi (1 bar)
25	25psi (1.7 bar)

INDICATOR OPTIONS	
0	No Gauge Port
1	Gauge Ports Drilled – Return
2	Gauge Ports Drilled – Suction
4	All Gauge Ports Drilled
9	Special

See Page 136 for Indicator Options Available.



SPECIFICATIONS

- Working Pressure–200psi (14 bar)
- For Use With Petroleum Based Fluids Only
- Operating Temperatures From -25°F to 212°F (-32°C to 100°C)
- Use a Strap-on Chain Wrench For Element Removal

OPTIONS

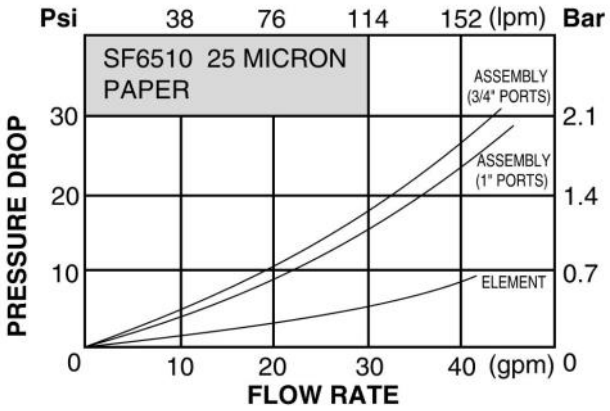
- Elements Available Individually or in Carton Quantities of 12
- 10 or 25 Micron Nominal Rating Paper Elements Available
- 3, 10 or 25 Micron Synthetic Media, ß-rated Elements Available
- Extended Length Elements Available in 10 and 25 Micron Paper

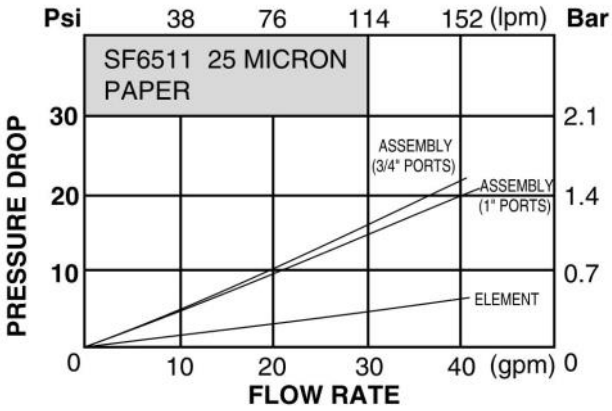
DIMENSIONS / ORDERING INFORMATION

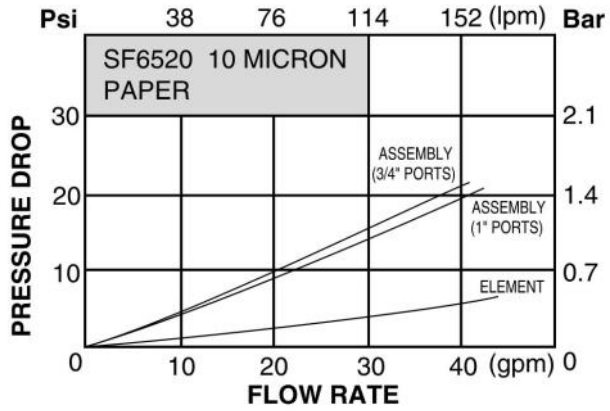
	PAPER								SYNTHETIC					
	SF 6520		SF6521		SF6510		SF6511		SF6549		SF6505		SF6504	
	10 MICRON		10 MICRON		25 MICRON		25 MICRON		3 MICRON		10 MICRON		25 MICRON	
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
DIAMETER	3.73	95	3.73	95	3.73	95	3.73	95	3.73	95	3.73	95	3.73	95
LENGTH	5.68	144	8.00	203	5.68	144	8.00	203	5.68	144	5.68	144	5.68	144
ELEMENT THREAD	1"-12 UNF		1"-12 UNF		1"-12 UNF		1"-12 UNF		1"-12 UNF		1"-12 UNF		1"-12 UNF	
ß-RATIO	ß10-2		ß10-2		ß25-12		ß25-12		ß3-75		ß10-75		ß25-75	
DIRT HOLDING CAPACITY (gm)	17		26		24		37		15		22		33	
FILTRATION AREA sq in.	393		602		343		525		391		366		366	
FILTRATION AREA sq cm	2535		3882		2212		3386		2521		2360		2360	
CARTON QUANTITY	12		12		12		12		12		12		12	
CARTON WEIGHT lbs. (kg)	13.9	(5.2)	18.5	(6.9)	14.2	(5.3)	19.4	(7.2)	19.0	(7.1)	19.0	(7.1)	19.0	(7.1)

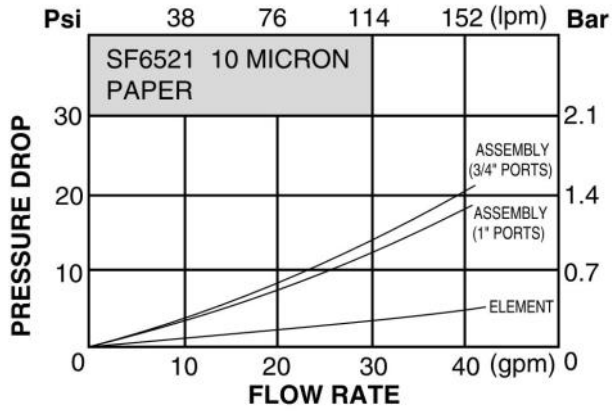
Note: These filters are not to be used on internal combustion engines as they do not contain an internal relief valve.

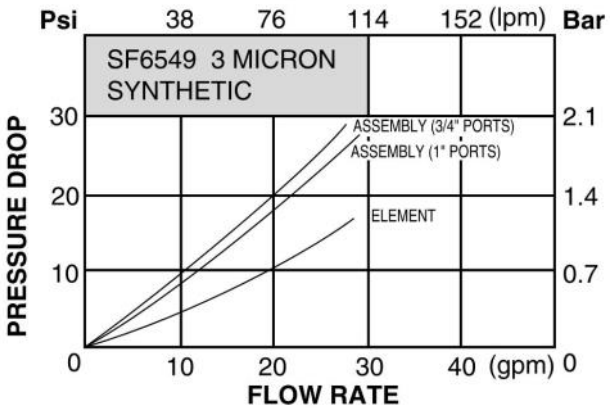
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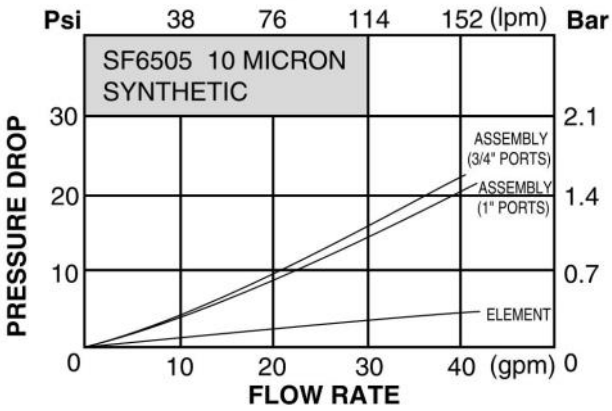


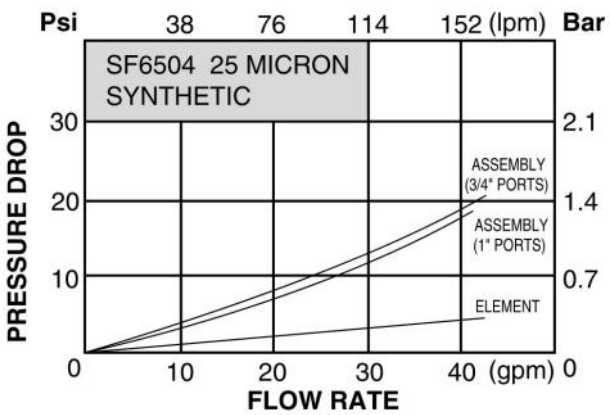












TEMPERATURE 100°F VISCOSITY 150 SSU

3/00

ACCESSORIES

STAUFF®



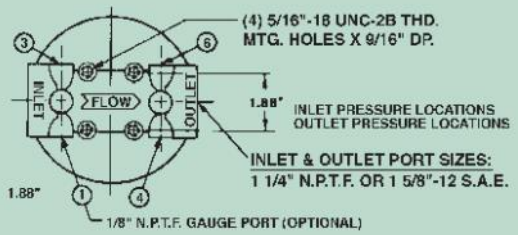
SPECIFICATIONS

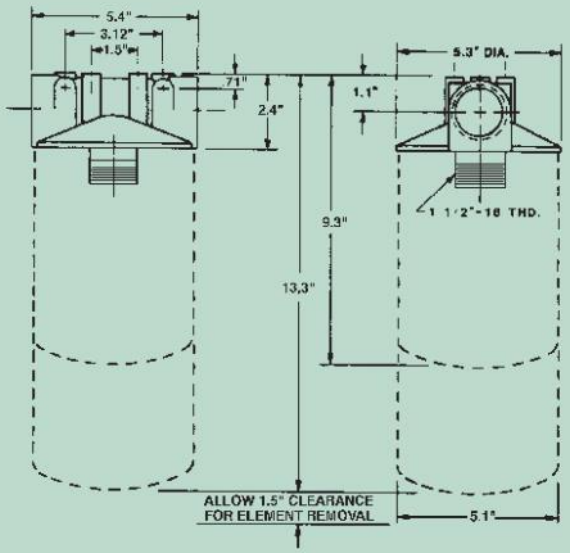
- Flows to 60gpm (225 lpm) for Return Line and 12gpm (46 lpm) for Suction Line Applications
- Working Pressure– 200psi (14 bar)
- Maximum Pressure Differential of 80psi (5.5 bar) on Filters With No By-Pass Valve Option
- For Use With Petroleum Based Fluids Only
- Operating Temperatures From -25°F to 212°F (-32°C to 100°C)
- Buna-N Seals
- Aluminum Die Cast Head

OPTIONS

- NPT or SAE Ports Available
- Visual and Electrical Indicators Available
- With or Without Gauge Indicator Ports
- By-Pass Options Available For Both Suction and Return Line Applications

DIMENSIONS





Indicator Option 1
– #'s 1 & 3 Gauge Ports Drilled – Return Line

Indicator Option 2
– #'s 4 & 6 Gauge Ports Drilled – Suction Line

Indicator Option 4
– #'s 1, 3, 4 & 6 Gauge Ports Drilled

ORDERING INFORMATION

SSF	120	25	0

PORT OPTIONS	
120	1 1/4" NPT
160	1 5/8" -12 SAE

BY-PASS OPTIONS	
00	No By-Pass
03	3psi (0.2 bar)
05	5psi (0.33 bar)
15	15psi (1 bar)
25	25psi (1.7 bar)

INDICATOR OPTIONS	
0	No Gauge Port
1	Gauge Ports Drilled – Return
2	Gauge Ports Drilled – Suction
4	All Gauge Ports Drilled
9	Special

See Page 136 for Indicator Options Available.

3/00

SPECIFICATIONS

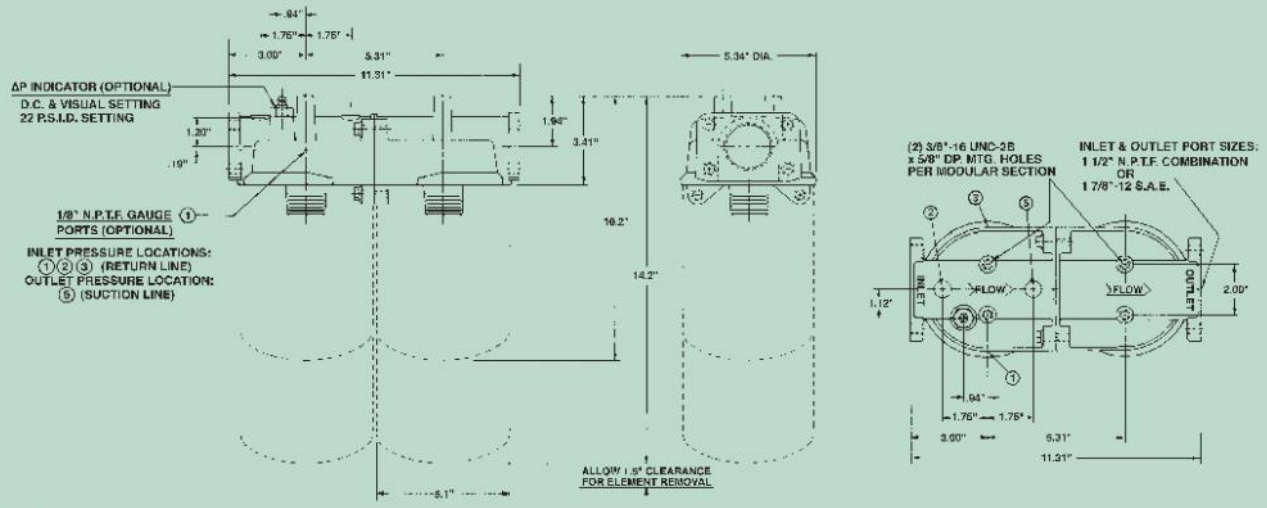
- Flows to 120gpm (450 lpm) for Return Line and 25gpm (95 lpm) for Suction Line Applications
- Working Pressure–150psi (10 bar)
- Maximum Pressure Differential of 80psi (5.5 bar) for Filter Heads With No By-Pass Valve Option
- For Use With Petroleum Based Fluids Only
- Parallel Flow Between the Two Filter Head Modules
- Operating Temperatures From -30°F to 212°F (-34°C to 100°C)
- Buna-N Seals
- Aluminum Die Cast Head



OPTIONS

- NPT and 2" 4-Bolt Flange or SAE Port
- Visual or Electrical Indicators Available
- With or Without Gauge Indicator Ports
- By-Pass Options Available For Both Suction and Return Line Applications

DIMENSIONS



Indicator Option 1
– #'s 1, 2, 3 & 5 Gauge Ports Drilled for suction or Return

ORDERING INFORMATION

SMF	2215	03	1	V

PORT OPTIONS	
2215	1 1/2" NPT and 2" SAE Flange
218	1 7/8" -12 SAE

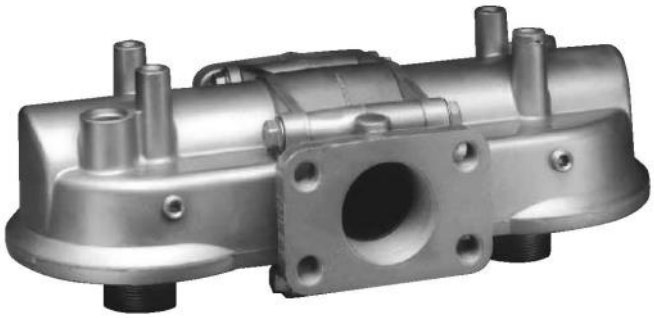
BY-PASS OPTIONS	
00	No By-Pass
03	3psi (0.2 bar)
05	5psi (0.33 bar)
15	15psi (1 bar)
25	25psi (1.7 bar)

INDICATOR OPTIONS	
0	No Gauge Port
1	Gauge Ports Drilled – Suction & Return
9	Special

INDICATOR	
OO	No Indicator
DL	DC Indicator
E	AC Indicator
V	Visual Indicator

3/00

See Page 135, 136 for Indicator Options Available.



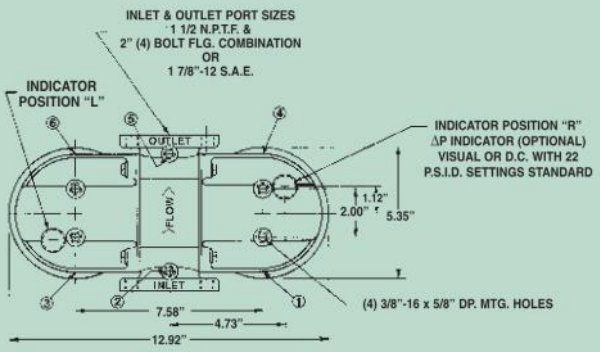
SPECIFICATIONS

- Flows to 120gpm (450 lpm) for Return Line and 25gpm (95 lpm) for Suction Line Applications
- Working Pressure–150psi (10 bar)
- Maximum Pressure Differential of 80psi (5.5 bar) on Heads With No By-Pass Option
- Parallel Flow Between The Two Filter Heads
- For Use With Petroleum Based Fluids Only
- Operating Temperatures From -30°F to 212°F (-34°C to 100°C)
- Buna-N Seals
- Die Cast Aluminum Head

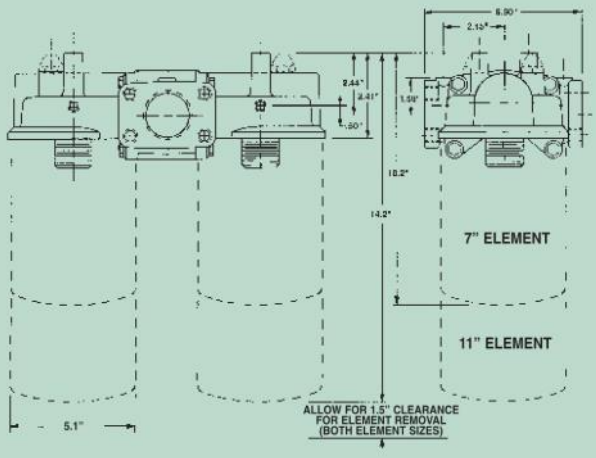
OPTIONS

- 11/2" NPT and 2" SAE Flange or SAE Ports
- Visual and Electrical Indicators Available
- With or Without Gauge Indicator Ports
- By-Pass Options Available For Both Suction and Return Applications

DIMENSIONS



Indicator Option 1
– #'s 1, 3, 4, 5 & 6 Gauge Ports Drilled



ORDERING INFORMATION

SDF 2215 25 0 0

PORT OPTIONS	
2215	1 1/2" NPT and 2" SAE 4-Bolt
218	1 7/8" -12 SAE

BY-PASS OPTIONS	
00	No By-Pass
03	3psi (0.2 bar)
05	5psi (0.33 bar)
15	15psi (1 bar)
25	25psi (1.7 bar)

INDICATOR PORT OPTIONS	
0	No Indicator
1	Gauge Ports Drilled (Suction & Return)
9	Special

INDICATOR	
OO	No Indicator
DL	DC in L Location
DR	DC In R Location
E	AC Indicator
V	Visual

See Page 135, 136 for Indicator Options Available.

3/00

SPECIFICATIONS

- Working Pressure– 200psi (10 bar)
- For Use With Petroleum Based Fluids Only
- Operating Temperature From -25°F to 212°F (-32°C to 100°C)
- Use a Strap-on Chain Wrench For Element Removal
- For Use With SSF, SMF and SDF Filter Heads

OPTIONS

- Elements Available Individually or in Carton Quantities of 6
- 10 or 25 Micron Nominal Rating Paper Elements
- 3, 6, 12 or 25 Micron Glass Fiber Elements
- 10 Micron Water Absorbing Elements
- 125 Micron Stainless Steel Wire Mesh Elements





DIMENSIONS / ORDERING INFORMATION

	PAPER								SYNTHETIC															
	SF 6720		SF6721		SF6710		SF6711		SF6703		SF6704		SF6706		SF6707		SF6730		SF6731		SF6728		SF6726	
	10 MICRON		10 MICRON		25 MICRON		25 MICRON		3 MICRON		3 MICRON		6 MICRON		6 MICRON		12 MICRON		12 MICRON		25 MICRON		25 MICRON	
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
DIAMETER	5.06	128	5.06	128	5.06	128	5.06	128	5.06	128	5.06	128	5.06	128	5.06	128	5.06	128	5.06	128	5.06	128	5.06	128
LENGTH	6.63	168	10.63	270	6.63	168	10.63	270	6.63	168	10.63	270	6.63	168	10.63	270	6.63	168	10.63	270	6.63	168	10.63	270
ELEMENT THREAD	1 1/2-16 UNF		1 1/2-16 UNF		1 1/2-16 UNF		1 1/2-16 UNF		1 1/2-16 UNF		1 1/2-16 UNF		1 1/2-16 UNF		1 1/2-16 UNF		1 1/2-16 UNF		1 1/2-16 UNF		1 1/2-16 UNF		1 1/2-16 UNF	
ß-RATIO	ß10-2		ß10-2		ß25-12		ß25-12		ß3-75		ß3-75		ß6-75		ß6-75		ß12-75		ß12-75		ß25-75		ß25-75	
DIRT HOLDING CAPACITY (grms)	29		53		40		74		27		50		32		61		40		74		54		102	
FILTRATION AREA (sq in)	664		1227		568		1052		680		1262		680		1262		561		1041		673		1267	
(sq cm)	4282		7914		3663		6785		4386		8139		4386		8139		3618		6714		4340		8172	
CARTON QUANTITY	6		6		6		6		6		6		6		6		6		6		6		6	
CARTON lbs. WEIGHT (kg)	14.6	(6.6)	17.5	(7.9)	14.9	(6.7)	20.6	(9.3)	18.0	(8.18)	26.1	(11.86)	18.0	(8.18)	27.2	(12.36)	15.8	(7.18)	23.1	(10.5)	15.6	(7.1)	23	(10.5)

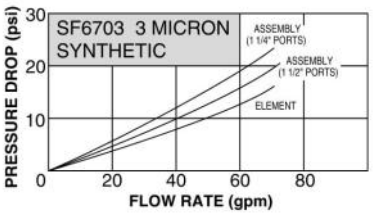
Note: These filters are not to be used on internal combustion engines as they do not contain an internal relief valve.

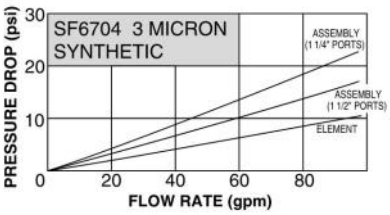
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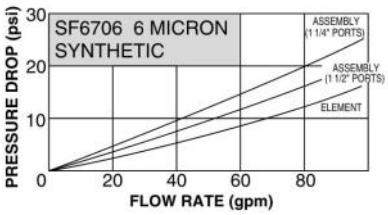
DIMENSIONS

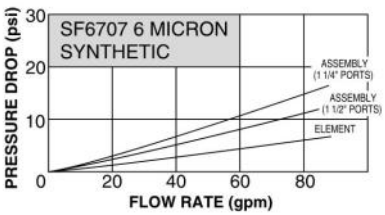
	WATER ABSORBING ELEMENTS						STAINLESS STEEL WIRE MESH (125 Micron)			
	SF 6520-W		SF 6620-W		SF6721-W		SF 6790		SF 6791	
	in	mm	in	mm	in	mm	in	mm	in	mm
DIAMETER	3.73	95	3.73	95	5.06	128	5.06	128	5.06	128
LENGTH	5.68	144	5.68	144	10.63	270	6.63	168	10.63	270
ELEMENT THREAD	1" – 12 UNF		1½" – 16 UNF		1½" – 16 UNF		1½" – 16 UNF		1½" – 16 UNF	
β-RATIO	β10=2		β10=2		β10=2		N/A		N/A	
FILTRATION AREA (sq in) (sq cm)	190 1225 cm²		190 1225 cm²		688 4440 cm²		200 1290 cm²		315 2032 cm²	
WATER HOLDING CAPACITY	5.5 oz 0.161 L		4.0 oz 0.12 L		15.0 oz 0.44 L		N/A		N/A	
MAXIMUM OPERATING PRESSURE	100 psi 6.8 bar		250 psi 17.2 bar		100 psi 6.8 bar		100 psi 6.8 bar		100 psi 6.8 bar	

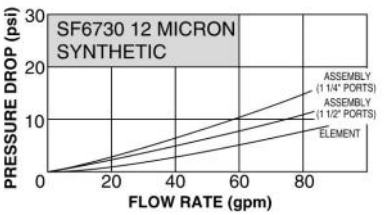
Note: These filters are not to be used on internal combustion engines as they do not contain an internal relief valve.

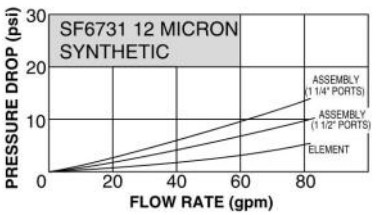


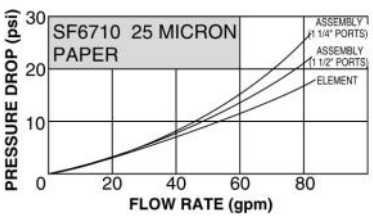


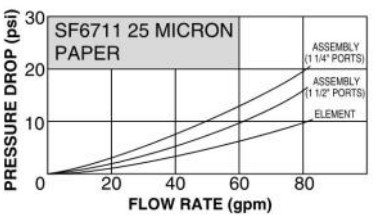


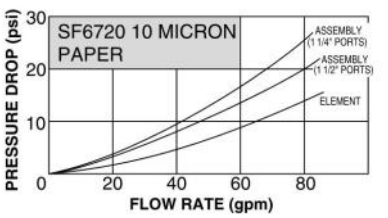


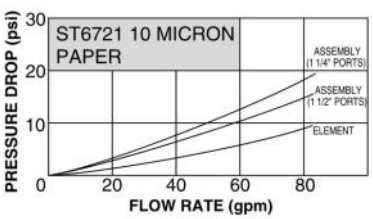


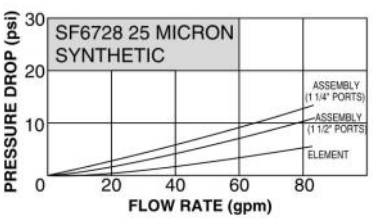


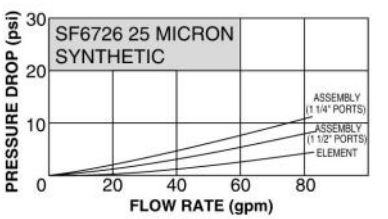










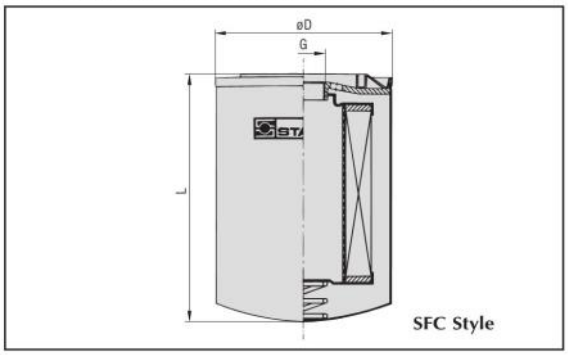


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TEMPERATURE 100°F VISCOSITY 150 SSU

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EUROPEAN INTERCHANGE REPLACEMENT ELEMENTS



SFC Style

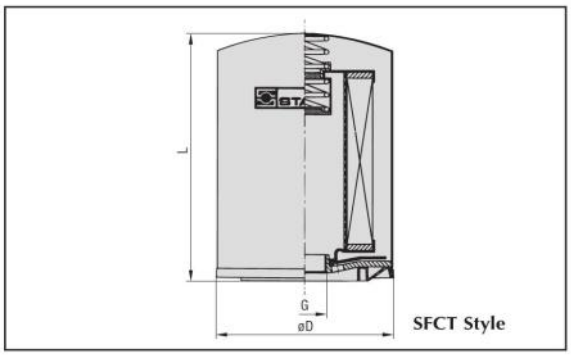
SFC elements (in-line mounting)

Micron Ratings Available

– 10 micron nominal paper
– 10 micron glass fiber

DIMENSIONAL TABLE

Type	SFC-35		SFC-36		SFC-57		SFC-58	
G	G¾		G¾		G 1¼		G 1¼	
D	3.86	98	3.86	98	5.2	32	5.2	132
L	5.7	145	7.5	190	7.1	80	8.9	226



SFCT Style

SFCT elements (tank top mounting)

Micron Ratings Available

– 10 micron nominal paper

DIMENSIONAL TABLE

Type	SFCT-35		SFCT-36		SFCT-57		SFCT-58	
G	G¾		G¾		G 1¼		G 1¼	
D	3.86	98	3.86	98	5.2	32	5.2	132
L	5.7	145	7.5	190	7.1	80	8.9	226

15psi (1 bar) bypass in top of replacement element
Internal anti-drain back diaphragm in element

ORDERING INFORMATION

SFCT 35 10E R

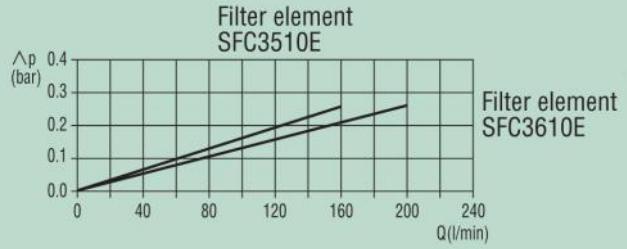
TYPE	
SFC	Spin-On filter elements (In-line mounting)
SFCT	Spin-On filter elements (Tank top mounting)

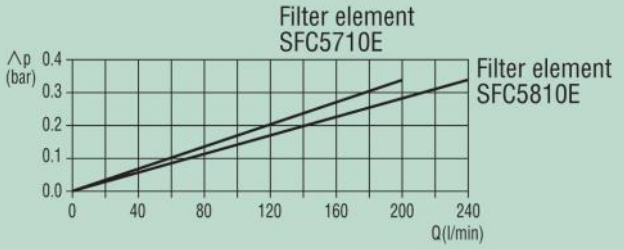
FILTER SIZE	
35	for ¾" BSP Post–Standard
36	for ¾" BSP Post–Long
57	for 1¼" BSP Post–Standard
58	for 1¼" BSP Post–Long

INTEGRATED BYPASS VALVE	
(none)	elements series SFC
R	elements series SFCT

FILTERMATERIAL / MICRON RATING	
10AE	10 µm Glass fibre
10E	10 µm Paper (standard)
25E	25 µm Paper (standard)
60E	60 µm Wire mesh
125E	125 µm Brass mesh

PRESSURE DROP vs. FLOW CURVES





3/00

SPECIFICATIONS

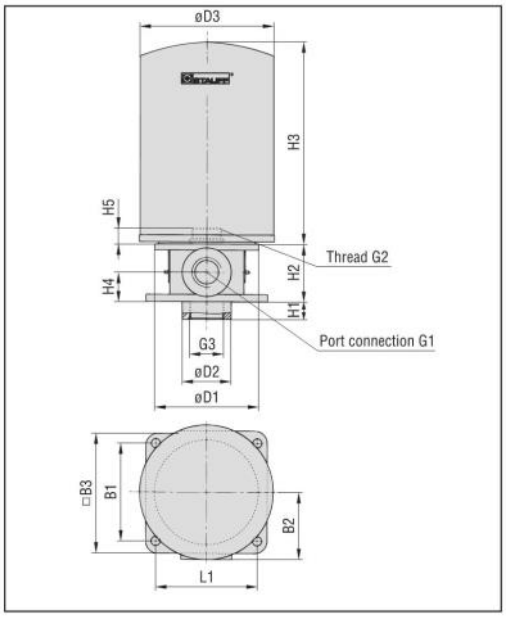
- Tank Top Mounted Spin-On filters
- Working Pressure is 100psi (7 bar)
- For Use With Mineral and Petroluem Based Fluids
- Operating Temperature From -22°F to 212°F (-30°C to 100°C)
- Die-Cast Aluminum Housing
- 15psi (1bar) By-Pass in Filter Element (Return Line Only)

OPTIONS

- Visual and Electrical Indicators Available
- 3/4" and 1 1/2" NPT Ports Avaliable



SERIES SSFT 12, SSFT 20



Spin-On Filters for tank top assembly with one filter element.

DIMENSIONAL TABLE

Type	SSFT12		SSFT20	
	in	mm	in	mm
D1	3.0	76	5.31	135
D2	1.38	35	2.36	60
D3	3.85	98	3.2	132
G1	¾" NPT		1½" NPT	
G2	¾" BSP		1¼" BSP and 1½ - 16 UNF (dual spigot)	
G3	¾" NPT		1½" NPT	
H1	0.63	16	0.78	20
H2	1.97	50	2.87	73
H3	see element length for SFCT35/36 (S.27)		see element length for SFCT57/58 (S.27)	
H4	0.98	25	1.97	50
H5	0.55	14	1.34	34
L1	2.75	70	3.93	100
B1	2.75	70	3.93	100
B2	1.97	50	2.75	70
B3	3.55	90	4.72	120

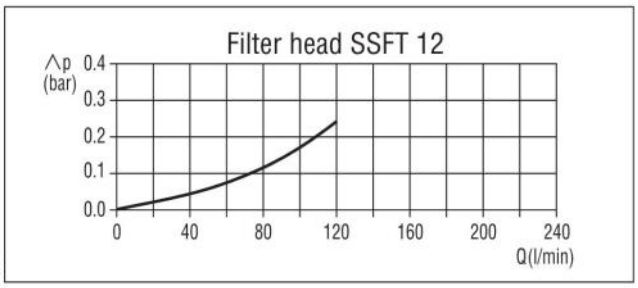
minimum clearance for element installation:
element length + 20 mm (SSFT 12) / + 40 mm (SSFT 20)

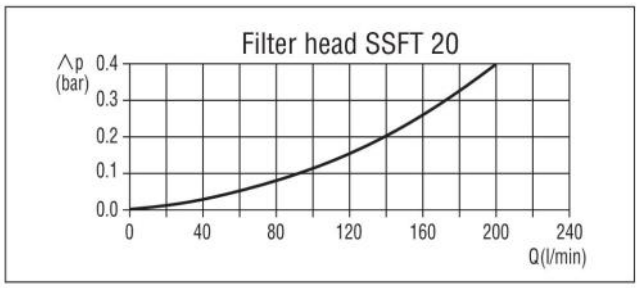
For visual indicator use CI-12.
For electrical indicator use EPS-1.

ORDERING CODE

FILTER HEADS:	SSFT 12R – ¾" NPT, INDICATOR PORTS TAPPED 1/8" NPT & PLUGGED SSFT20R – 1½" NPT, INDICATOR PORTS TAPPED 1/8" NPT & PLUGGED
FILTER ELEMENTS:	USE SFCT STYLE ELEMENTS DESCRIBED IN PAGE 129

TECHNICAL INFORMATION – PRESSURE DROP/FLOW





3/00

ACCESSORIES



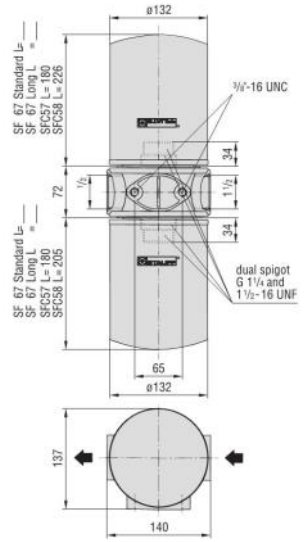
SPECIFICATIONS

- Flows to 120gpm for Return Line and 35gpm for Suction Line Applications
- Working Pressure is 150psi (10 bar)
- For Use With Petroluem Based Fluids Only
- Operating Temperature From -22°F to 212°F (-30°C to 100°C)
- Buna–N Seals
- Cast Aluminum Head
- Dual Port for Filter Elements Which Will Accept Either the USA Style (1 1/2-16" UNF) or European Style Elements (1 1/4" BSP)

OPTIONS

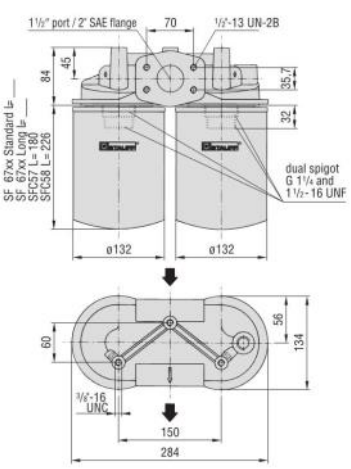
- A Wide range of Elements Available (see pages 126 & 129)
- Visual or Electrical Indicators Available
- By-pass Options Avaliable for Both Suction or Return

SERIES SSF 24



For USA style element, use L-shaped seal (SSF-24L)

SERIES SSF 25



For USA style element, use L-shaped seal (SSF-24L)

ORDERING INFORMATION

SSF24N 25 O O

FILTER HEAD	
SSF-24N	1 1/2" NPT Ports
SSF-24S	1 7/8" SAE Ports
SSF-25	1 1/2" NPT/2" SAE Flange

BY-PASS OPTIONS	
00	No By-Pass
03	3psi (0.2 bar)
05	5psi (0.33 bar)
15	15psi (1 bar)
25	25psi (1.7 bar)

INDICATOR PORT OPTIONS	
0	No Indicator
1	All Indicator Ports Drilled and Tapped

INDICATOR	
0	No Indicator
EP	ElectricalPressure
EVS-1	Electrical Vacuum
GV5	For Use With 3psi By-pass
GV10	For Use With 5psi By-pass
CI-12	For Use With 15psi By-pass
CI-20	For Use With 25psi By-pass

See Pages 126, 127 & 129.

3/00

SPECIFICATIONS

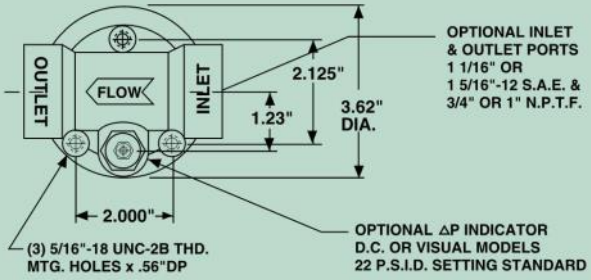
- Flows to 40gpm (150 lpm) for Return Line Application
- Maximum Static Pressure–600psi
- Maximum Pressure Differential of 100psi (7 bar) For Heads With No By-Pass Option
- For Use With Petroleum Based Fluids Only
- Operating Temperatures From -25°F to 212°F (-32°C to 100°C)
- Buna-N Seals
- Die Cast Aluminum Head

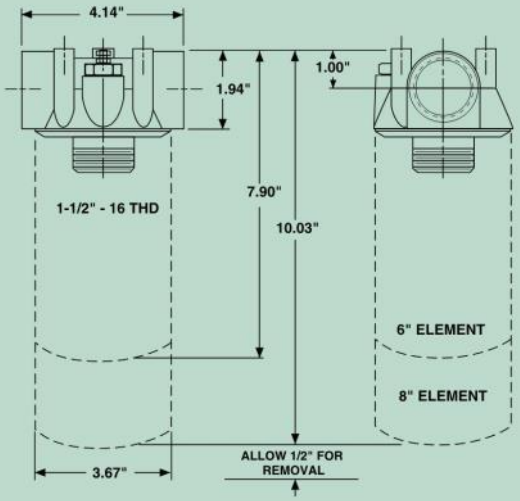


OPTIONS

- 3/4" or 1" NPT or SAE Ports
- Visual or DC-Electrical Indicators
- No By-Pass, 15psi (1 bar) or 25psi (1.7 bar) By-Pass Available

DIMENSIONS





ORDERING INFORMATION

SHF	07	15	V

PORT OPTIONS	
07	3/4" NPT
10	1" NPT
11	1 1/16-12 SAE
13	1 5/16-12 SAE

BY-PASS OPTIONS	
00	No By-Pass
15	15psi (1 bar)
25	25psi (1.7 bar)

INDICATOR OPTIONS	
0	No Indicator
D	DC Indicator
V	Visual Indicator

3/00

See Page 136 for Further Details on Indicator Options.





SPECIFICATIONS

- Maximum Static Pressure– 600psi
- For Use With Petroleum Based Fluids Only
- Operating Temperature From -25°F to 212°F (-32°C to 100°C)
- Use a Strap-on Chain Wrench For Element Removal

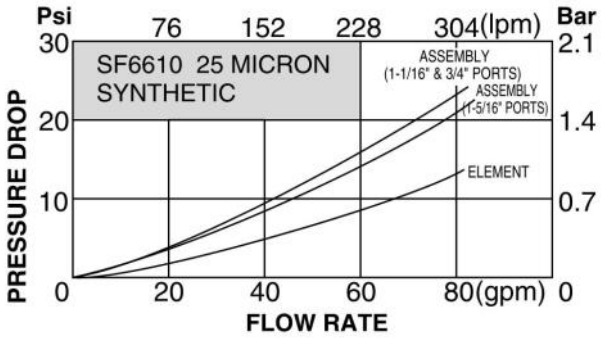
OPTIONS

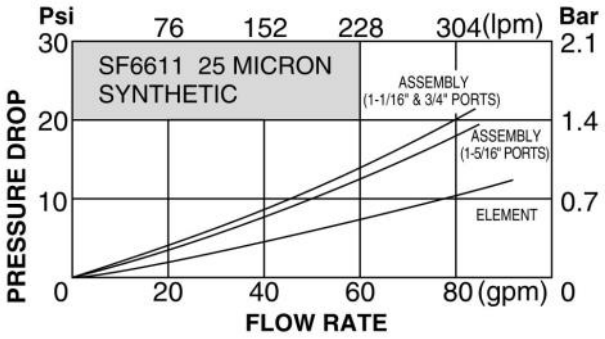
- Elements Available Individually or in Carton Quantities of 12
- 10 or 25 Micron Nominal Rating Paper Elements
- Extended Length Elements Available

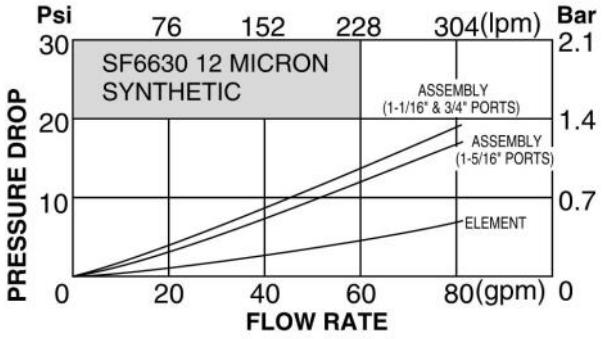
DIMENSIONS / ORDERING INFORMATION

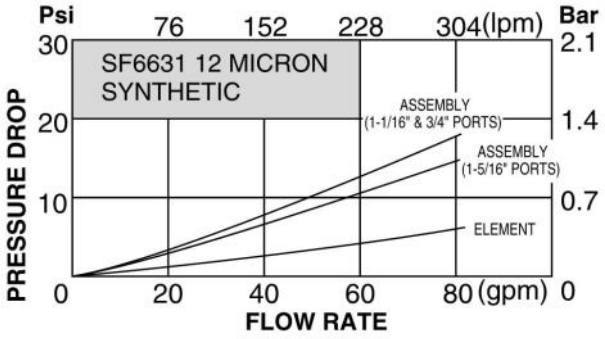
	PAPER								SYNTHETIC							
	SF 6620		SF6621		SF6610		SF6611		SF6630		SF6631		SF6634		SF6635	
	10 MICRON		10 MICRON		25 MICRON		25 MICRON		12 MICRON		12 MICRON		25 MICRON		25 MICRON	
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
DIAMETER	3.73	95	3.73	95	3.73	95	3.73	95	3.73	95	3.73	95	3.73	95	3.73	95
LENGTH	5.68	144	8.00	203	5.68	144	8.00	203	5.68	144	8.00	203	5.68	144	8.00	203
ELEMENT THREAD	1 1/2-16 UNC		1 1/2-16 UNC		1 1/2-16 UNC		1 1/2-16 UNC		1 1/2-16 UNC		1 1/2-16 UNC		1 1/2-16 UNC		1 1/2-16 UNC	
ß-RATIO	ß10-2		ß10-2		ß25-12		ß25-12		ß12-75		ß12-75		ß25-75		ß25-75	
DIRT HOLDING CAPACITY (gms)	16		25		23		36		30		29		27		41	
FILTRATION AREA (sq in) (sq cm)	377 2432		576 3716		322 2077		493 3180		304 1961		466 3006		338 2180		518 3341	
CARTON QUANTITY	12		12		12		12		12		12		12		12	
CARTON lbs. WEIGHT (kg)	1.20	(0.54)	1.72	(0.78)	1.20	(0.54)	1.52	(0.70)	1.40	(0.64)	1.94	(0.89)	1.48	(0.67)	2.86	(1.3)

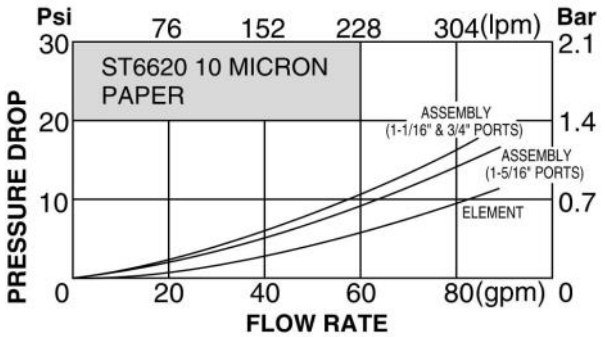
3/00

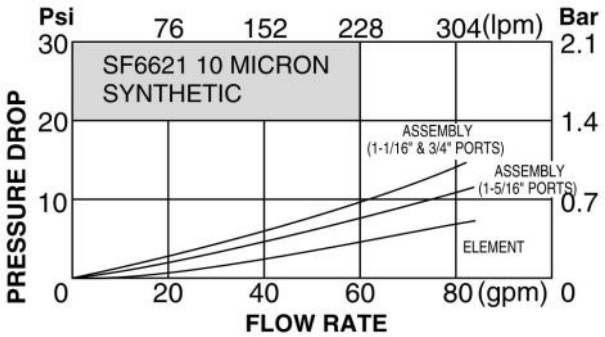


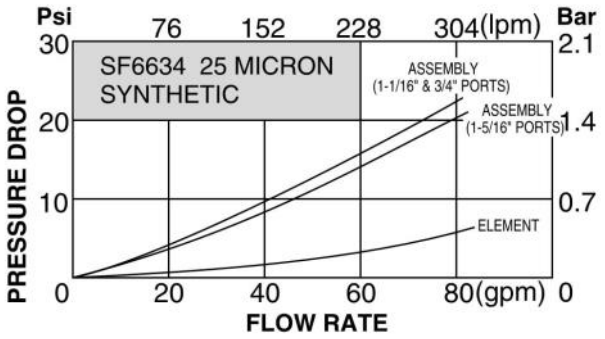


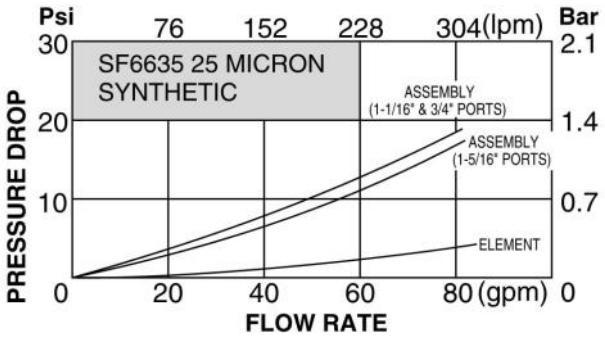












ACCESSORIES

3/00

TEMPERATURE 100°F VISCOSITY 150 SSU

STAUFF®



SPECIFICATIONS

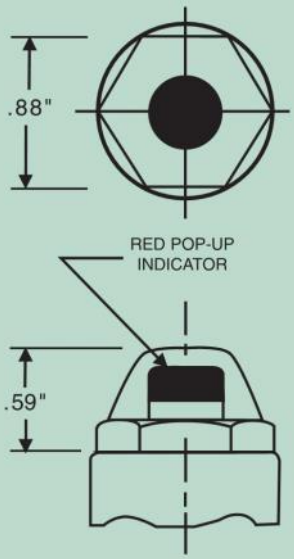
- For Use With SHF, SMF and SDF Filters
- 22 P.S.I.D. Setting Standard for 25psi By-pass
- Indicators Have Automatic Reset After Cold Start Situations or After the Element is Replaced

OPTIONS

- Visual or DC
- Other psi setting— 13.2psi —15psi By-pass
  2.64psi — 3psi By-pass
  4.40psi — 5psi By-pass

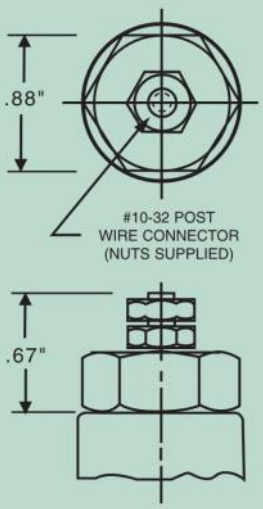
DIMENSIONS

VISUAL INDICATOR

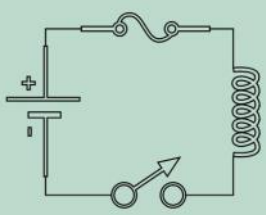


Indication: Red Pop-up Indicator

DC ELECTRICAL INDICATOR



Setting: 22 P.S.I.D. ± 10%
Indication: Electrical Contact Closes Circuit
Voltage: 36 Volts D.C.
Current: 200 MA
Circuit: Normally Open

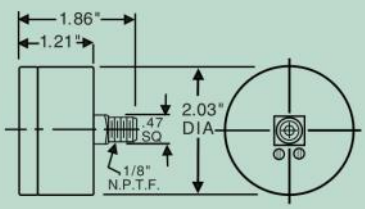


Both Models Must be Factory Installed

3/00

ACCESSORIES

VISUAL INDICATORS



• Brass Internals

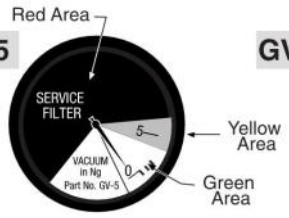




Vacuum Gauges
Suction Line Applications

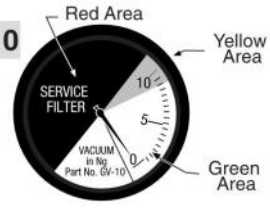
Pressure Gauges
Return Line Applications

GV-5



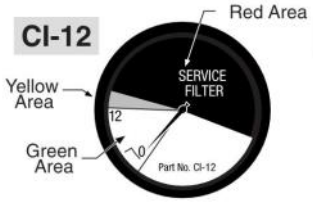
For use with 3psi filter by-pass valve

GV-10



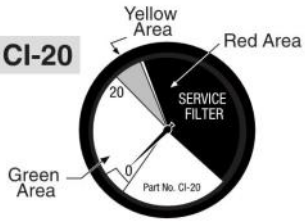
For use with 5psi filter by-pass valve

CI-12



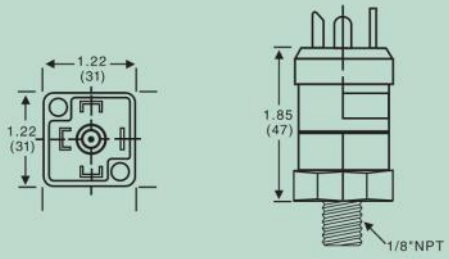
For use with 15psi filter by-pass valve

CI-20

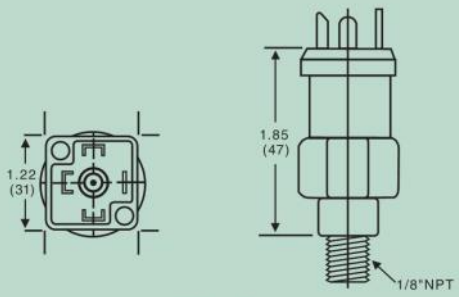


For use with 25psi filter by-pass valve

ELECTRICAL INDICATOR



EPS-1



EVS-1

Can Be Field Installed

	EPS-1 (PRESSURE)	EVS-1 (VACUUM)
ELECTRICAL	7AMP 125/250 VAC	7AMP 125/250 VAC
PROTECTION	DIN 43650 IP65	DIN 43650 PIP65
TEMPERATURE RANGE	-40°F TO 180°F (-40°C TO +80°C) AMBIENT & MEDIUM	-40°F TO +180°F (-40°C TO +80°C AMBIENT & MEDIUM
DIAPHRAGM MATERIAL	EPICHLOROHYDRIN STANDARD	EPICHLOROHYDRIN STANDARD
HOUSING MATERIAL	ZINC PLATED STEEL STANDARD	ALUMINUM AL2024
MAXIMUM OVERPRESSURE	350 PSI (25 BAR) 6:1 SAFETY FACTOR	350 PSI (25 BAR)
ADJUSTMENT RANGES	5/35 PSI (0.35/2.5 BAR)	5/30 IN HG (150/1000 MBAR)
DEAD BAND	20%	25%
MAXIMUM PRESSURE	350 PSI (25 BAR)	350 PSI (25 BAR)
WELTED AREA MATERIAL	ELASTOMER & ZINC PLATED STEEL BRASS	ELASTOMER & ANODIZED ALUMINUM 316SS OPTIONAL
WEIGHT	STEEL HOUSING 0.23 LB (0.11 KG)	0.50 LBS. (0.25 KG)
REPEATABILITY	±2% AT 70°F (20°C) AMBIENT TEMPERATURE	±2% AT 70°F (20°C) AMBIENT TEMPERATURE
HIRSCHMANN CONNECTOR WITH STRAIN RELIEF		

3/00



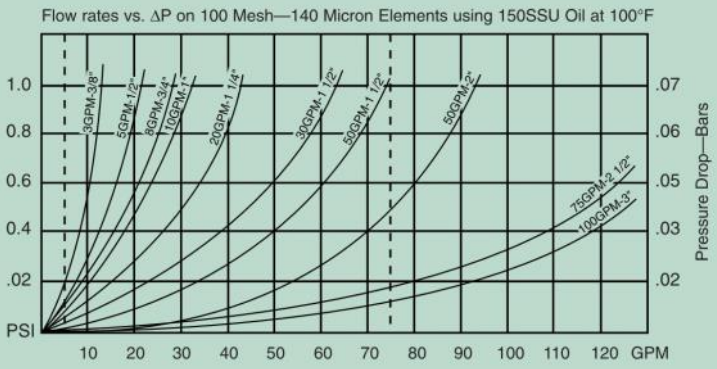
SPECIFICATIONS

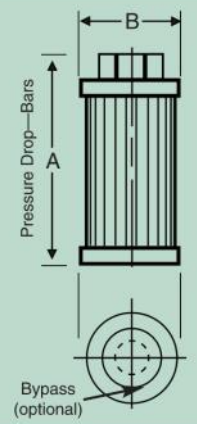
- Stainless Steel Mesh 140µ—100 Mesh
- Temperature to 250°F (+120°C)
- Epoxy Bonded for Compatibility with Petroleum & Mineral Based Fluids.
- Aluminum End Caps

OPTIONS

- No By-pass or 3psi By-pass Available
- Custom Sizes on Request

TECHNICAL INFORMATION





DIMENSIONS / ORDERING INFORMATION

PART NO.	PORT	NOMINAL FLOW		FILTER AREA		LENGTH A		DIA. B		WT
METAL NO BY-PASS	(NPT)	GPM	L/MIN	IN²	CM²	in	mm	in	mm	(LB.)
TFS-040-0	3/8"	3	11	20	130	3.5	90	1.8	46	0.3
TFS-050-0	1/2"	5	19	25	161	4.2	107	1.8	46	0.4
TFS-070-0	3/4"	8	31	62	400	4.2	107	2.6	64	0.5
TFS-100-0	1"	10	38	110	710	5.5	140	2.6	64	0.7
TFS-120-0	1 1/4"	20	88	162	1050	5.5	174	3.4	86	1.0
tfs-150-0	1 1/2"	30	120	225	1450	5.5	225	3.4	86	1.2
TFS-1540-0	1 1/2"	50	198	340	2190	10.0	260	3.4	86	1.4
TFS-200-0	2"	50	198	340	2190	10.0	260	3.4	86	1.8
TFS-250-0	2 1/2"	75	283	400	2580	8.4	260	5.9	150	2.3
TFS-300-0	3"	100	379	500	3230	10.7	272	5.9	150	3.0

For Bypass Option Specify -3 (Eg. TFS-100-3)

3/00

ACCESSORIES

SPECIFICATIONS

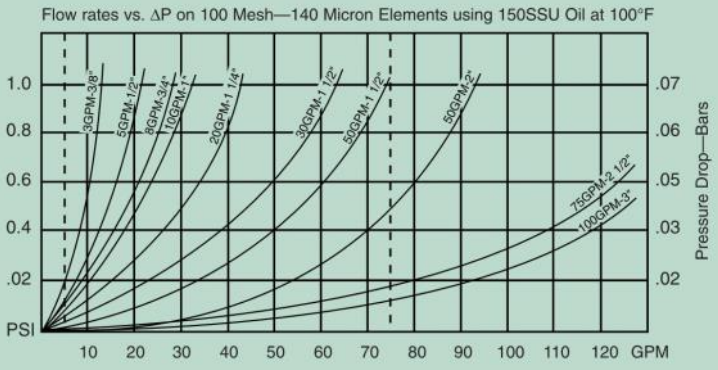
- Stainless Steel Mesh 140µ—100 Mesh
- Temperature to 250°F (+120°C)
- Epoxy Bonded for Compatibility with Petroleum & Mineral Based Fluids.
- Plastic/Aluminum End Caps

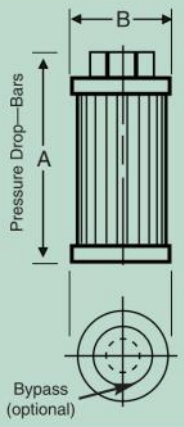
OPTIONS

- No By-pass or 3psi By-pass Available
- Custom Sizes on Request



TECHNICAL INFORMATION





DIMENSIONS / ORDERING INFORMATION

PART NO.	PORT	NOMINAL FLOW		FILTER AREA		LENGTH A		DIA. B		WT
METAL NO BY-PASS	(NPT)	GPM	L/MIN	IN²	CM²	in	mm	in	mm	(LB.)
TFS-040-0-P	3/8″	3	11	20	130	1.9	50	1.9	50	0.3
TFS-050-0-P	1/2″	5	19	25	161	4.0	101	1.9	50	0.4
TFS-070-0-P	3/4″	8	31	62	400	4.1	105	2.6	68	0.5
TFS-100-0-P	1″	10	38	110	710	5.5	141	2.6	68	0.7
TFS-120-0-P	1 1/4″	20	88	162	1050	5.5	141	3.5	88	1.0
TFS-150-0-P	1 1/2″	30	120	225	1450	5.5	141	3.5	88	1.2
TFS-1540-0-P	1 1/2″	50	198	340	2190	7.9	201	3.9	102	1.4
TFS-200-0-P	2″	50	198	340	2190	10.2	261	3.9	102	1.8
TFS-250-0-P	2 1/2″	75	283	400	2580	8.4	209	5.1	131	2.3
TFS-300-0-P	3″	100	379	500	3230	10.7	273	5.1	131	3.0
For Bypass Option Specify -3 (Eg. TFS-100-3-P)										

3/00

SUCTION STRAINER
TMF SERIES – TANK MOUNTED



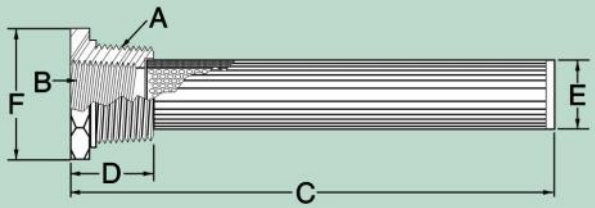
SPECIFICATIONS

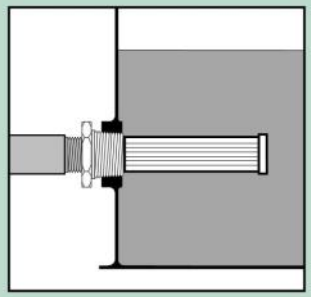
- Stainless Steel Mesh 100 Mesh - 140 Micron
- Cast Iron Bushings
- Epoxy Bonded for Compatability with most Petroleum & Mineral Based Fluids
- Perforated Steel Inner Supports

OPTIONS

- No By-Pass or 5psi By-Pass
- Custom Screens Available on Request
- SAE Threads/Hose Barbs Available for OEM Applications

DIMENSIONS / MOUNTING INFORMATION





ORDERING INFORMATION

PART NO.	FLOWRATE		NPT SIZES		C		D		HEX F		E		SCREEN AREA	
			A	B										
	GPM	LPM			in	mm	in	mm	in	mm	in	mm	in²	mm²
TMF-05	5	19	1″	1/2″	5.34	135	1.06	27	1.625	41	1.17	29	40	258
TMF-10	10	37.8	1 1/4″	3/4″	8.17	207	1.20	30	1.812	46	1.36	34	67	432
TMF-15	15	56.8	1 1/2″	1″	8.20	208	1.22	31	2.187	55	1.66	42	86	554
TMF-25	25	94.5	2″	1 1/4″	9.04	230	1.35	35	2.562	65	2.12	54	159	1025
TMF-50	50	189	3″	2″	9.7	246	1.70	43	3.875	98	3.0	76	252	1625
TMF-100	100	378	4″	3″	11.3	287	1.80	46	4.750	120	4.0	101	315	2032
For Bypass Option Specify -5 (Eg. TMF-100-5)														

3/00

SPECIFICATIONS

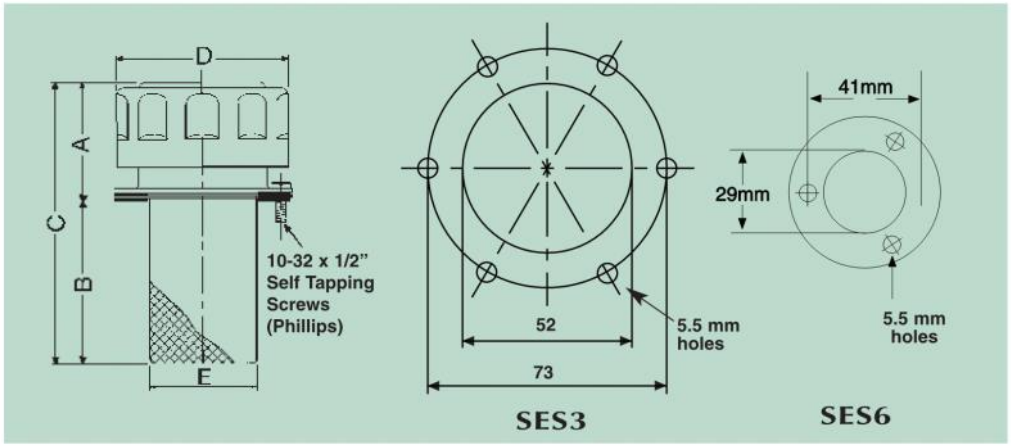
- Chrome-Plated Metal Cap
- 30 Mesh Metal Basket
- Cork Gaskets
- Air Flow to 25cfm



OPTIONS

- Two Diameter Caps Available: 3.15" for SES3, 1.85" for SES6.
- 3µ, 10µ 40 Filtration Available on SES3 Version. 40µ Only on SES6 Version.
- 3, 6, and 8 inches Basket Length Available on SES3.
- Weatherproof Black Epoxy Coated Version Available.
- Special Versions Available on Request

DIMENSIONS





PART NO.	MICRON RATING	AIR FLOW CAPACITY		OIL DISPLACEMENT		A		B		C		D		E		SCREWS
		cfm	m³/min	gpm	lpm	in	mm	in	mm	in	mm	in	mm	in	mm	
SES3-03	3	10.0	0.28	72	272	2.17	55	3.14	80	5.32	135	3.15	80	1.90	48	10-32x1/2
SES3-10	10	15.2	0.43	110	416	2.17	55	3.14	80	5.32	135	3.15	80	1.90	48	10-32x1/2
SES3-40	40	26.4	0.75	190	720	2.17	55	3.14	80	5.32	135	3.15	80	1.90	48	10-32x1/2
SES6-40	40	10.0	0.28	72	272	1.89	48	2.44	62	4.41	112	2.05	52	1.14	29	10-32x1/2

ORDERING INFORMATION

SES3 P 40 S80 D

PRODUCT TYPE	
SES3	Standard Air Breather Bayonet
SES6	Mini Air Breather Bayonet *
SES3L	Lockable Breather

FILTRATION LEVEL	
03	3 Micron Paper
10	10 Micron Foam
40	40 Micron Foam

PLATING	
–	Chrome
P	Weatherproof

BASKET LENGTH	
S80	Standard 80mm
S65	Mini Breather Basket (SES 6 only)
S150	Extended 150mm
S200	Extended 200mm

DIPSTICK	
D	Dipstick
Blank	No Dipstick

*Only 40µ available in SES 6 version.

3/00



SPECIFICATIONS

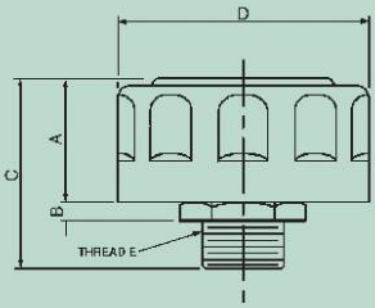
- Chrome-Plated Metal Cap
- Airflow to 25 cfm

OPTIONS

- 3/4" NPT on SES5 Version, 1/4", 3/8"NPT on SES6 Version
- Two Cap Diameters Available: 3.15" for SES5, 1.85" for SES6.
- 3µ, 10µ and 40µ Available on SES5. 40µ Available Only on SES6.
- Dipstick Available
- Weatherproof Black Epoxy Coated Version Available
- Special Versions Available on Request

DIMENSIONS





PART NO.	MICRON RATING	AIR FLOW CAPACITY		OIL DISPLACEMENT		A		B		C		D		THREAD E
		cfm	m³/min	gpm	lpm	in	mm	in	mm	in	mm	in	mm	
SES5-03	3	10.0	0.28	72	272	1.61	41	0.50	12.7	2.9	74	3.15	80	3/4" NPT
SES5-10	10	15.2	0.43	110	416	1.61	41	0.50	12.7	2.9	74	3.15	80	3/4" NPT
SES5-40	40	26.4	0.75	190	720	1.61	41	0.50	12.7	2.9	74	3.15	80	3/4" NPT
SES6-40	40	10.0	0.28	72	272	1.89	48	0.25	6.4	2.18	55	1.85	47	1/4", 3/8"NPT

ORDERING INFORMATION

SES5 P 03 N12 D

PRODUCT TYPE	
SES5	Standard Air Breather
SES6	Mini Air Breather

PLATING	
–	Chrome
P	Weatherproof

DIPSTICK	
D	Dipstick
Blank	No Dipstick

FILTRATION LEVEL	
03	3 Micron Paper
10	10 Micron Foam
40	40 Micron Foam

THREAD SIZE	
N04	1/4" NPT (*SES6 only)
N06	3/8" NPT (*SES6 only)
N12	3/4" NPT (*SES5 only)

3/00

SPECIFICATIONS

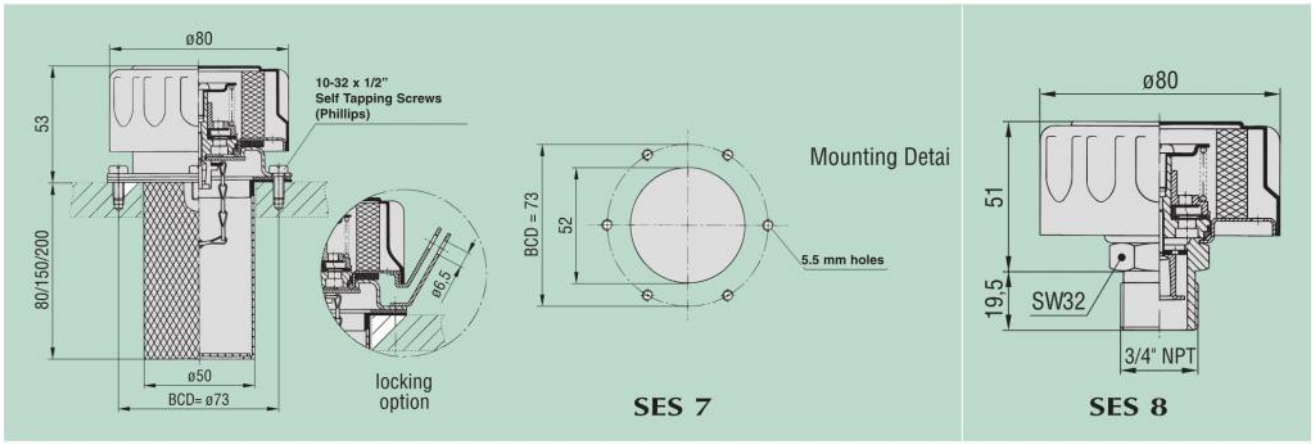
- Chrome Plated Metal Cap
- 30 Mesh Metal Basket
- Buna-N Gaskets
- Air Intake Valve Opens at 0.35psi
- Compatible with Petroleum and Mineral Based Fluids



OPTIONS

- 10µ & 40µ Filtration Available
- 5psi or 10psi Relief Valve Setting
- Bayonet or Screw-in Style
- 6″ or 8″ Stainless Steel Baskets Available
- Weatherproof Black Epoxy Coated Version Available.
- Special Versions Available on Request

DIMENSIONS



PART NO.	MICRON RATING	AIR FLOW CAPACITY cfm	AIR FLOW CAPACITY m³/min	OIL DISPLACEMENT gpm	OIL DISPLACEMENT lpm	SCREWS
SES7-10	10	15.2	0.43	110	416	10-32X1/2″
SES7-40	40	26.4	0.75	190	720	10-32X1/2″

PART NO.	MICRON RATING	AIR FLOW CAPACITY cfm	AIR FLOW CAPACITY m³/min	OIL DISPLACEMENT gpm	OIL DISPLACEMENT lpm	THREAD E
SES8-10	10	15.2	0.43	110	416	3/4″ NPT
SES8-40	40	26.4	0.75	190	720	3/4″ NPT

ORDERING INFORMATION

SES 7 P 40 5 S80 D

PRODUCT TYPE	
SES7	Pressurized (Bayonet)
SES8	Pressurized (Screw-in)

PLATING	
–	Chrome
P	Weatherproof

FILTRATION LEVEL	
10	10 Micron Foam
40	40 Micron Foam

RELIEF VALVE SETTING	
5	5psi
10	10psi

BASKET STYLE	
S80	Standard (SES7 only)
S150	6″ Stainless Steel (SES7 only)
S200	8″ Stainless Steel (SES7 only)
N12	3/4″ NPT (SES8 only)

OPTIONS	
D	Dipstick

3/00

STAUFF®



SPECIFICATIONS

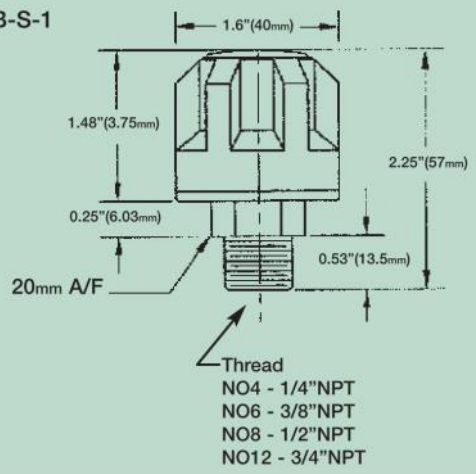
- Glass Filled Nylon Construction
- Compatible with Petroleum, Mineral and Water Based Hydraulic Fluids
- 10 Micron Polyurethane Foam Element
- Temperature Range (-40°F – 250°F)
  (-40°C – 120°C)
- Displacements to 300 GPM (Without Anti-Splash)

OPTIONS

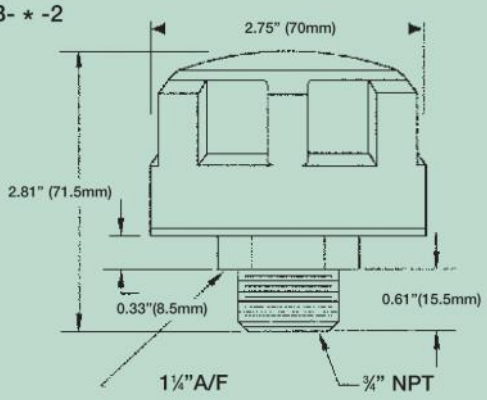
- Pressurized Version (5psi) Available on 70mm Cap
- Anti-Splash Baffle Available
- Dipstick Available

DIMENSIONS

SPB-S-1

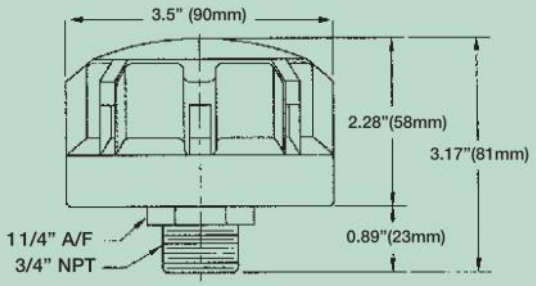


SPB- * -2

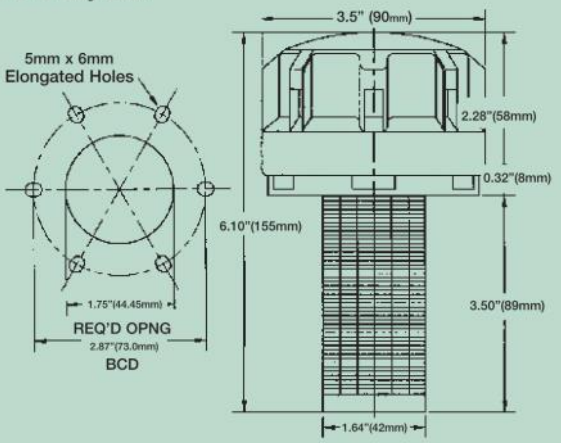


*See order code standard or pressurized (5psi)

SPB-S-3 Screw In



SPB-S-3 Bayonet



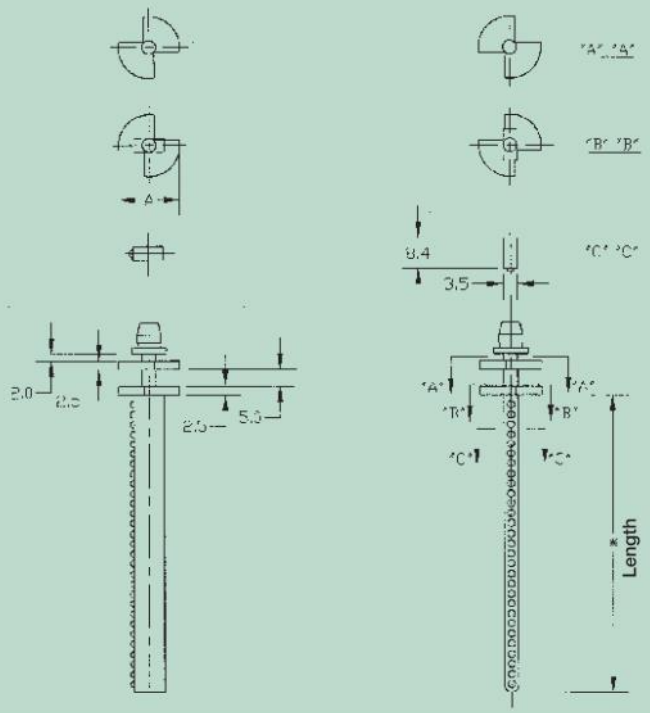
3/00

ACCESSORIES

DIPSTICK OPTION

CAP Ø MM	40		70	90	
Thread NPT	⅜"	½"	¾"	¾"	¾"
A	10.0		14.1	18.0	
Part No.	DS1-300		DS2-300	DS3-300	

*Cut Length to Suit – 300mm MAX.



NOTE: These Dipsticks also fit SES 7 & 8.

ORDERING INFORMATION

SPB S 2 10 N12 A D300

SPB PLASTIC

STYLE	
S	STANDARD
P	PRESSURIZED (SPB2 only) 5PSI

CAP SIZE	
1	40MM, 1.6" Diameter
2	70MM, 2.75" Diameter
3	90MM, 3.50" Diameter

FILTRATION LEVEL*	
10	10 MICRON

DIPSTICK*
OMIT - NO DIPSTICK
DXXX - DIPSTICK LENGTH in mm (300 Standard)

ANTI-SPLASH	
A	WITH ANTI-SPLASH – NO DIPSTICK

STYLE	
NO4	SCREW-IN ¼ NPT (Size 1 only)
NO6	SCREW-IN ⅜ NPT (Size 1 only)
NO8	SCREW-IN ½ NPT (Size 1 only)
NO12	SCREW-IN ¾ NPT (Size 1 only)
S80	BAYONET

*Consult factory for other options.

* Dipstick option always has Anti-splash.

3/00

FILLER BREATHER
PLASTIC SES1, SES2



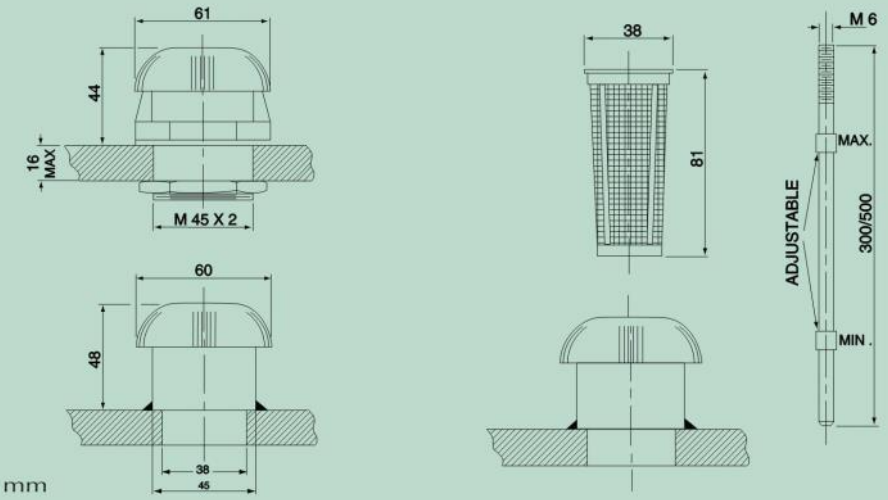
SPECIFICATIONS

- Manufactured from Oil and Acid Resistant Plastic
- Sintered Bronze Air Filter
- Adjustable Minimum and Maximum Indicators on the Optional Dipstick

OPTIONS

- Screw-In or Welded Versions
- Strainer Basket with Length 3.2″
- Dipsticks Available to a Maximum Length of 19.5 in. (500mm).

DIMENSIONS



•Dimensions in mm

ORDERING INFORMATION

SES1	S

PRODUCT TYPE	
SES1	Screw-In Version
SES2	Welded Version

OTHER OPTIONS	
D	Dipstick
S	Strainer

•Note: Specify Dipstick Length and Min/Max Marking

3/00

ACCESSORIES

SPECIFICATIONS

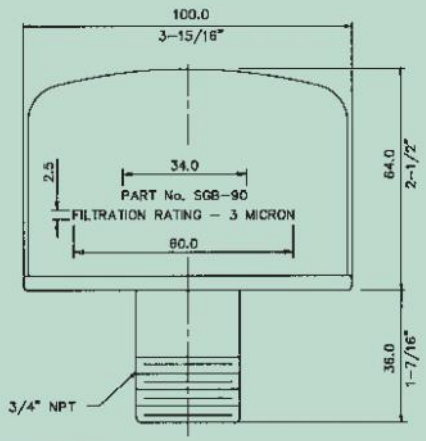
- 3 Micron Absolute Synthetic Media Filtration Element
- Compatible with Petroleum and Mineral Based Fluids
- Air Flow Rates of 135gpm for SGB-90C and of 395gpm for SGB-120C

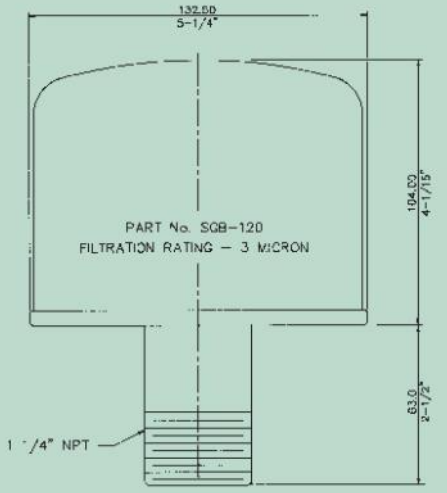
OPTIONS

- SGB-90C, 3/4" NPT Connector
- SGB-120C, 1 1/4" NPT Connector



DIMENSIONS





•Dimensions in mm

SPECIFICATIONS

PART NUMBER	ABSOLUTE MICRON RATING	AIR FLOW CAPACITY		AIR DISPLACEMENT		FILTRATION AREA	
		CFM	M³/MIN	GPM	LPM	SQ IN	SQ CM
SGB-90C	3	18	0.51	135	511	109	700
SGB-120C	3	55	1.56	395	1495	279	1800

ORDERING INFORMATION

Assemblies

SGB90C - 03

PRODUCT TYPE	
SGB90C	Filler Breather Assembly
SGB120C	Filler Breather Assembly (includes adaptor fitting)

FILTRATION LEVEL	
03	3 Micron

Replacement Elements (only)

PRODUCT TYPE	
SGB-90	3 Micron Glass Fiber
SGB-120	3 Micron Glass Fiber

3/00

ACCESSORIES



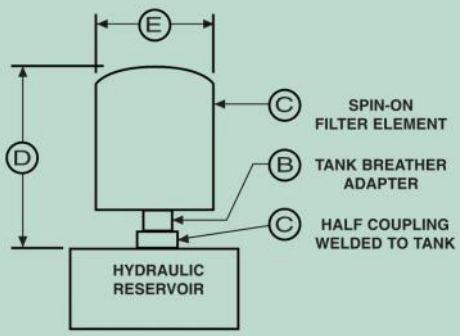
SPECIFICATIONS

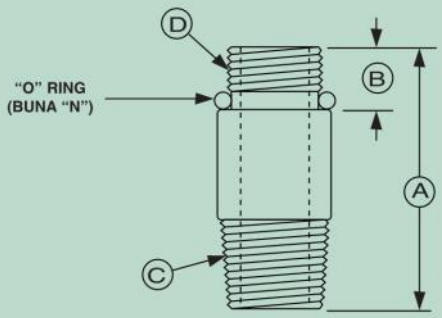
- Steel Construction, Zinc Plated
- Buna-N "O"-Ring
- Air Flows to 64 CFM / 480 G.P.M.

OPTIONS

- Available with 3/4" or 1 1/4" Male NPT Attachment
- Available with 1"–12", 1 1/2"–16 Element Attachment Thread to Fit SF6500 & SF6700 Series Element

DIMENSIONS





FILLER BREATHER ADAPTOR	A		B		C MALE PIPE THREAD	D ELEMENT ATTACHED THREAD	ELEMENT	MICRON RATING	AIR FLOW CFM/GPM
	in	mm	in	mm					
TBA-075	2.25"	57.15	0.5"	12.7	3/4"NPT	1"- 12 UNF	SF 6520/21	10µ	73/172
							SF 6549	3µ	20/47
TBA-125	3"	76.2	0.5"	12.7	1 1/4"NPT	1 1/2"- 16 UNF	SF 6720/21	10µ	159/440
							SF 6703/04	3µ	135/262

ORDERING INFORMATION

TBA 075

PRODUCT	
TBA	Filler Breather Adaptor

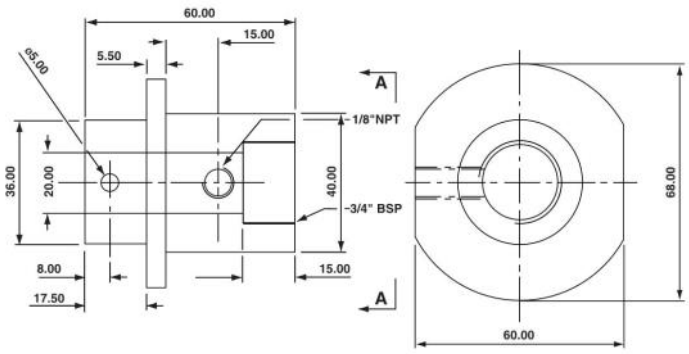
SIZE	
075	3/4"NPT
125	1 1/4"NPT

3/00

BAYONET ADAPTORS – BLACK ANODIZED ALUMINUM

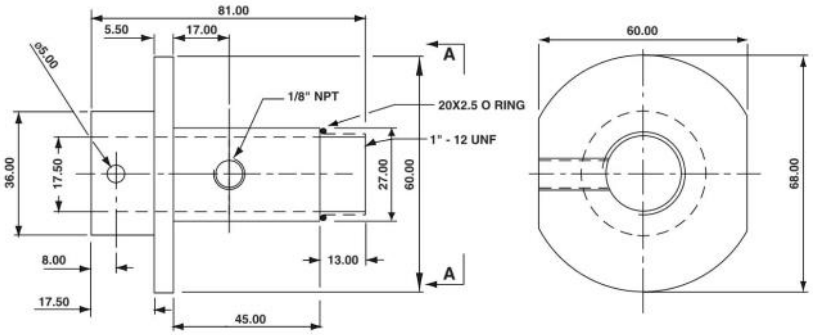
BA-1 • For Use With the SDB-93 and SDB-96 Desiccant Breathers • Buna-N Seals





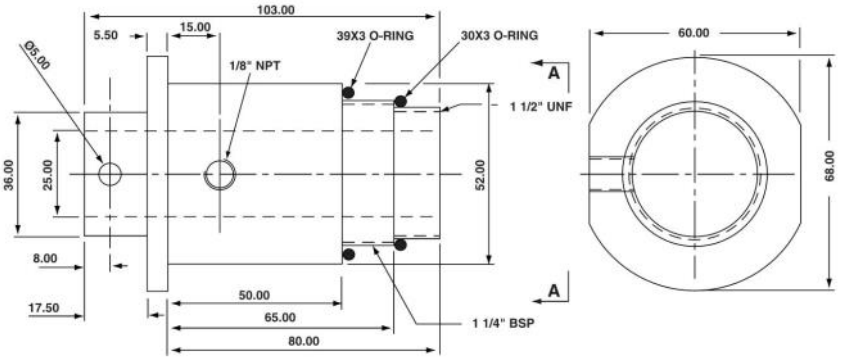
BA-2 • For Use With the SGB-90 Breather and SF-65xx Series Spin-On Elements • Buna-N Seals





BA-3 • For Use With the SGB-120 Breather and SF-67xx Series Spin-On Elements • Buna-N Seals

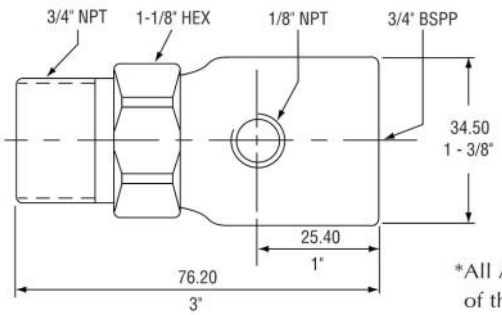




THREADED ADAPTOR – BLACK ANODIZED ALUMINUM

DBA-75 • For Use With the SDB-93 Desiccant Breather





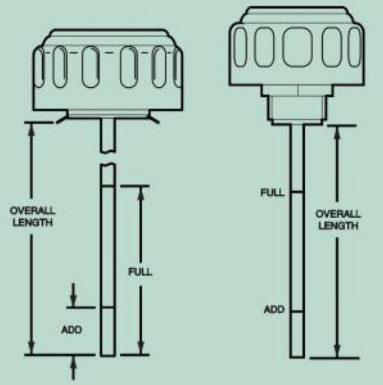
*All Adaptors Have 1/8″ NPT Port for Attachment of the FM-1 Filter Minder (see page 151)

3/00

ACCESSORIES

DIPSTICK

Metal (available on all models)



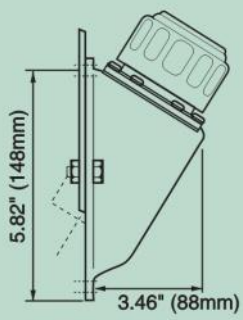
- Dipsticks can be custom marked as requested.

Note: Plastic Dipsticks are also available (see page 144).

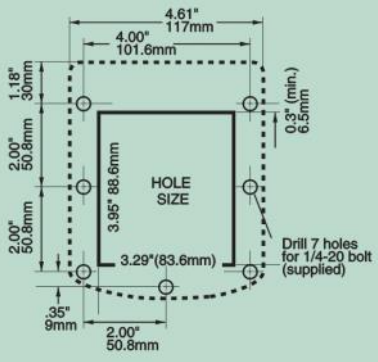
SIDE MOUNT ASSEMBLY

SES – ASMB – 1

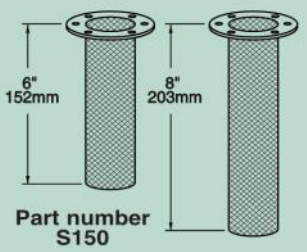
- Available for use on all bayonet style breathers except SES6



•Max torque for fastening
112 in. lbs with washers



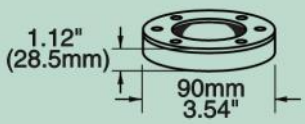
ADDITIONAL BASKETS



Part number S150

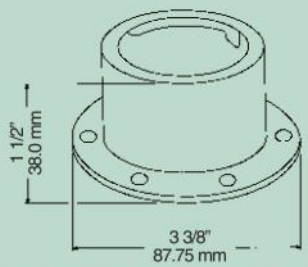
Part number S200

WELD RISER



Standard 6 bolt pattern
Part number WR-1

EXTENDED BAYONET FLANGE



Fits standard bayonet style breather
Part number EBF-1

3/00

ACCESSORIES

SPECIFICATIONS

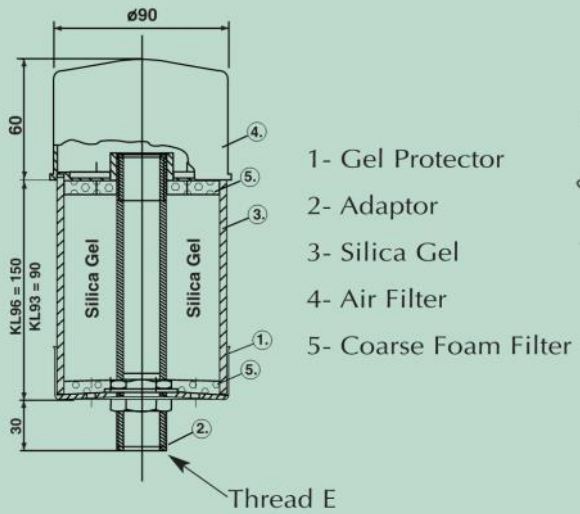
- Combination Air Breather and Water Removal Filter to Handle Air Flows up to 395 gpm
- 3 Micron Absolute Synthetic Media Air Breather
- Desiccant Material - Silica Gel

OPTIONS

- Available in Two Models With 3/4″ BSP Connection and Two Models with 1 1/4″ BSP Connection
- Adaptor Plate Available for use on Standard 6-Bolt Mounting Pattern (Includes Bolts)
- Filter Minder Available for use as an Air Breather Indicator.

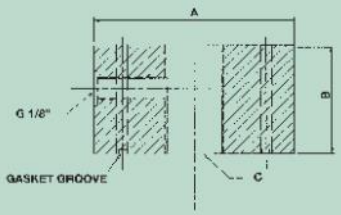


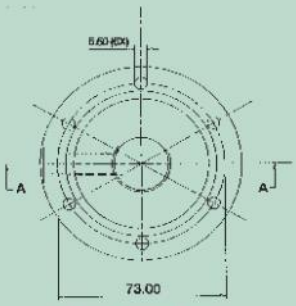
DIMENSIONS



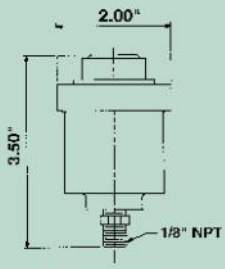
1- Gel Protector
2- Adaptor
3- Silica Gel
4- Air Filter
5- Coarse Foam Filter

Desiccant Breather





Adaptor Plate



Filter Minder (FM 1)

*Remove bottom seal and plug before use. •Dimensions in mm

For available Adaptors, see page 148.

DIMENSIONS – DESICCANT BREATHERS

PART NO.		A	B	C	D	E
SDB93	in.	3.54"	2.36″	3.54″	1.18″	3/4″ BSP
	mm	90.0	60.0	90.0	30.0	
SDB 96	in.	3.54″	2.36″	5.90″	1.18″	3/4″ BSP
	mm	90.0	60.0	150.0	30.0	
SDB 121	in.	5.22″	4.00″	11.18″	1.55″	1 1/4″ BSP
	mm	132.5	102.0	284.0	40.0	
SDB 122	in.	5.22″	4.00″	15.50″	1.55′	1 1/4″ BSP
	mm	132.5	102.0	394.0	40.0	

ADAPTOR PLATE

PART NO.		A	B	C
AP 1	in.	3.46"	1.97″	3/4″ BSP
	mm	88.0	50.0	
AP 2	in.	3.94″	2.75″	1 1/4″ BSP
	mm	100.0	70.0	

3/00

CONDENSATION IN RESERVOIRS

When the reservoir breathes, air containing water vapor is ingested into the system. Temperature fluctuations will cause the water vapor to condense. This condensed water will speed up the oxidation of the oil and lead to damage in the machine. The catalytic action of metal particles present in the contamination process speeds up both these processes. The Stauff Air conditioner first dries the air as it passes through the silica gel granules and the dry air passes through a 3 micron ß rated synthetic media element to remove any solid contamination particles.

The expelled air reaches the atmosphere via the same route but in the opposite direction.

MOUNTING

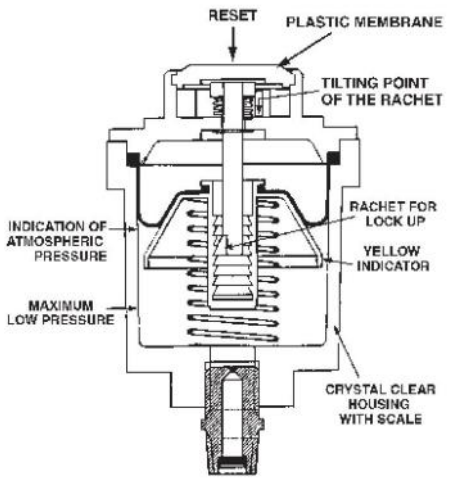
Direct mount onto the reservoir or use an adaptor plate which fits the standard 6 bolt pattern for filler breathers.
Note: Protective covering must be removed from silica gel holes before installation.

MONITORING

Air Dryer - As moisture is absorbed the silica gel granules will gradually change color from a deep blue to pink. When the granules are pink, replace the silica gel.



Air Filter - The adaptor plate has a connection for the "filter minder." This gives a static indication of the air breather. The unit can be reset when the element is changed.



FILTER MINDER

ACCESSORIES

3/00

TECHNICAL DETAILS

FILLER BREATHER TYPE		SDB93	SDB96	SDB121	SDB122
DESICCANT VOLUME	ml	300	600	1000	2000
	cu-in	18.3	36.6	61.0	122
MAXIMUM FLOW RATE (NOMINAL)	gpm	135		395	
	lpm	500		1500	
OVERALL WT.	lb	2.21	3.31	6.39	9.48
	kg	1.00	1.5	2.9	4.3
MOUNTING CONNECTOR*		3/4" BSP		1 1/4" BSP	
AMBIENT TEMPERATURE		-22° F TO 140°F (-30° C TO 60°C)			
DESICCANT		SILICA GEL			
DENSITY		56.16 lb/cu ft 900 kg/m^3			
GRANULE SIZE		.11" to .24"			
FILLING WEIGHT	lb	0.5	1.0	1.7	3.3
	grams	225	450	750	1500
MAXIMUM WATER UPTAKE	lb	0.16	0.32	0.53	1.06
	grams	72	144	240	480

ORDERING INFORMATION

SDB96 AP FM

PRODUCT TYPE	
SDB 93	Desiccant Air Breather
SDB 96	Desiccant Air Breather
SDB 121	Desiccant Air Breather
SDB 122	Desiccant Air Breather

OPTIONS REQUIRED	
AP	Adaptor Plate
–	Desiccant Air Breather only

AIR FILTER INDICATOR	
FM	Filter Minder
Omit	Not Included

For available Adaptors, see page 148.

REPLACEMENT SILICA GEL CARTRIDGE

DESICCANT AIR BREATHER	REPLACEMENT CARTRIDGE	SILICA GEL VOLUME CU IN	ML
SDB 93	RD 93	18.3	300
SDB 96	RD 96	36.6	600
SDB 121	RD 121	61.0	1000
SDB 122	RD 122	122	2000

REPLACEMENT AIR-BREATHER

DESICCANT AIR BREATHER	AIR-BREATHER
SDB 93/96	SGB 90
SDB 121/122	SGB 120

3/00



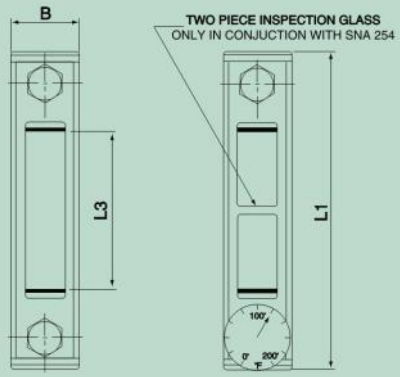
SPECIFICATIONS

- Black Epoxy Coated Metal Shroud with Polyamid Sight Tube
- Suitable for Use with Mineral and Petroleum Based Hydraulic Fluids, Lubricants and /Gasoline.
- Maximum Operating Temperature 194°F (90°C)
- Thermometer Calibration from -20°F to 180°F (-10°C to 80°C)
- SNA 076 has M10 Bolts as Standard
- SNA 127, SNA 254 has M12 Bolts as Standard
- Tightening Torque 70"/lb (7.9 Nm)

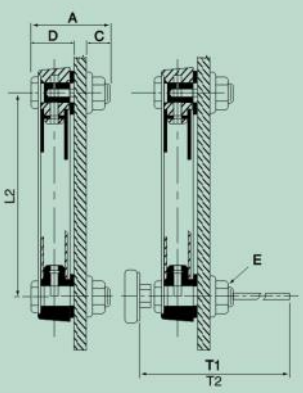
OPTIONS

- Viton Seals
- Dial Thermometer Available with 7.9 in (200mm) or 11.8 in (300mm) Probe
- Other Special Seals on Request
- Special Customized Scale Plates Available
- 1/2" UNC Bolts Available on SNA 127 and 254
- M12 Bolts Available on SNA 076

DIMENSIONS



	SNA 076	SNA 127	SNA 254
A	1.77	1.77	1.77
B	1.34	1.34	1.34
C	0.32MAX	0.32MAX	0.32MAX
D	1.06	1.06	1.06
E	M10	M12	M12
L1	4.25	6.25	11.25
L2	3.00	5.00	10.00
L3	1.45	3.00	8.00
T1	7.88	7.88	7.88
T2	11.88	11.88	11.88



ORDERING INFORMATION

SNA 127 B S T1 12 O60

TYPE
SNA

SERIES	
076	SNA 076 (3")
127	SNA 127 (5")
254	SNA 254 (10")

SEAL MATERIAL	
B	NBR (standard)
V	FPM

DESIGN OF SCALE PLATE	
S	With Stauff-Logo
N	Neutral
X	Special executions

THERMO SWITCH (see page 155 for details)	
OMIT	Without Thermo Switch
O60	TS-SNA/SNK-O-60
O70	TS-SNA/SNK-O-70
O80	TS-SNA/SNK-O-80

BANJO BOLTS	
12	M 12
10	M 10
U	1/2" UNC

THERMOMETER (Dial thermometer with probe T1/T2 for size M 12 only)	
O	Without Thermometer
T	Capillary Tube Thermometer on Scale Plate
T1	Dial Thermometer With 200 mm Probe
T2	Dial Thermometer With 300 mm Probe

3/00

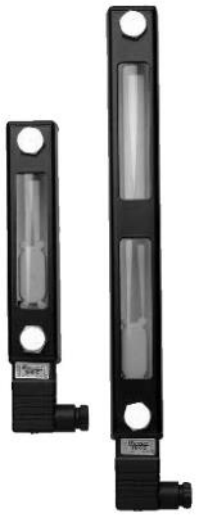
ACCESSORIES

SPECIFICATIONS

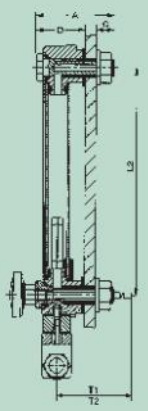
- Black Epoxy Coated Metal Shroud with Polyamid Sight Tube
- Suitable for Use with Mineral and Petroleum Based Hydraulic Fluids, Lubricants and Gasoline.
- Maximum Operating Temperature 194°F (90°C)
- Thermometer Calibration from 20°F to 180°F (-10°C to 80°C)
- Electrical Contact Made at Minimum Oil Level.
- Viton Seals, M12 Bolts
- Tightening Torque 70"/lbs

OPTIONS

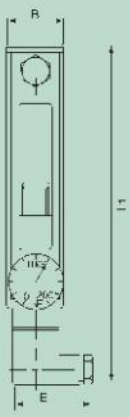
- Dial Thermometer Available with 7.9 in (200mm) or 11.8 in (300mm) Probe.
- 1/2" UNC Bolts Available



DIMENSIONS



	SNK 176		SNK 254	
	in	mm	in	mm
A	2.20	56	2.20	56
B	1.36	34.5	1.36	34.5
C	0.32MAX	8.2MAX	0.32MAX	8.2MAX
D	1.38	35.1	1.38	35.1
E	1.96	49.8	1.96	49.8
L1	8.00	203.2	13.00	330
L2	5.00	127	10.00	254
T1	7.88	200	7.88	200
T2	11.88	302	11.88	302



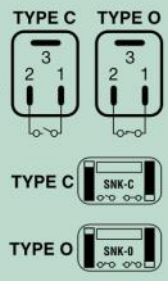
Electrical Connections and Functions

Contact load:
max 10 W (Type C)
max 3 W (Type 0)

Bias-reducing Potential:
5O V AC/DC

Current on Contact
max 0,50 A (Type C)
max 0,25 A (Type O)

Electrical switch PG 9
Protection IP65
Connection 3 is not engaged



ORDERING INFORMATION

SNK 127 V C T1 12 R O60

TYPE

SNK

SERIES

127	SNK 127 (5")
254	SNK 254 (10")

SEAL MATERIAL

V	FPM (standard)

ELECTRICAL FUNCTION

C	Make Contact, Closes at Minimum Level (n/o)
O	Break Contact, Opens at Minimum Level (n/c)

THERMOMETER

O	Without Thermometer
T1	Dial Thermometer With 200 mm probe
T2	Dial Thermometer With 300 mm probe

BANJO BOLTS

12	M 12 (standard)
10	M 10
U	1/2" UNC

ELECTRICAL SWITCH

R	Right Hand Side (Standard)
L	Left Hand Side

THERMO SWITCH
(see page 155 for details)

(none)	Without Thermo Switch
O60	TS-SNA/SNK-O-60
O70	TS-SNA/SNK-O-70
O80	TS-SNA/SNK-O-80

3/00



Area of Application:

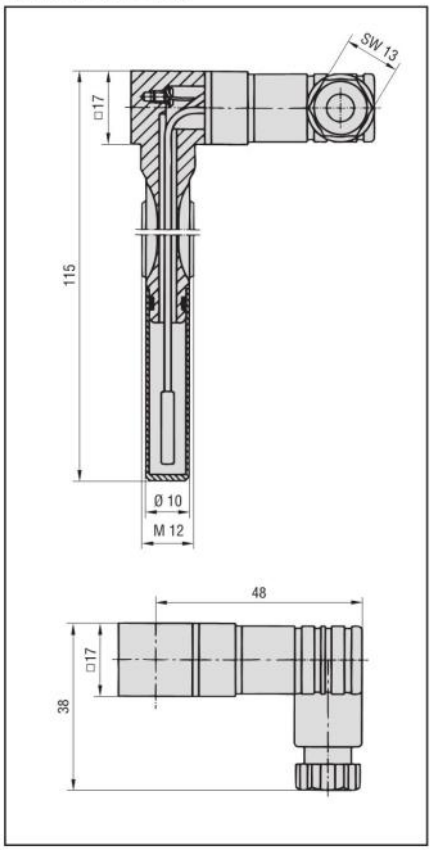
Oil temperature indicator to be used in conjunction with STAUFF level gauges SNA and SNK

Characteristics / Materials:

- available with 60°C, 70°C or 80°C switching temperature
- Activation takes place when the respective switching temperature is exceeded.
- Electrical function: break contact
- Steel parts made out of 1.0718
- Plastic parts made out of glass fibre reinforced polyamide

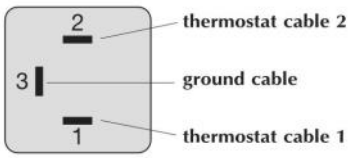
Thermo switches are available for the standard mounting size M12 only.

DIMENSIONS



TECHNICAL DATA (BREAK CONTACT):

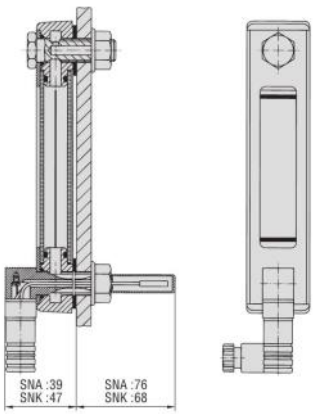
Switching temperature:	see ordering code
Hysteresis:	20° C
Switching temperature tolerance:	6 5°C.



Alternating current
- max voltage 250 V
- max current at 10.000 circuits
  ≈ 2,5 A at cos w = 1,0
  ≈ 1,6 A at cos w = 0,6
- max current at 100.000 circuits
  ≈ 0,5 A at cos w = 1,0
  ≈ 0,25 A at cos w = 0,6
- min voltage 50 mA

Direct current
- max voltage 42 V
- max current at 10.000 circuits 1 A

EXAMPLE OF APPLICATION



ORDERING CODE AND TEMPERATURE RANGE

TS SNA / SNK O 60

TYPE	
TS	Thermo Switch

SERIES
SNA / SNK

SWITCHING TEMPERATURE	
60	60°C / 140°F
70	70°C / 158°F
80	80°C / 176°F

ELECTRICAL FUNCTION	
O	Break Contact (n/c)

Thermo switches can be ordered both as a single component and in combination with STAUFF level gauges SNA and SNK.
See pages 153 and 154.

3/00

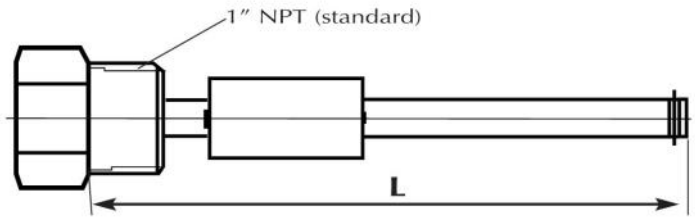
SPECIFICATIONS

- Brass Stem, Plastic float
- Compatible with mineral oils and petroleum based fluids
- Switches normally closed (NC)
- Max. operating temp 176°F
- Max. operating voltage 115V
- Max. current level contact 0.5A
- Max. current temp contact 2.0A
- Contact load level contact 10VA

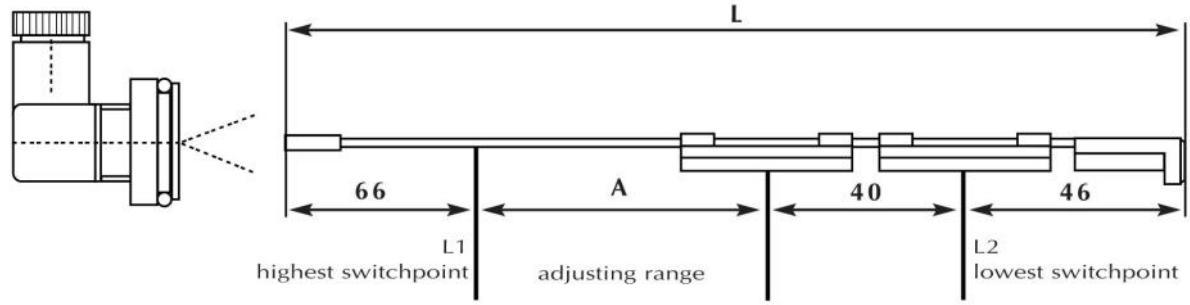
OPTIONS

- Any combination of three level temperature contacts
- Easy adjustable switch level
- Wide range of temperature switches
- Custom sizes, configuration and materials available on request





TYPE	L
SLTS - 12	12" (305mm)
SLTS- 18	18" (457 mm)
SLTS - SL	Custom Length

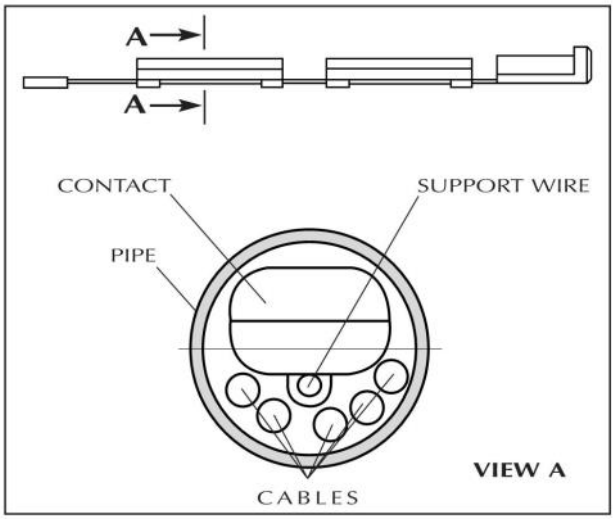


TYPE	L	A
SLTS - 12	12.3" (312mm)	6.3" (160mm)
SLTS- 18	18.3" (464 mm)	12.3" (312 mm)
SLTS - SL	Custom Length	Custom Range

3/00

GENERAL

The Stauff Level / Temperature Switches (SLTS-series) are unique in their design and modularity. One of the greatest advantages is the ability of the end-user to adjust the switching level. The internal support wire carrying the level and temperature switches makes it a simple and quick job to change the level switch position. See the drawings on the next page for the max and min level switch points and the total available switching range. This design permits changing the level switch function from Normally Closed (NC) to Normally Open (NO). Mentioned stem lengths are standard. Custom lengths are available upon request.



CONTACT LIFE TIME

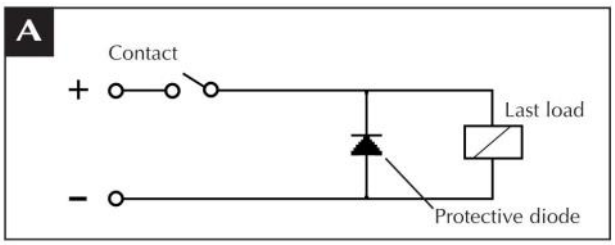
Due to their design Reed contacts have a very high life expectancy. However, it is worthwhile to note the following information.

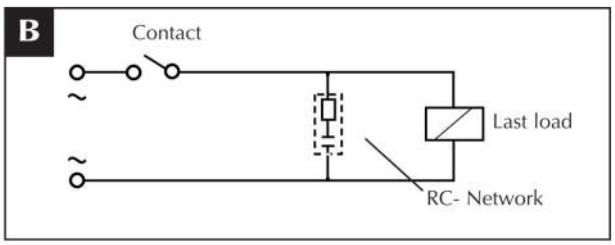
CONTACT PROTECTION

To reduce the high reverse voltage produced when a reed switch opens, the following contact protection can be applied.

a) DC voltage: a diode parallel to the load, see figure A

b) AC voltage: an RC-network parallel to the load, see figure B and table below.

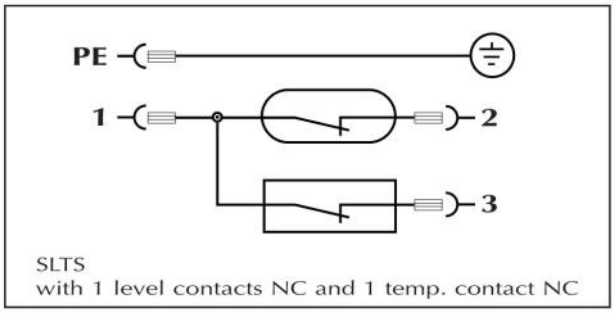




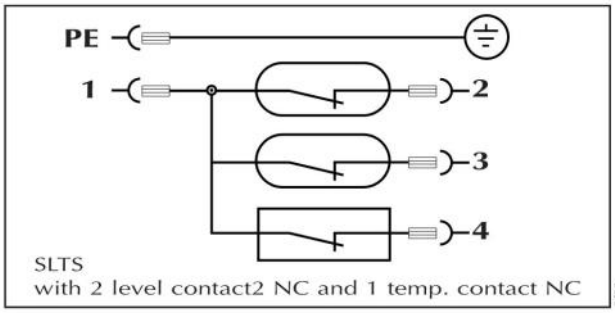
VA	10	25	50	75	100
Open contact voltage V	R/Ohm - C/µF	R/Ohm - C/µF	R/Ohm - C/µF	R/Ohm - C/µF	R/Ohm - C/µF
24	22 – 0,022	1 – 0,1	1 – 0,47	1 – 1	1 – 1
48	120 – 0,0047	22 – 0,022	1 – 0,1	1 – 0,47	1 – 0,47
110	470 – 0,001	120 – 0,0047	22 – 22	22 – 0,047	22 – 0,1

WIRING DIAGRAM

Please refer to the following connection diagrams and the relevant data in the specification sheets.



SLTS
with 1 level contacts NC and 1 temp. contact NC

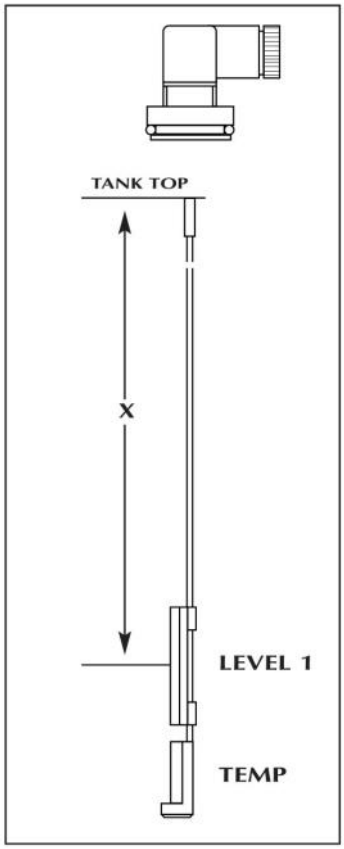


SLTS
with 2 level contact2 NC and 1 temp. contact NC

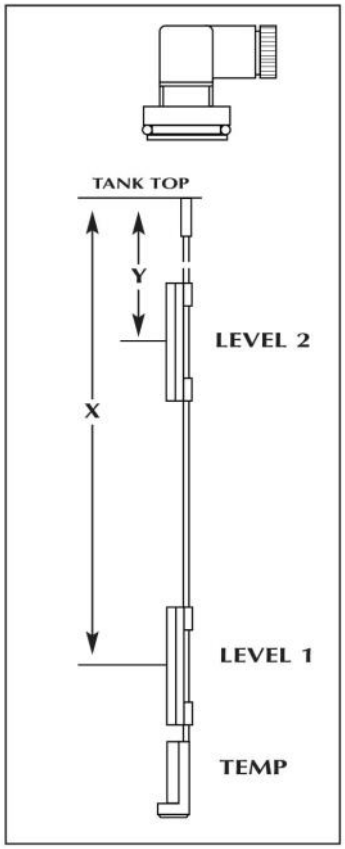
3/00

STANDARD FACTORY SETTINGS FOR LEVEL SWITCH POSITION			
	OPTION 1: LOW LEVEL ONLY (FROM TANK TOP TO SWITCH POSITION)	OPTION 2: HIGH AND LOW LEVEL (FROM TANK TOP TO SWITCH POSITION)	
SLTS TYPE	X(INCHES / MM)	X (INCHES / MM)	Y (INCHES / MM)
SLTS 12	10.5 / 266	10.5 / 266	2.6 / 66
SLTS 18	16.5 / 418	16.5 / 418	2.6 / 66

OPTION 1



OPTION 2



ORDERING INFORMATION

SLTS	12	140	2	N16	G115
PRODUCT CODE					

STEM LENGTH	
12	12″ (305mm)
18	18″ (457mm)
SL	SPECIAL LENGTH*

TEMPERATURE SWITCH	
140	140°F/60°C
158	158°F/70°C
ST	SPECIAL TEMP OR MORE THAN 1 TEMP SWITCH*

LEVEL SWITCH CONFIGURATION	
1	OPTION 1
2	OPTION 2
S	SPECIAL CONFIG.*

CONNECTOR	
G115	GS4 (MAX 115 VOLTS) STANDARD
G048	EUROPE (MAX 48 VOLTS)

THREAD SIZE	
N16	1″ NPT
B12	3/4″ BSP
ST	SPECIAL THREAD*

*CONTACT FACTORY

3/00



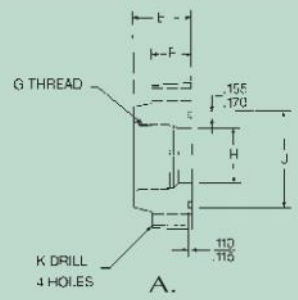
SPECIFICATIONS

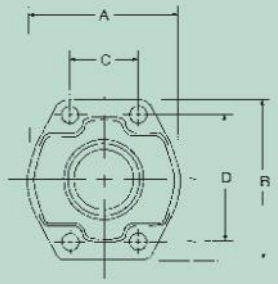
- Carbon Steel Forging
- 3000 PSI (200 bar) Code 61

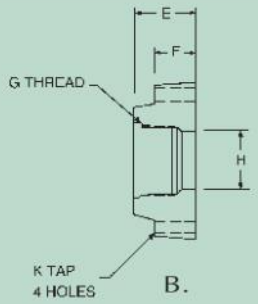
OPTIONS

- NPT or SAE Thread
- Standard and Companion Flanges
- Reducing Options Available.

DIMENSIONS / ORDERING INFORMATION







3000 PSI NPTF THREAD

O RING PART NO. FIG. A.	COMPANION PART NO. FIG B.	PIPE SIZE	PAD SIZE	A	B	C	D	E	F	G THREAD NPTF	H	J MIN	J MAX	K DRILL DIA.	K TAP UN-2B	O-RING DASH #
SP43-8-8	SP104-8-8	.50	.50	1.81	2.12	.688	1.500	1.25	.91	.50	.50	1.000	1.005	.344	5/16-18	-210
SP43-12-12	SP104-12-12	.75	.75	2.06	2.56	.875	1.875	1.25	.84	.75	.75	1.250	1.255	.406	3/8-16	-214
SP43-16-16	SP104-16-16	1.00	1.00	2.31	2.75	1.031	2.062	1.38	.97	1.00	1.00	1.560	1.565	.406	3/8-16	-219
SP43-20-20	SP104-20-20	1.25	1.25	2.88	3.12	1.188	2.312	1.50	1.03	1.25	1.25	1.750	1.755	.469	7/16-14	-222
SP43-24-24	SP104-24-24	1.50	1.50	3.25	3.69	1.406	2.750	1.62	1.09	1.50	1.50	2.115	2.125	.531	1/2-13	-225
SP43-32-32	SP104-32-32	2.00	2.00	3.81	4.00	1.688	3.062	1.62	1.09	2.00	2.00	2.490	2.500	.531	1/2-13	-228
SP43-40-40	SP104-40-40	2.50	2.50	4.28	4.50	2.000	3.500	2.00	1.47	2.50	2.50	2.995	3.005	.531	1/2-13	-232
SP43-48-48	SP104-48-48	3.00	3.00	5.16	5.31	2.438	4.188	2.25	1.59	3.00	3.00	3.615	3.625	.656	5/8-11	-237

3000 PSI S.A.E. STRAIGHT THREAD

O RING PART NO. FIG. A.	COMPANION PART NO. FIG B.	PIPE SIZE	PAD SIZE	A	B	C	D	E	F	G STRAIGHT THREAD	H	J MIN	J MAX	K DRILL DIA.	K TAP UN-2B	O-RING DASH #
SP46-8-8	SP106-8-8	.50	.50	1.81	2.12	.688	1.500	1.25	.91	3/4-16	.50	1.000	1.005	.344	5/16-18	-210
SP46-12-12	SP106-12-12	.75	.75	2.06	2.56	.875	1.875	1.25	.84	1 1/16/12	.75	1.250	1.255	.406	3/8-16	-214
SP46-16-16	SP106-16-16	1.00	1.00	2.31	2.75	1.031	2.062	1.38	.97	1 5/16-12	1.00	1.560	1.565	.406	3/8-16	-219
SP46-20-20	SP106-20-20	1.25	1.25	2.88	3.12	1.188	2.312	1.50	1.03	1 5/8-12	1.25	1.750	1.755	.469	7/16-14	-222
SP46-24-24	SP106-24-24	1.50	1.50	3.25	3.69	1.406	2.750	1.62	1.09	1 7/8-12	1.50	2.115	2.125	.531	1/2-13	-225

3/00

SPECIFICATIONS

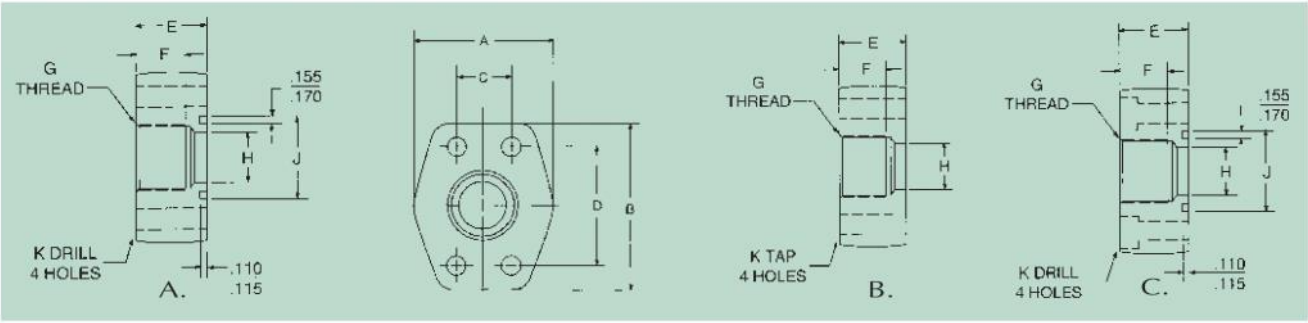
- Carbon Steel Forging
- 6000 psi (400 Bar) Code 62

OPTIONS

- NPT or SAE Thread
- Standard and Companion Flanges



DIMENSIONS / ORDERING INFORMATION



6000 PSI NPTF THREAD																
O RING PART NO. FIG. A.	FLAT FACE PART NO. FIG B.	TUBE SIZE	PAD SIZE	A	B	C	D	E	F MIN.	G THREAD NPTF	H DIA.	J DIA. MIN	J DIA. MAX	K DRILL DIA.	K TAP UN-2B	O-RING DASH #
SP44-12-12	SP45-12-12	.75	.75	2.38	2.81	.937	2.000	1.25	.760	.75	.75	1.250	1.255	.406	3/8-16	-214
SP44-16-16	SP45-16-16	1.00	1.00	2.75	3.19	1.093	2.250	1.50	.922	1.00	1.00	1.560	1.565	.469	7/16-14	-219
SP44-20-20	SP45-20-20	1.25	1.25	3.06	3.75	1.250	2.625	1.50	.940	1.25	1.25	1.750	1.755	.531	1/2-13	-222
SP44-24-24	SP45-24-24	1.50	1.50	3.75	4.44	1.437	3.125	1.75	.940	1.50	1.50	2.115	2.125	.656	5/8-11	-225
SP44-32-32	SP45-32-32	2.00	2.00	4.50	5.25	1.750	3.812	1.75	.957	2.00	2.00	2.490	2.500	.781	3/4-10	-228

6000 PSI S.A.E. STRAIGHT THREAD																
O RING PART NO. FIG. C.	FLAT FACE PART NO. FIG B.	TUBE SIZE	PAD SIZE	A	B	C	D	E	F MIN.	G STRAIGHT THREAD UN-28	H	J MIN.	J MAX.	K DRILL DIA.	K TAP UN-2B	O-RING DASH #
SP48-12-12	SP49-12-12	.75	.75	2.38	2.81	.937	2.000	1.250	.750	1 1/16-12	.75	1.250	1.255	.406	3/8-16	-214
SP48-16-16	SP49-16-16	1.00	1.00	2.75	3.19	1.093	2.250	1.500	.750	1 5/16-12	1.00	1.560	1.565	.469	7/16-14	-219
SP48-20-20	SP49-20-20	1.25	1.25	3.06	3.75	1.250	2.625	1.500	.750	1 5/8-12	1.25	1.750	1.755	.531	1/2-13	-222
SP48-24-24	SP49-24-24	1.50	1.50	3.75	4.44	1.437	3.125	1.750	.750	1 7/8-12	1.50	2.115	2.125	.656	5/8-11	-225
SP48-32-32	SP49-32-32	2.00	2.00	4.50	5.25	1.750	3.812	1.750	.750	2 1/2-12	2.00	2.490	2.500	.781	3/4-10	-228



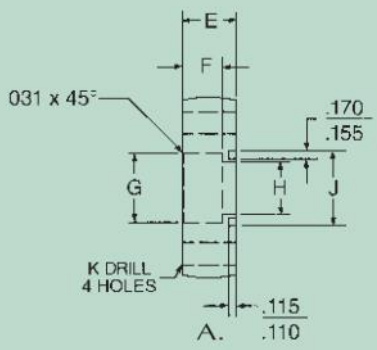
SPECIFICATIONS

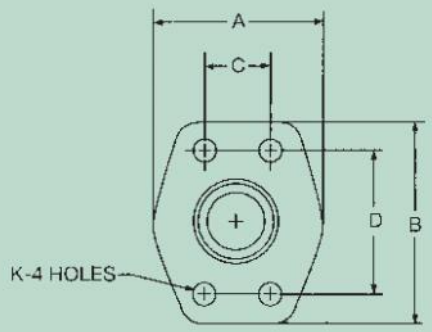
- Carbon Steel Forging
- Socket Tube

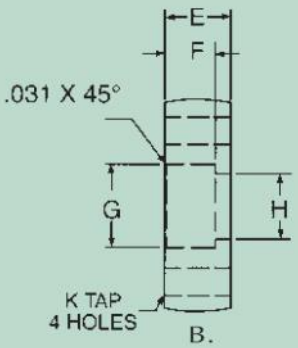
OPTIONS

- Standard and Companion Flanges
- 3000psi (200 Bar) Code 61 or 6000psi (400 Bar) Code 62
- Reducing Options Available

DIMENSIONS / ORDERING INFORMATION







3000 PSI FLAT SOCKET TUBE

O RING PART NO. FIG. A.	FLAT FACE PART NO. FIG B.	TUBE SIZE	PAD SIZE	A	B	C	D	E	F	G DIA. +.003 -.000	H DIA.	J DIA. MIN	J DIA. MAX	K DRILL DIA.	K TAP UN-2B	O-RING DASH #
SP6-12-12	SP62-12-12	.75	.75	2.060	2.560	.875	1.875	.750	.560	.752	.625	1.250	1.255	.406	3/8-16	-214
SP6-16-16	SP62-16-16	1.00	1.00	2.310	2.750	1.031	2.062	.880	.630	1.002	.875	1.560	1.565	.406	3/8-16	-219
SP6-20-20	SP62-20-20	1.25	1.25	2.880	3.120	1.188	2.312	.940	.690	1.252	1.125	1.750	1.755	.469	7/16-14	-222
SP6-24-24	SP62-24-24	1.50	1.50	3.250	3.690	1.406	2.750	1.190	.750	1.502	1.375	2.115	2.125	.531	1/2-13	-225
SP6-32-32	SP62-32-32	2.00	2.00	3.810	4.000	1.688	3.062	1.375	.875	2.002	1.875	2.490	2.500	.531	1/2-13	-228

6000 PSI FLAT SOCKET TUBE

O RING PART NO. FIG. A.	FLAT FACE PART NO. FIG B.	TUBE SIZE	PAD SIZE	A	B	C	D	E	F	G +.003 -.000	H	J MIN.	J MAX.	K DRILL DIA.	K TAP UN-2B	O-RING DASH #
SP58-12-12	SP63-12-12	.75	.75	2.38	2.81	.937	2.000	1.250	.560	.752	.625	1.250	1.256	.406	3/8-16	-214
SP58-16-16	SP63-16-16	1.00	1.00	2.75	3.19	1.093	2.250	1.500	.630	1.002	.875	1.560	1.565	.469	7/16-14	-219
SP58-20-20	SP63-20-20	1.25	1.25	3.06	3.75	1.250	2.625	1.500	.690	1.252	1.125	1.750	1.755	.531	1/2-13	-222
SP58-24-24	SP63-24-24	1.50	1.50	3.75	4.44	1.437	3.125	1.750	.750	1.502	1.375	2.115	2.125	.656	5/8-11	-225
SP58-32-32	SP63-32-32	2.00	2.00	4.50	5.25	1.750	3.812	1.750	.875	2.002	1.875	2.490	2.500	.781	3/4-10	-228

3000

SPECIFICATIONS

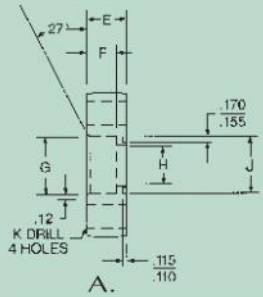
- Carbon Steel Forging
- For Socket-Pipe
- Sizes to 5" Pipe

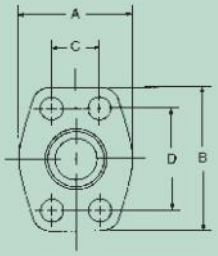
OPTIONS

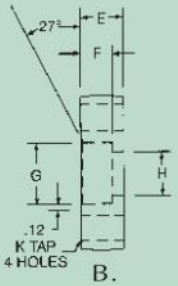
- 3000 psi (200 Bar), or 6000 psi (400 Bar) or 500 psi (35 Bar)
- Standard and Companions Flanges



DIMENSIONS / ORDERING INFORMATION







3000 PSI FLAT SOCKET PIPE

O RING PART NO. FIG. A.	FLAT FACE PART NO. FIG B.	PIPE SIZE	PAD	A	B	C	D	E	F	G DIA.	H DIA.	J DIA. MIN	J DIA. MAX	K DRILL DIA.	K TAP UN-2B
SP4-8-8	SP61-8-8	.50	.50	1.813	2.125	.688	1.500	.750	.560	.855	.50	1.000	1.005	.344	5/16-18
SP4-12-12	SP61-12-12	.75	.75	2.063	2.563	.875	1.875	.750	.560	1.062	.75	1.250	1.255	.406	3/8-16
SP4-16-16	SP61-16-16	1.00	1.00	2.313	2.750	1.031	2.063	.880	.630	1.328	1.00	1.560	1.565	.406	3/8-16
SP4-20-20	SP61-20-20	1.25	1.25	2.875	3.125	1.188	2.313	.940	.690	1.672	1.25	1.750	1.755	.469	7/16-14
SP4-24-24	SP61-24-24	1.50	1.50	3.250	3.688	1.406	2.750	1.190	.750	1.922	1.50	2.115	2.125	.531	1/2-13
SP4-32-32	SP61-32-32	2.00	2.00	3.813	4.000	1.688	3.063	1.380	.875	2.406	2.00	2.490	2.500	.531	1/2-13
SP4-40-40	SP61-40-40	2.50	2.50	4.281	4.500	2.000	3.500	1.750	1.000	2.906	2.50	2.995	3.005	.531	1/2-13
SP4-48-48	SP61-48-48	3.00	3.00	5.156	5.313	2.438	4.188	2.120	1.25	3.547	3.00	3.615	3.625	.656	5/8-11

6000 PSI FLAT SOCKET PIPE

O RING PART NO. FIG. A.	FLAT FACE PART NO. FIG B.	PIPE SIZE	PAD	A	B	C	D	E	F	G DIA.	H DIA.	J DIA. MIN	J DIA. MAX	K DRILL DIA.	K TAP UN-2B
SP59-8-8	SP60-8-8	.50	.50	1.88	2.22	.718	1.594	.870	.560	.855	.50	1.000	1.005	.344	5/16-18
SP59-12-12	SP60-12-12	.75	.75	2.38	2.81	.937	2.000	1.250	.560	1.062	.75	1.250	1.255	.406	3/8-16
SP59-16-16	SP60-16-16	1.00	1.00	2.75	3.19	1.093	2.250	1.500	.630	1.328	1.00	1.560	1.565	.469	7/16-14
SP59-20-20	SP60-20-20	1.25	1.25	3.06	3.75	1.250	2.625	1.500	.690	1.672	1.25	1.750	1.755	.531	1/2-13
SP59-24-24	SP60-24-24	1.50	1.50	3.75	4.44	1.437	3.125	1.750	.750	1.922	1.50	2.115	2.125	.656	5/8-11
SP59-32-32	SP60-32-32	2.00	2.00	4.50	5.25	1.750	3.812	1.750	.875	2.406	2.00	2.490	2.500	.781	3/4-10
SP59-40-40	SP60-40-40	2.50	2.50	5.87	6.87	2.312	4.875	2.060	1.000	2.906	2.50	2.995	3.005	.906	7/8-9
SP59-48-48	SP60-48-48	3.00	3.00	7.00	8.50	2.812	6.000	2.620	1.250	3.547	3.00	3.615	3.625	1.156	11/8-7

500 PSI FLAT SOCKET PIPE

O RING PART NO. FIG. A.	FLAT FACE PART NO. FIG B.	PIPE SIZE	PAD	A	B	C	D	E	F	G DIA.	H DIA.	J DIA. MIN	J DIA. MAX	K DRILL DIA.	K TAP UN-2B
SP72-48-48	SP91-48-48	3.00	3.00	5.12	5.31	2.438	4.188	1.380	1.120	3.547	3.000	3.625	3.615	.656	5/8-11
SP72-56-56	SP91-56-56	3.50	3.50	5.50	6.00	2.750	4.750	1.440	1.190	4.047	3.500	4.115	4.095	.656	5/8-11
SP72-64-64	SP91-64-64	4.00	4.00	6.00	6.38	3.062	5.125	1.500	1.250	4.578	4.000	4.615	4.595	.656	5/8-11
SP72-80-80	SP91-80-80	5.00	5.00	7.12	7.25	3.625	6.000	1.750	1.380	5.641	5.000	5.615	5.595	.656	5/8-11

3/00

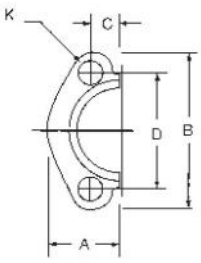


SPECIFICATIONS

- Carbon Steel

OPTIONS

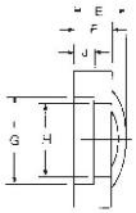
- 3000psi (200 Bar) Code 61 or 6000psi (400 Bar) Code 62



DIMENSIONS / ORDERING INFORMATION

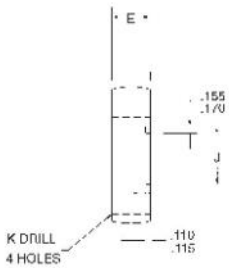
CODE 61 SPLIT FLANGE

PART NO.	FLANGE SIZE	A	B	C	D	E	F	G	H	J	K	WORKING PRESS MAX.	O-RING DASH #
SF3-12	.75	.98	2.56	.438	1.875	.88	.56	1.531	1.265	.245	.406	5000	-214
SF3-16	1.00	1.11	2.75	.515	2.062	.94	.62	1.781	1.515	.295	.406	5000	-219
SF3-20	1.25	1.39	3.12	.594	2.312	.88	.62	2.031	1.720	.295	.469	4000	-222
SF3-24	1.50	1.58	3.69	.703	2.750	1.00	.56	2.406	2.000	.295	.531	3000	-225
SF3-32	2.00	1.86	4.00	.844	3.062	1.03	.62	2.844	2.470	.355	.531	3000	-228
SF3-40	2.50	2.09	4.50	1.000	3.500	1.50	.75	3.344	2.950	.355	.531	2500	-232
SF3-48	3.00	2.53	5.31	1.219	4.188	1.62	.88	4.031	3.580	.355	.656	2000	-237



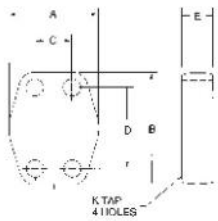
CODE 62 SPLIT FLANGE

PART NO.	FLANGE SIZE	A	B	C	D	E	F	G	H	J	K	WORKING PRESS MAX.	O-RING DASH #
SF6-12	.75	1.14	2.81	.469	2.000	1.12	.75	1.656	1.280	.325	.406	6000	-214
SF6-16	1.00	1.33	3.19	.547	2.250	1.31	.94	1.906	1.530	.355	.469	6000	-219
SF6-20	1.25	1.48	3.75	.625	2.625	1.50	1.06	2.156	1.750	.385	.531	6000	-222
SF6-24	1.50	1.83	4.44	.719	3.125	1.69	1.19	2.531	2.030	.475	.656	6000	-225
SF6-32	2.00	2.20	5.25	.875	3.812	2.06	1.44	3.156	2.660	.475	.781	6000	-228



3000 PSI BLANKING

O-RING PART NO. FIG. A	FLAT FACE PART NO. FIG. B	PAD SIZE	A	B	C	D	E	J MIN	J MAX	K DRILL DIA.	K TAP UN-2B	O-RING DASH #
SP36-12-12	SP37-12-12	.750	2.063	2.563	.875	1.875	.750	1.250	1.255	.406	3/8-16	-214
SP36-16-16	SP37-16-16	1.000	2.313	2.750	1.031	2.063	.880	1.560	1.565	.406	3/8-16	-219
SP36-20-20	SP37-20-20	1.250	2.875	3.125	1.188	2.313	.940	1.755	1.755	.469	7/16-14	-222
SP36-24-24	SP37-24-24	1.500	3.250	3.688	1.406	2.750	1.190	2.115	2.125	.531	1/2-13	-225
SP36-32-32	SP37-32-32	2.000	3.813	4.000	1.688	3.063	1.380	2.490	2.500	.531	1/2-13	-228
SF36-40-40	SP37-40-40	2.500	4.281	4.500	2.000	3.500	1.750	2.995	3.005	.531	1/2-13	-232
SF36-48-48	SP37-48-48	3.000	5.156	5.313	2.438	4.188	2.120	3.615	3.625	.656	5/8-11	-237



6000 PSI BLANKING

O-RING PART NO. FIG. A	FLAT FACE PART NO. FIG. B	PAD SIZE	A	B	C	D	E	J MIN	J MAX	K DRILL DIA.	K TAP UN-2B	O-RING DASH #
SP38-12-12	SP39-12-12	.750	2.380	2.810	.937	2.000	1.250	1.250	1.255	.406	3/8-16	-214
SP38-16-16	SP39-16-16	1.000	2.750	3.190	1.093	2.250	1.500	1.560	1.565	.469	7/16-14	-219
SP38-20-20	SP39-20-20	1.250	3.060	3.750	1.250	2.625	1.500	1.755	1.755	.531	1/2-13	-222
SP38-24-24	SP39-24-24	1.500	3.750	4.440	1.437	3.125	1.750	2.115	2.125	.656	5/8-11	-225
SP38-32-32	SP39-32-32	2.000	4.500	5.250	1.750	3.812	1.750	2.490	2.500	.781	3/4-10	-228

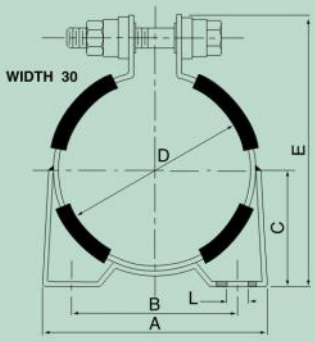
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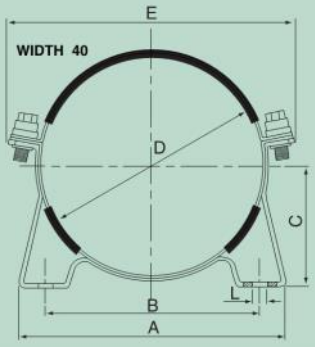
SPECIFICATIONS

- Plated Metal Support with Rubber Cushion Single Piece Construction



DIMENSIONS / ORDERING INFORMATION





ITEM PART NO.	D mm	A in	A mm	B in	B mm	C in	C mm	E in	E mm	L in	L mm	WEIGHT lbs.	WEIGHT kg
AMP 114	108-114	5.44	138	3.94	100	2.52	64	5.91	150	.35	8.9	1.63	.74
AMP 120	115-121	5.35	136	3.94	100	2.78	71	6.50	165	.35	8.9	1.10	.50
AMP 146	140-146	6.69	170	5.36	136	3.26	83	7.52	191	.35	8.9	1.88	.85
AMP 172	168-177	7.80	198	6.02	153	4.52	115	8.82	224	.50	12.5	2.33	1.06
AMP 206	206-215	10.12	257	8.46	215	4.52	115	9.76	248	.59	15	2.6	1.18
AMP 222	214-228	9.75	248	8.58	218	4.71	120	10.82	275	.35	8.9	2.63	1.20

ITEM PART NO.	D mm	A in	A mm	B in	B mm	C in	C mm	E in	E mm	L in	L mm	WEIGHT lbs.	WEIGHT kg
AMP/D 206	206-215	10.39	264	8.23	209	4.61	117	11.02	280	.59	15	3.50	1.59
AMP/D 210	208-220	10.63	270	8.46	215	4.76	121	11.02	280	.59	15	3.80	1.73
AMP/D 219	215-225	10.63	270	8.46	215	4.84	123	11.61	295	.59	15	3.80	1.73
AMP/D 228	220-230	10.63	270	8.50	216	4.84	133	11.61	295	.59	15	3.60	1.65
AMP/D 254	245-260	10.63	270	8.50	216	4.84	123	11.61	295	.59	15	4.10	1.90
AMP/D 286	280-290	12.99	330	10.94	278	6.46	164	14.17	360	.59	15	4.50	2.05
AMP/D 310	300-310	12.99	330	10.94	278	6.73	171	14.76	375	.59	15	4.80	2.18
AMP/D 362	358-365	16.81	427	14.37	365	7.68	195	16.69	424	.59	15	5.50	2.50

3/00

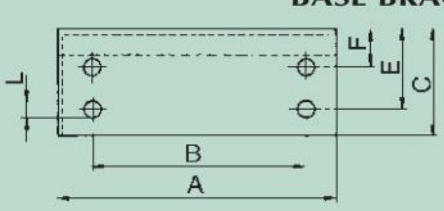


SPECIFICATIONS

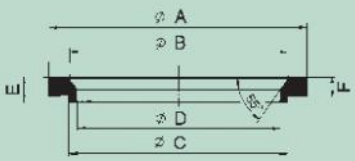
- Rubber Cushioning to Reduce Vibration and Noise
- Compensation for Thermal Expansion and Contraction
- Galvanized and Painted to Resist Corrosion
- Special Sizes and Designs are Available on Request

DIMENSIONS / ORDERING INFORMATION

BASE BRACKET



RUBBER RING



MODEL	DIMENSIONS IN INCHES A	B	C	D	E	F	G	H	L	WEIGHT/ LBS.
	BASE BRACKET WITH RUBBER RING (TO SPECIFY BASE BRACKET LESS RUBBER RING REMOVE "R" FROM MODEL NUMBER)									
BB120R	10.24	7.87	3.94	4.69	2.95	1.38	8.86	3.62	.67	5.5
BB170R	10.24	7.88	3.94	6.65	2.95	1.38	8.86	4.84	.67	5.3
BB211R	15.35	10.63	9.45	8.31	7.09	2.36	15.35	7.68	.87	44.4
	RUBBER RING									
RR108	5.91	4.72	4.72	4.25	.79	.59				
RR160	7.87	6.69	6.69	6.6	.79	.59				
RR200	9.84	8.66	8.27	7.87	.98	.79				

ACCUMULATOR SIZE	CLAMP NUMBER	QNTY.	DIA. (in.)	BASE BRACKET
1 QUART	AMP114	1	4.5	
2 QUART	AMP114	1	4.5	
1 GALLON	AMP172	1	6.7	BB120R
2.5 GALLON	AMPD228	1	9.0	BB170R
5 GALLON	AMPD228	2	9.0	BB170R
7.5 GALLON	AMPD228	2	9.0	BB170R
10 GALLON	AMPD228	2	9.0	BB170R
15 GALLON	AMPD228	3	9.0	BB170R
25 GALLON	AMPD362	3	14.25	BB211R
40 GALLON	AMPD362	3	14.25	BB211R

ACCUMULATOR SIZE	CLAMP NUMBER	QNTY.	DIA. (in.)	BASE BRACKET
1 QUART	AMP114	1	4.5	
2 QUART	AMP114	1	4.5	
	AMP114	2	4.5	
1 GALLON	AMP146	2	5.5	
	AMP172	1	7.0	BB120
	AMP114	2	4.5	
1.5 GALLON	AMP146	2	5.5	
	AMP172	1	7.0	BB120
2 GALLON	AMP114	2	4.5	
	AMP146	2	5.5	
2.5 GALLON	AMP172	1	7.0	BB120
	AMP206	1	8.0	BB170
	AMP146	2	5.5	
3 GALLON	AMP172	1	7.0	BB120
	AMP206	1	8.0	BB170
	AMP146	3	5.5	
4 GALLON	AMP172	1	7.0	BB120
	AMP206	1	8.0	BB170

ACCUMULATOR SIZE	CLAMP NUMBER	QNTY.	DIA. (in.)	BASE BRACKET
	AMP146	3	5.5	
5 GALLON	AMP172	2	7.0	BB120
	AMPD206	1	8.0	BB170
	AMPD225	1	9.0	BB170
	AMP172	2	7.0	BB170
7.5 GALLON	AMP206	2	8.0	BB170
	AMPD226	1	9.0	BB170
10 GALLON	AMPD206	2	8.0	BB170
	AMPD226	2	9.0	BB170
15 GALLON	AMPD206	2	8.0	BB170
	AMPD226	2	9.0	BB170
17.5 GALLON	AMPD226	3	8.0	BB170
20 GALLON	AMPD206	3	8.0	BB170
	AMPD226	3	9.0	BB170
23 GALLON	AMPD226	3	9.0	BB170
25 GALLON	AMPD226	4	9.0	BB170

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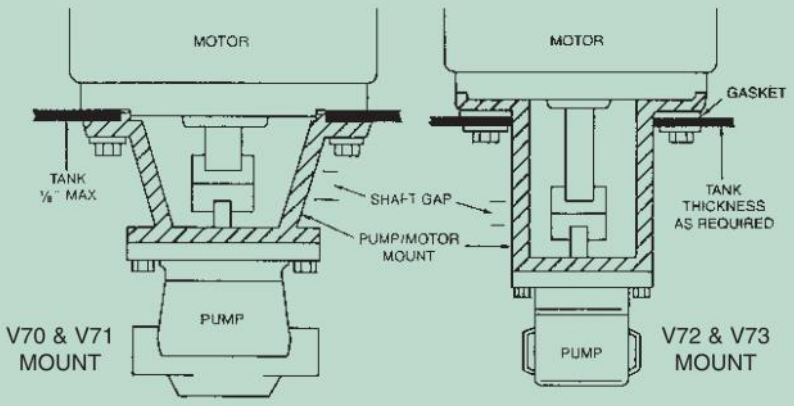
SPECIFICATIONS

- For Accurate Alignment Between Pump and Motor
- Lightweight, High Strength Aluminum Casting
- Snap-In Cover for Access Hole (Standard)
- Suitable for Electric Motors to 100 HP



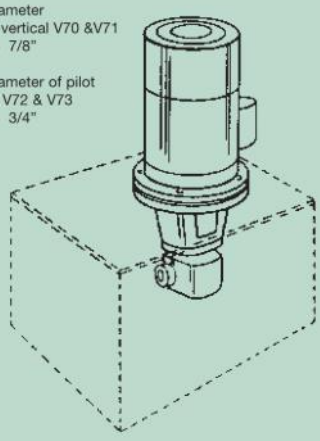
VERTICAL MOUNTS DIMENSIONAL INFORMATION

MOUNTS OFFER EASY ASSEMBLY OF PUMP TO VERTICAL MOTOR



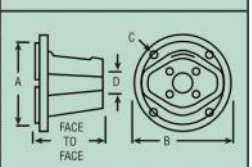
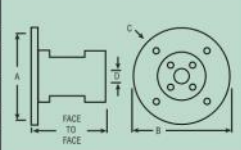
Note:
Outside diameter of pilot on vertical V70 &V71 mount is 4 7/8"

Outside diameter of pilot on vertical V72 & V73 mount is 5 3/4"



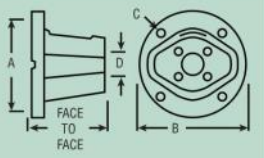
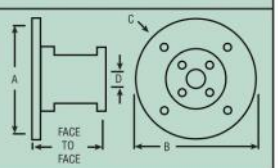
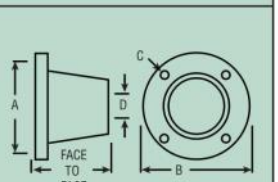
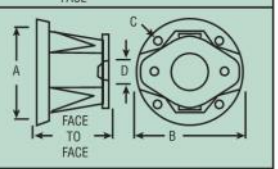
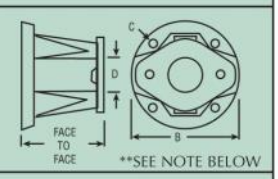
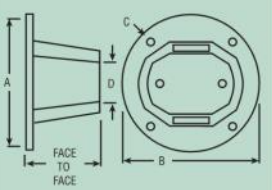
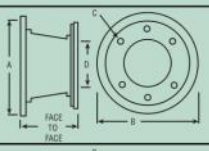
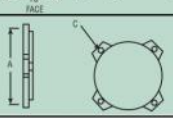
Vertical pump mounts allow pump/motor assembly to be directly mounted to reservoir.
Pump coupling and shafts are within reservoir for enclosed, quiet operation.
Faster assembly of equipment with this accurately machined, aluminum casting.

VERTICAL MOUNT ADAPTOR FOR ELECTRIC MOTORS

FRAME NUMBER	PUMP MOUNT PART NUMBER	MOTOR FRAME SIZE	SAE PUMP FLANGE	FACE TO FACE	DIMENSIONS OF NEMA-C FACE MOUNT END (INCHES) A	B	C	DIMENSIONS OF PUMP FACE MOUNT END (INCHES) D NOMINAL	PUMP BOLT CIRCLE	
E70	V70-A4	56C 143-145 TC	4F17	3.50"	4.50	6.625	5.875	1.78	2.828	
	V70-AA		AA-2 BOLT					2.00	3.25	
	V70-A2		A-2 BOLT					3.25	4.188	
E71	V71-A4	56C 143-145 TC	4F17	4.40"	4.50	6.625	5.875	1.78	2.828	
	V71-AA		AA-2 BOLT					2.00	3.25	
	V71-A2		A-2 BOLT					3.25	4.188	
E72	V72-A4	182-184 TC	4F17	5.12"	8.50	8.75	7.25	1.78	2.828	
	V72-AA	213-215 TC	AA-2 BOLT					2.00	3.25	
	V72-A2	254-256 TC	A-2 BOLT					3.25	4.188	
E73	V73-A4	182-184 TC	4F17	6.40"	8.50	8.75	7.25	1.78	2.828	
	V73-AA	213-215 TC	AA-2 BOLT					2.00	3.25	
	V73-A2	254-256 TC	A-2 BOLT					3.25	4.188	

3/00

HORIZONTAL MOUNTS FOR ELECTRIC MOTORS

FRAME NUMBER	PUMP MOUNT PART NUMBER	MOTOR FRAME SIZE	SAE PUMP FLANGE	FACE TO FACE	DIMENSIONS OF NEMA-C FACE MOUNT END (INCHES) A	B	C	DIMENSIONS OF PUMP FACE MOUNT END (INCHES) D NOMINAL	PUMP BOLT CIRCLE	MAXIMUM COUPLING DIAMETER	
E49	E49-A4	56C 143-145 TC	4F17	3.50″	4.50	6.625	5.875	1.78	2.828	3.00	
	E49-AA		AA-2 BOLT					2.00	3.25		
	E49-A2		A-2 BOLT					3.25	4.188		
E50	E50-A4	56C 143-145 TC	4F17	4.40″	4.50	6.625	5.875	1.78	2.828	3.00	
	E50-AA		AA-2 BOLT					2.00	3.25		
	E50-A2		A-2 BOLT					3.25	4.188		
	E50Z-A 2/4	56C-145TC	A 2/4					3.25	4.188		
E51	E51-A4	182-184 TC 213-215 TC	4F17	5.12″	8.50	8.75	7.25	1.78	2.828	3.50	
	E51-AA		AA-2 BOLT					2.00	3.25		
	E51-A2		A-2 BOLT					3.25	4.188		
E52	E52-A4	254-256 TC	4F17	6.40″				1.78	2.828	3.50	
	E52-AA		AA-2 BOLT					2.00	3.25		
	E52-A2		A-2 BOLT					3.25	4.188		
E53	E53-A2	182-184 TC	A-2 BOLT	5.81″	8.50	8.75	7.25	3.25	4.188	3.50	
E54	E54-B2		B-2 BOLT					4.00	5.75	4.00	
E55	E55-A2	213-215 TC	A-2 BOLT	6.81″				3.25	4.188	3.50	
E56	E56-B2		B-2 BOLT					4.00	5.75	4.00	
E57	E57-A2S	254-256 TC	A-2 BOLT	5.06″				3.25	4.188	3.50	
	E57-A2L		A-2 BOLT	5.12″				3.25	4.188		
	E57Z-A 2/4	182-256TC	A 2/4	5.25				3.25	4.188		
E58	E58-A2	182-182 TC	A-2 BOLT	5.81″	8.50	8.75	7.25	3.25	4.188	4.00	
	E58-B2	213-215TC	B-2 BOLT					4.00	5.75		
	E58-C2	254-256 TC	C-2 BOLT					5.00	7.125		
E59	E59-A2	182-184 TC	A-2 BOLT	6.81″	8.50	8.75	7.25	3.25	4.188		
	E59-B2	213-215 TC	B-2 BOLT					4.00	5.75		
	E59-C2	254-256 TC	C-2 BOLT					5.00	7.125		
E62	E62-A2	284-286 TC 284-286 TSC	A-2 BOLT	6.87″	10.50	11.00	9.00	3.25	4.188	4.50	
	E62-B2		B-2 BOLT					4.00	5.75		
	E62-C2		C-2 BOLT					5.00	7.125		
E63	E63-A2	284-286 TC 284-286 TSC	A-2 BOLT	7.87″	10.50	11.00	9.00	3.25	4.188		**SEE NOTE BELOW
	E63-B2		B-2 BOLT					4.00	5.75		
	E63-C2		C-2 BOLT					5.00	7.125		
E64	E64-A2	324-326 TSC	A-2 BOLT	6.62″	12.50	13.00	11.00	3.25	4.188	5.25	
			B-2 BOLT					4.00	5.75		
	E64-B2/4	364-365 TSC	B-4 BOLT					4.00	5.00		
			C-2 BOLT					5.00	7.125		
	E64-C2/4	404-405 TSC	C-4 BOLT					5.00	6.375		
E65	E65-A2	324-326 TSC	A-2 BOLT	7.06″	12.50	13.00	11.00	3.25	4.188	5.25	
			B-2 BOLT					4.00	5.75		
	E65-B2/4	364-326 TSC	B-4 BOLT					4.00	5.00		
			C-2 BOLT					5.00	7.125		
	E65-C2/4	404-405 TSC	C-4 BOLT					5.00	6.375		
E66	E66-A2	324-326 TSC	A-2 BOLT	8.75″	12.50	13.00	11.00	3.25	4.188	5.25	
			B-2 BOLT					4.00	5.75		
	E66-B2/4	369-365 TSC	B-4 BOLT					4.00	5.00		
			C-2 BOLT					5.00	7.125		
	E66-C2/4	404-405 TSC	C-4 BOLT					5.00	6.375		
E67	E67-D2/4	324-326 TSC 264-365 TSC 404-405 TSC	D-2 BOLT	7.06″	12.50	13.00	11.00	6.00	9.00	6.00	
			D-4 BOLT					6.00	9.00		
E68	E68-D2/4	324-326 TSC 269-365 TSC 404-405 TSC	D2 BOLT	8.75	12.50	13.00	11.00	6.00	9.00		
			D4 BOLT					6.00	9.00		
		ADAPTOR FOR E51-E59 TO CONVERT TO 284-286 TSC MOTORS									
E69	E69				10.50	11.00	9.00				

**NOTE: USE THE E69 ADAPTOR RING WITH E58 AND E59 MOUNTS FOR ALL E62 AND E63 MOUNTS

3/00

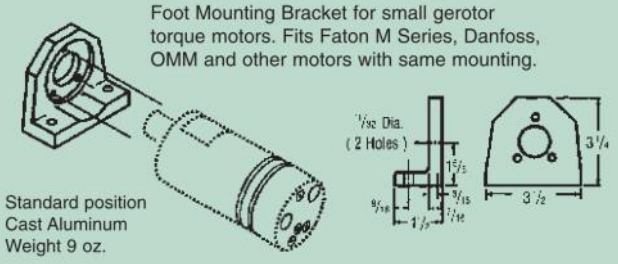
ACCESSORIES

SPECIFICATIONS

- Lightweight Aluminum Casting
- Sizes Available: SAEAA - 4 Bolt
  SAEAA - 2 Bolt
  SAEA - 2 Bolt
  SAEB - 2 Bolt

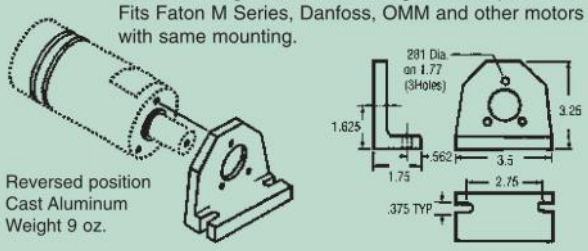
FM-36-M3

Foot Mounting Bracket for small gerotor torque motors. Fits Faton M Series, Danfoss, OMM and other motors with same mounting.

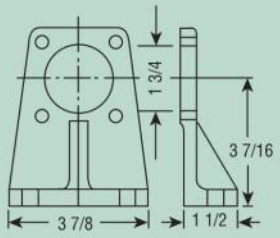


FM-37-M3R

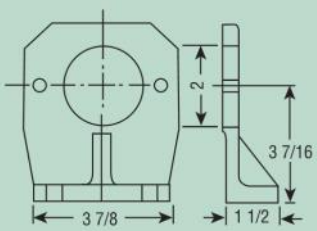
Foot Mounting Bracket for small gerotor torque motors. Fits Faton M Series, Danfoss, OMM and other motors with same mounting.



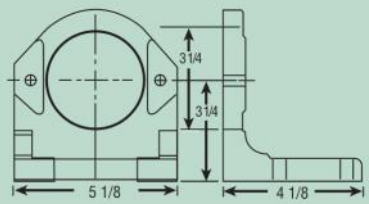
FM-38-4F



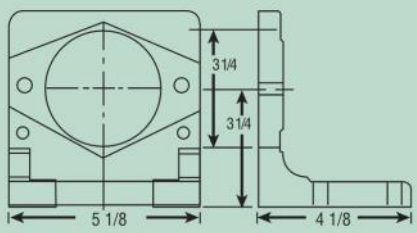
FM-39-AA2



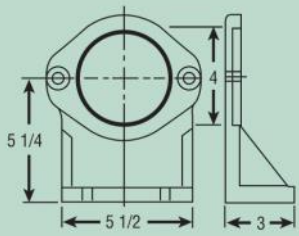
FM-40-A2



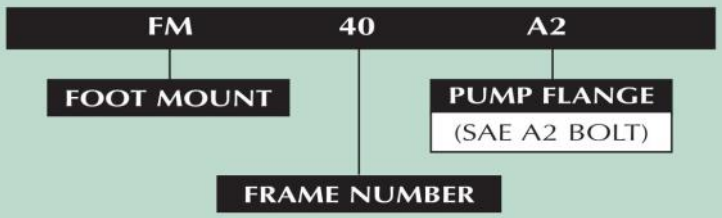
FM-41-A2C



FM-42-B2



ORDERING INFORMATION



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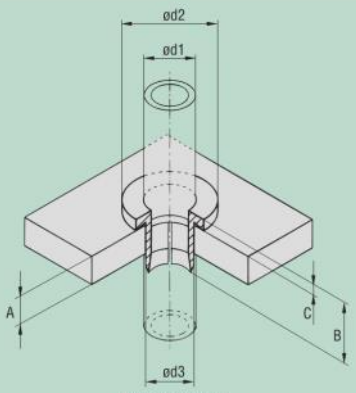
ACCESSORIES

SPECIFICATIONS

- Material: Santoprene
- Diameter: 1/4" to 2"
- Compatible with Most Hydraulic Fluids
- Packaged in Bags of Ten



DIMENSIONS



Mounting Hole

ORDERING INFORMATION



Tube Dia.	1/4" T	-	3/8" T	1/8" P	1/2" T	1/4" P	-	5/8" T	-	3/4" T	7/8" T	1" T	-	-	-	1 1/2" T	1 1/4" P
Ø d1	6	8	10		12	14	15	16	18	20	22	25	28	30	35	38	42
d2	18 / 0.71	20 / 0.78	22 / 0.86		24 / 0.94	26 / 1.02	28 / 1.10	28 / 1.10	30 / 1.18	32 / 1.25	34 / 1.33	38 / 1.49	41 / 1.61	43 / 1.69	48 / 1.88	51 / 2.00	55 / 2.16
d3	10 / 0.39	12 / 0.47	14 / 0.55		16 / 0.63	18 / 0.71	20 / 0.78	20 / 0.78	22 / 0.86	24 / 0.94	26 / 1.02	33 / 1.29	33 / 1.29	35 / 1.37	40 / 1.57	43 / 1.69	47 / 1.84
A	0.16" - 0.5" / 4 - 12mm																
B	0.9" / 23mm																
C	0.16" / 4mm																

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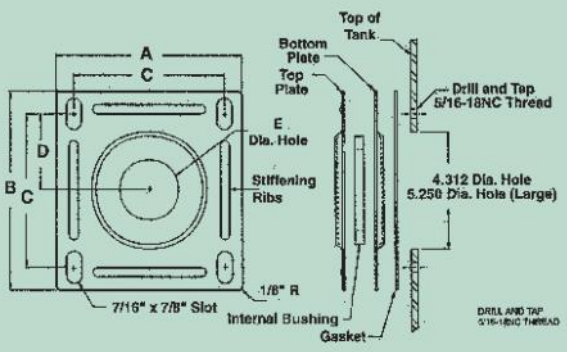


SPECIFICATIONS

- Designed to seal suction lines passing through the top plate of reservoir
- Allows access for easy removal of suction elements for inspection and cleaning
- Includes top plate, bottom plate, gasket, rubber bushing and 4 x 5/16-18 thread forming screws

PART NO.	DIMENSIONS										NOMINAL PIPE SIZE
	A		B		C		D		E		
	in	mm	in	mm	in	mm	in	mm	in	mm	
SF-050	4.25	108	5.25	133	5.50	140	4.25	108	0.44	11	1/2"
SF-075	4.25	108	5.25	133	5.50	140	4.25	108	0.44	11	3/4"
SF-100	4.25	108	5.25	133	5.50	140	4.25	108	0.44	11	1"
SF-125	4.25	108	5.25	133	5.50	140	4.25	108	0.44	11	1 1/4"
SF-150	4.25	108	5.25	133	5.50	140	4.25	108	0.44	11	1 1/2"
SF-200	4.25	108	5.25	133	5.50	140	4.25	108	0.44	11	2"
SF-250	6.25	159	7.50	190	7.50	190	6.25	159	0.44	11	2 1/2"
SF-300	6.25	159	7.50	190	7.50	190	6.25	159	0.44	11	3"

DIMENSIONS



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Area of Application:

Flow, pressure and temperature measuring of fluids (mobileand industrial hydraulics and grease systems)

Characteristics:

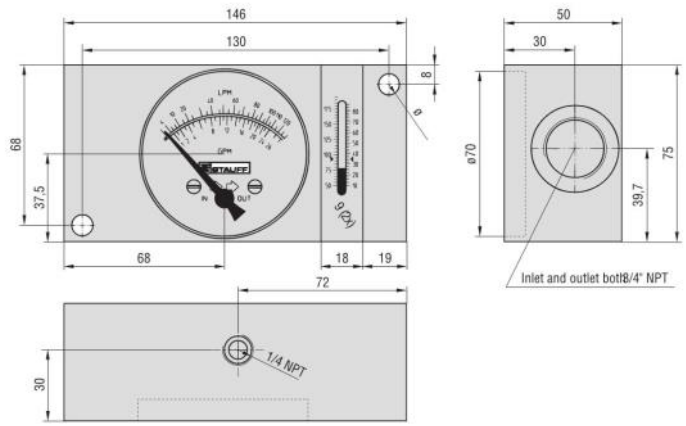
- Suitable for mineral oil (aluminium), HFC fluids
- Designed for in-line installation
- Mechanical process (off the line)
- 1/4 NPT connection for pressure gauge
- 2½" (63mm) Dial.
- Standard calibration for 150 SSU fluids
- Accuracy within ±4% full scale deflection

SDM indicator offer a simultaneous measurement of pressure,flow and temperature (dual scale in °C and °F).

- Bronze versions for water available on request



DIMENSIONS SDM-750

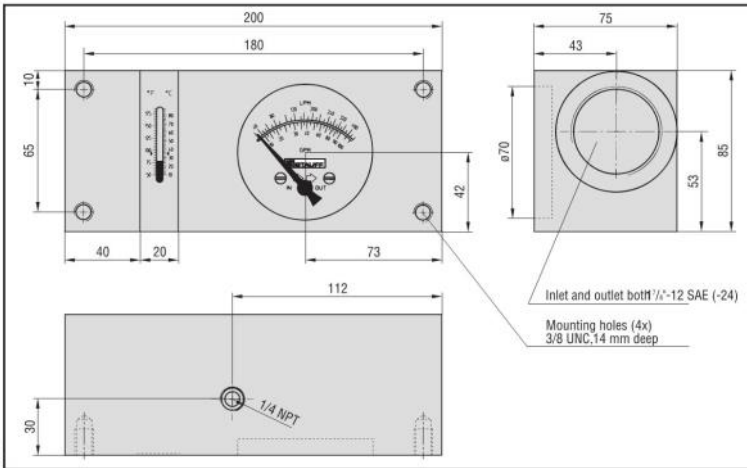


Technical Data

Accuracy:

Flow:	± 4% FSD
Temperature:	± 2°C
Temperature measuring range:	10°C ... 80°C
	50°F ... 176°F

DIMENSIONS SDM-1500



Technical Data

Accuracy:

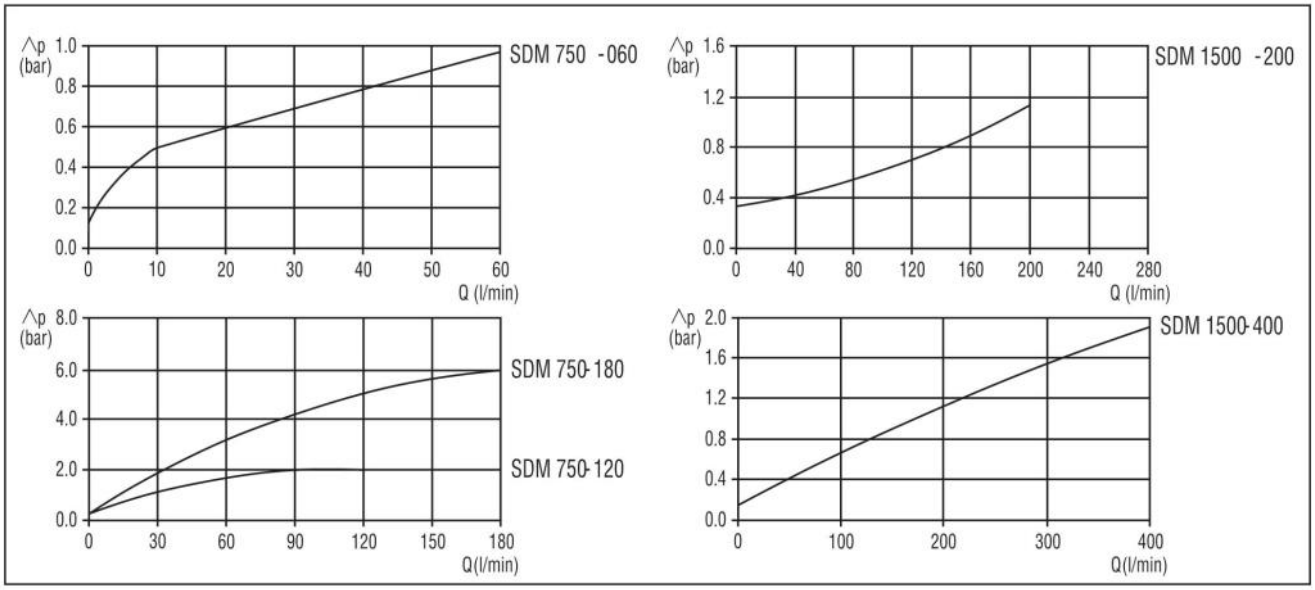
Flow:	± 4% FSD
Temperature:	± 2°C
Temperature measuring range:	10°C ... 80°C
	50°F ... 176°F

3/00

TECHNICAL DATA

PART NUMBER	MAX WORKING PRESSURE		FLOW RANGE		WEIGHT		CONNECTION
SDM-750-A-060-T0	6000 PSI	420 BAR	0.8-16 GPM	3 – 60 L/MIN	3 LB	1.36 KG	3/4 NPT
SDM-750-A-120-T0	6000 PSI	420 BAR	1.3-32 GPM	5 – 120 L/MIN	3 LB	1.36 KG	3/4 NPT
SDM-750-A-180-T0	6000 PSI	420 BAR	2.6-47 GPM	10 – 180 L/MIN	3 LB	1.36 KG	3/4 NPT
SDM-1500-A-200-T	4000 PSI	280 BAR	2.6-53 GPM	10 – 200 L/MIN	6.6 LB	3.00 KG	$1^{7}/_{8}$-12 SAE
SDM-1500-A-400-T	4000 PS	280 BAR	8-105 GPM	30 – 400 L/MIN	6.6 LB	3.00 KG	$1^{7}/_{8}$-12 SAE

FLOW CURVES



ORDERING CODE

SDM 750N A 016 T

TYPE	
SDM	Flow Indicator

SIZE	
750	size 750N
1500	size 1500S

HOUSING	
A	Aluminium
B	Bronze (special order)

THERMOMETER	
T	with integrated thermometer (standard)

FLOW	
060	0.8 - 16 gpm (3 - 6 lpm) - size 750
120	1.3 - 32 gpm (5-120lpm) - size 750
180	2.6 - 47 gpm (10-180 lpm - size 750
200	2.6 - 53 gpm (10-200 lpm) - size 750
400	8 - 105 gpm (20-400 lpm) - size 750

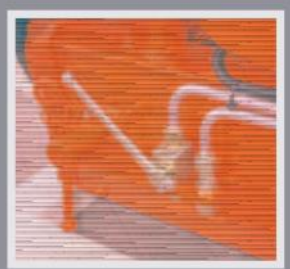
3/00

STAUFF®

Valves

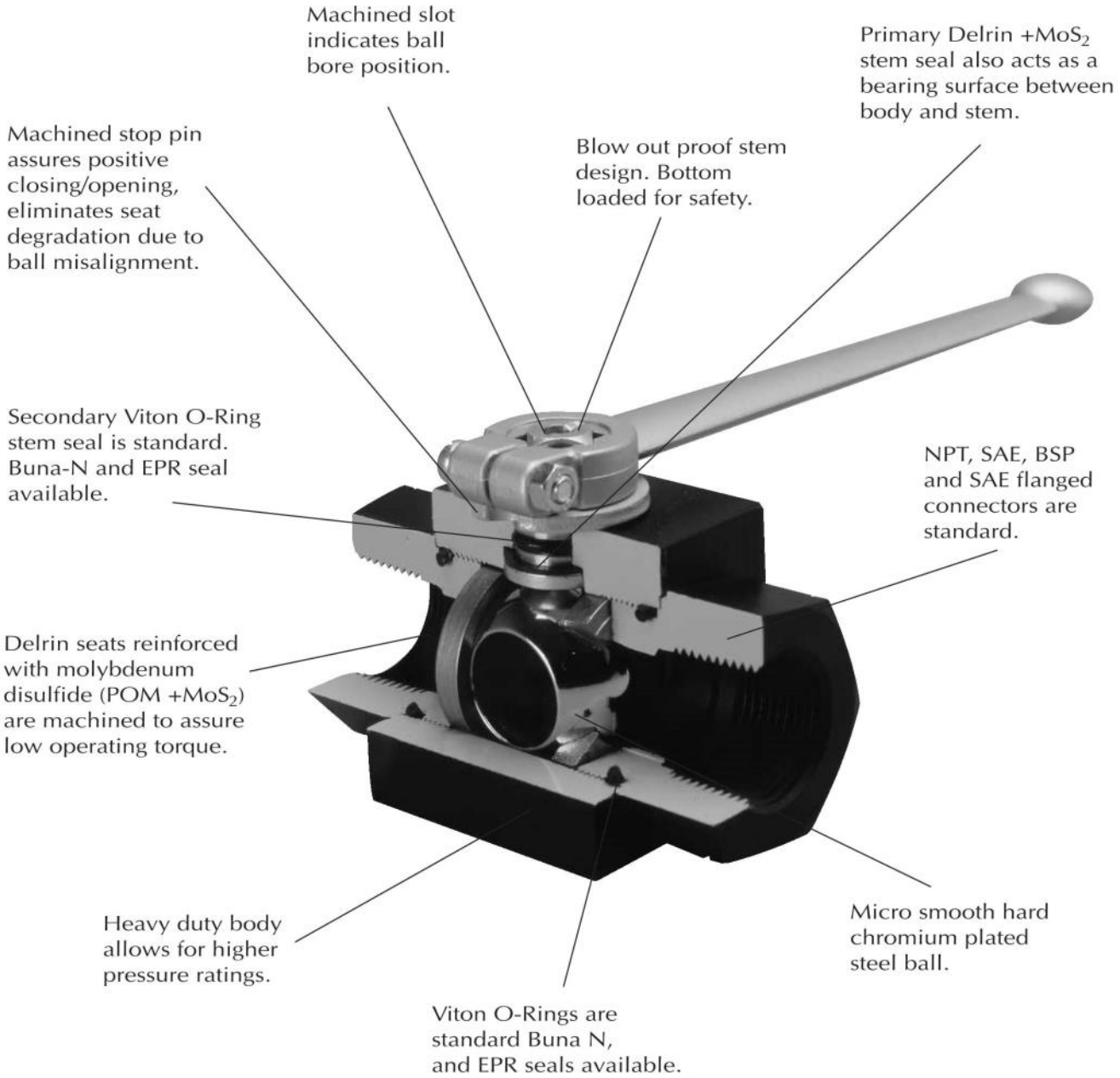


Quality and Service Worldwide





FULL FLOW AND EASY OPERATION UP TO 12,000 PSI



Dimensions are for general information only. Due to constant development and updating of technical details, we ask that all critical dimensions be made by requesting a certified print.

3/00

Features

- Available in carbon or stainless steel.
- 1/4 turn positive operation.
- Depending on size and materials, working pressures of up to 12,000 PSI and temperatures of up to 930° F can be accommodated.
- No lubrication or maintenance required for the life of the valve.
- All Stauff valves are easily and completely rebuildable.
- All Stauff valves offer completely bidirectional operation, eliminating any chance of incorrect installation.

Note: Stauff valves are designed for use as on/off devices and must not be used to throttle fluid flow. Use in any position other than fully open or fully closed can lead to rapid deterioration of valve components.

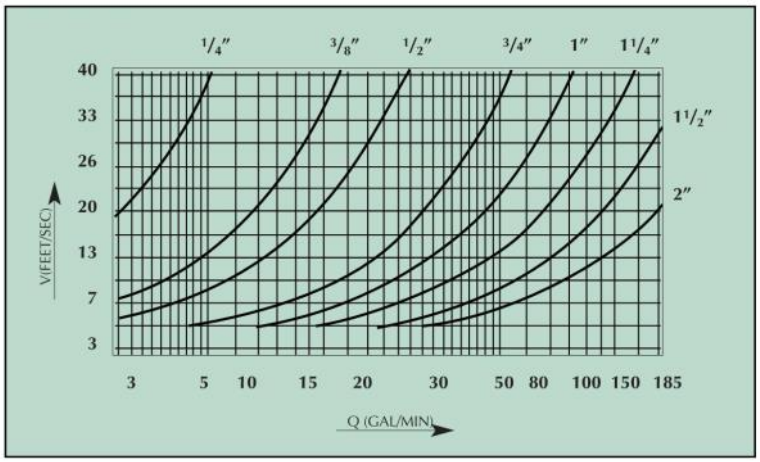
- No threads in fluid service to contaminate flow or cause turbulence.
- "Floating Ball" design insures a positive, leak-free seal and automatically compensates for any seat wear or misalignment.
- Hard chrome plated microsmooth ball greatly reduces friction and seat wear.
- Ball seats are available in a variety of materials to suit your special applications.
- Full size ports on most two-way valves virtually eliminates pressure drop. Cv factor is usually equal to a length of pipe the same length and diameter as the valve.
- All Stauff valves are proof tested to 1.5 times the maximum rated working pressure before shipment from manufacturing facilities.
- Long seal life.

Available Options

- Locking or detent type handles
- Pneumatic or electrical actuator
- Special service seat and seal combinations
- Panel mounted valves
- Tandem mounted valves
- Special threads and connections
- Custom design valves
- Limit/proximity switches

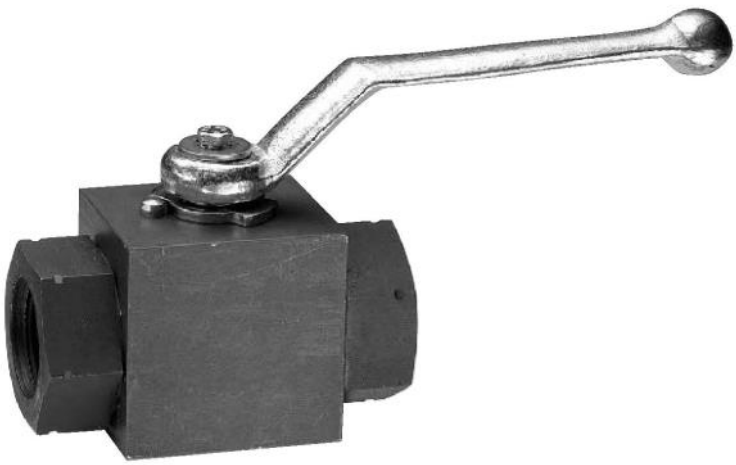
Contact STAUFF for special requirements.

VALVE SELECTION CHART



3/00

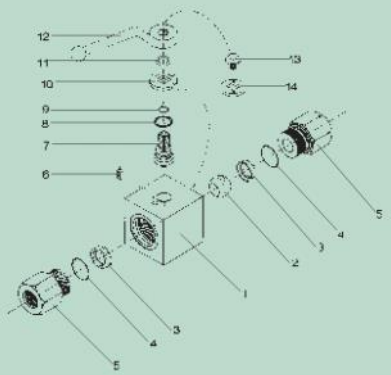
STAUFF®



SPECIFICATIONS

- Two-Way Shut-off Valve
- 1/8"-1" Fully Ported-(1 1/4" & 1 1/2" with reduced bore)
- NPT, BSP or SAE O-Ring Connectors
- Delrin +MoS2 Ball Seats
- Viton O-Ring
- Pressure Range: Up to 7250 PSI (500 bar) (depending on material combination and size)
- Standard Carbon Steel Construction
- Temperature Range: -60°F to 400°F (-50°C to 200°C) (depending on material combinations)
- Zinc Plated Body

TECHNICAL INFORMATION



Item Number	Quantity	Description
1	1	Housing
2	1	Ball
3*	2	Seat
4*	2	Connector O-Ring
5	2	Connector
6	1	Stop Pin
7	1	Stem
8*	1	Thrust Ring
9*	1	Stem O-Ring
10	1	Cam Plate
11	1	Snap Ring
12	1	Handle
13	1	Stem Screw
14	1	Flow Indicator

*Included in Seal Kit

OPTIONS

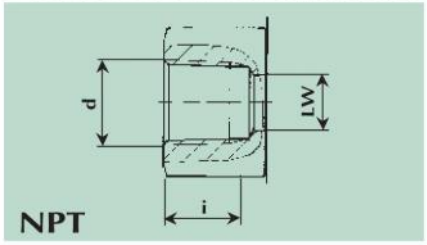
- Locking Kits
- Pneumatic and Electric Actuator packages available (see page 204)
- Stainless Steel Body
- Stainless Steel Ball and stem

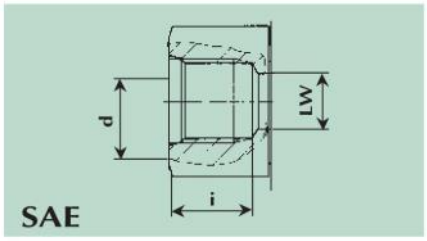
SIZE		PART NUMBER	MAXIMUM WORKING PRESSURE	*ACTUATOR CODE		SIZE		PART NUMBER	MAXIMUM WORKING PRESSURE	*ACTUATOR CODE	
				EDA	ESA					EDA	ESA
1/8"	NPT	BBV20020001M	7250 PSI	A	B	3/4"	NPT	BBV20120001M	5000 PSI	C	C
	SAE	BBV21020001M	7250 PSI	A	B		SAE	BBV21120001M	5000 PSI	C	C
1/4"	NPT	BBV20040001M	7250 PSI	A	B	1"	NPT	BBV20160001M	5000 PSI	C	C
	SAE	BBV21040001M	7250 PSI	A	B		SAE	BBV21160001M	5000 PSI	C	C
3/8"	NPT	BBV20060001M	7250 PSI	A	B	1 1/4"	NPT	BBV20200001M	5000 PSI	C	C
	SAE	BBV21060001M	7250 PSI	A	B		SAE	BBV21200001M	5000 PSI	C	C
1/2"	NPT	BBV20080001M	7250 PSI	A	B	1 1/2"	NPT	BBV20240001M	5000 PSI	C	C
	SAE	BBV21080001M	7250 PSI	A	B		SAE	BBV21240001M	5000 PSI	C	C

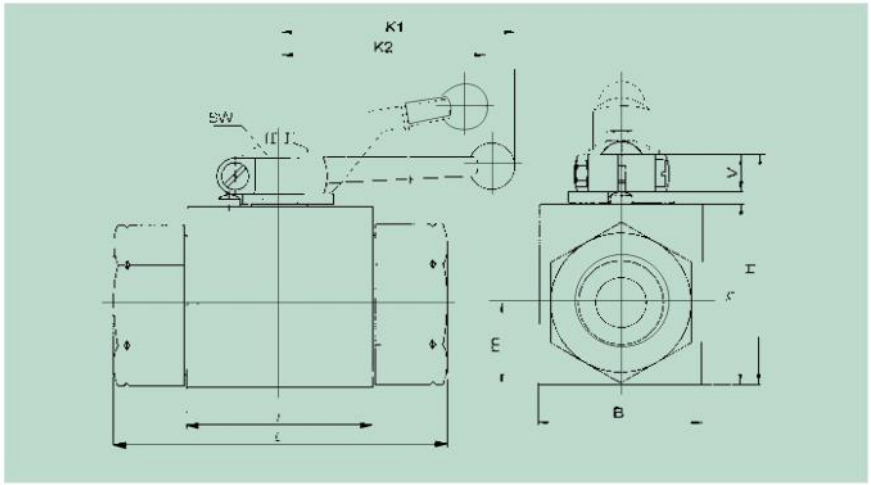
* See Actuator Code on Page 204.

3/00

DIMENSIONAL INFORMATION







SIZE	d NPT	d SAE	i NPT	i SAE	L NPT	L SAE	LW NPT	LW SAE	l	B	H	h	m	V	SW	K_1	K_2	Weight
			in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	lbs / kg
1/8"	1/8 –27	–	0.51 / 12.95		2.72 / 69.09		0.24 / 6.10		1.57 / 39.88	1.02 / 25.91	1.85 / 46.99	1.30 / 33.02	0.53 / 13.46	0.43 / 10.92	9 / 5.91	5.91 / 150.11	4.53 / 115.06	0.50 / 0.23
1/4"	1/4 –18	7/16 –20	0.67 / 17.02	0.55 / 13.97	2.72 / 69.09	2.72 / 69.09	0.24 / 6.10	0.2 / 5.08	1.57 / 39.88	1.02 / 25.91	1.85 / 46.99	1.30 / 33.02	0.53 / 13.46	0.43 / 10.92	9 / 5.91	5.91 / 150.11	4.53 / 115.06	0.66 / 0.30
3/8"	1/8 –18	9/16–18	0.69 / 17.53	0.61 / 15.49	3.07 / 77.98	2.83 / 71.88	0.39 / 10	0.39 / 10	1.69 / 42.93	1.26 / 32.00	2.05 / 52.07	1.50 / 38.10	0.69 / 17.53	0.43 / 10.92	9 / 5.91	5.91 / 150.11	4.53 / 115.06	1.10 / 0.50
1/2"	1/2 –14	3/4–16	0.98 / 24.89	0.69 / 17.53	4.09 / 103.89	3.27 / 83.06	0.51 / 13	0.51 / 13	1.89 / 48.01	1.38 / 35.05	2.13 / 54.10	1.57 / 39.88	0.75 / 19.05	0.43 / 10.92	9 / 5.91	5.91 / 150.11	4.53 / 115.06	1.65 / 0.75
3/4"	1/4 –14	1 1/16 –12	0.91 / 23.11	0.91 / 23.11	4.02 / 102.11	3.74 / 95.00	0.79 / 20	0.79 / 20	2.44 / 61.98	1.93 / 49.02	2.95 / 74.93	2.24 / 56.90	0.96 / 24.38	0.55 / 13.97	14 / 7.87	7.87 / 199.90	6.30 / 160.02	3.65 / 1.66
1"	1–11 1/2	1 5/16 –12	1.09 / 27.69	0.91 / 23.11	4.69 / 119.13	4.45 / 113.03	0.98 / 25	0.98 / 25	2.60 / 66.04	2.28 / 57.91	3.27 / 83.06	2.56 / 65.02	1.16 / 29.46	0.55 / 13.97	14 / 7.87	7.87 / 199.90	6.30 / 160.02	5.06 / 2.30
1 1/4"	1 1/4 –11 1/2	1 5/8 –12	1.10 / 27.94	0.91 / 23.11	5.10 / 129.54	5.10 / 129.54	0.98 / 25	0.98 / 25	2.60 / 66.04	2.28 / 57.91	3.27 / 83.06	2.56 / 65.02	1.16 / 29.46	0.55 / 13.97	14 / 7.87	7.87 / 199.90	6.30 / 160.02	5.50 / 2.50
1 1/2"	1 1/2 –11 1/2	1 7/8 –12	1.19 / 30.23	0.91 / 23.11	5.20 / 132.08	5.20 / 132.08	0.98 / 25	0.98 / 25	2.60 / 66.04	2.28 / 57.91	3.27 / 83.06	2.56 / 65.02	1.16 / 29.46	0.55 / 13.97	14 / 7.87	7.87 / 199.90	6.30 / 160.02	5.75 / 2.61

ORDERING INFORMATION

BBV 2 0 16 0 0 0 1 M LD

BODY STYLE
Block Body Style

NUMBER OF PORTS

CONNECTION STYLE
0 - NPT Female
1 - SAE "
R - BSPP "

CONNECTOR SIZE
In 1/16"
02 – 1/8"
04 – 1/4"
06 – 3/8"
08 – 1/2"
12 – 3/4"
16 – 1"
20 – 1 1/4"*
24 – 1 1/2"*
*Restricted Bore (1" –25mm)

BODY MATERIAL
0 - Carbon Steel
1 - 316 Stainless
6 - Zinc Plated Carbon Steel

BALL & STEM MATERIAL
0 - Carbon Steel (standard)
1 - 316 Stainless Steel

BALL SEAT MATERIAL
0 - Delrin (standard)
1 - Polyamide
2 - Buna (NBR)
3 - Viton
4 - Teflon (PTFE)

O RING MATERIAL
0 - Buna
1 - Viton standard (FPM)
2 - Teflon (PTFE)
3 - EPDM (EPR)

MANUFACTURING CODE

LOCKING KIT
LD – Locking Device
OMIT – No Locking Device

3/00

VALVES

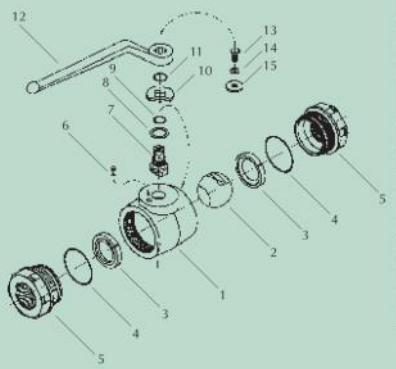
STAUFF®



SPECIFICATIONS

- Two-Way Valves
- 1¼" – 2" Fully Ported
- NPT or SAE O-Ring Connections
- Delrin +MoS2 Ball Seats
- Viton O-Rings
- Steel Handle
- Pressure Range: Up to 5000 PSI (350 bar)
- Carbon Steel Construction
- Temperature Range: -60°F to 400°F
  (-50°C to 200°C)
  (depending on material combinations and size)
- Zinc Plated Body

TECHNICAL INFORMATION



Item Number	Quantity	Description
1	1	Housing
2	1	Ball
3*	2	Seat
4*	2	Connector O-Ring
5	2	Connector
6	1	Stop Pin
7	1	Stem
8*	1	Thrust Ring
9*	1	Stem O-Ring
10	1	Cam Plate
11	1	Snap Ring
12	1	Steel Handle
13	1	Screw
14	1	Lock Washer
15	1	Washer

*Included in Seal Kit

OPTIONS

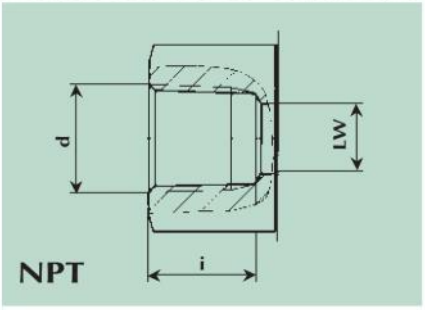
- Locking Kits
- Stainless Steel Body
- Stainless Steel Ball and stem

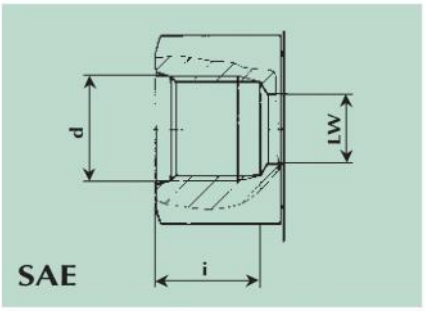
SIZE		PART NUMBER	MAXIMUM WORKING PRESSURE	*ACTUATOR CODE	
				EDA	ESA
1¼"	NPT	FBV20200001M	5000 PSI	E	D
	SAE	FBV21200001M	5000 PSI	E	D
1½"	NPT	FBV20240001M	5000 PSI	E	E
	SAE	FBV21240001M	5000 PSI	E	E
2"	NPT	FBV20320001M	5000 PSI	E	E
	SAE	FBV21320001M	5000 PSI	E	E

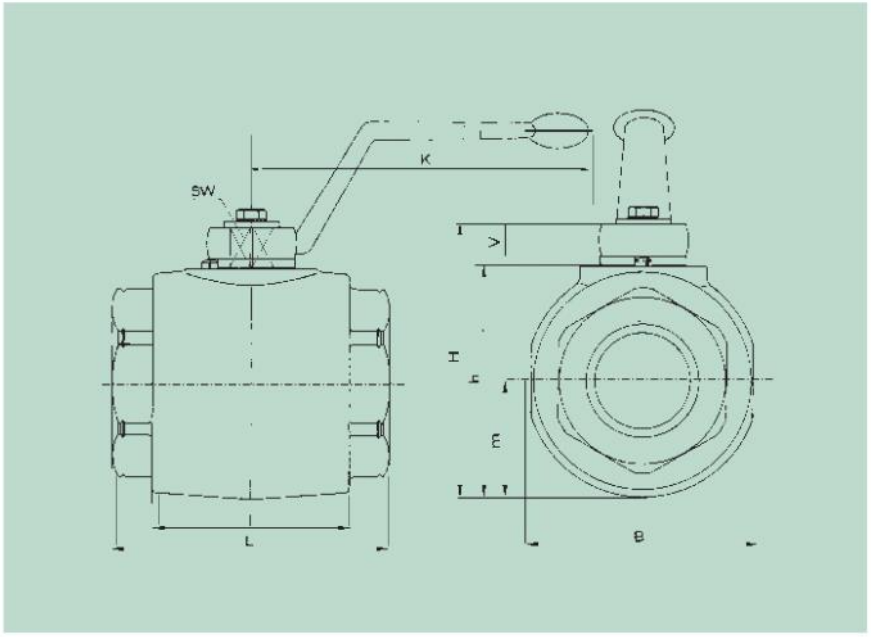
* See Actuator Code on Page 204.

3/00

DIMENSIONAL INFORMATION







SIZE	d NPT	d SAE	i NPT	i SAE	L NPT	L SAE	LW NPT	LW SAE	I	B	H	h	m	V	SW	K	Weight
			in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	lbs / kg
1¼"	1¼–11½	1⅝–12	1.11 / 28.19	0.91 / 23.11	4.72 / 119.89	4.37 / 111.00	1.26 / 32.00	1.18 / 29.97	3.15 / 80.01	3.19 / 81.03	4.21 / 106.93	3.39 / 86.11	1.59 / 40.39	0.65 / 16.51	17 / 11.81	11.81 / 299.97	8.04 / 3.65
1½"	1½–11½	1⅞–12	1.1 / 27.94	0.91 / 23.11	5.12 / 130.05	5.12 / 130.05	1.50 / 38.10	1.50 / 38.10	3.35 / 85.09	3.94 / 100.08	4.88 / 123.95	4.06 / 103.12	1.97 / 50.04	0.65 / 16.51	17 / 11.81	11.81 / 299.97	13.00 / 5.91
2"	2–11½	2½–12	1.19 / 30.23	0.91 / 23.11	5.51 / 139.95	5.51 / 139.95	1.89 / 48.01	1.77 / 44.96	3.94 / 100.08	4.65 / 118.11	5.43 / 137.92	4.61 / 117.09	2.32 / 58.93	0.65 / 16.51	17 / 11.81	11.81 / 299.97	19.00 / 8.64

ORDERING INFORMATION

FBV 2 0 24 0 0 0 1 M LD

BODY STYLE
Forged Body Valve

NUMBER OF PORTS

CONNECTION STYLE
0 - NPT
1 - SAE
R - BSPP

CONNECTOR SIZE
20 – 1¼"
24 – 1½"
32 – 2"

BODY MATERIAL
0 - Carbon Steel
1 - 316 Stainless
6 - Zinc Plated Carbon Steel

BALL & STEM MATERIAL
0 - Carbon Steel (standard)
1 - 316 Stainless Steel

BALL SEAT MATERIAL
0 - Delrin (standard)
1 - Polyamide
2 - Buna (NBR)
3 - Viton
4 - Teflon (PTFE)

O RING MATERIAL
0 - Buna
1 - Viton standard (FPM)
2 - Teflon (PTFE)
3 - EPDM (EPR)

MANUFACTURING CODE

LOCKING KIT
LD – Locking Device
OMIT – No Locking Device

3/00



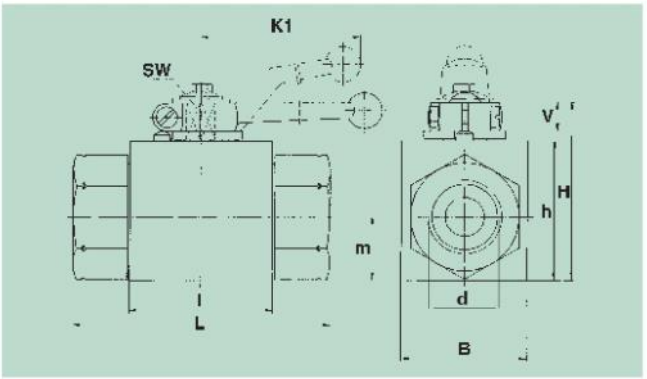
SPECIFICATIONS

- 100,000 Cycle Seal Life
- NPT and SAE Ports Available
- 1/4" - 1" Sizes Available
- Fully Ported
- Carbon Steel Body
- Chrome Plated Brass Ball

OPTIONS

- Locking Kits

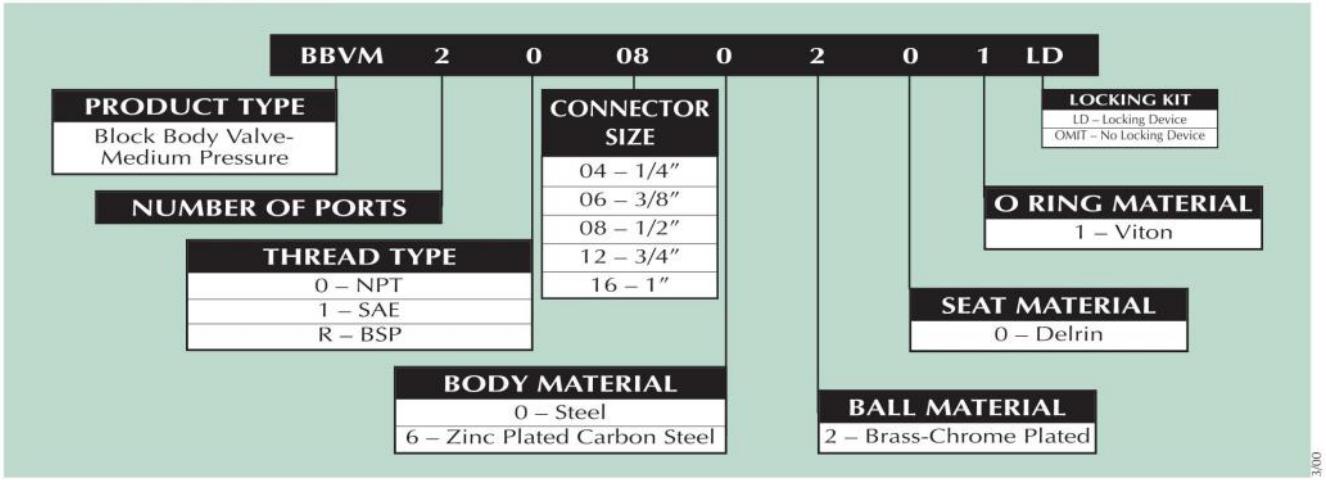
DIMENSIONAL INFORAMTION



See Page 177 for Pressure Rating

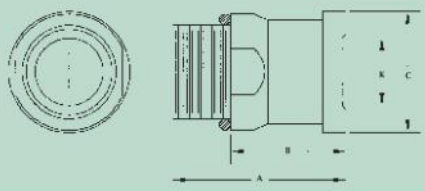
PART#	SIZE	d NPT	d SAE	L NPT	L SAE	l	B	H	h	m	V	SW	K_1	Weight
				in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	lb / kg
BBVM 20040001 BBVM 21040001	¼"	¼–18	7/16–20	2.72 / 69.09	2.72 / 69.09	1.57 / 39.88	1.02 / 25.91	1.85 / 46.99	1.30 / 33.02	0.53 / 13.46	0.43 / 10.92	9 / 4.53	4.53 / 115.06	0.66 / 0.30
BBVM 20060001 BBVM 21060001	⅜"	⅜–18	9/16–18	3.07 / 77.98	2.83 / 71.88	1.69 / 42.93	1.26 / 32.00	2.05 / 52.07	1.50 / 38.10	0.69 / 17.53	0.43 / 10.92	9 / 4.53	4.53 / 115.06	1.10 / 0.50
BBVM 20080001 BBVM 21080001	½"	½–14	¾–16	4.09 / 103.89	3.27 / 83.06	1.89 / 48.01	1.38 / 35.05	2.13 / 54.10	1.57 / 39.88	0.75 / 19.05	0.55 / 13.97	9 / 4.53	4.53 / 115.06	1.65 / 0.75
BBVM 20120001 BBVM 21120001	¾"	¾–14	1 1/16–12	4.02 / 102.11	3.74 / 95.00	2.44 / 61.98	1.93 / 49.02	2.95 / 74.93	2.24 / 56.90	0.90 / 22.86	0.55 / 13.97	14 / 7.87	6.81 / 172.97	3.65 / 1.66
BBVM 20160001 BBVM 21160001	1"	1–11½	1 5/16–12	4.69 / 119.13	4.45 / 113.03	2.60 / 66.04	2.28 / 57.91	3.27 / 83.06	2.56 / 65.02	1.16 / 29.46	0.55 / 13.97	14 / 7.78	7.87 / 199.90	5.06 / 2.30

ORDERING INFORMATION



3/00

SPLIT FLANGE END CONNECTION ADAPTOR



Use these adaptors to extend the application range of Stauff SAE Threaded Valves by using Stauff High Pressure Adaptors on one or both ports.

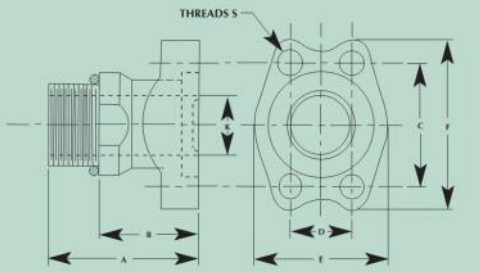


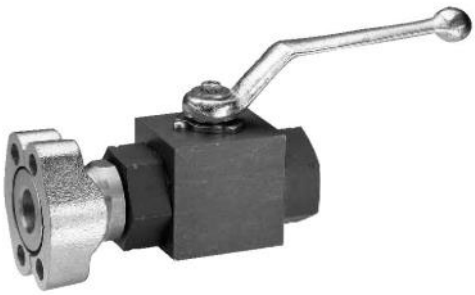
Part Number	Tube O.D.	Flange Size Code 61	Flange Size Code 62	A	B	C	Thread	K
				in / mm	in / mm	in / mm		in / mm
302-12-12	¾"	¾"		2.48 / 62.99	1.88 / 47.75	1.50 / 38.10	1 5/16–12	0.66 / 16.76
302-16-16	1"	1"		2.48 / 62.99	1.88 / 47.75	1.75 / 44.45	1 5/16–12	0.88 / 22.35
302-20-20	1¼"	1¼"		3.00 / 76.20	2.4 / 60.96	2.00 / 50.80	1 5/8–12	1.1 / 27.94
302-24-24	1½"	1½"		3.01 / 76.45	2.41 / 61.21	2.38 / 60.45	1 7/8–12	1.3 / 33.02
302-32-32	2"	2"		3.50 / 88.90	2.4 / 60.96	2.81 / 71.37	2 1/2–12	1.8 / 45.72
602-12-12	¾"		¾"	2.48 / 62.99	1.88 / 47.75	1.62 / 41.15	1 5/16–12	0.66 / 16.76
602-16-16	1"		1"	2.48 / 62.99	1.88 / 47.75	1.87 / 47.50	1 5/16–12	0.88 / 22.35
602-20-20	1¼"		1¼"	2.52 / 64.01	2.23 / 56.64	2.12 / 53.85	1 5/8–12	1.1 / 27.94
602-24-24	1½"		1½"	3.19 / 81.03	2.41 / 61.21	2.50 / 63.50	1 7/8–12	1.3 / 33.02
602-32-32	2"		2"	3.60 / 91.44	3 / 76.20	3.12 / 79.25	2 1/2–12	1.8 / 45.72

Note: Pressure rating of valve determines assembly pressure rating.

Step size available-call for details.

4 BOLT FLANGE CONNECTOR ADAPTOR





Part Number	Tube O.D.	Flange Size Code 61	Flange Size Code 62	A	B	C	D	E	F	Thread	K	S
				in / mm		in / mm	in / mm	in / mm	in / mm		in / mm	
302-12-12/SF	¾"	¾"		2.48 / 62.99	1.88 / 47.75	1.875 / 47.63	0.875 / 22.23	2.06 / 52.32	2.56 / 65.02	1 5/16–12	0.66 / 16.76	⅜–16
302-16-16/SF	1"	1"		2.48 / 62.99	1.88 / 47.75	2.06 / 52.32	1.03 / 26.16	2.31 / 58.67	2.75 / 69.85	1 5/16–12	0.88 / 22.35	⅜–16
302-20-20/SF	1¼"	1¼"		3.00 / 76.20	2.4 / 60.96	2.31 / 58.67	1.18 / 29.97	2.88 / 73.15	3.12 / 79.25	1 5/8–12	1.1 / 27.94	7/16–14
302-24-24/SF	1½"	1½"		3.01 / 76.45	2.41 / 61.21	2.75 / 69.85	1.40 / 35.56	3.25 / 82.55	3.69 / 93.73	1 7/8–12	1.3 / 33.02	½–13
302-32-32/SF	2"	2"		3.50 / 88.90	2.406 / 61.11	3.06 / 77.72	1.68 / 42.67	3.81 / 96.77	4.00 / 101.60	2 1/2–12	1.8 / 45.72	½–13
602-12-12/SF	¾"		¾"	2.48 / 62.99	1.886 / 47.90	2.00 / 50.80	0.94 / 23.88	2.38 / 60.45	2.81 / 71.37	1 5/16–12	0.66 / 16.76	⅜–16
602-16-16/SF	1"		1"	2.48 / 62.99	1.886 / 47.90	2.25 / 57.15	1.10 / 27.94	2.75 / 69.85	3.19 / 81.03	1 5/16–12	0.88 / 22.35	7/16–14
602-20-20/SF	1¼"		1¼"	3.00 / 76.20	2.051 / 52.79	2.625 / 66.68	1.25 / 31.75	3.06 / 77.72	3.75 / 95.25	1 5/8–12	1.1 / 27.94	½–13
602-24-24/SF	1½"		1½"	3.01 / 76.45	2.236 / 56.79	3.125 / 79.38	1.44 / 36.58	3.75 / 95.25	4.44 / 112.78	1 7/8–12	1.3 / 33.02	⅝–11
602-32-32/SF	2"		2"	3.50 / 88.90	2.826 / 71.78	3.81 / 96.77	1.75 / 44.45	4.50 / 114.30	5.25 / 133.35	2 1/2–12	1.8 / 45.72	¾–10

Note: Pressure rating of valve determines assembly pressure rating.

Step size available-call for details.

3/00

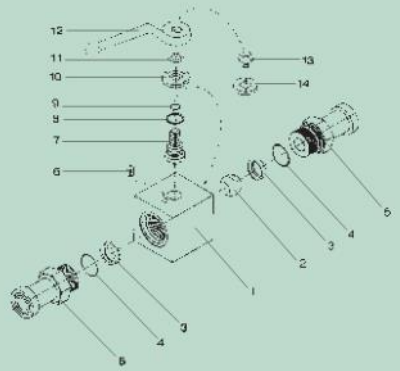
STAUFF®



SPECIFICATIONS

- ½", ¾" & 1" Block Body Style
- SAE Code 61 & 62
- Split Flange Connectors
- Delrin +MoS2 Ball Seats
- Viton O-Rings
- Pressure Range: Up to 6000 PSI (400 bar)
- Carbon Steel Construction Standard; Other Material Available To Order.
- Temperature Range: -20°F to 212°F (-29°C to 100°C)
- Zinc Plated Body

TECHNICAL INFORMATION



Item Number	Quantity	Description
1	1	Housing
2	1	Ball
3*	2	Seat
4*	2	Connector O-Ring
5	2	Connector
6	1	Stop Pin
7	1	Stem
8*	1	Thrust Ring
9*	1	Stem O-Ring
10	1	Cam Plate
11	1	Snap Ring
12	1	Handle
13	1	Stem Screw
14	1	Flow Indicator

*Included in Seal Kit

OPTIONS

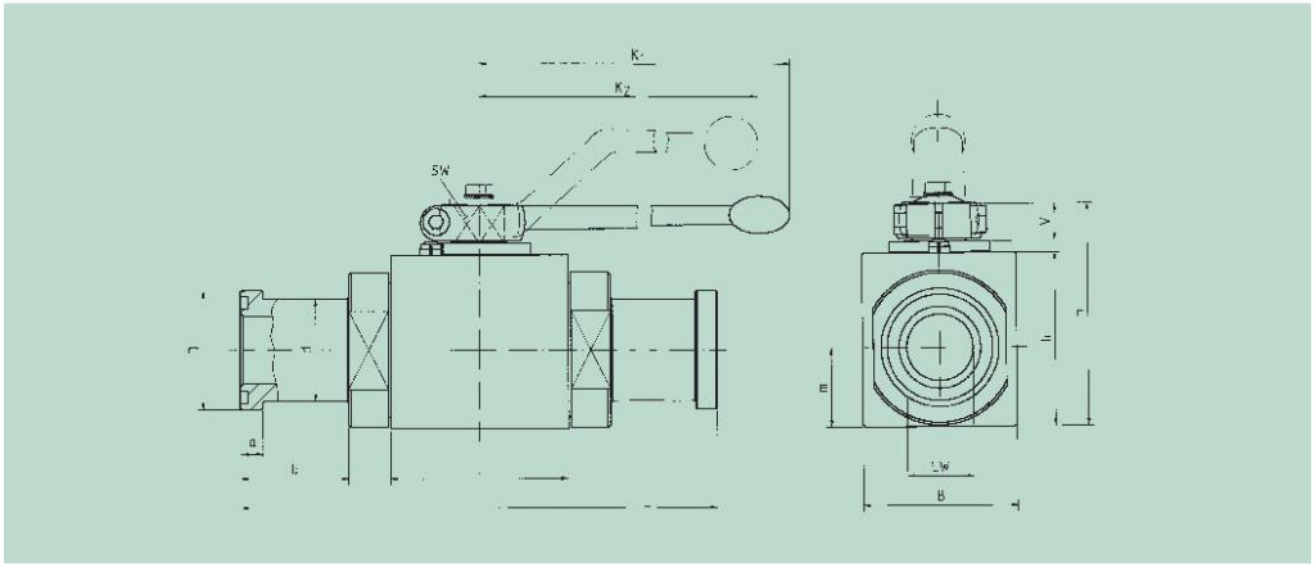
- Split Flange Kits Available SF Series for Both Code 61 & Code 62
- Locking Kits
- Pneumatic & Electric Actuator Packages Available (see page 204)

SIZE		PART NUMBER WITHOUT FLANGES	PART NUMBER WITH FLANGES	MAXIMUM WORKING PRESSURE	*ACTUATOR CODE	
					EDA	ESA
1/2"	CODE 61	BBV22080001M	BBV22080001M/SF	3000 PSI	A	B
	CODE 62	BBV23080001M	BBV23080001M/SF	5000 PSI	A	B
3/4"	CODE 61	BBV22120001M	BBV22120001M/SF	3000 PSI	C	C
	CODE 62	BBV23120001M	BBV23120001M/SF	5000 PSI	C	C
1"	CODE 61	BBV22160001M	BBV22160001M/SF	3000 PSI	C	C
	CODE 62	BBV23160001M	BBV23160001M/SF	5000 PSI	C	C

* See Actuator Code on Page 204.

3/00

DIMENSIONAL INFORMATION



CODE 61

SIZE	LW	L	I	B	H	h	m	V	SW	K1	K2	D	d	a	b	Weight
	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	lbs / kg
½"	0.51 / 12.95	5.94 / 150.88	1.89 / 48.01	1.38 / 35.05	2.13 / 54.10	1.57 / 39.88	0.75 / 19.05	0.43 / 10.92	0.35 / 9	5.91 / 150.11	4.53 / 115.06	1.19 / 30.23	0.94 / 23.88	0.27 / 6.86	1.73 / 43.94	2.0 / 0.91
¾"	0.75 / 19.05	6.38 / 162.05	2.44 / 61.98	1.93 / 49.02	2.95 / 74.93	2.24 / 56.90	0.96 / 24.38	0.55 / 13.97	0.55 / 9	7.87 / 199.90	6.30 / 160.02	1.50 / 38.10	1.25 / 31.75	0.27 / 6.86	1.67 / 194.82	3.5 / 1.59
1"	0.98 / 24.89	7.01 / 178.05	2.60 / 66.04	2.28 / 57.91	3.27 / 83.06	2.56 / 65.02	1.16 / 29.46	0.55 / 13.97	0.55 / 14	7.87 / 199.90	6.30 / 160.02	1.75 / 44.45	1.50 / 38.10	0.32 / 8.13	1.57 / 39.88	5.0 / 2.27

CODE 62

SIZE	LW	L	I	B	H	h	m	V	SW	K1	K2	D	d	a	b	Weight
	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	lbs / kg
½"	0.51 / 12.95	5.94 / 150.88	1.89 / 48.01	1.38 / 35.05	2.13 / 54.10	1.57 / 39.88	0.75 / 19.05	0.43 / 10.92	9 / 9	5.91 / 150.11	4.53 / 115.06	1.25 / 31.75	0.94 / 23.88	0.31 / 7.87	1.57 / 39.88	2.0 / 0.91
¾"	0.75 / 19.05	6.85 / 162.05	2.44 / 61.98	1.93 / 49.02	2.95 / 74.93	2.24 / 56.90	0.96 / 24.38	0.55 / 13.97	14 / 9	7.87 / 199.90	6.30 / 160.02	1.63 / 41.40	1.25 / 31.75	0.35 / 8.89	1.85 / 46.99	3.5 / 1.59
1"	0.87 / 24.89	7.80 / 178.05	2.60 / 66.04	2.28 / 57.91	3.27 / 83.06	2.56 / 65.02	1.16 / 29.46	0.55 / 13.97	14 / 14	7.87 / 199.90	6.30 / 160.02	1.87 / 47.50	1.50 / 38.10	0.38 / 9.65	1.97 / 50.04	5.0 / 2.27

ORDERING INFORMATION

BBV 2 2 08 0 0 0 1 M LD

PRODUCT TYPE
Block Body Valve

NO. OF PORTS

CONNECTOR TYPE
2 – SAE CODE 61
3– SAE CODE 62

CONNECTOR SIZE
08 – 1/2"
12 – 3/4"
16 – 1"

BODY MATERIAL
0 – Carbon Steel
6 – Zinc Plated Carbon Steel

BALL & STEM MATERIAL
0 – Carbon Steel

SEAT MATERIAL
0 – Delrin

O RING MATERIAL
1 – Viton

MANUFACTURING CODE

LOCKING KIT
LD – Locking Device
OMIT – No Locking Device

3/00



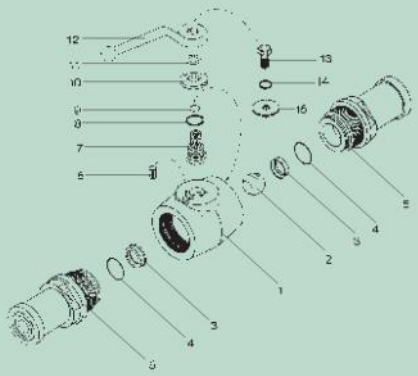
SPECIFICATIONS

- 1¼", 1½" & 2" Forged Body Style
- Pressure Range: Up to 6000 PSI (400 bar)
- SAE Code 61 & 62
- Split Flange Connectors
- Delrin +MoS2 Ball Seats
- Viton O-Rings
- Carbon Steel Construction
- Temperature Range: -20°F to 212°F (-29°C to 100°C)

OPTIONS

- Split Flange Kits Available SF Series for Both Code 61 & Code 62
- Locking Kits
- Pneumatic & Electric Actuator Packages Available (see page 204)

TECHNICAL INFORMATION



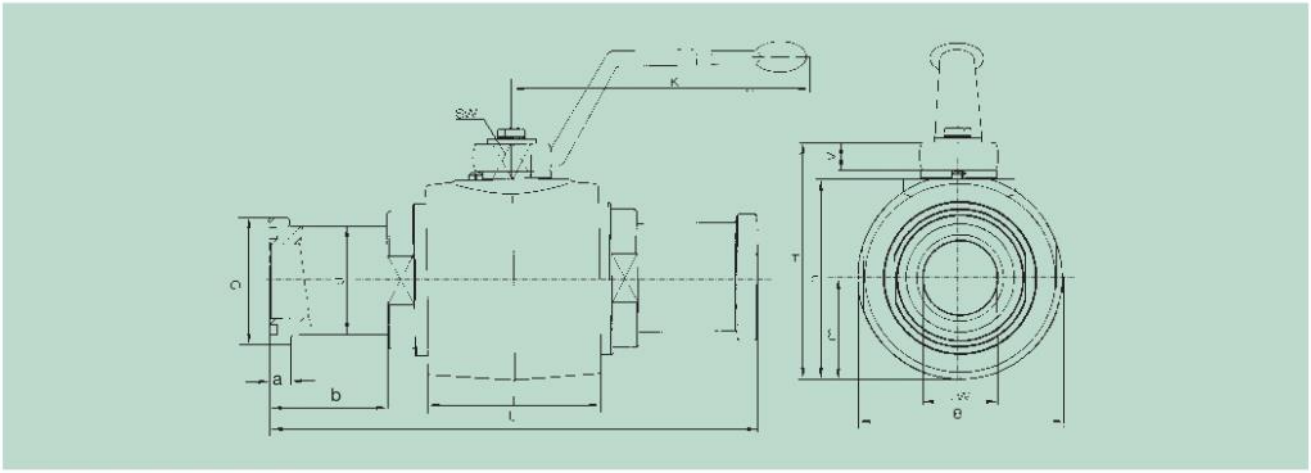
Item Number	Quantity	Description
1	1	Housing
2	1	Ball
3*	2	Seat
4*	2	Connector O-Ring
5	2	Connector
6	1	Stop Pin
7	1	Stem
8*	1	Thrust Ring
9*	1	Stem O-Ring
10	1	Cam Plate
11	1	Snap Ring
12	1	Steel Handle
13	1	Screw
14	1	Lock Washer
15	1	Washer

*Included in Seal Kit

SIZE		PART NUMBER WITHOUT FLANGES	PART NUMBER WITH FLANGES	MAXIMUM WORKING PRESSURE	*ACTUATOR CODE	
					EDA	ESA
1¼"	CODE 61	FBV22200001M	FBV22200001M/SF	3000 PSI	E	D
	CODE 62	FBV23200001M	FBV23200001M/SF	6000 PSI	E	E
1½"	CODE 61	FBV22240001M	FBV22240001M/SF	3000 PSI	E	D
	CODE 62	FBV23240001M	FBV23240001M/SF	6000 PSI	E	E
2"	CODE 61	FBV22320001M	FBV22320001M/SF	3000 PSI	E	D
	CODE 62	FBV23320001M	FBV23320001M/SF	6000 PSI	E	E

* See Actuator Code on Page 204.

DIMENSIONAL INFORMATION



CODE 61

SIZE	LW	L	I	B	H	h	m	V	SW	K1	D	d	a	b	Weight
	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	lbs / kg
1¼"	1.18 / 29.97	7.50 / 190.50	3.15 / 80.01	3.19 / 81.03	4.21 / 106.93	3.39 / 86.11	1.59 / 40.39	0.65 / 16.51	0.67 / 17	11.81 / 299.97	2.00 / 50.80	1.70 / 43.18	0.32 / 8.13	1.38 / 35.05	8 / 3.64
1½"	1.42 / 36.07	9.09 / 230.89	3.35 / 85.09	3.94 / 100.08	4.88 / 123.95	4.06 / 103.12	1.97 / 50.04	0.65 / 16.51	0.67 / 17	11.81 / 299.97	2.37 / 60.20	1.98 / 50.29	0.32 / 8.13	2.09 / 53.09	14 / 6.36
2"	1.89 / 48.01	9.13 / 231.90	3.94 / 100.08	4.65 / 118.11	5.43 / 137.92	4.61 / 117.09	2.32 / 58.93	0.65 / 16.51	0.67 / 17	11.81 / 299.97	2.81 / 71.37	2.45 / 62.23	0.38 / 8.13	1.81 / 45.97	20 / 9.09

CODE 62

SIZE	LW	L	I	B	H	h	m	V	SW	K1	D	d	a	b	Weight
	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	lbs / kg
1¼"	1.06 / 26.92	8.78 / 223.01	3.15 / 80.01	3.19 / 81.03	4.21 / 106.93	3.39 / 86.11	1.59 / 40.39	0.65 / 16.51	0.67 / 17	11.81 / 299.97	2.13 / 54.10	1.73 / 43.94	0.41 / 10.41	2.01 / 51.05	8.5 / 3.86
1½"	1.26 / 32.00	11.06 / 280.92	3.35 / 85.09	3.94 / 100.08	4.88 / 123.95	4.06 / 103.12	1.97 / 50.04	0.65 / 16.51	0.67 / 17	11.81 / 299.97	2.50 / 63.50	2.01 / 51.05	0.50 / 12.70	3.07 / 77.98	15 / 6.82
2"	1.77 / 44.96	12.44 / 315.98	3.94 / 100.08	4.65 / 118.11	5.43 / 137.92	4.61 / 117.09	2.32 / 58.93	0.65 / 16.51	0.67 / 17	11.81 / 299.97	3.13 / 79.50	2.65 / 67.31	0.50 / 12.70	3.46 / 87.88	21 / 9.55

ORDERING INFORMATION

FBV 2 3 24 0 0 0 1 M LD

BODY STYLE
Forged Body Valve

NUMBER OF PORTS

CONNECTOR STYLE
2 – CODE 61 SAE FLANGE
3 – CODE 62 SAE FLANGE

CONNECTOR SIZE
20 – 1¼"
24 – 1½"
32 – 2"

BODY MATERIAL
0 - Carbon Steel
1 - 316 Stainless
6 - Zinc Plated Carbon Steel

BALL & STEM MATERIAL
0 - Carbon Steel
1 - 316 Stainless Steel

BALL SEAT MATERIAL
0 - Delrin (standard)
1 - Polyamide
2 - Buna (NBR)
3 - Viton
4 - Teflon (PTFE)

O RING MATERIAL
0 - Buna (NBR)
1 - Viton (standard)
2 - Teflon (PTFE)
3 - EPDM (EPR)

MANUFACTURING CODE

LOCKING KIT
LD – Locking Device
OMIT – No Locking Device

3/00

STAUFF®

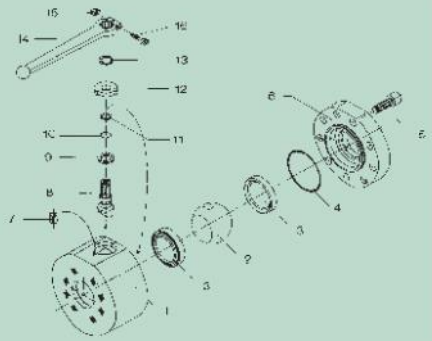


SPECIFICATIONS

Dual Pattern Code 61 and Code 62

- ½″ – 2″
- Delrin +MoS2 Ball Seats
- Viton O-Rings
- Direct Mount Saves Time and Money
- Machined Body Parts for Reduced Torque Operation.
- Pressure Range: Up to 6000 PSI (400 bar)
- Temperature Range: -30°F to 212°F (-34°C to 100°C)
- Carbon Steel Construction

TECHNICAL INFORMATION



Item Number	Quantity	Description
1	1	Housing
2	1	Ball
3*	2	Seat
4*	1	Cover O-Ring
5	7 to 9**	Cover Screws
6	1	Cover
7	1	Stop Pin
8	1	Stem
9*	1	Thrust Ring
10*	1	Stem O-Ring
11*	1	Back-up Ring
12	1	Cam Plate
13	1	Snap Ring
14	1	Handle
15	1	Nut
16	1	Screw

*Included in Seal Kit
** DEPENDING ON VALVE SIZE

OPTIONS

- Split Flange Kits Available SF Series for Both Code 61 & Code 62
- Locking Kits
- Pneumatic & Electric Actuator Packages Available (see page 204)

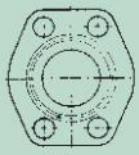
SIZE		PART NUMBER	MAXIMUM WORKING PRESSURE	*ACTUATOR CODE	
				EDA	ESA
1/2″	CODE 61	BBV29080001M	5000 PSI	C	B
	CODE 62		6000 PSI	C	B
3/4″	CODE 61	BBV29120001M	5000 PSI	C	C
	CODE 62		6000 PSI	C	C
1″	CODE 61	BBV29160001M	5000 PSI	C	C
	CODE 62		6000 PSI	C	C
1 1/4″	CODE 61	BBV29200001M	4000 PSI	E	D
	CODE 62		6000 PSI	E	E
1 1/2″	CODE 61	BBV29240001M	3000 PSI	E	D
	CODE 62		6000 PSI	E	E
2″	CODE 61	BBV29320001M	3000 PSI	E	E
	CODE 62		6000 PSI	E	E

* See Actuator Code on Page 204.

FLANGE POSITION
CODE 61

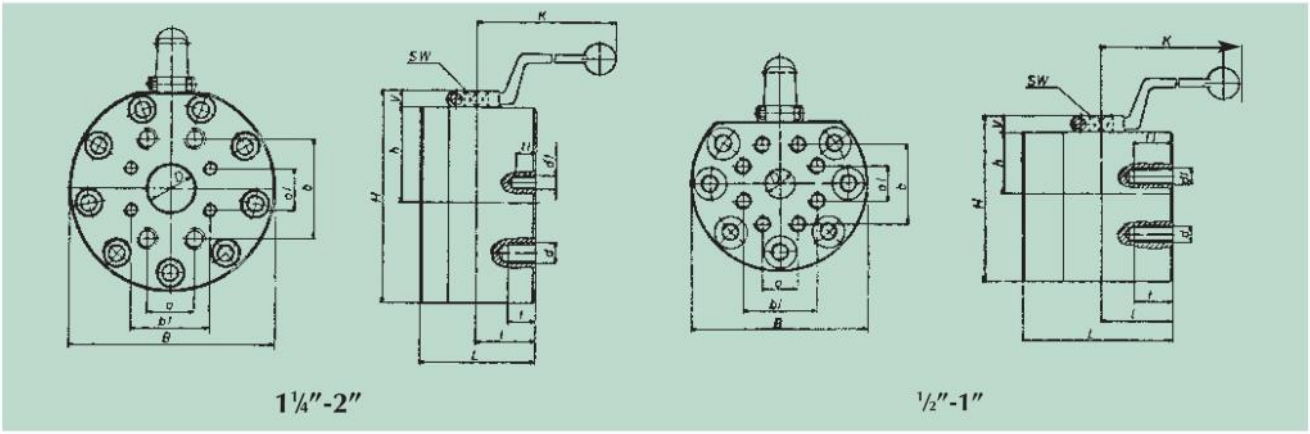


CODE 62



3/00

DIMENSIONAL INFORMATION



1¼"-2" ½"-1"

SIZE	D	L	I	B	H	h	V	SW	K	a	b	a1	b1
	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm
½"	0.59 / 14.99	2.95 / 74.93	1.38 / 35.05	3.46 / 87.88	3.46 / 87.88	1.22 / 30.99	0.51 / 12.95	329.03 / 12	6.3 / 160.02	0.72 / 18.29	1.59 / 40.39	0.69 / 17.53	1.50 / 38.10
¾"	0.79 / 20.07	3.15 / 80.01	1.38 / 35.05	3.86 / 98.04	3.94 / 100.08	1.44 / 36.58	0.55 / 13.97	354.84 / 14	6.3 / 160.02	0.94 / 23.88	2.00 / 50.80	0.87 / 22.10	1.87 / 47.50
1"	0.98 / 24.98	3.46 / 87.88	1.50 / 38.10	4.65 / 118.11	4.45 / 113.03	1.56 / 39.62	0.55 / 13.97	354.84 / 14	6.3 / 160.02	1.03 / 26.16	2.06 / 52.32	1.09 / 27.69	2.25 / 57.15
1¼"	1.26 / 32.00	3.94 / 100.08	1.97 / 50.04	5.71 / 145.03	6.22 / 157.99	2.68 / 68.07	0.67 / 17.02	432.26 / 17	11.81 / 299.97	1.25 / 31.75	2.63 / 66.80	1.19 / 30.23	2.31 / 58.67
1½"	1.50 / 38.10	4.33 / 109.98	2.17 / 55.12	6.50 / 165.10	7.01 / 178.05	3.07 / 77.98	0.67 / 17.02	432.26 / 17	11.81 / 299.97	1.44 / 36.58	3.13 / 79.50	1.40 / 35.56	2.75 / 69.85
2"	1.89 / 48.01	4.57 / 116.08	2.28 / 57.91	7.80 / 198.12	8.27 / 210.06	3.70 / 93.98	0.67 / 17.02	432.26 / 17	11.81 / 299.97	1.75 / 44.45	3.81 / 96.77	1.69 / 42.93	3.06 / 77.72

SIZE	UNC Thread d	UNC Thread d_1	t	t_1	Weight
			in / mm	in / mm	lb / kg
½"	5/16"	5/16"	0.71 / 18.03	0.71 / 18.03	5.50 / 2.50
¾"	3/8"	3/8"	0.71 / 18.03	0.71 / 18.03	8.58 / 3.90
1"	7/16"	3/8"	0.79 / 20.07	0.79 / 20.07	13.20 / 6.00
1¼"	1/2"	7/16"	0.87 / 22.10	0.87 / 22.10	25.52 / 11.60
1½"	5/8"	1/2"	0.75 / 19.05	0.94 / 23.88	35.64 / 16.20
2"	3/4"	1/2"	0.75 / 19.05	1.10 / 27.94	54.78 / 24.90

ORDERING INFORMATION

BBV 2 9 16 0 0 0 1 M LD

PRODUCT TYPE
Block Body Valve

NO. OF PORTS

CONNECTOR STYLE
9 – Dual Pattern SAE Flange

CONNECTOR SIZE
08 – 1/2"
12 – 3/4"
16 – 1"
20 – 1¼"
24 – 1½"
32 – 2"

BODY MATERIAL
0 – Carbon Steel
6 – Zinc Plated Carbon Steel

BALL & STEM MATERIAL
0 – Carbon Steel

BALL SEAT MATERIAL
0 – Delrin

O RING MATERIAL
1 – Viton

MANUFACTURING CODE

LOCKING KIT
LD – Locking Device
OMIT – No Locking Device

3/00

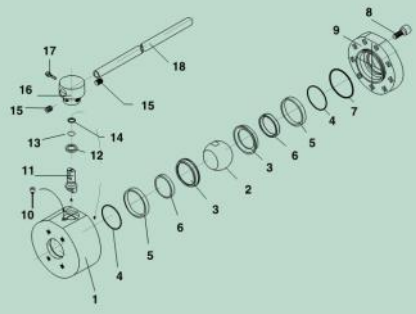
STAUFF®



SPECIFICATION

- 2½ – 5″ Code 61 Style Flange Connection
- Delrin +MoS_2 Ball Seats
- Viton O-Rings
- Direct Mount, saves time and money
- Machined Body Parts for Reduced Torque Operation.
- Pressure Range: Up to 2500 PSI** (160 bar)
- Temperature Range: -30°F to 212°F (-34°C to 100°C)
- Carbon Steel Construction
- Removable Adjustable Handle

TECHNICAL INFORMATION



Item Number	Quantity	Description
1	1	Housing
2	1	Ball
3*	2	Seat
4*	2	O-Ring
5	2	Outer S/S Support Ring
6	2	Inner S/S Support Ring
7*	1	Cover O-Ring
8	9	Cover Bolts
9	1	Cover
10	1	Stop Screw
11	1	Stem
12*	1	Thrust Ring
13*	1	Stem O-Ring
14*	1	Back-up Ring
15	2	Set Screws
16	1	Stem/Handle Adaptor
17	1	Screw
18	1	Steel Handle

*Included in Seal Kit

OPTIONS

- Split Flange Kits Available SF Series for Both Code 61 & Code 62
- Locking Kits
- Pneumatic & Electric Actuator Packages Available (see page 204)

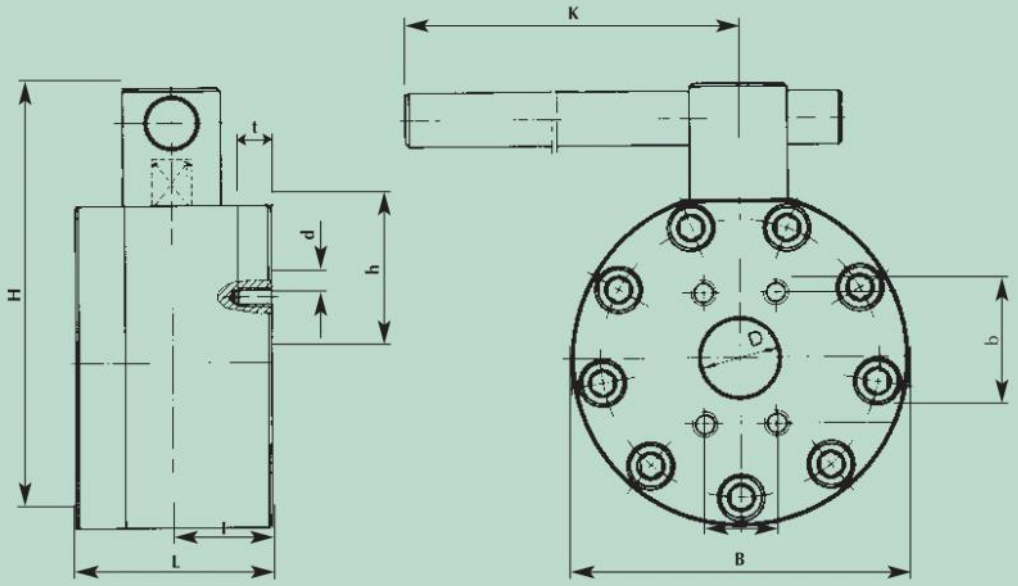
** Working Pressure for these valves is limited to the SAE Flange Ratings, higher pressures can be accommodated with special Flange Connectors. See "BBVF" Series on page 191.

SIZE		PART NUMBER	MAXIMUM WORKING PRESSURE**	*ACTUATOR CODE	
				EDA	ESA
2½″	CODE 61	BBV27400001M	2500 PSI	E	G
3″	CODE 61	BBV27480001M	2000 PSI	E	G
4″	CODE 61	BBV27640001M	500 PSI	E	G
5″	CODE 61	BBV27800001M	500 PSI	E	G

* See Actuator Code on Page 204.

3/00

DIMENSIONAL INFORMATION



SIZE	D	L	I	B	H	h	SW	K	a	b	UNC Thread d	T	WEIGHT
	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm		in / mm	lb / kg
2½″	2.48 / 62.99	5.91 / 150.11	2.95 / 74.93	7.80 / 198.12	10.16 / 258.06	3.70 / 93.98	0.75 / 19	23.62 / 599.95	2.00 / 50.80	3.50 / 88.90	½″	0.75 / 19.05	67.10 / 30.50
3″	2.99 / 75.95	5.51 / 139.95	2.76 / 70.10	8.27 / 210.06	10.91 / 277.11	3.94 / 100.08	0.75 / 19	23.62 / 599.95	2.44 / 61.98	4.19 / 106.43	⅝″	0.94 / 23.88	68.20 / 31.00
4″	3.94 / 100.08	6.69 / 169.93	3.35 / 85.09	10.16 / 258.06	12.83 / 325.88	4.80 / 121.92	0.94 / 24	35.43 / 899.92	3.06 / 77.72	5.13 / 130.30	⅝″	0.94 / 23.88	121.00 / 55.00
5″	4.65 / 118.11	8.27 / 210.06	4.13 / 104.90	11.61 / 294.89	14.84 / 376.94	5.51 / 139.95	1.42 / 36	35.43 / 899.92	3.63 / 92.20	6.00 / 152.40	¾″	1.18 / 29.97	193.60 / 88.00

ORDERING INFORMATION

BBV	2	7	40	0	0	0	1	M	LD

PRODUCT TYPE
Block Body Valve

NO. OF PORTS

CONNECTOR STYLE
7 – CODE 61 SAE Flange Direct Mount

CONNECTOR SIZE
40 – 2 ½″
48 – 3″
64 – 4″
80 – 5″

BODY MATERIAL
0 – Carbon Steel
6 – Zinc Plated Carbon Steel

BALL & STEM MATERIAL
0 – Carbon Steel

BALL SEAT MATERIAL
0 – Delrin

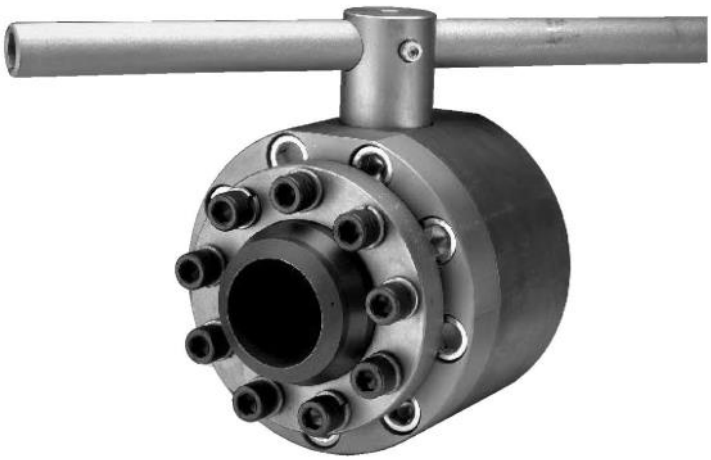
O RING MATERIAL
1 – Viton

MANUFACTURING CODE

LOCKING KIT
LD – Locking Device
OMIT – No Locking Device

3/00

STAUFF®



SPECIFICATIONS

Direct Mount Valves

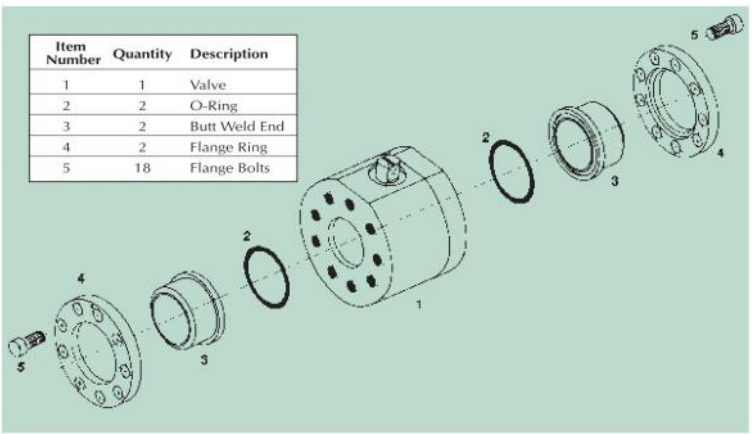
- Two-Way Shut-off Valve
- 2½" – 5" with Special Flanges for up to 4200 PSI (250 bar) Working Pressure at a 3:1 Safety Factor
- Temperature Range: -30°F to 212°F (-34°C to 100°C)
- Carbon Steel Construction
- Removable Adjustable Handle

OPTIONS

- Actuator Packages
- Limit Switches
- Safety Lock out

TECHNICAL INFORMATION

Item Number	Quantity	Description
1	1	Valve
2	2	O-Ring
3	2	Butt Weld End
4	2	Flange Ring
5	18	Flange Bolts

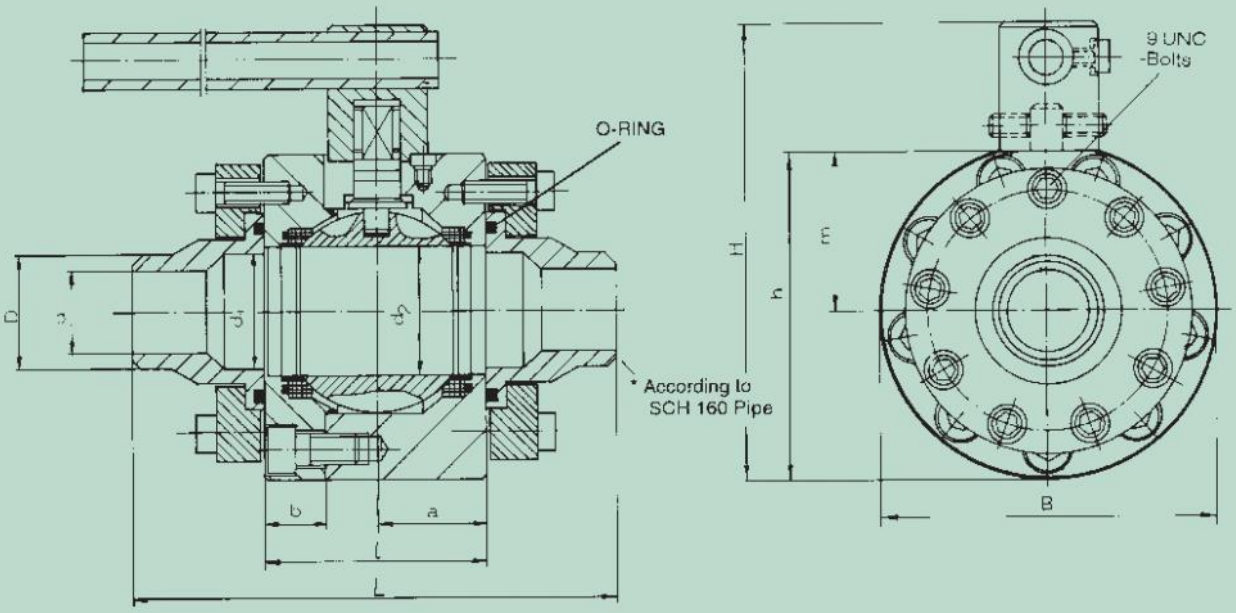


SIZE	PART NUMBER	MAXIMUM WORKING PRESSURE	*ACTUATOR CODE	
			EDA	ESA
2½"	BBVF27400001M	4200 PSI	E	**
3"	BBVF27480001M	4100 PSI	F	**
4"	BBVF27640001M	4000 PSI	H	**
5"	BBVF27800001M	3860 PSI	H	**

* See Actuator Code on Page 204.
** ON REQUEST CONTACT FACTORY

3/00

DIMENSIONAL INFORMATION



*Specify pipe schedule when ordering

SIZE	D	d	d_1	d_2	a	b	l	L	H	h	m	B	SCREW	WT
	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm		lb / kg
2½″	2.87 / 72.90	2.13 / 54.10	2.37 / 60.20	2.48 / 62.99	2.95 / 74.93	1.69 / 42.93	5.91 / 150.11	9.84 / 249.94	10.16 / 258.06	7.60 / 193.04	3.70 / 93.98	7.80 / 198.12	½″x1½″	84 / 38.2
3″	3.50 / 88.90	2.63 / 66.80	3.11 / 78.99	2.99 / 75.95	2.76 / 70.10	1.38 / 35.05	5.51 / 139.95	10.24 / 260.10	10.91 / 277.11	8.07 / 204.98	3.93 / 99.82	8.27 / 210.06	⅝″x1¾″(2″)	94 / 42.7
4″	4.50 / 114.30	3.44 / 87.38	3.86 / 98.04	3.93 / 99.82	3.35 / 85.09	1.77 / 44.96	6.69 / 169.93	12.99 / 329.95	12.83 / 325.88	9.88 / 250.95	4.80 / 121.92	10.16 / 258.06	⅝″x1¾″	155 / 70.5
5″	5.56 / 141.22	4.31 / 106.47	4.74 / 120.40	4.64 / 117.86	4.13 / 104.90	1.89 / 48.01	8.27 / 210.06	14.57 / 370.08	14.84 / 376.94	11.31 / 287.27	5.51 / 139.95	11.61 / 294.89	¾″x2¼″	257 / 116.8

ORDERING INFORMATION

BBVF 2 7 40 0 0 0 1 M LD

PRODUCT TYPE
Block Body Valve Complete With Special Flange

NO. OF PORTS

CONNECTOR STYLE
7– SAE CODE 61 Direct Mount

CONNECTOR SIZE
40 – 2 ½″
48 – 3″
64 – 4″
80 – 5″

BODY MATERIAL
0 – Carbon Steel
6 – Zinc Plated Carbon Steel

BALL & STEM MATERIAL
0 – Carbon Steel

BALL SEAT MATERIAL
0 – Delrin

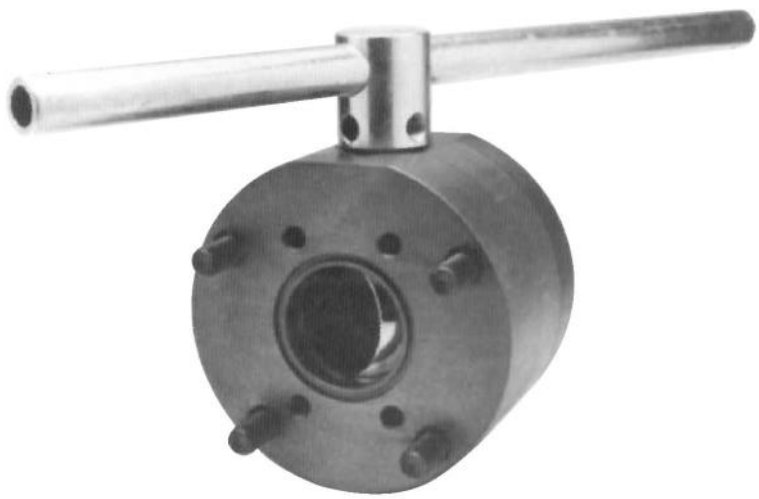
O RING MATERIAL
1 – Viton

MANUFACTURING CODE

LOCKING KIT
LD – Locking Device
OMIT – No Locking Device

3/00

STAUFF®



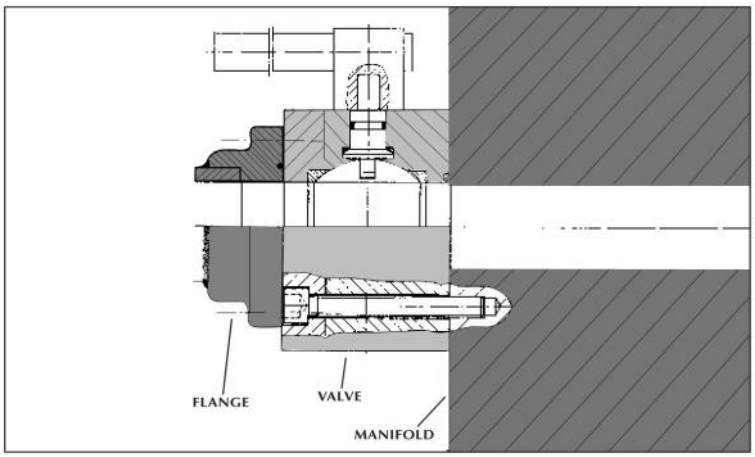
SPECIFICATIONS

- ½″ – 2″ SAE/Manifold Valve in Code 61 and 62
- 2½″ – 5″ Available OnRequest
- Pressure Range: Up to 6000 PSI (400 bar)
- Temperature Range: -30°F to 212°F (-34°C to 100°C)
- Valve Connects Directly to Manifold Block and Accepts Code 61 or Code 62 SAE Flange
- Carbon Steel Construction

OPTIONS

- Actuator Packages
- Limit Switches
- Safety Lock out

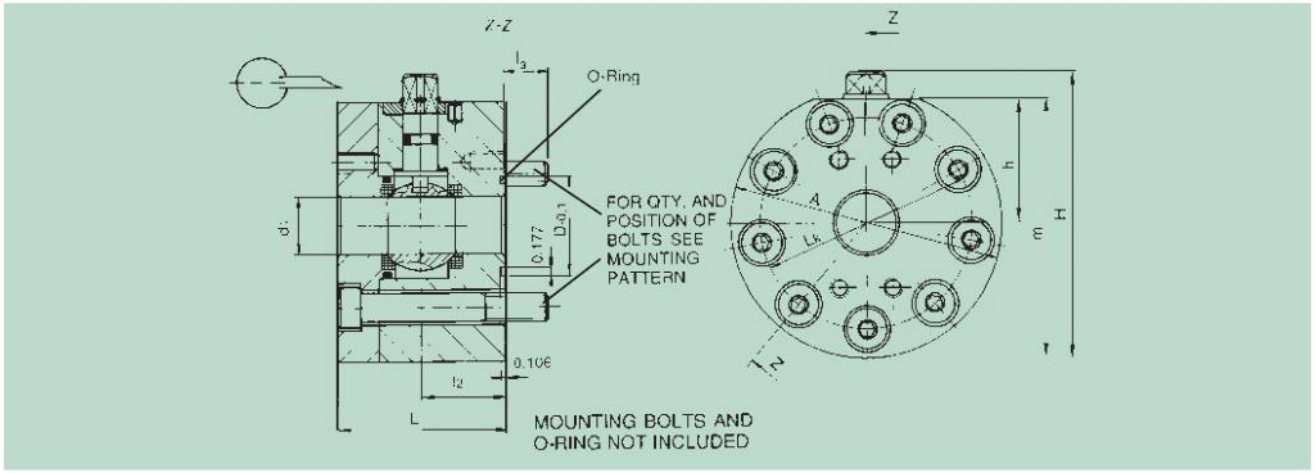
TYPICAL INSTALLATION



SIZE	SAE FLANGE STYLES	PART NUMBER	MAXIMUM WORKING PRESSURE
1/2″	CODE 61	BBVD27080001M	5000 PSI
	CODE 62	BBVD28080001M	6000 PSI
3/4″	CODE 61	BBVD27120001M	5000 PSI
	CODE 62	BBVD28120001M	6000 PSI
1″	CODE 61	BBVD27160001M	5000 PSI
	CODE 62	BBVD28160001M	6000 PSI
1 1/4″	CODE 61	BBVD27200001M	4000 PSI
	CODE 62	BBVD28200001M	6000 PSI
1 1/2″	CODE 61	BBVD27240001M	3000 PSI
	CODE 62	BBVD28240001M	6000 PSI
2″	CODE 61	BBVD27320001M	3000 PSI
	CODE 62	BBVD28320001M	6000 PSI

3/00

DIMENSIONAL INFORMATION



MOUNTING HOLE DIMENSIONS

PATTERN	SIZE	d_1	D_2	Lk	A	B
		in / mm		in / mm		
A	½"	0.59 / 14.99	½"	2.28 / 57.91		
	¾"	0.79 / 20.07	½"	3.03 / 76.96		
	1"	0.98 / 24.89	9/16"	3.54 / 89.92		
B	1¼"	1.26 / 32.00	½"	4.57 / 116.08		
	1½"	1.50 / 38.10	⅝"	5.31 / 134.87		
	2"	1.89 / 48.01	¾"	6.50 / 165.10		

SIZE	L	l_2	h	m	H	A	Lk	D_{01}	l_3	Screws	Wt
	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm		lb / ml
½"	2.95 / 74.93	1.38 / 35.05	1.22 / 30.99	2.76 / 70.10	3.27 / 83.06	3.07 / 77.98	2.28 / 57.91	1.26 / 32.00	0.59 / 14.99	½"x 3"	5.50 / 2.5
¾"	3.75 / 95.25	1.38 / 35.05	1.44 / 36.58	3.37 / 85.60	3.94 / 100.08	3.86 / 98.04	3.03 / 76.96	1.26 / 32.00	0.59 / 14.99	½"x 3¼"	8.60 / 3.9
1"	3.46 / 87.88	1.50 / 38.10	1.56 / 39.62	3.88 / 98.55	4.45 / 113.03	4.65 / 118.11	3.54 / 89.92	1.52 / 38.61	0.59 / 14.99	9/16"x 3½"	13.20 / 6.0
1¼"	3.94 / 100.08	1.97 / 50.04	2.68 / 68.07	5.53 / 140.46	6.22 / 157.99	5.71 / 145.03	4.57 / 116.08	1.76 / 44.70	1.18 / 29.97	½"x 4½"	25.50 / 11.6
1½"	4.33 / 109.98	2.17 / 55.12	3.07 / 77.98	6.32 / 160.53	7.01 / 178.05	6.50 / 165.10	5.31 / 134.87	2.13 / 54.10	1.18 / 29.97	⅝"x 4¾"	36.00 / 16.4
2"	4.57 / 116.08	2.28 / 57.91	3.70 / 93.98	7.60 / 193.04	8.27 / 210.06	7.80 / 198.12	6.50 / 165.10	2.51 / 63.75	1.18 / 29.97	¾"x 5"	55.00 / 25.0

ORDERING INFORMATION

BBVD 2 7 16 0 0 0 1 M LD

PRODUCT TYPE
Block Body
SAE Flange
Direct Mount

NO. OF PORTS

CONNECTOR STYLE
7 – CODE 61 SAE Flange
8 – CODE 62 SAE Flange

CONNECTOR SIZE
08 – 1/2"
12 – 3/4"
16 – 1"
20 – 1¼"
24 – 1½"
32 – 2"

BODY MATERIAL
0 – Carbon Steel
6 – Zinc Plated Carbon Steel

BALL & STEM MATERIAL
0 – Carbon Steel

BALL SEAT MATERIAL
0 – Delrin

O RING MATERIAL
1 – Viton

MANUFACTURING CODE

LOCKING KIT
LD – Locking Device
OMIT – No Locking Device

3/00

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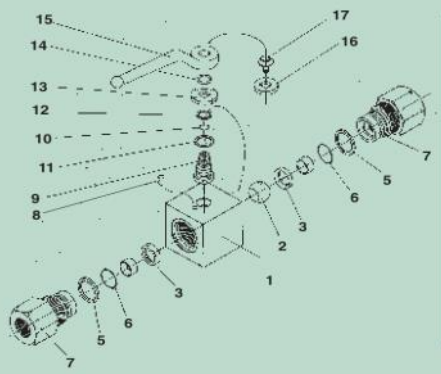
SPECIFICATIONS

- Two-Way Valves
- 1/4" – 1" Fully Ported
- NPT Connections
- Pressure Range: Up to 12,000 PSI (825 bar)
- Temperature Range: -30°F to 212°F (-34°C to 100°C)
- Carbon Steel
- Zinc Chromate Finish

OPTIONS

- Stainless Steel Construction

TECHNICAL INFORMATION



Item Number	Quantity	Description
1	1	Body
2	1	Ball
3*	2	Seat
5*	2	Connector O-Ring
6*	2	Pipe Back-up Ring
7	2	Connector
8	1	Stop Pin
9	1	Stem
10*	1	Thrust Ring
11*	1	Stem O-Ring
12*	1	Pipe Back-up
13	1	Cam Plate
14	1	Snap Ring
15	1	Handle
16	1	Flow Indicator
17	1	Stem Screw

*Included in Seal Kit

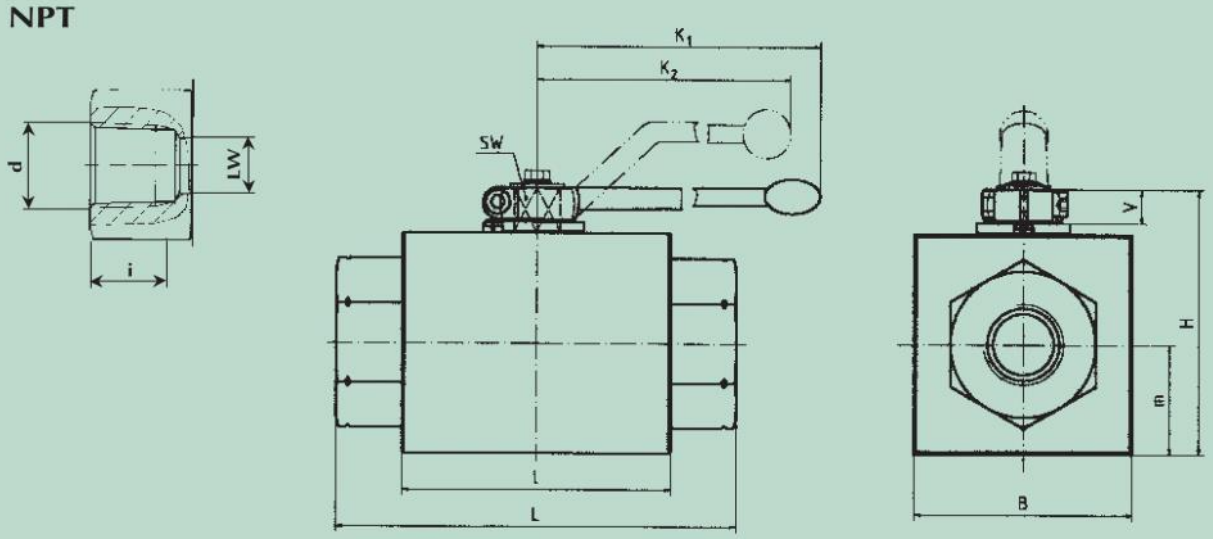
SIZE		PART NUMBER	MAXIMUM WORKING PRESSURE	*ACTUATOR CODE	
				EDA	ESA
1/4"	NPT	HBV20040001M	12,000 PSI	A	C
3/8"	NPT	HBV20060001M	12,000 PSI	A	C
1/2"	NPT	HBV20080001M	12,000 PSI	B	C
3/4"	NPT	HBV20120001M	12,000 PSI	C	D
1"	NPT	HBV20160001M	12,000 PSI	C	D

* See Actuator Code on Page 204.

3/00

DIMENSIONAL INFORMATION

NPT



SIZE	d NPT	i NPT	LW	L	l	B	H	m	V	SW	K_1	K_2	Weight
			in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	lb / kg
1/4"	1/4–18	0.67	0.24 / 6.10	5.12 / 130.05	2.99 / 75.95	1.97 / 50.04	2.52 / 64.01	0.98 / 24.89	0.43 / 10.92	0.35 / 9	5.91 / 150.11	4.53 / 115.06	2.86 / 1.3
3/8"	3/8–18	0.69	0.51 / 12.95	5.12 / 130.05	2.99 / 75.95	1.97 / 50.04	2.52 / 64.01	0.98 / 24.89	0.43 / 10.92	0.35 / 9	5.91 / 150.11	4.53 / 115.06	2.86 / 1.3
1/2"	1/2–14	0.98	0.51 / 12.95	5.12 / 130.05	2.99 / 75.95	1.97 / 50.04	2.52 / 64.01	0.98 / 24.89	0.43 / 10.92	0.35 / 9	5.91 / 150.11	4.53 / 115.06	2.86 / 1.3
3/4"	3/4–14	0.91	0.79 / 20.07	6.34 / 161.04	4.37 / 111.00	3.54 / 89.92	4.25 / 107.95	1.77 / 44.96	0.55 / 13.97	0.55 / 14	7.87 / 199.90	6.30 / 160.02	12.32 / 5.6
1"	1–11 1/4	1.09	0.98 / 24.89	6.46 / 164.08	4.37 / 111.00	3.54 / 89.92	4.25 / 107.95	1.77 / 44.96	0.55 / 13.97	0.55 / 14	7.87 / 199.90	6.30 / 160.02	12.32 / 5.6

ORDERING INFORMATION

HBV 2 0 12 0 0 0 1 M LD

PRODUCT TYPE
HBV – 12,000 Psi
High Pressure Valve

NO. OF PORTS

CONNECTOR STYLE
0 – NPT
1 – SAE

CONNECTOR SIZE
02 – 1/8"
04 – 1/4"
06 – 3/8"
08 – 1/2"
12 – 3/4"
16 – 1"
20 – 1 1/4"
24 – 1 1/2"
32 – 2"

BODY MATERIAL
0 – Carbon Steel
1 – 316 Stainless Steel
6 – Zinc Plated Carbon Steel

BALL & STEM MATERIAL
0 – Carbon Steel
1 – 316 Stainless Steel

BALL SEAT MATERIAL
0 – Delrin

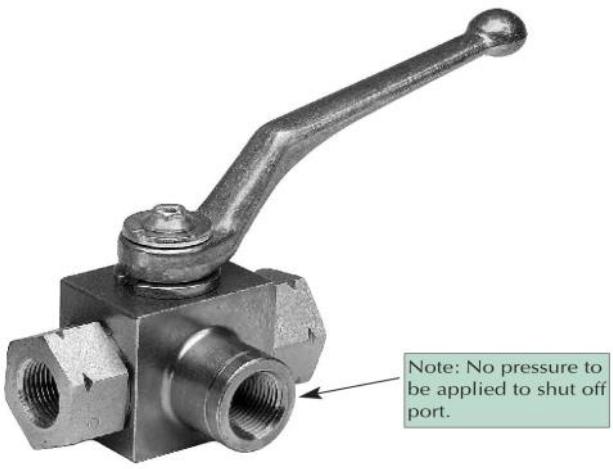
O RING MATERIAL
1 – Viton

MANUFACTURING CODE

LOCKING KIT
LD – Locking Device
OMIT – No Locking Device

3/00

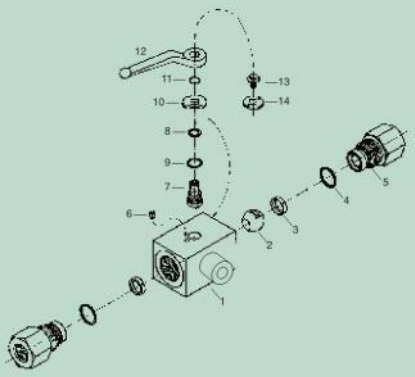
STAUFF®



SPECIFICATIONS

- 1/8"– 2" NPT and SAE Connections
- Delrin +MoS_2 Ball Seats
- Viton O-Rings
- Pressure Range: Up to 4500 PSI (300 bar)
- Carbon Steel Construction
- Yellow Chromated Zinc Plating Finish
- Temperature Range: –30°F to 212°F (–34°C to 100°C)

TECHNICAL INFORMATION



Item Number	Quantity	Description
1	1	Body
2	1	Ball
3*	2	Seat
4*	2	Connector O-Ring
5	2	Connector
6	1	Stop Pin
7	1	Stem
8*	1	Thrust Ring
9*	1	Stem O-Ring
10	1	Cam Plate
11	1	Snap Ring
12	1	Handle
13	1	Stem Screw
14	1	Flow Indicator

*Included in Seal Kit

OPTIONS

- Stainless Steel Construction

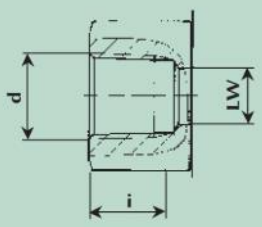
SIZE		PART NUMBER	MAXIMUM WORKING PRESSURE	*ACTUATOR CODE	
				EDA	ESA
1/8"	NPT	CBV30020001R	4500 PSI	A	B
	SAE	**			
1/4"	NPT	CBV30040001M	4500 PSI	A	B
	SAE	**			
3/8"	NPT	CBV30060001M	4500 PSI	A	B
	SAE	**			
1/2"	NPT	CBV30080001M	4500 PSI	A	B
	SAE	CBV31080001M	4500 PSI	A	B
3/4"	NPT	CBV30120001M	3600 PSI	C	C
	SAE	CBV31120001M	3600 PSI	C	C
1"	NPT	CBV30160001M	3600 PSI	C	C
	SAE	CBV31160001M	3600 PSI	C	C
1 1/4"	NPT	CBV30200001M	2300 PSI	C	C
	SAE	**			
1 1/2"	NPT	CBV30240001M	2300 PSI	C	C
	SAE	**			
2"	NPT	CBV30320001M	2300 PSI	C	C
	SAE	**			

* See Actuator Code on Page 204.
** Contact Factory for Availability

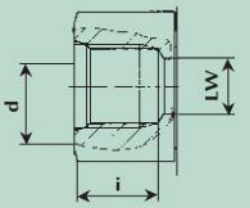
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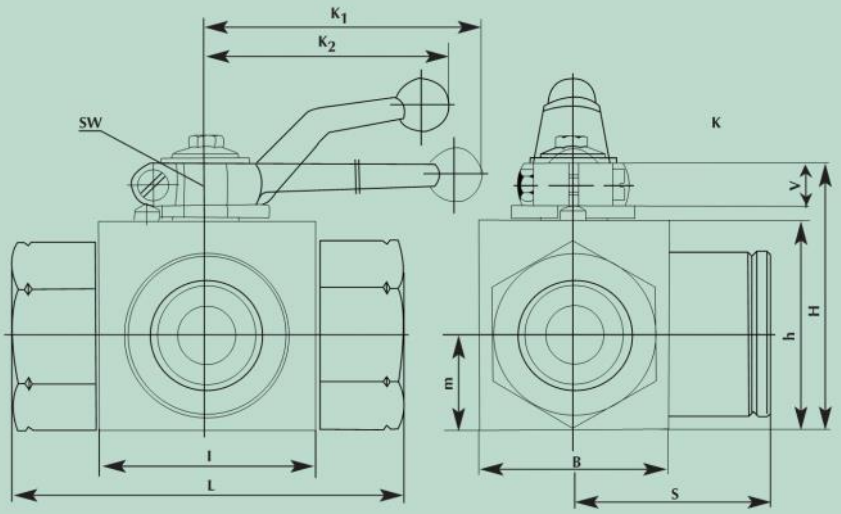
DIMENSIONAL INFORMATION

NPT



SAE





SIZE	d NPT	d SAE	i NPT	i SAE	L NPT	L SAE	LW NPT	LW SAE	I	B	H	h	m	V	S	SW	K1	K2	Wt
			in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	lb / kg
1/8"	1/8 –27	–	0.51 / 12.95		2.72 / 69.09		0.24 / 6.10		1.57 / 39.88	1.02 / 25.91	1.85 / 46.99	1.30 / 33	0.53 / 13.46	0.43 / 10.92	1.36 / 34.54	0.35 / 9	5.91 / 150.11	4.53 / 115.06	0.66 / 0.3
1/4"	1/4 –18	7/16 –20	0.67 / 17.02	0.55 / 13.97	2.72 / 69.09	2.72 / 69.09	0.24 / 6.10	0.20 / 5.08	1.57 / 39.88	1.02 / 25.91	1.85 / 46.99	1.30 / 33	0.53 / 13.46	0.43 / 10.92	1.36 / 34.54	0.35 / 9	5.91 / 150.11	4.53 / 115.06	0.66 / 0.3
3/8"	3/8 –18	9/16 –18	0.69 / 17.53	0.61 / 15.49	3.07 / 77.98	2.83 / 71.88	0.39 / 9.91	0.39 / 9.91	1.69 / 42.93	1.26 / 32.00	2.05 / 52.07	1.50 / 38	0.69 / 17.53	0.43 / 10.92	1.42 / 36.07	0.35 / 9	5.91 / 150.11	4.53 / 115.06	0.99 / 0.5
1/2"	1/2 –14	3/4 –16	0.98 / 24.89	0.69 / 17.53	4.09 / 103.89	3.27 / 83.06	0.51 / 12.95	0.51 / 12.95	1.89 / 48.01	1.38 / 35.03	2.13 / 54.10	1.57 / 40	0.75 / 19.05	0.43 / 10.92	1.63 / 41.40	0.35 / 9	5.91 / 150.11	4.53 / 115.06	1.21 / 0.6
3/4"	3/4 –14	1 1/16 –12	0.91 / 23.11	0.91 / 23.11	4.02 / 102.11	3.74 / 95.00	0.79 / 20.07	0.79 / 20.07	2.44 / 61.98	1.93 / 49.02	2.95 / 74.93	2.24 / 57	0.96 / 24.38	0.55 / 13.97	1.87 / 47.50	0.55 / 14	7.87 / 199.90	6.30 / 160.02	3.30 / 1.5
1"	1–11 1/2	1 5/16 –12	1.09 / 27.69	0.91 / 23.11	4.69 / 119.13	4.45 / 113.03	0.98 / 24.89	0.83 / 21.08	2.60 / 66.04	2.28 / 57.91	3.27 / 83.06	2.56 / 65	1.16 / 29.46	0.55 / 13.97	2.22 / 56.39	0.55 / 14	7.87 / 199.90	6.30 / 160.02	4.84 / 2.2
1 1/4"	1 1/4 –11 1/2	1 5/8 –12	1.11 / 28.19	0.91 / 23.11	4.72 / 119.89	4.33 / 109.98	1.26 / 32.00	1.06 / 26.92	3.19 / 81.03	3.15 / 80.01	3.98 / 101.09	3.15 / 8	1.36 / 34.54	0.65 / 16.51	3.03 / 76.96	0.67 / 17		11.81 / 299.97	10.00 / 4.5
1 1/2"	1 1/2 –11 1/2	1 7/8 –12	1.10 / 27.94	0.91 / 23.11	5.12 / 130.05	5.12 / 130.05	1.50 / 38.10	1.30 / 33.02	3.39 / 86.11	3.94 / 100.08	4.76 / 120.90	3.94 / 100	1.85 / 46.99	0.65 / 16.51	3.15 / 80.01	0.67 / 17		11.81 / 299.97	18.00 / 8.2
2"	2 1/2 –11 1/2	2 1/2 –12	1.19 / 30.23	0.91 / 23.11	5.51 / 139.95	5.51 / 139.95	1.89 / 48.01	1.77 / 44.96	3.98 / 101.09	4.33 / 109.98	5.16 / 131.06	4.33 / 110	2.05 / 52.07	0.65 / 16.51	3.54 / 89.92	0.67 / 17		11.81 / 299.97	22.00 / 10.0

ORDERING INFORMATION

CBV 3 0 12 0 0 0 1 M LD

PRODUCT TYPE
CBV – Compact Body 3 Way Diverter Valve

NO. OF PORTS

CONNECTOR STYLE
0 – NPT
1 – SAE

CONNECTOR SIZE
02 – 1/8"
04 – 1/4"
06 – 3/8"
08 – 1/2"
12 – 3/4"
16 – 1"
20 – 1 1/4"
24 – 1 1/2"
32 – 2"

BODY MATERIAL
0 – Carbon Steel
1 – 316 Stainless Steel
6 – Zinc Plated Carbon Steel

BALL & STEM MATERIAL
0 – Carbon Steel
1 – 316 Stainless Steel

BALL SEAT MATERIAL
0 – Delrin

O RING MATERIAL
1 – Viton

MANUFACTURING CODE

LOCKING KIT
LD – Locking Device
OMIT – No Locking Device

3/00

STAUFF®



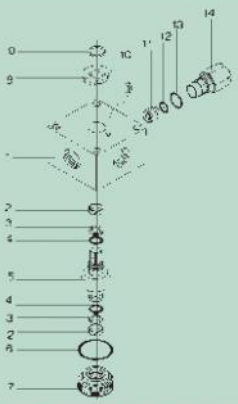
SPECIFICATIONS

- 1/8" – 1" Full Bore
- 1 1/4 – 1 1/2" Reduced Bore
- NPT Connections
- Block Body Style
- Pressure Range: Up to 7250 PSI (485 bar)
- Yellow Chromated Zinc Plated Finish
- Steel Hard Chromium Plated Trunnion
- Temperature Range: -60°F to 400° F (-51°C to 200° C) (depending on Material Combinations)

OPTIONS

- SAE Ports Available On Request

TECHNICAL INFORMATION



Item Number	Quantity	Description
1	1	Body
2	2	Bearing
3*	2	Back-up Ring
4*	2	O-Ring
5	1	Trunnion Ball
6*	1	O-Ring
7	1	Trunnion Retainer
8	1	Cam Plate
9	1	Snap Ring
10	1	Stop Pin
11*	4	Seat
12*	4	O-Ring
13*	4	O-Ring
14	4	Connector

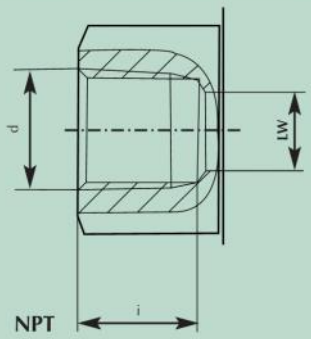
*Included in Seal Kit

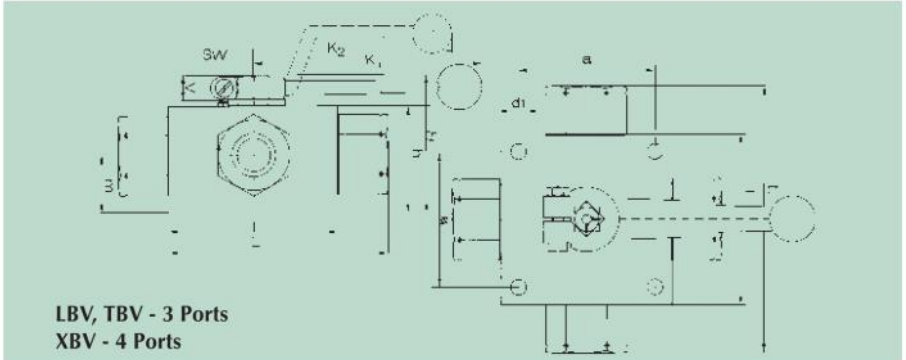
SIZE		PART NUMBER	MAXIMUM WORKING PRESSURE	*ACTUATOR CODE	
				EDA	ESA
1/4"	NPT	LBV30040001M TBV30040001M XBV40040001M	7250 PSI	**	**
3/8"	NPT	LBV30060001M TBV30060001M XBV40060001M	7250 PSI	**	**
1/2"	NPT	LBV30080001M TBV30080001M XBV40080001M	5800 PSI	**	**
3/4"	NPT	LBV30120001M TBV30120001M XBV40120001M	4500 PSI	**	**
1"	NPT	LBV30160001M TBV30160001M XBV40160001M	4500 PSI	**	**
*** 1 1/4"	NPT	LBV30200001M TBV30200001M XBV40200001M	4500 PSI	**	**
*** 1 1/2"	NPT	LBV30240001M TBV30240001M XBV40240001M	3600 PSI	**	**

* See Actuator Code on Page 204. **Contact Factory ***Reduced Bore

3/00

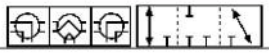
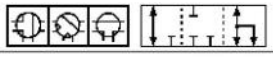
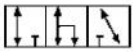
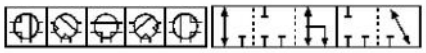
DIMENSIONAL INFORMATION





Size	d NPT	LW	L	l	a	H	h	m	K_1	K_2	V	SW	i	d_1	Weight
		in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	lb / kg
¼"	¼–18	0.24 / 6.10	3.94 / 100.08	2.76 / 70.10	2.17 / 55.12	2.28 / 57.91	1.57 / 39.88	0.87 / 22.10		6.30 / 160.02	0.51 / 12.95	0.47 / 12	0.67 / 17.02	0.26 / 6.60	3.60 / 1.64
⅜"	⅜–18	0.31 / 7.87	4.53 / 115.06	3.15 / 80.01	2.56 / 65.02	2.68 / 68.07	1.97 / 50.04	1.06 / 26.92	7.87 / 199.90	6.30 / 160.02	0.55 / 13.97	0.55 / 14	0.69 / 17.53	0.26 / 6.60	5.10 / 2.32
½"	½–14	0.51 / 12.95	6.30 / 160.02	3.94 / 100.08	3.15 / 80.01	3.07 / 77.98	2.36 / 59.94	1.22 / 30.99	7.87 / 199.90	6.30 / 160.02	0.55 / 13.97	0.55 / 14	0.98 / 24.89	0.35 / 8.89	11.50 / 5.23
¾"	½–14	0.71 / 18.03	6.46 / 154.08	4.45 / 113.03	3.35 / 85.09	3.46 / 87.88	2.64 / 67.06	1.44 / 36.58		11.81 / 299.97	0.65 / 16.51	0.67 / 17		0.33 / 8.38	15.15 / 6.89
1"	1–11½	0.91 / 23.11	7.32 / 185.93	4.68 / 118.87	3.35 / 85.09	4.06 / 103.12	3.23 / 82.04	1.87 / 47.50		11.81 / 299.97	0.65 / 16.51	0.67 / 17	1.11 / 28.19	0.33 / 8.38	19.10 / 8.68
1¼"	1¼–11½	0.91 / 23.11	7.32 / 185.93	4.68 / 118.87	3.35 / 85.09	4.06 / 103.12	3.23 / 82.04	1.87 / 47.50		11.81 / 299.97	0.65 / 16.51	0.67 / 17	1.09 / 27.94	0.33 / 8.38	19.70 / 8.95
1½"	1½–11½	0.91 / 23.11	7.32 / 185.93	4.68 / 118.87	3.35 / 85.09	4.06 / 103.12	3.23 / 82.04	1.87 / 47.50		11.81 / 299.97	0.65 / 16.51	0.67 / 17	1.10 / 27.94	0.33 / 8.38	19.90 / 9.05

STANDARD PORTING PATTERNS FOR MULTI-POSITION VALVES

REF NO.	VALVE STYLE	CYCLING	PORTING SYMBOLS	HYDRAULIC SCHEMATIC SYMBOLS	CROSS-OVER POSITION SYMBOLS	DESCRIPTIONS
1	**3/2 – Position Valve** with L bore LBV...	90°				Trunnion ball, all ports closed in cross-over position, full bore.
2	**3/2 – Position Valve** with T bore TBV...	90°				Trunnion ball, all ports closed in cross-over position, full bore.
3	**3/3 – Position Valve** with T bore and detent	2 x 90°				Trunnion ball, all ports closed in cross-over position, full bore; detent at center position is recommended.
4	**4/2 – Position Valve** with double L bore XBV...	90°				Trunnion ball, temporary connection of all ports in cross-over position but with full shut-off at center point; reduced bore; detent at center position is recommended.

ORDERING INFORMATION

LBV 3 0 08 0 0 0 1 M LD

PRODUCT TYPE
- LBV – 3/2 L Ported Valve
- TBV – 3/2 T Ported Valve
- XBV – 4/2 X Ported Valve

NO. OF PORTS
- 3 – LBV, TBV
- 4 – XBV

CONNECTOR STYLE
- 0 – NPT
- 1 – SAE

CONNECTOR SIZE
- 04 – 1/4"
- 06 – 3/8"
- 08 – 1/2"
- 12 – 3/4"
- 16 – 1"
- 20 – 1¼"
- 24 – 1½"

BODY MATERIAL
- 0 – Carbon Steel
- 1 – 316 Stainless Steel
- 6 – Zinc Plated Carbon Steel

TRUNNION MATERIAL
- 0 – Chrome Plated Steel
- 1 – 316 Stainless Steel

BALL SEAT MATERIAL
- 0 – Delrin
- 4 – Teflon (PTFE)

O RING MATERIAL
- 1 – Viton
- 2 – Teflon (PTFE)

MANUFACTURING CODE

LOCKING KIT
- LD – Locking Device
- OMIT – No Locking Device

3/00

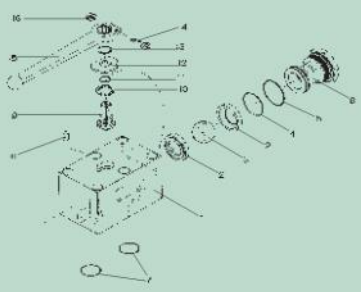
STAUFF®



SPECIFICATIONS

- ¼" – 2"
- Improved manifold design eliminates external piping and connectors.
- Delrin +MoS2 Ball Seat
- Viton O-Rings
- Pressure Range: Up to 7250 PSI (485 bar)
- Carbon Steel Construction
- Temperature Range: -20°F to 212°F (-29°C to 100°C)
- Six Mounting Bolts, for added safety (¼" and ⅜" only four bolts)
- O-Ring Seals eliminates threads in Flow Path.

TECHNICAL INFORMATION



Item Number	Quantity	Description
1	1	Body
2*	1	Seats
3	2	Ball
4*	2	O-Ring
5*	2	O-Ring
6	2	Retainer Plug
7*	2	O-Ring
8	1	Stop Pin
9	1	Stem
10*	1	Thrust Ring
11	1	O-Ring
12	1	Cam Plate
13	1	Snap Ring
14	1	Clamping Screw
15	1	Handle
16	1	Clamping Nut

*Included in Seal Kit

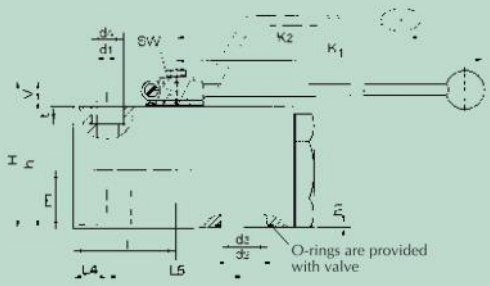
OPTIONS

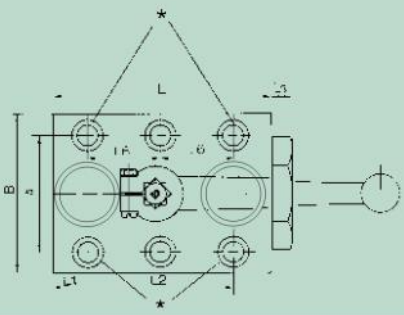
- Stainless Steel available on request
- Three-way valves available to order.

SIZE	PART NUMBER	MAXIMUM WORKING PRESSURE	*ACTUATOR CODE	
			EDA	ESA
¼"	BBV25040001M	7250 PSI	**	**
⅜"	BBV25060001M	7250 PSI	**	**
½"	BBV25080001M	5800 PSI	**	**
¾"	BBV25120001M	4500 PSI	**	**
1"	BBV25160001M	4500 PSI	**	**
1¼"	BBV25200001M	4500 PSI	**	**
1½"	BBV25240001M	4500 PSI	**	**
2"	BBV25320001M	4500 PSI	**	**

* See Actuator Code on Page 204. **Contact Factory

DIMENSIONAL INFORMATION





*1/4″ and 3/8″ valves only 4 mounting holes
*Contact factory for mounting flange dimensions

Size	L	L_1	L_2	L_3	L_4	L_5	L_6	l	d_1	d_2	d_3	d_4
	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm
1/4″	2.24 / 56.90	0.33 / 8.38	1.38 / 35.05	0.24 / 6.10	0.33 / 8.38	1.38 / 35.05		1.02 / 25.91	0.26 / 6.60	0.46 / 11.68	0.24 / 6.10	0.41 / 10.41
3/8″	2.76 / 70.10	0.30 / 7.62	2.17 / 55.12	0.39 / 9.91	0.39 / 9.91	1.73 / 43.94		1.14 / 28.96	0.33 / 8.38	0.59 / 14.89	0.37 / 9.40	0.53 / 13.46
1/2″	3.86 / 98.04	0.30 / 7.62	3.27 / 83.06	0.39 / 9.91	0.63 / 16.00	2.28 / 57.91	1.63 / 41.40	1.67 / 42.42	0.33 / 8.38	0.98 / 24.89	0.51 / 12.95	0.53 / 13.46
3/4″	4.61 / 117.09	0.39 / 9.91	3.82 / 97.03	0.39 / 9.91	0.79 / 20.07	2.72 / 69.09	1.91 / 48.51	2.01 / 51.05	0.41 / 10.41	1.22 / 30.99	0.79 / 20.07	0.65 / 16.51
1″	5.31 / 134.87	0.39 / 9.91	4.53 / 115.06	0.39 / 9.91	0.94 / 23.88	3.19 / 81.03	2.26 / 57.40	2.44 / 61.98	0.41 / 10.41	1.37 / 34.80	0.98 / 24.89	0.65 / 16.51
1 1/4″	6.50 / 165.10	0.47 / 11.94	5.35 / 135.89	0.39 / 9.91	1.14 / 28.96	3.78 / 96.01	2.68 / 68.07	2.95 / 74.93	0.51 / 12.95	1.57 / 39.88	1.26 / 32.00	0.75 / 19.05
1 1/2″	7.11 / 180.59	1.12 / 28.45	4.41 / 112.01	0.65 / 16.51	1.12 / 28.45	4.41 / 112.01	2.20 / 55.88	3.33 / 84.58	0.67 / 17.02	1.88 / 47.75	1.50 / 38.10	0.98 / 24.89
2″	8.90 / 226.06	1.50 / 38.10	5.35 / 135.89	0.60 / 15.24	1.50 / 38.10	5.35 / 135.89	2.68 / 68.07	4.17 / 111.00	0.83 / 21.08	2.35 / 59.69	1.89 / 48.01	1.22 / 30.99

Size	H	h	h_1	m	V	SW	K_1	K_2	B	b	t	Weight
	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	lb / kg
1/4″	1.69 / 42.93	1.38 / 35.05	0.07 / 1.78	0.77 / 19.56	0.24 / 6.10	0.28 / 7		3.15 / 80.01	1.57 / 39.88	1.06 / 26.92	0.27 / 6.86	1.32 / 0.6
3/8″	2.32 / 58.93	1.77 / 44.96	0.07 / 1.78	0.96 / 24.38	0.43 / 10.92	0.35 / 9	5.91 / 150.11	4.53 / 115.06	2.17 / 55.12	1.57 / 39.88	0.33 / 8.38	2.86 / 1.3
1/2″	2.72 / 69.09	2.17 / 55.12	0.07 / 1.78	1.34 / 34.04	0.43 / 10.92	0.35 / 9	5.91 / 150.11	4.53 / 115.06	2.36 / 59.94	1.77 / 44.96	0.28 / 7.11	4.84 / 2.2
3/4″	3.46 / 87.88	2.76 / 70.10	0.12 / 3.05	1.48 / 37.59	0.55 / 13.97	0.55 / 14	7.87 / 199.90	6.30 / 160.02	2.76 / 70.10	2.01 / 51.05	0.41 / 10.41	8.58 / 3.9
1″	3.86 / 98.04	3.15 / 80.01	0.09 / 2.29	1.75 / 44.45	0.55 / 13.97	0.55 / 14	7.87 / 199.90	6.30 / 160.02	3.15 / 80.01	2.36 / 59.94	0.41 / 10.41	12.43 / 5.65
1 1/4″	4.76 / 120.90	3.94 / 100.08	0.08 / 2.03	2.15 / 54.61	0.65 / 16.51	0.67 / 17		11.81 / 299.97	3.94 / 100.08	3.07 / 77.98	0.47 / 11.94	24.42 / 11.1
1 1/2″	4.76 / 120.90	3.94 / 100.08	0.09 / 2.29	1.85 / 45.72	0.65 / 16.51	0.67 / 17		11.81 / 299.97	5.12 / 130.05	3.74 / 95.00	0.67 / 17.02	33.66 / 15.3
2″	5.90 / 149.86	5.07 / 128.78	0.09 / 2.29	2.80 / 71.12	0.80 / 20.32	0.67 / 17		11.81 / 299.97	5.91 / 150.11	4.41 / 112.01	0.85 / 21.59	48.18 / 21.9

ORDERING INFORMATION

BBV 2 5 08 0 0 0 1 M

PRODUCT TYPE
Block Body Valve

NO. OF PORTS

CONNECTION TYPE
5 – Manifold Mount

VALVE SIZE
04 – 1/4″
06 – 3/8″
08 – 1/2″
12 – 3/4″
16 – 1″
20 – 1 1/4″
24 – 1 1/2″
32 – 2″

BODY MATERIAL
0 – Carbon Steel
6 – Zinc Plated Carbon Steel

BALL & STEM MATERIAL
0 – Carbon Steel
1 – Stainless Steel

BALL SEAT MATERIAL
0 – Delrin (standard)
4 – Teflon

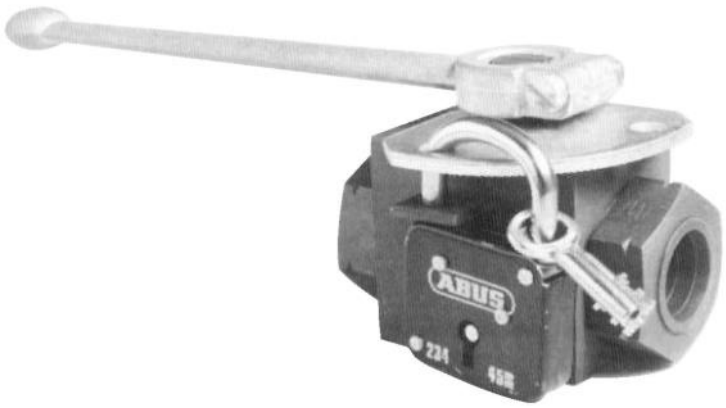
O RING MATERIAL
1 – Viton (standard)
4 – Teflon

MANUFACTURING CODE

3/00

STAUFF®

Add on feature to lock or tag out valves used in pressure line in accordance with OSHA regulations.



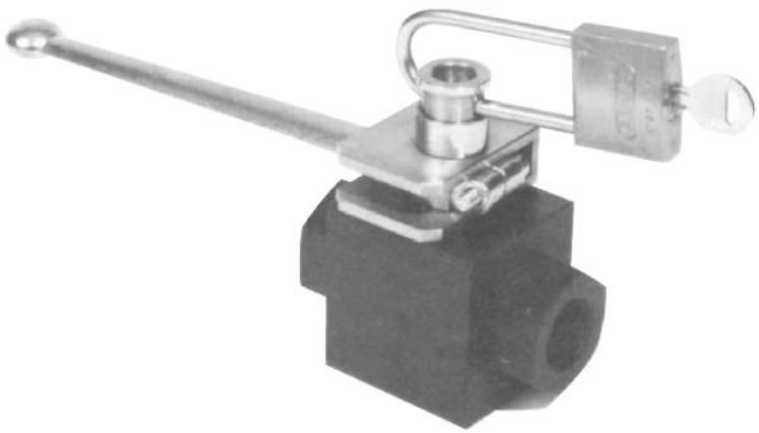
SPECIFICATIONS

- Standard factory installed locking device. Available for STAUFF valves up to 2" size. Design changes for Direct Mount SAE Valve. Pad lock not included. Plate is carbon steel, zinc plated.

ORDER EXAMPLE

- Specify/LD behind Valve Part Number for Locking Device Option.

i.e.; BBV20160001M/LD



SPECIFICATIONS

- New design for easy field installation. No welding or drilling required. This tamper resistant design is available up to 2" size. Made of Zinc plated yellow chromated carbon steel. Pad lock not included.

ORDER EXAMPLE

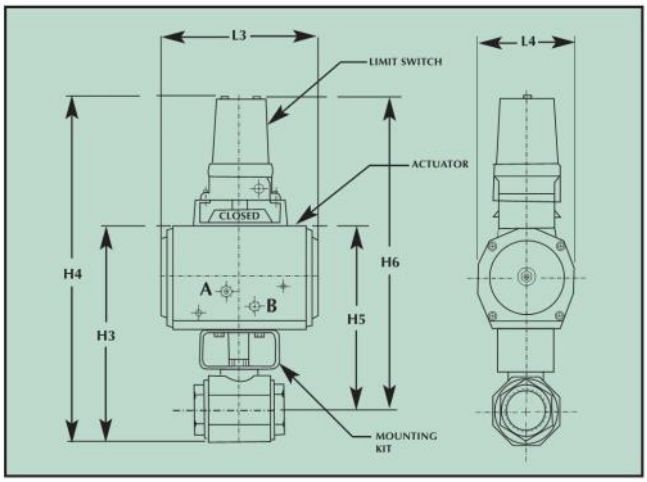
- Match dimension "SW" of Valve, with **bold SW** for order number.

i.e.; **Part #**
LD **SW9** FI
LD **SW14** FI
LD **SW17** FI

ALL VALVES ARE AVAILABLE WITH LOCKING DEVICE CONTACT FACTORY FOR DETAILS.

3/00

DIMENSION DRAWING: VALVE-PNEUMATIC / HYDRAULIC ACTUATOR



SPECIFICATIONS

- Double Acting and Spring Return Versions are Available
- Reliable Rack and Pinion Design
- Compact Overall Size
- Self Lubricating Design

OPTIONS

- Solenoid Valve
- Limit Switches Available

EDA DOUBLE ACTING ACTUATOR INFORMATION

VALVE MODEL AND SIZE	ACTUATOR TORQUE INCH/LBS AT AIR PRESSURE				ACTUATOR MODEL	ACTUATOR CODE
	40 PSI	60 PSI	80 PSI	100 PSI		
BBV						
¼	106	168	221	274	EDA 25	A
⅜	106	168	221	274	EDA 25	A
½	106	168	221	274	EDA 25	A
¾	310	469	628	788	EDA 65	C
1	310	469	628	788	EDA 65	C
FBV/BBV						
1-¼	1009	1522	2044	2558	EDA 200	E
1-½	1009	1522	2044	2558	EDA 200	E
2	1009	1522	2044	2558	EDA 200	E
CBV						
¼	106	168	221	274	EDA 25	A
⅜	106	168	221	274	EDA 25	A
½	106	168	221	274	EDA 25	A
¾	310	469	628	788	EDA 65	C
1	310	469	628	788	EDA 65	C
1-¼	310	469	628	788	EDA 65	C
1-½	310	469	628	788	EDA 65	C
2	310	469	628	788	EDA 65	C
TBV & LBV						
XBV						
¼	106	168	221	274	EDA25	A
⅜	106	168	221	274	EDA 25	A
½	460	699	929	1168	EDA 100	D
¾	460	699	929	1168	EDA 100	D
1	1009	1522	2044	2558	EDA 200	E
1-¼	1009	1522	2044	2558	EDA 200	E
1-½	1009	1522	2044	2558	EDA 200	E
HBV						
¼	204	310	416	513	EDA 40	B
⅜	204	310	416	513	EDA 40	B
½	310	469	628	788	EDA 65	C
¾	1009	1522	2044	2558	EDA 200	E
1	1009	1522	2044	2558	EDA 200	E

3/00

* See Page 42 For Spring Return Actuator Information.

DIMENSIONAL INFORMATION

VALVE WITH PNEUMATIC/HYDRAULIC ACTUATOR MOUNTED

BBV		H3	H4	H5	H6	L3	L4
1/4	in mm	5.95 151.13	11.83 300.48	5.42 137.67	11.30 287.02	6.26 159.00	3.25 82.55
3/8	in. mm	6.15 156.21	12.03 305.56	5.46 138.68	11.34 288.04	6.26 159.00	3.25 82.55
1/2	in. mm	6.22 157.99	12.10 307.34	5.47 138.94	11.35 288.29	6.26 159.00	3.25 82.55
3/4	in. mm	8.37 212.60	14.25 361.95	7.47 189.74	13.35 339.09	7.84 199.14	3.76 95.50
1	in. mm	8.69 220.73	14.57 370.08	7.54 191.52	13.42 340.87	7.84 199.14	3.76 95.50
FBV							
1 1/4	in. mm	10.92 277.37	16.80 426.72	9.42 239.27	15.30 388.62	11.14 282.96	5.37 136.40
1 1/5	in. mm	11.53 292.86	17.41 442.21	9.72 246.89	15.60 396.24	11.14 282.96	5.37 136.40
2	in. mm	12.00 304.80	17.88 454.15	9.91 251.71	15.76 400.30	11.14 282.96	5.37 136.40
TBV/LBV/XBV							
1/4	in mm	6.22 157.99	12.10 307.34	5.35 135.89	11.23 285.24	6.26 159.00	3.25 82.55
3/8	in. mm	6.62 168.15	12.50 317.50	5.56 141.22	11.44 290.58	6.26 159.00	3.25 82.55
1/2	in. mm	9.29 235.97	15.17 385.32	8.07 204.98	13.95 354.33	8.70 220.98	4.58 116.33
3/4	in. mm	9.60 243.84	15.48 393.19	8.16 207.26	14.04 356.62	8.70 220.98	4.58 116.33
1	in. mm	11.48 291.59	17.37 441.20	9.89 251.21	15.77 400.56	11.14 282.96	5.37 136.40
1 1/4	in. mm	11.48 291.59	17.37 441.20	9.89 251.21	15.77 400.56	11.14 282.56	5.37 136.40
1 1/2	in. mm	11.48 291.59	17.37 441.20	9.89 251.21	15.77 400.56	11.14 282.96	5.37 136.40
CBV							
1/4	in. mm	5.95 151.13	11.83 300.48	5.42 137.67	11.30 287.02	6.26 159.00	3.25 82.55
3/8	in. mm	6.15 156.21	12.03 305.56	5.46 138.68	11.34 288.04	6.26 159.00	3.25 82.55
1/2	in. mm	6.22 157.99	12.10 307.34	5.47 138.94	11.35 288.29	6.26 159.00	3.25 82.55
3/4	in. mm	8.37 212.60	14.25 361.95	7.47 189.74	13.35 339.09	7.84 199.14	4.19 106.43
1	in. mm	8.69 220.73	14.57 370.08	7.54 191.52	13.42 340.87	7.84 199.14	4.19 106.43
1 1/4	in. mm	9.28 235.71	15.16 385.06	7.92 201.17	13.80 350.52	7.84 199.14	4.19 106.43
1 1/2	in. mm	10.07 255.78	15.95 405.13	8.22 208.79	14.10 358.14	7.84 199.14	4.19 106.43
2	in. mm	10.46 265.68	16.34 415.04	8.41 213.61	14.29 362.97	7.84 199.14	4.19 106.43
BBV25							
3/8	in. mm	6.42 163.07	12.30 312.42			6.26 159.00	3.25 82.55
1/2	in. mm	6.82 173.23	12.70 322.58			6.26 159.00	3.25 82.55
3/4	in. mm	8.89 225.81	14.77 375.16			7.84 199.14	4.19 106.43
1	in. mm	9.28 235.71	15.16 385.06			7.84 199.14	4.19 106.43
1 1/4	in. mm	11.57 293.88	17.46 443.48			11.14 282.96	5.37 136.40
1 1/2	in. mm	11.57 293.88	17.46 443.48			11.14 282.96	5.37 136.40
2	in. mm	11.96 303.78	17.84 453.14			11.14 282.96	5.37 136.40
BBV29							
1/2	in. mm	7.4 187.96	13.28 337.31	5.87 149.10	11.57 293.88	6.26 159.00	3.25 82.55
3/4	in. mm	9.49 241.05	15.37 390.40	7.56 192.02	13.44 341.38	7.84 199.14	3.76 95.50
1	in. mm	10 254.00	15.88 403.35	7.68 195.07	13.56 344.42	7.84 199.14	3.76 95.50
1 1/4	in. mm	13.16 334.26	19.04 483.62	10.3 261.62	16.18 410.97	11.14 282.96	5.37 136.40
1 1/2	in. mm	13.65 346.71	19.53 496.06	10.7 271.78	16.58 421.13	11.14 282.96	5.37 136.40
2	in. mm	15.22 386.59	21.1 535.94	11.33 287.78	17.21 437.13	11.14 282.96	5.37 136.40
HBV							
1/4	in. mm	7.13 181.10	13 330.20	6.13 155.70	12.01 305.05	7.09 180.09	3.76 95.50
3/8	in. mm	7.13 181.10	13 330.20	6.13 155.70	12.01 305.05	7.09 180.09	3.76 95.50
1/2	in. mm	8.1 205.74	13.98 355.09	7.1 180.34	12.98 329.69	7.84 199.14	4.19 106.43
3/4	in. mm	11.17 283.72	17.05 433.07	9.4 238.76	15.28 388.11	11.14 282.96	5.37 136.40
1	in. mm	11.17 283.72	17.05 433.07	9.4 238.76	15.28 388.11	11.14 282.96	5.37 136.40

Contact Factory for Critical Dimensions.

3/00

"E" & "P" SERIES SPRING RETURN TORQUE (90°: Torque in lb. in.)

MODEL	SPRING SET NUMBER	40 PSI AIR START	40 PSI AIR END	60 PSI AIR START	60 PSI AIR END	80 PSI AIR START	80 PSI AIR END	100 PSI AIR START	100 PSI AIR END	SPRING TORQUE MAX. SPRING START	SPRING TORQUE MIN. SPRING END
ESA 40	2	133	82	243	193	354	303	464	414	117	73
	3	91	15	201	125	312	236	422	346	176	110
	4	0	0	159	56	270	169	380	279	234	146
	5	0	0	0	0	227	101	338	212	293	183
	6	0	0	0	0	185	34	296	144	351	220
ESA 65	2	196	117	364	285	532	453	700	621	186	117
	3	129	10	297	178	466	347	634	515	279	175
	4	0	0	230	71	398	240	567	408	372	234
	5	0	0	0	0	331	133	499	301	465	292
	6	0	0	0	0	0	0	432	194	558	351
ESA 200	2	656	406	1201	952	1747	1498	2293	2044	579	362
	3	448	74	994	620	1539	1165	2085	1710	868	542
	4	0	0	786	287	1331	832	1878	1378	1157	723
	5	0	0	0	0	1124	500	1670	1045	1447	904
	6	0	0	0	0	916	167	1462	713	1736	1085
ESA 350	2	1105	684	2053	1632	3002	2582	3950	3529	1025	658
	3	727	95	1675	1043	2623	1991	3571	2939	1537	987
	4	0	0	1296	454	2244	1402	3193	2350	2049	1317
	5	0	0	0	0	1866	814	2814	1762	2561	1646
	6	0	0	0	0	1487	226	2436	1173	3074	1975
PSA 500	4	1837	1128	3028	2319	4220	3510	5411	4702	1134	452
	6	1586	522	2777	1713	3969	2905	5160	4096	1701	678
	8	0	0	2526	1108	3718	2299	4909	3490	2268	904
	10	0	0	2275	502	3467	1693	4658	2884	2835	1130
	12	0	0	0	0	3216	1087	4407	2279	3402	1356
	14	0	0	0	0	2964	482	4156	1673	3969	1582
PSA 750	4	2767	1845	4539	3617	6310	5389	8082	7160	1529	641
	6	2411	1028	4181	2800	5954	4572	7726	6343	2294	961
	8	2055	211	3827	1983	5598	3755	7370	5526	3059	1282
	10	0	0	3471	1166	5243	2938	7014	4709	3823	1602
	12	0	0	3315	349	4887	2121	6658	3893	4588	1922
	14	0	0	0	0	4531	1304	6302	3076	5352	2243
PSA 1100	4	4020	2995	6633	5608	9246	8221	11859	10834	1999	1000
	6	3464	1927	6077	4540	8690	7153	11303	9766	2999	1500
	8	2909	859	5522	3472	8135	6085	10748	8698	3999	2000
	10	0	0	4966	2404	7579	5017	10192	7630	4998	2500
	12	0	0	4410	1336	7023	3949	9636	6562	5998	3000
	14	0	0	0	0	6468	2881	9081	5494	6997	3501

TECHNICAL INFORMATION

AIR PRESSURE	90° Models: Double acting....20 to 120 psi Spring return....40 to 120 psi 180° Models:.....80 psi max.	**MEDIA**	Dry and lubricated air, non-corrosive gas, or hydraulic oil.	**MATERIAL**	Body..... Aluminum alloy, polyurethane coating
TEMPERATURE RANGE	Standard.....-4° to + 175°F With Fluorocarbon seals.....-4° to + 212°F With optional Fluorocarbon seals and bronze bearing.....-4° to + 250°F	**ROTATION**	Counter-clockwise, port A pressurized	**LIMIT SWITCH**	Enclosure.....NEMA-4 (weatherproof) Explosion proof (optional) Switching elements...2 single pole double throw switches: 220V - 11A 110V - 15A Temperature Range....-4°F to + 175° Housing material.....Aluminum casting, polyurethane coating

Actuator code is determined by using torque requirement of the valve at 80% of the maximum working pressure and 80PSI air supply pressure in a hydraulic oil application.

3/00

***Sizing recommendations are for General Purpose applications only. Contact Stauff for special or critical applications.**

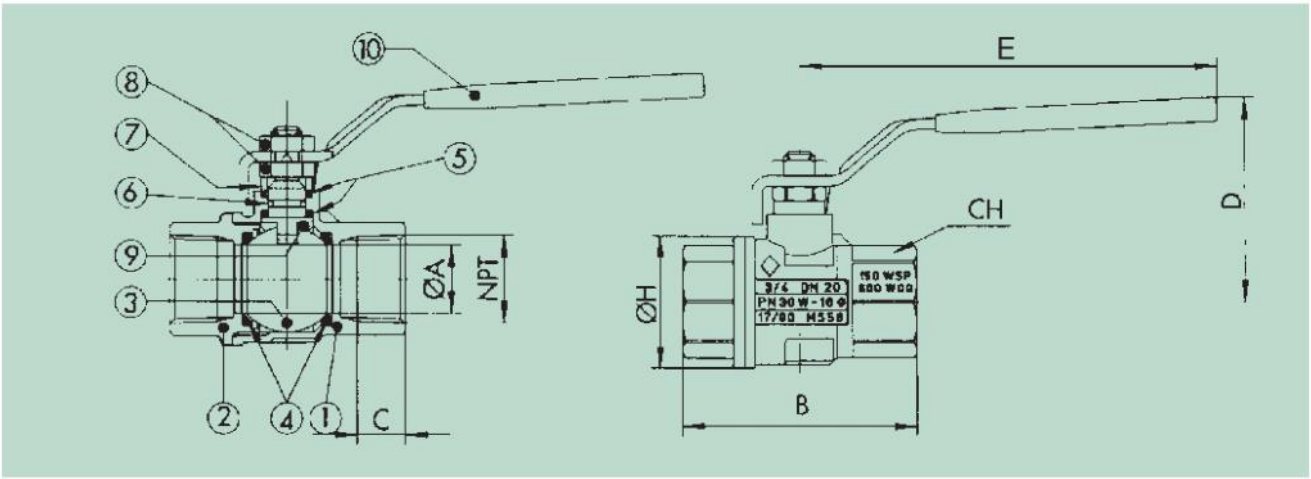


SPECIFICATIONS

- Brass Hot Stamping with Chrome Plated Brass Ball
- Pressure Rating to 600 PSI (WOG) (40 bar)
- Blow Out Proof Stem
- Teflon Seats, Seals & Thrust Washer
- Temperature to 320°F (160°C)
- Metal Handle ¼" to 2"
- Aluminum Handle 2½" to 4"
- All Valves are Full Port.

OPTIONS

- Sizes From ¼" to 4"



DIMENSIONAL INFORMATION

N POS	PART NAME	MATERIALS	N PCS.
1	BODY	BRASS UNI 5707-65	1
2	END CONNECTION	BRASS UNI 5705-65	1
3	BALL	BRASS UNI 5705-65	1
4	SEAT MATERIAL	P.T.F.E.	2
5	STEM SEALS	P.T.F.E.	2
6	O-RING	NBR 75 Sh A	1
7	PACKING GLAND	BRASS UNI 5705-65	1
8	NUT	PLATED STEEL	2
9	STEM	BRASS UNI 5705-65	1
10	LEVER HANDLE	PLATED* STEEL	1

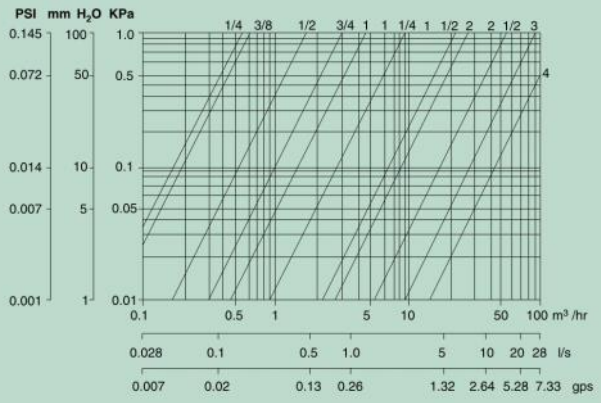
*2½"- 4" have Aluminum handle

PART NO.	SIZE	A	C	B	H	CH	E	D KV	CV KV	PSI BAR	Lbs Kg
2BVL-20 04 B	¼" in	0.39	0.39	2.02	0.90	0.78	3.85	1.75	6.29	600	0.30
	mm	10	10	51.5	23	20	98	44.5	54	40	0.14
2BVL-20 06 B	⅜" in	0.39	0.40	2.02	0.90	0.78	3.85	1.75	6.99	600	0.28
	mm	10	10	51.5	23	20	98	44.5	6	40	0.13
2BVL-20 08 B	½" in	0.59	0.53	2.44	1.25	0.98	3.85	1.88	19	600	0.41
	mm	15	13.6	62	32	25	98	48	16.3	40	0.19
2BVL-20 12 B	¾" in	0.78	0.55	2.71	1.53	1.22	4.80	2.28	34.42	600	0.67
	mm	20	14	69	39	31	122	58	29.5	40	0.31
2BVL-20 16 B	1" in	0.98	0.66	3.07	1.92	1.49	4.80	2.44	50.18	600	1.09
	mm	25	16.8	78	49	38	122	62	43	40	0.50
2BVL-20 20 B	1¼" in	1.25	0.68	3.42	2.32	1.88	6.02	3.07	103.7	600	2.01
	mm	32	17.3	87	59	48	153	78	89	40	0.92
2BVL-20 24 B	1½" in	1.57	0.68	3.89	2.87	2.12	6.02	3.34	268.41	600	3.08
	mm	40	17.3	99	73	54	153	85	230	40	1.40
2BVL-20 32 B	2" in	1.96	0.69	4.33	3.38	2.63	6.37	3.79	309.2	600	4.18
	mm	50	17.7	110	86	67	162	96.5	265	40	190
2BVL-20 40 B	2½" in	2.56	1.19	5.59	4.37	3.54	8.07	5.02	629	600	8.00
	mm	65	30.2	142	111	90	205	127.5	540	40	3.66
2BVL-20 48 B	3" in	3.15	1.31	6.45	5.35	4.13	8.07	5.45	1018.17	600	12.90
	mm	80	33.3	164	136	105	205	138.5	873	40	5.90
2BVL-20 64 B	4" in	3.94	1.55	7.60	6.35	5.12	10.23	6.34	1622	600	22.04
	mm	100	39.3	193	166	130	260	161	1390	40	10.0

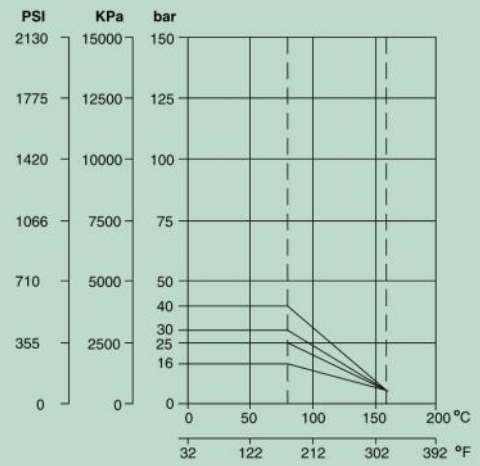
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TECHNICAL INFORMATION

PRESSURE/DROP



PRESSURE/TEMPERATURE RATINGS



	*Contact Factory	R1210	R1211	R1212	R1271 2½"–3" R1272 4"
REPLACEMENT HANDLE	FITS ¼", ⅜", ½"	FITS ¾", 1"	FITS 1¼", 1½"	FITS 2"	FITS 2½", 3", 4"
Locking Device	BVLK-04	BVLK-12	BVLK-20	BVLK-32	BVLK-40
	FITS ¼", ⅜", ½"	FITS ¾", 1"	FITS 1¼", 1½"	FITS 2"	FITS 2½", 3", 4"

ORDERING INFORMATION

2BVL 2 0 08 B L

PRODUCT TYPE

2BVL-	2 Part Low Pressure Valve

NO. OF PARTS

2 - 2

THREAD

0 - NPT
1 - SAE
R - BSP

PORT SIZES

04	¼"
06	⅜"
08	½"
12	¾"
16	1"
20	1¼"
24	1½"
32	2"
40	2½"
48	3"
64	4"

MATERIAL

B Brass

LOCKING DEVICE

-	No Lock
L	With Lock
X	With Lock & Limit Switch
S	With Limit Switch Only

3/00

STAUFF®



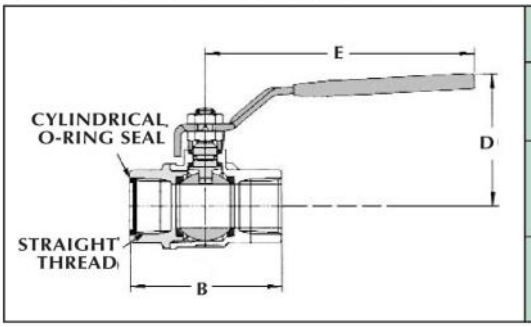
SPECIFICATIONS

- Leak Free O-Ring Sealing to 4" with a Variety of Connection Options:
  - Socket Weld
  - Hose Barb (Straight 45° & 90°)
  - Split Flange
- Carbon Steel Construction
- Lock Nut Design Simplifies the Positioning of Valves and Eliminates Weld Damage to Valve.
- Buna N Seals

OPTIONS

- Viton Seals

DIMENSIONAL INFORMATION

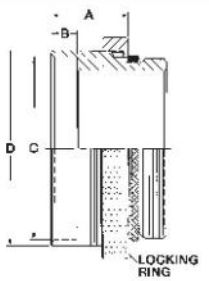


PART NO.	SIZE		B	E	D	PSI BAR	WEIGHT
2BVL-2R 40 B	2½"	in	5.59	8.07	5.02	600	8.00 lb
		mm	142	205	127.5	40	3.66 kg
2BVL-2R 48 B	3"	in	6.45	8.07	5.45	600	12.90 lb
		mm	164	205	138.5	40	5.90 kg
2BVL-2R 64 B	4"	in	7.60	10.23	6.34	600	22.04 lb
		mm	193	260	161	40	10.0 kg

*Note: All "O"-rings should be lubricated before assembly.

SWA - SWIVEL SOCKET WELD ADAPTOR

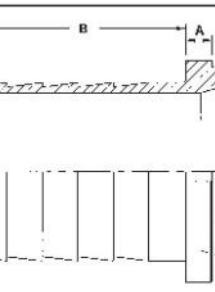
PART NO.	PORT	THREAD	A	B	C	D
SWA - 16LR	1"	1 5/16"-12UN-2B	0.88"	0.25"	1.33"	1.63"
SWA - 20LR	1¼"	1⅝"-12UN-2B	0.88"	0.25"	1.67"	2.00"
SWA - 24LR	1½"	1⅞"-12UN-2B	0.88"	0.25"	1.91"	2.25"
SWA - 32LR	2"	2½"-12UN-2B	1.00"	0.25"	2.39"	2.75"
SWA - 40LR	2¼"	2½"-11BSP	1.50"	0.50"	2.89"	3.25"
SWA - 48LR	3"	3"-11BSP	1.50"	0.50"	3.51"	3.75"
SWA - 60LR	4"	4"-11BSP	1.50"	0.50"	4.51"	4.75"



*Note: Remove "O" ring before welding, valve should not be installed before welding adaptor.

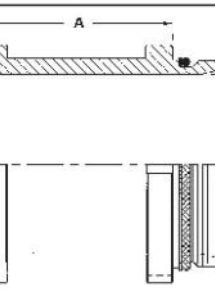
HA - SAE TO HOSE BARB ADAPTOR

PART NO.	PORT	THREAD	A	B	C
HA-16	1"	1 5/16"-12UN-2B	0.375"	1.37"	0.84"
HA-20	1¼"	1⅝"-12UN-2B	0.40"	1.90"	1.06"
HA-24	1½"	1⅞"-12UN-2B	0.40"	1.94"	1.25"
HA-32	2"	2½"-12UN-2B	0.41"	2.43"	1.70"
HA-40	2¼"	2½"-11BSP	0.45"	3.09"	2.15"
HA-48	3"	3"-11BSP	0.45"	3.62"	2.65"
HA-64	4"	4"-11BSP	0.45"	4.90"	3.65"



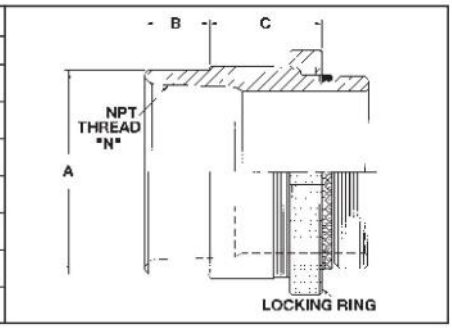
SAS - SAE TO SPLIT FLANGE (CODE 61) ADAPTOR

PART NO.	PORT	THREAD	A	B	C
SAS-16	1"	1 5/16"-12UN-2B	2.40"	1.00"	1.75"
SAS-20	1¼"	1⅝"-12UN-2B	2.72"	1.25"	2.00"
SAS-24	1½"	1⅞"-12UN-2B	2.72"	1.50"	2.375"
SAS-32	2"	2½"-12UN-2B	2.97"	2.00"	2.812"
SAS-40	2¼"	2½"-11BSP	3.18"	2.50"	3.312"
SAS-48	3"	3"-11BSP	3.18"	3.00"	4.00"
SAS-64	4"	4"-11BSP	3.44"	4.00"	5.00"



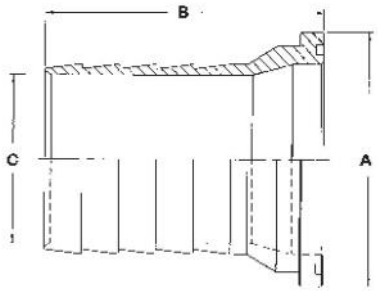
SNN - SAE SWIVEL TO NPT FEMALE ADAPTOR

PART NO.	PORT	THREAD	A	B	C
SNN-16	1″	1⁵⁄₁₆″-12UN-2B	1.63″	0.88″	1.50″
SNN-20	1¼″	1⅝″-12UN-2B	1.88″	0.88″	1.56″
SNN-24	1½″	1⅞″-12UN-2B	2.25″	0.88″	1.56″
SNN-32	2″	2½″-12UN-2B	2.75″	0.88″	1.75″
SNN-40	2¼″	2½″-11BSP	3.13″	1.00″	1.75″
SNN-48	3″	3″-11BSP	3.88″	1.00″	1.75″
SNN-64	4″	4″-11BSP	4.88″	1.00″	1.75″



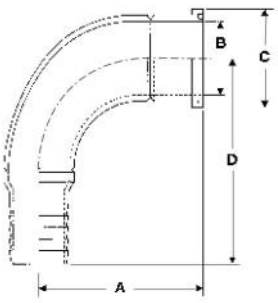
HAS - SPLIT FLANGE TO HOSE BARB ADAPTOR

PART NO.	PORT	THREAD	A	B	C
HAS-16	1″	CODE 61	1.75″	2.63″	0.84″
HAS-20	1¼″	CODE 61	2.00″	3.00″	1.06″
HAS-24	1½″	CODE 61	2.38″	3.00″	1.25″
HAS-32	2″	CODE 61	2.81″	3.25″	1.70″
HAS-40	2¼″	CODE 61	3.31″	4.00″	2.15″
HAS-48	3″	CODE 61	4.00″	4.50″	2.65″
HAS-64	4″	CODE 61	5.00″	5.00″	3.65″



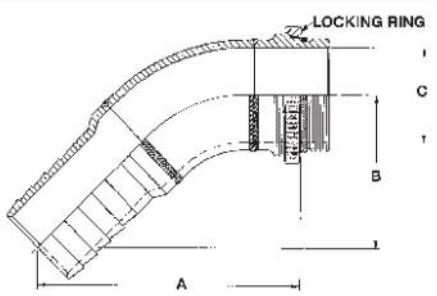
HA 90° - SAE SWIVEL TO HOSE BARB ELBOW 90° ADAPTOR

PART NO.	PORT	A	B	C	D
HA 90-16	1″	2.75″	1.00″	1.75″	3.63″
HA 90-20	1¼″	3.25″	1.25″	2.00″	4.63″
HA 90-24	1½″	3.50″	1.50″	2.38″	5.00″
HA 90-32	2″	4.25″	2.00″	2.81″	6.25″
HA 90-40	2¼″	5.50″	0.5″	3.31″	7.88″
HA 90-48	3″	6.38″	3.00″	4.00″	9.00″
HA 90-64	4″	8.00″	4.00″	5.00″	11.38″



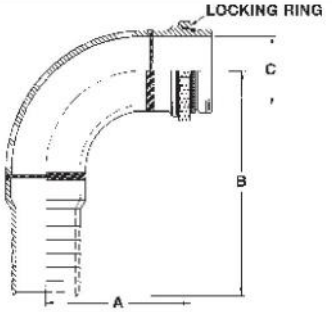
HA 45° - SAE SWIVEL TO HOSE BARB ELBOW 45° ADAPTOR

PART NO.	PORT	THREAD	A	B	C
HA 45-16	1″	1⁵⁄₁₆″-12UN-2B	3.50″	2.00″	1.00″
HA 45-20	1¼″	1⅝″-12UN-2B	4.25″	2.50″	1.25″
HA 45-24	1½″	1⅞″-12UN-2B	4.38″	2.50″	1.50″
HA 45-32	2″	2½″-12UN-2B	5.38″	3.13″	2.00″
HA 45-40	2¼″	2½″-11BSP	7.00″	4.00″	2.50″
HA 45-48	3″	3″-11BSP	8.00″	4.64″	3.00″
HA 45-64	4″	4″-11BSP	9.50″	5.50″	4.00″



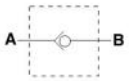
HA 90° - SAE SWIVEL TO HOSE BARB ELBOW 90° ADAPTOR

PART NO.	PORT	THREAD	A	B	C
HA 90-16	1″	1⁵⁄₁₆″-12UN-2B	2.38″	3.63″	1.00″
HA 90-20	1¼″	1⅝″-12UN-2B	2.75″	4.50″	1.25″
HA 90-24	1½″	1⅞″-12UN-2B	3.13″	5.00″	1.50″
HA 90-32	2″	2½″-12UN-2B	4.00″	6.25″	2.00″
HA 90-40	2¼″	2½″-11BSP	5.25″	8.06″	2.50″
HA 90-48	3″	3″-11BSP	6.00″	9.06″	3.00″
HA 90-64	4″	4″-11BSP	7.75″	11.38″	4.00″



3/00





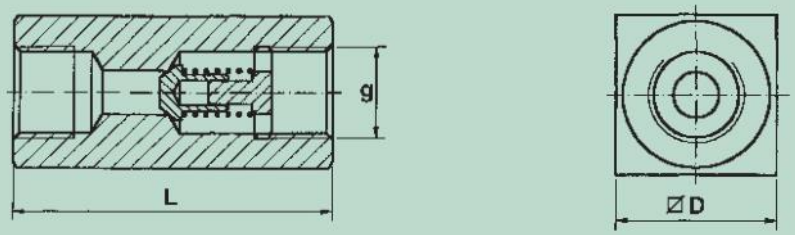
SPECIFICATIONS

- Sizes to 2″
- Carbon Steel Body
- Working pressure to 5000 PSI (350 bar)
- Metal to Metal Seat
- Yellow Chromated Zinc Plated Finish

OPTIONS

- NPT or SAE
- Two Spring Cracking Pressures
  7 PSI (0.5 bar) or 65 PSI (4.5 bar)
- Special Spring Cracking Pressures
  Available On Request.

DIMENSIONAL INFORMATION



NOMINAL SIZE	DN		PORT G		OPERATING PRESSURE		D		L		WEIGHT	
	mm	inch	NPT	SAE	Bar	PSI	mm	inch	mm	inch	kg	lbs
RV8	8	0.31	¼" NPT	7/16-20	500	7250	25	.98	55	2.17	0.2	0.44
RV10	10	0.39	⅜" NPT	9/16-18	500	7250	30	1.18	65	2.56	0.4	0.88
RV12	12	0.47	½" NPT	¾-16	500	7250	35	1.38	73	2.87	0.7	1.54
RV16	16	0.63	¾" NPT	1 1/16-12	500	7250	45	1.77	88	3.46	1.2	2.64
RV20	20	0.79	1" NPT	1 5/16-12	500	7250	50	1.97	127	5.00	2	4.4
RV25	25	0.98	1¼" NPT	1⅝-12	400	5800	60	2.36	143	5.63	3.3	7.26
RV30	30	1.18	1½" NPT	1⅞-12	315	4500	70	2.75	143	5.63	4.2	9.24
RV40	40	1.57	2″ NPT	2½-12	315	4500	90	3.54	165	6.49	7.2	15.84

ORDERING INFORMATION

RV 16 7 S

PRODUCT TYPE

RV – Check Valve

PORT SIZE

8	¼″
10	⅜″
12	½″
16	¾″
20	1″
25	1¼″
30	1½″
40	2″

THREAD TYPE

N	NPT
S	SAE

SPRING SETTING

7	7 Psi (0.5 Bar)
65	65 Psi (4.5 Bar)

SPECIFICATIONS

- Sizes to 1½"
- Carbon steel body
- Viton O-ring
- Temperature range: 14°F – 212°F (-10°C – 100°C)
- Working Pressure to 5000 PSI (350 bar)
- Graduated Knob and Color Coded Spindle to Accurately Control Flow.
- Set-screw Located on Side of Knob to Lock Valve in Position.

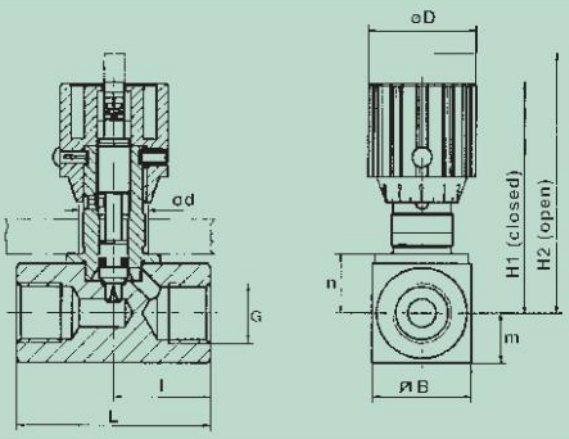




OPTIONS

- NPT or SAE Threaded Connection
- Panel Mounting Kit Available
- Special Seals Available On Request.

DIMENSIONAL INFORMATION



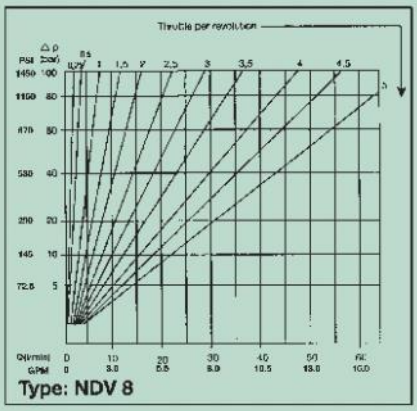
NOMINAL SIZE	DN		PORT G		OPERATING PRESSURE		H2 OPEN		H1 CLOSED		m		n		B		l		L		D		d		WEIGHT	
	mm	inch	NPT	SAE	BAR	PSI	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	kg	lbs
NDV8	8	0.31	¼" NPT	7/16-20	350	5000	71	2.80	65	2.56	12.5	0.49	14.5	0.57	25	0.98	24	0.94	48	1.89	29	1.14	19	0.75	0.25	0.55
NDV10	10	0.39	⅜" NPT	9/16-18	350	5000	75	2.95	68	2.68	15	0.59	17	0.67	30	1.18	29	1.14	58	2.28	29	1.14	19	0.75	0.40	0.88
NDV12	12	0.47	½" NPT	¾-16	350	5000	92	3.62	82	3.23	17.5	0.69	21	0.83	35	1.38	34	1.34	68	2.68	38	1.50	23	0.91	0.70	1.54
NDV16	16	0.63	⅝" NPT	1 1/16-12	350	5000	106	4.17	96	3.78	22.5	0.89	26	1.02	45	1.77	39	1.54	78	3.07	38	1.50	23	0.91	1.20	2.64
NDV20	20	0.79	1" NPT	1 5/16-12	350	5000	149	5.87	132	5.20	25	0.98	30	1.18	50	1.97	54	2.13	108	4.25	55	2.17	38	1.50	2.10	4.62
NDV25	25	0.98	1¼" NPT	1⅝-12	350	5000	154	6.06	137	5.39	30	1.18	35	1.38	60	236	54	2.12	108	4.25	55	2.17	38	1.5	2.8	6.16
NDV30	30	1.18	1½" NPT	1⅞-12	35	5000	159	6.26	142	5.59	35	1.38	40	1.57	70	.75	54	2.12	108	4.35	55	2.17	38	1.5	3.5	7.7

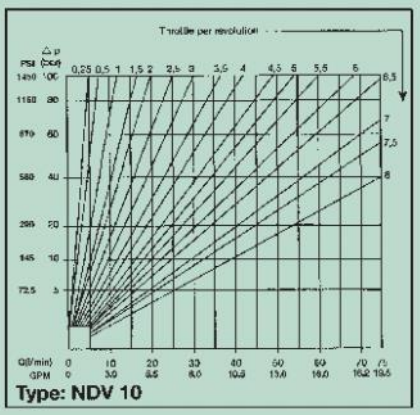
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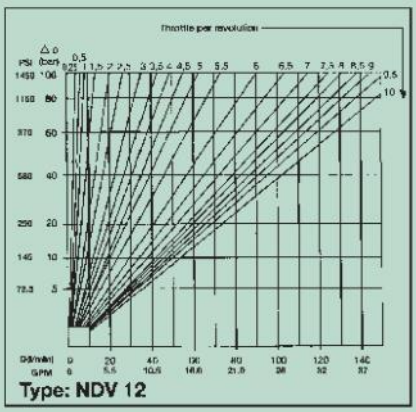
STAUFF®

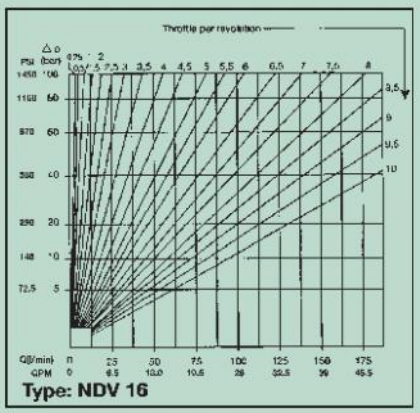
TECHNICAL INFORMATION

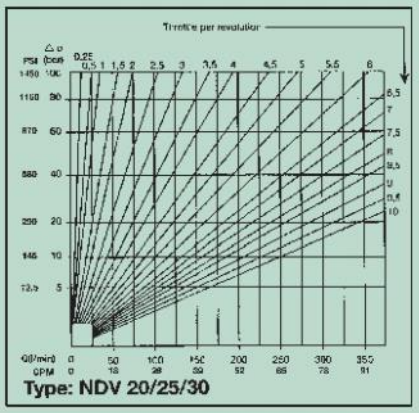
PRESSURE DROP/FLOW INFORMATION











ORDERING INFORMATION

NDV	10	S	PM

PRODUCT TYPE

NDV – Needle Valve

PORT SIZE

8	¼″
10	⅜″
12	½″
16	¾″
20	1″
25	1¼″
30	1½″
40	2″

THREAD TYPE

N	NPT
S	SAE

OPTIONS

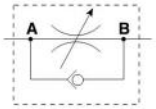
OMIT - Standard
PM - Panel Mount

3/00

SPECIFICATIONS

- Sizes to 2″
- Carbon Steel Body
- 7 PSI Standard Spring Setting
- Viton O-ring
- Temperature range
  -10°C – 100°C
  14°F – 212°F
- Working Pressure to 5000 PSI (350 bar)
- Graduated Knob and Color Coded Spindle To Accurately Control Flow
- Set-Screw Located On Side Of Knob To Lock Valve In Position

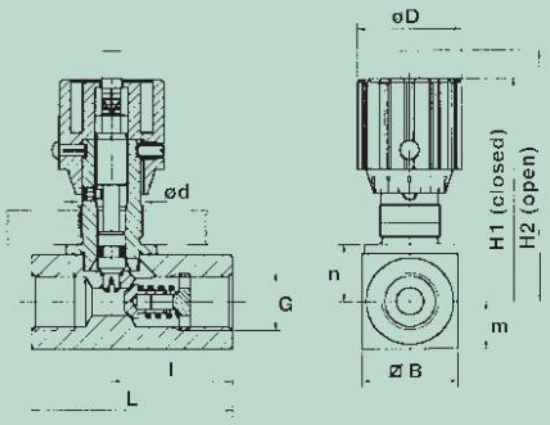




OPTIONS

- NPT or SAE Threaded Connection
- Panel Mounting Kit Available
- Special Seals Available On Request
- Special Spring Settings On Request

DIMENSIONAL INFORMATION

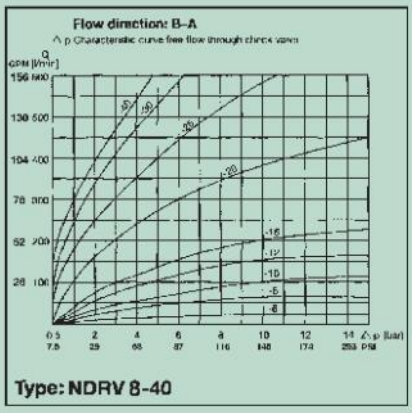


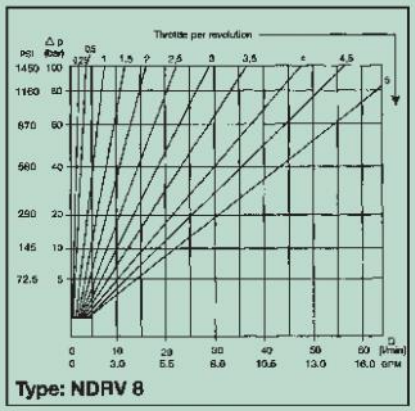
NOMINAL SIZE	DN		PORT G		OPERATING PRESSURE		H2 OPEN		H1 CLOSED		m		n		B		l		L		D		d		WEIGHT	
	mm	inch	NPT	SAE	BAR	PSI	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	kg	lbs
NDRV8	8	0.31	¼" NPT	7/16-20	350	5000	71	2.80	65	2.56	12.5	0.49	14.5	0.57	25	0.98	33.5	0.94	55	1.89	29	1.14	19	0.75	0.30	0.66
NDRV10	10	0.39	⅜" NPT	9/16-18	350	5000	75	2.95	68	2.68	15	0.59	17	0.67	30	1.18	41	1.14	65	2.28	29	1.14	19	0.75	0.45	0.99
NDRV12	12	0.47	½" NPT	¾-16	350	5000	92	3.62	82	3.23	17.5	0.69	21	0.83	35	1.38	44	1.34	73	2.68	38	1.50	23	0.91	0.80	1.76
NDRV16	16	0.63	¾" NPT	1 1/16-12	350	5000	106	4.17	96	3.78	22.5	0.89	26	1.02	45	1.77	57	1.54	88	3.07	38	1.50	23	0.91	1.30	2.86
NDRV20	20	0.79	1" NPT	1 5/16-12	350	5000	149	5.87	132	5.20	25	0.98	30	1.18	50	1.97	77	2.13	127	4.25	55	2.17	38	1.50	2.40	5.28
NDRV25	25	0.98	1¼" NPT	1 5/8-12	350	5000	154	6.06	137	5.39	30	1.18	35	1.38	60	2.36	93	3.66	143	5.62	55	2.17	38	1.50	3.50	7.7
NDRV30	30	1.18	1½" NPT	1 7/8-12	350	5000	159	6.26	142	5.59	35	1.38	40	1.57	70	2.75	91	3.58	143	5.62	55	2.17	38	1.50	4.60	10.12
NDRV40	40	1.57	2" NPT	2 1/2-12	350	5000	169	6.65	152	5.98	40	1.57	50	1.97	90	3.55	111	4.37	165	6.50	55	2.17	38	1.50	7.70	16.94

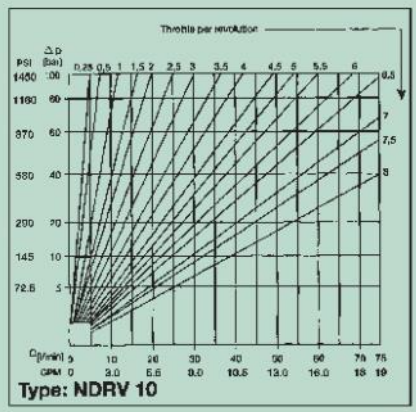
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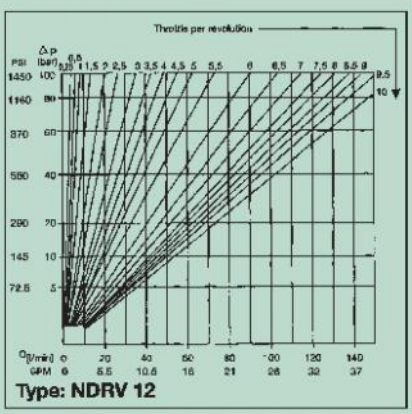
TECHNICAL INFORMATION

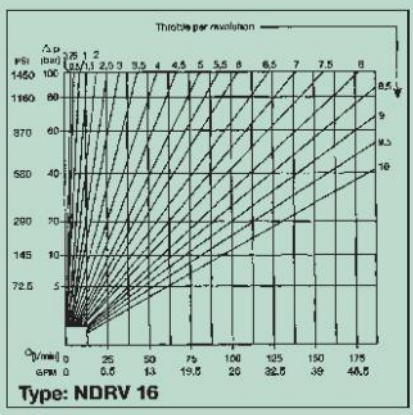
PRESSURE DROP/FLOW INFORMATION

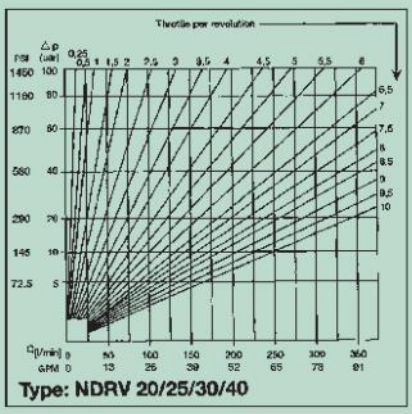












ORDERING INFORMATION

NDRV 10 S PM

PRODUCT TYPE
Flow Control Valve

PORT SIZE	
8	1/4″
10	3/8″
12	1/2″
16	3/4″
20	1″
25	1 1/4″
30	1 1/2″
40	2″

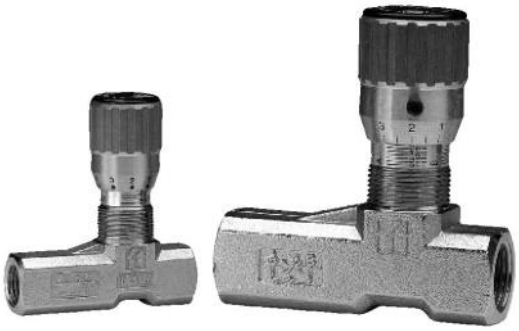
OPTIONS
OMIT – Standard
PM – Panel Mount

THREAD TYPE	
N	NPT
S	SAE

3/00

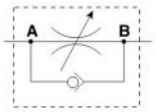
SPECIFICATIONS

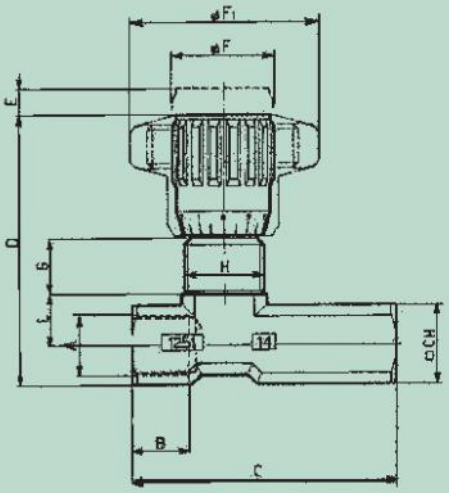
- Sizes to 1/4", 3/8"and 1/2"
- NPT or BSP Threads
- Working Pressure 3000 PSI (200bar)
- Nickel Plated Brass Body, Stainless Steel Needle
- Flow Setting Can Be Locked With Handle Set Screw
- Stem Seal-Buna With PTFE Back Up Ring
- Temperature range: -30°F to 250°F
  (-34°C to 121°C)



OPTIONS

- VITON Seals
- Panel Mount Lock Nut





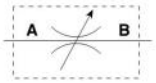
DIMENSIONS

PART NUMBER	THREAD A	B	C	D	E	F	F1	G	H	L	CH	WEIGHT
		in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm		in / mm	in / mm	lb / kg
FCM-8N FCM-8B	1/4"NPT 1/4"BSP	0.47 / 12	2.20 / 56	2.24 / 57	0.18 / 4,5	0.87 / 22	1.57 / 40	0.45 / 11,5	M17X1	0.43 / 11	0.67 / 17	0.31 / 0.14
FCM-10N FCM-10B	3/8"NPT 3/8"BSP	0.51 / 13	2.54 / 64,5	2.72 / 69	0.28 / 7	1.06 / 27	1.97 / 50	0.49 / 12,5	M20X1	0.59 / 15	0.97 / 22	0.57 / 0.26
FCM-12N FCM-12B	1/2"NPT 1/2"BSP	0.63 / 16	3.42 / 87	3.23 / 82	0.39 / 10	1.30 / 33	2.76 / 70	0.51 / 13	M25X1,5	0.75 / 19	1.06 / 27	1.08 / 0.49

3/00

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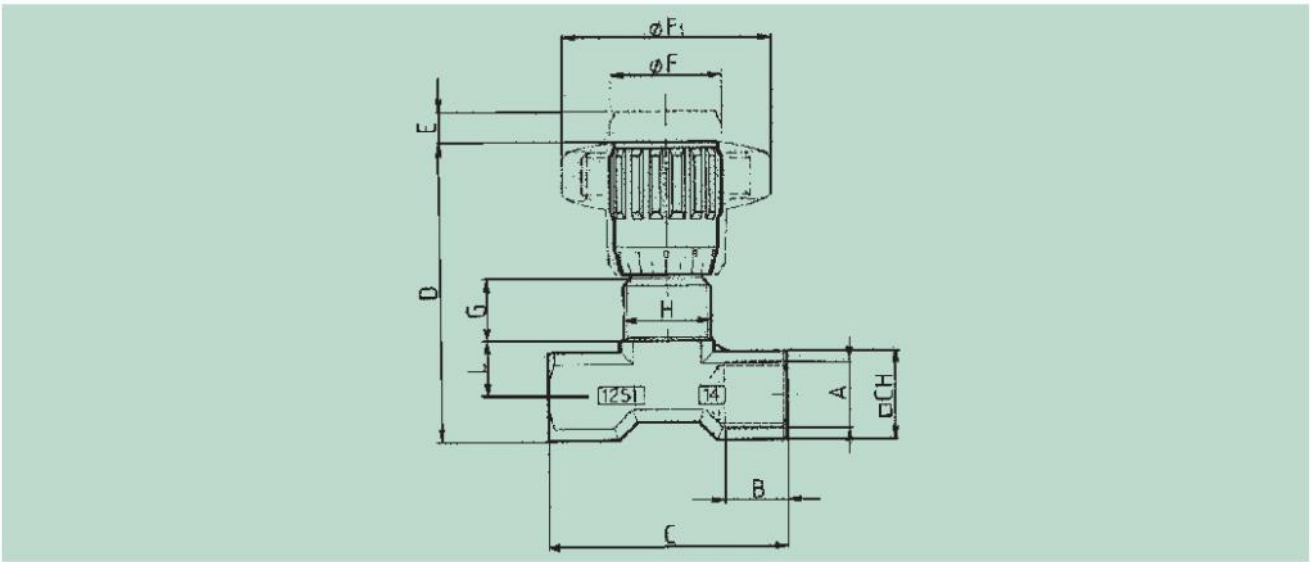


SPECIFICATIONS

- Sizes to 1/4", 3/8"and 1/2" NPT
- Working Pressure 3000 PSI (200 bar)
- Nickel Plated Brass Body, Stainless Steel Needle
- Flow Setting Can Be Locked With Handle Set Screw
- Stem Seal-Buna with PTFE Back Up Ring
- Temperature range: -30°F to 250°F (-34°C to 121°C)

OPTIONS

- VITON Seals
- Panel Mount Lock Nut



DIMENSIONS

PART NUMBER	THREAD A	B	C	D	E	F	F1	G	H	L	CH	WEIGHT
		in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm		in / mm	in / mm	lb / kg
NVM-8N	1/4"NPT	0.47 / 12	1.81 / 46	2.24 / 57	0.18 / 4,5	0.87 / 22	1.57 / 40	0.45 / 11,5	M17X1	0.43 / 11	0.67 / 17	0.26 / 0.12
NVM-10N	3/8"NPT	0.51 / 13	2.17 / 55	2.72 / 69	0.28 / 7	1.06 / 27	1.97 / 50	0.49 / 12,5	M20X1	0.59 / 15	0.97 / 22	0.51 / 0.23
NVM-12N	1/2"NPT	0.63 / 16	2.76 / 70	3.23 / 82	0.39 / 10	1.30 / 33	2.76 / 70	0.51 / 13	M25X1,5	0.75 / 19	1.06 / 27	1.0 / 0.45

3/00

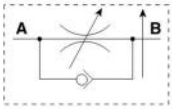
SPECIFICATIONS

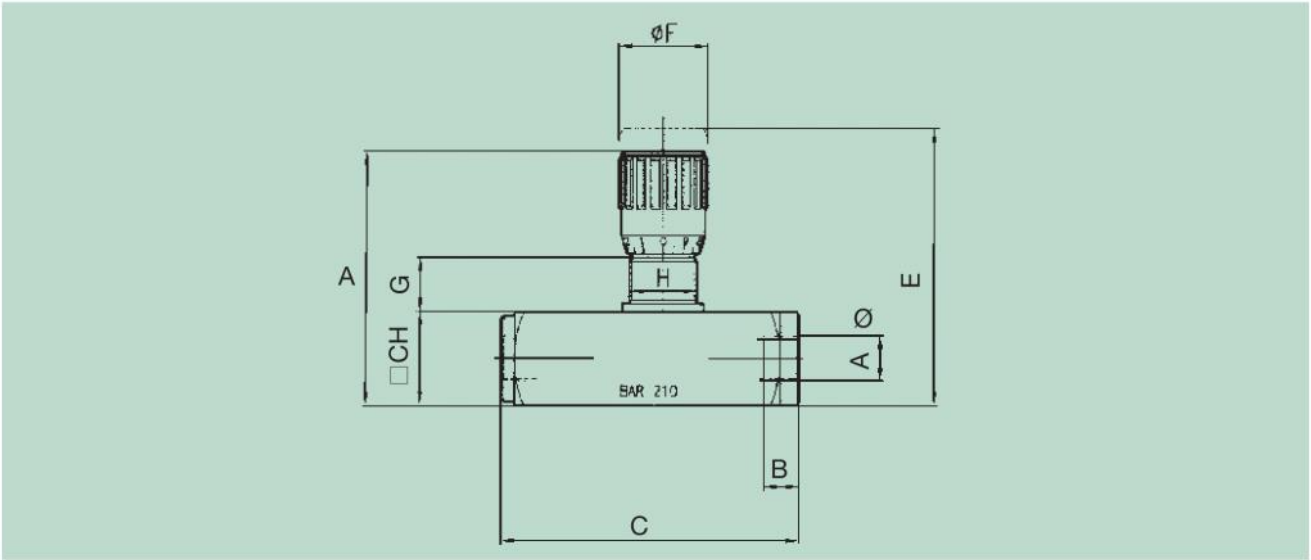
- Sizes to 1/4", 3/8", 1/2" and3/4" NPT
- Working Pressure 3000 PSI (200 bar)
- Carbon Steel Body, Stainless Steel Internal Components
- Stem Seal-Buna With PTFE Back Up Ring
- Temperature range: -30°F to 250°F (-34°C to 121°C)



OPTIONS

- VITON Seals
- Panel Mount Lock Nut





DIMENSIONS

PART NUMBER	THREAD A	B	C	D	E	F	G	H	CH	WEIGHT
		in / mm	in / mm	in / mm	in / mm	in / mm	in / mm		in / mm	lb / kg
PNDRV-8N	1/4"NPT	0.49 / 12,5	3.70 / 94	3.21 / 81,5	3.48 / 88,5	1.06 / 27	0.59 / 15	M20X1	1.18 / 30	1.28 / 0.58
PNDRV-10N	3/8"NPT	0.51 / 13	4.35 / 110,5	3.72 / 94,5	4.06 / 103	1.30 / 33	0.67 / 17	M25X1	1.38 / 35	2.07 / 0.94
PNDRV-12N	1/2"NPT	0.61 / 15,5	5.39 / 137	4.41 / 112	4.80 / 122	1.50 / 38	0.71 / 18	M30X1,5	1.77 / 1.77	4.03 / 1.83
PNDRV-16N	3/4"NPT	0.67 / 17	6.42 / 163	5.43 / 138	5.91 / 150	1.85 / 47	0.94 / 24	M40X1,5	2.17 / 55	7.37 / 3.35

3/00



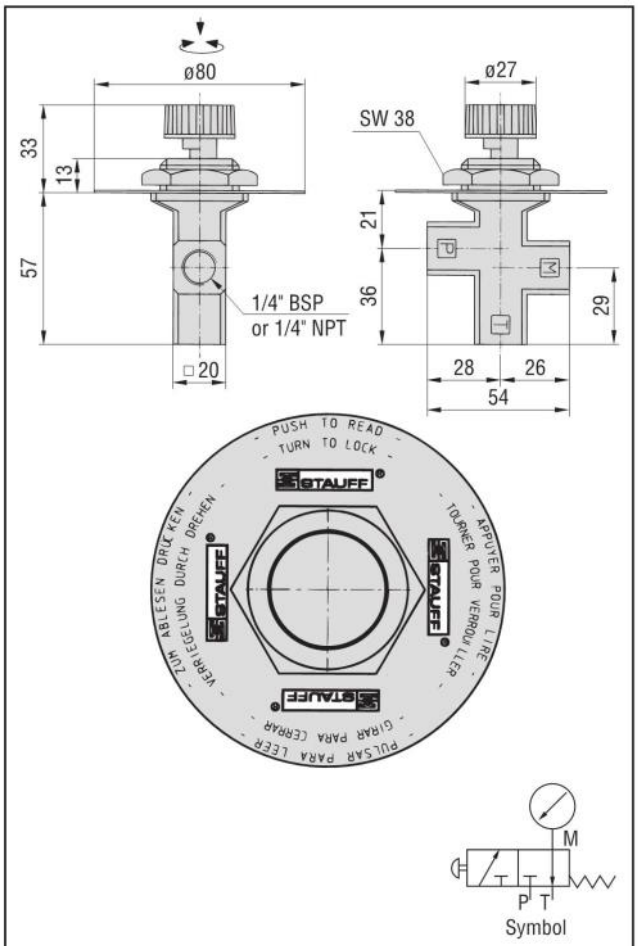
SPECIFICATIONS

- Working Pressure 5800 PSI (390 bar)
- VITON Seals
- NPT, BSP & SAE Ports
- Temperature range:
  Style S1 and M -30°F – 240°F (-22°C – 115°C)
- Protects Gauges From Pressure Surges

OPTIONS

- Single Station
- Multi Station

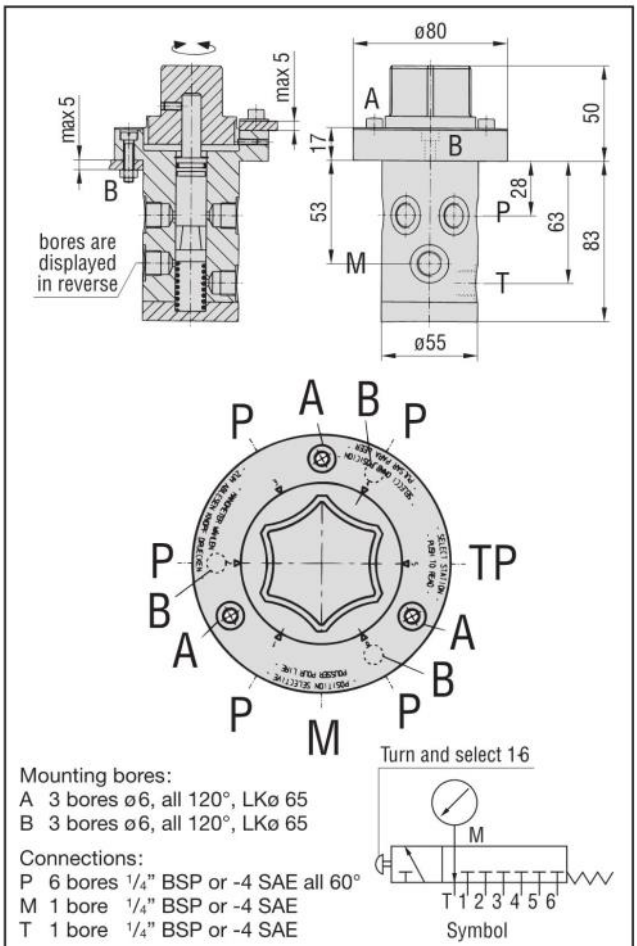
SINGLE STATION DIMENSIONS



Single station gauge isolator valve

PART NUMBER	CONNECTION
SWS-B04-S1	1/4" BSP
SWS-N04-S1	1/4" NPT

6 STATION DIMENSIONS



Mounting bores:
A 3 bores ø6, all 120°, LKø 65
B 3 bores ø6, all 120°, LKø 65

Connections:
P 6 bores 1/4" BSP or -4 SAE all 60°
M 1 bore 1/4" BSP or -4 SAE
T 1 bore 1/4" BSP or -4 SAE

Multi station gauge isolator valve

PART NUMBER	CONNECTION
SWS-B04-M	1/4" BSP
SWS-U04-M	-4 SAE

3/00

SPECIFICATIONS

- Sizes 1/4" NPT
- Working Pressure 6000 PSI (400 bar)
- Nickel Plated brass Body
- Stem Seal-Buna With PTFE Back Up Ring



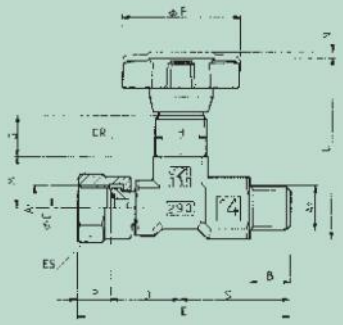
OPTIONS

- In line or 90° Style
- NPT/SAE Version
- Panel Mount Lock Nut

DIMENSIONS

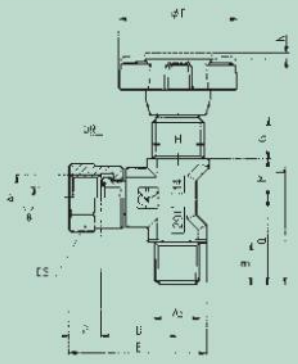
THREAD	VALUE STYLE	PORT A1	PORT A2	B	C	D	E	F	G	H	L	M	N	P	S	HEX	WEIGHT
S04	A1	1/4" SAE	1/4" NPT	13	5,6	20	61,5	34	12	M15X1	53	15	2	8,5	33	18	0,125
N04		1/4" NPT	1/4" NPT														
B04		1/4" BSP	1/4" BSP														
B04	A2	1/4" BSP	1/4" BSP	13,5	5,6	22	40	34	10	M15X1	66	11	2	8,5	28	18	0,105
N04	90°	1/4" NPT	1/4" NPT														

In-line



A1

90°



A2

ORDERING INFORMATION

SWS N04 A1

PRODUCT TYPE
SWS-Gauge Isolator Valve

THREAD TYPE	
N04	1/4" NPT Female - 1/4" NPT Male
S04	1/4" SAE Female - 1/4" NPT Male
B04	1/4" BSP Male/Female

VALVE STYLE	
A1	In-line
A2	90° Version

NOTE: S04 available in in-line version or A1 only

3/00