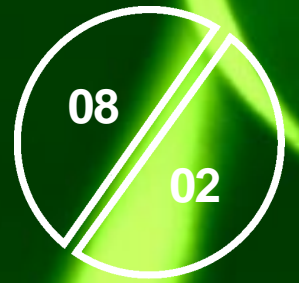




Quality Products for Mechanical
& Fluid Power



PIPE FLANGES





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quality products for mechanical & fluid power

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Manufacturing Standards

Our flanges are manufactured in accordance with the following standards:

- SAE Flanges SAE J 518 C, ISO 6162
- Cetop Flanges CETOP RP 63H
- 4 Bolt Square Flanges ISO/DIS 6164

Pressure Ratings

For maximum flange pressure ratings, please refer to the tables below and the specific flange catalogue page. Please note that the quoted pressure ratings are for a working temperature range of between -20°C to +90°C. For use outside of this temperature range please consult the *jbj Techniques technical department*.

Standard Pressure: Series 3000 psi

Size	Maximum Working Pressure	
	PSI	BAR
1/2"	5000	340
3/4"	5000	340
1"	5000	340
1 1/4"	4000	275
1 1/2"	3000	200
2"	3000	200
2 1/2"	2500	175
3"	2000	135
3 1/2"	510	35
4"	510	35

High Pressure: Series 6000 psi

Size	Maximum Working Pressure	
	PSI	BAR
3/8"	6000	420
3/4"	6000	420
1"	6000	420
1 1/4"	6000	420
1 1/2"	6000	420
2"	6000	420
2 1/2"	6000	420
3"	6000	420

Materials

For available flange material please refer to relevant page. If several materials are shown, the choice of material used is at the discretion of the manufacturer.

Corrosion Protection

Unless otherwise stated on the product range all flanges are delivered in natural condition and coated with a rust inhibitor.

Flange Kits

All flange kits are supplied with relevant bolts and seals, as indicated on corresponding page.

Used Bolts

- SAE flanges metric bolts: DIN 912-8.8 (ISO 4762-8.8) or DIN 912-10.9 (ISO 4762-10.9)*
 UNC bolts: ASA B 18.3
- Gear pump flanges metric bolts: DIN 912-8.8 (ISO 4762-8.8)
- 4-bolt square flanges metric bolts: DIN 931/934-8.8 (ISO4014/4017-8.8) or DIN 931/934-10.9 (ISO 4014/4017-10.9)*
- Cetop flanges metric bolts: DIN 931/934-8.8 (ISO 4014/4017-8.8 or DIN 931-934-10.9 (ISO 4014/4017-10.9)*

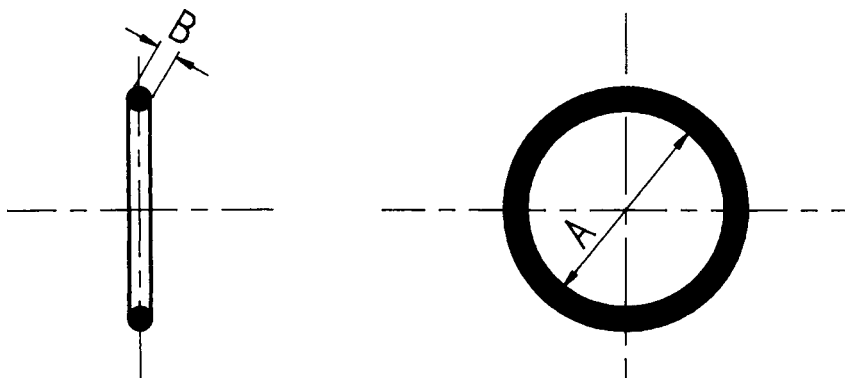
* The system pressure is determined by the wall thickness and the quality of the tube used.



Seal Material

The standard o-ring seal material is Buna (90 shore). However Viton (85 - 90 shore) is available as an option on request. For all SAE flanges and Cetop flanges the o-ring dimensions are according to the following table -

O-Rings for use with SAE Flanges



Size	A	B
3/8"	17.12	2.62
1/2"	18.66	3.53
3/4"	25.00	3.53
1"	32.92	3.53
1 1/4"	37.70	3.53
1 1/2"	47.22	3.53
2"	56.75	3.53
2 1/2"	69.45	3.53
3"	85.32	3.53
3 1/2"	98.02	3.53
4"	110.72	3.53
5"	136.12	3.53

Flange Tube Connections

We suggest that where applicable tubing to the following standards should be utilised

Seamless precision steel tube to DIN2391, material grade C, ST 37-4 or ST 52-4. Seamless boiler tube to DIN 2441 groups 1 & 2, material grade ST 37-4 or ST 52-4. Tubing according to ASA B36-10.

We suggest the use of tubing to the following dimensions:

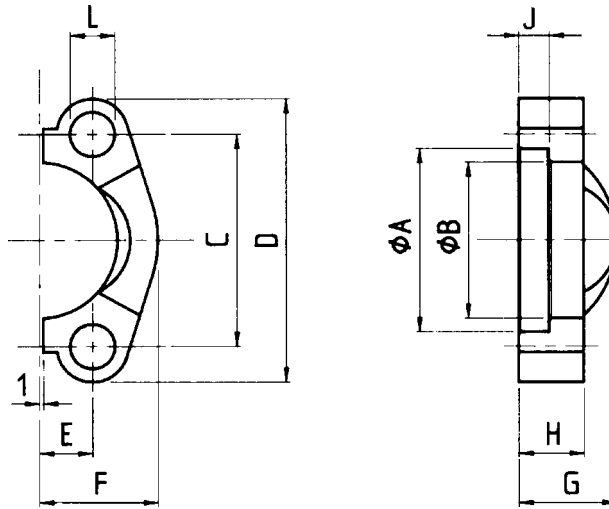
Size	Tubes to DIN 2391					Tubes to DIN 2448		Tubes to ASA B 36-10			
	Series					Series		Series			
	100 bar	160 bar	250 bar	315 bar	400 bar	250 bar	400 bar	Schedule	250	Schedule	400
1/2"	15 x 1 18 x 1	18 x 1.5	16 x 2.0 20 x 2.5	16 x 2.5 20 x 3	16 x 3 20 x 3.5	21.3 x 2.6	21.3 x 3.2	40	21.3 x 2.8	80	21.3 x 3.7
3/4"	-	-	25 x 3	25 x 3.5	25 x 4	26.9 x 2.6	26.9 x 4	40	26.7 x 2.9	80	26.7 x 3.9
1"	28 x 2	-	28 x 3 30 x 4	30 x 5	30 x 6	33.7 x 4	33.7 x 6.3	40	33.7 x 4.8	160	33.7 x 6.4
1 1/4"	35 x 2	-	35 x 4 38 x 5	38 x 6	38 x 7	42.4 x 5	42.4 x 6.3	80	42.4 x 4.8	160	42.4 x 6.4
1 1/2"	42 x 3	-	42 x 5 50 x 6	50 x 8	50 x 9	48.3 x 5	48.3 x 8	80	48.3 x 5.1	160	48.3 x 7.1
2"	-	-	-	65 x 8	65 x 10	60.3 x 6.3	60.3 x 10	160	60.3 x 8.7	200	60.3 x 11.1
2 1/2"	-	-	-	80 x 10	80 x 12.5	76.1 x 8	76.1 x 12.5	160	73 x 9.5	200	73 x 14
3"	-	-	-	-	-	88.9 x 10	88.9 x 16	160	88.9 x 11.1	200	88.9 x 15.2
3 1/2"	-	-	-	-	-	101.6 x 10	101.6 x 16	-	-	-	-
4"	-	-	-	-	-	114.3 x 12.5	114.3 x 20	160	114.3 x 13.5	200	114.3 x 17.1

PIPE FLANGES

A.S.A. SCHEDULE PIPE SIZES



A.S.A. Schedule Pipe Sizes. Nominal Wall Thickness in mm														
Nominal Bore	O.D. mm	Schedule												
		10	20	30	STD & 40S	40	60	XS & 80S	80	100	120	140	160	XXS
1/2"	10.3				1.73	1.73		2.41	2.41					
3/4"	13.7				2.24	2.24		3.02	3.02					
1"	17.1				2.31	2.31		3.20	3.20					
1 1/4"	21.3				2.77	2.77		3.73	3.73				4.78	7.47
1 1/2"	26.7				2.87	2.87		3.91	3.91				5.56	7.82
2"	33.4				3.38	3.38		4.55	4.55				6.35	9.09
2 1/2"	42.2				3.56	3.56		4.85	4.85				6.35	9.07
3"	48.3				3.68	3.68		5.08	5.08				7.14	10.16
3 1/2"	60.3				3.91	3.91		5.54	5.54				8.74	11.07
4"	73.0				5.16	5.16		7.01	7.01				9.52	14.02
4 1/2"	88.9				5.49	5.49		7.62	7.62				11.13	15.24
5"	101.6				5.74	5.74		8.08	8.08					
6"	114.3				6.02	6.02		8.56	8.58		11.13		13.49	17.12
8"	141.3				6.55	6.55		9.52	9.52		12.70		15.88	19.05
10"	168.3				7.11	7.11		10.97	10.97		14.27		18.26	21.95
12"	219.1		6.35	7.04	8.18	8.18	10.31	12.70	12.70	15.09	18.26	20.62	23.01	22.22
14"	273.0		6.35	7.80	9.27	9.27	12.70	12.70	15.09	18.26	21.44	25.40	28.58	25.40
16"	323.9		6.35	8.38	9.52	10.31	14.27	12.70	17.47	21.44	25.40	28.58	33.34	25.40
18"	355.6	6.35	7.92	9.52	9.52	11.13	15.09	12.70	19.05	23.82	27.79	31.75	35.71	
20"	406.4	6.35	7.92	9.52	9.52	12.70	16.64	12.70	21.44	26.19	30.96	36.52	40.49	
22"	457.2	6.35	7.92	11.13	9.52	14.27	19.05	12.70	23.82	29.36	34.92	39.69	45.24	
24"	508.0	6.35	9.52	12.70	9.52	15.09	20.62	12.70	26.19	32.54	38.10	44.45	50.01	
26"	558.8	6.35	9.52	12.70	9.52	15.88	22.22	12.70	28.58	34.92	41.28	47.62	53.98	
28"	609.6	6.35	9.52	14.27	9.52	17.48	24.61	12.70	30.96	38.89	46.02	52.39	59.54	
30"	660.4	7.92	12.70		9.52			12.70						
32"	711.2	7.92	12.70	15.88	9.52			12.70						
34"	762.8	7.92	12.70	15.88	9.52	17.48		12.70						
36"	812.8	7.92	12.70	15.88	9.52	17.48		12.70						
	863.6	7.92	12.70	15.88	9.52	17.48		12.70						
	914.4	7.92	12.70	15.88	9.52	19.05		12.70						



Material: 1 ST 52.3 (FE 510)Zinc Plated Yellow Chromate
 2. 1.4404/1.4541 316L/321Stainless Steel

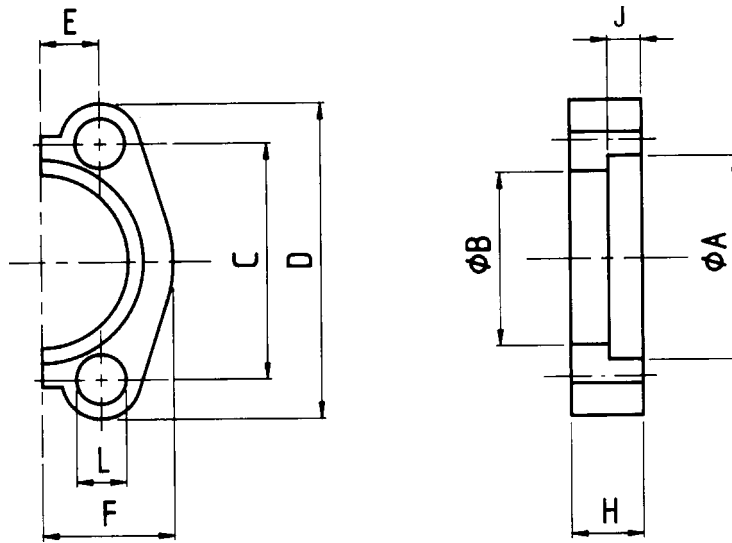
3.000 Series														
Size	Type	A	B	C	D	E	F	G	H	J	Ø L	Screws		Weight kg.
												Metric	UNC	
1/2"	FH 3001	30.96	24.26	38.10	54	8.74	22.8	19	13	6.22	8.50	M 8 x 25	5/16" x 1 1/4"	0.07
3/4"	FH 3002	38.89	32.13	47.63	65	11.13	25.9	22	14	6.22	10.50	M 10 x 30	3/8" x 1 1/4"	0.09
1"	FH 3003	45.24	38.48	52.37	70	13.08	29.2	24	16	7.49	10.50	M 10 x 30	3/8" x 1 1/4"	0.11
1 1/4"	FH 3004	51.59	43.69	58.72	79	15.09	36.3	22	16	7.49	12.00	M 10 x 35	7/16" x 1 1/2"	0.15
1 1/4"	FH 3014	51.59	43.69	58.72	79	15.09	36.3	22	16	7.49	10.50	M 10 x 35	-	0.15
1 1/4"	FH 3044	51.59	43.69	58.72	79	15.09	36.3	22	16	7.49	12.50	M 12 x 35	-	0.15
1 1/2"	FH 3005	61.09	50.80	69.85	94	17.86	41.1	25	16	7.49	13.50	M 12 x 35	1/2" x 1 1/2"	0.23
2"	FH 3006	72.24	62.74	77.77	102	21.44	48.2	26	16	9.02	13.50	M 12 x 35	1/2" x 1 1/2"	0.25
2 1/2"	FH 3007	84.94	74.93	88.90	114	25.40	54.1	38	19	9.02	13.50	M 12 x 40	1/2" x 1 1/2"	0.37
3"	FH 3008	102.39	90.93	106.38	135	30.96	65.3	41	22	9.02	16.75	M 16 x 45	5/8" x 2"	0.65
3 1/2"	FH 3009	115.10	102.36	120.65	152	34.92	69.5	28	22	10.72	17.00	M 16 x 45	5/8" x 2"	0.75
4"	FH 3010	127.79	115.06	130.18	162	38.88	76.0	35	25	10.72	17.00	M 16 x 50	5/8" x 2"	0.84
5"	FH 3011	153.19	140.46	152.40	184	46.04	90.0	41	28	10.72	17.00	M 16 x 50	5/8" x 2"	1.25
6.000 Series														
1/2"	FH 6001	32.54	24.64	40.49	56	9.12	23.6	22	16	7.24	8.50	M 8 x 30	5/16" x 1 1/4"	0.08
3/4"	FH 6002	42.06	32.51	50.80	71	11.91	30.0	28	19	8.26	10.50	M 10 x 35	3/8" x 1 1/2"	0.18
1"	FH 6003	48.41	38.86	57.17	81	13.89	34.8	33	24	9.02	12.50	M 12 x 45	-	0.27
1"	FH 6013	48.41	38.86	57.15	81	13.89	34.8	33	24	9.02	12.00	-	7/16" x 1 3/4"	0.27
1 1/4"	FH 6004	54.76	44.45	66.68	95	15.88	38.6	38	27	9.78	14.50	M 14 x 50	-	0.40
1 1/4"	FH 6044	54.76	44.45	66.68	95	15.88	38.6	38	27	9.78	13.50	-	1/2" x 1 3/4"	0.40
1 1/2"	FH 6005	64.29	51.56	79.38	113	18.26	47.5	43	30	12.07	16.75	M 16 x 55	5/8" x 2"	0.68
2"	FH 6006	80.16	67.56	96.82	133	22.23	56.9	52	37	12.07	21.00	M 20 x 65	3/4" x 2 1/2"	1.05

ordering code:

ST 52.3 1.4404/1.4541

flange only
 flange with metric bolts
 flange with UNC bolts
 *supplied without o-ring

FH... FHx...
 FH.../M FHx.../M
 FH.../U FHx.../U



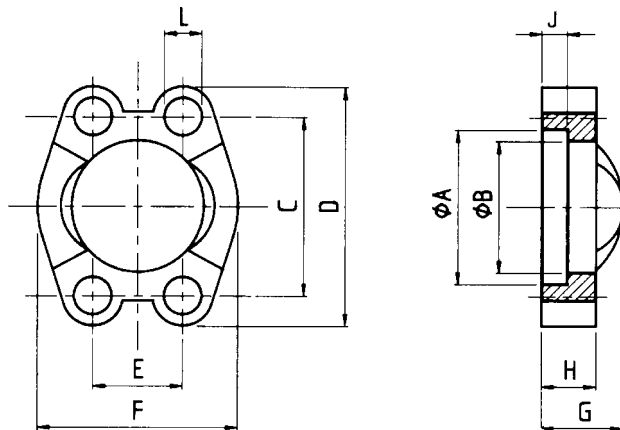
Material: C 60 Zinc Plated Yellow Chromate

3.000 Series													
Size	Type	A	B	C	D	E	F	H	J	ØL	Screws		Weight kg.
											Metric	UNC	
1/2"	HF 3001	30.96	24.26	38.10	54	8.74	22.8	13	6.22	8.50	M 8 x 25	5/16" x 1 1/4"	0.06
3/4"	HF 3002	38.89	32.13	47.63	65	11.13	25.9	14	6.22	10.50	M 10 x 30	3/8" x 1 1/4"	0.07
1"	HF 3003	45.24	38.48	52.37	70	13.08	29.2	16	7.49	10.50	M 10 x 30	3/8" x 1 1/4"	0.10
1 1/4"	HF 3004	51.59	43.69	58.72	79	15.09	36.6	16	7.49	11	M 10 x 35	-	0.15
1 1/2"	HF 3005	61.09	50.80	69.85	94	17.86	41.1	16	7.49	13	M 12 x 35	1/2" x 1 1/2"	0.18
2"	HF 3006	72.24	62.74	77.77	102	21.44	48.2	16	9.02	13	M 12 x 35	1/2" x 1 1/2"	0.22
6.000 Series													
1/2"	HF 6001	32.54	24.64	40.49	56	9.12	23.60	16	7.24	9.00	M 8 x 30	5/16" x 1 1/4"	0.08
3/4"	HF 6002	42.06	32.51	50.80	71	11.91	30.00	20	8.26	11.00	M 10 x 35	3/8" x 1 1/2"	0.16
1"	HF 6003	48.41	38.86	57.15	81	13.89	34.80	25	9.02	13.00	M 12 x 45	7/16" x 1 3/4"	0.25
1 1/4"	HF 6004	54.76	44.45	66.68	95	15.88	38.60	27	9.78	15.00	M 14 x 45	1/2" x 1 3/4"	0.34
1 1/2"	HF 6005	64.29	51.56	79.38	113	18.26	47.50	30	12.07	17.00	M 16 x 50	5/8" x 2"	0.55
2"	HF 6006	80.16	67.56	96.82	133	22.23	56.90	37	12.07	21.00	M 20 x 65	3/4" x 2 1/2"	1.02
2 1/2"	HF 6007	108.90	90.00	123.80	180	29.40	75.08	45	20.50	26.00	M 24 x 75	-	2.05
3"	HF 6008	132.50	115.00	152.40	215	35.80	99.08	55	25.50	32.00	M 30 x 90	-	4.30

ordering code:

flange only

HF...



Material: 1 ST 52.3 (FE 510)Zinc Plated Yellow Chromate
 2. 1.4404/1.4541 316L/320Stainless Steel

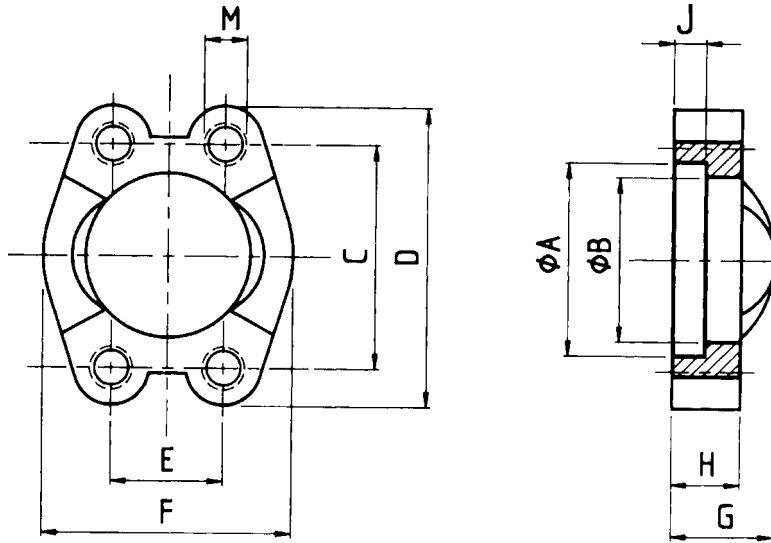
3.000 Series														
Size	Type	A	B	C	D	E	F	G	H	J	ØL	Screws		Weight kg
												Metric	UNC	
1/2"	VF 3001	30.96	24.26	38.10	54	17.48	45.6	19	13	6.22	8.50	M 8 x 25	5/16" x 1 1/4"	0.15
3/4"	VF 3002	38.89	32.13	47.63	65	22.23	51.8	22	14	6.22	10.50	M 10 x 30	3/8" x 1 1/4"	0.17
1"	VF 3003	45.24	38.48	52.37	70	26.19	58.4	24	16	7.49	10.50	M 10 x 35	3/8" x 1 1/4"	0.22
1"	VF 3003-6000 psi	45.24	38.48	52.37	71	26.19	60.0	26	26	7.49	10.50	M 10 x 45	-	0.43
1 1/4"	VF 3004	51.59	43.69	58.72	79	30.18	72.6	22	16	7.49	12.00	M 10 x 35	7/16" x 1 1/2"	0.30
1 1/4"	VF 3004-6000 psi	51.59	43.69	58.72	80	30.18	73.0	33	24	7.49	13.00	M 12 x 45	-	0.64
1 1/2"	VF 3005	61.09	50.80	69.85	94	35.71	82.2	25	16	7.49	13.50	M 12 x 35	1/2" x 1 1/2"	0.45
1 1/2"	VF 3005-6000 psi	61.09	50.80	69.85	95	35.71	83.0	37	27	7.49	13.50	M 12 x 50	-	0.96
2"	VF 3006	72.24	62.74	77.77	102	42.88	96.4	26	16	9.02	13.50	M 12 x 35	1/2" x 1 1/2"	0.50
2"	VF 3006-6000 psi	72.24	62.74	77.77	103	42.88	97.0	43	30	9.02	13.50	M 12 x 50	-	1.38
2 1/2"	VF 3007	84.94	74.93	88.90	114	50.80	108.2	38	19	9.02	13.50	M 12 x 35	1/2" x 1 1/2"	0.74
2 1/2"	VF 3007-6000 psi	84.94	74.93	88.90	114	50.80	108.2	49	30	9.02	15.00	M 14 x 50	-	1.75
3"	VF 3008	102.39	90.93	106.38	135	61.93	130.6	41	22	9.02	16.75	M 16 x 50	5/8" x 2"	1.30
3 1/2"	VF 3009	115.10	102.36	120.65	152	69.85	139.0	28	22	10.72	17.00	M 16 x 50	5/8" x 2"	1.50
4"	VF 3010	127.79	115.06	130.18	162	77.77	152.0	35	25	10.72	17.00	M 16 x 50	5/8" x 2"	1.65
5"	VF 3011	153.19	140.46	152.40	184	92.08	180.0	41	28	10.72	17.00	M 16 x 50	5/8" x 2"	2.50
6.000 Series														
1/2"	VF 6001	32.54	24.64	40.49	56	18.24	47.20	22	16	7.24	8.50	M 8 x 30	5/16" x 1 1/4"	0.16
3/4"	VF 6002	42.06	32.51	50.80	71	23.80	60.00	28	19	8.26	10.50	M 10 x 35	3/8" x 1 1/2"	0.35
1"	VF 6003	48.41	38.86	57.15	81	27.76	69.90	33	24	9.02	12.50	M 12 x 45	-	0.53
1"	VF 6003-12	48.41	38.86	57.15	81	27.76	69.90	33	24	9.02	12.00	-	7/16" x 1 3/4"	0.53
1 1/4"	VF 6004	54.76	44.45	66.68	95	31.75	77.20	38	27	9.78	14.50	M 14 x 50	1/2" x 1 3/4"	0.80
1 1/2"	VF 6005	64.29	51.56	79.38	113	36.50	95.00	43	30	12.07	16.75	M 16 x 55	5/8" x 2"	1.35
2"	VF 6006	80.16	67.56	96.82	133	44.45	113.80	52	37	12.07	21.00	M 20 x 65	3/4" x 2 1/2"	2.10
2 1/2"	VF 6007	108.90	90.00	123.80	180	58.80	150.20	45	45	20.50	26.00	M 24 x 75	-	4.10
3"	VF 6008	132.50	115.00	152.40	215	71.60	198.16	55	55	25.50	31.00	M 30 x 90	-	8.60

ordering code:

ST 52.3 1.4404/1.4541

flange with metric threads
 flange with metric bolts
 flange with UNC bolts
 *supplied without o-ring

VF... VFx...
 VF.../M VFx.../M
 VF.../U VFx.../U



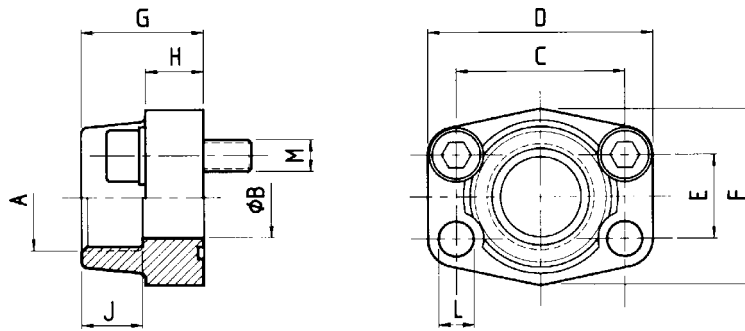
Material: 1 ST 52.3 (FE 510)Zinc Plated Yellow Chromate
 2. 1.4404, 316L Stainless Steel

3.000 Series												
Size	Type	A	B	C	D	E	F	G	H	J	M	Weight kg
1/2"	VFG 3001	30.96	24.26	38.10	54	17.48	45.6	19	13	6.22	M 8	0.15
3/4"	VFG 3002	38.89	32.13	47.63	65	22.23	51.8	22	14	6.22	M 10	0.17
1"	VFG 3003	45.24	38.48	52.37	70	26.19	58.4	24	16	7.49	M 10	0.22
1 1/4"	VFG 3004	51.59	43.69	58.72	79	30.18	72.6	22	16	7.49	M 10	0.30
1 1/2"	VFG 3005	61.09	50.80	69.85	94	35.71	82.2	25	16	7.49	M 12	0.45
2"	VFG 3006	72.24	62.74	77.77	102	42.88	96.4	26	16	9.02	M 12	0.50
2 1/2"	VFG 3007	84.94	74.93	88.90	114	50.80	108.2	38	19	9.02	M 12	0.74
3"	VFG 3008	102.39	90.93	106.38	135	61.93	130.6	41	22	9.02	M 16	1.30
3 1/2"	VFG 3009	115.10	102.36	120.65	152	69.85	139.0	28	22	10.72	M 16	1.50
4"	VFG 3010	127.79	115.06	130.18	162	77.77	152.0	35	25	10.72	M 16	1.65
5"	VFG 3011	153.19	140.46	152.40	184	92.08	180.0	41	28	10.72	M 16	2.50
6.000 Series												
Size	Type	A	B	C	D	E	F	G	H	J	M	Weight kg
1/2"	VFG 6001	32.54	24.64	40.49	56	18.24	47.20	22	16	7.24	M 8	0.16
3/4"	VFG 6002	42.06	32.51	50.80	71	23.80	60.00	28	19	8.26	M 10	0.35
1"	VFG 6003	48.41	38.86	57.15	81	27.76	69.90	33	24	9.02	M 12	0.53
1 1/4"	VFG 6004	54.76	44.45	66.68	95	31.75	77.20	38	27	9.78	M 14	0.80
1 1/2"	VFG 6005	64.29	51.56	79.38	113	36.50	95.00	43	30	12.07	M 16	1.35
2"	VFG 6006	80.16	67.56	96.82	133	44.45	113.80	52	37	12.07	M 20	2.10
2 1/2"	VFG 6007	108.90	90.00	123.80	180	58.80	190.20	45	45	20.50	M 24	4.10
3"	VFG 6008	132.50	115.00	152.40	215	71.50	198.16	55	55	25.50	M 30	8.60

ordering code: ST 52.3 1.4404

flange with metric threads VFG... VFG-x...

Note: Stainless steel flanges are supplied with zinc plated bolts where necessary.



Material: 1 ST 44.3 (FE 430) Carbon Steel
 2. 1.4404 316L Stainless Steel

3000 Series														
Size	Type	A	B	C	D	E	F	G	H	J	ØL	M (Screws)		Weight kg
												Metric	UNC	
1/2"	AFS 080 G	R 1/2"	13	38.10	54	17.48	46	36	16	19	9.0	M 8 x 30	5/16" x 1 1/4"	0.25
1/2"	AFS 080 G-038	R 3/8"	13	38.10	54	17.48	46	36	16	19	9.0	M 8 x 30	5/16" x 1 1/4"	0.28
3/4"	AFS 100 G	R 3/4"	19	47.63	65	22.23	50	36	18	19	11.0	M 10 x 35	3/8" x 1 1/2"	0.39
3/4"	AFS 100 G-012	R 1/2"	13	47.63	65	22.23	50	36	18	19	11.0	M 10 x 35	3/8" x 1 1/2"	0.42
1"	AFS 102 G	R 1"	25	52.37	70	26.19	55	38	18	22	11.0	M 10 x 35	3/8" x 1 1/2"	0.46
1"	AFS 102 G-034	R 3/4"	19	52.37	70	26.19	55	35	21	19	11.0	M 10 x 35	3/8" x 1 1/2"	0.49
1"	AFS 102 G-012	R 1/2"	13	52.37	70	26.16	55	38	18	22	11.0	M 10 x 35	3/8" x 1 1/2"	0.52
1 1/4"	AFS 104 G	R 1 1/4"	32	58.72	79	30.18	68	41	21	22	11.5	M 10 x 40	7/16" x 1 1/2"	0.66
1 1/4"	AFS 104 G	R 1 1/4"	32	58.72	79	30.18	68	41	21	22	13.0	M 12 x 40	-	0.66
1 1/4"	AFS 104 G-100	R 1"	25	58.72	81	30.18	65	42	25	22	11.5	M 10 x 40	7/16" x 1 3/4"	0.75
1 1/4"	AFS 104 G-100	R 1"	25	58.72	81	30.18	65	42	25	22	13.0	M 12 x 40	-	0.75
1 1/4"	AFS 104 G-034	R 3/4"	19	58.72	79	30.18	68	41	21	22	11.5	M 10 x 40	7/16" x 1 1/2"	0.79
1 1/2"	AFS 106 G	R 1 1/2"	38	69.85	93	35.71	78	45	25	24	13.5	M 12 x 45	1/2" x 1 3/4"	1.05
1 1/2"	AFS 106 G-114	R 1 1/4"	32	69.85	95	35.71	78	45	27	24	13.5	M 12 x 45	1/2" x 1 3/4"	1.10
1 1/2"	AFS 106 G-100	R 1"	25	69.85	93	35.71	78	45	25	24	13.5	M 12 x 45	1/2" x 1 3/4"	1.16
1 1/2"	AFS 106 G-034	R 3/4"	19	69.85	93	35.71	78	45	25	24	13.5	M 12 x 45	1/2" x 1 3/4"	1.23
2"	AFS 108 G	R 2"	51	77.77	102	42.88	90	45	25	30	13.5	M 12 x 45	1/2" x 1 3/4"	1.19
2"	AFS 108 G-112	R 1 1/2"	38	77.77	102	42.88	90	45	25	26	13.5	M 12 x 45	1/2" x 1 3/4"	1.25
2"	AFS 108 G-114	R 1 1/4"	32	77.77	102	42.88	90	45	25	24	13.5	M 12 x 45	1/2" x 1 3/4"	1.40
2"	AFS 108 G-100	R 1"	25	77.77	102	42.88	90	45	25	26	13.5	M 12 x 45	1/2" x 1 3/4"	1.44
2 1/2"	AFS 110 G	R 2 1/2"	63	88.90	114	50.80	105	50	25	30	13.5	M 12 x 45	1/2" x 1 3/4"	1.40
2 1/2"	AFS 110 G-200	R 2"	51	88.90	114	50.80	105	50	25	30	13.5	M 12 x 45	1/2" x 1 3/4"	1.45
3"	AFS 112 G	R 3"	73	106.38	134	61.93	124	50	27	34	17.5	M 16 x 50	5/8" x 2"	2.15
3"	AFS 112 G-212	R 2 1/2"	63	106.38	134	61.93	124	50	27	30	17.5	M 16 x 50	5/8" x 2"	2.25
3 1/2"	AFS 114 G	R 3 1/2"	89	120.65	152	69.85	136	48	27	34	17.5	M 16 x 50	5/8" x 2"	2.40
3 1/2"	AFS 114 G-300	R 3"	73	120.65	152	69.85	136	48	27	34	17.5	M 16 x 50	5/8" x 2"	2.50
4"	AFS 116 G	R 4"	99	130.18	162	77.77	146	48	27	34	17.5	M 16 x 50	5/8" x 2"	2.85
4"	AFS 116 G-312	R 3 1/2"	89	130.18	162	77.77	146	48	27	34	17.5	M 16 x 50	5/8" x 2"	3.00

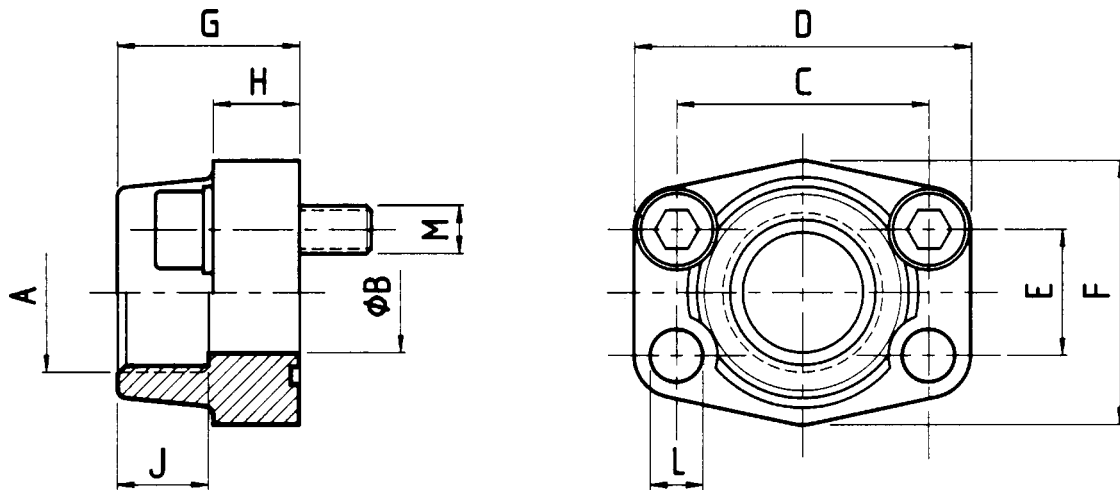
ordering code:

ST 44.3 1.4404

flange only
 flange including metric screws and o-ring
 flange including unc screws and o-ring

AFS...G AFx...G
 AFS...GM AFx...GM
 AFS...GU AFx...GU

Note: Stainless steel flanges are supplied with zinc plated bolts where necessary.



Material: 1 ST 44.3 (FE 430) Carbon Steel
 2. 1.4404, 316L Stainless Steel

6.000 Series														
Size	Type	A	B	C	D	E	F	G	H	J	ØL	M (Screws)		Weight kg
												Metric	UNC	
1/2"	AFS 401 G-012	R 1/2"	13	40.49	54	18.24	46	36	16	19	9	M 8 x 30	5/16" x 1 1/4"	0.26
1/2"	AFS 401 G-038	R 3/8"	13	40.49	54	18.24	46	36	16	19	9	M 8 x 30	5/16" x 1 1/4"	0.29
3/4"	AFS 402 G	R 3/4"	19	50.80	71	23.80	55	35	21	22	11	M 10 x 35	3/8" x 1 1/2"	0.50
3/4"	AFS 402 G-012	R 1/2"	13	50.80	71	23.80	55	35	21	22	11	M 10 x 35	3/8" x 1 1/2"	0.55
1"	AFS 403 G	R 1"	25	57.15	81	27.76	65	42	25	24	13	M 12 x 45	7/16" x 1 3/4"	0.76
1"	AFS 403 G-034	R 3/4"	19	57.15	81	27.76	65	42	25	24	13	M 12 x 45	7/16" x 1 3/4"	0.80
1 1/4"	AFS 404 G	R 1 1/4"	32	66.68	95	31.75	78	45	27	25	15*	M 14 x 45	1/2" x 1 3/4"	1.20
1 1/4"	AFS 404 G-100	R 1"	25	66.68	95	31.75	78	45	27	25	15*	M 14 x 45	1/2" x 1 3/4"	1.30
1 1/2"	AFS 405 G	R 1 1/2"	38	79.38	112	36.50	94	50	30	28	17	M 16 x 50	5/8" x 2"	1.65
1 1/2"	AFS 405 G-114	R 1 1/4"	32	79.38	112	36.50	94	50	30	28	17	M 16 x 50	5/8" x 2"	1.75
2"	AFS 406 G	R 2"	51	96.82	134	44.45	114	65	37	30	21	M 20 x 65	3/4" x 2 1/2"	2.45
2"	AFS 406 G-112	R 1 1/2"	38	96.82	134	44.45	114	65	37	30	21	M 20 x 65	3/4" x 2 1/2"	2.55

ordering code:

ST 44.3

1.4404

* 13.5 for UNC screws

flange only

AFS...G

AFx...G

flange including metric screws and o-ring

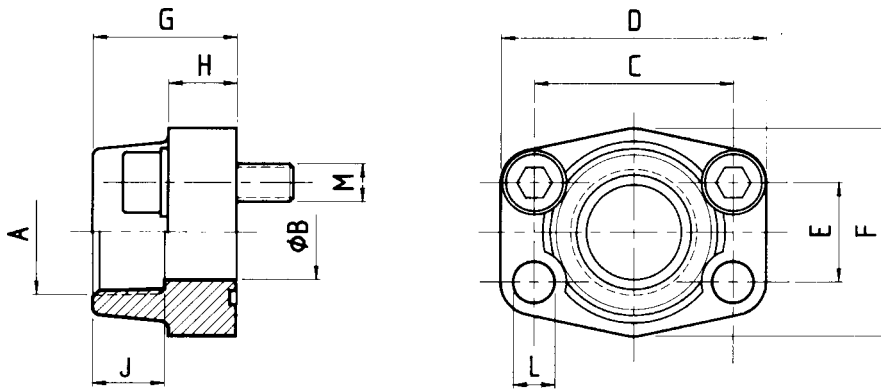
AFS...GM

AFx...GM

flange including UNC screws and o-ring

AFS...GU

AFx...GU



Material: 1 ST 44.3 (FE 430) Carbon Steel
 2. 1.4404, 316L Stainless Steel

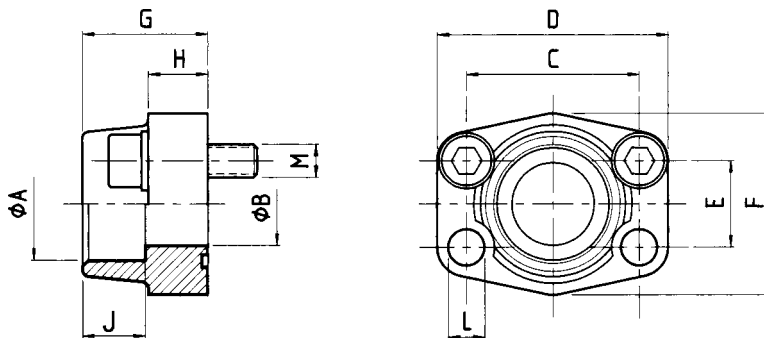
3.000 Series														
Size	Type	A	B	C	D	E	F	G	H	J	ØL	M (Screws)		Weight kg
												Metric	UNC	
1/2"	AFS 080 N	1/2" NPT	13	38.10	54	17.48	46	36	16	19	9.0	M 8 x 30	5/16" x 1 1/4"	0.25
1/2"	AFS 080 N-038	3/8" NPT	13	38.10	54	17.48	46	36	16	19	9.0	M 8 x 30	5/16" x 1 1/4"	0.28
3/4"	AFS 100 N	3/4" NPT	19	47.63	65	22.23	50	36	18	19	11.0	M 10 x 35	3/8" x 1 1/2"	0.39
3/4"	AFS 100 N-012	1/2" NPT	13	47.63	65	22.23	50	36	18	19	11.0	M 10 x 35	3/8" x 1 1/2"	0.42
1"	AFS 102 N	1" NPT	25	52.37	70	26.19	55	38	18	22	11.0	M 10 x 35	3/8" x 1 1/2"	0.46
1"	AFS 102 N-034	3/4" NPT	19	52.37	70	26.19	55	35	21	19	11.0	M 10 x 35	3/8" x 1 1/2"	0.49
1 1/4"	AFS 104 N	1 1/4" NPT	32	58.72	79	30.18	68	41	21	22	11.5	M 10 x 40	7/16" x 1 1/2"	0.66
1 1/4"	AFS 104 N-100	1" NPT	25	58.72	81	30.18	65	42	25	22	11.5	M 10 x 40	7/16" x 1 1/2"	0.75
1 1/2"	AFS 106 N	1 1/2" NPT	38	69.85	93	35.71	78	45	25	24	13.5	M 12 x 45	1/2" x 1 3/4"	1.05
1 1/2"	AFS 106 N-104	1 1/4" NPT	32	69.85	95	35.71	78	45	27	24	13.5	M 12 x 45	1/2" x 1 3/4"	1.10
2"	AFS 108 N	2" NPT	51	77.77	102	42.88	90	45	25	30	13.5	M 12 x 45	1/2" x 1 3/4"	1.19
2"	AFS 108 N-112	1 1/2" NPT	38	77.77	102	42.88	90	45	25	26	13.5	M 12 x 45	1/2" x 1 3/4"	1.25
2 1/2"	AFS 110 N	2 1/2" NPT	63	88.90	114	50.80	105	50	25	30	13.5	M 12 x 45	1/2" x 1 3/4"	1.40
3"	AFS 112 N	3" NPT	73	106.38	134	61.93	124	50	27	34	17.5	M 16 x 50	5/8" x 2"	2.15
3 1/2"	AFS 114 N	3 1/2" NPT	89	120.65	152	69.85	136	48	27	34	17.5	M 16 x 50	5/8" x 2"	2.40
4"	AFS 116 N	4" NPT	99	130.18	162	77.77	146	48	27	34	17.5	M 16 x 50	5/8" x 2"	2.85
6.000 Series														
1/2"	AFS 401 N-012	1/2" NPT	13	40.49	54	18.24	46	36	16	19	9	M 8 x 30	5/16" x 1 1/4"	0.26
1/2"	AFS 401 N-038	3/8" NPT	13	40.49	54	18.24	46	36	16	19	9	M 8 x 30	5/16" x 1 1/4"	0.29
3/4"	AFS 402 N	3/4" NPT	19	50.80	71	23.80	55	35	21	22	11	M 10 x 35	3/8" x 1 1/2"	0.50
3/4"	AFS 402 N-012	1/2" NPT	13	50.80	71	23.80	55	35	21	22	11	M 10 x 35	3/8" x 1 1/2"	0.55
1"	AFS 403 N	1" NPT	25	57.15	81	27.76	65	42	25	24	13	M 12 x 45	7/16" x 1 3/4"	0.76
1"	AFS 403 N-034	3/4" NPT	19	57.15	81	27.76	65	42	25	24	13	M 12 x 45	7/16" x 1 3/4"	0.80
1 1/4"	AFS 404 N	1 1/4" NPT	32	66.68	95	31.75	78	45	27	25	15*	M 14 x 45	1/2" x 1 3/4"	1.20
1 1/4"	AFS 404 N-100	1" NPT	25	66.68	95	31.75	78	45	27	25	15*	M 14 x 45	1/2" x 1 3/4"	1.30
1 1/2"	AFS 405 N	1 1/2" NPT	38	79.38	112	36.50	94	50	30	28	17	M 16 x 50	5/8" x 2"	1.65
1 1/2"	AFS 405 N-114	1 1/4" NPT	32	79.38	112	36.50	94	50	30	28	17	M 16 x 50	5/8" x 2"	1.75
2"	AFS 406 N	2" NPT	51	96.82	134	44.45	114	65	37	30	21	M 20 x 65	3/4" x 2 1/2"	2.45
2"	AFS 406 N-112	1 1/2" NPT	38	96.82	134	44.45	114	65	37	30	21	M 20 x 65	3/4" x 2 1/2"	2.55

ordering code:
 flange only
 flange with metric screws and o-ring
 flange with UNC screws and o-ring

ST 44.3
 AFS...N
 AFS...NM
 GFS...NU

1.4404
 AFx...N
 AFx...NM
 GFx...NU

* 13.5 for UNC screws



Material: 1 ST 44.3 (FE 430) Carbon Steel
 2. 1.4404 316L Stainless

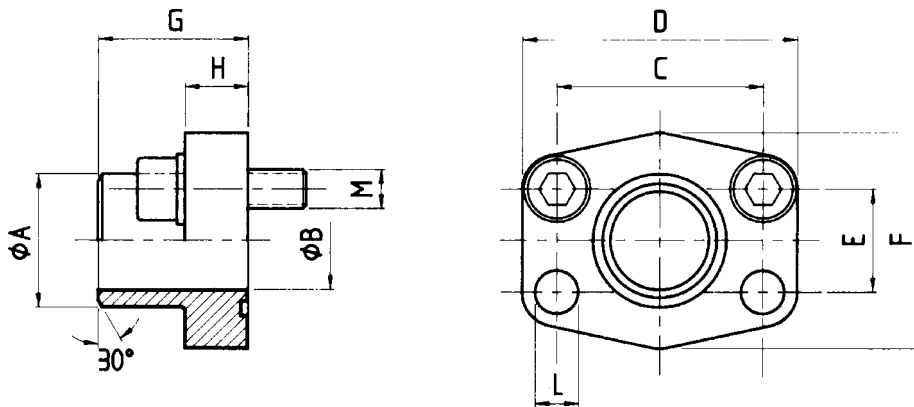
3.000 Series														
Size	Type	A	B	C	D	E	F	G	H	J	L	M (Screws)		Weight kg
												Metric	UNC	
1/2"	AFS 080 S	21.6	13	38.10	54	17.48	46	36	16	19	9.0	M 8 x 30	5/16" x 1 1/4"	0.25
1/2"	AFS 080 S-038	17.5	13	38.10	54	17.48	46	36	16	19	9.0	M 8 x 30	5/16" x 1 1/4"	0.28
1/2"	AFS 080 S A20	20.3	13	38.10	54	17.48	46	36	16	19	9.0	M 8 x 30	5/16" x 1 1/4"	0.25
3/4"	AFS 100 S	27.2	19	47.63	65	22.23	50	36	18	19	11.0	M 10 x 35	3/8" x 1 1/2"	0.39
3/4"	AFS 100 S A25	25.3	19	47.63	65	22.23	50	36	18	19	11.0	M 10 x 35	3/8" x 1 1/2"	0.39
1"	AFS 102 S	34.0	25	52.37	70	26.19	55	38	18	19	11.0	M 10 x 35	3/8" x 1 1/2"	0.46
1"	AFS 102 S A30	30.3	25	52.37	70	26.19	55	38	18	19	11.0	M 10 x 35	3/8" x 1 1/2"	0.46
1 1/4"	AFS 104 S	42.8	32	58.72	79	30.18	68	41	21	22	11.5	M 10 x 40	7/16" x 1 1/2"	0.66
1 1/4"	AFS 104 S A38	38.3	32	58.72	79	30.18	68	41	21	22	11.5	M 10 x 40	7/16" x 1 1/2"	0.66
1 1/2"	AFS 106 S	48.6	38	69.85	93	35.71	78	45	25	24	13.5	M 12 x 45	1/2" x 1 3/4"	1.05
1 1/2"	AFS 106 S A50	50.5	38	69.85	93	35.71	78	45	25	24	13.5	M 12 x 45	1/2" x 1 3/4"	1.05
2"	AFS 108 S	61.0	51	77.77	102	42.88	90	45	25	26	13.5	M 12 x 45	1/2" x 1 3/4"	1.19
2 1/2"	AFS 110 S	76.6	63	88.90	114	50.80	105	50	25	30	13.5	M 12 x 45	1/2" x 1 3/4"	1.40
3"	AFS 112 S	90.5	73	106.38	134	61.93	124	50	27	34	17.5	M 16 x 50	5/8" x 2"	2.15
3 1/2"	AFS 114 S	103.0	89	120.65	152	69.85	136	48	27	34	17.5	M 16 x 50	5/8" x 2"	2.40
3"	AFS 116 S	115.5	99	130.18	162	77.77	146	48	27	34	17.5	M 16 x 50	5/8" x 2"	2.85
6.000 Series														
1/2"	AFS 401 S-012	21.6	13	40.49	54	18.24	46	36	16	19	9.0	M 8 x 30	5/16" x 1 1/4"	0.26
1/2"	AFS 401 S-038	17.5	13	40.49	54	18.24	46	36	16	19	9.0	M 8 x 30	5/16" x 1 1/4"	0.29
1/2"	AFS 401 S A20	20.3	13	40.49	54	18.24	46	36	16	19	9.0	M 8 x 30	5/16" x 1 1/4"	0.26
3/4"	AFS 402 S	27.2	19	50.80	71	23.80	55	35	21	22	11.0	M 10 x 35	3/8" x 1 1/2"	0.50
3/4"	AFS 402 S A25	25.3	19	50.80	71	23.80	55	35	21	22	11.0	M 10 x 35	3/8" x 1 1/2"	0.50
1"	AFS 403 S	34.0	25	57.15	81	27.76	65	42	25	22	13.0	M 12 x 45	7/16" x 1 3/4"	0.76
1"	AFS 403 S A30	30.3	25	57.15	81	27.76	65	42	25	22	13.0	M 12 x 45	7/16" x 1 3/4"	0.76
1 1/4"	AFS 404 S	42.8	32	66.68	95	31.75	78	45	27	25	15.0*	M 14 x 45	1/2" x 1 3/4"	1.20
1 1/4"	AFS 404 S A38	38.3	32	66.68	95	31.75	78	45	27	25	15.0*	M 14 x 45	1/2" x 1 3/4"	1.20
1 1/2"	AFS 405 S	48.6	38	79.38	112	36.50	94	50	30	28	17.5	M 16 x 50	5/8" x 2"	1.65
1 1/2"	AFS 405 S A50	50.5	38	79.38	112	36.50	94	50	30	28	17.5	M 16 x 50	5/8" x 2"	1.65
2"	AFS 406 S	61.0	51	96.82	134	44.45	114	65	37	24	21.0	M 20 x 65	3/4" x 2 1/2"	2.45
2 1/2"	AFS 407 S	76.6	63	123.80	180	58.70	152	80	45	30	26.0	M 24 x 75	-	8.30

ordering code:

flange only
 flange including metric screws and o-ring
 flange including UNC screws and o-ring

AFG...
 AFG...M
 AFG...U

*L = 13.5 UNC



Material: 1 ST 44.3 (FE 430) Carbon Steel
 2. 1.4404 316L Stainless

3.000 Series													
Size	Type	A	B	C	D	E	F	G	H	ØL	M (Screws)		Weight kg
											Metric	UNC	
1/2"	AFS 080 ST	21.6	13.0	38.10	54	17.48	46	36	16	9.0	M 8 x 30	5/16" x 1 1/4"	0.28
1/2"	AFS 080 ST-038	17.5	13.0	38.10	54	17.48	46	36	16	9.0	M 8 x 30	5/16" x 1 1/4"	0.25
3/4"	AFS 100 ST	28.0	19.0	47.63	65	22.23	50	36	18	11.0	M 10 x 35	3/8" x 1 1/2"	0.39
1"	AFS 102 ST	34.0	25.0	52.37	70	26.19	55	38	18	11.0	M 10 x 35	3/8" x 1 1/2"	0.46
1 1/4"	AFS 104 ST	42.8	32.0	58.72	79	30.18	68	41	21	11.5	M 10 x 40	7/16" x 1 1/2"	0.66
1 1/2"	AFS 106 ST	48.6	38.0	69.85	93	35.71	78	44	25	13.5	M 12 x 45	1/2" x 1 3/4"	1.05
2"	AFS 108 ST	61.0	51.0	77.77	102	42.88	90	45	25	13.5	M 12 x 45	1/2" x 1 3/4"	1.19
2 1/2"	AFS 110 ST	77.0	63.0	88.90	114	50.80	105	50	25	13.5	M 12 x 45	1/2" x 1 3/4"	1.40
3"	AFS 112 ST	92.0	73.0	106.38	134	61.93	124	50	27	17.5	M 16 x 50	5/8" x 2"	2.15
3 1/2"	AFS 114 ST	103.0	89.0	120.65	152	69.85	136	48	27	17.5	M 16 x 50	5/8" x 2"	2.40
4"	AFS 116 ST	115.5	99.0	130.18	162	77.77	146	48	27	17.5	M 16 x 50	5/8" x 2"	2.85
5"	AFS 118 ST	140.2	120.0	152.40	184	92.08	180	50	28	17.5	M 16 x 55	5/8" x 2"	5.20
6.000 Series													
1/2"	AFS 401 ST-012	21.5	13.0	40.49	54	18.24	46	36	16	9.0	M 8 x 30	5/16" x 1 1/4"	0.29
1/2"	AFS 401 ST-038	17.5	13.0	40.49	54	18.24	46	36	16	9.0	M 8 x 30	5/16" x 1 1/4"	0.26
3/4"	AFS 402 ST	28.0	19.0	50.80	71	23.80	55	35	21	11.0	M 10 x 35	3/8" x 1 1/2"	0.50
1"	AFS 403 ST	34.0	25.0	57.15	79	27.76	68	41	21	13.0	M 12 x 45	7/16" x 1 3/4"	0.76
1 1/4"	AFS 404 ST	42.8	32.0	66.68	93	31.75	78	44	25	15.0*	M 14 x 45	1/2" x 1 3/4"	1.20
1 1/4"	AFS 404 ST 160	42.8	29.0	66.68	93	31.75	78	44	25	15.0*	M 14 x 45	1/2" x 1 3/4"	1.35
1 1/2"	AFS 405 ST	48.6	38.0	79.38	112	36.50	94	55	30	17.0	M 16 x 50	5/8" x 2"	1.65
1 1/2"	AFS 405 ST 160	48.6	34.0	79.38	112	36.50	94	55	30	17.0	M 16 x 50	5/8" x 2"	1.80
2"	AFS 406 ST	61.0	51.0	96.82	134	44.45	114	65	37	21.0	M 20 x 65	3/4" x 2 1/2"	2.45
2"	AFS 406 ST 160	61.0	43.0	96.82	134	44.45	114	65	37	21.0	M 20 x 65	3/4" x 2 1/2"	2.70
2 1/2"	AFS 407 ST 76	76.1	51.0	123.80	180	58.70	152	80	45	26.0	M 24 x 75	-	6.40
2 1/2"	AFS 407 ST 88	90.0	60.5	123.80	180	58.70	152	80	45	26.0	M 24 x 75	-	8.30

ordering code:

ST 44.3

1.4404

*13.5 for UNC screws

flange only
 flange with metric screws and o-ring
 flange with UNC screws and o-ring

AFS...ST

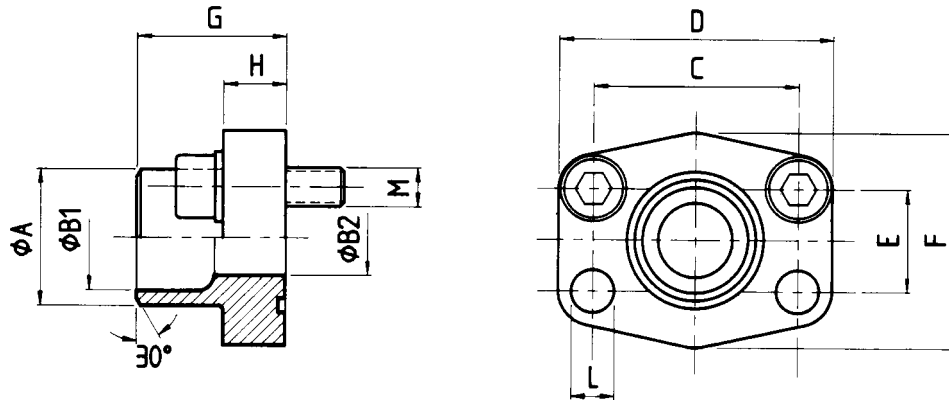
AFx...ST

AFS...STM

AFx...STM

AFS...STU

AFx...STU



Material: 1 ST 44.3 (FE 430) Carbon Steel
 2 1.4404 316L Stainless Steel

3.000 Series

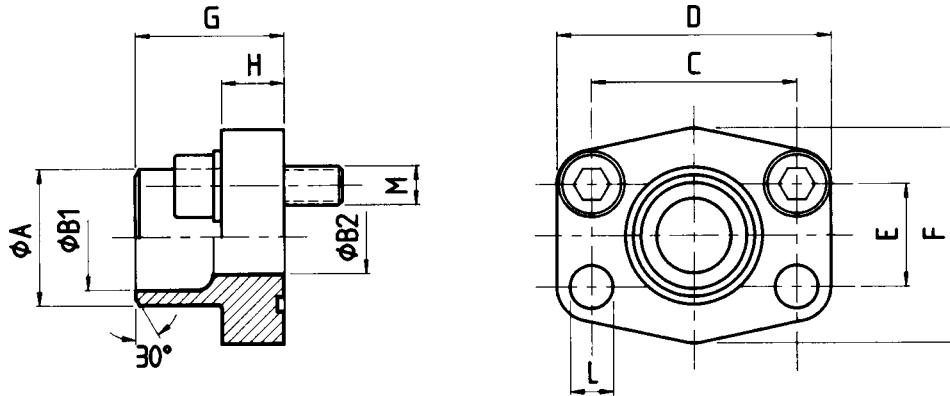
Size	Type	Tube	A	B ₁	B ₂	C	D	E	F	G	H	ØL	M (Screws)		Weight kg
													Metric	UNC	
1/2"	AFS 080 SRE 20	20 x 3	20	14.0	14	38.10	54	17.48	46	35.0	16.0	9.0	M 8 x 30	5/16" x 1 1/4"	0.28
1/2"	AFS 080 SRE 22	22 x 3	22	16.0	13	38.10	54	17.48	46	35.0	16.0	9.0	M 8 x 30	5/16" x 1 1/4"	0.28
3/4"	AFS 100 SRE 25	25 x 3	25	19.0	19	47.63	65	22.23	50	36.0	18.0	11.0	M 10 x 35	3/8" x 1 1/2"	0.39
3/4"	AFS 100 SRE 28	28 x 3	28	21.5	19	47.63	65	22.23	50	36.0	18.0	11.0	M 10 x 35	3/8" x 1 1/2"	0.39
1"	AFS 102 SRE 30	30 x 4	30	22.0	22	52.37	70	26.19	55	38.0	18.0	11.0	M 10 x 35	3/8" x 1 1/2"	0.46
1"	AFS 102 SRE 35	35 x 3	35	27.0	25	52.37	70	26.19	55	38.0	18.0	11.0	M 10 x 35	3/8" x 1 1/2"	0.47
1 1/4"	AFS 104 SRE 38	38 x 4	38	30.0	30	58.72	79	30.18	68	41.0	21.0	11.5	M 10 x 40	7/16" x 1 1/2"	0.66
1 1/4"	AFS 104 SRE 42	42 x 3	43	36.0	31	58.72	79	30.18	68	41.0	21.0	11.5	M 10 x 40	7/16" x 1 1/2"	0.66
1 1/2"	AFS 106 SRE 38	38 x 4	38	30.0	30	69.85	93	35.71	78	44.5	24.5	13.5	M 12 x 45	1/2" x 1 3/4"	1.05
1 1/2"	AFS 106 SRE 42	42 x 3	42	36.0	36	69.85	93	35.71	78	44.5	24.5	13.5	M 12 x 45	1/2" x 1 3/4"	1.05
1 1/2"	AFS 106 SRE 48	48.3 x 4.5	49	38.0	38	69.85	93	35.71	78	44.5	24.5	13.5	M 12 x 45	1/2" x 1 3/4"	1.05
2"	AFS 108 SRE 60	60.3 x 5.6	61	49.0	49	77.77	102	42.88	90	45.0	25.0	13.5	M 12 x 45	1/2" x 1 3/4"	1.20
2 1/2"	AFS 110 SRE 76	76.1 x 7.1	77	62	62	88.90	114	50.80	105	50.0	25.0	13.5	M 12 x 45	1/2" x 1 3/4"	1.40
3"	AFS 112 SRE 76	76.1 x 7.1	77	62	62	106.38	134	61.93	124	51.0	26.0	17.5	M 16 x 50	5/8" x 2"	2.15

ordering code:

ST 44.3 1.4404

flange only
 flange with metric screws and o-ring
 flange with UNC screws and o-ring

AFS... AFx...
 AFS...M AFx...M
 AFS...U AFx...U



Material: 1 ST 44.3 (FE 430) Carbon Steel
 2 1.4404 316L Stainless

3.000 Series															
Size	Type	Tube	A	B ₁	B ₂	C	D	E	F	G	H	ØL	M (Screws)		Weight kg
													Metric	UNC	
1/2"	AFS 401 SRE 20	20 x 3	20	14	14	40.49	54	18.24	46	34	16	9	M 8 x 30	5/16" x 1 1/4"	0.29
3/4"	AFS 402 SRE 20	20 x 3	20	14	14	50.80	71	23.80	55	35	21	11	M 10 x 35	3/8" x 1 1/2"	0.50
3/4"	AFS 402 SRE 25	25 x 4	25	17	17	50.80	71	23.80	55	35	21	11	M 10 x 35	3/8" x 1 1/2"	0.53
1"	AFS 403 SRE 25	25 x 4	25	17	17	57.15	81	27.76	65	42	25	13	M 12 x 45	7/16" x 1 1/2"	0.76
1"	AFS 403 SRE 30	30 x 4	30	22	22	57.15	81	27.76	65	42	25	13	M 12 x 45	7/16" x 1 1/2"	0.80
1 1/4"	AFS 404 SRE 30	30 x 4	30	22	22	66.68	95	31.75	78	44	25	15 *	M 14 x 45	1/2" x 1 3/4"	1.20
1 1/4"	AFS 404 SRE 38	38 x 6	38	26	26	66.68	95	31.75	78	44	25	15 *	M 14 x 45	1/2" x 1 3/4"	1.29
1 1/2"	AFS 405 SRE 38	38 x 6	38	26	26	79.38	112	36.50	94	56	28	17	M 16 x 50	5/8" x 2"	1.52
1 1/2"	AFS 405 SRE 48	48.3 x 8	49	32	32	79.38	112	36.50	94	56	28	17	M 16 x 50	5/8" x 2"	1.57
1 1/2"	AFS 405 SRE 60	60.3 x 10	61	40	40	79.38	112	36.50	94	56	28	17	M 16 x 50	5/8" x 2"	1.65
2"	AFS 406 SRE 60	60.3 x 10	61	40	40	96.82	134	44.45	114	65	33	21	M 20 x 60	3/4" x 2 1/2"	2.45
2"	AFS 406 SRE 76	76.1 x 12.5	76	48	48	96.82	134	44.45	114	80	33	21	M 20 x 60	3/4" x 2 1/2"	2.96

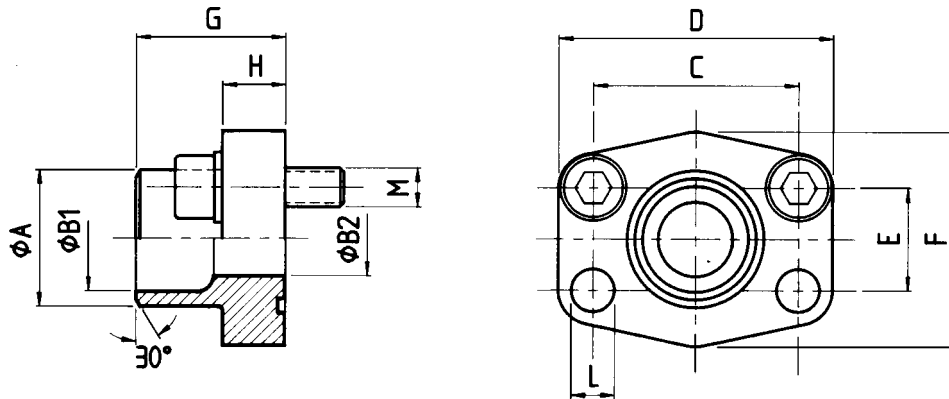
ordering code:

ST 44.3 1.4404

*13.5 for UNC screws

flange only
 flange with metric screws and o-ring
 flange with unc screws and o-ring

AFS... AFx...
 AFS...M AFx...M
 AFS...U AFx...U



Material: 1 ST 44.3 (FE 430) Carbon Steel
 2 1.4404 316L Stainless Steel

3.000 Series

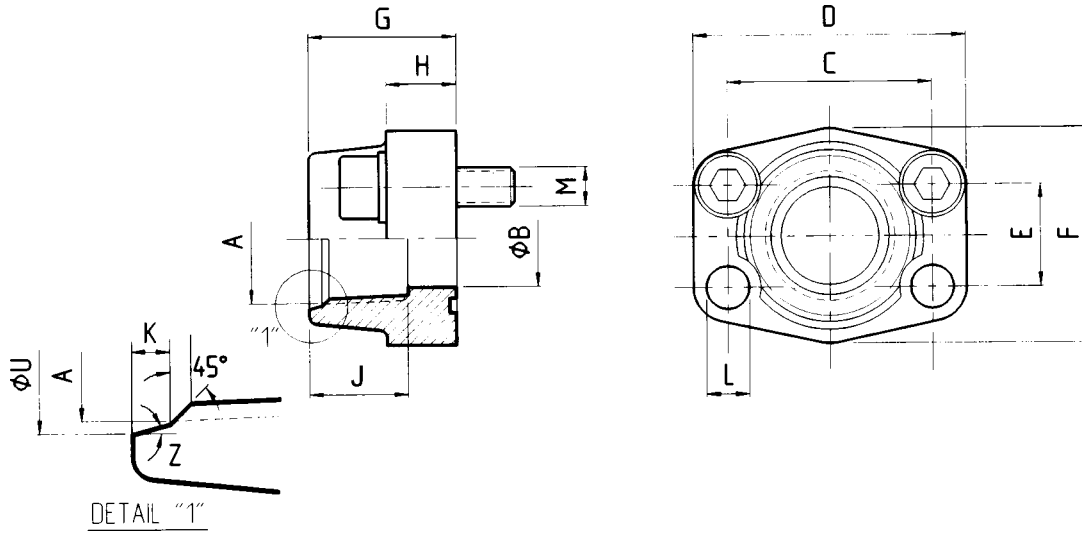
Size	Type	Tube	A	B ₁	B ₂	C	D	E	F	G	H	ØL	M (Screws)		Weight kg
													Metric	UNC	
1/2"	AFS 080 STRE 21.3	21.3 x 2.6	22.0	16.0	13	38.10	54	17.48	46	35.0	16.0	9.0	M 8 x 30	5/16" x 1 1/4"	0.28
3/4"	AFS 100 STRE 26.9	26.9 x 2.6	28.0	21.5	19	47.63	65	22.23	50	36.0	18.0	11.0	M 10 x 35	3/8" x 1 1/2"	0.39
1"	AFS 102 STRE 33.7	33.7 x 3.2	35.0	27.0	25	52.37	70	26.19	55	38.0	18.0	11.0	M 10 x 35	3/8" x 1 1/2"	0.46
1 1/4"	AFS 104 STRE 42.4	42.4 x 3.2	43.0	36.0	31	58.72	79	30.18	68	41.0	21.0	11.5	M 10 x 40	7/16" x 1 1/2"	0.66
1 1/2"	AFS 106 STRE 48.3	48.3 x 3.2	49.0	42.0	38	69.85	93	35.71	78	44.5	24.5	13.5	M 12 x 45	1/2" x 1 3/4"	1.05
2"	AFS 108 STRE 48.3	48.3 x 3.2	49.0	42.0	42	77.77	102	42.88	90	45.0	25.0	13.5	M 12 x 45	1/2" x 1 3/4"	1.12
2"	AFS 108 STRE 60.3	60.3 x 3.6	61.0	53.0	49	77.77	102	42.88	90	45.0	25.0	13.5	M 12 x 45	1/2" x 1 3/4"	1.19
2 1/2"	AFS 110 STRE 60.3	60.3 x 3.6	61.0	53.0	53	88.90	114	50.80	105	50.0	25.0	13.5	M 12 x 45	1/2" x 1 3/4"	1.31
2 1/2"	AFS 110 STRE 76.1	76.1 x 3.6	77.0	70.0	62	88.90	114	50.80	105	50.0	25.0	13.5	M 12 x 45	1/2" x 1 3/4"	1.40
3"	AFS 112 STRE 88.9	88.9 x 3.6	90.0	82.0	74	106.38	134	61.93	124	51.0	26.0	17.5	M 16 x 50	5/8" x 2"	2.15
3 1/2"	AFS 114 STRE 88.9	88.9 x 3.6	90.0	82.0	82	120.65	152	69.85	136	48.0	26.0	17.5	M 16 x 50	5/8" x 2"	2.40
3 1/2"	AFS 114 STRE 76.1	76.1 x 3.6	77.0	70.0	70	120.65	152	69.85	136	48.0	26.0	17.5	M 16 x 50	5/8" x 2"	2.38
4"	AFS 116 STRE 88.9	88.9 x 3.6	90.0	82.0	82	130.18	162	77.77	146	48.0	26.0	17.5	M 16 x 50	5/8" x 2"	2.75
4"	AFS 116 STRE 114	114.0 x 3.6	115.0	107.0	102	130.18	162	77.77	146	48.0	26.0	17.5	M 16 x 50	5/8" x 2"	2.85
5"	AFS 118 STRE 139FL	139.7 x 4.0	141.0	-	131	152.40	190	92.10	170	28.0	28.0	17.5	M 16 x 50	5/8" x 2"	2.80
5"	AFS 118 STRE 139	139.7 x 4.0	140.2	131	120	152.40	184	92.08	180	50.0	28.0	17.5	M 16 x 55	-	5.00

ordering code:

ST 44.3 1.4404

flange only
 flange with metric screws and o-ring
 flange with UNC screws and o-ring

AFS... AFx...
 AFS...M AFx...M
 AFS...U AFx...U



Material: 1 ST 44.3 (FE 430) Carbon Steel
 2. 1.4404, 316L Stainless Steel

3.000 Series																	
Size	Type	A	B	C	D	E	F	G	H	J	ØL	U	E	Z	M (Screws)		Weight kg
															Metric	UNC	
1/2"	AFS 080 T	3/4" 16 UNF	13	38.10	54	17.48	46	36	16	17	9.0	20.6	2.5	15°	M 8 x 30	5/16" x 1 1/4"	0.25
3/4"	AFS 100 T	1 1/16" 12 UN	19	47.63	65	22.23	50	36	18	23	11.0	29.2	3.3	15°	M 10 x 35	3/8" x 1 1/2"	0.39
1"	AFS 102 T	1 5/16" 12 UN	25	52.37	70	26.19	55	38	18	23	11.0	35.5	3.3	15°	M 10 x 35	3/8" x 1 1/2"	0.46
1 1/4"	AFS104 T	1 5/8" 12 UN	32	58.72	79	30.18	68	41	21	23	11.5	43.5	3.3	15°	M 10 x 40	7/16" x 1 1/2"	0.66
1 1/2"	AFS 106 T	1 7/8" 12 UN	38	69.85	93	35.71	78	45	25	23	13.5	49.8	3.3	15°	M 12 x 45	1/2" x 1 3/4"	1.05
6.000 Series																	
1/2"	AFS 401 T	3/4" 16 UNF	13	40.49	54	18.24	46	36	16	17	9	20.6	2.5	15°	M 8 x 30	5/16" x 1 1/4"	0.26
3/4"	AFS 402 T	1 1/16" 12 UN	19	50.80	71	23.80	55	35	21	23	11	29.3	3.3	15°	M 10 x 35	3/8" x 1 1/2"	0.50
1"	AFS 403 T	1 5/16" 12 UN	25	57.15	81	27.76	65	42	25	23	13	35.5	3.3	15°	M 12 x 45	7/16" x 1 3/4"	0.76
1 1/4"	AFS 404 T	1 5/8" 12 UN	32	66.68	95	31.75	78	45	27	23	15*	43.5	3.3	15°	M 14 x 45	1/2" x 1 3/4"	1.20
1 1/2"	AFS 405 T	1 7/8" 12 UN	38	79.38	112	36.50	94	50	30	23	17	49.8	3.3	15°	M 16 x 50	5/8" x 2"	1.65

ordering code:

ST 44.3

1.4404

*13.5 for UNC Screws

flange only

flange including metric screws and o-ring

flange including UNC screws and o-ring

AFS...T

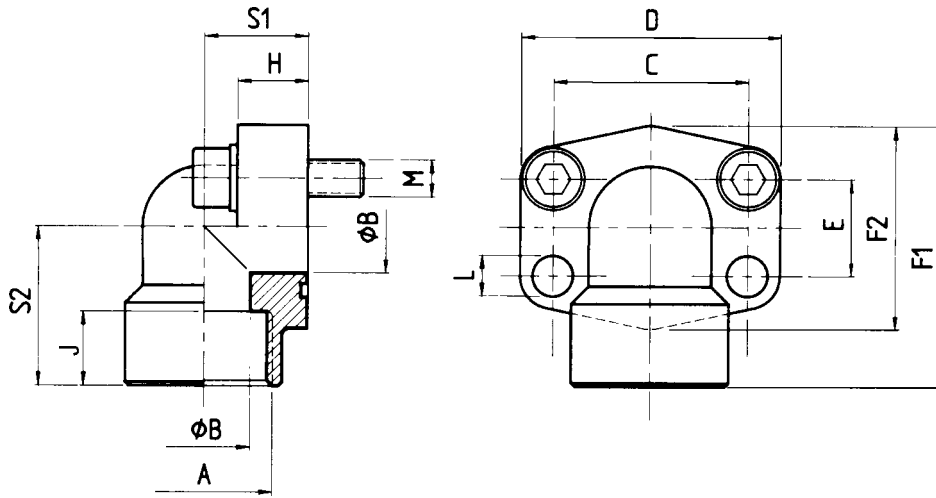
AFS...TM

AFS...TU

AFx...T

AFx...TMx

AFx...TUx



Material: 1 ST 44.3 (FE 430) ST 52.3 (FE 510) Carbon Steel
 2. 1.4404 316L Stainless Steel

3.000 Series																
Size	Type	A	B	C	D	E	F ₁	F ₂	H	J	ØL	S ₁	S ₂	M (Screws)		Weight kg
														Metric	UNC	
1/2"	AFS 080/90 G	R 1/2"	13	38.10	54	17.48	60	48	16.0	19	9.0	20	37	M 8 x 30	5/16" x 1 1/4"	0.35
1/2"	AFS 080/90 G-038	R 3/8"	13	38.10	54	17.48	60	48	16.0	19	9.0	20	37	M 8 x 30	5/16" x 1 1/4"	0.35
3/4"	AFS 100/90 G	R 3/4"	19	47.63	65	22.23	63	52	18.0	19	11.0	24	38	M 10 x 35	3/8" x 1 1/2"	0.55
1"	AFS 102/90G	R 1"	25	52.37	70	26.19	70	60	19.0	20	11.0	28	43	M 10 x 35	3/8" x 1 1/2"	0.80
1 1/4"	AFS104/90 G	R 1 1/4"	32	58.72	79	30.18	85	73	21.0	22	11.5	34	51	M 10 x 40	7/16" x 1 1/2"	1.30
1 1/2"	AFS 106/90 G	R 1 1/2"	38	69.85	93	35.71	95	83	25.0	25	13.5	38	56	M 12 x 45	1/2" x 1 3/4"	1.60
2"	AFS 108/90 G	R 2"	51	77.77	110	42.88	110	94	25.0	28	13.5	42	65	M 12 x 45	5/8" x 2"	2.00
6.000 Series																
1/2"	AFS 401/90 G-012	R 1/2"	13	40.49	54	18.24	60	46	16.0	19	9	20	37	M 8 x 30	5/16" x 1 1/4"	0.35
1/2"	AFS 401/90 G-038	R 3/8"	13	40.49	54	18.24	60	46	16.0	19	9	20	37	M 8 x 30	5/16" x 1 1/4"	0.35
3/4"	AFS 402/90 G	R 3/4"	19	50.80	70	23.80	70	56	19.0	20	11	28	43	M 10 x 35	3/8" x 1 1/2"	0.80
1"	AFS 403/90 G	R 1"	25	57.15	79	27.76	85	72	21.0	22	13	34	51	M 12 x 45	7/16" x 1 3/4"	1.30
1 1/4"	AFS 404/90 G	R 1 1/4"	32	66.68	93	31.75	95	75	25.0	25	15*	38	56	M 14 x 50	1/2" x 1 3/4"	1.60
1 1/2"	AFS 405/90 G	R 1 1/2"	38	79.38	110	36.50	94	94	25.0	28	17	42	65	M 16 x 50	5/8" x 2"	2.00
2"	AFS 406/90 G	R 2"	51	96.82	134	50.00	150	106	76.5	28	21	60	92	M 20 x 110	-	8.20

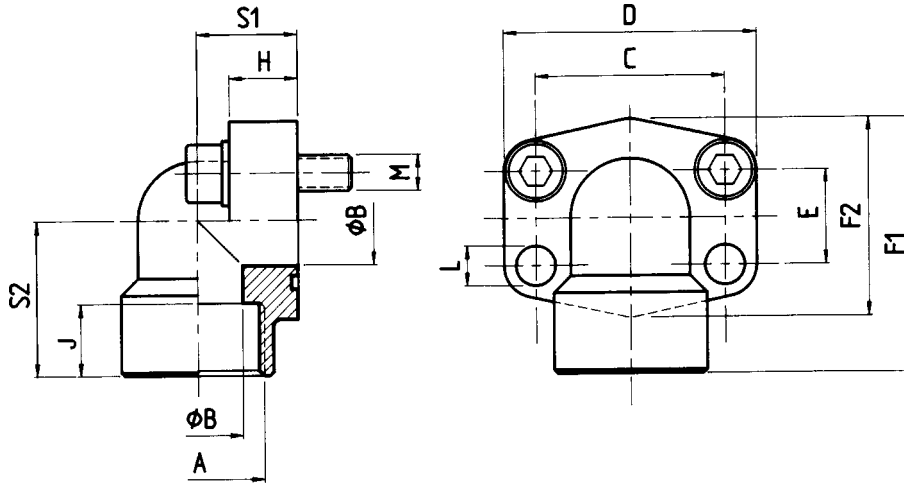
ordering code:

ST 44.3 1.4404

*13.5 for UNC screws

flange only
 flange with metric screws and o-ring
 flange with UNC screws and o-ring

AFS.../90 G AFx.../90 G
 AFS.../90 GM AFx.../90 GMx
 AFS.../90 GU AFx.../90 GUx



Material: 1 ST 44.3 (FE 430) ST 52.3 (FE 510) Carbon Steel
 2. 1.4404 316L Stainless Steel

3.000 Series																
Size	Type	A	B	C	D	E	F ₁	F ₂	H	J	ØL	S ₁	S ₂	M (Screws)		Weight kg
														Metric	UNC	
1/2"	AFS 080/90 N	1/2" NPT	13	38.10	54	17.48	60	48	16.0	19	9.0	20	37	M 8 x 30	5/16" x 1 1/4"	0.35
1/2"	AFS 080/90 N-038	3/8" NPT	13	38.10	54	17.48	60	48	16.0	19	9.0	20	37	M 8 x 30	5/16" x 1 1/4"	0.35
3/4"	AFS 100/90 N	3/4" NPT	19	47.63	65	22.23	63	52	18.0	19	11.0	24	38	M 10 x 35	3/8" x 1 1/2"	0.55
1"	AFS 102/90 N	1" NPT	25	52.37	70	26.19	70	60	19.0	20	11.0	28	43	M 10 x 35	3/8" x 1 1/2"	0.80
1 1/4"	AFS104/90 N	1 1/4" NPT	32	58.72	79	30.18	85	73	21.0	22	11.5	34	51	M 10 x 40	7/16" x 1 1/2"	1.30
1 1/2"	AFS 106/90 N	1 1/2" NPT	38	69.85	93	35.71	95	83	25.0	25	13.5	38	56	M 12 x 45	1/2" x 1 3/4"	1.60
2"	AFS 108/90 N	2" NPT	51	77.77	110	42.88	110	94	25.0	28	13.5	42	65	M 12 x 45	5/8" x 2"	2.00
6.000 Series																
1/2"	AFS 401/90 N-012	1/2" NPT	13	40.49	54	18.24	60	46	16.0	19	9.0	20	37	M 8 x 30	5/16" x 1 1/4"	0.35
1/2"	AFS 401/90 N-038	3/8" NPT	13	40.49	54	18.24	60	46	16.0	19	9.0	20	37	M 8 x 30	5/16" x 1 1/4"	0.35
3/4"	AFS 402/90 N	3/4" NPT	19	50.80	70	23.80	70	55	19.0	20	11.0	28	43	M 10 x 35	3/8" x 1 1/2"	0.80
1"	AFS 403/90 N	1" NPT	25	57.15	79	27.76	85	72	21.0	22	13.0	34	51	M 12 x 45	7/16" x 1 3/4"	1.30
1 1/4"	AFS 404/90 N	1 1/4" NPT	32	66.68	93	31.75	95	75	25.0	25	15.0*	38	56	M 14 x 50	1/2" x 1 3/4"	1.60
1 1/2"	AFS 405/90 N	1 1/2" NPT	38	79.38	110	36.50	94	110	25.0	28	17.0	42	65	M 16 x 50	5/8" x 2"	2.00

ordering code:

ST 44.3/52.3

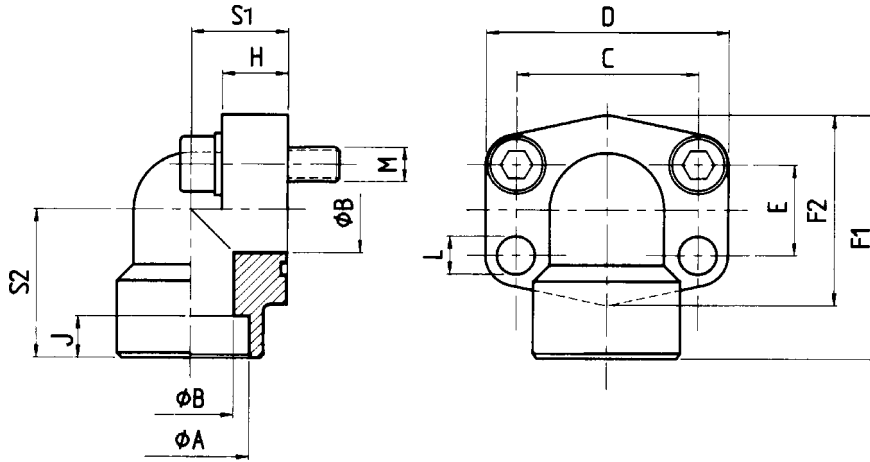
1.4404

*13.5 for UNC screws

flange only
 flange with metric screws and o-ring
 flange with UNC screws and o-ring

AFS.../90 N
 AFS.../90 NM
 AFS.../90 NU

AFx.../90 N
 AFx.../90 NM
 AFx.../90 NU



Material: 1 ST 44.3 (FE 430) ST 52.3 (FE 510) Carbon Steel
 2. 1.4404 316L Stainless Steel

3.000 Series																
Size	Type	A	B	C	D	E	F ₁	F ₂	H	J	ØL	S ₁	S ₂	M (Screws)		Weight kg
														Metric	UNC	
1/2"	AFS 080/90 S	21.6	13	38.10	54	17.48	60	48	16.0	10	9.0	20	37	M 8 x 30	5/16" x 1 1/4"	0.35
1/2"	AFS 080/90 S-038	17.5	13	38.10	54	17.48	60	48	16.0	10	9.0	20	37	M 8 x 30	5/16" x 1 1/4"	0.35
3/4"	AFS 100/90 S	27.2	19	47.63	65	22.23	63	50	18.0	10	11.0	24	38	M 10 x 35	3/8" x 1 1/2"	0.55
1"	AFS 102/90 S	34.0	25	52.37	70	26.19	70	60	19.0	12	11.0	28	43	M 10 x 35	3/8" x 1 1/2"	0.80
1 1/4"	AFS104/90 S	42.8	32	58.72	79	30.18	85	68	21.0	14	11.5	34	51	M 10 x 40	7/16" x 1 1/2"	1.30
1 1/2"	AFS 106/90 S	48.6	38	69.85	93	35.71	95	78	25.0	16	13.5	38	56	M 12 x 45	1/2" x 3/4"	1.60
2"	AFS 108/90 S	61.0	51	77.77	110	42.88	110	90	25.0	18	13.5	42	65	M 12 x 45	5/8" x 2"	2.00
6.000 Series																
1/2"	AFS 401/90 S-012	21.6	13	40.49	54	18.24	60	48	16.0	10	9.0	20	37	M 8 x 30	5/16" x 1 1/4"	0.35
1/2"	AFS 401/90 S-038	17.5	13	40.49	54	18.24	60	48	16.0	10	9.0	20	37	M 8 x 30	5/16" x 1 1/4"	0.35
3/4"	AFS 402/90 S	27.2	19	50.80	70	23.80	70	60	19.0	12	11.0	28	43	M 10 x 35	3/8" x 1 1/2"	0.80
1"	AFS 403/90 S	34.0	25	57.15	79	27.76	85	70	21.0	14	13.0	34	51	M 12 x 45	7/16" x 1 3/4"	1.30
1 1/4"	AFS 404/90 S	42.8	32	66.68	93	31.75	95	78	25.0	16	15.0*	38	56	M 14 x 50	1/2" x 3/4"	1.60
1 1/2"	AFS 405/90 S	48.6	38	79.38	110	36.50	110	94	25.0	18	17.5	42	65	M 16 x 50	5/8" x 2"	2.00
2"	AFS 406/90 S	61.0	51	96.82	134	44.50	150	106	76.5	18	21.0	60	92	M 20 x 110	-	8.20

ordering code:

ST 44.3/52.3

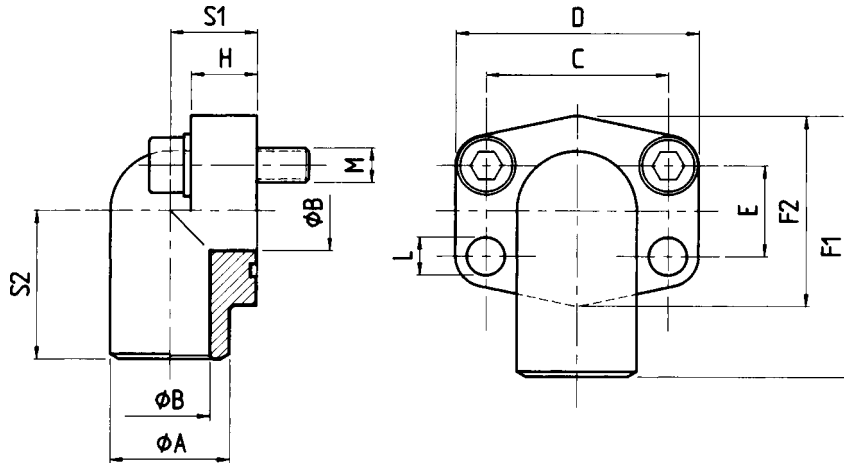
1.4404

*13.5 for UNC screws

flange only 90° elbow
 flange, metric screws and o-ring
 flange, UNC screws and o-ring

AFS-.../90S
 AFS-.../90SM
 AFS-.../90SU

AFx-.../90S
 AFx-.../90SM
 AFx-.../90SU



Material: 1 ST 44.3 (FE 430) ST 52.3 (FE 510)

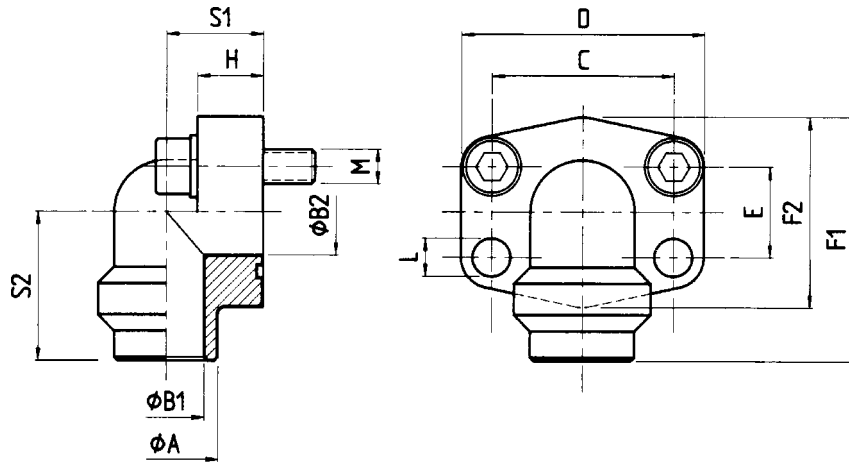
3.000 Series															
Size	Type	A	B	C	D	E	F ₁	F ₂	H	L	S ₁	S ₂	M (Screws)		Weight kg
													Metric	UNC	
3/4"	AFS 200/90 ST	27.0	19	47.63	70	22.23	63	50	21.0	11.0	23.0	41	M 10 x 40	-	0.65
1"	AFS 202/90 ST	34.5	23	52.37	75	26.19	72	60	24.0	11.0	25.0	48	M 10 x 45	-	0.85
1 1/4"	AFS 204/90 ST	43.0	31	58.72	86	30.18	82	68	25.0	11.5	27.0	54	M 10 x 45	-	1.15
1 1/2"	AFS 206/90 ST	50.0	35	69.85	97	35.71	92	78	29.0	14.0	31.5	57	M 12 x 50	-	1.70
2"	AFS 208/90 ST	65.0	48	77.77	100	42.88	99	90	50.0	14.0	37.5	63	M 12 x 70	-	2.15
6.000 Series															
3/4"	AFS 700/90 ST	28.0	19	50.80	71	23.80	70	60	19.0	11.0	22.0	40	M 10 x 35	-	0.50
1"	AFS 702/90 ST	34.0	25	57.15	81	27.76	82	70	24.0	13.0	27.0	47	M 10 x 45	-	0.80
1 1/4"	AFS 704/90 ST	42.0	32	66.68	95	31.75	95	78	27.0	15.0	32.0	56	M 14 x 50	-	1.15
1 1/2"	AFS 706/90 ST	48.0	38	79.38	113	36.50	115	94	30.0	17.0	40.0	68	M 16 x 50	-	2.00
2"	AFS 708/90 ST	65.0	47	96.82	134	44.50	150	106	76.5	21.0	60.0	92	M 20 x 110	-	8.20

ordering code:

ST 44.3/52.3

flange only
 flange, metric screws and o-ring
 flange, UNC screws and o-ring

AFS-.../90ST
 AFS-.../90STM
 AFS-.../90STU



Material: 1 ST 44.3 (FE 430) ST 52.3 (FE 510) Carbon Steel
 2. 1.4404 316L Stainless Steel

3.000 Series

Size	Type	Tube	A	B ₁	B ₂	C	D	E	F ₁	F ₂	H	S ₁	S ₂	ØL	M (Screws)		Weight kg
															Metric	UNC	
1/2"	AFS 080/90 SRE 20	20 x 3	20	14	13	38.10	54	17.48	60	48	16	20	37	9.0	M 8 x 30	5/16" x 1 1/4"	0.33
1/2"	AFS 080/90 SRE 22	22 x 2	22	18	13	38.10	54	17.48	60	48	16	20	37	9.0	M 8 x 30	5/16" x 1 1/4"	0.34
1/2"	AFS 080/90 SRE 25	25 x 3	25	19	13	38.10	54	17.48	60	48	16	20	37	9.0	M 8 x 30	5/16" x 1 1/4"	0.35
1/2"	AFS 080/90 SRE 28	28 x 3	28	22	13	38.10	54	17.48	60	48	16	20	37	9.0	M 8 x 30	5/16" x 1 1/4"	0.36
3/4"	AFS 100/90 SRE 25	25 x 3	25	19	19	47.63	65	22.23	63	50	18	24	38	11.0	M 10 x 35	3/8" x 1 1/2"	0.49
3/4"	AFS 100/90 SRE 28	28 x 3	28	22	19	47.63	65	22.23	63	50	18	24	38	11.0	M 10 x 35	3/8" x 1 1/2"	0.50
3/4"	AFS 100/90 SRE 30	30 x 4	30	22	19	47.63	65	22.23	63	50	18	24	38	11.0	M 10 x 35	3/8" x 1 1/2"	0.51
3/4"	AFS 100/90 SRE 35	35 x 4	35	27	19	47.63	65	22.23	63	50	18	24	38	11.0	M 10 x 35	3/8" x 1 1/2"	0.55
1"	AFS 102/90 SRE 30	30 x 4	30	22	25	52.37	70	26.19	70	60	19	28	43	11.0	M 10 x 35	3/8" x 1 1/2"	0.70
1"	AFS 102/90 SRE 35	35 x 4	35	27	25	52.37	70	26.19	70	60	19	28	43	11.0	M 10 x 35	3/8" x 1 1/2"	0.73
1"	AFS 102/90 SRE 38	38 x 4	38	30	25	52.37	70	26.19	70	60	19	28	43	11.0	M 10 x 35	3/8" x 1 1/2"	0.76
1"	AFS 102/90 SRE 42	42 x 3	42	36	25	52.37	70	26.19	70	60	19	28	43	11.0	M 10 x 35	3/8" x 1 1/2"	0.80
1 1/4"	AFS 104/90 SRE 38	38 x 4	38	30	32	58.72	79	30.18	85	68	21	34	51	11.5	M 10 x 40	7/16" x 1 1/2"	1.20
1 1/4"	AFS 104/90 SRE 42	42 x 3	42	36	32	58.72	79	30.18	85	68	21	34	51	11.5	M 10 x 40	7/16" x 1 1/2"	1.24
1 1/4"	AFS 104/90 SRE 48.3	48.3 x 4.5	49	39	32	58.72	79	30.18	85	68	21	34	51	11.5	M 10 x 40	7/16" x 1 1/2"	1.30
1 1/2"	AFS 106/90 SRE 38	38 x 4	38	30	38	69.85	93	35.71	95	78	25	38	55	13.5	M 12 x 45	1/2" x 1 3/4"	1.50
1 1/2"	AFS 106/90 SRE 42	42 x 3	42	36	38	69.85	93	35.71	95	78	25	38	55	13.5	M 12 x 45	1/2" x 1 3/4"	1.53
1 1/2"	AFS 106/90 SRE 48.3	48.3 x 4.5	49	39	38	69.85	93	35.71	95	78	25	38	55	13.5	M 12 x 45	1/2" x 1 3/4"	1.60
2"	AFS 108/90 SRE 60.3	60.3 x 5.6	61	51	45	77.77	110	42.88	110	90	25	42	65	13.5	M 12 x 45	1/2" x 1 3/4"	1.93
2"	AFS 108/90 SRE 76.1	76.1 x 7.1	77	51	45	77.77	110	42.88	110	90	25	42	65	13.5	M 12 x 45	1/2" x 1 3/4"	2.00

ordering code:

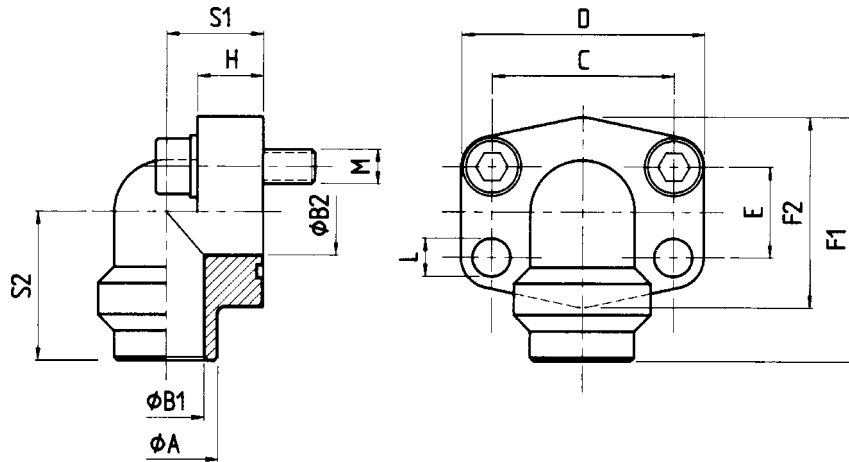
ST 44.3/52.3

1.4404

flange only
 flange, metric screws and o-ring
 flange, UNC screws and o-ring

AFs-...
 AFs-...M
 AFS-...M

AFx-...
 AFx-...M
 AFx-...U



Material: 1 ST 44.3 (FE 430) ST 52.3 (FE 510) Carbon Steel
 2. 1.4404 316L Stainless Steel

6.000 Series																	
Size	Type	Tube	A	B ₁	B ₂	C	D	E	F ₁	F ₂	H	S ₁	S ₂	ØL	M (Screws)		Weight kg
															Metric	UNC	
1/2"	AFS 401/90 SRE 20	20 x 3	20	14	13	40.49	56.4	17.48	60	48	16	20	37	9.0	M 8 x 30	5/16" x 1 1/4"	0.35
1/2"	AFS 401/90 SRE 25	28 x 4	25	17	13	40.49	56.4	17.48	60	48	16	20	37	9.0	M 8 x 30	5/16" x 1 1/4"	0.36
3/4"	AFS 402/90 SRE 25	25 x 4	25	17	19	50.80	71.3	22.23	70	60	19	28	43	11.0	M 10 x 35	3/8" x 1 1/2"	0.74
3/4"	AFS 402/90 SRE 30	30 x 4	30	22	19	50.80	71.3	22.23	70	60	19	28	43	11.0	M 10 x 35	3/8" x 1 1/2"	0.80
1"	AFS 403/90 SRE 30	30 x 4	30	22	25	57.15	81.0	22.23	85	70	21	34	51	13.0	M 12 x 45	7/16" x 1 3/4"	1.25
1"	AFS 403/90 SRE 38	38 x 5	38	28	25	57.15	81.0	22.23	85	70	21	34	51	13.0	M 12 x 45	7/16" x 1 3/4"	1.30
1 1/4"	AFS 404/90 SRE 38	38 x 5	38	28	32	66.68	95.2	26.19	95	78	25	38	56	14.5*1	M 14 x 45	1/2" x 1 3/4"	1.52
1 1/4"	AFS 404/90 SRE 48.3	48.3 x 8	49	32	32	66.68	95.2	26.19	95	78	25	38	56	14.5*1	M 14 x 45	1/2" x 1 3/4"	1.60
1 1/2"	AFS 405/90 SRE 38	38 x 5	38	28	38	79.38	112.8	36.50	110	94	25	42	65	17.0	M 16 x 50	5/8" x 2"	1.84
1 1/2"	AFS 405/90 SRE 48.3	48.3 x 8	49	32	38	79.38	112.8	36.50	110	94	25	42	65	17.0	M 16 x 50	5/8" x 2"	1.92
1 1/2"	AFS 405/90 SRE 60.3	60.3 x 10	61	40	38	79.38	112.8	30.18	110	94	25	42	65	17.5	M 16 x 50	5/8" x 2"	2.00
2"	AFS 406/90 SRE 60.3	60.3 x 10	61	40	51	96.82	134.0	30.18	150	106	76.5	60	92	21.0	M 20 x 110	-	8.20
2"	AFS 406/90 SRE 76.1	76.1 x 12.5	74	50	51	96.82	134.0	42.88	150	106	76.5	60	92	21.0	M 20 x 110	-	8.20

ordering code:

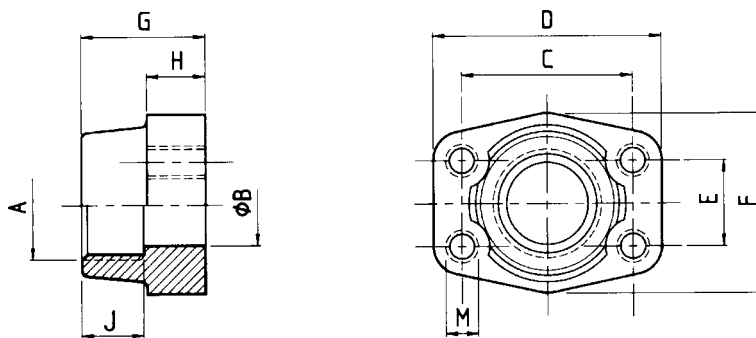
ST 44.3/52.3

1.4404

flange only
 flange, metric screws and o-ring
 flange, UNC screws and o-ring

AFs-...
 AFs-...M
 AFS-...M

AFx-...
 AFx-...M
 AFx-...U



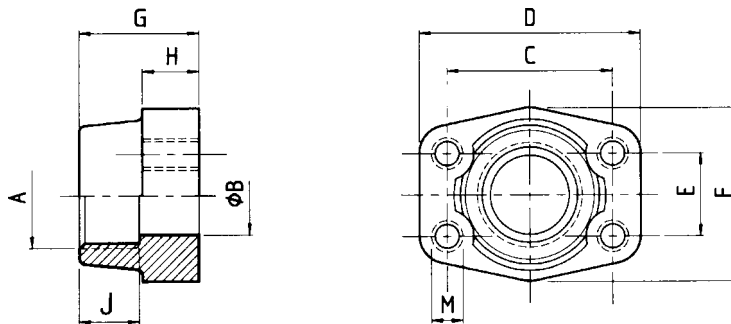
Material: 1 ST 44.3 (FE 430) Carbon Steel
 2. 1.4404 316L Stainless Steel

3.000 Series													
Size	Type	A	B	C	D	E	F	G	H	J	M(Screws)		Weight kg
											Metric	UNC	
1/2"	GFS 080 G	R 1/2"	13	38.10	54	17.48	46	36	16	19	M 8	5/16"	0.25
1/2"	GFS 080 G-038	R 3/8"	13	38.10	54	17.48	46	36	16	19	M 8	5/16"	0.28
3/4"	GFS 100G	R 3/4"	19	47.63	65	22.23	50	36	18	19	M 10	3/8"	0.39
3/4"	GFS 100 G-012	R 1/2"	13	47.63	65	22.23	50	36	18	19	M 10	3/8"	0.42
1"	GFS 102 G	R 1"	25	52.37	70	26.19	55	38	18	22	M 10	3/8"	0.46
1"	GFS 102 G-034	R 3/4"	19	52.37	70	26.19	55	35	21	19	M 10	3/8"	0.49
1 1/4"	GFS 104 G	R 1 1/4"	32	58.72	79	30.18	68	41	21	22	M 10	7/16"	0.66
1 1/4"	GFS 104 G-100	R 1"	25	58.72	81	30.18	65	42	25	22	M 10	7/16"	0.75
1 1/2"	GFS 106 G	R 1 1/2"	38	69.85	93	35.71	78	45	25	24	M 12	1/2"	1.05
1 1/2"	GFS 106 G-114	R 1 1/4"	32	69.85	95	35.71	78	45	27	24	M 12	1/2"	1.10
2"	GFS 108 G	R 2"	51	77.77	102	42.88	90	45	25	30	M 12	1/2"	1.19
2"	GFS 108 G-112	R 1 1/2"	38	77.77	102	42.88	90	45	25	26	M 12	1/2"	1.25
2 1/2"	GFS 110 G	R 2 1/2"	63	88.90	114	50.80	105	50	25	30	M 12	1/2"	1.40
2 1/2"	GFS 110 G-200	R 2"	51	88.90	114	50.80	105	50	25	30	M 12	1/2"	1.45
3"	GFS 112 G	R 3"	73	106.38	134	61.93	124	50	27	34	M 16	5/8"	2.15
3"	GFS 112 G-212	R 2 1/2"	63	106.38	134	61.93	124	50	27	30	M 16	5/8"	2.25
3 1/2"	GFS 114	R 3 1/2"	89	120.65	152	69.85	136	48	27	34	M 16	5/8"	2.40
3 1/2"	GFS 114 G-300	R 3"	73	120.65	152	69.85	136	48	27	34	M 16	5/8"	2.50
4"	GFS 116	R 3"	99	130.18	162	77.77	146	48	27	34	M 16	5/8"	2.85
4"	GFS 116 G-312	R 3 1/2"	89	130.18	162	77.77	146	48	27	34	M 16	5/8"	3.00
6.000 Series													
1/2"	GFS 401 G-012	R 1/2"	13	40.49	54	18.24	46	36	16	19	M 8	5/16"	0.26
1/2"	GFS 401 G-038	R 3/8"	13	40.49	54	18.24	46	36	16	19	M 8	5/16"	0.29
3/4"	GFS 402 G	R 3/4"	19	50.80	71	23.80	55	35	21	22	M 10	3/8"	0.50
3/4"	GFS 402 G-012	R 1/2"	13	50.80	71	23.80	55	35	21	22	M 10	3/8"	0.55
1"	GFS 403 G	R 1"	25	57.16	81	27.76	65	42	25	24	M 12	7/16"	0.76
1"	GFS 403 G-034	R 3/4"	19	57.16	81	27.76	65	42	25	24	M 12	7/16"	0.80
1 1/4"	GFS 404 G	R 1 1/4"	32	66.68	95	31.75	78	45	27	25	M 14	1/2"	1.20
1 1/4"	GFS 404 G-100	R 1"	25	66.68	95	31.75	78	45	27	25	M 14	1/2"	1.30
1 1/2"	GFS 405 G	R 1 1/2"	38	79.38	112	36.50	94	50	30	28	M 16	5/8"	1.65
1 1/2"	GFS 405 G-114	R 1 1/4"	32	79.38	112	36.50	94	50	30	28	M 16	5/8"	1.75
2"	GFS 406 G	R 2"	51	96.82	134	44.45	114	65	37	30	M 20	3/4"	2.45
2"	GFS 406 G-112	R 1 1/2"	38	96.82	134	44.45	114	65	37	30	M 20	3/4"	2.55

ordering code: ST 44.3 1.4404

flange with metric threads GFS...GM GFx...GM
 flange with UNC threads GFS...GU GFx...GU

Special order minimum quantity 50 pieces



- Material: 1 ST 44.3 (FE 430) Carbon Steel
 2. 1.4404 316L Stainless Steel

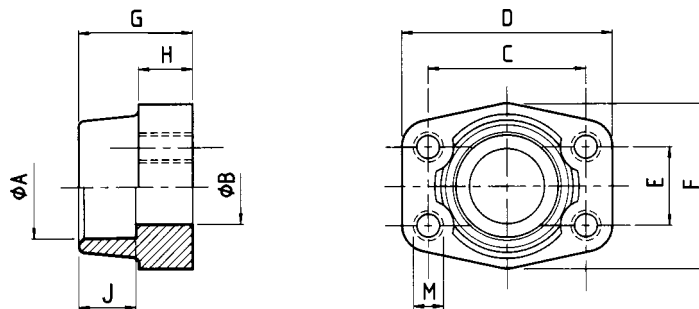
3.000 Series													
Size	Type	A	B	C	D	E	F	G	H	J	M (Screws)		Weight kg
											Metric	UNC	
1/2"	GFS 080 N	1/2" NPT	13	38.10	54	17.48	46	36	16	19	M 8	5/16"	0.25
1/2"	GFS 080 N-038	3/8" NPT	13	38.10	54	17.48	46	36	16	19	M 8	5/16"	0.28
3/4"	GFS 100 N	3/4" NPT	19	47.63	65	22.23	50	36	18	19	M 10	3/8"	0.39
3/4"	GFS 100 N-012	1/2" NPT	13	47.63	65	22.23	50	36	18	19	M 10	3/8"	0.42
1"	GFS 102 N	1" NPT	25	52.37	70	26.19	55	38	18	22	M 10	3/8"	0.46
1"	GFS 102 N-034	3/4" NPT	19	52.37	70	26.19	55	35	21	19	M 10	3/8"	0.49
1 1/4"	GFS 104 N	1 1/4" NPT	32	58.72	79	30.18	68	41	21	22	M 10	7/16"	0.66
1 1/4"	GFS 104 N-100	1" NPT	25	58.72	81	30.18	65	42	25	22	M 10	7/16"	0.75
1 1/2"	GFS 106 N	1 1/2" NPT	38	69.85	93	35.71	78	45	25	24	M 12	1/2"	1.05
1 1/2"	GFS 106 N-114	1 1/4" NPT	32	69.85	95	35.71	78	45	27	24	M 12	1/2"	1.10
2"	GFS 108 N	2" NPT	51	77.77	102	42.88	90	45	25	30	M 12	1/2"	1.19
2"	GFS 108 N-112	1 1/2" NPT	38	77.77	102	42.88	90	45	25	26	M 12	1/2"	1.25
2 1/2"	GFS 110 N	2 1/2" NPT	63	88.90	114	50.80	105	50	25	30	M 12	1/2"	1.40
3"	GFS 112 N	3" NPT	73	106.38	134	61.93	124	50	27	34	M 16	5/8"	2.15
3 1/2"	GFS 114 N	3 1/2" NPT	89	120.65	152	69.85	136	48	27	34	M 16	5/8"	2.40
4"	GFS 116 N	4" NPT	99	130.18	162	77.77	146	48	27	34	M 16	5/8"	2.85
6.000 Series													
1/2"	GFS 401 N-012	1/2" NPT	13	40.49	54	18.24	46	36	16	19	M 8	5/16"	0.26
1/2"	GFS 401 N-038	3/8" NPT	13	40.49	54	18.24	46	36	16	19	M 8	5/16"	0.29
3/4"	GFS 402 N	3/4" NPT	19	50.80	71	23.80	55	35	21	22	M 10	3/8"	0.50
3/4"	GFS 402 N-012	1/2" NPT	13	50.80	71	23.80	55	35	21	22	M 10	3/8"	0.55
1"	GFS 403 N	1" NPT	25	57.15	81	27.76	65	42	25	24	M 12	7/16"	0.76
1"	GFS 403 N-034	3/4" NPT	19	57.15	81	27.76	65	42	25	24	M 12	7/16"	0.80
1 1/4"	GFS 404 N	1 1/4" NPT	32	66.68	95	31.75	78	45	27	25	M 14	1/2"	1.20
1 1/4"	GFS 404 N-100	1" NPT	25	66.68	95	31.75	78	45	27	25	M 14	1/2"	1.30
1 1/2"	GFS 405 N	1 1/2" NPT	38	79.38	112	36.50	94	50	30	28	M 16	5/8"	1.65
1 1/2"	GFS 405 N-114	1 1/4" NPT	32	79.38	112	36.50	94	50	30	28	M 16	5/8"	1.75
2"	GFS 406 N	2" NPT	51	96.82	134	44.45	114	65	37	30	M 20	3/4"	2.45
2"	GFS 406 N-112	1 1/2" NPT	38	96.82	134	44.45	114	65	37	30	M 20	3/4"	2.55

ordering code:

ST 44.3 1.4404

flange with metric threads
 flange with UNC threads

GFS...NM GFx...NM
 GFS...NU GFx...NU



Material: 1 ST 44.3 (FE 430) Carbon Steel
 2. 1.4404 316L Stainless Steel

3.000 Series													
Size	Type	A	B	C	D	E	F	G	H	J	M (Screws)		Weight kg
											Metric	UNC	
1/2"	GFS 080 S	21.6	13	38.10	54	17.48	46	36	16	19	M 8	5/16"	0.25
1/2"	GFS 080 S-038	17.5	13	38.10	54	17.48	46	36	16	19	M 8	5/16"	0.28
1/2"	GFS 080 S-A20	20.3	13	38.10	54	17.48	46	36	16	19	M 8	5/16"	0.25
3/4"	GFS 100 S	27.2	19	47.63	65	22.23	50	36	18	19	M 10	3/8"	0.39
3/4"	GFS 100 S-A25	25.3	19	47.63	65	22.23	50	36	18	19	M 10	3/8"	0.39
1"	GFS 102 S	34.0	25	52.37	70	26.19	55	38	18	19	M 10	3/8"	0.46
1"	GFS 102 S-A30	30.3	25	52.37	70	26.19	55	38	18	19	M 10	3/8"	0.46
1 1/4"	GFS 104 S	42.8	32	58.72	79	30.18	68	41	21	22	M 10	7/16"	0.66
1 1/4"	GFS 104 S-A38	38.3	32	58.72	79	30.18	68	41	21	22	M 10	7/16"	0.66
1 1/2"	GFS 106 S	48.6	38	69.85	93	35.71	78	45	25	24	M 12	1/2"	1.05
1 1/2"	GFS 106 S-A50	50.5	38	69.85	93	35.71	78	45	25	24	M 12	1/2"	1.05
2"	GFS 108 S	61.0	51	77.77	102	42.88	90	45	25	26	M 12	1/2"	1.19
2 1/2"	GFS 110 S	76.6	63	88.90	114	50.80	105	50	25	30	M 12	1/2"	1.40
3"	GFS 112 S	90.5	73	106.38	134	61.93	124	50	27	34	M 16	5/8"	2.15
3 1/2"	GFS 114 S	103.0	89	120.65	152	69.85	136	48	27	34	M 16	5/8"	2.40
4"	GFS 116 S	115.5	99	130.18	162	77.77	146	48	27	34	M 16	5/8"	2.85
6.000 Series													
1/2"	GFS 401 S-012	21.6	13	40.49	54	18.24	46	36	16	19	M 8	5/16"	0.26
1/2"	GFS 401 S-038	17.5	13	40.49	54	18.24	46	36	16	19	M 8	5/16"	0.29
1/2"	GFS 401 S-A20	20.3	13	40.49	54	18.24	46	36	16	19	M 8	5/16"	0.26
3/4"	GFS 402 S	27.2	19	50.80	71	23.80	55	35	21	22	M 10	3/8"	0.50
3/4"	GFS 402 S-A25	25.3	19	50.80	71	23.80	55	35	21	22	M 10	3/8"	0.50
1"	GFS 403 S	34.0	25	57.15	81	27.76	65	42	25	22	M 12	7/16"	0.76
1"	GFS 403 S-A30	30.3	25	57.15	81	27.76	65	42	25	22	M 12	7/16"	0.76
1 1/4"	GFS 404 S	42.8	32	66.68	95	31.75	78	45	27	25	M 14	1/2"	1.20
1 1/4"	GFS 404 S-A38	38.3	32	66.68	95	31.75	78	45	27	25	M 14	1/2"	1.20
1 1/2"	GFS 405 S	48.6	38	79.38	112	36.50	94	50	30	28	M 16	5/8"	1.65
1 1/2"	GFS 405 S-A50	50.5	38	79.38	112	36.50	94	50	30	28	M 16	5/8"	1.65
2"	GFS 406 S	61.0	51	96.82	134	44.45	114	65	37	24	M 20	3/4"	2.45
2 1/2"	GFS 407 S	76.6	63	123.80	180	58.70	152	80	45	30	M 24	-	8.30

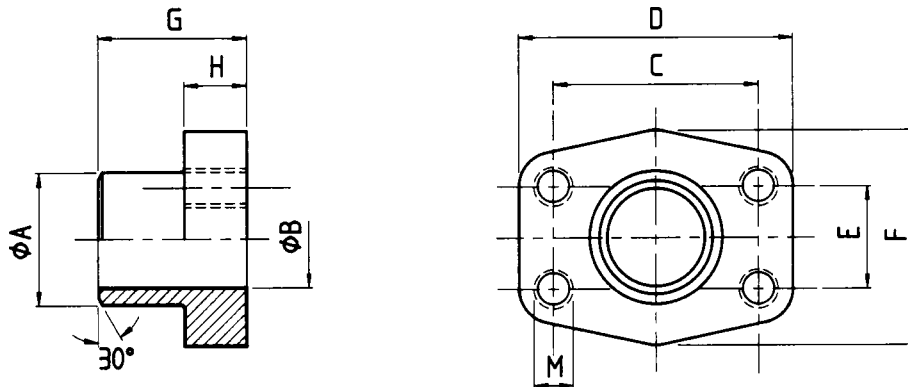
ordering code:

ST 44.3 1.4404

flange with metric threads
 flange with UNC threads

GFS...SM GFx...SM
 GFS...SU GFx...SU

Special order minimum quantity 50 pieces



Material: 1 ST 44.3 (FE 430) Carbon Steel
 2. 1.4404 316L Stainless Steel

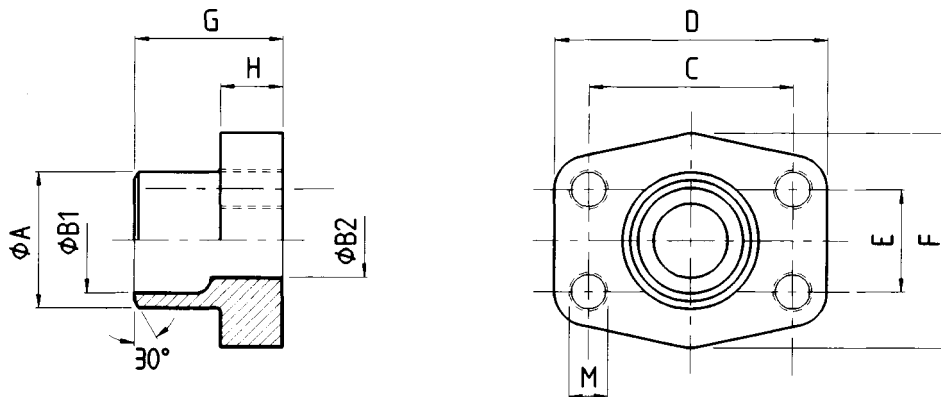
3.000 Series												
Size	Type	A	B	C	D	E	F	G	H	M (Screws)		Weight kg
										Metric	UNC	
1/2"	GFS 080 ST	21.5	13	38.10	54	17.48	46	36	16	M 8	5/16"	0.25
1/2"	GFS 080 ST-038	17.5	13.0	38.10	54	17.48	46	36	16	M 8	5/16"	0.28
3/4"	GFS 100 ST	28.0	19.0	47.63	65	22.23	50	36	18	M 10	3/8"	0.39
1"	GFS 102 ST	34.0	25.0	52.37	70	26.19	55	38	18	M 10	3/8"	0.46
1 1/4"	GFS 104 ST	42.8	32.0	58.72	79	30.18	68	41	21	M 10	7/16"	0.66
1 1/2"	GFS 106 ST	48.6	38.0	69.85	93	35.71	78	44	25	M 12	1/2"	1.05
2"	GFS 108 ST	61.0	51.0	77.77	102	42.88	90	45	25	M 12	1/2"	1.19
2 1/2"	GFS 110 ST	77.0	63.0	88.90	114	50.80	105	50	25	M 12	1/2"	1.40
3"	GFS 112 ST	92.0	73.0	106.38	134	61.93	124	50	27	M 16	5/8"	2.15
3 1/2"	GFS 114 ST	103.0	89.0	120.65	152	69.85	136	48	27	M 16	5/8"	2.40
4"	GFS 116 ST	115.5	99.0	130.18	162	77.77	146	48	27	M 16	5/8"	2.85
5"	GFS 118 ST	140.2	120	152.40	184	92.08	180	50	28	M 16	5/8"	5.20
6.000 Series												
1/2"	GFS 401 ST-012	21.6	13.0	40.49	54	18.24	46	36	16	M 8	5/16"	0.26
1/2"	GFS 401 ST-038	17.5	13.0	40.49	54	18.24	46	36	16	M 8	5/16"	0.29
3/4"	GFS 402 ST	28.0	19.0	50.80	71	23.80	55	35	21	M 10	3/8"	0.50
1"	GFS 403 ST	34.0	25.0	57.15	79	27.76	68	41	21	M 12	7/16"	0.76
1 1/4"	GFS 404 ST	42.8	32.0	66.68	93	31.75	78	44	25	M 14	1/2"	1.20
1 1/4"	GFS 404 ST 160	42.8	29.0	66.68	93	31.75	78	44	25	M 14	1/2"	1.35
1 1/2"	GFS 405 ST	48.6	38.0	79.38	112	36.50	94	55	30	M 16	5/8"	1.65
1 1/2"	GFS 405 ST 160	48.6	34.0	79.38	112	36.50	94	55	30	M 16	5/8"	1.80
2"	GFS 406 ST	61.0	51.0	96.82	134	44.45	114	65	37	M 20	3/4"	2.45
2"	GFS 406 ST 160	61.0	43.0	96.82	134	44.45	114	65	37	M 20	3/4"	2.70
2 1/2"	GFS 407 ST 76	76.1	51.0	123.80	180	58.70	152	80	45	M 24	-	6.40
2 1/2"	GFS 407 ST 88	90.0	60.5	123.80	180	58.70	152	80	45	M 24	-	8.30

ordering code:

ST 44.3 1.4404

flange with metric threads
 flange with UNC threads

GFS...STM GFx...STM
 GFS...STU GFx...STU



Material: 1 ST 44.3 (FE 430) Carbon Steel
 2 1.4404 316L Stainless Steel

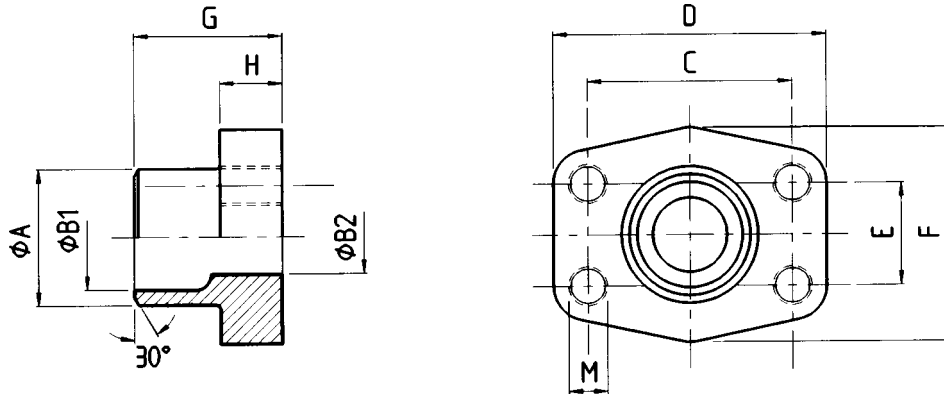
3.000 Series													
Size	Type	Tube	A	B ₁	B ₂	C	D	E	F	G	H	M	Weight kg
1/2"	GFS 080 SRE 20	20 x 3	20	14.0	14	38.10	54	17.48	46	35.0	16.0	M 8	0.28
1/2"	GFS 080 SRE 22	22 x 3	22	16.0	13	38.10	54	17.48	46	35.0	16.0	M 8	0.28
3/4"	GFS 100 SRE 25	25 x 3	25	19.0	19	47.63	65	22.23	50	36.0	18.0	M 10	0.39
3/4"	GFS 100 SRE 28	28 x 3	28	21.5	19	47.63	65	22.23	50	36.0	18.0	M 10	0.39
1"	GFS 102 SRE 30	30 x 4	30	22.0	22	52.37	70	26.19	55	38.0	18.0	M 10	0.46
1"	GFS 102 SRE 35	35 x 3	35	27.0	25	52.37	70	26.19	55	38.0	18.0	M 10	0.47
1 1/4"	GFS 104 SRE 38	38 x 4	38	30.0	30	58.72	79	30.18	68	41.0	21.0	M 10	0.66
1 1/4"	GFS 104 SRE 42	42 x 3	43	36.0	31	58.72	79	30.18	68	41.0	21.0	M 10	0.66
1 1/2"	GFS 106 SRE 38	38 x 4	38	30.0	30	69.85	93	35.71	78	44.5	24.5	M 12	1.05
1 1/2"	GFS 106 SRE 42	42 x 3	42	36.0	36	69.85	93	35.71	78	44.5	24.5	M 12	1.05
1 1/2"	GFS 106 SRE 48	48.3 x 4.5	49	38.0	38	69.85	93	35.71	78	44.5	24.5	M 12	1.05
2"	GFS 108 SRE 60	60.3 x 5.6	61	49.0	49	77.77	102	42.88	90	45.0	25.0	M 12	1.20
2 1/2"	GFS 110 SRE 76	76.1 x 7.1	77	62.0	62	88.90	114	50.80	105	50.0	25.0	M 12	1.40
3"	GFS 112 SRE 76	76.1 x 7.1	77	62.0	62	106.38	134	61.93	125	51.0	26.0	M 16	2.15
6.000 Series													
1/2"	GFS 401 SRE 20	20 x 3	20	14.0	14	40.49	54	18.24	46	34.0	16.0	M 8	0.29
3/4"	GFS 402 SRE 20	20 x 3	20	14.0	14	50.80	71	23.80	55	35.0	21.0	M 10	0.50
3/4"	GFS 402 SRE 25	25 x 4	25	17.0	17	50.80	71	23.80	55	35.0	21.0	M 10	0.53
1"	GFS 403 SRE 25	25 x 4	25	17.0	17	57.15	81	27.76	65	42.0	25.0	M 12	0.76
1"	GFS 403 SRE 30	30 x 4	30	22.0	22	57.15	81	27.76	65	42.0	25.0	M 12	0.80
1 1/4"	GFS 404 SRE 30	30 x 4	30	22.0	22	66.68	95	31.75	78	44.0	25.0	M 14	1.20
1 1/4"	GFS 404 SRE 38	38 x 6	38	26.0	26	66.68	95	31.75	78	44.0	25.0	M 14	1.29
1 1/2"	GFS 405 SRE 38	38 x 6	38	26.0	26	79.38	112	36.50	94	56.0	28.0	M 16	1.52
1 1/2"	GFS 405 SRE 48	48.3 x 8	49	32.0	32	79.38	112	36.50	94	56.0	28.0	M 16	1.57
1 1/2"	GFS 405 SRE 60	60.3 x 8	61	40.0	40	79.38	112	36.50	94	56.0	28.0	M 16	1.65
2"	GFS 406 SRE 60	60.3 x 10	61	40.0	40	96.82	134	44.45	114	65	33	M 20	2.45
2"	GFS 406 SRE 76	76.1 x 12.5	76	48	48	96.82	134	44.45	114	80	33	M 20	2.96

ordering code:

ST 44.3 1.4404

flange only

GFS... GFx...



Material: 1. ST 44.3 (FE 430) Carbon Steel
 2. 1.4404 316L Stainless Steel

3.000 Series

Size	Type	Tube	A	B ₁	B ₂	C	D	E	F	G	H	M	Weight kg
1/2"	GFS 080 STRE 21.3	21.3 x 2.6	22	16.0	13	38.10	54	17.48	46	35.0	16.0	M 8	0.28
3/4"	GFS 100 STRE 26.9	26.9 x 2.6	28	21.5	19	47.63	65	22.23	50	35.0	18.0	M 10	0.39
1"	GFS 102 STRE 33.7	33.7 x 3.2	35	27.0	25	52.37	70	26.19	55	38.0	18.0	M 10	0.46
1 1/4"	GFS 104 STRE 42.4	42.4 x 3.2	43	36.0	31	58.72	79	30.18	68	41.0	21.0	M 10	0.66
1 1/2"	GFS 106 STRE 48.3	48.3 x 3.2	49	42.0	38	69.85	93	35.71	78	44.5	24.5	M 12	1.05
2"	GFS 108 STRE 48.3	48.3 x 3.2	49	42.0	42	77.77	102	42.88	90	45.0	25.0	M 12	1.20
2"	GFS 108 STRE 60.3	60.3 x 3.6	61	53.0	49	77.77	102	42.88	90	45.0	25.0	M 12	1.25
2 1/2"	GFS 110 STRE 60.3	60.3 x 3.6	61	53.0	53	88.90	114	50.80	105	50.0	25.0	M 12	1.29
2 1/2"	GFS 110 STRE 76.1	76.1 x 3.6	77	70.0	62	88.90	114	50.80	105	50.0	25.0	M 12	1.40
3"	GFS 112 STRE 88.9	88.9 x 3.6	90	82.0	74	106.38	134	61.93	124	51.0	26.0	M 16	2.15
3 1/2"	GFS 114 STRE 88.9	88.9 x 3.6	90	82.0	82	120.65	152	69.85	136	48.0	26.0	M 16	2.40
3 1/2"	GFS 114 STRE 76.1	76.1 x 3.6	77	70.0	70	120.65	152	69.85	136	48.0	26.0	M 16	2.40
4"	GFS 116 STRE 88.9	88.9 x 3.6	90	82.0	82	130.18	162	77.77	146	48.0	26.0	M 16	2.69
4"	GFS 116 STRE 114	114.3 x 3.6	115	107.0	102	130.18	162	77.77	146	48.0	26.0	M 16	2.85
5"	GFS 118 STRE 139FL*	139.7 x 4.0	141	-	131	152.40	190	92.10	170	28.0	28.0	M 16	2.80
5"	GFS 118 STRE 139	139.7 x 4.0	140.2	131	120	152.40	184	92.08	180	50.0	28.0	M 16	5.00

ordering code:

ST 44.3

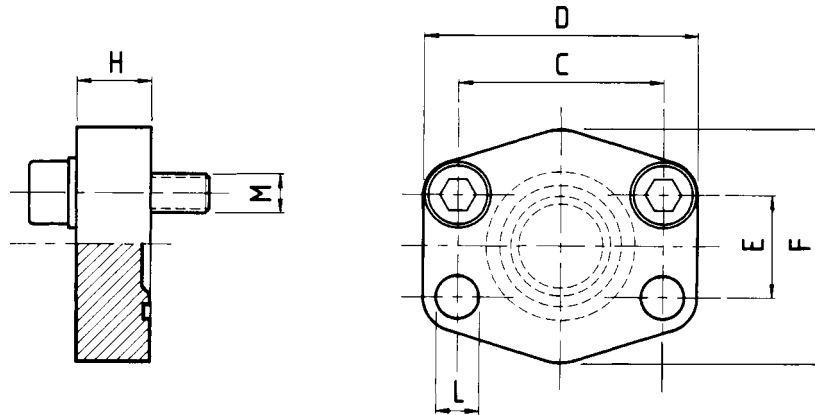
1.4404

*weld as flat flange

flange only

GFS...

GF...



Material: 1 ST 44.3 (FE 430) ST 52.3 (FE 510) Carbon Steel
 2. 1.4404 316L Stainless Steel

3.000 Series										
Size	Type	C	D	E	F	H	ØL	M (Screws)		Weight kg
								Metric	UNC	
1/2"	AFC 080	38.10	56	17.48	48	16	9.0	M 8 x 30	5/16" x 1 1/4"	0.20
3/4"	AFC 100	47.63	65	22.23	50	16	11	M 10 x 35	3/8" x 1 1/2"	0.30
1"	AFC 102	52.37	70	26.19	60	19	11.0	M 10 x 35	3/8" x 1 1/2"	0.37
1 1/4"	AFC 104	58.72	79	30.18	68	18	11.5	M 10 x 40	7/16" x 1 1/2"	0.54
1 1/2"	AFC 106	69.85	93	35.71	78	20	13.5	M 12 x 45	1/2" x 1 3/4"	0.90
2"	AFC 108	77.77	102	42.88	90	20	13.5	M 12 x 45	1/2" x 1 3/4"	1.00
2 1/2"	AFC 110	88.90	114	50.80	105	20	13.5	M 12 x 45	1/2" x 1 3/4"	1.35
3"	AFC 112	106.38	134	61.93	124	24	17.5	M 16 x 50	5/8" x 2"	2.35
3 1/2"	AFC 114	120.65	152	69.85	136	22	17.5	M 16 x 50	5/8" x 2"	2.90
4"	AFC 116	130.18	162	77.77	146	25	17.5	M 16 x 50	5/8" x 2"	3.90
5"	AFC 118	152.40	190	92.08	170	28	17.5	M 16 x 50	5/8" x 2"	4.00
6.000 Series										
1/2"	AFC 401	40.49	56	18.24	48	16	9.0	M 8 x 30	5/16" x 1 1/4"	0.20
3/4"	AFC 402	50.80	71	23.80	60	19	11.0	M 10 x 35	3/8" x 1 1/2"	0.48
1"	AFC 403	57.15	81	27.76	70	24	13	M 12 x 45	7/16" x 1 1/2"	0.77
1 1/4"	AFC 404	66.68	95	31.75	78	27	15*	M 14 x 45	1/2" x 1 3/4"	0.85
1 1/2"	AFC 405	79.38	112	36.50	94	30	17	M 16 x 50	5/8" x 2"	1.80
2"	AFC 406	96.82	134	44.45	114	30	21	M 20 x 65	3/4" x 2 1/2"	2.00
2 1/2"	AFC 407	123.80	180	58.80	150	45	26	M 24 x 75	-	5.30

ordering code:

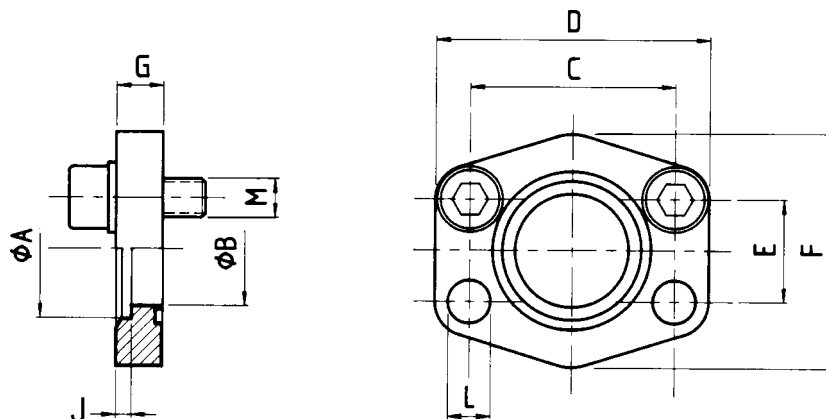
ST 44.3/52.3

1.4404

flange only
 flange, metric screws and o-ring
 flange, UNC screws and o-ring

AFC-...
 AFC-...M
 AFC-...U

AFC-x...
 AFC-x...M
 AFC-x...U



Material: 1 ST 44.3 (FE 430), ST 52.3 (FE 510) Carbon Steel
 2. 1.4404 316L Stainless Steel

Note: Maximum recommended working pressure 40 bar all sizes

3.000 Series

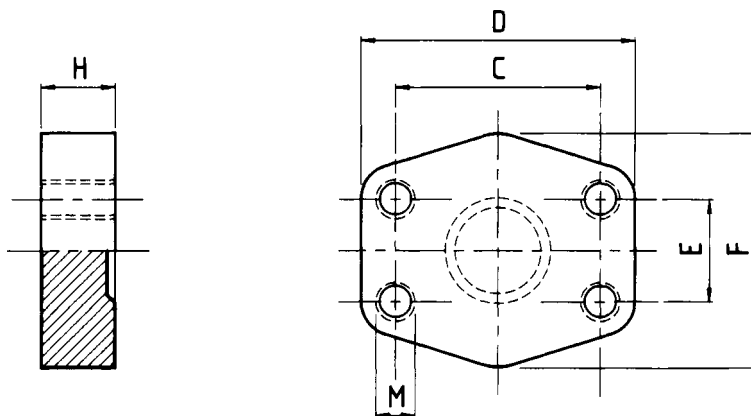
Size	Type	Tube	A	B	C	D	E	F	G	J	ØL	M (Screws)		Weight kg
												Metric	UNC	
1/2"	AFC 080 S	22 x 2	22.5	15	38.10	56	17.48	46	10	3	9.0	M 8 x 25	-	0.12
3/4"	AFC 100 S	28 x 2	28.5	20	47.63	65	22.23	50	12	4	11.0	M 10 x 30	-	0.20
1"	AFC 102 S	35 x 2	35.5	29	52.37	70	26.19	55	12	4	11.0	M 10 x 30	-	0.25
1 1/4"	AFC 104 S	42 x 2	42.5	34	58.72	79	30.18	68	12	4	11.5	M 10 x 30	-	0.31
1 1/2"	AFC 106 S	48.3 x 3.25	49.0	42	69.85	93	35.71	78	15	4	13.5	M 12 x 35	-	0.50
2"	AFC 108 S	60.3 x 3.65	61.0	53	77.77	102	42.88	90	15	4	13.5	M 12 x 35	-	0.59
2 1/2"	AFC 110 S	76.1 x 3.65	77.0	64	88.90	114	50.80	105	15	4	13.5	M 12 x 35	-	0.72
3"	AFC 112 S	88.9 x 4.05	90.0	80	106.38	134	61.93	124	20	5	17.5	M 16 x 40	-	1.25
3 1/2"	AFC 114 S	101.6 x 4.50	103.0	93	120.65	152	69.85	136	20	5	17.5	M 16 x 40	-	1.50
4"	AFC 116 S	114.3 x 4.50	116.0	105	130.18	162	77.77	146	25	6	17.5	M 16 x 45	-	2.15
5"	AFC 118 S	139.7 X 4.85	141.0	126	152.40	190	92.08	170	28	8	17.5	M 16 x 45	-	3.00

ordering code:

ST 44.3/52.3 1.4404

flange only
 flange with metric screws and o-ring

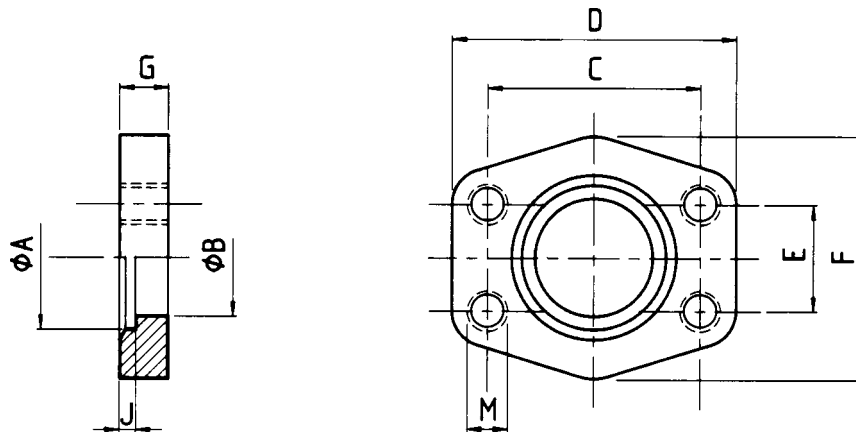
AFC...S AFCx...S
 AFC...SM AFCx...SM



Material: 1 ST 44.3 (FE 430) ST 52.3 (FE 510) Carbon Steel
 2. 1.4404 316L Stainless Steel

3.000 Series								
Size	Type	C	D	E	F	H	M	Weight kg
1/2"	GFC 080	38.10	56	17.48	48	16	M 8	0.20
3/4"	GFC 100	47.63	65	22.23	50	16	M 10	0.30
1"	GFC 102	52.37	70	26.19	60	19	M 10	0.37
1 1/4"	GFC 104	58.72	79	30.18	68	18	M 10	0.54
1 1/2"	GFC 106	69.85	93	35.71	78	20	M 12	0.90
2"	GFC 108	77.77	102	42.88	90	20	M 12	1.00
2 1/2"	GFC 110	88.90	114	50.80	105	20	M 12	1.35
3"	GFC 112	106.38	134	61.93	124	24	M 16	2.35
3 1/2"	GFC 114	120.65	152	69.85	136	22	M 16	2.90
4"	GFC 116	130.18	162	77.77	146	25	M 16	3.90
5"	GFC 118	152.40	190	92.08	170	28	M 16	4.00
6.000 Series								
1/2"	GFC 401	40.49	56	18.24	48	16	M 8	0.20
3/4"	GFC 402	50.80	71	23.80	60	19	M 10	0.48
1"	GFC 403	57.15	81	27.76	70	24	M 12	0.77
1 1/4"	GFC 404	66.68	95	31.75	78	27	M 14	0.85
1 1/2"	GFC 405	79.38	112	36.50	94	30	M 16	1.80
2"	GFC 406	96.82	134	44.45	114	28	M 20	2.00
2 1/2"	GFC 407	123.80	180	58.80	150	45	M 24	5.30

ordering code: ST 44.3/52.3 1.4404
 flange only GFC-... GFC-...



Material: 1 ST 44.3 (FE 430), ST 52.3 (FE 510) Carbon Steel
 2. 1.4404 316L Stainless Steel

Note: Maximum recommended working pressure 40 bar all sizes

3.000 Series

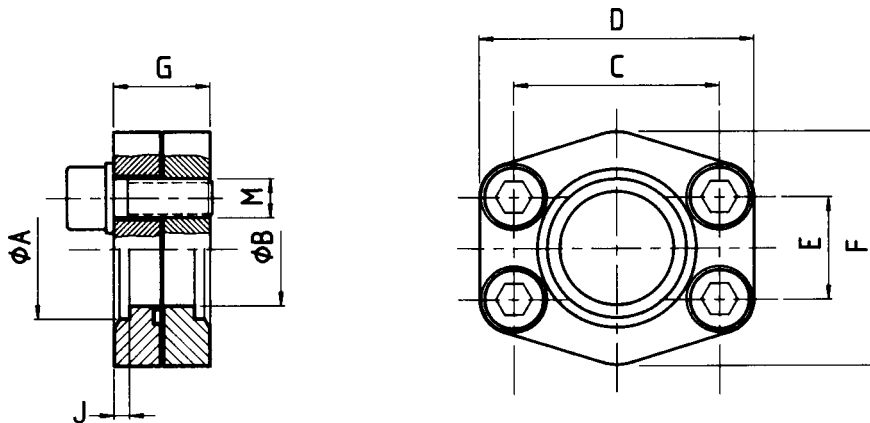
Size	Type	Tube	A	B	C	D	E	F	G	J	M	Weight kg
1/2"	GFC 080 S	22 x 2	22.5	15	38.10	56	17.48	46	10	3	M 8	0.12
3/4"	GFC 100 S	28 x 2	28.5	20	47.63	65	22.23	50	12	4	M 10	0.20
1"	GFC 102 S	35 x 2	35.5	29	52.37	70	26.19	55	12	4	M 10	0.25
1 1/4"	GFC 104 S	42 x 2	42.5	34	58.72	79	30.18	68	12	4	M 10	0.31
1 1/2"	GFC 106 S	48.3 x 3.25	49.0	42	69.85	93	35.71	78	15	4	M 12	0.50
2"	GFC 108 S	60.3 x 3.65	61.0	53	77.77	102	42.88	90	15	4	M 12	0.59
2 1/2"	GFC 110 S	76.1 x 3.65	77.0	64	88.90	114	50.80	105	15	4	M 12	0.72
3"	GFC 112 S	88.9 x 4.05	90.0	80	106.38	134	61.93	124	20	5	M 16	1.25
3 1/2"	GFC 114 S	101.6 x 4.5	103.0	93	120.65	152	69.85	136	20	5	M 16	1.50
4"	GFC 116 S	114.3 x 4.5	116.0	105	130.18	162	77.77	146	25	6	M 16	2.15
5"	GFC 118 S	139.7 X 4.85	141.0	126	152.40	190	92.08	170	28	8	M 16	3.00

ordering code:

ST 44.3/52.3 1.4404

flange only

GFC...S GFCx...S



Material: 1 ST 44.3 (FE 430), ST 52.3 (FE 510) Carbon Steel
 2. 1.4404 316L Stainless Steel

Note: Maximum recommended working pressure 40 bar all sizes

3.000 Series

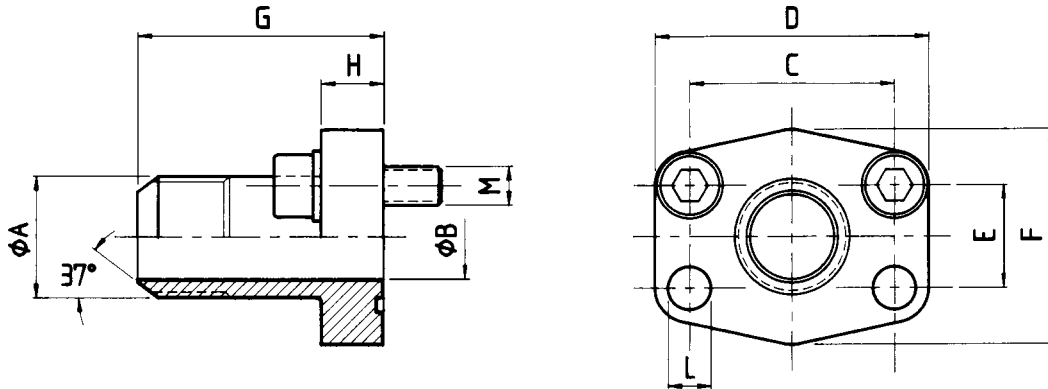
Size	Type	Tube	A	B	C	D	E	F	G	J	M	Weight kg
1/2"	DFC 080 S	22 x 2	22.5	15	38.10	56	17.48	46	20	3	M 8 x 25	0.24
3/4"	DFC 100 S	28 x 2	28.5	20	47.63	65	22.23	50	24	4	M 10 x 30	0.40
1"	DFC 102 S	35 x 2	35.5	29	52.37	70	26.19	55	24	4	M 10 x 30	0.50
1 1/4"	DFC 104 S	42 x 2	42.5	34	58.72	79	30.18	68	24	4	M 10 x 30	0.62
1 1/2"	DFC 106 S	48.3 x 3.25	49.0	42	69.85	93	35.71	78	30	4	M 12 x 35	1.00
2"	DFC 108 S	60.3 x 3.65	61.0	53	77.77	102	42.88	90	30	4	M 12 x 35	1.18
2 1/2"	DFC 110 S	76.1 x 3.65	77.0	64	88.90	114	50.80	105	30	4	M 12 x 35	1.44
3"	DFC 112 S	88.9 x 4.05	90.0	80	106.38	134	61.93	124	40	5	M 16 x 40	2.50
3 1/2"	DFC 114 S	101.6 x 4.5	103.0	93	120.65	152	69.85	136	40	5	M 16 x 40	3.00
4"	DFC 116 S	114.3 x 4.5	116.0	105	130.18	162	77.77	146	50	6	M 16 x 45	4.30
5"	DFC 118 S	139.7 X 4.85	141.0	126	152.40	190	92.08	170	56	8	M 16 x 45	6.00

ordering code:

ST 44.3/52.3 1.4404

flange with metric screws and o-ring

DFC...SM DFCx...SMx



Material: ST 44.3 (FE 430) Carbon Steel

3.000 Series													
Size	Type	A	B	C	D	E	F	G	H	L	M (Screws)		Weight kg
											Metric	UNC	
1/2"	AFG 080 JIC 3/4	3/4" -16 JIC	9.9	38.10	54	17.48	46	52	13	9.0	M 8 x 30	5/16" x 1 1/4"	0.25
1/2"	AFG 080 JIC 7/8	7/8" -14 JIC	12.3	38.10	54	17.48	46	52	13	9.0	M 8 x 30	3/8" x 1 1/4"	0.30
3/4"	AFG 100 JIC 1 1/16	1 1/16" -12 JIC	15.5	47.63	65	22.23	50	60	14	11.5	M 10 x 30	3/8" x 1 1/4"	0.35
1"	AFG 102 JIC 1 5/16	1 5/16" -12 JIC	21.5	52.37	70	26.19	55	63	16	11.5	M 10 x 30	3/8" x 1 1/4"	0.50
1 1/4"	AFG 104 JIC 1 5/8	1 5/8" -12 JIC	27.5	58.72	79	30.18	68	65	14	11.5	M 10 x 30	7/16" x 1 1/2"	0.70
1 1/4"	AFG 104 JIC 1 5/16	1 5/16" -12 JIC	21.5	58.72	79	30.18	68	65	14	11.5	M 10 x 30	7/16" x 1 1/2"	0.70
1 1/2"	AFG 106 JIC 1 7/8	1 7/8" -12 JIC	33.0	69.85	94	35.71	78	70	16	13.5	M 12 x 35	1/2" x 1 1/2"	1.00
6.000 Series													
1/2"	AFG 401 JIC 3/4	3/4" -16 JIC	9.9	40.49	56	18.24	48	60	16	9.0	M 8 x 30	5/16" x 1 1/4"	0.30
1/2"	AFG 401 JIC 7/8	7/8" -14 JIC	12.3	40.49	56	18.24	48	60	16	9.0	M 8 x 30	5/16" x 1 1/4"	0.40
3/4"	AFG 402 JIC 1 1/16	1 1/16" -12 JIC	15.5	50.80	71	23.80	60	73	19	11.5	M 10 x 35	3/8" x 1 1/2"	0.70
1"	AFG 403 JIC 1 5/16	1 5/16" -12 JIC	21.5	57.15	81	27.76	70	82	24	13.0	M 12 x 45	7/16" x 1 3/4"	1.00
1 1/4"	AFG 404 JIC 1 5/8	1 5/8" -12 JIC	27.5	66.68	95	31.75	78	92	27	15.0*	M 14 x 50	1/2" x 1 3/4"	1.50
1 1/4"	AFG 404 JIC 1 5/16	1 5/16" -12 JIC	21.5	66.68	95	31.75	78	92	27	15.0*	M 14 x 50	1/2" x 1 3/4"	1.50
1 1/2"	AFG 405 JIC 1 7/8	1 7/8" -12 JIC	33.0	79.38	113	36.50	95	96	30	17.5	M 16 x 50	5/8" x 2"	2.30

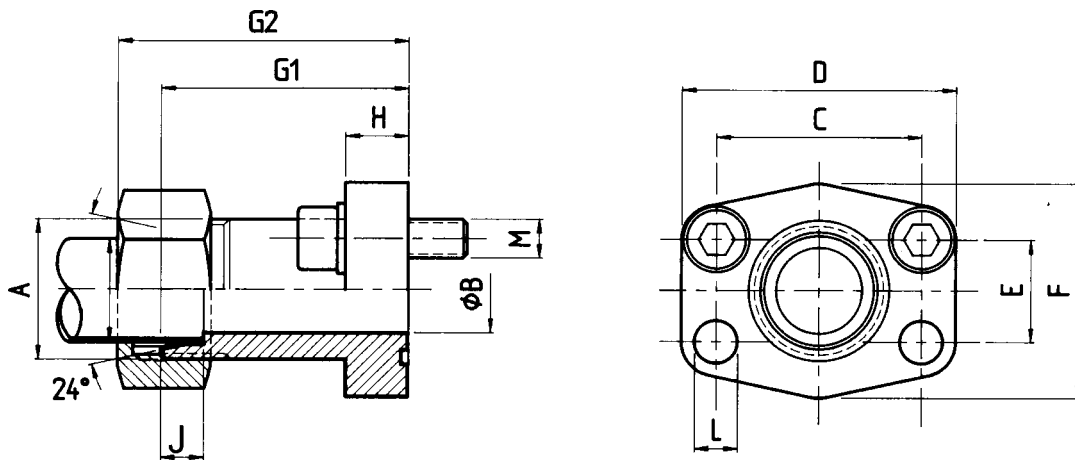
ordering code:

ST 44.3

*13.5 for UNC Screws

flange only
 flange, metric screws and o-ring
 flange, UNC screws and o-ring

AFG...
 AFG...M
 AFG...U



Material: 1 ST 44.3 (FE 430) Carbon Steel

3.000 Series															
Size	Type	A	B	C	D	E	F	G ₁	G ₂	H	J	ØL	M (Screws)		Weight kg
													Metric	UNC	
1/2"	AFG 080 M/L 15	M 22 x 1.5	12	38.10	54	17.48	46	52	60	13	7.0	9.0	M 8 x 30	5/16" x 1 1/4"	0.25
3/4"	AFG 100 M/L 22	M 30 x 2.0	19	47.63	65	22.23	50	60	69	14	7.5	11.5	M 10 x 30	3/8" x 1 1/4"	0.35
3/4"	AFG 100 M/S 20	M 30 x 2.0	16	47.63	65	22.23	50	60	73	14	10.5	11.5	M 10 x 30	3/8" x 1 1/4"	0.36
1"	AFG 102 M/L 22	M 30 x 2.0	19	52.37	70	26.19	55	63	72	16	7.5	11.5	M 10 x 30	3/8" x 1 1/4"	0.44
1"	AFG 102 M/L 28	M 36 x 2.0	24	52.37	70	26.19	55	63	72	16	7.5	11.5	M 10 x 30	3/8" x 1 1/4"	0.50
1"	AFG 102 M/S 20	M 30 x 2.0	16	52.37	70	26.19	55	63	76	16	10.5	11.5	M 10 x 30	3/8" x 1 1/4"	0.46
1"	AFG 102 M/S 25	M 36 x 2.0	20	52.37	70	26.19	55	63	75	16	12.0	11.5	M 10 x 30	3/8" x 1 1/4"	0.52
1 1/4"	AFG 104 M/L 28	M 36 x 2.0	24	58.72	79	30.18	68	65	74	14	7.5	11.5	M 10 x 35	7/16" x 1 1/2"	0.68
1 1/4"	AFG 104 M/L 35	M 45 x 2.0	29	58.72	79	30.18	68	65	76	14	10.5	11.5	M 10 x 35	7/16" x 1 1/2"	0.72
1 1/4"	AFG 104 M/S 30	M 42 x 2.0	25	58.72	79	30.18	68	65	78	14	13.5	11.5	M 10 x 35	7/16" x 1 1/2"	0.70
1 1/2"	AFG 106 M/L 42	M 52 x 2.0	36	69.85	94	35.71	78	70	82	16	11.0	13.5	M 12 x 35	1/2" x 1 1/2"	1.00
1 1/2"	AFG 106 M/L 38	M 52 x 2.0	32	69.85	94	35.71	78	70	85	16	16.0	13.5	M 12 x 35	1/2" x 1 1/2"	1.02
6.000 Series															
1/2"	AFG 401 M/S 16	M 24 x 1.5	12	40.49	56	18.24	48	60	70	16	8.5	9.0	M 8 x 30	5/16" x 1 1/4"	0.30
3/4"	AFG 402 M/S 25	M 36 x 2.0	19	50.80	71	23.80	60	73	85	19	12.0	11.5	M 10 x 35	3/8" x 1 1/2"	0.68
1"	AFG 403 M/S 30	M 42 x 2.0	25	57.15	81	27.76	70	82	95	24	13.5	13.0	M 12 x 45	7/16" x 1 3/4"	1.00
1 1/4"	AFG 404 M/S 38	M 52 x 2.0	29	66.68	95	31.75	78	92	107	27	16.0	15.0*	M 14 x 50	1/2" x 1 3/4"	1.60
1 1/4"	AFG 404 M/S 30	M 42 x 2.0	25	66.68	95	31.75	78	92	106	27	13.5	15.0*	M 14 x 50	1/2" x 1 3/4"	1.54
1 1/2"	AFG 405 M/S 38	M 52 x 2.0	32	79.38	113	36.50	95	96	111	30	16.0	17.5	M 16 x 50	5/8" x 2"	2.20

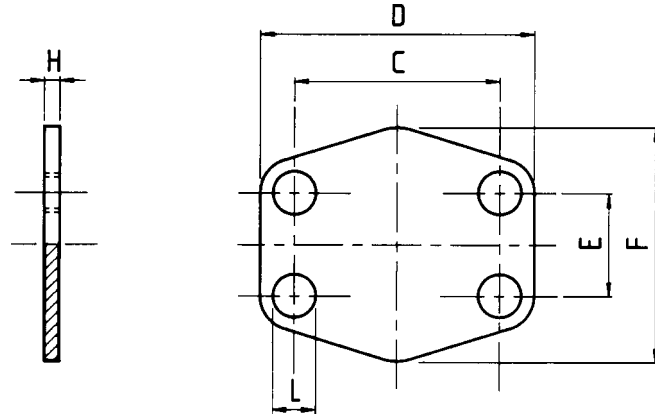
ordering code:

ST 44.3

*13.5 for UNC Screws

- flange only AFG...
- flange, metric screws and o-ring AFG...M
- flange, UNC screws and o-ring AFG...U
- flange, screws(metric or UNC) o-ring, cutting ring and nut AFG...MM(UM)

Note: the maximum working pressure for this series of components is determined by the tube thickness and quality of the tube. Flange is manufactured in accordance with SAE J518C and DIN3861 on the thread.



Material: ST 35

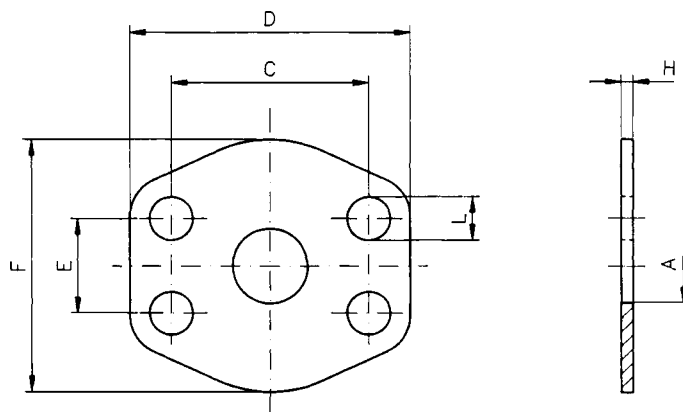
3.000 Series								
Size	Type	C	D	E	F	H	ØL	Weight kg
1/2"	AP 080	38.10	54	17.48	45.60	3	9	0.01
3/4"	AP 100	47.63	65	22.23	51.80	3	11	0.01
1"	AP 102	52.37	70	26.19	58.40	3	11	0.01
1 1/4"	AP 104	58.72	79	30.18	72.60	3	11	0.02
1 1/2"	AP 106	69.85	94	35.71	82.20	3	13	0.02
2"	AP 108	77.77	102	42.88	90.00	3	13	0.03
2 1/2"	AP 110	88.90	114	50.80	108.12	3	13	0.03
3"	AP 112	106.38	135	61.93	130.60	4	17	0.04
3 1/2"	AP 114	120.65	152	69.85	139.00	4	17	0.06
4"	AP 116	130.18	162	77.77	152.00	4	17	0.08
5"	AP 118	152.40	184	92.08	180.00	4	17	0.09
6.000 Series								
1/2"	AP 401	40.49	56	18.24	47.2	4	9	0.01
3/4"	AP 402	50.80	71	23.80	60.0	4	11	0.01
1"	AP 403	57.15	81	27.76	69.6	4	13	0.02
1 1/4"	AP 404	66.68	95	31.75	77.2	4	15	0.03
1 1/2"	AP 405	79.38	113	36.50	95.0	4	17	0.04
2"	AP 406	96.82	133	44.45	113.8	4	21	0.05

ordering code:

ST35

locking sheet only

AP-...



Material: ST 35

3.000 Series

Size	Type	ØA	C	D	E	F	H	ØL	Weight kg
1/2"	ZP 080	13	38.10	54	17.48	45.60	3	9	0.01
3/4"	ZP 100	19	47.63	65	22.23	51.80	3	11	0.01
1"	ZP 102	25	52.37	70	26.19	58.40	3	11	0.01
1 1/4"	ZP 104	32	58.72	79	30.18	72.60	3	11	0.02
1 1/2"	ZP 106	38	69.85	94	35.71	82.20	3	13	0.02
2"	ZP 108	51	77.77	102	42.88	90.00	3	13	0.03
2 1/2"	ZP 110	63	88.90	114	50.80	108.00	3	13	0.03
3"	ZP 112	73	106.38	135	61.93	130.60	4	17	0.04
3 1/2"	ZP 114	89	120.65	152	69.85	139.00	4	17	0.06
4"	ZP 116	99	130.18	162	77.77	152.00	4	17	0.08
5"	ZP 118	120	152.40	184	92.08	180.00	4	17	0.09

6.000 Series

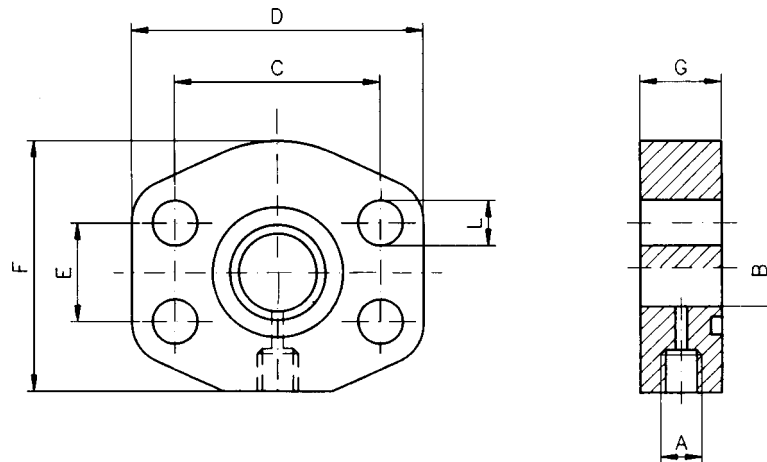
1/2"	ZP 401	13	40.49	56	18.24	47.2	4	9	0.01
3/4"	ZP 402	17	50.80	71	23.80	60.0	4	11	0.01
1"	ZP 403	24	57.15	81	27.76	69.6	4	13	0.02
1 1/4"	ZP 404	31	66.68	95	31.75	77.2	4	15	0.03
1 1/2"	ZP 405	38	79.38	113	36.50	95.0	4	17	0.04
2"	ZP 406	51	96.82	133	44.45	113.8	4	21	0.05

ordering code:

ST 35

adaptor sheet only

ZP-...

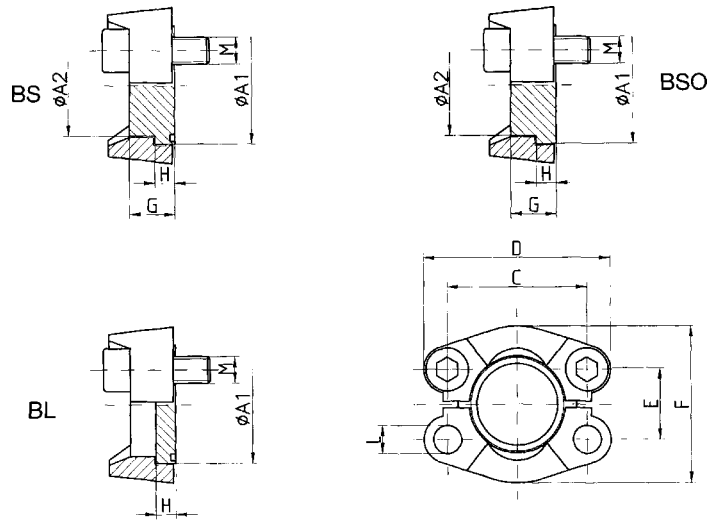


- Material: 1. FE 510 (ST 52.3), FE 430 (ST 44.3) Carbon Steel
 2. 1.4404, 316L stainless Stainless Steel

3.000 Series										
Size	Type	A	B	C	D	E	F	G	L	Weight kg
1/2"	AGL-080	G ^{1/4} "	12	38.10	55	17.48	38	24	9.0	0.45
3/4"	AGL-100	G ^{1/4} "	19	47.63	65	22.23	50	24	11.0	0.60
1"	AGL-102	G ^{1/4} "	24	52.37	70	26.19	50	24	11.0	0.60
1 1/4"	AGL-104	G ^{1/4} "	32	58.72	81	30.18	70	23	12.5	0.75
1 1/2"	AGL-106	G ^{1/4} "	38	69.85	95	35.71	78	24	13.5	0.80
2"	AGL-108	G ^{1/4} "	50	77.77	102	42.88	90	24	13.5	1.25
6.000 Series										
1/2"	AGL-401	G ^{1/4} "	12	40.49	55	18.24	38	24	9.0	0.45
3/4"	AGL-402	G ^{1/4} "	19	50.80	70	23.80	50	24	11.0	0.60
1"	AGL-403	G ^{1/4} "	24	57.15	81	27.76	70	23	13.0	0.75
1 1/4"	AGL-404	G ^{1/4} "	32	66.68	95	31.75	78	24	15.0	0.80
1 1/2"	AGL-405	G ^{1/4} "	38	79.38	112	36.50	94	24	17.0	1.40
2"	AGL-406	G ^{1/4} "	51	96.82	134	44.45	114	24	21.0	1.57

ordering code: FE 430/510 1.4404
 adaptor-flange only AGL-... AGL-x...

Note: Stainless steel flanges are supplied with zinc plated bolts where necessary.



Material: ST 44.3/52.3 finish: zinc plated yellow chromated

3.000 Series															
Size	Max. Working Pressure kg/cm ²		Type	A ₁	A ₂	C	D	E	F	G	H	L	M (Screws)		Weight (plug only) kg.
	BL	BS											metric	unc	
1/2"	210	345	BL/BS/BSO 3001	30.2	23.9	38.10	54	17.48	45.6	16	6.9	8.50	M 8 x 30	5/16" x 1 1/4"	0.03
3/4"	210	345	BL/BS/BSO 3002	38.1	31.7	47.63	65	22.23	51.8	17	6.9	10.50	M 10 x 30	3/8" x 1 1/4"	0.05
1"	210	345	BL/BS/BSO 3003	44.4	38.1	52.37	70	26.19	58.4	17	8.1	10.50	M 10 x 35	3/8" x 1 1/4"	0.08
1 1/4"	210	276	BL/BS/BSO 3004	50.8	42.3	58.72	79	30.18	72.6	17	8.1	10.5	M 10 x 30	-	0.11
												12.5	M 12 x 40	-	
												12.0	-	7/16" x 1 1/2"	
1 1/2"	160	207	BL/BS/BSO 3005	60.3	50.3	69.85	94	35.71	82.2	19	8.1	13.50	M 12 x 35	1/2" x 1 1/2"	0.16
2"	160	207	BL/BS/BSO 3006	71.4	62.2	77.77	102	42.88	96.4	19	9.7	13.50	M 12 x 35	1/2" x 1 1/2"	0.27
2 1/2"	-	172	BS/BSO 3007	84.1	74.0	88.90	114	50.80	108.0	40	9.5	13.50	M 12 x 35	1/2" x 1 1/2"	0.90
3"	-	138	BS/BSO 3008	101.6	90.0	106.38	135	61.93	130.6	45	9.5	16.75	M 16 x 50	5/8" x 2"	1.30
3 1/2"	-	34	BS/BSO 3009	114.3	102.0	120.65	152	69.85	139.0	30	11.2	17.00	M 16 x 50	5/8" x 2"	1.80
4"	-	34	BS/BSO 3010	127.0	114.0	130.18	162	77.77	152.0	36	11.2	17.00	M 16 x 50	5/8" x 2"	2.11
5"	-	34	BS/BSO 3011	152.4	140.0	152.40	184	92.08	180.0	45	11.2	17.00	M 16 x 50	5/8" x 2"	2.70
6.000 Series															
1/2"	250	420	BL/BS/BSO 6001	31.7	23.9	40.39	56	18.24	47.2	18	7.9	8.50	M 8 x 30	5/16" x 1 1/4"	0.04
3/4"	250	420	BL/BS/BSO 6002	41.3	31.7	50.80	71	23.80	60.0	15	8.9	10.50	M 10 x 35	3/8" x 1 1/2"	0.08
1"	250	420	BL/BS/BSO 6003	47.6	38.1	57.15	81	27.76	69.6	16	9.7	12.5	M 12 x 45	-	0.12
												12.0	-	7/16" x 1 3/4"	
1 1/4"	250	420	BL/BS/BSO 6004	54.0	43.7	66.68	95	31.75	77.2	16	10.4	14.5	M 14 x 50	-	0.17
												14.0	-	1/2" x 1 3/4"	
1 1/2"	250	420	BL/BS/BSO 6005	63.5	50.8	79.38	113	36.50	95.0	19	12.7	16.75	M 16 x 55	5/8" x 2"	0.30
2"	250	420	BL/BS/BSO 6006	79.4	66.5	96.82	133	44.45	113.8	30	12.7	21.00	M 20 x 65	3/4" x 2 1/2"	0.47
2 1/2"	-	420	BS/BSO 6007	108.0	90.0	123.80	180	58.80	150.2	45	21.2	26.00	M 24 x 75	-	2.60
3"	-	420	BS/BSO 6008	132.0	114.0	152.40	215	71.60	198.16	55	26.5	31.00	M 30 x 90	-	5.00

ordering code:

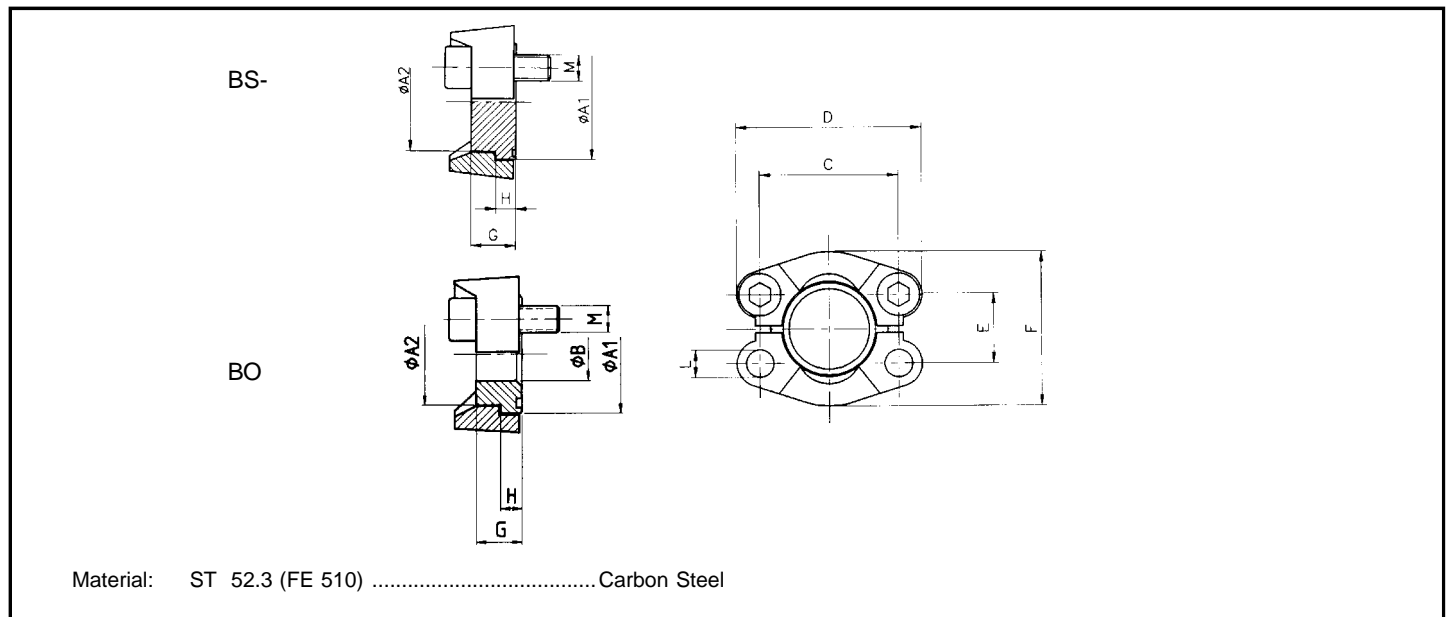
flange plug only with o-ring

flange plug companion including split flanges (or complete flange*), metric screws and o-ring

including split flanges (or complete flange), UNC screws and o-ring

ST 44.3/52.3

- BL-...
- BS-...
- BSO-...
- BL-...FH(VF*)-M
- BS-...FH(VF*)-M
- BSO-...FHG(VFG*)
- BL-...FH-U
- BS-...FH-U



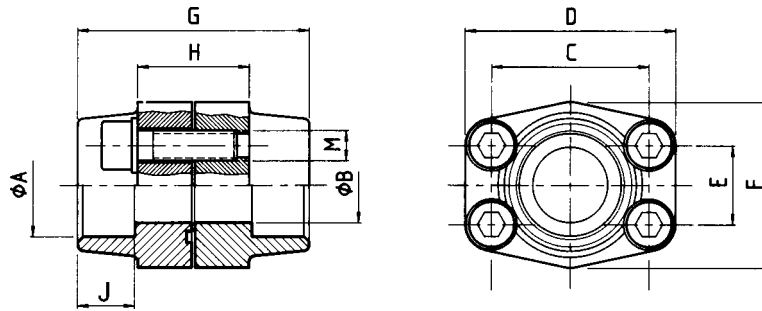
3.000 Series														
Size	Type	ØA ₁	ØA ₂	ØB min/max	C	D	E	F	G	H	ØL	M (Screws)		Weight (plug only) kg
												Metric	UNC	
1/2"	FT 3001 (BO)	30.2	23.9	0/10	38.10	54	17.48	45.6	16	6.9	8.5	M 8 x 30	5/16" x 1 1/4"	0.05
3/4"	FT 3002 (BO)	38.1	31.7	0/15	47.63	65	22.23	51.8	17	6.9	10.5	M 10 x 30	3/8" x 1 1/4"	0.08
1"	FT 3003 (BO)	44.4	38.1	0/20	52.37	70	26.19	58.4	17	8.1	10.5	M 10 x 35	3/8" x 1 1/2"	0.12
1 1/4"	FT 3004 (BO)	50.8	42.3	0/27	58.72	79	30.18	72.6	17	8.1	10.5	M 10 x 30	-	0.13
											12.5	M 12 x 40	-	
											12.0	-	7/16" x 1 1/2"	
1 1/2"	FT 3005 (BO)	60.3	50.3	0/32	69.85	94	35.71	82.2	19	8.1	13.5	M 12 x 35	1/2" x 1 1/2"	0.20
2"	FT 3006 (BO)	71.4	62.2	0/40	77.77	102	42.88	96.4	19	9.7	13.5	M 12 x 35	1/2" x 1 1/2"	0.31
2 1/2"	FT 3007 (BO)	84.1	74.0	0/50	88.90	114	50.80	108.2	30	9.7	13.5	M 12 x 40	1/2" x 1 3/4"	0.47
6.000 Series														
1/2"	FT 6001 (BO)	31.7	23.9	0/10	40.39	56	18.24	47.2	16	7.9	8.50	M 8 x 30	5/16" x 1 1/4"	0.06
3/4"	FT 6002 (BO)	41.3	31.7	0/15	50.80	71	23.80	60.0	20	8.9	10.50	M 10 x 35	3/8" x 1 1/2"	0.12
1"	FT 6003 (BO)	47.6	38.1	0/20	57.15	81	27.76	69.6	22	9.7	12.5	M 12 x 45	-	0.17
											12.0	-	7/16" x 1 3/4"	
1 1/4"	FT 6004 (BO)	54.0	43.7	0/27	66.68	95	31.75	77.2	27	10.4	14.5	M 14 x 50	-	0.22
											14.0	-	1/2" x 1 3/4"	
1 1/2"	FT 6005 (BO)	63.5	50.8	0/32	79.38	113	36.50	95.0	32	12.7	16.75	M 16 x 55	5/8" x 2"	0.39
2"	FT 6006 (BO)	79.4	66.5	0/40	96.82	133	44.45	113.8	40	12.7	21.00	M 20 x 65	3/4" x 2 1/2"	0.79

ordering code:

ST 52.3

flange head only
including split flanges (or complete flange*), metric screws and o-ring
including split flanges (or complete flange), UNC screws and o-ring

FT-...
FT-...FH(VF*)M
FT-...FHU



Material: 1 ST 52.3 Carbon Steel
 2. 1.4404 316L Stainless Steel

3.000 Series													
Size	Type	ØA	ØB	C	D	E	F	G	H	J	M (Screws)		Weight kg without screws
											Metric	UNC	
1/2"	DFS 080 S	21.6	13	38.10	54	17.48	46	72	32	19	M 8 x 30	5/16" x 1 1/4"	0.50
1/2"	DFS 080 S-038	17.5	13	38.10	54	17.48	46	72	32	19	M 8 x 30	5/16" x 1 1/4"	0.56
1/2"	DFS 080 S-A20	20.3	13	38.10	54	17.48	46	72	32	19	M 8 x 30	5/16" x 1 1/4"	0.56
3/4"	DFS 100 S	27.2	19	47.63	65	22.23	50	72	36	19	M 10 x 35	3/8" x 1 1/2"	0.78
3/4"	DFS 100 S-A25	25.3	19	47.63	65	22.23	50	72	36	19	M 10 x 35	3/8" x 1 1/2"	0.78
1"	DFS 102 S	34.0	25	52.37	70	26.19	55	76	36	19	M 10 x 35	3/8" x 1 1/2"	0.92
1"	DFS 102 S-A30	30.3	25	52.37	70	26.19	55	76	36	19	M 10 x 35	3/8" x 1 1/2"	0.92
1 1/4"	DFS 104 S	42.8	32	58.72	79	30.18	68	82	42	22	M 10 x 40	7/16" x 1 1/2"	1.32
1 1/4"	DFS 104 S-A38	38.3	32	58.72	79	30.18	68	82	42	22	M 10 x 40	7/16" x 1 1/2"	1.32
1 1/2"	DFS 106 S	48.6	38	69.85	93	35.71	78	90	50	24	M 12 x 45	1/2" x 1 3/4"	2.10
1 1/2"	DFS 106 S-A50	50.5	38	69.85	93	35.71	78	90	50	24	M 12 x 45	1/2" x 1 3/4"	2.10
2"	DFS 108 S	61.0	51	77.77	102	42.88	90	90	50	26	M 12 x 45	1/2" x 1 3/4"	2.38
2 1/2"	DFS 110 S	76.6	63	88.90	114	50.80	105	100	50	30	M 12 x 45	1/2" x 1 3/4"	2.80
3"	DFS 112 S	90.5	73	106.38	134	61.93	124	100	54	34	M 16 x 50	5/8" x 2"	4.30
3 1/2"	DFS 114 S	103.0	89	120.65	152	69.85	136	96	54	34	M 16 x 50	5/8" x 2"	4.80
4"	DFS 116 S	115.5	99	130.18	162	77.77	146	96	54	34	M 16 x 50	5/8" x 2"	5.70
6.000 Series													
1/2"	DFS 401 S-012	21.6	13	40.49	54	18.24	46	72	32	19	M 8 x 30	5/16" x 1 1/4"	0.52
1/2"	DFS 401 S-038	17.5	13	40.49	54	18.24	46	72	32	19	M 8 x 30	5/16" x 1 1/4"	0.58
1/2"	DFS 401 S-A20	20.3	13	40.49	54	18.24	46	72	32	19	M 8 x 30	5/16" x 1 1/4"	0.58
3/4"	DFS 402 S	27.2	19	50.80	71	23.80	55	70	42	22	M 10 x 35	3/8" x 1 1/2"	1.00
3/4"	DFS 402 S-A25	25.3	19	50.80	71	23.80	55	70	42	22	M 10 x 35	3/8" x 1 1/2"	1.00
1"	DFS 403 S	34.0	25	57.15	81	27.76	65	84	50	22	M 12 x 45	7/16" x 1 3/4"	1.52
1"	DFS 403 S-A30	30.3	25	57.15	81	27.76	65	84	50	22	M 12 x 45	7/16" x 1 3/4"	1.52
1 1/4"	DFS 404 S	42.8	32	66.68	95	31.75	78	90	54	25	M 14 x 45	1/2" x 1 3/4"	2.40
1 1/4"	DFS 404 S-A38	38.3	32	66.68	95	31.75	78	90	54	25	M 14 x 45	1/2" x 1 3/4"	2.40
1 1/2"	DFS 405 S	48.6	38	79.38	112	36.50	94	100	60	28	M 16 x 50	5/8" x 2"	3.30
1 1/2"	DFS 405 S-A50	50.5	38	79.38	112	36.50	94	100	60	28	M 16 x 50	5/8" x 2"	3.30
2"	DFS 406 S	61.0	51	96.82	134	44.45	114	130	74	24	M 20 x 65	5/8" x 2 1/2"	4.90

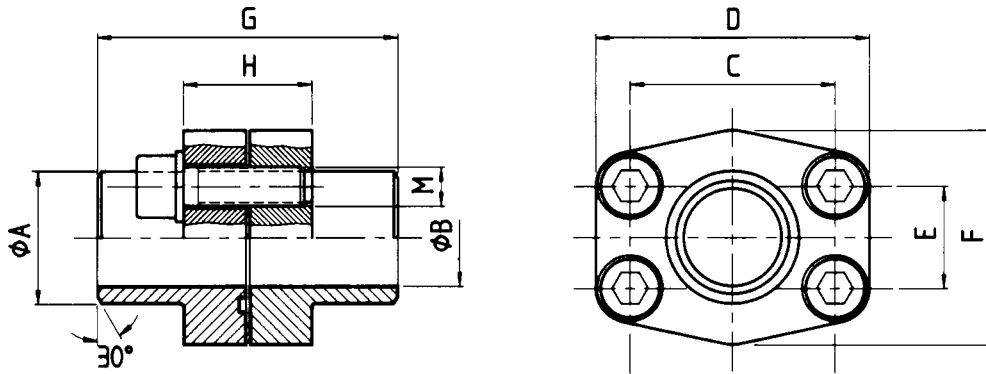
ordering code:

ST 52.3 1.4404

flange including metric screws and o-ring
 flange including UNC screws and o-ring

DFS...SM DFx...SM
 DFS...SU DFx...SU

Note: Stainless steel flanges are supplied with zinc plated bolts where necessary



- Material: 1. ST 52.3 (FE 530) Carbon Steel
 2. 1.4404 316L Stainless Steel

3.000 Series												
Size	Type	ØA	ØB	C	D	E	F	G	H	M (Screws)		Weight kg
										Metric	UNC	
1/2"	DFS 080 ST	21.5	13	38.10	54	17.48	46	72	32	M 8 x 30	5/16" x 1 1/4"	0.56
1/2"	DFS 080 ST-038	17.5	13	38.10	54	17.48	46	72	32	M 8 x 30	5/16" x 1 1/4"	0.50
3/4"	DFS 100 ST	28.0	19	47.63	65	22.23	50	72	36	M 10 x 35	3/8" x 1 1/2"	0.78
1"	DFS 102 ST	34.0	25	52.37	70	26.19	55	76	36	M 10 x 35	3/8" x 1 1/2"	0.92
1 1/4"	DFS 104 ST	42.8	32	58.72	79	30.18	68	82	42	M 10 x 40	7/16" x 1 1/2"	1.32
1 1/2"	DFS 106 ST	48.6	38	69.85	93	35.71	78	88	50	M 12 x 45	1/2" x 1 3/4"	2.10
2"	DFS 108 ST	61.0	51	77.77	102	42.88	90	90	50	M 12 x 45	1/2" x 1 3/4"	2.38
2 1/2"	DFS 110 ST	77.0	63	88.90	114	50.80	105	100	50	M 12 x 45	1/2" x 1 3/4"	2.80
3"	DFS 112 ST	92.0	73	106.38	134	61.93	124	100	54	M 16 x 50	5/8" x 2"	4.30
3 1/2"	DFS 114 ST	103.0	89	120.65	152	69.85	136	96	54	M 16 x 50	5/8" x 2"	4.80
4"	DFS 116 ST	115.5	99	130.18	162	77.77	146	96	54	M 16 x 50	5/8" x 2"	5.70
5"	DFS 118 ST	140.2	120	152.40	184	92.08	180	100	56	M 16 x 55	5/8" x 2"	10.00
6.000 Series												
1/2"	DFS 401 ST-012	21.6	13	40.49	54	18.24	46	72	32	M 8 x 30	5/16" x 1 1/4"	0.58
1/2"	DFS 401 ST-038	17.5	13	40.49	54	18.24	46	72	32	M 8 x 30	5/16" x 1 1/4"	0.52
3/4"	DFS 402 ST	28.0	19	50.80	71	23.80	55	70	42	M 10 x 35	3/8" x 1 1/2"	1.00
1"	DFS 403 ST	34.0	25	57.15	79	27.76	65	82	42	M 12 x 45	7/16" x 1 3/4"	1.52
1 1/4"	DFS 404 ST	42.8	32	66.68	95	31.75	78	88	48	M 14 x 45	1/2" x 1 3/4"	2.40
1 1/4"	DFS 404 ST 160	42.8	29	66.68	95	31.75	78	88	48	M 14 x 45	1/2" x 1 3/4"	2.80
1 1/2"	DFS 405 ST	48.6	38	79.38	114	36.50	94	110	60	M 16 x 50	5/8" x 2"	3.30
1 1/2"	DFS 405 ST 160	48.6	38	79.38	114	36.50	94	110	60	M 16 x 50	5/8" x 2"	4.00
2"	DFS 406 ST	61.0	51	96.82	134	44.45	114	130	74	M 20 x 65	3/4" x 2 1/2"	4.90
2"	DFS 406 ST 160	61.0	43	96.82	134	44.45	114	130	74	M 20 x 65	3/4" x 2 1/2"	5.50
2 1/2"	DFS 407 ST 76	76.1	51	123.80	180	58.70	152	160	90	M 24 x 75	-	12.80
2 1/2"	DFS 407 ST 88	88.9	60.5	123.80	180	58.70	152	160	90	M 24 x 75	-	16.60

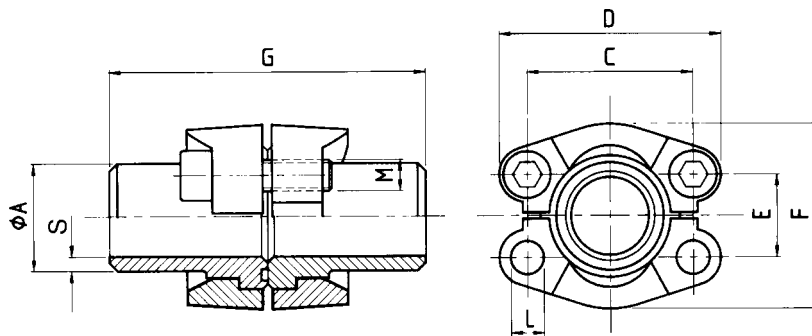
ordering code:

ST 52.3 1.4404

flange with metric screws and o-ring
 flange with UNC screws and o-ring

DFS...STM DFx...STM
 DFS...STU DFx...STU

Note: Stainless steel flanges are supplied with zinc plated bolts where necessary



Material: 1 ST 52.3 (FE 510) Carbon Steel

Note: Maximum recommended working pressure 40 bar all sizes

6.000 Series													
Size	Maximum Working Pressure kg/cm ³	Type	Tube		C	D	E	F	G	L	M (Screws)		Weight kg
			Ø	Wall							Metric	UNC	
			A	S									
1/2"	414	DSFS 6001	16.0	2.0	40.49	56	18.24	47.2	68	8.5	M 8 x 30	5/16" x 1 1/4"	0.60
			20.0	2.5									
			21.3	2.9									
3/4"	414	DSFS 6002	16.0	2.0	50.80	71	23.80	60.0	76	10.5	M 10 x 35	3/8" x 1 1/4"	1.10
			20.0	2.5									
			25.0	3.0									
			25.0	3.5									
			25.0	4.0									
1"	414	DSFS 6003	25.0	3.0	57.15	81	27.76	69.6	80	12.0	-	7/16" x 1 3/4"	1.70
			30.0	3.0									
			30.0	4.0									
			33.7	6.3									
			33.7	7.1									
			38.4	4.0									
1 1/4"	414	DSFS 6004	25.0	3.0	66.68	95	31.75	77.2	90	13.5	-	1/2" x 1 3/4"	2.50
			30.0	4.0									
			38.0	5.0									
			38.0	5.5									
			42.4	6.3									
1 1/2"	414	DSFS 6005	38.0	5.0	79.38	113	36.50	95.0	100	16.75	M 16 x 55	5/8" x 2"	4.10
			45.0	6.5									
			48.3	5.0									
			48.3	6.3									
			48.3	7.1									
			48.3	8.0									
			48.3	8.8									
			50.0	6.0									
2"	414	DSFS 6006	48.3	6.3	96.82	133	44.45	113.8	116	21.0	M 20 x 65	3/4" x 2 1/2"	6.70
			60.3	6.3									
			60.3	7.5									
			60.3	8.0									
			60.3	8.75									
			60.3	10.0									
			60.3	13.4									
2 1/2"	414	DSFS 6007	76.1	8.0	123.80	180	58.80	150.2	150	26.0	M 24 x 75	-	15.0
			76.1	10.0									
			88.9	10.0									
			88.9	11.0									
			88.9	14.2									
3"	414	DSFS 6008	88.9	10.0	152.40	215	71.60	198.2	160	31	M 30 x 90	-	27.0
			88.9	11.0									
			88.9	14.2									
			114.3	11.0									
			114.3	17.5									

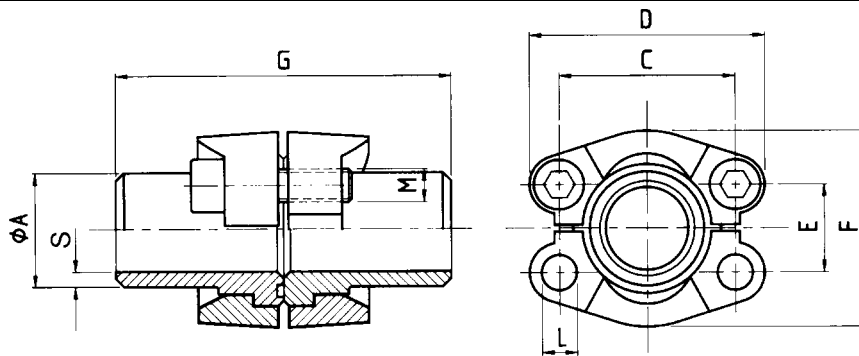
ordering code:

complete coupling

D-SFS...

* Please state M10 or M12 bolts

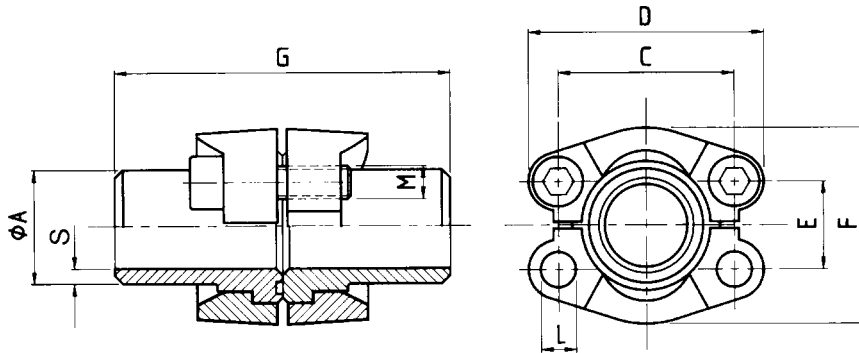
Note: The maximum working pressure is based on the flange (see page 1). The working pressure of the system is determined by the tube thickness and quality.



Material: 1 ST 52.3 (FE 510) Carbon Steel

Note: Maximum recommended working pressure 40 bar all sizes

3.000 Series													
Size	Maximum Working Pressure kg/cm ³	Type	Tube		C	D	E	F	G	L	M (Screws)		Weight kg
			Ø	Wall							Metric	UNC	
			A	S									
1/2"	345	DSFS 3001	16.0	2.0	38.10	54	17.48	45.6	82	8.5	M 8 x 30	5/16" x 1 1/4"	0.50
			20.0	2.5									
			21.3	2.9									
			21.3	3.8									
3/4"	345	DSFS 3002	25.0	3.0	47.63	65	22.23	51.8	100	10.5	M 10 x 30	3/8" x 1 1/4"	0.80
			26.9	3.6									
			26.9	3.9									
1"	345	DSFS 3003	25.0	3.0	52.37	70	26.19	58.4	100	10.5	M 10 x 35	3/8" x 1 1/4"	1.10
			30.0	3.0									
			30.0	4.0									
			33.7	4.5									
			38.0	4.0									
1 1/4"	276	DSFS 3004	25.0	3.0	58.72	79	30.18	72.6	110	12	-	7/16" x 1 1/2"	1.50
			30.0	3.0									
			38.0	3.0									
			38.0	4.0									
			38.0	5.0									
			42.4	3.6									
			42.4	4.5									
42.4	6.3												
1 1/2"	207	DSFS 3005	38.0	4.0	69.85	94	35.71	82.2	114	13.5	M 12 x 35	1/2" x 1 1/2"	2.20
			42.0	3.0									
			42.0	5.0									
			45.0	5.0									
			48.3	2.6									
			48.3	3.6									
			48.3	5.0									
			48.3	6.3									
			48.3	7.1									
50.0	6.0												
2"	207	DSFS 3006	48.3	5.0	77.77	102	42.88	96.4	114	13.5	M 12 x 35	1/2" x 1 1/2"	2.40
			55.0	5.0									
			60.3	2.9									
			60.3	3.9									
			60.3	5.0									
			60.3	6.3									
60.3	8.0												
2 1/2"	172	DSFS 3007	65.0	6.0	88.90	114	50.80	108.20	116	13.5	M 12 x 40	1/2" x 1 3/4"	3.50
			70.0	7.5									
			76.1	5.5									
			76.1	7.1									



Material: 1 ST 52.3 (FE 510) Carbon Steel

Note: Maximum recommended working pressure 40 bar all sizes

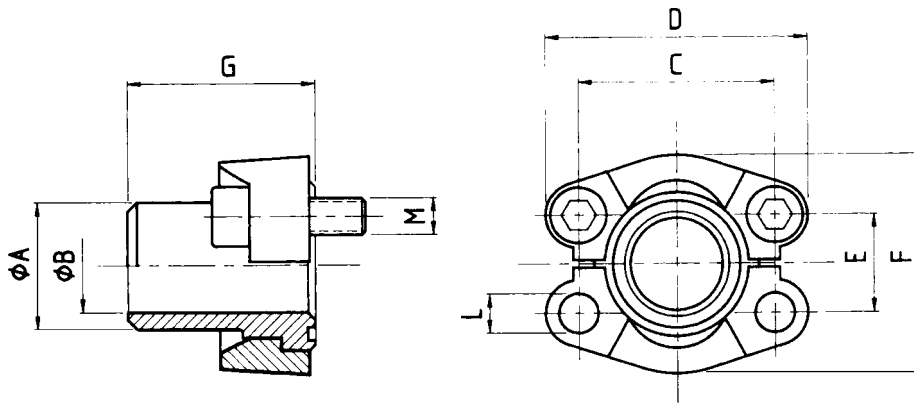
3.000 Series													
Size	Maximum Working Pressure kg/cm ³	Type	Tube		C	D	E	F	G	ØL	M (Screws)		Weight kg
			Ø	Wall							Metric	UNC	
			A	S									
3"	138	DSFS 3008	8.0	6.0	106.38	135	61.93	130.6	120	16.75	M 16 x 45	5/8" x 2"	5.30
			88.9	3.2									
			88.9	3.6									
			88.9	7.0									
			88.9	8.0									
3 1/2"	34	DSFS 3009	100.0	6.0	120.65	152	69.85	139.0	120	17.00	M 16 x 45	5/8" x 2"	5.30
			88.9	3.6									
			88.9	8.0									
4"	34	DSFS 3010	110.0	6.0	130.18	162	77.77	152.0	120	17.00	M 16 x 50	5/8" x 2"	7.50
			114.3	3.6									
			114.3	6.02									
			114.3	8.8									
5"	34	DSFS 3011	133.0	6.5	152.40	184	92.08	180.0	120	17.00	M 16 x 50	5/8" x 2"	11.00
			139.7	4.0									
			139.7	10.0									

ordering code:

complete coupling D-SFS...

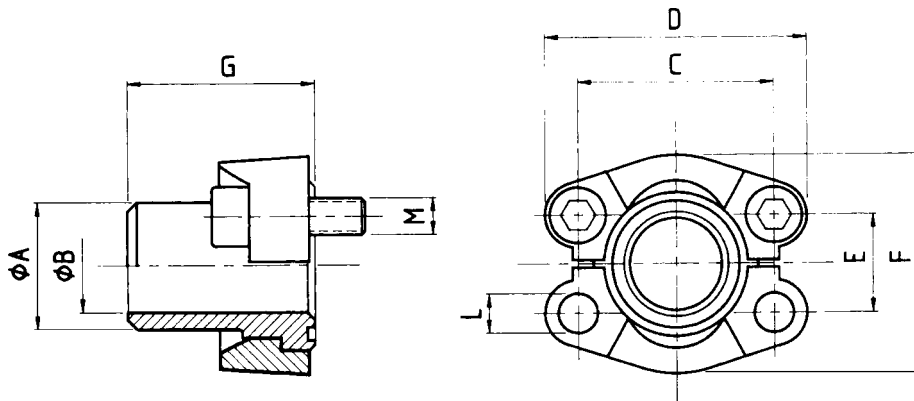
* Please state M10 or M12 bolts

Note: The maximum working pressure is based on the flange (see page 1). The working pressure of the system is determined by the tube thickness and quality.



Material: 1 ST 52.3 (FE 510)

3.000 Series													
Size	Maximum Working Pressure kg/cm ³	Type	Tube		C	D	E	F	G	L	M (Screws)		Weight kg
			Ø	Wall							Metric	UNC	
			A	S									
1/2"	345	SFS 3001	16.0	2.0	38.10	54	17.48	45.6	41	8.5	M 8 x 25	5/16" x 1 1/4"	0.08
			20.0	2.5									
			21.3	2.9									
			21.3	3.8									
			21.3	4.7									
3/4"	345	SFS 3002	25.0	3.0	47.63	65	22.23	51.8	50	10.5	M 10 x 30	3/8" x 1 1/4"	0.16
			26.9	3.6									
			26.9	3.9									
1"	345	SFS 3003	25.0	3.0	52.37	70	26.19	58.4	50	10.5	M 10 x 30	3/8" x 1 1/4"	0.23
			30.0	3.0									
			30.0	4.0									
			33.7	4.5									
			38.0	4.0									
1 1/4"	276	SFS 3004	25.0	3.0	58.72	79	30.18	72.6	55	12	-	7/16" x 1 1/2"	0.30
			30.0	3.0									
			38.0	3.0									
			38.0	4.0									
			38.0	5.0									
			42.4	3.6									
			42.4	4.5									
42.4	6.3												
1 1/2"	207	SFS 3005	38.0	4.0	69.85	94	35.71	82.2	57	13.5	M 12 x 35	1/2" x 1 1/2"	0.40
			42.0	3.0									
			42.0	5.0									
			45.0	5.0									
			48.3	2.6									
			48.3	3.6									
			48.3	5.0									
			48.3	6.3									
48.3	7.1												
50.0	6.0												
2"	207	SFS 3006	48.3	5.0	77.77	102	42.88	96.4	57	13.5	M 12 x 35	1/2" x 1 1/4"	0.50
			55.0	5.0									
			60.3	2.9									
			60.3	3.9									
			60.3	5.0									
			60.3	6.3									
60.3	8.0												
2 1/2"	172	SFS 3007	65.0	6.0	88.90	114	50.80	108.20	58	13.5	M 12 x 40	1/2" x 1 3/4"	0.80
			70.0	7.5									
			76.1	5.5									
			76.1	7.1									



Material: 1 ST 52.3 (FE 510)

3.000 Series													
Size	Maximum Working Pressure kg/cm ³	Type	Tube		C	D	E	F	G	L	M (Screws)		Weight kg
			Ø	Wall							Metric	UNC	
			A	S									
3"	138	SFS 3008	80.0	6.0	106.38	135	61.93	130.6	58	16.75	M 16 x 45	5/8" x 2"	1.10
			88.9	3.2									
			88.9	3.9									
			88.9	7.0									
			88.9	8.0									
3 1/2"	34	SFS 3009	100.0	6.0	120.65	152	69.85	139.0	60	17.00	M 16 x 45	5/8" x 2"	1.40
			88.9	3.6									
			88.9	8.0									
4"	34	SFS 3010	110.0	6.0	130.18	162	77.77	152.0	60	17.00	M 16 x 50	5/8" x 2"	1.75
			114.3	3.6									
			114.3	6.02									
			114.3	8.8									
5"	34	SFS 3011	133.0	6.5	152.40	184	92.08	180.0	60	17.00	M 16 x 50	5/8" x 2"	2.62
			139.7	4.0									
			139.7	10.0									

ordering code:

flange head only
 with split flanges (or complete flange), metric screws and o-ring
 with split flanges (or complete flange), unc screws and o-ring

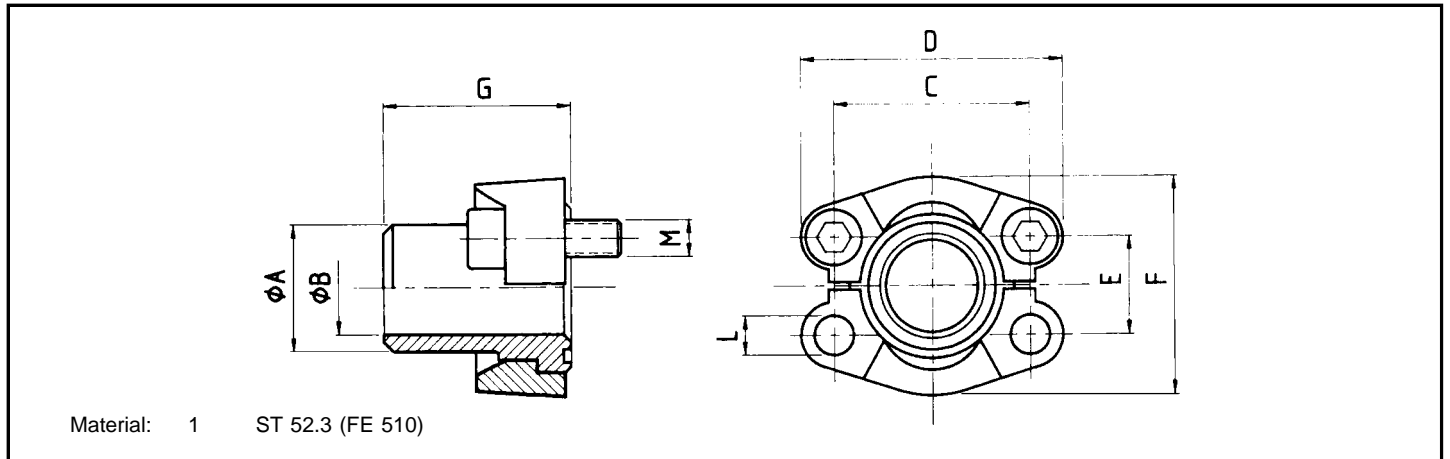
SFS...
 SFS...FH(VF)M
 SFS...FH(VF)U

ordering code for counterflange (without o-ring groove):

flange head only

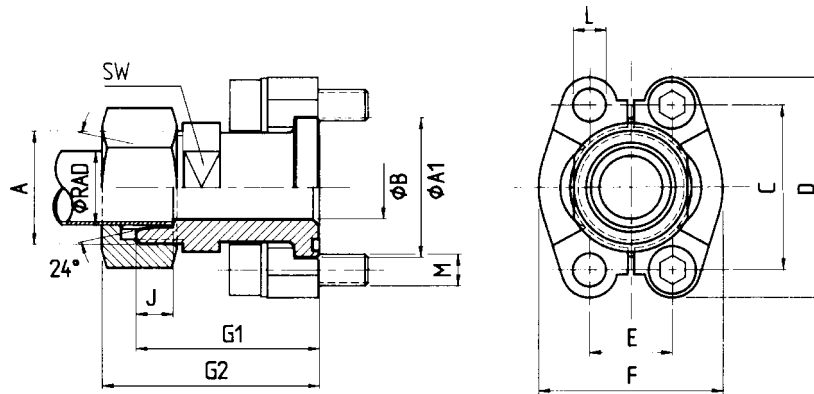
G-SFS...

This ordering code also applies to the 6000 series overleaf.



6.000 psi													
Size	Maximum Working Pressure kg/cm ³	Type	Tube		C	D	E	F	G	L	M (Screws)		Weight kg
			Ø	Wall							Metric	UNC	
			A	S									
1/2"	414	SFS 6001	16.0	2.0	40.49	56	18.24	47.2	34	8.5	M 8 x 30	5/16" x 1 1/4"	0.08
			20.0	2.5									
			21.3	4.5									
3/4"	414	SFS 6002	16.0	2.0	50.80	71	23.80	60.0	38	10.5	M 10 x 35	3/8" x 1 1/2"	0.17
			20.0	2.5									
			25.0	3.0									
			25.0	3.5									
			25.0	4.0									
1"	414	SFS 6003	25.0	3.0	57.15	81	27.76	69.6	40	12.0	-	7/16" x 1 3/4"	0.25
			30.0	3.0									
			30.0	4.0									
			33.7	6.3						12.5	M 12 x 45	-	
			33.7	7.1									
			38.4	4.0									
1 1/4"	414	SFS 6004	25.0	3.0	66.68	95	31.75	77.2	45	13.5	-	1/2" x 1 3/4"	0.30
			30.0	4.0									
			38.0	4.0						14.5	M 14 x 50	-	
			38.0	5.0									
			38.0	5.5									
1 1/2"	414	SFS 6005	42.4	6.3	79.38	113	36.50	95.0	50	16.75	M 16 x 55	5/8" x 2"	0.53
			38.0	5.0									
			45.0	6.5									
			48.3	5.0									
			48.3	6.3									
			48.3	7.1									
			48.3	8.0									
2"	414	SFS 6006	48.3	6.3	96.82	133	44.45	113.8	58	21.0	M 20 x 65	3/4" x 2 1/2"	0.90
			60.3	6.3									
			60.3	7.5									
			60.3	8.0									
			60.3	8.75									
			60.3	10.0									
			60.3	13.4									
2 1/2"	414	SFS 6007	76.1	8.0	123.80	180	58.80	150.2	75	26.0	M 24 x 75	-	2.40
			76.1	10.0									
			88.9	10.0									
			88.9	11.1									
			88.9	14.2									
3"	414	SFS 6008	88.9	10.0	152.40	215	71.60	198.2	80	31	M 30 x 90	-	3.60
			88.9	11.1									
			88.9	14.2									
			114.3	11.0									
			114.3	17.5									

See page 47 for ordering code



Material: 1 9SMnPb28K/C15mild steel - zinc plated, yellow chromated
 2. 1.4571, 316Tistainless steel

3.000 Series																	
Size	Maximum Working Pressure kg/cm ²	Type/Rad	A	A ₁	B	C	D	E	F	G ₁	G ₂	J	ØL	SW	M (Screws)		Weight kg
															Metric	UNC	
1/2"	315	SFCE 3001/L15	M 22 x 1.5	30.2	16/20	38.10	54	17.48	45.6	48.2	56	7.0	8.5	24	M 8 x 30	5/16" x 1 1/4"	0.29
1/2"	350	SFCE 3001/S16	M 24 x 1.5	30.2	13.0	38.10	54	17.48	45.6	50.2	60	8.5	8.5	24	M 8 x 30	5/16" x 1 1/4"	0.32
3/4"	315	SFCE 3002/L18	M 26 x 1.5	38.1	15/20	47.63	65	22.23	51.8	53.2	62	7.5	10.5	30	M 10 x 35	3/8" x 1 1/2"	0.55
3/4"	160	SFCE 3002/L22	M 30 x 2.0	38.1	19	47.63	65	22.23	51.8	53.2	62	7.5	10.5	30	M 10 x 35	3/8" x 1 1/2"	0.56
3/4"	160	SFCE 3002/L28	M 36 x 2.0	38.1	19	47.63	65	22.23	51.8	53.2	62	7.5	10.5	30	M 10 x 35	3/8" x 1 1/2"	0.75
3/4"	350	SFCE 3002/S20	M 30 x 2.0	38.1	16/20	47.63	65	22.23	51.8	57.2	68	10.5	10.5	30	M 10 x 35	3/8" x 1 1/2"	0.63
3/4"	350	SFCE 3002/S25	M 36 x 2.0	38.1	17	47.63	65	22.23	51.8	57.2	69	12.0	10.5	30	M 10 x 35	3/8" x 1 1/2"	0.76
1"	160	SFCE 3003/L28	M 36 x 2.0	44.4	24	52.37	70	26.19	58.4	54.2	65	7.5	10.5	36	M 10 x 35	3/8" x 1 1/2"	0.69
1"	350	SFCE 3003/S25	M 36 x 2.0	44.4	20	52.37	70	26.19	58.4	58.2	70	12.0	10.5	36	M 10 x 35	3/8" x 1 1/2"	0.78
1"	350	SFCE 3003/S30	M 42 x 2.0	44.4	24	52.37	70	26.19	58.4	63.2	76	13.5	10.5	36	M 10 x 35	3/8" x 1 1/2"	0.91
1 1/4"	160	SFCE 3003/L28	M 36 x 2.0	50.8	22	58.72	79	30.18	72.6	58.6	67	7.5	10.5	36	M 10 x 30	-	1.05
													12.5		M 12 x 40	-	
													12.0		-	7/16" x 1 1/4"	
1 1/4"	160	SFCE 3004/L35	M 45 x 2.0	50.8	30/32	58.72	79	30.18	72.6	58.6	69	10.5	10.5	41	M 10 x 30	-	1.10
													12.5		M 12 x 40	-	
													12.0		-	7/16" x 1 1/4"	
1 1/4"	280	SFCE 3003/S25	M 36 x 2.0	50.8	20/27	58.72	79	30.18	72.6	60.2	72	12.0	10.5	41	M 10 x 30	-	1.17
													12.5		M 12 x 40	-	
													12.0		-	7/16" x 1 1/4"	
1 1/4"	280	SFCE 3003/S30	M 42 x 2.0	50.8	25/28	58.72	79	30.18	72.6	62.2	75	13.5	10.5	41	M 10 x 30	-	1.19
													12.5		M 12 x 40	-	
													12.0		-	7/16" x 1 1/4"	
1 1/4"	280	SFCE 3004/S38	M 52 x 2.0	50.8	28	58.72	79	30.18	72.6	66.6	81	16.0	10.5	46	M 10 x 30	-	1.39
													12.5		M 12 x 40	-	
													12.0		-	7/16" x 1 1/4"	
1 1/4"	160	SFCE 3005/L42	M 52 x 2.0	60.3	36	69.85	94	35.71	82.2	64.2	76	11.0	13.5	46	M 12 x 40	7/16" x 1 1/4"	1.34
1 1/4"	210	SFCE 3005/S38	M 52 x 2.0	60.3	32	69.85	94	35.71	82.2	70.2	85	16.0	13.5	46	M 12 x 40	7/16" x 1 1/4"	1.50

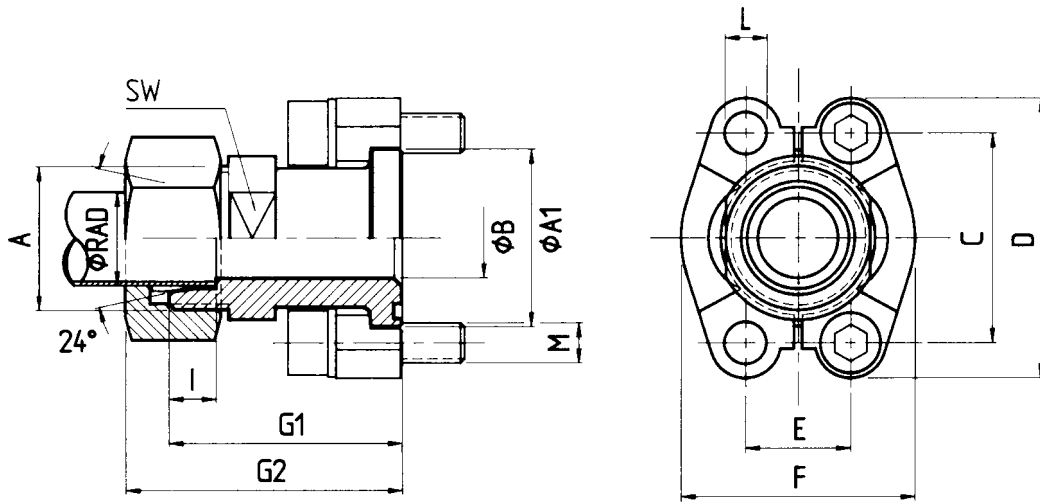
ordering code:

9SMnPb28K 1.4571

adaptor only
 adaptor including split flanges, metric screws and o-ring (nut and cutting ring)
 adaptor including split flanges, UNC screws and o-ring (nut and cutting ring)

SFCE... SFCEx...
 SFCE...M(M) SFCEx...M(M)
 SFCE...U(M) SFCEx...U(M)

Note: the maximum working pressure for this series of components is determined by the tube thickness and quality of the tube.
 Flange is manufactured in accordance with SAE J518C and DIN3861 on the thread.



Material: 1 9SMnPb28K/C15 mild steel - zinc plated, yellow chromated
 2. 1.4571, 316Ti stainless steel

6.000 Series																	
Size	Maximum Working Pressure kg/cm ²	Type	A	A ₁	B	C	D	E	F	G ₁	G ₂	J	L	SW	M (Screws)		Weight kg
															Metric	UNC	
1/2"	400	SFCE 6001/S16	M 24 x 1.5	31.7	12	40.49	56	18.24	47.2	53.2	63	8.5	8.5	24	M 8 x 30	5/16" x 1 1/4"	0.46
3/4"	400	SFCE 6002/S16	M 24 x 1.5	41.3	12	50.80	71	23.80	60.0	59.2	69	8.5	10.5	30	M 10 x 35	3/8" x 1 1/2"	0.78
3/4"	400	SFCE 6002/S20	M 30 x 2.0	41.3	16	50.80	71	23.80	60.0	61.2	72	10.5	10.5	30	M 10 x 35	3/8" x 1 1/2"	0.84
3/4"	400	SFCE 6002/S25	M 36 x 2.0	41.3	17	50.80	71	23.80	60.0	63.2	75	12.0	10.5	30	M 10 x 35	3/8" x 1 1/2"	0.96
3/4"	400	SFCE 6002/S30	M 42 x 2.0	41.3	18	50.80	71	23.80	60.0	64.0	77	13.5	10.5	36	M 10 x 35	3/8" x 1 1/2"	1.20
1"	400	SFCE 6003/S25	M 36 x 2.0	47.6	20	57.15	81	27.76	69.6	72.2	84	12.0	12.0	41	-	7/16" x 1 3/4"	1.42
															M 12 x 45	-	
1"	400	SFCE 6003/S30	M 42 x 2.0	47.6	24	57.15	81	27.76	69.6	74.0	87	13.5	12.0	41	-	7/16" x 1 3/4"	1.52
															M 12 x 45	-	
1 1/4"	400	SFCE 6004/S30	M 42 x 2.0	54.0	25/30	66.68	95	31.75	77.2	79.2	92	13.5	13.5	41	-	1/2" x 1 3/4"	1.93
															M 14 x 50	-	
1 1/4"	350	SFCE 6004/S38	M 52 x 2.0	54.0	30	66.68	95	31.75	77.2	83.2	98	16.0	13.5	46	-	1/2" x 1 3/4"	2.08
															M 14 x 50	-	
1 1/2"	350	SFCE 6005/S38	M 52 x 2.0	63.5	30	79.38	113	36.50	95.0	89.2	104	16.0	16.75	46	M 16 x 55	1/2" x 1 3/4"	3.03

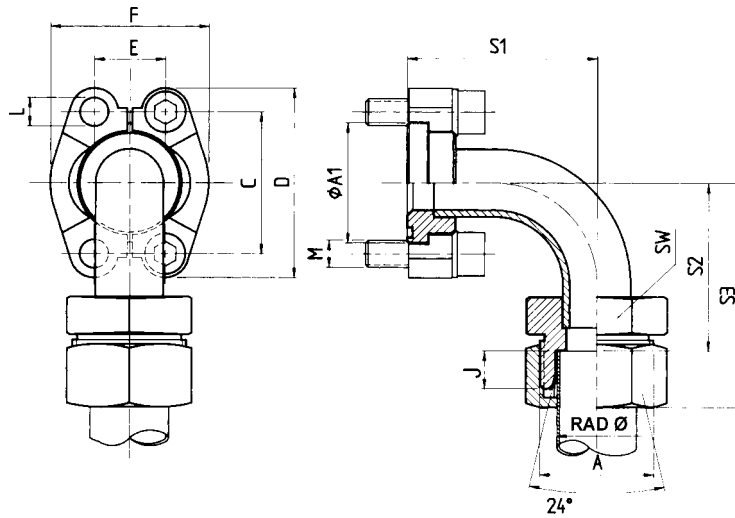
ordering code:

9SMnPb28K 1.4571

adaptor only
 adaptor including split flanges, metric screws and o-ring (nut and cutting ring)
 adaptor including split flanges, UNC screws and o-ring (nut and cutting ring)

SFCE... SFCEx...
 SFCE...M(M) SFCEx...M(M)
 SFCE...U(M) SFCEx...U(M)

Note: the maximum working pressure for this series of components is determined by the tube thickness and quality of the tube.
Flange is manufactured in accordance with SAE J518C and DIN3861 on the thread.



Material: 1 9SMnPb28K/C15 mild steel - zinc plated, yellow chromated
 2. 1.4571, 316Ti stainless steel

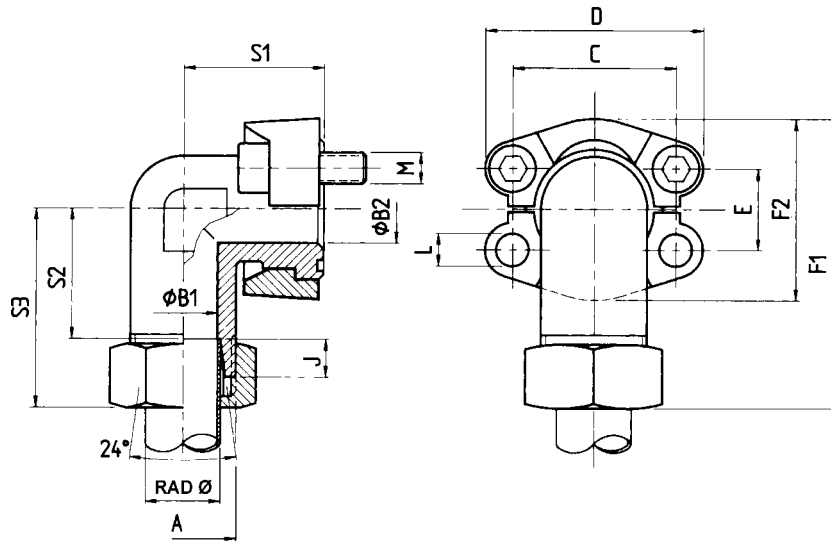
3.000 Series																
Size	Type/Rad	A	ØA1	C	D	E	F	J	S ₁	S ₂	S ₃	SW	L	M (Screws)		Weight (adaptor only) kg
														Metric	UNC	
1/2"	SFCE-3001-90/L15	M 22 x 1.5	30.2	38.10	54	17.48	45.6	7.0	40	43.0	58.0	22	8.5	M 8 x 30	5/16" x 1 1/4"	0.14
1/2"	SFCE-3001-90/S16	M 24 x 1.5	30.2	38.10	54	17.48	45.6	7.5	40	42.5	60.0	24	8.5	M 8 x 30	5/16" x 1 1/4"	0.15
3/4"	SFCE-3002-90/L22	M 30 x 2.0	38.1	47.63	65	22.23	51.8	7.5	59	63.5	80.0	30	10.5	M 10 x 35	3/8" x 1 1/2"	0.29
1"	SFCE-3003-90/L28	M 36 x 2.0	44.4	52.37	70	26.19	58.4	7.5	68	75.5	80.0	36	10.5	M 10 x 35	3/8" x 1 1/2"	0.43
1"	SFCE-3003-90/S25	M 36 x 2.0	44.4	52.37	70	26.19	58.4	12.0	68	71.0	95.0	36	10.5	M 10 x 35	3/8" x 1 1/2"	0.38
1"	SFCE-3003-90/S30	M 42 x 2.0	44.4	52.37	70	26.19	58.4	13.5	68	69.5	96.0	46	10.5	M 10 x 35	3/8" x 1 1/2"	0.55
1 1/4"	SFCE-3004-90/L35	M 45 x 2.0	50.8	58.72	79	30.18	72.6	10.5	86	94.5	116.0	46	10.5	M 10 x 30	-	0.76
													12.5	M 12 x 40	-	
													12.0	-	7/16" x 1 1/2"	
1 1/4"	SFCE-3004-90/S30	M 42 x 2.0	50.8	58.72	79	30.18	72.6	13.5	80	102.0	128.5	46	10.5	M 10 x 30	-	0.83
													12.5	M 12 x 40	-	
													12.0	-	7/16" x 1 1/2"	
1 1/2"	SFCE-3005-90/L42	M 52 x 2.0	60.3	69.85	94	35.71	82.6	11.0	98	104.0	127.0	55	13.5	M 12 x 35	1/2" x 1 1/2"	0.99
1 1/2"	SFCE-3005-90/L38	M 52 x 2.0	60.3	69.85	94	35.71	82.6	16.0	98	99.0	130.0	55	13.5	M 12 x 35	1/2" x 1 1/2"	0.95
6.000 Series																
1/2"	SFCE-6001-90/S16	M 24 x 1.5	31.8	40.49	56	18.24	47.2	8.5	40	41.5	60.0	24	8.5	M 8 x 30	5/16" x 1 1/4"	0.16
3/4"	SFCE-6002-90/S25	M 36 x 2.0	41.3	50.80	71	23.80	60.0	12.0	62	59.0	83.0	36	10.5	M 10 x 35	3/8" x 1 1/2"	0.37
3/4"	SFCE-6002-90/S30	M 42 x 2.0	41.3	50.80	71	23.80	60.0	13.5	62	57.5	84.0	46	10.5	M 10 x 35	3/8" x 1 1/2"	0.49
1"	SFCE-6003-90/S25	M 36 x 2.0	47.6	57.15	81	27.76	69.6	12.0	74	73.0	97.0	36	12.5	M 12 x 45	-	0.43
													12.0	-	7/16" x 1 3/4"	
1"	SFCE-6003-90/S30	M 42 x 2.0	47.6	57.15	81	27.76	69.6	13.5	74	71.5	98.0	46	12.5	M 12 x 45	-	0.59
													12.0	-	7/16" x 1 3/4"	
1 1/4"	SFCE-6004-90/S38	M 52 x 2.0	54.0	66.68	95	31.75	77.2	16.0	96	91.0	122.0	55	13.5	-	1/2" x 1 3/4"	0.95
1 1/2"	SFCE-6005-90/S38	M 52 x 2.0	63.5	79.38	113	36.50	95.0	16.0	111	91.0	122.0	55	16.75	M 16 x 55	5/8" x 2"	1.13

ordering code:

adaptor only
 including split flanges, metric screws and o-ring (nut and cutting ring)
 including split flanges, UNC screws, o-ring, (nut and cutting ring)

SFCE...
 SFCE...M(M)
 SFCE...U(M)

Note: the maximum working pressure for this series of components is determined by the tube thickness and quality of the tube.
 Flange is manufactured in accordance with SAE J518C and DIN3861 on the thread.



Material: 1 ST 52.3 (FE 510) carbon steel - zinc plated, yellow chromated
 2. 1.4571 316T stainless steel

3.000 Series																
Size	Type/Rad	A	B ₁	B ₂	C	D	E	F ₁	F ₂	J	ØL	S ₁	S ₂	S ₃	M	Weight kg
1/2"	WFG 3001/L15	M 22 x 1.5	12	11	38.10	54.0	17.48	66.8	45.6	7.0	8.5	39	29.0	44	M 8 x 30	0.39
1/2"	WFG 3001/S16	M 24 x 1.5	12	11	38.10	54.0	17.48	70.8	45.6	8.5	8.5	39	29.5	48	M 8 x 30	0.43
3/4"	WFG 3002/L18	M 26 x 1.5	15	19	47.63	64.9	22.23	73.9	51.8	7.5	10.5	42	31.5	48	M 10 x 35	0.63
3/4"	WFG 3002/L22	M 30 x 2.0	19	19	47.63	64.9	22.23	75.9	51.8	7.5	10.5	42	33.5	50	M 10 x 35	0.66
3/4"	WFG 3002/S20	M 30 x 2.0	16	19	47.63	64.9	22.23	79.9	51.8	10.5	10.5	42	32.5	54	M 10 x 35	0.71
3/4"	WFG 3002/S25	M 36 x 2.0	17	19	47.63	64.9	22.23	82.9	51.8	12.0	10.5	42	33.0	57	M 10 x 35	0.84
1"	WFG 3003/L28	M 36 x 2.0	24	25	52.37	69.9	26.19	82.9	58.4	7.5	10.5	45	36.5	53	M 10 x 35	0.82
1"	WFG 3003/S25	M 36 x 2.0	20	25	52.37	69.9	26.19	91.2	58.4	12.0	10.5	45	38.0	62	M 10 x 35	0.94
1"	WFG 3003/S30	M 42 x 2.0	24	25	52.37	69.9	26.19	92.2	58.4	13.5	10.5	45	36.5	63	M 10 x 35	1.02
1 1/4"	WFG 3004/L35	M 45 x 2.0	30	27	58.72	79.4	30.18	104.3	72.6	10.5	10.5	50	46.5	68	M 10 x 30	1.19
											12.5				M 12 x 40	
1 1/4"	WFG 3004/S25	M 36 x 2.0	20	27	58.72	79.4	30.18	103.3	72.6	12.0	10.5	50	43.0	67	M 10 x 30	1.40
											12.5				M 12 x 40	
1 1/4"	WFG 3004/S30	M 42 x 2.0	25	27	58.72	79.4	30.18	106.3	72.6	13.5	10.5	50	43.5	70	M 10 x 30	1.48
											12.5				M 12 x 40	
1 1/2"	WFG 3005/S38	M 52 x 2.0	28	27	58.72	79.4	30.18	110.3	72.6	16.0	10.5	50	43.0	74	M 10 x 30	1.55
											12.5				M 12 x 40	
1 1/2"	WFG 3005/L42	M 52 x 2.0	36	36	69.85	93.8	35.71	118.2	82.4	11.0	13.5	76	56.0	77	M 12 x 40	1.97
1 1/2"	WFG 3005/S38	M 52 x 2.0	32	36	69.85	93.8	35.71	128.2	82.4	16.0	13.5	76	56.0	87	M 12 x 40	2.12

ordering code:

ST 52.3

1.4571

only 90° elbow

WFG...

WFGx...

including split flanges, screws and o-ring

WFG...M

WFGx...M

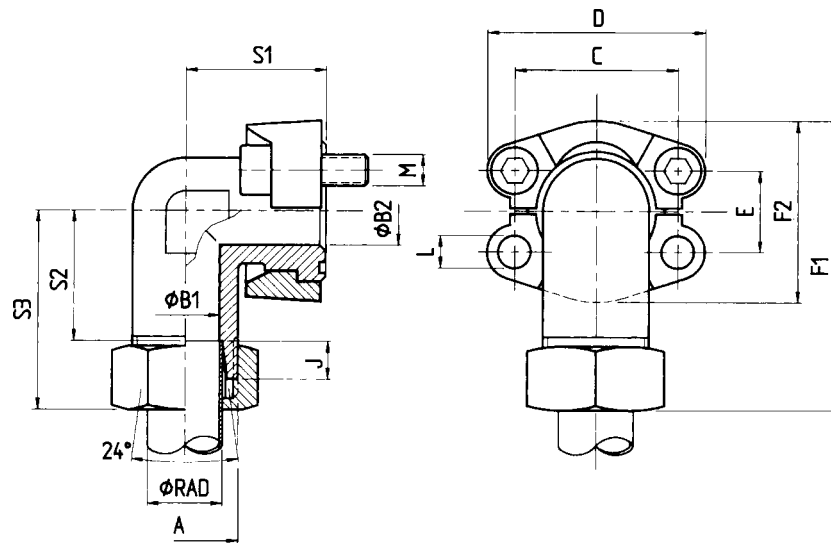
including split flanges, screws, o-ring, cutting ring and nut

WFG...MM

WFGx...MM

Note: the maximum working pressure for this series of components is determined by the tube thickness and quality of the tube.

Flange is manufactured in accordance with SAE J518C and DIN3861 on the thread.



Material: 1 ST 52.3 (FE 510) Carbon Steel
 2. 1.4571 316T Stainless Steel

6.000 Series

Size	Type/Rad	A	B ₁	B ₂	C	D	E	F ₁	F ₂	J	ØL	S ₁	S ₂	S ₃	M	Weight kg
1/2"	WFG 6001/S16	M 24 x 1.5	12	12	40.49	56.4	18.24	71.6	47.2	8.5	8.5	39	29.4	48	M 8 x 30	0.69
3/4"	WFG 6002/S16	M 24 x 1.5	12	17	50.80	71.3	23.80	85.0	60.0	8.5	10.5	48	36.5	55	M 10 x 35	0.92
3/4"	WFG 6002/S20	M 30 x 2.0	16	17	50.80	71.3	23.80	87.0	60.0	10.5	10.5	48	35.5	57	M 10 x 35	0.96
3/4"	WFG 6002/S25	M 36 x 2.0	17	17	50.80	71.3	23.80	90.0	60.0	12.0	10.5	48	36.0	60	M 10 x 35	1.09
1"	WFG 6003/S25	M 36 x 2.0	20	24	57.15	81.0	27.76	99.8	69.0	12.0	12.5	60	41.0	65	M 12 x 45	1.60
1"	WFG 6003/S30	M 42 x 2.0	24	24	57.15	81.0	27.76	102.85	69.0	13.5	12.5	60	41.5	68	M 12 x 45	1.70
1 1/4"	WFG 6004/S30	M 42 x 2.0	25	31	66.68	95.2	31.75	109.6	77.2	13.5	14.5	68	44.5	71	M 14 x 50	2.22
1 1/4"	WFG 6004/S38	M 52 x 2.0	28	31	66.68	95.2	31.75	114.6	77.2	16.0	14.5	68	45.0	76	M 14 x 50	2.32
1 1/2"	WFG 6005/S38	M 52 x 2.0	30	36	79.38	112.8	36.50	134.5	95.0	16.0	16.5	76	56.0	87	M 16 x 55	3.55

ordering code:

ST 52.3

1.4571

only 90° elbow

WFG...

WFGx...

including split flanges, screws and o-ring

WFG...M

WFGx...M

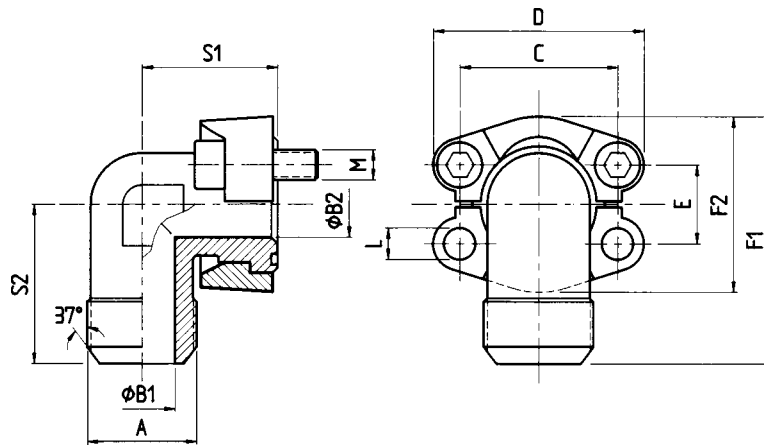
including split flanges, screws, o-ring, cutting ring and nut

WFG...MM

WFGx...MM

Note: the maximum working pressure for this series of components is determined by the tube thickness and quality of the tube.

Flange is manufactured in accordance with SAE J518C and DIN3861 on the thread.



Material: 1 ST 52.3 (FE 510) carbon steel - zinc plated, yellow chromated.
 2. 1.4571 316T stainless steel

3.000 Series															
Size	Type	A	B ₁	B ₂	C	D	E	F ₁	F ₂	S ₁	S ₂	ØL	M (Screws)		Weight kg
													Metric	UNC	
1/2"	WFG 3001 JIC 3/4"	3/4" -16 JIC	9.9	13	38.10	54	17.48	60.8	45.6	38	38	8.5	M 8 x 30	5/16" x 1 1/4"	0.34
1/2"	WFG 3001 JIC 7/8"	7/8" -14 JIC	12.3	13	38.10	54	17.48	60.8	45.6	38	38	8.5	M 8 x 30	5/16" x 1 1/4"	0.40
3/4"	WFG 3002 JIC 7/8"	7/8" -14 JIC	12.3	19	47.63	65	22.23	70.9	51.8	42	45	10.5	M 10 x 35	3/8" x 1 1/2"	0.60
3/4"	WFG 3002 JIC 1 1/16"	1 1/16" -12 JIC	15.5	19	47.63	65	22.23	70.9	51.8	42	45	10.5	M 10 x 35	3/8" x 1 1/2"	0.63
3/4"	WFG 3002 JIC 1 5/16"	1 5/16" -12 JIC	21.5	19	47.63	65	22.23	70.9	51.8	42	45	10.5	M 10 x 35	3/8" x 1 1/2"	0.66
1"	WFG 3003 JIC 1 1/16"	1 1/16" -12 JIC	15.5	24	52.37	70	26.19	79.2	58.4	45	50	10.5	M 10 x 35	3/8" x 1 1/2"	0.80
1"	WFG 3003 JIC 1 5/16"	1 5/16" -12 JIC	21.5	24	52.37	70	26.19	79.2	58.4	45	50	10.5	M 10 x 35	3/8" x 1 1/2"	0.85
1"	WFG 3003 JIC 1 5/8"	1 5/8" -12 JIC	27.5	24	52.37	70	26.19	79.2	58.4	45	50	10.5	M 10 x 35	3/8" x 1 1/2"	0.89
1 1/4"	WFG 3004 JIC 1 5/16"	1 5/16" -12 JIC	21.5	31	58.72	79	30.18	85.3	72.6	50	59	10.5	M 10 x 30	-	1.16
												12.5	M 12 x 30	-	
												12.0	-	7/16" x 1 1/2"	
1 1/4"	WFG 3004 JIC 1 5/8"	1 5/8" -12 JIC	27.5	31	58.72	79	30.18	85.3	72.6	50	59	*1	*2	7/16" x 1 1/2"	1.27
1 1/2"	WFG 3005 JIC 1 5/8"	1 5/8" -12 JIC	27.5	38	69.85	94	35.71	117.1	82.2	76	76	13.5	M 12 x 40	1/2" x 1 1/2"	1.90
1 1/2"	WFG 3005 JIC 1 7/8"	1 7/8" -12 JIC	33.0	38	69.85	94	35.71	117.1	82.2	76	76	13.5	M 12 x 40	1/2" x 1 1/2"	2.05

ordering code:

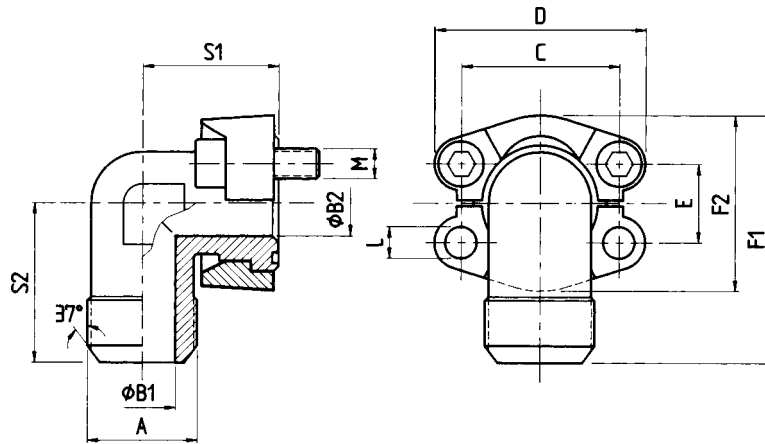
ST 52.3

1.4571

only 90° elbow
 including split flanges, metric screws and o-ring
 including split flanges, UNC screws and o-ring

WFG...
 WFG...M
 WFG...MM

WFGx...
 WFGx...M
 WFGx...MM



Material: 1 ST 52.3 (FE 510) carbon steelb - zinc plated, yellow chromated
 2. 1.4571 316T stainless steel

6.000 Series

Size	Type	A	B ₁	B ₂	C	D	E	F ₁	F ₂	S ₁	S ₂	ØL	M (Screws)		Weight kg
													Metric	UNC	
1/2"	WFG 6001 JIC 3/4"	3/4" -16 JIC	9.9	13	40.49	56	18.24	61.6	47.2	39	38	8.5	M 8 x 30	5/16" x 1 1/4"	0.37
1/2"	WFG 6001 JIC 7/8"	7/8" -14 JIC	12.3	13	40.49	56	18.24	61.6	47.2	39	38	8.5	M 8 x 30	5/16" x 1 1/4"	0.45
3/4"	WFG 6002 JIC 7/8"	7/8" -14 JIC	12.3	17	50.80	71	23.80	78.0	60.0	48	48	10.5	M 10 x 35	3/8" x 1 1/2"	0.88
3/4"	WFG 6002 JIC 1 1/16"	1 1/16" -12 JIC	15.5	17	50.80	71	23.80	78.0	60.0	48	48	10.5	M 10 x 35	3/8" x 1 1/2"	0.97
3/4"	WFG 6002 JIC 1 5/16"	1 5/16" -12 JIC	21.5	17	50.80	71	23.80	78.0	60.0	48	48	10.5	M 10 x 35	3/8" x 1 1/2"	1.02
1"	WFG 6003 JIC 1 1/16"	1 1/16" -12 JIC	15.5	24	57.15	81	27.76	99.0	69.9	60	60	12.0	M 12 x 45	-	1.46
												12.5	-	7/16" x 1 3/4"	
1"	WFG 6003 JIC 1 5/16"	1 5/16" -12 JIC	21.5	24	57.15	81	27.76	99.0	69.9	60	60	12.0	M 12 x 45	-	1.57
												12.5	-	7/16" x 1 3/4"	
1"	WFG 6003 JIC 1 5/8"	1 5/8" -12 JIC	27.5	24	57.15	81	27.76	99.0	69.9	60	60	12.0	M 12 x 45	-	1.70
												12.5	-	7/16" x 1 3/4"	
1 1/4"	WFG 6004 JIC 1 5/16"	1 5/16" -12 JIC	21.5	30	66.68	95	31.75	115.5	77.2	68	68	13.5	M 14 x 50	-	2.20
												14.5	-	1/2" x 1 3/4"	
1 1/4"	WFG 6004 JIC 1 5/8"	1 5/8" -12 JIC	27.5	30	66.68	95	31.75	115.5	77.2	68	68	13.5	M 14 x 50	-	2.30
												14.5	-	1/2" x 1 3/4"	
1 1/4"	WFG 6004 JIC 1 7/8"	1 7/8" -12 JIC	33.0	30	66.68	95	31.75	115.5	77.2	68	68	13.5	M 14 x 50	-	2.45
												14.5	-	1/2" x 1 3/4"	
1 1/2"	WFG 6005 JIC 1 5/8"	1 5/8" -12 JIC	27.5	32	79.38	113	36.50	133	95.0	76	76	16.5	M 16 x 55	5/8" x 2"	3.08
1 1/2"	WFG 6005 JIC 1 7/8"	1 7/8" -12 JIC	33.0	32	79.38	113	36.50	133	95.0	76	76	16.5	M 16 x 55	5/8" x 2"	3.45

ordering code:

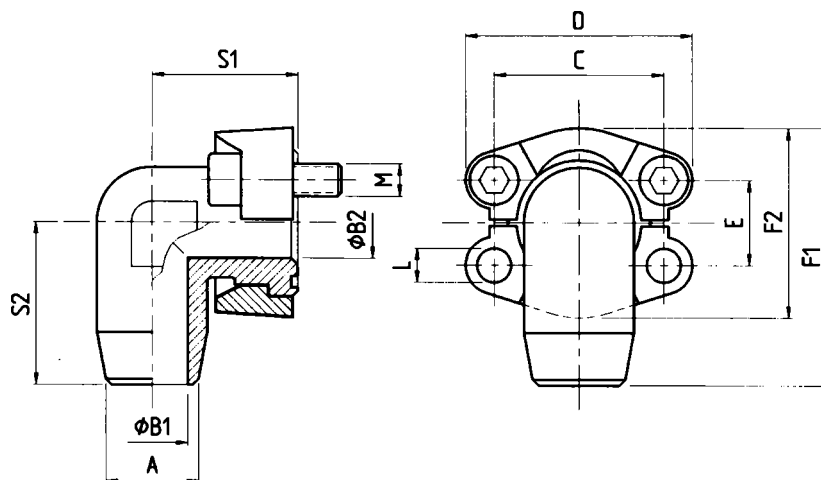
ST 52.3

1.4571

only 90° elbow
 including split flanges, metric screws and o-ring
 including split flanges, UNC screws and o-ring

WFG...
 WFG...M
 WFG...MM

WFG-x...
 WFG-x...M
 WFG-x...MM



Material: 1 ST 52.3 (FE 510) carbon steel
 2. 1.4571 316T stainless steel

3.000 Series															
Size	Type	A	B ₁	B ₂	C	D	E	F ₁	F ₂	S ₁	S ₂	ØL	M (Screws)		Weight kg
													Metric	UNC	
1/2"	WFS 3001-15	15	11	11	38.10	54	17.48	60.8	45.6	39	38	8.5	M 8 x 30	5/16" x 1 1/4"	0.36
1/2"	WFS 3001-16	16	10	10	38.10	54	17.48	60.8	45.6	39	38	8.5	M 8 x 30	5/16" x 1 1/4"	0.37
3/4"	WFS 3002-18	18	15	19	47.63	64.9	22.23	70.9	51.8	42	45	10.5	M 10 x 35	3/8" x 1 1/2"	0.57
3/4"	WFS 3002-20	20	14	17	47.63	64.9	22.23	70.9	51.8	42	45	10.5	M 10 x 35	3/8" x 1 1/2"	0.58
3/4"	WFS 3002-22	22	18	19	47.63	64.9	22.23	70.9	51.8	42	45	10.5	M 10 x 35	3/8" x 1 1/2"	0.59
3/4"	WFS 3002-25	25	17	17	47.63	64.9	22.23	70.9	51.8	42	45	10.5	M 10 x 35	3/8" x 1 1/2"	0.64
1"	WFS 3003-25	25	19	21	52.37	69.9	26.19	79.2	58.4	45	50	10.5	M 10 x 35	3/8" x 1 1/2"	0.77
1"	WFS 3003-28	28	24	25	52.37	69.9	26.19	79.2	58.4	45	50	10.5	M 10 x 35	3/8" x 1 1/2"	0.79
1"	WFS 3003-30	30	21	21	52.37	69.9	26.19	79.2	58.4	45	50	10.5	M 10 x 35	3/8" x 1 1/2"	0.84
1 1/4"	WFS 3004-25	25	19	27	58.72	79.4	30.18	85.3	72.6	50	59	10.5	M 10 x 30	-	1.13
												12.5	M 12 x 40	-	
												12.0	-	7/16" x 1 1/2"	
1 1/4"	WFS 3004-30	30	22	27	58.72	79.4	30.18	85.3	72.6	50	59	10.5	M 10 x 30	-	1.17
												12.5	M 12 x 40	-	
												12.0	-	7/16" x 1 1/2"	
1 1/4"	WFS 3004-35	35	31	32	58.72	79.4	30.18	85.3	72.6	50	59	10.5	M 10 x 30	-	1.18
												12.5	M 12 x 40	-	
												12.0	-	7/16" x 1 1/2"	
1 1/4"	WFS 3004-38	38	28	27	58.72	79.4	30.18	85.3	72.6	50	59	10.5	M 10 x 30	-	1.37
												12.5	M 12 x 40	-	
												12.0	-	7/16" x 1 1/2"	
1 1/2"	WFS 3005-38	38	30	32	69.85	93.8	35.71	117.1	82.2	76	76	13.5	M 12 x 40	1/2" x 1 1/2"	1.95
1 1/2"	WFS 3005-42	42	36	36	69.85	93.8	35.71	117.1	82.2	76	76	13.5	M 12 x 40	1/2" x 1 1/2"	2.04

ordering code:

ST 44.3/52.3

1.4404

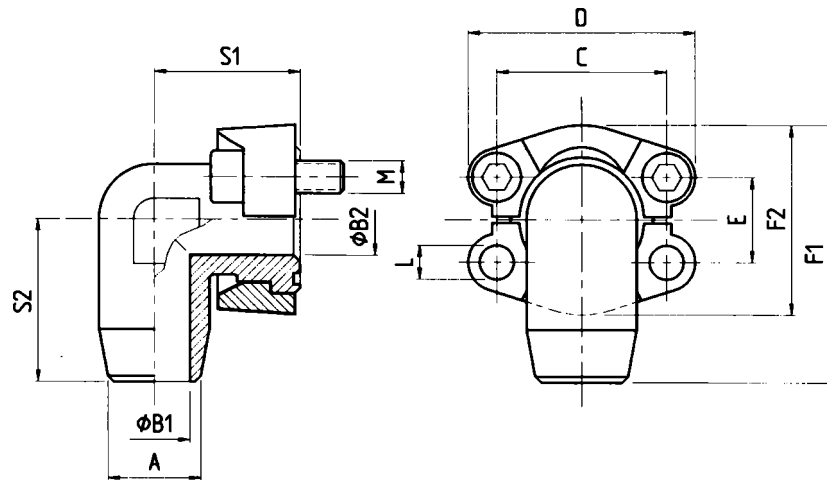
only 90° elbow
 including split flanges, metric screws and o-ring
 including split flanges, UNC screws and o-ring

WFS-...
 WFS-...M
 WFS-...U

WFS-x...
 WFS-x...M
 WFS-x...U

Note: the maximum working pressure for this series of components is determined by the tube thickness and quality of the tube.

PIPE FLANGES SAE - WELD ON FLANGE ADAPTOR 90° - for metric pipes



Material: 1 ST 52.3 (FE 510) carbon steel
 2. 1.4571 316T stainless steel

6.000 Series																
Size	Type	A	B ₁	B ₂	C	D	E	F ₁	F ₂	S ₁	S ₂	ØL	M (Screws)		Weight kg	
													Metric	UNC		
1/2"	WFS 6001-16	16	10	10	40.49	56	18.24	61.6	47.2	39	38	8.5	M 8 x 35	5/16" x 1 1/4"	0.48	
3/4"	WFS 6002-16	16	10	17	50.80	71	23.80	78.0	60.0	48	48	10.5	M 10 x 35	3/8" x 1 1/2"	0.83	
3/4"	WFS 6002-20	20	12	17	50.80	71	23.80	78.0	60.0	48	48	10.5	M 10 x 35	3/8" x 1 1/2"	0.87	
3/4"	WFS 6002-25	25	15	17	50.80	71	23.80	78	60	48	48	10.5	M 10 x 35	3/8" x 1 1/2"	0.96	
1"	WFS 6003-25	25	15	20	57.15	81	27.76	94.0	69.6	60	60	12.0	-	7/16" x 1 3/4"	1.35	
												12.5	M 12 x 45	-		
1"	WFS 6003-30	30	22	25	57.15	81	27.76	94	69.6	60	60	12.0	-	7/16" x 1 3/4"	1.40	
												12.5	M 12 x 45	-		
1"	WFS 6003-30-400	30	18	20	57.15	81	27.76	94	69.6	60	60	12.0	-	7/16" x 1 3/4"	1.53	
												12.5	M 12 x 45	-		
1 1/4"	WFS 6004-30	30	22	27	66.68	95	31.75	106.6	77.2	68	68	13.5	-	1/2" x 1 3/4"	2.10	
												14.5	M 14 x 50	-		
1 1/4"	WFS 6004-38	38	28	30	66.68	95	31.75	106.6	77.2	68	68	13.5	-	1/2" x 1 3/4"	2.36	
												14.5	M 14 x 50	-		
1 1/4"	WFS 6004-38-400	38	22	24	66.68	95	31.75	106.6	77.2	68	68	13.5	-	1/2" x 1 3/4"	2.45	
												14.5	M 14 x 50	-		
1 1/2"	WFS 6005-38	38	28	32	79.38	113	36.50	123.5	95.0	76	76	16.5	M 16 x 55	5/8" x 2"	3.25	
1 1/2"	WFS 6005-38-400	38	22	26	79.38	113	36.50	123.5	95	76	76	16.5	M 16 x 55	5/8" x 2"	3.38	

ordering code:

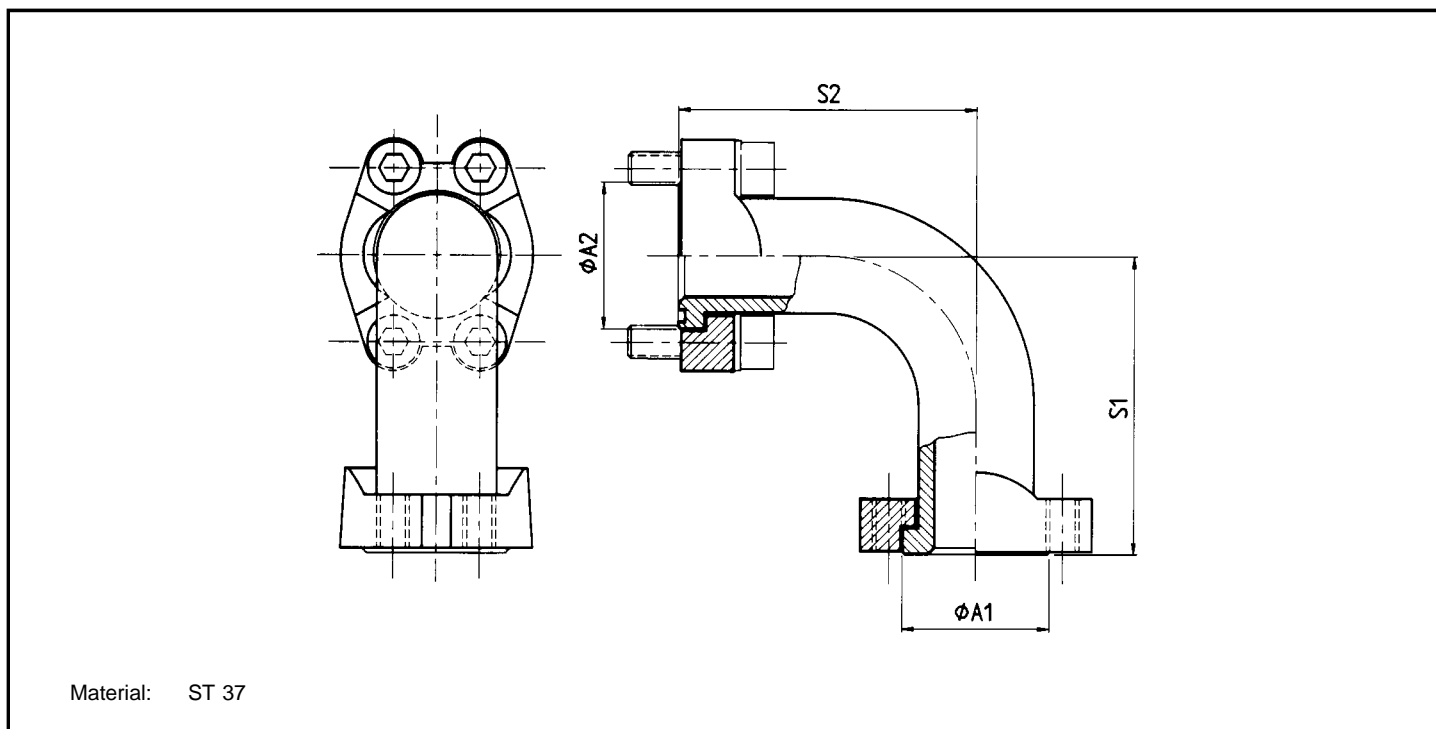
ST 44.3/52.3

1.4404

only 90° elbow
 including split flanges, metric screws and o-ring
 including split flanges, UNC screws and o-ring

WFS-...
 WFS-...M
 WFS-...U

WFS-x...
 WFS-x...M
 WFS-x...U

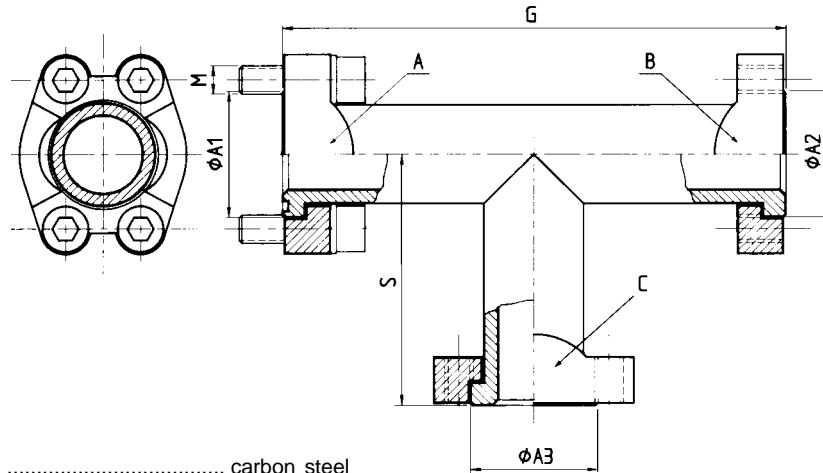


3.000 Series						
Size	Type	A ₁	A ₂	S ₁	S ₂	Weight kg
1/2"	AG 3001 90°	30.2	30.2	70	70	0.65
3/4"	AG 3002 90°	38.1	38.1	80	80	0.90
1"	AG 3003 90°	44.4	44.4	90	90	1.15
1 1/4"	AG 3004 90°	50.8	50.8	103	103	1.50
1 1/2"	AG 3005 90°	60.3	60.3	115	115	2.55
2"	AG 3006 90°	71.4	71.4	135	135	2.79
2 1/2"	AG 3007 90°	84.1	84.1	155	155	3.20
3"	AG 3008 90°	101.6	101.6	175	175	4.60
3 1/2"	AG 3009 90°	114.3	114.3	175	175	5.12
4"	AG 3010 90°	127.0	127.0	215	215	6.25
5"	AG 3011 90°	152.4	152.4	250	250	7.65

ordering code:

elbow only

AG-...



Material: ST37/ST52 carbon steel

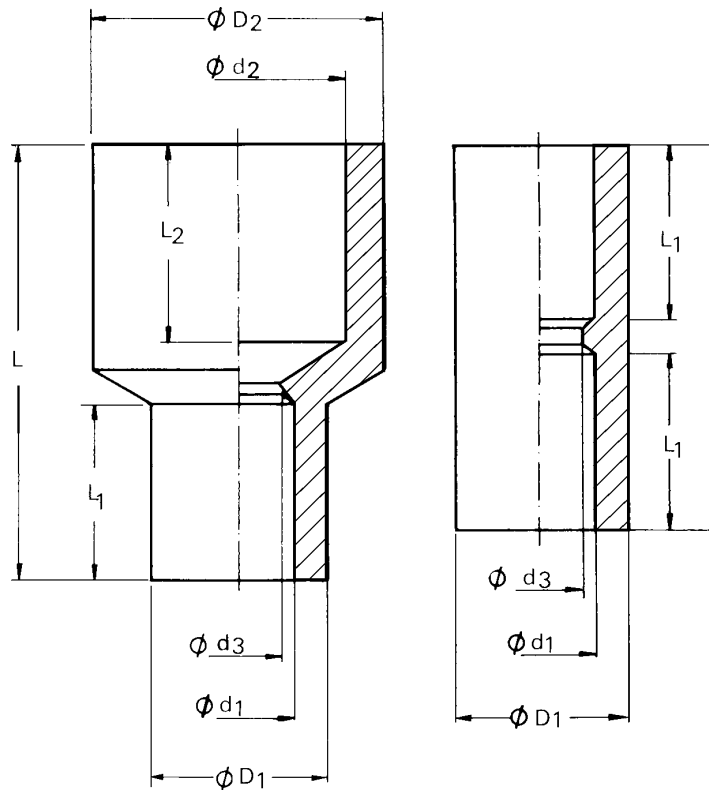
Type	Connection A			Connection B		Connection C		G	L	Weight kg
	Size	A ₁	M	Size	A ₂	Size	A ₃			
T 301 A-301 G-301 G	1/2"	30.2	M 8 x 30	1/2"	30.2	1/2"	30.2	133	67	0.97
T 302 A-302 G-302 G	3/4"	38.1	M 10 x 35	3/4"	38.1	3/4"	38.1	160	80	1.20
T 302 A-302 G-302 G	3/4"	38.1	M 10 x 35	3/4"	38.1	3/4"	38.2	160	67	1.14
T 303 A-303 G-303 G	1"	44.4	M 10 x 35	1"	44.4	1"	44.4	177	88	1.63
T 303 A-303 G-302 G	1"	44.4	M 10 x 35	1"	44.4	3/4"	38.1	177	80	1.50
T 303 A-303 G-301 G	1"	44.4	M 10 x 35	1"	44.4	1/2"	30.2	177	67	1.39
T 304 A-304 G-304 G	1 1/4"	50.8	M 10 x 30	1 1/4"	50.8	1 1/4"	50.8	208	103	2.25
T 304 A-304 G-303 G	1 1/4"	50.8	M 10 x 30	1 1/4"	50.8	1"	44.4	208	88	2.05
T 304 A-304 G-302 G	1 1/4"	50.8	M 10 x 30	1 1/4"	50.8	3/4"	38.1	208	80	1.94
T 305 A-305 G-305 G	1 1/2"	60.3	M 12 x 35	1 1/2"	60.3	1 1/2"	60.3	230	114	3.50
T 305 A-305 G-304 G	1 1/2"	60.3	M 12 x 35	1 1/2"	60.3	1 1/4"	50.8	230	103	3.03
T 305 A-305 G-303 G	1 1/2"	60.3	M 12 x 35	1 1/2"	60.3	1"	44.4	230	88	2.94
T 306 A-306 G-306 G	2"	71.4	M 12 x 35	2"	71.4	2"	71.4	244	122	4.20
T 306 A-306 G-305 G	2"	71.4	M 12 x 35	2"	71.4	1 1/2"	60.3	244	118	4.05
T 306 A-306 G-304 G	2"	71.4	M 12 x 35	2"	71.4	1 1/4"	50.8	244	115	3.87
T 307 A-307 G-307 G	2 1/2"	84.1	M 12 x 40	2 1/2"	84.1	2 1/2"	84.1	270	135	4.70
T 307 A-307 G-306 G	2 1/2"	84.1	M 12 x 40	2 1/2"	84.1	2"	74.1	270	128	4.30
T 307 A-307 G-305 G	2 1/2"	84.1	M 12 x 40	2 1/2"	84.1	1 1/2"	60.3	270	125	4.10
T 308 A-308 G-308 G	3"	101.6	M 16 x 50	3"	101.6	3"	101.6	293	146	8.20
T 308 A-308 G-307 G	3"	101.6	M 16 x 50	3"	101.6	2 1/2"	84.1	293	141	7.50
T 308 A-308 G-306 G	3"	101.6	M 16 x 50	3"	101.6	2"	71.4	293	133	7.20
T 309 A-309 G-309 G	3 1/2"	114.3	M 16 x 50	3 1/2"	114.3	3 1/2"	114.3	293	146	9.55
T 309 A-309 G-308 G	3 1/2"	114.3	M 16 x 50	3 1/2"	114.3	3"	101.6	293	146	9.20
T 309 A-309 G-307 G	3 1/2"	114.3	M 16 x 50	3 1/2"	114.3	2 1/2"	84.1	293	146	8.50
T 310 A-310 G-310 G	4"	127.0	M 16 x 50	4"	127.0	4"	127.0	332	165	12.10
T 310 A-310 G-309 G	4"	127.0	M 16 x 50	4"	127.0	3 1/2"	114.3	332	158	11.60
T 310 A-310 G-308 G	4"	127.0	M 16 x 50	4"	127.0	3"	101.6	332	158	10.95
T 311 A-311 G-311 G	5"	152.4	M 16 x 50	5"	152.4	5"	152.4	370	185	14.70
T 311 A-311 G-310 G	5"	152.4	M 16 x 50	5"	152.4	4"	127.0	370	177	13.95
T 311 A-311 G-309 G	5"	152.4	M 16 x 50	5"	152.4	3 1/2"	114.3	370	170	13.10

ordering code:

T-connection only

T...

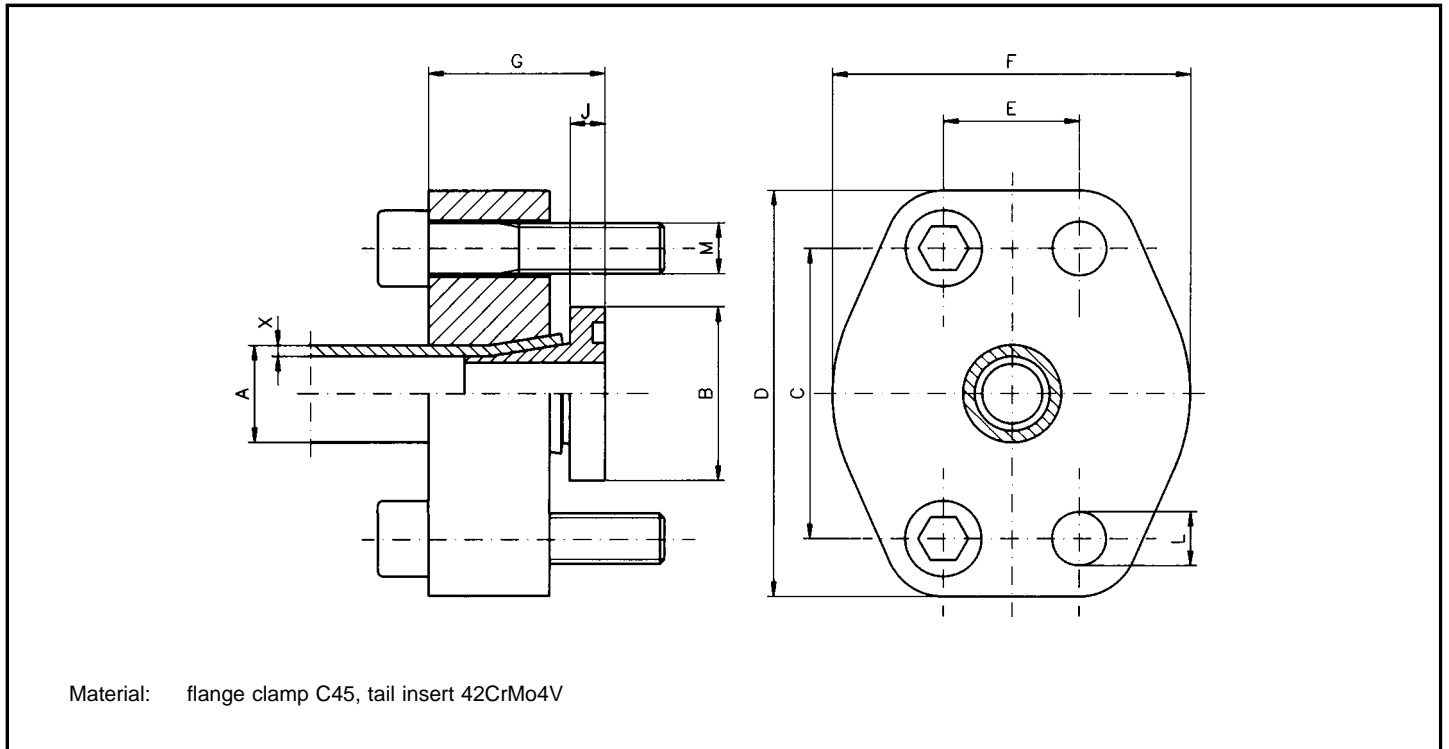
All connections can be supplied as shown with o-ring grooves (type A) or without o-ring grooves (type C)



- Material: 1. FE 510 (ST 52.3), FE 430 (ST 44.3) Carbon Steel
 2. 1.4404, 316L stainless Stainless Steel

Type	Ød ₁	ØD ₁	Ød ₂	ØD ₂	Ød ₃	L	L ₁	L ₂
SLM 5	6.2	8.0	-	-	5.0	26	12	-
SLM 6	10.3	16.0	-	-	8.0	35	16	-
SLM 6/10	10.3	16.0	16.3	21.3	8.0	40	16	18
SLM 10	16.3	21.3	-	-	15.0	40	18	-
SLM 10/16	16.3	21.3	20.3	26.9	12.3	45	18	18
SLM 16	20.3	26.9	-	-	18.0	40	18	-
SLM 16/20	20.3	26.9	25.3	31.8	15.7	50	18	20
SLM 20	25.3	31.8	-	-	23.0	45	20	-
SLM 20/25	25.3	31.8	30.3	42.4	19.2	50	20	20
SLM 25	30.3	42.4	-	-	27.0	45	20	-
SLM 25/32	30.3	42.4	38.4	51.0	24.8	50	20	22
SLM 32	38.4	51.0	-	-	32.0	50	22	-

Note: Alternative pipe sizes available on request

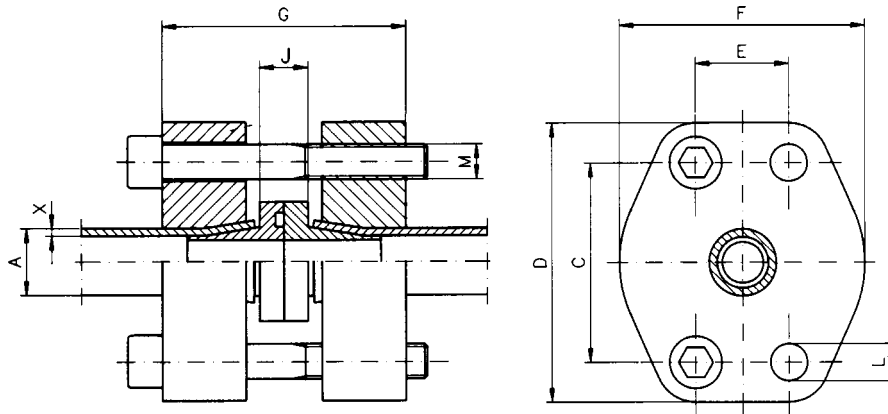


6.000 Series												
Size	Type	A x X	B	C	D	E	F	G	J	ØL	M	Weight kg
3/4"	BF-402-25 x 3	25 x 3	38.10	50.80	71	23.80	60	37.5	8.3	11	M 10 x 40	0.57
3/4"	BF-402-25 x 4	25 x 4	38.10	50.80	71	23.80	60	37.5	8.3	11	M 10 x 40	0.57
1"	BF-403-30 x 4	30 x 4	47.60	57.15	81	27.76	71	42.5	8.7	13	M 12 x 40	0.89
1"	BF-403-30 x 5	30 x 5	47.60	57.15	81	27.76	71	42.5	8.7	13	M 12 x 40	0.89
1 1/4"	BF-404-38 x 5	38 x 5	53.90	66.68	95	31.75	81	44.0	9.2	15	M 14 x 45	1.05
1 1/4"	BF-404-38 x 6	38 x 6	53.90	66.68	95	31.75	81	44.0	9.2	15	M 14 x 45	1.05
1 1/2"	BF-405-50 x 6	50 x 6	63.50	79.38	114	36.50	96	57.0	10.3	17	M 16 x 60	2.07
1 1/2"	BF-405-50 x 8	50 x 8	63.50	79.38	114	36.50	96	57.0	10.3	17	M 16 x 60	2.06
2"	BF-406-65 x 8	65 x 8	75.20	96.82	134	44.45	114	65.0	11.2	21	M 20 x 90	2.90

ordering code:

flange including metric screws and o-rings

BF...



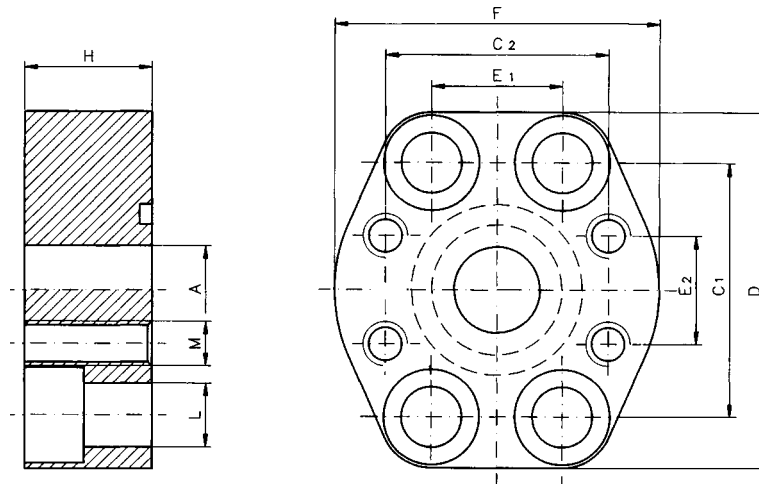
Material: flange clamp C45, tail insert 42CrMo4V

6.000 Series											
Size	Type	A x X	C	D	E	F	G	J	L	M	Weights kg
3/4"	BFK-402-25 x 3	25 x 3	50.80	71	23.80	60	75	16.5	11	M 10 x 60	1.14
3/4"	BFK-402-25 x 4	25 x 4	50.80	71	23.80	60	75	16.5	11	M 10 x 60	1.14
1"	BFK-403-30 x 4	30 x 4	57.15	81	27.76	71	85	17.4	13	M 12 x 70	1.78
1"	BFK-403-30 x 5	30 x 5	57.15	81	27.76	71	85	17.4	13	M 12 x 70	1.78
1 1/4"	BFK-404-38 x 5	38 x 5	66.68	95	31.75	81	88	18.4	15	M 14 x 80	2.10
1 1/4"	BFK-404-38 x 6	38 x 6	66.68	95	31.75	81	88	18.4	15	M 14 x 80	2.10
1 1/2"	BFK-405-50 x 6	50 x 6	79.38	114	36.50	96	114	20.6	17	M 16 x 90	4.14
1 1/2"	BFK-405-50 x 8	50 x 8	79.38	114	36.50	96	114	20.6	17	M 16 x 90	4.10
2"	BFK-406-65 x 8	65 x 8	96.82	134	44.45	114	130	22.4	21	M 20 x 120	5.80

ordering code:

flange coupling complete

BFK-...



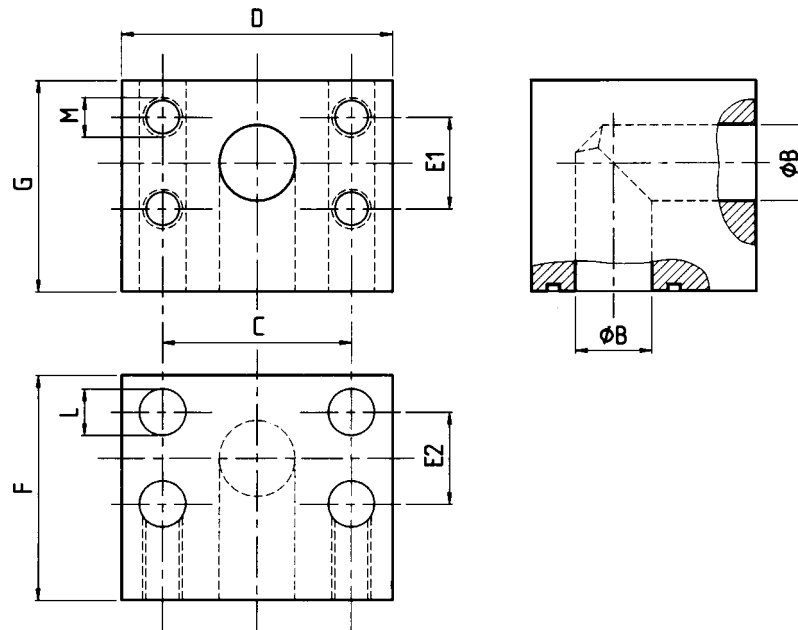
Material: ST 52.3 (Fe510) carbon steel

6.000 Series														
Size	Type	A ₁	C ₁	C ₂	D	E ₁	E ₂	F	H	ØL	M	M (Screws)		Weight kg
												Metric	UNC	
3/4" x 3/4"	G-AF 602-602	19	50.80	50.80	70	23.80	23.80	70	28	11	M 10	M 10 x 35	-	0.8
1" x 1"	G-AF 603-603	25	57.15	57.15	80	27.76	27.76	75	36	13	M 12	M 12 x 45	-	1.1
1" x 3/4"	G-AF 603-602	19	57.19	50.80	80	27.76	23.80	70	30	13	M 10	M 12 x 40	-	1.1
1 1/4" x 1 1/4"	G-AF 604-604	30	68.68	68.68	100	31.76	31.76	90	35	15	M 14	M 14 x 50	-	1.4
1 1/4" x 1"	G-AF 604-603	25	68.68	57.15	100	31.75	27.76	83	25	15	M 12	M 14 x 40	-	1.1
1 1/2" x 1 1/2"	G-AF 605-605	38	79.38	79.38	113	36.50	36.50	105	50	17	M 16	M 16 x 55	-	3.3
1 1/2" x 1 1/4"	G-AF 605-604	32	79.38	68.68	113	36.50	31.75	95	48	17	M 14	M 16 x 55	-	3.0
2" x 1 1/2"	G-AF 606-605	38	96.82	79.38	140	44.45	36.50	125	60	22	M 1	M 20 x 60	-	5.3

ordering code:

flange only

G-AF-...



Material: ST 52.3 (FE510) Carbon Steel
 1.4404 (316L) Stainless Steel

3.000 Series											
Size	Type	B	C	D	E ₁	E ₂	F	G	ØL	M	Weight kg
1/2"	L-GD 301	13	38.10	55	17.48	17.48	55	50	9.0	M 8	1.0
3/4"	L-GD 302	19	47.65	65	23.25	23.25	60	60	11.0	M 10	1.2
1"	L-GD 303	24	52.40	72	26.50	26.50	65	65	11.0	M 10	1.9
1 1/4"	L-GD 304	32	58.72	82	30.18	30.18	82	80	11.0	M 10	3.5
1 1/2"	L-GD 305	38	69.85	98	35.71	35.71	92	92	13.5	M 12	5.0
2"	L-GD 306	46	77.77	102	42.88	42.88	85	87	14.0	M 12	7.9
2 1/2"	L-GD 307	62	88.90	115	50.80	50.80	110	120	13.5	M 12	8.6
3"	L-GD 308	73	106.38	135	61.93	61.93	150	135	17.5	M 16	10.5
6.000 Series											
1/2"	L-GD 601	13	40.50	60	18.25	18.25	60	50	9.0	M 8	1.0
3/4"	L-GD 602	19	50.80	72	23.80	23.80	60	55	11.0	M 10	1.4
1"	L-GD 603	23	57.15	82	27.76	27.76	68	64	14.0	M 12	2.3
1 1/4"	L-GD 604	30	66.68	96	31.75	31.75	76	72	16.0	M 14	3.3
1 1/2"	L-GD 605	38	79.38	114	36.50	36.50	86	89	18.0	M 16	5.4
2"	L-GD 606	50	96.82	133	44.45	44.45	110	105	21.0	M 20	9.0
2 1/2"	L-GD 607	62	123.80	180	58.80	58.80	160	155	26.0	M 24	14.6

ordering code:

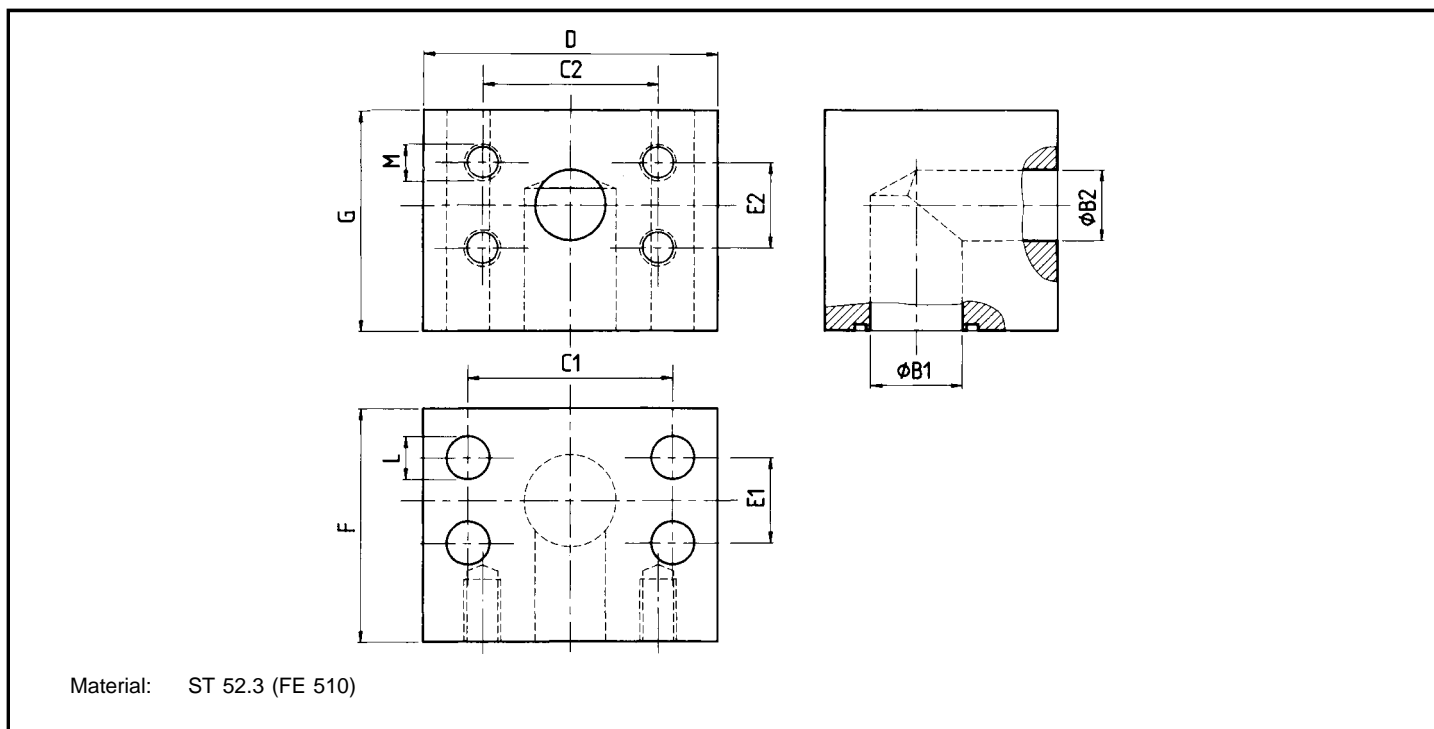
ST 52.3

1.4404

block only

L-GD-...

L-GDx...

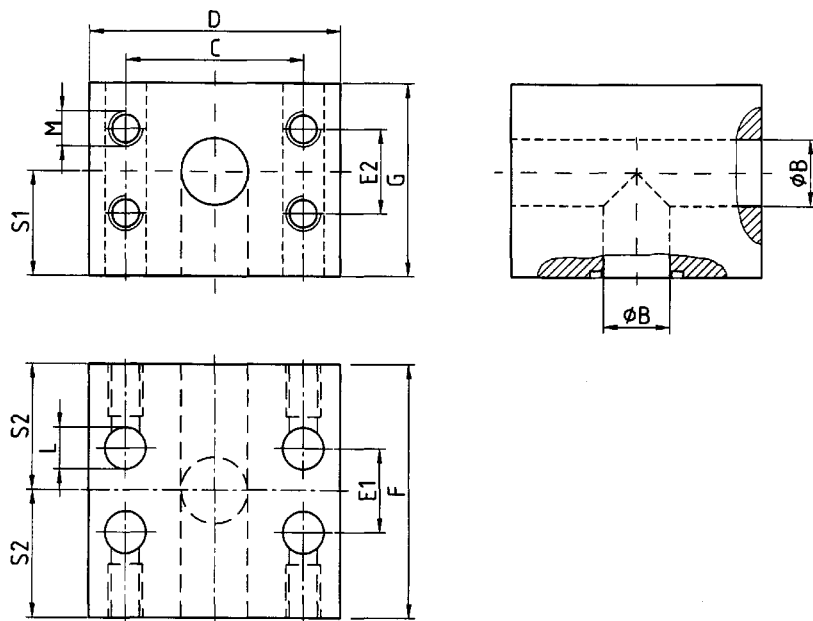


6.000 Series													
Size	Type	B ₁	B ₂	C ₁	C ₂	D	E ₁	E ₂	F	G	ØL	M	Weight kg
1"	RED-GD 603-602	23	19	57.15	50.80	82	27.76	23.80	68	64	14	M 10	2.8
1 1/4"	RED-GD 604-602	30	19	66.68	50.80	96	31.75	23.80	76	72	16	M 10	3.6
1 1/4"	RED-GD 604-603	30	23	66.68	57.15	96	31.75	27.76	76	72	16	M 12	3.3
1 1/2"	RED-GD 605-604	38	30	79.38	66.68	114	36.50	31.75	86	89	19	M 14	5.7
2"	RED-GD 606-605	50	38	96.82	79.38	133	44.45	36.50	110	110	22	M 16	9.0

ordering code:

block only

RED-GD-...



Material: ST 52.3 (FE 510)

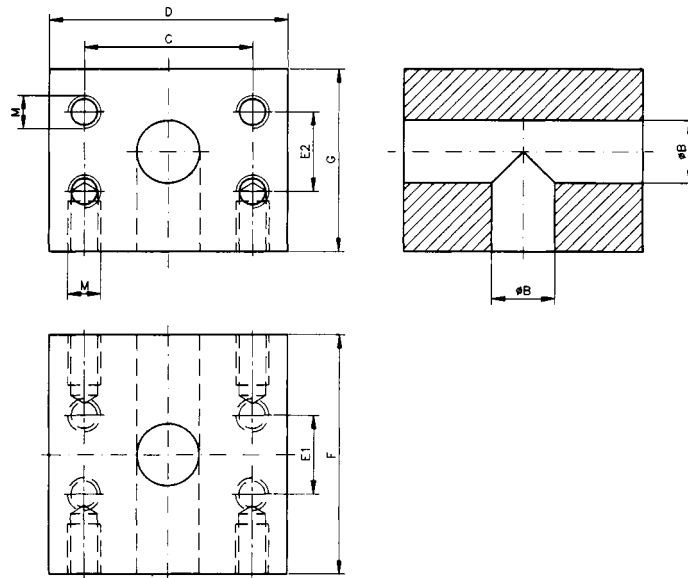
6.000 Series

Size	Type	B	C	D	E ₁	E ₂	F	G	ØL	M	S ₁	S ₂	Weight kg
3/4"	T-GD 602-602	19	50.80	72	23.80	23.80	72	55	11.0	M 10	32	36	1.7
1"	T-GD 603-603	23	57.15	82	27.76	27.76	80	64	14.0	M 12	37	40	2.9
1 1/4"	T-GD 604-604	30	66.68	96	31.75	31.75	92	72	16.0	M 14	41	46	3.8
1 1/2"	T-GD 605-605	38	79.38	114	36.50	36.50	104	89	18.0	M 16	50	52	8.9
2"	T-GD 606-606	50	96.82	133	44.45	44.45	140	105	22.0	M 20	63	70	12.7

ordering code:

block only

T-GD-...



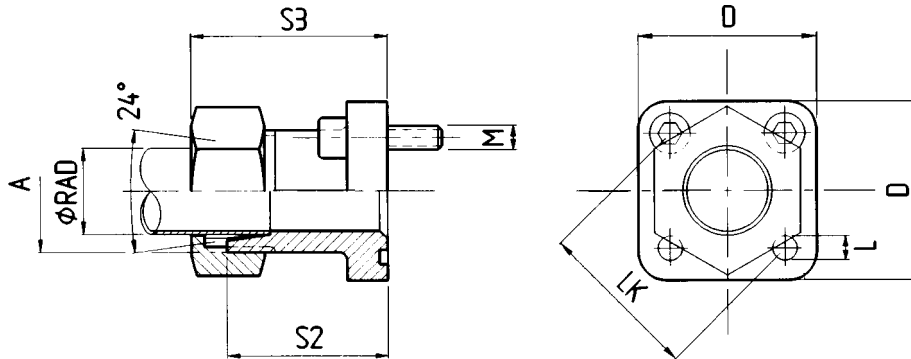
Material: ST 52.3

3.000 Series										
Size	Type	B	C	D	E ₁	E ₂	F	G	M	Weight kg
1/2"	T-BL 301-301	13	38.10	55	17.48	17.48	70	50	M 8	1.4
3/4"	T-BL 302-302	19	47.63	65	22.23	22.23	75	55	M 10	1.8
1"	T-BL 303-303	25	52.37	70	26.19	26.19	80	60	M 10	2.3
1 1/4"	T-BL 304-304	32	58.72	80	30.18	30.18	90	70	M 10	3.9
1 1/2"	T-BL 305-305	38	69.85	95	35.71	35.71	110	85	M 12	6.3
2"	T-BL 306-306	50	77.77	100	42.88	42.88	120	110	M 12	8.3
2 1/2"	T-BL 307-307	63	88.90	120	50.80	50.80	160	120	M 12	11.6
3"	T-BL 308-308	73	106.38	135	61.93	61.93	160	160	M 16	15.3
6.000 Series										
1/2"	T-BL 601-601	12	40.49	60	18.24	18.24	90	50	M 8	1.3
3/4"	T-BL 602-602	19	50.80	72	23.80	23.80	72	55	M 10	1.7
1"	T-BL 603-603	23	57.15	82	27.76	27.76	80	64	M 12	2.9
1 1/4"	T-BL 604-604	30	66.68	100	31.75	31.75	92	72	M 14	3.8
1 1/2"	T-BL 605-605	38	79.38	110	36.50	36.50	100	100	M 16	8.9
2"	T-BL 606-606	50	96.82	133	44.45	44.45	140	105	M 20	12.7
2 1/2"	T-BL 607-607	62	123.80	180	58.80	58.80	180	155	M 24	16.5

ordering code:

block only

T-BL...

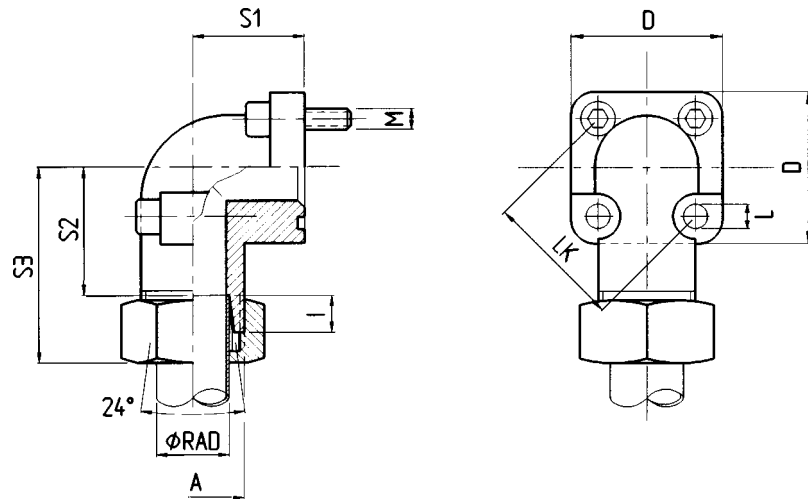


Material: A 105 surface: zinc plated, yellow chromated

LK	Maximum Working Pressure kg/cm ²	Type	RAD	A	B	D	S2	S3	ØL	M	o-ring	Weight kg
35	315	GF 35LK-L10-315	L 10	M 16 x 1.5	11	39	30	39.0	6.4	4 x M 6 x 22	20 x 2.5	0.09
35	315	GF 35LK-L12-315	L 12	M 18 x 1.5	11	39	30	39.0	6.4	4 x M 6 x 22	20 x 2.5	0.09
35	250	GF 35LK-L15-250	L 15	M 22 x 1.5	12	39	30	38.0	6.4	4 x M 6 x 22	20 x 2.5	0.10
35	315	GF 35LK-S16-315	S 16	M 24 x 1.5	12	39	30	39.5	6.4	4 x M 6 x 22	20 x 2.5	0.11
40	100	GF 40LK-L15-100	L 15	M 22 x 1.5	13	42	35	43.0	6.4	4 x M 6 x 22	26 x 2.5	0.12
40	100	GF 40LK-L18-100	L 18	M 26 x 1.5	16	42	35	44.0	6.4	4 x M 6 x 22	26 x 2.5	0.12
40	100	GF 40LK-L22-100	L 22	M 30 x 2.0	20	42	35	44.5	6.4	4 x M 6 x 22	26 x 2.5	0.13
40	100	GF 40LK-L28-100	L 28	M 36 x 2.0	20	42	35	44.5	6.4	4 x M 6 x 22	26 x 2.5	0.16
55	250	GF 55LK-S20-250	S 20	M 30 x 2.0	14	55	35	51.0	8.4	4 x M 8 x 25	32 x 2.5	0.30

ordering code:

flange including metric screws and o-ring GF-...K
 flange including metric screws, o-ring, cutting ring and nut GF-...K



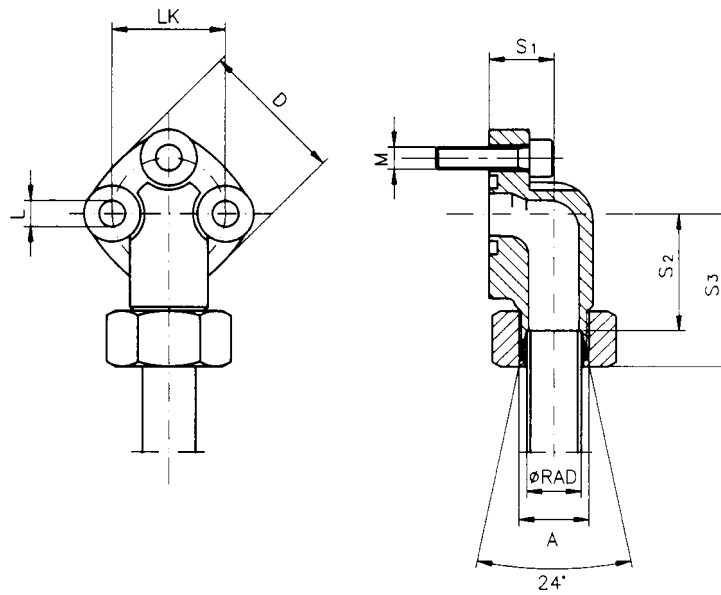
Material: GTW40 surface: zinc plated, yellow chromated

LK	Maximum Working Pressure kg/cm ²	TYPE	RAD	A	B	D	S ₁	S ₂	S ₃	ØL	M	o-ring	Weight kg
35	315	WF 35LK-L10-315	L 10	M 16 x 1.5	14	39	16.5	30.5	47.0	6.4	2 x M 6 x 22 2 x M 6 x 35	20 x 2.5	0.12
35	315	WF 35LK-L12-315	L 12	M 18 x 1.5	14	39	16.5	30.5	47.0	6.4	2 x M 6 x 22 2 x M 6 x 35	20 x 2.5	0.13
35	250	WF 35LK-L15-250	L 15	M 22 x 1.5	14	39	16.5	30.0	46.0	6.4	2 x M 6 x 22 2 x M 6 x 35	20 x 2.5	0.14
35	250	WF 35LK-L18-250	L 18	M 26 x 1.5	15	39	20.0	30.0	47.5	6.4	2 x M 6 x 22 2 x M 6 x 40	20 x 2.5	0.22
35	315	WF 35LK-S16-315	S 16	M 24 x 1.5	15	39	20.0	29.5	48.0	6.4	2 x M 6 x 22 2 x M 6 x 40	20 x 2.5	0.17
35	315	WF 35LK-S20-315	S 20	M 30 x 2.0	15	39	25.0	34.5	56.0	6.4	2 x M 6 x 22 2 x M 6 x 45	20 x 2.5	0.27
40	100	WF 40LK-L15-100	L 15	M 22 x 1.5	20	42	22.5	30.0	46.0	6.4	4 x M 6 x 22	26 x 2.5	0.15
40	100	WF 40LK-L18-100	L 18	M 26 x 1.5	20	42	22.5	30.5	47.0	6.4	4 x M 6 x 22	26 x 2.5	0.17
40	100	WF 40LK-L22-100	L 22	M 30 x 2.0	20	42	22.5	30.5	47.5	6.4	4 x M 6 x 22	26 x 2.5	0.19
40	100	WF 40LK-L28-100	L 28	M 36 x 2.0	20	42	28.0	32.5	49.0	6.4	2 x M 6 x 22 2 x M 6 x 50	26 x 2.5	0.27
40	100	WF 40LK-L35-100	L 35	M 45 x 2.0	20	42	34.0	30.5	52.0	6.4	2 x M 6 x 22 2 x M 6 x 60	20 x 2.5	0.35
40	250	WF 55LK-S20-250	S 20	M 30 x 2.0	20	42	22.5	29.5	50.0	6.4	2 x M 6 x 22 2 x M 6 x 45	20 x 2.5	0.20
55	100	WF 55LK-L35-100	L 35	M 45 x 2.0	26	58	32.0	38.5	62.0	8.4	2 x M 8 x 25 2 x M 8 x 60	32 x 2.5	0.46
55	100	WF 55LK-L42-100	L 42	M 52 x 2.0	26	58	40.0	38.0	61.0	8.4	2 x M 8 x 25 2 x M 8 x 70	32 x 2.5	0.61
55	250	WF 55LK-S20-250	S 20	M 30 x 2.0	18	58	24.0	34.5	56.0	8.4	2 x M 8 x 25 2 x M 8 x 50	32 x 2.5	0.43
55	250	WF 55LK-S25-250	S 25	M 36 x 2.0	20	58	30.0	37.0	61.0	8.4	2 x M 8 x 25 2 x M 8 x 55	32 x 2.5	0.49
55	250	WF 55LK-S30-250	S 30	M 42 x 2.0	26	58	32.0	35.5	62.0	8.4	2 x M 8 x 25 2 x M 8 x 50	32 x 2.5	0.51

ordering code:

flange including metric screws and o-ring
flange including metric screws, o-ring and nut

WF-...K
WF-...KM

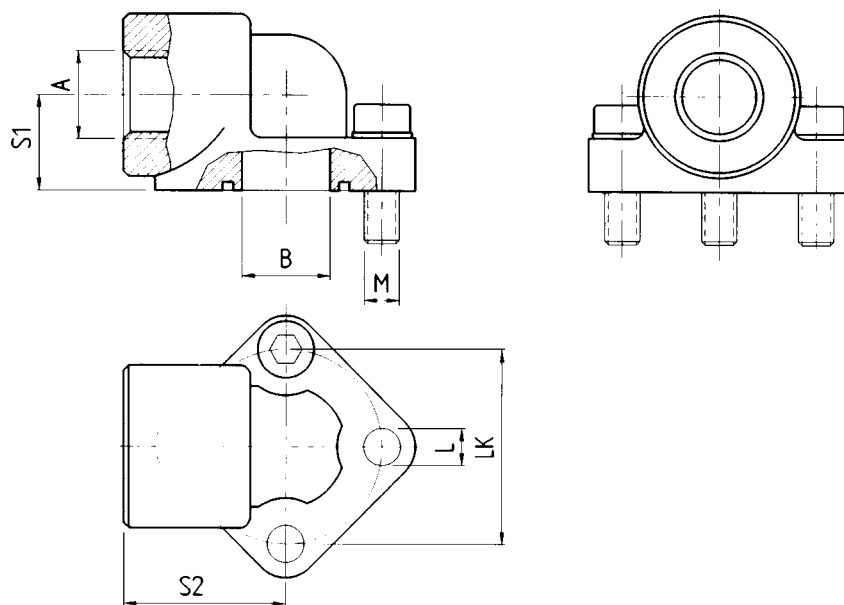


Material: GTW40 surface: zinc plated, yellow chromated

LK	Maximum Working Pressure kg/cm ²	Type	RAD	A	D	S ₁	S ₂	S ₃	ØL	M	o-ring	Weight kg
26	250	WF 26LK-L12/3	L 12	M 18 x 1.5	32	16	25.0	41.5	5.4	3 x M 5 x 20	14 x 1.78	0.13
30	250	WF 30LK-L12/3	L 15	M 18 x 1.5	38	19	30.0	46.5	6.4	3 x M 6 x 25	16 x 2.50	0.14
30	160	WF 30LK-L15/3	L 22	M 22 x 1.5	38	19	30.0	46.0	6.4	3 x M 6 x 25	16 x 2.50	0.29
40	160	WF 40LK-L22/3	L 28	M 30 x 2.0	48	25	35.5	52.5	8.4	2 x M 8 x 30	24 x 2.50	0.40

ordering code:

flange including metric screws and o-ring WF-...K
 flange including metric screws, o-ring, cutting ring and nut WF-...KM



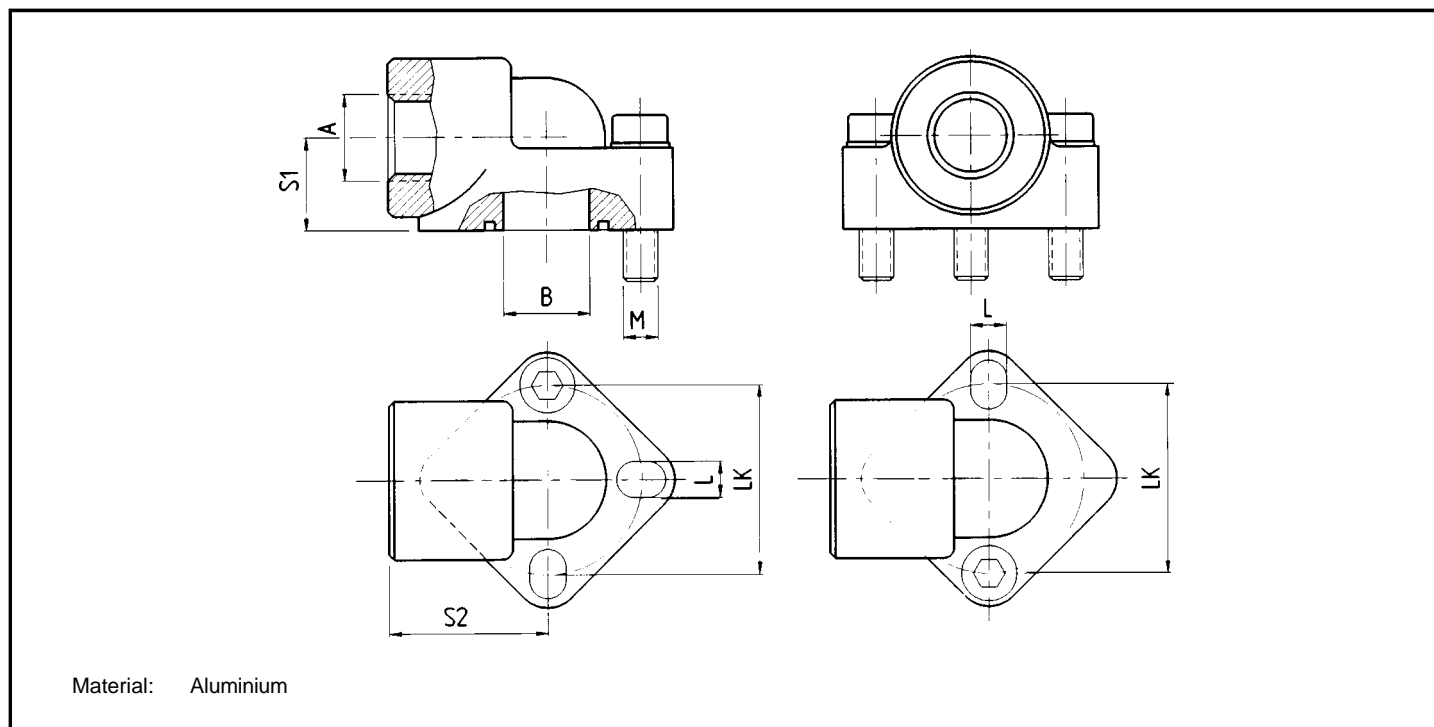
Material: ST42.3 surface: zinc plated, yellow chromated

LK	Maximum Working Pressure kg/cm ²	Type	A	ØB	S ₁	S ₂	L	M	o-ring	Weight kg
26	315	WDS 05/38	R 3/8"	11	17	24	5.3	3 x M 5 x 20	14.00 x 1.78	0.16
26	315	WDS 05/12	R 1/2"	11	17	24	5.3	3 x M 5 x 20	14.00 x 1.78	0.15
30	315	WDS 1/38	R 3/8"	12	17	24	6.3	3 x M 6 x 20	15.88 x 2.62	0.16
30	315	WDS 1/12	R 1/2"	12	17	24	6.3	3 x M 6 x 20	15.88 x 2.62	0.15
40	315	WDS 2/12	R 1/2"	19	21	36	8.5	3 x M 8 x 25	23.81 x 2.62	0.33
40	315	WDS 2/34	R 3/4"	19	21	36	8.5	3 x M 8 x 25	23.81 x 2.62	0.31
51	315	WDS 3/34	R 3/4"	26	26	45	10.5	3 x M 10 x 30	31.42 x 2.62	0.57
51	315	WDS 3/100	R 1"	26	26	45	10.5	3 x M 10 x 30	31.42 x 2.62	0.52
56	315	WDS 3B/34	R 3/4"	26	26	45	10.5	3 x M 10 x 30	31.42 x 2.62	0.57
56	315	WDS 3B/100	R 3/4"	26	26	45	10.5	3 x M 10 x 30	31.42 x 2.62	0.52

ordering code:

flange including metric screws and o-ring

WDS-...K



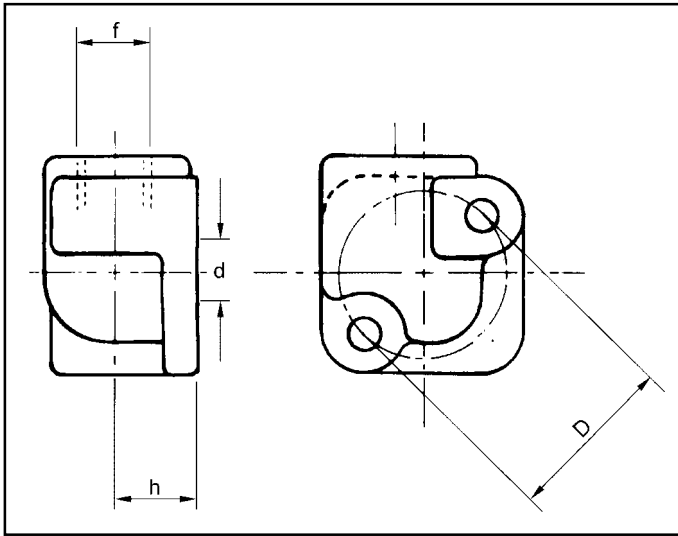
LK	Maximum Working Pressure kg/cm ²	Type	A	ØB	S ₁	S ₂	ØL	M	o-ring	Weight kg
26.0	180	WDA 05/38	R 3/8"	10.0	18.0	31	5.3	3 x M 5 x 35	14.00 x 1.78	0.06
26.0	180	WDA 05/12	R 1/2"	10.0	18.0	31	5.3	3 x M 5 x 35	14.00 x 1.78	0.05
30.0	180	WDA 1/38	R 3/8"	12.5	18.0	30	6.5	3 x M 6 x 35	15.88 x 2.62	0.08
30.0	180	WDA 1/12	R 1/2"	12.5	18.0	30	6.5	3 x M 6 x 35	15.88 x 2.62	0.08
40.0	180	WDA 2/12	R 1/2"	18.5	20.0	40	8.5	3 x M 8 x 45	22.22 x 2.62	0.15
40.0	180	WDA 2/34	R 3/4"	18.5	20.0	40	8.5	3 x M 8 x 45	22.22 x 2.62	0.16
51.0	180	WDA 3/34	R 3/4"	25.0	26.0	46	10.5	3 x M 10 x 60	29.75 x 3.53	0.32
56.0	180	WDA 3/100	R 1"	25.0	26.0	46	10.5	3 x M 10 x 60	29.75 x 3.53	0.33
62.0	120	WDA 3.5/114*	R 1/4"	32.0	33.5	57	13.0	2 x M 12 x 35	35.80 x 3.53	0.39
72.5	120	WDA 4/112*	R 1 1/2"	40.0	38.0	64	13.0	2 x M 12 x 35	44.04 x 3.53	0.49

ordering code:

flange including metric screws and o-ring

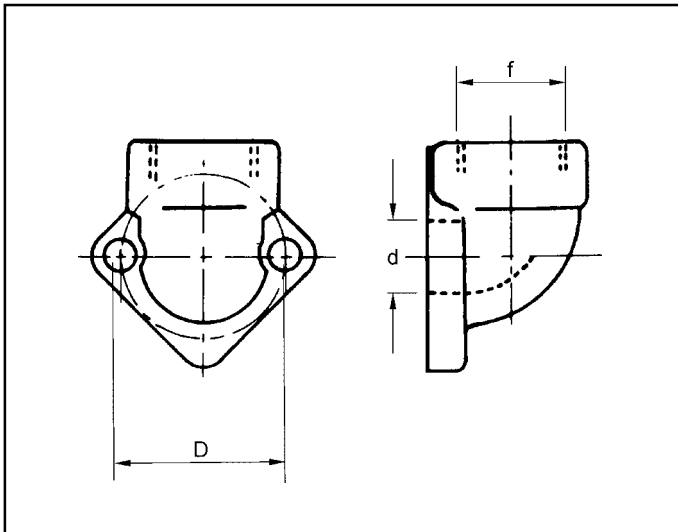
WDA-...K

* 2 bolt flange



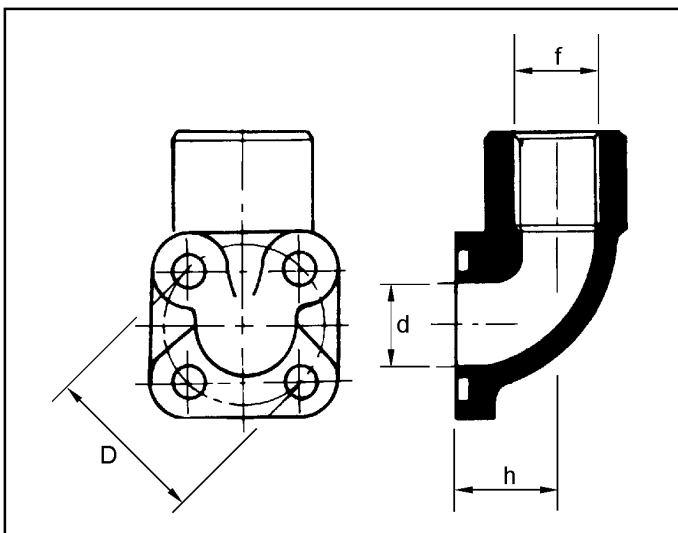
Type	f	Ød	h	D
1P 3/8" x 1P	R ^{3/8} "	10.5	17	30
1P 1/2" x 1P	R ^{1/2} "	10.5	17	30

Elbows in aluminium supplied with screws, washers and O-rings.



Type	Ød	f	h	D
3/8" x 30.0	12.5	R ^{3/8} "	17.5	30.0
1/2" x 30.0	12.5	R ^{1/2} "	17.5	30.0
3/8" x 40.0	12.5	R ^{3/8} "	18.5	40.0
1/2" x 40.0	12.5	R ^{3/8} "	21.0	40.0
3/4" x 40.0	19.0	R ^{3/4} "	21.0	40.0
1" x 51.0	26.0	R1"	25.5	51.0
3/4" x 56.0	20.0	R ^{3/4} "	27.0	56.0
1" x 30.0	26.0	R1"	27.0	56.0
1 1/4" x 62.0	33.0	R1 1/4"	34.5	62.0
1 1/2" x 72.5	40.0	R1 1/2"	34.5	72.5
2 1/2" x 92.0	65.0	R2 1/2"	51.0	92.0

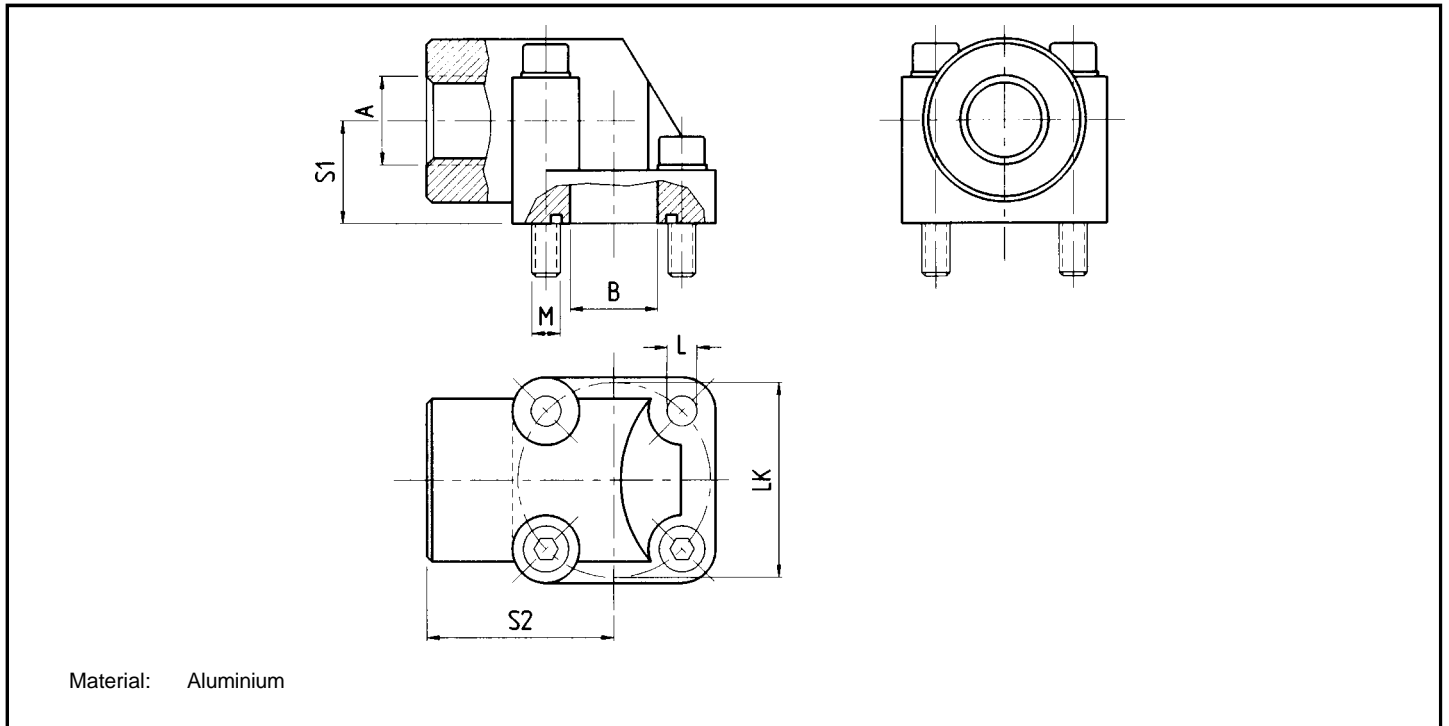
Elbows in C.I. supplied with screws, washers and O-rings.



Type	f	D	d	h
1BK 3/8" x 35	R ^{3/8} "	35	13	18
1BK 1/2" x 35	R ^{1/2} "	35	13	18
1BK 18 x 35	M18 x 1.5	35	13	18
2BK 18 x 40	M18 x 1.5	40	19	24
2BK 1/2" x 40	R ^{1/2} "	40	19	24
2BK 3/4" x 35	R ^{3/4} "	40	19	24
*3BK 1" x 55	R1"	55	26	28
*3BK 3/4" x 55	R ^{3/4} "	55	26	28

* Manufactured in aluminium

Elbows in C.I. supplied with screws, washers and O-rings.

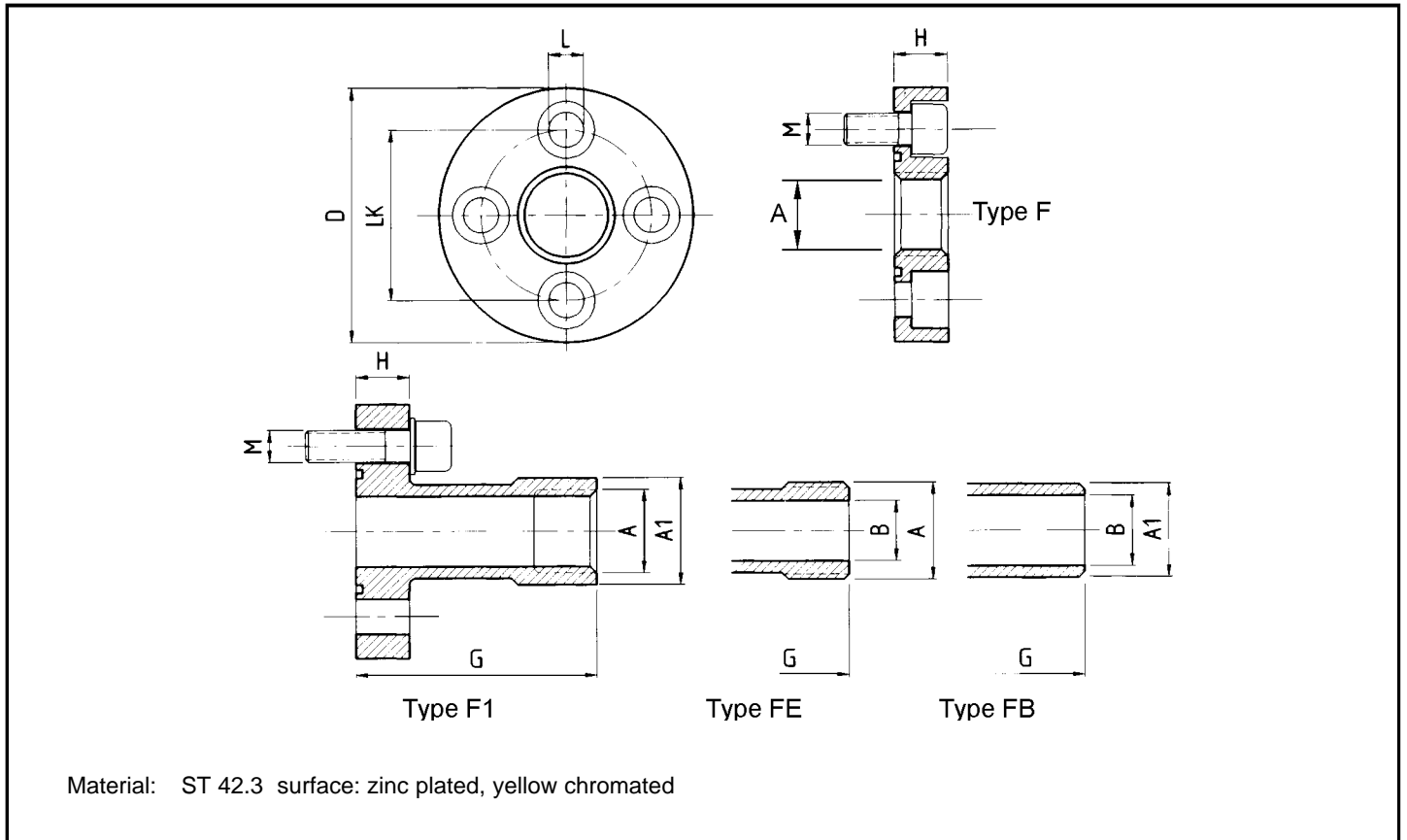


LK	Maximum Working Pressure kg/cm ²	Type	A	B	S ₁	S ₂	L	M	o-ring	Weight kg
30	180	WVA 38/30	R 3/8"	11.5	18	40.0	6.5	2 x M 6 x 30 2 x M 6 x 45	15.88 x 2.62	0.09
30	180	WVA 12/30	R 1/2"	11.5	18	40.0	6.5	2 x M 6 x 30 2 x M 6 x 45	15.88 x 2.62	0.09
35	180	WVA 38/35	R 3/8"	14.0	18	42.5	6.5	2 x M 6 x 30 2 x M 6 x 45	18.72 x 2.62	0.11
35	180	WVA 12/35	R 1/2"	14.0	18	42.5	6.5	2 x M 6 x 30 2 x M 6 x 45	18.72 x 2.62	0.10
40	180	WVA 12/40	R 1/2"	17.0	24	47.5	6.5	2 x M 6 x 35 2 x M 6 x 55	22.22 x 2.62	0.18
40	180	WVA 34/40	R 3/4"	17.0	24	47.5	6.5	2 x M 6 x 35 2 x M 6 x 55	22.22 x 2.62	0.17
55	180	WVA 43/55	R 3/4"	25.0	29	54.0	8.5	2 x M 8 x 45 2 x M 8 x 60	29.75 x 3.53	0.31
55	120	WVA 100/55	R 1"	25.0	29	54.0	8.5	2 x M 8 x 45 2 x M 8 x 60	29.75 x 3.53	0.30

ordering code:

flange including metric screws and o-ring

WVA-...K

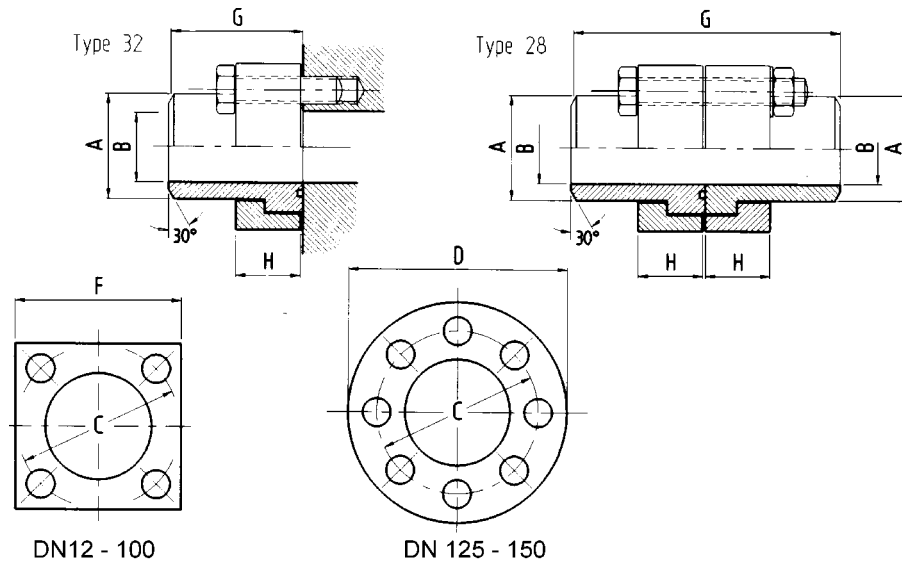


LK	Maximum Working Pressure kg/cm ²	Type	A	A ₁	B	ØD	G	H	ØL	M	o-ring	Weight kg
30.0	250	F 1	R 3/8"	-	-	45	-	11.5	6.5	4 x M 6 x 20	18.77 x 1.78	0.10
30.0	250	FI 1	R 3/8"	21	-	45	55	10.0	6.5	4 x M 6 x 20	18.77 x 1.78	0.15
30.0	250	FE 1	R 1/2"	-	14.0	45	55	10.0	6.5	4 x M 6 x 20	18.77 x 1.78	0.15
30.0	250	FB 1	-	19	14.0	45	55	10.0	6.5	4 x M 6 x 20	18.77 x 1.78	0.15
40.0	250	F 2	R 1/2"	-	-	58	-	14.0	8.5	4 x M 8 x 25	18.77 x 1.78	0.21
40.0	250	FI 2	R 1/2"	26.5	-	58	60	12.0	8.5	4 x M 8 x 25	25.12 x 1.78	0.27
40.0	250	FE 2	R 3/4"	-	19.0	58	60	12.0	8.5	4 x M 8 x 25	25.12 x 1.78	0.27
40.0	250	FB 2	-	25.4	19.0	58	60	12.0	8.5	4 x M 8 x 25	25.12 x 1.78	0.27
51.0	250	F 3A	R 3/4"	-	-	76	-	16.0	10.5	4 x M 10 x 30	25.12 x 1.78	0.48
51.0	250	FI 3A	R 3/4"	33.5	-	76	72	16.0	10.5	4 x M 10 x 30	31.42 x 2.62	0.59
51.0	250	FE 3A	R 1"	-	24.0	76	72	16.0	10.5	4 x M 10 x 30	31.42 x 2.62	0.59
51.0	250	FB 2A	-	32.0	24.5	76	72	16.0	10.5	4 x M 10 x 30	31.42 x 2.62	0.59
56.0	250	F 3B	R 3/4"	-	-	76	-	16.0	10.5	4 x M 10 x 30	31.42 x 2.62	0.48
56.0	250	F1 3B	R 3/4"	33.5	-	76	72	16.0	10.5	4 x M 10 x 30	31.42 x 2.62	0.59
56.0	250	FE 3B	R 1"	-	24.0	76	72	16.0	10.5	4 x M 10 x 30	31.42 x 2.62	0.69
56.0	250	FB 3B	-	32.0	24.5	76	72	16.0	10.5	4 x M 10 x 30	31.42 x 2.62	0.59
62.0	180	F 3,5A	R 1"	-	-	88	-	20.0	10.5	4 x M 10 x 30	39.70 x 3.53	0.53
62.0	180	F 3,5B	R 1"	-	-	88	-	20.0	12.5	4 x M 12 x 35	39.70 x 3.53	0.59
72.5	180	F 4	R 1 1/4"	-	-	98	-	20.0	12.5	4 x M 12 x 35	42.20 x 3.53	0.64

ordering code:

flange including metric screws and o-ring

F-...



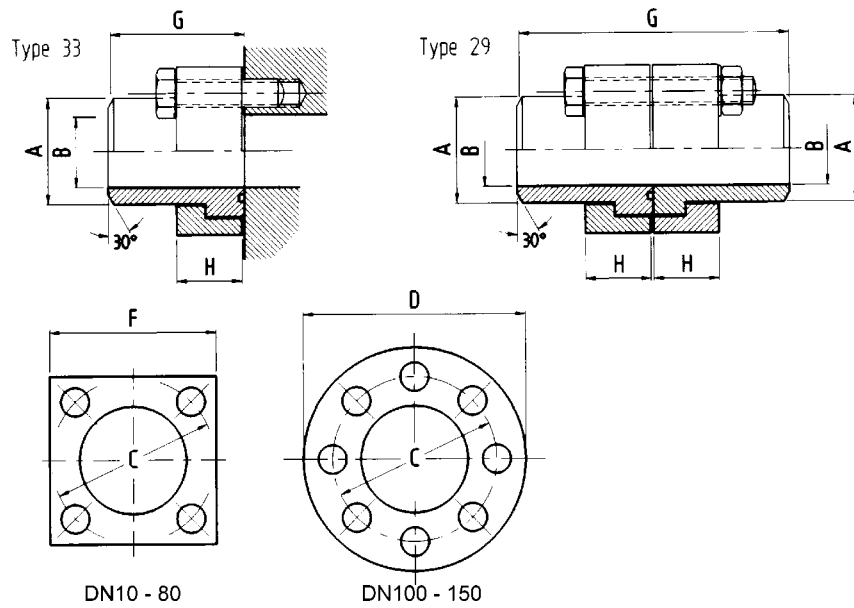
Material: ST52.3/C45
 Flange: ST52.3/C45
 Nipple: ST52.3/C15
 Also available in 1.457

Single Flange											
DN	Type	ØA	ØB	C	F	D	H	G	M	o-ring	Weight kg
12	VKA 32-12/16	16 x 2.0	12	44	50	-	19	43	4/M 10 x 35	16.3 x 2.40	0.40
16	VKA 32-12/20	20 x 2.5	15	54	60	-	19	50	4/M 10 x 35	25.3 x 2.40	0.65
20	VKA 32-20/25	25 x 3.0	19	54	60	-	19	50	4/M 10 x 35	25.3 x 2.40	0.70
25	VKA 32-25/30	30 x 4.0	24	64	70	-	19	56	4/M 12 x 35	29.8 x 2.60	0.90
32	VKA 32-32/38	38 x 5.0	28	72	80	-	24	64	4/M 12 x 40	34.5 x 2.60	1.40
40	VKA 32-40/48	48.3 x 5.0	38	80	90	-	29	68	4/M 16 x 50	46.0 x 3.00	2.00
50	VKA 32-50/60	60.3 x 6.3	48	98	100	-	38	80	4/M 16 x 60	53.3 x 5.33	3.00
65	VKA 32-65/76	76.1 x 7.1	62	118	120	-	47	98	4/M 20 x 70	69.2 x 5.33	5.20
80	VKA 32-80/101	101.6 x 10.0	82	175	180	-	58	135	4/M 30 x 90	100.0 x 6.00	16.50
100	VKA 32-100/114	114.3 x 11.0	92	175	180	-	58	135	4/M 30 x 90	106.6 x 6.00	16.90
125	VKA 32-125/152	152.4 x 16.0	120	200	-	245	69	150	8/M24 x 100	132.7 x 7.00	26.50
150	VKA 32-150/177	177.8 x 17.5	143	245	-	300	79	190	8/M30 x 110	148.0 x 7.00	46.50
Coupling Flange											
12	VKK 28-12/16	16.0 x 2.0	12	44	50	-	19	82	4/M10 x 55	16.3 x 2.40	0.75
16	VKK 28-16/20	20.0 x 2.5	15	54	60	-	19	96	4/M10 x 60	25.3 x 2.40	1.15
20	VKK 28-20/25	25.0 x 3.0	19	54	60	-	19	96	4/M10 x 60	25.3 x 2.40	1.20
25	VKK 28-25/30	30.0 x 4.0	24	64	70	-	19	106	4/M12 x 60	29.8 x 2.60	1.70
32	VKK 28-32/38	38.0 x 5.0	28	72	80	-	24	122	4/M12 x 70	34.5 x 2.60	2.65
40	VKK 28-40/48	48.3 x 5.0	38	80	90	-	29	130	4/M16 x 80	46.0 x 3.00	3.80
50	VKK 28-50/60	60.3 x 6.3	48	98	100	-	38	153	4/M16 x 100	53.3 x 5.33	5.90
65	VKK 28-65/76	76.1 x 7.1	62	118	120	-	47	190	4/M20 x 120	69.2 x 5.33	9.90
80	VKK 28-80/101	101.6 x 10.0	82	175	180	-	58	262	4/M30 x 150	100.0 x 6.00	31.65
100	VKK 28-100/114	114.3 x 11.0	92	175	180	-	58	262	4/M30 x 150	106.0 x 6.00	32.15
125	VKK 28-125/152	152.4 x 16.0	120	200	-	245	69	292	8/M24 x 170	132.7 x 7.00	53.60
150	VKK 28-150/177	177.8 x 17.5	143	245	-	300	79	372	8/M30 x 200	148.0 x 7.00	92.75

ordering code:

single flange only
 coupling flange
 including screws and o-ring

VKA 32.../...
 VKK 28.../...
 .../...M



Material:
 Flange: ST52.3/C45
 Nipple: ST52.3/C15
 Also available in 1.457

DN10 - 80

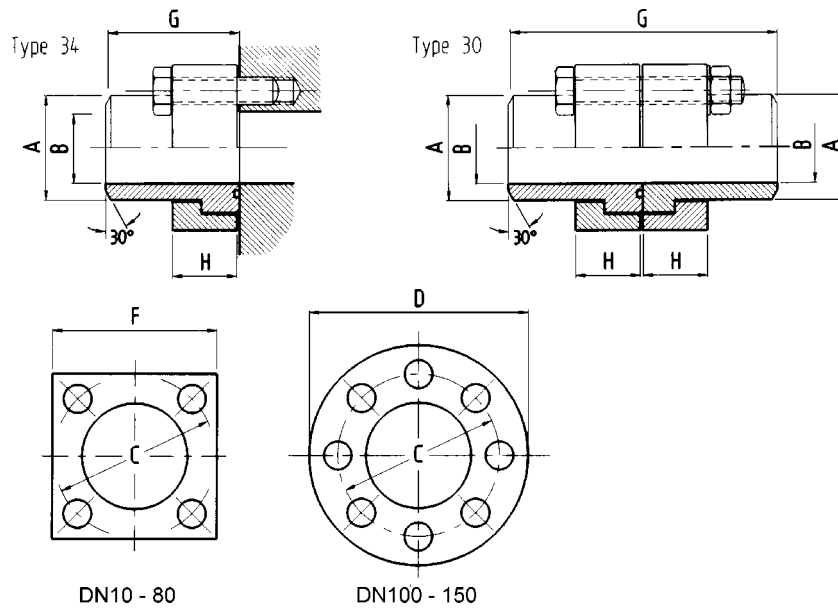
DN100 - 150

Single Flange											
DN	Type	ØA	ØB	C	F	D	H	G	M	o-ring	Weight kg
10	VKA 33-10/17	17.2 x 3.6	10	44	50	-	20	43	4/M 10 x 35	16.3 x 2.40	0.44
16	VKA 33-16/21	21.3 x 2.6	16	54	60	-	20	50	4/M 10 x 35	25.3 x 2.40	0.71
20	VKA 33-20/26	26.9 x 3.6	20	64	70	-	20	56	4/M 12 x 35	29.8 x 2.60	0.90
25	VKA 33-25/33	33.7 x 4.5	25	72	80	-	25	64	4/M 12 x 40	34.5 x 2.60	1.40
32	VKA 33-32/42	42.4 x 5.6	31	80	90	-	30	68	4/M 16 x 50	43.0 x 3.00	2.10
40	VKA 33-40/60	60.3 x 8.0	44	98	100	-	38	80	4/M 16 x 60	53.3 x 5.33	3.10
50	VKA 33-50/76	76.1 x 10.0	56	118	120	-	47	98	4/M 20 x 70	61.0 x 5.00	5.40
65	VKA 33-65/88	88.9 x 11.0	67	145	150	-	48	109	4/M 24 x 75	75.0 x 5.00	9.00
80	VKA 33-80/101	101.6 x 12.5	77	175	180	-	58	135	4/M 30 x 90	88.0 x 6.00	16.90
100	VKA 33-100/139	139.7 x 17.5	105	200	-	245	70	150	8/M 24 x 100	115.0 x 6.00	27.85
125	VKA 33-125/168	168.3 x 20.0	128	245	-	300	80	190	8/M 30 x 110	148.0 x 7.00	47.70
150	VKA 33-150/193	193.7 x 25.0	144	290	-	355	90	190	8/M 36 x 130	183.5 x 7.00	53.20
Coupling Flange											
10	VKK 29-10/17	17.2 x 3.6	10	44	50	-	20	82	4/M10 x 55	16.3 x 2.40	0.80
16	VKK 29-16/21	21.3 x 2.6	16	54	60	-	20	96	4/M10 x 60	25.3 x 2.40	1.22
20	VKK 29-20/26	26.4 x 3.6	20	64	70	-	20	106	4/M12 x 60	29.8 x 2.60	1.70
25	VKK 29-25/33	33.7 x 4.5	25	72	80	-	25	122	4/M12 x 70	34.5 x 2.60	2.70
32	VKK 29-32/42	42.4 x 5.6	31	80	90	-	30	130	4/M16 x 80	43.0 x 3.00	4.00
40	VKK 29-40/60	60.3 x 8.0	44	98	100	-	38	153	4/M16 x 100	53.3 x 5.33	6.00
50	VKK 29-50/76	76.1 x 10.0	56	118	120	-	47	190	4/M20 x 120	61.0 x 5.00	10.30
65	VKK 29-65/88	88.9 x 11.0	67	145	150	-	48	218	4/M24 x 130	75.0 x 5.00	17.45
80	VKK 29-80/101	101.6 x 12.5	77	175	180	-	58	262	4/M30 x 150	88.0 x 6.00	32.60
100	VKK 29-100/139	139.7 x 17.5	105	200	-	245	70	292	4/M24 x 170	115.0 x 6.00	54.00
125	VKK 29-125/168	168.3 x 20.0	128	245	-	300	80	372	8/M30 x 200	148.0 x 7.00	90.00
150	VKK 29-150/193	193.7 x 25.0	144	290	-	355	90	380	8/M36 x 220	183.5 x 7.00	105.00

ordering code:

single flange only
 coupling flange
 including screws and o-ring

VKA 33.../...
 VKK 29.../...
 .../...M



Material:
 Flange: ST52.3/C45
 Nipple: ST52.3/C15
 Also available in 1.457

DN10 - 80

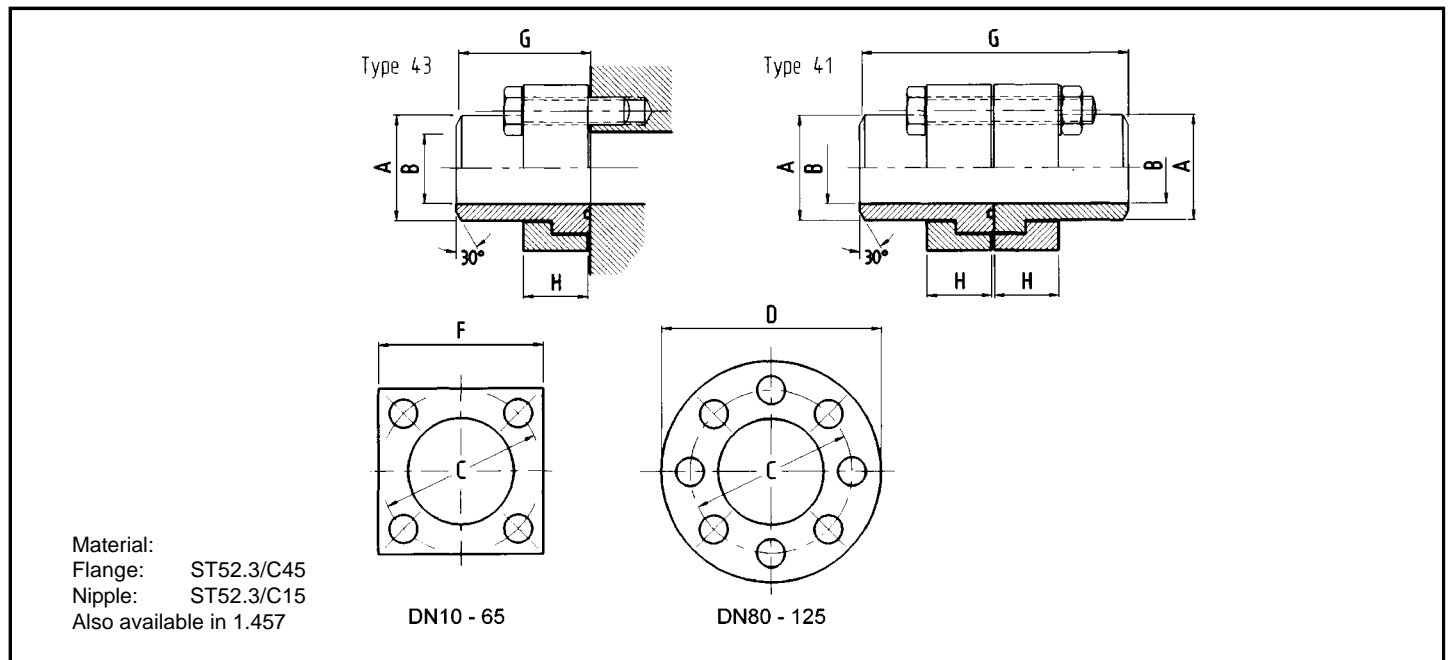
DN100 - 150

Single Flange											
DN	Type	ØA	ØB	C	F	D	H	G	M	o-ring	Weight kg
10	VKA 34-10/17	17.2 x 3.6	10	44	50	-	20	43	4/M 10 x 35	16.3 x 2.40	0.45
16	VKA 34-16/26	26.9 x 4.5	18	54	60	-	20	50	4/M 10 x 35	25.3 x 2.40	0.70
20	VKA 34-20/33	33.7 x 5.6	22	64	70	-	20	56	4/M 12 x 35	29.8 x 2.60	0.90
25	VKA 34-25/42	42.7 x 7.1	28	72	80	-	25	64	4/M 12 x 40	34.5 x 2.60	1.45
32	VKA 34-32/48	48.3 x 8.0	32	80	90	-	30	68	4/M 16 x 50	43.0 x 3.00	2.20
40	VKA 34-40/60	60.3 x 10.0	40	98	100	-	38	80	4/M 16 x 60	53.3 x 5.33	3.20
50	VKA 34-50/76	76.1 x 12.5	51	118	120	-	47	98	4/M 20 x 70	61.0 x 5.00	5.60
65	VKA 34-65/88	88.9 x 14.2	60	145	150	-	48	109	4/M 24 x 75	75.0 x 5.00	9.50
80	VKA 34-80/114	114.3 x 17.5	79	175	180	-	58	135	4/M 30 x 90	88.0 x 6.00	17.60
100	VKA 34-100/152	152.5 x 28.0	97	200	-	245	70	150	8/M 24 x 100	115.0 x 6.00	29.30
125	VKA 34-125/177	177.8 x 30.0	118	245	-	300	80	190	8/M 30 x 110	148.0 x 7.00	48.20
150	VKA 34-150/219	219.1 x 36.0	147	290	-	355	90	190	8/M 36 x 130	183.5 x 7.00	55.10
Coupling Flange											
10	VKK 30-10/17	17.2 x 3.6	10	44	50	-	20	82	4/M 10 x 55	16.3 x 2.40	0.81
16	VKK 30-16/26	26.9 x 4.5	18	54	60	-	20	96	4/M 10 x 60	25.3 x 2.40	1.21
20	VKK 30-20/33	33.7 x 5.6	22	64	70	-	20	106	4/M 12 x 60	29.8 x 2.60	1.70
25	VKK 30-25/42	42.4 x 7.1	28	72	80	-	25	122	4/M 12 x 70	34.5 x 2.60	2.70
32	VKK 30-32/48	48.3 x 8.0	32	80	90	-	30	130	4/M 16 x 80	43.0 x 3.00	4.15
40	VKK 30-40/60	60.3 x 10.0	40	98	100	-	38	153	4/M 16 x 100	53.3 x 5.33	6.25
50	VKK 30-50/76	76.1 x 12.5	51	118	120	-	47	190	4/M 20 x 120	61.0 x 5.00	10.80
65	VKK 30-65/88	88.9 x 14.2	60	145	150	-	48	218	4/M 24 x 130	75.0 x 5.00	18.35
80	VKK 30-80/114	114.3 x 17.5	89	175	180	-	58	262	4/M 30 x 150	88.0 x 6.00	33.80
100	VKK 30-100/152	152.5 x 28.0	96	200	-	245	70	292	8/M 24 x 170	115.0 x 6.00	57.20
125	VKK 30-125/177	177.8 x 30.0	118	245	-	300	80	372	8/M 30 x 200	148.0 x 7.00	95.00
150	VKK 30-150/219	219.1 x 36.0	147	290	-	355	90	380	8/M 36 x 220	183.5 x 7.00	109.20

ordering code:

single flange only
 coupling flange
 including screws and o-ring

VKA 34.../...
 VKK 30.../...
 .../...M

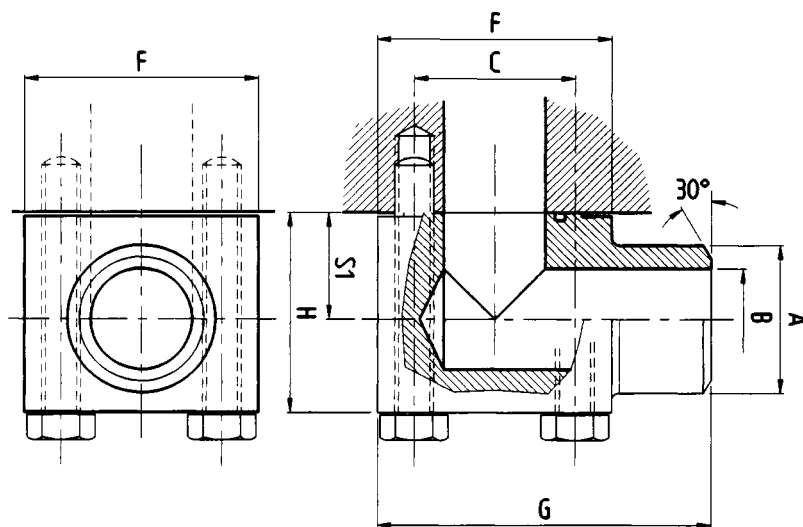


Single Flange											
DN	Type	A	B	C	F	D	H	G	M	o-ring	Weight kg
10	VKA 43-10/17	17.2 x 3.6	10	44	50	-	20	43	4/M 10 x 35	16.3 x 2.40	0.45
16	VKA 43-16/26	26.9 x 5.6	16	54	60	-	20	50	4/M 10 x 35	25.3 x 2.40	0.70
20	VKA 43-20/33	33.7 x 6.3	21	64	70	-	20	56	4/M 12 x 35	29.8 x 2.60	0.90
25	VKA 43-25/42	42.7 x 8.0	26	72	80	-	25	64	4/M 12 x 40	34.5 x 2.60	1.45
32	VKA 43-32/60	60.3 x 12.5	35	98	100	-	38	80	4/M 16 x 50	53.3 x 5.33	2.20
40	VKA 43-40/70	70.0 x 14.2	41	118	120	-	45	100	4/M 20 x 60	61.0 x 5.00	3.20
50	VKA 43-50/88	88.9 x 17.5	54	145	150	-	48	109	4/M 24 x 70	75.0 x 5.00	5.60
65	VKA 43-65/101	101.6 x 20.0	62	175	180	-	58	135	4/M 30 x 95	88.0 x 6.00	9.50
80	VKA 43-80/139	139.7 x 28.0	83	200	-	245	70	150	8/M 24 x 100	115.0 x 6.00	17.60
100	VKA 43-100/168	168.3 x 32.0	104	245	-	300	80	190	8/M 30 x 110	148.0 x 7.00	29.30
125	VKA 43-125/219	219.1 x 45.0	129	290	-	355	90	190	8/M 36 x 130	183.5 x 7.00	48.20
Coupling Flange											
DN	Type	A	B	C	F	D	H	G	M	o-ring	Weight kg
10	VKK 41-10/17	17.2 x 3.6	10	44	50	-	20	80	4/M 10 x 55	16.3 x 2.40	0.81
16	VKK 41-16/26	26.9 x 5.6	16	54	60	-	20	94	4/M 10 x 60	25.3 x 2.40	1.21
20	VKK 41-20/33	33.7 x 6.3	21	64	70	-	20	106	4/M 12 x 60	29.8 x 2.60	1.70
25	VKK 41-25/42	42.4 x 8.0	26	72	80	-	25	122	4/M 12 x 70	34.5 x 2.60	2.70
32	VKK 41-32/60	60.3 x 12.5	35	98	100	-	38	130	4/M 16 x 80	53.3 x 5.33	4.15
40	VKK 41-40/70	70.0 x 14.2	41	118	120	-	45	190	4/M 20 x 110	61.0 x 5.00	6.25
50	VKK 41-50/88	88.9 x 17.5	54	145	180	-	48	210	4/M 24 x 120	75.0 x 5.00	10.80
65	VKK 41-65/101	101.6 x 20.0	62	175	180	-	58	262	4/M 30 x 130	88.0 x 6.00	18.35
80	VKK 41-80/139	139.7 x 28.0	83	200	-	245	70	292	8/M 24 x 170	115.0 x 6.00	33.80
100	VKK 41-100/168	168.3 x 32.0	104	245	-	300	80	372	8/M 30 x 200	148.0 x 7.00	57.20
125	VKK 41-125/219	219.1 x 45.0	129	290	-	355	90	380	8/M 36 x 220	183.5 x 7.00	95.00

ordering code:

single flange only
 coupling flange
 including screws and o-ring

VKA 43.../...
 VKK 41.../...
 .../...M



Material: ST52.3/C15

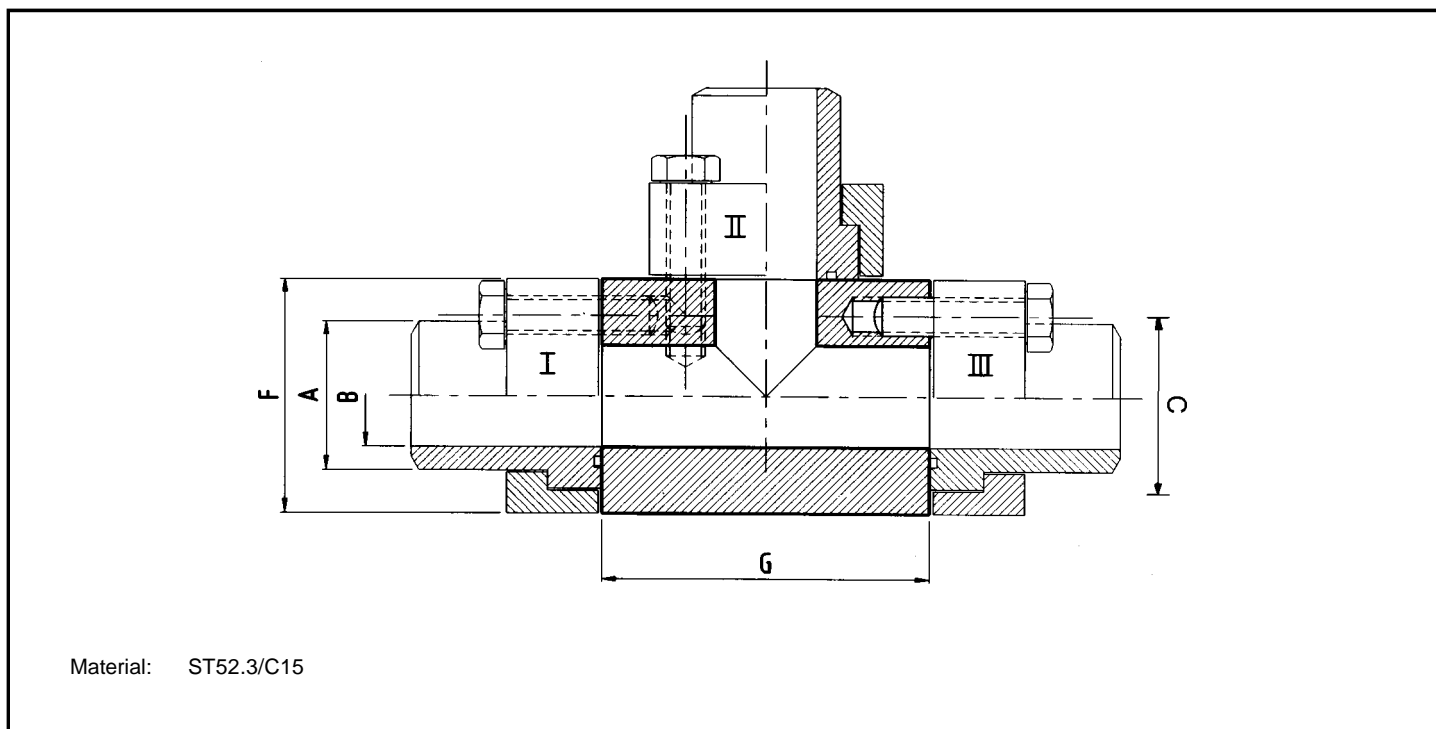
Elbow Only

DN	Maximum Working Pressure kg/cm ²	Type	ØA	ØB	C	F	S ₁	H	G	M	o-ring
10	250	VKW 10	17.2 x 3.6	10	44	50	17	29	80	4/M 10 x 40	16.3 x 2.40
16	250	VKW 16	21.3 x 2.6	16	54	60	23	41	95	4/M 10 x 45	25.3 x 2.40
20	250	VKW 20	26.9 x 3.6	20	64	70	26	47	110	4/M 12 x 60	29.8 x 2.60
25	250	VKW 25	33.7 x 4.5	25	72	80	30	56	130	4/M 12 x 65	34.5 x 2.60
32	250	VKW 32	42.4 x 5.6	31	80	90	35	64	140	4/M 16 x 80	43.0 x 3.00
40	250	VKW 40	60.3 x 8.0	44	98	100	40	76	155	4/M 16 x 90	53.3 x 5.33
50	250	VKW 50	76.1 x 10.0	56	118	120	53	100	175	4/M 20 x 125	61.0 x 5.00
65	250	VKW 65	88.9 x 11.0	67	145	150	64	120	200	4/M 24 x 150	75.0 x 5.00
80	250	VKW 80	101.6 x 12.5	77	175	180	73	140	220	4/M 30 x 180	88.0 x 6.00

ordering code:

elbow only
including screws and o-ring

VKW-...
VKW-...M



Elbow Only								
DN	Type	A	B	C	F	G	M	o-ring
10	VKV 10	17.2 x 3.6	10	44	50	100	12/M 10 x 35	16.3 x 2.40
16	VKV 16	21.3 x 2.6	16	54	60	110	12/M 10 x 35	25.3 x 2.40
20	VKV 20	26.9 x 3.6	20	64	70	115	12/M 12 x 35	29.8 x 2.60
25	VKV 25	33.7 x 4.5	25	72	80	125	12/M 12 x 40	34.5 x 2.60
32	VKV 32	42.4 x 5.6	31	80	90	140	12/M 16 x 50	43.0 x 3.00
40	VKV 40	60.3 x 8.0	44	98	100	160	12/M 16 x 60	53.3 x 5.33
50	VKV 50	76.1 x 10.0	56	118	120	180	12/M 20 x 70	61.0 x 5.00
65	VKV 65	88.9 x 11.0	67	145	150	200	12/M 24 x 75	75.0 x 5.00
80	VKV 80	101.6 x 12.5	77	175	180	240	12/M 30 x 90	88.0 x 6.00

T - connection can also be supplied with different sizes or different tube dimensions.

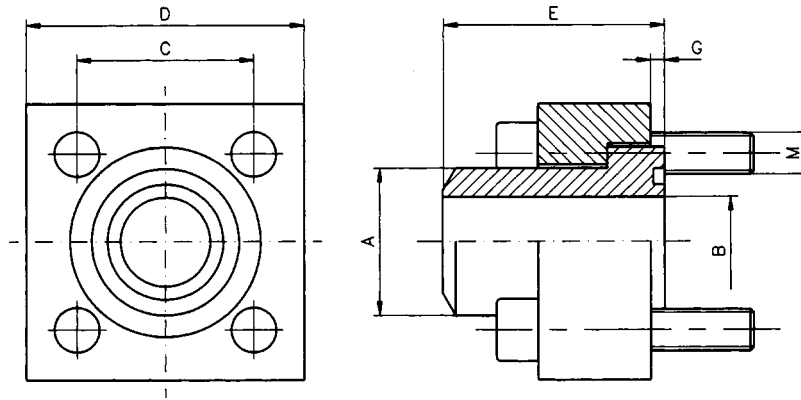
example: I = DN 25/33.7 x 4.5
 II = DN 16/21.3 x 2.6
 III = DN 20/29.9 x 3.6

VKV - 25/33.7 x 45 - 16/21.3 x 26 - 20/26.9 x 3.6

ordering code:

T - connection only
 including flange
 including flange, screws and o-ring

VKV-...
 VKV-...K
 VKV-...KM



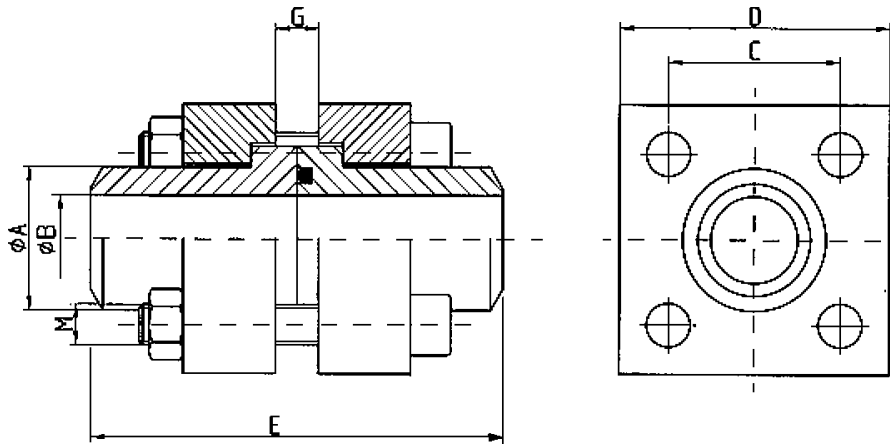
Material: ST44.3 (FE 430)
ST52.3 (FE 510)

250 bar									
Size	Type	A	ØB	C	D	E	G	M	Weight kg
3/8"	CET 38 ST 250	18	12.5	24.7	40	30	1.0	M 6 x 25	0.17
1/2"	CET 12 ST 250	22	15	29.7	45	30	1.0	M 8 x 30	0.22
3/4"	CET 34 ST 250	28	20	35.3	50	35	1.0	M 8 x 30	0.32
1"	CET 1 ST 250	35	25	43.8	65	40	1.0	M 10 x 35	0.63
1 1/4"	CET 114 ST 250	43	32	51.6	75	45	1.0	M 12 x 40	0.92
1 1/2"	CET 112 ST 250	50	38	60	85	50	1.0	M 14 x 45	1.34
2"	CET 2 ST 250	62	47	69.4	100	60	1.5	M 16 x 55	2.30
2 1/2"	CET 212 ST 250	76	58	83.4	120	70	1.5	M 20 x 65	4.00
3"	CET 3 ST 250	90	70	102.5	140	80	1.5	M 20 x 75	6.03
3 1/2"	CET 312 ST 250	102	80	102.5	140	90	1.5	M 20 x 90	7.56
4"	CET 4 ST 250	114	90	113.2	160	105	1.5	M 24 x 100	10.96
400 bar									
3/8"	CET 38 ST 400	18	11	24.7	40	35	1.0	M 6 x 25	0.20
1/2"	CET 12 ST 400	22	14	29.7	45	40	1.0	M 8 x 30	0.31
3/4"	CET 34 ST 400	28	18	35.3	50	45	1.0	M 8 x 35	0.45
1"	CET 1 ST 400	35	22	43.8	65	50	1.0	M 10 x 40	0.83
1 1/4"	CET 114 ST 400	44	29	51.6	75	55	1.0	M 12 x 45	1.19
1 1/2"	CET 112 ST 400	51	35	60.0	85	60	1.0	M 14 x 55	1.80
2"	CET 2 ST 400	61	43	69.4	100	70	1.5	M 16 x 65	3.08
2 1/2"	CET 212 ST 400	80	53	83.4	120	80	1.5	M 20 x 75	5.14
3"	CET 3 ST 400	90	58	102.5	140	90	1.5	M 20 x 90	7.34
3 1/2"	CET 312 ST 400	102	63	102.5	140	95	1.5	M 20 x 90	8.09
4"	CET 4 ST 400	114	74	113.2	160	105	1.5	M 24 x 100	12.75

ordering code:

weld-on flange coupling

CET-...



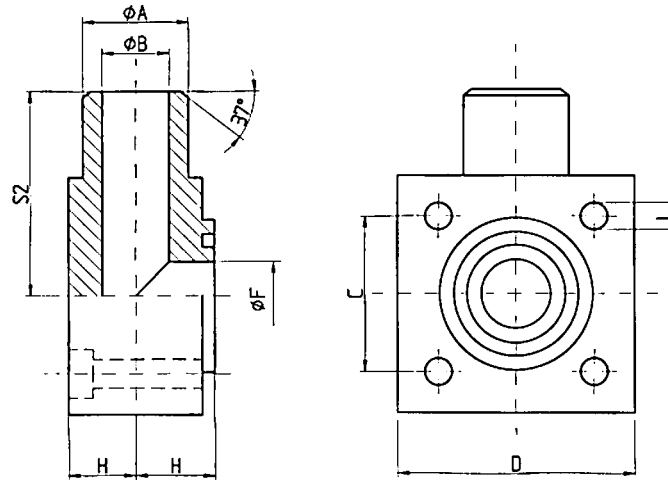
Material: ST44.3 (FE 430)
ST52.3 (FE 510)

250 bar									
Size	Type	A	ØB	C	D	E	G	M	Weight kg
3/8"	DCET 38 ST 250	18	12.5	24.7	40	60	2	M 6 x 45	0.42
1/2"	DCET 12 ST 250	22	15	29.7	45	60	2	M 8 x 50	0.52
3/4"	DCET 34 ST 250	28	20	35.3	50	70	2	M 8 x 55	0.68
1"	DCET 1 ST 250	35	25	43.8	65	80	2	M 10 x 65	1.30
1 1/4"	DCET 114 ST 250	43	32	51.6	75	90	2	M 12 x 75	1.98
1 1/2"	DCET 112 ST 250	50	38	60	85	100	2	M 14 x 90	2.79
2"	DCET 2 ST 250	62	47	69.4	100	120	3	M 16 x 100	4.67
2 1/2"	DCET 212 ST 250	76	58	83.4	120	140	3	M 20 x 110	7.96
3"	DCET 3 ST 250	90	70	102.5	140	160	3	M 20 x 120	11.80
3 1/2"	DCET 312 ST 250	102	80	102.5	140	180	3	M 20 x 130	14.10
4"	DCET 4 ST 250	114.3	90	114.5	160	210	3	M 24 x 170	21.60
400 bar									
3/8"	DCET 38 ST 400	18	11	24.7	40	70	2	M 6 x 45	0.47
1/2"	DCET 12 ST 400	22	14	29.7	45	80	2	M 8 x 50	0.63
3/4"	DCET 34 ST 400	28	18	35.2	50	90	2	M 8 x 55	0.90
1"	DCET 1 ST 400	35	22	43.8	65	100	2	M 10 x 65	1.73
1 1/4"	DCET 114 ST 400	44	29	51.6	75	110	2	M 12 x 75	2.62
1 1/2"	DCET 112 ST 400	51	35	60.0	85	120	2	M 14 x 90	3.76
2"	DCET 2 ST 400	61	43	69.4	100	140	3	M 16 x 100	6.40
2 1/2"	DCET 212 ST 400	80	53	83.4	120	160	3	M 20 x 130	10.50
3"	DCET 3 ST 400	90	58	102.5	160	180	3	M 24 x 130	16.40
3 1/2"	DCET 312 ST 400	102	63	113.1	160	190	3	M 24 x 150	16.70
4"	DCET 4 ST 400	114	74	123.7	180	210	3	M 24 x 170	25.00

ordering code:

weld-on flange coupling

D-CET-...



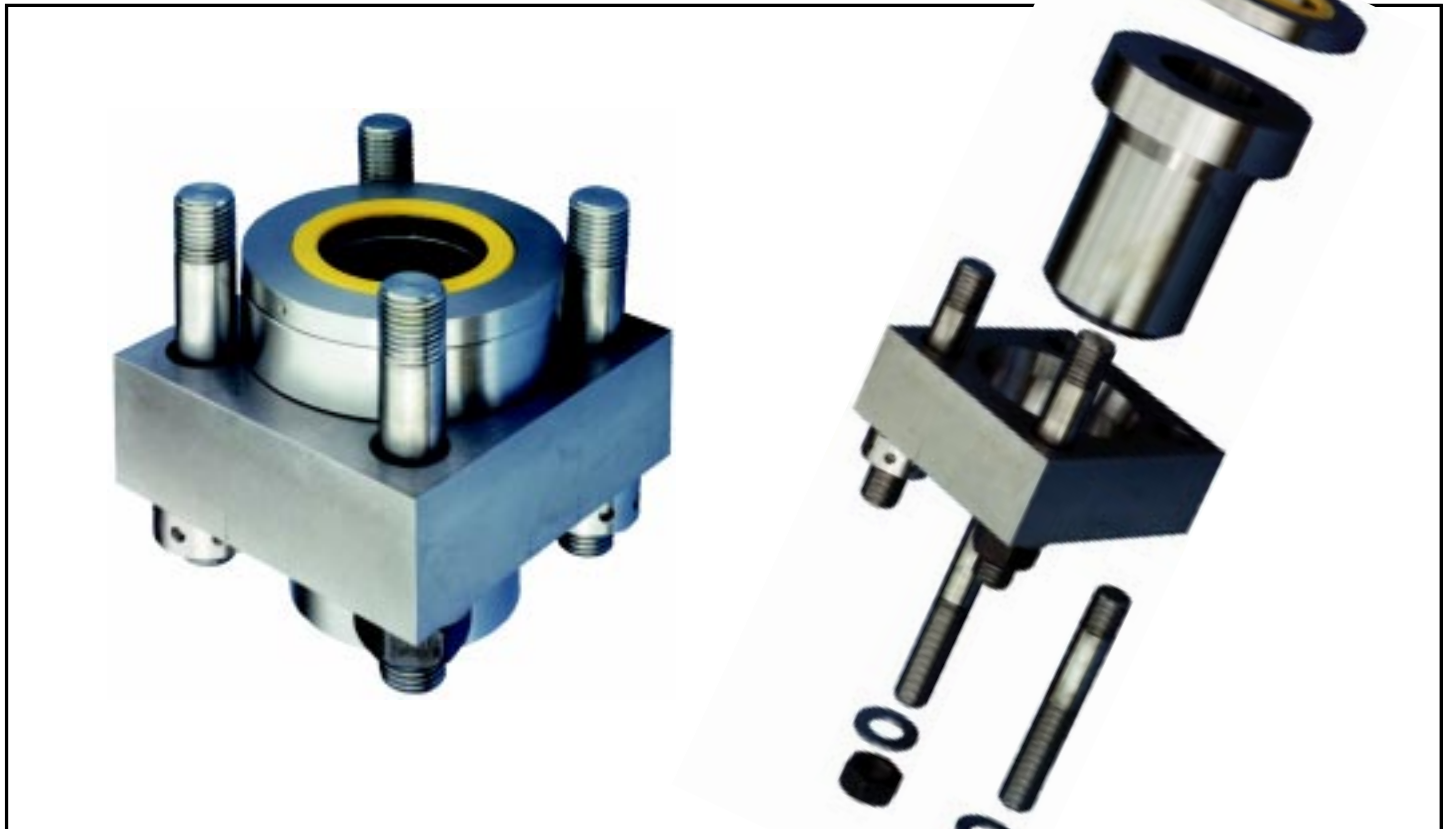
Material: ST44.3 (FE 430)
ST52.3 (FE 510)

3000 Series										
Size	Type	A	ϕB	C	D	F	H	L	S2	M
3/8"	CET 38 ST90 250	18	12.5	24.7	40	12.5	12	6.8	32	M 6 x 30
1/2"	CET 12 ST90 250	22	15	29.7	45	15	17	9	40	M 8 x 40
3/4"	CET 34 ST90 250	28	20	35.3	50	20	19	9	42	M 8 x 45
1"	CET 1 ST90 250	35	25	43.8	65	25	24	11	50	M 10 x 55
1 1/4"	CET 114 ST90 250	43	32	51.6	75	32	30	13	56	M 12 x 70
1 1/2"	CET 112 ST90 250	50	38	60.0	85	38	34	15	65	M 14 x 80
2"	CET 2 ST90 250	62	47	69.4	100	47	42	17	75	M 16 x 100
2 1/2"	CET 212 ST90 250	76	58	83.4	120	58	53	21	85	M 18 x 120
3"	CET 3 ST90 250	90	68	102.5	140	70	59	21	100	M 20 x 140
6000 Series										
3/8"	CET 38 ST90 400	18	11	24.7	40	12.5	12	6.8	32	M 6 x 30
1/2"	CET 12 ST90 400	22	14	29.7	45	15	17	9	40	M 8 x 40
3/4"	CET 34 ST90 400	28	18	35.3	50	20	19	9	42	M 8 x 45
1"	CET 1 ST90 400	35	22	43.8	65	25	24	11	50	M 10 x 55
1 1/4"	CET 114 ST90 400	44	29	51.6	75	32	30	13	56	M 12 x 70
1 1/2"	CET 112 ST90 400	51	35	60.0	85	38	34	15	65	M 14 x 80
2"	CET 2 ST90 400	61	43	69.4	100	47	42	17	75	M 16 x 100
2 1/2"	CET 212 ST90 400	80	53	83.4	120	58	53	21	85	M 20 x 120
3"	CET 3 ST90 400	90	58	102.5	140	58	59	21	100	M 20 x 140

ordering code:

butt weld flange coupling

CET-...



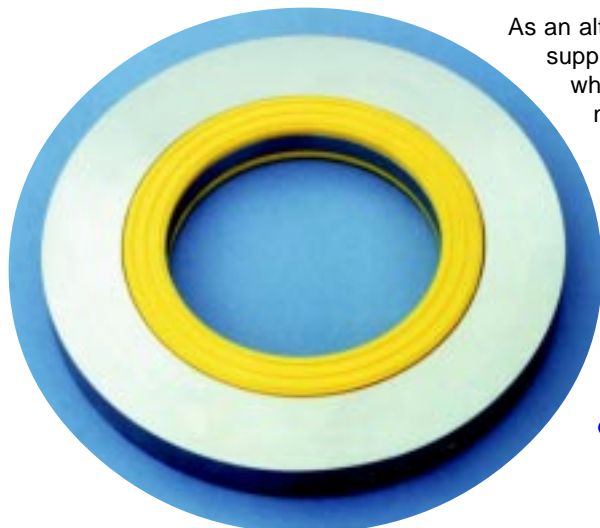
Important Characteristics

We now produce and market an innovative range of pipe flanges for fluid systems. Designed for pressures up to 450 bar, flow rates up to 20000 l.p.m. and pipe sizes between 20 and 220 mm outside diameter. They are specifically aimed at the steel, oil, gas and food industries where ease of maintenance features are economically attractive. Seal replacement downtime has been found to be reduced by more than 400%.

The ease of maintenance feature involves the ability to remove the seal, which is supported within a special retaining element, and replace it without fully disconnecting or moving the mating flange or runs of pipework as it is typically the case with the standard DIN and CETOP flanges found in heavy pipework systems.

There are no comparable products at the high flow end of the range. The flange design has considerable commercial potential in areas where the cost of downtime is very high, such as in offshore industry.

The flange can be supplied in any steels to suit the environment including 080M15 (standard), stainless or exotic alloys.

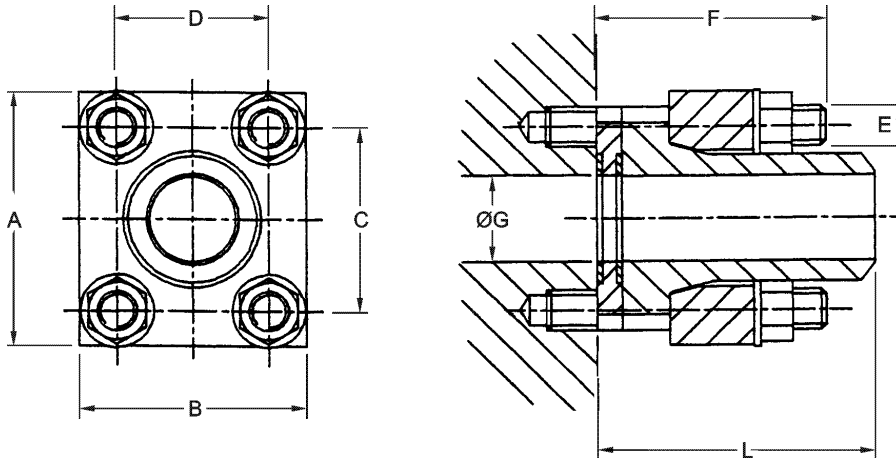


As an alternative to tightening the flanges using traditional studs and nuts they can be supplied with a bolt tensioning system that utilizes a hand operated jacking system which enable pre-tensioning of two or more studs at one time, thus alleviating the need for large torque wrenches, spanners etc. which become a big problem when space is at a premium.

- **Designed for pressures up to 450 bar**
- **Flow rates up to 20000 lpm**
- **Pipe sizes between 20 and 220 mm.**
- **Coupling flanges also available**
- **Specifically aimed at the steel, oil, gas and food industries where ease of maintenance features are particularly economically attractive.**



Plastic Seal Type. Maximum pressure 450 Bar



ØG Refers to maximum allowable hole in mating part

450 bar										
Part Number	Nominal Tube Ø	A	B	C	D	E	F	G	L	W.N. BORE
QM 30 C***-	30	65	60	48	43	M 10	55	18	65	to suit pipe wall
QM 38 C***-	38	80	75	58	52	M 12	68	22	75	
QM 42 C***-	42.4	85	80	60	56	M 12	78	25	90	
QM 48 C***-	48.3	115	105	74	62	M 16	101	30	105	
QM 60 C***-	60.3	140	127	92	74	M 20	119	45	145	
QM 76 C***-	76.1	170	152	110	90	M 24	138	51	165	
QM 90 C***-	88.9	200	170	130	102	M 30	164	62	185	
QM 114 C***-	114.3	205	195	138	128	M 30	184	80	205	
QM 140 C***-	139.7	250	230	166	154	M 36F	218	98	245	
QM 168 C***-	168.3	280	265	194	178	M 42F	257	105	295	
QM 210 C***-	219.1	330	310	245	225	M 42F	292	130	320	

ordering code:

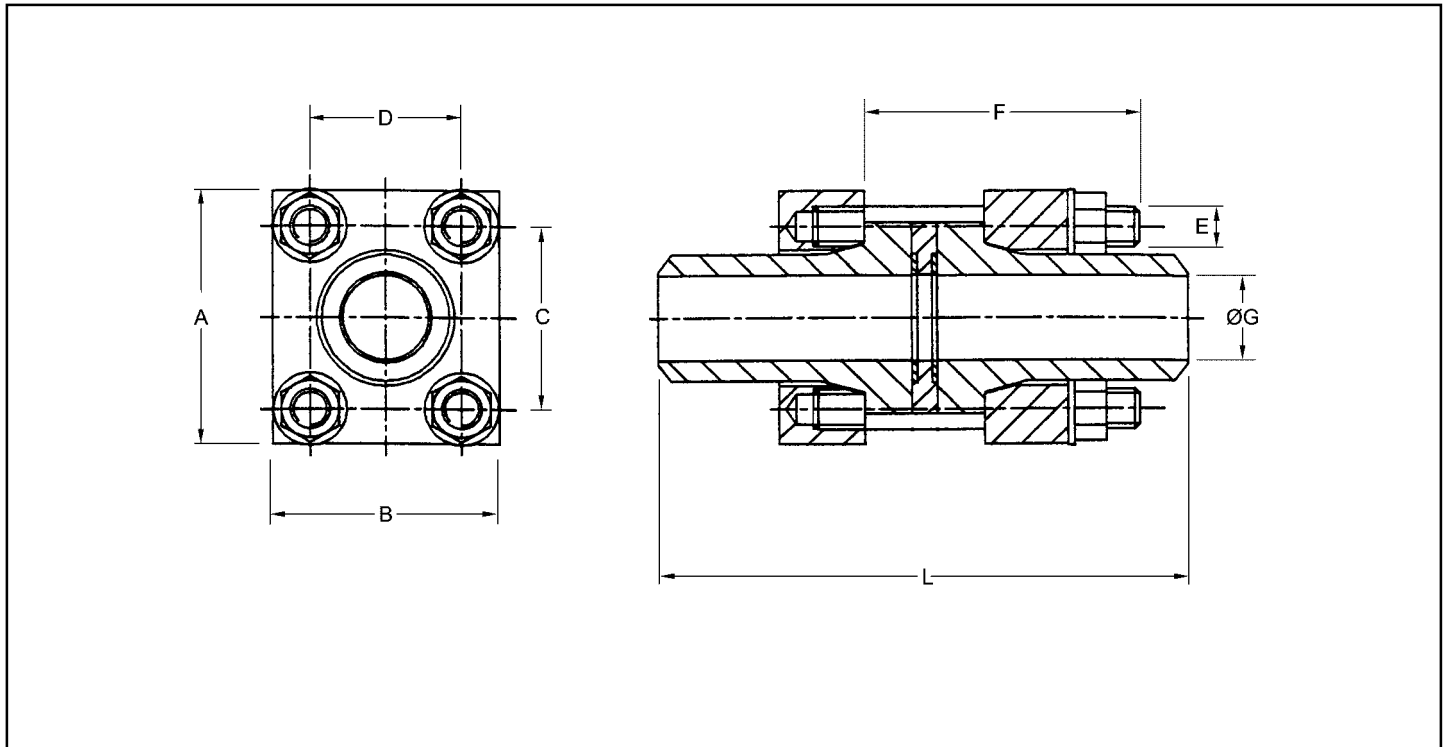
ST 52.3 1.4404

QM C***- QMx...C***-

where *** = tube diameter
- = wall thickness



Plastic Seal Type. Coupling assembly 450 bar.



450 bar										
Part Number	Nominal Tube Ø	A	B	C	D	E	F	G max.	L	W.N. BORE
QM 42 CC***--	42.4	85	80	60	56	M 12	92	25	165	to suit pipe wall
QM 48 CC***--	48.3	115	105	74	62	M 16	119	30	195	
QM 60 CC***--	60.3	140	127	92	74	M 20	147	45	275	
QM 76 CC***--	76.1	170	152	110	90	M 24	166	51	315	
QM 90 CC***--	88.9	200	170	130	102	M 30	201	62	355	
QM 114 CC***--	114.3	205	195	138	128	M 30	221	80	395	
QM 140 CC***--	139.7	250	230	166	154	M 36F	272	98	475	
QM 168 CC***--	168.3	280	265	194	178	M 42F	322	105	575	
QM 219 CC***--	219.1	330	310	245	225	M 42F	367	130	625	

ordering code:

ST 52.3 1.4404

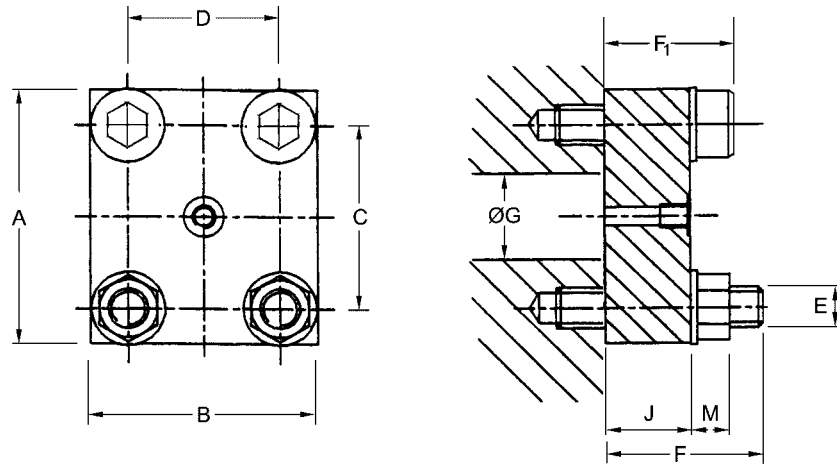
QM...CC***-- QMx...CC***--

where *** = tube diameter
 -- = wall thickness

Repeat if tube detail differs per side



Plastic Seal Type. Maximum pressure 450 bar.



ØG Refers to maximum allowable hole in mating part

450 bar												
Part Number	Type	A	B	C	D	E	F	F ₁	G	J	M	W.N. BORE
QM 30 CB	30	64	60	48	43	M 10	-	35	18	25	10	to suit pipe wall
QM 38 CB	38	80	76	58	52	M 12	-	42	22	32	12	
QM 42 CB	42.4	85	80	60	56	M 12	-	42	25	30	12	
QM 48 CB	48.3	100	89	74	62	M 16	-	53	30	37	16	
QM 60 CB	60.3	127	105	92	74	M 20	-	57	45	37	20	
QM 76 CB	76.1	150	127	110	90	M 24	-	73	51	49	24	
QM 90 CB	88.9	200	170	130	102	M 30	109	-	62	55	28	
QM 114 CB	114.3	205	195	138	128	M 30	129	-	80	75	28	
QM 140 CB	139.7	250	230	166	154	M 36F	148	-	98	80	34	
QM 168 CB	168.3	280	265	194	178	M 42F	177	-	105	100	41	
QM 219 CB	219.1	330	310	245	225	M 42F	202	-	130	125	41	

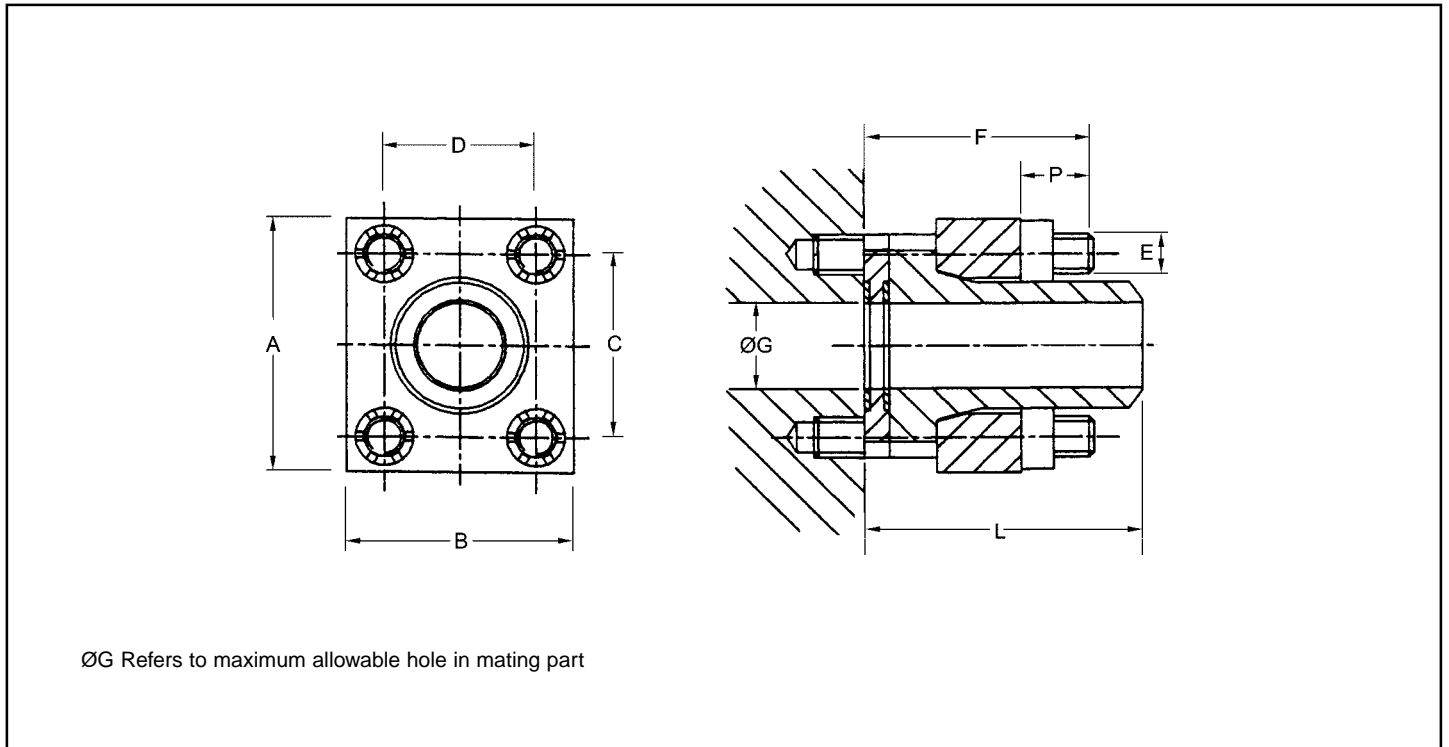
ordering code:

ST 52.3 1.4404

QM...CB QMx...CB



Plastic Seal Type. Maximum pressure 450 Bar



450 bar											W.N. BORE
Part Number	Nominal Tube Ø	A	B	C	D	E	F	G	L	P	
QM 48 D***-	48.3	115	105	74	62	M 16	101	30	105	29	to suit pipe wall
QM 60 D***-	60.3	140	127	92	74	M 20	119	45	145	38	
QM 76 D***-	76.1	170	152	110	90	M 24	138	51	165	43	
QM 90 D***-	88.9	200	170	130	102	M 30	164	62	185	54	
QM 114 D***-	114.3	205	195	138	128	M 30	184	80	205	54	
QM 140 D***-	139.7	250	230	166	154	M 36F	218	98	245	65	
QM 168 D***-	168.3	280	265	194	178	M 42F	257	105	295	76	
QM 219 D***-	219.1	330	310	245	225	M 42F	292	130	320	77	

ordering code:

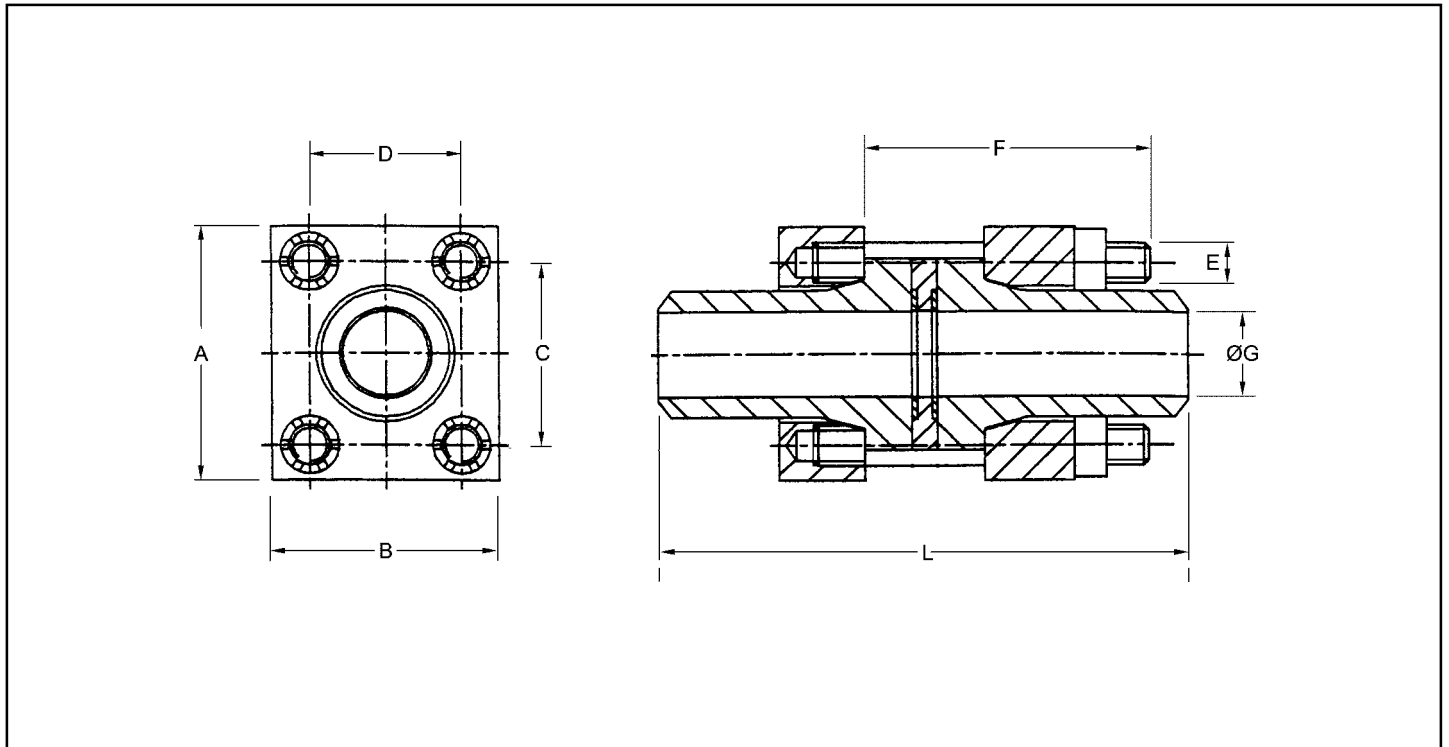
ST 52.3 1.4404

QM...D***- QMx...D***-

where *** = tube diameter
 - = wall thickness



Plastic Seal Type. Coupling assembly 450 Bar



450 bar										
Part Number	Nominal Tube Ø	A	B	C	D	E	F	G max.	L	W.N. BORE
QM 48 DC***--	48.3	115	105	74	62	M 16	119	30	195	to suit pipe wall
QM 60 DC***--	60.3	140	127	92	74	M 20	147	45	275	
QM 76 DC***--	76.1	170	152	110	90	M 24	166	51	315	
QM 90 DC***--	88.9	200	170	130	102	M 30	201	62	355	
QM 114 DC***--	114.3	205	195	138	128	M 30	221	80	395	
QM 140 DC***--	139.7	250	230	166	154	M 36F	272	98	475	
QM 168 DC***--	168.3	280	265	194	178	M 42F	322	105	575	
QM 219 DC***--	219.1	330	310	245	225	M 42F	367	130	625	

ordering code:

ST 52.3 1.4404

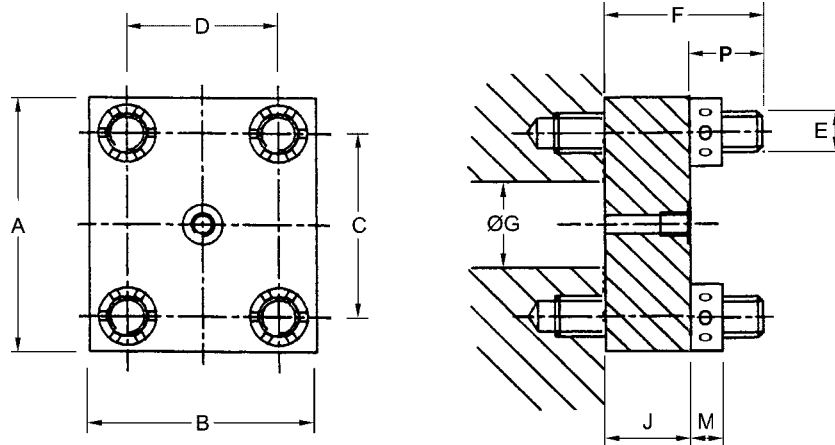
QM...DC***-- QMx...DC***--

where *** = tube diameter
 -- = wall thickness

Repeat if tube detail differs per side



Plastic Seal Type. Maximum pressure 450 bar.



ØG Refers to maximum allowable hole in mating part

450 bar												
Part Number	Type	A	B	C	D	E	F	G	J	M	P	W.N. BORE
QM 90 DB	88.9	200	170	130	102	M 30	109	62	55	24	54	to suit pipe wall
QM 114 DB	114.3	205	195	138	128	M 30	129	80	75	24	54	
QM 140 DB	139.7	250	230	166	154	M 36F	148	98	80	29	68	
QM 168 DB	168.3	280	265	194	178	M 42F	177	105	100	34	77	
QM 219 DB	219.1	330	310	245	225	M 42F	202	130	125	34	77	

ordering code:

ST 52.3 1.4404

QM...DB QMx...DB



Gear Pumps/Motors



Mini Power Packs



Screw Pumps



LSHT Motors/Geared Motors



Coolers



BD Clutches & Gearboxes



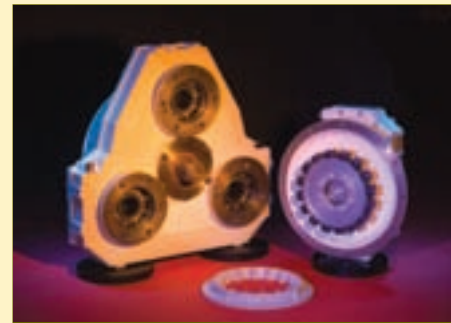
BDS Clutches



Planetary Gearboxes



Marine Gearboxes



Splitter Gearboxes



Hydraulic Adaptors



Torsional Couplings



Pressure Intensifiers



Bellhousings



Torsionally Flexible Couplings



Torsionally Rigid Couplings



FD20 Data Logging Device



quality products for mechanical & fluid power

www.jbj.co.uk/productlist.html



Torque Limiting Couplings



Dampers



Tanks/Accessories



ATEX Approved



Flanges



Engine Adaptor Kits



Flow Dividers