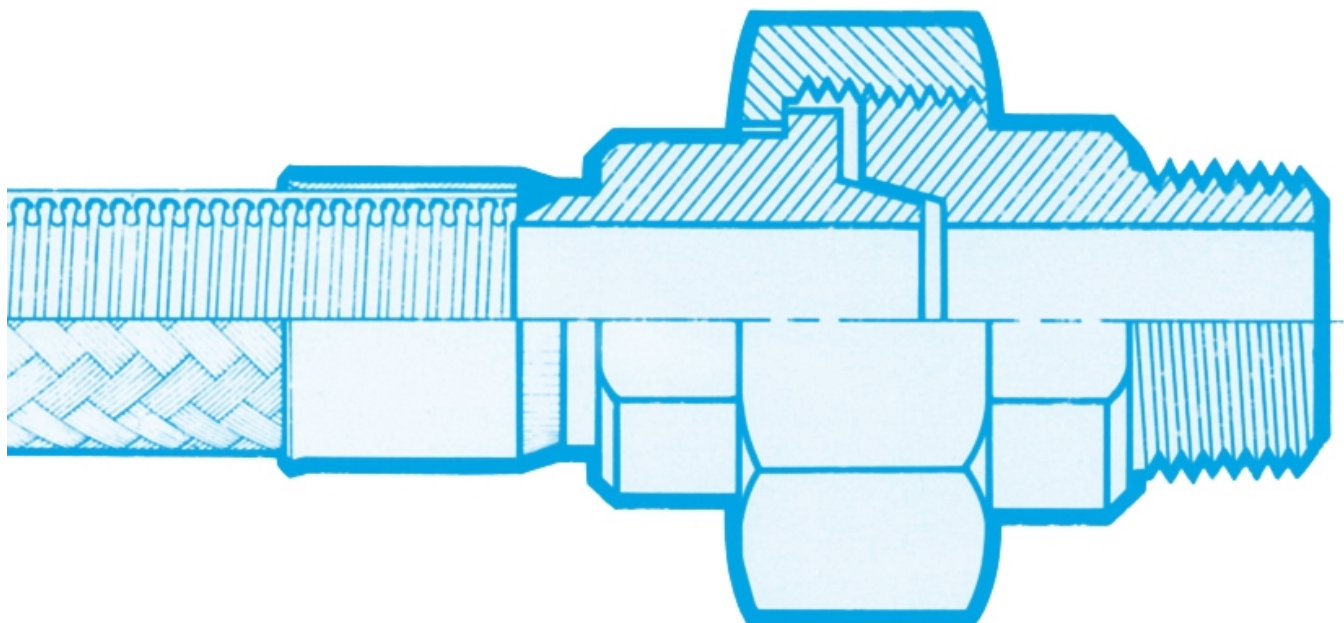


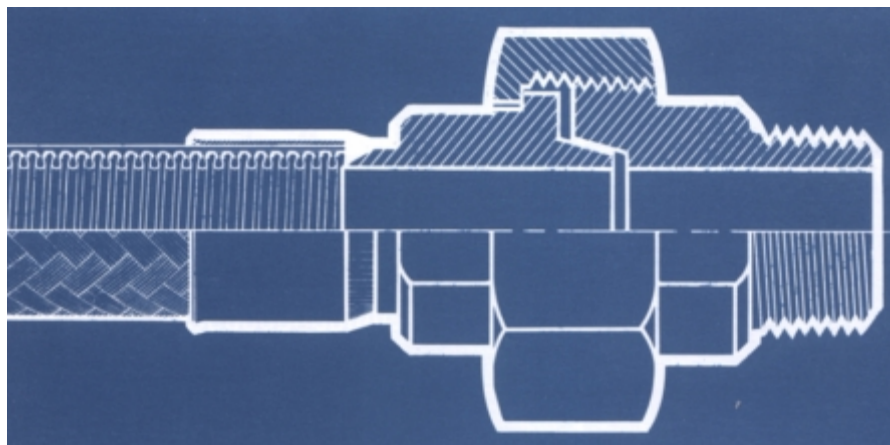
FITTINGS



FITTINGS

F1

FOR ALL SERIES SP



Type ...*/BA

Sterling silver brazed

On request Type .../BF hard-soldered

***MATERIALS AND WORKING TEMPERATURE**

AQ/BA: Carbon Steel 9S MnPb 23 UNI 4838 – **300 °C**

Fe 410 UNI 7070 or equivalents – **300 °C**

GM/BA: Malleable cast iron GM B40 UNI 3779 – **300 °C**

IN/BA: Stainless Steel AISI 304 – **300 °C**

Stainless Steel AISI 303 – **300 °C**

On request AISI 316 or other qualities - **300°C**

CI/BA: Internal parts in Stainless Steel AISI 304 - **300 °C**

On request AISI 316 or other qualities - **300°C**

External parts in carbon Steel Fe 410 UNI 7070 or equivalents.

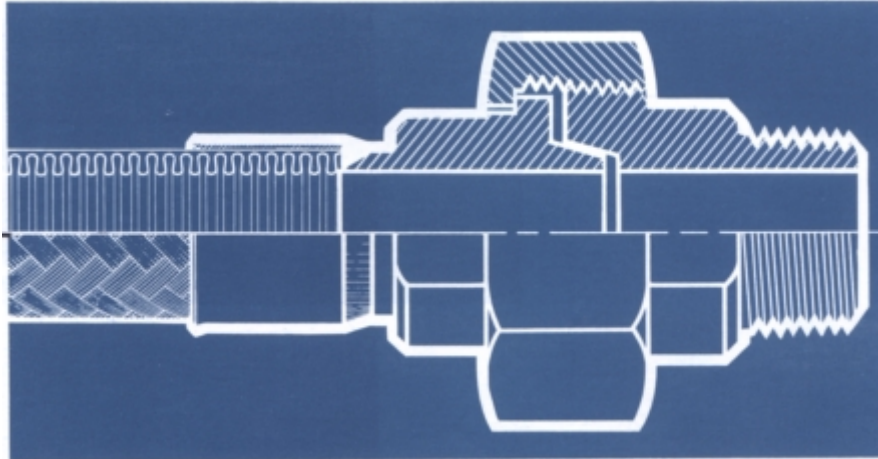
OT/BA: Brass OT 58 UNI 5705-85 – **200 °C**

BR/BA: Bronze BZ UNI 2527 - **200° C**

FITTINGS

F2

FOR ALL HOSES SERIES SP



Type...*/EL
TIG welding

On request Type.../BF hard- soldered

***MATERIALS AND WORKING TEMPERATURE**

IN/EL: Stainless Steel AISI 304 – More than **600 °C**
Stainless Steel AISI 303 – up to **600 °C**
On request AISI 316 or other qualities – up to **600 °C**

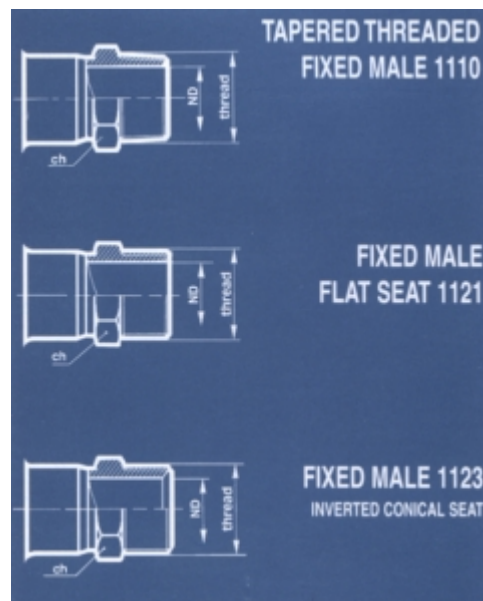
CI/EL: Internal parts in Stainless Steel AISI 304 – More than **600 °C**
On request AISI 316 or other qualities – up to **600 °C**
External parts in carbon Steel Fe 410 UNI 7070 or equivalents.

FITTINGS

F3

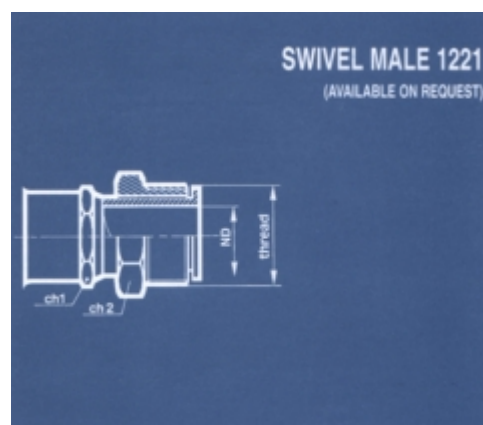
NPTA ASA B 2.1/1221- 1123 GAS UNI-ISO 228 – METRIC UNI M

Thread inches	ND mm	AQ/BA	GM/BA	IN/EL	IN/BA	OT / BA BR / BA
		ch mm	ch mm	ch mm	ch mm	ch mm
1/8"	6	12	14	12	12	12
1/4"	8	14	16	14	14	14
3/8"	10	17	20	17	17	17
1/2"	12	22	25	22	22	22
1/2"	16	22	25	22	22	22
3/4"	20	27	30	27	27	27
1"	25	36	40	36	36	36
1 1/4"	32	46	50	46	46	46
1 1/2"	40	50	55	50	50	50
2"	50	65	70	65	65	65
2 1/2"	65	75	85	75	75	75
3"	80	90	100	90	90	90
4"	100	115	130	115	115	115
5"	125	140	145	140	140	140
6"	150	165	170	165	165	165



1221 GAS UNI-ISO 228 – METRIC UNI M

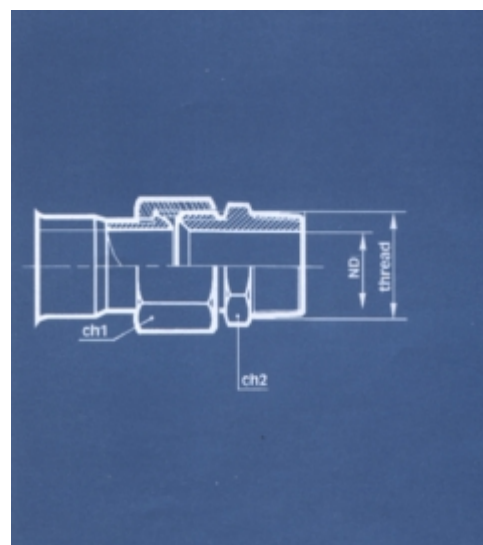
Thread inches	ND mm	AQ/BA		IN/EL		IN/BA		OT/BA	BR / BA
		ch1 mm	ch2 mm	ch1 mm	ch2 mm	ch1 mm	ch2 mm	ch1 mm	ch2 mm
1/8"	6	17	12	17	12	17	12	17	12
1/4"	8	20	14	20	14	20	14	20	14
3/8"	10	22	17	22	17	22	17	22	17
1/2"	12	25	22	25	22	25	22	25	22
1/2"	16	30	22	30	22	30	22	30	22
3/4"	20	36	27	36	27	36	27	36	27
1"	25	41	36	41	36	41	36	41	36
1 1/4"	32	50	46	50	46	50	46	50	46
1 1/2"	40	60	50	60	50	60	50	60	50
2"	50	70	65	70	65	70	65	70	65
2 1/2"	65	90	75	90	75	90	75	90	75
3"	80	100	90	100	90	100	90	100	90
4"	100	125	115	125	115	125	115	125	115
5"	125	160	140	160	140	160	140	160	140
6"	150	185	165	185	165	185	165	185	165



SWIVEL FEMALE PLUS NIPPLE

7321 GAS UNI-ISO 7/1

Thread inches	ND mm	AQ/BA		AQ/EL		IN/BA		IN/EL	
		ch1 mm	ch2 mm	ch1 mm	ch2 mm	ch1 mm	ch2 mm	ch1 mm	ch2 mm
1/8"	6	14	12	14	12	14	12	14	12
1/4"	8	19	14	19	14	19	14	19	14
3/8"	10	22	17	22	17	22	17	22	17
1/2"	12	27	22	27	22	27	22	27	22
1/2"	16	27	22	27	22	27	22	27	22
3/4"	20	32	27	32	27	32	27	32	27
1"	25	41	36	41	36	41	36	41	36
1 1/4"	32	50	46	50	46	50	46	50	46
1 1/2"	40	55	50	55	50	55	50	55	50
2"	50	70	65	70	65	70	65	70	65
2 1/2"	65	85	75	85	75	85	75	85	75
3"	80	100	90	100	90	100	90	100	90
4"	100	125	115	125	115	125	115	125	115



FITTINGS

F4

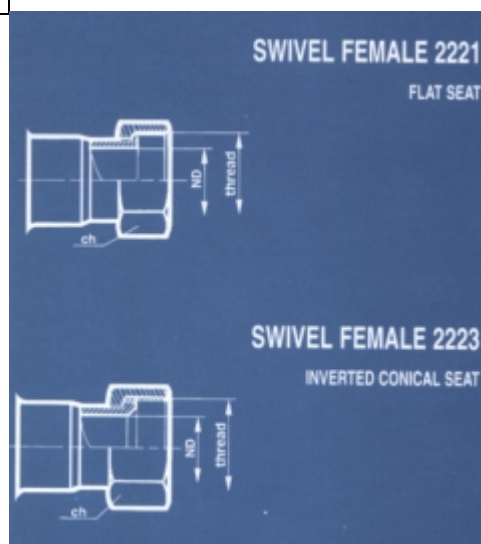
2110 NPT ASA B2.1 / 2121 (A) GAS UNI 338 BSP-METRIC UNI M

Thread inches	ND mm	AQ / BA	IN / EL	IN / BA
		ch mm	ch mm	ch mm
1/8"	6	14	14	14
1/4"	8	19	19	19
3/8"	10	22	22	22
1/2"	12	27	27	27
1/2"	16	27	27	27
3/4"	20	32	32	32
1"	25	41	41	41
1 1/4"	32	50	50	50
1 1/2"	40	55	55	55
2"	50	70	70	70
2 1/2"	65	85	85	85
3"	80	100	100	100
4"	100	125	125	125
5"	-	-	-	-
6"	-	-	-	-



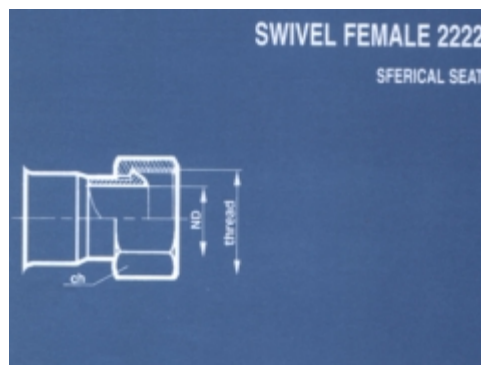
2221-2223 GAS UNI 338 BSPT –METRIC UNI M

Thread inches	ND mm	AQ / BA	GM / BA	IN / EL	IN / BA	OT/BA BR/BA
		ch mm	ch mm	ch mm	ch mm	ch mm
1/8"	6	14	14	14	14	14
1/4"	8	19	18	19	19	19
3/8"	10	22	22	22	22	22
1/2"	12	27	26	27	27	27
1/2"	16	27	26	27	27	27
3/4"	20	32	31	32	32	32
1"	25	41	38	41	41	41
1 1/4"	32	50	47	50	50	50
1 1/2"	40	55	54	55	55	55
2"	50	70	66	70	70	70
2 1/2"	65	85	85	85	85	85
3"	80	100	96	100	100	100
4"	100	125	123	125	125	125
5"	-	-	-	-	-	-
6"	-	-	-	-	-	-



2222 GAS UNI 338 BSP –METRIC UNI M

Thread inches	ND mm	AQ / BA	GM / BA	IN / EL	IN / BA	OT/BA BR/BA
		ch mm	ch mm	ch mm	ch mm	ch mm
1/8"	6	14	14	14	14	14
1/4"	8	19	18	19	19	19
3/8"	10	22	22	22	22	22
1/2"	12	27	26	27	27	27
1/2"	16	27	26	27	27	27
3/4"	20	32	31	32	32	32
1"	25	41	38	41	41	41
1 1/4"	32	50	47	50	50	50
1 1/2"	40	55	54	55	55	55
2"	50	70	66	70	70	70
2 1/2"	65	85	85	85	85	85
3"	80	100	96	100	100	100
4"	100	125	123	125	125	125
5"	-	-	-	-	-	-
6"	-	-	-	-	-	-



FITTINGS

F5

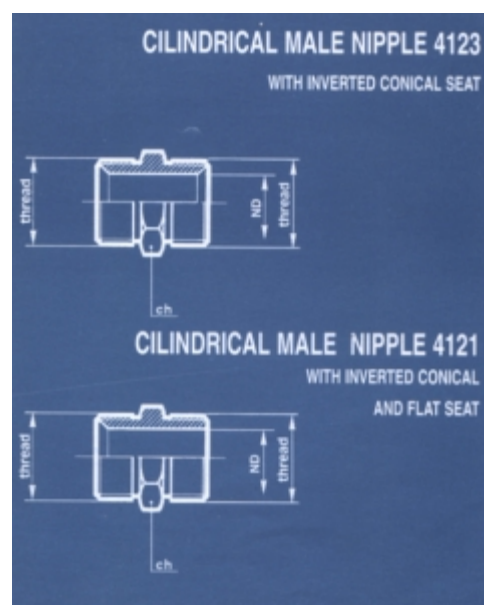
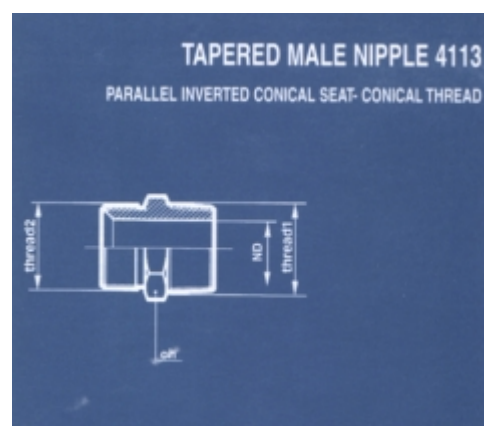
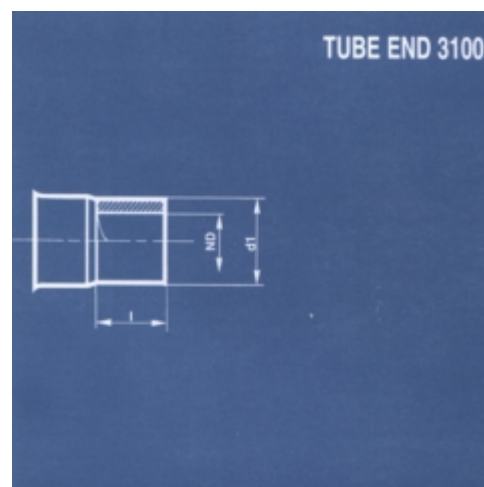
AQ / BA	AQ / EL	IN / EL	IN / BA	UNI 4991
ND mm	d1 mm	I min mm	I max mm	
6	10,2	25	60	
8	13,5	25	60	
10	17,2	25	70	
15	21,3	25	70	
20	26,9	30	70	
25	33,7	30	70	
32	42,4	30	75	
40	48,3	30	75	
50	60,3	40	90	
65	76,1	40	95	
80	88,9	40	100	
100	114,3	50	105	
125	139,7	50	120	
150	168,3	70	130	

4113 GAS UNI 338 BSP / GAS UNI 339 BSPT –NPT ASA B 2.1

Thread inches	ND mm	AQ ch mm	IN ch mm	
1/8"	6	14	14	
1/4"	8	19	19	
3/8"	10	22	22	
1/2"	12	27	27	
1/2"	16	27	27	
3/4"	20	36	36	
1"	25	41	41	
1 1/4"	32	50	50	
1 1/2"	40	55	55	
2"	50	70	70	
2 1/2"	65	85	85	
3"	80	95	95	
4"	100	120	120	
5"	125	-	-	
6"	150	-	-	-

4123 – 4121 GAS UNI 338 BSP

Thread inches	ND mm	AQ ch mm	IN ch mm	
1/8"	6	14	14	
1/4"	8	19	19	
3/8"	10	22	22	
1/2"	12	27	27	
1/2"	16	27	27	
3/4"	20	36	36	
1"	25	41	41	
1 1/4"	32	50	50	
1 1/2"	40	55	55	
2"	50	70	70	
2 1/2"	65	85	85	
3"	80	95	95	
4"	100	120	120	
5"	125		-	
6"	150		-	

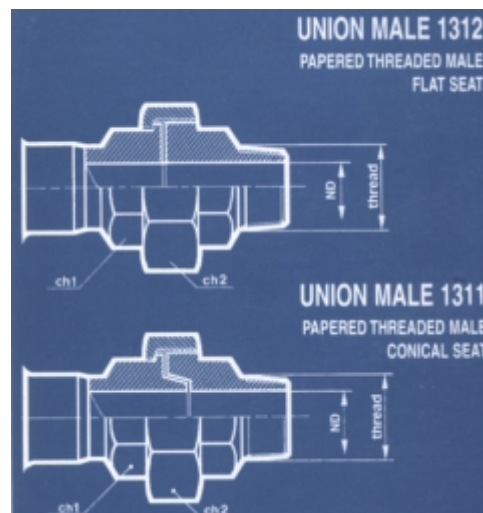


FITTINGS

F6

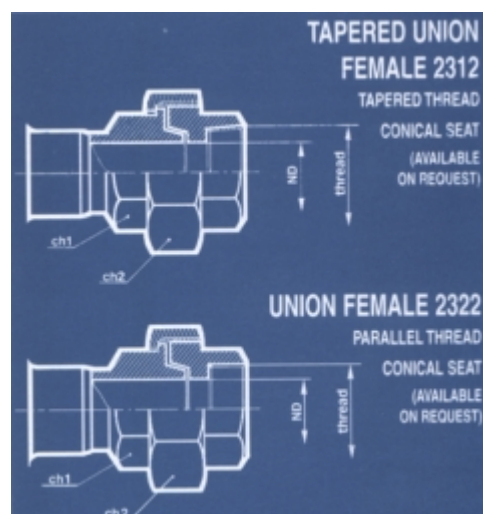
1311-1312 GAS UNI 339 BSPT-NPT ASA B 2,1

Thread inches	ND mm	AQ/BA		AQ/EL		GM/BA		IN / EL		IN / BA	
		ch1 mm	ch2 mm	ch1 mm	ch2 mm	ch1 mm	ch2 mm	ch1 mm	ch2 mm	ch1 mm	ch2 mm
1/8"	6	14	26	14	26	14	26	14	26	14	26
1/4"	8	14	27	17	27	18	27	17	27	17	27
3/8"	10	17	32	22	36	21	31	22	36	22	36
1/2"	12	24	41	26	47	25	38	26	47	26	47
1/2"	16	24	41	27	47	25	38	27	47	27	47
3/4"	20	30	50	32	50	31	47	32	50	32	50
1"	25	36	55	40	55	38	54	40	55	40	55
1 1/4"	32	46	70	50	65	47	67	50	65	50	65
1 1/2"	40	52	75	60	70	53	73	60	70	60	70
2"	50	60	85	70	90	66	88	70	90	70	90
2 1/2"	65	84	110	85	105	84	108	85	105	85	105
3"	80	95	125	98	122	96	122	98	122	98	122
4"	100	118	150	125	165	122	162	125	165	125	165
5"	125	-	-	-	-	-	-	-	-	-	-
6"	150	-	-	-	-	-	-	-	-	-	-



2312 NPT ASA B 2.1 – 2322 GAS UNI 338 BSP

Thread inches	ND mm	AQ/BA		AQ/EL		GM/BA		IN / EL		IN / BA	
		ch1 mm	ch2 mm	ch1 mm	ch2 mm	ch1 mm	ch2 mm	ch1 mm	ch2 mm	ch1 mm	ch2 mm
1/8"	6	14	26	14	26	14	26	14	26	14	26
1/4"	8	14	27	14	27	18	28	14	27	14	27
3/8"	10	17	32	22	36	22	32	22	36	22	36
1/2"	12	24	41	24	40	26	39	24	40	24	40
1/2"	16	24	41	24	40	26	39	24	40	24	40
3/4"	20	30	50	32	48	31	48	32	48	32	48
1"	25	36	55	36	55	38	54	36	55	36	55
1 1/4"	32	46	70	46	68	48	67	46	68	46	68
1 1/2"	40	52	75	52	72	54	73	52	72	52	72
2"	50	60	87	65	90	66	90	65	90	65	90
2 1/2"	65	84	110	78	105	84	118	78	105	78	105
3"	80	95	125	96	122	97	123	96	122	96	122
4"	100	118	150	125	165	123	164	125	165	125	165
5"	-	-	-	-	-	-	-	-	-	-	-
6"	-	-	-	-	-	-	-	-	-	-	-



FITTING FOR DOUBLE CONDUIT

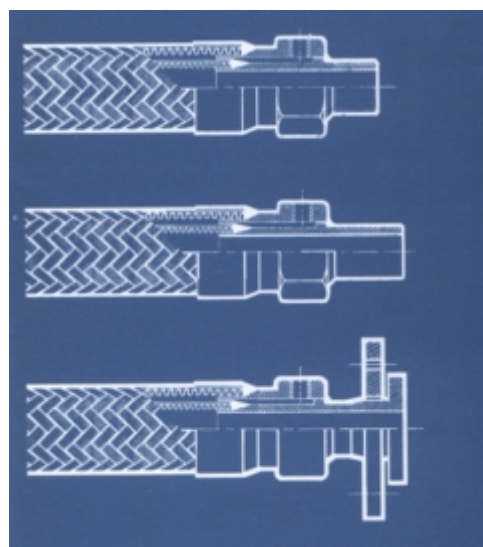
Any flange or end fitting can be supplied combined with the »D« attachment.

Denomination: D/Code number or flange or end fitting selected.

The type in picture, for example, have the following denomination:

D/1122 – D/3100 – D/5201

AVAILABLE FROM 3/8" UP TO 6"



FITTINGS

F7

ND mm	AQ/BA	AQ/EL		IN / EL	IN / BA	UNI 2280 - PN6
	d1 mm	d2 mm	s mm	N°Holes mm	Ø Holes mm	
10	50	75	12	4	11	
12	50	75	12	4	11	
15	55	80	12	4	11	
20	65	90	14	4	11	
25	75	100	14	4	11	
32	90	120	14	4	14	
40	100	130	14	4	14	
50	110	140	14	4	14	
65	130	160	14	4	14	
80	150	190	16	4	18	
100	170	210	16	4 ⁺	18	
125	200	240	18	8	18	
150	225	265	18	8	18	

* For oil conveying 8 holes

ND mm	AQ/BA	AQ/EL		IN / EL	IN / BA	UNI 2281 - PN10
	d1 mm	d2 mm	s mm	N°Holes mm	Ø Holes mm	
10	60	90	14	4	14	
12	60	90	14	4	14	
15	65	95	14	4	14	
20	75	105	16	4	14	
25	85	115	16	4	14	
32	100	140	16	4	18	
40	110	150	16	4	18	
50	125	165	18	4	18	
65	145	185	18	4	18	
80	160	200	20	4	18	
100	180	220	20	8	18	
125	210	250	22	8	18	
150	240	285	22	8	22	

FIXED FLANGE 5101

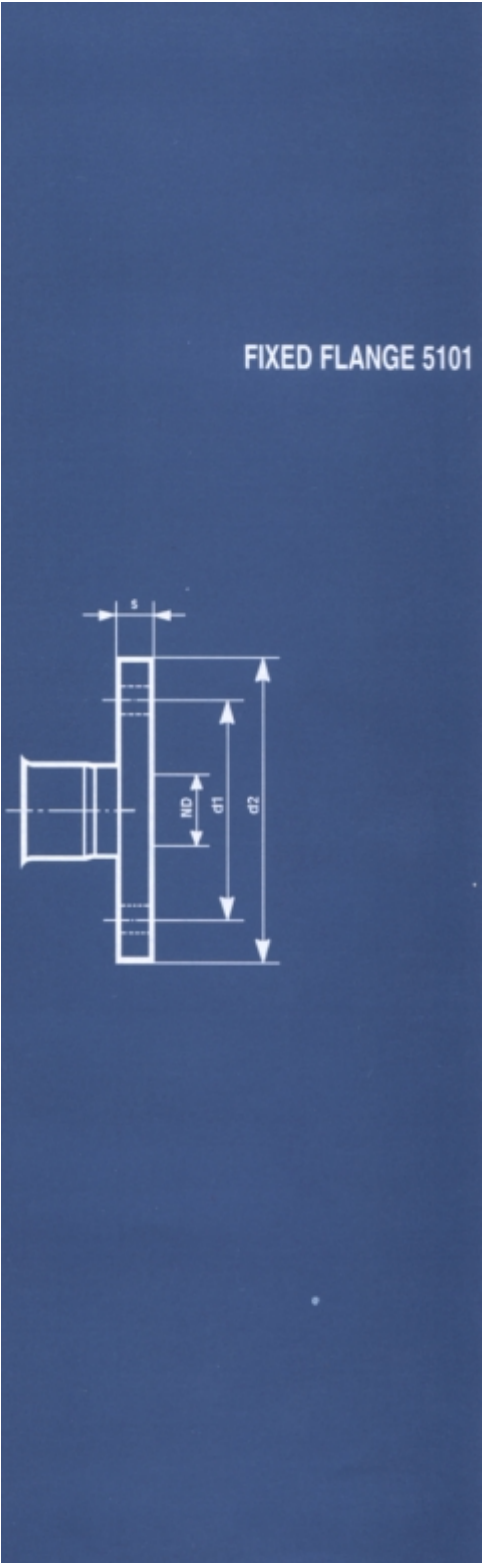


FITTINGS

F7

ND mm	AQ/BA	AQ/EL		IN / EL		IN / BA	UNI 2282 - PN16
	d1 mm	d2 mm	s mm	N°Holes mm	Ø Holes mm		
10	60	90	14	4	14		
12	60	90	14	4	14		
15	65	95	14	4	14		
20	75	105	16	4	14		
25	85	115	16	4	14		
32	100	140	16	4	18		
40	110	150	16	4	18		
50	125	165	18	4	18		
65	145	185	18	4	18		
80	160	200	20	8	18		
100	180	220	20	8	18		
125	210	250	22	8	18		
150	240	285	22	8	22		

ND mm	AQ/BA	AQ/EL		IN / EL		IN / BA	UNI 2283 - PN25
	d1 mm	d2 mm	s mm	N°Holes mm	Ø Holes mm		
10	60	90	16	4	14		
12	60	90	16	4	14		
15	65	95	16	4	14		
20	75	105	18	4	14		
25	85	115	18	4	14		
32	100	140	18	4	18		
40	110	150	18	4	18		
50	125	165	20	4	18		
65	145	185	22	8	18		
80	160	200	24	8	18		
100	190	235	24	8	22		
125	220	270	26	8	25		
150	250	300	28	8	25		



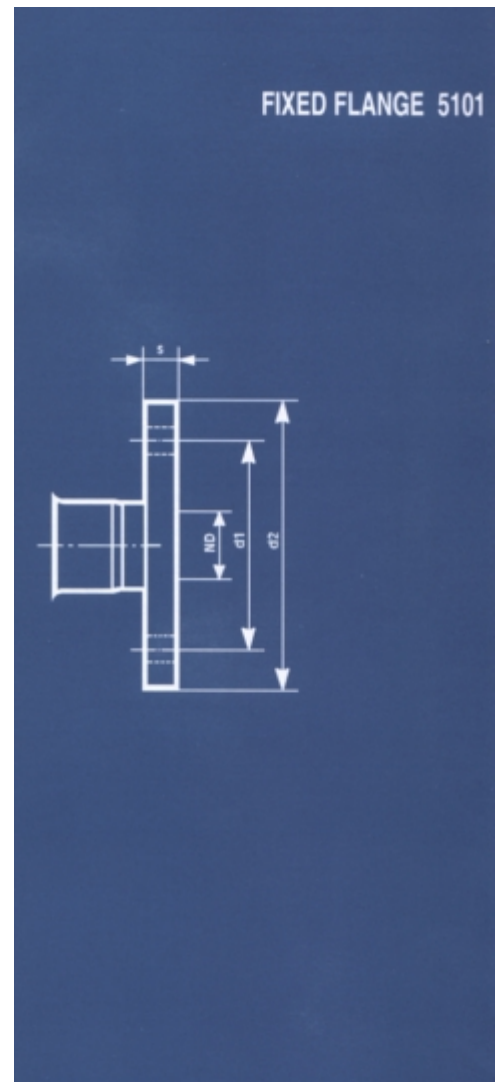
FITTINGS

F8

ND mm	AQ/BA	AQ/EL		IN / EL	IN / BA	UNI 2284 - PN40
	d1 mm	d2 mm	s mm	N°Holes mm	Ø Holes mm	
10	60	90	16	4	14	
12	60	90	16	4	14	
15	65	95	16	4	14	
20	75	105	18	4	14	
25	85	115	18	4	14	
32	100	140	18	4	18	
40	110	150	18	4	18	
50	125	165	20	4	18	
65	145	185	22	8	18	
80	160	200	24	8	18	
100	190	235	24	8	22	
125	220	270	26	8	25	
150	250	300	28	8	25	

ND mm	AQ/BA	AQ/EL		IN / EL	IN / BA	ASA 150- B16,5 RASED FACE
	d1 mm	d2 mm	s mm	N°Holes mm	Ø Holes mm	
15	60,3	89	11	4	16	
20	69,8	98,5	13	4	16	
25	79,4	108	14	4	16	
32	88,9	117,5	16	4	16	
40	98,4	127	18	4	16	
50	120,6	152,5	19	4	19	
65	139,7	178	22	4	19	
80	152,4	190,5	24	4	19	
100	190,5	228,5	24	8	19	
125	215,9	254	24	8	22	
150	241,3	279,5	25,5	8	22	

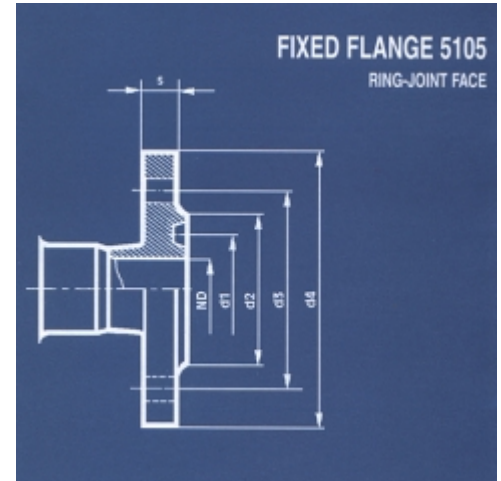
ND mm	AQ/BA	AQ/EL		IN / EL	IN / BA	ASA 300- B16,5 RASED FACE
	d1 mm	d2 mm	s mm	N°Holes mm	Ø Holes mm	
15	66,7	95	14	4	16	
20	82,5	117,5	16	4	19	
25	88,9	124	18	4	19	
32	98,4	133,5	19	4	19	
40	114,3	155,5	21	4	19	
50	127	165	22	8	22	
65	149,2	190,5	25,5	8	22	
80	168,3	209,5	28,5	8	22	
100	200	254	32	8	22	
125	235	279,5	35	8	22	
150	269,9	317,5	36,5	12	22	



FITTINGS

F8

ND mm	AQ/BA		AQ/EL		IN / EL		IN / BA		ASA 150 R.J.
	d1 mm	d2 mm	d3 mm	d4 mm	s mm	Nº Holes mm	Ø Holes mm		
10	-	-	-	-	-	-	-		
12	-	-	-	-	-	-	-		
15	-	-	-	-	-	-	-		
20	-	-	-	-	-	-	-		
25	47,62	63,5	79,4	108	14	8	16		
32	57,156	73	88,9	117,5	16	8	16		
40	65,1	82,5	98,4	127	18	4	16		
50	82,55	101,6	120,6	152,5	19	4	19		
65	101,6	120,7	139,7	178	22	4	19		
80	114,3	133,4	152,4	190,5	24	4	19		
100	149,22	171,5	190,5	228,5	²⁴ 8		19		
125	171,45	193,7	215,9	254	²⁴ 8		22		
150	193,68	219,1	241,3	279,5	^{25,5} 8		22		



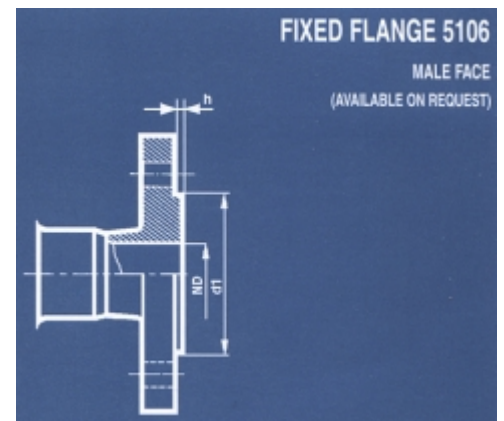
FITTINGS

F9

DIMENSION OF FLANGE COUPLING

5106 UNI 2225 /DIN 2513) – ASA 150 + 2500 Lb – B 16,5

ND mm	AQ/BA		AQ / EL		IN / EL		IN / BA	
	UNI d1mm	2225 h mm	Incameratura d1 mm	ASA larga h mm	B 16,5 Incameratura d1 mm	Stretta h mm		
15	39	4	34,9	6,35	18,25	6,35		
20	50	4	42,9	6,35	23,8	6,35		
25	57	4	50,8	6,35	30,2	6,35		
32	65	4	63,5	6,35	38,1	6,35		
40	75	4	73	6,35	44,4	6,35		
50	87	4	92,1	6,35	57,1	6,35		
65	109	4	104,8	6,35	68,3	6,35		
80	120	4	127	6,35	84,1	6,35		
100	149	4,5	157,2	6,35	109,5	6,35		
125	175	4,5	185,8	6,35	136,5	6,35		
150	203	4,5	215,9	6,35	161,9	6,35		



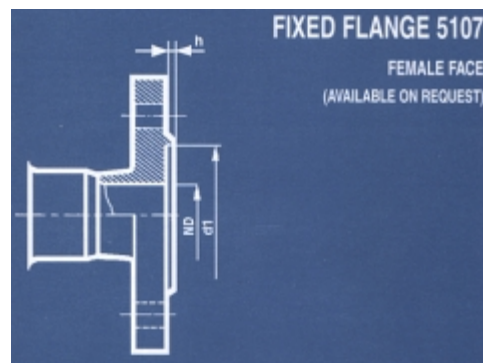
FITTINGS

F9

DIMENSION OF FLANGE COUPLING

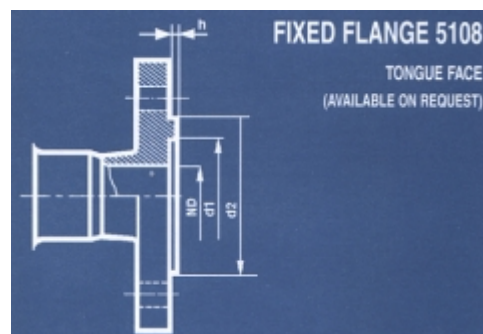
5107 UNI 2225 (DIN 2513) – ASA 150 + 2500 Lb – 16,6

	AQ/BA		AQ / EL		IN / EL		IN / BA	
ND mm	UNI d1mm	2225 h mm	Incameratura d1 mm	ASA larga h mm	B 16,5 Incameratura d1 mm		Stretta h mm	
15	40	4	36,5	4,8	19,8		4,8	
20	51	4	44,4	4,8	25,8		4,8	
25	58	4	52,4	4,8	31,7		4,8	
32	65	4	65,1	4,8	39,7		4,8	
40	76	4	74,6	4,8	46		4,8	
50	88	4	93,7	4,8	58,7		4,8	
65	110	4	106,41	4,8	69,8		4,8	
80	121	4	128,6	4,8	85,7		4,8	
100	150	4,5	158,8	4,8	111,1		4,8	
125	176	4,5	187,3	4,8	138,1		4,8	
150	204	4,5	217,5	4,8	163,5		4,8	



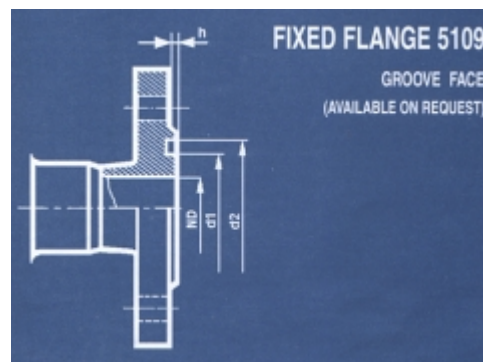
5108 UNI 2226 (DIN 2513) – ASA 150 + 2500

	AQ/BA		AQ / EL		IN / EL		IN / BA	
ND mm	UNI d1mm	2225 d2 mm	h mm	ASA d1mm	B 16,5 d2 mm		h mm	
15	29	39	4	25,4	334,9		6,35	
20	36	50	4	33,3	42,9		6,35	
25	43	57	4	38,1	50,8		6,35	
32	51	65	4	47,6	63,5		6,35	
40	61	75	4	54	73		6,35	
50	73	87	4	73	92,1		6,35	
65	95	109	4	85,7	104,8		6,35	
80	106	120	4,5	107,95	127		6,35	
100	129	149	4,5	131,8	157,2		6,35	
125	155	175	4,5	160,3	185,7		6,35	
150	183	203	4,5	190,5	215,9		6,35	



5109 UNI 2226 (DIN 2513) – ASA 150 +2500

	AQ/BA		AQ / EL		IN / EL		IN / BA	
ND mm	UNI d1mm	2225 d2 mm	h mm	ASA d1mm	B 16,5 d2 mm		h mm	
15	28	40	4	23,8	36,5		4,8	
20	35	51	4	31,7	44,4		4,8	
25	42	58	4	36,5	52,4		4,8	
32	50	66	4	46	65,1		4,8	
40	60	76	4	52,4	76,4		4,8	
50	72	88	4	71,4	93,7		4,8	
65	94	110	4	84,1	106,4		4,8	
80	105	121	4	106,4	128,6		4,8	
100	128	150	,5	130,2	158,8		4,8	
125	154	176	4	158,75	187,3		4,8	
150	182	204	4	188,9	217,5		4,8	



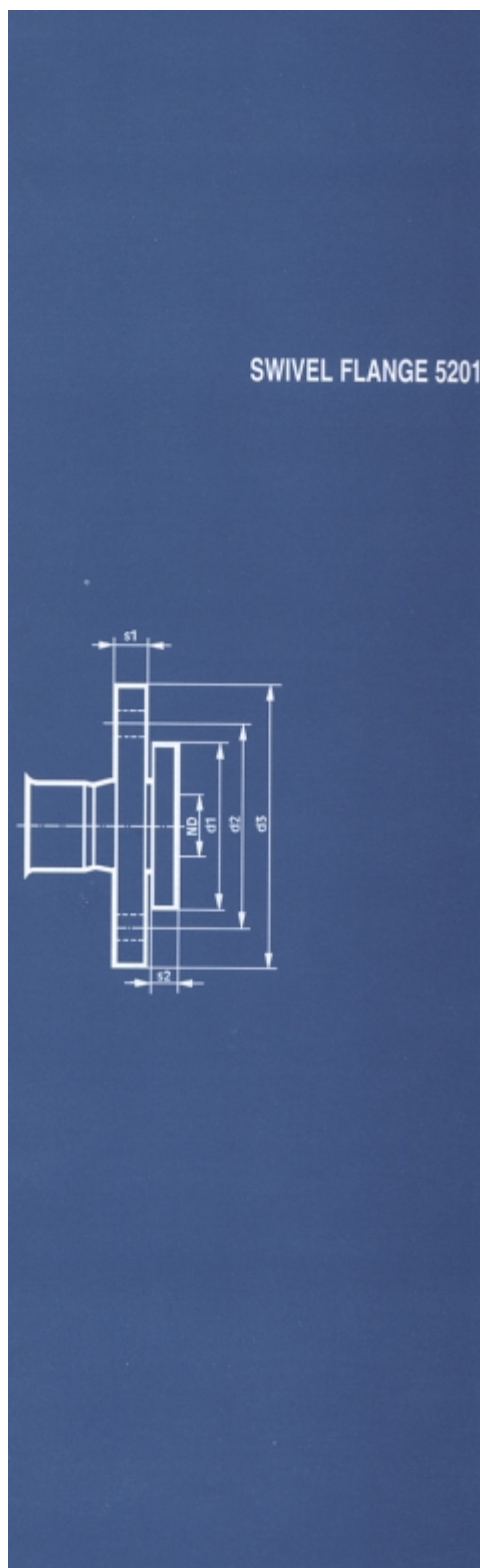
FITTINGS

F10

	AQ/ BA AQ/EL IN/EL IN / BA							UNI 2289 -PN 6
ND mm	s1 mm	s2 mm	d1 mm	d2 mm	d3 mm	N° Holes mm	Ø Holes mm	
10	10	10	33	50	75	4	11	
12	10	10	36	50	75	4	11	
15	10	10	39	55	80	4	11	
20	12	10	48	65	90	4	11	
25	12	10	58	75	100	4	11	
32	14	10	69	90	120	4	14	
40	14	10	78	100	130	4	14	
50	14	12	88	110	140	4	14	
65	14	12	108	130	160	4	14	
80	16	12	124	150	190	4	18	
100	16	14	144	170	210	4*	18	
125	18	14	174	200	240	8	18	
150	20	14	199	225	265	8	18	

- For oil conveying 8 holes

	AQ/ BA AQ/EL IN/EL IN / BA							UNI 2290 -PN 10
ND mm	s1 mm	s2 mm	d1 mm	d2 mm	d3 mm	N° Holes mm	Ø Holes mm	
10	12	12	41	60	90	4	14	
12	12	12	46	65	95	4	14	
15	12	12	46	65	95	4	14	
20	14	14	56	75	105	4	14	
25	14	14	65	85	115	4	14	
32	16	14	76	100	140	4	18	
40	16	14	84	110	150	4	18	
50	18	16	99	125	165	4	18	
65	20	16	118	145	185	4	18	
80	20	16	132	160	200	4	18	
100	22	18	156	180	220	8	18	
125	24	18	184	210	250	8	18	
150	24	20	211	240	285	8	22	



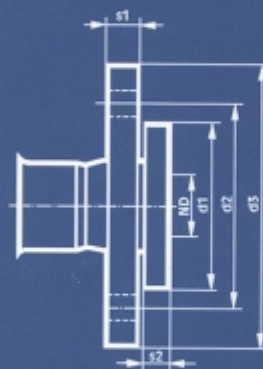
FITTINGS

F10

ND mm	AQ/ BA AQ/EL		IN/EL		IN / BA		UNI 2291 -PN 16
	s1 mm	s2 mm	d1 mm	d2 mm	d3 mm	N° Holes mm	Ø Holes mm
10	12	12	41	60	90	4	14
12	12	12	46	65	95	4	14
15	12	12	46	65	95	4	14
20	14	14	56	75	105	4	14
25	14	14	65	85	115	4	14
32	16	14	76	100	140	4	18
40	16	14	84	110	150	4	18
50	18	16	99	125	165	4	18
65	20	16	118	145	185	4	18
80	20	16	132	160	200	8	18
100	22	18	156	180	220	8	18
125	24	18	184	210	250	8	18
150	24	20	211	240	285	8	22

ND mm	AQ/ BA AQ/EL		IN/EL		IN / BA		UNI 2292 -PN 25
	s1 mm	s2 mm	d1 mm	d2 mm	d3 mm	N° Holes mm	Ø Holes mm
10	14	12	41	60	90	4	14
12	14	12	46	65	95	4	14
15	14	12	46	65	95	4	14
20	16	14	56	75	105	4	14
25	16	14	65	85	115	4	14
32	18	14	76	100	140	4	18
40	18	14	84	110	150	4	18
50	20	16	99	125	165	4	18
65	24	16	118	145	185	8	18
80	26	18	132	160	200	8	18
100	26	20	156	190	235	8	22
125	28	22	184	220	270	8	25
150	30	24	211	250	300	8	25

SWIVEL FLANGE 5201



FITTING S

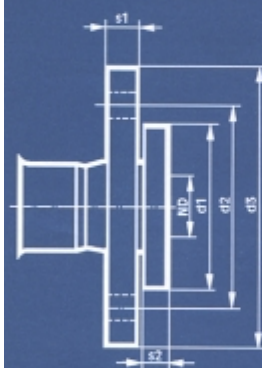
F11

ND mm	AQ/ BA AQ/EL IN/EL IN / BA						UNI 2293 -PN 40
	s1 mm	s2 mm	d1 mm	d2 mm	d3 mm	N° Holes mm	Ø Holes mm
10	14	12	41	60	90	4	14
12	14	12	46	65	95	4	14
15	14	12	46	65	95	4	14
20	16	14	56	75	105	4	14
25	16	14	65	85	115	4	14
32	18	14	76	100	140	4	18
40	18	14	84	110	150	4	18
50	20	16	99	125	165	4	18
65	24	16	118	145	185	8	18
80	26	18	132	160	200	8	18
100	26	20	156	190	235	8	22
125	28	22	184	220	270	8	25
150	30	24	211	250	300	8	25

ND mm	AQ/ BA AQ/EL IN/EL IN / BA						ASA 150 B 16,5
	s1 mm	s2 mm	d1 mm	d2 mm	d3 mm	N° Holes mm	Ø Holes mm
15	11	12	35	60,3	89	4	16
20	13	14	43	69,8	98,5	4	16
25	14	14	51	79,4	108	4	16
32	16	14	63,5	88,9	117,5	4	16
40	18	14	73	98,4	127	4	16
50	19	16	92	120,6	152,5	4	19
65	22	16	105	139,7	178	4	19
80	24	16	127	152,4	190,5	4	19
100	24	18	157	190,5	228,5	4	19
125	24	18	186	215,9	254	8	22
150	25,5	20	216	241,3	279,5	8	22

ND mm	AQ/ BA AQ/EL IN/EL IN / BA						ASA 300 B 16,5 (AVAILABLE ON REQUEST)
	s1 mm	s2 mm	d1 mm	d2 mm	d3 mm	N° Holes mm	Ø Holes mm
15	14	12	35	66,7	95	4	16
20	16	14	43	82,5	117,5	4	19
25	18	14	51	88,9	124	4	19
32	19	14	63,5	98,4	133,5	4	19
40	21	14	73	114,3	155,5	4	19
50	22	16	92	127	165	8	19
65	25,5	16	105	149,2	190,5	8	22
80	28,5	18	127	168,3	209,5	8	22
100	32	20	157	200	254	8	22
125	35	22	186	235	279,5	8	22
150	36,5	24	216	269,9	317,5	12	22

SWIVEL FLANGE 5201



FITTINGS

F12

STAINLESS STEEL FLANGES TYPE: IN/EL, IN/BA

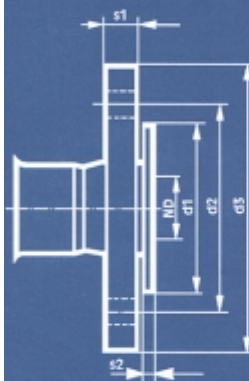
ND mm	IN/EL		IN / BA				N° Holes mm	Ø Holes mm	SIMILAR TO UNI 2289- PN 6
	s1 mm	s2 min mm	d1 mm	d2 mm	d3 mm				
12	10	3	35	55	80	4	11		
15	10	3	40	55	80	4	11		
20	12	3	50	65	90	4	11		
25	12	3	60	75	100	4	11		
32	14	3	70	90	120	4	14		
40	14	3	80	100	130	4	14		
50	14	3	90	110	140	4	14		
65	14	3	110	130	160	4	14		
80	16	4	128	150	190	4	18		
100	18	4	148	170	210	4*	18		
125	18	4	178	200	240	8	18		
150	20	4	202	225	265	8	18		

* For oil conveying 8 holes

ND mm	IN/EL		IN / BA				N° Holes mm	Ø Holes mm	SIMILAR TO UNI 2290 - PN 10
	s1 mm	s2 min mm	d1 mm	d2 mm	d3 mm				
12	14	3	40	65	95	4	14		
15	14	3	45	65	95	4	14		
20	14	3	58	75	105	4	14		
25	16	3	68	85	115	4	14		
32	16	3	78	100	140	4	18		
40	16	3	88	110	150	4	18		
50	16	3	102	125	165	4	18		
65	16	3	122	145	185	4	18		
80	18	4	138	160	200	4	18		
100	18	4	158	180	220	8	18		
125	18	4	188	210	250	8	18		
150	18	4	212	240	285	8	22		

ND mm	IN/EL		IN / BA				N° Holes mm	Ø Holes mm	SIMILAR TO UNI 2291 - PN 16
	s1 mm	s2 min mm	d1 mm	d2 mm	d3 mm				
12	14	3	40	65	95	4	14		
15	14	3	45	65	95	4	14		
20	14	3	58	75	105	4	14		
25	16	3	68	85	115	4	14		
32	16	3	78	100	140	4	18		
40	16	3	88	110	150	4	18		
50	16	3	102	125	165	4	18		
65	16	3	122	145	185	4	18		
80	18	4	138	160	200	4	18		
100	18	4	158	180	220	8	18		
125	18	4	188	210	250	8	18		
150	18	4	212	240	285	8	22		

SWIVEL FLANGE 5204



FITTINGS

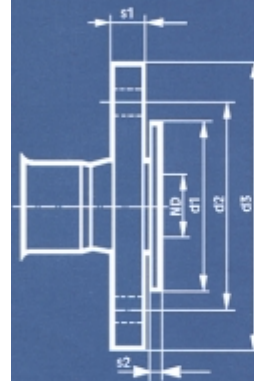
F12

**STAINLESS STEEL FLANGES TYPE:
IN/EL, IN/BA**

ND mm	IN/EL IN / BA							SIMILAR TO UNI 2292 – PN 25
	s1 mm	s2 min mm	d1 mm	d2 mm	d3 mm	N° Holes mm	Ø Holes mm	
12	16	4	40	65	95	4	14	
15	16	4	45	65	95	4	14	
20	16	4	58	75	105	4	14	
25	18	4	68	85	115	4	14	
32	18	4	78	100	140	4	18	
40	18	4	88	110	150	4	18	
50	20	4	102	125	165	4	18	
65	20	4	122	145	185	8	18	
80	22	4	138	160	200	8	18	
100	22	4	162	190	235	8	22	
125	24	4	188	220	270	8	25	
150	24	4	218	250	300	8	25	

ND mm	IN/EL IN / BA							HOLES TO ASA 150
	s1 mm	s2 min mm	d1 mm	d2 mm	d3 mm	N° Holes mm	Ø Holes mm	
15	10	3	35	60,3	89	4	16	
20	12	3	43	69,8	98,5	4	16	
25	13	3	51	79,4	108	4	16	
32	15	3	63,5	88,9	117,5	4	16	
40	16	3	73	98,4	127	4	16	
50	18	3	92	120,6	152,5	4	19	
65	21	3	105	139,7	178	4	19	
80	23	4	127	152,4	190,5	4	19	
100	23	4	157	190,5	228,5	4	19	
125	23	4	186	215,9	254	4	22	
150	24	4	216	241,3	279,5	4	22	

SWIVEL FLANGE 5204



FITTINGS

F13

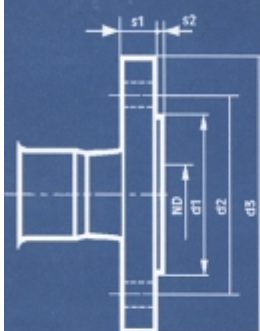
CARBON STEEL FLANGES WITH STAINLESS STEEL SLEEVE TYPE: CI/BA, CI/EL

ND mm	CI/BA		CI / EL					HOLES TO UNI PN 6
	s1 mm	s2 min mm	d1 mm	d2 mm	d3 mm	N° Holes mm	Ø Holes mm	
12	10	3	35	55	80	4	11	
15	10	3	40	55	80	4	11	
20	12	3	50	65	90	4	11	
25	12	3	60	75	100	4	11	
32	14	3	70	90	120	4	14	
40	14	3	80	100	130	4	14	
50	14	3	90	110	140	4	14	
65	14	3	110	130	160	4	14	
80	16	4	128	150	190	4	18	
100	18	4	148	170	210	4*	18	
125	18	4	178	200	240	8	18	
150	20	4	202	225	265	8	18	

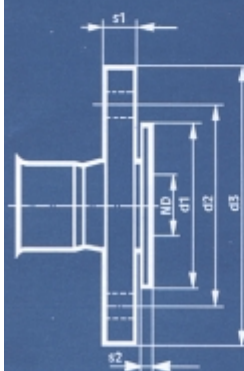
ND mm	CI/BA		CI / EL					HOLES TO UNI PN 10
	s1 mm	s2 min mm	d1 mm	d2 mm	d3 mm	N° Holes mm	Ø Holes mm	
12	14	3	40	65	95	4	14	
15	14	3	45	65	95	4	14	
20	14	3	58	75	105	4	14	
25	16	3	68	85	115	4	14	
32	16	3	78	100	140	4	18	
40	16	3	88	110	150	4	18	
50	16	3	102	125	165	4	18	
65	16	3	122	145	185	4	18	
80	18	4	138	160	200	4	18	
100	18	4	158	180	220	8	18	
125	18	4	188	210	250	8	18	
150	18	4	212	240	285	8	22	

ND mm	CI/BA		CI / EL					HOLES TO UNI PN 16
	s1 mm	s2 min mm	d1 mm	d2 mm	d3 mm	N° Holes mm	Ø Holes mm	
12	14	3	40	65	95	4	14	
15	14	3	45	65	95	4	14	
20	14	3	58	75	105	4	14	
25	16	3	68	85	115	4	14	
32	16	3	78	100	140	4	18	
40	16	3	88	110	150	4	18	
50	16	3	102	125	165	4	18	
65	16	3	122	145	185	4	18	
80	18	4	138	160	200	4	18	
100	18	4	158	180	220	8	18	
125	18	4	188	210	250	8	18	
150	18	4	212	240	285	8	22	

FIXED FLANGE 5104



FIXED FLANGE 5204



FITTINGS

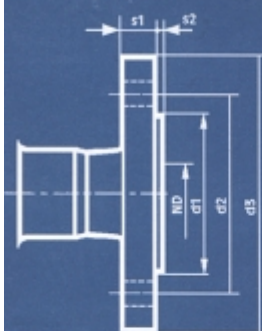
F13

**CARBON STEEL FLANGES WITH STAINLESS
STEEL SLEEVE TYPE: CI/BA, CI/EL**

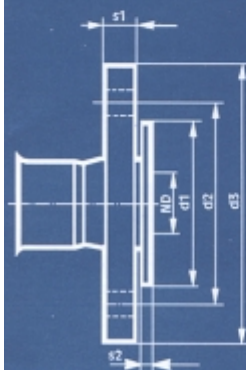
ND mm	CI/BA		CI / EL				HOLES TO UNI PN 25
	s1 mm	s2 min mm	d1 mm	d2 mm	d3 mm	N° Holes mm	Ø Holes mm
12	16	4	40	65	95	4	14
15	16	4	45	65	95	4	14
20	16	4	58	75	105	4	14
25	18	4	68	85	115	4	14
32	18	4	78	100	140	4	18
40	18	4	88	110	150	4	18
50	20	4	102	125	165	4	18
65	20	4	122	145	185	8	18
80	22	4	138	160	200	8	18
100	22	4	162	190	235	8	22
125	24	4	188	220	270	8	25
150	24	4	218	250	300	8	25

ND mm	CI/BA		CI / EL				HOLES TO ASA 150
	s1 mm	s2 min mm	d1 mm	d2 mm	d3 mm	N° Holes mm	Ø Holes mm
15	10	3	35	60,3	89	4	16
20	12	3	43	69,8	98,5	4	16
25	13	3	51	79,4	108	4	16
32	15	3	63,5	88,9	117,5	4	16
40	16	3	73	98,4	127	4	16
50	18	3	92	120,6	152,5	4	19
65	21	3	105	139,7	178	4	19
80	23	4	127	152,4	190,5	4	19
100	23	4	157	190,5	228,5	4	19
125	23	4	186	215,9	254	4	22
150	24	4	216	241,3	279,5	4	22

FIXED FLANGE 5104



FIXED FLANGE 5204



TECHNICAL DATA QUESTIONNAIRE



DESCRIPTON

HOSE type _____ overall length O.L. _____ mm*
 quantity _____ n. bend radius B.R. _____ mm
 I.D. Øi _____ mm material _____
 O.D. Øe _____ mm
 * ± 10 up to 500 ± 1% more than 500 mm

END FITTING left

_____ mm _____ right
 dimensions _____ mm _____
 type _____
 thread _____
 standards _____
 materials _____

USE

fluid _____ ambient _____
 concentration _____ concentration _____
 phase (liquid or gaz) _____ phase (liquid or gaz) _____

TEMPERATURE

minimum _____ °C _____ °C
 maximum _____ °C _____ °C
 operation _____ °C _____ °C

PRESSURE

minimum _____ Kg/cm2 _____ Kg/cm2
 OR maximum _____ Kg/cm2 _____ Kg/cm2
 DEPRESSURE operation _____ Kg/cm2 _____ Kg/cm2
 constant
 pulsating
 water hammer

MOVEMENTS

frequency _____ (per minute or per hour) amplitud (mm) _____

AMBIENT CONDITIONS

fallout of incandescent scums mechanical shocks operators near to the hose
 other _____

PLEASE ENCLOSE DINAMIC SKETCH OF HOSE AND ATTACHMENTS.

COMPANY _____ ADDRESS _____
 NAME AD DEPARTMENT _____
 TELEPHONE (AND EXTENSION) _____ FAX _____ e- mail _____
 DATE _____ SIGNATURE _____

