

The BF construction has the weld seal body-diaphragm as a wetted part, therefore diaphragm materials are mostly chosen the same as the flange material. BF is typically used in combination with (differential) pressure transmitters for applications such as level, flow and pressure measurement.



STANDARD EXECUTION

DIAPHRAGM	BODY	MOUNTING CONNECTION
AISI316(L)	AISI316(L)	top (axial)
FACING	FACING TYPE	
RF	B1	

FLANGED PROCESS CONNECTIONS

ASME B16.5

size	rating	dD
1"	cl. 150 - cl. 2500	32mm
1,5"	cl. 150 - cl. 2500	44mm
2"	cl. 150 - cl. 2500	57mm
3"	cl. 150 - cl. 2500	81mm
4"	cl. 150 - cl. 2500	81mm

EN 1092-1

size	rating	dD
DN25	PN10 - PN100	32mm
DN40	PN10 - PN100	44mm
DN50	PN10 - PN100	57mm
DN80	PN10 - PN100	81mm
DN100	PN10 - PN100	81mm

API ISO 10423

size	rating	facing	dD
1-13/16"	69 - 138 MPa	6BX - RJF	32mm
2-1/16"	13.8 - 34.5 MPa	6B - RJF	44mm
2-1/16"	69 - 138 MPa	6BX - RJF	44mm
2-9/16"	13.8 - 34.5 MPa	6B - RJF	57mm
2-9/16"	69 - 138 MPa	6Bx - RJF	57mm
3-1/8"	13.8 - 34.5 MPa	6B - RJF	72mm
3-1/8"	39 - 138 MPa	6Bx - RJF	72mm

JIS B2220

Size	rating	facing	dD
25 (1")	5K - 20K	RF	32mm
32 (1,25")	5K - 20K	RF	32mm
40 (1,5)	5K - 20K	RF	44mm
50 (2")	5K - 20K	RF	57mm
65 (2,5")	5K - 20K	RF	57mm
80 (3")	5K - 20K	RF	81mm
90 (3,5")	5K - 20K	RF	81mm
100 (4")	5K - 20K	RF	81mm

Note: JIS RF facing roughness is Ra 3.2-6.3 µm

WETTED PARTS, BODY MATERIALS, AND FACING OPTIONS

diaphragm material	body material
AISI 316(L)	AISI 316(L)
AISI 304	
AISI 321	
Hastelloy C-276	
Monel 400	Monel 400
Hastelloy C-276	Hastelloy C-276
Duplex 2205	Super Duplex / Duplex
Inconel 600	Inconel 600

facing (ASME B16.5)	
RF	Ra 3.2-6.3 µm
RJF	Ra <1.6 µm
LMF	Ra 3.2-6.3 µm
SMF	Ra <3.2 µm
FF	Ra 3.2-6.3 µm
LTF	Ra <3.2 µm
STF	Ra <3.2 µm
LGF	Ra <3.2 µm
SGF	Ra <3.2 µm
LFF	Ra 3.2-6.3 µm
SFF	Ra <3.2 µm

facing type (EN 1092-1)	
B1	Ra 3.2-12.5 µm
A	Ra 3.2-12.5 µm
B2	Ra 0.8-3.2 µm
C	Ra 0.8-3.2 µm
D	Ra 0.8-3.2 µm
E	Ra 3.2-12.5 µm
F	Ra 3.2-12.5 µm
G	Ra 0.8-3.2 µm
H	Ra 0.8-3.2 µm

COATING AND OTHER OPTIONS

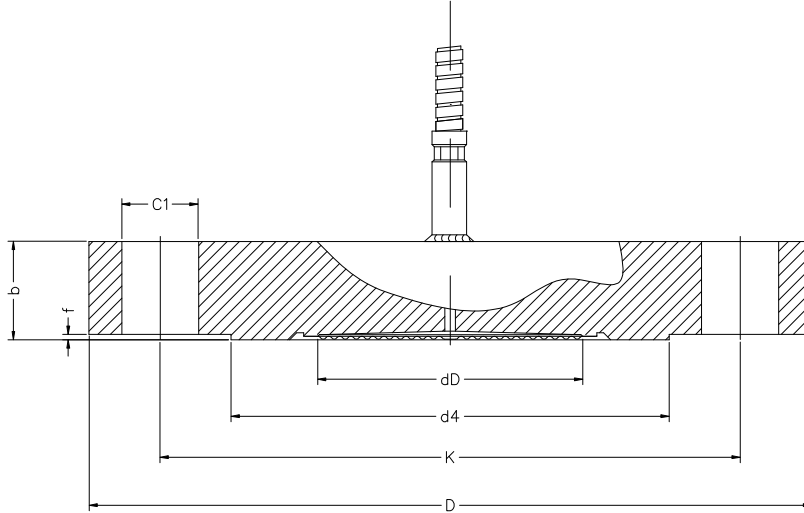
COATINGS

Gold 24 Kt chemical resistance and/or hydrogen permeation protection (facing and/or diaphragm)
 PTFE, ECTFE for anti stick purpose only
 Tantalum wetted parts

OTHER OPTIONS

set of handles welded on side of flange
 heavy duty capillary tube - full welded
 temperature reducer system TR
 temperature compensator TC
 capillary side mounted (radial)
 degreasing of wetted parts

DRAWING AND DIMENSIONS STANDARD EXECUTIONS



ASME B16.5 - RF FACING

size	rating	facing	dD	b	D	f	d4	K	C1 / pcs	C1 (inch)
1"	cl. 150	RF	32	15	110	2	51	80	16 / 4x	5/8"
1"	cl. 300	RF	32	18	125	2	51	89	19 / 4x	3/4"
1"	cl. 400-600	RF	32	25	125	7	51	89	19 / 4x	3/4"
1"	cl. 900-1500	RF	32	36	150	7	51	102	25 / 4x	1"
1"	cl. 2500	RF	32	42	160	7	51	108	25 / 4x	1"
1,5"	cl. 150	RF	44	18	125	2	73	99	16 / 4x	5/8"
1,5"	cl. 300	RF	44	21	155	2	73	114	22 / 4x	7/8"
1,5"	cl. 400-600	RF	44	29	155	7	73	114	22 / 4x	7/8"
1,5"	cl. 900-1500	RF	44	39	180	7	73	124	29 / 4x	1 1/8"
1,5"	cl. 2500	RF	44	52	205	7	73	146	32 / 4x	1 1/4"
2"	cl. 150	RF	57	20	150	2	92	121	19 / 4x	3/4"
2"	cl. 300	RF	57	23	165	2	92	127	19 / 8x	3/4"
2"	cl. 400-600	RF	57	32	165	7	92	127	19 / 8x	3/4"
2"	cl. 900-1500	RF	57	45	215	7	92	165	25 / 8x	1"
2"	cl. 2500	RF	57	58	235	7	92	171	29 / 8x	1 1/8"
3"	cl. 150	RF	81	24	190	2	127	152	19 / 4x	3/4"
3"	cl. 300	RF	81	29	210	2	127	168	22 / 8x	7/8"
3"	cl. 400-600	RF	81	39	210	7	127	168	22 / 8x	7/8"
3"	cl. 900	RF	81	45	240	7	127	191	25 / 8x	1"
3"	cl. 1500	RF	81	55	265	7	127	203	32 / 8x	1 1/4"
3"	cl. 2500	RF	81	74	305	7	127	229	35 / 8x	1 3/8"
4"	cl. 150	RF	81	24	230	2	157	191	19 / 8x	3/4"
4"	cl. 300	RF	81	32	255	2	157	200	22 / 8x	7/8"
4"	cl. 400	RF	81	42	255	7	157	200	25 / 8x	1"
4"	cl. 600	RF	81	45	275	7	157	216	25 / 8x	1"
4"	cl. 900	RF	81	52	290	7	157	235	32 / 8x	1 1/4"
4"	cl. 1500	RF	81	61	310	7	157	241	35 / 8x	1 3/8"
4"	cl. 2500	RF	81	83	355	7	157	273	42 / 8x	1 3/8"

All dimensions in mm

DATA SHEET

BF – FLUSH DIAPHRAGM, FLANGED TYPE

EN 1092-1 - B1

size	rating	type	dD	b	D	f	d4	K	C1 / pcs
DN25	PN10-40	B1	32	18	115	2	68	85	14 / 4x
DN25	PN63	B1	32	24	140	2	68	100	18 / 4x
DN25	PN100	B1	32	24	140	2	68	100	18 / 4x
DN40	PN10-40	B1	44	18	150	3	88	110	18 / 4x
DN40	PN63	B1	44	26	170	3	88	125	22 / 4x
DN40	PN100	B1	44	26	170	3	88	125	22 / 4x
DN50	PN10-40	B1	57	20	165	3	102	125	18 / 4x
DN50	PN63	B1	57	26	180	3	102	135	22 / 4x
DN50	PN100	B1	57	28	195	3	102	145	26 / 4x
DN80	PN10-40	B1	81	24	200	3	138	160	18 / 8x
DN80	PN63	B1	81	28	215	3	138	170	22 / 8x
DN80	PN100	B1	81	32	230	3	138	180	26 / 8x
DN100	PN10-16	B1	81	20	220	3	158	180	18 / 8x
DN100	PN25-40	B1	81	24	235	3	162	190	22 / 8x
DN100	PN63	B1	81	30	250	3	162	200	26 / 8x
DN100	PN100	B1	81	36	265	3	162	210	30 / 8x

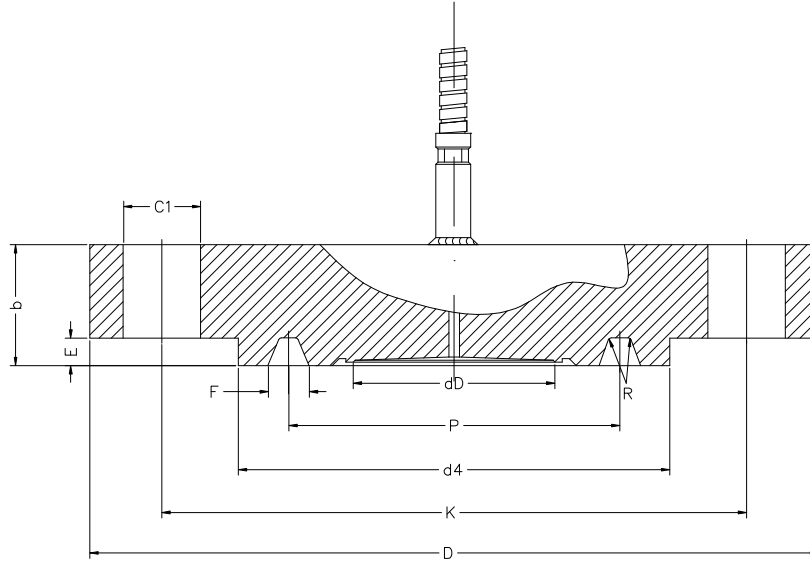
All dimensions in mm

JIS B2220 - RF FACING

size	rating	facing	dD	b	D	f	d4	K	C1 / pcs
25	5K	RF	32	10	95	1	59	75	12 / 4x
25	10K	RF	32	14	125	1	67	90	19 / 4x
25	16K	RF	32	14	125	1	67	90	19 / 4x
25	20K	RF	32	16	125	1	67	90	19 / 4x
32	5K	RF	32	12	115	2	70	90	15 / 4x
32	10K	RF	32	16	135	2	76	100	19 / 4x
32	16K	RF	32	16	135	2	76	100	19 / 4x
32	20K	RF	32	18	135	2	76	100	19 / 4x
40	5K	RF	44	12	120	2	75	95	15 / 4x
40	10K	RF	44	16	140	2	81	105	19 / 4x
40	16K	RF	44	16	140	2	81	105	19 / 4x
40	20K	RF	44	18	140	2	81	105	19 / 4x
50	5K	RF	57	14	130	2	85	105	15 / 4x
50	10K	RF	57	16	155	2	96	120	19 / 4x
50	16K	RF	57	16	155	2	96	120	19 / 8x
50	20K	RF	57	18	155	2	96	120	19 / 8x
65	5K	RF	57	14	155	2	110	130	15 / 4x
65	10K	RF	57	18	175	2	116	140	19 / 4x
65	16K	RF	57	18	175	2	116	140	19 / 8x
65	20K	RF	57	20	175	2	116	140	19 / 8x
80	5K	RF	81	14	180	2	121	145	19 / 4x
80	10K	RF	81	18	185	2	126	150	19 / 8x
80	16K	RF	81	20	200	2	132	160	23 / 8x
80	20K	RF	81	22	200	2	132	160	23 / 8x
90	5K	RF	81	14	190	2	131	155	19 / 4x
90	10K	RF	81	18	195	2	136	160	19 / 8x
90	16K	RF	81	20	210	2	145	170	23 / 8x
90	20K	RF	81	24	210	2	145	170	23 / 8x
100	5K	RF	81	16	200	2	141	163	19 / 8x
100	10K	RF	81	18	210	2	151	175	19 / 8x
100	16K	RF	81	22	225	2	160	185	23 / 8x
100	20K	RF	81	24	225	2	160	185	23 / 8x

All dimensions in mm

DRAWING AND DIMENSIONS RJF FACING AND API



ASME B16.5 - RJF FACING

size	rating	facing	dD	b	D	d4	K	C1 / pcs	C1 (inch)	P	F	E	Ring #
1"	cl. 150	RJF	32	19	110	64	79	16 / 4x	5/8"	48	9	6	15
1"	cl. 300	RJF	32	22	125	70	89	19 / 4x	3/4"	51	9	6	16
1"	cl. 400-600	RJF	32	24	125	70	89	19 / 4x	3/4"	51	9	6	16
1"	cl. 900-1500	RJF	32	35	150	72	102	25 / 4x	1"	51	9	6	16
1"	cl. 2500	RJF	32	41	160	83	108	25 / 4x	1"	60	9	6	18
1,5"	cl. 150	RJF	44	22	125	83	98	16 / 4x	5/8"	65	9	6	19
1,5"	cl. 300	RJF	44	26	155	91	114	22 / 4x	7/8"	68	9	6	20
1,5"	cl. 400-600	RJF	44	29	155	91	114	22 / 4x	7/8"	68	9	6	20
1,5"	cl. 900-1500	RJF	44	38	180	92	124	28 / 4x	1 1/8"	69	9	6	20
1,5"	cl. 2500	RJF	44	53	205	114	146	32 / 4x	1 1/4"	83	12	8	23
2"	cl. 150	RJF	57	24	150	102	121	19 / 4x	3/4"	83	9	6	22
2"	cl. 300	RJF	57	29	165	108	127	19 / 8x	3/4"	83	12	8	23
2"	cl. 400-600	RJF	57	33	165	108	127	19 / 8x	3/4"	83	12	8	23
2"	cl. 900-1500	RJF	57	46	215	124	165	25 / 8x	1"	95	12	8	24
2"	cl. 2500	RJF	57	59	235	133	171	28 / 8x	1 1/8"	102	12	8	26
3"	cl. 150	RJF	81	29	190	133	152	19 / 4x	3/4"	114	9	6	29
3"	cl. 300	RJF	81	35	210	146	168	22 / 8x	7/8"	124	12	8	31
3"	cl. 400-600	RJF	81	40	210	146	168	22 / 8x	7/8"	124	12	8	31
3"	cl. 900	RJF	81	46	240	156	191	25 / 8x	1"	124	12	8	31
3"	cl. 1500	RJF	81	56	265	168	203	32 / 8x	1 1/4"	137	12	8	35
3"	cl. 2500	RJF	81	77	305	168	229	35 / 8x	1 3/8"	127	14	10	32
4"	cl. 150	RJF	81	29	230	171	191	19 / 8x	3/4"	149	9	6	36
4"	cl. 300	RJF	81	38	255	175	200	22 / 8x	7/8"	149	12	8	37
4"	cl. 400	RJF	81	43	255	175	200	25 / 8x	1"	149	12	8	37
4"	cl. 600	RJF	81	46	275	175	216	25 / 8x	1"	149	12	8	37
4"	cl. 900	RJF	81	52	290	181	235	32 / 8x	1 1/4"	149	12	8	37
4"	cl. 1500	RJF	81	62	310	194	241	35 / 8x	1 3/8"	162	12	8	39
4"	cl. 2500	RJF	81	87	355	203	273	42 / 8x	1 3/8"	157	17	11	38

API 6A ISO 10423 - TYPE 6BX

size		rating	dD	b	D	d4	K	C1/pcs	P	F	E	ring
1-13/16"	6BX	69MPa	32mm	42	185	105	146	23 / 8x	66	11	6	BX-151
1-13/16"	6BX	103,5MPa	32mm	47	210	106	160	26 / 8x	66	11	6	BX-151
1-13/16"	6BX	138MPa	32mm	47	255	117	203	29 / 8x	66	11	6	BX-151
2-1/16"	6BX	69MPa	44mm	44	200	111	159	23 / 8x	74	12	6	BX-152
2-1/16"	6BX	103,5MPa	44mm	53	220	114	175	26 / 8x	74	12	6	BX-152
2-1/16"	6BX	138MPa	44mm	53	285	132	230	32 / 8x	74	12	6	BX-152
2-9/16"	6BX	69MPa	57mm	51	230	132	184	23 / 8x	89	14	7	BX-153
2-9/16"	6BX	103,5MPa	57mm	66	255	133	200	29 / 8x	89	14	7	BX-153
2-9/16"	6BX	138MPa	57mm	66	325	151	262	35 / 8x	89	14	7	BX-153
3-1/16"	6BX	69MPa	57mm	64	270	152	216	29 / 8x	104	15	8	BX-154
3-1/16"	6BX	103,5MPa	57mm	79	290	154	230	32 / 8x	104	15	8	BX-154
3-1/16"	6BX	138MPa	57mm	79	355	171	287	39 / 8x	104	15	8	BX-154

API 6A ISO 10423 - TYPE 6B

size		rating	dD	b	D	d4	K	C1/pcs	P	F	E	ring
2-1/16"	6B	13,8MPa	44mm	33	165	108	127	20 / 8x	83	12	8	R or RX-23
2-1/16"	6B	20,7MPa	44mm	46	215	124	165	26 / 8x	95	12	8	R or RX-24
2-1/16"	6B	34,5MPa	44mm	46	215	124	165	26 / 8x	95	12	8	R or RX-24
2-9/16"	6B	13,8MPa	57mm	36	190	127	149	23 / 8x	102	12	8	R or RX-26
2-9/16"	6B	20,7MPa	57mm	38	245	137	190	29 / 8x	108	12	8	R or RX-27
2-9/16"	6B	34,5MPa	57mm	38	245	137	190	29 / 8x	108	12	8	R or RX-27
3-1/8"	6B	13,8MPa	72mm	40	210	146	168	23 / 8x	124	12	8	R or RX-31
3-1/8"	6B	20,7MPa	72mm	46	240	156	191	26 / 8x	124	12	8	R or RX-31
3-1/8"	6B	34,5MPa	72mm	56	265	168	203	32 / 8x	137	12	8	R or RX-35

All dimensions in mm



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