

The BRF construction has a seal body that is made of a blind flange and is designed to obtain a diaphragm seal with full wetted parts in exotic materials. With Badotherm unique resistance weld technology, a stainless steel body (non-wetted) has its wetted parts (diaphragm and raised face area) covered by sheet material in the required exotic material. This is more economic than producing the full body in exotic material. BRF is typically used in combination with (differential) pressure transmitters for applications such as level, flow and (absolute) pressure measurement.


**STANDARD EXECUTION**

<b>WETTED PARTS</b> Hastelloy C-276	<b>BODY</b> AISI 316(L)	<b>MOUNTING CONNECTION</b> top (axial)	<b>GASKET SURFACE FINISH</b> factory standard
<b>FACING</b> RF	<b>FACING TYPE</b> B1		

**FLANGED PROCESS CONNECTIONS**
**ASME B16.5**

size	rating	dD
<b>1"</b>	cl. 150 - cl. 2500	23.0mm
<b>1.5"</b>	cl. 150 - cl. 600	44.0mm
<b>1.5"</b>	cl. 900 - cl. 2500	32.0mm
<b>2"</b>	cl. 150 - cl. 600	57.0mm
<b>2"</b>	cl. 900 - cl. 2500	44.0mm
<b>3"</b>	cl. 150 - cl. 2500	81.0mm
<b>4"</b>	cl. 150 - cl. 2500	89.0mm

**EN 1092-1**

size	rating	dD
<b>DN20</b>	PN10 – PN400	23.0mm
<b>DN25</b>	PN10 – PN400	32.0mm
<b>DN40</b>	PN10 – PN400	44.0mm
<b>DN50</b>	PN10 – PN400	57.0mm
<b>DN80</b>	PN10 – PN400	81.0mm
<b>DN100</b>	PN10 – PN400	89.0mm

**JIS B2220**

Size	rating	facing	dD
<b>25 (1")</b>	10K – 20K	RF	32.0mm
<b>32 (1.25")</b>	10K – 20K	RF	44.0mm
<b>40 (1.5")</b>	10K – 20K	RF	44.0mm
<b>50 (2")</b>	10K – 20K	RF	57.0mm
<b>80 (3")</b>	10K – 20K	RF	81.0mm
<b>90 (3.5")</b>	10K – 20K	RF	81.0mm
<b>100 (4")</b>	10K	RF	81.0mm
<b>100 (4")</b>	16K – 20K	RF	89.0mm

**WETTED PARTS, BODY MATERIALS, AND FACING OPTIONS**

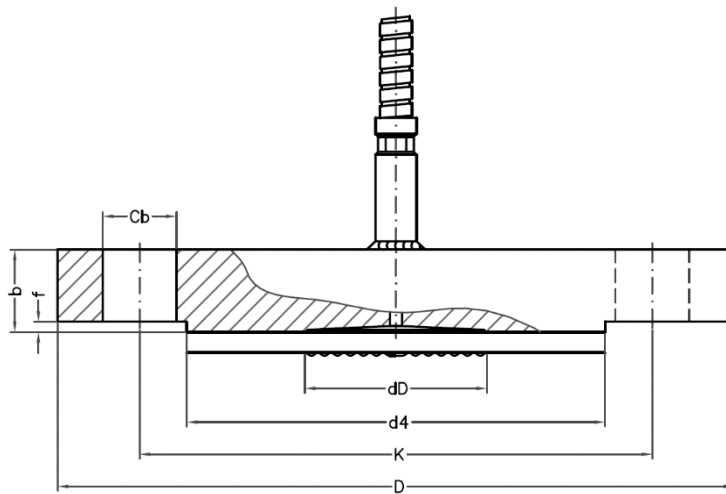
body material	diaphragm material
<b>AISI 316(L)</b>	Hastelloy C-276 254 SMO (6Mo) AISI 304L AISI 316 UG AISI 321 AISI 904(L) Duplex 2205 Super Duplex 2507 Alloy 20 Inconel 600 Inconel 625 Inconel 825 Monel 400 Nickel 201 Niobium Tantalum Titanium Gr. 1 Zirconium 702

facing (ASME B16.5)	facing type (EN 1092-1)
RF	B1
LMF	A
SMF	B2
FF	E

Note: soft gasket to be used with all facings

**OTHER OPTIONS**

- set of handles welded on side of flange
- heavy duty capillary tube
- TR - temperature reducer
- TC - temperature compensator
- capillary side mounted (radial)
- LGP – execution for low pressures
- degreasing wetted parts

**DRAWING AND DIMENSIONS STANDARD EXECUTIONS**

**ASME B16.5 - RF FACING**

size	rating	facing	dD	b	D	d4	f	K	Cb / pcs
1"	cl. 150	RF	23.5	14.7	110.0	50.8	2.0	79.4	15.9 / 4x
1"	cl. 300	RF	23.5	17.9	125.0	50.8	2.0	88.9	19.1 / 4x
1"	cl. 400-600	RF	23.5	24.5	125.0	50.8	7.0	88.9	19.1 / 4x
1"	cl. 900-1500	RF	23.5	35.6	150.0	50.8	7.0	101.6	25.4 / 4x
1"	cl. 2500	RF	23.5	42.0	160.0	50.8	7.0	108.0	25.4 / 4x
1.5"	cl. 150	RF	44.0	17.9	125.0	73.0	2.0	98.4	15.9 / 4x
1.5"	cl. 300	RF	44.0	21.1	155.0	73.0	2.0	114.3	22.3 / 4x
1.5"	cl. 400-600	RF	44.0	29.3	155.0	73.0	7.0	114.3	22.3 / 4x
1.5"	cl. 900-1500	RF	32.0	38.8	180.0	73.0	7.0	123.8	28.6 / 4x
1.5"	cl. 2500	RF	32.0	51.5	205.0	73.0	7.0	146.0	31.8 / 4x
2"	cl. 150	RF	57.0	19.5	150.0	92.1	2.0	120.7	19.1 / 4x
2"	cl. 300	RF	57.0	22.7	165.0	92.1	2.0	127.0	19.1 / 8x
2"	cl. 400-600	RF	57.0	32.4	165.0	92.1	7.0	127.0	19.1 / 8x
2"	cl. 900-1500	RF	44.0	45.1	215.0	92.1	7.0	165.1	25.4 / 8x
2"	cl. 2500	RF	44.0	57.9	235.0	92.1	7.0	171.4	28.6 / 8x
3"	cl. 150	RF	81.0	24.3	190.0	127.0	2.0	152.4	19.1 / 4x
3"	cl. 300	RF	81.0	29.0	210.0	127.0	2.0	168.3	22.3 / 8x
3"	cl. 400-600	RF	81.0	38.8	210.0	127.0	7.0	168.3	22.3 / 8x
3"	cl. 900	RF	81.0	45.1	240.0	127.0	7.0	190.5	25.4 / 8x
3"	cl. 1500	RF	81.0	54.7	265.0	127.0	7.0	203.2	31.8 / 8x
3"	cl. 2500	RF	81.0	73.7	305.0	127.0	7.0	228.6	34.9 / 8x
4"	cl. 150	RF	89.0	24.3	230.0	157.2	2.0	190.5	19.1 / 8x
4"	cl. 300	RF	89.0	32.2	255.0	157.2	2.0	200.0	22.3 / 8x
4"	cl. 400	RF	89.0	42.0	255.0	157.2	7.0	200.0	25.4 / 8x
4"	cl. 600	RF	89.0	45.1	275.0	157.2	7.0	215.9	25.4 / 8x
4"	cl. 900	RF	89.0	51.5	290.0	157.2	7.0	235.0	31.8 / 8x
4"	cl. 1500	RF	89.0	61.0	310.0	157.2	7.0	241.3	34.9 / 8x
4"	cl. 2500	RF	89.0	83.2	355.0	157.2	7.0	273.0	41.3 / 8x

All dimensions in mm

## EN 1092-1 - TYPE B1

size	rating	type	dD	b	D	f	d4	K	Cb / pcs
DN20	PN10-40	B1	23.0	18.0	105.0	2.0	58.0	75.0	14.0 / 4x
DN20	PN63-100	B1	23.0	22.0	130.0	2.0	58.0	90.0	18.0 / 4x
DN20	PN160	B1	23.0	na	na	na	na	na	na
DN20	PN250	B1	23.0	na	na	na	na	na	na
DN20	PN320	B1	23.0	na	na	na	na	na	na
DN20	PN400	B1	23.0	na	na	na	na	na	na
DN25	PN10-40	B1	32.0	18.0	115.0	2.0	68.0	85.0	14.0 / 4x
DN25	PN63-100	B1	32.0	24.0	140.0	2.0	68.0	100.0	18.0 / 4x
DN25	PN160	B1	32.0	24.0	140.0	2.0	68.0	100.0	18.0 / 4x
DN25	PN250	B1	32.0	28.0	150.0	2.0	68.0	105.0	22.0 / 4x
DN25	PN320	B1	32.0	34.0	160.0	2.0	68.0	115.0	22.0 / 4x
DN25	PN400	B1	32.0	38.0	180.0	2.0	68.0	130.0	26.0 / 4x
DN32	PN10-40	B1	32.0	18.0	140.0	2.0	78.0	100.0	18.0 / 4x
DN32	PN63-100	B1	32.0	24.0	155.0	2.0	78.0	110.0	22.0 / 4x
DN32	PN160	B1	32.0	na	na	na	na	na	na
DN32	PN250	B1	32.0	na	na	na	na	na	na
DN32	PN320	B1	32.0	na	na	na	na	na	na
DN32	PN400	B1	32.0	na	na	na	na	na	na
DN40	PN10-40	B1	44.0	18.0	150.0	3.0	88.0	110.0	18.0 / 4x
DN40	PN63-100	B1	44.0	26.0	170.0	3.0	88.0	125.0	22.0 / 4x
DN40	PN160	B1	44.0	28.0	170.0	3.0	88.0	125.0	22.0 / 4x
DN40	PN250	B1	44.0	34.0	185.0	3.0	88.0	135.0	26.0 / 4x
DN40	PN320	B1	44.0	38.0	195.0	3.0	88.0	145.0	26.0 / 4x
DN40	PN400	B1	44.0	48.0	220.0	3.0	88.0	165.0	30.0 / 4x
DN50	PN10-16	B1	57.0	18.0	165.0	3.0	102.0	125.0	18.0 / 4x
DN50	PN25-40	B1	57.0	20.0	165.0	3.0	102.0	125.0	18.0 / 4x
DN50	PN63	B1	57.0	26.0	180.0	3.0	102.0	135.0	22.0 / 4x
DN50	PN100	B1	57.0	28.0	195.0	3.0	102.0	145.0	26.0 / 4x
DN50	PN160	B1	57.0	30.0	195.0	3.0	102.0	145.0	26.0 / 4x
DN50	PN250	B1	57.0	38.0	200.0	3.0	102.0	150.0	26.0 / 8x
DN50	PN320	B1	57.0	42.0	210.0	3.0	102.0	160.0	26.0 / 8x
DN50	PN400	B1	57.0	52.0	235.0	3.0	102.0	180.0	30.0 / 8x
DN80	PN10-16	B1	81.0	20.0	200.0	3.0	138.0	160.0	18.0 / 8x
DN80	PN25-40	B1	81.0	24.0	200.0	3.0	138.0	160.0	18.0 / 8x
DN80	PN63	B1	81.0	28.0	215.0	3.0	138.0	170.0	22.0 / 8x
DN80	PN100	B1	81.0	32.0	230.0	3.0	138.0	180.0	26.0 / 8x
DN80	PN160	B1	81.0	36.0	230.0	3.0	138.0	180.0	26.0 / 8x
DN80	PN250	B1	81.0	46.0	255.0	3.0	138.0	200.0	30.0 / 8x
DN80	PN320	B1	81.0	55.0	275.0	3.0	138.0	220.0	30.0 / 8x
DN80	PN400	B1	81.0	68.0	305.0	3.0	138.0	240.0	33.0 / 8x
DN100	PN10-16	B1	89.0	20.0	220.0	3.0	158.0	180.0	18.0 / 8x
DN100	PN25-40	B1	89.0	24.0	235.0	3.0	162.0	190.0	22.0 / 8x
DN100	PN63	B1	89.0	30.0	250.0	3.0	162.0	200.0	26.0 / 8x
DN100	PN100	B1	89.0	36.0	265.0	3.0	162.0	210.0	30.0 / 8x
DN100	PN160	B1	89.0	40.0	265.0	3.0	162.0	210.0	30.0 / 8x
DN100	PN250	B1	89.0	54.0	300.0	3.0	162.0	235.0	33.0 / 8x
DN100	PN320	B1	89.0	65.0	335.0	3.0	162.0	265.0	36.0 / 8x
DN100	PN400	B1	89.0	80.0	370.0	3.0	162.0	295.0	39.0 / 8x

All dimensions in mm

## JIS B2220 - RF FACING

size	rating	facing	dD	b	D	d4	f	K	Cb / pcs
25	10K	RF	32.0	15.0	125.0	67.0	1.0	90.0	19.0 / 4x
25	16K	RF	32.0	15.0	125.0	67.0	1.0	90.0	19.0 / 4x
25	20K	RF	32.0	17.0	125.0	67.0	1.0	90.0	19.0 / 4x
32	10K	RF	44.0	18.0	135.0	76.0	2.0	100.0	19.0 / 4x
32	16K	RF	44.0	18.0	135.0	76.0	2.0	100.0	19.0 / 4x
32	20K	RF	44.0	20.0	135.0	76.0	2.0	100.0	19.0 / 4x
40	10K	RF	44.0	18.0	140.0	81.0	2.0	105.0	19.0 / 4x
40	16K	RF	44.0	18.0	140.0	81.0	2.0	105.0	19.0 / 4x
40	20K	RF	44.0	20.0	140.0	81.0	2.0	105.0	19.0 / 4x
50	10K	RF	57.0	18.0	155.0	96.0	2.0	120.0	19.0 / 4x
50	16K	RF	57.0	18.0	155.0	96.0	2.0	120.0	19.0 / 8x
50	20K	RF	57.0	20.0	155.0	96.0	2.0	120.0	19.0 / 8x
80	10K	RF	81.0	20.0	185.0	126.0	2.0	150.0	19.0 / 8x
80	16K	RF	81.0	22.0	200.0	132.0	2.0	160.0	23.0 / 8x
80	20K	RF	81.0	24.0	200.0	132.0	2.0	160.0	23.0 / 8x
90	10K	RF	81.0	20.0	195.0	136.0	2.0	160.0	19.0 / 8x
90	16K	RF	81.0	22.0	210.0	145.0	2.0	170.0	23.0 / 8x
90	20K	RF	81.0	26.0	210.0	145.0	2.0	170.0	23.0 / 8x
100	10K	RF	81.0	20.0	210.0	151.0	2.0	175.0	19.0 / 8x
100	16K	RF	89.0	24.0	225.0	160.0	2.0	185.0	23.0 / 8x
100	20K	RF	89.0	26.0	225.0	160.0	2.0	185.0	23.0 / 8x

All dimensions in mm



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