

General Specifications

GS 06P01Y01-E-E

Diaphragm Seals
with DPharp
EJA and EJX Series
Pressure Transmitters



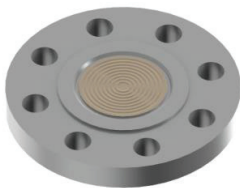
DIRECT OR REMOTE MOUNT DFS DIAPHRAGM SEALS

The remote or direct mount DFS diaphragm seals are commonly used when process operating conditions extend beyond the normal operating limits of a pressure transmitter. Especially for dP level applications the use of (2) remote diaphragm seal(s) is the most appropriate and economic way to mount the instrument. Diaphragm seals are produced and mounted on Yokogawa DPHarp EJA and EJX pressure transmitters by Badotherm®.

For overall performance of the combination DPHarp+DFS, see: www.basecal.com.



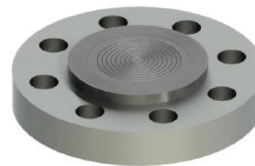
Badotherm Diaphragm Seal (DFS) overview



DFS-BF



DFS-BFr



DFS-BRF



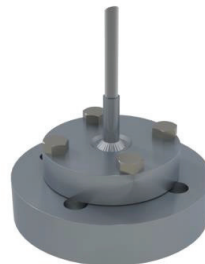
DFS-BC



DFS-BRC



DFS-EXT



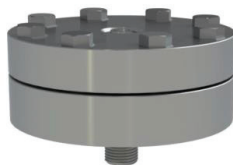
DFS-USF



DFS-USL-F



DFS-UST



DFS-USL-T



DFS-PS



DFS-SA

■ STANDARD SPECIFICATIONS

Flange / Body Material*

316/316L dual grade Stainless Steel

Seal Process connections*

Threaded 1/2" to 1" NPT , BSP, Metric

1/2"/ DN15 to 4"/ DN100 flanged

50-250 mm. Extension lengths

Capillary*

316SS tube with 316SS armour; standard

316SS tube with 316SS armour + PVC sleeve

ID 2mm. / 0,08"

ID 1mm. / 0,04"

316SS direct mount tube

Flushing*

Flush rings

Flush valves

Blind and vent plugs

Coatings*

Gold 6µm, 25µm & 40µm

PFA

PTFE

ECTFE

Flange Standard*

ASME B16.5

EN1092-1

Ratings*

cl. 150-2500

PN 10-400

For services where one or more of the following conditions exist, the use of diaphragm seals is appropriate:

- High temperature processes (up to 850°C.)
- Clogging potential
- Frequent cleaning requirements
- Aggressive processes
- Highly viscous processes
- Abrasive processes
- Sanitary requirements
- Possible formation of H⁺ ions (gold coating)

Wetted part materials*

AISI 316(L) STD.

AISI 304L

AISI 321

Alloy 400

Alloy B2

Alloy C-276

Tantalum

Nickel 201

Alloy 625

Duplex 2205

SuperDuplex 2507

Titanium Gr. 1

On request:

AISI 316L UG

25-22-2 LMN

AISI 904L

Alloy 20

Alloy 600

Alloy 825

Alloy C-22

254 SMO (6Mo)

Zirconium 702

AISI347

For further information on the range of Yokogawa DPharp differential and static pressure transmitters please visit:

<https://www.yokogawa.com/solutions/products-platforms/field-instruments/pressure-transmitters/>

***Note:** Not all available options are listed in the model codifications. Please contact your Yokogawa Representative for more information.

■ GENERAL INFORMATION

Filling fluids

Code	Temp limits		Description	Density @ 25°C	Badotherm reference
-F1	-20/+350°C	-4/+662°F	Silicon Oil	1,07	BSO-42
-F2	-40/+250°C	-40/+482°F	Fluorinated Oil	1,87	BSO-25
-F3	-50/+225°C	-58/+437°F	Silicon Oil	0,95	BSO-22
-F4	-15/+225°C	+5/+437°F	FDA approved	0,92	BSO-40
-F5	-40/+400°C	-40/+752°F	Silicon Oil	0,93	BSO-02
-F6	-80/+100°C	-112/+212°F	Fluorinated Oil	1,84	BSO-03
-F7	-10/+315°C	+14/+599°F	Silicon Oil	1,07	BSO-18
-F8	-40/+315°C	-40/+599°F	Silicon Oil	1,07	BSO-21
-F9	-80/+120°C	-112/+248°F	Silicon Oil	0,92	BSO-41
-F0	-20/+420°C	-4/+788°F	Silicon Oil	1,08	BSO-48

Vapor pressure results in mbara										
Temp. (°C)	-F1	-F2	-F3	-F4	-F5	-F6	-F7	-F8	-F9	-F0
-80						1			1	
-70						1			1	
-60						1			1	
-40		1	1		1	1		1	1	
-20	1	1	1		1	1		1	1	1
-15	1	1	1	1	1	1		1	1	1
-10	1	1	1	1	1	1	1	1	1	1
-5	1	1	1	1	1	1	1	1	1	1
0	1	1	1	1	1	1	1	1	1	1
10	1	1	1	1	1	1	1	1	1	1
20	1	1	1	1	1	1	1	1	1	1
40	1	1	1	1	1	4	1	1	1	1
60	1	1	1	1	1	12	1	1	50	1
80	1	2	1	2	10	28	1	1	150	1
100	1	5	1	2	40	105	1	1	300	1
120	1	9	7	6	85		1	1	500	1
150	1	23	140	30	260		1	1		1
180	10	47	300	500	600		1	1		1
200	20	74	500	875	950		10	20		1.3
230	50	133		1120	1720		20	30		3
250	100	195			2420		50	500		6
260	200				2840		100	600		8
280	500				3800		200	1000		14
300	1000				4960		500	2000		28
315	1200				6310		3000	3000		46
350	1500				8710					140
380					11600					380
400					13700					700
410										950
420										1022

Certificates

Each Instrument is standard supplied with following certificates:

- 3.1 Material Certificate acc. EN10204
- Test Certificate (which includes calibration & a pressure test and vacuum test)
- Other certificates, see options per DFS model

Additional certificates and documents available

- **DFS-DOC -PMI:** Positive Material Identification (external) / lot
- **DFS-DOC -ITP:** Inspection Test Plan / lot
- **DFS-DOC -2.1:** 2.1 Certificate - Declaration of Conformity of the order / lot
- **DFS-DOC -MDB:** Manufacturing Data Book (per copy) / lot
- **DFS-DOC -IOM:** IOM manual diaphragm seals / lot
- **DFS-DOC -PMS:** Project manufacturing schedule (monthly) / lot
- **DFS-DOC -INS:** ½ day Inspection facilitated by Badotherm / lot
- **DFS-DOC -DWG:** Type IV GA drawing
- **DFS-Q5:** 5 Points Test Report Including Transmitter adjustment
- **DFS-DOC-STAT:** 2.1 DoC Standard Static Pressure test ≤ 100 bar-g or MWP of DFS
- **DFS-DOC-HSTAT:** 2.1 DoC High Static Pressure test ≤ 1000 bar-g or MWP of DFS
- **DFS-DOC-BAS:** Basecal report / tag
- **DFS-DOC-HEL:** 2.1 DoC Helium Leak test on diaphragm weld

dD	AP/GP	DP (2 sided DFS)
23 mm	17,5 bar	N/A
32 mm	11 bar	N/A
44 mm	1575 mbar	255 mbar
50 mm	1000 mbar	180 mbar
57 mm	415 mbar	70 mbar
72 mm	155 mbar	30 mbar
81 mm	110 mbar	20 mbar

Recommended minimum spans per diaphragm diameter (dD, see codification) for: ≤ 3 m. capillary; -F3 (BSO-22) fill fluid; ambient temperature: $-10/+40^{\circ}\text{C}$; process temperature: $\leq 100^{\circ}\text{C}$.

When no calibrated span is mentioned on the PO, the instruments will be adjusted and tested at 25% of maximum range (URV) or MWP of DFS.

The selection of the communication style, does not affect the technical specifications of the DFS nor of the assembled systems.

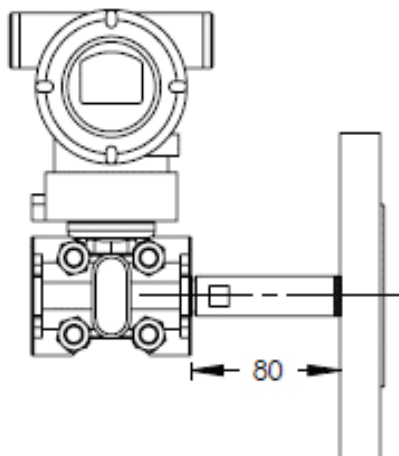
For full technical compatibility see: <http://www.basecal.com/>

For all detailed data sheets and dimensions, see:

<https://www.badotherm.com/knowledgecenter/product-datasheets-diaphragm-seals-accessories/>

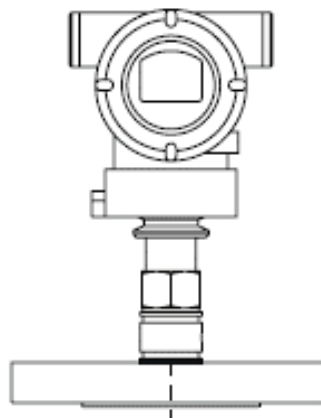
■ ASSEMBLY DRAWINGS

Direct Mount EJA/EJX-110/430



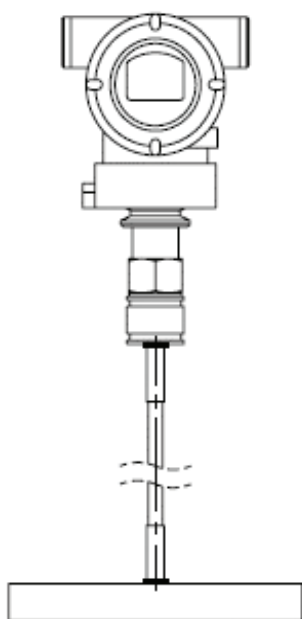
Direct mount: maximum process temperature: 225°C
 Direct mount + /D2: maximum process temperature: 300°C
 Direct mount + /TR: maximum process temperature: 420°C

Direct Mount EJA/EJX-530 Welded / Full welded

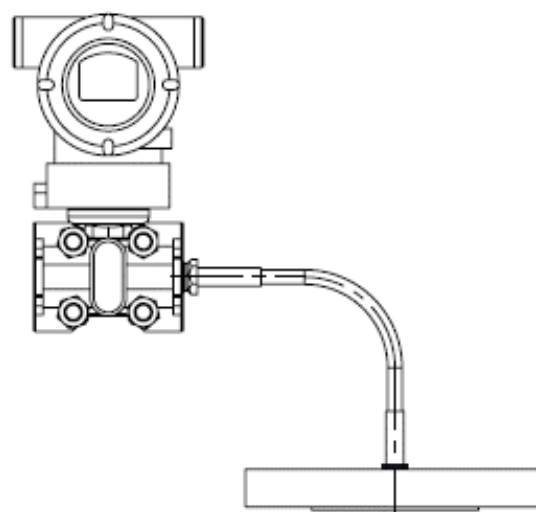


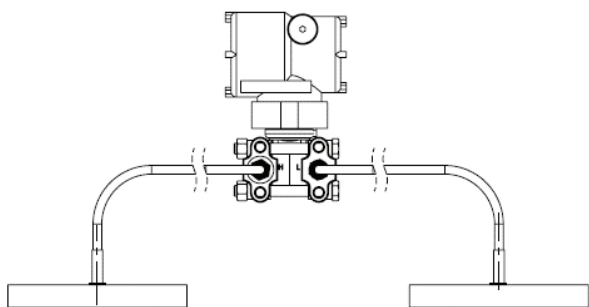
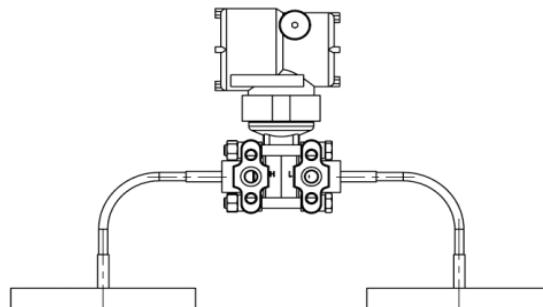
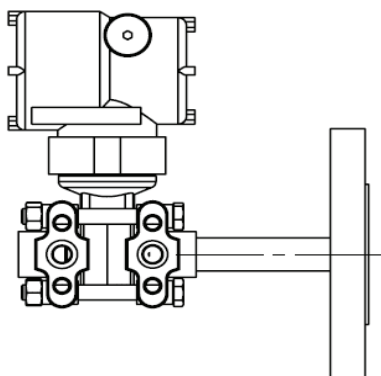
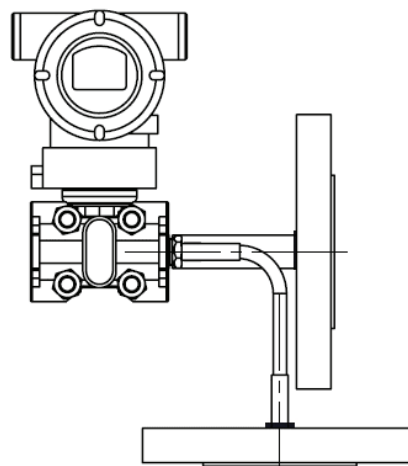
Direct mount: maximum process temperature: 175°C
 Direct mount + /D1: maximum process temperature: 225°C
 Direct mount + /D2: maximum process temperature: 300°C
 Direct mount + /TR: maximum process temperature: 420°C

Remote Mount EJA/EJX-530 Welded / Full Welded



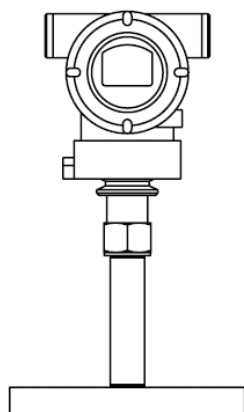
Remote Mount EJA/EJX-110/430 - Single seal



Remote Mount EJA/EJX-110 - 2 seals**Remote Mount EJA/EJX-110 - 2 seals****Full welded construction****Remote Mount EJA/EJX-110/430 - Single seal****Full welded construction****Direct Mount + Remote mount EJA/EJX - 110**

Direct mount: maximum process temperature: 225°C
 Direct mount + /D2: maximum process temperature: 300°C
 Direct mount + /TR: maximum process temperature: 420°C

Direct mount: maximum process temperature: 225°C
 Direct mount + /D2: maximum process temperature: 300°C
 Direct mount + /TR: maximum process temperature: 420°C



Direct mount flanged process connection (FPC).
Welded construction

■ MODEL AND SUFFIX CODES

• DFS-BF Diaphragm Seal - Blind flange, Raised Face.....	8
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• DFS-EXT Diaphragm Seal - Extended, Flush Diaphragm, Flanged type.....	32
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• DFS-USL-F Diaphragm Seal - Internal Diaphragm, Flanged type.....	42
• DFS-UST Diaphragm Seal - Internal Diaphragm Threaded.....	48
• DFS-USL-T Diaphragm Seal - Internal Diaphragm, Threaded.....	53
• DFS-PS Diaphragm Seal - Plug Seal.....	58
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• DFS-FPC Open Flanged Process Connection.....	63

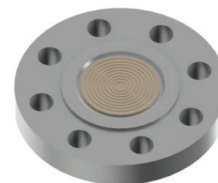
1. DFS-BF Diaphragm Seal - Blind flange, Raised Face

1.1. Model'

Std.

TXMH	EJA-E / EJX-A 100, 300 & 400 Series; 4-20 mA + digital communication	●
TXMB	EJA-E / EJX-A 100, 300 & 400 Series; 'Bus' communication	
TXPH	EJA-E / EJX-A 130 & 440Series; 4-20 mA + digital communication	●
TXPB	EJA-E / EJX-A 130 & 440Series; 'Bus' communication	
TXDH	EJA-E / EJX-A 500 & 600 Series; 4-20 mA + digital communication	●
TXDB	EJA-E / EJX-A 500 & 600 Series; 'Bus' communication	
TXDE	EJA-E / EJX-A 500 & 600 Series; DRS system	
TXDW	EJA-E / EJX-A 500 & 600 Series; Wireless communication	
TXMW	EJA-E / EJX-A 100, 300 & 400 Series; Wireless communication	

***Note 1:** For TXMH, TXMB, TXPH, TXPB and TXMW: Only M, H, V & H, B, A capsules allowed; S wetted parts only.
For TXDH, TXDB, TXDE and TXDW: Mandatory connections "4" or "W"; S wetted parts only



1.2. Seal Type

DFS-BF	Diaphragm Seal - Blind flange, Raised Face	
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1.3. Mounting

WN5	TXM/P_ with W option =/N5 mandatory option	●
XN5	TXD_ 500/600 series only; /N5 option not applicable	●
WN1	TXM/P_ with W option =/N5 mandatory option; single sided mounting EJ_100 series only	

1.4. Flange Size & Rating

Std.

					dD (min. span, see page 4)	
02A1	1"	cl. 150 RF	acc. ASME B16.5	23,5 mm.	●	
02A2	1"	cl. 300 RF	acc. ASME B16.5	23,5 mm.	●	
02A4	1"	cl. 600 RF	acc. ASME B16.5	23,5 mm.		
02A6	1"	cl. 1500 RF	acc. ASME B16.5	23,5 mm.		
02A7	1"	cl. 2500 RF	acc. ASME B16.5	23,5 mm.		
04A1	1,5"	cl. 150 RF	acc. ASME B16.5	44 mm.	●	
04A2	1,5"	cl. 300 RF	acc. ASME B16.5	44 mm.	●	
04A4	1,5"	cl. 600 RF	acc. ASME B16.5	44 mm.		
04A6	1,5"	cl. 1500 RF	acc. ASME B16.5	32 mm.		
04A7	1,5"	cl. 2500 RF	acc. ASME B16.5	32 mm.		
05A1	2"	cl. 150 RF	acc. ASME B16.5	57 mm.	●	
05A2	2"	cl. 300 RF	acc. ASME B16.5	57 mm.	●	
05A4	2"	cl. 600 RF	acc. ASME B16.5	57 mm.	●	
05A6	2"	cl. 1500 RF	acc. ASME B16.5	44 mm.		
05A7	2"	cl. 2500 RF (*LH recommended)	acc. ASME B16.5	44 mm.		
08A1	3"	cl. 150 RF	acc. ASME B16.5	81 mm.	●	
08A2	3"	cl. 300 RF	acc. ASME B16.5	81 mm.	●	
08A4	3"	cl. 600 RF	acc. ASME B16.5	81 mm.	●	
08A5	3"	cl. 900 RF	acc. ASME B16.5	81 mm.		
08A6	3"	cl. 1500 RF (*LH recommended)	acc. ASME B16.5	81 mm.		
08A7	3"	cl. 2500 RF (*LH recommended)	acc. ASME B16.5	81 mm.	●	

1.4. Flange Size & Rating**Std.**

10A1	4"	cl. 150 RF	acc. ASME B16.5	81 mm.	
10A2	4"	cl. 300 RF	acc. ASME B16.5	81 mm.	
02D4	DN25	PN10-40	form B1 acc. EN 1092-1	32 mm.	●
02D5	DN25	PN63	form B1 acc. EN 1092-1	32 mm.	
02D6	DN25	PN100	form B1 acc. EN 1092-1	32 mm.	
04D4	DN40	PN10-40	form B1 acc. EN 1092-1	44 mm.	
05D4	DN50	PN10-40	form B1 acc. EN 1092-1	57 mm.	●
05D5	DN50	PN63	form B1 acc. EN 1092-1	57 mm.	
08D4	DN80	PN10-40	form B1 acc. EN 1092-1	81 mm.	●
10D2	DN100	PN10-16	form B1 acc. EN 1092-1	81 mm.	
10D4	DN100	PN25-40	form B1 acc. EN 1092-1	81 mm.	

1.5. Flange Material**Std.**

SS	SS AISI 316(L)	●
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1.6. Diaphragm Material**Std.**

SS	SS AISI 316(L)		●
HC	Alloy C276		●
A0	6 µm gold (24 Crt)	size 05 (on diaphragm)	
A1	25 µm gold (24 Crt)	size 05 (on diaphragm)	
A2	40 µm gold (24 Crt)	size 05 (on diaphragm)	
A3	25 µm gold (24 Crt)	size 08 (on diaphragm)	
A4	40 µm gold (24 Crt)	size 08 (on diaphragm)	
A5	6 µm gold (24 Crt)	size 08 (on diaphragm)	
PF	Coating PFA	(+/- 40 µm thickness) - (anti-stick only)	
PT	Coating PTFE	(+/- 30-35 µm thickness) - (anti-stick only)	

1.7. Fill Fluid**Std.**

-F1	BSO-42	Silicon Oil	-20/+350°C	-4/+662°F	●
-F2	BSO-25	Fluorinated Oil	-40/+250°C	-40/+482°F	●
-F3	BSO-22	Silicon Oil	-50/+225°C	-58/+437°F	●
-F4	BSO-40	FDA approved	-15/+225°C	+5/+437°F	●
-F5	BSO-02	Silicon Oil	-40/+400°C	-40/+752°F	●
-F6	BSO-03	Fluorinated Oil	-80/+100°C	-112/+212°F	●
-F7	BSO-18	Silicon Oil	-10/+315°C	+14/+599°F	●
-F8	BSO-21(<7m,no /IC1)	Silicon Oil	-40/+315°C	-40/+599°F	●
-F9	BSO-41	Silicon Oil	-80/+120°C	-112/+248°F	●
-F0	BSO-48	Silicon Oil	-20/+420°C	-4/+788°F	●

1.8. Capillary Size / Type (AISI 316 Stainless Steel; 316 Armoured)

NN	Direct coupled / Welded (No Capillary) ²	●
C1	Capillary (2mm ID) - Axial	●
C2	Capillary (2mm ID) - Radial	

1.9. Capillary Length**Std.**

NN	Direct coupled / Welded (No Capillary) ²		●
D1	Extended Direct mount (80mm); temp reduction 125°C; 500/600 series only		●
D2	Extended Direct mount (150 mm); temp reduction 170°C		●
TR	Temperature reducer; temp reduction 300°C		
01	1 m	3 ft.	●
1A	1,5 m	5 ft.	●
02	2 m	6 ft.	●
03	3 m	10 ft.	●
04	4 m	13 ft.	●
05	5 m	15 ft.	●
06	6 m	20 ft.	●
07	7 m	23 ft.	
08	8 m	25 ft.	
09	9 m	30 ft.	
10	10 m	33 ft.	
11	11 m	35 ft.	
12	12 m	40 ft.	
13	13 m	43 ft.	
14	14 m	45 ft.	
15	15 m	50 ft.	

NOTE 2: In case process temperature exceeds 150°C, please ensure selection of required cooling options (D1;D2;TR)

1.10. Flush rings in AISI 316(L)**Std.**

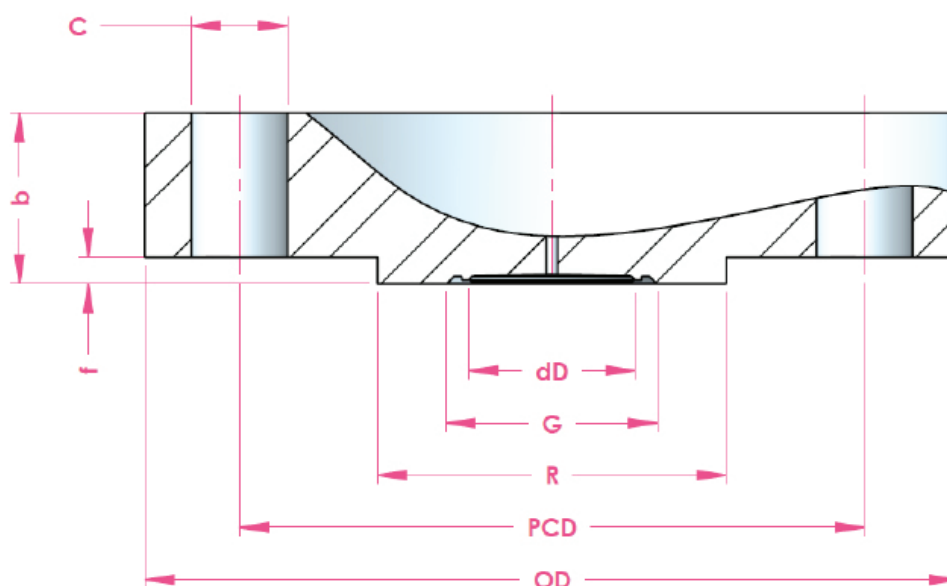
/FL01	size 02 RF/B1 Mat. 316(L); unplugged	1 x 1/4" NPT	
/FL02	size 02 RF/B1 Mat. 316(L); unplugged	1 x 1/2" NPT	
/FL03	size 04 RF/B1 Mat. 316(L); unplugged	1 x 1/4" NPT	
/FL04	size 04 RF/B1 Mat. 316(L); unplugged	1 x 1/2" NPT	
/FL05	size 05 RF/B1 Mat. 316(L); unplugged	1 x 1/4" NPT	●
/FL06	size 05 RF/B1 Mat. 316(L); unplugged	1 x 1/2" NPT	●
/FL07	size 08 RF/B1 Mat. 316(L); unplugged	1 x 1/4" NPT	●
/FL08	size 08 RF/B1 Mat. 316(L); unplugged	1 x 1/2" NPT	●
/FL09	size 10 RF/B1 Mat. 316(L); unplugged	1 x 1/4" NPT	
/FL10	size 10 RF/B1 Mat. 316(L); unplugged	1 x 1/2" NPT	
/F21	Second flush port 1/4" NPTf		●
/F22	Second flush port 1/2" NPTf		●
/FLV1	Vent plugs 1/4" (not-fitted)		
/FLV2	Vent plugs 1/2" (not-fitted)		
/FLP1	Blind plugs 1/4" (not-fitted)		●
/FLP2	Blind plugs 1/2" (not-fitted)		●
/FP1	1x fitted to flush port – PTFE fitting paste + pressure leak test		
/FG1	1x fitted to flush port – Graphite fitting paste + pressure leak test		
/FP2	2x fitted to flush port – PTFE fitting paste + pressure leak test		
/FG2	2x fitted to flush port – Graphite fitting paste+ pressure leak test		
/FV91	Pair flush valves BDTV911	for 1/4" ports (fitted)	●
/FV92	Pair flush valves BDTV911	for 1/2" ports (fitted)	●
/FV93	Single flush valve BDTV911	for 1/4" port (fitted)	
/FV94	Single flush valve BDTV911	for 1/2" port (fitted)	



1.11. Options

/N5	EJX/EJA100/300/400 + W option	Low volume covers by Yokogawa	
/FW	Full welded construction	recomm. for vacuum service	(< 500 mbara)
/FWS	Full Welded construction for 500/600 series	recomm. for vacuum service	(< 500 mbara)
/IC1	Capillary ID 1 mm. / 0,04"		
/BS6	Black sleeve on capillary ≤ 6 m.		
/BS15	Black sleeve on capillary > 6 ≤ 15 m.		
/WS6	White sleeve on capillary ≤ 6 m		
/WS15	White sleeve on capillary > 6 ≤ 15 m.		
/LH	Lifting handles (recomm. for ≥ cl. 900); (including wooden crate)		
/K1	Degreasing Treatment I + certificate		
/K2	Degreasing Treatment (applicable F2 fill) + certificate		
/NACE	NACE MR01-75 (ISO15156) or MR0103 (ISO17945) compliance		
/BAS	Basecal performance calculation report		
/DP1	Dye penetrant test pressurized welds + 2.2 EN-10204 test report (Level I)		
/DP2	Dye penetrant test pressurized welds + 3.1 EN-10204 test report (Level II)		
/QDBDT	<5 working days ex works BADO or rush charge compensation for standards (●) only		
/WC	Wooden crate packing		

Dimensions tables



ASME B16.5 RF facing

Size	Rating	OD	b	PCD	C / pcs	dD	R	f	G	Weight		
1"	cl. 150	110.0	14.7	79.4	15.9 / 4x	23.5	50.8	1.5	31.8	0.9		
	cl. 300	125.0	17.9	88.9	19.1 / 4x					1.4		
	cl. 400-600		24.5							1.6		
	cl. 900-1500	150.0	35.6	101.6	25.4 / 4x			6.4		3.6		
	cl. 2500	160.0	42.0	108.0						5.0		
1.5"	cl. 150	125.0	17.9	98.4	15.9 / 4x	44.0	73.0	1.5	52.4	1.5		
	cl. 300	155.0	21.1	114.3	22.3 / 4x					32.0	6.4	2.7
	cl. 400-600		29.3									3.3
	cl. 900-1500	180.0	38.8	123.8	28.6 / 4x	41.5		5.8				
	cl. 2500	205.0	51.5	146.0	31.8 / 4x			10.4				
2"	cl. 150	150.0	19.5	120.7	19.1 / 4x	57.0	91.9	1.5	70.2	2.4		
	cl. 300	165.0	22.7	127.0	19.1 / 8x					44.0	6.4	3.2
	cl. 400-600		32.4									4.2
	cl. 900-1500	215.0	45.1	165.1	25.4 / 8x	55.4		10.1				
	cl. 2500	235.0	57.9	171.4	28.6 / 8x			15.6				
3"	cl. 150	190.0	24.3	152.4	19.1 / 4x	81.0	127.0	1.5	93.0	4.9		
	cl. 300	210.0	29.0	168.3	22.3 / 8x					6.4	6.8	
	cl. 400-600		38.8								8.4	
	cl. 900	240.0	45.1	190.5	25.4 / 8x			13.1				
	cl. 1500	265.0	54.7	203.2	31.9 / 8x			19.1				
	cl. 2500	305.0	73.7	228.6	35.0 / 8x			34.8				
4"	cl. 150	230.0	24.3	190.5	19.1 / 8x	81.0	157.2	1.5	93.0	7.0		
	cl. 300	255.0	32.2	200.0	22.3 / 8x					11.5		

EN 1092-1 type B1

Size	Rating	OD	b	PCD	C / pcs	dD	R	f	G	Weight
DN25	PN10-40	115.0	18.0	85.0	14.0 / 4x	32.0	68.0	2.0	41.0	1.0
	PN63-100	140.0	24.0	100.0	18.0 / 4x					2.5
DN40	PN10-40	150.0	18.0	110.0	18.0 / 4x	44.0	88.0	3.0	55.4	2.0
DN50	PN10-40	165.0	20.0	125.0	18.0 / 4x	57.0	102.0		70.2	3.0
DN80	PN10-40	215.0	24.0	160.0	18.0 / 8x	81.0	138.0		93.0	5.0
DN100	PN10-16	220.0	20.0	180.0	18.0 / 8x		158.0			4.5
	PN25-40	235.0	24.0	190.0	22.0 / 8x		162.0			6.5

All dimensions in mm, weight in kg

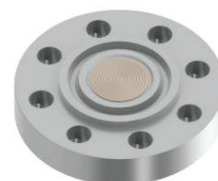
Flush ring dimensions, [see page 30](#)

2. DFS-BFr Diaphragm Seal - Blind flange, Ring Joint Facing

2.1. Model'

		Std.
TXMH	EJA-E / EJX-A 100, 300 & 400 Series; 4-20 mA + digital communication	●
TXMB	EJA-E / EJX-A 100, 300 & 400 Series; 'Bus' communication	
TXPH	EJA-E / EJX-A 130 & 440Series; 4-20 mA + digital communication	●
TXPB	EJA-E / EJX-A 130 & 440Series; 'Bus' communication	
TXDH	EJA-E / EJX-A 500 & 600 Series; 4-20 mA + digital communication	●
TXDB	EJA-E / EJX-A 500 & 600 Series; 'Bus' communication	
TXDE	EJA-E / EJX-A 500 & 600 Series; DRS system	
TXDW	EJA-E / EJX-A 500 & 600 Series; Wireless communication	
TXMW	EJA-E / EJX-A 100, 300 & 400 Series; Wireless communication	

*Note 1: For TXMH, TXMB, TXPH, TXPB and TXMW: Only M, H, V & H, B, A capsules allowed; S wetted parts only.
For TXDH, TXDB, TXDE and TXDW: Mandatory connections "4" or "W"; S wetted parts only



2.2. Seal Type

DFS-BFr	Diaphragm Seal - Blind flange, Raised Face	
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2.3. Mounting

WN5	TXM/P_ with W option =/N5 mandatory option	●
XN5	TXD_ 500/600 series only; /N5 option not applicable	●
WN1	TXM/P_ with W option =/N5 mandatory option; single sided mounting EJ_100 series only	

2.4. Flange Size & Rating

Std.

					dD (min. span, see page 4)
05A1	2"	cl. 150 RJF	acc. ASME B16.5	57 mm.	
05A2	2"	cl. 300 RJF	acc. ASME B16.5	57 mm.	●
05A4	2"	cl. 600 RJF	acc. ASME B16.5	57 mm.	●
05A6	2"	cl. 1500 RJF	acc. ASME B16.5	57 mm.	●
05A7	2"	cl. 2500 RJF (*LH recommended)	acc. ASME B16.5	57 mm.	
08A1	3"	cl. 150 RJF	acc. ASME B16.5	81 mm.	
08A2	3"	cl. 300 RJF	acc. ASME B16.5	81 mm.	
08A4	3"	cl. 600 RJF	acc. ASME B16.5	81 mm.	●
08A5	3"	cl. 900 RJF	acc. ASME B16.5	81 mm.	●
08A6	3"	cl. 1500 RJF (*LH recommended)	acc. ASME B16.5	81 mm.	
08A7	3"	cl. 2500 RJF (*LH recommended)	acc. ASME B16.5	81 mm.	

2.5. Flange Material

Std.

SS	SS AISI 316(L)	●
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2.6. Diaphragm Material

Std.

SS	SS AISI 316(L)		●
HC	Alloy C276		●
A0	6 µm gold (24 Crt)	size 05 (on diaphragm)	
A1	25 µm gold (24 Crt)	size 05 (on diaphragm)	

2.6. Diaphragm Material**Std.**

A2	40 µm gold (24 Crt)	size 05 (on diaphragm)	
A3	25 µm gold (24 Crt)	size 08 (on diaphragm)	
A4	40 µm gold (24 Crt)	size 08 (on diaphragm)	
A5	6 µm gold (24 Crt)	size 08 (on diaphragm)	
PF	Coating PFA	(+/- 40 µm thickness) - (anti-stick only)	
PT	Coating PTFE	(+/- 30-35 µm thickness) - (anti-stick only)	

2.7. Fill Fluid**Std.**

-F1	BSO-42	Silicon Oil	-20/+350°C	-4/+662°F	●
-F2	BSO-25	Fluorinated Oil	-40/+250°C	-40/+482°F	●
-F3	BSO-22	Silicon Oil	-50/+225°C	-58/+437°F	●
-F4	BSO-40	FDA approved	-15/+225°C	+5/+437°F	●
-F5	BSO-02	Silicon Oil	-40/+400°C	-40/+752°F	●
-F6	BSO-03	Fluorinated Oil	-80/+100°C	-112/+212°F	●
-F7	BSO-18	Silicon Oil	-10/+315°C	+14/+599°F	●
-F8	BSO-21(<7m,no /IC1)	Silicon Oil	-40/+315°C	-40/+599°F	●
-F9	BSO-41	Silicon Oil	-80/+120°C	-112/+248°F	●
-F0	BSO-48	Silicon Oil	-20/+420°C	-4/+788°F	●

2.8. Capillary Size / Type (AISI 316 Stainless Steel; 316 Armoured)

NN	Direct coupled / Welded (No Capillary) ²	●
C1	Capillary (2mm ID) - Axial	●
C2	Capillary (2mm ID) - Radial	

2.9. Capillary Length**Std.**

NN	Direct coupled / Welded (No Capillary) ²	●
D1	Extended Direct mount (80mm); temp reduction 125°C; 500/600 series only	●
D2	Extended Direct mount (150 mm); temp reduction 170°C	●
TR	Temperature reducer; temp reduction 300°C	
01	1 m	3 ft. ●
1A	1,5 m	5 ft. ●
02	2 m	6 ft. ●
03	3 m	10 ft. ●
04	4 m	13 ft. ●
05	5 m	15 ft. ●
06	6 m	20 ft. ●
07	7 m	23 ft.
08	8 m	25 ft.
09	9 m	30 ft.
10	10 m	33 ft.
11	11 m	35 ft.
12	12 m	40 ft.
13	13 m	43 ft.
14	14 m	45 ft.
15	15 m	50 ft.

2.10. Flush rings in AISI 316(L)**Std.**

/FL5A1	2" - cl. 150 RJF	Mat, 316(L) 1 x 1/4" NPT; unplugged	
/FL5A2	2" - cl. 300 RJF	Mat, 316(L) 1 x 1/4" NPT; unplugged	●
/FL5A4	2" - cl. 600 RJF	Mat, 316(L) 1 x 1/4" NPT; unplugged	●
/FL5A6	2" - cl. 1500 RJF	Mat, 316(L) 1 x 1/4" NPT; unplugged	●
/FL5A7	2" - cl. 2500 RJF	Mat, 316(L) 1 x 1/4" NPT; unplugged	
/FL8A1	3" - cl. 150 RJF	Mat, 316(L) 1 x 1/4" NPT; unplugged	
/FL8A2	3" - cl. 300 RJF	Mat, 316(L) 1 x 1/4" NPT; unplugged	
/FL8A4	3" - cl. 600 RJF	Mat, 316(L) 1 x 1/4" NPT; unplugged	
/FL8A5	3" - cl. 900 RJF	Mat, 316(L) 1 x 1/4" NPT; unplugged	●
/FL8A6	3" - cl. 1500 RJF	Mat, 316(L) 1 x 1/4" NPT; unplugged	●
/FL8A7	3" - cl. 2500 RJF	Mat, 316(L) 1 x 1/4" NPT; unplugged	
/F20	Flush port 1 x 1/2" NPTf		●
/F21	Second flush port 1/4" NPTf		●
/F22	Second flush port 1/2" NPTf		●
/FLV1	Vent plugs 1/4" (not-fitted)		
/FLV2	Vent plugs 1/2" (not-fitted)		
/FLP1	Blind plugs 1/4" (not-fitted)		
/FLP2	Blind plugs 1/2" (not-fitted)		
/FP1	1x fitted to flush port – PTFE fitting paste + pressure leak test		
/FG1	1x fitted to flush port – Graphite fitting paste + pressure leak test		
/FP2	2x fitted to flush port – PTFE fitting paste + pressure leak test		
/FG2	2x fitted to flush port – Graphite fitting paste+ pressure leak test		
/FV91	Pair flush valves BDTV911	for 1/4" ports (fitted)	●
/FV92	Pair flush valves BDTV911	for 1/2" ports (fitted)	●
/FV93	Single flush valve BDTV911	for 1/4" port (fitted)	
/FV94	Single flush valve BDTV911	for 1/2" port (fitted)	

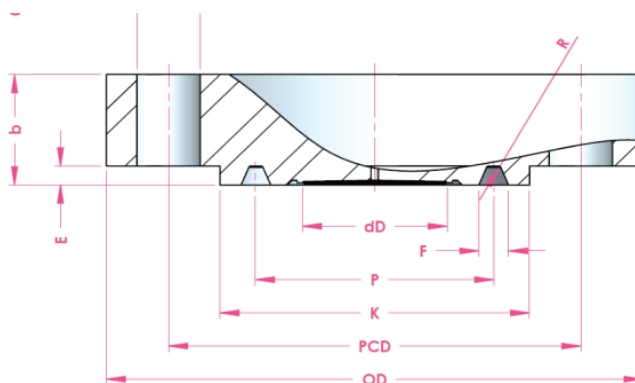
NOTE 2: In case process temperature exceeds 150°C, please ensure selection of required cooling options (D1;D2;TR)

**2.11. Options**

/N5	EJX/EJA100/300/400 + W option	Low volume covers by Yokogawa	
/FW	Full welded construction	recomm. for vacuum service	(< 500 mbara)
/FWS	Full Welded construction for 500/600 series	recomm. for vacuum service	(< 500 mbara)
/IC1	Capillary ID 1 mm. / 0,04"		

2.11. Options

/BS6	Black sleeve on capillary ≤ 6 m.
/BS15	Black sleeve on capillary > 6 ≤ 15 m.
/WS6	White sleeve on capillary ≤ 6 m
/WS15	White sleeve on capillary > 6 ≤ 15 m
/LH	Lifting handles (recomm.for ≥ cl. 900) (including wooden crate)
/K1	Degreasing Treatment I + certificate
/K2	Degreasing Treatment (applicable F2 fill) + certificate
/NACE	NACE MR01-75 (ISO15156) or MR0103 (ISO17945) compliance
/BAS	Basecal performance calculation report
/DP1	Dye penetrant test pressurized welds + 2.2 EN-10204 test report (Level I)
/DP2	Dye penetrant test pressurized welds + 3.1 EN-10204 test report (Level II)
/QDBDT	<5 working days ex works BADO or rush charge compensation for standards (●) only
/WC	Wooden crate packaging



ASME B16.5 RJF facing

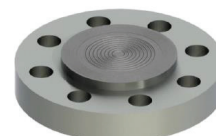
Size	Rating	OD	b	PCD	C / pcs	dD	K	E	F	P	Ring #	Weight
2"	cl. 150	150.0	23.9	120.7	19.1 / 8x	57.0	102.0	6.4	8.7	82.6	22	2.4
	cl. 300	165.0	28.6	127.0			108.0	7.9	11.9		95.3	23
	cl. 400-600		33.3		19.1 / 8x					101.6		24
	cl. 900-1500	215.0	46.0	165.1	25.4 / 8x		124.0			114.3	26	10.1
	cl. 2500	235.0	58.8	171.4	28.6 / 8x		133.0			114.3	29	15.6
3"	cl. 150	190.0	28.7	152.4	19.1 / 4x	81.0	146.0	6.4	8.7	114.3	31	4.9
	cl. 300	210.0	34.9	168.3	22.3 / 8x			156.0	7.9	11.9		123.8
	cl. 400-600		39.7	168.3			136.5					35
	cl. 900	240.0	46.0	190.5	25.4 / 8x		168.0	9.5	13.5	127.0	13.1	
	cl. 1500	265.0	58.8	203.2	31.8 / 8x					127.0	32	19.1
	cl. 2500	305.0	76.2	228.6	34.9 / 8x					127.0	32	34.8

3. DFS-BRF Diaphragm Seal - Blind flange, Raised Face

3.1. Model¹

Std.

TXMH	EJA-E / EJX-A 100, 300 & 400 Series; 4-20 mA + digital communication	●
TXMB	EJA-E / EJX-A 100, 300 & 400 Series; 'Bus' communication	
TXPH	EJA-E / EJX-A 130 & 440Series; 4-20 mA + digital communication	●
TXPB	EJA-E / EJX-A 130 & 440Series; 'Bus' communication	
TXDH	EJA-E / EJX-A 500 & 600 Series; 4-20 mA + digital communication	●
TXDB	EJA-E / EJX-A 500 & 600 Series; 'Bus' communication	
TXDE	EJA-E / EJX-A 500 & 600 Series; DRS system	
TXDW	EJA-E / EJX-A 500 & 600 Series; Wireless communication	
TXMW	EJA-E / EJX-A 100, 300 & 400 Series; Wireless communication	



***Note 1:** For TXMH, TXMB, TXPH, TXPB and TXMW: Only M, H, V & H, B, A capsules allowed; S wetted parts only.
For TXDH, TXDB, TXDE and TXDW: Mandatory connections "4" or "W"; S wetted parts only

3.2. Seal Type

DFS-BRF	Diaphragm Seal - Blind flange, Raised Face
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3.3. Mounting

WN5	TXM/P_ with W option =/N5 mandatory option	●
XN5	TXD_ 500/600 series only; /N5 option not applicable	●
WN1	TXM/P_ with W option =/N5 mandatory option; single sided mounting EJ_100 series only	

3.4. Flange Size & Rating

Std.

					dD (min. span, see page 4)	
02A1	1"	cl. 150 RF	acc. ASME B16.5	23,5 mm.	●	
02A2	1"	cl. 300 RF	acc. ASME B16.5	23,5 mm.	●	
02A4	1"	cl. 600 RF	acc. ASME B16.5	23,5 mm.		
02A6	1"	cl. 1500 RF	acc. ASME B16.5	23,5 mm.		
02A7	1"	cl. 2500 RF	acc. ASME B16.5	23,5 mm.		
04A1	1,5"	cl. 150 RF	acc. ASME B16.5	44 mm.	●	
04A2	1,5"	cl. 300 RF	acc. ASME B16.5	44 mm.	●	
04A4	1,5"	cl. 600 RF	acc. ASME B16.5	44 mm.		
04A6	1,5"	cl. 1500 RF	acc. ASME B16.5	32 mm.		
04A7	1,5"	cl. 2500 RF	acc. ASME B16.5	32 mm.		
05A1	2"	cl. 150 RF	acc. ASME B16.5	57 mm.	●	
05A2	2"	cl. 300 RF	acc. ASME B16.5	57 mm.	●	
05A4	2"	cl. 600 RF	acc. ASME B16.5	57 mm.	●	
05A6	2"	cl. 1500 RF	acc. ASME B16.5	44 mm.		
05A7	2"	cl. 2500 RF (*LH recommended)	acc. ASME B16.5	44 mm.		
08A1	3"	cl. 150 RF	acc. ASME B16.5	81 mm.	●	
08A2	3"	cl. 300 RF	acc. ASME B16.5	81 mm.	●	
08A4	3"	cl. 600 RF	acc. ASME B16.5	81 mm.	●	
08A5	3"	cl. 900 RF	acc. ASME B16.5	81 mm.		
08A6	3"	cl. 1500 RF (*LH recommended)	acc. ASME B16.5	81 mm.		
08A7	3"	cl. 2500 RF (*LH recommended)	acc. ASME B16.5	81 mm.	●	

3.4. Flange Size & Rating**Std.**

10A1	4"	cl. 150 RF	acc. ASME B16.5	81 mm.	
10A2	4"	cl. 300 RF	acc. ASME B16.5	81 mm.	
02D4	DN25	PN10-40	form B1 acc. EN 1092-1	32 mm.	●
02D5	DN25	PN63	form B1 acc. EN 1092-1	32 mm.	
02D6	DN25	PN100	form B1 acc. EN 1092-1	32 mm.	
04D4	DN40	PN10-40	form B1 acc. EN 1092-1	44 mm.	
05D4	DN50	PN10-40	form B1 acc. EN 1092-1	57 mm.	●
05D5	DN50	PN63	form B1 acc. EN 1092-1	57 mm.	
08D4	DN80	PN10-40	form B1 acc. EN 1092-1	81 mm.	●
10D2	DN100	PN10-16	form B1 acc. EN 1092-1	81 mm.	
10D4	DN100	PN25-40	form B1 acc. EN 1092-1	81 mm.	

3.5. Flange Material**Std.**

SS	SS AISI 316(L)	●
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3.6. Wetted parts material (Diaphragm Material & Raised face covered)**Std.**

HB	Alloy B2	●
HC	Alloy C276	●
I6	Alloy 625	●
DU	Duplex 2205	●
SD	Super Duplex 2507	●
M4	Alloy 400	●
N2	Nickel 201	●
TA	Tantalum	●
S4	AISI304L	●
S2	AISI321	●
T1	Titanium Gr. 1	●

3.7. Fill Fluid**Std.**

-F1	BSO-42	Silicon Oil	-20/+350°C	-4/+662°F	●
-F2	BSO-25	Fluorinated Oil	-40/+250°C	-40/+482°F	●
-F3	BSO-22	Silicon Oil	-50/+225°C	-58/+437°F	●
-F4	BSO-40	FDA approved	-15/+225°C	+5/+437°F	●
-F5	BSO-02	Silicon Oil	-40/+400°C	-40/+752°F	●
-F6	BSO-03	Fluorinated Oil	-80/+100°C	-112/+212°F	●
-F7	BSO-18	Silicon Oil	-10/+315°C	+14/+599°F	●
-F8	BSO-21(<7m,no /IC1)	Silicon Oil	-40/+315°C	-40/+599°F	●
-F9	BSO-41	Silicon Oil	-80/+120°C	-112/+248°F	●
-F0	BSO-48	Silicon Oil	-20/+420°C	-4/+788°F	●

3.8. Capillary Size / Type (AISI 316 Stainless Steel; 316 Armoured)

NN	Direct coupled / Welded (No Capillary) ²	●
C1	Capillary (2mm ID) - Axial	●
C2	Capillary (2mm ID) - Radial	

3.9. Capillary Length

Std.

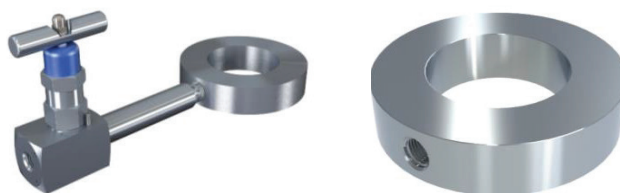
NN	Direct coupled / Welded (No Capillary) ²		●
D1	Extended Direct mount (80mm); temp reduction 125°C; 500/600 series only		●
D2	Extended Direct mount (150 mm); temp reduction 170°C		●
TR	Temperature reducer; temp reduction 300°C		
01	1 m	3 ft.	●
1A	1,5 m	5 ft.	●
02	2 m	6 ft.	●
03	3 m	10 ft.	●
04	4 m	13 ft.	●
05	5 m	15 ft.	●
06	6 m	20 ft.	●
07	7 m	23 ft.	
08	8 m	25 ft.	
09	9 m	30 ft.	
10	10 m	33 ft.	
11	11 m	35 ft.	
12	12 m	40 ft.	
13	13 m	43 ft.	
14	14 m	45 ft.	
15	15 m	50 ft.	

3.10. Flush rings in AISI 316(L)

Std.

/FL01	size 02 RF/B1 Mat. 316(L); unplugged	1 x 1/4" NPT	
/FL02	size 02 RF/B1 Mat. 316(L); unplugged	1 x 1/2" NPT	
/FL03	size 04 RF/B1 Mat. 316(L); unplugged	1 x 1/4" NPT	
/FL04	size 04 RF/B1 Mat. 316(L); unplugged	1 x 1/2" NPT	
/FL05	size 05 RF/B1 Mat. 316(L); unplugged	1 x 1/4" NPT	●
/FL06	size 05 RF/B1 Mat. 316(L); unplugged	1 x 1/2" NPT	●
/FL07	size 08 RF/B1 Mat. 316(L); unplugged	1 x 1/4" NPT	●
/FL08	size 08 RF/B1 Mat. 316(L); unplugged	1 x 1/2" NPT	●
/FL09	size 10 RF/B1 Mat. 316(L); unplugged	1 x 1/4" NPT	
/FL10	size 10 RF/B1 Mat. 316(L); unplugged	1 x 1/2" NPT	
/F21	Second flush port 1/4" NPTf		●
/F22	Second flush port 1/2" NPTf		●
/FLV1	Vent plugs 1/4" (not-fitted)		
/FLV2	Vent plugs 1/2" (not-fitted)		
/FLP1	Blind plugs 1/4" (not-fitted)		●
/FLP2	Blind plugs 1/2" (not-fitted)		●
/FP1	1x fitted to flush port – PTFE fitting paste + pressure leak test		
/FG1	1x fitted to flush port – Graphite fitting paste + pressure leak test		
/FP2	2x fitted to flush port – PTFE fitting paste + pressure leak test		
/FG2	2x fitted to flush port – Graphite fitting paste+ pressure leak test		
/FV91	Pair flush valves BDTV911	for 1/4" ports (fitted)	●
/FV92	Pair flush valves BDTV911	for 1/2" ports (fitted)	●
/FV93	Single flush valve BDTV911	for 1/4" port (fitted)	
/FV94	Single flush valve BDTV911	for 1/2" port (fitted)	

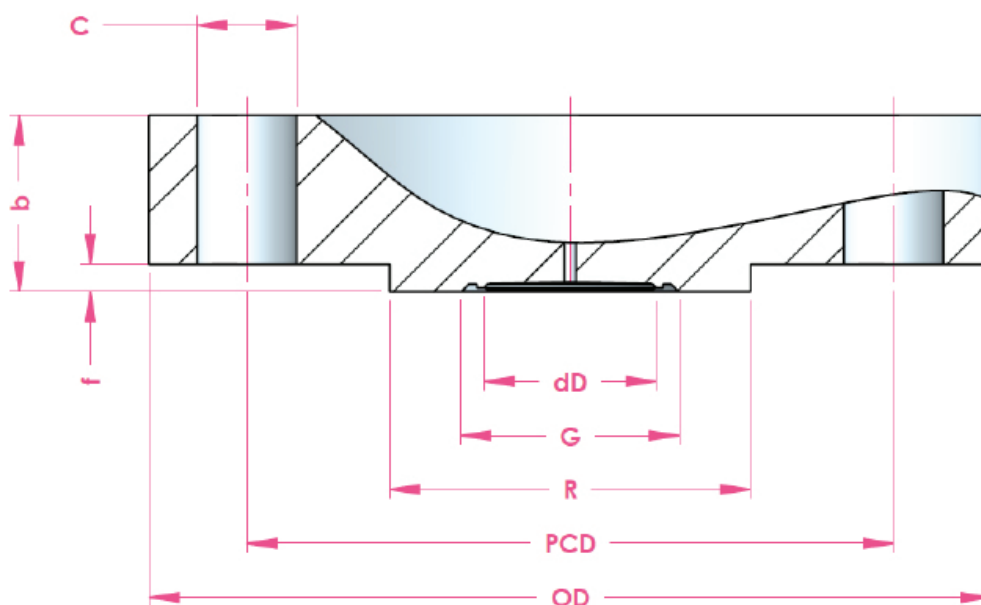
NOTE 2: In case process temperature exceeds 150°C, please ensure selection of required cooling options (D1;D2;TR)



3.11. Options

/N5	EJX/EJA100/300/400 + W option	Low volume covers by Yokogawa	
/FW	Full welded construction	recomm. for vacuum service	(< 500 mbara)
/FWS	Full Welded construction for 500/600 series	recomm. for vacuum service	(< 500 mbara)
/IC1	Capillary ID 1 mm. / 0,04"		
/BS6	Black sleeve on capillary ≤ 6 m.		
/BS15	Black sleeve on capillary $> 6 \leq 15$ m.		
/WS6	White sleeve on capillary ≤ 6 m.		
/WS15	White sleeve on capillary $> 6 \leq 15$ m.		
/LH	Lifting handles (recomm. for $\geq$ cl. 900) (including wooden crate)		
/K1	Degreasing Treatment I + certificate		
/K2	Degreasing Treatment (applicable F2 fill) + certificate		
/NACE	NACE MR01-75 (ISO15156) or MR0103 (ISO17945) compliance		
/BAS	Basecal performance calculation report		
/DP1	Dye penetrant test pressurized welds + 2.2 EN-10204 test report (Level I)		
/DP2	Dye penetrant test pressurized welds + 3.1 EN-10204 test report (Level II)		
/QDBDT	<5 working days ex works BADO or rush charge compensation for standards (●) only		
/WC	Wooden crate packing		

Dimensions tables



ASME B16.5 RF facing

Size	Rating	OD	b	PCD	C / pcs	dD	R	f	G	Weight
1"	cl. 150	110.0	14.7	79.4	15.9 / 4x	23.5	50.8	1.5	31.8	0.9
	cl. 300	125.0	17.9	88.9	19.1 / 4x					1.4
	cl. 400-600		24.5							1.6
	cl. 900-1500	150.0	35.6	101.6	25.4 / 4x			6.4		3.6
	cl. 2500	160.0	42.0	108.0						5.0
1.5"	cl. 150	125.0	17.9	98.4	15.9 / 4x	44.0	73.0	1.5	52.4	1.5
	cl. 300	155.0	21.1	114.3	22.3 / 4x					2.7
	cl. 400-600		29.3							3.3
	cl. 900-1500	180.0	38.8	123.8	28.6 / 4x	32.0		6.4	41.5	5.8
	cl. 2500	205.0	51.5	146.0	31.8 / 4x					10.4

ASME B16.5 RF facing

2"	cl. 150	150.0	19.5	120.7	19.1 / 4x	57.0	91.9	1.5	70.2	2.4	
	cl. 300	165.0	22.7	127.0	19.1 / 8x			6.4		55.4	3.2
	cl. 400-600		32.4								4.2
	cl. 900-1500	215.0	45.1	165.1	25.4 / 8x	44.0		6.4	55.4	10.1	
	cl. 2500	235.0	57.9	171.4	28.6 / 8x					15.6	
3"	cl. 150	190.0	24.3	152.4	19.1 / 4x	81.0	127.0	1.5	93.0	4.9	
	cl. 300	210.0	29.0	168.3	22.3 / 8x			6.4		93.0	6.8
	cl. 400-600		38.8								8.4
	cl. 900	240.0	45.1	190.5	25.4 / 8x			6.4		93.0	13.1
	cl. 1500	265.0	54.7	203.2	31.9 / 8x						19.1
	cl. 2500	305.0	73.7	228.6	35.0 / 8x						34.8
4"	cl. 150	230.0	24.3	190.5	19.1 / 8x	81.0	157.2	1.5	93.0	7.0	
	cl. 300	255.0	32.2	200.0	22.3 / 8x					11.5	

EN 1092-1 type B1

Size	Rating	OD	b	PCD	C / pcs	dD	R	f	G	Weight
DN25	PN10-40	115.0	18.0	85.0	14.0 / 4x	32.0	68.0	2.0	41.0	1.0
	PN63-100	140.0	24.0	100.0	18.0 / 4x					2.5
DN40	PN10-40	150.0	18.0	110.0	18.0 / 4x	44.0	88.0	3.0	55.4	2.0
DN50	PN10-40	165.0	20.0	125.0	18.0 / 4x	57.0	102.0		70.2	3.0
DN80	PN10-40	215.0	24.0	160.0	18.0 / 8x	81.0	138.0		93.0	5.0
DN100	PN10-16	220.0	20.0	180.0	18.0 / 8x		158.0			4.5
	PN25-40	235.0	24.0	190.0	22.0 / 8x		162.0			6.5

All dimensions in mm, weight in kg.

Flush ring dimensions, [see page 30](#)

4. DFS-BC Diaphragm Seal - Blind flange, Raised Face

4.1. Model¹

Std.

TXMH	EJA-E / EJX-A 100, 300 & 400 Series; 4-20 mA + digital communication	●
TXMB	EJA-E / EJX-A 100, 300 & 400 Series; 'Bus' communication	
TXPH	EJA-E / EJX-A 130 & 440Series; 4-20 mA + digital communication	●
TXPB	EJA-E / EJX-A 130 & 440Series; 'Bus' communication	
TXDH	EJA-E / EJX-A 500 & 600 Series; 4-20 mA + digital communication	●
TXDB	EJA-E / EJX-A 500 & 600 Series; 'Bus' communication	
TXDE	EJA-E / EJX-A 500 & 600 Series; DRS system	
TXDW	EJA-E / EJX-A 500 & 600 Series; Wireless communication	
TXMW	EJA-E / EJX-A 100, 300 & 400 Series; Wireless communication	

*Note 1: For TXMH, TXMB, TXPH, TXPB and TXMW: Only M, H, V & H, B, A capsules allowed; S wetted parts only.
For TXDH, TXDB, TXDE and TXDW: Mandatory connections "4" or "W"; S wetted parts only



4.2. Seal Type

DFS-BC	Diaphragm Seal - Blind flange, Raised Face
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4.3. Mounting

WN5	TXM/P_ with W option =/N5 mandatory option	●
XN5	TXD_ 500/600 series only; /N5 option not applicable	●
WN1	TXM/P_ with W option =/N5 mandatory option; single sided mounting EJ_100 series only	

4.4. Flange Size & Rating

Std.

					dD (min. span, see page 4)
04A1	1.5"	cl. 150-600 RF	acc. ASME B16.5	44 mm.	
04A2	1.5"	cl. 900-2500 RF	acc. ASME B16.6	32 mm.	
05A1	2"	cl. 150-600 RF	acc. ASME B16.5	57 mm.	●
05A2	2"	cl. 900-2500 RF	acc. ASME B16.6	44 mm.	
08A1	3"	cl. 150-2500 RF	acc. ASME B16.5	81 mm.	●
10A1	4"	cl. 150-2500 RF	acc. ASME B16.5	81 mm.	
05D1	DN50	PN10-400	form B1 acc. EN 1092-1	57 mm.	●
08D1	DN80	PN10-400	form B1 acc. EN 1092-1	81 mm.	●
10D1	DN100	PN10-400	form B1 acc. EN 1092-1	81 mm.	

4.5. Flange Material

Std.

SS	SS AISI 316(L)	●
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4.6. Diaphragm Material

Std.

SS	SS AISI 316(L)			●
HC	Alloy C276			●
A0	6 µm gold (24 Crt)	size 05	on diaphragm	
A1	25 µm gold (24 Crt)	size 05	on diaphragm	
A2	40 µm gold (24 Crt)	size 05	on diaphragm	
A3	25 µm gold (24 Crt)	size 08	on diaphragm	
A4	40 µm gold (24 Crt)	size 08	on diaphragm	
A5	6 µm gold (24 Crt)	size 08	on diaphragm	

4.6. Diaphragm Material**Std.**

PF	Coating PFA	(+/- 40 µm thickness)	(anti-stick only)	
PT	Coating PTFE	(+/- 35 µm thickness)	(anti-stick only)	

4.7. Fill Fluid**Std.**

-F1	BSO-42	Silicon Oil	-20/+350°C	-4/+662°F	●
-F2	BSO-25	Fluorinated Oil	-40/+250°C	-40/+482°F	●
-F3	BSO-22	Silicon Oil	-50/+225°C	-58/+437°F	●
-F4	BSO-40	FDA approved	-15/+225°C	+5/+437°F	●
-F5	BSO-02	Silicon Oil	-40/+400°C	-40/+752°F	●
-F6	BSO-03	Fluorinated Oil	-80/+100°C	-112/+212°F	●
-F7	BSO-18	Silicon Oil	-10/+315°C	+14/+599°F	●
-F8	BSO-21 (<7m, no IC1)	Silicon Oil	-40/+315°C	-40/+599°F	●
-F9	BSO-41	Silicon Oil	-80/+120°C	-112/+248°F	●
-F0	BSO-48	Silicon Oil	-20/+420°C	-4/+788°F	●

4.8. Capillary Size / Type (AISI 316 Stainless Steel; 316 Armoured)**Std.**

C2	Capillary (2mm ID) - radial	●
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4.9. Capillary Length**Std.**

01	1 m	3 ft.	●
1A	1,5 m	5 ft.	●
02	2 m	6 ft.	●
03	3 m	10 ft	●
04	4 m	13 ft.	●
05	5 m	15 ft.	●
06	6 m	20 ft	●
07	7 m	23 ft.	
08	8 m	25 ft.	
09	9 m	30 ft.	
10	10 m	33 ft.	
11	11m	35 ft.	
12	12 m	40 ft.	
13	13 m	43 ft	
14	14 m	45 ft.	
15	15 m	50 ft.	

4.10. Flush rings in AISI 316(L)**Std.**

/FL01	size 02 RF/B1 (unplugged)	Mat, 316(L) 1 x 1/4" NPT	
/FL02	size 02 RF/B1 (unplugged)	Mat, 316(L) 1 x 1/2" NPT	
/FL03	size 04 RF/B1 (unplugged)	Mat, 316(L) 1 x 1/4" NPT	●
/FL04	size 04 RF/B1 (unplugged)	Mat, 316(L) 1 x 1/2" NPT	●
/FL05	size 05 RF/B1 (unplugged)	Mat, 316(L) 1 x 1/4" NPT	●
/FL06	size 05 RF/B1 (unplugged)	Mat, 316(L) 1 x 1/2" NPT	●
/FL07	size 08 RF/B1 (unplugged)	Mat, 316(L) 1 x 1/4" NPT	
/FL08	size 08 RF/B1 (unplugged)	Mat, 316(L) 1 x 1/2" NPT	
/FL09	size 10 RF/B1 (unplugged)	Mat, 316(L) 1 x 1/4" NPT	●
/FL010	size 10 RF/B1 (unplugged)	Mat, 316(L) 1 x 1/2" NPT	●

4.10. Flush rings in AISI 316(L)

Std.

/F21	Second flush port 1/4" NPTf		
/F22	Second flush port 1/2" NPTf		
/FLV1	Vent plugs 1/4" (not fitted)		●
/FLV2	Vent plugs 1/2" (not fitted)		●
/FLP1	Blind plugs 1/4" (not fitted)		
/FLP2	Vent plugs 1/2" (not fitted)		
/FP1	1x fitted to flush port – PTFE fitting paste + pressure leak test		
/FG1	1x fitted to flush port – Graphite fitting paste + pressure leak test		
/FP2	2x fitted to flush port – PTFE fitting paste + pressure leak test		
/FG2	2x fitted to flush port – Graphite fitting paste+ pressure leak test		
/FV91	Pair flush valves BDTV911	for 1/4" ports (fitted)	
/FV92	Pair flush valves BDTV911	for 1/2" ports (fitted)	
/FV93	Single flush valve BDTV911	for 1/4" ports (fitted)	
/FV94	Single flush valve BDTV911	for 1/4" ports (fitted)	
/FB4A1	Backup Flange, 1,5" cl. 150 in 316(L) mounted with 2 screws		
/FB4A3	Backup Flange, 1,5" cl. 300 in 316(L) mounted with 2 screws		
/FB4A4	Backup Flange, 1,5" cl. 600 in 316(L) mounted with 2 screws		
/FB5A1	Backup Flange, 2" cl. 150 in 316(L) mounted with 2 screws		
/FB5A3	Backup Flange, 2" cl. 300 in 316(L) mounted with 2 screws		
/FB5A4	Backup Flange, 2" cl. 600 in 316(L) mounted with 2 screws		
/FB8A1	Backup Flange, 3" cl. 150 in 316(L) mounted with 2 screws		
/FB8A3	Backup Flange, 3" cl. 300 in 316(L) mounted with 2 screws		
/FB8A4	Backup Flange, 3" cl. 600 in 316(L) mounted with 2 screws		
/FB5D4	Backup Flange, DN50/PN10-40 in 316(L) mounted with 2 screws		
/FB8D4	Backup Flange, DN80/PN10-40 in 316(L) mounted with 2 screws		



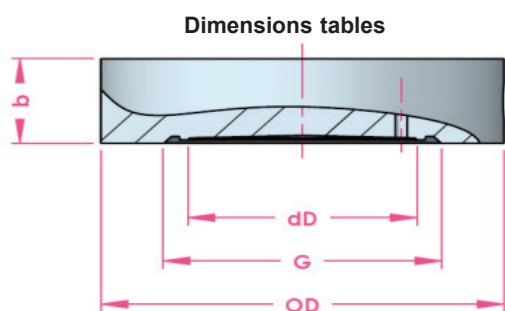
4.11. Options

Std.

/N5	EJX/EJA100/300/400 + W option	Low volume covers by Yokogawa	●
/FW	Full welded construction	recomm. for vacuum service - (< 500 mbara)	
/FWS	Full Welded construction for 500/600 series	recomm. for vacuum service - (< 500 mbara)	
/IC1	Capillary ID 1 mm. / 0,04"		
/BS6	Black sleeve on capillary ≤ 6 m.		
/BS15	Black sleeve on capillary > 6 ≤ 15 m.		
/WS6	White sleeve on capillary ≤ 6 m.		
/WS15	White sleeve on capillary > 6 ≤ 15 m.		

4.11. Options

/K1	Degreasing Treatment I + certificate	
/K2	Degreasing Treatment (applicable F2 fill) + certificate	●
/NACE	NACE MR01-75 (ISO15156) or MR0103 (ISO17945) compliance	●
/BAS	Basical performance calculation report	
/DP1	Dye penetrant test pressurized welds + 2.2 EN-10204 test report (Level I)	
/DP2	Dye penetrant test pressurized welds + 3.1 EN-10204 test report (Level II)	
/QDBDT	<5 working days ex works BADO or rush charge compensation for standards (●) only	
/WC	Wooden crate packing	



ASME B16.5 RF facing

Size	Rating	OD	dD	b	G	weight
1.5"	cl. 150-600	73.0	44.0	24.0	52.4	0.8 kg
	cl. 900-2500		32.0		41.5	0.8 kg
2"	cl. 150-600	91.9	57.0		70.2	1.3 kg
	cl. 900-2500		44.0		55.4	1.3 kg
3"	cl. 150-2500	127.0	81.0		93.0	2.4 kg
4"	cl. 150-2500	157.2				3.7 kg

EN 1092-1 B1 type

Size	Rating	OD	dD	b	G	weight
DN50	PN10-400	102.0	57.0	24	70.	1.5 kg
DN80		138.0	81.0		93.	2.9 kg
DN100	PN10-16	158.0			101.0	3.8 kg
	PN25-400	162.0				3.9 kg

All dimensions in mm, weight in kg.

Flush ring dimensions, [see page 30](#)

5. DFS-BRC Diaphragm Seal - Blind flange, Raised Face

5.1. Model¹

Std.

TXMH	EJA-E / EJX-A 100, 300 & 400 Series; 4-20 mA + digital communication	●
TXMB	EJA-E / EJX-A 100, 300 & 400 Series; 'Bus' communication	
TXPH	EJA-E / EJX-A 130 & 440Series; 4-20 mA + digital communication	●
TXPB	EJA-E / EJX-A 130 & 440Series; 'Bus' communication	
TXDH	EJA-E / EJX-A 500 & 600 Series; 4-20 mA + digital communication	●
TXDB	EJA-E / EJX-A 500 & 600 Series; 'Bus' communication	
TXDE	EJA-E / EJX-A 500 & 600 Series; DRS system	
TXDW	EJA-E / EJX-A 500 & 600 Series; Wireless communication	
TXMW	EJA-E / EJX-A 100, 300 & 400 Series; Wireless communication	

***Note 1:** For TXMH, TXMB, TXPH, TXPB and TXMW: Only M, H, V & H, B, A capsules allowed; S wetted parts only.
For TXDH, TXDB, TXDE and TXDW: Mandatory connections "4" or "W"; S wetted parts only



5.2. Seal Type

DFS-BRC	Diaphragm Seal - Blind flange, Raised Face	
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5.3. Mounting

WN5	TXM/P_ with W option =/N5 mandatory option	●
XN5	TXD_ 500/600 series only; /N5 option not applicable	●
WN1	TXM/P_ with W option =/N5 mandatory option; single sided mounting EJ_100 series only	

5.4. Flange Size & Rating

Std.

					dD (min. span, see page 4)
04A1	1.5"	cl. 150-600 RF	acc. ASME B16.5	44 mm.	
04A2	1.5"	cl. 900-2500 RF	acc. ASME B16.6	32 mm.	
05A1	2"	cl. 150-600 RF	acc. ASME B16.5	57 mm.	●
05A2	2"	cl. 900-2500 RF	acc. ASME B16.6	44 mm.	
08A1	3"	cl. 150-2500 RF	acc. ASME B16.5	81 mm.	●
10A1	4"	cl. 150-2500 RF	acc. ASME B16.5	81 mm.	
05D1	DN50	PN10-400	form B1 acc. EN 1092-1	57 mm.	●
08D1	DN80	PN10-400	form B1 acc. EN 1092-1	81 mm.	●
10D1	DN100	PN10-400	form B1 acc. EN 1092-1	81 mm.	

5.5. Flange Material

Std.

SS	SS AISI 316(L)	●
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5.6. Wetted parts material (Diaphragm Material & Raised face covered)

Std.

HB	Alloy B2	●
HC	Alloy C276	●
I6	Alloy 625	●
DU	Duplex 2205	●
SD	Super Duplex 2507	●
M4	Alloy 400	●
N2	Nickel 201	●
TA	Tantalum	●

5.6. Wetted parts material (Diaphragm Material & Raised face covered)**Std.**

S4	AISI304L	●
S2	AISI321	●
T1	Titanium Gr. 1	●

5.7. Fill Fluid**Std.**

-F1	BSO-42	Silicon Oil	-20/+350°C	-4/+662°F	●
-F2	BSO-25	Fluorinated Oil	-40/+250°C	-40/+482°F	●
-F3	BSO-22	Silicon Oil	-50/+225°C	-58/+437°F	●
-F4	BSO-40	FDA approved	-15/+225°C	+5/+437°F	●
-F5	BSO-02	Silicon Oil	-40/+400°C	-40/+752°F	●
-F6	BSO-03	Fluorinated Oil	-80/+100°C	-112/+212°F	●
-F7	BSO-18	Silicon Oil	-10/+315°C	+14/+599°F	●
-F8	BSO-21(<7m,no /IC1)	Silicon Oil	-40/+315°C	-40/+599°F	●
-F9	BSO-41	Silicon Oil	-80/+120°C	-112/+248°F	●
-F10	BSO-48	Silicon Oil	-20/+420°C	-4/+788°F	●

5.8. Capillary Size / Type (AISI 316 Stainless Steel; 316 Armoured)**Std.**

C2	Capillary (2mm ID) - radial	●
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5.9. Capillary Length**Std.**

01	1 m	3 ft.	●
1A	1,5 m	5 ft.	●
02	2 m	6 ft.	●
03	3 m	10 ft.	●
04	4 m	13 ft.	●
05	5 m	15 ft.	●
06	6 m	20 ft.	●
07	7 m	23 ft.	
08	8 m	25 ft.	
09	9 m	30 ft.	
10	10 m	33 ft.	
11	11 m	35 ft.	
12	12 m	40 ft.	
13	13 m	43 ft.	
14	14 m	45 ft.	
15	15 m	50 ft.	

5.10. Flush rings in AISI 316(L)**Std.**

/FL03	size 04 RF/B1 (unplugged)	Mat, 316(L) 1 x 1/4" NPT	●
/FL04	size 04 RF/B1 (unplugged)	Mat, 316(L) 1 x 1/2" NPT	●
/FL05	size 05 RF/B1 (unplugged)	Mat, 316(L) 1 x 1/4" NPT	●

5.10. Flush rings in AISI 316(L)

Std.

/FL06	size 05 RF/B1 Mat. 316(L); unplugged	1 x 1/2" NPT	●
/FL07	size 08 RF/B1 Mat. 316(L); unplugged	1 x 1/4" NPT	
/FL08	size 08 RF/B1 Mat. 316(L); unplugged	1 x 1/2" NPT	
/FL09	size 10 RF/B1 Mat. 316(L); unplugged	1 x 1/4" NPT	●
/FL10	size 10 RF/B1 Mat. 316(L); unplugged	1 x 1/2" NPT	●
/F21	Second flush port 1/4" NPTf		
/F22	Second flush port 1/2" NPTf		
/FLV1	Vent plugs 1/4" (not fitted)		●
/FLV2	Vent plugs 1/2" (not fitted)		●
/FLP1	Blind plugs 1/4" (not fitted)		
/FLP2	Blind plugs 1/2" (not fitted)		
/FP1	1x fitted to flush port – PTFE fitting paste + pressure leak test		
/FG1	1x fitted to flush port – Graphite fitting paste + pressure leak test		
/FP2	2x fitted to flush port – PTFE fitting paste + pressure leak test		
/FG2	2x fitted to flush port – Graphite fitting paste+ pressure leak test		
/FV91	Pair flush valves BDTV911	for 1/4" ports (fitted)	
/FV92	Pair flush valves BDTV911	for 1/2" ports (fitted)	
/FV93	Single flush valve BDTV911	for 1/4" port (fitted)	
/FV94	Single flush valve BDTV911	for 1/2" port (fitted)	
/FB4A1	Backup Flange, 1,5" cl. 150 in 316(L) mounted with 2 screws		
/FB4A3	Backup Flange, 1,5" cl. 300 in 316(L) mounted with 2 screws		
/FB4A4	Backup Flange, 1,5" cl. 600 in 316(L) mounted with 2 screws		
/FB5A1	Backup Flange, 2" cl. 150 in 316(L) mounted with 2 screws		
/FB5A3	Backup Flange, 2" cl. 300 in 316(L) mounted with 2 screws		
/FB5A4	Backup Flange, 2" cl. 600 in 316(L) mounted with 2 screws		
/FB8A1	Backup Flange, 3" cl. 150 in 316(L) mounted with 2 screws		
/FB8A3	Backup Flange, 3" cl. 300 in 316(L) mounted with 2 screws		
/FB8A4	Backup Flange, 3" cl. 600 in 316(L) mounted with 2 screws		
/FB5D4	Backup Flange, DN50/PN10-40 in 316(L) mounted with 2 screws		
/FB8D4	Backup Flange, DN80/PN10-40 in 316(L) mounted with 2 screws		



5.11. Options

Std.

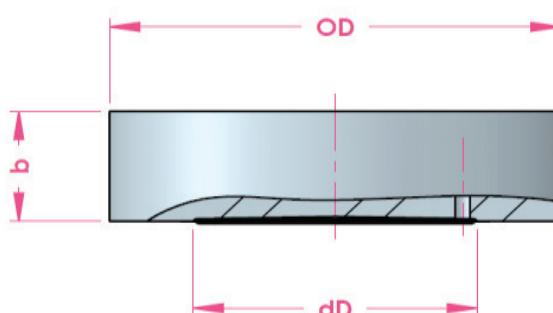
/N5	EJX/EJA100/300/400 + W option	Low volume covers by Yokogawa	●
/FW	Full welded construction	recomm. for vacuum service - (< 500 mbara)	
/FWS	Full Welded construction for 500/600 series	recomm. for vacuum service - (< 500 mbara)	
/IC1	Capillary ID 1 mm. / 0,04"		
/BS6	Black sleeve on capillary ≤ 6 m.		
/BS15	Black sleeve on capillary > 6 ≤ 15 m.		

5.11. Options

Std.

/WS6	White sleeve on capillary ≤ 6 m.	●
/WS15	White sleeve on capillary $> 6 \leq 15$ m.	
/K1	Degreasing Treatment I + certificate	
/K2	Degreasing Treatment (applicable F2 fill) + certificate	
/NACE	NACE MR01-75 (ISO15156) or MR0103 (ISO17945) compliance	
/BAS	Basical performance calculation report	●
/DP1	Dye penetrant test pressurized welds + 2.2 EN-10204 test report (Level I)	●
/DP2	Dye penetrant test pressurized welds + 3.1 EN-10204 test report (Level II)z	
/QDBDT	<5 working days ex works BADO or rush charge compensation for standards (●) only	
/WC	Wooden crate packing	

Dimensions tables



ASME B16.5 RF facing

Size	Rating	OD	db	b	Weight
1.5"	cl. 150-600	73.0	44.0	24	0.8 kg
	cl. 900-2500		32.0		0.8 kg
2"	cl. 150-600	92.1	57.0		1.3 kg
	cl. 900-2500		44.0		1.3 kg
3"	cl. 150-2500	127.0	81.0		2.4 kg
4"	cl. 150-2500	157.2			3.7 kg

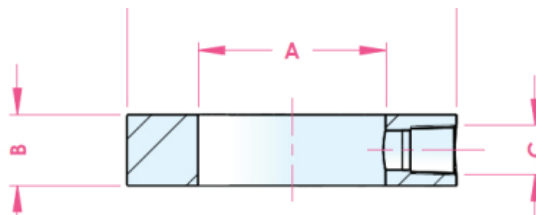
EN 1092-1 B1 type

Size	Rating	OD	db	b	Weight
DN50	PN10-400	102.0	57.0	24	1.5 kg
DN80		138.0	81.0		2.9 kg
DN100	PN10-16	158.0			3.8 kg
	PN25-400	162.0			3.9 kg

All dimensions in mm, weight in kg.

Flush ring dimensions, [see page 30](#)

Dimensions tables



ASME B16.5 RF facing

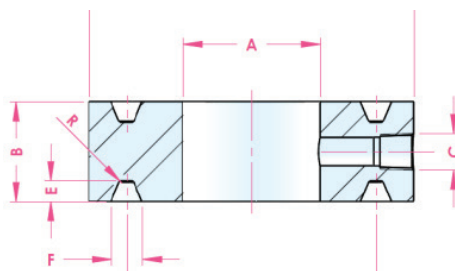
Size	Rating	D	A	B	C	b
1"	cl. 150-600	50.8	26.6	35	½" NPT	17.5
	cl. 900-1500	70.0				8.0
	cl. 2500	75.0				
1.5"	cl. 150-600	73.0	40.9			17.5
	cl. 900-1500	85.0				8.0
	cl. 2500	95.0				
2"	cl. 150-600	91.9	52.5			17.5
	cl. 900-1500	100.0				8.0
	cl. 2500	115.0				
3"	cl. 150-600	127.0	77.9			17.5
	cl. 900					
	cl. 1500	135.0				8.0
	cl. 2500	165.0				
4"	cl. 150-600	157.2	102.3			17.5
	cl. 900					
	cl. 1500	165.0				8.0
	cl. 2500	190.0				

EN 1092-1 B1 type

Size	Rating	D	A	B	C	b	
DN25	PN10-160	68.0	28.5	35	½" NPT	17.5	
	PN250	70.0				8.0	
	PN320	75.0					
	PN400	80.0					
DN40	PN10-160	88.0	43.1				17.5
	PN250						
	PN320	95.0				8.0	
	PN400	100.0					
DN50	PN10-160	102.0	53.9			17.5	
	PN250						
	PN320	110.0					8.0
	PN250400	115.0					
DN80	PN10-160	138.0	80.9			17.5	
	PN250						
	PN320	145.0					8.0
	PN400	155.0					

DN100	PN10-16	158.0	104.3	35	½" NPT	17.5
	PN25-160	162.0				
	PN250	170.0				
	PN320	180.0				
	PN400	195.0				8.0

Dimensions tables



ASME B16.5 RJF facing

Size	Rating	D	A	B	E	F	P	R	C	Ring #		
2"	cl. 150	102.0	52.5	50	6.4	8.7	82.6	0.8	½" NPT	22		
	cl. 300	108.0			7.9	11.9				95.3	23	
	cl. 400-600						24					
	cl. 900-1500						124.0				101.6	26
	cl. 2500						133.0					
3"	cl. 150	133.0	77.9	50	6.4	8.7	114.3	0.8	½" NPT	29		
	cl. 300	146.0			7.9	11.9	123.8			31		
	cl. 400-600										136.5	
	cl. 900						156.0	127.0				1.5
	cl. 1500						168.0	9.5			13.5	127.0
	cl. 2500											

Ring thickness

Flush size	Class	RF /B1 facing	RJF facing
¼"	150-600	20.0	$B = 20 + 2 \cdot E$
	900-1500	25.0	$B = 25 + 2 \cdot E$
	2500	35.0	$B = 35 + 2 \cdot E$
¾"	All	40.0	$B = 40 + 2 \cdot E$

Thickness of the ring is depending on flush hole size. The above dimensions tables are based on ½" flush connections. For ¼", ¾", below rules can be followed.

All dimensions in mm.

6. DFS-EXT Diaphragm Seal - Extended, Flush Diaphragm, Flanged type

6.1. Model¹

Std.

TXMH	EJA-E / EJX-A 100, 300 & 400 Series; 4-20 mA + digital communication	●
TXMB	EJA-E / EJX-A 100, 300 & 400 Series; 'Bus' communication	
TXPH	EJA-E / EJX-A 130 & 440Series; 4-20 mA + digital communication	●
TXPB	EJA-E / EJX-A 130 & 440Series; 'Bus' communication	
TXDH	EJA-E / EJX-A 500 & 600 Series; 4-20 mA + digital communication	●
TXDB	EJA-E / EJX-A 500 & 600 Series; 'Bus' communication	
TXDE	EJA-E / EJX-A 500 & 600 Series; DRS system	
TXDW	EJA-E / EJX-A 500 & 600 Series; Wireless communication	
TXMW	EJA-E / EJX-A 100, 300 & 400 Series; Wireless communication	

***Note 1:** For TXMH, TXMB, TXPH, TXPB and TXMW: Only M, H, V & H, B, A capsules allowed; S wetted parts only.
For TXDH, TXDB, TXDE and TXDW: Mandatory connections "4" or "W"; S wetted parts only



6.2. Seal Type

DFS-EXT	Diaphragm Seal - Extended. Flush Diaphragm, Flangedtype	
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6.3. Mounting

WN5	TXM/P_ with W option =/N5 mandatory option	●
XN5	TXD_ 500/600 series only; /N5 option not applicable	●
WN1	TXM/P_ with W option =/N5 mandatory option; single sided mounting EJ_100 series only	

6.4. Flange Size & Rating

Std.

						dD (min. span, see page 4)
05A1	2"	cl. 150 RJF	acc. ASME B16.5	44 mm.	●	
05A2	2"	cl. 300 RJF	acc. ASME B16.5	44 mm.	●	
05A4	2"	cl. 600 RJF	acc. ASME B16.5	44 mm.		
08A1	3"	cl. 150 RF	acc. ASME B16.5	72 mm.	●	
08A2	3"	cl. 300 RF	acc. ASME B16.5	72 mm.	●	
08A4	3"	cl. 600 RF	acc. ASME B16.5	72 mm.		
10A1	4"	cl. 150 RF	acc. ASME B16.5	81 mm.	●	
10A2	4"	cl. 300 RF	acc. ASME B16.5	81 mm.	●	
05D4	DN50	PN10-40	form B1 acc. EN 1092-1	44 mm.	●	
08D4	DN80	PN10-40	form B1 acc. EN 1092-1	72 mm.	●	
08D4	DN100	PN10-16	form B1 acc. EN 1092-1	81 mm.		
10D4	DN100	PN25-40	form B1 acc. EN 1092-1	81 mm.		

6.5. Flange Material

Std.

SS	SS AISI 316(L)	●
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6.6. Extension length - Material 316(L)

Std.

-050	Extension Ø 48, length (=H) 50 mm / 2 " size 05	●
-100	Extension Ø 48, length (=H) 100 mm / 4 " size 05	●
-150	Extension Ø 48, length (=H) 150 mm / 6 " size 05	
-200	Extension Ø 48, length (=H) 200 mm / 8 " size 05	
-250	Extension Ø 48, length (=H) 250 mm / 10 " size 05	

6.6. Extension length - Material 316(L)**Std.**

-051	Extension Ø 76, length (=H) 50 mm / 2 " size 08	●
-101	Extension Ø 76, length (=H) 100 mm / 4 " size 08	●
-151	Extension Ø 76, length (=H) 150 mm / 6 " size 08	
-201	Extension Ø 76, length (=H) 200 mm / 8 " size 08	
-251	Extension Ø 76, length (=H) 250 mm / 10 " size 08	
-052	Extension Ø 93, length (=H) 50 mm / 2 " size 10	●
-102	Extension Ø 93, length (=H) 100 mm / 4 " size 10	●
-152	Extension Ø 93, length (=H) 150 mm / 6 " size 10	
-252	Extension Ø 93, length (=H) 250 mm / 10 " size 10	

6.7. Diaphragm Material**Std.**

SS	SS AISI 316(L)	
HC	Alloy C276	

6.8. Fill Fluid**Std.**

-F1	BSO-42 Silicon Oil	-20/+350°C	-4/+662°F	●
-F2	BSO-25 Fluorinated Oil	-40/+250°C	-40/+482°F	●
-F3	BSO-22 Silicon Oil	-50/+225°C	-58/+427°F	●
-F4	BSO-40 FDA approved	-15/+225°C	+5/+437°F	●
-F5	BSO-02 Silicon Oil	-40/+400°C	-40/+752°F	●
-F6	BSO-03 Fluorinated Oil	-80/+100°C	-112/+212°F	●
-F7	BSO-18 Silicon Oil	-10/+315°C	+14/+599°F	●
-F8	BSO-21 Silicon Oil (<7m, no /IC1)	-40/+315°C	-40/+599°F	●
-F9	BSO-41 Silicon Oil	-80/+120°C	-112/+248°F	●
-F0	BSO-48 Silicon Oil	-20/+420°C	-4/+788°F	●

6.9. Capillary Size / Type (AISI 316 Stainless Steel; 316 Armoured)**Std.**

NN	Direct coupled / Welded (No Capillary) ²	●
C1	Capillary (2mm ID) - axial	●

6.10. Capillary Length**Std.**

Capillary Length			State
NN	Direct coupled / Welded (No Capillary) ²		●
D1	Extended Direct mount (80mm); temp reduction 125°C; 500/600 series only		●
D2	Extended Direct mount (150 mm); temp reduction 170°C		●
TR	Temperature reducer; temp reduction 300°C		
01	1 m	3 ft.	●
1A	1,5 m	5 ft.	●
02	2 m	6 ft.	●
03	3 m	10 ft.	●
04	4 m	13 ft.	●
05	5 m	15 ft.	●
06	6 m	20 ft.	●
07	7 m	23 ft.	
08	8 m	25 ft.	
09	9 m	30 ft.	
10	10 m	33 ft.	

6.10. Capillary Length**Std.**

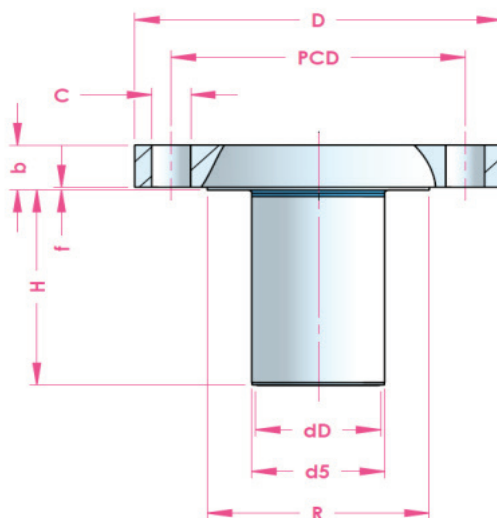
11	11 m	35 ft.	
12	12 m	40 ft.	
13	13 m	43 ft.	
14	14 m	45 ft.	
15	15 m	50 ft.	

NOTE 2: In case process temperature exceeds 150°C, please ensure selection of required cooling options (D1;D2;TR)

6.11. Options**Std.**

/N5	EJX/EJA100/300/400 + W option	Low volume covers by Yokogawa		●
/FW	Full welded construction	recomm. for vacuum service	(< 500 mbara)	
/FWS	Full Welded construction for 500/600 series	recomm. for vacuum service	(< 500 mbara)	
/IC1	Capillary ID 1 mm. / 0,04"			●
/BS6	Black sleeve on capillary ≤ 6 m.			●
/BS15	Black sleeve on capillary > 6 ≤ 15 m.			
/WS6	White sleeve on capillary ≤ 6 m.			
/WS15	White sleeve on capillary > 6 ≤ 15 m.			
/LH	Lifting handles (recomm.for ≥ cl. 900; (including wooden crate)			
/K1	Degreasing Treatment I + certificate			
/K2	Degreasing Treatment (applicable F2 fill) + certificate			
/NACE	NACE MR01-75 (ISO15156) or MR0103 (ISO17945) compliance			●
/BAS	Basecal performance calculation report)			●
/DP1	Dye penetrant test pressurized welds + 2.2 EN-10204 test report (Level I)			
/DP2	Dye penetrant test pressurized welds + 3.1 EN-10204 test report (Level II)			
/QDBDT	<5 working days ex works BADO or rush charge compensation for standards (●) only			
/WC	Wooden crate packing			

Dimensions tables



ASME B16.5 RF facing

Size	Rating	D	b	PCD	C / pcs	dD	d5	R	f	Weight	EXT weight ¹	
2"	cl. 150	150.0	19.5	120.7	19.1 / 4x	44.0	48.0	92.1	1.5	2.4	+ 0.004 x H	
	cl. 300	165.0	22.7	127.0	19.1 / 8x					3.2		
	cl. 400-600		32.4							6.4		4.2
3"	cl. 150	190.0	24.3	152.4	19.1 / 4x	72.0	76.0	127.0	1.5	4.9	+ 0.010 x H	
	cl. 300	210.0	29.0	168.3	22.3 / 8x					6.4		6.8
	cl. 400-600		38.8									8.4
4"	cl. 150	230.0	24.3	190.5	19.1 / 8x	81.0	93.0	157.2	1.5	7.0	+ 0.029 x H	
	cl. 300	255.0	32.2	200.0	22.3 / 8x					11.5		

EN 1092-1 B1 type

Size	Rating	D	b	PCD	C / pcs	dD	d5	R	f	Weight	EXT weight ¹
DN50	PN10-40	165.0	20.0	125.0	18.0 / 4x	44.0	48.0	102.0	3.0	3.0	+ 0.004 x H
DN80	PN10-40	215.0	24.0	160.0	18.0 / 8x	72.0	76.0	138.0	3.0	5.0	+ 0.010 x H
DN100	PN10-16	220.0	20.0	180.0	18.0 / 8x	81.0	93.0	158.0	3.0	4.5	+ 0.029 x H
	PN25-40	235.0	24.0	190.0	22.0 / 8x			162.0		6.5	

1) This weight should be taken for exotics as well.

All dimensions in mm, weight in kg

7. DFS-USF Diaphragm Seal - Internal Diaphragm, Flanged type

7.1. Model¹

Std.

TXMH	EJA-E / EJX-A 100, 300 & 400 Series; 4-20 mA + digital communication	●
TXMB	EJA-E / EJX-A 100, 300 & 400 Series; 'Bus' communication	
TXPH	EJA-E / EJX-A 130 & 440Series; 4-20 mA + digital communication	●
TXPB	EJA-E / EJX-A 130 & 440Series; 'Bus' communication	
TXDH	EJA-E / EJX-A 500 & 600 Series; 4-20 mA + digital communication	●
TXDB	EJA-E / EJX-A 500 & 600 Series; 'Bus' communication	
TXDE	EJA-E / EJX-A 500 & 600 Series; DRS system	
TXDW	EJA-E / EJX-A 500 & 600 Series; Wireless communication	
TXMW	EJA-E / EJX-A 100, 300 & 400 Series; Wireless communication	



*Note 1: For TXMH, TXMB, TXPH, TXPB and TXMW: Only M, H, V & H, B, A capsules allowed; S wetted parts only.
For TXDH, TXDB, TXDE and TXDW: Mandatory connections "4" or "W"; S wetted parts only

7.2 Seal Type

Std.

DFS-USF	Diaphragm Seal - Internal Diaphragm, Flanged type	
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7.3 Mounting

Std.

WN5	TXM/P_ with W option =/N5 mandatory option	●
XN5	TXD_ 500/600 series only; /N5 option not applicable	●
WN1	TXM/P_ with W option =/N5 mandatory option; single sided mounting EJ_100 series only	

7.4 Flange Size & Rating (standard supplied with 4 bolts up to 125 bar and PTFE gasket)

Std.

dD (min. span, see page 4):					
01A1	1/2"	cl. 150 RF	acc. ASME B16.5	50 mm.	●
01A2	1/2"	cl. 300 RF	acc. ASME B16.5	50 mm.	●
01A4	1/2"	cl. 600 RF	acc. ASME B16.5	50 mm.	
1AA1	3/4"	cl. 150 RF	acc. ASME B16.5	50 mm.	●
1AA2	3/4"	cl. 300 RF	acc. ASME B16.5	50 mm.	●
1AA4	3/4"	cl. 600 RF	acc. ASME B16.5	50 mm.	
02A1	1"	cl. 150 RF	acc. ASME B16.5	50 mm.	●
02A2	1"	cl. 300 RF	acc. ASME B16.5	50 mm.	●
02A4	1"	cl. 600 RF	acc. ASME B16.5	50 mm.	
04A1	1,5"	cl. 150 RF	acc. ASME B16.5	50 mm.	
04A2	1,5"	cl. 300 RF	acc. ASME B16.5	50 mm.	
04A4	1,5"	cl. 600 RF	acc. ASME B16.5	50 mm.	
01D4	DN15	PN10-40	form B1 acc. EN 1092-1	50 mm.	
01D5	DN15	PN63	form B1 acc. EN 1092-1	50 mm.	
01D6	DN15	PN100	form B1 acc. EN 1092-1	50 mm.	
02D4	DN25	PN10-40	form B1 acc. EN 1092-1	50 mm.	
02D5	DN25	PN63	form B1 acc. EN 1092-1	50 mm.	●
02D6	DN25	PN100	form B1 acc. EN 1092-1	50 mm.	
04D4	DN40	PN10-40	form B1 acc. EN 1092-1	50 mm.	
04D5	DN40	PN63	form B1 acc. EN 1092-1	50 mm.	
04D6	DN40	PN100	form B1 acc. EN 1092-1	50 mm.	

7.5 Lower Part Material**Std.**

SS	SS AISI 316(L)	●
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7.6 Diaphragm Material**Std.**

SS	Stainless Steel AISI 316L		●
HB	Alloy B2		
HC	Alloy C276		●
DU	Duplex 2205		
I6	Alloy 625		
M4	Alloy 400		
N2	Nickel 201		
TA	Tantalum		
SD	Super Duplex 2507		
S4	AISI304L		
S2	AISI321		
A0	6 µm gold (24 Crt)	size 05 (on diaphragm)	
A1	25 µm gold (24 Crt)	size 05 (on diaphragm)	
A2	40 µm gold (24 Crt)	size 05 (on diaphragm)	
PF	Coating PFA	(+/- 40 µm thickness)	(anti-stick only)
PT	Coating PTFE (anti-stick only)	(+/- 30-35 µm thickness) - (anti-stick only)	

7.7 Fill Fluid**Std.**

-F1	BSO-42	Silicon Oil	-20/+350°C	-4/+662°F	●
-F2	BSO-25	Fluorinated Oil	-40/+250°C	-40/+482°F	●
-F3	BSO-22	Silicon Oil	-50/+225°C	-58/+437°F	●
-F4	BSO-40	FDA approved	-15/+225°C	+5/+437°F	●
-F5	BSO-02	Silicon Oil	-40/+400°C	-40/+752°F	●
-F6	BSO-03	Fluorinated Oil	-80/+100°C	-112/+212°F	●
-F7	BSO-18	Silicon Oil	-10/+315°C	+14/+599°F	●
-F8	BSO-21	Silicon Oil	-40/+315°C	-40/+599°F	●
-F9	BSO-41	Silicon Oil	-80/+120°C	-112/+248°F	●
-F0	BSO-48	Silicon Oil	-20/+420°C	-4/+788°F	●

7.8 Capillary Size / Type (AISI 316 Stainless Steel; 316 Armoured)**Std.**

NN	Direct coupled / Welded (No Capillary) ²		●
C1	Capillary (2mm ID)	axial	●

7.9. Capillary Length**Std.**

NN	Direct coupled / Welded (No Capillary) ²		●
D1	Extended Direct mount (80mm); temp reduction 125°C; 500/600 series only		●
D2	Extended Direct mount (150 mm); temp reduction 170°C		●
TR	Temperature reducer; temp reduction 300°C		
01	1 m	3 ft.	●
1A	1,5 m	5 ft.	●
02	2 m	6 ft.	●

7.9. Capillary Length

Std.

03	3 m	10 ft.	●
04	4 m	13 ft.	●
05	5 m	15 ft.	●
06	6 m	20 ft.	
07	7 m	23 ft.	
08	8 m	25 ft.	
09	9 m	30 ft.	
10	10 m	33 ft.	
11	11 m	35 ft.	
12	12 m	40 ft.	
13	13 m	43 ft.	
14	14 m	45 ft.	
15	15 m	50 ft.	

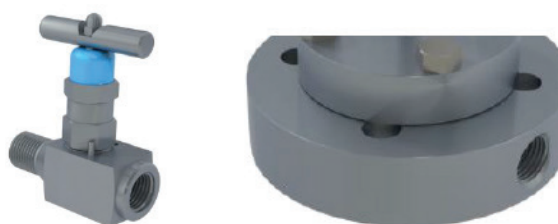
NOTE 2: In case process temperature exceeds 150°C, please ensure selection of required cooling options (D1;D2;TR)

NOTE 3: Standard supplied with PTFE gasket, to be used up to 240°C. In case process temperature exceeds 240°C, please check gasket material needed (/GGA; /CAM)

7.10. Flush rings in AISI 316(L)

Std.

/FR01	Flush port Unplugged	1 x 1/4" NPT
/FR02	Flush port Unplugged	2 x 1/4" NPT
/FR03	Flush port Vent Plug (fitted with PTFE)	1 x 1/4" NPT
/FR04	Flush port 2x Vent plug (fitted with PTFE)	2 x 1/4" NPT
/FR05	Flush port Blind plug (fitted with PTFE)	1 x 1/4" NPT
/FR06	Flush port 2x Blind plug (fitted with PTFE)	2 x 1/4" NPT
/FR10	Flush port Unplugged	1 x 1/2" NPT
/FR20	Flush port Unplugged	2 x 1/2" NPT
/FR30	Flush port Vent Plug (fitted with PTFE)	1 x 1/2" NPT
/FR40	Flush port 2x Vent plug (fitted with PTFE)	2 x 1/2" NPT
/FR50	Flush port Blind plug (fitted with PTFE)	1 x 1/2" NPT
/FR60	Flush port 2x Blind plug (fitted with PTFE)	2 x 1/2" NPT
/FG1	1x fitted to flush port – Graphite fitting paste + pressure leak test	
/FG2	2x fitted to flush port – Graphite fitting paste+ pressure leak test	
/FV91	Pair flush valves BDTV910	for 1/4" ports (fitted with PTFE)
/FV92	Pair flush valves BDTV910	for 1/2" ports (fitted with PTFE)
/FV93	Single flush BDTV910 for 1/4"	for 1/4" ports (fitted with PTFE)
/FV94	Single flush BDTV910 for 1/2"	for 1/2" ports(fitted with PTFE)

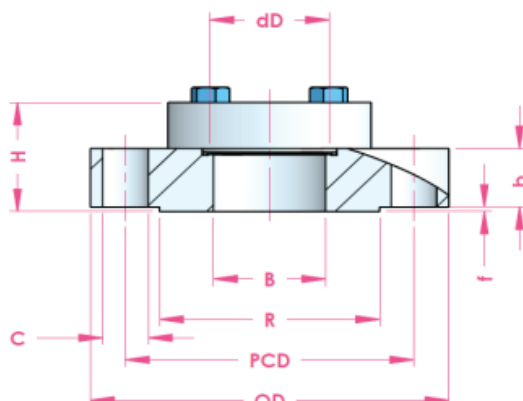


7.11. Options

Std.

/N5	EJX/EJA100/300/400 + W option	Low volume covers by Yokogawa	●
/FW	Full welded construction	recomm. for vacuum service (< 500 mbara)	
/FWS	Full Welded construction for 500/600 series	recomm. for vacuum service (< 500 mbara)	
/GGA	Garlock Style 9850 (Carbon Fiber / Nitrile Binder) up to 343°C		●
/CAM	Camprofile (316L SS core with graphite overlay) up to 500°C		●
/IC1	Capillary ID 1 mm. / 0,04"		
/BS6	Black sleeve on capillary ≤ 6 m.		
/BS15	Black sleeve on capillary > 6 ≤ 15 m.		
/WS6	White sleeve on capillary ≤ 6 m.		
/WS15	White sleeve on capillary > 6 ≤ 15 m.		
/K1	Degreasing Treatment I + certificate		
/K2	Degreasing Treatment (applicable F2 fill) + certificate		
/NACE	NACE MR01-75 (ISO15156) or MR0103 (ISO17945) compliance		●
/BAS	Basecal performance calculation report		●
/DP1	Dye penetrant test pressurized welds + 2.2 EN-10204 test report (Level I)		
/DP2	Dye penetrant test pressurized welds + 3.1 EN-10204 test report (Level II)		
/LMF	Large Male Facing	acc. ASME B16.5	
/SMF	Small Male Facing	acc. ASME B16.5	
/FF	Flat Facing	acc. ASME B16.5	
/LTF	Large Tongue	acc. ASME B16.5	
/STF	Small Tongue Facing	acc. ASME B16.5	
/LGF	Large Groove Facing	acc. ASME B16.5	
/SGF	Small Groove Facing	acc. ASME B16.5	
/LFF	Large Female Facing	acc. ASME B16.5	
/SFF	Small Female Facing	acc. ASME B16.5	
/RJF	Ring Joint Facing	acc. ASME B16.5	
/A	Form A	acc. EN1092-1	
/B2	Form B2	acc. EN1092-1	
/C	Form C	acc. EN1092-1	
/D	Form D	acc. EN1092-1	
/E	Form E	acc. EN1092-1	
/F	Form F	acc. EN1092-1	
/G	Form G	acc. EN1092-1	
/H	Form H	acc. EN1092-1	
/QBDT	<5 working days ex works BADO or rush charge compensation for standards (●) only		
/WC	Wooden crate packing		

Dimensions tables



ASME B16.5 RF facing

Size	Rating	OD	B	R	b	f	H	PCD	C/PCS	Weight
1/2"	cl. 150	90.0	15.8	34.9	33	1.6	54.0	60.3	1/2"-13UNC/4x	2.4
	cl. 300	95.0					52.0	66.7		2.5
	cl. 400-600				39	6.4	57.0			2.5
	cl. 900-1500	120.0			35		61.0	82.6	3/4"-10 UNC/4x	3.7

ASME B16.5 RF facing

Size	Rating	OD	B	R	b	f	H	PCD	C/PCS	Weight
3/4"	cl. 150	100.0	21.0	42.9	30	1.6	45.0	69.9	1/2"-13 UNC / 4x	2.2
	cl. 300	115.0			29		50.0	82.6	5/8"-11UNC/4x	3.0
	cl. 400-600					33				6.4
	cl. 900-1500	130.0			4.6					
1"	cl.150	110.0	26.6	50.8	24	1.6	45.0	79.4	1/2" - 13 UNC / 4x	2.5
	cl.300	125.0			29		50.0	88.9	5/8" - 11 UNC / 4x	3.4
	cl.400 - 600					37				6.4
	cl. 900-1500	150.0			6.4					
1.5"	cl. 150	125.0	40.9	73.0	27	1.6	50.0	98.4	1/2" - 13 UNC / 4x	3.4
	cl. 300	29			58.0		111.3	3/4" - 10 UNC / 4x	5.8	
	cl. 400 - 600					32			6.4	63.0
	cl. 900-1500	180.0			9.2					

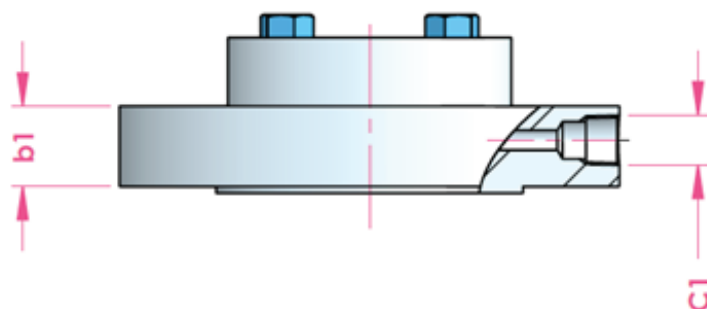
EN 1092-1 B1 type

Size	Rating	OD	B	b	R	f	H	PCD	C / pcs	Weight
DN15	PN10-40	95.0	15.0	32.0	45.0	2.0	48.5	65.0	M12 / 4x	3.5 kg
	PN63-100	105.0		29.0			49.5	75.0		3.6 kg
DN25	PN10-40	115.0	25.0	29.0	68.0		48.1	85.0		M16 / 4x
	PN63-100	140.0		35.0			55.5	100.0	6.8 kg	
DN40	PN10-40	150.0	40.0	24.0	88.0		45.5		M20 / 4x	
	PN63-100	170.0		26.0			47.5			6.6 kg

EN 1092-1 B1 type

Size	Rating	OD	B	b	R	f	H	PCD	C / pcs	Weight
DN50	PN10-16	165.0	47.0	30.0	102.0	3.0	48.5	125.0	M16 / 4x	6.7 kg
	PN25-40									
	PN63	180.0					49.5	135.0	M20 / 4x	9.2 kg
	PN100	195.0		28.0				145.0	M24 / 4x	

Thickness with flush ports



Flush size (C1)	b1
1/4" NPT	B<20 then b1=20
1/2" NPT	B<35 then b1=35

All dimensions in mm, weight in kg

8. DFS-USL-F Diaphragm Seal - Internal Diaphragm, Flanged type

8.1. Model¹

Std.

TXMH	EJA-E / EJX-A 100, 300 & 400 Series; 4-20 mA + digital communication	●	
TXMB	EJA-E / EJX-A 100, 300 & 400 Series; 'Bus' communication		
TXPH	EJA-E / EJX-A 130 & 440Series; 4-20 mA + digital communication	●	
TXPB	EJA-E / EJX-A 130 & 440Series; 'Bus' communication		
TXDH	EJA-E / EJX-A 500 & 600 Series; 4-20 mA + digital communication	●	
TXDB	EJA-E / EJX-A 500 & 600 Series; 'Bus' communication		
TXDE	EJA-E / EJX-A 500 & 600 Series; DRS system		
TXDW	EJA-E / EJX-A 500 & 600 Series; Wireless communication		
TXMW	EJA-E / EJX-A 100, 300 & 400 Series; Wireless communication		

***Note 1:** For TXMH, TXMB, TXPH, TXPB and TXMW: Only M, H, V & H, B, A capsules allowed; S wetted parts only.
For TXDH, TXDB, TXDE and TXDW: Mandatory connections "4" or "W"; S wetted parts only

8.2 Seal Type

Std.

DFS-USLF	Diaphragm Seal - Internal Diaphragm, Flanged type	
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8.3 Mounting

Std.

WN5	TXM/P_ with W option ≠/N5 mandatory option	●
XN5	TXD_ 500/600 series only; /N5 option not applicable	●
WN1	TXM/P_ with W option ≠/N5 mandatory option; single sided mounting EJ_100 series only	

8.4. Flange Size & Rating

Std.

dD (min. span, see page 4)				
01A1	1/2"	cl. 150 RF	81 mm.	●
01A2	1/2"	cl. 300 RF	81 mm.	●
01A4	1/2"	cl. 600 RF	81 mm.	
1AA1	3/4"	cl. 150 RF	81 mm.	●
1AA2	3/4"	cl. 300 RF	81 mm.	●
1AA4	3/4"	cl. 600 RF	81 mm.	
02A1	1"	cl. 150 RF	81 mm.	
02A1	1"	cl. 300 RF	81 mm.	
02A4	1"	cl. 600 RF	81 mm.	
04A1	1,5"	cl. 150 RF	81 mm.	
04A2	1,5"	cl. 300 RF	81 mm.	
04A4	1,5"	cl. 600 RF	81 mm.	
05A1	2"	cl. 150 RF	81 mm.	●
05A2	2"	cl. 300 RF	81 mm.	●
05A4	2"	cl. 600 RF	81 mm.	●
01D4	DN15	PN10-40	81 mm.	
01D5	DN15	PN63	81 mm.	
01D6	DN15	PN100	81 mm.	
02D4	DN25	PN10-40	81 mm.	
02D5	DN25	PN63	81 mm.	
02D6	DN25	PN100	81 mm.	

8.4. Flange Size & Rating

Std.

dD (min. span, see page 4)				
02D6	DN25	PN100	81 mm.	
04D4	DN40	PN10-40	81 mm.	
04D5	DN40	PN63	81 mm.	
04D6	DN40	PN100	81 mm.	
05D4	DN50	PN10-40	81 mm.	●
05D5	DN50	PN63	81 mm.	
05D6	DN50	PN100	81 mm.	

8.5. Lower part material

Std.

SS	SS AISI 316(L)	●
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8.6. Diaphragm Material

Std.

SS	Stainless Steel AISI 316 L		●
HB	Alloy B2		
HC	Alloy C276		●
DU	Duplex 2205		
I6	Alloy 625		
M4	Alloy 400		
N2	Nickel 201		
TA	Tantalum		
SD	Super Duplex 2507		
S4	AISI304L		
S2	AISI321		
A0	6 µm gold (24 Crt)	size 05 (on diaphragm)	
A1	25 µm gold (24 Crt)	size 05 (on diaphragm)	
A2	40 µm gold (24 Crt)	size 05 (on diaphragm)	
PF	Coating PFA	(+/- 40 µm thickness) (anti-stick only)	
PT	Coating PTFE	(+/- 30-35 µm thickness) - (anti-stick only)	

8.7. Fill Fluid

Std.

-F1	BSO-42	Silicon Oil	-20/+350°C ²	-4/+662°F	●
-F2	BSO-25	Fluorinated Oil	-40/+250°C ²	-40/+482°F	●
-F3	BSO-22	Silicon Oil	-50/+225°C	-58/+437°F	●
-F4	BSO-40	FDA approved	-15/+225°C	+5/+437°F	●
-F5	BSO-02	Silicon Oil	-40/+400°C ²	-40/+752°F	●
-F6	BSO-03	Fluorinated Oil	-80/+100°C	-112/+212°F	●
-F7	BSO-18	Silicon Oil	-10/+315°C ²	+14/+599°F	●
-F8	BSO-21 (<7m, no /IC1)	Silicon Oil	-40/+315°C ²	-40/+599°F	●
-F9	BSO-41	Silicon Oil	-80/+120°C	-112/+248°F	●
-F0	BSO-48	Silicon Oil	-20/+420°C ²	-4/+788°F	●

8.8. Capillary Size / Type (AISI 316 Stainless Steel; 316 Armoured)

Std.

NN	Direct coupled / Welded (No Capillary) ²		●
C1	Capillary (2mm ID) - axial		●

8.9. Capillary Length**Std.**

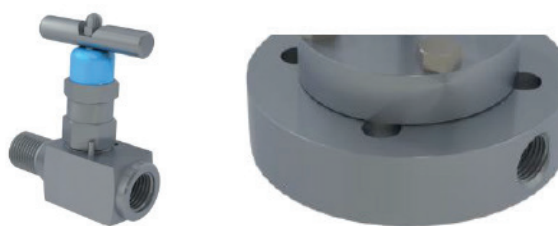
NN	Direct coupled / Welded (No Capillary) ²		●
D1	Extended Direct mount (80mm); temp reduction 125°C; 500/600 series only		●
D2	Extended Direct mount (150 mm); temp reduction 170°C		●
TR	Temperature reducer; temp reduction 300°C		●
01	1 m	3 ft.	●
1A	1,5 m	5 ft.	●
02	2 m	6 ft.	●
03	3 m	10 ft	●
04	4 m	13 ft.	
05	5 m	15 ft.	
06	6 m	20 ft	
07	7 m	23 ft.	
08	8 m	25 ft.	
09	9 m	30 ft.	
10	10 m	33 ft.	
11	11m	35 ft.	
12	12 m	40 ft.	
13	13 m	43 ft	
14	14 m	45 ft.	
15	15 m	50 ft.	

NOTE 2: In case process temperature exceeds 150°C, please ensure selection of required cooling options (D1;D2;TR)

NOTE 3: Standard supplied with PTFE gasket, to be used up to 240°C. In case process temperature exceeds 240°C, please check gasket material needed (/GGA; /CAM)

8.10. Flush connections lower part**Std.**

/FR01	Flush port Unplugged	1 x ¼" NPT
/FR02	Flush port Unplugged	2 x ¼" NPT
/FR03	Flush port Vent plug (fitted with PTFE)	1 x ¼" NPT
/FR04	Flush port 2x Vent plug (fitted with PTFE)	2 x ¼" NPT
/FR05	Flush port Blind plug (fitted with PTFE)	1 x ¼" NPT
/FR06	Flush port 2x Blind plug (fitted with PTFE)	2 x ¼" NPT
/FR10	Flush port Unplugged	1 x ½" NPT
/FR20	Flush port Unplugged	2 x ½" NPT
/FR30	Flush port Vent plug (fitted with PTFE)	1 x ½" NPT
/FR40	Flush port 2x Vent plug (fitted with PTFE)	2 x ½" NPT
/FR50	Flush port Blind plug (fitted with PTFE)	1 x ½" NPT
/FR60	Flush port 2x Blind plug (fitted with PTFE)	2 x ½" NPT
/FG1	1x fitted to flush port – Graphite fitting paste + pressure leak test	
/FG2	2x fitted to flush port – Graphite fitting paste+ pressure leak test	
/FV91	Pair flush valves BDTV910	for 1/4" ports (fitted with PTFE)
/FV92	Pair flush valves BDTV910	for 1/2" ports (fitted with PTFE)
/FV93	Single flush BDTV910 for 1/4"	for 1/4" ports (fitted with PTFE)
/FV94	Single flush BDTV910 for 1/2"	for 1/2" ports(fitted with PTFE)



8.11. Options

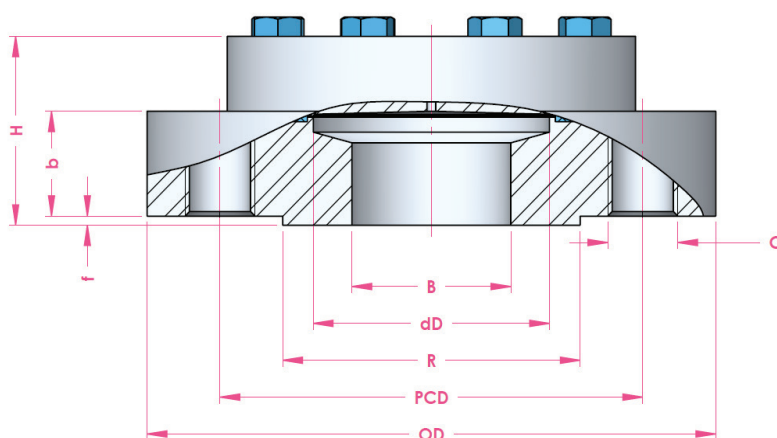
Std.

/N5	EJX/EJA100/300/400 + W option	Low volume covers by Yokogawa	●
/FW	Full welded construction	recomm. for vacuum service (< 500 mbara)	
/FWS	Full Welded construction for 500/600 series	recomm. for vacuum service (< 500 mbara)	
/GGA	Garlock Style 9850 (Carbon Fiber / Nitrile Binder) up to 343°C		●
/CAM	Camprofile (316L SS core with graphite overlay) up to 500°C		●
/IC1	Capillary ID 1 mm. / 0,04"		
/BS6	Black sleeve on capillary ≤ 6 m.		
/BS15	Black sleeve on capillary > 6 ≤ 15 m.		
/WS6	White sleeve on capillary ≤ 6 m.		
/WS15	White sleeve on capillary > 6 ≤ 15 m.		
/K1	Degreasing Treatment I + certificate		
/K2	Degreasing Treatment (applicable F2 fill) + certificate		●
/NACE	NACE MR01-75 (ISO15156) or MR0103 (ISO17945) compliance		●
/BAS	Basecal performance calculation report		
/DP1	Dye penetrant test pressurized welds + 2.2 EN-10204 test report (Level I)		
/DP2	Dye penetrant test pressurized welds + 3.1 EN-10204 test report (Level II)		
/LMF	Large Male Facing	acc. ASME B16.5	
/SMF	Small Male Facing	acc. ASME B16.5	
/FF	Flat Facing	acc. ASME B16.5	
/LTF	Large Tongue	acc. ASME B16.5	
/STF	Small Tongue Facing	acc. ASME B16.5	
/LGF	Large Groove Facing	acc. ASME B16.5	
/SGF	Small Groove Facing	acc. ASME B16.5	
/LFF	Large Female Facing	acc. ASME B16.5	
/SFF	Small Female Facing	acc. ASME B16.5	
/RJF	Ring Joint Facing	acc. ASME B16.5	
/A	Form A	acc. EN1092-1	
/B2	Form B2	acc. EN1092-1	

8.11. Options

Std.

/C	Form C	acc. EN1092-1	
/D	Form D	acc. EN1092-1	
/E	Form E	acc. EN1092-1	
/F	Form F	acc. EN1092-1	
/G	Form G	acc. EN1092-1	
/H	Form H	acc. EN1092-1	
/QDBDT	<5 working days ex works BADO or rush charge compensation for standards (●) only		
/WC	Wooden crate packing		



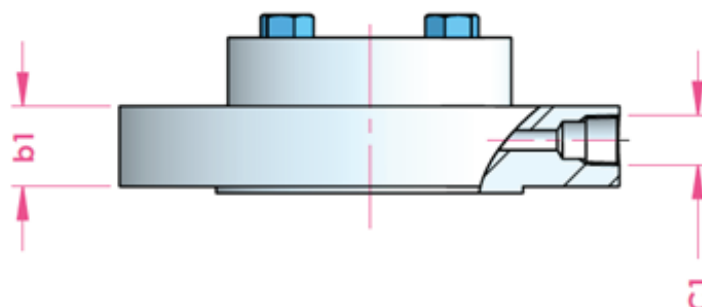
ASME B16.5 RF facing

Size	Rating	OD	B	b	R	f	H	PCD	C/PCS	Weight
1/2"	cl. 150	140.0	15.8	40.0	34.9	1	67.0	60.3	0.5" - 13 UNC / 4x	7.9
	cl. 300						66.7			
	cl. 400-600					6.4	71.0			
3/4"	cl. 150	140.0	21.1	39	42.9	1.5	66.0	69.9	5/8" - 11 UNC / 4x	7.9
	cl. 300						71.0	82.6		
	cl. 400-600					6.4	76.0			
1"	cl. 150	140.0	26.6	38.0	50.8	1.5	65.0	79.4	5/8" - 11 UNC / 4x	7.9
	cl. 300						48.0	88.9		
	cl. 400-600					6.4	50.0	88.9		
1.5"	cl. 150	140.0	40.9	38.0	73.0	1.5	65.0	79.4	3/4" - 10 UNC / 4x	7.9
	cl. 300							114.3		
	cl. 400-600					6.4	6			
2"	cl. 150	150.0	52.5	29.0	92.1	1.5	56.0	120.7	5/8"-11 UNC / 8x	8.0
	cl. 300	160.0					57.0	127.0		
	cl. 400-600					6.4	61.0			

EN 1092-1 B1 type

Size	Rating	OD	B	b	R	f	H	PCD	C/PCS	Weight	
DN15	PN10-40	140.0	17.3	40.0	45.0	2.0	67	65	M12 / 4x	7.9	
	PN63-100			37.0			64	75			
DN20	PN10-40		22.3	38.0	58.0		65.0	90.0			M16 / 4x
	PN63-100		21.7	43.0			70.0				
DN25	PN10-40		28.5	35.5	68.0		62.5	85.0	M12 / 4x	M16 / 4x	8.2
	PN 63-100			40.0			77.0	100.0			
DN40	PN10-40	150.0	43.1	40.0	88.0	3.0	78.0	110.0	M20 / 4x		8.5
	PN63-100	170.0	42.5	41.0			79.0	125.0			
DN50	PN10-40	165	54.5	30.0	102.0		58.0	135.0	M16 / 4x	7.0	
	PN63	180.0		30.0					M20 / 4x		
	PN100	195.0		53.9				40.0	68.0	145.0	M24 / 4x

Thickness with flush ports



Flush size (C1)	b1
1/4" NPT	B<20 then b1=20
1/2" NPT	B<35 then b1=35

All dimensions in mm, weight in kg

9. DFS-UST Diaphragm Seal - Internal Diaphragm, Threaded

9.1. Model¹

Std.

TXMH	EJA-E / EJX-A 100, 300 & 400 Series; 4-20 mA + digital communication	●
TXMB	EJA-E / EJX-A 100, 300 & 400 Series; 'Bus' communication	
TXPH	EJA-E / EJX-A 130 & 440Series; 4-20 mA + digital communication	●
TXPB	EJA-E / EJX-A 130 & 440Series; 'Bus' communication	
TXDH	EJA-E / EJX-A 500 & 600 Series; 4-20 mA + digital communication	●
TXDB	EJA-E / EJX-A 500 & 600 Series; 'Bus' communication	
TXDE	EJA-E / EJX-A 500 & 600 Series; DRS system	
TXDW	EJA-E / EJX-A 500 & 600 Series; Wireless communication	
TXMW	EJA-E / EJX-A 100, 300 & 400 Series; Wireless communication	



***Note 1:** For TXMH, TXMB, TXPH, TXPB and TXMW: Only M, H, V & H, B, A capsules allowed; S wetted parts only.
For TXDH, TXDB, TXDE and TXDW: Mandatory connections "4" or "W"; S wetted parts only

9.2. Seal Type

Std.

DFS-UST	Diaphragm Seal - Internal Diaphragm, Threaded	
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9.3. Mounting

Std.

WN5	TXM/P_ with W option =/N5 mandatory option	●
XN5	TXD_ 500/600 series only; /N5 option not applicable	●
WN1	TXM/P_ with W option =/N5 mandatory option; single sided mounting EJ_100 series only	

9.4. Thread & Form - (standard supplied with 4 bolts up to 125 bar and PTFE gasket)

Std.

dD (min. span, see page 4)				
T1NF	1/4"	NPT female	50 mm.	
T2NF	1/2"	NPT female	50 mm.	
T3NF	3/4"	NPT female	50 mm.	●
T4NF	1"	NPT female	50 mm.	●
T1NM	1/4"	NPT male	50 mm.	
T2NM	1/2"	NPT male	50 mm.	
T3NM	3/4"	NPT male	50 mm.	●
T4NM	1"	NPT male	50 mm.	●
T1BM	1/4"	ISO 228 male	50 mm.	●
T2BM	1/2"	ISO 228 male	50 mm.	
T3BM	3/4"	ISO 228 male	50 mm.	●
T4BM	1"	ISO 228 male	50 mm.	●
T1BF	1/4"	ISO 228 female	50 mm.	●
T2BF	1/2"	ISO 228 female	50 mm.	
T3BF	3/4"	ISO 228 female	50 mm.	
T4BF	1"	ISO 228 female	50 mm.	
T1MM	M12*1.5	Metric male	50 mm.	
T2MM	M20*1.5	Metric male	50 mm.	
T1MF	M12*1.5	Metric female	50 mm.	
T2MF	M20*1.5	Metric female	50 mm.	

9.5. Lower part material

Std.

SS	SS AISI 316(L)	●
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9.6. Diaphragm Material**Std.**

SS	Stainless Steel AISI 316 L			●
HB	Alloy B2			
HC	Alloy C276			●
DU	Duplex 2205			
I6	Alloy 625			
M4	Alloy 400			
N2	Nickel 201			
TA	Tantalum			
SD	Super Duplex 2507			
S4	AISI304L			
S2	AISI321			
A0	6 µm gold (24 Crt)	size 05 (on diaphragm)		
A1	25 µm gold (24 Crt)	size 05 (on diaphragm)		
A2	40 µm gold (24 Crt)	size 05 (on diaphragm)		
PF	Coating PFA	(+/- 40 µm thickness)	(anti-stick only)	
PT	Coating PTFE (anti-stick only)	(+/- 30-35 µm thickness)	(anti-stick only)	

9.7. Fill Fluid**Std.**

-F1	BSO-42	Silicon Oil	-20/+350°C	-4/+662°F	●
-F2	BSO-25	Fluorinated Oil	-40/+250°C	-40/+482°F	●
-F3	BSO-22	Silicon Oil	-50/+225°C	-58/+437°F	●
-F4	BSO-40	FDA approved	-15/+225°C	+5/+437°F	●
-F5	BSO-02	Silicon Oil	-40/+400°C	-40/+752°F	●
-F6	BSO-03	Fluorinated Oil	-80/+100°C	-112/+212°F	●
-F7	BSO-18	Silicon Oil	-10/+315°C	+14/+599°F	●
-F8	BSO-21	Silicon Oil	-40/+315°C	-40/+599°F	●
-F9	BSO-41	Silicon Oil	-80/+120°C	-112/+248°F	●
-F0	BSO-48	Silicon Oil	-20/+420°C	+4/+788°F	●

9.8. Capillary Size / Type (AISI 316 Stainless Steel; 316 Armoured)**Std.**

NN	Direct coupled / Welded (No Capillary)			●
C1	Capillary (2mm ID)	axial		●

9.9. Capillary Length**Std.**

NN	Direct coupled / Welded (No Capillary)			●
D1	Extended Direct mount (80mm); temp reduction 125°C; 500/600 series only			●
D2	Extended Direct mount (150 mm); temp reduction 170°C			●
TR	Temperature reducer; temp reduction 300°C			
1	1 m	3 ft.		●
1A	1,5 m	5 ft.		●
02	2 m	6 ft.		●
03	3 m	10 ft.		●
04	4 m	13 ft.		●
05	5 m	15 ft.		●
06	6 m	20 ft.		●
07	7 m	23 ft.		●

9.9. Capillary Length**Std.**

08	8 m	25 ft.	
09	9 m	30 ft.	
10	10 m	33 ft.	
11	11 m	35 ft.	
12	12 m	40 ft.	
13	13 m	43 ft.	
14	14 m	45 ft.	
15	15 m	50 ft.	

9.10. Flush connections lower part**Std.**

/FR01	Flush port	Unplugged	1 x ¼" NPT	
/FR02	Flush port	Unplugged	2 x ¼" NPT	
/FR03	Flush port Vent Plug (fitted with PTFE)		1 x ¼" NPT	
/FR04	Flush port 2x Vent plug (fitted with PTFE)		2 x ¼" NPT	
/FR05	Flush port Blind plug (fitted with PTFE)		1 x ¼" NPT	
/FR06	Flush port 2x Blind plug (fitted with PTFE)		2 x ¼" NPT	
/FR10	Flush port	Unplugged	1 x ½" NPT	
/FR20	Flush port	Unplugged	2 x ½" NPT	
/FR30	Flush port Vent Plug (fitted with PTFE)		1 x ½" NPT	
/FR40	Flush port 2x Vent plug (fitted with PTFE)		2 x ½" NPT	
/FR50	Flush port Blind plug (fitted with PTFE)		1 x ½" NPT	
/FR60	Flush port 2x Blind plug (fitted with PTFE)		2 x ½" NPT	
/FG1	1x fitted to flush port – Graphite fitting paste + pressure leak test			
/FG2	2x fitted to flush port – Graphite fitting paste+ pressure leak test			
/FV91	Pair flush valves BDTV910	for 1/4" ports (fitted with PTFE)		
/FV92	Pair flush valves BDTV910	for 1/2" ports (fitted with PTFE)		
/FV93	Single flush BDTV910 for 1/4"	for 1/4" ports (fitted with PTFE)		
/FV94	Single flush BDTV910 for 1/2"	for 1/2" ports(fitted with PTFE)		

9.11. Options**Std.**

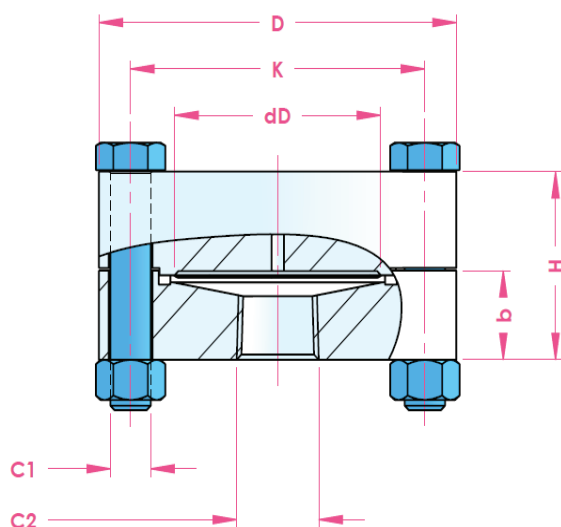
/N5	EJX/EJA100/300/400 + W option	Low volume covers by Yokogawa		●
/FW	Full welded construction	recomm. for vacuum service	(< 500 mbara)	
/FWS	Full Welded construction for 500/600 series	recomm. for vacuum service	(< 500 mbara)	
/GGA	Garlock Style 9850 (Carbon Fiber / Nitrile Binder) up to 343°C			
/CAM	Camprofile (316L SS core with graphite overlay) up to 500°C			
/IC1	Capillary ID 1 mm. / 0,04"			
/BS6	Black sleeve on capillary ≤ 6 m.			
/BS15	Black sleeve on capillary > 6 ≤ 15 m.			
/WS6	White sleeve on capillary ≤ 6 m.			
/WS15	White sleeve on capillary > 6 ≤ 15 m.			
/K1	Degreasing Treatment I + certificate			
/K2	Degreasing Treatment (applicable F2 fill) + certificate			
/NACE	NACE MR01-75 (ISO15156) or MR0103 (ISO17945) compliance			

9.11. Options

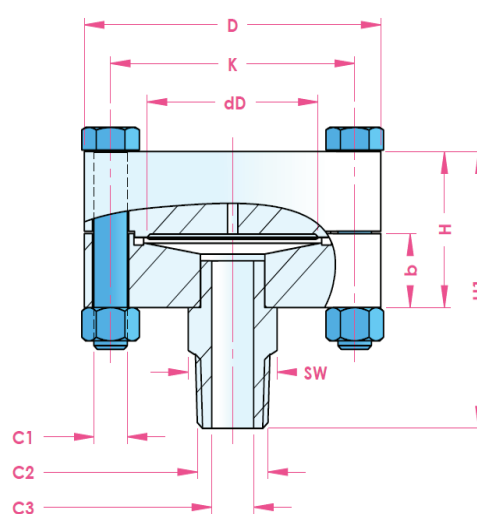
Std.

/BAS	Basecal performance calculation report
/DP1	Dye penetrant test pressurized welds + 2.2 EN-10204 test report (Level I)
/DP2	Dye penetrant test pressurized welds + 3.1 EN-10204 test report (Level II)
/QDBDT	<5 working days ex works BADO or rush charge compensation for standards (●) only ●
/WC	Wooden crate packing

Dimensions table: Female threaded



Dimensions table: Male threaded



Maximum Allowable Operating Pressure: 125 bar

ASME 1.20.1 – NPT Tapered thread

Female threaded

Thread Size (C2)	dD	D	H	b	K	C1	Weight
1/4" NPT-f	50.0	85.0	37.5	19.0	70.0	3/8"UNC	<2.5
1/2" NPT-f							
3/4" NPT-f			43.5	25.0			
1" NPT-f							

Male threaded

Thread Size (C2)	dD	D	H	H1	b	K	C1	C3	SW	Weight
1/4" NPT-m	50.0	85.0	37.5	65.5	19.0	70.0	3/8"UNC	6.0	22	<2.5
1/2" NPT-m				68.5				8.0		
3/4" NPT-m				71.5				10.0		
1" NPT-m				87.5				12.0		

ISO 228 – G (BSP) Parallel thread**Female threaded**

Thread Size (C2)	dD	D	H	b	K	C1	Weight
G 1/4	50.0	85.0	37.5	19.0	70.0	3/8"UNC	<2.5
G 1/2							
G 3/4			43.5	25.0			
G1							

Male threaded

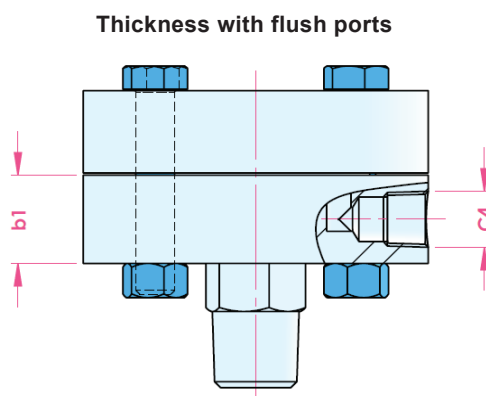
Thread Size (C2)	dD	D	H	H1	b	K	C1	C3	SW	Weight
G 1/4 A	50.0	85.0	37.5	65.5	19.0	70.0	3/8"UNC	6.0	22	<2.5
G 1/2 A				68.5				8.0		
G 3/4 A				71.5				10.0		
G 1A				87.5				12.0		

DIN 13-1 – Metric ISO thread**Female threaded**

Thread Size (C2)	dD	D	H	b	K	C1	Weight
M12X1.5	50.0	85.0	37.5	19.0	70.0	3/8"UNC	<2.5
M20X1.5							

Male threaded

Thread Size (C2)	dD	D	H	H1	b	K	C1	C3	SW	Weight
M12X1.5	50.0	85.0	37.5	65.5	19.0	70.0	3/8"UNC	6.0	22	<2.5
M20X1.5				68.5				8.0		



Flush size (C4)	b1
1/4" G/NPT	b1=20
1/2" G/NPT	b1=35

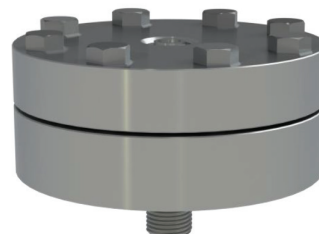
All dimensions in mm, weight in kg

10. DFS-USL-T Diaphragm Seal - Internal Diaphragm, Threaded

10.1. Model¹

Std.

TXMH	EJA-E / EJX-A 100, 300 & 400 Series; 4-20 mA + digital communication	●
TXMB	EJA-E / EJX-A 100, 300 & 400 Series; 'Bus' communication	
TXPH	EJA-E / EJX-A 130 & 440Series; 4-20 mA + digital communication	●
TXPB	EJA-E / EJX-A 130 & 440Series; 'Bus' communication	
TXDH	EJA-E / EJX-A 500 & 600 Series; 4-20 mA + digital communication	●
TXDB	EJA-E / EJX-A 500 & 600 Series; 'Bus' communication	
TXDE	EJA-E / EJX-A 500 & 600 Series; DRS system	
TXDW	EJA-E / EJX-A 500 & 600 Series; Wireless communication	
TXMW	EJA-E / EJX-A 100, 300 & 400 Series; Wireless communication	



***Note 1:** For TXMH, TXMB, TXPH, TXPB and TXMW: Only M, H, V & H, B, A capsules allowed; S wetted parts only.
For TXDH, TXDB, TXDE and TXDW: Mandatory connections "4" or "W"; S wetted parts only

10.2. Seal Type

Std.

DFS-USL-T	Diaphragm Seal - Internal Diaphragm, Threaded	
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10.3. Mounting

Std.

WN5	TXM/P_ with W option =/N5 mandatory option	●
XN5	TXD_ 500/600 series only; /N5 option not applicable	●
WN1	TXM/P_ with W option =/N5 mandatory option; single sided mounting EJ_100 series only	

10.4. Thread & Form (standard supplied with 8 bolts up to 125 bar and PTFE gasket)

Std.

dD (min. span, see page 4)				
T1NF	1/4"	NPT female	81 mm.	
T2NF	1/2"	NPT female	81 mm.	
T3NF	3/4"	NPT female	81 mm.	●
T4NF	1"	NPT female	81 mm.	●
T1NM	1/4"	NPT male	81 mm.	
T2NM	1/2"	NPT male	81 mm.	
T3NM	3/4"	NPT male	81 mm.	●
T4NM	1"	NPT male	81 mm.	●
T1BM	1/4"	ISO 228 male	81 mm.	●
T2BM	1/2"	ISO 228 male	81 mm.	
T3BM	3/4"	ISO 228 male	81 mm.	●
T4BM	1"	ISO 228 male	81 mm.	●
T1BF	1/4"	ISO 228 female	81 mm.	●
T2BF	1/2"	ISO 228 female	81 mm.	
T3BF	3/4"	ISO 228 female	81 mm.	
T4BF	1"	ISO 228 female	81 mm.	
T1MM	M12*1.5	Metric male	81 mm.	
T2MM	M20*1.5	Metric male	81 mm.	
T1MF	M12*1.5	Metric female	81 mm.	
T2MF	M20*1.5	Metric female	81 mm.	

10.5. Lower part material

Std.

SS	SS AISI 316(L)	●
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10.6. Diaphragm Material**Std.**

SS	Stainless Steel AISI 316 L			●
HB	Alloy B2			
HC	Alloy C276			●
DU	Duplex 2205			
I6	Alloy 625			
M4	Alloy 400			
N2	Nickel 201			
TA	Tantalum			
SD	Super Duplex 2507			
S4	AISI304L			
S2	AISI321			
A0	6 µm gold (24 Crt)	size 05 (on diaphragm)		
A1	25 µm gold (24 Crt)	size 05 (on diaphragm)		
A2	40 µm gold (24 Crt)	size 05 (on diaphragm)		
PF	Coating PFA	(+/- 40 µm thickness)	(anti-stick only)	
PT	Coating PTFE (anti-stick only)	(+/- 30-35 µm thickness)	(anti-stick only)	

10.7. Fill Fluid**Std.**

-F1	BSO-42	Silicon Oil	-20/+350°C	-4/+662°F	●
-F2	BSO-25	Fluorinated Oil	-40/+250°C	-40/+482°F	●
-F3	BSO-22	Silicon Oil	-50/+225°C	-58/+437°F	●
-F4	BSO-40	FDA approved	-15/+225°C	+5/+437°F	●
-F5	BSO-02	Silicon Oil	-40/+400°C	-40/+752°F	●
-F6	BSO-03	Fluorinated Oil	-80/+100°C	-112/+212°F	●
-F7	BSO-18	Silicon Oil	-10/+315°C	+14/+599°F	●
-F8	BSO-21	Silicon Oil	-40/+315°C	-40/+599°F	●
-F9	BSO-41	Silicon Oil	-80/+120°C	-112/+248°F	●
-F0	BSO-48	Silicon Oil	-20/+420°C	'4/+788°F	●

10.8. Capillary Size / Type (AISI 316 Stainless Steel; 316 Armoured)**Std.**

NN	Direct coupled / Welded (No Capillary)			●
C1	Capillary (2mm ID)		Axial	●

10.9. Capillary Length**Std.**

NN	Direct coupled / Welded (No Capillary)			●
D1	Extended Direct mount (80mm); temp reduction 125°C; 500/600 series only			
D2	Extended Direct mount (150 mm); temp reduction 170°C			
TR	Temperature reducer; temp reduction 300°C			
1	1 m	3 ft		●
1A	1,5 m	5 ft		●
02	2 m	6 ft		●
03	3 m	10 ft		●
04	4 m	13 ft		●
05	5 m	15 ft		●
06	6 m	20 ft		●
07	7 m	23 ft		●

10.9. Capillary Length**Std.**

08	8 m	25 ft	
09	9 m	30 ft	
10	10 m	33 ft	
11	11 m	35 ft	
12	12 m	40 ft	
13	13 m	43 ft	
14	14 m	45 ft	
15	15 m	50 ft	

10.10. Flush connections lower part**Std.**

/FR01	Flush port	Unplugged	1 x ¼" NPT	
/FR02	Flush port	Unplugged	2 x ¼" NPT	
/FR03	Flush port Vent Plug (fitted with PTFE)		1 x ¼" NPT	
/FR04	Flush port 2x Vent plug (fitted with PTFE)		2 x ¼" NPT	
/FR05	Flush port Blind plug (fitted with PTFE)		1 x ¼" NPT	
/FR06	Flush port 2x Blind plug (fitted with PTFE)		2 x ¼" NPT	
/FR10	Flush port	Unplugged	1 x ½" NPT	
/FR20	Flush port	Unplugged	2 x ½" NPT	
/FR30	Flush port Vent Plug (fitted with PTFE)		1 x ½" NPT	
/FR40	Flush port 2x Vent plug (fitted with PTFE)		2 x ½" NPT	
/FR50	Flush port Blind plug (fitted with PTFE)		1 x ½" NPT	
/FR60	Flush port 2x Blind plug (fitted with PTFE)		2 x ½" NPT	
/FG1	1x fitted to flush port – Graphite fitting paste + pressure leak test			
/FG2	2x fitted to flush port – Graphite fitting paste+ pressure leak test			
/FV91	Pair flush valves BDTV910	for 1/4" ports (fitted with PTFE)		
/FV92	Pair flush valves BDTV910	for 1/2" ports (fitted with PTFE)		
/FV93	Single flush BDTV910 for 1/4"	for 1/4" ports (fitted with PTFE)		
/FV94	Single flush BDTV910 for 1/2"	for 1/2" ports(fitted with PTFE)		

10.11. Options**Std.**

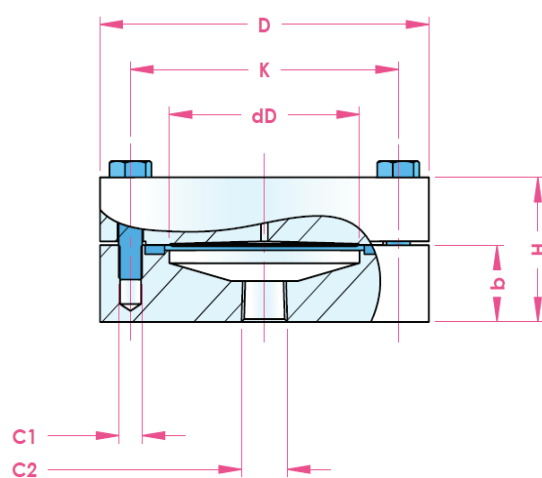
/N5	EJX/EJA100/300/400 + W option	Low volume covers by Yokogawa		●
/FW	Full welded construction	recomm. for vacuum service	(< 500 mbara)	
/FWS	Full Welded construction for 500/600 series	recomm. for vacuum service	(< 500 mbara)	
/GGA	Garlock Style 9850 (Carbon Fiber / Nitrile Binder) up to 343°C			
/CAM	Camprofile (316L SS core with graphite overlay) up to 500°C			
/IC1	Capillary ID 1 mm. / 0,04"			
/BS6	Black sleeve on capillary ≤ 6 m.			
/BS15	Black sleeve on capillary > 6 ≤ 15 m.			
/WS6	White sleeve on capillary ≤ 6 m.			
/WS15	White sleeve on capillary > 6 ≤ 15 m.			
/K1	Degreasing Treatment I + certificate			
/K2	Degreasing Treatment (applicable F2 fill) + certificate			

10.11. Options

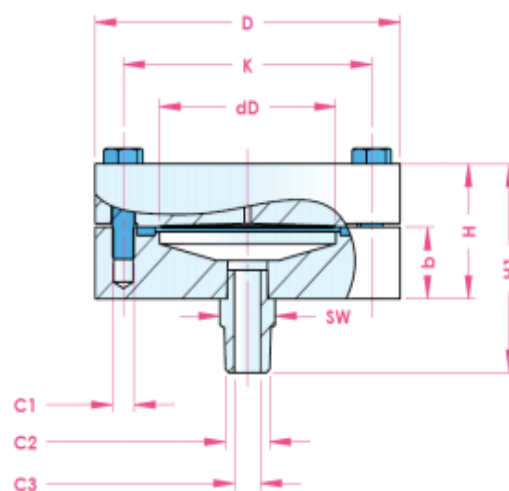
Std.

/NACE	NACE MR01-75 (ISO15156) or MR0103 (ISO17945) compliance
/BAS	Basical performance calculation report
/DP1	Dye penetrant test pressurized welds + 2.2 EN-10204 test report (Level I)
/DP2	Dye penetrant test pressurized welds + 3.1 EN-10204 test report (Level II)
/QDBDT	<5 working days ex works BADO or rush charge compensation for standards (●) only ●
/WC	Wooden crate packing

Dimensions table: Female threaded



Dimensions table: Male threaded



Maximum Allowable Operating Pressure: 125 bar

ASME 1.20.1 – NPT Tapered thread

Female threaded

Thread Size (C2)	dD	D	H	b	K	C1	Weight
1/4" NPT-f	81.0	140.0	55.0	20.0	114.0	m10	<4.5
1/2" NPT-f							
3/4" NPT-f							
1" NPT-f							

Male threaded

Thread Size (C2)	dD	D	H	H1	b	K	C1	C3	SW	Weight
1/4" NPT-m	81.0	140.0	55.0	83.0	20.0	114.0	m10	6.0	22	<4.5
1/2" NPT-m				86.0				8.0		
3/4" NPT-m				89.0				10.0		
1" NPT-m				105.0				12.0		

ISO 228 – G (BSP) Parallel thread**Female threaded**

Thread Size (C2)	dD	D	H	b	K	C1	Weight
G 1/4	81.0	140.0	55.0	20.0	114.0	M10	<4.5
G 1/2							
G 3/4							
G1							

Male threaded

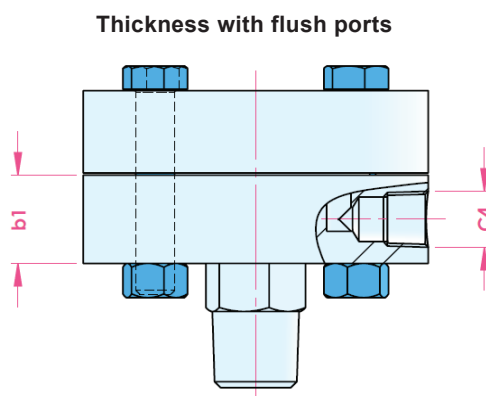
Thread Size (C2)	dD	D	H	H1	b	K	C1	C3	SW	Weight
G 1/4 A	81.0	140.0	55.0	83.0	20.0	114.0	M10	6.0	22	<4.5
G 1/2 A				86.0				8.0		
G 3/4 A				89.0				10.0	27	
G 1A				105.0				12.0	36	

DIN 13-1 – Metric ISO thread**Female threaded**

Thread Size (C2)	dD	D	H	b	K	C1	Weight
M12X1.5	81.0	140.0	55.0	20.0	114.0	M10	<4.5
M20X1.5							

Male threaded

Thread Size (C2)	dD	D	H	H1	b	K	C1	C3	SW	Weight
M12X1.5	81.0	140.0	55.0	83.0	20.0	114.0	M10	6.0	22	<4.5
M20X1.5				86.0				8.0		



Flush size (C4)	b1
1/4" G/NPT	b1=20
1/2" G/NPT	b1=35

All dimensions in mm, weight in kg

11. DFS-PS Diaphragm Seal - Plug Seal

11.1. Model¹

Std.

TXDH	EJA-E / EJX-A 500 & 600 Series; 4-20 mA + digital communication	●	
TXDB	EJA-E / EJX-A 500 & 600 Series; 'Bus' communication	●	
TXDE	EJA-E / EJX-A 500 & 600 Series; DRS system	●	
TXDW	EJA-E / EJX-A 500 & 600 Series; Wireless communication		

*Note 1: For TXDH, TXDB, TXDE and TXDW: Mandatory connections "4" or "W"; S wetted parts only

11.2. Seal Type

Std.

DFS-PS	Diaphragm Seal - Plug Seal	
--------	----------------------------	--

11.3. Mounting

Std.

XN5	TXD_ 500/600 series only; /N5 option not applicable	●
-----	---	---

11.4. Thread & Form

Std.

dD (min. span, see page 4)					
-T4NM	1"	NPT male	PN600	23.5mm	
-T5NM	1,5"	NPT male	PN400	35mm	
-T6NM	2"	NPT male	PN250	44mm	
-T4BM	1"	ISO 228 BSP male	PN600	23.5mm	●
-T5BM	1,5"	ISO 228 BSP male	PN400	35mm	●
-T6BM	2"	ISO 228 BSP male	PN250	44mm	

11.5. Body Material

Std.

SS	SS AISI 316(L)	●
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11.6. Diaphragm Material

Std.

SS	Stainless Steel AISI 316 L	●
HC	Alloy C276	

11.7. Fill Fluid

Std.

-F3	BSO-22	Silicon Oil	-50/+225°C	-58/+437°F	
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11.8. Capillary Size / Type (AISI 316 Stainless Steel Armoured)

Std.

NN	Direct coupled / Welded (No Capillary)	●
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11.9. Capillary Length

Std.

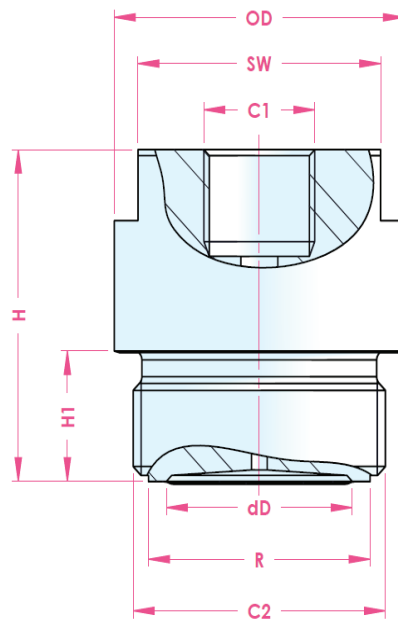
NN	Direct coupled / Welded (No Capillary)	●
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11.10. Options

Std.

/QDBDT	<5 working days ex works BADO or rush charge compensation for standards (●) only	●
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Dimensions Table: PS



C2	dD	R	SW	OD	H1	H
1" Male	23.5	28.0	SW 41	45	28	58
1.5" Male	35.0	42.0	SW 46	55	34	64
2" Male	44.0	47.0	SW 54	62	37	65

12. DFS-SA Diaphragm Seal - Sanitary Seals

12.1. Model

Std.

TXMH	EJA-E / EJX-A 100, 300 & 400 Series; 4-20 mA + digital communication	●
TXMB	EJA-E / EJX-A 100, 300 & 400 Series; 'Bus' communication	
TXDH	EJA-E / EJX-A 500 & 600 Series; 4-20 mA + digital communication	●
TXDB	EJA-E / EJX-A 500 & 600 Series; 'Bus' communication	
TXDE	EJA-E / EJX-A 500 & 600 Series; DRS system	
TXDW	EJA-E / EJX-A 500 & 600 Series; Wireless communication	
TXMW	EJA-E / EJX-A 100, 300 & 400 Series; Wireless communication	



***Note 1:** For TXMH, TXMB and TXMW : Only M, H, V & H, B, A capsules are allowed; S wetted parts only.
For TXDH, TXDB, TXDE and TXDW: Mandatory connections "4" or "W"; S wetted parts only

12.2. Seal Type

Std.

DFS-SA	Diaphragm Seal - Sanitary Seals	●
---------------	---------------------------------	---

12.3. Mounting

Std.

WN5	TXM/P_ with W option =/N5 mandatory option	●
XN5	TXD_ 500/600 series only; /N5 option not applicable	●
WN1	TXM/P_ with W option =/N5 mandatory option; single sided mounting EJ_100 series only	

12.4. Thread & Form

Std.

-D3	DN25	female nut	acc. DIN 11851	●
-D4	DN32	female nut	acc. DIN 11851	
-D5	DN40	female nut	acc. DIN 11851	●
-D6	DN50	female nut	acc. DIN 11851	●
-D8	DN80	female nut	acc. DIN 11851	
-S5	1,5"	male thread	acc. SMS 1145	●
-S6	2"	male thread	acc. SMS 1145	●
-S8	3"	male thread	acc. SMS 1145	
-T5	1,5"	Tri-clamp	acc. ISO 2852	●
-T6	2"	Tri-clamp	acc. ISO 2852	●
-T8	3"	Tri-clamp	acc. ISO 2852	●

12.5. Process Connection

Std.

SS	SS AISI 316(L)	●
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12.6. Diaphragm Material

Std.

SS	Stainless Steel AISI 316 L	●
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12.7. Fill Fluid

Std.

-F4	BSO-40	FDA approved	-15/+225°C	+5/+437°F	●
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12.8. Capillary Size / Type (AISI 316 Stainless Steel; 316 Armoured)

Std.

NN	Direct coupled / Welded (No Capillary)		●
C1	Capillary (2mm ID)	axial	●

12.9. Capillary Length

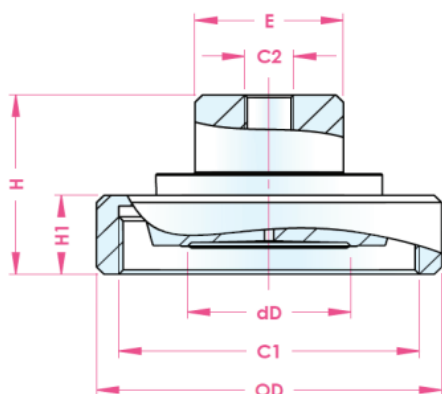
Std.

NN	Direct coupled / Welded (No Capillary)		●
D1	Extended Direct mount (80mm); temp reduction 125°C; 500/600 series only		●
D2	Extended Direct mount (150 mm); temp reduction 170°C		●
TR	Temperature reducer; temp reduction 300°C		
01	1 m	3 ft	●
1A	1,5 m	5 ft	●
02	2 m	6 ft	●
03	3 m	10 ft	●
04	4 m	13 ft	●
05	5 m	15 ft	●
06	6 m	20 ft	●
07	7 m	23 ft	
09	9 m	30 ft	
10	10 m	33 ft	
11	11 m	35 ft	
12	12 m	40 ft	
13	13 m	43 ft	
14	14 m	45 ft	
15	15 m	50 ft	

12.10. Options

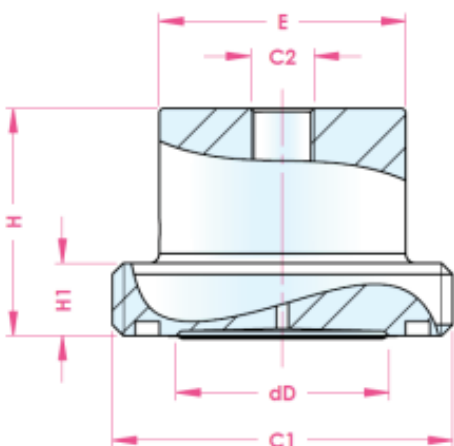
Std.

/N5	EJX/EJA100/300/400 + W option	Low volume covers by Yokogawa		●
/FW	Full welded construction	recomm. for vacuum service	(< 500 mbara)	
/FWS	Full Welded construction for 500/600 series	recomm. for vacuum service	(< 500 mbara)	
/IC1	Capillary ID 1 mm. / 0,04"			
/BS6	Black sleeve on capillary ≤ 6 m.			
/BS15	Black sleeve on capillary > 6 ≤ 15 m.			
/WS6	White sleeve on capillary ≤ 6 m.			
/WS15	White sleeve on capillary > 6 ≤ 15 m.			
/BAS	Basecal performance calculation report			
/DP1	Dye penetrant test pressurized welds + 2.2 EN-10204 test report (Level I)			
/DP2	Dye penetrant test pressurized welds + 3.1 EN-10204 test report (Level II)			
/QBDT	<5 working days ex works BADO or rush charge compensation for standards (●) only			
/WC	Wooden crate packing			



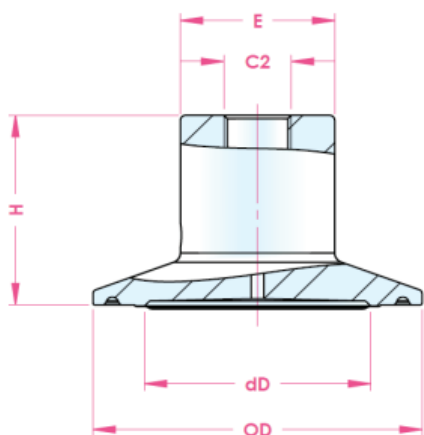
Dimensions table: SAF DIN 11851

size	rating	dD	OD	H1	H	E	C1
DN25	PN40	23.5	63.0	21.0	50.0	35.0	Rd52 x 1/6"
DN40			78.0			48.0	Rd65 x 1/6"
DN50	PN25	44.0	92.0	22.0	38.0	40.0	Rd78 x 1/6"
DN80		72.0	127.0			93.0	Rd110 x 1/6"



SAF SMS 1145

size	rating	dD	H1	H	E	C1
1.5"	PN40	32.0	15.0	47.0	30.0	Rd60 x 1/6"
2"		44.0				Rd70 x 1/6"



SAT - Tri-Clamp ISO - 2852

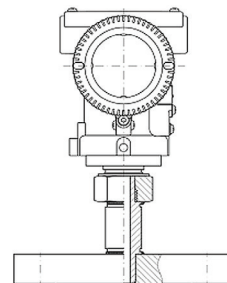
30.0	DN	For pipe	rating	dD	D	H	E
1.5"	25	25.4 x 22.6	PN40	32.0	50.5	38	30.0
2"	40	40.6 x 37.6		44.0	64.0		50.0
3"	76	76.7 x 72.9	PN25	72.0	91.0		76.0

13. DFS-FPC Open Flanged Process Connection

13.1. Model

Std.

TXMH	EJA-E / EJX-A 100, 300 & 400 Series; 4-20 mA + digital communication	●
TXMB	EJA-E / EJX-A 100, 300 & 400 Series; 'Bus' communication	
TXDH	EJA-E / EJX-A 500 & 600 Series; 4-20 mA + digital communication	●
TXDB	EJA-E / EJX-A 500 & 600 Series; 'Bus' communication	
TXDE	EJA-E / EJX-A 500 & 600 Series; DRS system	
TXDW	EJA-E / EJX-A 500 & 600 Series; Wireless communication	
TXMW	EJA-E / EJX-A 100, 300 & 400 Series; Wireless communication	



***Note 1:** For TXMH, TXMB, and TXMW: Only M, H, V & H, B, A capsules are allowed; S wetted parts only.
For TXDH, TXDB, TXDE and TXDW: Mandatory connections "4" or "W"; S wetted parts only

13.2. Seal Type

Std.

DFS-FPC	Open Flanged Process Connection	●
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13.3. Flange Size & Rating

Std.

-A11	1"	cl. 150 RF	acc. ASME B16.5	●
-A13	1"	cl. 300 RF	acc. ASME B16.5	●
-A16	1"	cl. 600 RF	acc. ASME B16.5	
-A21	2"	cl. 150 RF	acc. ASME B16.5	●
-A23	2"	cl. 300 RF	acc. ASME B16.5	●
-A26	2"	cl. 600 RF	acc. ASME B16.5	
-A31	3"	cl. 150 RF	acc. ASME B16.5	
-A33	3"	cl. 300 RF	acc. ASME B16.5	
-A36	3"	cl. 600 RF	acc. ASME B16.5	
-D25	DN25	PN10-40	form B1 acc. EN 1092-1	●
-D40	DN40	PN10-40	form B1 acc. EN 1092-1	
-D50	DN50	PN10-40	form B1 acc. EN 1092-1	●
-D80	DN80	PN10-40	form B1 acc. EN 1092-1	

13.4. Flange material

SS	SS AISI 316(L)	●
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13.5. Mounting

NN	Direct mount/ Welded (Distancer 50 mm for TXCD; 80 mm. For TXCM)	●
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13.6. Options

/D1	Extended Direct mount (80mm)	
/FL	Filter (copper)	
/QBDT	<5 working days ex works BADO or rush charge compensation for standards (●) only	

For dimensions tables, see flange dimensions tables on DFS-BF pages

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