

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.

■ STANDARD SPECIFICATIONS

Flange / Body Material*

316/316L dual grade Stainless Steel

Seal Process connections*

Threaded ½" to 1" NPT , BSP, Metric
1/2" / DN15 to 4" / DN100 flanged
50-250 mm. Extension lengths

Capillary*

316SS with 304SS armour; standard
316SS with 304SS 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 25µ & 40µ
PFA
PTFE
ECTFE

Flange Standard*

ASME B16.5
EN1092-1
API 6A ISO 10423 - TYPE 6BX

Ratings*

cl. 150-2500
PN 10-400
69 MPa

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

On request:

AISI 316L UG
25-22-2 LMN
AISI 904L
Alloy 20
Alloy 600
Alloy 825
Alloy C-22
254 SMO (6Mo)
Titanium Gr. 1
Zirconium 702



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

- High temperature processes (up to 600°C.)
- Clogging potential
- Frequent cleaning requirements
- Aggressive processes
- Highly viscous processes
- Abrasive processes
- Sanitary requirements
- Possible formation of H⁺ ions (gold coating)

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/>

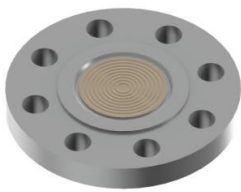
*Note: Not all available options are listed in the model codifications. Please contact your Yokogawa Representative for more information.

■ GENERAL INFORMATION

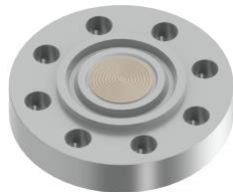
Filling fluids

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/+200°C	-58/+392°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

Badotherm Diaphragm Seal (DFS) overview



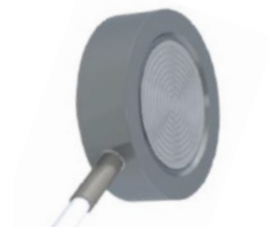
DFS-BF



DFS-BFr



DFS-BRF



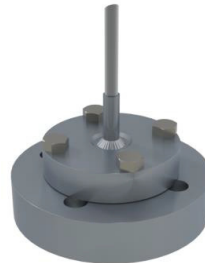
DFS-BC



DFS-BRC



DFS-EXT



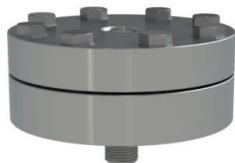
DFS-USF



DFS-USL-F



DFS-UST



DFS-USL-T



DFS-PS



DFS-SA

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

dD	AP/GP	DP (2 sided DFS)
23,5 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

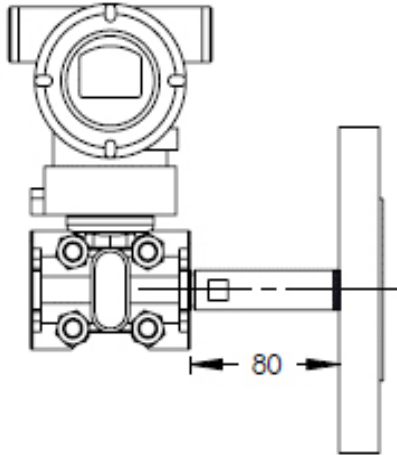
Recommended minimum spans per diaphragm diameter (dD, see codification) for: ≤ 3 m. capillary; -F3 (BSO-22) fill fluid; ambient temperature: -10/+40°C; process temperature: ≤ 100°C.

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

For all detailed data sheets and dimensions, see: <http://www.badotherm.com/downloads.html>

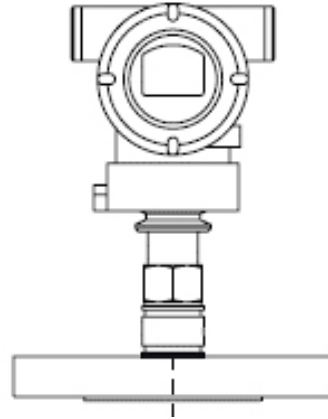
■ ASSEMBLY DRAWINGS

Direct Mount EJA/EJX-110/430



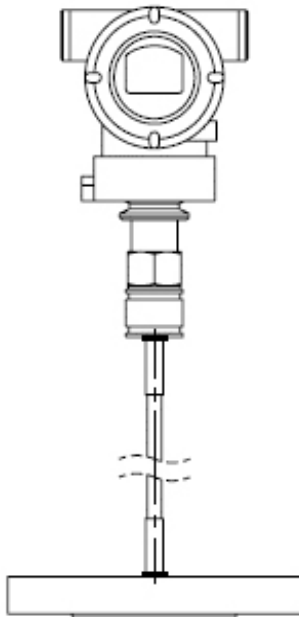
Direct mount: maximum process temperature: 225°C
Direct mount + /DM2: maximum process temperature: 300°C
Direct mount + /TR: maximum process temperature: 420°C

Direct Mount EJA/EJX-530 Welded / Full welded

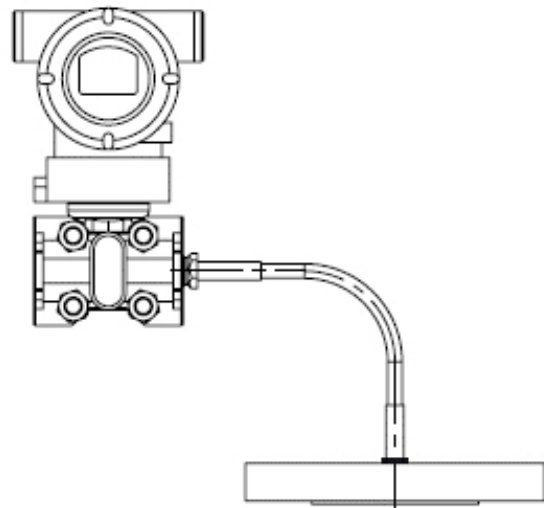


Direct mount: maximum process temperature: 175°C
Direct mount + /DM1: maximum process temperature: 225°C
Direct mount + /DM2: maximum process temperature: 300°C
Direct mount + /TR: maximum process temperature: 420°C

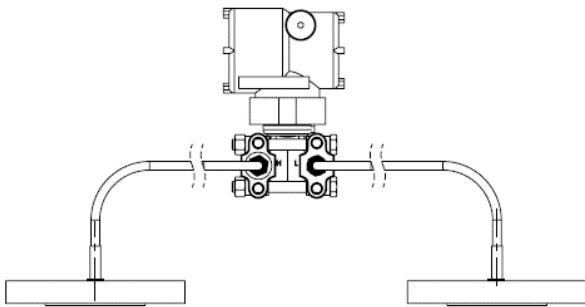
Remote Mount EJA/EJX-530 Welded / Full Welded



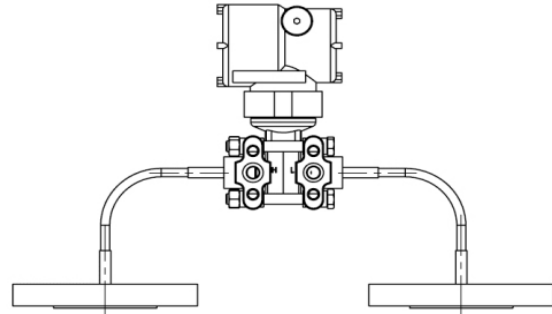
Remote Mount EJA/EJX-110/430 - Single seal



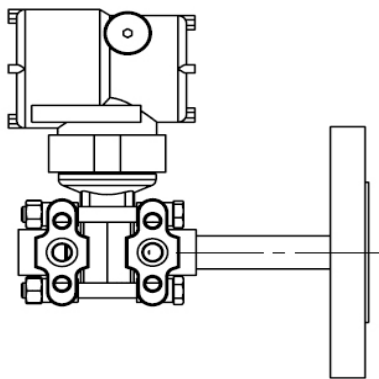
Remote Mount EJA/EJX-110 - 2 seals



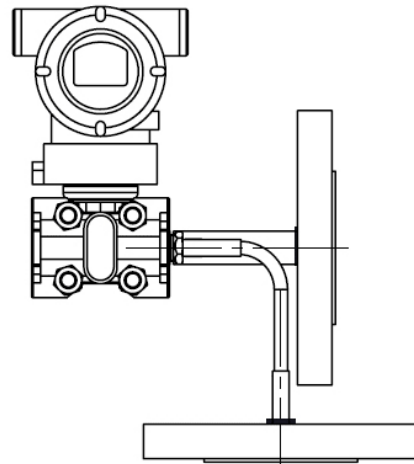
**Remote Mount EJA/EJX-110 - 2 seals
Full welded construction**



**Remote Mount EJA/EJX-110/430 - Single seal
Full welded construction**

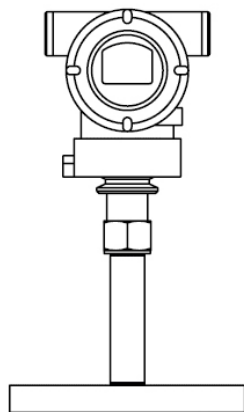


Direct Mount + Remote mount EJA/EJX - 110



Direct mount: maximum process temperature: 225°C
Direct mount + /DM2: maximum process temperature: 300°C
Direct mount + /TR: maximum process temperature: 420°C

Direct mount: maximum process temperature: 225°C
Direct mount + /DM2: maximum process temperature: 300°C
Direct mount + /TR: maximum process temperature: 420°C



**Direct mount flanged process connection (FPC).
Welded construction**

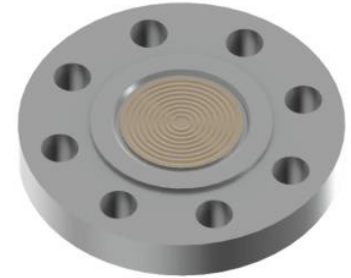
■ **MODEL AND SUFFIX CODES**

- **DFS-BF** Diaphragm Seal - Blind flange, Raised Face 7
- **DFS-BFr** Diaphragm Seal - Blind flange, Ring Joint Facing 11
- **DFS-BRF** Diaphragm Seal - Blind flange, Raised Face 15
- **DFS-BC** Diaphragm Seal - Blind flange, Raised Face 19
- **DFS-BRC** Diaphragm Seal - Blind flange, Raised Face 22
- **DFS-EXT** Diaphragm Seal - Extended, Flush Diaphragm, Flanged type 26
- **DFS-USF** Diaphragm Seal - Internal Diaphragm, Flanged type 29
- **DFS-USL-F** Diaphragm Seal - Internal Diaphragm, Flanged type 34
- **DFS-UST** Diaphragm Seal - Internal Diaphragm Threaded 39
- **DFS-USL-T** Diaphragm Seal - Internal Diaphragm, Threaded 44
- **DFS-PS** Diaphragm Seal - Plug Seal 49
- **DFS-SA** Diaphragm Seal - Sanitary Seals 50
- **Open FPC** 53

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

1.1. Model

TXCP	EJA-E / EJX-A 130 & 440Series
TXCM	EJA-E / EJX-A 100, 300 & 400 Series
TXCD	EJA-E / EJX-A 500 & 600 Series (preferred connection "4" / WN)



1.2. Seal Type

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

WN5	TXCM with W option =/N5 mandatory option
XN5	TXCD no N5 / W available

1.4. Flange Size & Rating

					dD (min. span, see page 3)
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	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	acc. ASME B16.5		81 mm.
08A7	3"	cl. 2500 RF	acc. ASME B16.5		81 mm.
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

SS	SS AISI 316(L)
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1.6. Diaphragm Material

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

1.7. Fill Fluid

-F1	BSO-42	Silicon Oil	-20/+350°C	-4/+662°F
-F2	BSO-25	Fluorinated O	-40/+250°C	-40/+482°F
-F3	BSO-22	Silicon Oil	-50/+200°C	-58/+392°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

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

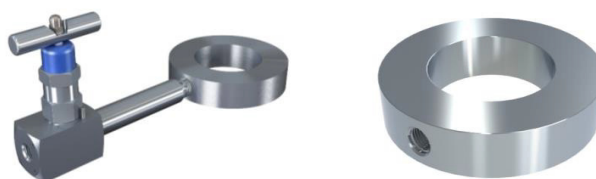
NN	Direct coupled / Welded (No Capillary)
C1	Capillary (2mm ID) - Axial
C2	Capillary (2mm ID) - Radial

1.9. Capillary Length

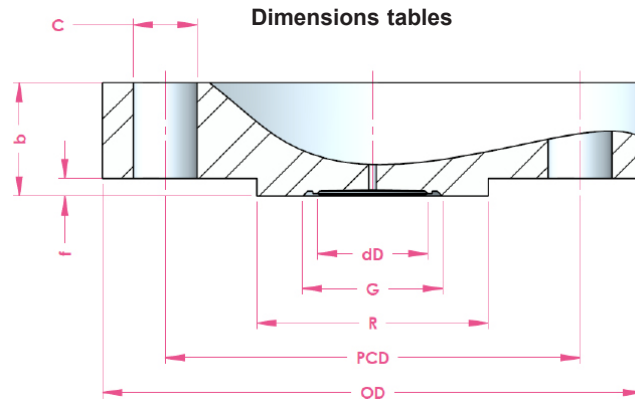
NN	Direct coupled / Welded (No Capillary)	
01	1 m	3 ft.
1A	1,5 m	5ft.
02	2 m	6 ft.
03	3 m	10 ft
04	4 m	13 ft.
05	5 m	15 ft.
06	6 m	20 ft
07	7 m	23 ft.
08	8 m	25 ft.
09	9 m	30 ft.
10	10 m	33 ft.
11	11m	35 ft.
12	12 m	40 ft.
13	13 m	43 ft
14	14 m	45 ft.
15	15 m	50 ft.

1.10. Flush rings in AISI 316(L)

/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"	
/FLV2	Vent plugs 1/2"	
/FLP1	Blind plugs 1/4"	
/FLP2	Blind plugs 1/2"	
/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)
/DM1	Extended Direct mount (80mm)	(temp reduction: 100°C)	
/DM2	Extended Direct mount (150 mm)	(temp reduction: 175°C)	
/TR	Temperature reducer (max. temp. fill fluid allowed)		
/IC1	Capillary ID 1 mm. / 0,04"		
/BS6	Black sleeve on capillary ≤ 6 m.		
/BS15	Black sleeve on capillary > 6 ≤ 15 m.		
/LH	Lifting handles (recomm.for ≥ cl. 900)		
/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)		
/QBDT	<5 working days ex works BADO or rush charge compensation		



ASME 16.5 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	2.0	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			7.0		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	2.0	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		7.0	5.8
	cl. 2500	205.0	51.5	146.0							31.8 / 4x
2"	cl. 150	150.0	19.5	120.7	19.1 / 4x	57.0	92.1	2.0	70.2	2.4	
	cl. 300	165.0	22.7	127.0	19.1 / 8x					3.2	
	cl. 400-600		32.4							4.2	
	cl. 900-1500	215.0	45.1	165.1	25.4 / 8x			44.0		7.0	10.1
	cl. 2500	235.0	57.9	171.4							28.6 / 8x
3"	cl. 150	190.0	24.3	152.4	19.1 / 4x	81.0	127.0	2.0	93.0	4.9	
	cl. 300	210.0	29.0	168.3	22.3 / 8x					6.8	
	cl. 400-600		38.8							8.4	
	cl. 900	240.0	45.1	190.5	25.4 / 8x			7.0		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	2.0	93.0	7.0	
	cl. 300	255.0	32.2	200.0	22.3 / 8x					11.5	

EN 1092-1 type B1

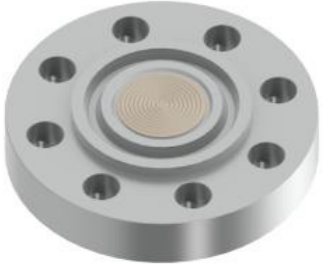
Size	Rating	OD	b	PCD	C / pcs	dD	R	f	G	Weight
DN25	PN10-40	115.0	18.0	85.0	14.0 / 4x	32.0	68.0	2.0	41.0	1.0
	PN63-100	140.0	24.0	100.0	18.0 / 4x					2.5
DN40	PN10-40	150.0	18.0	110.0	18.0 / 4x	44.0	88.0	3.0	55.4	2.0
DN50	PN10-40	165.0	20.0	125.0	18.0 / 4x	57.0	102.0		70.2	3.0
DN80	PN10-40	215.0	24.0	160.0	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 25](#)

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

2.1. Model

TXCM	EJA-E / EJX-A 100, 300 & 400 Series	
TXCP	EJA-E / EJX-A 130 & 440 Series	
TXCD	EJA-E / EJX-A 500 & 600 Series (preferred connection "4" / WN)	

2.2. Seal Type

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

WN5	TXCM with W option =/N5 mandatory option
XN5	TXCD no N5 / W available

2.4. Flange Size & Rating

dD (min. span, see page 3)				
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	57 mm.
05A7	2"	cl. 2500 RF	acc. ASME B16.5	57 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 RJF	acc. ASME B16.5	81 mm.
08A6	3"	cl. 1500 RJF	acc. ASME B16.5	81 mm.
08A7	3"	cl. 2500 RJF	acc. ASME B16.5	81 mm.
1669	1-13/16"	6BX 69MPa (10kPSI)	acc.API 6A ISO 10423 - TYPE 6BX	32 mm.
2669	2-1/16"	6BX 69MPa (10kPSI)	acc.API 6A ISO 10423 - TYPE 6BX	44 mm.

2.5. Flange Material

SS	SS AISI 316(L)
----	----------------

2.6. Diaphragm Material

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

2.7. Fill Fluid

-F1	BSO-42	Silicon Oil	-20/+350°C	-4/+662°F
-F2	BSO-25	Fluorinated Oil	-40/+250°C	-40/+482°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

2.7. Fill Fluid

-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 Armoured)

NN	Direct coupled / Welded (No Capillary)
C1	Capillary (2mm ID) - axial
C2	Capillary (2mm ID) - radial

2.9. Capillary Length

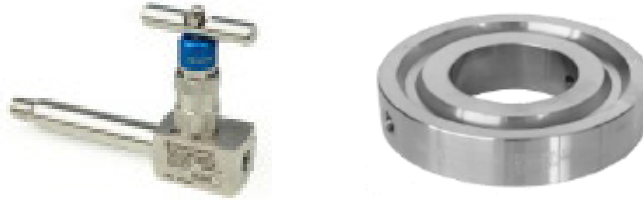
NN	Direct coupled / Welded (No Capillary)	
01	1 m	3 ft.
1A	1,5 m	5ft.
02	2 m	6 ft.
03	3 m	10 ft
04	4 m	13 ft.
05	5 m	15 ft.
06	6 m	20 ft
07	7 m	23 ft.
08	8 m	25 ft.
09	9 m	30 ft.
10	10 m	33 ft.
11	11m	35 ft.
12	12 m	40 ft.
13	13 m	43 ft
14	14 m	45 ft.
15	15 m	50 ft.

2.10. Flush rings in AISI 316(L)

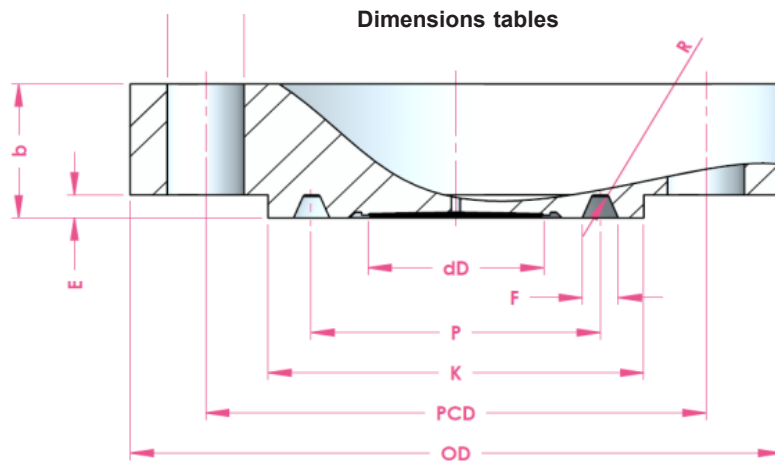
/FL5A1	2" cl. 150 RJF	Mat, 316(L) 1 x 1/4" NPT; unplugged
/FL5A2	2" cl. 300 RJF	Mat, 316(L) 1 x 1/4" NPT; unplugged
/FL5A4	2" cl. 600 RJF	Mat, 316(L) 1 x 1/4" NPT; unplugged
/FL5A6	2" cl. 1500 RJF	Mat, 316(L) 1 x 1/4" NPT; unplugged
/FL5A7	2" cl. 2500 RJF	Mat, 316(L) 1 x 1/4" NPT; unplugged
/FL8A1	3" 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
/FL169	1-13/16" 6BX 69MPa (10kPSI)	Mat, 316(L) 1 x 1/4" NPT; unplugged
/FL269	2-1/16" 6BX 69MPa (10kPSI)	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"	
/FLV2	Vent plugs 1/2"	
/FLP1	Blind plugs 1/4"	
/FLP2	Blind plugs 1/2"	

2.10. Flush rings in AISI 316(L)

/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)

**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)
/DM1	Extended Direct mount (80mm)	(temp reduction: 100°C)	
/DM2	Extended Direct mount (150 mm)	(temp reduction: 175°C)	
/TR	Temperature reducer (max. temp. fill fluid allowed)		
/IC1	Capillary ID 1 mm. / 0,04"		
/BS6	Black sleeve on capillary ≤ 6 m.		
/BS15	Black sleeve on capillary > 6 ≤ 15 m.		
/LH	Lifting handles (recomm.for ≥ cl. 900)		
/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		



ASME 16.5 RF 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		124.0			101.6		24
	cl. 900-1500	215.0	46.0	165.1	25.4 / 8x		133.0		114.3	26	15.6	
	cl. 2500	235.0	58.8	171.4	28.6 / 8x		81.0	6.4	8.7	114.3	29	4.9
3"	cl. 150	190.0	28.7	152.4	19.1 / 4x	146.0						
	cl. 300	210.0	34.9	168.3	22.3 / 8x	156.0		13.1				
	cl. 400-600		39.7	168.3		168.0		136.5	35	19.1		
	cl. 900	240.0	46.0	190.5	25.4 / 8x	9.5		13.5	127.0	32	34.8	
cl. 1500	265.0	58.8	203.2	31.8 / 8x								
cl. 2500	305.0	76.2	228.6	34.9 / 8x								

API 10423 – Type 6BX

Size	Rating	OD	b	PCD	C / pcs	dD	K	E	F	RING	Weight
1-13/16"	69MPa	185.0	42.1	146.1	23.0 / 8x	32.0	105.0	5.6	77.7	BX-151	9.0
2-1/16"	69MPa	200.0	44.1	158.8	23.0 / 8x	44.0	111.0	5.9	86.2	BX-152	11.0

All dimensions in mm, weight in kg.

Flush ring dimensions, [see page 25](#)

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

3.1. Model

TXCM	EJA-E / EJX-A 100, 300 & 400 Series
TXCP	EJA-E / EJX-A 130 & 440 Series
TXCD	EJA-E / EJX-A 500 & 600 Series (preferred connection "4" / WN)



3.2. Seal Type

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

WN5	TXCM with W option =/N5 mandatory option
XN5	TXCD no N5 / W available

3.4. Flange Size & Rating

				dD (min. span, see page 3)
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	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	acc. ASME B16.5	81 mm.
08A7	3"	cl. 2500 RF	acc. ASME B16.5	81 mm.
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

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

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

3.7. Fill Fluid

-F1	BSO-42	Silicon Oil	-20/+350°C	-4/+662°F
-F2	BSO-25	Fluorinated O	-40/+250°C	-40/+482°F
-F3	BSO-22	Silicon Oil	-50/+200°C	-58/+392°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

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

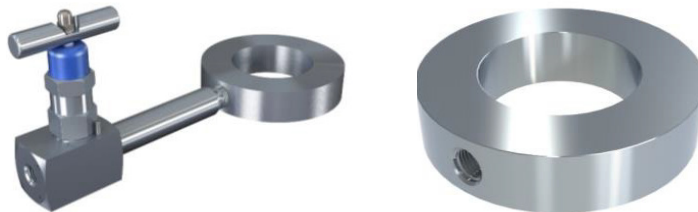
NN	Direct coupled / Welded (No Capillary)
C1	Capillary (2mm ID) - axial
C2	Capillary (2mm ID) - radial

3.9. Capillary Length

NN	Direct coupled / Welded (No Capillary)	
01	1 m	3 ft.
1A	1,5 m	5ft.
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.

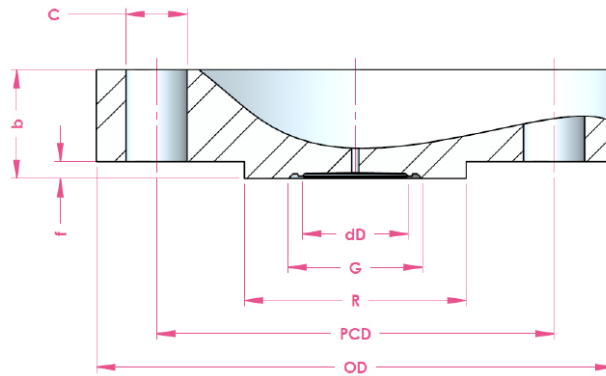
3.10. Flush rings in AISI 316(L)

/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"	
/FLV2	Vent plugs 1/2"	
/FLP1	Blind plugs 1/4"	
/FLP2	Blind plugs 1/2"	
/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)

**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)
/DM1	Extended Direct mount (80mm)	(temp reduction: 100°C)	
/DM2	Extended Direct mount (150 mm)	(temp reduction: 175°C)	
/TR	Temperature reducer (max. temp. fill fluid allowed)		
/IC1	Capillary ID 1 mm. / 0,04"		
/BS6	Black sleeve on capillary ≤ 6 m.		
/BS15	Black sleeve on capillary > 6 ≤ 15 m.		
/LH	Lifting handles (recomm.for ≥ cl. 900)		
/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		

Dimensions tables



ASME 16.5 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	2.0	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			7.0		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	2.0	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		7.0	41.5	5.8
	cl. 2500	205.0	51.5	146.0						31.8 / 4x
2"	cl. 150	150.0	19.5	120.7	19.1 / 4x	57.0	92.1	2.0	70.2	2.4
	cl. 300	165.0	22.7	127.0	19.1 / 8x					3.2
	cl. 400-600		32.4							4.2
	cl. 900-1500	215.0	45.1	165.1	25.4 / 8x	44.0		7.0	55.4	10.1
	cl. 2500	235.0	57.9	171.4						28.6 / 8x
3"	cl. 150	190.0	24.3	152.4	19.1 / 4x	81.0	127.0	2.0	93.0	4.9
	cl. 300	210.0	29.0	168.3	22.3 / 8x					6.8
	cl. 400-600		38.8							8.4
	cl. 900	240.0	45.1	190.5	25.4 / 8x			7.0		13.1
	cl. 1500	265.0	54.7	203.2						
	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	2.0	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 25](#)

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

4.1. Model

TXCM	EJA-E / EJX-A 100, 300 & 400 Series
TXCP	EJA-E / EJX-A 130 & 440 Series
TXCD	EJA-E / EJX-A 500 & 600 Series (preferred connection "4" / WN)



4.2. Seal Type

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

4.3. Mounting

WN5	TXCM with W option =/N5 mandatory option
XN5	TXCD no N5 / W available

4.4. Flange Size & Rating

dD (min. span, see page 3)				
05A1	2"	cl. 150-600 RF	acc. ASME B16.5	57 mm.
05A2	2"	cl. 900-2500 RF	acc. ASME B16.5	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

SS	SS AISI 316(L)
----	----------------

4.6. Diaphragm Material

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

4.7. Fill Fluid

-F1	BSO-42	Silicon Oil	-20/+350°C	-4/+662°F
-F2	BSO-25	Fluorinated Oil	-40/+250°C	-40/+482°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

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

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

01	1 m	3 ft.
1A	1,5 m	5ft.
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)

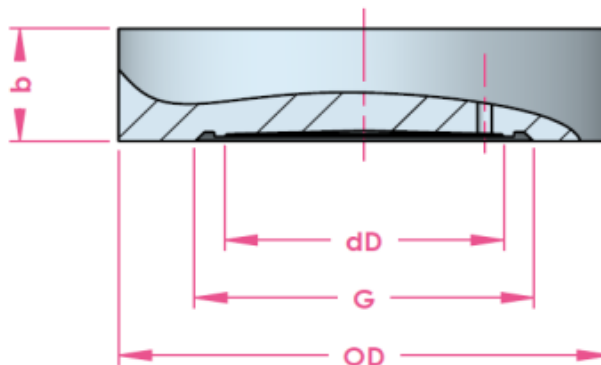
/FL01	size 02 RF/B1 (unplugged)	Mat, 316(L) 1 x 1/4" NPT
/FL02	size 02 RF/B1 (unplugged)	Mat, 316(L) 1 x 1/2" NPT
/FL03	size 04 RF/B1 (unplugged)	Mat, 316(L) 1 x 1/4" NPT
/FL04	size 04 RF/B1 (unplugged)	Mat, 316(L) 1 x 1/2" NPT
/FL05	size 05 RF/B1 (unplugged)	Mat, 316(L) 1 x 1/4" NPT
/FL06	size 05 RF/B1 (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
/F21	Second flush port 1/4" NPTf	
/F22	Second flush port 1/2" NPTf	
/FLV1	Vent plugs 1/4"	
/FLV2	Vent plugs 1/2"	
/FLP1	Blind plugs 1/4"	
/FLP2	Vent plugs 1/2"	
/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)



4.11. 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.	
/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	

Dimensions tables



ASME 16.5 RF facing

Size	Rating	OD	dD	b	G	weight
2"	cl. 150-600	92.1	57.0	24	70.	1.3 kg
	cl. 900-2500		44.0		55.	1.3 kg
3"	cl. 150-2500	127.0	81.0		93.	2.4 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			93.	2.9 kg
DN100	PN10-16	158.0	81.0		101.0	3.8 kg
	PN25-400	162.0				3.9 kg

All dimensions in mm, weight in kg.

Flush ring dimensions, [see page 25](#)

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

5.1. Model

TXCM	EJA-E / EJX-A 100, 300 & 400 Series
TXCP	EJA-E / EJX-A 130 & 440 Series
TXCD	EJA-E / EJX-A 500 & 600 Series (preferred connection "4" / WN)

5.2. Seal Type

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

WN5	TXCM with W option =/N5 mandatory option
XN5	TXCD no N5 / W available



5.4. Flange Size & Rating

					dD (min. span, see page 3)
05A1	2"	cl. 150-2500 RF	acc. ASME B16.5		57 mm.
05A2	2"	cl. 900-2500 RF	acc. ASME B16.5		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

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

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

5.7. Fill Fluid

-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/+200°C	-58/+392°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
-F9	BSO-41	Silicon Oil	-80/+120°C	-112/+248°F
-F0	BSO-48	Silicon Oil	-20/+420°C	-4/+788°F

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

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

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)

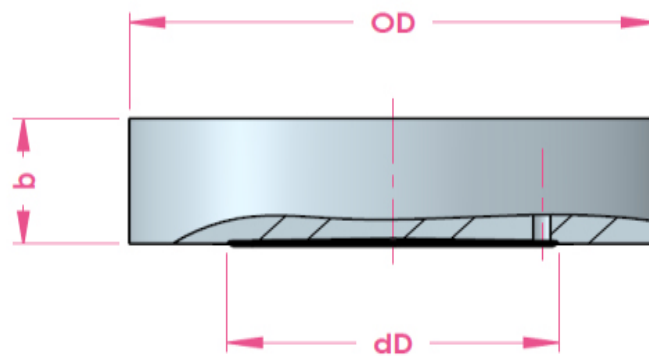
/FL01	size 02 RF/B1 Mat. 316(L); unplugged	1 x 1/4" NPT
/FL02	size 02 RF/B1 Mat. 316(L); unplugged	1 x 1/2" NPT
/FL03	size 04 RF/B1 Mat. 316(L); unplugged	1 x 1/4" NPT
/FL04	size 04 RF/B1 Mat. 316(L); unplugged	1 x 1/2" NPT
/FL05	size 05 RF/B1 Mat. 316(L); unplugged	1 x 1/4" NPT
/FL06	size 05 RF/B1 Mat. 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"	
/FLV2	Vent plugs 1/2"	
/FLP1	Blind plugs 1/4"	
/FLP2	Blind plugs 1/2"	
/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)



5.11. 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.		
/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)z		
/QDBDT	<5 working days ex works BADO or rush charge compensation		

Dimensions tables



ASME 16.5 RF facing

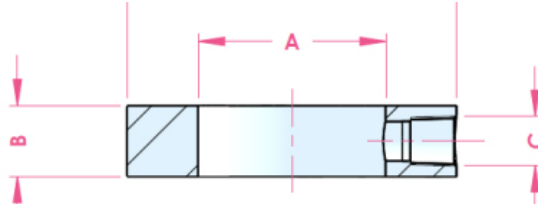
Size	Rating	OD	db	b	Weight
2"	cl. 150-600	92.1	57.0	24	1.3 kg
	cl. 900-2500		44.0		1.3 kg
3"	cl. 150-2500	127.0	81.0		2.4 kg
4"	cl. 150-2500	157.2			3.7 kg

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			2.9 kg
DN100	PN10-16	158.0	81.0		3.8 kg
	PN25-400	162.0			3.9 kg

All dimensions in mm, weight in kg.

Flush ring dimensions, [see page 25](#)

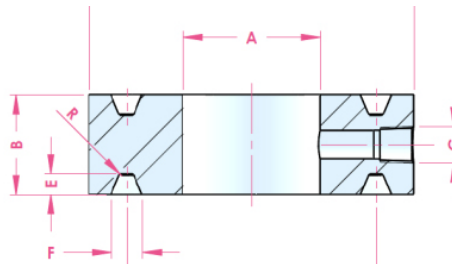


ASME 16.5 RF facing

Size	Rating	D	A	B	C
1"	cl. 150-2500	50.8	26.6	35	½" NPT
1.5"		73.0	40.9		
2"		92.1	52.5		
3"		127.0	77.9		
4"		157.2	102.3		

EN 1092-1 B1 type

Size	C	D	A	B	C
DN25	PN10-400	68.0	28.5	35	½" NPT
DN40		88.0	43.1		
DN50		102.0	53.9		
DN80		138.0	80.9		
DN100	PN10-16	158.0	104.3	35	½" NPT
	PN25-100	162.0	104.3		



ASME 16.5 RJF facing

Size	Rating	D	A	B	E	F	P	R	C	Ring #
2"	cl. 150	102.0	52.5		6.4	8.7	82.6	0.8	½" NPT	22
	cl. 300	108.0			7.9	11.9				95.3
	cl. 400-600	124.0					101.6			
	cl. 900-1500				26					
3"	cl. 150	133.0	77.9		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	156.0								
	cl. 900	168.0			9.5	13.5	127.0	1.5		32
	cl. 1500									
	cl. 2500									

Ring thickness

Flush size	RF /B1 facing	RJF facing
¼"	20.0	$B = 20 + 2 \cdot E$
¾"	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. Model

TXCM	EJA-E / EJX-A 100, 300 & 400 Series
TXCP	EJA-E / EJX-A 130 & 440 Series
TXCD	EJA-E / EJX-A 500 & 600 Series - (preferred connection "4" / WN)



6.2. Seal Type

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

6.3. Mounting

WN5	TXCM with W option =/N5 mandatory option
XN5	TXCD no N5 / W available

6.4. Flange Size & Rating

05A1	2"	cl. 150 RF	acc. ASME B16.5	44 mm.
05A2	2"	cl. 300 RF	acc. ASME B16.5	44 mm.
05A4	2"	cl. 600 RF	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

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

-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
-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

SS	SS AISI 316(L)
HC	Alloy C276

6.8. Fill Fluid

-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/+200°C	-58/+392°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

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

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

6.10. Capillary Length

NN	Direct coupled / Welded (No Capillary)	
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.

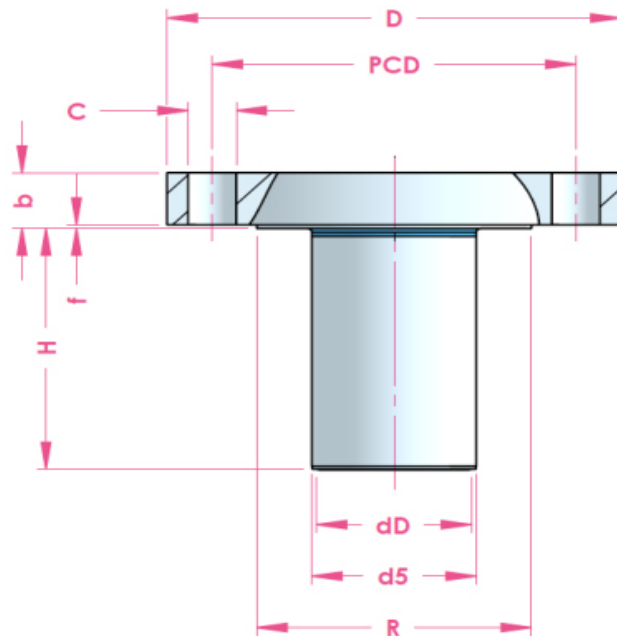
6.11. Options

/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)
/DM1	Extended Direct mount (80mm)	(temp reduction: 100°C)	
/DM2	Extended Direct mount (150 mm)	(temp reduction: 175°C)	
/TR	Temperature reducer	(max. temp. fill fluid allowed)	
/IC1	Capillary ID 1 mm. / 0,04"		
/LH	Lifting handles (recomm.for ≥ cl. 900)		
/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		

6.11. Options

/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

Dimensions tables



ASME 16.5 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	2.0	2.4	+ 0.004 x H	
	cl. 300		22.7	127.0	19.1 / 8x					3.2		
	cl. 400-600	32.4	7.0							4.2		
3"	cl. 150	190.0	24.3	152.4	19.1 / 4x	72.0	76.0	127.0	2.0	4.9	+ 0.010 x H	
	cl. 300	210.0	29.0	168.3	22.3 / 8x					7.0		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	2.0	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	

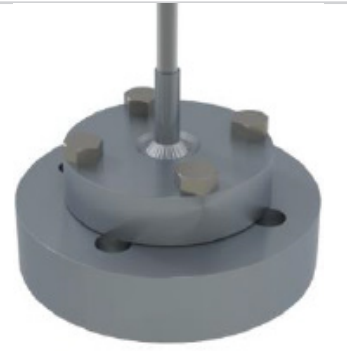
1) This weight should be taken for exotics as well.

All dimensions in mm, weight in kg

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

7.1. Model

TXCM	EJA-E / EJX-A 100, 300 & 400 Series
TXCP	EJA-E / EJX-A 130 & 440 Series
TXCD	EJA-E / EJX-A 500 & 600 Series - (preferred connection "4" / WN)



7.2. Seal Type

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

7.3. Mounting

WN5	TXCM with W option =/N5 mandatory option
XN5	TXCD no N5 / W available

7.4. Flange Size & Rating

				dD (min. span, see page 3)
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.
01A6	1/2"	cl. 1500 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.
1AA6	3/4"	cl. 1500 RF	acc. ASME B16.5	50 mm.
02A1	1"	cl. 150 RF	acc. ASME B16.5	50 mm.
02A1	1"	cl. 300 RF	acc. ASME B16.5	50 mm.
02A4	1"	cl. 600 RF	acc. ASME B16.5	50 mm.
02A6	1"	cl. 1500 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.
04A6	1,5"	cl. 1500 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

SS	SS AISI 316(L)
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7.6. Diaphragm Material

HB	Alloy B2
HC	Alloy C276
DU	Duplex 2205
I6	Alloy 625

7.6. Diaphragm Material

M4	Alloy 400	
N2	Nickel 201	
TA	Tantalum	
SD	Super Duplex 2507	
S4	AISI304L	
S2	AISI321	
A1	25 µm gold (24 Crt)	
A2	40 µm gold (24 Crt)	
PT	Coating PTFE	(+/- 35 µm thickness) (anti-stick only)

7.7. Fill Fluid

-F1	BSO-42	Silicon Oil	-20/+350°C	-4/+662°F
-F2	BSO-25	Fluorinated O	-40/+250°C	-40/+482°F
-F3	BSO-22	Silicon Oil	-50/+200°C	-58/+392°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 Armoured)

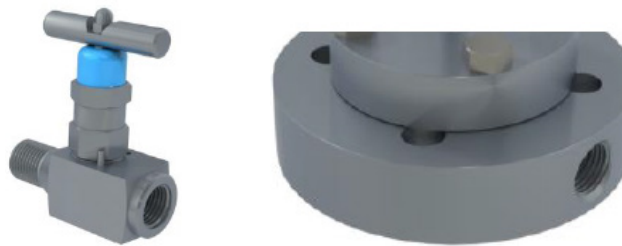
NN	Direct coupled / Welded (No Capillary)
C1	Capillary (2mm ID) - axial

7.9. Capillary Length

NN	Direct coupled / Welded (No Capillary)	
01	1 m	3 ft.
1A	1,5 m	5ft.
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.

7.10. Flush rings in AISI 316(L)

/FR01	Flush port Unplugged	1 x ¼" NPT
/FR02	Flush port Unplugged	2 x ¼" NPT
/FR03	Flush port Vent plug	1 x ¼" NPT
/FR04	Flush port Vent plug	2 x ¼" NPT
/FR05	Flush port Blind plugs	1 x ¼" NPT
/FR06	Flush port Blind plugs	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	1 x ½" NPT
/FR40	Flush port Vent plug	2 x ½" NPT
/FR50	Flush port Blind plugs	1 x ½" NPT
/FR60	Flush port Blind plugs	2 x ½" NPT
/FV91	Pair flush valves BDTV910	for ¼" ports (fitted)
/FV92	Pair flush valves BDTV910	for ½" ports (fitted)
/FV93	Single flush BDTV910 for 1/4"	for ¼" port (fitted)
/FV94	Single flush BDTV910 for 1/2"	for ½" port (fitted)

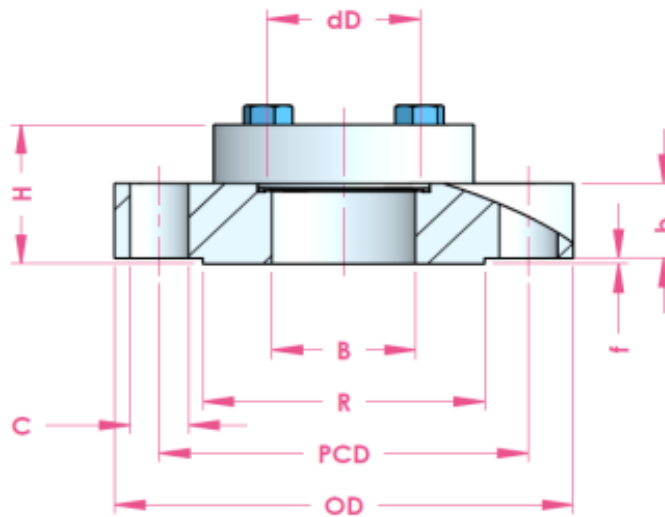
**7.11. Options**

/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)
/4B8	4 bolts B8 (Max. 150 bar)		
/8B2	8 bolts A2-70 (Max. 250 bar)		
/8B8	8 bolts B8 (Max. 300 bar)		
/GGA	Graphite gasket (up to 343°C)		
/CAM	Camprofile gasket (up to 500°C) for steam applications		
/DM1	Extended Direct mount (80mm)	(temp reduction: 100°C)	
/DM2	Extended Direct mount (150 mm)	temp reduction: 175°C)	
/TR	Temperature reducer	(max. temp. fill fluid allowed)	
/IC1	Capillary ID 1 mm. / 0,04"		
/BS6	Black sleeve on capillary ≤ 6 m.		
/BS15	Black 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)		

7.11. Options

/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	Quick delivery ex works BADO (< 5 working days)	

Dimensions tables



ASME 16.5 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	2.0	54.0	60.3	1/2"-13UNC/4x	2.4
	cl. 300	95.0					52.0	66.7		2.5
	cl. 400-600	120.0			39	7.0	57.0	3/4"-10 UNC/4x	2.5	
	cl. 900-1500				35	61.0	82.6		3.7	

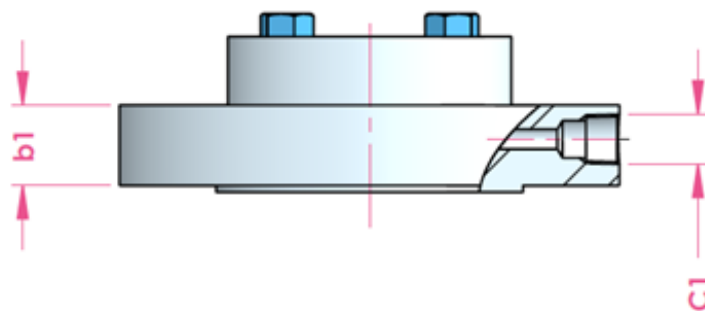
EN 1092-1 B1 type

Size	Rating	OD	B	R	b	f	H	PCD	C/PCS	Weight
3/4"	cl. 150	100.0	21.0	42.9	30	2.0	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					130.0	33		7.0	55.0
	cl900-1500	63.5			88.9			3/4'-10 UNC/4x	4.6	
1"	cl.50	110.0	26.6	50.8	24	2.0	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					150.0	37		7.0	55.0
	cl. 900-1500	69.0			101.6			7/8" - 9 UNC / 4x	6.4	
1.5"	cl. 150	125.0	40.9	73.0	27	2.0	98.4		1/2" - 13 UNC / 4x	3.4
	cl. 300	155.0			29		114.3		3/4" - 10 UNC / 4x	5.8
	cl. 400 - 600					180.0	32		7.0	123.8
	cl. 900-1500	123.8						1" - 8 UNC / 4x	9.2	

ASME 16.5 RF facing

Size	Rating	OD	B	b	R	f	H	PCD	C / pcs	Weight
DN15	PN10-40	95.0	15.	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	M12 / 4x	3.6 kg
DN25	PN10-40	115.0	25.0	29.0	68.0		48.1	85.0	M16 / 4x	4.0 kg
	PN63-100	140.0		35.0			55.5	100.0	M16 / 4x	6.8 kg
DN40	PN10-40	150.0	40.0	24.0	88.0	45.5	100.0	M16 / 4x	7.2 kg	
	PN63-100	170.0		26.0		47.5		M20 / 4x	6.6 kg	
DN50	PN10-16	165.0	47.0	30.0	102.0	3.0	48.5	125.0	M16 / 4x	6.7 kg
	PN25-40						49.5	135.0	M20 / 4x	
	PN63	180.0		28.0		49.5	145.0	M24 / 4x	9.2 kg	
	PN100	195.0								

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. Model

TXCM	EJA-E / EJX-A 100, 300 & 400 Series
TXCP	EJA-E / EJX-A 130 & 440 Series
TXCD	EJA-E / EJX-A 500 & 600 Series - (preferred connection "4" / WN)



8.2. Seal Type

DFS-USL-F	Diaphragm Seal - Internal Diaphragm, Flanged type
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8.3. Mounting

WN5	TXCM with W option =/N5 mandatory option
XN5	TXCD no N5 / W available

8.4. Flange Size & Rating

				dD (min. span, see page 3)
01A1	1/2"	cl. 150 RF	cl. 150 RF	81 mm.
01A2	1/2"	cl. 300 RF	cl. 150 RF	81 mm.
01A4	1/2"	cl. 600 RF	cl. 150 RF	81 mm.
1AA1	3/4"	cl. 150 RF	cl. 150 RF	81 mm.
1AA2	3/4"	cl. 300 RF	cl. 150 RF	81 mm.
1AA4	3/4"	cl. 600 RF	cl. 150 RF	81 mm.
02A1	1"	cl. 150 RF	cl. 150 RF	81 mm.
02A1	1"	cl. 300 RF	cl. 150 RF	81 mm.
02A4	1"	cl. 600 RF	cl. 150 RF	81 mm.
04A1	1,5"	cl. 150 RF	cl. 150 RF	81 mm.
04A2	1,5"	cl. 300 RF	cl. 150 RF	81 mm.
04A4	1,5"	cl. 600 RF	cl. 150 RF	81 mm.
05A1	2"	cl. 150 RF	cl. 150 RF	81 mm.
05A2	2"	cl. 300 RF	cl. 150 RF	81 mm.
05A4	2"	cl. 600 RF	cl. 150 RF	81 mm.
01D4	DN15	PN10-40	form B1 acc. EN 1092-1	81 mm.
01D5	DN15	PN63	form B1 acc. EN 1092-1	81 mm.
01D6	DN15	PN100	form B1 acc. EN 1092-1	81 mm.
02D4	DN25	PN10-40	form B1 acc. EN 1092-1	81 mm.
02D5	DN25	PN63	form B1 acc. EN 1092-1	81 mm.
02D6	DN25	PN100	form B1 acc. EN 1092-1	81 mm.
04D4	DN40	PN10-40	form B1 acc. EN 1092-1	81 mm.
04D5	DN40	PN100	form B1 acc. EN 1092-1	81 mm.
04D6	DN40	PN100	form B1 acc. EN 1092-1	81 mm.
05D4	DN50	PN10-40	form B1 acc. EN 1092-1	81 mm.
05D5	DN50	PN63	form B1 acc. EN 1092-1	81 mm.
05D6	DN50	PN100	form B1 acc. EN 1092-1	81 mm.

8.5. Lower part material

SS	SS AISI 316(L)
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8.6. Diaphragm Material

SS	Stainless Steel AISI 316 L
HB	Alloy B2
HC	Alloy C276

8.6. Diaphragm Material

DU	Duplex 2205
I6	Alloy 625
M4	Alloy 400
N2	Nickel 201
TA	Tantalum
SD	Super Duplex 2507
S4	AISI304L
S2	AISI321
A1	25 µm gold (24 Crt)
A2	40 µm gold (24 Crt)
PT	Coating PTFE (+/- 35 µm thickness) (anti-stick only)

8.7. Fill Fluid

-F1	BSO-42	Silicon Oil	-20/+350°C	-4/+662°F
-F2	BSO-25	Fluorinated O	-40/+250°C	-40/+482°F
-F3	BSO-22	Silicon Oil	-50/+200°C	-58/+392°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

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

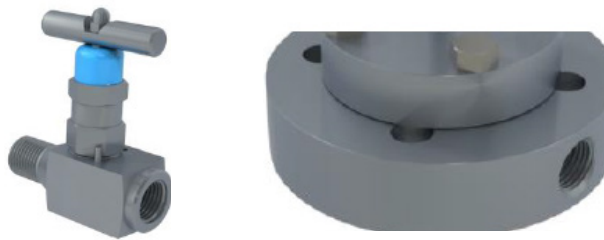
NN	Direct coupled / Welded (No Capillary)
C1	Capillary (2mm ID) - axial

8.9. Capillary Length

NN	Direct coupled / Welded (No Capillary)	
01	1 m	3 ft.
1A	1,5 m	5ft.
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.

8.10. Flush connections lower part

/FR01	Flush port Unplugged	1 x ¼" NPT
/FR02	Flush port Unplugged	2 x ¼" NPT
/FR03	Flush port Vent plug	1 x ¼" NPT
/FR04	Flush port Vent plug	2 x ¼" NPT
/FR05	Flush port Blind plugs	1 x ¼" NPT
/FR06	Flush port Blind plugs	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	1 x ½" NPT
/FR40	Flush port Vent plug	2 x ½" NPT
/FR50	Flush port Blind plugs	1 x ½" NPT
/FR60	Flush port Blind plugs	2 x ½" NPT
/FV91	Pair flush valves BDTV910	for ¼" ports (fitted)
/FV92	Pair flush valves BDTV910	for ½" ports (fitted)
/FV93	Single flush BDTV910 for 1/4"	for ¼" port (fitted)
/FV94	Single flush BDTV910 for 1/2"	for ½" port (fitted)

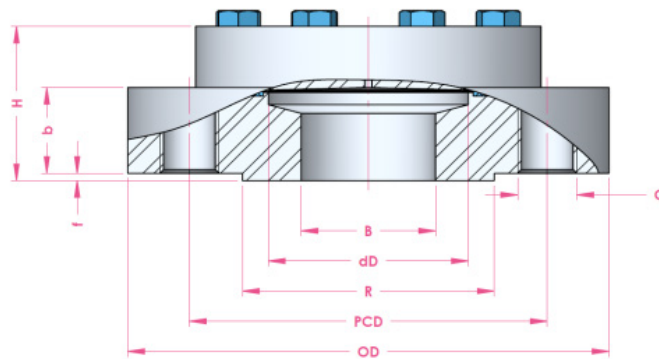
**8.11. Options**

/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)
/8B8	8 bolts B8 (Max. 248 bar)		
/GGA	Graphite gasket (up to 343°C)		
/CAM	Camprofile gasket (up to 500°C) for steam applications		
/DM1	Extended Direct mount (80mm)	(temp reduction: 100°C)	
/DM2	Extended Direct mount (150 mm)	temp reduction: 175°C)	
/TR	Temperature reducer	(max. temp. fill fluid allowed)	
/IC1	Capillary ID 1 mm. / 0,04"		
/BS6	Black sleeve on capillary ≤ 6 m.		
/BS15	Black 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	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)		
/LMF	Large Male Facing	acc. ASME B16.5	

8.11. Options

/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	Quick delivery ex works BADO (< 5 working days)	

Dimensions tables



ASME 16.5 RF facing

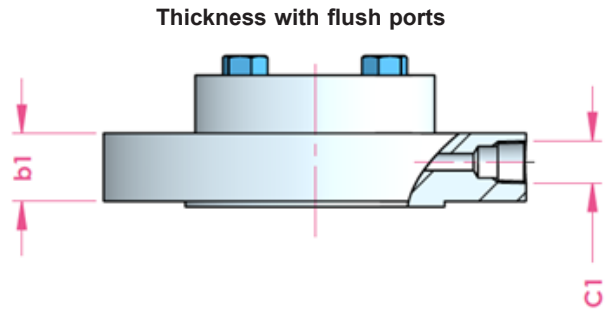
Size	Rating	OD	B	b	R	f	H	PCD	C/PCS	Weight
1/2"	cl. 150	140.0	15.8	40.0	34.9	2.0	67.0	60.3	0.5" - 13 UNC / 4x	7.9 kg
	cl. 300			39.0	39	7.0	71.0	66.7		
	cl. 400-600			39.0	39	7.0	71.0	66.7		
3/4"	cl. 150	140.0	21.0	39.0	42.9	2.0	66.0	69.9	0.5" - 13 UNC / 4x	7.9 kg
	cl. 300			44.0			71.0	82.6		
	cl. 400-600			44.0			71.0	82.6	5/8"-11UNC/4x	

ASME 16.5 RF facing

Size	Rating	OD	B	b	R	f	H	PCD	C/PCS	Weight
1"	cl. 150	140.0	26.6	38.0	50.8	2.0	65.0	79.4	0.5" - 13 UNC / 4x	7.9 kg
	cl. 300			41.0			48.0	88.9	5/8" - 11 UNC / 4x	
	cl. 400 - 600			7.0			50.0	88.9		
1.5"	cl. 150	140.0	40.9	38.0	73.0	2.0	65.0	98.4	1/2" - 13 UNC / 4x	7.9 kg
	cl. 300	155.0		44.0			69.0	114.3	3/4" - 10 UNC / 4x	8.5 kg
	cl. 400 - 600			45.0			7.0			
2"	cl. 150	150.0	52.5	29.0	92.1	2.0	56.0	120.7	5/8"-11 UNC / 4x	7.0 kg
	cl. 300	30.0		57.0			5/8"-11 UNC / 8x		8.0 kg	
	cl. 400 - 600	160.0		29.0				7.0		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	67.0	65.0	M12 / 4x	7.9 kg	
	PN63-100			37.0			64.0	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		8.2 kg
	PN63-100						40.0				
DN40	PN10-40	150.0	43.1	40.0	88.0	3.0	78.0	110.0	M16 / 4x	8.5 kg	
	PN63-100	170.0	42.5	41.0			79.0	125.0			M20 / 4x
DN50	PN10-40	165.0	54.5	30.0	102.0	58.0	135.0	M20 / 4x	7.0 kg		
	PN63	180.0		30.0							
	PN10	195.0	53.9	40.0						68.0	145.0



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. Model

TXCM	EJA-E100, 300 & 400 Series
TXCP	EJA-E130 & 440 Series
TXCD	EJA-E500 Series - (preferred connection "4" / WN)



9.2. Seal Type

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

WN5	TXCM with W option =/N5 mandatory option
XN5	TXCD no N5 / W available

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

				dD (min. span, see page 3)
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

SS	SS AISI 316(L)
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9.6. Diaphragm Material

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

9.6. Diaphragm Material

S4	AISI304L	
S2	AISI321	
A1	25 µm gold (24 Crt)	
A2	40 µm gold (24 Crt)	
PT	Coating PTFE	(+/- 35 µm thickness) (anti-stick only)

9.7. Fill Fluid

-F1	BSO-42	Silicon Oil	-20/+350°C	-4/+662°F
-F2	BSO-25	Fluorinated O	-40/+250°C	-40/+482°F
-F3	BSO-22	Silicon Oil	-50/+200°C	-58/+392°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 Armoured)

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

9.9. Capillary Length

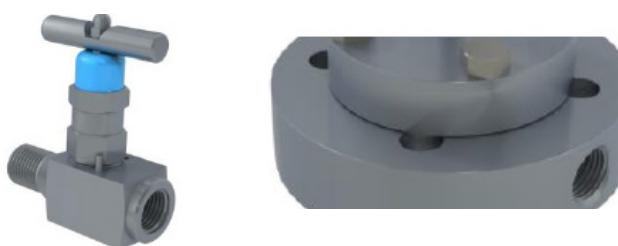
NN	Direct coupled / Welded (No Capillary)	
01	1 m	3 ft.
1A	1,5 m	5ft.
02	2 m	6 ft.
03	3 m	10 ft
04	4 m	13 ft.
05	5 m	15 ft.
06	6 m	20 ft
07	7 m	23 ft.
08	8 m	25 ft.
09	9 m	30 ft.
10	10 m	33 ft.
11	11m	35 ft.
12	12 m	40 ft.
13	13 m	43 ft
14	14 m	45 ft.
15	15 m	50 ft.

9.10. Flush connections lower part

/FR01	Flush port Unplugged	1 x ¼" NPT
/FR02	Flush port Unplugged	2 x ¼" NPT
/FR03	Flush port Vent plug	1 x ¼" NPT
/FR04	Flush port Vent plug	2 x ¼" NPT
/FR05	Flush port Blind plugs	1 x ¼" NPT

9.10. Flush connections lower part

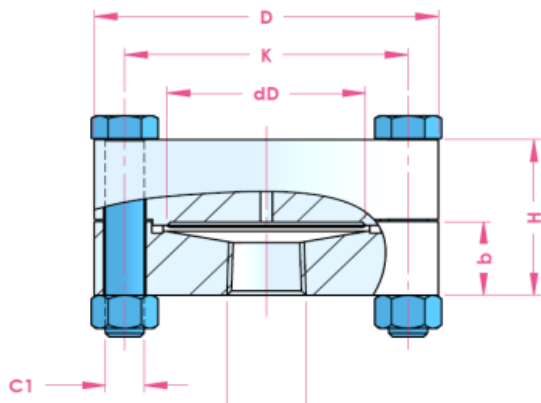
/FR06	Flush port Blind plugs	2 x ¼" NPT
/FR10	Flush port Unplugged	1 x ½" NPT
/FR20	Flush port Unplugged	2 x ½" NPT
/FR30	Flush port Vent plug	1 x ½" NPT
/FR40	Flush port Vent plug	2 x ½" NPT
/FR50	Flush port Blind plugs	1 x ½" NPT
/FR60	Flush port Blind plugs	2 x ½" NPT
/FV91	Pair flush valves BDTV910	for ¼" ports (fitted)
/FV92	Pair flush valves BDTV910	for ½" ports (fitted)
/FV93	Single flush BDTV910 for 1/4"	for ¼" port (fitted)
/FV94	Single flush BDTV910 for 1/2"	for ½" port (fitted)



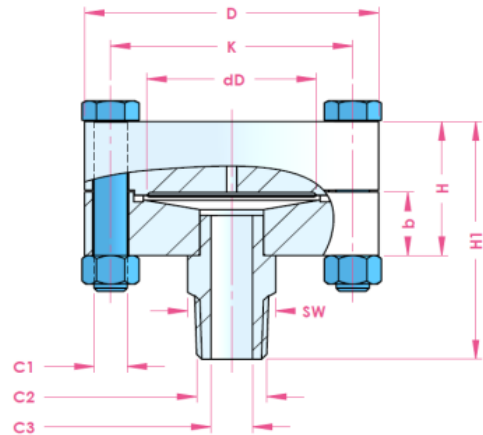
9.11. Options

/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)
/4B8	4 bolts B8 (Max. 150 bar)		
/8B2	8 bolts A2-70 (Max. 250 bar)		
/8B8	8 bolts B8 (Max. 300 bar)		
/GGA	Graphite gasket (up to 343°C)		
/CAM	Camprofile gasket (up to 500°C) for steam applications		
/DM1	Extended Direct mount (80mm)	(temp reduction: 100°C)	
/DM2	Extended Direct mount (150 mm)	temp reduction: 175°C)	
/TR	Temperature reducer	(max. temp. fill fluid allowed)	
/IC1	Capillary ID 1 mm. / 0,04"		
/BS6	Black sleeve on capillary ≤ 6 m.		
/BS15	Black 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)		
/QBDT	Quick delivery ex works BADO (< 5 working days)		

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 kg
1/2" NPT-f			43.5	25.0			
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	50.0	85.0	37.5	65.5	19.0	70.0	3/8"UNC	6.0	22	< 2.5 kg
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 kg
G 1/2			43.5	25.0			
G 3/4							
G 1							

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 kg
1/2" NPT-m				68.5				8.0		
3/4" NPT-m				71.5				10.0		
1" NPT-m				87.5				12.0		

DIN 13-1 – Metric ISO thread

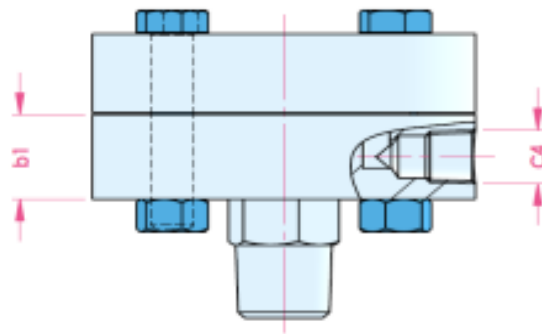
Female threaded

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 kg
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 kg
M20x1.5				68.5				8.0		

Thickness with flush ports



Flush size (C1)	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. Model

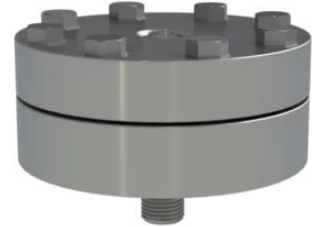
TXCM	EJA-E100, 300 & 400 Series
TXCP	EJA-E130 & 440 Series
TXCD	EJA-E500 Series (preferred connection "4" / WN)

10.2. Seal Type

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

WN5	EJAM with N5 / EJXM / TXCM with W option =/N5 mandatory option
XN5	EJAD / EJXD / TXCD no N5 / W available



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

			dD (min. span, see page 3)
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

SS	SS AISI 316(L)
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10.6. Diaphragm Material

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

10.6. Diaphragm Material

SD	Super Duplex 2507	
S4	AISI304L	
S2	AISI321	
A1	25 µm gold (24 Crt)	
A2	40 µm gold (24 Crt)	
PT	Coating PTFE	(+/- 35 µm thickness) (anti-stick only)

10.7. Fill Fluid

-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/+200°C	-58/+392°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 Armoured)

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

10.9. Capillary Length

NN	Direct coupled / Welded (No Capillary)	
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

10.10. Flush connections lower part

/FR01	Flush port Unplugged	1 x ¼" NPT
/FR02	Flush port Unplugged	2 x ¼" NPT
/FR03	Flush port Vent plug	1 x ¼" NPT
/FR04	Flush port Vent plug	2 x ¼" NPT
/FR05	Flush port Blind plugs	1 x ¼" NPT
/FR06	Flush port Blind plugs	2 x ¼" NPT

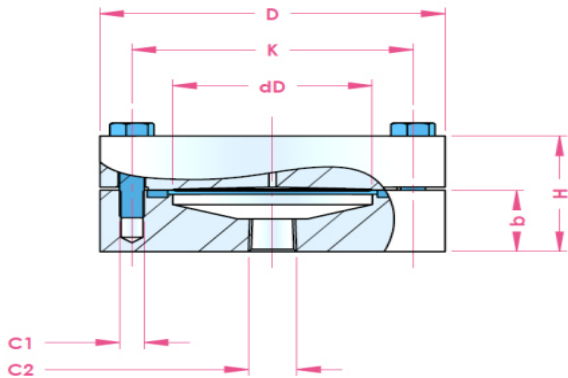
10.10. Flush connections lower part

/FR10	Flush port Unplugged	1 x 1/2" NPT
/FR20	Flush port Unplugged	2 x 1/2" NPT
/FR30	Flush port Vent plug	1 x 1/2" NPT
/FR40	Flush port Vent plug	2 x 1/2" NPT
/FR50	Flush port Blind plugs	1 x 1/2" NPT
/FR60	Flush port Blind plugs	2 x 1/2" NPT
/FV91	Pair flush valves BDTV910	for 1/4" ports (fitted)
/FV92	Pair flush valves BDTV910	for 1/2" ports (fitted)
/FV93	Single flush BDTV910 for 1/4"	for 1/4" port (fitted)
/FV94	Single flush BDTV910 for 1/2"	for 1/2" port (fitted)

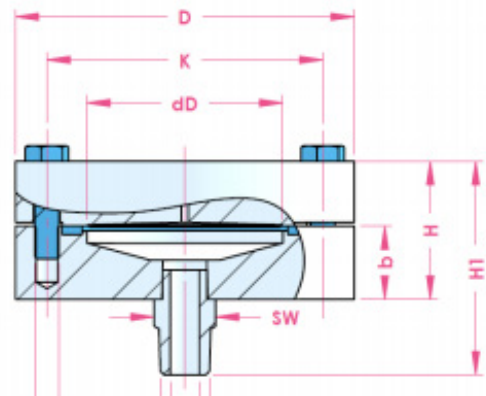
**10.11. Options**

/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)
/8B8	8 bolts B8 (Max. 248 bar)		
/GGA	Graphite gasket (up to 343°C)		
/CAM	Camprofile gasket (up to 500°C) for steam applications		
/DM1	Extended Direct mount (80mm)	(temp reduction: 100°C)	
/DM2	Extended Direct mount (150 mm)	(temp reduction: 175°C)	
/TR	Temperature reducer	(max. temp. fill fluid allowed)	
/IC1	Capillary ID 1 mm. / 0,04"		
/BS6	Black sleeve on capillary ≤ 6 m.		
/BS15	Black 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	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)		
/QBDT	Quick delivery ex works BADO (< 5 working days)		

Dimensions tables: Female threaded



Dimensions tables: 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 kg
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 kg
1/2" NPT-m				86.0				8.0		
3/4" NPT-m				89.0				10.0	27	
1" NPT-m				105.0				12.0	36	

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 kg
G 1/2							
G 3/4							
G 1							

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 kg
G 1/2 A				86.0				8.0		
G 3/4 A				89.0				10.0	27	
G 1 A				105.0				12.0	36	

DIN 13-1 – Metric ISO thread

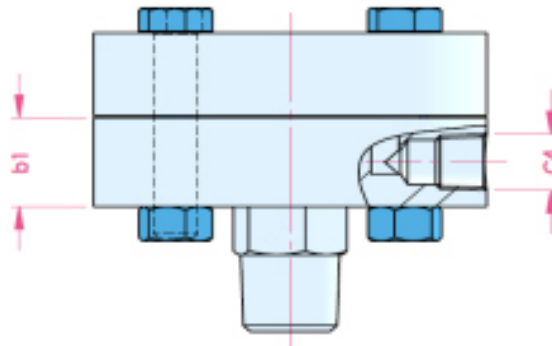
Female threaded

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 kg
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 kg
M20x1.5				86.0				8.0		

Thickness with flush ports



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. Model

TXCD	EJA-E / EJX-A 500 & 600 Series - (preferred connection "4" / WN)
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11.2. Seal Type

DFS-PS	Diaphragm Seal - Plug Seal
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11.3. Mounting

XN5	TXCD no N5 / W available
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11.4. Thread & Form

				dD (min. span, see page 3)
-T4NM	1"	NPT male	PN600	23,5 mm.
-T5NM	1,5"	NPT male	PN400	35 mm.
-T5NM	2"	NPT male	PN250	44 mm.
-T4BM	1"	ISO 228 BSP male	PN600	23,5 mm.
-T5BM	1,5"	ISO 228 BSP male	PN400	35 mm.
-T6BM	2"	ISO 228 BSP male	PN250	44 mm.

11.5. Body material

SS	SS AISI 316(L)
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11.6. Diaphragm Material

SS	Stainless Steel AISI 316 L
HC	Alloy C276

11.7. Fill Fluid

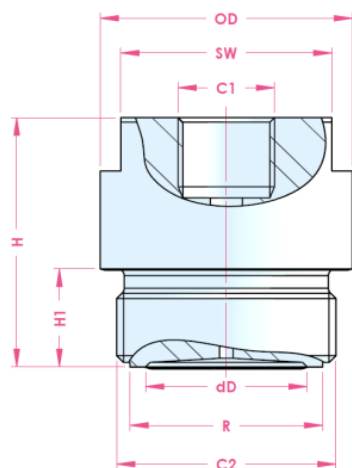
- F3	SS AISI 316(L)	BSO-22	Silicon Oil	-50/+200°C	-58/+392°F
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11.8. Capillary Size / Type (AISI 316 Stainless Steel Armoured)

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

NN	Direct coupled / Welded (No Capillary)
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Dimensions table: PS

Thread size(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	47	65

All dimensions in mm, weight in kg

12. DFS-SA Diaphragm Seal - Sanitary Seals

12.1. Model

TXCM	EJA-E100, 300 & 400 Series	
TXCD	EJA-E500 Series - (preferred connection "4" / WN)	
12.2. Seal Type		
DFS-SA	Diaphragm Seal - Sanitary Seals	
12.3. Mounting		
WN5	TXCM with W option =/N5 mandatory option	
XN5	TXCD no N5 / W available	

12.4. Thread & Form

					dD (min. span, see page 3)
-D3	DN25	female nut	acc. DIN 11851		23,5 mm.
-D5	DN40	female nut	acc. DIN 11851		32 mm.
-D6	DN50	female nut	acc. DIN 11851		44 mm.
-D8	DN80	female nut	acc. DIN 11851		72 mm.
-S5	1,5"	female nut	acc. SMS 1145		32 mm.
-S6	2"	female nut	acc. SMS 1145		44 mm.
-S8	3"	female nut	acc. SMS 1145		72 mm.
-T5	1,5"	Tri-clamp	acc. ISO 2852		32 mm.
-T6	2"	Tri-clamp	acc. ISO 2852		44 mm.
-T8	3"	Tri-clamp	acc. ISO 2852		72 mm.

12.5. Process connection

SS	SS AISI 316(L)
----	----------------

12.6. Diaphragm Material

SS	Stainless Steel AISI 316 L
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12.7. Fill Fluid

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

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

12.9. Capillary Length

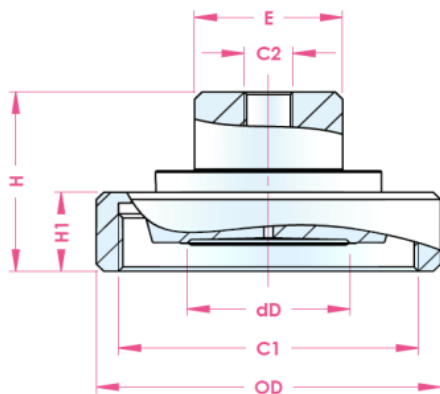
			Direct coupled / Welded (No Capillary)
NN			
01	1 m		3 ft.
1A	1,5 m		5ft.
02	2 m		6 ft.
03	3 m		10 ft
04	4 m		13 ft.
05	5 m		15 ft.
06	6 m		20 ft
07	7 m		23 ft.
08	8 m		25 ft.
09	9 m		30 ft.
10	10 m		33 ft.

12.9. Capillary Length

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

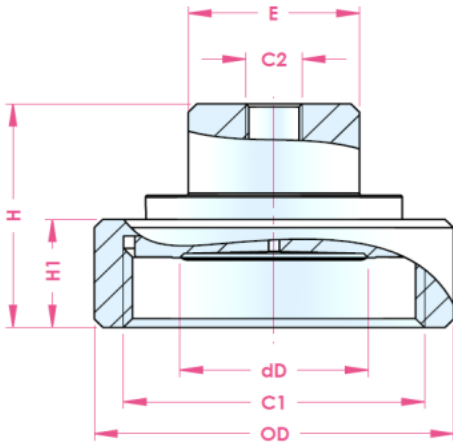
12.10. Options

/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)
/DM1	Extended Direct mount (80mm)	(temp reduction: 100°C)	
/DM2	Extended Direct mount (150 mm)	temp reduction: 175°C)	
/TR	Temperature reducer	(max. temp. fill fluid allowed)	
/IC1	Capillary ID 1 mm. / 0,04"		
/BS6	Black sleeve on capillary ≤ 6 m.		
/BS15	Black 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		



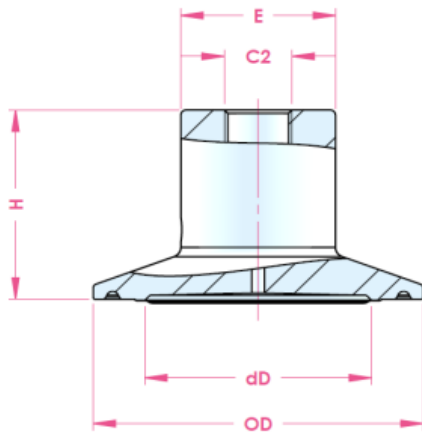
Dimensions table: SAF DIN 11851

size	rating	dD	OD	H1	H	E	C1
DN25	PN40	3.5	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			127.0	29.0		93.	Rd110 x 1/6"



SAF SMS 1145

size	rating	dD	OD	H1	H	E	C1
1.5"	PN40	32.0	74.0	21.0	50.0	40.0	Rd60 x 1/6"
2"		44.0	84.0				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	8	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

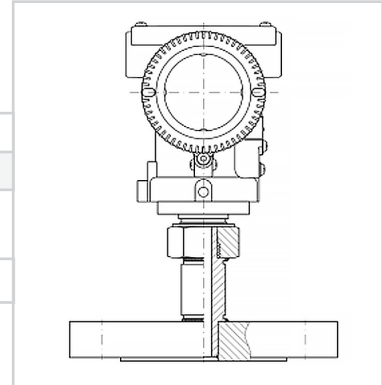
13. Open Flanged Process Connection

13.1. Model

TXCM	EJA-E / EJX-A 100, 300 & 400 Series
TXCD	EJA-E500 Series - (preferred connection "4" / WN)

13.2. Seal Type

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

-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	

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

/FL	Filter (copper)
/QBDT	Quick delivery ex works BADO (< 5 working days)

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

<p>YOKOGAWA ELECTRIC CORPORATION World Headquarters9-32, Nakacho 2-chome, Musashino-shi Tokyo 180-8750 Japan www.yokogawa.com</p> <p>YOKOGAWA CORPORATION OF AMERICA 2 Dart RoadNewnan GA 30265 USA www.yokogawa.com/us</p> <p>YOKOGAWA EUROPE BV Euroweg 2 3825 HD AMERSFOORT The Netherlands www.yokogawa.com/eu</p>	<p>YOKOGAWA ELECTRIC ASIA Pte. LTD.5 Bedok South Road Singapore 469270 Singapore www.yokogawa.com/sg</p> <p>YOKOGAWA CHINA CO. LTD. 3F Tower D Cartelo Crocodile Building No.568 West Tianshan Road Changing District Shanghai, China www.yokogawa.com/cn</p> <p>YOKOGAWA MIDDLE EAST B.S.C.(c) P.O. Box 10070, Manama Building 577, Road 2516, Busaiten 225 Muharraq, Bahrain www.yokogawa.com/bh</p>	<p>Yokogawa has an extensive sales and distribution network. Please refer to the European website (www.yokogawa.com/eu) to contact your nearest representative.</p>  <p>YOKOGAWA ◆</p>
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