



FDB

Diaphragm Sealed
Direct Flanged With Coupled Sealed

Special Features

- Welded diaphragm
- Most suitable for slurry & corrosive service
- Flushing ring, flange & diaphragm are Available in various type of ss
 & exotic materials



- Diaphragm seals are provided in the instruments like pressure Gauges, switches, transmitters in order to isolate the sensing Element from the main service due to its corrosive, viscous and Sedimented nature and to avoid clogging and solidification.
- These kind of seals are widely used in the viscous & corrosive services where flushing is required periodically & frequently



Specifications

Standard Version (For Flange Size 1-1/2" And Above)

(Compatible models: PPS, SF6, WP6, WP4, DD1, DD2, DB, BEC, DEC

Seal type : S53 = -1 to 0 kg/cm² & 0 to 250 kg/cm² (Non PTFE Lined)* (Standard)

P53 = -1 to 0 kg/cm² & 0 to 40 kg/cm² (PTFE Lined)*

Process temperature : Max. 150°C for PTFE lined

-40°C to 200°C for without PTFE lined

Instrument connection : 3/8" BSP (F)

Process connection : Flange (As per DIN/BS/ANSI/JIS), 40 NB (1- $\frac{1}{2}$ ") & above

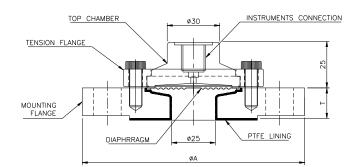
Fill fluid : Silicon Oil - DC 200 Flange finish : 125-250 AARH

* Range of selected instrument shall be suitable to flange pressure rating.

Diaphragm : AISI 316L SS
Top chamber : AISI 304 SS
Flange : AISI 316 SS

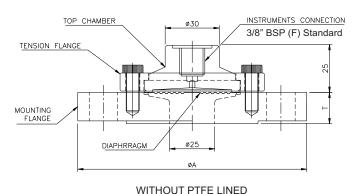
Dimensions - Standard Version

SEAL TYPE: S53



SEAL TYPE: P53

PTFE LINED



* * As per standard flange table ANSI, DIN, BS, JIS, Etc.,



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Flange Table With Ordering Codes

How To Select

E.g. For flange size of 1-1/2" as per BS-10 table e with raised face : C10 - FF

RF Raised Face

FF Flat Face

Flange Finish shall be 125 - 250 AARH as a standard. For other finish, please consult factory.

As Per DIN 2527

6 A41 6	A61
10 442	
10 A42	4.00
10 A42 10	A62
16 A43 16	A63
25 A44 25	A64
40 40 A45 65 40	A65
64 A46 64	A66
100 A47 100	A67
160 A48 160	A68
250 A49 250	A69
400 A50 400	A70
6 A51 6	A71
10 A52 10	A72
16 A53 16	A73
25 A54 25	A74
50 40 A55 80 40	A75
64 A56 64	A76
100 A57 100	A77
160 A58 160	A78
250 A59 250	A79
400 A60 400	A80

As Per ANSI B 16.5

	A3 1 C1 A				
NOMINAL SIZE	RATING /CLASS	CODE	NOMINAL SIZE	RATING /CLASS	CODE
	150	B33		150	B45
	300	B34		300	B46
1 ½"	600	B35	21/2"	600	B47
	900	B36		900	B48
	1500	B37		1500	B49
	2500	B38		2500	B50
	150	B39		150	B51
	300	B40		300	B52
2"	600	B41	3"	600	B53
	900	B42		900	B54
	1500	B43		1500	B55
	2500	B44		2500	B56

As Per DIN 2642

DN	PN	CODE
40	10	A95
50		A96
65		A97
80		A98

As Per DIN 2635

DN	PN	CODE
40	40	B05
50		B06
65		B07
80		B08

As Per BS - 10

NOMINAL SIZE	TABLE	CODE
	D	C09
	E	C10
11/2"	F	C11
	Н	C12
	J	C13
	K	C14
	D	C15
	E	C16
2"	F	C17
	Н	C18
	J	C19
	K	C20

NOMINAL SIZE	TABLE	CODE
	D	C21
	E	C22
2 1/2"	F	C23
	Н	C24
	J	C25
	K	C26
	D	C27
	Е	C28
3"	F	C29
	Н	C30
	J	C31
	K	C32

As Per DIN 2633

DN	PN	CODE
40	16	A86
50		A87
65		A88
80		A89

As Per JIS - B 2210

NOMINAL SIZE	RATING /CLASS	CODE
	5K	B72
40A	10K	B73
	40K	B74

NOMINAL SIZE	RATING /CLASS	CODE
	5K	B75
50A	10K	B76
	40K	B77
	5K	B78
65A	10K	B79
	40K	B80
	5K	B81
80A	10K	B82
	40K	B83



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How To Order		Exampl
Basic Model		
Code		FDB
Optional Extras		
[It is recommended the	at the MOC of Diaphragm & flange should be equivalent.]	
Seal Type		
S53 -1 to 0 kg/cm ² &	0 to 250 kg/cm² (Non PTFE Lined) (Standard)* P53 -1 to 0 kg/cm² & 0 to 40 kg/cm² (PTFE Lined)*	XXX
* Range of selected in	nstrument shall be suitable to flange pressure rating.	
Instrument Connecti	ion	
4NF ½" NPT (F)	4BF ½" BSP (F) 3BF 3/8" BSP (F)	XX
Top Chamber		
SL AISI 316L SS	CS Carbon Steel	XX
S6 AISI 316 SS	S4 AISI 304 SS (standard)	
Diaphragm		
TN Tantalum	TI Titanium SI SILVER# KE PTFE*	XX
HC Hastelloy 'C'	MO Monel SL AISI 316L SS (Standard)	_
Flange Material		_
S4 AISI 304 SS SL AISI 316L SS	CS Carbon Steel S6 AISI 316 SS (standard) MO Monel HC Hastelloy C	XX
Process Connection	•	_
	ISI / JIS (select Code From Flange Table)	XXX
Protection On Wette	,	_ ^^^
	n Bottom Chamber - 2 mm Thick (Max. Up to 150°C)	_
•	n For Diaphragm (Max. Up to 150°C) \$uitable for Pressure Ranges only)	XX
PC PTFE Coating C	On Diaphragm (Max. Up to 315°C)	
Filling Fluids (* Cons	sult factory for specifications, price and delivery.)	
S1 Silicon DC 200 [-	[-40 to 205°C] (Standard) S3 Silicon DC 710 [7 to 371°C]	
FG Food Grade OIL	L [-20 to 140°C] SY Syltherm 800 [-40 to 315°C]	VV
S2 Silicon DC 704 [10 to 337°C]	XX
Remote Mounting (W	Vith capillary of Max. Up to 6 Mtrs.)	
Specify In Meters (e.g	g. 1.5 = 1.5 METERS 2.0 = 2 METERS)	3Mtr.
Capillary		_
PE AISI 304 SS	PG AISI 316 SS	XX
	/ith Armour (applicable If Capillary is Selected)	
\$4 AISI 304 SS	S6 AISI 316 SS PC PVC (Ambient Temp. Max. 60°C)	XX
Options	· · · ·	
HLT Helium Leak Tes	st WOI Dry Seal Only Without Instrument MTC Material Test Certificates*	XX
CNS Conformity as pe		
* Material Test Certific Please Consult Facto	cates Will Be Provided For Wetted Parts Only With Chemical Composition Testing. For Others, ory.	
Refer Datasheet FLR	R for selection of Flushing Rings.	
Ordering Example: F	FDB - XXX - XX - XX - XX - XXX - XX - XX	
For Other Optional Ite	ems, Please Contact Factory For Delivery And Minimum Quantity Of Order.	
	and dimensions given in this product catalogue represents the state of engineering at the time	

Note: Specifications and dimensions given in this product catalogue represents the state of engineering at the time of printing. Modifications may take place and materials specified may be replaced by others without prior notice.