

DIAPHRAGM SEAL

FLANGE - "I" SECTION TYPE



IPS-DS-06

SPECIAL FEATURES

- CONTINUOUS DUTY
- FLUSHING RING (OPTIONAL)
- "I" SECTION EXTENSION TO FACILITATE SMALLER FLANGE SIZES
- SUITABLE FOR CORROSIVE & VISCOUS SERVICE

APPLICATIONS

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. THIS CAN BE WIDELY USED WITH ANTI CORROSIVE TREATMENT/PROTECTION & VARIOUS FLANGED SIZES.



SPECIFICATIONS

STANDARD VERSION (PREFERABLE FOR FLANGE SIZE 1" AND BELOW)

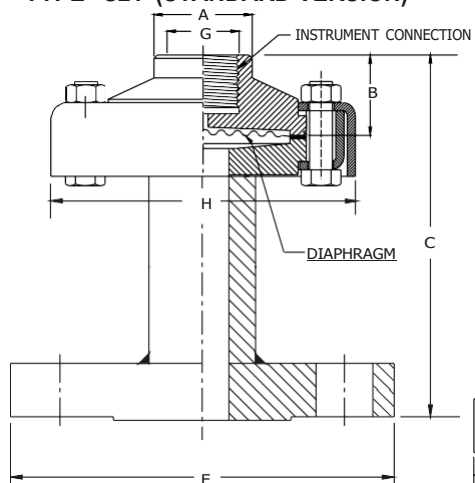
Seal Type	: S21= -1 to 0 kg/cm ² & 0 to 70 kg/cm ² (Standard)
	: S22 = 100 kg/cm ² to 400 kg/cm ²
	: S23= -1 to 0 kg/cm ² & 0 to 70 kg/cm ² *
Process Temperature	: Max. 150 °C for PTFE lined
	: - 40 °C to 200 °C for without PTFE lined
Instrument Connection	: 1/2" BSP (F)
Process Connection	: Flange (as per DIN/BS/ANSI/JIS) Finish 125 - 250 AARH
Fill Fluid	: Silicon Oil - DC 200
Mounting	: Direct (Without capillary)

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

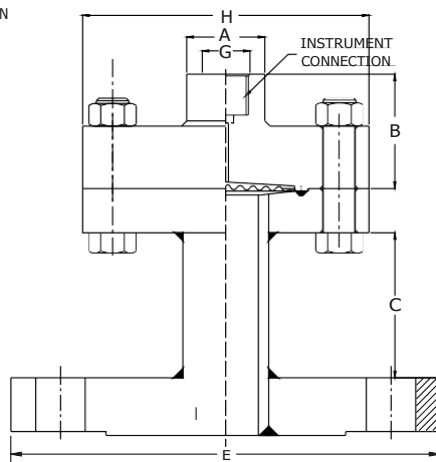
Diaphragm	: AISI 316L SS
Top Chamber	: AISI 304 SS
Bottom Chamber ("I" Section)	: AISI 316 SS Flange (as per DIN/BS/ANSI/JIS)
Nut, Bolts & Slip ring (Cup type)	: Steel (Plated)
Sealing Gasket	: PTFE

DIMENSIONS - STANDARD VERSION

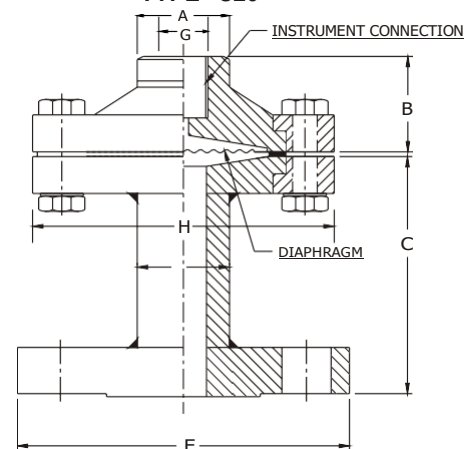
TYPE "S21"(STANDARD VERSION)



TYPE "S22"



TYPE "S23"



Seal Type	Ranges	A	~ B	~ C	E	H	G
S21	-1 to 0 kg/cm ² 0 to 70 kg/cm ²	30	31	75	*	98	1/2" BSP (F)

Seal Type	Ranges	A	~ B	~ C	E	H	G
S22	100 to 400 kg/cm ²	30	44	50	*	110	1/2" BSP (F)

Seal Type	Ranges	A	~ B	~ C	E	H	G
S23	-1 to 0 kg/cm ² 0 to 70 kg/cm ²	30	31	75	*	98	1/2" BSP (F)

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

Notes : ● Drawings are not to scale. ● All Dimensions are in mm.



Industrix Precise Solutions Private Limited

Room No – 303, Bhumika Residency, Plot No-21, Sector-20, Roadpali, Kalamboli, Panvel (Tal.), Raigad (Dist.), Maharashtra, India – 410218.

Mobile: +91 99309 98399 / +91 99674 97447

E-mail: admin@ipspl.in / sales@ipspl.in Website: www.ipspl.in

CIN : U52399MH2021PTC368555

FLANGE TABLE WITH ORDERING CODES

HOW TO SELECT

e.g. FOR FLANGE SIZE OF 1" AS PER BS-10 TABLE E WITH RAISED FACE : B97 - A2

A2 RAISED FACE

A3 FLAT FACE

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

AS PER DIN 2527

DN	PN	CODE
10	6	A01
	10	A02
	16	A03
	25	A04
	40	A05
	64	A06
	100	A07
	160	A08
	250	A09
	400	A10
15	6	A11
	10	A12
	16	A13
	25	A14
	40	A15
	64	A16
	100	A17
	160	A18
250	A19	
400	A20	
20	6	A21
	10	A22
	16	A23
	25	A24
	40	A25
25	6	A26
	10	A27
	16	A28
	25	A29
	40	A30
	64	A31
	100	A32
	160	A33
	250	A34
400	A35	

AS PER DIN 2633

DN	PN	CODE
10	16	A81
15		A82
20		A83
25		A84

AS PER DIN 2635

DN	PN	CODE
10	40	A99
15		B01
20		B02
25		B03

AS PER DIN 2642

DN	PN	CODE
10	10	A90
15		A91
20		A92
25		A93

AS PER ANSI B 16.5

NOMINAL SIZE	RATING /CLASS	CODE
1/2"	150	B09
	300	B10
	600	B11
	900	B12
	1500	B13
	2500	B14
3/4"	150	B15
	300	B16
	600	B17
	900	B18
	1500	B19
2500	B20	

NOMINAL SIZE	RATING /CLASS	CODE
1"	150	B21
	300	B22
	600	B23
	900	B24
	1500	B25
	2500	B26

AS PER JIS - B 2210

NOMINAL SIZE	RATING /CLASS	CODE
10A	5K	B57
	10K	B58
	40K	B59
15A	5K	B60
	10K	B61
	40K	B62
20A	5K	B63
	10K	B64
	40K	B65

NOMINAL SIZE	RATING /CLASS	CODE
25A	5K	B66
	10K	B67
	40K	B68

AS PER BS - 10

NOMINAL SIZE	TABLE	CODE
1/2"	D	B84
	E	B85
	F	B86
	H	B87
	J	B88
3/4"	K	B89
	D	B90
	E	B91
	F	B92
	H	B93
	J	B94
	K	B95

NOMINAL SIZE	TABLE	CODE
1"	D	B96
	E	B97
	F	B98
	H	B99
	J	C01
	K	C02



HOW TO ORDER

BASIC MODEL

CODE

OPTIONAL EXTRAS

[It is recommended that the MOC of Diaphragm should be equivalent or superior than the MOC of Bottom chamber.]

SEAL TYPE

S21 -1 to 0 kg/cm² & 0 to 70 kg/cm² (Standard) **S22** 100 kg/cm² to 400 kg/cm² **S23** -1 to 0 kg/cm² & 0 to 70 kg/cm²

XXX

INSTRUMENT CONNECTION

VP 3/8" BSP (F) **VL** 1/2" BSP (F)(Standard) **VM** 1/2" NPT (F)

XX

TOP CHAMBER

XW AISI 304 SS (Standard) **XY** AISI 316 SS **YA** AISI 316L SS **YC** CARBON STEEL

XX

DIAPHRAGM (* Range up to 21 kg/cm²)

UL HASTELLOY 'C' **UP** SILVER* **UR** TITANIUM **UJ** AISI 316L SS (Standard)
UQ TANTALUM **UM** MONEL

XX

SEALING GASKET

VI PTFE (Standard) **YR** METAL

XX

BOTTOM CHAMBER (I SECTION) (* Refer Pressure v/s Temperature table below.)

TK AISI 304 SS **TZ** PVC*
TL AISI 316L SS **UA** PVDF*
UH TITANIUM **TY** POLYPROPELENE*
TT HASTELLOY C
TX MONEL
TN CARBON STEEL
TM AISI 316 SS (Standard)

MOC OF BOTTOM CHAMBER	PRESSURE V/S TEMPERATURE					
	20 °C	40 °C	60 °C	80 °C	100 °C	120 °C
PVDF	10 kg/cm ²	10 kg/cm ²	10 kg/cm ²	7 kg/cm ²	4 kg/cm ²	2 kg/cm ²
PP	10 kg/cm ²	10 kg/cm ²	6 kg/cm ²	4 kg/cm ²	1 kg/cm ²	NA
PVC	10 kg/cm ²	10 kg/cm ²	4 kg/cm ²	1 kg/cm ²	NA	NA

XX

PROCESS CONNECTION

AS PER DIN / BS / ANSI/ JIS (SELECT CODE FROM FLANGE TABLE)

XXX

TENSION FLANGE & NUT - BOLTS (*Nut & Bolts will be AISI 304 SS)

VB PRESSED STEEL - CUP TYPE (PLATED) (Standard) **XS** STEEL (PLATED)
XQ AISI 304 SS **XR** AISI 316 SS*

XX

PROTECTION ON WETTED PARTS

VS PTFE LINING ON BOTTOM CHAMBER ("I" SECTION)- 2 mm THICK (Max. Up to 150 °C)
VV PTFE PROTECTION FOR DIAPHRAGM (Max. Up to 150 °C) (Suitable for Pressure Ranges only)
VZ PTFE COATING ON DIAPHRAGM (Max. Up to 315 °C)

XX

FILLING FLUIDS (* Consult factory for specifications, price and delivery)

US FLUROLUBE 4.2 [-45 to 175 °C] **UY** SILICON DC 704 [10 to 337 °C]
UT FLUROLUBE 6.3 [-40 to 235 °C] **UZ** SILICON DC 710 [7 to 371 °C]
UU FLUROLUBE FS-5 [-28 to 148 °C] **VA** SYL THERM 800 [-40 to 315 °C]
UV FOOD GRADE OIL [-20 to 140 °C] **VB** SYL THERM XLT [-100 to 260 °C]
UX SILICON DC 200 [-40 to 205 °C] (Standard) **VC** HALOCARBON OIL*

XX

REMOTE MOUNTING (With capillary of Max. Up to 6 Mtrs.)

SPECIFY IN METERS (e.g. 1.5 = 1.5 METERS 2.0 = 2 METERS)

3Mtr.

CAPILLARY

PE AISI 304 SS **PG** AISI 316 SS
CAPILLARY COVERED WITH ARMOUR (Applicable with PE or PG if selected)

XX

PF AISI 304 SS **PH** AISI 316 SS **PI** PVC (Ambient Temp. Max. 60°C)

XX

OTHER OPTIONS

TB HELIUM LEAK TEST **TC** DRY SEAL ONLY WITHOUT INSTRUMENT **GH** MATERIAL TEST CERTIFICATES*

XX

* MATERIAL TEST CERTIFICATES WILL BE PROVIDED FOR WETTED PARTS ONLY WITH CHEMICAL COMPOSITION TESTING. FOR OTHERS, PLEASE CONSULT FACTORY.

Refer Datasheet EE for selection of Flushing Rings.

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.

