

**INDUSTRIAL AND PROCESS APPLICATIONS****MODEL : CSF06 SERIES**

Sealed diaphragm pressure gauges are designed for use in process applications where

- Process element materials capable of withstanding corrosive effects of certain fluids are not available.
- The process fluid being measured would normally clog the pressure measuring device or
- The process fluid in the measuring element might freeze due to changes in ambient temperatures.

**SPECIAL FEATURES**

- Flush type bolted construction, standard model
- Flanged process connection for direct mounting
- Weather proof to IP68 per IS/IEC 60529:2001
- Diaphragm material, SS316 teflon protected
- Scale ranges upto 0...210 kg/cm<sup>2</sup>
- Also available with flexible stainless steel armored capillary assembly.

**DESIGN**

EN837-1

**NOMINAL DIAL SIZE**

NS 100, 150 & 250mm

**ACCURACY**

As per EN837-1

**SCALE RANGES**

0...1 kg/cm<sup>2</sup> to 0...200 kg/cm<sup>2</sup> (Single range)  
0...1.06 kg/cm<sup>2</sup> / 15 psi to 0...210 kg/cm<sup>2</sup> / 3000 psi (Dual range)  
or other equivalent units of pressure

**WORKING PRESSURE**

Steady : 75% of FSD  
Fluctuating : 66% of FSD  
Short Time : FSD

**OPERATING TEMPERATURE**

Ambient : -40 to 60°C without liquid filling  
-20 to 60°C gauge with glycerine filling  
Medium : 80°C max.

**TEMPERATURE EFFECT**

When temperature of the pressure element deviates from reference temperature (+30°C) : Max. ±0.4% / 10K of true scale value

**PRIMARY SENSING ELEMENT**

Diaphragm, SS316 / SS316 PTFE coated

**UPPER DIAPHRAGM HOUSING**

SS304

**TENSION FLANGE**

SS304

**SEAL FLUID**

Silicon oil

**SECONDARY SENSING ELEMENT**

Bourdon tube, SS316L

**MOVEMENT**

SS304, SS316

**DIAL**

Off-white aluminum with black lettering

**POINTER**

Black aluminum, Zero-adjustment pointer

**CASE & BEZEL**

Case & Bezel : SS304 Bayonet type

**INGRESS PROTECTION**

IP68 per IS/IEC 60529:2001

## BOD (VENT PLUG)

Neoprene

## DAMPING LIQUID

Glycerine 99.7%

## PROCESS CONNECTION

Material : SS316 / SS304  
 Standard flange : ASME B16.5 (ANSI)  
 Size : 25 NB, 40 NB

## EXTENSION CAPILLARY

Flexible stainless steel armored capillary assembly with flush mounting bracket / surface mounting flange



Standard lengths of capillary : 1.5mtr, 3mtr and 5mtr

## WINDOW

Toughened glass

## MOUNTING

### NS 100 & 150mm

Direct Bottom (20)

Back Eccentric Mount (30)

### NS 250mm

Direct Bottom (20)

## OPTIONAL EXTRA

- Other process connection, DIN, BS, JIS (contact factory)
- Other lengths of capillary
- Silicon oil filling
- Flange size smaller than 25 NB see model CSE08
- Alarm contacts see model EOC.XXX

## ACCESSORIES



ADAPTORS



PULSATION DAMPENER



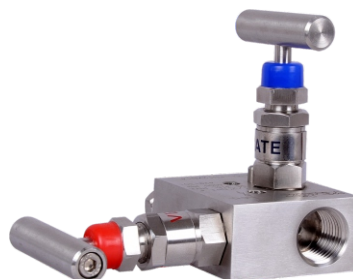
ISOLATION VALVE



GAUGE COCK



GAUGE SAVER



MANIFOLD VALVE

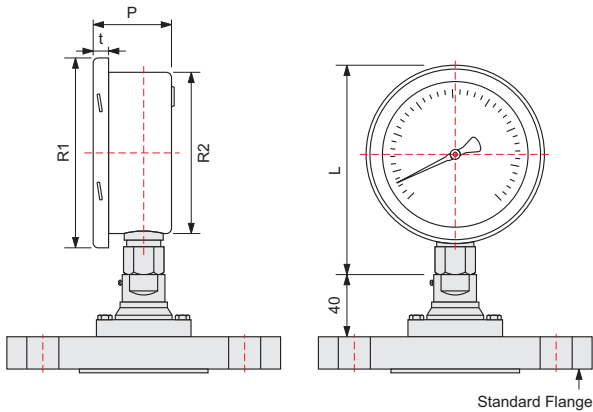


SYPHON

**A. DIRECT MOUNTING**

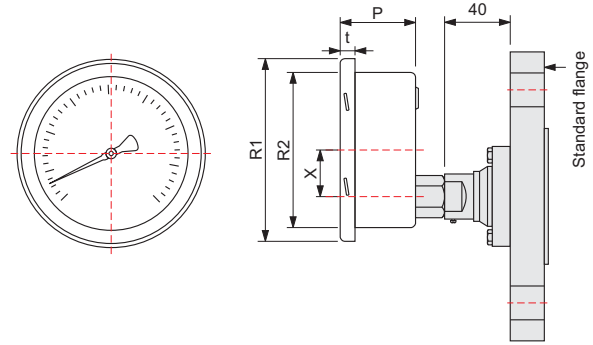
**DIRECT BOTTOM**

**20**



**BACK ECCENTRIC MOUNT**

**30**



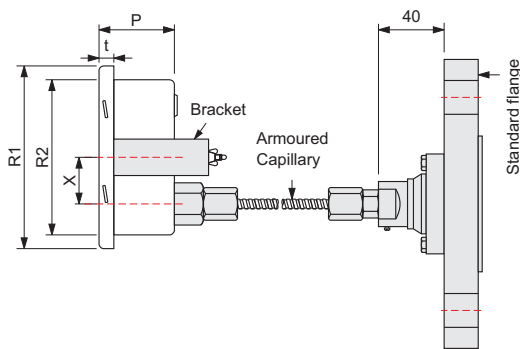
DIAL SIZE	R1	R2	t	P	L	X
100	110	100	15	50	126	30
150	165	150	15	50	181	48
250	270	250	15	50	286	-

\*All dimensions are in mm

**B. REMOTE MOUNTING WITH CAPILLARY**

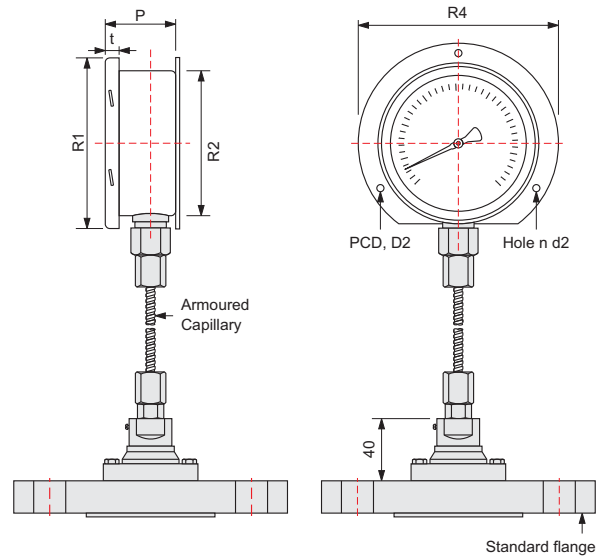
**FLUSH PANEL WITH BRACKET**

**40**



**SURFACE MOUNT**

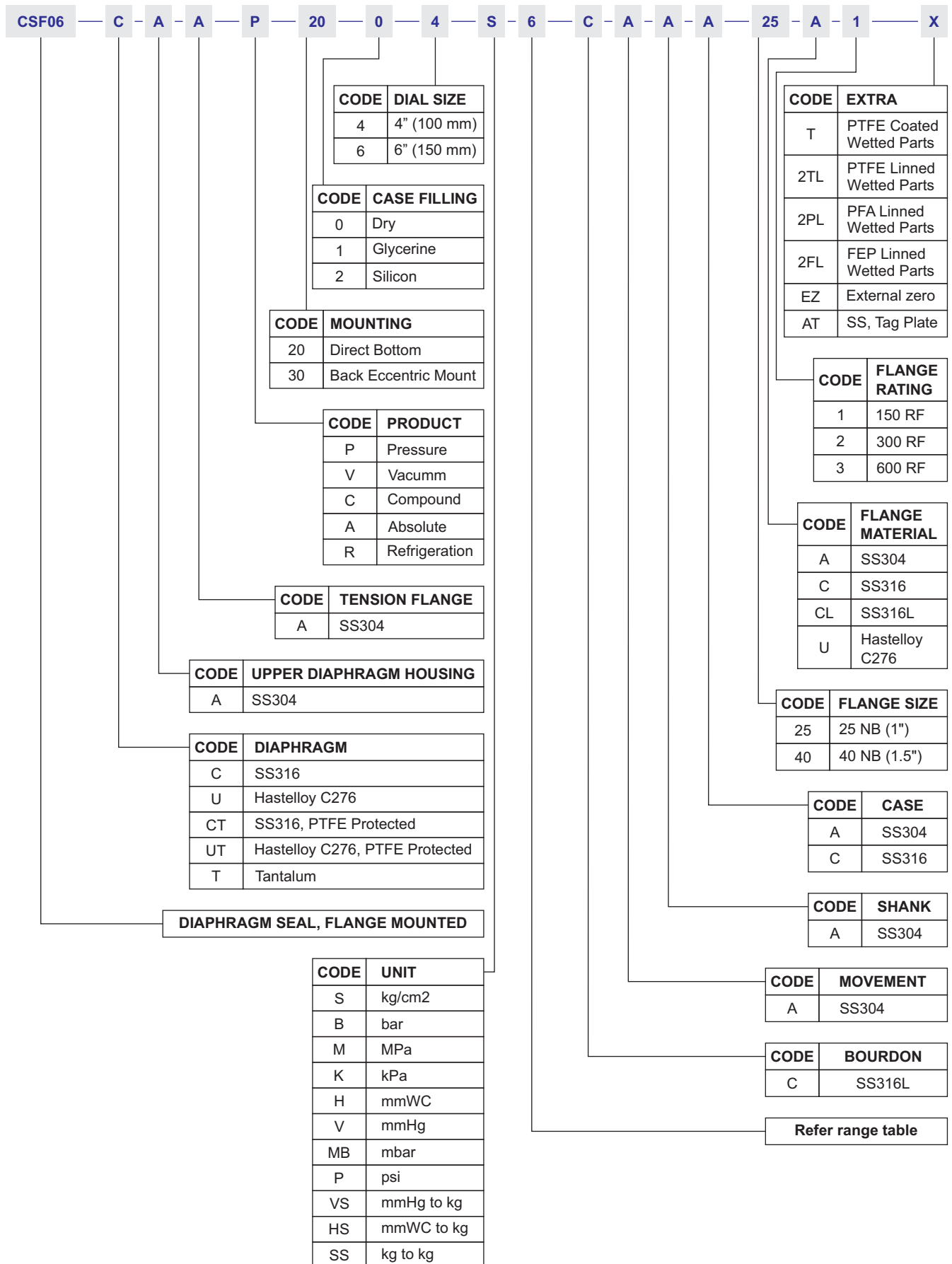
**60**



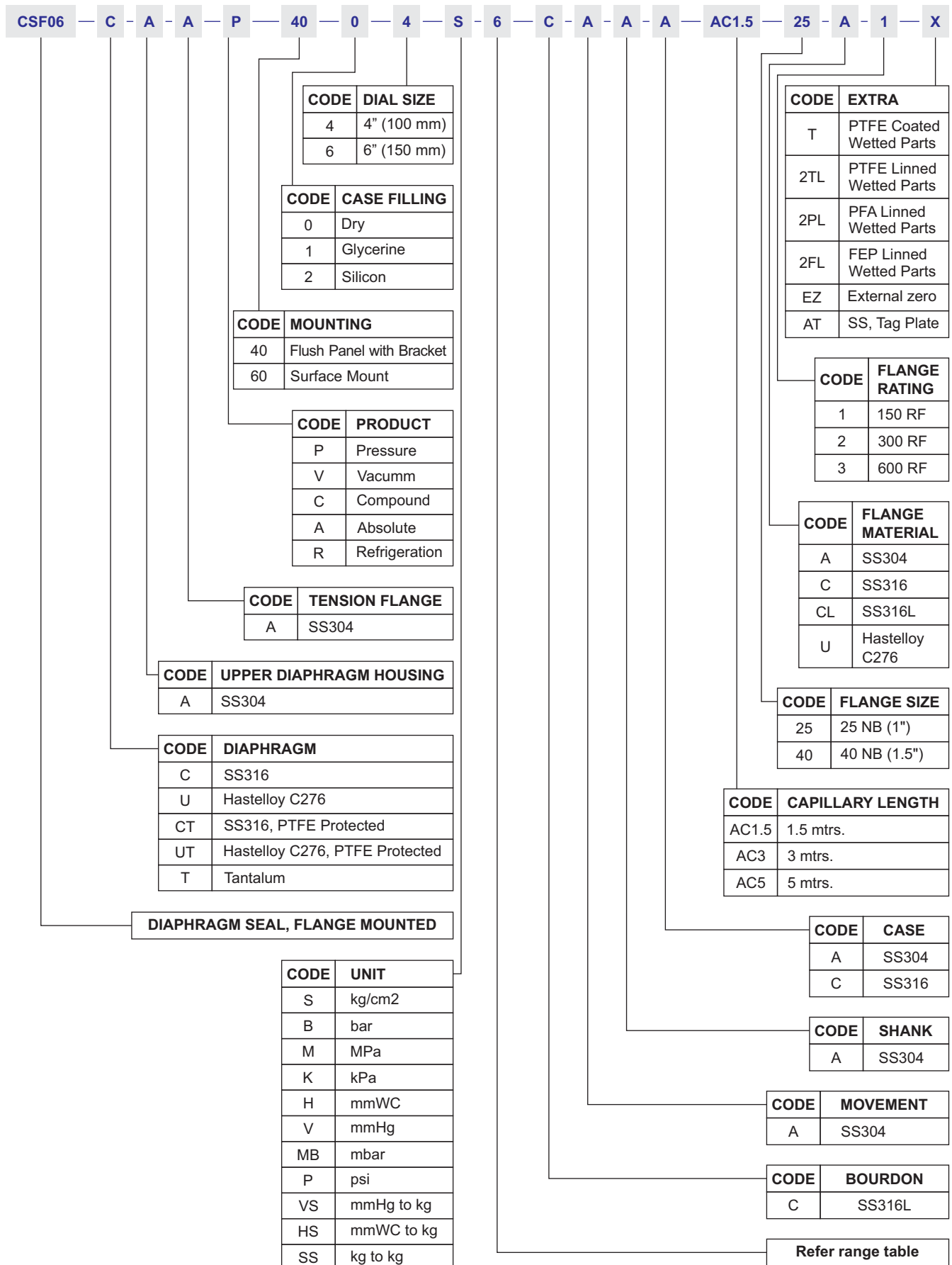
DIAL SIZE	R1	R2	t	P	L	X	R4	D2	d2
100	110	100	15	50	126	30	128	116	5.4
150	165	150	15	50	181	48	198	171	5.4
250	270	250	15	50	286	-	-	-	-

\*All dimensions are in mm

## HOW TO ORDER - WITHOUT CAPILLARY



## HOW TO ORDER - WITH CAPILLARY



**STANDARD RANGES & LEAST COUNT**

CODE	RANGE	LEAST COUNT
<b>(SINGLE SCALE)</b>		
S1	0 to 1 kg/cm <sup>2</sup>	0.01 kg/cm <sup>2</sup>
S1.6	0 to 1.6 kg/cm <sup>2</sup>	0.02 kg/cm <sup>2</sup>
S2	0 to 2 kg/cm <sup>2</sup>	0.05 kg/cm <sup>2</sup>
S2.5	0 to 2.5 kg/cm <sup>2</sup>	0.05 kg/cm <sup>2</sup>
S4	0 to 4 kg/cm <sup>2</sup>	0.1 kg/cm <sup>2</sup>
S6	0 to 6 kg/cm <sup>2</sup>	0.1 kg/cm <sup>2</sup>
S10	0 to 10 kg/cm <sup>2</sup>	0.1 kg/cm <sup>2</sup>
S16	0 to 16 kg/cm <sup>2</sup>	0.2 kg/cm <sup>2</sup>
S20	0 to 20 kg/cm <sup>2</sup>	0.5 kg/cm <sup>2</sup>
S25	0 to 25 kg/cm <sup>2</sup>	0.5 kg/cm <sup>2</sup>
S40	0 to 40 kg/cm <sup>2</sup>	1 kg/cm <sup>2</sup>
S60	0 to 60 kg/cm <sup>2</sup>	1 kg/cm <sup>2</sup>
S100	0 to 100 kg/cm <sup>2</sup>	1 kg/cm <sup>2</sup>
S160	0 to 160 kg/cm <sup>2</sup>	2 kg/cm <sup>2</sup>
S200	0 to 200 kg/cm <sup>2</sup>	5 kg/cm <sup>2</sup>

CODE	RANGE	LEAST COUNT
<b>(DUAL SCALE)</b>		
D1.06	0 to 1.06 kg/cm <sup>2</sup> (15psi)	0.02 kg/cm <sup>2</sup> (0.2psi)
D2.1	0 to 2.1 kg/cm <sup>2</sup> (30psi)	0.05 kg/cm <sup>2</sup> (0.5psi)
D2.8	0 to 2.8 kg/cm <sup>2</sup> (40psi)	0.05 kg/cm <sup>2</sup> (0.5psi)
D3.5	0 to 3.5 kg/cm <sup>2</sup> (50psi)	0.1 kg/cm <sup>2</sup> (1psi)
D4.2	0 to 4.2 kg/cm <sup>2</sup> (60psi)	0.1 kg/cm <sup>2</sup> (1psi)
D7	0 to 7 kg/cm <sup>2</sup> (100psi)	0.1 kg/cm <sup>2</sup> (1psi)
D10.6	0 to 10.6 kg/cm <sup>2</sup> (150psi)	0.2 kg/cm <sup>2</sup> (2psi)
D14	0 to 14 kg/cm <sup>2</sup> (200psi)	0.2 kg/cm <sup>2</sup> (2psi)
D21	0 to 21 kg/cm <sup>2</sup> (300psi)	0.5 kg/cm <sup>2</sup> (5psi)
D28	0 to 28 kg/cm <sup>2</sup> (400psi)	0.5 kg/cm <sup>2</sup> (5psi)
D35	0 to 35 kg/cm <sup>2</sup> (500psi)	1 kg/cm <sup>2</sup> (10psi)
D42	0 to 42 kg/cm <sup>2</sup> (600psi)	1 kg/cm <sup>2</sup> (10psi)
D70	0 to 70 kg/cm <sup>2</sup> (1000psi)	1 kg/cm <sup>2</sup> (10psi)
D106	0 to 106 kg/cm <sup>2</sup> (1500psi)	2 kg/cm <sup>2</sup> (25psi)
D140	0 to 140 kg/cm <sup>2</sup> (2000psi)	2 kg/cm <sup>2</sup> (20psi)
D210	0 to 210 kg/cm <sup>2</sup> (3000psi)	5 kg/cm <sup>2</sup> (50psi)