Euro gauge
Liquid filled industrial pressure gauge (Internal brass)
Model : P259 series

Spec. sheet no. PD02-14

Service intended
P259 series are designed for long and reliable service under rugged conditions. P259 sereis are intended for adverse service conditions where pulsating or vibration exits, Hydraulic & compressors and are suitable for gaseous or liquid media that will not obstruct.

Nominal diameter
63, 100 and 160 mm

Accuracy
P2592 (63 mm) : ±1.6% of full scale
P2594 (100 mm) and P2596 (160 mm) : ±1.0% of full scale

Scale range (MPa, kPa, bar)
63 mm : -0.1 ~ 0 to 0 ~ 40 MPa
100 and 160 mm : -0.1 ~ 0 to 0 ~ 100 MPa

Filling liquid
Glycerine

Working pressure
Steady : 75% of full scale (63 mm)
100% of full scale (100 and 160 mm)
Over range protection : 130% of full scale

Working temperature
Ambient : -20 ~ 60°C (With glycerin filling)
-40 ~ 60°C (With silicone filling)
Fluid : Max. 60°C

Degree of protection
EN60529/IEC529/IP67

Temperature effect
Accuracy at temperature above and below the reference temperature (20℃) will be effected by approximately ±0.4% per 10℃ of full scale

Standard features

Pressure connection
Brass

Element
Brass
Model : P2594 (100 mm) and P2596 (160 mm)
<10 MPa : C type bourdon tube
≥10 MPa : Helical type bourdon tube with 316SS
Model : P2592 (63 mm)
<6 MPa : C type bourdon tube
≥6 MPa : Helical type bourdon tube

Blowout protection
Back, Rubber disc for 100 and 160 mm
Top, Rubber disc for 63 mm

Case
Stainless steel (304SS)

Cover
Stainless steel (304SS)
Bayonet type

Window
Laminated safety glass

Movement
63 mm : Brass
100 and 160 mm : Stainless steel

Dial
White aluminium with black graduations

Pointer
Black painted aluminium alloy

Process connection
63 mm : ¼" PT, NPT and PF
100 and 160 mm : ⅜", ½" PT, NPT and PF

Option
Zero adjustable pointer
(Only available with diameter 100 and 160 mm)
Silicone filling

Main order — Ordering information

1. Base model

P259 Liquid filled industrial pressure gauge (Internal brass)

2. Nominal diameter (mm)

2 63
4 100
6 160

3. Type of mounting

A Bottom connection, direct
B Bottom connection, surface, case mounting plate
F Center back connection, direct, only available with diameter 63 mm
G Lower back connection, direct, only available with diameter 100 mm
H Center back connection, flush, case center mounting plate, only available with diameter 63 mm
I Center back connection, flush, case center mounting plate with bracket, only available with diameter 63 mm
J Center back connection, flush, cover mounting plate, only available with diameter 63 mm
L Lower back connection, flush, case center mounting plate, only available with diameter 100 mm
M Lower back connection, flush, case center mounting bracket, only available with diameter 100 mm
N Lower back connection, flush, cover mounting plate, only available with diameter 100 mm
V Center back connection, flush, cover mounting bracket, only available with diameter 63 mm
W Lower back connection, flush, cover mounting bracket, only available with diameter 100 mm

4. Accuracy

3 ±1.0% of full scale, not available with diameter 63 mm
4 ±1.6% of full scale, only available with diameter 63 mm

5. Process connection

C ¼"
D ⅜", not available with diameter 63 mm
E ½", not available with diameter 63 mm

6. Connection type

B PF
C PT
D NPT
F BSPT
G BSP (G)
Z Other

7. Unit

H bar
I MPa
J kPa
Z Other

8. Range

XXX Refer to pressure unit and range table

9. Dial color

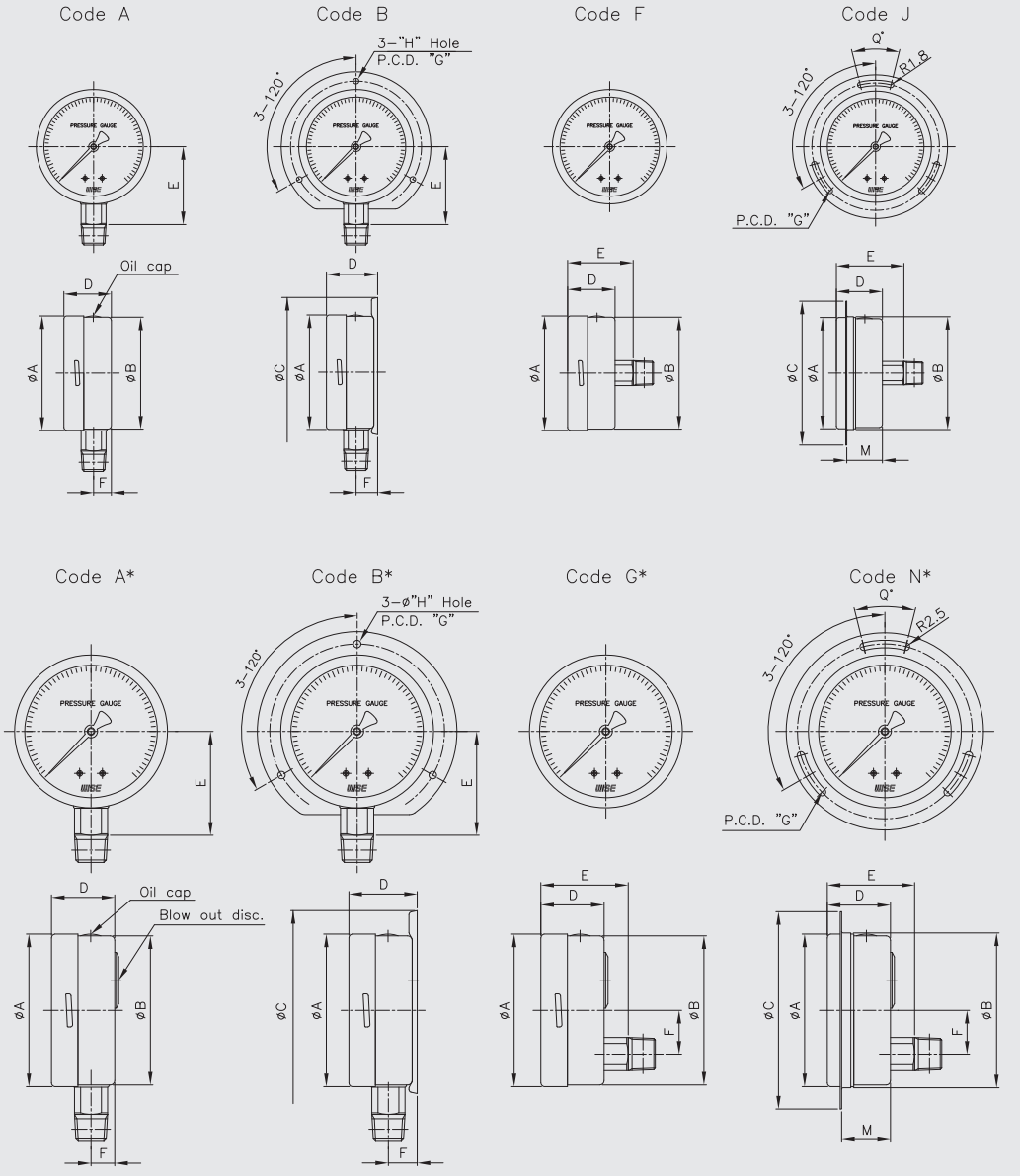
1 2 colors
5 3 colors

10. Option

0 None
1 Accessories
2 Silicone filling
3 Accessories and silicone filling

1	2	3	4	5	6	7	8	9	10	
P259	**4**	**A**	**3**	**C**	**D**	**H**	**XXX**	**5**	**0**	**Sample ordering code**

P259 : Type of mounting (1/2)

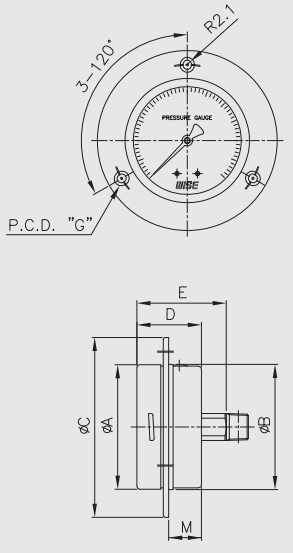


Dimensions (mm)

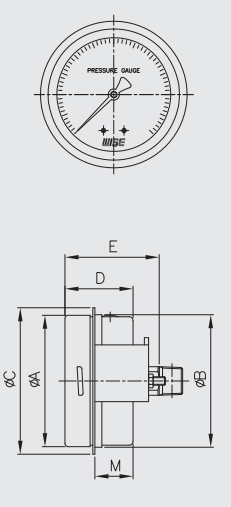
Dial size	Available code	A	B	C	D±2	E±2	F±1	M	G	H	Q
63	A	64	62		34	41.7	11				
	B	64		85	37	41.7	15		74~75	R2.1	
	F	64	62		34	45					
	J	64	66	86	34	45		28	75		15
100	A*	101.3	99		50	65	16				
	B*	101.3		133	54.4	65	19.4		115~116	R2.5	
	G*	101.3	99		50	65	29				
	N*	101.3	103.1	130.5	50	65	29	45	116		28
160	A*	160.6	159		52.5	94	15.8				
	B*	160.6		196	56	94	19.3		178	5.8	

P259 : Type of mounting (2/2)

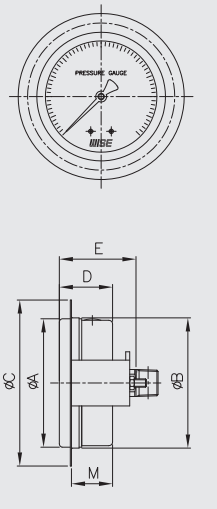
Code H



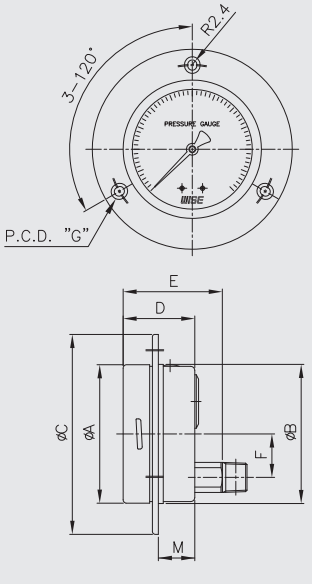
Code I



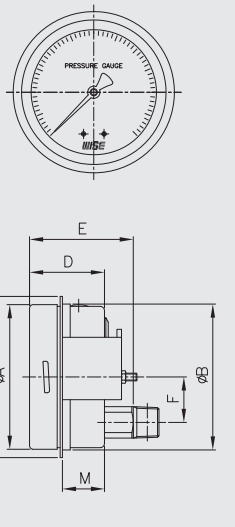
Code V



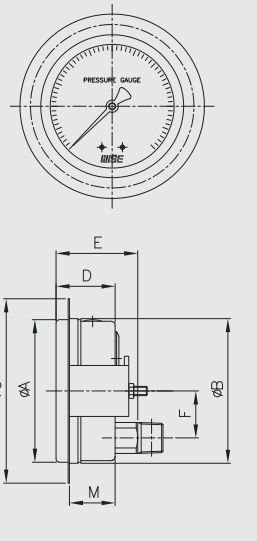
Code L*



Code M*



Code W*



Dimensions (mm)

Dial size	Available code	A	B	C	D±2	E±2	F ±1	M	G
63	H	64	64.5	92	34	45			77~78
	I	64	63.7	71	34	45		18.5	
	V	64	66	86	34	45		28	
100	L*	101.3	100.4	132	50	65	29	27.7	115~116
	M*	101.3	101	107.5	50	65	29	29.5	
	W*	101.3	103.1	130.5	50	65	29	45	

Pressure unit and range table

Range and code	Unit and code			Nominal diameter		
	H : bar	I : MPa	J : kPa	63 mm	100 mm	160 mm
026	-1 ~ 0	-0.1 ~ 0	-100 ~ 0	O	O	O
041	0 ~ 1	0 ~ 0.1	0 ~ 100	O	O	O
133	0 ~ 1.6	0 ~ 0.16	0 ~ 160	O	O	O
042	0 ~ 2	0 ~ 0.2	0 ~ 200	O	O	O
134	0 ~ 2.5	0 ~ 0.25	0 ~ 250	O	O	O
043	0 ~ 3	0 ~ 0.3	0 ~ 300	O	O	O
044	0 ~ 4	0 ~ 0.4	0 ~ 400	O	O	O
045	0 ~ 6	0 ~ 0.6	0 ~ 600	O	O	O
047	0 ~ 10	0 ~ 1	0 ~ 1,000	O	O	O
050	0 ~ 15	0 ~ 1.5	X	O	O	O
143	0 ~ 16	0 ~ 1.6	X	O	O	O
051	0 ~ 20	0 ~ 2	X	O	O	O
052	0 ~ 25	0 ~ 2.5	X	O	O	O
054	0 ~ 35	0 ~ 3.5	X	O	O	O
151	0 ~ 40	0 ~ 4	X	O	O	O
055	0 ~ 50	0 ~ 5	X	O	O	O
056	0 ~ 60	0 ~ 6	X	O	O	O
057	0 ~ 70	0 ~ 7	X	O	O	O
058	0 ~ 100	0 ~ 10	X	O	O	O
059	0 ~ 150	0 ~ 15	X	O	O	O
060	0 ~ 160	0 ~ 16	X	O	O	O
062	0 ~ 250	0 ~ 25	X	O	O	O
064	0 ~ 350	0 ~ 35	X	O	O	O
065	0 ~ 400	0 ~ 40	X	O	O	O
066	0 ~ 500	0 ~ 50	X	X	O	O
067	0 ~ 600	0 ~ 60	X	X	O	O
068	0 ~ 700	0 ~ 70	X	X	O	O
070	0 ~ 1,000	0 ~ 100	X	X	O	O
027	-1 ~ 1	-0.1 ~ 0.1	-100 ~ 100	O	O	O
007	-1 ~ 1.5	-0.1 ~ 0.15	-100 ~ 150	O	O	O
028	-1 ~ 2	-0.1 ~ 0.2	-100 ~ 200	O	O	O
029	-1 ~ 3	-0.1 ~ 0.3	-100 ~ 300	O	O	O
030	-1 ~ 4	-0.1 ~ 0.4	-100 ~ 400	O	O	O
010	-1 ~ 5	-0.1 ~ 0.5	-100 ~ 500	O	O	O
031	-1 ~ 6	-0.1 ~ 0.6	-100 ~ 600	O	O	O
014	-1 ~ 9	-0.1 ~ 0.9	-100 ~ 900	O	O	O
032	-1 ~ 10	-0.1 ~ 1	-100 ~ 1,000	O	O	O
033	-1 ~ 15	-0.1 ~ 1.5	X	O	O	O
034	-1 ~ 20	-0.1 ~ 2	X	O	O	O
017	-1 ~ 24	-0.1 ~ 2.4	X	O	O	O
035	-1 ~ 25	-0.1 ~ 2.5	X	O	O	O

O : Available X : Not available

Conversion table

Pressure conversion chart

psi	atm	kgf/cm²	inH₂O	mmHg	inHg	kPa	bar	mmH₂O
1	0.068046	0.070307	27.7276	51.715	2.03602	6.835	0.06895	704.28104
14.696	1	1.0332	407.484	760	29.921	101.325	1.01325	10350.0936
14.2233	0.96784	1	394.38	735.559	28.959	98.096	0.98067	10,000
0.036092	0.002454	0.00253	1	1.8651	0.07343	0.249	0.00249	25.4
0.019336	0.001315	0.001359	0.53616	1	0.03937	0.1333	0.001333	13.618464
0.491154	0.0033421	0.03453	13.6185	25.4	1	3.3864	0.033864	345.9099
0.145	0.00987	0.010197	4.0186	7.5006	0.2953	1	0.01	102.07244
14.5038	0.98692	1.01972	402.156	750.062	29.53	100	1	10214.7624
0.00142	0.000097	0.0001	0.03937	0.0734	0.0029	0.0098	0.000098	1

Volume conversion chart

Gallon (U.S)	Cubic feet	Cubic inches	Barrels (Oil)	Cubic cm	Cubic meter	Liter	IMP. Gallon
1	0.1337	231	0.02381	3,785	0.003785	3.785	0.8327
7.481	1	1,728	0.1781	28,320	0.02832	28.32	6.229
0.004329	0.000578	1	0.000103	16.39	0.000016	0.01639	0.003605
42	5.615	9,702	1	159,000	0.159	158.94	34.97
0.000264	0.000035	0.06102	0.000006	1	0.000001	0.001	0.00022
264.17	35.3144	61,023	6.2906	1,000,000	1	1,000	220.1
0.264	0.0353	61.03	0.0629	1,000	0.001	1	0.22
1.201	0.1606	277.4	0.0286	4,546	0.004546	4.546	1

Mass conversion chart

lb.	oz.	kg	gm	gal H₂O (32F)	Long ton	Metric tonne	ton
1	16	0.4536	453.6	0.1198	0.000446	0.000453	0.0005
0.0625	1	0.02835	28.35	0.00749	0.000027	0.000028	0.000031
2.205	35.27	1	1,000	0.2642	0.009839	0.001	0.001102
0.002205	0.03527	0.001	1	0.00264	0.000000	0.000001	0.000001
8.345	133.5	3.785	3,785	1	0.003726	0.003786	0.004171
2,240	35,840	1016.4	1,016,363	268.352	1	1.016	1.12
2,204.6	35,273	1,000	1,000,000	264.11	0.9842	1	1.1023
2,000	32,000	907.03	909,090.9	239.7	0.892857	0.907194	1

Density conversion chart

lb / ft³	gm / cm³	ka / m³	lb / in³
1	0.016018	16.0184	0.000578
62.43	1	1,000	0.03613
0.06243	0.001	1	0.000036
1728	27.68	27,679.8	1