

INDUSTRIAL SERVICE PRESSURE GAUGE MODEL : P221, P253 SERIES

WISE®

SERVICE INTENDED

The P221, P253 Series are suitable for corrosive environment and chemical, petro-chemical, refining, power, marine & foods. Its Stainless steel case and cover have good appearance and excellent proof to corrosion & chemical attack.

NOMINAL DIAMETER

40 and 50mm

ACCURACY

40mm : $\pm 3.0\%$ of Full Scale

50mm : $\pm 1.5\%$ of Full Scale

SCALE RANGE (kgf/cm², bar, kPa, MPa)

0~2, 4, 6, 10, 15kgf/cm²

WORKING PRESSURE

Steady : 75% of Full Scale

Over Range Protection : 130% of Full Scale

WORKING TEMPERATURE

Ambient : -20 ~ 65°C

Fluid : Model No. P221- +200°C maximum

Model No. P253- +60°C maximum

DEGREE OF PROTECTION

IP56



Standard Features

PRESSURE CONNECTION

Model P221 : Stainless Steel (316SS)

Model P253 : Brass with Cr Plated

MOVEMENT

Model P221 : Stainless Steel

Model P253 : Brass

ELEMENT

C Type Bourdon Tube

Model P221 : Stainless Steel (316SS)

Model P253 : Brass

DIAL

White Aluminium with Black Graduations

CASE & BEZEL RING

40mm : Stainless Steel (304SS) & Polycarbonate

50mm : Stainless Steel (304SS)

POINTER

Aluminium alloy, Black painted

WINDOW

Polycarbonate (40 & 50mm)

Glass (40mm) - Optional

PROCESS CONNECTION

1/8", 1/4" PT, NPT & PF

ORDERING INFORMATION

BASE MODEL

P221 : INDUSTRIAL SERVICE PRESSURE GAUGE

P253 : PROCESS INDUSTRY PRESSURE GAUGE

NOMINAL DIAMETER

- 0 : 40mm
- 1 : 50mm

MOUNTING TYPE(Refer to Mounting Type & Dimension)

- A : Bottom Connection, Direct
- E : Center Back Connection, Direct

ACCURACY

- 4 : ±1.5% of Full Scale, Only available with diameter 50mm
- 6 : ±3.0% of Full Scale, Only available with diameter 40mm

CONNECTION

- B : 1/8"
- C : 1/4"

CONNECTION TYPE

- B : PF
- C : PT
- D : NPT
- Z : Other

UNIT

- B : kgf/cm²
- H : bar
- I : MPa
- J : kPa

RANGE

- 042 : 0~2
- 044 : 0~4
- 045 : 0~6
- 047 : 0~10
- 050 : 0~15

DIAL COLOR

- 1 : 2 Colors Model P253
- 3 : 2 Colors Model P221

OPTIONS

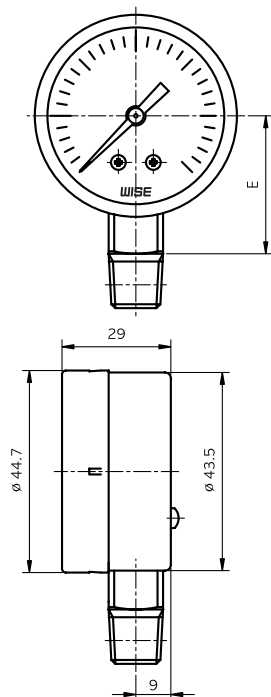
- O : None
- 1 : Glass Window,
Only Available
with diameter 40mm

P221	1	F	4	C	D	B	047	3	0
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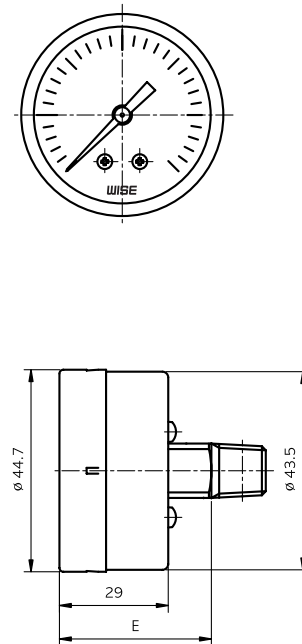
SAMPLE
MODEL
NUMBER

P221, P253 : TYPE OF MOUNTING

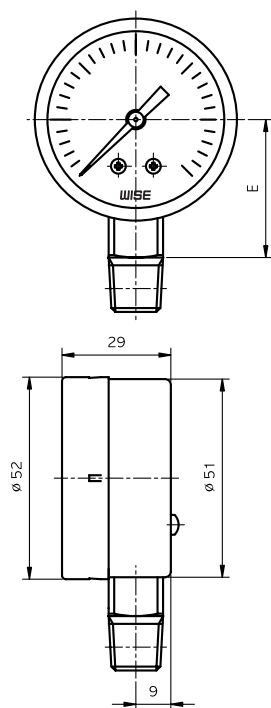
CODE A



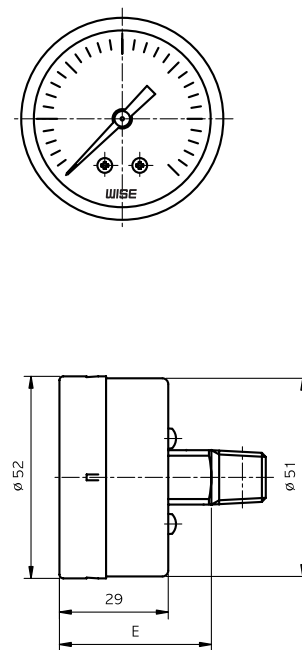
CODE F



CODE A*



CODE F*



Dimensions (mm)

DIAL SIZE	AVAILABLE CODE	P221	P253
		E	E
40	A	34.5	27.8
	F	38.1	37.5
50	A*	34.5	27.8
	F*	38.1	37.5

CONVERSION TABLE

PRESSURE CONVERSION CHART								
PSI	ATM	kg/cm²	in.H ₂ O	mmHg	in.Hg	kPa	Bar	mmH ₂ O
1	0.068046	0.070307	27.7276	51.715	2.03602	6.895	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	10000
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	3785	0.003785	3.785	0.8327
7.481	1	1728	0.1781	28320	0.02832	28.32	6.229
0.004329	0.000578	1	0.000103	16.39	0.000016	0.01639	0.003605
42	5.615	9702	1	159000	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	61023	6.2906	1000000	1	1000	220.1
0.264	0.0353	61.03	0.0629	1000	0.001	1	0.22
1.201	0.1606	277.4	0.0286	4546	0.004546	4.546	1

MASS CONVERSION CHART							
lb.	oz.	kg	gm	gal H ₂ O (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	1000	0.2642	0.009839	0.001	0.001102
0.002205	0.03527	0.001	1	0.000264	0.000000	0.000001	0.000001
8.345	133.5	3.785	3785	1	0.003726	0.003786	0.004171
2240	35840	1016.4	1016363	268.352	1	1.016	1.12
2204.6	35273	1000	1000000	264.11	0.9842	1	1.1023
2000	32000	907.03	909090.9	239.7	0.892857	0.907194	1

DENSITY CONVERSION CHART			
lb/ft³	gm/cm²	kg/m³	lb/in³
1	0.016018	16.0184	0.000578
62.43	1	1000	0.03613
0.06243	0.001	1	0.000036
1728	27.68	27679.8	1