

XSEL® Process Gauge - Stainless Steel

Type 232.34 - Dry Case

Type 233.34 - Liquid-filled Case

WIKA Datasheet 23X.34

Applications

- For applications with high dynamic pressure pulsations or vibration a liquid filled case and socket restrictor are available
- Suitable for corrosive environments and gaseous or liquid media that will not obstruct the pressure system
- Process industry: chemical/petrochemical, power stations, mining, on and offshore, environmental technology, mechanical engineering and plant construction

Product features

- Excellent load-cycle stability and shock resistance
- Solid front thermoplastic case
- Positive pressure ranges to 30,000 psi (2,000 bar)
- XSEL® Process Gauge with 5 year warranty on gauge and 10 year warranty on pressure system (see terms and condition)
- All lower mount connection gauges are factory prepared for liquid filling

(LBM: must install membrane prior to field filling)

Specifications

Design

ASME B40.100

Sizes

4½" & 6" (115 & 160 mm) dial size

Accuracy class

± 0.5% of span (ASME B40.100 Grade 2A)
± 1.0% of span (ASME B40.100 Grade 1A)
for ≥ 20,000 psi (1,600 bar) range and above

Ranges

Vacuum / Compound to 400 psi (25 bar)
Pressure from 15 psi (1 bar) to 30,000 psi (2,000 bar)
or other equivalent units of pressure or vacuum

Working pressure

Steady: full scale value
Fluctuating: 0.9 x full scale value
Short time: 1.5 x full scale value

Operating temperature

Ambient: -40°F to +140°F (-40°C to +60°C) - dry
-4°F to +140°F (-20°C to +60°C) - glycerine filled
-40°F to +140°F (-40°C to +60°C) - silicone filled
Medium: max. +212°F (+100°C)



Bourdon Tube Pressure Gauge Model 232.34

Temperature error

Additional error when temperature changes from reference temperature of 68°F (20°C) ±0.4% of span for every 18°F (10°K) rising or falling.

Weather protection

Weather resistant (IP54) - without membrane
Weather tight (IP65) - dry case or filled case with membrane installed (standard for low mount versions)

Pressure connection

Material: 316L stainless steel
Lower mount (LM) or lower back mount (LBM)
1/4" or 1/2" NPT with M4 internal tap

Restrictor

Material: Stainless steel (0.6 mm), standard

Bourdon tube

Material: 316L stainless steel
≤ 1,000 psi (69 bar): C-shape
≥ 1,500 psi (100 bar): Helical

Movement

Stainless steel
Internal overload stop set at 1.1x full scale
Underload stop-standard
Dampened movement-optional

Dial

White aluminum with black lettering, stop pin at 6 o'clock
Standard WIKA psi single scales (4½" only) with large figures at beginning and end for quick and easy identification.

Pointer

Black aluminum, adjustable

Case

Black fiberglass-reinforced thermoplastic (POCAN)
Solid front, blowout back
Turret-style case with built in rear flange lugs

Window

Clear acrylic with Buna-N gasket

Case filling Type 233.34

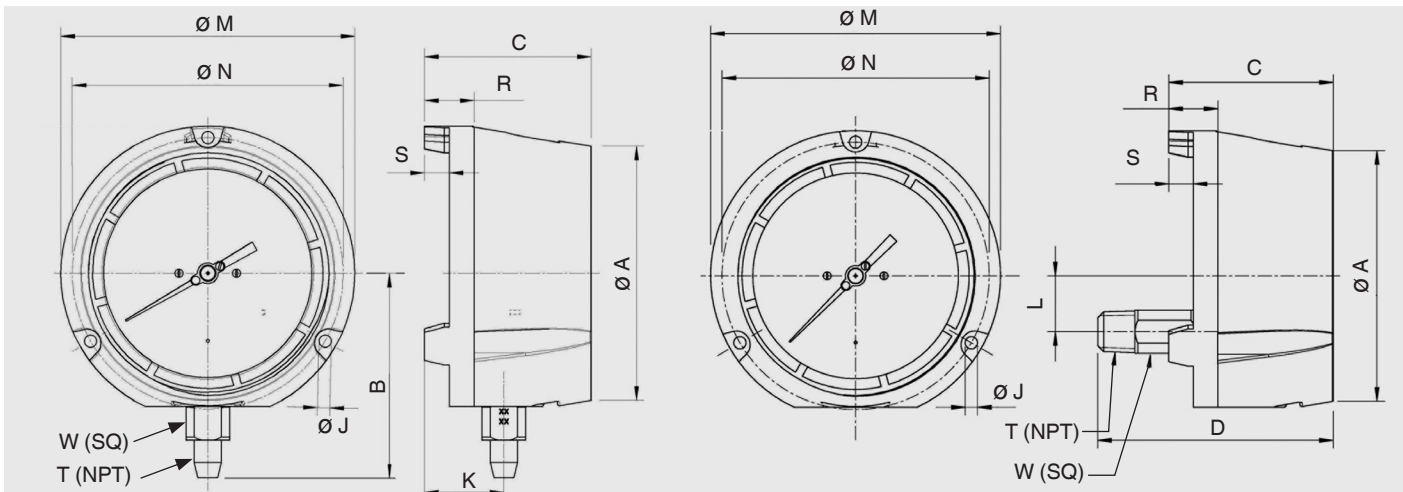
Glycerine 99.7% and > 40 psi (2.5 bar)

Glycerine/Water - <= 40 psi (2.5 bar)

Optional extras

- Silicone dampened movement
- Panel mounting adaptor kit (field assembled)
- Silicone case filling
- Halocarbon case filling
- Cleaned for oxygen service
- Instrument glass or safety glass window
- Drag pointer (maximum reading indicator)
- Alarm contacts switches (magnetic or inductive)
- Special process connections
- Custom dial layout
- External zero adjustment (4.5" size only)
- Case and ring in red or yellow thermoplastic (4½" LM only)
- Insight® reflective dial options available in white, fluorescent yellow, fluorescent orange or glow-in-the-dark

Dimensions



Size		A	B	C	D	J	K	L	M	N	R	S	T	W	Weight ¹	
4.5"	mm	128	103	84	120.3	6.3	40	28.5	148	136.5	25	12.5		22	2 lb.	dry
	in	5	4.06	3.31	4.74	0.248	1.57	1.12	5.83	5.37	0.99	0.49	1/2"	0.87	3 lb.	filled
6"	mm	164	122.5	88	123.4	7.1	40.2	28.5	190	177.8	25.4	12.7		22	3 lb.	dry
	in	6.46	4.82	3.46	4.86	0.28	1.58	1.12	7.5	7	1	0.5	1/2"	0.87	4 lb.	filled

¹ Weight without optional accessories





Quick Order Guide




Specifications according to data sheet
Case
Bezel ring

APM 02.10
Black Fiberglass Reinforced Thermoplastic (Pocan B4225)
Threaded, Black Fiberglass Reinforced Thermoplastic (Pocan B4225)
+/- .5% (ASME B40.100 2A)

Accuracy Class

Ordering information

Measuring System		Stainless Steel					
Case filling		without			with		
Nominal size		4.5"			4.5"		
Process Connection		1/2 NPT		1/4 NPT		1/2 NPT	1/4 NPT
Connector location							
Scale range	2nd Scale / Special Scale	without	2nd scale kPa	2nd scale kg/cm2	without	without	without
0/15 psi		9834800	9776885	9696479	9834559	9833981	9833808
0/30 psi		9834818	9837680	9696487	9834567	9833999	9833816
0/60 psi		9834826	9776877	9696495	9834575	9834006	9833825
0/100 psi		9834834	9837760	9696509	9834583	9834015	9833833
0/160 psi		9834842	9776869	9696517	9834591	9834023	9833841
0/200 psi		9834850	9837841	9696525	9834605	9834031	9833859
0/300 psi		9834869	9837884	9696534	9834613	9834049	9833867
0/400 psi		9834877	8985116	9696542	9834621	9834057	9833875
0/600 psi		9834885	9837965	9696550	9834630	9834065	9833884
0/1000 psi		9834893	9778918	9696576	9834648	9834074	9833892
0/1500 psi		9834907	9838082	9696585	9793318	9834082	4209827
0/2000 psi		9834915	9838120	9696593	9793661	9834090	4209835
0/3000 psi		9834923	9838163	9696606	9748911	9834104	4209843
0/5000 psi		9834931	9838201	9696615	9793521	9834112	9791919
0/10000 psi		9834940	9838244	9696623	9793679	9834120	50888960
0/15000 psi		9834958	4209860	9696631	50013181	9834138	50399993
-30 inHg/0 psi		9834729	9837604	50322036	9834478	9833914	9833735
-30 inHg/15 psi		9834737	9837566	9696428	9834486	9833922	9833744
-30 inHg/30 psi		9834745	9837523	9696436	9834494	9833930	9833752
-30 inHg/60 psi		52532313	9837485	9696445	9834508	9833948	9833760
-30 inHg/100 psi		9834761	9792818	9696453	9834516	9833956	9833778
-30 inHg/160 psi		9834770	52263436	9696461	9834524	9833965	9833786
-30 inHg/200 psi		9834788	9837361	52219488	9834532	9833973	9833795
-30 inHg/300 psi		4260180	52868970	52909300	4260163	52861267	52849274

	available on stock
	available after production
	not available

Standard Order Code

1	3	Measuring System	Stainless Steel		
		Case filling			
2	3	without			
		with			
3	H	Nominal size	4.5"		
		Unit of outer Scale	psi / -inHg		
4	P	Measuring range	gauge pressure range		
		Scale range	vacuum- or compound-range		
5	V	269	0/10 psi		
		310	0/15 psi (-30"Hg/0)		
		321	0/30 psi (-30"Hg/15 psi)		
		341	0/60 psi		
		369	0/100 psi		
		411	0/160 psi		
		414	0/200 psi		
		421	0/300 psi		
		428	0/400 psi		
		441	0/600 psi		
		455	0/800 psi		
		469	0/1000 psi		
		510	0/1500 psi		
		514	0/2000 psi		
		521	0/3000 psi		
		534	0/5000 psi		
		6	Z	without	
B	2nd scale bar				
P	2nd scale psi				
L	2nd scale kPa				
E	2nd scale MPa				
7	K			without	
				B	2nd scale bar
				P	2nd scale psi
				L	2nd scale kPa
				E	2nd scale MPa

8	GB	Process Connection	1/2 NPT
		GD	G 1/2 B
		NB	1/4 NPT
		GB	G 1/4 B
9	3	Connector location	lower mount
		Mounting flange/bracket	without (standard)
10	Q	Panel Adapter, Stainless Steel, polished	
		Window	acrylic (PMMA) (standard)
11	H	Flat Instrument Glass	
		laminated safety glass	
		Restrictor	Without (standard)
12	Q	stainless steel, D 0.6	
		Pointer	adjustable pointer (standard)
13	W	Set / Drag Pointer	Without (standard)
		Drag pointer Assembly, Permanent Reset Knob	
		Drag Pointer Assembly, Removeable Reset Knob	
		Special design features	without (standard)
15	N	for Oxygen, Cleanliness ASME B40.1 Level IV	
		NACE Sour Gas Service	
		Certificates	without (standard)
16	1	quality certificates	
		Approvals	without (standard)
17	1	with	
		Electric alarm contact	Without (standard)
18	L	828.1 Normal Open	
		828.2 Normal Close	
		828.11 Normal Open / Normal Open	
		828.12 Normal Open / Normal Close	
		828.21 Normal Close / Normal Open	
		828.22 Normal Close / Normal Close	
		838.1 Normal Open	
		838.2 Normal Close	
		838.11 Normal Open / Normal Open	
		838.12 Normal Open / Normal Close	
		838.21 Normal Close / Normal Open	
		838.22 Normal Close / Normal Close	
19	T	Additional ordering Information	Without (standard)
		Additional text	

Modelcode: 2 3 .34 - - - - - A - - - - -

Additional Text:

Additional scale ranges and options are available. Please contact the factory or access the product configurator for model 232.34 on the WIKA US website.

