

# 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  
Damped movement-optimal

#### 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

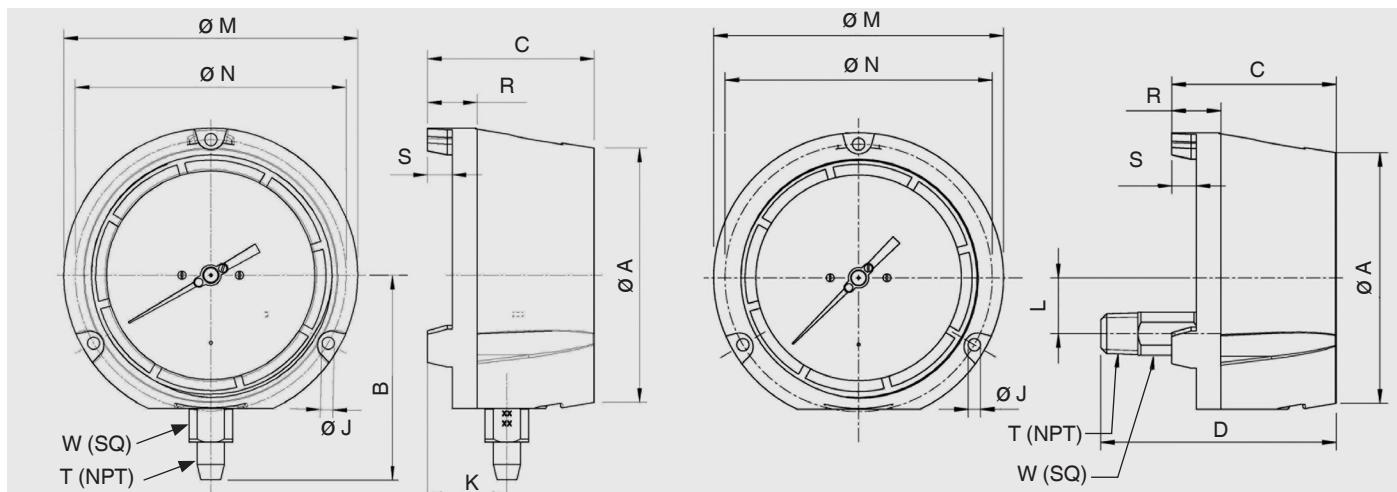
Glycerine 99.7% and > 40 psi (2.5 bar)

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

Size	A	B	C	D	J	K	L	M	N	R	S	T	W	Weight <sup>1</sup>		
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

<sup>1</sup> Weight without optional accessories

## Quick Order Guide

Specifications according to data sheet	APM 02.10
Case	Black Fiberglass Reinforced Thermoplastic (Pocan B4225)
Bezel ring	Threaded, Black Fiberglass Reinforced Thermoplastic (Pocan B4225)
Accuracy Class	+/- .5% (ASME B40.100 2A)

### 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
0/15 psi		9834800	9776885	9696479	9834559	9833981
0/30 psi		9834818	9837680	9696487	9834567	9833999
0/60 psi		9834826	9776877	9696495	9834575	9834006
0/100 psi		9834834	9837760	9696509	9834583	9834015
0/160 psi		9834842	9776869	9696517	9834591	9834023
0/200 psi		9834850	9837841	9696525	9834605	9834031
0/300 psi		9834869	9837884	9696534	9834613	9834049
0/400 psi		9834877	8985116	9696542	9834621	9834057
0/600 psi		9834885	9837965	9696550	9834630	9834065
0/1000 psi		9834893	9778918	9696576	9834648	9834074
0/1500 psi		9834907	9838082	9696585	9793318	9834082
0/2000 psi		9834915	9838120	9696593	9793661	9834090
0/3000 psi		9834923	9838163	9696606	9748911	9834104
0/5000 psi		9834931	9838201	9696615	9793521	9834112
0/10000 psi		9834940	9838244	9696623	9793679	9834120
0/15000 psi		9834958	4209860	9696631	50013181	9834138
-30 inHg/0 psi		9834729	9837604	50322036	9834478	9833914
-30 inHg/15 psi		9834737	9837566	9696428	9834486	9833922
-30 inHg/30 psi		9834745	9837523	9696436	9834494	9833930
-30 inHg/60 psi		52532313	9837485	9696445	9834508	9833948
-30 inHg/100 psi		9834761	9792818	9696453	9834516	9833956
-30 inHg/160 psi		9834770	52263436	9696461	9834524	9833965
-30 inHg/200 psi		9834788	9837361	52219488	9834532	9833973
-30 inHg/300 psi		4260180	52868970	52909300	4260163	52861267
						52849274

	available on stock
	available after production
	not available

## Standard Order Code

Measuring System		
1	<input type="checkbox"/>	3 Stainless Steel
	<input type="checkbox"/>	Case filling
Nominal size		
2	<input type="checkbox"/>	2 without
3	<input type="checkbox"/>	3 with
	<input type="checkbox"/>	U 4.5"
3	<input type="checkbox"/>	H 6"
Unit of outer Scale		
4	<input type="checkbox"/>	P psi / -inHg
Measuring range		
5	<input type="checkbox"/>	G gauge pressure range
	<input type="checkbox"/>	V vacuum- or compound-range
Scale range		
	<input type="checkbox"/>	269 0/10 psi
	<input type="checkbox"/>	310 0/15 psi (-30" Hg/0)
	<input type="checkbox"/>	321 0/30 psi (-30" Hg/15 psi)
	<input type="checkbox"/>	341 0/60 psi
	<input type="checkbox"/>	369 0/100 psi
	<input type="checkbox"/>	411 0/160 psi
	<input type="checkbox"/>	414 0/200 psi
	<input type="checkbox"/>	421 0/300 psi
	<input type="checkbox"/>	428 0/400 psi
	<input type="checkbox"/>	441 0/600 psi
	<input type="checkbox"/>	455 0/800 psi
	<input type="checkbox"/>	469 0/1000 psi
	<input type="checkbox"/>	510 0/1500 psi
	<input type="checkbox"/>	514 0/2000 psi
	<input type="checkbox"/>	521 0/3000 psi
	<input type="checkbox"/>	534 0/5000 psi
	<input type="checkbox"/>	541 0/6000 psi
	<input type="checkbox"/>	569 0/10000 psi
	<input type="checkbox"/>	610 0/15000 psi
	<input type="checkbox"/>	331 -30 inHg/30 psi
	<input type="checkbox"/>	352 -30 inHg/60 psi
	<input type="checkbox"/>	379 -30 inHg/100 psi
	<input type="checkbox"/>	412 -30 inHg/160 psi
	<input type="checkbox"/>	415 -30 inHg/200 psi
6	<input type="checkbox"/>	422 -30 inHg/300 psi
2nd Scale / Special Scale		
	<input type="checkbox"/>	Z without
	<input type="checkbox"/>	B 2nd scale bar
	<input type="checkbox"/>	P 2nd scale psi
	<input type="checkbox"/>	L 2nd scale kPa
	<input type="checkbox"/>	E 2nd scale MPa
7	<input type="checkbox"/>	K 2nd scale kg/cm <sup>2</sup>

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

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19

Modelcode: 23  .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.

