

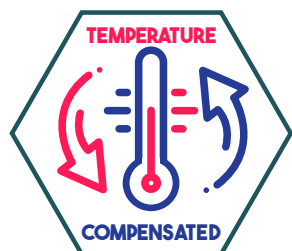
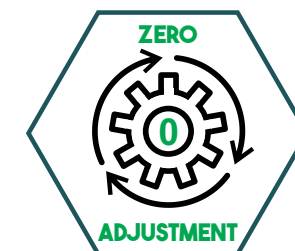
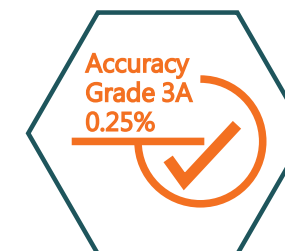


Precision Test Gauge Pressure

HAWK GAUGE CO., LTD

Tel:+886-2-26792233 Fax:+886-2-26703594

E-mail:sales@hawkgauge.com.tw



Dial Size

Selecting suitable dial size may let users read easily. HAWK supplies two selections of the gauge sizes including 4 1/2"(125mm) and 6"(150mm) for precision test gauges.

Temperature

Temperature need be considered when selecting a pressure gauge. All welded stainless steel construction pressure gauge without filling liquid can withstand continuous ambient temperatures as high as 212°F (100°C). Accuracy of measurement will be affected by the ambient temperature. This inaccuracy may be as much as 0.3% of full scale for 20°F (12°C) temperature change.

Case

HAWK supplies various selections of the case style including phenolic, aluminum and stainless-steel case. The model 31, 35 and 36 series are constructed with a solid wall between the sensing element and window which provide the maximum safety for monitoring.

Range

The appropriate operating pressure range falls in the middle half (25% to 75% of full scales). If you choose the unsuitable range, the fatigue of bourdon tube may be resulted, HAWK supplies a wide selection of range from vacuum through 10,000 PSI pressure including compound.

Accuracy

Accuracy complies within 0.25% of span (ASME B40.1 Grade 3A). Temperature change will reduce the accuracy of the gauges, check the individual specifications for available requirement.

Connection

HAWK pressure gauges are available in wide variety of connections. NPT threads are the standard configurations, BSP and JIS are available. If you have a requirement for a connection not listed, please contact with our offices/agents/distributors.

Mounting

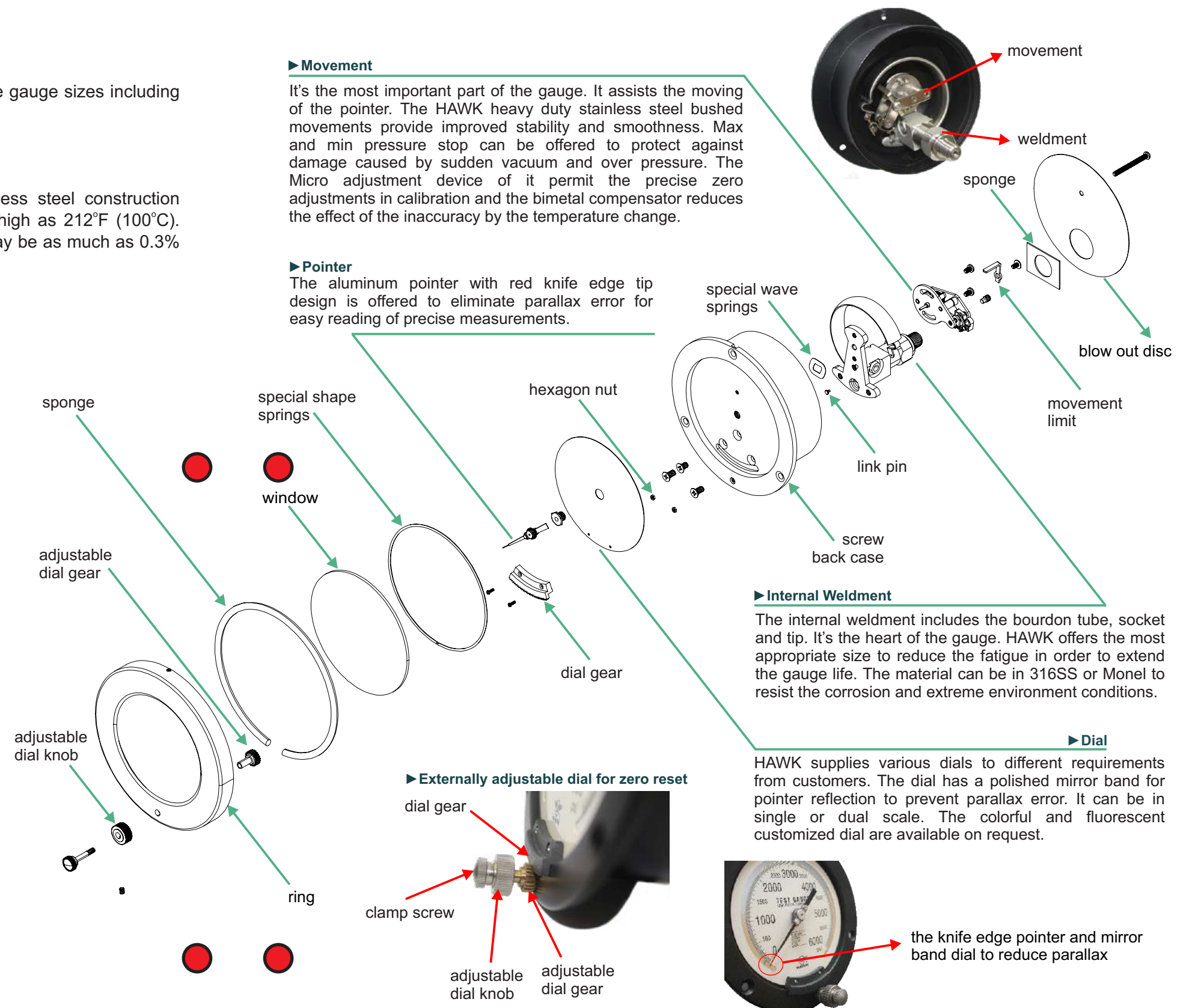
The gauge can be selected in stem, flush or surface mounting for the different installation requirements from the users. The surface mounting is usually in flange style. For the flush panel mounting, HAWK offers the U-clamp and flange for choice.

Movement

It's the most important part of the gauge. It assists the moving of the pointer. The HAWK heavy duty stainless steel bushed movements provide improved stability and smoothness. Max and min pressure stop can be offered to protect against damage caused by sudden vacuum and over pressure. The Micro adjustment device of it permit the precise zero adjustments in calibration and the bimetal compensator reduces the effect of the inaccuracy by the temperature change.

Pointer

The aluminum pointer with red knife edge tip design is offered to eliminate parallax error for easy reading of precise measurements.



Internal Weldment

The internal weldment includes the bourdon tube, socket and tip. It's the heart of the gauge. HAWK offers the most appropriate size to reduce the fatigue in order to extend the gauge life. The material can be in 316SS or Monel to resist the corrosion and extreme environment conditions.

Dial

HAWK supplies various dials to different requirements from customers. The dial has a polished mirror band for pointer reflection to prevent parallax error. It can be in single or dual scale. The colorful and fluorescent customized dial are available on request.

Specifications

Specifications

General Specifications

Accuracy
±0.25%

Dial Material
Aluminum

Bourdon Tube Material
Brass, 316LSS or Monel K500

Socket Material
Brass, 316SS/316LSS or Monel K400

Movement
Stainless Steel

Pointer
Aluminum

Connecting Size
1/2", 1/4" NPT standard

Range
Vac/10,000PSI

Separate Specifications



Model 31



Model 32



Model 35



Model 36

Socket to Case Seal
Case Material
Dial Size (Code)
Ring Style
Ring Material
Mounting
Window
Weatherproof
Zero Adjustment
Safety Style

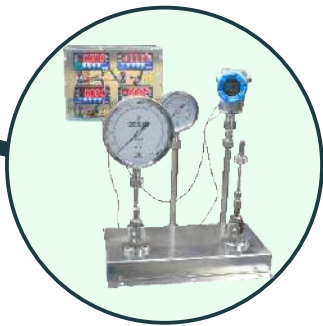
Solid Front Case
Sponge Gasket
Aluminum
115mm(45), 150mm(06)
Hinged Ring
Black Enamel Aluminum
Local/Panel Mounting
PC(4.5"), Plain Glass(6")
NEMA 3/3X, IP54
Dial
Pressure Relief Open

O-ring(Brass/Monel), Welding(SS316)
Stainless Steel 304
150mm(06)
Polished Bayonet Ring
Stainless Steel 304
Stem, Surface or Flush Mounting
Tempered Safety Glass
NEMA 4/4X, IP65
Micro Adjustable Pointer
Top Disc Pressure Relief

Solid Front Case
O-Ring
Phenol
115mm(45)
Threaded Screw Ring
Nylon
Local/Surface Mounting
Polycarbonate
NEMA 4/4X, IP65
Micro Adjustable Pointer
Pressure Relief Back

Solid Front Case
Welding
Stainless Steel 304
115mm(45)
Polished Bayonet Ring
Stainless Steel 304
Stem, Flush Mounting
Polycarbonate
NEMA 4/4X, IP65
Micro Adjustable Pointer
Pressure Relief Back

CALIBRATION

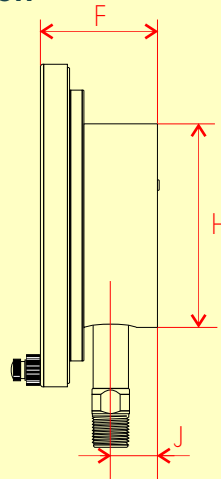
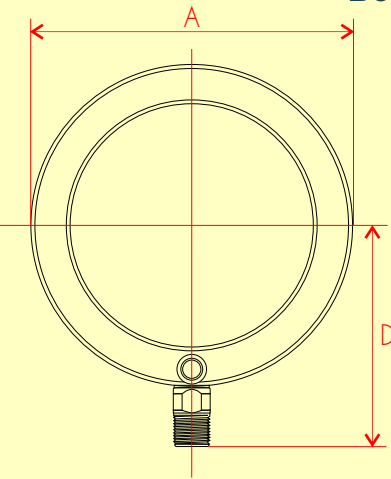


Dimensions

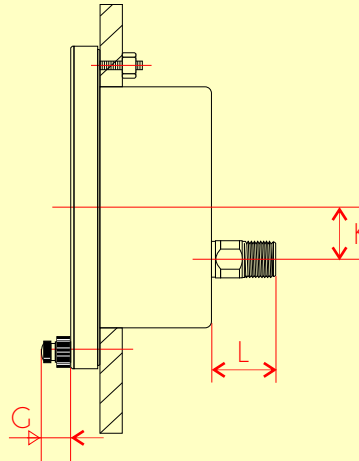
Dimensions

Type 31 Normal Size

Bottom Connection



Back Connection



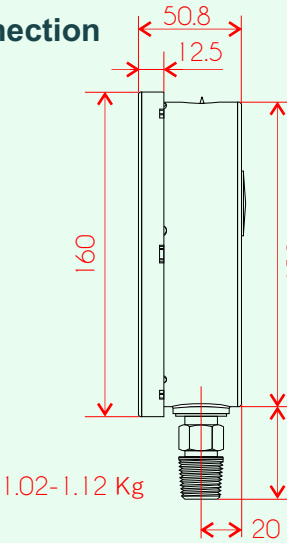
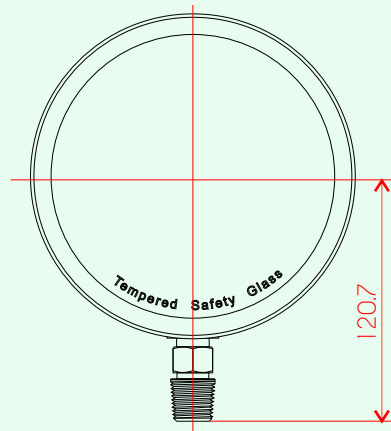
Dimensions in mm.

Type No	Dial Size	A	B	C	D	F	G	H	J	K	L	Weight
31L	4.5"	6.18" (157)			4.37" (111)	2.42" (61.5)	0.69" (17.5)	4.77" (121)	0.91" (23)			0.83-0.99 Kg
31B	4.5"	6.18" (157)				2.42" (61.5)	0.69" (17.5)	4.77" (121)		1.20" (30.4)	1.62" (41)	0.83-0.99 Kg
31L	6"	7.56" (192)			5.20" (132)	2.75" (69.8)	0.69" (17.5)	4.77" (121)	1.10" (27.9)			1.35-1.48 Kg
31B	6"	7.56" (192)				2.75" (69.8)	0.69" (17.5)	4.77" (121)		1.20" (30.4)	1.52" (38.5)	1.35-1.48 Kg

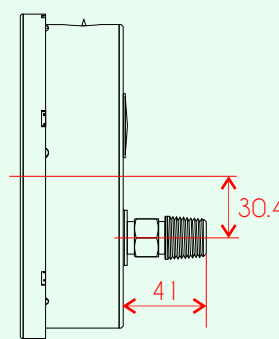
Type 32 Normal Size

Dial Size: 6"

Bottom Connection

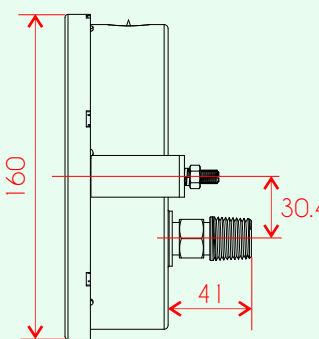
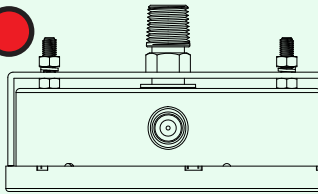


Back Connection

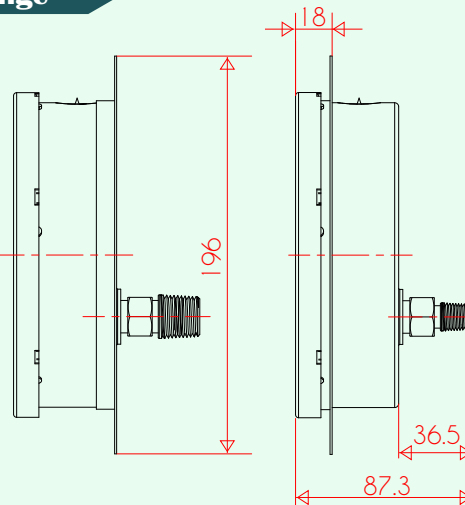
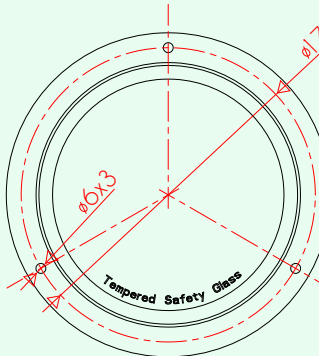


1.12-1.20 Kg

Gauge with U-clamp



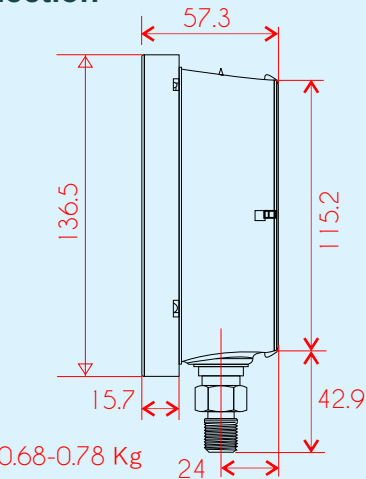
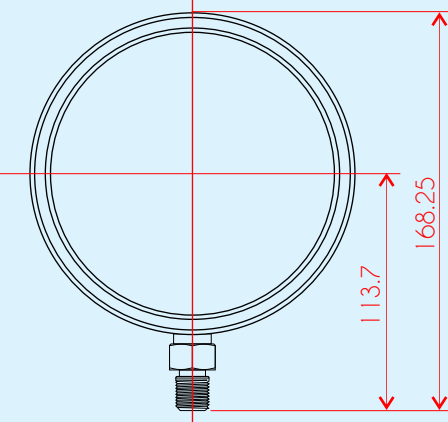
Gauge with Flange



Type 36 Normal Size

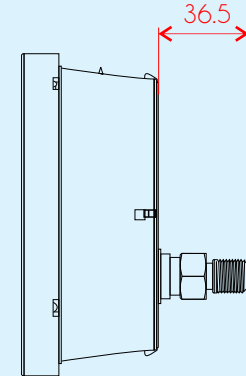
Dial Size: 4.5"

Bottom Connection



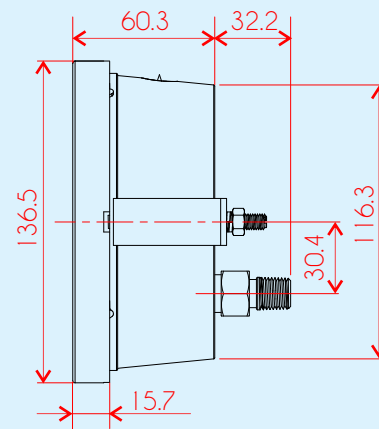
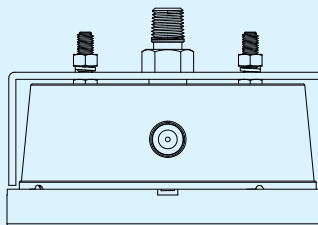
0.68-0.78 Kg

Back Connection

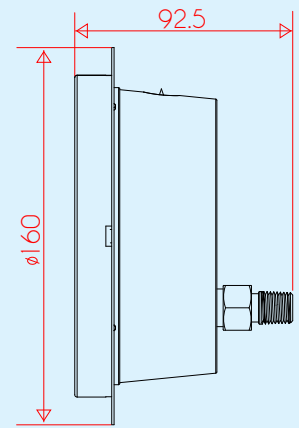
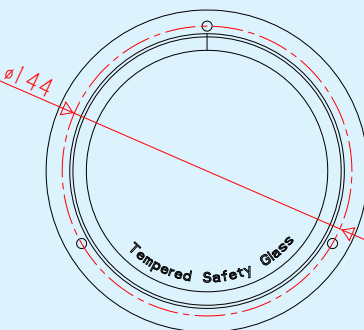


0.68-0.78 Kg

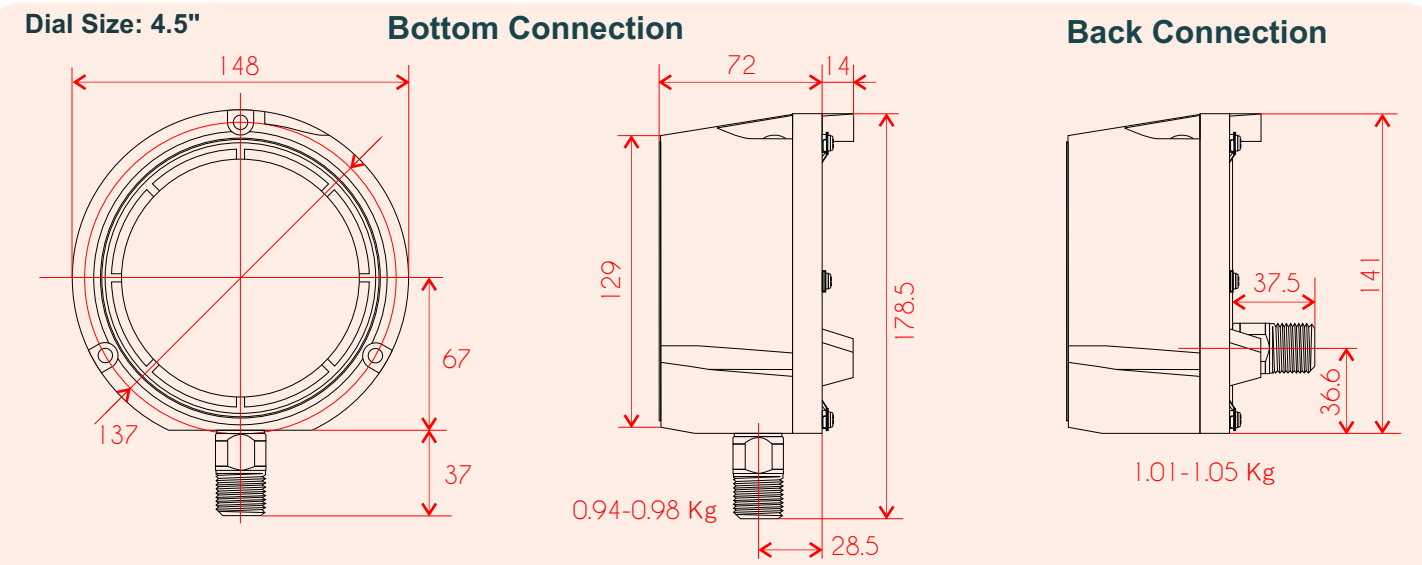
Gauge with U-clamp



Gauge with Flange



Type 35 Normal Size



Order Information

Example:

Series
P - 1C

Model
31

Type
L

Dial
06

Wetted Parts
S

Process Connection
M 2

Pressure Range
P 4 1

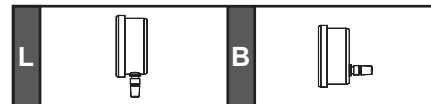
Option
H- Z L

Model

31-Aluminum Case 35-Phenol Case
32-Stainless Steel Case 36-Stainless Steel Case

Type

L-Lower (Bottom) Connection B-Lower Back Connection



Dial

45-4 1/2" (115mm) 60-6" (150mm)

Wetted Parts

S-316SS W-316LSS B-Brass M-Monel

Process Connection

M-Male F-Female

2-1/2"NPT 3-3/8"NPT H-G3/8 A-R1/2 B-R1/4
4-1/4"NPT D-G1/2 E-G1/4 G-R3/8

Pressure Range

Please refer to the range table (From Page 10 to 11), and write down the code you need

Option

Please refer to the accessories/options (Page 9), and write down the code you need

Precision Digital Pressure Gauge



P-2J Series

Model DK3

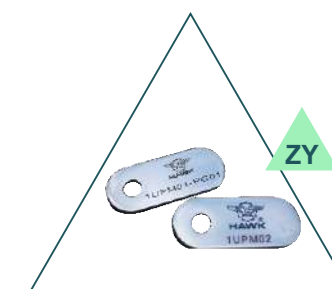
Options



- ZC Certificate of Accuracy (Factory)
- ZE Certificate of Accuracy (TAF)
- ZI Certificate of Accuracy (NIST)



- ZX Cleaned for Oxygen Service



ZY SS Tag Plate

Back Flange Case

ZB



Front Flange Case

ZF



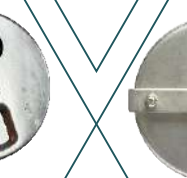
Disc Blow Out Back

ZD



Z3 316SS Case

Z3



12 O'clock Connection

0F



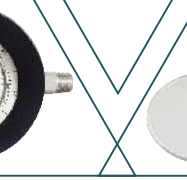
9 O'clock Connection

0E



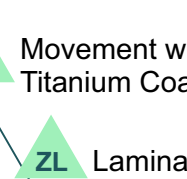
0D 3 O'clock Connection

0D



ZQ Movement with PTFE or Titanium Coated Gear

ZQ



ZL Laminated Safety Glass Lens

ZL



ZT Tempered Safety Glass Lens

ZT



ZP Polycarbonate Lens

ZP



- The other scales and ranges not listed are available in request.
- Not all listed ranges and scales are in stock, consult your distributors for the detailed information.

Code Range

PRESSURE RANGES

PSI	P29 6	P43A 180	P53A 1600
P30 8	P44 200	P54 2000	
P32 15	P45 250	P56 3000	
P33 20	P46 300	P57 3500	
P35 30	P47 350	P58 4000	
P37 40	P48 400	P58A 4250	
P38 50	P48A 450	P59 5000	
P39 60	P49 500	P60 6000	
P40 80	P50 600	P60B 7000	
P40A 85	P51 800	P61 8000	
P41 100	P51A 850	P62 10000	
P42 150	P52 1000		
P43 160	P53 1500		

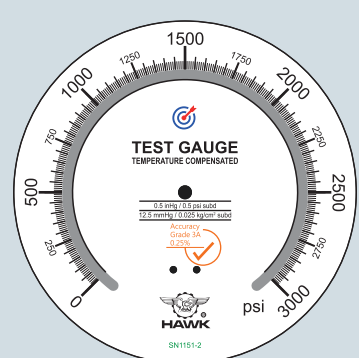
Bar	R1 0.4	R13B 14	R23A 140
R2 0.6	R13C 15	R24 160	
R3 1	R14 16	R25 200	
R4 1.6	R15 20	R26 250	
R5 2	R16 25	R26A 280	
R6 2.5	R16B 28	R27 300	
R7 3	R17 30	R28 350	
R8 4	R18 35	R29 400	
R9 5	R19 40	R30 500	
R11 6	R20 50	R31 600	
R12 7	R21 60	R33 700	
R13 10	R22 70		
R13A 11	R23 100		

kPa	K29 40	K42B 1400	K52B 14000
K31 60	K42C 1500	K53 16000	
K33 100	K43 1600	K54 20000	
K34 160	K44 2000	K55 25000	
K35 200	K45 2500	K55A 28000	
K36 250	K45A 2800	K56 30000	
K37 300	K46 3000	K56A 35000	
K38 400	K47 3500	K57 40000	
K39 500	K48 4000	K58 50000	
K40 600	K49 5000	K59 60000	
K41 700	K50 6000	K60 70000	
K42 1000	K51 7000		
K42A 1100	K52 10000		

VACUUM RANGES

inHg	PV1 -30/0	Bar	RV1 -1/0	kPa	KV1 -0.04	Kg/cm2	GV1 -1/0
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Single Scale



COMPOUND RANGES

PSI	PCA1 VAC/8.5	PCC VAC/60	PCD VAC/100	PCE VAC/150	PCF VAC/160	PCG VAC/200	PCH VAC/300	PCI VAC/400	PCJ VAC/500	PCK VAC/600
Bar	RCA -1/0.6	RCC -1/1.5	RCE -1/2.5	RCF -1/3	RCG -1/4	RCH -1/5	RCJ -1/7	RCK -1/9	RCL -1/10	RCM -1/11
Bar	RCA -1/0.6	RCC -1/1.5	RCE -1/2.5	RCF -1/3	RCG -1/4	RCH -1/5	RCJ -1/7	RCK -1/9	RCL -1/10	RCM -1/11
Bar	RCA -1/0.6	RCC -1/1.5	RCE -1/2.5	RCF -1/3	RCG -1/4	RCH -1/5	RCJ -1/7	RCK -1/9	RCL -1/10	RCM -1/11

kPa

KOQ -100/60	KOW -100/1500	KOW2 -100/1900	KOW3 -100/2000	KOX -100/2400	KOX1 -100/2500	KOX2 -100/2700	KOY -100/3000	KOZ -100/3500	KOZ1 -100/4000	KOZ2 -100/5000	KOZ3 -100/6000	KOZ7 -100/10000
KOR -100/100	KOS -100/150	KOS1 -100/200	KOS2 -100/250	KOT -100/300	KOT2 -100/400	KOU -100/500	KOU2 -100/700	KOV -100/900	KOV1 -100/1000	KOV2 -100/1100	KOV4 -100/1400	

Kg/cm2

GCA -1/0.6	GCB -1/1	GCC -1/1.5	GCD -1/2	GCE -1/2.5	GCF -1/3	GCG -1/4	GCH -1/5	GCI -1/6	GCK -1/7	GCL -1/8	GCM -1/9	GCO -1/10
GCB -1/1	GCC -1/1.5	GCD -1/2	GCE -1/2.5	GCF -1/3	GCG -1/4	GCH -1/5	GCI -1/6	GCK -1/7	GCL -1/8	GCM -1/9	GCO -1/10	

Kg/cm2

G1 0.4	G13C 14	G23A 140	G2 0.6	G13B 15	G24 160	G3 1	G14 16	G25 200	G4 1.6	G15 20	G26 250	G5 2	G16 25	G26A 280	G6 2.5	G16A 28	G27 300	G7 3	G17 30	G28 350	G8 4	G18 35	G29 400	G9 5	G19 40	G30 500	G10 6	G20 50	G31 600	G11 7	G21 60	G32 700	G12 10	G22 70	G13A 11	G23 100
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Code Range

PRESSURE RANGES

Bar/PSI	X9 0.4	X24 14	X40 140
X11 0.6	X25 15	X42 160	
X12 1	X26 16	X43 200	
X13 1.6	X28 20	X44 250	
X14 2	X29 25	X44A 280	
X15 2.5	X30 28	X45 300	
X16 3	X31 30	X46 350	
X18 4	X32 35	X47 400	
X19 5	X33 40	X48 500	
X20 6	X34 50	X49 600	
X21 7	X35 60	X50 700	
X22 10	X36 70		
X23 11	X39 100		

kPa/PSI

Y16 40	Y37 1400	Y51 14000	Y18 60	Y38 1500	Y53 16000	Y22 100	Y39 1600	Y54 20000	Y26 200	Y41 2500	Y56 28000	Y27 250	Y42 2800	Y57 30000	Y28 280	Y43 3000	Y58 35000	Y31 400	Y44 3500	Y59 40000	Y33 500	Y45 4000	Y60 50000	Y36 1000	Y46 5000	Y61 60000	Y34 700	Y47 6000	Y62 70000	Y36A 1100	Y50 10000
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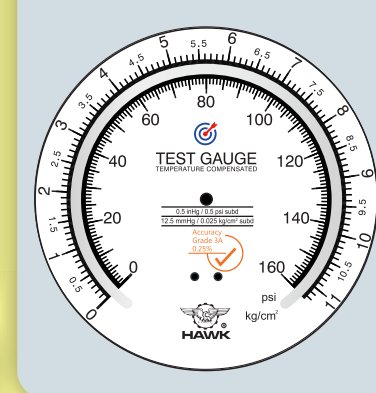
Kg/cm2/PSI

W9 0.4	W24 14	W40 140	W11 0.6	W25 15	W42 160	W12 1	W26 16	W43 200	W13 1.6	W28 20	W44 250	W14 2	W29 25	W44A 280	W15 2.5	W30 28	W45 300	W16 3	W31 30	W46 350	W18 4	W32 35	W47 400	W19 5	W33 40	W48 500	W20 6	W34 50	W49 600	W21 7	W35 60	W50 700	W22 10	W36 70		W23 11	W39 100
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VACUUM RANGES

Bar/PSI	XV1 -1	kPa/PSI	YV1 -100	cmHg/inHg	WV1 -76
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Dual Scale



COMPOUND RANGES

Bar/PSI	XCA -1/0.6	XCP -1/15	XCB -1/1	XCR -1/19	XCC -1/1.5	XCS -1/20	XCD -1/2	XCT -1/24	XCE -1/2.5	XCU -1/25	XCF -1/3	XCV -1/27	XCG -1/4	XCW -1/30	XCH -1/5	XCX -1/35	XCJ -1/7	XCZ -1/40	XCK -1/9	XCZ -1/50	XCL -1/10	XC1 -1/60	XCM -1/11	XC2 -1/100	XCO -1/14
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kPa/PSI

YCA -100/60	YCP -100/1500	YCB -100/100	YCR -100/1900	YCC -100/150	YCS -100/2000	YCD -100/200	YCT -100/2400	YCE -100/250	YCU -100/2500	YCF -100/300	YCV -100/2700	YCG -100/400	YCW -100/3000	YCH -100/500	YCX -100/3500	YCY -100/4000	YCK -100/900	YCC -100/1000	YCM -100/1100	YCO -100/1400
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Kg/cm2/PSI

WCA -1/0.6	WCP -1/15	WCB -1/1	WCR -1/19	WCC -1/1.5	WCS -1/20	WCD -1/2	WCT -1/24	WCE -1/2.5	WCU -1/25	WCF -1/3	WCW -1/27	WCG -1/4	WCW -1/30	WCH -1/5	WCX -1/35	WCJ -1/7	WCY -1/40	WCK -1/9	WCZ -1/50	WCL -1/10	WC1 -1/60	WCM -1/11	WC2 -1/100	WCO -1/14
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Dual Pressure Ranges

Bar/kPa/PSI							
ZV1	-1	ZCO	-1/14	Z21	7	Z39A	110
ZCA	-1/0.6	ZCP	-1/15	Z22	10	Z40	140
ZCB	-1/1	ZCR	-1/19	Z23	11	Z42	160
ZCC	-1/1.5	ZCS	-1/20	Z24	14	Z43	200
ZCD	-1/2	ZCT	-1/24	Z26	16	Z44	250
ZCE	-1/2.5	Z11	0.6	Z28	20	Z44A	280
ZCF	-1/3	Z12	1	Z29	25	Z45	300
ZCG	-1/4	Z13	1.6	Z30	28	Z47	400
ZCH	-1/5	Z14	2	Z31	30	Z48	500
ZCI	-1/6	Z15	2.5	Z33	40	Z49	600
ZCJ	-1/7	Z16	3	Z34	50	Z50	700
ZCK	-1/9	Z18	4	Z35	60	Z52	1000
ZCL	-1/10	Z19	5	Z36	70		
ZCM	-1/11	Z20	6	Z39	100		