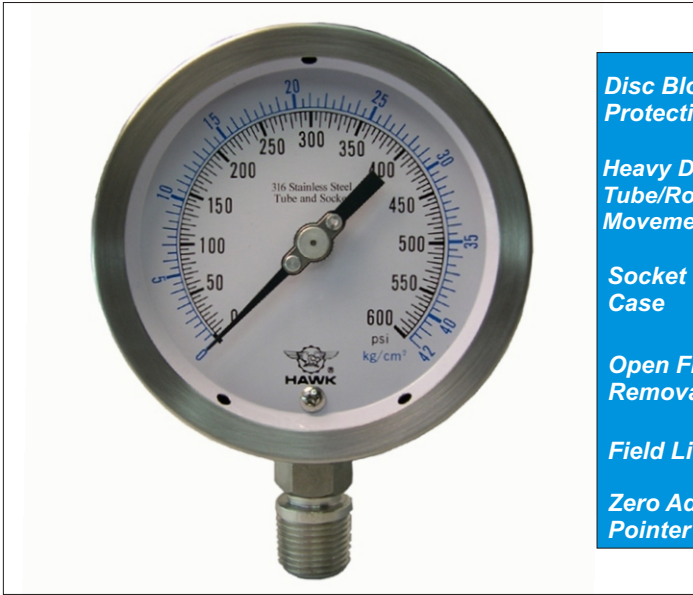


HAWK

Since 1971

All Stainless Steel Pressure Gauge

Bayonet Ring(Open Front)



Disc Blow Out Protection

Heavy Duty Bourdon Tube/Rotary Geared Movement fro 4" and 6"

Socket welded to Case

Open Front/Removable Ring

Field Liquid Fillable

Zero Adjustable Pointer

HAWK 27L and 27B series bourdon tube all stainless steel pressure gauges are designed to fulfill the requirements of high quality from various industries. Because the socket of it is welded to the case, the gauge is stronger, more durable, and shockproof. This design also can eliminate the leak paths when the gauge is liquid filled and extend its service life. The 316SS construction pressure gauges are good in use on demanding applications where corrosion resistance, rugged environment resistance and reliable operation are required. These gauges are ideal to use combined with diaphragm seal where re-calibration is required.

27L,27 B Series

Typical Applications:

√Petrochemical and chemical processing √Medical and pharmaceutical industry √Industrial OEM equipments √Hydraulic monitoring systems √Power generating stations √offshore oil platforms √Pneumatic systems √Level measurement

Specifications:

Operating:

Steady: 100%*full scale value
Pulsation: 90%*full scale value
Sudden: 130%*full scale value

The appropriate operating range falls in the middle half of the gauge(25% to 75% of full scale). If you choose the unsuitable range, the fatigue of bourdon tube may be resulted. HAWK Supplies a wide selection of range from vacuum to 20000 PSI including compound range.

Temperature limit:

Ambient: -40 to 100 C°(Dry Gauge)
-10 to 65 C°(Glycerine Filled Gauge)
-50 to 80 C°(Silicon Filled Gauge)

Media: max 125 C°(Standard), 300 C°(Optional)

Temperature effect:

Accuracy of measurement will be effected by the temperature change. This inaccuracy may as high as $\pm 0.3\%$ for 12 C° temperature change.

Dial Size:

4"(100mm), 4 1/2"(115mm),
6"(150mm)

Case&Ring:

Stainless Steel 304(SS316-option),
polished bayonet ring

Socket

316 Stainless Steel or Monel K400

Movement

Stainless steel movement with overload and underload stops-standard, silicon dampened movement on request

Bourdon Tube:

316-Stainless Steel or Monel K50
30"Hg(Vac) to 1500PSI...C-type
2000 to 20000PSI...Helical type

Window:

Plain glass-standard
Tempered safety, Polycarbonate
or laminated safety glass-optional

Pointer:

Anodized aluminum with black finish

Accuracy:

$\pm 1.0\%$ of span
(Grade 1A to ASME B40.1)

Zero-Adjustment:

Micro-adjustable pointer

Scale:

PSI, kPa, Mpa, bar, kg/cm²,
inHg, cmHg, torr, mmHg
(single or dual scale)

Connection:

1/2", 3/8", 1/4" NPT standard,
JIS, DIN , M14*1.0 3/4"NPT,
and M20*1.5 available

Mounting:

Stem or Flushing U-clamp mounting

Weatherproof:

NEMA 4X/IP65 enclosure

Option:

T-Tempered safety glass lens

6-Refrigerant Scale

4-Receiver Scale 3....15 PSI

U-Stainless steel U-clamp bracket

Q-Movement with PTFE coated gear

3-316SS Case

S-Silicone Filled

X-Cleaned for oxygen service

1-Improved Accuracy 0.5%(Grade 2A-ASME B40.1)

L-Laminated safety glass lens

5-Ammoniated Scale

7-Retard Scale

B-Back Flange case

Z-Movement with Titanium coated gear

G-Glycerine Filled

C-Certification of calibration

J-Maximum pointer

P-Polycarbonate lens

Customer dial

8-Altitude Scale

F-Front flange case

M-Dampened movement

H-Halocarbon Filled

9/16"Autoclave connection

D-Disc Blow Out Back

W-Electrical alarm contact

Pressure Range:

Pressure Range		W21	0/7kg/cm ² /psi	Y25	0/160kPa/psi	Y64	0/140000kPa/psi
Code	Dial Range	W22	0/10kg/cm ² /psi	Y26	0/200kPa/psi	Y66	0/160000kPa/psi
P32	0/15 PSI	W23	0/11kg/cm ² /psi	Y27	0/250kPa/psi	X11	0/0.6 bar/psi
P35	0/30 PSI	W24	0/14kg/cm ² /psi	Y31	0/400kPa/psi	X12	0/1 bar/psi
P39	0/60 PSI	W25	0/15kg/cm ² /psi	Y33	0/600kPa/psi	X13	0/1.6 bar/psi
P41	0/100 PSI	W26	0/16kg/cm ² /psi	Y34	0/700kPa/psi	X14	0/2 bar/psi
P43	0/160 PSI	W27	0/17.5kg/cm ² /psi	Y36	0/1000kPa/psi	X15	0/2.5 bar/psi
P44	0/200 PSI	W28	0/20kg/cm ² /psi	Y37	0/1400kPa/psi	X18	0/4 bar/psi
P46	0/300 PSI	W29	0/25kg/cm ² /psi	Y38	0/1500kPa/psi	X20	0/6 bar/psi
P48	0/400 PSI	W30	0/28kg/cm ² /psi	Y35	0/1600kPa/psi	X21	0/7 bar/psi
P50	0/600 PSI	W31	0/30kg/cm ² /psi	Y39	0/2000kPa/psi	X22	0/10 bar/psi
P51	0/800 PSI	W32	0/35kg/cm ² /psi	Y40	0/2500kPa/psi	X23	0/11 bar/psi
P52	0/1000 PSI	W33	0/40kg/cm ² /psi	Y41	0/2800kPa/psi	X24	0/14 bar/psi
P53	0/1500 PSI	W34	0/50kg/cm ² /psi	Y42	0/3000kPa/psi	X26	0/16 bar/psi
P54	0/2000 PSI	W35	0/60kg/cm ² /psi	Y44	0/4000kPa/psi	X28	0/20 bar/psi
P56	0/3000 PSI	W36	0/70kg/cm ² /psi	Y46	0/6000kPa/psi	X29	0/25 bar/psi
P59	0/5000 PSI	W35	0/100kg/cm ² /psi	Y47	0/7000kPa/psi	X30	0/28 bar/psi
P60	0/6000 PSI	W39	0/140kg/cm ² /psi	Y49	0/10000kPa/psi	X33	0/40 bar/psi
P62	0/10000 PSI	W41	0/160kg/cm ² /psi	Y50	0/14000kPa/psi	X35	0/60 bar/psi
P63	0/15000 PSI	W42	0/200kg/cm ² /psi	Y52	0/16000kPa/psi	X36	0/70 bar/psi
P64	0/20000 PSI	W43	0/250kg/cm ² /psi	Y53	0/20000kPa/psi	X35	0/100 bar/psi
W11	0/0.6kg/cm ² /psi	W45	0/350kg/cm ² /psi	Y54	0/25000kPa/psi	X39	0/140 bar/psi
W12	0/1kg/cm ² /psi	W46	0/400kg/cm ² /psi	Y55	0/28000kPa/psi	X41	0/160 bar/psi
W14	0/2kg/cm ² /psi	W47	0/500kg/cm ² /psi	Y56	0/30000kPa/psi	X42	0/200 bar/psi
W15	0/2.5kg/cm ² /psi	W48	0/600kg/cm ² /psi	Y57	0/35000kPa/psi	X43	0/250 bar/psi
W16	0/3kg/cm ² /psi	W49	0/700kg/cm ² /psi	Y58	0/40000kPa/psi	X45	0/350 bar/psi
W18	0/4kg/cm ² /psi	W51	0/1000kg/cm ² /psi	Y59	0/50000kPa/psi	X46	0/400 bar/psi
W19	0/5kg/cm ² /psi	W52	0/1400kg/cm ² /psi	Y61	0/70000kPa/psi	X48	0/600 bar/psi
W20	0/6kg/cm ² /psi	Y22	0/100kPa/psi	Y63	0/100000kPa/psi	X49	0/700 bar/psi

HAWK

Since 1971

All Stainless Steel Pressure Gauge

Bayonet Ring(Open Front)

Pressure Range		M21	0/6.0 Mpa	K52	0/10000 kPa	KVX	-100 kPa
Code	Dial Range	M23	0/10 Mpa	K53	0/16000 kPa	Compound Range	
X51	0/1000 bar/psi	M24	0/16 Mpa	K54	0/20000 kPa	Code	Dial Range
X52	0/1400 bar/psi	M25	0/20 Mpa	K55	0/25000 kPa	PCA	-30inHg/0/15psi
R1	0/0.4 bar	M26	0/25 Mpa	K57	0/40000 kPa	PCB	-30inHg/0/30psi
R2	0/0.6 bar	M29	0/40 Mpa	K59	0/60000 kPa	PCC	-30inHg/0/60psi
R3	0/1.0 bar	M31	0/60 Mpa	K61	0/100000 kPa	PCD	-30inHg/0/100psi
R4	0/1.6 bar	M33	0/100 Mpa	K62	0/160000 kPa	PCE	-30inHg/0/150psi
R5	0/2.0 bar	M34	0/160 Mpa	H76	0/4.0 mHQ	PCG	-30inHg/0/200psi
R6	0/2.5 bar	G1	0/0.4 kg/cm ²	H78	0/6.0 mHQ	PCH	-30inHg/0/300psi
R9	0/4.0 bar	G2	0/0.6 kg/cm ²	H80	0/10 mHQ	WCB	-76cmHg/1kg/cm ²
R11	0/6.0 bar	G3	0/1.0 kg/cm ²	H82	0/16 mHQ	WCC	-76cmHg/1.5kg/cm ²
R13	0/10 bar	G4	0/1.6 kg/cm ²	H83	0/20 mHQ	WCD	-76cmHg/2kg/cm ²
R14	0/16 bar	G5	0/2.0 kg/cm ²	H84	0/25 mHQ	WCF	-76cmHg/3kg/cm ²
R15	0/20 bar	G6	0/2.5 kg/cm ²	H87	0/40 mHQ	WCG	-76cmHg/4kg/cm ²
R16	0/25 bar	G9	0/4.0 kg/cm ²	H89	0/60 mHQ	WCH	-76cmHg/5kg/cm ²
R19	0/40 bar	G11	0/6.0 kg/cm ²	H91	0/100 mHQ	WCJ	-76cmHg/7kg/cm ²
R21	0/60 bar	G13	0/10 kg/cm ²	H92	0/140 mHQ	WCL	-76cmHg/10kg/cm ²
R23	0/100 bar	G14	0/16 kg/cm ²	H94	0/160 mHQ	WCP	-76cmHg/15kg/cm ²
R24	0/160 bar	G15	0/20 kg/cm ²	H95	0/200 mHQ	WCS	-76cmHg/20kg/cm ²
R25	0/200 bar	G16	0/25 kg/cm ²	J37	0/40 ftHQ	WCT	-76cmHg/24kg/cm ²
R26	0/250 bar	G19	0/40 kg/cm ²	J39	0/60 ftHQ	WCX	-76cmHg/35kg/cm ²
R29	0/400 bar	G21	0/60 kg/cm ²	J41	0/100 ftHQ	WC1	-76cmHg/60kg/cm ²
R31	0/600 bar	G23	0/100 kg/cm ²	J42	0/140 ftHQ	WC2	-76cmHg/100kg/cm ²
R33	0/1000 bar	G24	0/160 kg/cm ²	J43	0/160 ftHQ	YCB	-100/+100 kPa/psi
R34	0/1600 bar	G25	0/200 kg/cm ²	J44	0/200 ftHQ	YCD	-100/+200 kPa/psi
M1	0/0.04 Mpa	G26	0/250 kg/cm ²	J45	0/250 ftHQ	YCG	-100/+400 kPa/psi
M2	0/0.06 Mpa	G29	0/400 kg/cm ²	J48	0/400 ftHQ	YCJ	-100/+700 kPa/psi
M3	0/0.1 Mpa	G31	0/600 kg/cm ²	J50	0/600 ftHQ	YCL	-100/+1000 kPa/psi
M4	0/0.16 Mpa	G33	0/1000 kg/cm ²	J52	0/1000 ftHQ	YCO	-100/+1400 kPa/psi
M5	0/0.20 Mpa	G34	0/1600 kg/cm ²	Vacuum Range		YCS	-100/+2100 kPa/psi
M6	0/0.25 Mpa	K38	0/400 kPa	Code	Dial Range	XCA	-1/+0.6 bar/psi
M9	0/0.4 Mpa	K40	0/600 kPa	CV1	-30 inHg/0	XCB	-1/+1 bar/psi
M11	0/0.6 Mpa	K42	0/1000 kPa	CV2	-76 cmHg/inHg/0	XCC	-1/+1.5 bar/psi
M13	0/1.0 Mpa	K43	0/1600 kPa	CV3	-100 kPa/inHg/0	XCD	-1/+2 bar/psi
M14	0/1.6 Mpa	K44	0/2000 kPa	CV4	-1 bar/inHg/0	XCE	-1/+2.5 bar/psi
M15	0/2.0 Mpa	K45	0/2500 kPa	RV1	-1 bar	XCF	-1/+3 bar/psi
M16	0/2.5 Mpa	K48	0/4000 kPa	MV1	-0.1 Mpa	XCG	-1/+4 bar/psi
M19	0/4.0 Mpa	K50	0/6000 kPa	GV1	-1 kg/cm ²	XCH	-1/+5 bar/psi

HAWK

Since 1971

All Stainless Steel Pressure Gauge

Bayonet Ring(Open Front)

Compound Range		RCK	-1/+9 bar	MCJ	-0.1/+0.7 Mpa	KOQ	-100/+60 kPa
XCJ	-1/+7 bar/psi	RCP	-1/+15 bar	MCK	-0.1/+0.9 Mpa	KOS	-100/+150 kPa
XCK	-1/+9 bar/psi	RCT	-1/+24 bar	MCP	-0.1/+1.5 Mpa	KOT	-100/+300 kPa
XCL	-1/+10 bar/psi	MCA	-0.1/+0.06 Mpa	MCT	-0.1/+2.4 Mpa	KOU	-100/+500 kPa
XCO	-1/+14 bar/psi	MCC	-0.1/+0.15 Mpa	GCA	-1/+0.6 kg/cm ²	KOV	-100/+900 kPa
XCP	-1/+15 bar/psi	MCD	-0.1/+0.2 Mpa	GCC	-1/+1.5 kg/cm ²	KOW	-100/+1500 kPa
XCT	-1/+24 bar/psi	MCE	-0.1/+0.25 Mpa	GCF	-1/+3 kg/cm ²	KOX	-100/+2400 kPa
RCA	-1/+0.6 bar	MCF	-0.1/+0.3 Mpa	GCH	-1/+5 kg/cm ²	HDR	-10/+10 mH ₂ O
RCC	-1/+1.5 bar	MCG	-0.1/+0.4 Mpa	GCK	-1/+9 kg/cm ²	HDS	-10/+20 mH ₂ O
RCF	-1/+3 bar	MCH	-0.1/+0.5 Mpa	GCP	-1/+15 kg/cm ²	HDT	-10/+30 mH ₂ O
RCH	-1/+5 bar	MCI	-0.1/+0.6 Mpa	GCT	-1/+24 kg/cm ²		

1. The other scales and ranges(DIN) are available in request.

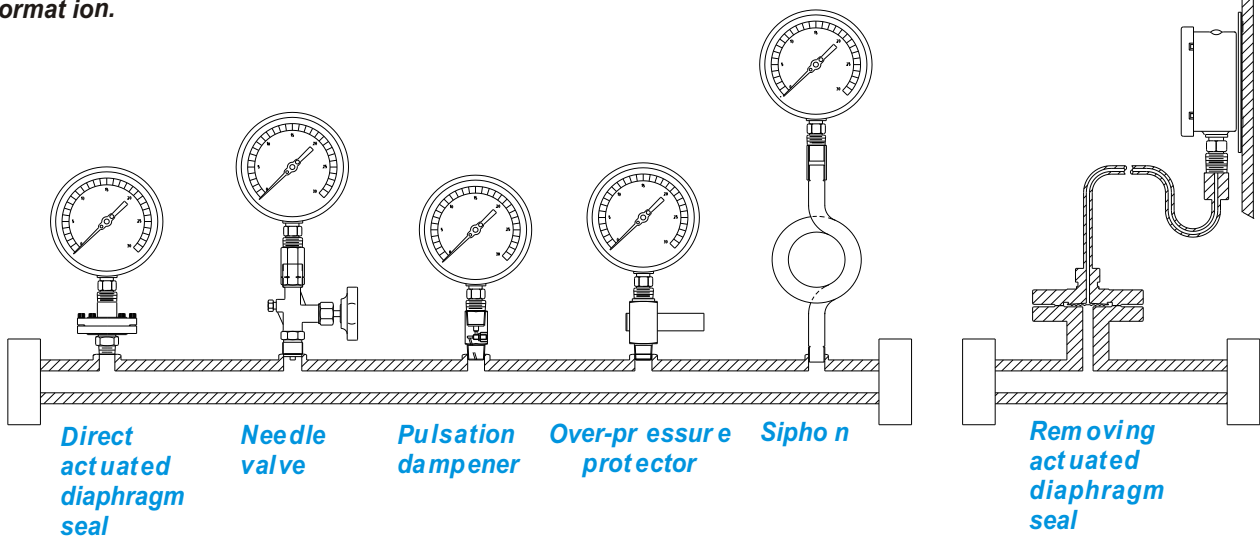
2. Not all listed ranges and scales are in stock, Consult your distributors for available.

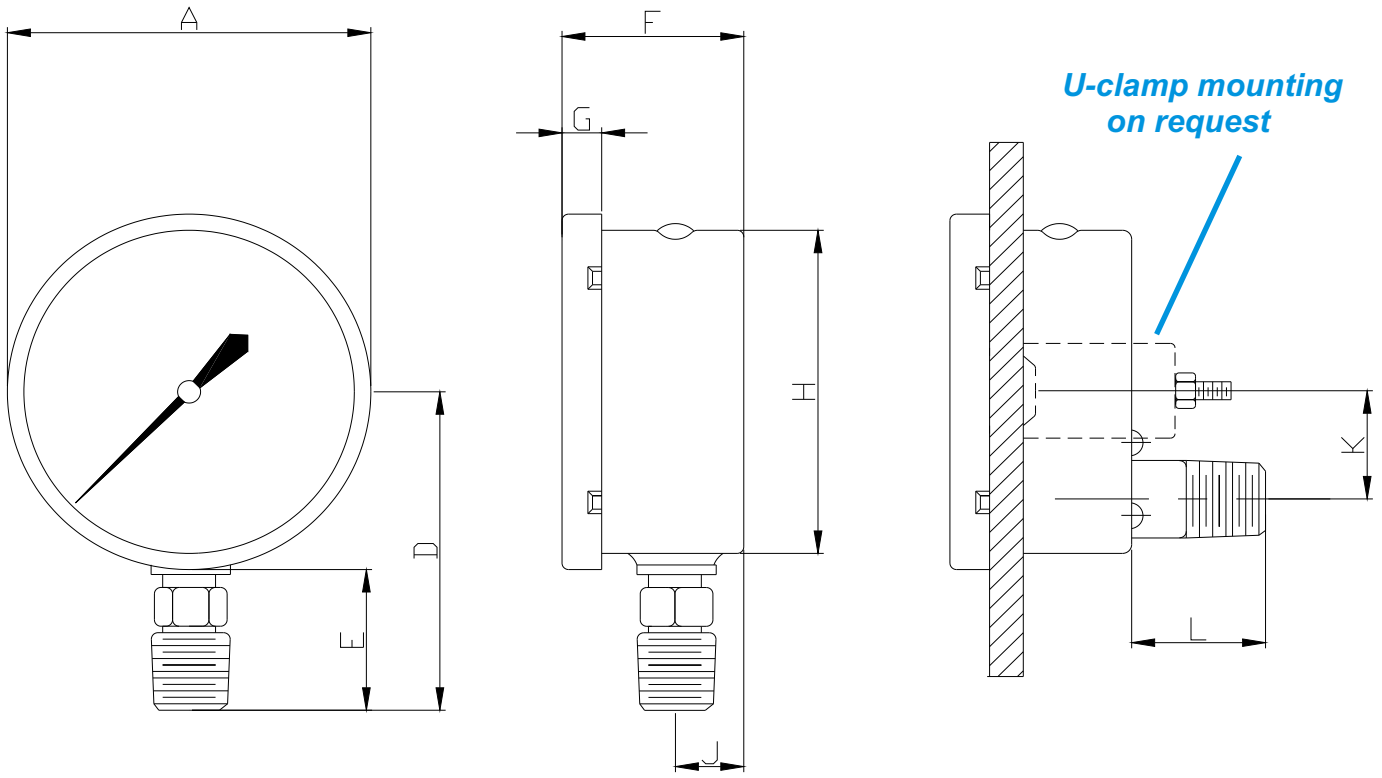


Socket welded to Casing

Accessories:

Please refer to HAWK diaphragm seal and accessories data sheets for detailed information.





27L(Bottom Connection)

27B(Lower Back Connection)

4"(100mm) Dial Size

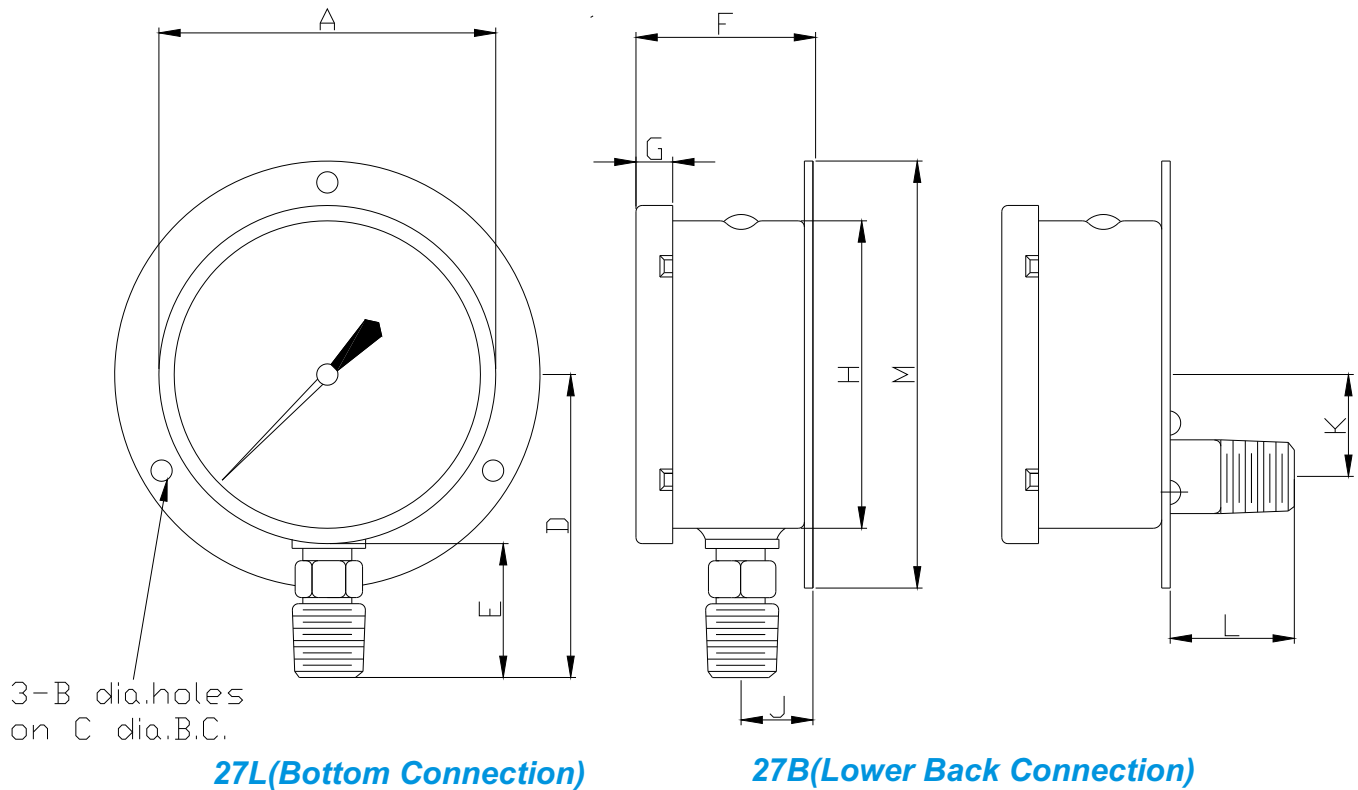
Type No:	A	B	C	D	E	F	G	H	J	K	L	Weight
27L(4")	4.33" (110)			4.41" (112)	1.49" (38)	1.89" (48)	0.47" (12)	3.94" (100)	0.79" (20)			0.49-0.55 Kg
27B(4")	4.33" (110)					1.89" (48)	0.47" (12)	3.94" (100)		1.18" (30)	1.26" (32)	0.58-0.64 Kg

4 1/2"(115mm) Dial Size

Type No:	A	B	C	D	E	F	G	H	J	K	L	Weight
27L(4.5")	4.40" (137)			4.21" (107)	1.53" (39)	2.25" (57)	0.63" (16)	4.76" (121)	0.95" (24)			0.62-0.69 Kg
27B(4.5")	4.40" (137)					2.25" (57)	0.63" (16)	4.76" (121)		1.18" (30)	1.26" (32)	0.72-0.78 Kg

6"(150mm) Dial Size

Type No:	A	B	C	D	E	F	G	H	J	K	L	Weight
27L(6")	6.23" (160)			4.72" (120)	1.58" (40)	1.97" (50)	0.51" (13)	5.91" (150)	0.79" (20)			1.02-1.12 Kg
27B(6")	6.23" (160)					1.97" (50)	0.51" (13)	5.91" (150)		1.26" (32)	1.26" (32)	1.12-1.20 Kg



Back Flange

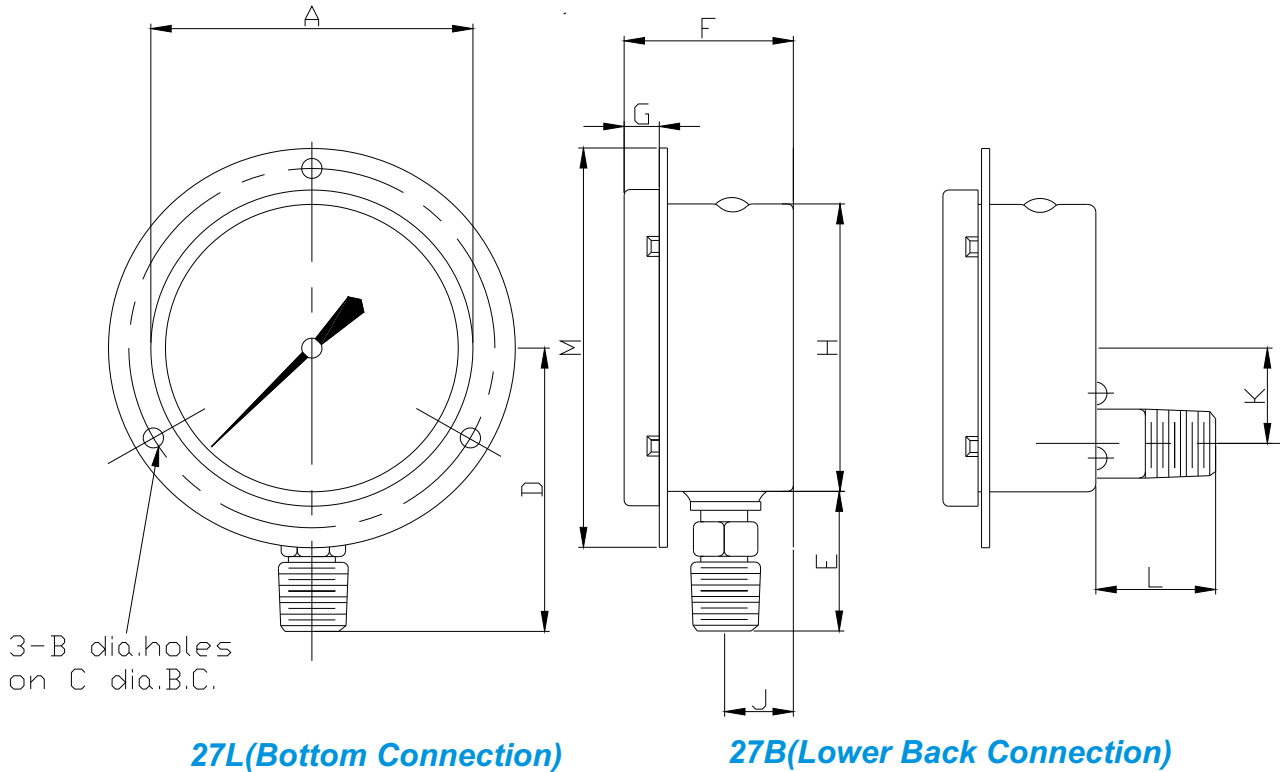
4"(100mm) Dial Size

Type No:	A	B	C	D	E	F	G	H	J	K	L	M	Weight
27L(4")	4.33" (110)	0.20" (5)	4.73" (120)	4.41" (112)	1.49" (38)	1.89" (48)	0.47" (12)	3.94" (100)	0.79" (20)	✕	✕	5.12" (130)	0.59-0.65 Kg
27B(4")	4.33" (110)	0.20" (5)	4.73" (120)	✕	✕	1.89" (48)	0.47" (12)	3.94" (100)	✕	1.18" (30)	1.26" (32)	5.12" (130)	0.68-0.74 Kg

6"(150mm) Dial Size

Type No:	A	B	C	D	E	F	G	H	J	K	L	M	Weight
27L(6")	6.23" (160)	0.24" (6)	7.01" (178)	4.72" (120)	1.58" (40)	1.97" (50)	0.51" (13)	5.91" (150)	0.79" (20)	✕	✕	7.72" (196)	1.27-1.37 Kg
27B(6")	6.23" (160)	0.24" (6)	7.01" (178)	✕	✕	1.97" (50)	0.51" (13)	5.91" (150)	✕	1.26" (32)	1.26" (32)	7.72" (196)	1.37-1.45 Kg

Dimensions:



Front Flange

4"(100mm) Dial Size

Type No:	A	B	C	D	E	F	G	H	J	K	L	M	Weight
27L(4")	4.33" (110)	0.20" (5)	4.73" (120)	4.41" (112)	1.49" (38)	1.89" (48)	0.47" (12)	3.94" (100)	0.79" (20)			5.12" (130)	0.59-0.65 Kg
27B(4")	4.33" (110)	0.20" (5)	4.73" (120)			1.89" (48)	0.47" (12)	3.94" (100)		1.18" (30)	1.26" (32)	5.12" (130)	0.68-0.74 Kg

4 1/2"(115mm) Dial Size

Type No:	A	B	C	D	E	F	G	H	J	K	L	M	Weight
27L(4.5")	4.33" (110)	0.20" (5)	5.67" (144)	4.41" (112)	1.49" (38)	1.89" (48)	0.47" (12)	3.94" (100)	0.79" (20)			6.29" (160)	0.79-0.85 Kg
27B(4.5")	4.33" (110)	0.20" (5)	5.67" (144)			1.89" (48)	0.47" (12)	3.94" (100)		1.18" (30)	1.26" (32)	6.29" (160)	0.88-0.94 Kg

6"(150mm) Dial Size

Type No:	A	B	C	D	E	F	G	H	J	K	L	M	Weight
27L(6")	6.23" (160)	0.24" (6)	7.01" (178)	4.72" (120)	1.58" (40)	1.97" (50)	0.51" (13)	5.91" (150)	0.79" (20)			7.72" (196)	1.27-1.37 Kg
27B(6")	6.23" (160)	0.24" (6)	7.01" (178)			1.97" (50)	0.51" (13)	5.91" (150)		1.26" (32)	1.26" (32)	7.72" (196)	1.37-1.45 Kg

Order Information:

P - 1A - **27L** **04** **S** **2** **C5** H - **X**

Type No:	Dial Sizes:	Wetted Parts:	Process Connection:	Pressure Range:	Option:
27L -Lower (Bottom) Connection 27B -Lower Back Connection	04 -4" (100mm) 45 -4 ½" (115mm) 06 -6" (150mm)	S -316SS M -Monel	2 -1/2"NPT 4 -1/4"NPT 8 -1/8"NPT 7 -7/16"UNF D -G1/2 H -G3/8 E -G1/4 A -R1/2 G -R3/8 B -R1/4 L -Others 3 -3/8"NPT 9 -9/16"UNF 5 -3/4"NPT J -M20*1.5 K -M14*1.0	Please refer to the range table and write down the code you need. Vacuum Compound Pressure	P -Polycarbonate Window L -Laminated Safety Glass Lens T -Tempered Safety Glass Lens U -U-clamp Kit D -Disc Blow Out Back 3 -316SS Case B -Back Flange F -Front Flange

Limited Warranty and Liability

HAWK GAUGE CO.,LTD warrants all its mechanical instruments to be free from defects in materials and workmanship. HAWK agrees to repair or replace any pressure gauges if returned to our factory, transportation charges prepaid, and after which examination reveals is to be defective due to faculty workmanship or material.

This warrant should not apply to subject to the following terms and conditions:

- A). The product has not been subjected to misuse, neglect, abuse , accident, incorrect mounting, improper use or misapplication such as negligence, accident, vandalism, shock or vibration.
- B). The performance of any system of which HAWK's products are a component part.
- C). The product has not been exposed to any other service, range or environment of greater severity than that for which the products were designed.
- D). The product has not been altered or repaired by anyone except HAWK GAUGE or its authorized service agencies.
- E). The serial number or date code has not been removed, defaced or changed.
- F). The actual pressure&temperature occurring exceed the values specified for HAWK Process gauge.

Unless otherwise specified in a manual or warranty card, or agree to in a writing signed by HAWK GAUGE office, HAWK Process gauge products shall be warranted for one years from the date of sale.

This warranty is in lieu of all other warranties expressed or implied, and of all obligations or liabilities on its part for damages including but not limited to consequential damages, following the use of misuse of instruments sold by it. No agent is authorized to assume for it any liability except as set forth above.

Note

HAWK GAUGE CO.,LTD reserves the right to make product improvements and change its specifications at any time stated throughout this brochure without notification. Please contact the factory on all critical dimensions and specifications for verification.

HAWK GAUGE is not expert in the customer's technical field and therefore doesn't warrant suitability of it's product for the application selected by customer.

HAWK[®]

Pressure Temperature Level Flow

No 145 Dha Hu Rd Ying Ko Town Taipei County Taiwan
TEL:886-2-26792233 FAX:886-2-26703594 www.hawkgauge.com.
© 2001, by HAWK GAUGE Co., Ltd. All rights reserved.

