



**24L, 24B
Series**

- Disc Blow Out Protection
- Heavy Duty Bourdon Tube/
Industrial Grade Movement
- 1 1/2" and 2" size to conserve
space

- Electrical Polished Crimped
Ring
- Brass Wetted Parts
- Field Liquid Fillable

HAWK 24L and 24B series bourdon tube stainless steel case pressure gauges are designed to fulfill the requirements of high quality from various industries. It is offered with waterproof and corrosion resistant case. Widely pressure ranges can be chosen. It is suitable to measure pressure of air, oil, gas, water or any other medium which does not clog the pressure port or corrode copper alloy. It's easy to use and install, 1 1/2" and 2" smaller size gauges are used whenever space limitations exist.

Typical Application

- Hydraulic monitoring systems
- Power generating stations
- Compressors
- Valve positioners
- Pneumatic systems
- Regulators
- Pumps

Specification

Operating

Steady: 75%*full scale value
Pulsation: 50%*full scale value
Sudden: 100%*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 15000 PSI including compound range.

Temperature limit

Ambient:
-25 to 60°C (Dry Gauge)
Media: max 60°C-Standard

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

1 1/2"(40mm), 2"(50mm)

Case&Ring

Stainless Steel 304, polished crimped ring

Socket

Brass

Movement

Brass

Bourdon Tube

Brass

Window

Plain Glass-standard
Tempered safety, Polycarbonate-optional

Pointer

Anodized aluminum with black finish

Accuracy

$\pm 2-1-2\%$ of span
(Grade 1A to ASME B40.1)

Scale

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

Connection

1/4", 1/8" NPT standard, JIS,
DIN, M14*1.0 available

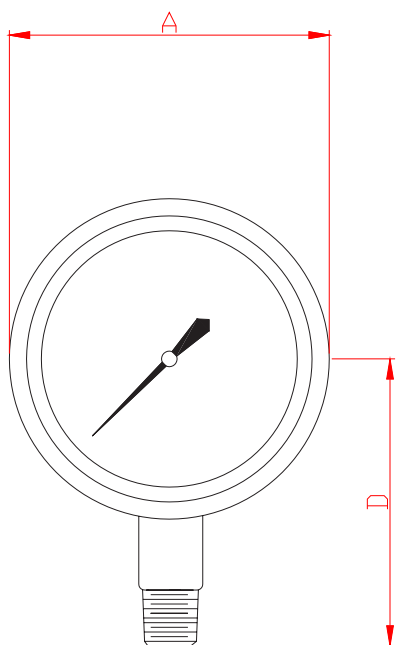
Mounting

Stem or Flushing U-clamp
mounting

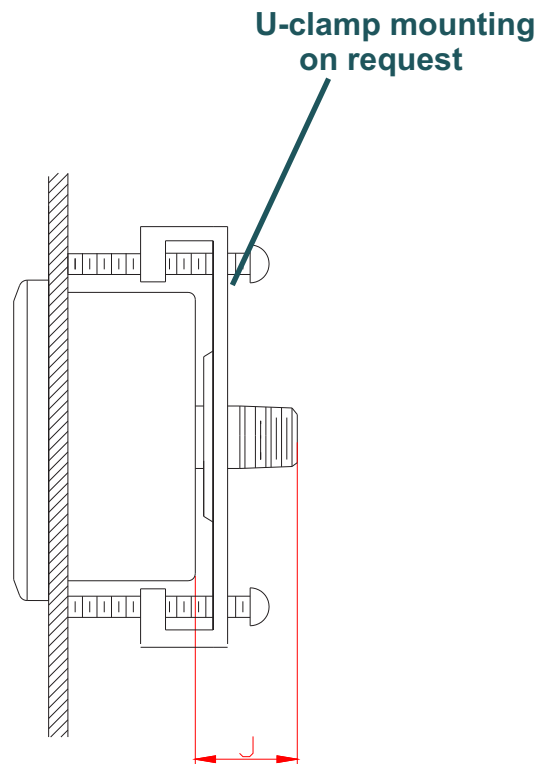
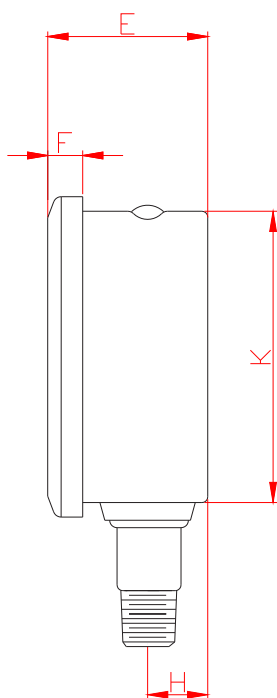
Weatherproof

NEMA 4X/IP65 enclosure

Dimensions



24L (Bottom Connection)



24B (Center Back Connection)

Dimensions, in.(mm)

Type No	Dial Size	A	B	C	D	E	F	G	H	J	K	L	Weight
24L	1.5"	1.93" (49)			1.65" (42)	1.22" (31)	0.26" (7)		0.51" (13)		1.73" (44)		0.08-0.13 Kg
24B	1.5"	1.93" (49)				1.22" (31)	0.26" (7)			0.79" (20)	1.73" (44)		0.08-0.13 Kg

Type No	Dial Size	A	B	C	D	E	F	G	H	J	K	L	Weight
24L	2"	2.28" (58)			2.05" (52)	1.18" (30)	0.26" (7)		0.51" (13)		2.09" (53)		0.12-0.17 Kg
24B	2"	2.28" (58)				1.18" (30)	0.26" (7)			0.95" (24)	2.09" (53)		0.12-0.17 Kg

Pressure Range

- The other scales and ranges (DIN) are available in request.
- Not all listed ranges and scales are in stock, consult your distributors for available.

Pressure Ranges

SINGLE SCALE				DUAL SCALE			
PSI		Bar		KPa		Kg/cm2	
Code	Range	Code	Range	Code	Range	Code	Range
P29	6	R1	0.4	K29	40	G1	0.4
P30	8	R2	0.6	K31	60	G2	0.6
P32	15	R3	1	K33	100	G3	1
P33	20	R4	1.6	K34	160	G4	1.6
P35	30	R5	2	K35	200	G5	2
P37	40	R6	2.5	K36	250	G6	2.5
P38	50	R7	3	K37	300	G7	3
P39	60	R8	4	K38	400	G9	4
P40	80	R9	5	K39	500	G10	5
P40A	85	R11	6	K40	600	G11	6
P41	100	R12	7	K41	700	G12	7
P42	150	R13	10	K42	1000	G13	10
P43	160	R13A	11	K42A	1100	G13A	11
P43A	180	R13B	14	K42B	1400	G13C	14
P44	200	R13C	15	K42C	1500	G13B	15
P45	250	R14	16	K43	1600	G14	16
P46	300	R15	20	K44	2000	G15	20
P47	350	R16	25	K45	2500	G16	25
P48	400	R16B	28	K55A	2800	G16A	28
P48A	450	R17	30	K46	3000	G17	30
P49	500	R18	35	K47	3500	G18	35
P50	600	R19	40	K48	4000	G19	40
P51	800	R20	50	K49	5000	G20	50
P51A	850	R21	60	K50	6000	G21	60
P52	1,000	R22	70	K51	7000	G22	70
P53	1,500	R23	100	K52	10000	G23	100
P53A	1,600	R23A	140	K52B	14000	G23A	140
P54	2,000	R24	160	K53	16000	G24	160
P56	3,000	R25	200	K54	20000	G25	200
P57	3,500	R26	250	K55	25000	G26	250
P58	4,000	R26A	280	K55A	28000	G26A	280
P58A	4,250	R27	300	K56	30000	G27	300
P59	5,000	R28	350	K56A	35000	G28	350
P60	6,000	R29	400	K57	40000	G29	400
P60B	7,000	R30	500	K58	50000	G30	500
P61	8,000	R31	600	K59	60000	G31	600
P62	10,000	R33	700	K60	70000	G32	700
P63	15,000	R33	1000	K61	100000	G33	1000
P64	20,000	R33A	1400	K61A	140000	G33A	1400
P65	25,000	R34	1600	K62	160000	G34A	1600

Vacuum Ranges

SINGLE SCALE

InHg	Bar	KPa	Kg/cm2
Code Range	Code Range	Code Range	Code Range
PV1 -30/0	RV1 -1/0	KV1 -0.04	GV1 -1/0

DUAL SCALE

Bar & PSI	Kpa & PSI	Kg/cm2 & PSI
Code Range	Code Range	Code Range
XV1 -1 Bar/PSI	YV1 -100 kPa/PSI	WV1 -76 cmHg/inHg

Compound Ranges

SINGLE SCALE

PSI	Bar	KPa	Kg/cm2
Code Range	Code Range	Code Range	Code Range
PCA1 VAC/8.5	RCA -1/0.6	KOQ -100/60	GCA -1/0.6
PCA VAC/15	RCB -1/1	KOR -100/100	GCB -1/1
	RCC -1/1.5	KOS -100/150	GCC -1/1.5
PCB VAC/30	RCD -1/2	KOS1 -100/200	GCD -1/2
	RCE -1/2.5	KOS2 -100/250	GCE -1/2.5
	RCF -1/3	KOT -100/300	GCF -1/3
PCC VAC/60	RCG -1/4	KOT2 -100/400	GCG -1/4
	RCH -1/5	KOU -100/500	GCH -1/5
PCD VAC/100	RCJ -1/7	KOU2 -100/700	GCJ -1/7
	RCK -1/9	KOV -100/900	GCK -1/9
PCE VAC/150	RCL -1/10	KOV1 -100/1000	GCL -1/10
PCF VAC/160	RCM -1/11	KOV2 -100/1100	GCM -1/11
PCG VAC/200	RCO -1/14	KOV4 -100/1400	GCO -1/14
	RCP -1/15	KOW -100/1500	GCP -1/15
	RCR -1/19	KOW2 -100/1900	GCR -1/19
PCH VAC/300	RCS -1/20	KOW3 -100/2000	GCS -1/20
	RCT -1/24	KOX -100/2400	GCT -1/24
	RCU -1/25	KOX1 -100/2500	GCU -1/25
PCI VAC/400	RCV -1/27	KOX2 -100/2700	GCV -1/27
	RCW -1/30	KOY -100/3000	GCW -1/30
PCJ VAC/500	RCW1 -1/35	KOZ -100/3500	GCW1 -1/35
PCK VAC/600	RCX -1/40	KOZ1 -100/4000	GCX -1/40
	RCY -1/50	KOZ2 -100/5000	GCY -1/50
	RCZ -1/60	KOZ3 -100/6000	GCZ -1/60
	RC0 -1/100	KOZ7 -100/10000	GC0 -1/100

DUAL SCALE

Bar & PSI	Kpa & PSI	Kg/cm2 & PSI
Code Range	Code Range	Code Range
XCA -1/0.6 Bar/PSI	YCA -100/60 kPa/PSI	WCA -76cmHg/0.6 Kg/cm2
XCB -1/1 Bar/PSI	YCB -100/100 kPa/PSI	WCB -76cmHg/1 Kg/cm2
XCC -1/1.5 Bar/PSI	YCC -100/150 kPa/PSI	WCC -76cmHg/1.5 Kg/cm2
XCD -1/2 Bar/PSI	YCD -100/200 kPa/PSI	WCD -76cmHg/2 Kg/cm2
XCE -1/2.5 Bar/PSI	YCE -100/250 kPa/PSI	WCE -76cmHg/2.5 Kg/cm2
XCF -1/3 Bar/PSI	YCF -100/300 kPa/PSI	WCF -76cmHg/3 Kg/cm2
XCG -1/4 Bar/PSI	YCG -100/400 kPa/PSI	WCG -76cmHg/4 Kg/cm2
XCH -1/5 Bar/PSI	YCH -100/500 kPa/PSI	WCH -76cmHg/5 Kg/cm2
XCJ -1/7 Bar/PSI	YCJ -100/700 kPa/PSI	WCJ -76cmHg/7 Kg/cm2
XCK -1/9 Bar/PSI	YCK -100/900 kPa/PSI	WCK -76cmHg/9 Kg/cm2
XCL -1/10 Bar/PSI	YCL -100/1000 kPa/PSI	WCL -76cmHg/10 Kg/cm2
XCM -1/11 Bar/PSI	YCM -100/1100 kPa/PSI	WCM -76cmHg/11 Kg/cm2
XCO -1/14 Bar/PSI	YCO -100/1400 kPa/PSI	WCO -76cmHg/14 Kg/cm2
XCP -1/15 Bar/PSI	YCP -100/1500 kPa/PSI	WCP -76cmHg/15 Kg/cm2
XCR -1/19 Bar/PSI	YCR -100/1900 kPa/PSI	WCR -76cmHg/19 Kg/cm2
XCS -1/20 Bar/PSI	YCS -100/2000 kPa/PSI	WCS -76cmHg/20 Kg/cm2
XCT -1/24 Bar/PSI	YCT -100/2400 kPa/PSI	WCT -76cmHg/24 Kg/cm2
XCU -1/25 Bar/PSI	YCU -100/2500 kPa/PSI	WCU -76cmHg/25 Kg/cm2
XCV -1/27 Bar/PSI	YCV -100/2700 kPa/PSI	WCV -76cmHg/27 Kg/cm2
XCW -1/30 Bar/PSI	YCW -100/3000 kPa/PSI	WCW -76cmHg/30 Kg/cm2
XCX -1/35 Bar/PSI	YCX -100/3500 kPa/PSI	WCX -76cmHg/35 Kg/cm2
XCX -1/40 Bar/PSI	YCY -100/4000 kPa/PSI	WCY -76cmHg/40 Kg/cm2
XCZ -1/50 Bar/PSI	YCY -100/5000 kPa/PSI	WCZ -76cmHg/50 Kg/cm2
XC1 -1/60 Bar/PSI	YC1 -100/6000 kPa/PSI	WC1 -76cmHg/60 Kg/cm2
XC2 -1/100 Bar/PSI	YC2 -100/10000 kPa/PSI	WC2 -76cmHg/100 Kg/cm2

Order Information

Example:

Series
P - 1F - 24

Model
L

Dial
15

Wetted
Parts
B

Process
Connection
M 4

Pressure Range
P 4 1

Option
H- Z G

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

15-1.5"
(40mm)
02-2"
(50mm)

B-Brass

M-Male
F-Female
4-1/4"NPT
8-1/8"NPT
E-G1/4
K-G1/8
B-R1/4
H-R1/8

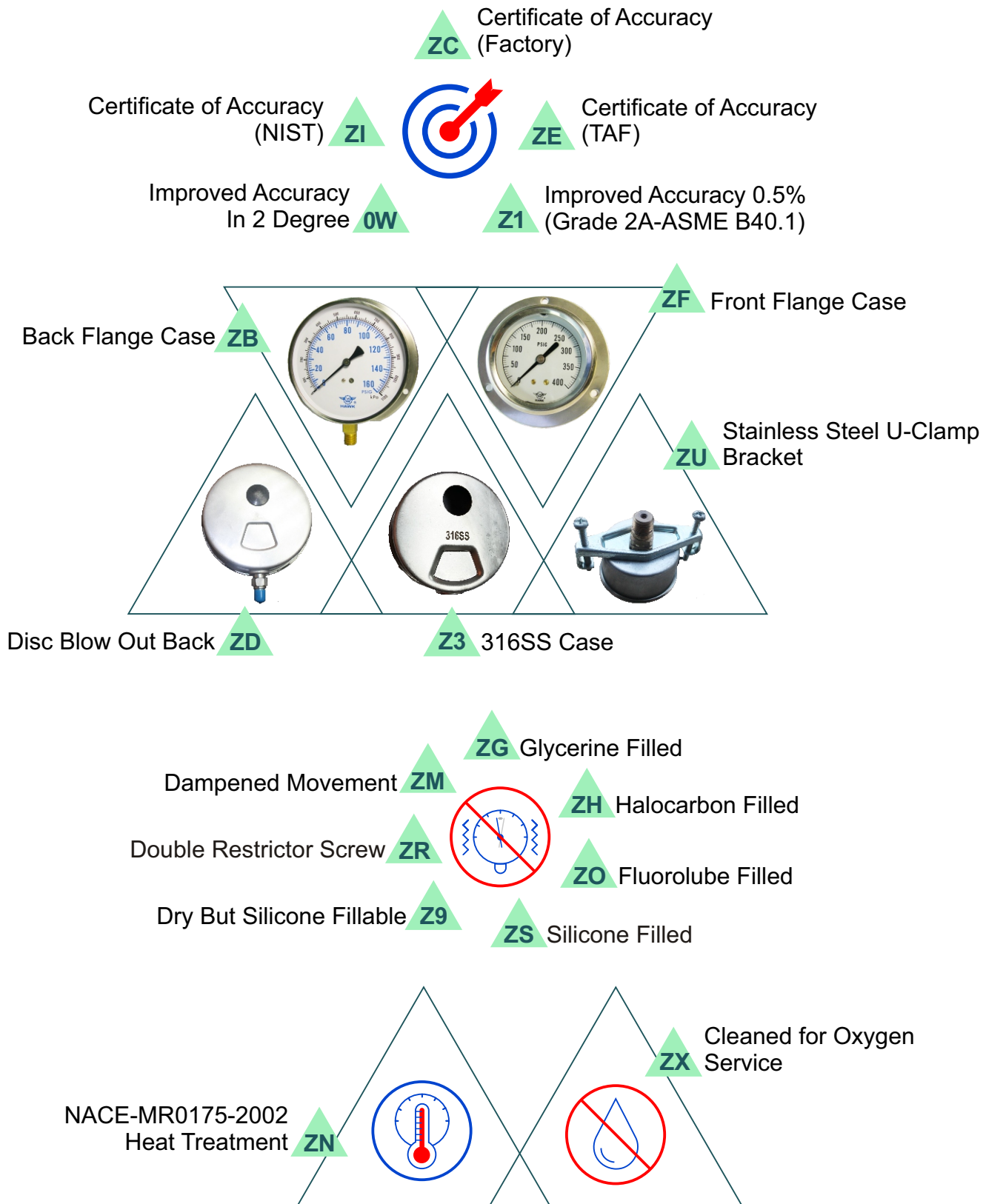
0L-Others

Please refer to the
range table and
write down the
code you need.
Vacuum
Compound
Pressure

ZT-Tempered Safety Glass Lens
ZG-Glycerine Filled
ZC-Certificate of Calibration
ZJ-Maximum Pointer
Z1-Improved Accuracy 1.0%
(Grade 1A-ASME B40.1)

Other options please
check the next page

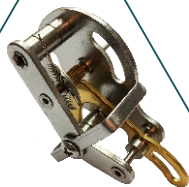
Option



Option

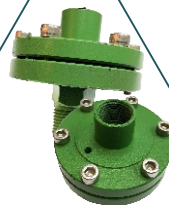
Movement with PTFE or
Titanium Coated Gear

ZQ



0J

FCFC Painting



0M

Stop Pin at 6 O'clock



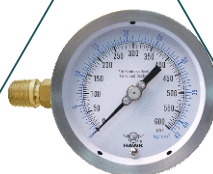
0F

12 O'clock Connection



9 O'clock
Connection

0E



0A

Red Pointer



0P

Stop Pin



0D

3 O'clock Connection



Polycarbonate Lens

ZP



Tempered Safety Glass
Lens

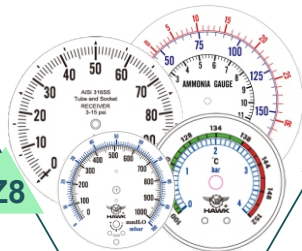
ZT

Laminated Safety Glass
Lens

ZL

Degree C Scale

0I



09

Receiver Scale 0...30 PSI

Altitude Scale

Z8

Z4

Receiver Scale 3...15 PSI

Retard Scale

Z7

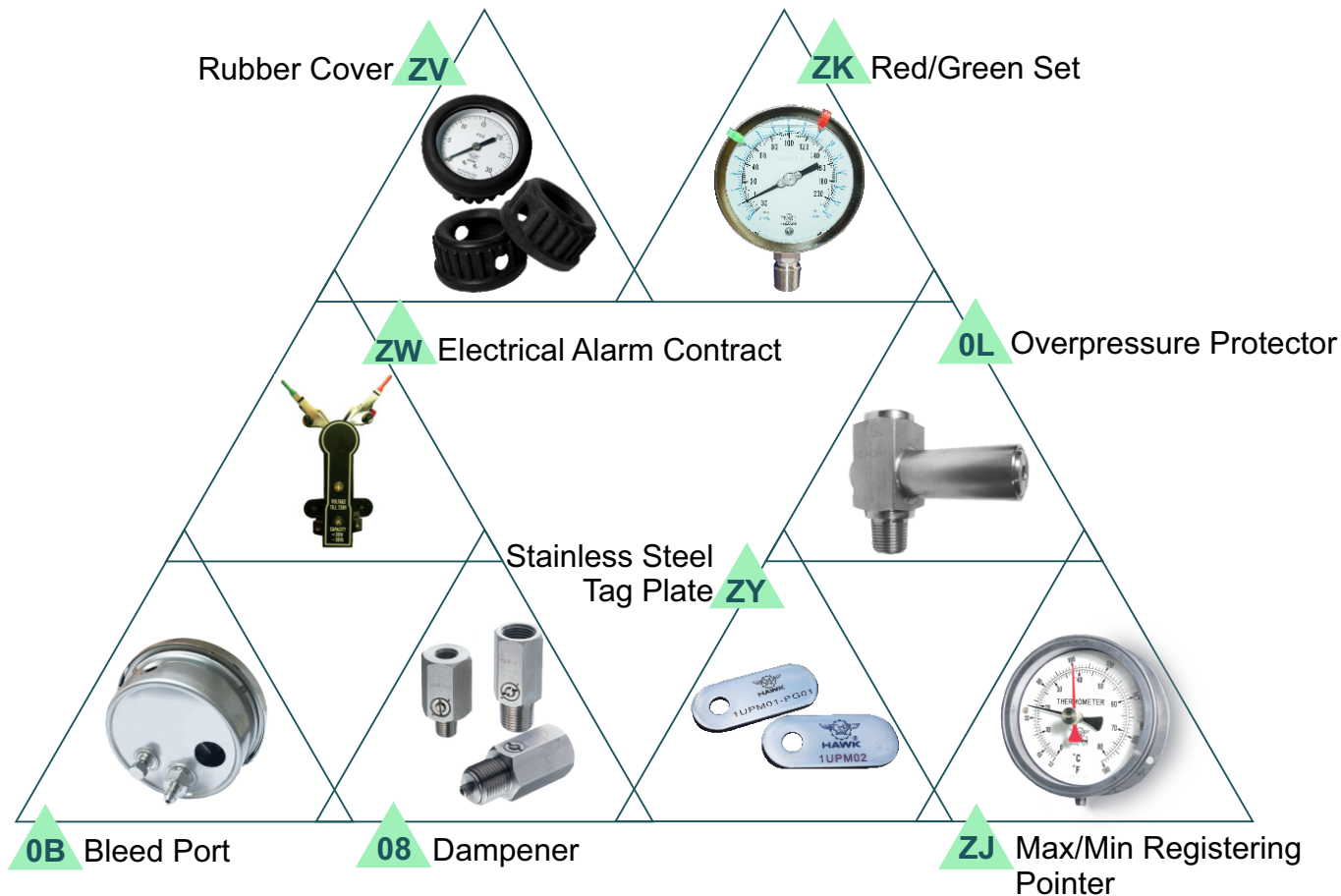
Z5

Ammoniated Scale

Z6

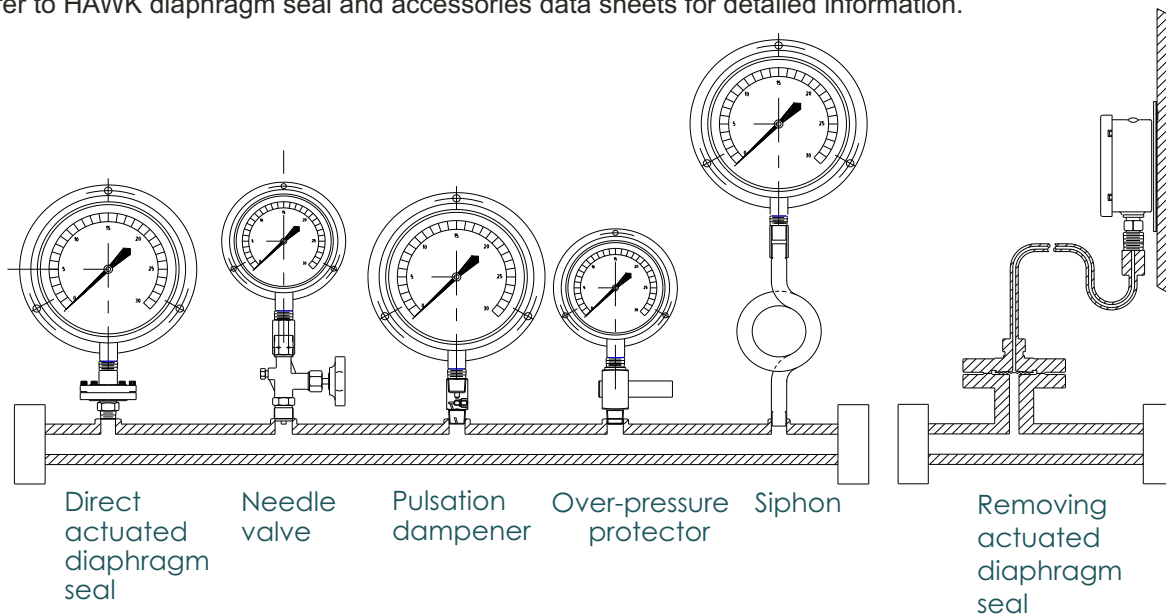
Refrigerant Scale

Option



Accessories

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



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 two 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.



Data Sheet No: MKDP1F24A2-E