



ALL SS PRESSURE GAUGE

BOURDON



SPECIAL FEATURES

- STAINLESS STEEL CASE & MEASURING SYSTEM
- SOCKET & CASE WELDED
- PROTECTION IP 55 / IP 65 / IP 66
- DRY OR LIQUID FILLED
- ACCURACY UPTO 0.5%
- STANDARD FOLLOWED IN GENERAL EN 837-1 /
- IS 3624 & ANSI / ASME B40.1 FOR NS 115 MM

APPLICATIONS

FOOD & BEVERAGE, PHARMACEUTICAL, CRYOGENICS, CHEMICAL & PETROCHEMICAL INDUSTRIES, CONVENTIONAL & NUCLEAR POWER PLANTS, PUMPS, HYDRO-CLEANING MACHINES, PRESSES, ENGINE COMPRESSORS, TURBINES, DIESEL ENGINES & REFRIGERATING PLANTS.

SPECIFICATIONS

STANDARD VERSION : 100mm, 115mm, 150mm

Accuracy	: ±1.0% of F.S.
Ambient temperature	: - 25°C to + 65°C
Process temperature	: Max 300°C
Operating pressure	: 75% of the Scale Value
Over pressure limit	: 30% for Pressure Ranges upto 600kg / cm ² 15% for Pressure Ranges above 600kg / cm ²

Case	: AISI 304 SS
Ring	: AISI 304 SS, Bayonet Type
Bourdon	: AISI 316L SS
Socket	: AISI 316L SS (Directly Welded to Case)
Movement	: AISI 304 SS
Joints	: Tig Argon Arc Welding

Protection	: IP 55
Dial	: Aluminium, black graduation on white background
Pointer	: Aluminium, black coloured micrometer zero adjustable
Window	: Sheet Glass
Blow off Disc	: Neoprene
Gasket	: Neoprene

GLYCERINE FILLED VERSION (OPTION PY)

Accuracy	: ±1.0% of F.S.
Ambient Temperature	: Maximum 65°C
Process Temperature	: +15°C / 65° C
Window	: Shatter Proof
Damping Liquids	: Glycerine 98% (others available as option)
Other Features	: Refer Specification of Standard Version

DRY BUT FILLABLE VERSION

Option Code	Fillable Dampening Liquid
FG	: Fillable Glycerine 98% (PY)
FS	: For Silicon Oil (QA)



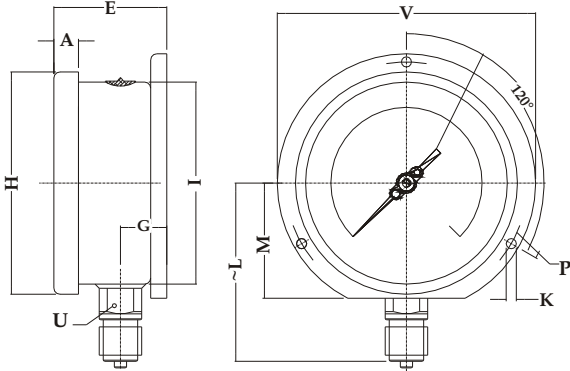
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DIMENSIONS - STANDARD VERSION

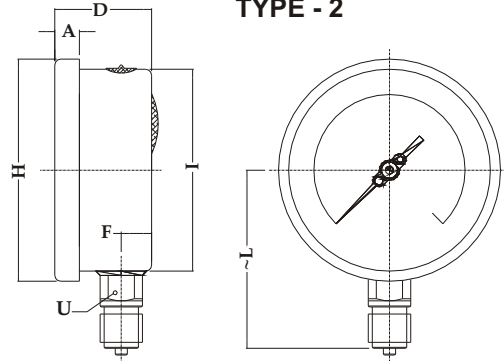


TYPE - 1



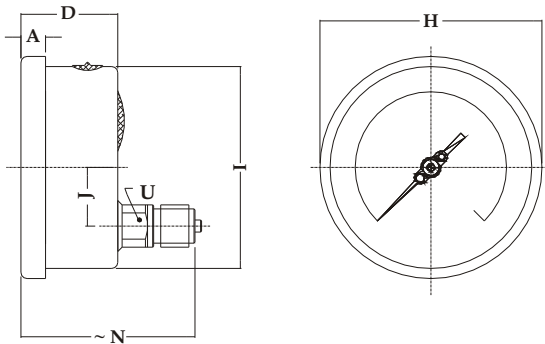
NS	A	E	G	H	I	K	~L	M	P	U	V	WT (kg)
100	12	55	20	110.5	100	6	100	56	120	22	128	0.70
115	11.5	55	23	131	118.5	5.6	95	67	137	22	160	0.78
150	16	54	23.5	164.5	149	7	115	82	174	22	191	1.15

TYPE - 2



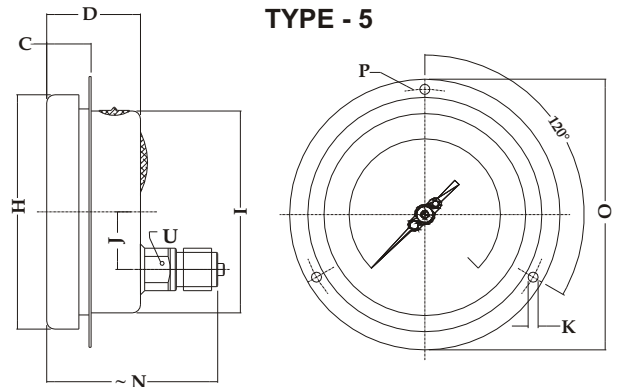
NS	A	D	F	H	I	~L	U	WT(kg)
100	12	47	16.5	110.5	100	90	22	0.64
115	11.5	49	16.5	131	118.5	95	22	0.70
150	16	49	16.5	164.5	149	108	22	1.05

TYPE - 3



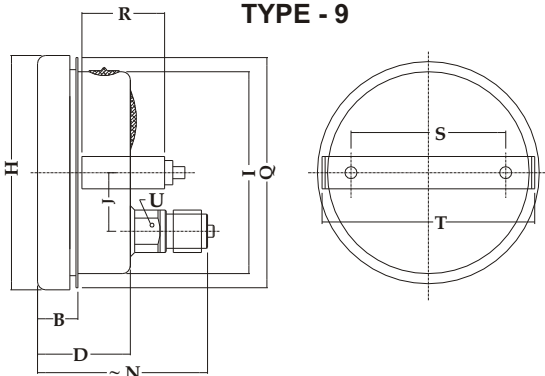
NS	A	D	H	I	J	N	U	WT.
100	12	47	110.5	100	21	87	22	0.66
115	11.5	47	131	118.5	30	87	22	0.72
150	16	49	164.5	149	46	92	22	1.02

TYPE - 5



NS	C	D	H	I	J	K	~N	O	P	U	WT(kg)
100	12	47	110.5	100	30	6	87	125	115	22	0.72
115	20	49	131	118.5	30	5.6	87	160	137	22	0.80
150	16	49	164.5	149	46	6.5	91	188	174	22	0.7

TYPE - 9



NS	B	D	H	I	J	N	Q	R	S	T	U	WT (kg)
100	21	47	110.5	100	30	87	115	40	70	105	22	0.71
115	20	49	131	118.5	30	87	132	43	80	130	22	0.78
150	16	49	164.5	149	48	92	165	43	105	158	22	1.12

(*WEIGHTS MENTIONED ARE FOR STANDARD VERSION.)
Notes : • Drawings are not to scale. • All Dimensions are in mm.



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RANGE TABLE

Note : Waaree offers National / International Scales like kPa,Mpa,bar,psi,kg/cm² & Dual Scale like kPa with psi, kPa with bar, bar with psi or Equivalent scales as per the requirement can be provided on request.

Following are the example tables for kg/cm² & psi scales



PRESSURE

SINGLE SCALE (kg/cm ² or bar)					
RANGE	RANGE	RANGE	RANGE	RANGE	RANGE
0/0.6	0/4	0/25	0/160	0/1000	
0/1	0/6	0/40	0/250	0/1600	
0/1.6	0/10	0/60	0/400		
0/2.5	0/16	0/100	0/600		
DUAL SCALE (PSI with kg/cm ²) or PSI with bar					
RANGE (PSI)	RANGE (kg/cm ²)	RANGE (PSI)	RANGE (kg/cm ²)	RANGE (PSI)	RANGE (kg/cm ²)
0/15	0/1	0/400	0/28	0/4000	0/280
0/30	0/2	0/500	0/35	0/5000	0/350
0/60	0/4	0/600	0/42	0/6000	0/420
0/100	0/7	0/1000	0/70	0/10000	0/700
0/150	0/10	0/1500	0/100	0/15000	0/1000
0/200	0/14	0/2000	0/140	0/20000	0/1400
0/300	0/20	0/3000	0/200		

VACUUM & COMPOUND

DUAL SCALE (inHg with PSI & mmHg with kg/cm ²)					
Range	Range	Range	Range	Range	Range
inHg with PSI	mmHg with kg/cm ²	inHg with PSI	mmHg with kg/cm ²	inHg with PSI	mmHg with kg/cm ²
- 30/0	- 760/0	- 30/60	- 760/4	- 30/200	- 760/14
- 30/15	- 760/1	- 30/100	- 760/7	- 30/300	- 760/21
- 30/30	- 760/2	- 30/150	- 760/10		
SINGLE SCALE (kg/cm ²)					
RANGE	RANGE	RANGE	RANGE		
- 1/0	- 1/1.5	- 1/5	- 1/15		
- 1/0.6	- 1/3	- 1/9	- 1/24		

RECEIVER

LINEAR SCALE	SQUARE ROOT SCALE
(0 - 100% Internal Scale)	(0 - 10 Sq - Root Internal Scale)
External Scale	External Scale
0.2 - 1 kg/cm ² or 3 - 15 psi	0.2 - 1 kg/cm ² or 3 - 15 psi
(0-100% linear scale)	(0.2 - 1 kg/cm ²)

FREON (WITH TEMPERATURE SCALE)

DUAL SCALE (Inch Hg to PSI)			AMMONIA (WITH TEMPERATURE SCALE)	
RANGE	RANGE	RANGE	RANGE (kg/cm ²)	RANGE (psi)
-30/150	-30/500	0-300	-1 to 12.5	-30 - 150
-30/300		0-500	-1 to 16	-30 - 300
			-1 to 25	0 - 300

ACCESSORIES*

EA ANTI VIBRATION SPRING	ED GAUGE SAVER	EG SNUBBER
EB COOLING TOWER	EE MANIFOLD	EH SYPHON
EC GAUGE COCK	EF NEEDLE VALVE	

DAMPENING LIQUIDS : CODE

DAMPENING LIQUIDS	OPTION CODE	AMBIENT TEMPERATURE LIMIT	PROCESS TEMPERATURE LIMIT
Glycerine 98%	PY	+ 15 / + 65°C	+ 20 / + 65°C
Fluoroube	PX	- 45 / + 65°C	- 45 / + 70°C
Mineral Oil	PZ	- 60 / + 65°C	- 40 / + 140°C
Silicon Oil	QA	- 40 / + 65°C	- 40 / + 170°C

(*REFER DATASHEETS FOR ORDERING & TECHNICAL INFORMATION)
Note : For Diaphragm Seals refer Datasheets DX series



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BASIC MODEL

AL

NOMINAL SIZE

F 100 mm G 115 mm H 150 mm

G

TYPE OF MOUNTING

- 1 WALL/ SURFACE/ PROJECTION MOUNTING WITH BOTTOM ENTRY
- 2 DIRECT BOTTOM ENTRY
- 3 DIRECT LOWER BACK ENTRY
- 5 FLUSH PANEL LOWER BACK ENTRY WITH FRONT FLANGE
- 9 LOWER BACK ENTRY WITH MOUNTING BRACKET

2

(OTHER TYPES OF MOUNTING CAN BE PROVIDED ON REQUEST)

GAUGE CONNECTION

2BM 1/4" BSP (M)	3NM 3/8" NPT (M)	4TM 1/2" BSPT (M)
3BM 3/8" BSP (M) STANDARD	4NM 1/2" NPT (M) STANDARD	2MM M 12 X 1 (M)
4BM 1/2" BSP (M) STANDARD	2TM 1/4" BSPT (M)	3MM M 16 X 1.5 (M)
2NM 1/4" NPT (M)	3TM 3/8" BSPT (M)	4MM M 20 X 1.5 (M)

4NM

ADAPTORS CAN BE PROVIDED FOR NON STD. FLARRED & FEMALE CONNECTIONS

RANGE

REFER TABLES

0-10
kg/cm²

OPTIONS

OA ACCURACY 0.5% OF F.S. (EXCEPT WITH OPTION DAMPENING LIQUID, ELECTRIC CONTACT, MAXIMUM READING POINTER)	SX SS TAG PLATE
TI MONEL BOURDON & SOCKET (MONEL VERSION)	SW DIAL TAG MARKING
PS AISI 316 SS CASE & RING	TB HELIUM LEAK TEST
PW FIVE POINT FACTORY CALIBRATION CERTIFICATE	TF TESTED TO NACE STANDARDS
FS FILLABLE LIQUID SILICON OIL*	RH CUSTOM DESIGNED DIAL
FG FILLABLE LIQUID GLYCERINE	PZ DAMPENING LIQUID MINERAL LIQUID FILLED
RQ ENCLOSURE PROTECTION IP 65	PX DAMPENING LIQUID FLOUROLUBE FILLED
RR ENCLOSURE PROTECTION IP 66	PY DAMPENING LIQUID GLYCERINE FILLED
RW PLEXI GLASS	QA DAMPENING LIQUID SILICON OIL FILLED*
RX SHATTERPROOF GLASS	QB DAMPENING SCREW IN AISI 316 SS
RZ TOUGHENED GLASS	SA INTERNAL OVERPRESSURE STOP
SF MOVEMENT WITH DAMPENING JELLY	SB INTERNAL VACUUM STOP
SG OXYGEN SERVICE (WITHOUT OPTION DAMPENING LIQUID, ELECTRIC CONTACT)	ZB RECEIVER RANGE
SI KNIFE EDGE POINTER	ZC FREON RANGE (WITH TEMPERATURE SCALE)
SJ MAXIMUM READING POINTER (WITHOUT OPTIONS : ELECTRIC CONTACTS & FILLED VERSION GAUGES)	ZD AMMONIA RANGE (WITH TEMPERATURE SCALE)

QA

ELECTRIC CONTACTS

(WITHOUT IP 55, NOT AVAILABLE IN NOMINAL SIZE G, DAMPENING LIQUID OPTIONS ARE NOT AVAILABLE)

A) MAGNETIC SNAP ACTION TYPE (230 Vac, 1Amp)

RJ Single; NORMALLY CLOSED
RK Double; NORMALLY CLOSED + NORMALLY OPEN
RL Single; NORMALLY OPEN
RM Double; NORMALLY OPEN + NORMALLY CLOSED
RN Double; NORMALLY CLOSED
RO Double; NORMALLY OPEN
RP BOOSTER FOR CURRENT UPTO 5Amp

B) INDUCTIVE TYPE (220 Vac, 4Amp)

YW Single; NORMALLY OPEN
YV Single; NORMALLY CLOSED
YX Double; NORMALLY CLOSED + NORMALLY OPEN
YY Double; NORMALLY OPEN
YZ Double; NORMALLY CLOSED
ZA Double; NORMALLY OPEN + NORMALLY CLOSED

* GASKET, BOD & PLUG OF VITON

Note : Due to continuous changes the specification may vary from time to time