



SPECIAL FEATURES

- C E APPROVED MICRO SWITCH
- STAINLESS STEEL CASE & MEASURING SYSTEM
- LONG OPERATING LIFE
- HIGH REPEATABILITY
- STANDARD FOLLOWED IN GENERAL EN 837-1

APPLICATIONS

TO CONTROL HYDRO PNEUMATIC EQUIPMENTS IN FOOD, PHARMACEUTICAL, OIL, PETROCHEMICAL, REFRIGERATION, HVAC AND COMPRESSOR INDUSTRIES. SUITABLE FOR CORROSIVE ENVIRONMENTS & GASEOUS OR LIQUID MEDIA THAT WILL NOT OBSTRUCT THE PRESSURE SYSTEM.



SPECIFICATIONS

STANDARD VERSION : 50 mm, 63 mm, 100 mm & 150 mm

Accuracy*	: ±1.0 % of F. S. FOR NS 100 & 150 mm : ±1.6 % of F. S. FOR NS 63 mm : ±2.0 % of F. S. FOR NS 50 mm
Ambient temperature	: - 20°C to + 65°C
Process temperature	: Max. 150°C
Electric Wiring	: Transparent DIN Connector with LED indicator
Electrical specification	: 1 SPDT Micro switch (250 V AC / 15 Amp, 220 V DC / 0.2 Amp)
Contact setting	: Between 10% to 75 % of Scale Value
Set Point	: User to specify while ordering
Switching Differential	: Fixed, between 2% to 4% of Scale Value
Operating pressure range	: 75% of Scale Value
Over pressure limit	: Not Suitable

* The accuracy for Micro Switch shall be ±4.0 % of F. S.

F 2 SPDT, Silver & Gold contact micro switch on request.

Case & Bezel	: 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 65
Dial	: Aluminium, black graduation on white background
Pointer	: Aluminium, black coloured Micrometer zero adjustable
Window	: Sheet Glass
Blow off Disc	: Neoprene
Gasket & Filling Plug	: Neoprene

Temperature effect:

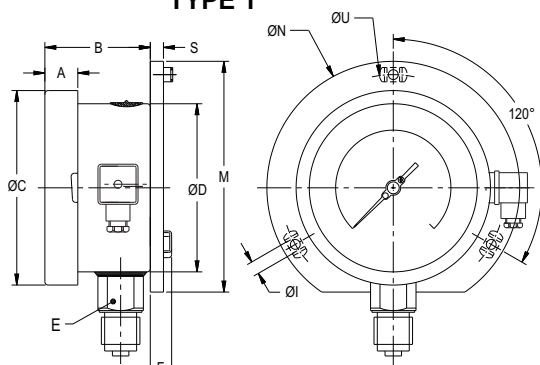
The variation of indication caused by effects of temperature is to be calculated by below formula; which is to be added in the specified accuracy while measurement :-

Formula : $\pm 0.04 \times (t_2 - t_1) \% \text{ of F. S.}$

where t_1 = reference temperature (+20°C) and t_2 = ambient temperature in °C.

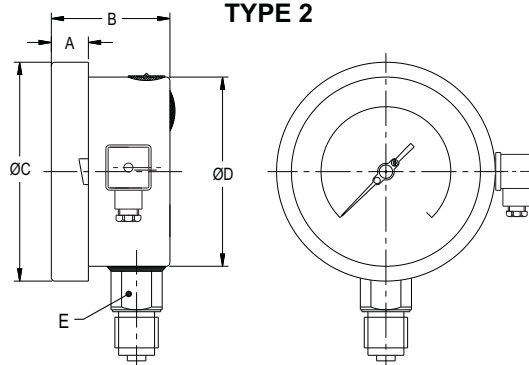
DIMENSIONS - STANDARD VERSION

TYPE 1



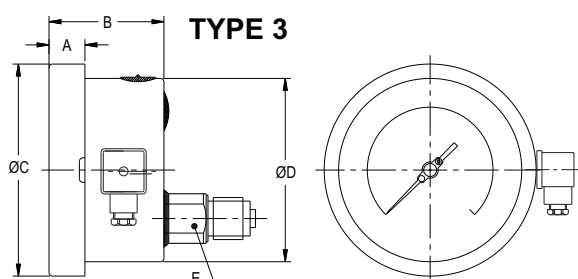
NS	A	B	ØC	ØD	E	M	S	F	ØI	ØN	ØU	Weight in gram (With Box)
100	12.5	45	111	100	22	128	6	14.5	6	134	118	715.0
150	15	46.5	161	149	22	174.5	6	14.5	6	186	168	1240

TYPE 2



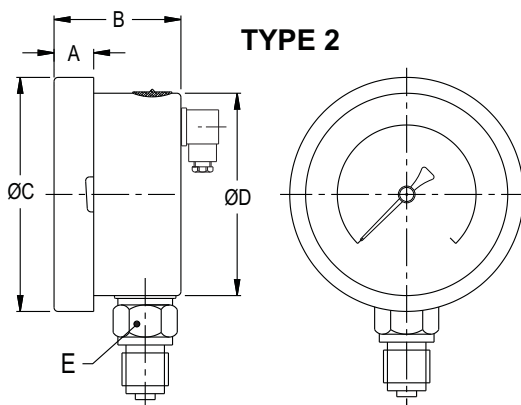
NS	A	B	ØC	ØD	E	Weight in gram (With Box)
100	12.5	47	111	100	22	630.0
150	15	49	161	149	22	1060

TYPE 3



NS	A	B	ØC	ØD	E	Weight in gram (With Box)
100	12.5	47	111	100	22	625.0
150	15	49	161	149	22	998.0

TYPE 2



NS	A	B	ØC	ØD	E	Weight in gram (With Box)
50	10	32.5	58.5	51	A/F 14	185.0
63	10	31	69.5	62.5	A/F 14	215.0

WIRING DIAGRAMS

SPDT SWITCH

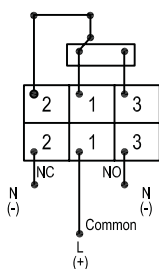
Specifications for Snap Action Type Switch

Contact Rating :15A / 250 V AC

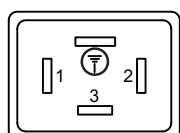
:0.2A / 220 V DC

1 SPDT switch

Terminal Strip Connection Diagram



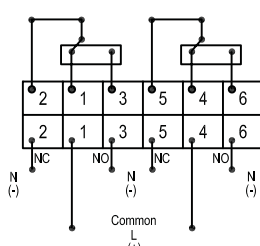
DIN PLUG



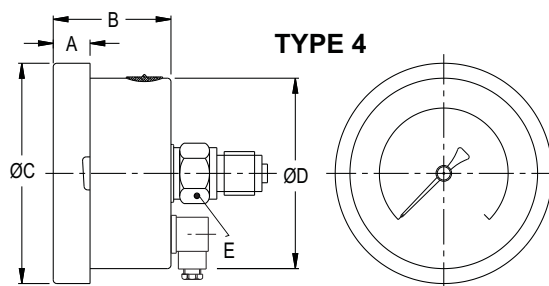
- 1 Common
- 2 NC
- 3 NO

2 SPDT switch

Terminal Strip Connection Diagram



TYPE 4



NS	A	B	ØC	ØD	E	Weight in gram (With Box)
50	10	32.5	58.5	51	A/F 14	200.0
63	10	32	69.5	62.5	A/F 14	220.0

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

SINGLE SCALE (kg/cm ² or bar)					
0/1	0/4	0/16	0/60	0/250	
0/1.6	0/6	0/25	0/100	0/400	
0/2.5	0/10	0/40	0/160	0/600	
DUAL SCALE (psi with kg/cm ²)					
psi	kg/cm ²	psi	kg/cm ²	psi	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	0/40	0/6000	0/420
0/100	0/7	0/1000	0/70	0/10000	0/700
0/150	0/10	0/1500	0/100		
0/220	0/16	0/2200	0/160		
0/300	0/20	0/3000	0/200		

ACCESSORIES (Refer Datasheet for complete specifications)

EB COOLING TOWER	ED OVER LOAD PROTECTOR (GAUGE SAVER)**	EG SNUBBER
EC GAUGE COCK	* NEEDLE VALVE	EH SIPHON

* Refer catalogue for Valves & Manifolds.

** For Pressure Ranges.

HOW TO ORDER

BASIC MODEL

CODE

NOMINAL SIZE

C	D	F	H
50 mm	63 mm	100 mm	150 mm

TYPE OF MOUNTING

1	WALL / SURFACE / PROJECTION MOUNTING WITH BOTTOM ENTRY*	×	×	✓	✓
2	DIRECT BOTTOM ENTRY	✓	✓	✓	✓
3	DIRECT LOWER BACK ENTRY	×	×	✓	✓
4	DIRECT CENTER BACK ENTRY	✓	✓	×	×

CONNECTION

2BM	1/4" BSP(M) (Standard)*
2NM	1/4" NPT(M) (Standard)*

Note : Connections like Metric/ PT/ PF/ Flaired/ UNF/ G/ R etc. can be provided on request.

RANGE

REFER RANGE TABLE

OPTIONAL EXTRAS

TI	MONEL BOURDON & SOCKET (MONEL VERSION)**	SX	SS TAG PLATE
FL	INTEGRAL DAMPENING SCREW (MONEL)**	SW	DIAL TAG MARKING
RW	PLEXI GLASS	TB	HELIUM LEAK TEST
RX	SHATTERPROOF/SAFETY GLASS	PW	FIVE POINT CALIBRATION CERTIFICATE
RZ	TOUGHENED GLASS	RH	CUSTOM DESIGNED DIAL
SF	MOVEMENT WITH DAMPENING JELLY	GH	MATERIAL TEST CERTIFICATES*
QB	INTEGRAL DAMPENING SCREW (AISI 316 SS)		

Example

BO

X

X

XXX

0/10
kg/cm²

XX

*MATERIAL TEST CERTIFICATES WILL BE PROVIDED FOR WETTED PARTS ONLY WITH CHEMICAL COMPOSITION TESTING. FOR OTHERS, PLEASE CONSULT FACTORY.

**INTEGRAL DAMPENING SCREW WILL BE IN MONEL IF ORDERED. REFER OPTION FL.

Ordering Example: BO - X - X - XXX - 0/10 kg/cm² - XX

Note : Specifications and dimensions given in this product catalogue represents the state of engineering at the time of printing.

Modifications may take place and materials specified may be replaced by others without prior notice.