Baumer
Passion for Sensors

BA

Differential Pressure Gauge
Single diaphragm type

GOST - R

GOST

Special Features

- CE & Atex approved electrical contacts
- Case & measuring system in SS
- Dry or liquid filled
- Standard followed in general EN 837 - 3

Application

- Suitable for clean air
- Compatible gases
- Fertilizer
- Petrochemicals
- Pharmaceutical
- Power
- Cement
- Sugar
- Food & beverages
- Pulp
- Paper
- Allied process industries

Specifications

Standard Version : 100 mm & 150 mm

Accuracy	:	±2.5% of F. S. (For ascending order)
Ambient temperature	:	- 25°C to + 65°C
Process temperature	:	Max. 100°C
Static pressure	:	10 kg/cm^2 up to ranges 600 mmWC
	:	40 kg/cm^2 for ranges 1000 mmWC to 2500 mmWC
	:	60 kg/cm^2 for ranges 4000 mmWC & above
Over pressure limit	:	130% of Max. Scale Value

☞ Static Pressure up to 100 kg/cm^2 on request.

Case & bezel	:	AISI 304 SS (Bayonet Type)
Diaphragm	:	Spring Steel with PTFE protection (AISI 316L SS on request)
Nuts & bolts	:	AISI 304 SS
Process connection	:	1/4" NPT (F) x 2 Nos.
Seal chamber	:	AISI 304 SS
Movement	:	AISI 304 SS

Protection	:	IP 65
Dial	:	Aluminum, black graduation on white background
Pointer	:	Aluminum, black coloured, Micrometer Zero Adjustable
Window	:	Shatter proof / Safety Glass
Case Gasket	:	Neoprene
Scale Amplitude	:	180 to 270 (Depends on Range)

Glycerine filled version (option PY)

Accuracy	:	±4% of F. S. (For ascending order)
Ambient Temperature	:	Maximum 65°C
Process Temperature	:	Maximum 65°C
Window	:	Plexi Glass
Dampening Liquids	:	Glycerin 99.7%
Other Features	:	Refer Specification of Standard Version

Electrical contacts - dry version

Accuracy	:	±3% of F. S. (For ascending order)
Ambient Temperature	:	Maximum 65°C
Process Temperature	:	Maximum 65° C
Window	:	Polycarbonate Dome
Dampening Liquids	:	Dielectric Oil (Optional)
Electrical Contacts*	:	Refer How to Order
Other Features	:	Refer Specification of Standard Version

* Please specify contact set points while ordering.

Temperature effect:

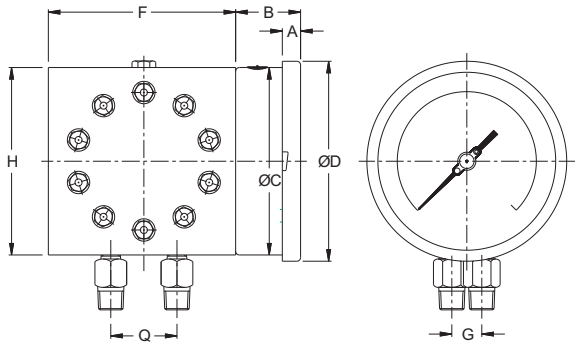
The variation of indication caused by effects of temperature is to be calculated by below formula; which is to be added in the specified accuracy while measurement :- Formula : ± 0.08 x (t2 - t1) % of F. S. where t1 = reference temperature (+20°C) and t2 = ambient temperature in °C.
Note : The addition of mechanical electric contacts affects the accuracy of instruments such that 1% becomes 1.5%, 1.6% becomes 2.4% etc. (Add the 50% of accuracy; If the contact is of the magnetically assisted type, this value can't be added within the ±5% of setting point.)

BA

Differential Pressure Gauge
Single diaphragm type

Dimensions - standard version

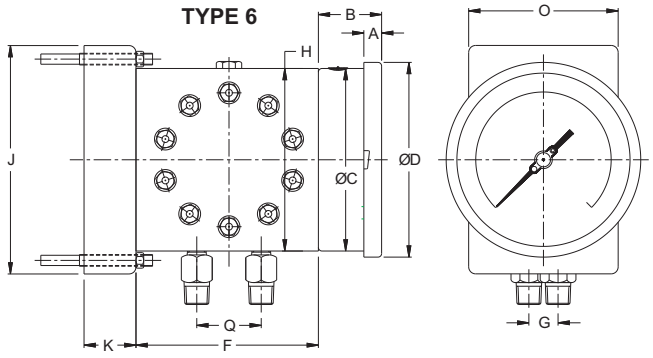
TYPE 2



LOW PRESSURE CHAMBER

NS	A	B	ØC	ØD	F	H	G	Q	Weight in gram (With Box)
100	12.5	47	100	111	150	150	24	54	8100.0
150	15	49	149	161	150	150	24	54	8260.0

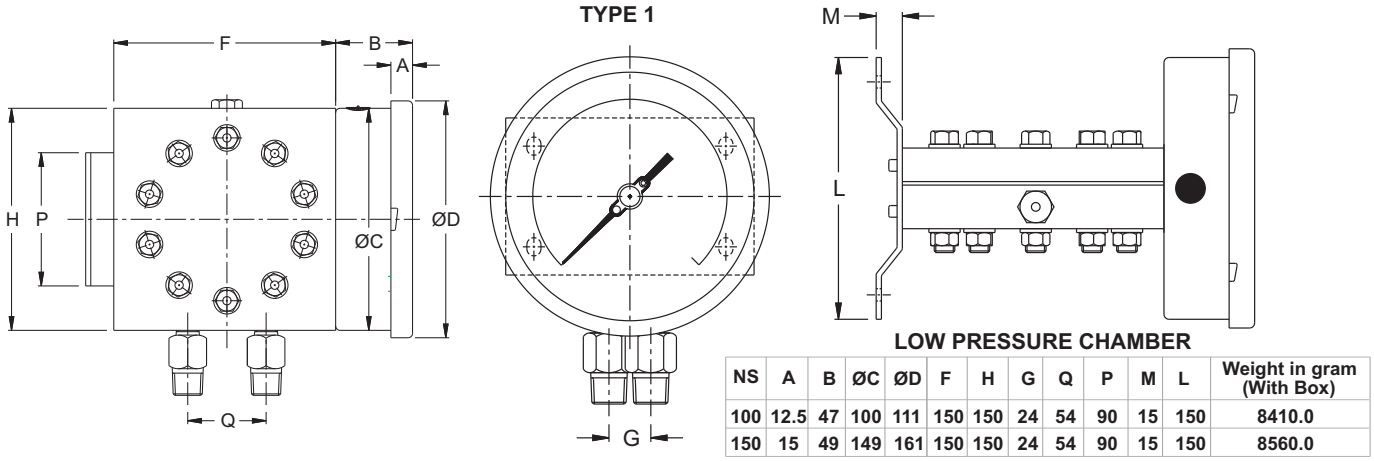
TYPE 6



LOW PRESSURE CHAMBER

NS	A	B	ØC	ØD	F	H	G	Q	J	K	O	Weight in gram (With Box)
100	12.5	47	100	111	150	150	24	54	161	39	101	9000.0
150	15	49	149	161	150	150	24	54	161	39	101	9250.0

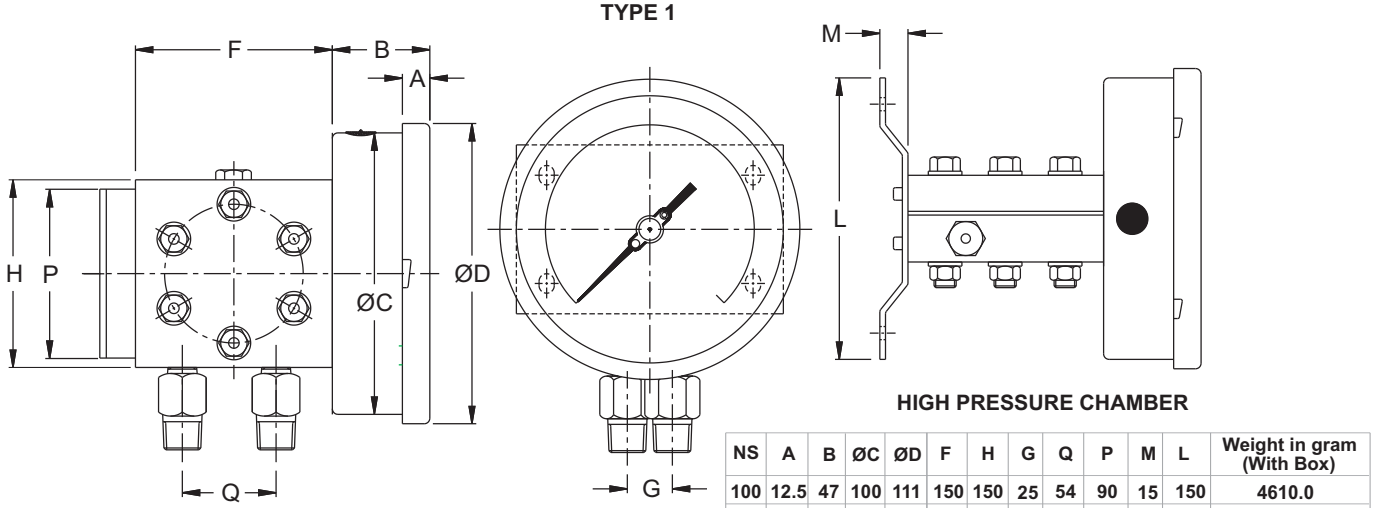
TYPE 1



LOW PRESSURE CHAMBER

NS	A	B	ØC	ØD	F	H	G	Q	P	M	L	Weight in gram (With Box)
100	12.5	47	100	111	150	150	24	54	90	15	150	8410.0
150	15	49	149	161	150	150	24	54	90	15	150	8560.0

TYPE 1



HIGH PRESSURE CHAMBER

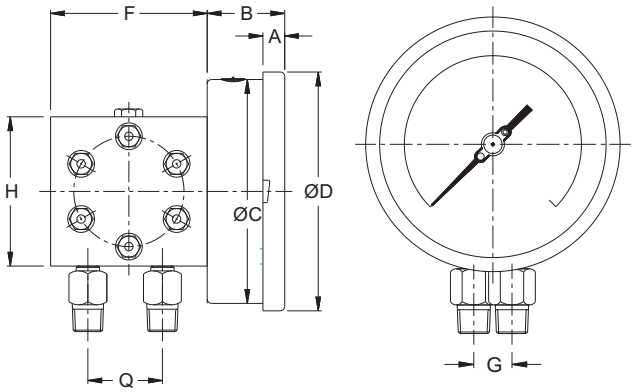
NS	A	B	ØC	ØD	F	H	G	Q	P	M	L	Weight in gram (With Box)
100	12.5	47	100	111	150	150	25	54	90	15	150	4610.0
150	15	49	149	161	150	150	25	54	90	15	150	4760.0

BA

Differential Pressure Gauge
Single diaphragm type

Dimensions - standard version

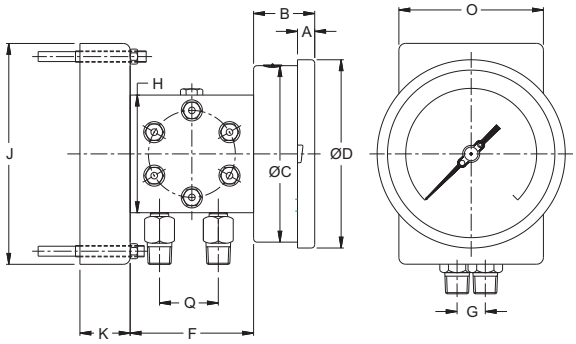
TYPE 2



HIGH PRESSURE CHAMBER

NS	A	B	ØC	ØD	F	H	G	Q	Weight in gram (With Box)
100	12.5	47	100	111	105	100	25	54	4250.0
150	15	49	149	161	105	100	25	54	4400.0

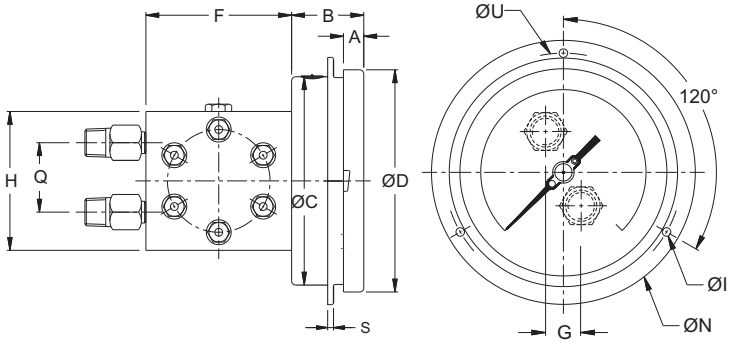
TYPE 6



HIGH PRESSURE CHAMBER

NS	A	B	ØC	ØD	F	H	G	Q	J	K	O	Weight in gram (With Box)
100	12.5	47	100	111	150	150	24	54	161	39	101	5000.0
150	15	49	149	161	150	150	24	54	161	39	101	5250.0

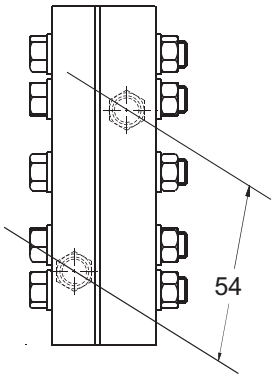
TYPE 12



HIGH PRESSURE CHAMBER

NS	A	B	ØC	ØD	F	H	G	Q	Weight in gram (With Box)
100	12.5	47	100	111	105	100	25	54	4250.0
150	15	49	149	161	105	100	25	54	4400.0

DETAILS - CENTER DISTANCE



Notes :
- Drawings are not to scale.
- All Dimensions are in mm.
- NS = Nominal Size.

Range Table

Note : We offer Pressure, Vacuum and Compound ranges in Scales like kPa, MPa, bar, psi, kg/cm^2 & Dual Scale like kPa with psi, kPa with bar, bar with psi or scales as per the requirement can be provided on request. Following are the example tables for kg/cm^2 & psi scales

Pressure range (Single Scale)

Low Pressure			High Pressure		
mmWC	mmWC	mmWC	kg/cm²	kg/cm²	kg/cm²
0/250	0/1000	0/4000	0/1	0/2.5	0/10
0/400	0/1600	0/6000	0/1.6	0/4	
0/600	0/2500		0/2	0/6	

Note : Other Scale are available on customer request.

Accessories (refer datasheet for complete specifications)

* Manifolds

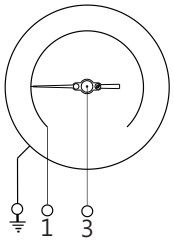
* Refer catalogue for Valves & Manifolds

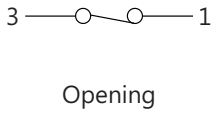
Range Table

Wiring diagrams for electric contacts

Single Contact

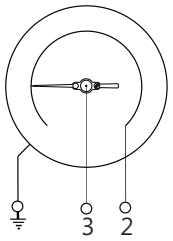
1 NO

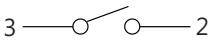




Opening

1 NC

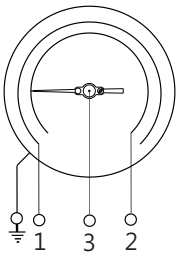


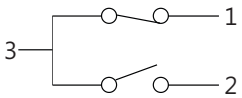


Closing

Double contact

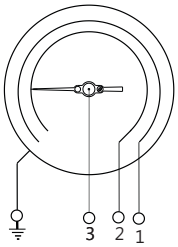
1 NO + 1 NC

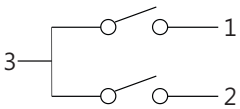




Opening 1
Closing 2

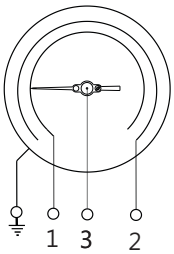
1 NC + 1 NC

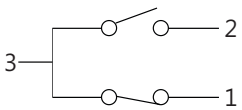




Closing 1
Closing 2

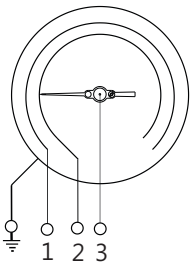
1 NC + 1 NO

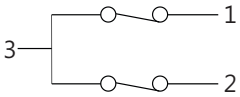




Closing 2
Opening 1

1 NO + 1 NO

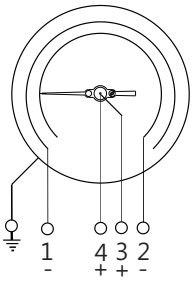


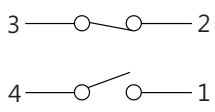


Opening 1
Opening 2

Independent double contact

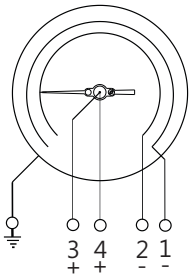
1 NO+ 1 NC

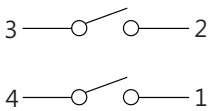




Opening 1
Closing 2

1 NC + 1 NC





Closing 1
Closing 2

Baumer
Passion for Sensors

BA

Differential Pressure Gauge
Single diaphragm type

How To Order				Example
Basic Model				BA
Code				
Nominal Size	**F**	**H**		X
	100 mm	150 mm		
Type of Mounting				
1 Wall / surface / projection mounting with bottom entry				X OR XX
2 Direct bottom entry				
6 2" pipe / yoke mounting bottom entry (mounting bracket will be provided of steel epoxy painted.)				
12 Center back entry with front flange (suitable for high pressure chamber only)				
Gauge Connection (through adaptors)				
4BM 1/4" NPT (M) x ½" BSP (M) X 2 Nos.	**4NM** 1/4" NPT (M) x ½" NPT (M) X 2 Nos.	**2NF** 1/4" NPT (F) (Standard)*		XXX
* These female connections are directly provided on chamber. Note : Connections like Metric/ PT/ PF/ Flaired/ UNF/ G/ R etc can be provided on request.				
Diaphragm				
CV Spring Steel with PTFE protection (Standard)	**UM** MONEL	**UJ** AISI 316L SS		XX
Chamber				
CY AISI 304 SS (Standard)	**RB** AISI 316 SS	**RD** MONEL		XX
Range				
Refer range table				0/2 kg/cm^2
Options				
PS AISI 316 SS case & bezel		**RZ** Toughened glass		XX
PW Five point calibration certificate		**RH** Custom designed dial		
PY Dampening liquid glycerine filled		**RW** Plexi glass		
QA Dampening liquid silicon oil**		**SW** Dial tag marking		
GH Material test certificates#		**SX** SS tag plate		
SJ Maximum reading pointer with plexi glass (for dry version)*		**TF** Conformity as per NACE standard		
JU 2" pipe/yoke mounting bracket & 'U' clamp (AISI 304 SS)		**ZZ** Dielectric oil filled**		
FN 2" pipe/yoke mounting bracket & 'U' clamp (AISI 316 SS)				
* For ranges 2.5 kg/cm² and above. ** Gasket & plug of Viton. # Material test certificates will be provided for wetted parts only with chemical composition testing. For others, Please consult factory				
Electric Contacts (CE & Atex approved)				
(For dry version, with ingress protection up to IP 55 & poly carbonate dome as a window)				
A) Single insulated magnetic snap action type (230 V AC, 1 Amp.) (48 V DC, 0.5 Amp.) (available for 1 kg/cm² & above)		**B) Inductive type (220 V AC, 0.4 Amp.) (available for 1000 mmWC & above)**		XX
RJ Single; normally closed (1 NC)		**YW** Single; normally open (1 NO)		
RK Double; normally closed + normally open (1 NC +1 NO)		**YV** Single; normally closed (1 NC)		
RL Single; normally open (1 NO)		**YX** Double; normally closed + normally open (1 NC +1 NO)		
RM Double; normally open + normally closed (1 NO + 1 NC)		**YY** Double; normally open (both NO)		
RN Double; normally closed (both NC)		**YZ** Double; normally closed (both NC)		
RO Double; normally open (both NO)		**ZA** Double; normally open + normally closed (1 NO + 1 NC)		
RU Booster with relay for current upto 5 Amp.				
RA SPDT				
RC DPDT				

Ordering Example: BA . X . X OR XX . XXX . XX-XX . 0/2 kg/cm^2 . XX . XX

For other optional items, please contact factory for delivery and minimum quantity of order.

For diaphragm seals, valves & manifolds, refer individual data sheets.

(The capillary length shall be maximum up to 3 meters & range shall be above 1 kg/cm².)

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.