

DGC 300

Diaphragm differential pressure gauge (and/or switch)
for static pressure up to 100 bar

Available pressure ranges:
0...0.075 to 0...4 bar differential pressure
0...1 to 0...60 psi



Specification:

Accuracy:	±2% FS (calibrated at ascending pressure)
Migration:	no migration (zero leakage from high to low port)
Ranges:	0...0.75 to 0...4 bar or equivalent ranges in other units
First marking on the scale:	15% FS
Sensing element:	diaphragm
Wetted parts:	diaphragm, body material, stainless steel AISI 302 spring and ceramic magnet
Case material:	stainless steel AISI 304, available with case diameters 2", 2.5", 3.5", 4", 4.5" and 6" or engineering polymer, available with case diameters 2.5", 4.5" and 6" or bayonet style case with case diameter 4"
Mounting:	direct or with front flange or with 2" pipe and surface mounting
Max. working pressure:	100 bar (1500 psi)
Max. process temperature:	0...80°C (32...175°F)
Body material:	aluminium, brass, or stainless steel AISI 316 or monel
Diaphragm:	Buna-N or Viton or EPDM
Window:	glass or toughened glass or acrylic and safety glass
Connection:	1/4" NPT F or 1/4" BSP F or through adaptor others
Porting:	in-line or rear or bottom or bottom and vent or in-line and vent or in-line and bottom or in-line and back or bottom vent and inline
Over range protection:	up to the max. working pressure from high side
Protection (gauge and switch):	IP 65 (NEMA-4)

The instrument can be calibrated with square root scale for flow measurement.

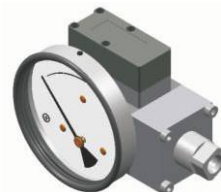
Available versions:



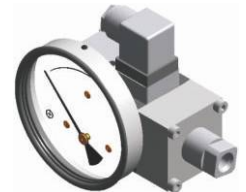
Gauge



Switch



Gauge+Switch
(with a terminal strip inside)



Gauge+Switch
(with a DIN plug on top)

Switches:

adjustable from 30 to 100% of full scale value

- 1 or 2 SPSTs with a DIN plug
- 1 or 2 SPSTs with a terminal strip
- 1 SPST with a built in relay
- 1 or 2 SPDTs with a terminal strip
- 1 or 2 SPDTs with a DIN plug

Switch cover combinations



with DIN plug



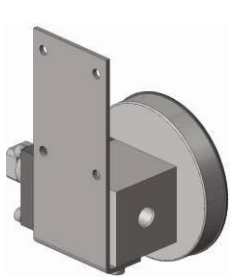
with terminal strip
and cable glands

DGC 300

Diaphragm differential pressure gauge
max. static pressure 100 bar



Mounting brackets:



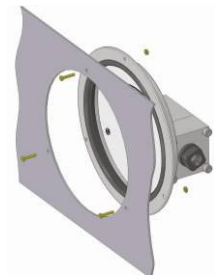
Surface mounting



Horizontal pipe mounting



Vertical pipe mounting

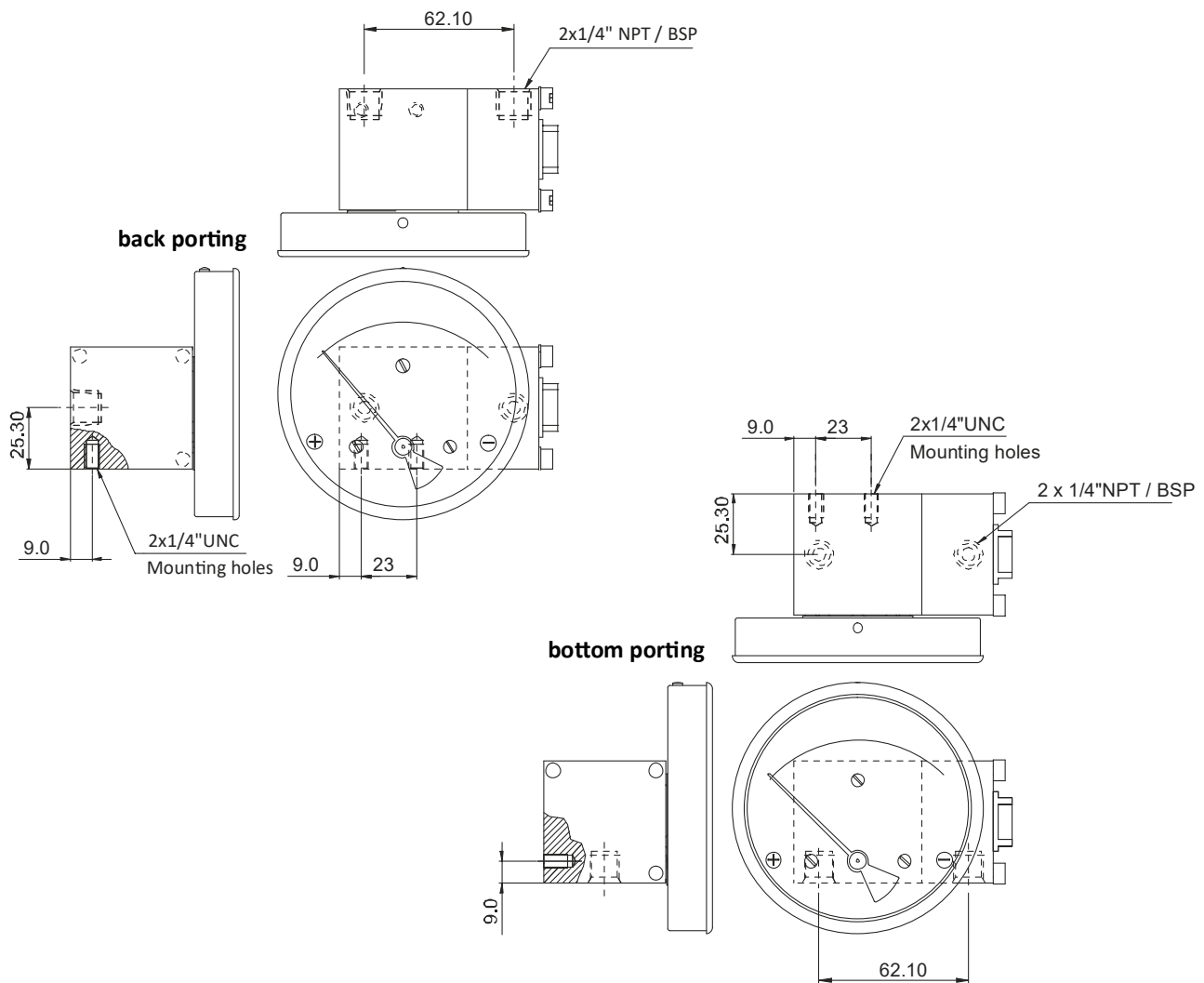


Panel / flange mounting

Options:

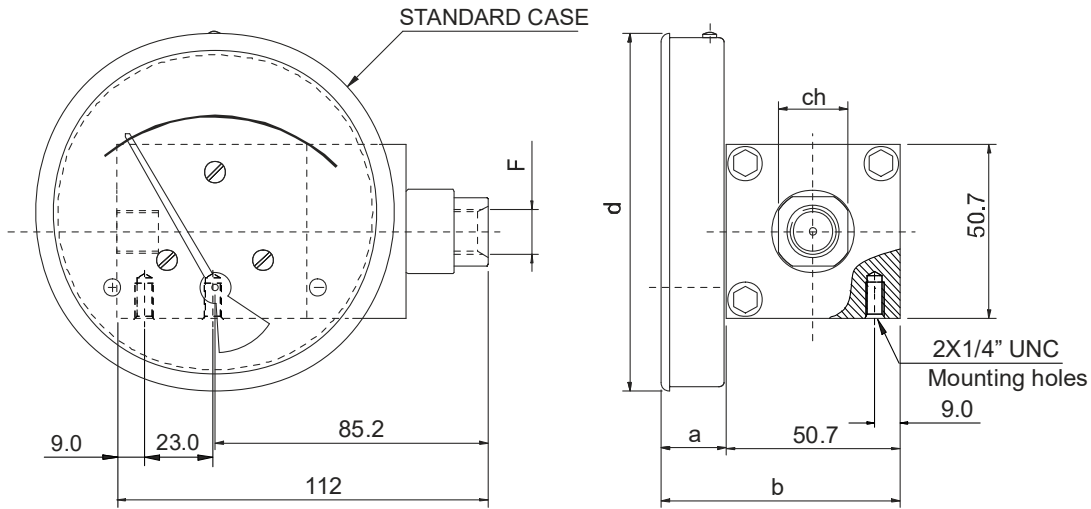
- Liquid filling
- Customer logo
- Colour band
- Calibration at descending pressure
- Red follower pointer
- Dual scale
- Filter mesh in (+) connection
- Mounting brackets (several versions)

Porting details:

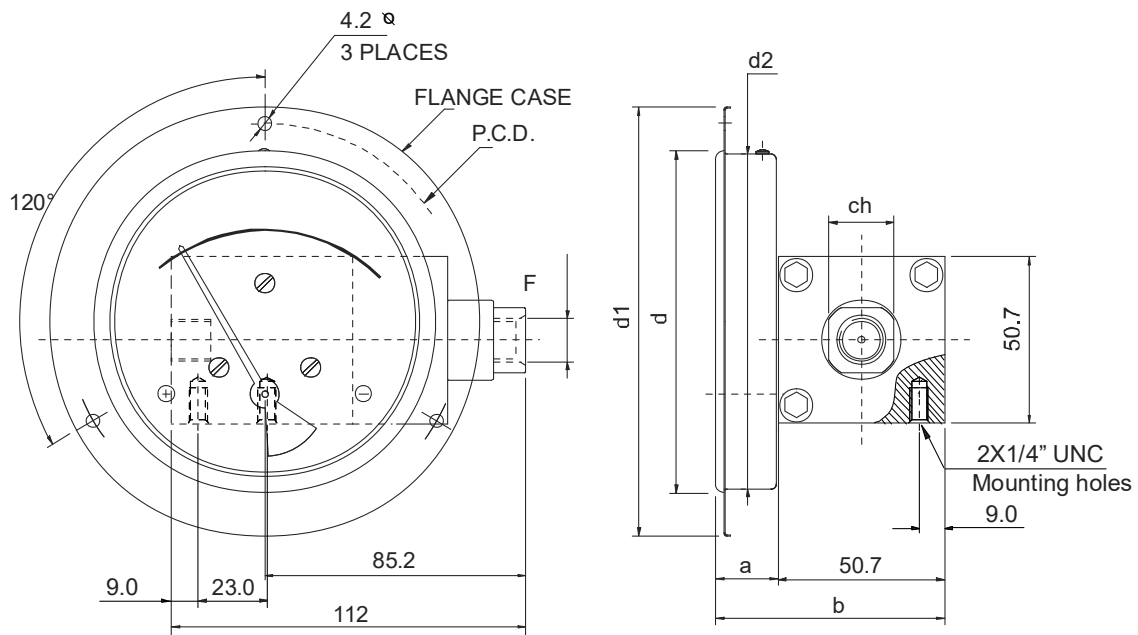


Note : 2x1/4"UNC mounting holes provided on request.

Standard dimensions:



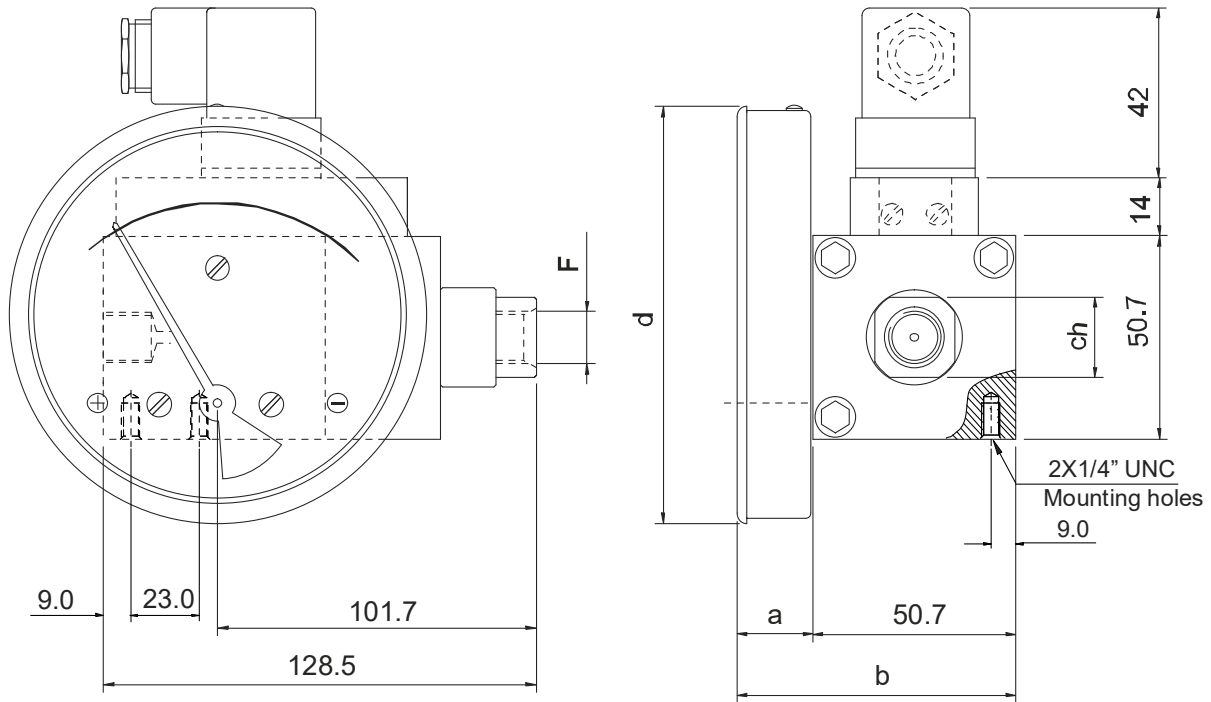
DIAL Ø	F	a	b	d	ch
63 (2.5")	1/4"BSP - 1/4"NPT	19	69.7	66	20
80 (3.5")	1/4"BSP - 1/4"NPT	19	69.7	83	20
100 (4")	1/4"BSP - 1/4"NPT	19	69.7	104.3	20
115(4.5")	1/4"BSP - 1/4"NPT	19	69.7	119.7	20
150(6")	1/4"BSP - 1/4"NPT	19	69.7	154.3	20



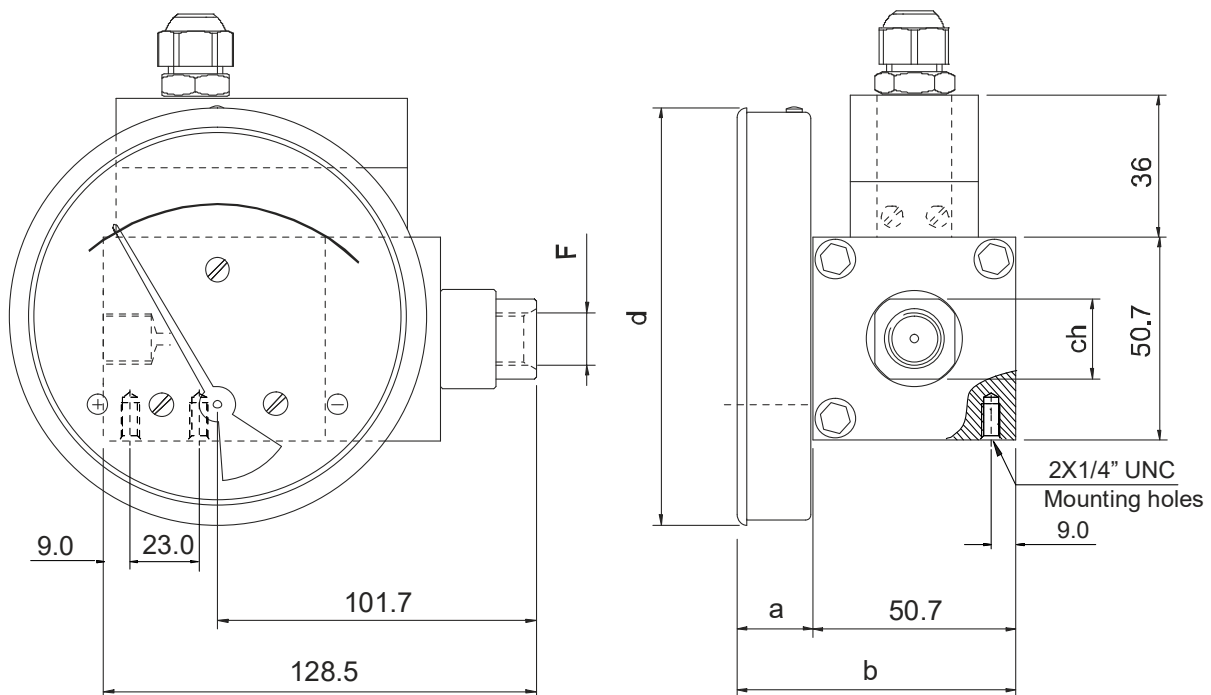
DIAL Ø	F	a	b	d1	d2	ch	p.c.d.	d *
63(2.5")	1/4"BSP - 1/4"NPT	19	69.7	93	65	20	83	66
80(3.5")	1/4"BSP - 1/4"NPT	19	69.7	109	82	20	99	83
100(4")	1/4"BSP - 1/4"NPT	19	69.7	131	102	20	121	104.3
115(4.5")	1/4"BSP - 1/4"NPT	19	69.7	146	117	20	136	119.7
150(6")	1/4"BSP - 1/4"NPT	19	69.7	181	152.5	20	171	154.3

* PANEL CUTOUT = d +1

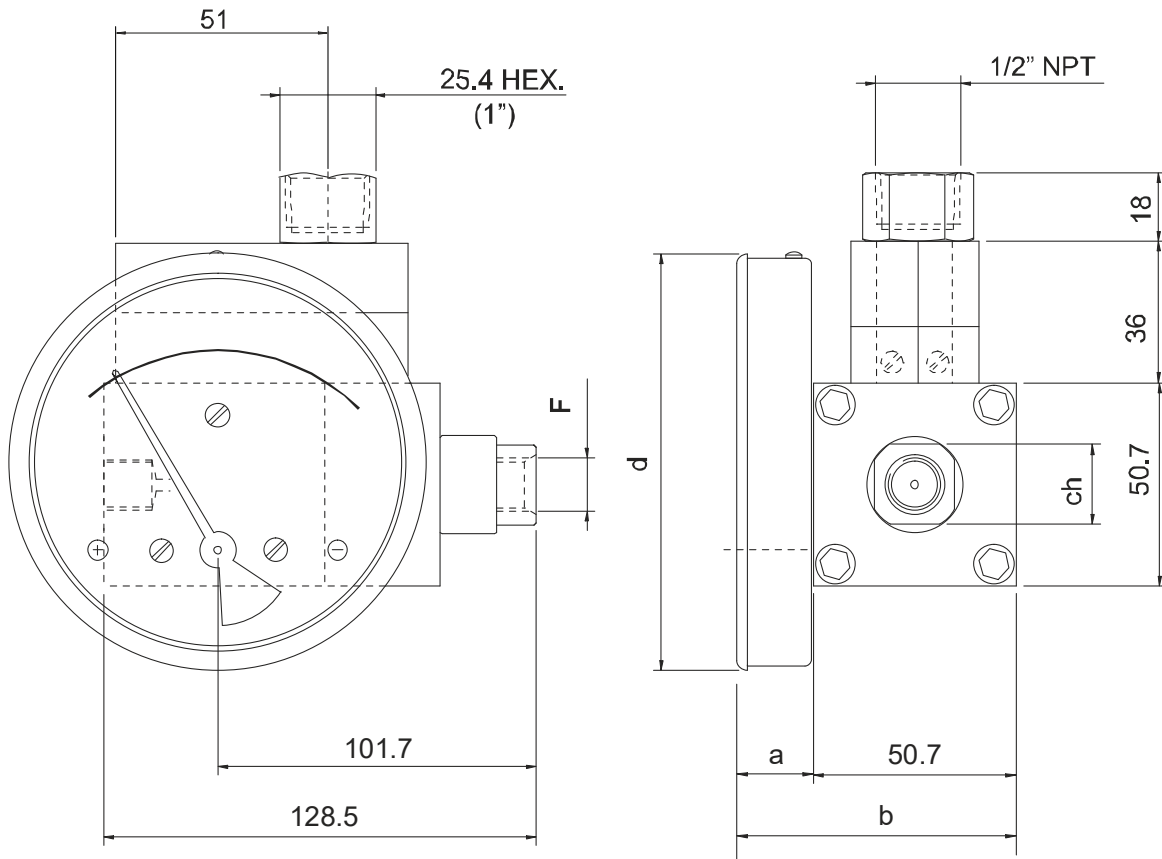
Gauge and reedswitch with DIN plug and terminal strip



DIAL Ø	F	a	b	d	ch
63	1/4"BSP - 1/4"NPT	19	69.7	66	20
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100	1/4"BSP - 1/4"NPT	19	69.7	104.3	20
115	1/4"BSP - 1/4"NPT	19	69.7	119.7	20
150	1/4"BSP - 1/4"NPT	19	69.7	154.3	20



Gauge and reedswitch with terminal strip and 1/2" NPT conduit connection



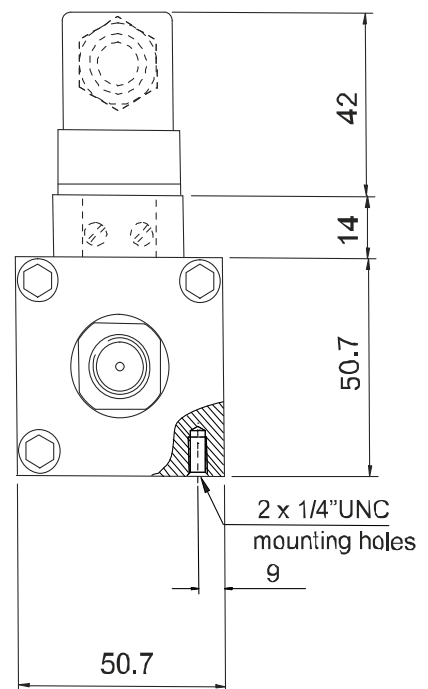
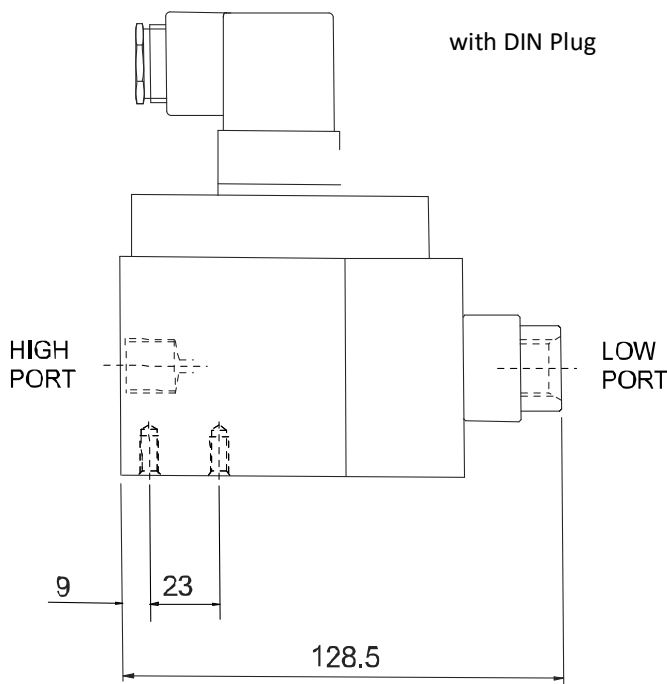
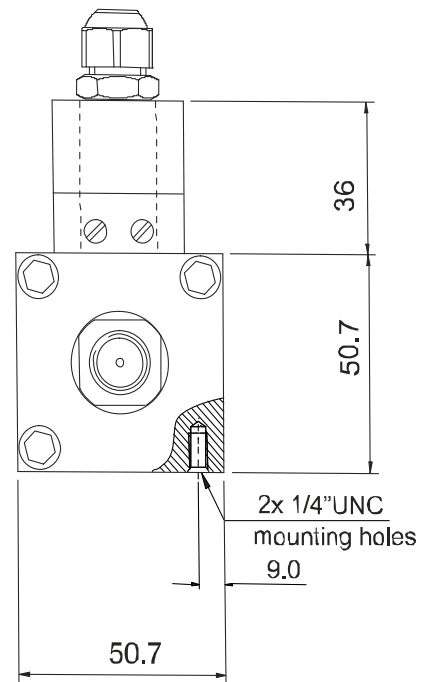
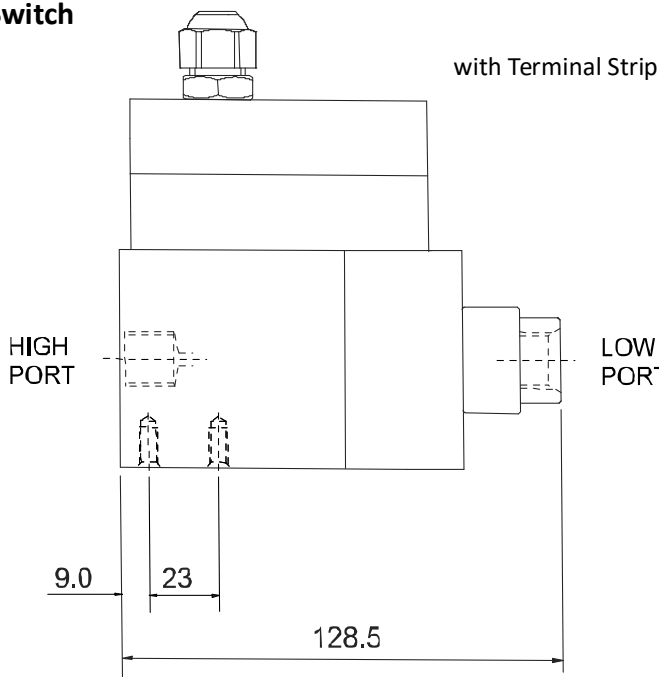
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100	1/4"BSP - 1/4"NPT	19	69.7	104.3	20
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max. static pressure 100 bar



Switch



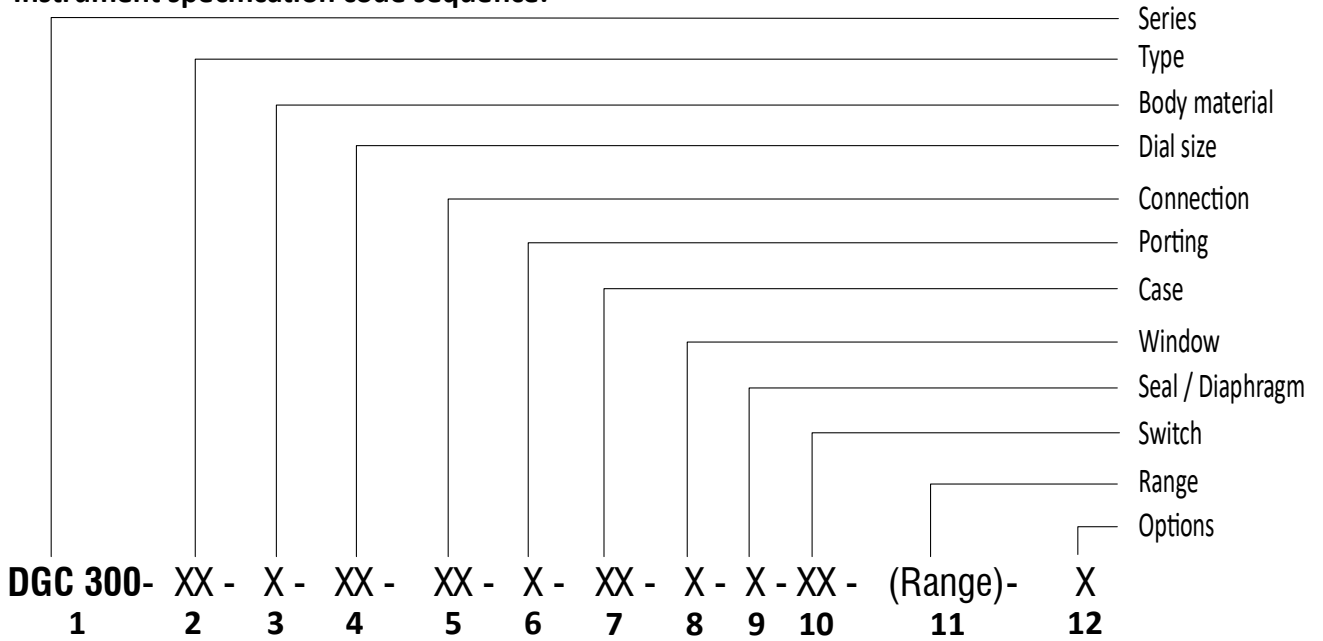
Advantages of DGC 300 instruments:

Instrument automatically resets after line surges and cold start. This eliminates balancing of differential pressure instrument after such events.

NOTES regarding DGC 300 instruments:

- Up to 1% accuracy available on request.
- For stainless steel AISI 316 case, please contact DRUCK & TEMPERATUR Leitenberger (MOQ applies).
- Switch adjustment range between 30% and 100% of full scale deflection (FSD). For specific details, please contact DRUCK & TEMPERATUR Leitenberger.
- Top vent not available with switch option.
- Liquid filling and follower pointer available.
- Mounting bracket: aluminium (standard); stainless steel (optional).

Instrument specification code sequence:



1 Modell	DGC 300			
2 Typ	G	Gauge + Switch	S	switch
	GS	gauge + switch		
3 Body material	A	aluminium	S	st.st. AISI 316
	B	brass	M	Monel
4 Dial size	2.0	2.0 " (DS 50)	4.0	4.0 " (DS 100)
	2.5	2.5 " (DS 63)	4.5	4.5 " (DS 115)
	3.5	3.5 " (DS 80)	6.0	6.0 " (DS 150)
5 Connection	4N	1/4" NPT F (std.)	4B	1/4" BSP F
	ZZ	special connection sizes via adaptor		
6 Porting	1	in-line (std.)	5	in-line + vent
	2	rear / back	6	in-line + bottom
	3	bottom	7	bottom vent + in-line
	4	bottom + vent	8	in-line + back
7 Case	S4	st.st. AISI 304 (std.)	S6	st.st. AISI 316
	F4	st.st. AISI 304 flange		
	EP	engineering polymer (available in 2.5", 4.5" and 6.0" only)		
	BF	bayonet (available in 4.0" and with safety glass only)		
8 Window	F	glass (std.)	A	acrylic
	T	toughened glass	L	safety glass
9 Seals/Diaphragm	B	Buna-N (std.)	E	EPDM
	V	Viton		
10 Switch	see table "Switch" on next page			

continued on next page

10 Switch select option & specifications

0	None
1	One SPST, with a DIN plug *)
2	One SPST, with a terminal strip
2A	One SPST, with built in relay
3	Two SPSTs, with a DIN plug *)
4	Two SPSTs, with a terminal strip

+

SPST Specifications (AC/DC max)

1 standard	2	3	4
10 VA	40 VA	100 VA	60 VA
100 V	230 V	300 V	240 V
0.5 Amp	1 Amp	1 Amp	3 Amp
Adjustable	Adjustable	Adjustable	Adjustable

5	One SPDT, with a DIN plug *)
6	One SPDT, with a terminal strip
7	Two SPDTs, with two DIN plugs
8	Two SPDTs, with a terminal strip

+

SPDT Specifications (AC/DC max)

1 standard	2	3	4
3 VA	5 VA	5 VA	60 VA
30 V	125 V	175 V	400 V
0.3 Amp	0.25 Amp	0.25 Amp	1 Amp
Adjustable	Adjustable	Adjustable	Factory Set

Example: Switch selection 21 is 1 SPST with terminal strip with switch specifications 10VA, 100V, 0.5Amp
*) DIN plug mounted on the top

11 Range standard ranges: (other ranges and pressure units on request)

Kg/cm ²	0.075	0.25	-	0.5	0.75	1	-	1.6	2	2.5	3	-	4
bar	0.075	0.25	-	0.5	0.75	1	-	1.6	2	2.5	3	-	4
mbar	75	250	-	-	750	-	-	-	-	-	-	-	-
psi	1	-	5	8	-	15	20	25	30	-	40	50	60
kPa	-	25	-	50	75	100	-	160	200	250	300	-	400

12 Options

0	none
A	glycerine filled (affects accurac)
B	red follower pointer on acrylic window (affects accuracy)
C	customer logo
D	dual scale
E	colour band
F	filter mesh in (+) connection
G	reverse port (pointer moves from right to left)
H	descending calibration (longer delivery time)
N	NACE
S	silicone oil (affects accuracy)
I	oxygen service (on request)
M1	horizontal 2" pipe mounting bracket
M2	surface mounting bracket
M3	vertical 2" pipe mounting bracket
Q	metallic switch cover with tamper proof plastic plugs (minimum order quantity applies, on request)

Contact DRUCK & TEMPERATUR Leitenberger GmbH for special execution.