

MG5 Stainless steel gauges with inductive contacts DN 100

All stainless steel pressure gauge with inductive contacts

Corrosive atmospheres and fluids

Resistant to transient overpressure

MG5 - inductive contacts (80xx)

Fully welded process connection

Sealed case can be filled with dampening fluid

The mechanical components conform to the Pressure Directive PED 97/23/CE

Conforms to ATEX 94/9/CE (EN 60079-0/EN 60079-11)

LCIE 03 ATEX 6402X (MG5 replaces DRCE)

CE0081



II 2 G

Ex ia IIC T6 to T4

Hazardous area: 1 and 2

Pressure gauges intended for process industries such as chemical, petro-chemical, energy or gas industries.

These pressure gauges have been designed to satisfy requirements to operate in aggressive environments. All of the external components, together with the measurement element and connection are made of stainless steel.



Technical Data (20°C)

Measurement range -1...0 to 0...1600 bar

Minimum ranges

Inductive contacts (80xx)	
1 contact	2 contacts
1 bar	1.6 bar

Gauge working temperature

-20...70°C for sensor SJ2N
-40...70°C for sensor SJ2SN
Temperature classification T4-T6 for inductive contacts, see leaflet A21-33

All necessary measures must be taken by the user, to avoid the calorific transfer from the fluid to the apparatus head increasing the head's temperature to such that it reaches the self-ignition temperature of the gas in which it is used.

Temperature error

Additional error when temperature of the pressure element deviates from +20°C (68°F) ±0.4% for every 10°C (50°F) rising or falling. Percentage of span.

Accuracy

Class 1,6 of full scale (within the operating range)

IP rating

IP 65 (EN 60529)

Case and bezel ring

1.4301 (AISI 304) st. steel, bayonet lock type. With blow-out disc at the top of the case.

Connection

1.4571 (316Ti) or 1.4404 (316L) st. steel, 22 mm square, G1/2 or 1/2NPT

Sensing element

$P \leq 2.5$ bar and $P \geq 1000$ bar: 1.4404 (316L) stainless steel, solid drawn tube.
 $2.5 < P < 1000$ bar: 1.4571 (316Ti) st. steel, rolled welded tube.
Tube shape: < 60 bar : in C
 ≥ 60 bar : helicoil

Movement

Stainless steel with zero and overrange stops

Window

Safety laminated glass, 4 mm thick

Window gasket

Elastomer

Dial

White aluminium, black lettering.

Pointer

Black aluminium, balanced.

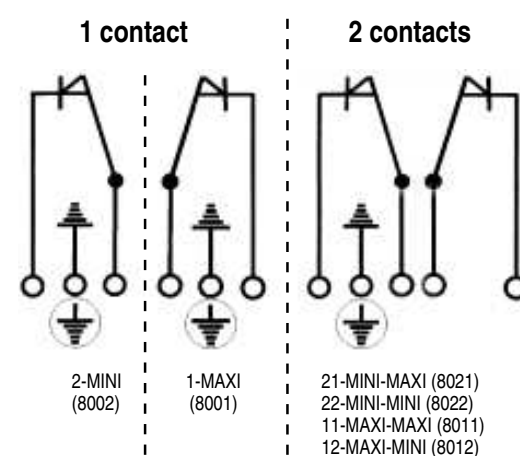
Options

Electrical connection

Terminal block. Cable gland M20x1.5
Cable 7 to 13 mm. **Code 4710**

Block wiring diagram :

For each independant inductive contact : U nominal 8 Vdc - current consumption ≥ 3 mA - Ci = 30 nF, Li = 100 uH



For inductif contact characteristics : AYRA relay for ATEX and Electrical output , see data sheet A21.33

Options

Supplementary blow-out back (30 mm dia). **Code 0760**

Sensing element 1.4404 (AISI 316L) st. steel solid drawn tube ($2.5 < P < 1000$ bar). **Code 0816**

Oxygen Application. **Code 0765**

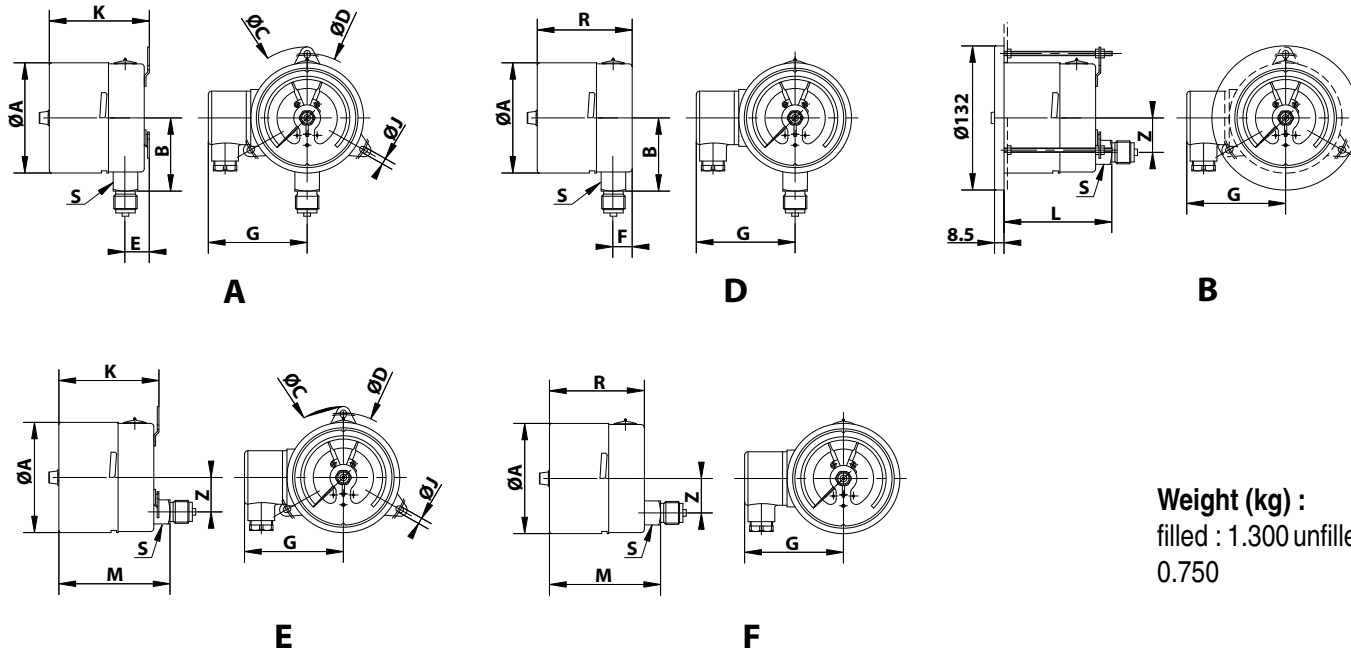
Special connection

Restrictor screw **Code 0771**



Baumer

Dimensions - Types of mounting



	[mm]
A	101
B	67
C	134
D	118
E	21.5
F	17
G	89
J	5.5
K	89.5
L	96
M	99
R	85.5
S	22
Z	31.5

Weight (kg) :
filled : 1.300 unfilled :
0.750

Panel cut-outs for types B = Ø 102 mm

Ordering Details - MG5

		MG5xxxxxx	
Family	1' digit		
Pressure gauge		M	
Contacts	2' digit		
Inductive contacts CEI (80xx)		G	
Dimension nominal	3' digit		
100 mm		5	
Control functions	4' digit		
Mini (8002)	} 1 contact with sensor SJ2N	1	
Maxi (8001)		2	
Mini-Maxi (8021)	} 2 contacts with sensor SJ2N	4	
Mini-Mini (8022)		5	
Maxi-Maxi (8011)		6	
Maxi-Mini (8012)		7	
Mini (8002/8801)	} 1 contact with sensor SJ2SN	J	
Maxi (8001/8801)		L	
Mini-Maxi (8021/8801)	} 2 contacts with sensor SJ2SN	K	
Mini-Mini (8022/8801)		I	
Maxi-Maxi (8011/8801)		M	
Maxi-Mini (8012/8801)		N	
Type of mounting*	5' digit		
Bottom connection, 3 back lugs fixing		A	
Back connection, front flange		B	
Bottom connection		D	
Back connection, 3 back lugs fixing		E	
Back connection		F	
* Option Stainless steel case and bezel ring inox 1.4404 (316L) change A with 1, B with 2, D with 4, E with 5 and F with 6			
Hydraulic connection	6' digit		
G1/4		2	
G1/2		3	
1/4NPT		5	
1/2NPT		6	
Liquid filling	7' digit		
Dry		0	
BH3 (silicone)		3	
BH5 (oxygen 160 bar max.)		5	
BH10 (paraffin vaseline oil)		K	
Unit of measurement	8' digit		
bar		B	
kPa		D	
psi		H	
Pressure range	9' ... 10' digit		
See data sheet			XX

code	bar	kPa	code	Psi
59**	-1 + 0	-100 + 0	59**	-30"Hg+ 0
72**	-1 + 0.6	-100 + 60	73**	-30"Hg+ 15
74**	-1 + 1.5	-100 + 150	75**	-30"Hg+ 30
76	-1 + 3	-100 + 300	2C	-30"Hg+ 60
77	-1 + 5	-100 + 500	78	-30"Hg+ 100
79	-1 + 9	-100 + 900	79	-30"Hg+ 150
81	-1 + 15	-100 + 1500	81	-30"Hg+ 220
82	-1 + 24	-100 + 2400	82	-30"Hg+ 300
15**	0 + 1	0 + 100	15**	0 + 15
16**	0 + 1.6	0 + 160	1C**	0 + 20
18**	0 + 2.5	0 + 250	17**	0 + 30
19	0 + 4	0 + 400	19	0 + 60
20	0 + 6	0 + 600	21	0 + 100
22	0 + 10	0 + 1000	22	0 + 160
24	0 + 16	0 + 1600	23	0 + 200
26	0 + 25	0 + 2500	25	0 + 300
27	0 + 40	0 + 4000	26	0 + 400
29	0 + 60	0 + 6000	27	0 + 600
31	0 + 100	0 + 10000	30	0 + 1000
33	0 + 160	0 + 16000	31	0 + 1500
35	0 + 250	0 + 25000	34	0 + 3000
38	0 + 400	0 + 40000	38	0 + 6000
39	0 + 600	0 + 60000	40	0 + 10000
41*	0 + 1000	0 + 100000	41*	0 + 15000
42*	0 + 1600	0 + 160000	1D*	0 + 20000

* Working pressure steady: 75% of full scale value

** See minimum measurement range for 1 and 2 contacts

Uncoded options:

PNEUMATIC RECEIVER	0.2 - 1 bar 3-15 psi
0 - 10 lin.	
0 - 10 √	
0 - 100 lin.	
0 - 100 √	

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