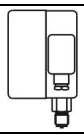
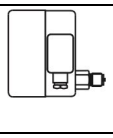
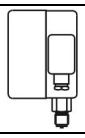
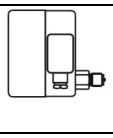
CONTACT PRESSURE GAUGES WITH BOURDON TUBE ACC. TO EN 837-1

Nominal size NS 160
Connection brass
Connection position bottom or back without / with silicone oil filling

DRUCK & TEMPERATUR

Contact pressure gauges with electrical alarm contacts are suitable for controlling and regulating process sequences. The contacts open or close electrical circuits depending on the pointer position of the pressure gauge. This devices are suitable for media that do not attack copper alloys, are not highly viscous and do not tend to crystallize.

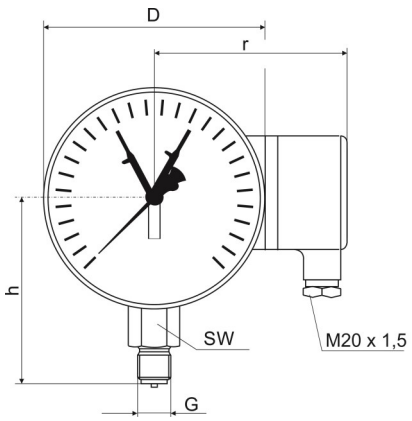
Type	6211	6411	8111	8211	Options
Nominal size	160				
Liquid filling			with silicone oil		Contact protection relay for filled devices and high / low switching capacities
Symbol					
Accuracy class	1,0 according to DIN EN 837-1				
Ranges	0...1 bar up to 0...1600 bar, positive or negative overpressure				MPa, kPa others on request
Applications	Constant load: full scale value Alternating load: 0,9 x full scale value Short-time: max. 1,3 x full scale value				
Case	Stainless steel				
Ring	Bayonet, stainless steel				
Measuring element	CuZn alloy up to 40 bar, above 60 bar stainless steel				
Connection	CuZn-alloy up to 1000 bar; above 1000 bar stainless steel 1.4571				
Thread	G 1/2 B				M20x1,5 others on request
Connection position	radial bottom	eccentric back	radial bottom	eccentric back	
Orifice					Ø0,3, 0,4, 0,8 mm
Window	Polycarbonate				Safety glass
Movement	Cu-alloy, German silver				
Dial	Aluminium white, scale and lettering black				Special scale
Pointer	Aluminium black				Drag indicator, Mark pointer
Temperatures	Medium: -20°C up to +80°C, ambient: -25°C up to +60°C				
Protection	IP54 acc. to EN 60529 / IEC 529		IP65 acc. To EN 60529 / IEC 529		
Mounting					back flange or front flange
Weight	approx. 1,80 kg		approx. 3,30 kg		

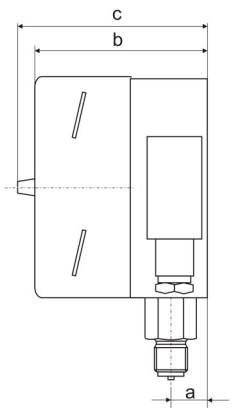
Dimensional drawings

Dimensions in mm

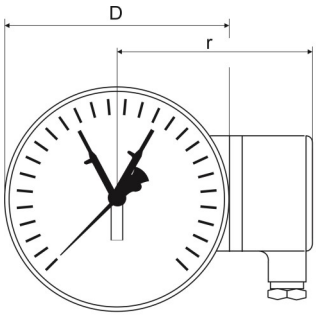
SUKU
DRUCK & TEMPERATUR

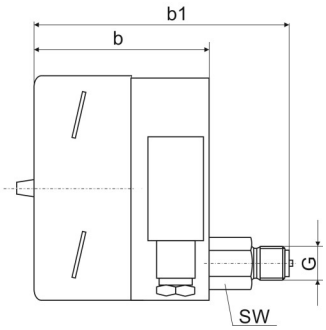
Type 6211, 8111



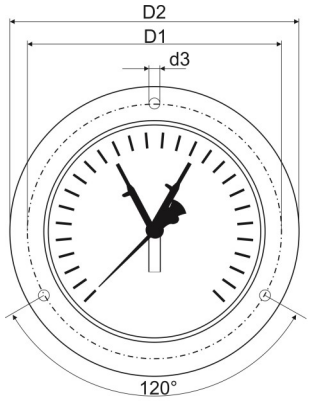


Type 6411, 8211

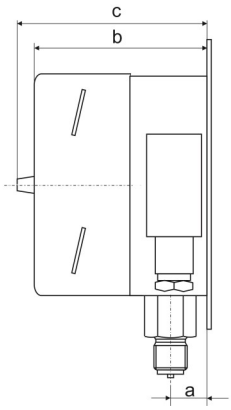




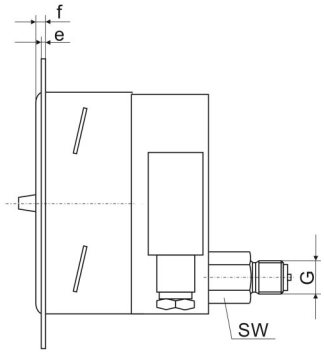
Hole pattern



rear flange



front flange



Type	NS	G	D	D1	D2	b	b1	c	h	r	e	f	d3	SW
6211	160	G1/2B	160	178	196	97		107	118	118	3	8	5,6	22
6411	160	G1/2B	160	178	196		132	107		118	3	8	5,6	22
8111	160	G1/2B	160	178	196	97		107	118	118	3	8	5,6	22
8211	160	G1/2B	160	178	196		132	107		118	3	8	5,6	22

Installation of several limit switches (e.g. M11) only possible from a measuring range of 1.6 bar.

Magnatic snap-action contact

DRUCK & TEMPERATUR

Application

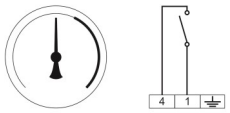
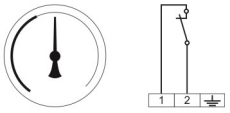
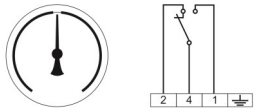
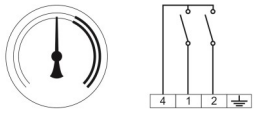
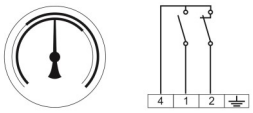
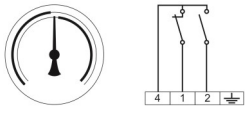
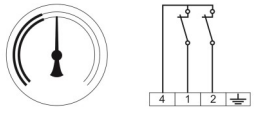
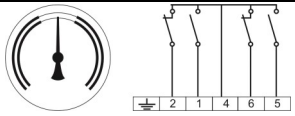
Magnetic snap contacts can be used in different operating conditions.
Contact protection relays are recommended for high or low switching capacities. Contact protection relays must also be used with filled devices, as switching uncertainties occur due to filling and burn-off (better: use electronic contacts).

Attention: Only inductive contacts with ATEX approval may be used in potentially explosive areas.
With nominal operating voltages> 50 VAC or> 120 VDC, the contacts must be reliably earthed according to DIN VDE 0110.

Technical data

Switching voltage:	max. 250 V
Min. switching voltage:	24 V (with ohmic load and operation in air)
Switching current:	max. 1,0 A
Continuous current:	max. 0,6 A
Minimum current:	20 mA
Switching power:	max. 30 W; 50 VA
Minimum switching power:	0,4 W; 0,4 VA
Contact material:	Ag80 Ni20
Switching accuracy:	ca. 2-5% full of scale value

Switching function

Type	clockwise under increasing pressure	Cable socket connection diagram
M-1	Contact closes	
M-2	Contact opens	
M-3	1-fold changeover contact (1 set point)	
M-11	Contact 1 closes Contact 2 closes	
M-12	Contact 1 closes Contact 2 opens	
M-21	Contact 1 opens Contact 2 closes	
M-22	Contact 1 opens Contact 2 opens	
M-33	2-fold changeover contact (2 set points)	

Modifications reserved!

Inductive contact

Application

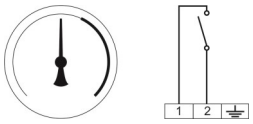
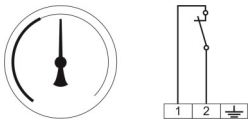
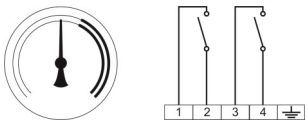
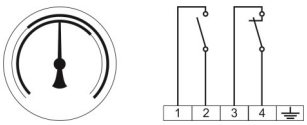
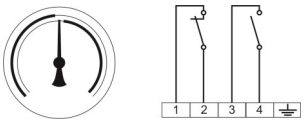
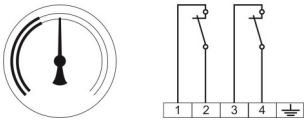
Inductive contact in pointer-type measuring instruments are equipped with electrical distance sensors (proximity sensors) in accordance with DIN 19234 resp.

When using the Ex isolating switch amplifier, the equipment corresponds to type of ignition property "i".
It is approved under the classification EEx ib II C T6 for use in potentially explosive areas (zone 1 and 2).

Multi-function relays are recommended for installation in normal industrial plants for which explosion protection is not required.

Technical data

Nominal voltage:	8V = (Ri = 1 k OHM)
Operating voltage:	5...25 V
Current consumption:	approx. 1...3 mA
Switching accuracy:	approx 0,5% of full scale value
Ambient temperature:	-20°C…+70°

Type	clockwise under increasing pressure	Cable socket connection diagram
I-1	Contact closes	
I-2	Contact opens	
I-11	Contact 1 closes Contact 2 closes	
I-12	Contact 1 closes Contact 2 opens	
I-21	Contact 1 opens Contact 2 closes	
I-22	Contact 1 opens Contact 2 opens	

Modification reserved!

SUKU Druck- und Temperaturmesstechnik GmbH
Garnsdorfer Hauptstraße 109 • 09244 Lichtenau / Sachsen - GERMANY
Tel.: +49 37208 / 2717 • Fax: +49 37208 / 61713 • contact@suku.de • www.suku.de