

YOUR MANUFACTURER FOR MEASUREMENT TECHNOLOGY FOR PRESSURE, TEMPERATURE



- MANOMETER
- PRESSURE MEASURERS
- PRESSURE SENSORS
- DIGITAL INDICATORS
- PRESSURE SWITCH
- BIMETAL THERMOMETER
- GAS PRESSURE THERMOMETERS
- MACHINE THERMOMETERS
- TEMPERATURE SENSORS
- PROTECTIVE TUBE
- ACCESSORIES

CALIBRATION SERVICE

PRICE LIST 2026

AS A MANUFACTURER WE DELIVER HIGH QUALITY PRODUCTS OF PRESSURE AND TEMPERATURE MEASUREMENT TECHNOLOGY

DEAR USER OF MEASURING INSTRUMENTS, As a manufacturer, we supply you with high-quality products in the field of pressure and temperature measuring technology.

„We launched our business in 1988 using the SUCHY brand name to provide services related to measuring technology.

As the production of mechanical and electronic measuring instruments is our passion, we have constantly expanded our production programme in the course of our company's development.

It is a special privilege for our high-quality and motivated employees to be able to work with many customers on a partner-like basis.

We are delighted by the fact that our products are not only used in Germany and Europe, but on other continents too.

Our company slogan summarises matters in a nutshell:

SUCHY MESSTECHNIK ... ADAPTED TO YOUR NEEDS

One essential foundation of our work involves ethical values such as honesty, reliability and dealing with customers, suppliers and employees in a *friendly and helpful manner*.

In order to practise these values in a credible manner, we are actively involved in sharing ideas with other companies in the Association of Christians in Business.

Our employees will be very happy to help you.

WE ARE YOUR COMPETENT PARTNER FOR PRESSURE AND TEMPERATURE MEASURING TECHNOLOGY IN THE INDUSTRIAL SECTOR.

Please write to me if what we say does not match what you experience.



Markus Suchy & Frank Suchy
Managing Directors
Suchy Messtechnik GmbH

OUR QUALITY ADJUSTED TO YOU





AS A MANUFACTURER OF MEASURING INSTRUMENTS,

we are certified in line with ISO 9001 to design, produce, calibrate and distribute pressure and temperature measuring instruments and their accessories.

We also have various permits, such as type examination certificates and the PTB „(National Metrology Institute of Germany) certificate related to the German Measuring and Calibration Order.“

*Visit us on the Internet and discover more at:
suchy-messtechnik.de*

All the specifications and information are provided to the best of our knowledge.

They do not provide any guarantee of quality and do not exempt users from testing the items.

The information provided in this technical documentation does not provide

any grounds for liability for any kind of compensation or on any other legal basis.

We reserve the right to make technical changes as part of our product development.

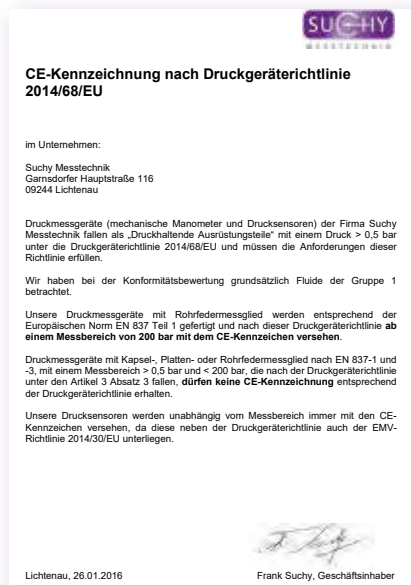


Table of contents



Pressure gauges				
Description	Type	Nominal size	Data sheet	Page
Technical information for pressure gauges				12
Type identification key				13
1. Pressure gauges with Bourdon tube				
Standard version	MR-00/04, MR-10/14	40, 50, 63	M 110	15
Standard version	MR-10, MR-14	80, 100	M 120	16
Standard version	MR-10 F, MR-14 F	63	M 150	17
Industry version	MR-20, MR-25	63	M 210	18
Industry version	MR-20 F, MR-25 F	63	M 210	
Industry version	MR-20, MR-25	100, 160	M 220	19
Industry version	MR-20 F, MR-25 F	100, 160	M 230	
Industry version with contact	KMR-20, KMR-25 KMR-20 F, KMR-25 F	100	M 240	20
Industry version with contact	KMR-20, KMR-25 KMR-20 F, KMR-25 F	160	M 250	
Stainless steel version	MR-30, MR-34 MR-30 F, MR-34 F	40	M 320	21
Stainless steel version	MR-30, MR-34 MR-30 F, MR-34 F	50	M 305	
Stainless steel version	MR-30, MR-35 MR-30 F, MR-35 F	63	M 310	22
Safety version	MR-36, MR-37 MR-36 F, MR-37 F	63	M 315	
Stainless steel version	MR-30, MR-35	100, 160	M 320	23
Stainless steel version	MR-30 F, MR-35 F	100, 160	M 330	
Stainless steel version with contact	KMR-30, KMR-35 KMR-36, KMR-37	63	M 348	24
Stainless steel version with contact	KMR-30, KMR-35 KMR-30 F, KMR-35 F	100	M 350	
Stainless steel version with contact	KMR-30, KMR-35 KMR-30 F, KMR-35 F	160	M 360	25
Safety version	MR-36, MR-37 MR-36 F, MR-37 F	100	M 340	
Safety version	MR-36, MR-36 F	160	M 342	26
Safety version with contact	KMR-36, KMR-37 KMR-36 F, KMR-37 F	100	M 370	
Safety version with contact	KMR-36, KMR-36 F	160	M 372	
2. Pressure gauges with Precision Bourdon tube				
Industry version	MRF-20, MRF-25 MRF-20 F, MRF-25 F	160	M 380	27
Stainless steel version	MRF-30, MRF-35 MRF-30 F, MRF-35 F	160	M 382	28
Safety version	MRF-36, MRF-36 F	160	M 384	
3. Pressure gauges with Capsule element				
Industry version	MK-20, MK-24	63	M 410	29
Industry version	MK-20, MK-24	100, 160	M 420	
Stainless steel version	MK-30, MK-34	63	M 430	30
Stainless steel version	MK-30, MK-34	100, 160	M 440	
Surcharge for Pressure gauges with Bourdon tube or Capsule element				31

Table of contents



Pressure gauges

Description	Type	Nominal size	Data sheet	Page
4. Pressure gauge with diaphragm				
Industry version	MP-20, MP-20 F	100, 160	M 510	32
Stainless steel version	MP-30, MP-30 F	100, 160	M 550	
Industry version	KMP-20, KMP-20 F	100, 160	M 520	34
with contact				
Stainless steel version	KMP-30, KMP-30 F	100, 160	M 560	
with contact				
Surcharge for pressure gauges with diaphragm				36
Surcharge for pressure gauges with diaphragm with PTFE-lining				39

5. Differential Pressure Gauges

Capsule element - Industry version	MDK-20, MDK-24	63	M 620	40
Capsule element - Industry version	MDK-20, MDK-24	100	M 622	
Bourdon tube - Industry version	MDR-20, MDR-20 F	100, 160	M 610	41
Bourdon tube - Stainless steel version	MDR-31, MDR- 31 F	100, 160	M 615	
Diaphragm - Stainless steel version	MDP-30, MDP-30 F	100, 160	M 661	42
Diaphragm - Stainless steel version	KMDP-31, KMDP-31 F	100, 160	M 681	43
with contact				
Surcharge for pressure gauges with contact				44

Chemical seals

Description	Type	Connection	Data sheet	Page
Technical information and selection guide for chemical seals				46
1. Diaphragm type chemical seal with thread connection				
with male thread	DM-10, DM-11, DM-12	G 1/2 B	D 110	47
with female thread	DM-20, DM-21, DM-22	G 1/2 inside	D 120	
with male thread	DM-15	G 1/2 B	D 110	48
with female thread	DM-25	G 1/2 inside	D 110	
2. Diaphragm type chemical seal with flange connection and internal diaphragm				
with DIN-flange	DM-30	DN 15 - DN 25	D 130	49
with ASME B16,5-flange	DM-32	1/2, 3/4, 1"	D 132	50
with DIN-flange	DM-33	DN 15 - DN 25	D 133	51
with ASME B16,5-flange	DM-34	1/2, 3/4, 1"	D 134	52
3. Diaphragm type chemical seal with flange connection and front flush diaphragm				
with DIN-flange	DM-35	DN 25, DN 50	D 135	53
with ASME B16,5-flange	DM-37	1", 2"	D 137	54
4. Chemical seal for food industry with union nut				
in accordance with DIN 11 851	DM-40	DN 25 - DN 80	D 140	55
in accordance with SMS-standard	DM-41	1" - 2 1/2"	D 141	56
in accordance with DS-722 standard	DM-42	DN 25 - DN 65	D 142	57
in accordance with IDF-standard	DM-43	1", 1 1/2", 2"	D 142	58
5. Chemical seal for pharmaceutical industry				
with clamp connection to ISO 2852	DM-50	1" - 3"	D 150	59
with clamp connection to DIN 32 676	DM-52	DN 25 - DN 65	D 152	60

Table of contents



Chemical seals

Description	Type	Connection	Data sheet	Page
6. Diaphragm type chemical seal for food industry with threaded socket				
in accordance with DIN 11 851	DM-60	DN 25 - DN 80	D 160	61
in accordance with SMS-standard	DM-61	1" - 2 1/2"	D 161	62
in accordance with DS-722 standard	DM-62	DN 25 - DN 65	D 162	63
in accordance with IDF-standard	DM-63	1", 1 1/2", 2"	D 162	64
7. Diaphragm type chemical seal for pulp industry				
with pulp flange	DM-70, DM-71	DN 48	D 170	65
8. Diaphragm type chemical seal with thread connection and front flush diaphragm				
with male thread connection	DM-80	G 1/2 - G 2	D 180	66
9. Diaphragm type chemical seal in plastic with internal diaphragm				
with female thread connection	DM-109	G 1/2 inside	D 109	67
10. Diaphragm type chemical seal for homogenizing machines				
with female thread connection	DM-110		D 110	68
with female thread connection	DM-111			
11. Mounting the gauge at the chemical seal				
Mounting				69

Thermometer

Description	Type	Nominal size	Data sheet	Page
Technical information and selection guide for thermometer				71
Type identification key for thermometer				72
1. Thermometer with Bimetal coil				
Standard version	TB-10	63, 100, 160	T 110	73
Standard version	TB-14	63, 100, 160	T 120	
Surcharge for Standard version	TB-10, TB-14			74
Industry version	TB-20	63, 100, 160	T 130	75
Industry version	TB-24	63, 100, 160	T 140	
Surcharge for Industry version	TB-20, TB-24			76
Thermo wells for Industry version	TB-20, TB-24			77
Stainless steel version	TB-30	63, 80, 100, 160	T 150	78
Stainless steel version	TB-34	63, 80, 100, 161	T 160	
Surcharge for Stainless steel version	TB-30, TB-34			79
Stainless steel version, swivelling	TB-33	80, 100, 160	T 160	80
Surcharge for Stainless steel version	TB-33			81
2. Gas thermometers				
Stainless steel version with fixed sensor	TG-30, TG-34	63, 80	T 252	82
		100, 160	T 250	
Stainless steel version with capillary	TG-32, TG-37	63, 80	T 262	83
		100, 160	T 260	
Surcharges for Gas thermometer				84
3. V-form Industrial Thermometers				
Industry version	TM-20, TM-25	150	T 320	85

Table of contents



Thermometer				
Description	Type	Nominal size	Data sheet	Page
4. Thermo wells for thermometer				
to screw in accordance to DIN 43 772		Form 5, 6	T 830	86
to screw in accordance to DIN 43 772		Form 8, 9	T 832	87
to weld in accordance to DIN 16 179		Form BS	T 850	88
to weld in accordance to DIN 43 772		Form 4	T 860	89
				90
Pressure sensors				
Description	Type		Data sheet	Page
Technical information and selection guide for pressure sensors				92
Type identification key for pressure sensors				93
1. Pressure sensors with internal diaphragm				
Low-cost measurement with ceramic	SD-25, SD-26, SD-27, SD-28		SD 250	94
For general industrial applications	SD-30, SD-31, SD-32, SD-33		SD 310	95
with local display	SMR-36, SMR-36 F		SD 910	96
Precision	SD-36, SD-37		SD 360	97
High pressure	SD-38, SD-39		SD 380	98
2. Pressure sensors with front flush diaphragm				
with Stainless steel diaphragm	SD-40, SD-41, SD-42		SD 410	99
with ceramic diaphragm	SD-45		SD 450	100
	SD-47		SD 470	
with ceramic diaphragm, capacitively	SD-50, SD-52		SD 510	101
3. Pressure sensors in version Immersion sensor				
with Stainless steel measuring cell	SD-60, SD-62		SD 610	102
with ceramic measuring cell	SD-65, SD-66		SD 650	
4. Pressure sensors for Low-pressure measurement				
with silicon measuring cell	SD-70, SD-71		SD 710	103
5. Pressure sensors for food industry				
with union nut to DIN 11 851	SD-140		SD 140	104
with union nut to SMS-standard	SD-141		SD 141	105
with union nut to DS-722 standard	SD-142		SD 142	106
with union nut to IDF-standard	SD-143		SD 143	107
6. Pressure sensors for Pharma Industry				
with clamp connection to ISO 2852	SD-150		SD 150	108
with clamp connection to DIN 32 676	SD-152		SD 152	109
Surcharges for pressure sensors				110
7. Pressure sensors for Differential-pressure measurement				
Low differential pressure measurement	SDD-80 - SDD-83		SD 810	111
Surcharges for SDD-80				112
Universal differ. pressure measurement	SDD-30, SDD-40		SD 301	113
Surcharges for SDD-30, SDD-40				114
8. Digital-pressure gauges				
Digital-pressure gauges	SD-130		SD 130	115
Digital-pressure gauges	SD-134, SD-135		SD 134	116
Surcharges for Digital-pressure gauges				117

Table of contents



Temperature sensor

Description	Type	Data sheet	Page
1. Resistance thermometer Pt 100			
to screw in stainless steel	ST-20, ST-21, ST-22 ST-24, ST-25, ST-26	ST 210	118
Low-cost version	ST-30, ST-32, ST-34	ST 230	119
with output 4...20 mA	ST-40, ST-42, ST-44	ST 240	
Low-cost version	ST-35, ST-36, ST-37	ST 230	120
with output 4...20 mA	ST-45, ST-46, ST-47	ST 240	
with Round plug M 12x1, 4-pole			
Surcharges for Temperature sensors			121

Digital displays

Description	Type	Data sheet	Page
For plugging on the sensor	SA-10, SA-11, SA-12, SA-10 Ex	SA 110	122

Switches for pressure

Description	Type	Data sheet	Page
1. Pressure switches			
Industry version, adjustable	SC-20	SC 120	124
Stainless steel version, adjustable	SC-30	SC 130	
Industry version, adjustable fixed	SC-50	SC 150	125
Stainless steel version, adjustable fixed	SC-53	SC 153	126
Industry version, adjustable	SC-60	SC 160	127
Industry version, adjustable	SC-61	SC 161	128
Stainless steel version, adjustable	SC-63	SC 163	129
Stainless steel version, adjustable	SC-64	SC 164	130
2. Differential-pressure switches			
Industry version, adjustable	SCD-70	SC 170	131

Table of contents



Accessories for the installation of measuring devices

Description	Type	Nominal size	Data sheet	Page
Pressure gauge stopcocks			Z 120	133
Pressure gauge valves			Z 110	
Siphons			Z 150	134
Connecting pipes			Z 160	
Adapter, adapter sleeves and seals			Z 210	135
Weld sockets and weld end			Z 210	136
Instrument holder and overpressure protection equipment			Z 210	137
Self-sealing nipple, pressure surge reducer, cooling elements and seals			Z 210	138

following

Description	Data sheet	Page
Information		
Scale division of pressure gauges	M 910	139
Conversion table for pressure units		140
General terms and conditions		141



MANOMETER

FROM A – Z

Technical information and selection guide for pressure gauges



Type	Description, construction, operation and application
MR	Pressure gauges with Bourdon tube The medium to be measured flows through the nozzle into the curved pipe measuring element. By this pressure the measuring element begins to alter its bending radius. The Bourdon tube converts this pressure into a defined path to which we measure.
MRF-	Precision measuring gauges with Bourdon tube These precision pressure gauge for accurate pressure measurement or checking of other pressure measuring instruments, for example used in laboratories or in quality assurance.
MP	Pressure gauge with diaphragm measuring element The medium to be measured flows through the nozzle to a robust spring diaphragm measuring element. By this pressure starts the measuring element upward bending. The diaphragm thus converts the pressure into a defined path to which we measure.
MK	Pressure gauges with capsule element The medium to be measured flows through the spring nozzle to the membrane of the capsule. By this pressure the measuring element begins to bend and this converts the pressure in a defined path that we measure.
MD.	Differential pressure gauge These pressure gauges are used to measure the difference of two existing pressures. As measuring components, tube, diaphragm or capsule pressure are used. These instruments are used to filter and process monitoring. It is important in selecting the respect of the measuring range and the maximum static pressure of the system.
M.-1.	Pressure gauges in standard version This low cost version is used for simple measurement tasks in the field of heating or compressed air technology.
M.-2.	Pressure gauges in industry version This high-quality version is used in many areas of general industry. The measurement system usually consists of copper alloy or galvanized steel Diaphragm and should not be used for aggressive media.
M.-3.	Pressure gauges in Stainless steel version This high-quality version is used in many fields of chemical industry. Other applications include for example the pharmaceutical or food industry. The measurement system consists of stainless steel 1.4571 and is ideal for many aggressive media.
M.-xx F	Pressure gauges with liquid filled in the casing To increase the wear resistance of the pointer movement, the entire pressure gauge is filled with a highly viscous glycerine. Pressure gauges with electric contact devices are filled with silicone oil. Thereby the pressure gauges are used in areas of greater mechanical stress, for example in pumping and hydraulic systems.

Type identification key for pressure gauges



1. Contact	Mark	8. Ranges	Mark
with electrical contact	K	0...2.5 mbar	698
without electrical contact	nothing	0...4 mbar	699
		0...6 mbar	700
		0...10 mbar	701
		0...16 mbar	702
		0...25 mbar	703
		0...40 mbar	704
		0...60 mbar	706
		0...100 mbar	710
		0...160 mbar	716
		0...250 mbar	725
		0...400 mbar	740
		0...600 mbar	760
		0...0,6 bar	000
		0...1 bar	001
		0...1.6 bar	002
		0...2.5 bar	003
		0...4 bar	004
		0...6 bar	006
		0...10 bar	010
		0...16 bar	016
		0...25 bar	025
		0...40 bar	040
		0...60 bar	060
		0...100 bar	100
		0...160 bar	160
		0...250 bar	250
		0...400 bar	400
		0...600 bar	600
		0...1.000 bar	910
		0...1.600 bar	916
		0...2.500 bar	925
		0...4.000 bar	940
		0...1.600 bar	916
		0...2.500 bar	925
		0...4.000 bar	940

2. Measuring instrument

Pressure gauges	M
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3. Measuring element

Bourdon tube	R
Diaphragm	P
Capsule element	K
Precision Bourdon tube	RF
Differential with Bourdon tube	DR
Differential with diaphragm	DP
Differential with capsule element	DK

4. Version

Heating version	0
Standard version	1
Industry version	2
Stainless steel version	3

5. Design

Connection bottom	0
Connection back centric	4
Connection back eccentric	5
Safety case	6
with connection bottom	
Safety case	7
with connection back, eccentric	

6. Filling

Case without filling	nothing
Case with filling	F

7. Nominal size

Case with ND 40	40
Case with ND 50	50
Case with ND 63	63
Case with ND 80	80
Case with ND 100	100
Case with ND 160	160

Order example:

Pressure gauge without contact
with Bourdon tube
In Industry version
with connection bottom
Case without filling
Nominal size **100**
Range 0...**10** bar

Article no.:

MR-20 100 010

Type identification key for pressure gauges



8.	Ranges	Mark	8.	Ranges	Mark
	-2.5...0 mbar	498		-10...+15 mbar	515
	-4...0 mbar	499		-15...+10 mbar	551
	-6...0 mbar	500			
	-10...0 mbar	501		-25...+15 mbar	521
	-16...0 mbar	502		-15...+25 mbar	512
				-20...+20 mbar	522
	-25...0 mbar	503			
	-40...0 mbar	504		-40...+20 mbar	542
	-60...0 mbar	506		-20...+40 mbar	524
	-100...0 mbar	510			
	-160...0 mbar	516		-40...+60 mbar	546
	-250...0 mbar	525		-60...+40 mbar	564
	-400...0 mbar	540		-50...+50 mbar	555
	-600...0 mbar	560			
				-60...+100 mbar	561
	-0.6...0 bar	800		-100...+60 mbar	517
	-1...0 bar	801		-100...+150 mbar	415
	-1...+0.6 bar	802		-150...+100 mbar	451
	-1...+1.5 bar	803			
	-1...+3 bar	804		-150...+250 mbar	412
	-1...+5 bar	805		-250...+150 mbar	421
	-1...+9 bar	809		-200...+200 mbar	422
	-1...+15 bar	815		-100...+300 mbar	413
	-1...+24 bar	824			

Pressure gauges with Bourdon tube in Standard version



Nominal size 40, 50 and 63

Accuracy class 1.6 and 2.5 according to EN 837-1

Special features

Simple, low cost version

Applications

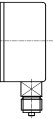
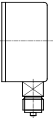
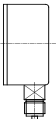
Heating systems
Pneumatic systems
Air conditioning
Simple hydraulic systems

Usage

For measuring points without intense dynamic alternating loads,
for all gaseous and liquid media,
which do not crystallize, attack copper alloys
or react viscous.



DG 7

Version	Standard version					
Model	MR-10	MR-14	MR-10	MR-14	MR-10	MR-14
ND	40	40	50	50	63	63
Connection position						
	Data sheet M 110					
Class	2.5				1.6	
Connection	G 1/8 o.Z. or G 1/4 B		G 1/4 B			
	Key size 14, CuZn alloy Type MR-10 bottom, Type and MR-14 back centric					
Measur element	Copper alloy, up to 40 bar with C-Bourdon tube, from 60 bar with coil spring					
Case	Steel, black				Steel, Black	
Window	Glass					
Movement	CuZn alloy					
Price in €	15,14	16,55	15,37	15,80	12,20	12,85
Ranges Range ID	-1...0 bar = 801 -1...+1,5 bar = 803 -1...+3 bar = 804 -1...+5 bar = 805					
Price in €			15,37	15,80	12,20	12,85
Ranges Range ID	-1...+0.6 bar = 802 -1...+9 bar = 809 -1...+15 bar = 815					
Price in €			15,37	15,80	12,20	12,85
Ranges Range ID	0...0.6 bar = 000					
Price in €	8,80	9,50	9,50	10,20	12,09	12,85
Ranges Range ID	0...1 bar = 001 0...1.6 bar = 002 0...2.5 bar = 003					
Price in €	8,80	9,50	9,50	10,20	9,90	10,66
Ranges Range ID	0...4 bar = 004 0...6 bar = 006 0...10 bar = 010 0...16 bar = 016 0...25 bar = 025 0...40 bar = 040					
Price in €	14,40	15,10	15,10	15,80	12,20	12,85
Ranges Range ID	0...60 bar = 060 0...100 bar = 100 0...160 bar = 160 0...250 bar = 250 0...400 bar = 400					

Article-no: Type + ND + Range ID

Example: MR-10 40 010

Surcharges see page 31

Pressure gauges with Bourdon tube in standard version



Nominal size 80 and 100 accuracy 1.6 according to EN 837-1

Special features

Simple, low cost version

Applications

Heating plants
Pneumatic systems
Simple plants and hydraulic systems

Usage

For measuring points without intense dynamic alternating loads,
for all gaseous and liquid media,
which do not crystallize, attack copper alloys
or react viscous.



DG 7

Version	Standard version			
Type	MR-10	MR-14	MR-10	MR-14
ND	80	80	100	100
Connection position				
Data sheet M 120				
Connection	G 1/2 B key size 22	G 1/4 B key size 14	G 1/2 B key size 22	G 1/4 B key size 14
	Type MR-10 bottom, Type MR-14 back centric, in Cu-alloy			
Measur element	Cu-alloy up to 40 bar with Bourdon tube, from 60 bar with Coil spring			
Case	steel, black			
Dial	Red marker pointer up to 40 bar standard, from 60 bar and vacuum measuring ranges optional			
Window	acrylic glass			
Movement	Cu-alloy			
Price in €	22,65	23,85	18,73	20,04
Ranges Range ID	-1...0 bar = 801 -1...+1.5 bar = 803 -1...+3 bar = 804 -1...+5 bar = 805			
Price in €	22,65	23,85	18,73	20,04
Ranges Range ID	-1...+0.6 bar = 802 -1...+9 bar = 809 -1...+15 bar = 815			
Price in €	22,65	23,85	18,73	20,04
Ranges Range ID	0...0.6 bar = 000			
Price in €	22,65	23,85	18,73	20,04
Ranges Range ID	0...1 bar = 001 0...1.6 bar = 002 0...2.5 bar = 003			
Price in €	22,65	23,85	17,75	20,04
Ranges Range ID	0...4 bar = 004 0...6 bar = 006 0...10 bar = 010 0...16 bar = 016 0...25 bar = 025 0...40 bar = 040			
Price in €	23,85	a.A	18,95	a.A
Ranges Range ID	0...60 bar = 060 0...100 bar = 100 0...160 bar = 160 0...250 bar = 250 0...400 bar = 400			

Article-no: Type + ND + Range ID

Example: MR-10 80 010

Surcharges see page 31

Pressure gauges with Bourdon tube in Standard- and Industry version



Nominal size 63, accuracy 1.6 according to EN 837-1

Special features

- Robust version
- For durability designed measurement system
- High quality pointer dial
- High reliability and long-term stability

Applications

- Machinery and plant engineering
- Energy utilities
- Water and Wastewater Technology
- Hydraulic systems

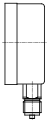
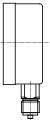
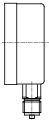
Usage

For all gaseous and liquid media,
which do not crystallize, attack copper alloys
or react viscous.



DG 7

DG 5

Version	Standard version		Industry version			
	with glycerine filling				with glycerine filling	
Type	MR-10 F	MR-14 F	MR-20	MR-25	MR-20 F	MR-25 F
ND	63	63	63	63	63	63
Connection position						
	Data sheet M 150		Data sheet M 210			
Connection	G 1/4 B with key size 14, Cu alloy, Types MR-10 F and MR-20 F bottom Type MR-14 F back centric, MR-25 F back eccentric					
Measur element	Cu-alloy, up to 60 bar with Bourdon tube, from 100 bar CrNi-Steel with coil spring					
Case	CrNi-Steel					
Ring	CrNi-Steel, crimped		CrNi Steel bayonet style			
Window	Acrylic glass		Instrument glass			
Movement	Cu-alloy					
Protection class	IP 65 acco. EN 60529 / IEC 529		IP 54 acco. EN 60529 / IEC 529		IP 65 acco. EN 60529 / IEC 529	
Price in €	25,70	26,35	43,29	43,29	52,79	52,79
Ranges Range ID	-1...0 bar = 801 -1...+5 bar = 805	-1...+0.6 bar = 802 -1...+9 bar = 809	-1...+1.5 bar = 803 -1...+15 bar = 815	-1...+3 bar = 804 1...+24 bar = 824		
Price in €	24,72	25,16	43,29	43,29	52,79	52,79
Ranges Range ID	0...1 bar = 001	0...1.6 bar = 002	0...2.5 bar = 003			
Price in €	23,30	23,85	43,29	43,29	52,79	52,79
Ranges Range ID	0...4 bar = 004 0...16 bar = 016	0...6 bar = 006 0...25 bar = 025	0...10 bar = 010 0...40 bar = 040			
Price in €	29,62	30,17	51,43	51,77	60,93	60,93
Ranges Range ID	0...60 bar = 060 0...250 bar = 250	0...100 bar = 100 0...400 bar = 400	0...160 bar = 160 0...600 bar = 600			
Mehrpreise						
Price in €	8,06	8,06	Front flange with three holes in CrNi-Steel			
	9,15	9,15	Triangular front flange with Clamp fixing in CrNi-steel			
	11,65	11,65	Rear edge of stainless steel			
	6,53	6,53	Clip mark pointer adjustable from the outside			

Article-no:

Type + ND + Range ID

Example: MR-20 63 010

Surcharges see page 31

Pressure gauges with Bourdon tube in Industry version



Nominal size 100 and 160, accuracy 1 according to EN 837-1

Special features

Robust version
For durability designed measurement system
High quality pointer dial

Applications

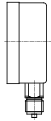
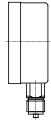
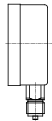
Machinery and plant engineering
Energy utilities
Water and Wastewater Technology
Hydraulic plants (with glycerol)

Usage

For all gaseous and liquid media,
which do not attack copper alloys
or react viscous.



DG 5

Version					with glycerine filling			
Type	MR-20	MR-25	MR-20	MR-25	MR-20 F	MR-25 F	MR-20 F	MR-25 F
ND	100	100	160	160	100	100	160	160
Connection position								
	Data sheet M 220				Data sheet M 230			
Connection	G 1/2 B with key size 22, Cu-alloy Types MR-20 bottom, Types MR-25 back eccentric							
Measur element	ND 100 Cu-alloy, up to 60 bar with Bourdon tube, from 100 bar CrNi-steel 316L with coil spring ND 160 Cu-alloy, up to 40 bar with Bourdon tube, from 60 bar CrNi-steel 316L with coil spring							
Case	CrNi-Steel							
Bayonet ring	CrNi-Steel							
Window	Instrument glass						Safety glass	
Movement	Copper alloy and nickel silver							
Protection class	IP 54 according to EN 60529 / IEC 529				IP 65 according to EN 60529 / IEC 529			
Price in €	47,14	73,70	82,89	116,32	86,93	133,72	144,58	193,07
Ranges Range ID	-0.6...0 bar = 800 -1...0 bar = 801 -1...+0.6 bar = 802 -1...+1.5 bar = 803 -1...+3 bar = 804 -1...+5 bar = 805 -1...+9 bar = 809 -1...+15 bar = 815 -1...+24 bar = 824 0...0.6 bar = 000 0...1 bar = 001 0...1.6 bar = 002 0...2.5 bar = 003							
Price in €	47,14	73,70	82,89	116,32	86,93	133,72	144,58	193,07
Ranges Range ID	0...4 bar = 004 0...6 bar = 006 0...10 bar = 010 0...16 bar = 016 0...25 bar = 025 0...40 bar = 040							
Price in €	69,86	96,87	114,88	121,52	111,68	157,69	168,20	229,13
Ranges Range ID	0...60 bar = 060 0...100 bar = 100 0...160 bar = 160 0...250 bar = 250 0...400 bar = 400 0...600 bar = 600							
Price in €	113,94	137,34	142,01	188,89	171,93	186,63	248,23	259,54
Ranges Range ID	0...1.000 bar = 910							

Article-no: Type + ND + Range ID

Example: MR-20 100 010

Surcharges see page 31

Pressure gauges with Bourdon tube in Industry version



Nominal size 100 and 160, accuracy 1 according to EN 837-1

Special features

robust version
for durability designed measurement system
high quality pointer dial

Applications

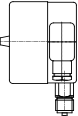
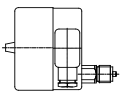
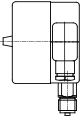
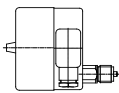
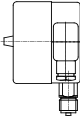
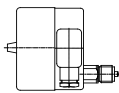
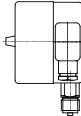
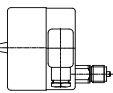
Machinery and plant engineering
Energy utilities
Water and Wastewater Technology
Hydraulic systems -
(with silicone oil filling)

Usage

For controlling processes by opening
or closing the adjustable contacts from outside.
for all gaseous and liquid media,
which do not attack copper alloys
or react viscous.



DG 5

	with magnetic snap contact 1-way - Surcharges see page 44							
Version					with silicone oil filling			
Type	KMR-20	KMR-25	KMR-20	KMR-25	KMR-20 F	KMR-25 F	KMR-20 F	KMR-25 F
ND	100	100	160	160	100	100	160	160
Connection position								
	Data sheet M 240		Data sheet M 250		Data sheet M 240		Data sheet M 250	
Connection	G 1/2 B with key size 22, Cu-alloy Types KMR-20 bottom, Types KMR-25 back eccentric							
Measur element	ND 100 Cu-alloy, up to 60 bar with Bourdon tube, from 100 bar CrNi-steel 316L with coil spring ND 160 Cu-alloy, up to 40 bar with Bourdon tube, from 60 bar CrNi-steel 316L with coil spring							
Case	CrNi-steel							
Window	Polycarbonate							
Movement	Copper alloy and nickel silver							
Protection class	IP 54 according to EN 60529 / IEC 529				IP 65 according to EN 60529 / IEC 529			
Price in €	277,73	291,30	331,99	357,88	443,22	456,45	533,99	546,99
Ranges Range ID	-1...0 bar = 801 -1...+0,6 bar = 802 -1...+1,5 bar = 803 -1...+3 bar = 804 -1...+5 bar = 805 -1...+9 bar = 809 -1...+15 bar = 815 1...+24 bar = 824 0...1 bar = 001 0...1,6 bar = 002 0...2,5 bar = 003							
Price in €	273,67	286,78	327,81	350,19	439,04	452,38	529,58	542,70
Ranges Range ID	0...4 bar = 004 0...6 bar = 006 0...10 bar = 010 0...16 bar = 016 0...25 bar = 025 0...40 bar = 040							
Preis in €	302,26	314,81	367,37	393,94	466,73	480,41	570,84	583,84
Ranges Range ID	0...60 bar = 060 0...100 bar = 100 0...160 bar = 160 0...250 bar = 250 0...400 bar = 400 0...600 bar = 600							
Preis in €	341,26	356,97	398,12	429,21	496,24	509,24	601,70	614,93
Ranges Range ID	0...1.000 bar = 910							

Article-No: Type + ND + Range ID + Contact name (see page 44)

Example: KMR-20 100 010 M12

Surcharges see page 31

Pressure gauges with Bourdon tube in Stainless steel version



Nominal size 40 and 50, accuracy 1.6 according to EN 837-1

Special features

Robust version
High reliability and long-term stability
High wear resistance to the movement

Applications

Chemical and petrochemical
Industries
Pharmacy
Food Industry

Usage

For all gaseous and liquid media,
which do not attack the measuring system
or react viscous.



DG 7

Version					With glycerine filling			
Type	MR-30	MR-34	MR-30	MR-34	MR-30 F	MR-34 F	MR-30 F	MR-34 F
ND	40	40	50	50	40	40	50	50
Connection position								
	Data sheet M 302				Data sheet M 305			
Connection	G 1/8 B		G 1/4 B		G 1/8 B		G 1/4 B	
	Key size 14, CrNi-steel 316L							
	Types MR-30 bottom, Types MR-34 back centric							
Measur element	CrNi-Steel 316L, up to 100 bar with Bourdon tube, from 160 bar with coil spring							
Case	CrNi-Steel							
Crimped-on ring	CrNi-steel							
Window	Instrument glass							
Movement	CrNi-Steel							
Protection class	IP 65 according to EN 60529 / IEC 529							
Price in €	91,45	102,30	91,45	102,30	99,00	110,50	99,00	110,50
Ranges Range ID	-1...0 bar = 801 -1...+0.6 bar = 802 -1...+1.5 bar = 803 -1...+3 bar = 804 -1...+5 bar = 805 -1...+9 bar = 809 -1...+15 bar = 815							
Price in €	91,45	102,30	91,45	102,30	99,00	110,50	99,00	110,50
Ranges Range ID	0...1 bar = 001 0...1.6 bar = 002 0...2.5 bar = 003							
Price in €	91,45	102,30	91,45	102,30	99,00	110,50	99,00	110,50
Ranges Range ID	0...4 bar = 004 0...6 bar = 006 0...10 bar = 010 0...16 bar = 016 0...25 bar = 025 0...40 bar = 040							
Price in €	99,80	111,00	99,80	111,00	113,14	119,50	113,14	119,50
Ranges Range ID	0...60 bar = 060 0...100 bar = 100 0...160 bar = 160 0...250 bar = 250 0...400 bar = 400 0...600 bar = 600 *)							

Article-no: Type + ND + Range ID

Example: MR-30 40 010

Surcharges see page 31

*) only class 2.5

Pressure gauges with Bourdon tube in Stainless steel version



Nominal size 63, accuracy 1.6 according to EN 837-1

Special features

- Robust version
- High reliability and long-term stability
- High wear resistance to the movement

Applications

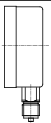
- Chemical and petrochemical Industries
- Pharmacy
- Food Industry

Usage

For all gaseous and liquid media, which do not attack the measuring system, do not crystallize or react viscous.



DG 5

	Stainless steel version				Safety version S3		
Version			With glycerine filling			DG 7	With glycerine filling
Type	MR-30	MR-35	MR-30 F	MR-35 F	MR-36	MR-37	MR-36 F
ND	63	63	63	63	63	63	63
Connection position							
	Data sheet M 310				Data sheet M 315		
Connection	G 1/4 B with key size 14, CrNi-steel 316L Types MR-30 and MR-36 bottom, Types MR-35 and MR-37 back eccentric						
Measur element	CrNi-Steel 316L, up to 100 bar with Bourdon tube, from 160 bar with coil spring						
Case	CrNi-Steel				CrNi-Steel with solid baffle wall and blow-out back, Category S 3		
Bayonet ring	CrNi-Steel						
Window	Laminated safety glass						
Movement	CrNi-Steel						
Protection class	IP 65 according to EN 60529 / IEC 529						
Price in €	75,00	83,00	87,00	95,00	96,99	163,50	106,82
Ranges Range ID	-1...0 bar = 801 -1...+5 bar = 805 0...1 bar = 001	-1...+0.6 bar = 802 -1...+9 bar = 809 0...1.6 bar = 002	-1...+1.5 bar = 803 -1...+15 bar = 815 0...2.5 bar = 003	-1...+3 bar = 804 1...+24 bar = 824			
Price in €	71,00	75,00	85,00	89,00	92,80	163,50	102,98
Ranges Range ID	0...4 bar = 004 0...16 bar = 016	0...6 bar = 006 0...25 bar = 025	0...10 bar = 010 0...40 bar = 040				
Price in €	85,00	89,00	99,00	103,00	107,61	177,50	121,63
Ranges Range ID	0...60 bar = 060 0...250 bar = 250	0...100 bar = 100 0...400 bar = 400	0...160 bar = 160 0...600 bar = 600 *)				
Price in €	122,50	122,53	146,50	146,50	125,92	192,50	135,76
Ranges Range ID	0...1.000 bar = 910 *)						

Article-no: Type + ND + Range ID

Example: MR-30 63 010

Surcharges see page 31

*) only class 2.5

Pressure gauges with Bourdon tube in Stainless steel version



Nominal size 100 and 160, accuracy 1 according to EN 837-1

Special features

- Robust version
- High reliability and long-term stability
- High wear resistance to the movement

Applications

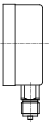
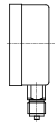
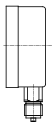
- Chemical and petrochemical Industries
- Pharmacy
- Food Industry

Usage

For all gaseous and liquid media, which do not attack the measuring system do not crystallize or react viscous.



DG 5

Version					with glycerine filling			
Type	MR-30	MR-35	MR-30	MR-35	MR-30 F	MR-35 F	MR-30 F	MR-35 F
ND	100	100	160	160	100	100	160	160
Connection position								
	Data sheet M 320				Data sheet M 330			
Connection	G 1/2 B with key size 22, CrNi-steel 316L Types MR-30 bottom, Types MR-35 back eccentric							
Measur element	ND 100 CrNi-steel 316L, up to 60 bar with Bourdon tube, from 100 bar with coil spring ND 160 CrNi-steel 316L, up to 40 bar with Bourdon tube, from 60 bar with coil spring and 1.600 bar NiFe-alloy with coil spring							
Case	CrNi-Steel							
Bayonet ring	CrNi-Steel							
Window	Laminated safety glass							
Movement	CrNi-Steel							
Protection class	IP 54 according to EN 60529 / IEC 529				IP 65 according to EN 60529 / IEC 529			
Price in €	118,92	141,98	172,61	205,05	135,98	166,62	249,59	267,56
Ranges Range ID	-0.6...0 bar = 800 -1...+3 bar = 804 -1...+24 bar = 824	-1...0 bar = 801 -1...+5 bar = 805 0...0.6 bar = 000	-1...+0.6 bar = 802 -1...+9 bar = 809 0...1 bar = 001	-1...+1.5 bar = 803 -1...+15 bar = 815 0...1.6 bar = 002 0...2.5 bar = 003				
Price in €	114,85	137,79	168,31	200,98	131,46	162,44	245,75	263,38
Ranges Range ID	0...4 bar = 004 0...16 bar = 016	0...6 bar = 006 0...25 bar = 025	0...10 bar = 010 0...40 bar = 040					
Price in €	142,65	163,91	208,33	241,22	155,43	191,26	285,65	297,86
Ranges Range ID	0...60 bar = 060 0...250 bar = 250	0...100 bar = 100 0...400 bar = 400	0...160 bar = 160 0...600 bar = 600					
Price in €	181,54	193,75	257,39	290,28	207,88	218,73	333,80	346,91
Ranges Range ID	0...1.000 bar = 910							
Price in €	254,11	266,88	316,62	351,66	259,99	271,97	372,91	385,69
Ranges Range ID	0...1.600 bar = 916							

Article-no: Type + ND + Range ID
Example: MR-30 100 010

Surcharges see page 31

Contact pressure gauge with Bourdon tube in Stainless steel- and Safety version



Nominal size 63, accuracy 1.6 according to EN 837-1

Special features

Robust version
High reliability and long-term stability
High wear resistance to the movement

Applications

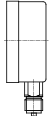
Chemical and petrochemical
Industries
Pharmacy
Food Industry

Usage

For controlling processes by opening
or closing the adjustable contacts from outside.
For all gaseous and liquid media,
which do not attack the measuring system
do not crystallize or react viscous.



DG 7

	with Reed-contact 1-way, surcharges see page 44				magnetic snap cont. 1-way	
Version	Stainless steel version		Safety version			
Type	KMR-30	KMR-35	KMR-36	KMR-37	KMR-36	KMR-37
ND	63	63	63	63	63	63
Connection position						
	Data sheet M 348					
Connection	G 1/4 B with key size 14, CrNi-steel 316L Types KMR-30 bottom, Types KMR-35 and KMR-37 back eccentric					
Measur element	CrNi-Steel 316L, up to 60 bar with Bourdon tube, from 100 bar with coil spring					
Case	CrNi-Steel		CrNi-Steel with solid baffle wall and blow-out back, Category S 3			
Window	Polycarbonate					
Movement	CrNi-Steel					
Protection class	IP 54 according to EN 60529 / IEC 529					
Price in €	319,08	325,50	384,00	396,00	519,10	531,10
Ranges Range ID	-1...+1.5 bar = 803 -1...+3 bar = 804 -1...+5 bar = 805 -1...+9 bar = 809 -1...+15 bar = 815					
Price in €	315,05	321,47	380,00	392,00	515,50	555,00
Ranges Range ID	0..2.5 bar = 003 0...4 bar = 004 0...6 bar = 006 0...10 bar = 010 0...16 bar = 016 0...25 bar = 025 0...40 bar = 040					
Price in €	333,67	338,68	420,00	455,50	525,80	565,30
Ranges Range ID	0...60 bar = 060 0...100 bar = 100 0...160 bar = 160 0...250 bar = 250 0...400 bar = 400 0...600 bar = 600 *)					
Price in €	351,96	358,39	440,50	476,00	546,30	585,80
Ranges Range ID	0...1.000 bar = 910 *)					

Article-no: Type + ND + Range ID + contact name (see page 44)

Example: KMR-30 63 010 R1

Surcharges see page 31

*) only class 2.5

Contact pressure gauge with Bourdon tube in Stainless steel version



Nominal size 100 and 160, accuracy 1 according to EN 837-1

Special features

- Robust version
- High reliability and long-term stability
- High wear resistance to the movement

Applications

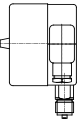
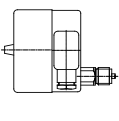
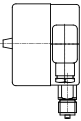
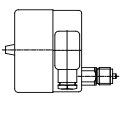
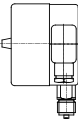
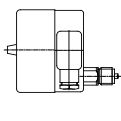
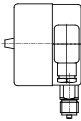
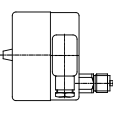
- Chemical and petrochemical Industries
- Pharmacy
- Food Industry

Usage

- For controlling processes by opening or closing the adjustable contacts from outside.
- For all gaseous and liquid media, which do not attack the measuring system do not crystallize or react viscous.



DG 5

	With magnetic snap contact 1-way, surcharges see page 44							
Version					With silicone oil filling			
Type	KMR-30	KMR-35	KMR-30	KMR-35	KMR-30 F	KMR-35 F	KMR-30 F	KMR-35 F
ND	100	100	160	160	100	100	160	160
Connection position								
	Data sheet M 350		Data sheet M 360		Data sheet M 350		Data sheet M 360	
Connection	G 1/2 B with key size 22, CrNi-steel 316L Types KMR-30 bottom, Types KMR-35 back eccentric							
Measur element	ND 100 CrNi-steel 316L, up to 60 bar with Bourdon tube, from 100 bar with coil spring ND 160 CrNi-steel 316L, up to 40 bar with Bourdon tube, from 60 bar with coil spring and 1.600 bar NiFe-alloy with coil spring							
Case	CrNi-Steel							
Window	Polycarbonate							
Movement	CrNi-Steel							
Protection class	IP 54 according to EN 60529 / IEC 529				IP 65 according to EN 60529 / IEC 529			
Price in €	396,54	408,63	478,60	491,49	465,83	478,60	592,43	604,87
Ranges Range ID	-1...0 bar = 801 -1...+0.6 bar = 802 -1...+1.5 bar = 803 -1...+3 bar = 804 -1...+5 bar = 805 -1...+9 bar = 809 -1...+15 bar = 815 1...+24 bar = 824 0...1 bar = 001 0...1.6 bar = 002 0...2.5 bar = 003							
Price in €	392,13	404,22	474,42	487,31	461,42	474,42	588,14	600,35
Ranges Range ID	0...4 bar = 004 0...6 bar = 006 0...10 bar = 010 0...16 bar = 016 0...25 bar = 025 0...40 bar = 040							
Price in €	419,94	431,58	516,36	528,45	489,68	501,32	629,62	641,94
Ranges Range ID	0...60 bar = 060 0...100 bar = 100 0...160 bar = 160 0...250 bar = 250 0...400 bar = 400 0...600 bar = 600							
Price in €	449,33	461,99	544,96	604,08	519,41	531,73	658,45	670,88
Ranges Range ID	0...1.000 bar = 910							
Price in €	524,84	537,38	605,88	618,09	594,81	607,13	719,49	731,92
Ranges Range ID	0...1.600 bar = 916							

Article-no: Type + ND + Range ID + contact name (see page 44)

Example: KMR-30 100 010 M12

Surcharges see page 31

Safety pressure gauges with Bourdon tube in Stainless steel version



Nominal size 100 and 160, accuracy 1 according to EN 837-1

Special features

- Unbreakable wall between the measuring system and dial
- Pressure relief of the case by blow out back wall
- High reliability and long-term stability

Applications

- Machinery and plant engineering
- Energy utilities
- Water and Wastewater Technology
- Hydraulic systems

Usage

- For high-pressure gases, and for safety-technical and labour protection requirements.
- For all gaseous and liquid media, which do not attack the measuring system do not crystallize or react viscous.



DG 5

Version	with glycerine filling				
Type	MR-36	MR-37	MR-36	MR-36 F	MR-36 F
ND	100	100	160	100	160
Connection position					
	Data sheet M 340		M 342	M 340	M 342
Connection	G 1/2 B with key size 22, CrNi-steel Types MR-36 bottom, Types MR-37 back eccentric				
Measur element	ND 100 CrNi-Steel 316L, up to 60 bar with Bourdon tube, from 100 bar with coil spring ND 160 CrNi-Steel 316L, up to 40 bar with Bourdon tube, from 60 bar with coil spring and 1.600 bar NiFe-alloy with coil spring				
Case	CrNi-Steel with solid baffle wall and blow-out back, Category S 3				
Bayonet ring	CrNi-Steel				
Window	Laminated safety glass				
Movement	CrNi-steel				
Protection class	IP 54 according to EN 60529 / IEC 529			IP 65 acco. to EN 60529 / IEC 529	
Price in €	153,05	179,62	258,07	186,74	339,23
Ranges Range ID	-0.6...0 bar = 800 -1...+3 bar = 804 -1...+24 bar = 824	-1...0 bar = 801 -1...+5 bar = 805 0...0.6 bar = 000	-1...+0.6 bar = 802 -1...+9 bar = 809 0...1 bar = 001	-1...+1.5 bar = 803 -1...+15 bar = 815 0...1.6 bar = 002	0...2.5 bar = 003
Price in €	148,98	175,77	254,00	182,44	335,27
Ranges Range ID	0...4 bar = 004 0...16 bar = 016	0...6 bar = 006 0...25 bar = 025	0...10 bar = 010 0...40 bar = 040		
Price in €	170,01	196,69	288,70	209,01	365,00
Ranges Range ID	0...60 bar = 060 0...250 bar = 250	0...100 bar = 100 0...400 bar = 400	0...160 bar = 160 0...600 bar = 600		
Price in €	214,66	241,22	344,88	240,21	408,97
Ranges Range ID	0...1.000 bar = 910				
Price in €	275,02	301,59	405,69	300,57	468,54
Ranges Range ID	0...1.600 bar = 916				

Article-no: Type + ND + Range ID
Example: MR-36 100 010

Surcharges see page 31

Safety-Contact pressure gauge with Bourdon tube in Stainless steel version



Nominal size 100 and 160, accuracy 1 according to EN 837-1

Special features

- Unbreakable wall between the measuring system and dial
- Pressure relief of the case by blow out back wall
- High reliability and long-term stability

Applications

- Machinery and plant engineering
- Energy utilities
- Water and Wastewater Technology
- Hydraulic systems

Usage

- For high-pressure gases, and for safety-technical and labour protection requirements.
- For all gaseous and liquid media, which do not attack the measuring system do not crystallize or react viscous.



DG 5

With magnetic snap contact 1-way - surcharges see page 51					
Version	DG 7		With silicone oil filling		
Type	KMR-36	KMR-37	KMR-36	KMR-36 F	KMR-36 F
ND	100	100	160	100	160
Connection position					
Data sheet	M 370		M 380	M 370	M 372
Connection	G 1/2 B with key size 22, CrNi-steel 316L Types KMR-36 bottom, Types KMR-37 back eccentric				
Measur element	ND 100 CrNi-Steel 316L, up to 60 bar with Bourdon tube, from 100 bar with coil spring ND 160 CrNi-Steel 316L, up to 40 bar with Bourdon tube, from 60 bar with coil spring and 1.600 bar NiFe-alloy with coil spring				
Case	CrNi-Steel with solid baffle wall and blow-out back, Category S 3				
Window	Polycarbonate				
Movement	CrNi-Steel				
Protection class	IP 54 according to EN 60529 / IEC 529			IP 65 acco. to EN 60529 / IEC 529	
Price in €	423,10	on re.	570,84	492,96	667,04
Ranges Range ID	-1...0 bar = 801 -1...+5 bar = 805 0...1 bar = 001	-1...+0.6 bar = 802 -1...+9 bar = 809 0...1,6 bar = 002	-1...+1.5 bar = 803 -1...+15 bar = 815 0...2,5 bar = 003	-1...+3 bar = 804 1...+24 bar = 824	
Price in €	418,81	on re.	566,43	488,78	662,86
Ranges Range ID	0...4 bar = 004 0...16 bar = 016	0...6 bar = 006 0...25 bar = 025	0...10 bar = 010 0...40 bar = 040		
Price in €	445,37	on re.	609,84	515,57	705,92
Ranges Range ID	0...60 bar = 060 0...250 bar = 250	0...100 bar = 100 0...400 bar = 400	0...160 bar = 160 0...600 bar = 600		
Price in €	476,91	on re.	642,06	546,88	738,37
Ranges Range ID	0...1.000 bar = 910				
Price in €	536,59	on re.	701,85	606,45	801,44
Ranges Range ID	0...1.600 bar = 916				

Article-no: Type + ND + Range ID + contact name (see page 51)

Example: KMR-36 100 010 M12

Surcharges see page 31

Precision pressure gauge with Bourdon tube in Industry version



Nominal size 160, accuracy 0.6 according to EN 837-1

Special features

Smooth running of the special pointer work
Good measured values with fine graduation
and the knife edge pointer
High reliability and long-term stability

Applications

Laboratory
Quality assurance

Usage

For accurate pressure measurements and pressure tests
For all gaseous and liquid media,
which do not attack the measuring system,
do not crystallize or react viscous.



DG 5

Industry version				
Version	With glycerine filling			
Type	MRF-20	MRF-25	MRF-20 F	MRF-25 F
ND	160	160	160	160
Connection position				
Data sheet M 380				
Connection	G 1/2 B with key size 22, Cu-alloy up to 1.000 bar, 1.600 bar CrNi-steel 316L Types MRF-20 bottom, Type MRF-25 back eccentric			
Measur element	Cu-alloy, up to 40 bar with Bourdon tube, from 60 bar CrNi-steel 316L with coil spring up 1.000 bar NiFe-alloy with coil spring			
Case	CrNi-Steel			
Bayonet ring	CrNi-Steel			
Window	Instrument glass			
Movement	Copper alloy and nickel silver			
Protection class	IP 54 according to EN 60529 / IEC 529			
Price in €	242,84	278,30	455,20	484,26
Ranges Range ID	-0.6...0 bar = 800 *) -1...0 bar = 801 *) -1...+0.6 bar = 802 *) -1...+1.5 bar = 803 *) -1...+3 bar = 804 -1...+5 bar = 805 -1...+9 bar = 809 -1...+15 bar = 815 -1...+24 bar = 824 0...0.6 bar = 000 *) 0...1 bar = 001 *) 0...1.6 bar = 002 *) 0...2.5 bar = 003			
Price in €	221,70	261,46	438,70	467,64
Ranges Range ID	0...4 bar = 004 0...6 bar = 006 0...10 bar = 010 0...16 bar = 016 0...25 bar = 025 0...40 bar = 040			
Price in €	284,55	335,72	496,80	541,57
Ranges Range ID	0...60 bar = 060 0...100 bar = 100 0...160 bar = 160 0...250 bar = 250 0...400 bar = 400 0...600 bar = 600			
Price in €	402,68	413,04		
Ranges Range ID	0...1.000 bar = 910 *)			

Article-no: Type + ND + Range ID
Example: MRF-20 160 010
Surcharges see page 31

*) Ranges not available with glycerine filling!

Precision pressure gauge with Bourdon tube in Stainless steel version



Nominal size 160, accuracy 0.6
according to EN 837-1

Special features

Smooth running of the special pointer work
Good measured values with fine graduation
and the knife edge pointer
High reliability and long-term stability

Applications

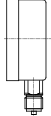
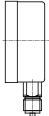
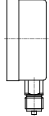
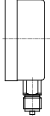
Laboratory
Quality assurance

Usage

For accurate pressure measurements and pressure tests
For all gaseous and liquid media,
which do not attack the measuring system,
do not crystallize or react viscous.



DG 5

	Stainless steel version				Safety version	
Version			With glycerine filling			glycerine filling
Type	MRF-30	MRF-35	MRF-30 F	MRF-35 F	MRF-36	MRF-30 F
ND	160	160	160	160	160	160
Connection position						
	Data sheet M 382				Data sheet M 384	
Connection	G 1/2 B with key size 22, CrNi-Steel 316L Types MRF-30 and MRF 36 bottom, Types MR-35 back eccentric					
Measur element	CrNi-Steel 316L, up to 40 bar with Bourdon tube, from 60 bar with coil spring 1.600 bar NiFe-alloy with coil spring					
Case	CrNi-Steel				CrNi-Steel With solid baffle wall and blow-out back wall	
Window	Laminated safety glass					
Movement	Precision-movement copper alloy and nickel silver					
Protection class	IP 54 acco. EN 60529 / IEC 529		IP 65 acco. EN 60529 / IEC 529		IP 54	IP 65
Price in €	432,94	474,08	653,59	697,67	559,99	780,64
Ranges Range ID	-0.6...0 bar = 800 *) -1...0 bar = 801 *) -1...+0.6 bar = 802 *) -1...+1.5 bar = 803 *) -1...+3 bar = 804 -1...+5 bar = 805 -1...+9 bar = 809 -1...+15 bar = 815 -1...+24 bar = 824 0...0,6 bar = 000 *) 0...1 bar = 001 *) 0...1,6 bar = 002 *) 0...2,5 bar = 003					
Price in €	416,21	455,88	637,31	681,28	543,37	764,36
Ranges Range ID	0...4 bar = 004 0...6 bar = 006 0...10 bar = 010 0...16 bar = 016 0...25 bar = 025 0...40 bar = 040					
Price in €	501,10	542,70	724,80	774,42	628,27	851,74
Ranges Range ID	0...60 bar = 060 0...100 bar = 100 0...160 bar = 160 0...250 bar = 250 0...400 bar = 400 0...600 bar = 600					
Price in €	628,49	670,09	on re.	on re.	755,66	on re.
Ranges Range ID	0...1.000 bar = 910					

Article-no: Type + ND + Range ID

Example: MRF-30 163 010

Surcharges see page 31

*) Ranges not available with glycerine filling!

Pressure gauges with capsule measuring element in Industry version



Nominal size 63, 100 and 160, accuracy 1.6 according to EN 837-3

Special features

- Zero-point correction on dial
- Robust version
- High reliability and long-term stability due to Copper-beryllium capsule

Applications

- Machinery and plant engineering
- Energy utilities

Usage

- For measuring of low pressures
- For all gaseous and dry media, which do not attack the measuring system.



DG 5

Version	Industry version									
Type	MK-20	MK-24	MK-20	MK-24	MK-20	MK-24				
ND	63	63	100	100	160	160				
Connection position										
	Data sheet M 410		Data sheet M 420							
Connection	G 1/4 B with key size 14 Cu-alloy Types MK-20 bottom, Types MK-24 back centric		G 1/2 B with key size 22							
Overpre. Safety	to 16 mbar 1,3-x, 0...25 mbar 5-x, from 40 to 100 mbar 10-x, from 160 mbar 5-x full scale value									
Measur element	Copper-beryllium capsule									
Case	CrNi-Steel									
Bayonet ring	CrNi-Steel									
Movement	Copper alloy and nickel silver									
Protection class	IP 54 according to EN 60529 / IEC 529									
Preis in €			220,42	220,42						
Ranges Range ID	-2,5...0 mbar = 498 *) -4...0 mbar = 499 -6...0 mbar = 500 -10...0 mbar = 501 -16...0 mbar = 502 0...2.5 mbar = 698 *) 0...4 mbar = 699 0...6 mbar = 700 0...10 mbar = 701 0...16 mbar = 702									
Price in €	66,69	66,69	77,54	77,54	162,58	154,18				
Ranges Range ID	-25...0 mbar = 503 -160...0 mbar = 516	-40...0 mbar = 504 -250...0 mbar = 525	-60...0 mbar = 506 -400...0 mbar = 540	-100...0 mbar = 510 -600...0 mbar = 560						
Price in €	72,34	72,34	83,31	83,31	168,24	159,84				
Ranges Range ID	-10...+15 mbar = 515 -15...+10 mbar = 551 -20...+20 mbar = 522 -20...+40 mbar = 524 -40...+20 mbar = 542 -50...+50 mbar = 555 -40...+60 mbar = 546 -100...+60 mbar = 517 -60...+100 mbar = 561 -100...+150 mbar = 415 -150...+100 mbar = 451 -100...+300 mbar = 413									
Price in €	56,41	56,41	60,93	60,93	145,74	137,34				
Ranges Range ID	0...25 mbar = 703 0...40 mbar = 704 0...60 mbar = 706 0...100 mbar = 710 0...160 mbar = 716 0...250 mbar = 725 0...400 mbar = 740 0...600 mbar = 760									

Article-no: Type + ND + Range ID

Example: MK-20 63 710

Surcharges see page 31

*) Measuring ranges 0 ... 2,5 mbar and -2,5 ... 0 mbar with a 180 ° angle scale

Pressure gauges with capsule measuring element in Stainless steel version



Nominal size 63, 100 and 160, accuracy 1.6 according to EN 837-3

Special features

- Zero-point correction on dial
- Robust version
- High reliability and long-term stability due to

Applications

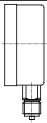
- Chemical and petrochemical industry
- Pharmacy

Usage

- For measuring of low pressures
- For all gaseous and dry media, which do not attack the measuring system.



DG 5

Version	Stainless steel version					
Type	MK-30	MK-34	MK-30	MK-34	MK-30	MK-34
ND	63	63	100	100	160	160
Connection position						
	Data sheet M 430		Data sheet M 440			
Connection	G 1/4 B with key size 14 CrNi-Steel 316L Types MK-30 bottom, Types MK-34 back centric		G 1/2 B with key size 22			
Overpressure safety	1,3 x full scale, only for a short time!					
Measur element	CrNi-Steel 316L					
Case	CrNi-Steel					
Bayonet ring	CrNi-Steel					
Window	Laminated safety glass					
Movement	CrNi-Steel					
Protection class	IP 54 according to EN 60529 / IEC 529					
Price in €	180,80	180,80	211,61	211,61	281,24	281,24
Ranges Range ID	-25...0 mbar = 503 -160...0 mbar = 516	-40...0 mbar = 504 -250...0 mbar = 525	-60...0 mbar = 506 -400...0 mbar = 540	-100...0 mbar = 510 -600...0 mbar = 560		
Price in €	189,80	189,80	222,23	222,23	295,14	295,14
Ranges Range ID	-10...+15 mbar = 515 -20...+40 mbar = 524 -40...+60 mbar = 546 -100...+150 mbar = 415	-15...+10 mbar = 551 -40...+20 mbar = 542 -100...+60 mbar = 517 -150...+100 mbar = 451	-20...+20 mbar = 522 -50...+50 mbar = 555 -60...+100 mbar = 561 -100...+300 mbar = 413			
Price in €	164,80	164,80	197,03	195,78	265,30	265,30
Ranges Range ID	0...25 mbar = 703 0...160 mbar = 716	0...40 mbar = 704 0...250 mbar = 725	0...60 mbar = 706 0...400 mbar = 740	0...100 mbar = 710 0...600 mbar = 760		

Article-no: Type + ND + Range ID
Example: MK-30 63 710
Surcharges see page 31

Extra charges for pressure gauges with Bourdon tube and capsule element



DG 5

Price in €					
	ND 40	ND 50	ND 63	ND 100	ND 160
Front flange with three holes in CrNi-steel			12,66	13,79	36,17
Triangular front flange with Clamp fixing in CrNi-steel			12,89	17,29	36,17
Back flange steel black			8,70	10,96	
Rear edge of stainless steel			12,66	20,57	23,96
Red mark on the dial			1,02	1,02	1,02
Pointer on the dial (not adjustable from the outside)			3,28	3,28	3,62
Pointer in window with removable button			13,68	13,68	15,94
2-position pointer in window with fixed button				48,15	64,09
Trailing pointer			22,72	37,42	47,14
Trailing pointer with adjustable torque				51,55	61,27
2-position Trailing pointer (from 6 bar)				72,12	86,81
Movement of stainless steel				7,46	17,07
Laminated safety glass			6,22	6,22	7,91
Throttle made of copper alloy			1,70	1,70	1,70
Throttle made of CrNi steel			3,28	3,28	3,28
Oil and grease free up to 600 bar			11,19	11,19	11,19
Oil and grease-free for oxygen, up to 600 bar (only in safety version)			25,00	25,00	25,00
Silicone-free version	6,90	6,90	6,90	6,90	6,90
Special thread for connection of copper alloy			3,73	4,41	4,41
Special thread for connection of CrNi steel			6,44	7,23	7,23
Leaded devices				6,22	6,22
Adjusting direction 90° differing			10,74	10,74	10,74
Connection position from six o'clock position differing			13,23	13,23	13,23
Medium temperature up to 130 °C with special solder			3,73	3,73	3,73
Medium temperature up to 150 °C with hard solder			7,23	7,23	7,23
Medium temperature up to 200 °C, only stainless steel version			8,70	8,70	8,70
Production of the dial plate net	on	on	50,75	64,09	77,43
Any additional color printing to the black base color *) net	request	request	6,78	6,78	6,78
Test certificate with 5 measuring points (Class 1.0) net	33,46	33,46	33,46	33,46	33,46
Test certificate with 10 measuring points (Class 0.6) net				40,13	40,13
Factory certificate 2.2 EN 10 204 net	15,57	15,57	15,57	15,57	15,57
Factory certificate 3.1 EN 10 204 net	36,33	36,33	36,33	36,33	36,33
Stamp costs per instrument net	2,08	2,08	2,08	2,08	2,08
Accuracy class 1 for MR-2x, MR-3x, ND 63 Class 1,6			10,85		
Accuracy class 0.6 for Bourdon tube pressure gauge Class 1				133,05	
Accuracy class 0.25 for Precision pressure gauge Class 0.6					100,49
Only with Measur and Movement of Cu-alloy					
ATEX-certificate net			8,48	8,48	8,48

*) Not for the MR-1x series, please inquire.

Pressure gauge with diaphragm measuring element in Industry- and Stainless steel version



Nominal size 100 and 160, accuracy 1.6 according to EN 837-3

Special features

- Robust version
- Diaphragm with the high torque
- Highly insensitive to shock and vibration

Applications

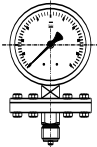
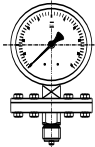
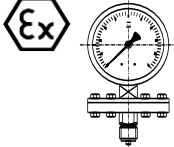
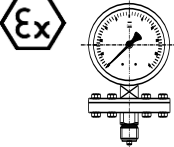
- Machinery and plant engineering
- Energy utilities
- Water and Wastewater Technology
- Pump plants

Usage

- For hard requirements in production
- For highly viscous and crystallizing media open connection flanges are used to allow easy cleaning.



DG 5

	Industry version				Stainless steel version			
Version			With glycerine filling				With glycerine filling	
Type	MP-20	MP-20	MP-20 F	MP-20 F	MP-30	MP-30	MP-30 F	MP-30 F
ND	100	160	100	160	100	160	100	160
Connection position								
	Data sheet M 510				Data sheet M 550			
Connection	G 1/2 B with key size 22, galvanized steel				G 1/2 B with key size 22, CrNi-Steel 316L			
Wetted parts	Galvanized steel, NBR seals (Perbunan)				CrNi-Steel 316L, FPM seals (Viton) Measuring flange DN 100			
Case	CrNi-Steel							
Bayonet ring	CrNi-Steel							
Window	Instrument glass			Laminated safety glass				
Movement	Copper alloy and nickel silver				CrNi-Steel			
Protection class	IP 54 acco. EN 60529		IP 65 acco. EN 60529		IP 54 acco. EN 60529		IP 65 acco. EN 60529	
Price in €	138,70	199,95	233,88	317,52	288,47	370,57	387,95	468,32
Ranges Range ID	-0.6...0 bar = 800		-1...0 bar = 801		-1...+0.6 bar = 802		-1...+1.5 bar = 803	
	-1...+3 bar = 804		-1...+5 bar = 805		-1...+9 bar = 809		-1...+15 bar = 815	
	-1...+24 bar = 824		0...400 mbar = 740		0...0.6 bar = 000		0...1 bar = 001	
	0...1.6 bar = 002		0...2.5 bar = 003		0... 4 bar = 004		0...6 bar = 006	
	0...10 bar = 010		0... 16 bar = 016		0...25 bar= 025			

Article-no: Type + ND + Range ID
Example: MP-20 100 010

Surcharges see page 36

Pressure gauge with diaphragm measuring element in Industry- and Stainless steel version



Nominal size 100 and 160, accuracy 1.6*) according to EN 837-3

Special features

- Robust version
- Diaphragm with the high torque
- Highly insensitive to shock and vibration

Applications

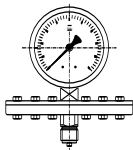
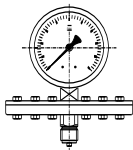
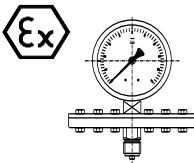
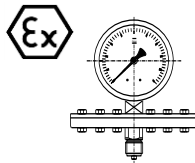
- Machinery and plant engineering
- Energy utilities
- Water and Wastewater Technology
- Pump plants

Usage

- For hard requirements in production
- For highly viscous and crystallizing media open
- Connection flanges are used to allow easy cleaning.



DG 5

	Industry version				Stainless steel version			
Version			With glycerine filling				With glycerine filling	
Type	MP-20	MP-20	MP-20 F	MP-20 F	MP-30	MP-30	MP-30 F	MP-30 F
ND	100	160	100	160	100	160	100	160
Connection position								
	Data sheet M 510				Data sheet M 550			
Connection	G 1/2 B with key size 22, galvanized steel				G 1/2 B with key size 22, CrNi-Steel 316L			
Wetted parts	galvanized steel, NBR seals (Perbunan) Measuring flange DN 160				CrNi-steel 316L, FPM seals (Viton) Measuring flange DN 160			
Case	CrNi-Steel							
Bayonet ring	CrNi-Steel							
Window	Instrument glass			Laminated safety glass				
Movement	Copper alloy and nickel silver				CrNi-Steel			
Protection class	IP 54 acco. EN 60529		IP 65 acco. EN 60529		IP 54 acco. EN 60529		IP 65 acco. EN 60529	
Price in €	459,42	557,50	686,12	799,68	731,79	799,26	979,87	1074,33
Ranges Range ID	0...10 mbar = 701 0...16 mbar = 702							
Price in €	231,28	294,95	333,80	402,53	451,70	489,46	550,47	619,20
Ranges Range ID	-25...0 mbar = 503		-40...0 mbar = 504		-60...0 mbar = 506		-100...0 mbar = 510	
	-160...0 mbar = 516		-250...0 mbar = 525		-400...0 mbar = 540			
Price in €	231,28	294,95	333,80	402,53	451,70	489,46	550,47	619,20
Ranges Range ID	0...25 mbar = 703		0...40 mbar = 704		0...60 mbar = 706		0...100 mbar = 710	
	0...160 mbar = 716		0...250 mbar = 725		0...400 mbar = 740			

Article-no: Type + ND + Range ID

Example: MP-20 100 710

*) Ranges below 400 mbar with glycerine filling only class 2.5

*) Ranges with vacuum and overpressure on request

Surcharges see page 36

Contact pressure gauge with diaphragm in Industry- and Stainless steel version



Nominal size 100 and 160, accuracy 1.6 according to EN 837-3

Special features

- Robust version
- Diaphragm with the high torque
- Highly insensitive to shock and vibration

Applications

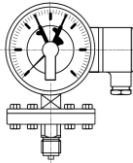
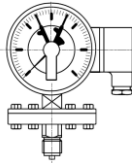
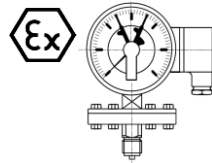
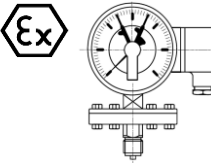
- Machinery and plant engineering
- Energy utilities
- Water and Wastewater Technology
- Pump plants

Usage

- For hard requirements in production
- For highly viscous and crystallizing media open connection flanges are used to allow easy cleaning.



DG 5

	With magnetic snap contact 1-way - Surcharges see page 51							
	Industry version				Stainless steel version			
Version			With silicone oil filling				With silicone oil filling	
Type	KMP-20	KMP-20	KMP-20 F	KMP-20 F	KMP-30	KMP-30	KMP-30 F	KMP-30 F
ND	100	160	100	160	100	160	100	160
Connection position								
	Data sheet M 520				Data sheet M 560			
Connection	G 1/2 B with key size 22, galvanized steel				G 1/2 B with key size 22, CrNi-steel 316L			
Wetted parts	Galvanized steel, NBR seals (Perbunan) Measuring flange DN 100				CrNi-Steel 316L, FPM seals (Viton) Measuring flange DN 100			
Case	CrNi-Steel							
Bayonet ring	CrNi-Steel							
Window	Polycarbonate							
Movement	Copper alloy and nickel silver				CrNi-Steel			
Protection class	IP 54 acco. EN 60529		IP 65 acco. EN 60529		IP 54 acco. EN 60529		IP 65 acco. EN 60529	
Price in €	365,79	425,70	450,00	581,28	507,09	549,70	592,43	705,83
Ranges	-0.6...0 bar = 800		-1...0 bar = 801		-1...+0.6 bar = 802		-1...+1.5 bar = 803	
Range ID	-1...+3 bar = 804		-1...+5 bar = 805		-1...+9 bar = 809		-1...+15 bar = 815	
	-1...+24 bar = 824		0...0.6 bar = 000		0...1 bar = 001			
	0...1.6 bar = 002		0...2.5 bar = 003		0... 4 bar = 004		0...6 bar = 006	
	0...10 bar = 010		0... 16 bar = 016		0...25 bar= 025			

Article-no: Type + ND + Range ID + contact name (see page 51)
Example: KMP-20 100 010 M12

Surcharges see page 36

Contact pressure gauge with diaphragm in Industry- and Stainless steel version



Nominal size 100 and 160, accuracy 1.6 according to EN 837-3

Special features

Robust version
Diaphragm with the high torque
Highly insensitive to shock and vibration

Applications

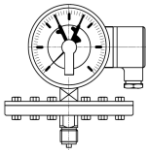
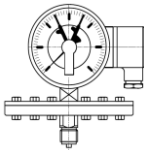
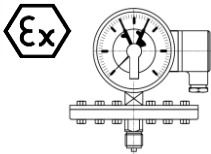
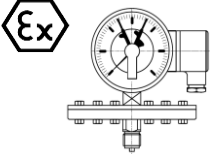
Machinery and plant engineering
Energy utilities
Water and Wastewater Technology
Pumping plants

Usage

For hard requirements in production
For highly viscous and crystallizing media open
connection flanges are used
to allow easy cleaning.



DG 5

	With magnetic snap contact 1-way - Surcharges see page 44							
	Industry version				Stainless steel version			
Version			With silicone oil filling				With silicone oil filling	
Type	KMP-20	KMP-20	KMP-20 F	KMP-20 F	KMP-30	KMP-30	KMP-30 F	KMP-30 F
ND	100	160	100	160 **)	100	160	100	160 **)
Connection position								
	Data sheet M 520				Data sheet M 560			
Connection	G 1/2 B with key size 22, galvanized steel				G 1/2 B with key size 22, CrNi-steel 316L			
Wetted parts	Galvanized steel, NBR seals (Perbunan) Measuring flange DN 160				CrNi-Steel 316L, FPM seals (Viton) Measuring flange DN 160			
Case	CrNi-Steel							
Bayonet ring	CrNi-Steel							
Window	Polycarbonate							
Movement	Copper alloy and nickel silver				CrNi-Steel			
Protection class	IP 54 acco. EN 60529		IP 65 acco. EN 60529		IP 54 acco. EN 60529		IP 65 acco. EN 60529	
Preis in €	453,74	528,79	537,95	669,51	704,23	721,30	789,46	915,52
Ranges Range ID	-60...0 mbar = 506 -100...0 mbar = 510 -160...0 mbar = 516 -250...0 mbar = 525 -400...0 mbar = 540							
Price in €	453,74	528,79	537,95	669,51	704,23	721,30	789,46	915,52
Ranges Range ID	0...60 mbar = 706 0...100 mbar = 710 0...160 mbar = 716 0...250 mbar = 725 0...400 mbar = 740							

Article-no: Type + ND + Range ID + contact name (see page 44)

Example: KMP-20 100 010 M12

Surcharges see page 36

Ranges with vacuum and overpressure on request

**) With magnetic snap M33 or magnetic snap contact 3-waycontact
not possible

**Extra charges for pressure gauges
with diaphragm, with flange connection**



With measuring flange diameter 160 mm and ranges up to 400 mbar

DG 5

Price in €

Scale ranges up to 400 mbar

Measuring flange diameter 160 mm

Surcharges for flange version according to DIN EN 1092-1

DN	Diaphragm-type	Material	PN	Article-No.	
DN 15	MP-20, MP-20 F, KMP-20, KMP-20 F	Galvan. steel	PN 40	M FL 160 DIN 15-2	180,30
DN 20	MP-20, MP-20 F, KMP-20, KMP-20 F	Galvan. steel	PN 40	M FL 160 DIN 20-2	180,30
DN 25	MP-20, MP-20 F, KMP-20, KMP-20 F	Galvan. steel	PN 40	M FL 160 DIN 25-2	180,30
DN 40	MP-20, MP-20 F, KMP-20, KMP-20 F	Stahl, verzinkt	PN 40	M FL 160 DIN 40-2	186,63
DN 50	MP-20, MP-20 F, KMP-20, KMP-20 F	Galvan. steel	PN 40	M FL 160 DIN 50-2	192,96
DN 65	MP-20, MP-20 F, KMP-20, KMP-20 F	Galvan. steel	PN 40	M FL 160 DIN 65-2	264,40
DN 80	MP-20, MP-20 F, KMP-20, KMP-20 F	Galvan. steel	PN 40	M FL 160 DIN 80-2	335,16

DN 15	MP-30, MP-30 F, KMP-30, KMP-30 F	CrNi-Steel	PN 40	M FL 160 DIN 15-3	401,96
DN 20	MP-30, MP-30 F, KMP-30, KMP-30 F	CrNi-Steel	PN 40	M FL 160 DIN 20-3	401,96
DN 25	MP-30, MP-30 F, KMP-30, KMP-30 F	CrNi-Steel	PN 40	M FL 160 DIN 25-3	401,96
DN 40	MP-30, MP-30 F, KMP-30, KMP-30 F	CrNi-Steel	PN 40	M FL 160 DIN 40-3	426,38
DN 50	MP-30, MP-30 F, KMP-30, KMP-30 F	CrNi-Steel	PN 40	M FL 160 DIN 50-3	451,81
DN 65	MP-30, MP-30 F, KMP-30, KMP-30 F	CrNi-Steel	PN 40	M FL 160 DIN 65-3	494,77
DN 80	MP-30, MP-30 F, KMP-30, KMP-30 F	CrNi-Steel	PN 40	M FL 160 DIN 80-3	562,48

Surcharges for flange version according to ASME B16.5

DN	Diaphragm-type		PN	Article-No.	
1/2"	MP-20, MP-20 F, KMP-20, KMP-20 F	Galvan. steel	Class 150	M FL 160 A150 15-2	180,30
3/4"	MP-20, MP-20 F, KMP-20, KMP-20 F	Galvan. steel	Class 150	M FL 160 A150 20-2	180,30
1"	MP-20, MP-20 F, KMP-20, KMP-20 F	Galvan. steel	Class 150	M FL 160 A150 25-2	180,30
2"	MP-20, MP-20 F, KMP-20, KMP-20 F	Galvan. steel	Class 150	M FL 160 A150 50-2	192,96

1/2"	MP-20, MP-20 F, KMP-20, KMP-20 F	Galvan. steel	Class 300	M FL 160 A300 15-2	180,30
3/4"	MP-20, MP-20 F, KMP-20, KMP-20 F	Galvan. steel	Class 300	M FL 160 A300 20-2	180,30
1"	MP-20, MP-20 F, KMP-20, KMP-20 F	Galvan. steel	Class 300	M FL 160 A300 25-2	180,30
2"	MP-20, MP-20 F, KMP-20, KMP-20 F	Galvan. steel	Class 300	M FL 160 A300 50-2	192,96

1/2"	MP-30, MP-30 F, KMP-30, KMP-30 F	CrNi-Steel	Class 150	M FL 160 A150 15-3	401,96
3/4"	MP-30, MP-30 F, KMP-30, KMP-30 F	CrNi-Steel	Class 150	M FL 160 A150 20-3	401,96
1"	MP-30, MP-30 F, KMP-30, KMP-30 F	CrNi-Steel	Class 150	M FL 160 A150 25-3	401,96
2"	MP-30, MP-30 F, KMP-30, KMP-30 F	CrNi-Steel	Class 150	M FL 160 A150 50-3	451,70

1/2"	MP-30, MP-30 F, KMP-30, KMP-30 F	CrNi-Steel	Class 300	M FL 160 A300 15-3	401,96
3/4"	MP-30, MP-30 F, KMP-30, KMP-30 F	CrNi-Steel	Class 300	M FL 160 A300 20-3	401,96
1"	MP-30, MP-30 F, KMP-30, KMP-30 F	CrNi-Steel	Class 300	M FL 160 A300 25-3	401,96
2"	MP-30, MP-30 F, KMP-30, KMP-30 F	CrNi-Steel	Class 300	M FL 160 A300 50-3	451,70

**Extra charges for pressure gauges
with diaphragm, with flange connection**



With measuring flange diameter 100 mm and ranges from 0,6 bar

DG 5

Price in €

Scale ranges up to 0,6 bar

Measuring flange diameter 100 mm

Surcharges for flange version according to DIN EN 1092-1

DN	Diaphragm-type	Material	PN	Article-No.	
DN 15	MP-20, MP-20 F, KMP-20, KMP-20 F	Galvan. steel	PN 40	M FL 100 DIN 15-2	103,88
DN 20	MP-20, MP-20 F, KMP-20, KMP-20 F	Galvan. steel	PN 40	M FL 100 DIN 20-2	103,88
DN 25	MP-20, MP-20 F, KMP-20, KMP-20 F	Galvan. steel	PN 40	M FL 100 DIN 25-2	103,88
DN 40	MP-20, MP-20 F, KMP-20, KMP-20 F	Galvan. steel	PN 40	M FL 100 DIN 40-2	128,52
DN 50	MP-20, MP-20 F, KMP-20, KMP-20 F	Galvan. steel	PN 40	M FL 100 DIN 50-2	116,20
DN 65	MP-20, MP-20 F, KMP-20, KMP-20 F	Galvan. steel	PN 40	M FL 100 DIN 65-2	197,93
DN 80	MP-20, MP-20 F, KMP-20, KMP-20 F	Galvan. steel	PN 40	M FL 100 DIN 80-2	268,58

DN 15	MP-30, MP-30 F, KMP-30, KMP-30 F	CrNi-Steel	PN 40	M FL 100 DIN 15-3	178,37
DN 20	MP-30, MP-30 F, KMP-30, KMP-30 F	CrNi-Steel	PN 40	M FL 100 DIN 20-3	178,37
DN 25	MP-30, MP-30 F, KMP-30, KMP-30 F	CrNi-Steel	PN 40	M FL 100 DIN 25-3	178,37
DN 40	MP-30, MP-30 F, KMP-30, KMP-30 F	CrNi-Steel	PN 40	M FL 100 DIN 40-3	206,18
DN 50	MP-30, MP-30 F, KMP-30, KMP-30 F	CrNi-Steel	PN 40	M FL 100 DIN 50-3	233,76
DN 65	MP-30, MP-30 F, KMP-30, KMP-30 F	CrNi-Steel	PN 40	M FL 100 DIN 65-3	275,59
DN 80	MP-30, MP-30 F, KMP-30, KMP-30 F	CrNi-Steel	PN 40	M FL 100 DIN 80-3	346,24

Surcharges for flange version according to ASME B16.5

DN	Diaphragm-type		PN	Article-No.	
1/2"	MP-20, MP-20 F, KMP-20, KMP-20 F	Galvan. steel	Class 150	M FL 100 A150 15-2	103,88
3/4"	MP-20, MP-20 F, KMP-20, KMP-20 F	Galvan. steel	Class 150	M FL 100 A150 20-2	103,88
1"	MP-20, MP-20 F, KMP-20, KMP-20 F	Galvan. steel	Class 150	M FL 100 A150 25-2	103,88
2"	MP-20, MP-20 F, KMP-20, KMP-20 F	Galvan. steel	Class 150	M FL 100 A150 50-2	128,41

1/2"	MP-20, MP-20 F, KMP-20, KMP-20 F	Galvan. steel	Class 300	M FL 100 A300 15-2	103,88
3/4"	MP-20, MP-20 F, KMP-20, KMP-20 F	Galvan. steel	Class 300	M FL 100 A300 20-2	103,88
1"	MP-20, MP-20 F, KMP-20, KMP-20 F	Galvan. steel	Class 300	M FL 100 A300 25-2	103,88
2"	MP-20, MP-20 F, KMP-20, KMP-20 F	Galvan. steel	Class 300	M FL 100 A300 50-2	128,41

1/2"	MP-30, MP-30 F, KMP-30, KMP-30 F	CrNi-Steel	Class 150	M FL 100 A150 15-3	178,49
3/4"	MP-30, MP-30 F, KMP-30, KMP-30 F	CrNi-Steel	Class 150	M FL 100 A150 20-3	178,49
1"	MP-30, MP-30 F, KMP-30, KMP-30 F	CrNi-Steel	Class 150	M FL 100 A150 25-3	178,49
2"	MP-30, MP-30 F, KMP-30, KMP-30 F	CrNi-Steel	Class 150	M FL 100 A150 50-3	233,76

1/2"	MP-30, MP-30 F, KMP-30, KMP-30 F	CrNi-Steel	Class 300	M FL 100 A300 15-3	178,49
3/4"	MP-30, MP-30 F, KMP-30, KMP-30 F	CrNi-Steel	Class 300	M FL 100 A300 20-3	178,49
1"	MP-30, MP-30 F, KMP-30, KMP-30 F	CrNi-Steel	Class 300	M FL 100 A300 25-3	178,49
2"	MP-30, MP-30 F, KMP-30, KMP-30 F	CrNi-Steel	Class 300	M FL 100 A300 50-3	233,76

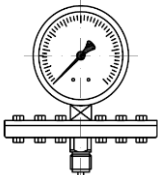
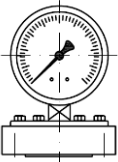
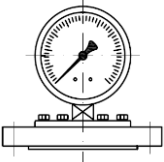
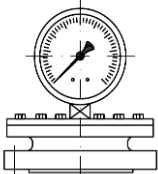
Extra charges for pressure gauges with diaphragm



DG 5

Price in €		
	ND 100	ND 160
Safety case with blow out back wall, with internal separating wall (S3)	34,36	85,80
Red mark on the dial	1,02	1,02
Pointer on the dial (not adjustable from the outside)	3,28	3,62
Pointer in the window with removeable button	13,68	15,94
2-position pointer in window with fixed button	48,04	64,09
Trailing pointer	37,42	47,14
2-position Trailing pointer (from 60 mbar)	72,12	86,70
Adjustable pointer with transmission, aluminum	6,44	
Movement of stainless steel	7,35	16,96
Throttle made of CrNi-steel	3,28	3,28
Laminated safety glass	6,22	7,91
Oil and grease free	11,19	11,19
Silicone-free version	6,90	6,90
Leaded devices	6,22	6,22
Adjusting direction 90° differing	10,74	10,74
Connection position from six o'clock position differing	13,23	13,23
Channel bore diameter of 10 mm drilled with MP in industry version	7,57	7,57
Channel bore diameter of 10 mm drilled with MP in stainless steel version	13,34	13,34
Overpressure 2 times, but max. 40 bar	26,00	26,00
Overpressure 10 times, but max. 40 bar	191,37	191,37
Measuring flange diameter 100 mm		
Overpressure 10 times, but max. 40 bar	225,74	225,74
Measuring flange diameter 160 mm		
Protection film of PTFE for Measuring flange diameter 100 mm	50,75	50,75
Protection film of PTFE for Measuring flange diameter 160 mm	68,84	68,84
Protection film of TANTAL for Measuring flange diameter 100 mm	a.A.	a.A.
Protection film of TANTAL for Measuring flange diameter 160 mm	a.A.	a.A.
Protection film of fine silver for Measuring flange diameter 100 mm	a.A.	a.A.
Production of the dial plate net	64,09	77,43
Any additional color printing to the black base color net	6,78	6,78
Test certificate with 5 measuring points net	33,46	33,46
Test certificate with 10 measuring points net	40,13	40,13
Factory certificate 2.2 EN 10 204 net	15,57	15,57
Factory certificate 3.1 EN 10 204 net	36,33	36,33
Stamp costs per instrument net	2,08	2,08
ATEX-certificate net	8,48	8,48

Extra charges for Pressure gauges with diaphragm For PTFE - lining

Price in €			
	Article-No.	ND 100	ND 160
Measuring flange diameter 100 mm with thread connection 	M PTFE 100-10	236,14	236,14
Measuring flange diameter 160 mm with thread connection 	M PTFE 160-10	374,61	374,61
Measuring flange diameter 100 mm with internal thread DN 15 DIN-flange connection DN 20 DIN-flange connection DN 25 DIN-flange connection 1/2" ASME-flange connection 3/4" ASME-flange connection 1" ASME-flange connection 	M PTFE 100-15	261,46	261,46
	M PTFE 100-20		
	M PTFE 100-25		
	M PTFE 100-16		
	M PTFE 100-21		
	M PTFE 100-26		
Measuring flange diameter 100 mm with open DIN-flange connection DN 50 or with open ASME-flange connection 2" 	M PTFE 100-50	278,64	278,64
Measuring flange diameter 160 mm with open DIN-flange connection DN 15, DN 20 or DN 25 or with open ASME-flange connection 1/2", 3/4" or 1" 	M PTFE 160-15	558,30	558,30
Measuring flange diameter 160 mm with open DIN-flange connection DN 50 or with open ASME-flange connection 2" 	M PTFE 160-50	590,85	590,85

*) only accuracy class 2.5 according to DIN EN 837-3

Differential pressure gauge with capsule measuring element in Industry version



Nominal size 63 and 100, accuracy 1.6 according to EN 837-3

Special features

Zero-point correction on dial
Robust version
High reliability and long-term stability due to
Copper-beryllium capsule

Applications

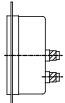
Filter monitoring
Plant engineering
Laboratory

Usage

For measuring small differential pressures
For all gaseous and dry media,
which do not attack the measuring system.



DG 5

Version	Industry version			
Type	MDK-20	MDK-24	MDK-20	MDK-24
ND	63	63	100	100
Connection position				
	Data sheet M 620		Data sheet M 622	
Connection	2 x Push-in fitting for hose 6mm outside Types MDK-20 bottom, Types MDK-24 back		Push-in fitting for hose 8 mm outside and 6 mm inside	
Static pressure	10 x full scale, maximum 400 mbar on the minus side			
Measur element	Copper-beryllium capsule			
Case	CrNi-Steel			
Mounting	rear edge	Three-hole front flange	Rear edge	Three-hole front flange
Bayonet ring	CrNi-Steel			
Window	Laminated safety glass			
Movement	Copper alloy and nickel silver			
Protection class	IP 67 according to EN 60529 / IEC 529			
Price in €	95,00	95,00	120,00	120,00
Ranges Range ID	0...16 mbar = 702 *) 0...100 mbar = 710	0...25 mbar = 703 0...160 mbar = 716	0...40 mbar = 704 0...250 mbar = 725	0...60 mbar = 706 0...400 mbar = 740

Article-no:

Type + ND + Range ID

Example:

MDK-20 63 703

*) Range 0...16 mbar with scale only over 180°

Differential pressure gauge with Bourdon tube in Industry- and Stainless steel version



Nominal size 100 and 160, accuracy class 1.6



Special features

Robust version
High reliability and long-term stability

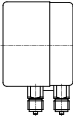
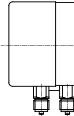
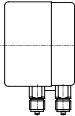
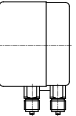
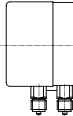
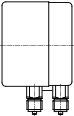
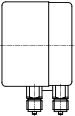
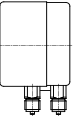
Applications

Filter monitoring
Plant engineering
Heating plants

Usage

For measuring differential pressures
For all gaseous and liquid media,
which do not attack the measuring system,
do not crystallize or react viscous.

DG 7

	Industry version				Stainless steel version			
Version			With glycerine filling				With glycerine filling	
Type	MDR-20	MDR-20	MDR-20 F	MDR-20 F	MDR-30	MDR-30	MDR-30 F	MDR-30 F
ND	100	160	100	160	100	160	100	160
Connection position								
	Data sheet M 610				Data sheet M 615			
Connection	2 x G 1/2 B with key size 22 Cu-alloy				G 1/2 B with key size 22 CrNi-Steel 316L			
static pressure	Maximum full scale							
Measur element	Cu-alloy Up to 40 bar with Bourdon tube, from 60 bar with coil spring in CrNi-steel 316L				CrNi-Steel			
Case	Steel, black*) CrNi-Steel							
Ring	Steel, black *) CrNi Steel bayonet style							
Window	Instrument glass				Laminated safety glass			
Pointer	Aluminum black, for indicating the pressure from the positive connection Aluminium red with turnable scale disc for indicating the pressure from the minus port and the differential pressure Optional: without scale disc, then with two pointers (without additional price)							
Movement	Copper alloy and nickel silver							
Protection class	IP 43 acco. EN 60529		IP 65 acco. EN 60529		IP 54 acco. EN 60529		IP 65 acco. EN 60529	
Price in €	204,03	310,50	482,50	565,60	486,74	627,25	726,27	906,91
Ranges Range ID	0...0.6 bar = 000 *) 0...1 bar = 001 0...1.6 bar = 002 0...2.5 bar = 003 0...4 bar = 004 0...6 bar = 006 0...10 bar = 010 0...16 bar = 016 0...25 bar = 025 0...40 bar = 040							
Price in €	393,37	499,50	666,50	764,60	683,88	795,60	906,23	1060,50
Ranges Range ID	0...60 bar = 060 0...100 bar = 100 0...160 bar = 160 0...250 bar = 250 0...400 bar = 400 0...600 bar = 600							

Article-no: Type + ND + Range ID
Example: MDR-20 100 010

*) range 0...0,6 bar only in ND 100

*) range from 60 bar with housing made of CrNi steel

Differential pressure gauge with diaphragm element in Stainless steel version



Nominal size 100 and 160, accuracy class 1.6

Special features

- High overpressure safety
- Robust version
- High reliability and long-term stability

Applications

- Filter monitoring
- Plant engineering
- Heating plants

Usage

For measuring differential pressures
For all gaseous and liquid media,
which do not attack the measuring system,
do not crystallize or react viscous.



DG 7

Version	With glycerine filling			
Type	MDP-31	MDP-31	MDP-31 F	MDP-31 F
ND	100	160	100	160
Connection position				
Data sheet M 661				
Connection	2 x G 1/2 B with key size 22, CrNi-Steel 316L, axle distance 54 mm Connection of the minus side front, connection of the plus side at the rear			
Static pressure	100 mbar: max. 10 bar both sides - optional up to 25 bar ab 250 mbar max. 25 bar both sides - optional up to 40 bar			
Wetted parts	CrNi-Steel 316L, membrane FPM (viton)			
Case	CrNi-Steel			
Bayonet ring	CrNi-Steel			
Window	Laminated safety glass			
Movement	CrNi-Steel			
Protection class	IP 54 acco. EN 60529		IP 65 acco. EN 60529	
Price in €	678,69	726,61	726,61	826,03
Ranges Range ID	0...100 mbar = 710 0...160 mbar = 716			
Price in €	576,04	629,40	629,40	388,65
Ranges Range ID	0...250 mbar = 725 0...400 mbar = 740 0...600 mbar = 760 0...1 bar = 001 0...1.6 bar = 002 0...2.5 bar = 003 0...4 bar = 004 0...6 bar = 006 0...10 bar = 010 0...16 bar = 016 0...25 bar = 025			

Extra charges

Prices in €		
	NG 100	NG 160
Wall mounting bracket	41,16	41,16
Oil and grease free	24,50	24,50
Ranges from 0...100 mbar overpressure safe up to 25 bar	66,86	66,86
Ranges from 250 mbar overpressure safe up to 40 bar	96,38	96,38

Article-no: Type + ND + Range ID
Example: MDP-31 100 010

Contact differential pressure gauge with diaphragm measuring element in Stainless steel version



Nominal size 100 and 160, accuracy 1.6

Special features

- High overpressure safety
- Robust version
- High reliability and long-term stability

Applications

- Filter monitoring
- Plant Engineering
- Heating plants

Usage

For measuring differential pressure
For all gaseous and liquid media,
which do not attack the measuring system,
do not crystallize or react viscous.



DG 7

With magnetic snap contact 1-way - Surcharges see page 44				
Version	With silicone oil filling			
Type	KMDP-31	KMDP-31	KMDP-31 F	KMDP-31 F
ND	100	160	100	160
Connection position				
Data sheet M 681				
Connection	2 x G 1/2 B with key size 22, CrNi-Steel 316L, axle distance 54 mm Connection of the minus side front, connection of the plus side at the rear			
Static pressure	100 mbar: max. 10 bar both sides - Optional up to 25 bar ab 250 mbar max. 25 bar both sides - Optional up to 40 bar			
Wetted parts	CrNi-Steel 316L, membrane FPM (viton)			
Case	CrNi-Steel			
Bayonet ring	CrNi-Steel			
Window	Polycarbonate			
Movement	CrNi-Steel			
Protection class	IP 54 acco. EN 60529		IP 65 acco. EN 60529	
Price in €	1027,18	1081,32	1107,10	1187,92
Ranges Range ID	0...100 mbar = 710 0...160 mbar = 716 0...250 mbar = 725 0...400 mbar = 740			
Price in €	857,06	909,84	937,20	1016,67
Ranges Range ID	0...250 mbar = 725 0...400 mbar = 740 0...600 mbar = 760 0...1 bar = 001 0...1.6 bar = 002 0...2.5 bar = 003 0...4 bar = 004 0...6 bar = 006 0...10 bar = 010 0...16 bar = 016 0...25 bar = 025			

Extra charges

Prices in €		
	NG 100	NG 160
Wall mounting bracket	41,16	41,16
Oil and grease free	24,50	24,50
Ranges from 0...100 mbar overpressure safe up to 25 bar	66,86	66,86
Ranges from 250 mbar overpressure safe up to 40 bar	96,38	96,38

Article-no: Type + ND + Range ID + contact name (see page 44)
Example: KMDP-31 100 010

Extra charges for contact pressure gauges with Bourdon tube and Diaphragm



Following prices are to be added to the basic rates
of the pressure gauges, independent of the nominal size

Price in €			
Contact type	View clockwise (with increasing pressure)	Contact name	
Reed Contact Only for KMR-3x 63	Contact closes	R-1	0,00
	Contact opens	R-2	0,00
	1. Contact closes, 2. Contact closes	R-11	265,19
	1. Contact closes, 2. Contact opens	R-12	265,19
	1. Contact opens, 2. Contact closes	R-21	265,19
	1. Contact opens, 2. Contact opens	R-22	265,19
Contact type	View clockwise (with increasing pressure)	Contact name	
Magnetic snap contact ND 63 maximum 2 contacts	Contact closes	M-1	0,00
	Contact opens	M-2	0,00
	1-way Changer (1 set pointer)	M-3	38,09
	1. Contact closes, 2. Contact closes	M-11	38,09
	1. Contact closes, 2. Contact opens	M-12	38,09
	1. Contact opens, 2. Contact closes	M-21	38,09
	1. Contact opens, 2. Contact opens	M-22	38,09
	2-Way Changer (2 set pointer)	M-33	148,53
	3-Way contacts, as required	M-xxx	148,53
	Surcharges for 2 separate electrical circuits		33,46
Contact type	View clockwise (with increasing pressure)	Contact name	
Inductive contact ND 63 maximum 2 contacts	Contact closes	I-1	179,96
	Contact opens	I-2	179,96
	1. Contact closes, 2. Contact closes	I-11	385,91
	1. Contact closes, 2. Contact opens	I-12	385,91
	1. Contact opens, 2. Contact closes	I-21	385,91
	1. Contact opens, 2. Contact opens	I-22	385,91
Contact type	View clockwise (with increasing pressure)	Contact name	
Electronic contact ND 63 maximum 2 contacts Output PNP for SPS-systems	Contact closes	E-1	179,73
	Contact opens	E-2	179,73
	1. Contact closes, 2. Contact closes	E-11	386,03
	1. Contact closes, 2. Contact opens	E-12	386,03
	1. Contact opens, 2. Contact closes	E-21	386,03
	1. Contact opens, 2. Contact opens	E-22	386,03
Extra charges	Plug-connector instead of cable boxes		27,36
	with square plug connector EN 175301-803 (DIN 43 650), instead cable boxes		27,36

Minimum ranges Number of contact	Bourdon tube pressure gauges ND 63	
1 Contact	from 2.5 bar	
2 Contacts	from 4 bar	
Minimum ranges Number of contact	Bourdon tube pressure gauges ND 100 and 160	Diaphragm ND 100 and 160
1 Contact	from 1.0 bar	from 60 mbar
2 Contacts	from 1.6 bar	from 100 mbar
3 Contacts	from 4 bar	from 160 mbar



CHEMICAL SEALS

FOR A WIDE RANGE OF APPLICATIONS

Technical information and selection guide for chemical seals



Type	Description, construction, operation and application
DM	Diaphragm chemical seal Diaphragm chemical seals separate with their diaphragm the to measured medium from the transmission fluid inside the measuring instrument. This allows depending on the version of the pressure transmitter also highly viscous and corrosive or hot liquids with pressure gauges or pressure sensors to measure. By using capillary tubes, the measuring instruments will be mounted away from the pressure measuring point. Height differences between the measuring point and the measuring instrument or temperature Influences will be adjusted in the gauges.
DM-1x	Diaphragm chemical seal with thread connection These chemical seal have an internal diaphragm and it is thereby protected from damage. The medium must flow through the connection channel and may therefore not be highly viscous.
DM-3x	Diaphragm chemical seal with DIN-flange These chemical seals are screwed directly onto DIN welding neck flanges. From the nominal diameter 25 these type with a front flush diaphragm are supplied.
DM-4x DM-6x	Diaphragm chemical seal for the food industry These chemical seals have a front flush diaphragm and therefore they can be mounted "dead space free" at plants, without the measuring medium can accumulate at the edges or transitions. As the filling oil will be used in general medical white oil, according to FDA standards.
DM-5x	Diaphragm chemical seal with clamp connection for pharmacy These chemical seals have a front flush diaphragm and therefore they can be mounted "dead space free" at plants, without the measuring medium can accumulate at the edges or transitions. As the filling oil will be used in general medical white oil, according to FDA standards.
DM-70	Diaphragm chemical seal for the pulp industry These chemical seals have a front flush diaphragm and therefore they can be mounted "dead space free" at plants, without the measuring medium can accumulate at the edges or transitions. For mounting, a special mounting flange is included.
DM-80	Diaphragm-small-chemical seal These chemical seals have a front flush diaphragm and therefore they can be mounted "dead space free" at plants, without the measuring medium can accumulate at the edges or transitions.
DM-109	Diaphragm chemical seal of plastic These chemical seals have a internal diaphragm. These are used because of the high chemical resistance for corrosive media. The PN is limited to 10 bar.
DM-110	Diaphragm chemical seal for homogenising machines These chemical seals have a front flush diaphragm and therefore they can be mounted "dead space free" at plants.

Diaphragm-chemical seal with internal diaphragm and thread connection



Special features

Chemical seal separate with their diaphragm the to measure the medium from the mounted pressure gauge, pressure switch or pressure sensor.

Applications

Machinery and plant engineering
Chemical and petrochemical industry
Pharmacy
Foodstuffs Industry

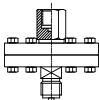
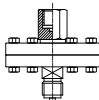
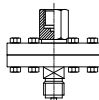
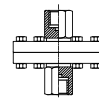
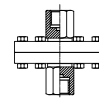
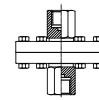
Usage

For the protection the measuring ins the measuring instruments
From corrosive media, pollutions, too high temperatures, crystallizable or highly viscous media.



By using capillary tubes, the measuring instruments will be mounted away from the pressure measuring point.

DG1

Version	Two parts, upper and lower parts bolted together, Diaphragm reset					
Type	DM-10	DM-11	DM-12	DM-20	DM-21	DM-22
Conn.position						
	Data sheet D 110			Data sheet D 120		
PN	PN 40	PN 100	PN 250	PN 40	PN 100	PN 250
Connection	G 1/2 B, key size 22, CrNi-steel 316L			G 1/2 female thread, key size 22, CrNi-steel 316L		
Upper part	CrNi-Steel 316L					
Diaphragm	CrNi-Steel 316L with upper part welded					
Diaphragm-Dm.	60 mm	60 mm	48 mm	60 mm	60 mm	48 mm
Lower part	CrNi-Steel 316L					
Sealing	FPM (Viton)					
Filling liquid	Oil					
Perm. temp.	Medium: -20°C up to +200 °C					
Price in €	244,73			244,73		
For ranges	-1...+0,6 bar, -1...+5 bar, -1...0 bar,	-1...+1,5 bar, -1...+9 bar, 0...1 bar,	-1...+3 bar, -1...+15 bar, 0...1,6 bar,	-1...+24 bar 0...2,5 bar		
Price in €	244,73	281,80	415,30	244,73	281,80	415,30
For ranges	0...4 bar, 0...6 bar, 0...10 bar, 0...16 bar, 0...25 bar, 0...40 bar					
Price in €		281,80	415,30		281,80	415,30
For ranges	0...60 bar, 0...100 bar					
Price in €			415,30			415,30
For ranges	0...160 bar, 0...250 bar					

Article no. = Type

Additional prices for the required mounting to the pressure gauges see page 69

Diaphragm-chemical seal with internal diaphragm with thread connection and large working volume



Special features

Chemical seal separate with their diaphragm the to measure the medium from the mounted pressure gauge, pressure switch or pressure sensor.

Applications

Machinery and plant engineering
Chemical and petrochemical industry
Pharmacy
Foodstuffs Industry

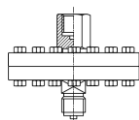
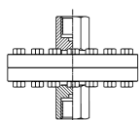
Usage

For the protection
the measuring instruments
From corrosive media, pollutions, too high temperatures,
crystallizable or highly viscous media.



By using capillary tubes, the measuring instruments will be mounted away from the pressure measuring point.

DG1

Version	Two parts, upper and lower parts bolted together, Diaphragm reset			
Type	DM-15		DM-25	
Conn.position				
	Data sheet D 150			
PN	PN 40			
Connection	G 1/2 B with key size 27, CrNi-steel 316L		G 1/2 inside with key size 27, CrNi-steel 316L	
Upper part	CrNi-steel 316L			
Diaphragm	CrNi-steel 316L with Upper part welded			
Diaphragm-Dm.	89 mm			
Lower part	CrNi-steel 316L			
Sealing	NBR (Perbunan)			
Filling liquid	Oil			
Perm. temp.	Medium: -20°C up to +200 °C			
Price in €	296,84		296,84	
For ranges	-1...+0.6 bar, -1...+5 bar, -1...0 bar,	-1...+1.5 bar, -1...+9 bar, 0...1 bar,	-1...+3 bar, -1...+15 bar, 0...1.6 bar,	-1...+24 bar 0...2.5 bar
Price in €	296,84		296,84	
For ranges	0...4 bar, 0...6 bar, 0...10 bar, 0...16 bar, 0...25 bar, 0...40 bar			

Article no. = Type

Additional prices for the required mounting to the pressure gauges see page 69

Diaphragm-chemical seal with internal diaphragm With flange connection according to DIN EN 1092-1 With sealing ledge form B1



Special features

Chemical seal separate with their diaphragm the to measure the medium from the mounted pressure gauge, pressure switch or pressure sensor.

Applications

Machinery and plant engineering
chemical and petrochemical industry
Pharmacy
Foodstuffs Industry

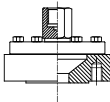
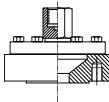
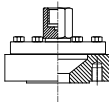
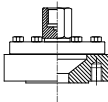
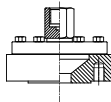
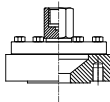
Usage

For the protection
the measuring instruments
From corrosive media, pollutions, too high temperatures,
crystallizable or highly viscous media.



By using capillary tubes, the measuring instruments will be mounted away from the pressure measuring point.

DG1

Version	Two parts, upper and lower parts bolted together, Diaphragm reset					
Type	DM-30 15	DM-30 16	DM-30 20	DM-30 21	DM-30 25	DM-30 26
Conn.position						
	Data sheet D 130					
PN	PN 40	PN 100	PN 40	PN 100	PN 40	PN 100
Connection	DN 15		DN 20		DN 25	
Upper part	CrNi-Steel 316L					
Diaphragm	CrNi-Steel 316L with upper part welded					
Diaphragm-Dm.	60 mm					
Lower part	CrNi-Steel 316L					
Sealing	FPM (Viton)					
Filling liquid	Oil					
Perm. temp.	Medium: -20°C up to +200 °C					
Price in €	347,82		347,82		347,82	
For ranges	-1...+0.6 bar, -1...+5 bar, -1...0 bar,	-1...+1.5 bar, -1...+9 bar, 0...1 bar,	-1...+3 bar, -1...+15 bar, 0...1.6 bar,	-1...+24 bar 0...2.5 bar		
Price in €	347,82	397,89	347,82	397,89	347,82	397,89
For ranges	0...4 bar, 0...6 bar, 0...10 bar, 0...16 bar, 0...25 bar, 0...40 bar					
Price in €		397,89		397,89		397,89
For ranges	0...60 bar, 0...100 bar					

Article no. = Type

Additional prices for the required mounting to the pressure gauges see page 69

Diaphragm-chemical seal with internal diaphragm With flange connection according to ASME B16.5



Special features

Chemical seal separate with their diaphragm the to measure the medium from the mounted pressure gauge, pressure switch or pressure sensor.

Applications

Machinery and plant engineering
Chemical and petrochemical industry
Pharmacy
Foodstuffs Industry

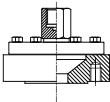
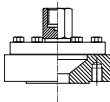
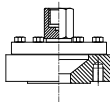
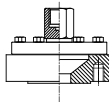
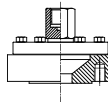
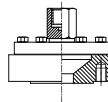
Usage

For the protection
The measuring instruments
from corrosive media, pollutions, too nigh temperatures,
crystallizable or highly viscous media.



By using capillary tubes, the measuring instruments will be mounted away from the pressure measuring point.

DG1

Version	Two parts, upper and lower parts bolted together, Diaphragm reset					
Type	DM-32 15	DM-32 16	DM-32 20	DM-32 21	DM-32 25	DM-32 26
Conn.position						
	Data sheet D 132					
PN	Class 150	Class 300	Class 150	Class 300	Class 150	Class 300
Connection	1/2"		3/4"		1"	
Upper part	CrNi-Steel 316L					
Diaphragm	CrNi-Steel 316L with Upper part welded					
Diaphragm-Dm.	60 mm					
Lower part	CrNi-Steel 316L					
Sealing	FPM (Viton)					
Filling liquid	Oil					
Perm. temp.	medium: -20°C up to +200 °C					
Price in €	347,82	347,82	347,82	347,82	347,82	347,82
For ranges	-1...+0.6 bar, -1...+5 bar, -1...0 bar,	-1...+1.5 bar, -1...+9 bar, 0...1 bar,	-1...+3 bar, -1...+15 bar, 0...1.6 bar,	-1...+24 bar 0...2.5 bar		
Price in €	347,82	347,82	347,82	347,82	347,82	347,82
For ranges	0...4 bar, 0...6 bar, 0...10 bar, 0...16 bar					
Price in €		347,82		347,82		347,82
For ranges	0...16 bar					

Article no. = Type

Additional prices for the required mounting to the pressure gauges see page 69

Diaphragm-chemical seal with internal diaphragm With flange connection according to DIN EN 1092-1 With large working volume



Special features

Chemical seal separate with their diaphragm the to measure the medium from the mounted pressure gauge, pressure switch or pressure sensor.

Applications

Machinery and plant engineering
Chemical and petrochemical industry
Pharmacy
Foodstuffs Industry

Usage

For the protection
the measuring instruments
From corrosive media, pollutions, too high temperatures,
crystallizable or highly viscous media.



By using capillary tubes, the measuring instruments will be mounted away from the pressure measuring point.

DG1

Version	Two parts, upper and lower parts bolted together, Diaphragm reset		
Type	DM-33 15	DM-33 20	DM-33 25
Conn.position			
Data sheet D 133			
PN	PN 40		
Connection	DN 15	DN 20	DN 25
Upper part	CrNi-Steel 316L		
Diaphragm	CrNi-Steel 316L with Upper part welded		
Diaphragm-Dm.	89 mm		
Lower part	CrNi-Steel 316L		
Sealing	NBR (Perbunan)		
Filling liquid	Oil		
Perm. temp.	Medium: -20°C up to +200 °C		
Price in €	432,60	432,60	432,60
For ranges	-1...+0.6 bar, -1...+1.5 bar, -1...+3 bar, -1...+5 bar, -1...+9 bar, -1...+15 bar, -1...+24 bar -1...0 bar, 0...1 bar, 0...1.6 bar, 0...2.5 bar		
Price in €	432,60	432,60	432,60
For ranges	0...4 bar, 0...6 bar, 0...10 bar, 0...16 bar, 0...25 bar, 0...40 bar		

Article no. = Type

Additional prices for the required mounting to the pressure gauges see page 69

Diaphragm-chemical seal with internal diaphragm With flange connection according to ASME B16.5 With large working volume



Special features

Chemical seal separate with their diaphragm the to measure the medium from the mounted pressure gauge, pressure switch or pressure sensor.

Applications

Machinery and plant engineering
Chemical and petrochemical industry
Pharmacy
Foodstuffs Industry

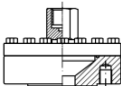
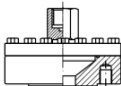
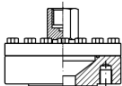
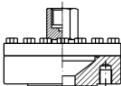
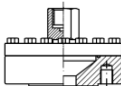
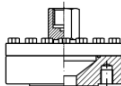
Usage

For the protection
the measuring instruments
From corrosive media, pollutions, too high temperatures,
crystallizable or highly viscous media.



By using capillary tubes, the measuring instruments will be mounted away from the pressure measuring point.

DG1

Version	Two parts, upper and lower parts bolted together, Diaphragm reset					
Type	DM-34 15	DM-34 16	DM-34 20	DM-3 21	DM-34 25	DM-34 26
Conn.position						
	Data sheet D 134					
PN	Class 150	Class 300	Class 150	Class 300	Class 150	Class 300
Connection	1/2"		3/4"		1"	
Upper part	CrNi-Steel 316L					
Diaphragm	CrNi-Steel 316L with Upper part welded					
Diaphragm-Dm.	89 mm					
Lower part	CrNi-Steel 316L					
Sealing	NBR (Perbunan)					
Filling liquid	Oil					
Perm. temp.	Medium: -20°C up to +200 °C					
Price in €	432,60	432,60	432,60	432,60	432,60	432,60
For ranges	-1...+0.6 bar, -1...+5 bar, -1...0 bar,	-1...+1.5 bar, -1...+9 bar, 0...1 bar,	-1...+3 bar, -1...+15 bar, 0...1.6 bar,	-1...+24 bar 0...2.5 bar		
Price in €	432,60	432,60	432,60	432,60	432,60	432,60
For ranges	0...4 bar, 0...6 bar, 0...10 bar, 0...16 bar					
Price in €		432,60		432,60		432,60
For ranges	0...16 bar					

Article no. = Type

Additional prices for the required mounting to the pressure gauges see page 69

Diaphragm-chemical seal with front flush diaphragm

With flange connection according to DIN EN 1092-1

With sealing ledge form B1



Special features

Chemical seal separate with their diaphragm the to measure the medium from the mounted pressure gauge, pressure switch or pressure sensor.

Applications

Machinery and plant engineering
Chemical and petrochemical industry
Pharmacy
Foodstuffs Industry

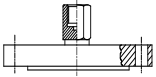
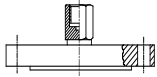
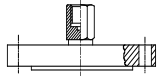
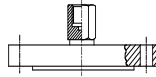
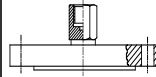
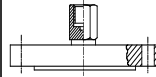
Usage

For the protection
the measuring instruments
From corrosive media, pollutions, too high temperatures,
crystallizable or highly viscous media.



By using capillary tubes, the measuring instruments will be mounted away from the pressure measuring point.

DG1

Version	One-piece, diaphragm front flush welded					
Type	DM-35 25	DM-35 26	DM-35 40	DM-35 50	DM-35 51	DM-35 52
Conn.position						
	Data sheet D 135					
PN	PN 40	PN 100	PN 40	PN 40	PN 63	PN 100
Connection	DN 25		DN 40	DN 50		
Upper part	CrNi-Steel 316L					
Diaphragm	CrNi-Steel 316L with Upper part welded					
Diaphragm-Dm.	28 mm		38 mm	48 mm		
Filling liquid	Oil					
Perm. temp.	Medium: -20°C up to +200 °C					
Price in €				479,96		
For ranges	-1...0 bar, 0...1 bar					
Price in €			465,83	479,96		
For ranges	-1...+0.6 bar, -1...+5 bar, 0...1.6 bar,	-1...+1.5 bar, -1...+9 bar, 0...2.5 bar	-1...+3 bar, -1...+15 bar, 0...4 bar	-1...+24 bar		
Price in €	417,00	452,38	465,83	479,96	758,15	824,95
For ranges	0...6 bar, 0...10 bar, 0...16 bar, 0...25 bar, 0...40 bar					
Price in €		452,38			758,15	824,95
For ranges	0...60 bar					
Price in €		452,38				824,95
For ranges	0...100 bar					

Article no. = Type

Additional prices for the required mounting to the pressure gauges see page 69

Diaphragm-chemical seal with front flush diaphragm With flange connection according to ASME B16.5



Special features

Chemical seal separate with their diaphragm the to measure the medium from the mounted pressure gauge, pressure switch or pressure sensor.

Applications

Machinery and plant engineering
Chemical industry
Petrochemical industry
Pharmacy
Foodstuffs Industry

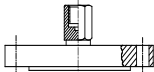
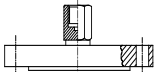
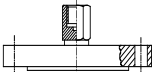
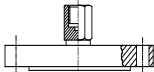
Usage

For the protection
the measuring instruments
From corrosive media, pollutions, too high temperatures,
crystallizable or highly viscous media.



By using capillary tubes, the measuring instruments will be mounted away from the pressure measuring point.

DG1

Version	One-piece, diaphragm front flush welded			
Type	DM-37 25	DM-37 26	DM-37 50	DM-37 51
Conn.position				
	Data sheet D 137			
PN	Class 150	Class 300	Class 150	Class 300
Connection	1"		2"	
Upper part	CrNi-Steel 316L			
Diaphragm	CrNi-Steel 316L with Upper part welded			
Diaphragm-Dm.	28 mm		48 mm	
Filling liquid	Oil			
Perm. temp.	Medium: -20°C up to +200 °C			
Price in €			479,96	479,96
For ranges	-1...+0.6 bar, -1...+1.5 bar, -1...+3 bar, -1...+5 bar, -1...+9 bar, -1...+15 bar, -1...+24 bar -1...0 bar, 0...1 bar, 0...1.6 bar, 0...2.5 bar 0...4 bar			
Price in €	417,00	417,00	479,96	479,96
For ranges	0...6 bar, 0...10 bar, 0...16 bar			
Price in €		417,00		479,96
For ranges	0...25 bar, 0...40 bar			

Article no. = Type

Additional prices for the required mounting to the pressure gauges see page 69

Diaphragm-chemical seal for food industry with union nut according to DIN 11 851



Special features

Chemical seal separate with their diaphragm the to measure the medium from the mounted pressure gauge, pressure switch or pressure sensor.

Quick-connect union nut



Applications

Pharmacy
Foodstuffs Industry

Usage

For the protection the measuring instruments from corrosive media
Pollutions, to high temperatures, crystallizable or highly viscous media.

DG1

Version	with union nut					
Type	DM-40 25	DM-40 32	DM-40 40	DM-40 50	DM-40 65	DM-40 80
Conn.position						
Data sheet D 140						
PN	PN 40	PN 40	PN 40	PN 25	PN 16	PN 16
Connection	DN 25	DN 32	DN 40	DN 50	DN 65	DN 80
Upper part	CrNi-Steel 316L					
Diaphragm	CrNi-Steel 316L with Upper part welded					
Diaphragm-Dm.	28 mm	34 mm	38 mm	48 mm	52 mm	72 mm
Filling liquid	Food stuff oil, FDA-conform					
Perm. temp.	Medium: -20°C up to +120 °C					
Price in €				148,53	237,61	342,17
For ranges	0...1 bar					0... 0.6 bar 0...1 bar
Price in €			138,70	148,53	237,61	342,17
For ranges	0...1.6 bar, -1...+0.6 bar					
Price in €		135,87	138,70	148,53	237,61	342,17
For ranges	0...2.5 bar, -1...+1.5 bar					
Price in €	130,33	135,87	138,70	148,53	237,61	342,17
For ranges	-1...+3 bar, 0...4 bar,	-1...+5 bar, 0...6 bar,	-1...+9 bar, 0...10 bar,	-1...+15 bar, 0...16 bar,	-1...+24 bar, 0...25 bar	
Price in €	130,33	135,87	138,70			
For ranges	0...40 bar					

Article no. = Type

Additional prices for the required mounting to the pressure gauges see page 69

Diaphragm-chemical seal for food industry with collar connecting sleeve and union nut according to SMS-standard



Special features

Chemical seal separate with their diaphragm the to measure the medium from the mounted pressure gauge, pressure switch or pressure sensor.
Quick-connect union nut

Applications

Pharmacy
Foodstuffs Industry

Usage

For the protection the measuring instruments
From corrosive media
pollutions, to high temperatures,
crystallizable or highly viscous media.



DG1

Version	With collar connecting sleeve and union nut			
Type	DM-41 25	DM-41 40	DM-41 50	DM-41 65
Conn.position				
Data sheet D 141				
PN	PN 40	PN 40	PN 40	PN 25
Connection	1"	1 1/2"	2"	2 1/2"
Upper part	CrNi-Steel 316L			
Diaphragm	CrNi-Steel 316L with Upper part welded			
Diaphragm-Dm.	24 mm	34 mm	46 mm	52 mm
Filling liquid	Food stuff oil, FDA-conform			
Perm. temp.	Medium: -20°C up to +120 °C			
Price in €			217,49	349,85
For ranges	0...1 bar			
Price in €			217,49	349,85
For ranges	0...1.6 bar, -1...+0.6 bar			
Price in €		186,06	217,49	349,85
For ranges	0...2.5 bar, -1...+1.5 bar			
Price in €	175,77	186,06	217,49	349,85
For ranges	-1...+3 bar, 0...4 bar,	-1...+5 bar, 0...6 bar,	-1...+9 bar, 0...10 bar,	-1...+15 bar, 0...16 bar, -1...+24 bar, 0...25 bar
Price in €	175,77	186,06	217,49	
for ranges	0...40 bar			

Article no. = Type

Additional prices for the required mounting to the pressure gauges see page 69

Diaphragm-chemical seal for food industry with collar connecting sleeve and union nut according to DS 722-standard



Special features

Chemical seal separate with their diaphragm the to measure the medium from the mounted pressure gauge, pressure switch or pressure sensor.
Quick connection via union nut

Applications

Pharmacy
Foodstuffs Industry

Usage

For the protection the measuring instruments from corrosive media pollutions, to high temperatures, crystallizable or highly viscous media.



DG1

Version	With collar connecting sleeve and union nut				
Type	DM-42 25	DM-42 32	DM-42 40	DM-42 50	DM-42 65
Conn.position					
Data sheet D 142					
PN	PN 40	PN 40	PN 40	PN 25	PN 16
Connection	DN 25	DN 32	DN 40	DN 50	DN 65
Upper part	CrNi-Steel 316L				
Diaphragm	CrNi-Steel 316L with Upper part welded				
Diaphragm-Dm.	24 mm	28 mm	34 mm	46 mm	59 mm
Filling liquid	Food stuff oil, FDA-conform				
Perm. temp.	Medium: -20°C up to +120 °C				
Price in €				213,42	265,41
For ranges	0...1 bar				
Price in €				213,42	265,41
For ranges	0...1,6 bar, -1...+0,6 bar				
Price in €			182,33	213,42	265,41
For ranges	0...2.5 bar, -1...+1.5 bar				
Price in €		177,70	182,33	213,42	265,41
For ranges	0...4 bar, -1...+3 bar				
Price in €	171,93	177,70	182,33	213,42	265,41
For ranges	-1...+5 bar, 0...6 bar,	-1...+9 bar, 0...10 bar,	-1...+15 bar, 0...16 bar,	-1...+24 bar 0...25 bar	
Price in €	171,93	177,70	182,33		
For ranges	0...40 bar				

Article no. = Type

Additional prices for the required mounting to the pressure gauges see page 69

Diaphragm-chemical seal for food industry with collar connecting sleeve and union nut according to ISO 2853, IDF-standard



Special features

Chemical seal separate with their diaphragm the to measure the medium from the mounted pressure gauge, pressure switch or pressure sensor.
quick connection via union nut

Applications

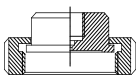
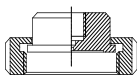
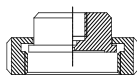
Pharmacy
Foodstuffs Industry

Usage

For the protection the measuring instruments from corrosive media pollutions, to high temperatures, crystallizable or highly viscous media.



DG1

Version	With collar connecting sleeve and union nut		
Type	DM-43 25	DM-43 40	DM-43 50
Conn.position			
	Data sheet D 143		
PN	PN 40		
Connection	1"	1 1/2"	2"
Upper part	CrNi-Steel 316L		
Diaphragm	CrNi-Steel 316L with Upper part welded		
Diaphragm-Dm.	24 mm	34 mm	45 mm
Filling liquid	Food stuff oil, FDA-conform		
Perm. temp.	Medium: -20°C up to +120 °C		
Price in €			250,27
For ranges	0...1 bar		
Price in €			250,27
For ranges	0...1.6 bar, -1...+0.6 bar		
Price in €		224,49	250,27
For ranges	0...2.5 bar, -1...+1.5 bar		
Price in €	205,62	224,49	250,27
For ranges	0...4 bar, -1...+3 bar		
Price in €	205,62	224,49	250,27
For ranges	-1...+5 bar, 0...6 bar,	-1...+9 bar, 0...10 bar,	-1...+15 bar, 0...16 bar, -1...+24 bar, 0...25 bar 0...40 bar

Article no. = Type

Additional prices for the required mounting to the pressure gauges see page 69

Diaphragm-chemical seal with Clamp connection according to ISO 2852



Special features

Chemical seal separate with their diaphragm the to measure the medium from the mounted pressure gauge, pressure switch or pressure sensor.
(Quick connection via clamp*)

Applications

Pharmacy

Usage

For the protection the measuring instruments from corrosive media pollutions, to high temperatures, crystallizable or highly viscous media.



DG1

Version	With Clamp connection				
Type	DM-50 25	DM-50 38	DM-50 51	164	DM-50 76,1
Conn.position					
Data sheet D 150					
PN	PN 40	PN 40	PN 40	PN 25	PN 25
Connection	1"	1 1/2"	2"	2 1/2"	3"
Upper part	CrNi-Steel 316L				
Diaphragm	CrNi-Steel 316L with Upper part welded				
Diaphragm-Dm.	23 mm	34 mm	42 mm	54 mm	66 mm
Filling liquid	Food stuff oil, FDA-conform				
Perm. temp.	Medium: -20°C up to +120 °C				
Price in €			180,75	185,38	210,02
For ranges	0...1 bar				
Price in €			180,75	185,38	210,02
For ranges	0...1.6 bar, -1...+0.6 bar				
Price in €		135,31	180,75	185,38	210,02
For ranges	0...2.5 bar, -1...+1.5 bar				
Price in €		135,31	180,75	185,38	210,02
For ranges	0...4 bar, -1...+3 bar				
Price in €	135,31	135,31	180,75	185,38	210,02
For ranges	-1...+5 bar, 0...6 bar,	-1...+9 bar, 0...10 bar,	-1...+15 bar, 0...16 bar,	-1...+24 bar 0...25 bar	
Price in €	135,31	135,31	180,75		
for ranges	0...40 bar				

*) Clamp and sealing and are not included with

Article No. = Type

Additional prices for the required mounting to the pressure gauges see page 69

Diaphragm-chemical seal with Clamp connection according to DIN 32 676



Special features

Chemical seal separate with their diaphragm the to measure the medium from the mounted pressure gauge, pressure switch or pressure sensor.
(Quick connection via clamp*)



Applications

Pharmacy

Usage

For the protection the measuring instruments from corrosive media pollutions, to high temperatures, crystallizable or highly viscous media.

DG1

Version	With Clamp connection				
Type	DM-52 25	DM-52 32	DM-52 40	DM-52 50	DM-52 65
Conn.position					
Data sheet D 152					
PN	PN 40	PN 40	PN 40	PN 25	PN 25
Connection	DN 25	DN 32	DN 40	DN 50	DN 65
Upper part	CrNi-Steel 316L				
Diaphragm	CrNi-Steel 316L with Upper part welded				
Diaphragm-Dm.	23 mm	28 mm	34 mm	42 mm	60 mm
Filling liquid	Food stuff oil, FDA-conform				
Perm. temp.	Medium: -20°C up to +120 °C				
Price in €				180,75	210,02
For ranges	0...1 bar				
Price in €				180,75	210,02
For ranges	0...1.6 bar, -1...+0.6 bar				
Price in €		135,31	135,31	180,75	210,02
For ranges	0...2.5 bar, -1...+1.5 bar				
Price in €		135,31	135,31	180,75	210,02
For ranges	0...4 bar, -1...+3 bar				
Price in €	135,31	135,31	135,31	180,75	210,02
For ranges	-1...+5 bar, 0...6 bar,	-1...+9 bar, 0...10 bar,	-1...+15 bar, 0...16 bar,	-1...+24 bar 0...25 bar	
Price in €	135,31	135,31	135,31	180,75	210,02
For ranges	0...40 bar				

*) Clamp and sealing and are not included with

Article no. = Type

Additional prices for the required mounting to the pressure gauges see page 69

Diaphragm-chemical seal for food industry with thread socket according to DIN 11 851



Special features

Chemical seal separate with their diaphragm the to measure the medium from the mounted pressure gauge, pressure switch or pressure sensor.

Quick connection via union nut



Applications

Pharmacy

Foodstuffs Industry

Usage

For the protection the measuring instruments from corrosive media pollutions, to high temperatures, crystallizable or highly viscous media.

DG1

Version	With thread socket					
Type	DM-60 25	DM-60 32	DM-60 40	DM-60 50	DM-60 65	DM-60 80
Conn.position						
Data sheet D 160						
PN	PN 40	PN 40	PN 40	PN 25	PN 25	PN 25
Connection	DN 25	DN 32	DN 40	DN 50	DN 65	DN 80
Upper part	CrNi-Steel 316L					
Diaphragm	CrNi-Steel 316L with Upper part welded					
Diaphragm-Dm.	26 mm	30 mm	34 mm	46 mm	59 mm	70 mm
Filling liquid	Food stuff oil, FDA-conform					
Perm. temp.	Medium: -20°C up to +120 °C					
Price in €				251,06	299,55	382,41
For ranges	0...1 bar					0... 0.6 bar 0...1 bar
Price in €				251,06	299,55	382,41
For ranges	0...1.6 bar, -1...+0.6 bar					
Price in €		210,59	233,20	251,06	299,55	382,41
For ranges	0...2.5 bar, -1...+1.5 bar					
Price in €	181,88	210,59	233,20	251,06	299,55	382,41
For ranges	-1...+3 bar, 0...4 bar,	-1...+5 bar, 0...6 bar,	-1...+9 bar, 0...10 bar,	-1...+15 bar, 0...16 bar,	-1...+24 bar 0...25 bar	
Price in €	181,88	210,59	233,20			
For ranges	0...40 bar					

Article no. = Type

Additional prices for the required mounting to the pressure gauges see page 69

Diaphragm-chemical seal for food industry with thread socket according to SMS-standard



Special features

Chemical seal separate with their diaphragm the to measure the medium from the mounted pressure gauge, pressure switch or pressure sensor.
Quick connection via union nut

Applications

Pharmacy
Foodstuffs Industry

Usage

For the protection the measuring instruments from corrosive media pollutions, to high temperatures, crystallizable or highly viscous media.



DG1

Version	With thread socket			
Type	DM-61 25	DM-61 32	DM-61 40	DM-61 50
Conn.position				
Data sheet D 161				
PN	PN 40	PN 40	PN 40	PN 25
Connection	1"	1 1/2"	2"	2 1/2"
Upper part	CrNi-Steel 316L			
Diaphragm	CrNi-Steel 316L with Upper part welded			
Diaphragm-Dm.	26 mm	30 mm	34 mm	46 mm
Filling liquid	Food stuff oil, FDA-conform			
Perm. temp.	Medium: -20°C up to +120 °C			
Price in €				287,12
For ranges	0...1 bar			
Price in €				287,12
For ranges	0...1.6 bar, -1...+0.6 bar			
Price in €		222,35	242,24	287,12
For ranges	0...2.5 bar, -1...+1.5 bar			
Price in €	206,07	222,35	242,24	287,12
For ranges	-1...+3 bar, 0...4 bar,	-1...+5 bar, 0...6 bar,	-1...+9 bar, 0...10 bar,	-1...+15 bar, 0...16 bar, -1...+24 bar, 0...25 bar
Price in €	206,07	222,35	242,24	
For ranges	0...40 bar			

Article no. = Type

Additional prices for the required mounting to the pressure gauges see page 69

Diaphragm-chemical seal for food industry with thread socket according to DS 722-standard



Special features

Chemical seal separate with their diaphragm the to measure the medium from the mounted pressure gauge, pressure switch or pressure sensor.

Quick connection via union nut

Applications

Pharmacy
Foodstuffs Industry

Usage

For the protection the measuring instruments from corrosive media pollutions, to high temperatures, crystallizable or highly viscous media.



DG1

Version	With thread socket				
Type	DM-62 25	DM-62 32	DM-62 40	DM-62 50	DM-62 65
Conn.position					
Data sheet D 162					
PN	PN 40	PN 40	PN 40	PN 25	PN 16
Connection	DN 25	DN 32	DN 40	DN 50	DN 65
Upper part	CrNi-Steel 316L				
Diaphragm	CrNi-Steel 316L with Upper part welded				
Diaphragm-Dm.	24 mm	28 mm	34 mm	46 mm	59 mm
Filling liquid	Food stuff oil, FDA-Conform				
Perm. temp.	Food stuff oil, FDA-Conform				
Price in €				237,72	265,19
For ranges	0...1 bar				
Price in €				237,72	265,19
For ranges	0...1.6 bar, -1...+0.6 bar				
Preis in €			217,26	237,72	265,19
For ranges	0...2.5 bar, -1...+1.5 bar				
Price in €		211,27	217,26	237,72	265,19
For ranges	0...4 bar, -1...+3 bar				
Price in €	200,19	211,27	217,26	237,72	265,19
For ranges	-1...+5 bar, 0...6 bar,	-1...+9 bar, 0...10 bar,	-1...+15 bar, 0...16 bar,	-1...+24 bar 0...25 bar	
Price in €	200,19	211,27	217,26		
For ranges	0...40 bar				

Article no. = Type

Additional prices for the required mounting to the pressure gauges see page 69

Diaphragm-chemical seal for food industry with thread socket according to ISO 2853, IDF-standard



Special features

Chemical seal separate with their diaphragm the to measure the medium from the mounted pressure gauge, pressure switch or pressure sensor.
Quick connection via union nut

Applications

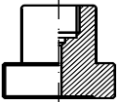
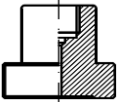
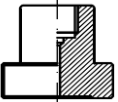
Pharmacy
Foodstuffs Industry

Usage

For the protection the measuring instruments from corrosive media pollutions, to high temperatures, crystallizable or highly viscous media.



DG1

Version	With thread socket		
Type	DM-63 25	DM-63 40	DM-63 50
Conn.position			
	Data sheet D 163		
PN	PN 40		
Connection	1"	1 1/2"	2"
Upper part	CrNi-Steel 316L		
Diaphragm	CrNi-Steel 316L with Upper part welded		
Diaphragm-Dm.	24 mm	34 mm	45 mm
Filling liquid	Food stuff oil, FDA-Conform		
Perm. temp.	Medium: -20°C up to +120 °C		
Price in €			268,92
For ranges	0...1 bar		
Price in €			268,92
For ranges	0...1.6 bar, -1...+0.6 bar		
Price in €		231,62	268,92
For ranges	0...2.5 bar, -1...+1.5 bar		
Price in €		231,62	268,92
For ranges	0...4 bar, -1...+3 bar		
Price in €	179,39	231,62	268,92
For ranges	-1...+5 bar, 0...6 bar,	-1...+9 bar, 0...10 bar, -1...+15 bar, 0...16 bar,	-1...+24 bar, 0...25 bar
Price in €	179,39	231,62	268,92
For ranges	0...40 bar		

Article no. = Type

Additional prices for the required mounting to the pressure gauges see page 69

Diaphragm-chemical seal with front flush Diaphragm for the cellulose industry



Special features

Chemical seal separate with their diaphragm the to measure the medium from the mounted pressure gauge, pressure switch or pressure sensor.

Applications

Paper Industry

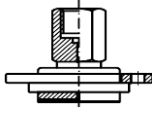
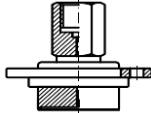
Usage

For the protection from corrosive media from corrosive media, pollutions, too high temperatures, crystallizable or highly viscous media.



By using capillary tubes, the measuring instruments will be mounted away from the pressure measuring point.

DG1

Version	One piece with clamping flange	
Type	DM-70	DM-71
Conn.position		
Data sheet D 170		
PN	PN 40	
Tube length	6.5 mm	15 mm
Upper part	CrNi-Steel 316L	
Diaphragm	CrNi-Steel 316L with Upper part welded	
Diaphragm-Dm.	48 mm	
Tension flange	CrNi-Steel	
Filling liquid	Oil	
Perm. temp.	Medium: -20°C up to +200 °C	
Price in €	216,13	216,13
For ranges	-1...+0.6 bar, -1...+1.5 bar 0... 1 bar, 0...1.6 bar, 0... 2.5 bar	
Price in €	216,13	216,13
For ranges	-1...+3 bar, -1...+5 bar, -1...+9 bar, -1...+15 bar, -1...+24 bar 0... 4 bar, 0...6 bar, 0...10 bar, 0... 16 bar, 0...25 bar, 0...40 bar	

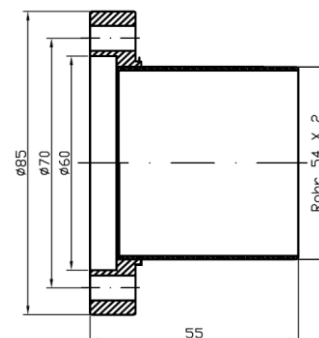
Accessories for the installation

Price in €		
	Article-No.	
Counter flange for welding with pipe end	ZDM 70-1	114,17

Article no. = Type

Additional prices for the

Required mounting to the pressure gauges see page 69



Diaphragm-small-chemical seal with front flush Diaphragm and male threaded connection



Special features

Chemical seal separate with their diaphragm the to measure the medium from the mounted pressure gauge, pressure switch or pressure sensor.

Applications

Machinery and plant engineering
Chemical and petrochemical industry
Pharmacy
Foodstuffs Industry

Usage

For the protection the measuring instruments from corrosive media pollutions, too high temperatures, crystallizable or highly viscous media.



By using capillary tubes, the measuring instruments will be mounted away from the pressure measuring point.

DG1

Version	with male thread				
Type	DM-80 15 *)	DM-80 20	DM-80 25	DM-80 40	DM-80 50
Conn.position					
Data sheet D 180					
PN	PN 600				
Connection	G 1/2 B	G 3/4 B	G 1 B	G 1 1/2 B	G 2 B
Upper part	CrNi-Steel 316L				
Diaphragm	CrNi-Steel 316L with Upper part welded				
Diaphragm-Dm.	18 mm	23 mm	28 mm	42 mm	54 mm
Filling liquid	Oil				
Perm. temp.	Medium: -10°C up to +100 °C				
Price in €					249,48
For ranges	0...1 bar				
Preis in €				221,67	249,48
For ranges	0...1.6 bar, -1...+0.6 bar				
Preis in €				221,67	249,48
For ranges	-1...+1.5 bar, -1...+3 bar 0... 2.5 bar, 0... 4 bar				
Preis in €			208,67	221,67	249,48
For ranges	0...6 bar, -1...+5 bar,				
Preis in €	160,74	188,10	208,67	221,67	249,48
For ranges	-1... +9 bar, -1...+15 bar, -1...+24 bar 0... 10 bar, 0...16 bar, 0... 25 bar, 0...40 bar				
Preis in €	160,74	188,10	208,67	221,67	249,48
For ranges	0... 60 bar, 0...100 bar, 0...160 bar 0...250 bar, 0...400 bar, 0...600 bar				

Article no. = Type

*) only in ND 63

Additional prices for the required mounting to the pressure gauges see page 69

Diaphragm chemical seal with internal diaphragm of plastic



Special features

Chemical seal separate with their diaphragm the to measure the medium from the mounted pressure gauge, pressure switch or pressure sensor.

Applications

Machinery and plant engineering
Water-wastewater engineering

Usage

For the protection the measuring instruments from corrosive media, pollution, crystallized or highly viscous media.



DG1

Version	With female thread G 1/2		
Type	DM-109 01	DM-109 02	DM-109 03
Conn.position			
Data sheet D 109			
PN	PN 10		
Connection	G 1/2 inside		
Upper part	PP, fiberglass-reinforced, orange		
Diaphragm	EPDM, PTFE-coated		
Diaphragm-Dm.	55 mm		
Lower part	PVC, Grey	PP, Grey	PVDF, Grey
Filling liquid	oil or water-alcohol mixture		
perm. temp.	Medium: 0°C bis +60°C		Medium: 0°C bis +80°C
Price in €	119,48	145,03	199,75
For ranges	-1...+3 bar, 0... 2.5 bar,	-1...+5 bar, 0... 4 bar,	-1...+9 bar 0...6 bar, 0...10 bar

Ausführung	With female thread G 1/4		
Typ	DM-109 11	DM-109 12	DM-109 13
Anschlusslage			
Datenblatt D 109			
PN	PN 10		
Connection	G 1/4 inside		
Upper part	PP, fiberglass-reinforced, orange		
Diaphragm	EPDM, PTFE-Coated		
Diaphragm-Dm.	55 mm		
Lower part	PVC, Grey	PP, Grey	PVDF, Grey
Filling liquid	Oil or water-alcohol mixture		
Perm. temp.	Medium: 0°C bis +60°C		Medium: 0°C bis +80°C
Price in €	119,48	145,03	199,75
Für die Anzeigebereiche	-1...+3 bar, 0... 2.5 bar,	-1...+5 bar, 0... 4 bar,	-1...+9 bar 0...6 bar, 0...10 bar

Article no. = Type

Additional prices for the required mounting to the pressure gauges see page 69

Diaphragm chemical seal with front flush Diaphragm for homogenising machines



Special features

Chemical seal separate with their diaphragm the to measure the medium from the mounted pressure gauge, pressure switch or pressure sensor.



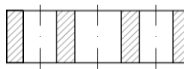
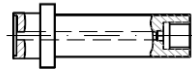
Applications

Pharmacy
Foodstuffs Industry

Usage

For the protection the measuring instruments from corrosive media, pollutions, crystallizable or highly viscous media.

DG1

Version	With Tension flange				Without Tension flange	
Type	DM 110				DM 111	
Position	 					
	Data sheet D 110					
Connection	Connection for homogenising machines Ø 23,8 mm, 13 mm depth					
Tension flange	95 x 43 x 28 mm, CrNi-steel				Without	
PN	PN 600					
Tubus length	13 mm					
Upper part	CrNi-Steel 316L					
Diaphragm	CrNi-Steel 316L with Upper part welded					
Diaphragm-Dm.	22 mm					
Filling liquid	Foodstuff oil, FDA-conform					
Perm. temp.	Medium: -20°C up to +120 °C					
Price in €	433,39				293,45	
For ranges	0...10 bar	0...16 bar	0...25 bar	0...40 bar	0...60 bar	
	0...60 bar	0...100 bar	0...160 bar	0...250 bar	0...400 bar	0...600 bar

Article no. = Type

Additional prices for the required mounting to the pressure gauges see page 69

Additional prices for installation of the chemical seal on the pressure measuring instrument and the filling with oil



Price in €		
Filling with silicone oil, -20 ...+200 °C		Article No.
Direct mounting	900	90,66
Mounting on capillary of stainless steel with protective tube		Article No.
Mounting with 1.0 m capillary	901	268,69
Mounting with 2.0 m capillary	902	322,38
Mounting with 3.0 m capillary	903	343,52
Mounting with 4.0 m capillary	904	367,60
Mounting with 5.0 m capillary	905	397,33
Mounting with 10 m capillary	910	572,54

Filling with foodstuffs oil, FDA-conform, -10 ...+200 °C		Article No.
Direct mounting	900-1	90,54
Mounting on capillary of stainless steel with protective tube		Article No.
Mounting with 1.0 m capillary	901-1	268,69
Mounting with 2.0 m capillary	902-1	322,38
Mounting with 3.0 m capillary	903-1	343,52
Mounting with 4.0 m capillary	904-1	367,60
Mounting with 5.0 m capillary	905-1	397,33
Mounting with 10 m capillary	910-1	572,54

Filling with heat transfer fluid oil, -45°C ...+200 °C		Article No.
Direct mounting	900-2	97,67
Mounting on capillary of stainless steel with protective tube		Article No.
Mounting with 1.0 m capillary	901-2	275,59
Mounting with 2.0 m capillary	902-2	329,39
Mounting with 3.0 m capillary	903-2	350,53
Mounting with 4.0 m capillary	904-2	374,61
Mounting with 5.0 m capillary	905-2	404,22
Mounting with 10 m capillary	910-2	579,55



THERMOMETERS

FOR LIQUIDS AND GASES

Type	Description, construction, operation and application
TB	Thermometers with bimetal coil The bimetal element is located at the lowest point in the thermometer sensor is mounted on one side and consists of two metals with different thermal expansion coefficients. By the helical shape of the bimetal temperature change occurs at a rotation angle change, which is on measuring instruments read pointer on the dial as a temperature.
TG	Thermometer with Gas pressure measuring system The temperature sensor is filled with a defined gas pressure and joined via a capillary with the metal spring snails. A change in temperature on the thermometer sensor, the pressure changes in the system, which is measured and the measuring instruments read pointer on the dial as a temperature.
TM	V-form-machine thermometers Machine thermometers are glass thermometer whose inside space is filled with a liquid. A change in temperature, the volume of liquid and thus the height of the liquid column changes in the glass capillary, which is read as temperature.
T.-1.	Thermometer in standard version This inexpensive version is used for simple measuring applications in field of heating or air pressure technology.
T.-2.	Thermometer in industry version This high-quality version is used in many fields of general industry.
T.-3.	Thermometer in stainless steel version This high-quality version is used in many fields of chemical industry. Other applications include for example the pharmacy or the foodstuffs industry. The sensor is made of stainless steel 1.4571 and is suitable for many aggressive media.
T.-xx F	To increase the abrasion resistance of the pointer work, the whole thermometer case with a highly viscous glycerine is filled. This allows these thermometers in areas with greater mechanical stress, such as used in hydraulic pumps and generators to be.

SUCHY
MESSTECHNIK

*) Ranges only for thermometers with Gas pressure system
#) Ranges only for thermometer with Gas pressure system

10. Smooth sensor	F1
Separate thermowell	F2
Fixed Thread connection	F3
Loose coupling nut	F4
rotatable connection tap	F5
Loose coupling nut With connection-Screw connection	F6
Compression fitting	F7

Thermometers with bimetal coil in Standard version



ND 63, 80, 100 and 160, class 2 according to DIN EN 13 190

Special features

Simple version
Rapidly reacting coiled bimetal
Short response time

Applications

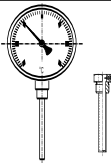
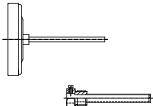
Heating systems
Plants in the industry with low
Requirements on the measuring instruments

Usage

For measuring temperatures
in pipes and tanks



DG 2

Type	TB-10	TB-10	TB-10	TB-14	TB-14	TB-14
ND	63	100	160	63	100	160
						
	Data sheet T 110			Data sheet T 120		
Connection	G 1/2 with key size 21, cupper alloy Removable thermo well with side locking screw, diameter 12 mm Types TB-10 bottom, types TB-14 back centric					
Operate pressure	Up to sensor length 100 mm PN 10, from 160 mm PN 6					
Stem	Copper alloy, Diameter 9 mm, with connection-diameter 14 mm					
measur element	Coiled bimetal					
Case	Steel galvanized		Steel black	Steel galvanized		Steel black
Bezel ring	Steel, nickel plated		Steel black	Steel, nickel plated		Steel black
Viewing glass	Plastic					
Protection class	IP 41 according to EN 60529 / IEC 529					
Display range	0...120 °C with Range ID 120					
Price in €	36,09	42,47	48,85	5,28	7,70	20,36
Sensor length	45 mm					
Price in €	36,86	43,13	49,40	5,94	8,36	21,02
Sensor length	63 mm					
Price in €	37,41	43,79	50,17	7,26	9,68	22,23
Sensor length	100 mm					
Price in €	38,73	44,45	50,72	8,91	10,23	23,55
Sensor length	150 mm					
Price in €	39,39	45,00	51,38	10,56	11,88	24,76
Sensor length	200 mm					
Price in €	39,94	45,77	51,93	12,21	13,09	27,95
Sensor length	250 mm					

Article-no.: Type + ND + Range ID + sensor length

Example: TB-10 100 120 063

Surcharges see page 74

Surcharges for Thermometers with bimetal coil in Standard version



DG 2

display range	Range ID	Price in €
-30...+ 50°C *)	002	7,70
-20...+ 60°C *)	005	7,70
0... + 40°C **)	040	4,73
0... + 60°C *)	060	4,73
0... + 80°C ***)	080	4,73
0... + 100°C	100	4,73
0... + 160°C	160	4,73
0... + 200°C	200	4,73
0... + 250°C	250	4,73
0... + 300°C	300	4,73
0... + 400°C	400	4,73
Surcharge for stem length each additional 100 mm		6,38

*) TB-10 from stem length = 63 mm

**) TB-10 from stem length = 160 mm

***) Display range 0...80°C only for ND 100

Thermometers with bimetal coil in industry version



ND 63, 80, 100 and 160, class 1 according to DIN EN 13 190

Special features

High-quality version
Rapidly reacting coiled bimetal
Short response time

Applications

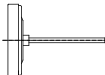
Machinery and plant construction
Tank and pipeline construction
Energy supply
Heating systems

Usage

For measuring temperatures
in pipes and tanks



DG 2

Type	TB-20	TB-20	TB-20	TB-24	TB-24	TB-24
ND	63	100	160	63	100	160
						
	Data sheet T 130			Data sheet T 140		
Connection	Smooth, with collar for attachment of the protection tube, with connection-diameter 18 mm Thermowell selection on page 73 Types TB-20 bottom, types TB-24 back centric					
Operate pressure	Depending on the thermowell					
Stem	CrNi-Steel, diameter 8 mm					
Measur element	Coiled bimetal					
Case	CrNi-Steel					
Bezel ring	CrNi-Steel					
Viewing glass	Instrument glass					
Protection class	IP 43 according to EN 60529 / IEC 529					
Display range	0...120 °C with Range ID 120					
Price in €	51,38	70,31	89,34	19,81	22,45	64,04
Sensor length	45 mm					
Price in €	52,48	71,52	90,55	20,91	23,44	65,14
Sensor length	63 mm					
Price in €	53,58	72,62	91,65	22,45	24,54	66,35
Sensor length	100 mm					
Price in €	54,24	74,49	93,63	23,88	26,41	68,22
Sensor length	150 mm					
Price in €	56,55	77,02	95,94	26,30	28,83	70,64
Sensor length	200 mm					
Price in €	66,13	86,26	103,98	35,65	38,18	78,67
Sensor length	250 mm					

Article-no.: Type + ND + Range ID + sensor length

Example: TB-20 100 120 063

Surcharges see page 86

Thermowell selection on page 77

Surcharges for Thermometers with bimetal coil in Industry version



DG 2

Display range	Range ID	Price in €
-20...+ 60°C *)	002	8,25
-30...+ 50°C *)	005	8,25
0... + 40°C *)	040	6,05
0... + 60°C *)	060	6,05
0... + 80°C **)	080	6,05
0... + 100°C	100	6,05
0... + 160°C	160	6,71
0... + 200°C	200	6,71
0... + 250°C	250	6,71
0... + 300°C	300	6,71
0... + 400°C	400	6,71
Surcharge for stem length each additional 100 mm		8,91

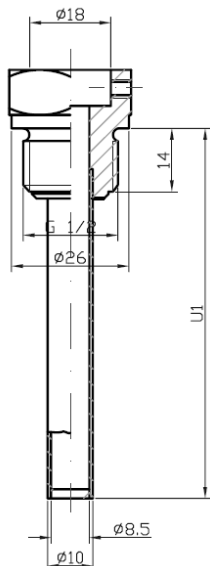
*) TB-20 from stem length = 63 mm

***) Display range 0...80°C only for ND 100

Surcharges for Thermometers with bimetal coil in industry version

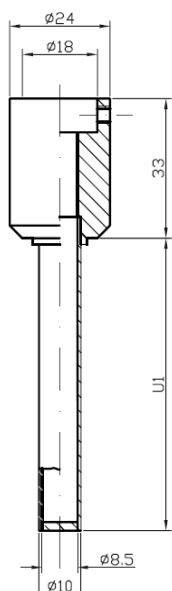
Price in €

Thermo well for thermometer TB-20 and TB-24 for screwing



Data sheet		T 810		
Connection		G 1/2 with key size 27		
Thermometer conn.		Diameter 18 mm (alternative 15 mm)		
Thermo well diameter		Inside 8,5 mm Outside 10 mm		
Sensor length	Material	PN	Article-no	
45 mm	Brass MS 58	PN 16	TS 10451	10,56
63 mm			TS 10631	10,56
100 mm			TS 11001	10,89
160 mm			TS 11601	11,33
200 mm			TS 12001	12,10
250 mm			TS 12501	12,98
Surcharge for stem length each additional 100 mm				2,86
Sensor length	Material	PN	Article-no	
45 mm	Steel	PN 25	TS 10452	19,58
63 mm			TS 10632	20,25
100 mm			TS 11002	20,91
160 mm			TS 11602	21,57
200 mm			TS 12002	22,12
250 mm			TS 12502	23,44
Surcharge for stem length each additional 100 mm				5,28
sensor length	material	PN	Article-No	
45 mm	Cr-Ni-Steel	PN 25	TS 10453	29,82
63 mm			TS 10633	29,82
100 mm			TS 11003	30,26
160 mm			TS 11603	30,70
200 mm			TS 12003	31,47
250 mm			TS 12503	41,04
Surcharge for stem length each additional 100 mm				9,35

Thermo well for thermometers TB-20 and TB-24 for welding



Data sheet		T 810		
Connection		Diameter 24 mm		
Thermometer conn.		Band 18		
Thermo well diameter		Inside 8,5 mm Outside 10 mm		
Sensor length	Material	PN	Article-No	
45 mm	Steel	PN 25	TS 20452	18,26
63 mm			TS 20632	18,92
100 mm			TS 21002	19,58
160 mm			TS 21602	20,25
Sensor length	material	PN	Article-No	
45 mm	Cr-Ni-Steel	PN 25	TS 20453	28,50
63 mm			TS 20633	28,50
100 mm			TS 21003	28,83
160 mm			TS 21603	29,27
200 mm			TS 22003	30,26
250 mm			TS 22503	39,83
Surcharge for stem length each additional 100 mm				9,35

Thermometers with bimetal coil in stainless steel version



ND 63, 80, 100 and 160, class 1 according to DIN EN 13 190

Special features

High-quality version
Rapidly reacting Coiled bimetal
Short response time

Applications

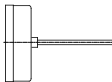
Chemical and
Petrochemical industry
Pharmacy
Food industry

Usage

For measuring temperatures
In pipes and tanks



DG 2

Type	TB-30	TB-30	TB-30	TB-30	TB-34	TB-34	TB-34	TB-34
ND	63	80	100	160	63	80	100	160
Connection								
	Data sheet T 150				Data sheet T 160			
Connection	See sensor type selection on page 75 and data sheet T 190 01 Type TB-30 bottom, type TB-34 back centric							
Operate pressure	Depending on the thermo well							
Stem	CrNi-Steel 316L, diameter 8 mm							
Measur element	Coiled bimetal							
Case	CrNi-Steel							
Crimped-on ring	CrNi-Steel							
Viewing glass	Instrument glass							
Protection class	IP 65 according to EN 60529 / IEC 529							
Display range	0...120 °C with Range ID 120							
Price in €	113,80	121,15	132,11	200,90	88,27	94,91	104,12	164,52
Sensor length	45 mm							
Price in €	113,80	121,15	132,11	200,90	88,27	94,91	104,12	164,52
Sensor length	63 mm							
Price in €	113,80	121,15	132,11	200,90	88,27	94,91	104,12	164,52
Sensor length	100 mm							
Price in €	113,80	121,15	132,11	200,90	88,27	94,91	104,12	164,52
Sensor length	150 mm							
Price in €	113,80	121,15	132,11	200,90	88,27	94,91	104,12	164,52
Sensor length	200 mm							
Price in €	120,56	128,03	138,99	207,66	97,83	104,47	112,99	174,90
Sensor length	250 mm							

Article-no.: Type + ND + Range ID + sensor length + sensor type

Example: TB-30 100 120 063 F3

Surcharges see page 79

Surcharges for Thermometers with bimetal coil in stainless steel version TB-30 and TB-34



DG 2

Price in €		
Display range	Range ID	
-20...+ 40°C	062	0,00
-20...+ 60°C	005	0,00
-30...+ 50°C	002	0,00
-20...+ 80°C	102	0,00
-30...+ 70°C	103	0,00
-50...+ 50°C	105	24,14
0... + 60°C	060	0,00
0... + 80°C	080	0,00
0... + 100°C	100	0,00
0... + 160°C	160	0,00
0... + 200°C	200	0,00
0... + 250°C	250	0,00
0... + 300°C, with neck tube 80 mm	300	14,58
0... + 400°C, with neck tube 80 mm	400	14,58
0... + 500°C, with neck tube 80 mm	500	24,14

Sensor connection for thermometer, CrNi-steel 316L for TB-30 and TB-34

Sensor type	Minimum stem length	Description	
F1	40 mm, for 60°C from 60 mm	Smooth sensor, without thread	0,00
F2	60 mm, for 60°C from 80 mm	With connection-diameter 18 mm For thermo wells type TS 1 and TS 02	11,66
F3	60 mm, for 60°C from 80 mm	Fix thread connection, G 1/2	21,34
F4	52 mm, for 60°C from 72 mm	Loose coupling nut, G 1/2	37,90
F5	45 mm, for 60°C from 65 mm	Rotatable connection tap, G 1/2 Only in combination with thermo well!	37,90
F6	60 mm, for 60°C from 80 mm	Loose coupling nut, G 1/2 With screw connection	73,57
F7	100 mm, for 0°C from 115 mm	Smooth sensor With compression fittings, G 1/2	49,09
Surcharge for stem length each additional 100 mm			10,38

Surcharges	
Case filling: -20°C ...+100°C with glycerin, -40°C und ab 120°C bis 250°C with silikon	57,25

Surcharges for thermo wells see page 86

Thermometers with bimetal coil in stainless steel version



ND 80, 100 and 160, class 1 according to DIN EN 13 190

Special features

- High-quality version
- Short response time
- Rotating and pivoting case

Applications

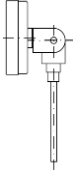
- Chemical and Petrochemical industry
- Pharmacy
- Food industry

Usage

- For measuring temperatures in pipes and tanks



DG 2

Type	TB-33	TB-33	TB-33	TB-33
ND	63	80	100	160
Connection				
	Data sheet T 170			
Connection	See sensor type selection on page 77 and data sheet T 190			
Operating pressure	Depending on the thermo well			
Stem	CrNi-Steel 316L, Diameter 8 mm			
Measuring element	Coiled bimetal			
Case	CrNi-Steel			
Ring	CrNi-Steel, crimp ring			
Viewing glass	Instrument glass			
Protection class	IP 65 according to EN 60529 / ICE 529			
Display range	0...120 °C with Range ID 120			
Price in €	132,69	135,14	148,08	225,85
Sensor length	45 mm			
Price in €	132,69	135,14	148,08	225,85
Sensor length	63 mm			
Price in €	132,69	135,14	148,08	225,85
Sensor length	100 mm			
Price in €	132,69	135,14	148,08	225,85
Sensor length	150 mm			
Price in €	132,69	135,14	148,08	225,85
Sensor length	200 mm			
Price in €	143,07	145,52	158,46	236,23
Sensor length	250 mm			

Article-no.: Typ + Nenngröße + Messtyp + ND + Range ID + sensor length + sensor type

Example: TB-33 100 120 063 F3 TB-33 100 120 063 F3

Surcharges see page 81

Surcharges for Thermometers with bimetal coil in stainless steel version TB-33



DG 2

Price in €		
Display range	Range ID	
-20...+ 40°C	062	0,00
-20...+ 60°C	005	0,00
-30...+ 50°C	002	0,00
-20...+ 80°C	102	0,00
-30...+ 70°C	103	0,00
-50...+ 50°C	105	24,14
0... + 60°C	060	0,00
0... + 80°C	080	0,00
0... + 100°C	100	0,00
0... + 160°C	160	0,00
0... + 200°C	200	0,00
0... + 250°C	250	0,00
0... + 300°C, with neck tube 80 mm	300	14,58
0... + 400°C, with neck tube 80 mm	400	14,58
0... + 500°C, with neck tube 80 mm	500	24,14

Sensor connection for thermometer, CrNi-steel 316L for TB-33

Sensor type	Minimum stem length	Description	
F1	40 mm, for 60°C from 60 mm	Smooth sensor, without thread	0,00
F2	60 mm, for 60°C from 80 mm	With connection-diameter 18 mm For thermo wells type TS 1 and TS 02	11,66
F3	60 mm, for 60°C from 80 mm	Fix thread connection, G 1/2	21,34
F4	52 mm, for 60°C from 72 mm	Loose coupling nut, G 1/2	37,90
F5	45 mm, for 60°C from 65 mm	Rotatable connection tap, G 1/2 Only in combination with thermo well!	37,90
F6	60 mm, für 60°C ab 80 mm	loose union nut, G 1/2 with connection screw	73,57
F7	100 mm, for 0°C from 115 mm	Smooth sensor With compression fittings, G 1/2	49,09
Surcharge for stem length each additional 100 mm			10,38

Surcharges

Case filling: -20°C ...+100°C with glycerin, -40°C und ab 120°C bis 250°C with silikon	57,25
--	-------

Surcharges for thermo wells see page 86

Thermometer with gas pressure measuring sensor in stainless steel version



ND 63, 80, 100 and 160, class 1 according to DIN EN 13 190

Special features

Fulfills high technical requirements
Inert gas filling, physiologically harmless
Short response time

Applications

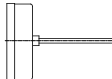
Chemical and
Petrochemical industry
Pharmacy
Food industry

Usage

For measuring temperatures
in pipes and tanks



DG 2

Version	With fixed sensor connection							
Type	TG-30				TG-34			
ND	63	80 *)	100	160	63	80 *)	100	160
Connection								
	Data sheet T 252		Data sheet T 250		Data sheet T 252		Data sheet T 250	
Connection	See sensor type selection on page 94 and data sheet T 250 or 252 Type TG-30 bottom, type TG-34 back centric							
Sensor length	up to 200 mm, for other lengths see additional charges on page 94 Please note the minimum sensor length on page 94!							
Operate pressure	Depending on the thermo well							
Stem	CrNi-Steel 316L, diameter 10 mm (depending on the display range and Diving depth even 8 or 12 mm)							
Measur element	Gas pressure measuring sensor							
Case *)	CrNi-Steel in bayonet version, NG 80 only with crimp ring case							
Ring	CrNi-Steel							
Viewing glass	Instrument glass							
Protection class	IP 65 according to EN 60529 / IEC 529							
Price in €	189,48	193,91	208,60	269,70	192,51	198,34	212,91	274,13
Display range Range ID	-20...+60 °C = 005 -30...+50 °C = 002 -40...+40 °C = 084 -20...+80 °C = 102 -40...+60 °C = 105 0...+80 °C = 080 0...+100 °C = 100 0...+120 °C = 120 0...+160 °C = 160 0...+200 °C = 200 0...+250 °C = 250							
Price in €	204,17	208,60	223,17	284,27	207,20	212,91	227,49	288,70
Display range Range ID	+50...+300 °C = 350 +50...+400 °C = 450 +100...+500 °C = 610 0...+300 °C = 300 0...+400 °C = 400							
Price in €	208,13	212,45	227,14	288,24	210,93	216,99	231,57	292,67
Display range Range ID	0...+500 °C = 500 0...+600 °C = 600							

Article-no.: Type + ND + Range ID + sensor length + sensor type

Example: TG-30 100 120 063 F3

Additional prizes for sensor see page 84

Thermometer with gas pressure measuring sensor in stainless steel version with capillary line



ND 63, 80, 100 and 160, class 1 according to DIN EN 13 190

Special features

Fulfills high technical requirements
Gas pressure-inert gas filling, physiologically harmless
Short response time

Applications

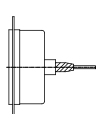
Chemical and
Petrochemical industry
Pharmacy
Food industry

Usage

For measuring temperatures
in pipes and tanks



DG 2

Version	With transmission									
Type	TG-32				TG-37					
ND	63	80 *)	100	160	63	80 *)	100	160		
Connection										
	Data sheet T 262	Data sheet T 260			Data sheet T 262	Data sheet T 260				
Connection	According to sensor type selection on page 94 and data sheet T 260 or T 262, types TG-32 downwards, types TG-37 backwards, centrically, including 1 meter CrNi capillary line, with a diameter of 2mm. Types TG-32 also with collar for measuring device holder. Please order measuring device holder separately, see page 153									
Sensor length	up to 200 mm, for other lengths see additional charges on page 94 Please note the minimum sensor length on page 94!									
Operate pressure	Depending on the thermo well									
Stem	CrNi-Steel 316L, diameter 10 mm (depending on the display range and Diving depth even 8 or 12 mm)									
Measur element	Gas pressure measuring sensor									
Case *)	CrNi-Steel in bayonet version NG 80 only with crimp ring case				With Three-hole front ring NG 80 only with crimp ring case					
Ring	CrNi-Steel									
Viewing glass	Laminated safety glass									
Protection class	IP 65 according to EN 60529 / IEC 529									
Price in €	215,83	218,74	247,08	287,30	224,57	247,08	253,84	313,42		
Display range Range ID	-20...+60 °C = 005 -20...+80 °C = 102 0...+80 °C = 080 0...+160 °C = 160	-30...+50 °C = 002 -40...+60 °C = 105 0...+100 °C = 100 0...+200 °C = 200	-40...+40 °C = 084 0...+120 °C = 120 0...+250 °C = 250							
Price in €	230,40	233,32	261,53	301,88	239,15	261,53	268,30	328,00		
Display range Range ID	+50...+300 °C = 350 0...+300 °C = 300								+50...+400 °C = 450 0...+400 °C = 400	+100...+500 °C = 610
Price in €	233,32	236,23	264,57	304,79	242,06	264,57	271,21	331,03		
Display range Range ID	0...+500 °C = 500								0...+600 °C = 600	

Article-no.: Type + ND + Range ID + sensor length + sensor type

Example: TG-32 100 120 063 F3

Additional prizes for sensor see page 84

Please choose the type of attachment yet!

e.g. edge with front, rear or instrument holder

Surcharges for Thermometers with bimetal coil with gas pressure measuring sensor in stainless steel version



DG 2

Price in €

Sensor type	Description	
F1	Smooth sensor, without thread	0,00
F2 (only with stem diameter 8 mm and NOT for capillary line)	With connection-diameter 18 mm For thermo wells type TS 1 and TS 02	11,66
F3	Fix thread connection, G 1/2 Only for model TG-30, not possible with transmissen	21,34
F4	Loose coupling nut, G 1/2	37,90
F5	Rotatable connection tap, G 1/2 Only in combination with thermo well!	37,90
F6	Loose coupling nut, G 1/2 With compression fittings	73,57
F7	Smooth sensor With compression fittings, G 1/2	50,25
Sensor length, thread	Description	
Sensor length	Each additional 100 mm	6,53
Thread connection	M 20 x 1,5	0,00
	G 3/4 or M 27 x 1,5	12,24
Capillary Line Each additional meter (up to 15 m)	transmission made of CrNi-steel	12,83
	each additional meter spiral protection hose	17,26
Contact	description	
Contact Magnetic snap contact simple M 1, M 2	NG 100	282,87
	NG 160	307,59
Contact Magnetic snap contact twice M 11, M 12, M 21, M 22	NG 100	320,77
	NG 160	347,00
Contact Inductive contact simple I 1, I 2	NG 100	481,09
	NG 160	488,44
Contact Inductive contact twice I 11, I 12, I 21, I 22	NG 100	692,37
	NG 160	699,83

Surcharges in €	ND	63	80	100	160
Housing with silicone oil filling		22,74	24,14	25,89	54,45
Housing with silicone oil filling - with contact				79,87	115,55
Front flange with three holes in CrNi-steel		7,81		14,92	39,29
Front flange with three holes in CrNi-steel		a.A	a.A	a.A	a.A
Rear edge of CrNi-Steel		9,44	a.A	16,32	25,30

Minimum stem length für display range u to 500°C (please ask für 600°C)

Sensor type	Stem diameter 8 mm	Stem diameter 10 mm	Stem diameter 12 mm
F1	95	65	55
F2	100	-	-
F3	89	59	49
F4	95	65	55
F5	95	65	55
F6	89	59	49
F7	130	100	90

Additional prizes for sensor see page 86

V-form-machine thermometers in industry version



ND 150 and 200, class 1 according to DIN 16 185 and 16 186

Special features

High-quality and robust version
Very durable and stable
Fulfills high technical requirements

Applications

Heating systems
Machinery and plant construction
Shipping

Usage

For measuring temperatures
in pipes and tanks



DG 2

Type	TM-20				TM-25			
ND	150				150			
Connection								
	Data sheet T 320							
Connection	G 1/2 with key size 27, cupper alloy Type TM-20 bottom, type TM-25 with 90° back							
Operate pressure	PN 16, over PN 16 protection tubes are used!							
Stem	Cupper alloy, diameter 10 / 11 mm, brazed							
Measur element	With blue glass capillary filling for measuring ranges up to 200 ° C.							
Case	150 x 30 mm made of aluminum, V-form, anodized brass colour							
Sensor length	63 mm	100 mm	160 mm	250 mm	63 mm	100 mm	160 mm	200 mm
Price in €	48,74	52,37	57,87	65,14	54,57	58,75	63,60	71,74
Display range Range ID	-30...+50 °C = 002 -10...+50 °C = 007							
Price in €	48,74	51,38	53,36	58,31	54,57	57,76	58,75	69,32
Display range Range ID	0...+50 °C = 050 0...+60 °C = 060 0...+100 °C = 100 0...+120 °C = 120							
Price in €	52,70	55,23	57,87	61,73	55,12	57,32	65,14	72,95
Display range Range ID	0...+160 °C = 160 0...+200 °C = 200							

Display range up to 200°C on request

Surcharges

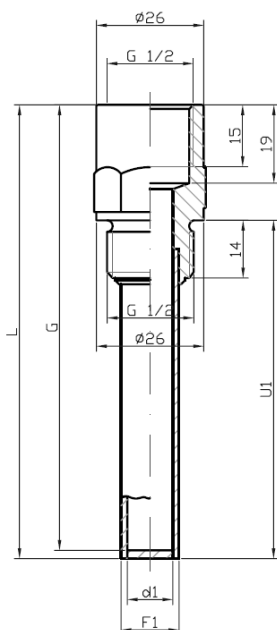
Price in €	
Upper part NG 200, 200 x 36 mm, for TM-20 und TM-25	6,60
Surcharge for stem length each additional 100 mm	3,41
Braze execution	2,64
Coupling nut 1/2"	3,96
Coupling nut 3/4"	7,81
Thread 3/4"	7,81

Article-no.: Type + ND + Range ID + Sensor length
Example: TM-20 150 120 063

Thermo wells for thermometer

For screwing according to DIN 43 772

Price in €



Form 5, multipart, with Inside- and external thread

Data sheet

T 830

Connection

G 1/2 outside, with key size 27

Thermometer connection

G 1/2 inside

Thermo well diameter

Each optionally

Inside in mm (d1)

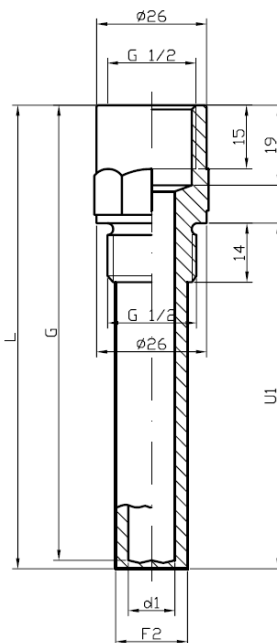
9 11

Outside in mm (F1)

14 14

For Sensor length	Overall length L	Mount. length U1	Material	Article-no	
63 mm *)	73	45	Brass MS 58	TS 50451	31,69
100 mm	110	82		TS 50821	33,12
160 mm	170	142		TS 51421	37,30
200 mm *)	210	182		TS 51821	40,38
250 mm	260	232		TS 52321	41,26
400 mm	410	382		TS 53821	46,98

For Sensor length	Overall length L	Mount. length U1	Material	Article-no	
63 mm *)	73	45	CrNi-Steel 316L	TS 50453	44,78
100 mm	110	82		TS 50823	46,21
160 mm	170	142		TS 51423	50,28
200 mm *)	210	182		TS 51823	52,70
250 mm	260	232		TS 52323	53,25
400 mm	410	382		TS 53823	59,86



Form 6, one-piece, with Inside- and external thread

Data sheet

T 830

Connection

G 1/2 outside, with key size 27

Thermometer connection

G 1/2 inside

Sensor diameter

Each optionally

Inside in mm

9 11

Outside in mm

17 17

For Sensor length	Overall length L	Mount. length U1	Material	Article-no	
63 mm *)	73	45	Steel C 22.8	TS 60452	84,06
100 mm	110	82		TS 60822	86,70
160 mm	170	142		TS 61422	107,39
200 mm *)	210	182		TS 61822	141,50
250 mm	260	232		TS 62322	143,26
400 mm	410	382		TS 63822	244,92

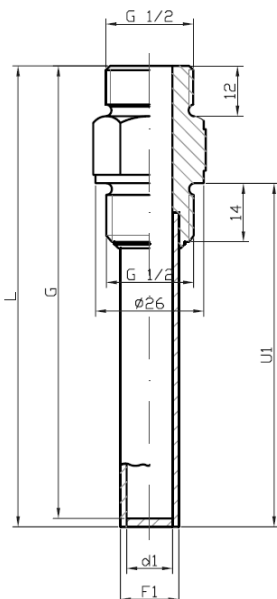
For Sensor length	Overall length L	Mount. length U1	Material	Article-no	
63 mm *)	73	45	CrNi-Steel 316L	TS 60453	97,04
100 mm	110	82		TS 60823	99,69
160 mm	170	142		TS 61423	120,48
200 mm *)	210	182		TS 61823	154,48
250 mm	260	232		TS 32323	156,24
400 mm	410	382		TS 63823	284,31

*) in line with the DIN 43 772

Thermo wells for thermometer

For screwing according to DIN 43 772

Price in €



Form 8, multipart, with external thread

Data sheet

T 832

Connection G 1/2 outside, with key size 27

Thermometer connection G 1/2 outside

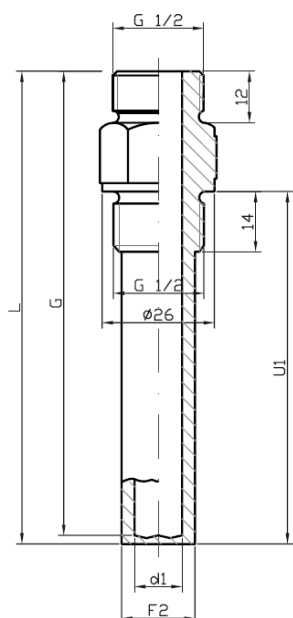
Thermo well diameter Each optionally

Inside in mm 9 11

Outside in mm 14 14

Inner length G	Overall length L	Mount. length U1	Material	Article-no	
93	101	73	Brass MS 58	TS 80731	31,69
130	138	110		TS 81101	35,87
190	198	170		TS 81701	37,30
280	288	260		TS 82601	40,05
430	438	410		TS 84101	52,48

Inner length G	Overall length L	Mount. length U1	Material	Article-no	
93	101	73	CrNi-Steel 316L	TS 80733	44,78
130	138	110		TS 81103	48,85
190	198	170		TS 81703	50,28
280	288	260		TS 82603	53,03
430	438	410		TS 84103	65,36



Form 9, one-piece, with external thread

Data sheet

T 832

Connection G 1/2 outside, with key size 27

thermometer connection G 1/2 inside

Thermo well diameter each optionally

Inside in mm 9 11

Outside in mm 17 17

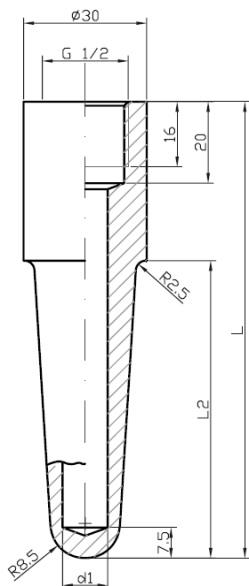
For Sensor length	Overall length L	Mount. length U1	Material	Article-no	
93	101	73	Steel C 22.8	TS 90732	89,45
130	138	110		TS 91102	93,63
190	198	170		TS 91702	100,46
280	288	260		TS 92602	136,32
430	438	410		TS 94102	238,10

For Sensor length	Overall length L	Mount. length U1	Material	Article-no	
93	101	73	CrNi-Steel 316L	TS 90733	102,44
130	138	110		TS 91103	106,62
190	198	170		TS 91703	113,44
280	288	260		TS 92603	149,31
430	438	410		TS 94103	284,20

Thermo wells for thermometer

For welding according to DIN 16 179

Price in €



Form BS, one-piece, with internal thread

Data sheet

T 850

Thermometer connection

G 1/2 Outside

Thermo well diameter

Inside

10 mm

Outside

30 mm

For Sensor length	Overall length L	Length L 2	Material	Article-no	
63 mm	87	48	steel C 22.8	TS 30482	50,28
100 mm	112	73		TS 30732	53,03
160 mm	172	133		TS 31332	64,92
200 mm *)	212	173		TS 32122	79,99
250 mm	262	223		TS 32232	86,48

For Sensor length	Overall length L	Length L 2	Material	Article-no	
63 mm	87	48	CrNi-Steel	TS 30483	66,57
100 mm	112	73		TS 30733	77,13
160 mm	172	133		TS 31333	87,03
200 mm *)	212	173		TS 32123	108,49
250 mm	262	223		TS 32233	115,09

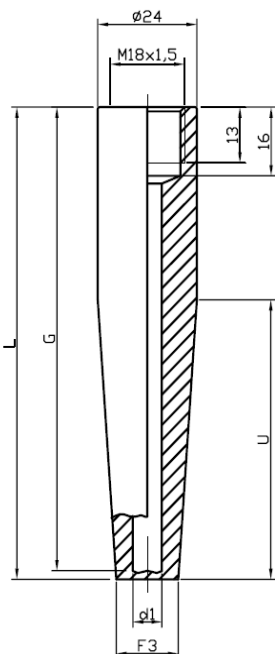
For Sensor length	Overall length L	Length L 2	Material	Article-no	
63 mm	87	48	13 CrMo4-4	TS 30484	59,64
100 mm	112	73		TS 30734	63,16
160 mm	172	133		TS 31334	75,48
200 mm *)	212	173		TS 32124	90,66
250 mm	262	223		TS 32234	97,15

For Sensor length	Overall length L	Length L 2	Material	Article-no	
63 mm	87	48	16 MO3	TS 30485	58,86
100 mm	112	73		TS 30735	61,95
160 mm	172	133		TS 31335	74,27
200 mm *)	212	173		TS 32125	86,81
250 mm	262	223		TS 32235	93,30

Thermo wells for thermometer

For welding according to DIN 43 772

Price in €



Form 4, one-piece, with internal thread 7 mm *)

Data sheet

T 860

Thermometer connection

M 18x1,5 inside

Thermo well diameter

Inside

7 mm

Outside

24 mm

For Sensor length	Overall length L	Length U	Material	Article-no	
100 mm	110	65	Steel C 22.8	TS 41002-18	45,44
130 mm	140	65		TS 41302-18	47,42
160 mm	170	133		TS 41602-18	51,93
190 mm	200	65		TS 41902-18 D4	58,42
190 mm	200	125		TS 41902-18	58,42
250 mm	260	125		TS 42502-18	61,07
400 mm	410	275		TS 44002-18	188,15

For Sensor length	Overall length L	Length U	Material	Article-no	
100 mm	110	65	CrNi-Steel	TS 41003-18	58,42
130 mm	140	65		TS 41303-18	59,75
160 mm	170	133		TS 41603-18	64,92
190 mm	200	65		TS 41903-18 D4	71,52
190 mm	200	125		TS 41903-18	71,52
250 mm	260	125		TS 42503-18	76,69
400 mm	410	275		TS 44003-18	219,40

For Sensor length	Overall length L	Length U	Material	Article-no	
100 mm	110	65	13 CrMo4-4	TS 41004-18	51,93
130 mm	140	65		TS 41304-18	53,25
160 mm	170	133		TS 41604-18	57,21
190 mm	200	65		TS 41904-18 D4	61,07
190 mm	200	125		TS 41904-18	61,07
250 mm	260	125		TS 42504-18	70,20
400 mm	410	275		TS 44004-18	193,43

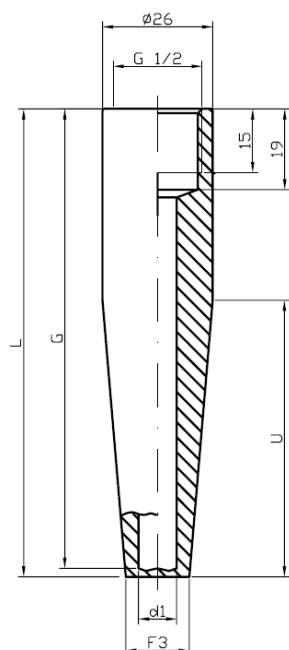
For Sensor length	Overall length L	Length U	Material	Article-no	
100 mm	110	65	16 MO3	TS 41005-18	50,61
130 mm	140	65		TS 41305-18	53,25
160 mm	170	133		TS 41605-18	57,21
190 mm	200	65		TS 41905-18 D4	61,07
190 mm	200	125		TS 41905-18	61,07
250 mm	260	125		TS 42505-18	67,56
400 mm	410	275		TS 44005-18	195,96

*) other lengths or diameters on request

Thermo wells for thermometer

For welding according to DIN 43 772

Price in €



Form 4, one-piece, with internal thread 9 mm *)

Data sheet

T 860

Thermometer connection

G 1/2 inside

Thermo well diameter

Inside

9 mm

Outside

26 mm

For Sensor length	Overall length L	Length U	Material	Article-no	
100 mm	110	65	Steel C 22.8	TS 41002	57,21
130 mm	140	65		TS 41302	62,39
160 mm	170	133		TS 41602	66,24
190 mm	200	65		TS 41902 D4	74,05
190 mm	200	125		TS 41902	74,05
250 mm	260	125		TS 42502	79,33
400 mm	410	275		TS 44002	214,22

For Sensor length	Overall length L	Length U	Material	Article-no	
100 mm	110	65	CrNi-Steel	TS 41003	68,88
130 mm	140	65		TS 41303	72,07
160 mm	170	133		TS 41603	75,37
190 mm	200	65		TS 41903 D4	83,18
190 mm	200	125		TS 41903	83,18
250 mm	260	125		TS 42503	89,67
400 mm	410	275		TS 44003	240,19

For Sensor length	Overall length L	Length U	Material	Article-no	
100 mm	110	65	13 CrMo4-4	TS 41004	62,39
130 mm	140	65		TS 41304	63,71
160 mm	170	133		TS 41604	70,86
190 mm	200	65		TS 41904 D4	78,56
190 mm	200	125		TS 41904	78,56
250 mm	260	125		TS 42504	88,35
400 mm	410	275		TS 44004	227,10

For Sensor length	Overall length L	Length U	Material	Article-no	
100 mm	110	65	16 MO3	TS 41005	62,39
130 mm	140	65		TS 41305	63,71
160 mm	170	133		TS 41605	70,86
190 mm	200	65		TS 41905 D4	78,56
190 mm	200	125		TS 41905	78,56
250 mm	260	125		TS 42505	88,35
400 mm	410	275		TS 44005	231,17

*) other lengths or diameters on request



SENSORS

FOR TEMPERATURE AND PRESSURE

Type	Description, construction, operation and application
	Piezoresistive sensor with sensor element made of silicon The piezoresistive effect is the change in resistivity from semi-conductor materials under mechanical stress. The change in resistance in semiconductors based on the altered movement of the electrons in a crystalline structure.
SD-7x SDD-8x	Encapsulated silicon piezoresistive sensors The medium to be measured is in direct contact with the sensing element. Used for gases and liquids and non-aggressive liquids. Usage: simple industrial usage, pneumatic Characteristics: low cost version, for low ranges Ranges: 10 mbar ...10 bar
SD-3x SDD-30	Capsulated silicon piezoresistive sensors The silicon measuring cell is mounted in a stainless steel case and the measured medium work on a thin stainless steel - diaphragm. The located behind the membrane liquid transmits the pressure to the measuring element. Usage: for general industry usage, Plant engineering, laboratory Characteristics: Measuring element is separated from the medium Ranges: 100 mbar ...600 bar
SD-3x	Thin-film cell On the back of the thin-film cell in a defined arrangement of resistors are plotted as a Wheatstone bridge. The resistance of this bridge will change in deflection of the measuring cell under pressure. Usage: for general industry usage, Environmental engineering, hydraulic Characteristics: Measuring element is separated from the medium Ranges: 1 bar ...4.000 bar
SD-2x SD-45/46	Ceramic measuring cell As a carrier material a ceramic is used, is plotted on the back of the measuring cell, the Wheatstone bridge. The resistance of this bridge will change in deflection of the measuring cell under pressure. Usage: for general industry usage, Hydraulic, mechanical engineering Characteristics: high corrosion resistance of the ceramic Ranges: 1 bar ...400 bar
SD-5x	Capacitive ceramic measuring cell As a carrier material a ceramic is used. When pressure is applied, the capacitive output signal of the measuring cell changed. Flush version is possible, however, is the ceramic membrane by design something in return. Usage: for level measurement, food industry Characteristics: high corrosion resistance of the ceramic Ranges: 50 mbar ...20 bar
SD-40/42	Front flush pressure sensor with diaphragm made of stainless steel Flush with the connecting thread, a stainless steel diaphragm is welded with a laser. Between this membrane and the pressure measuring cell is placed in an oil, which transfers the process pressure. Usage: for highly viscous media, foodstuffs and hygienic industry Characteristics: in the pressure sensor no process leaving residue, no blocking possible Ranges: 100 mbar ...400 bar

Type identification key for Pressure sensors



1. Pressure sensor type

Mark

Pressure sensor
Differential-Pressure sensor

SD

SDD

2. Ranges Mark Ranges Mark Ranges Mark

0...1 mbar	696	-10...+15 mbar	515	-0.6...0 bar	800
0...1.6 mbar	697	-15...+10 mbar	551	-1...0 bar	801
0...2.5 mbar	698	-25...+15 mbar	521	-1...+0.6 bar	802
0...4.0 mbar	699	-15...+25 mbar	512	-1...+1.5 bar	803
0...6.0 mbar	700	-20...+20 mbar	522	-1...+3 bar	804
				-1...+5 bar	805
0...10 mbar	701	-40...+20 mbar	542	-1...+9 bar	809
0...16 mbar	702	-20...+40 mbar	524	-1...+15 bar	815
0...25 mbar	703	-40...+60 mbar	546	-1...+24 bar	824
0...40 mbar	704	-60...+40 mbar	564		
0...60 mbar	706	-50...+50 mbar	555	0...0.6 bar	000
0...100 mbar	710	-60...+100 mbar	561	0...1 bar	001
0...160 mbar	716			0...1.6 bar	002
0...250 mbar	725	-100...+60 mbar	516	0...2.5 bar	003
0...400 mbar	740	-100...+150 mbar	415	0...4 bar	004
0...600 mbar	760	-150...+100 mbar	451	0...6 bar	006
				0...10 bar	010
-2.5...0 mbar	498	-150...+250 mbar	412	0...16 bar	016
-4...0 mbar	499	-250...+150 mbar	421	0...25 bar	025
-6...0 mbar	500	-200...+200 mbar	422	0...40 bar	040
-10...0 mbar	501	-100...+300 mbar	413	0...60 bar	060
-16...0 mbar	502			0...100 bar	100
-25...0 mbar	503			0...160 bar	160
-40...0 mbar	504			0...250 bar	250
-60...0 mbar	506			0...400 bar	400
-100...0 mbar	510			0...600 bar	600
-160...0 mbar	516			0...1.000 bar	910
-250...0 mbar	525			0...1.600 bar	916
-400...0 mbar	540			0...2.500 bar	925
-600...0 mbar	560			0...4.000 bar	940

3. Special versions:

Plug M 12x1, 4-pin	M12x1
for Absolute pressure	ABS
EX-version	EX

Order example:

Pressure sensor for Absolute pressure measuring
Type
Range 0...1 bar
Output: 4...20 mA
For Absolute pressure
in EX-version

Type:

SD-30 001 420 ABS EX

Pressure sensor with internal diaphragm in ceramic



Accuracy 0,5 % and 1,0 % according to IEC 61298-2

Special features

High overload capacity
High shock and vibration resistance
For dynamic and static measurements

Applications

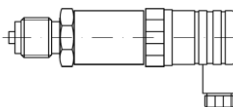
Machinery and plant engineering
Hydraulic systems
Pneumatic systems

Usage

For general industrial applications.
For all gaseous and liquid pressure media,
which do not attack the measuring system,
do not crystallize or react viscous.



DG 3

	Low cost pressure measurement			
Type	SD-25	SD-26	SD-27	SD-28
Conn.position				
	Data sheet SD 250			
Connection	G 1/2 B CrNi-Steel 316L key size 27	G 1/4 B CrNi-Steel 316L key size 27	G 1/2 B CrNi-Steel 316L key size 27	G 1/4 B CrNi-Steel 316L key size 27
Accuracy	1.0 % of full scale		0.5 % of full scale	
Output signal	4...20 mA			
Sensor element	Thick layer-ceramic in monolithic construction			
Wetted parts	Ceramic (Al2O3), O-Ring Viton (FKM) CrNi-Steel 316L			
Electr. connection	With square plug connector EN 175301-803 (DIN 43 650) / ISO 4400			
Power supply	10...30 V DC (12...30 V for output 0...5 / 10 V)			
Temperatures	Medium: -20°C up to 100°C, ambient: -25°C up to 80°C			
Protection class	IP 65 according to EN 60529 / IEC 529			
Price in €	145,54	145,54	203,73	203,73
Ranges Range ID	-1...+1.5 bar = 803 -1...+9 bar = 809	-1...+3 bar = 804 -1...+15 bar = 815	-1...+5 bar = 805 -1...+24 bar = 824	
Price in €	114,16	114,16	161,86	161,86
Ranges Range ID	0...1.6 bar = 002			
Price in €	114,16	114,16	161,86	161,86
Ranges Range ID	0...2,5 bar = 003 0...16 bar = 016 0...100 bar = 100	0...4 bar = 004 0...25 bar = 025 0...160 bar = 160	0...6 bar = 006 0...40 bar = 040 0...250 bar = 250	0...10 bar = 010 0...60 bar = 060 0...400 bar = 400

Article-no: Type + Range ID + output signal
Example: SD-25 010 420

Surcharges see page 110

Pressure sensor with internal diaphragm in stainless steel



Accuracy 0,25 % and 0,5 % according to IEC 61298-2

Special features

High overload capacity
High shock and vibration resistance
For dynamic and static measurements

Applications

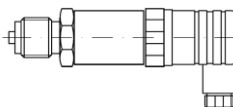
Machinery and plant engineering
Hydraulic systems
Environmental technology
Laboratory sector

Usage

For industrial applications with high requirements
For accuracy and long-term stability.
For all gaseous and liquid pressure media,
which do not attack the measuring system,
do not crystallize or react viscous.



DG 3

	General industry usage			
Type	SD-30	SD-31	SD-32	SD-33
Conn.position				
	Data sheet SD 310			
Connection	G 1/2 B	G 1/4 B	G 1/2 B	G 1/4 B
	CrNi-steel 316L key size 27		CrNi-Steel 316L key size 27	
Accuracy	0.5 % of full scale		0.25 % of full scale	
Output signal	4...20 mA			
Sensor element	Stainless steel measuring cell, from 600 bar welded thin-film technology			
Wetted parts	CrNi-Steel 316L Piezoresistive stainless steel measuring cell with O-ring seal viton (FKM)			
Electr. connection	With square plug connector EN 175301-803 (DIN 43 650) / ISO 4400			
Power supply	10...30 V DC (12...30 V for output 0...5 / 10 V)			
Temperatures	Medium: -20°C up to 100°C, ambient: -25°C up to 80°C			
Protection class	IP 65 according to EN 60529 / IEC 529			
Price in €	228,70	228,70	242,70	242,70
Ranges	-100...0 mbar = 510	-160...0 mbar = 516	-250...0 mbar = 525	
Range ID	-400...0 mbar = 540	-600...0 mbar = 560		
Price in €	214,70	214,70	228,70	228,70
Ranges	0...100 mbar = 710	0...160 mbar = 716	0...250 mbar = 725	
Range ID	0...400 mbar = 740	0...600 mbar = 760		
Price in €	209,00	209,00	240,50	240,50
Ranges	-1...0 bar = 801	-1...+0.6 bar = 802		
Range ID	-1...+1.5 bar = 803	-1...+3 bar = 804	-1...+5 bar = 805	
	-1...+9 bar = 809	-1...+15 bar = 815	-1...+24 bar = 824	
Price in €	195,00	195,00	226,40	226,40
Ranges	0...1 bar = 001	0...1.6 bar = 002	0...2,5 bar = 003	0...4 bar = 004
Range ID	0...6 bar = 006	0...10 bar = 010	0...16 bar = 016	0...25 bar = 025
	0...40 bar = 040	0...60 bar = 060	0...100 bar = 100	0...160 bar = 160
	0...250 bar = 250	0...400 bar = 400	0...600 bar = 600	0...1.000 bar = 910

Article-no: Type + Range ID + output signal

Example: SD-30 010 420

Surcharges see page 110

Pressure gauge with Bourdon tube and integrated Pressure sensor



Nominal size 100 and 160, Accuracy class 1 according to EN 837-1

Special features

- Case in Safety version S3 according to DIN EN 837-1
- Analog display and analog output signal on site
- For remote transmission of measured value
- Bourdon tube and sensor operate independently from each other



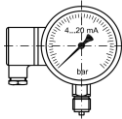
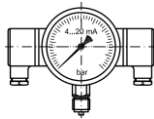
Applications

- Machinery and plant engineering
- Hydraulic systems
- Environmental Technology

Usage

- For all gaseous and liquid pressure media, which do not attack the measuring system, do not crystallize or react viscous.

DG 3

					With magnetic snap cont. 1-way Surcharges see page 51	
						with silicone oil
Type	SMR-36	SMR-36	SMR-36 F	SMR-36 F	KSMR-36	KSMR-36 F
ND	100	160	100	160	100	100
Conn.position						
	Data sheet SD 910					
Connection	G 1/2 B with key size 22, CrNi-steel 316L					
Accuracy	1 % of full scale					
Output signal	4...20 mA					
measur element	CrNi-Steel 316L, to 60 bar with Bourdon tube, from 100 bar with helical spring					
Sensor element	thin film - Stainless steel measuring cell					
wetted parts	CrNi-Steel 316L, to 60 bar with Bourdon tube, from 100 bar with helical spring O-ring viton (FKM)					
Case	CrNi-Steel with solid baffle wall and blow-out back, Category S 3					
Bayonet ring	CrNi-Steel					
Viewing glass	Laminated safety glass					
electr. connection	Cable socket with screw connection M 20x1,5					
Power supply	10...30 V DC (12...30 V for Output 0...5 / 10 V)					
Temperatures	Medium: -20°C to 80°C, ambient: -25°C to 60°C					
Protection class	IP 65 according to EN 60529 / IEC 529					
Price in €	390,19	517,70	448,59	573,78	632,71	724,19
Ranges Range ID	-1...+1.5 bar = 803 -1...+9 bar = 809	-1...+3 bar = 804 -1...+15 bar = 815	-1...+5 bar = 805 -1...+24 bar = 824			
Price in €	375,88	503,50	434,28	559,47	618,30	709,88
Ranges Range ID	0...2.5 bar = 003 0...16 bar = 016 0...100 bar = 100	0...4 bar = 004 0...25 bar = 025 0...160 bar = 160	0...6 bar = 006 0...40 bar = 040 0...250 bar = 250	0...10 bar = 010 0...60 bar = 060 0...400 bar = 400		

Article-no: Type + Range ID + output signal

Example: (K)SMR-36 010 420 (M12*)

Surcharges see page 110

* only model KSMR 36 100 and KSMR 36 F 100

Precisions-Pressure sensor with internal diaphragm in stainless steel



Accuracy 0,1 % according to IEC 61298-2

Special features

High overload capacity
High shock and vibration resistance
For dynamic and static measurements

Applications

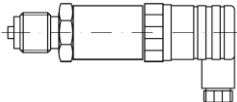
Clean room and medical technology
Laboratory sector
Monitoring of measuring equipment

Usage

For high requirements
For accuracy and long-term stability.
For all gaseous and liquid pressure media,
which do not attack the measuring system,
do not crystallize or react viscous.



DG 3

	Precision pressure measurement		
Type	SD-36		SD-37
Conn.position			
	Data sheet SD 360		
Connection	G 1/2 B CrNi-Steel 316L key size 27		G 1/4 B CrNi-Steel 316L key size 27
Accuracy	0.1 % of full scale		
Output signal	4...20 mA		
Sensor element	Stainless steel measuring cell, from 600 bar welded thin-film technology		
Wetted parts	CrNi-Steel 316L		
Electr. connection	With square plug connector EN 175301-803 (DIN 43 650) / ISO 4400		
Power supply	10...30 V DC (12...30 V for output 0...5 / 10 V)		
Temperatures	Medium: -20°C up to 80°C, ambient: -25°C up to 80°C		
Protection class	IP 65 according to EN 60529 / IEC 529		
Price in €	401,00		401,00
Ranges	-100...0 mbar = 510	-160...0 mbar = 516	-250...0 mbar = 525
Range ID	-400...0 mbar = 540	-600...0 mbar = 560	
Price in €	401,00		401,00
Ranges	0...100 mbar = 710	0...160 mbar = 716	0...250 mbar = 725
Range ID	0...400 mbar = 740	0...600 mbar = 760	
Price in €	395,50		395,50
Ranges	-1...+1.5 bar = 803	-1...+3 bar = 804	-1...+5 bar = 805
Range ID	-1...+9 bar = 809	-1...+15 bar = 815	-1...+24 bar = 824
Price in €	381,00		381,00
Ranges	0...2.5 bar = 003	0...4 bar = 004	0...6 bar = 006
Range ID	0...10 bar = 010	0...16 bar = 016	0...25 bar = 025
	0...40 bar = 040	0...60 bar = 060	0...100 bar = 100
	0...160 bar = 160	0...250 bar = 250	0...400 bar = 400

Article-no: Type + Range ID + output signal

Example: SD-36 010 420

Surcharges see page 110

High pressure-Pressure sensor with internal diaphragm in stainless steel



Accuracy 0,5 % according to IEC 61298-2

Special features

High overload capacity
High shock and vibration resistance
For dynamic and static measurements

Applications

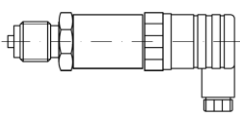
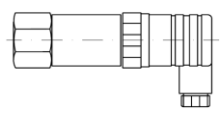
Machinery and plant engineering
Hydraulic systems
Environmental technology
Laboratory sector

Usage

For high pressure measurements
For all gaseous and liquid pressure media,
which do not attack the measuring system,
do not crystallize or react viscous.



DG 3

High pressure measurement		
Type	SD-38	SD-39
Conn.position		
Data sheet SD 380		
Connection	G 1/2 B CrNi-Steel316L key size 27	High pressure connection M 20 x 1,5 internal or 9/16-18 UNF internal, with out surcharges CrNi-Steel 316L key size 27
Accuracy	0.5 % of full scale	
Output signal	4...20 mA	
Sensor element	Stainless steel measuring cell in thin film technology welded	
Wetted parts	CrNi-Steel 316L	
Electr. connection	With square plug connector EN 175301-803 (DIN 43 650) / ISO 4400	
Power supply	10...30 V DC (12...30 V for output 0...5 / 10 V)	
Temperatures	Medium: -20°C up to 100°C, ambient: -25°C up to 80°C	
Protection class	IP 65 according to EN 60529 / IEC 529	
Price in €	493,96	505,83
Ranges Range ID	0...1.600 bar = 916	
Price in €		579,71
Ranges Range ID	0...2.500 bar = 925	
Price in €		1612,68
Ranges Range ID	0...4.000 bar = 940	
Price in €		1612,68
Ranges Range ID	0...5.000 bar = 950	
Price in €		1612,68
Ranges Range ID	0...6.000 bar = 960	

Article-no: Type + Range ID + output signal

Example: SD-38 916 420

Surcharges see page 110

Pressure sensor with front flush diaphragm in stainless steel



Accuracy 0,25 % and 0,5 % according to IEC 61298-2

Special features

- High overload capacity
- High shock and vibration resistance
- For dynamic and static measurements

Applications

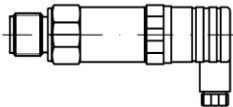
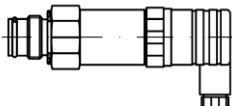
- Machinery and plant engineering
- Environmental technology
- Water and wastewater technology

Usage

- For highly viscous and crystallizing media
- For all gaseous and liquid pressure media, which do not attack the measuring system.



DG 3

	Front flush pressure measurement with stainless steel diaphragm			
Typ	SD-40		SD-42	SD-41
Anschlusslage				
	Data sheet SD 410		Data sheet SD 411	
Abdichtung	with profile sealing ring on the hexagon		with double O-ring seal	
Connection	G 1" CrNi-Steel 316L, for ranges up to 600 mbar G 1/2" CrNi-Steel 316L, for ranges from 1 bar CrNi-steel 316L key size 27		G 1/2"	
Accuracy	0.5 % of full scale	0.25 % of full scale	0.5 % of full scale	
Output signal	4...20 mA			
Sensor element	Stainless steel measuring cell			
Wetted parts	CrNi-Steel 316L profile sealing ring FKM		CrNi-Steel 316L profile sealing ring and O-ring FKM	
Electr. connection	With square plug connector EN 175301-803 (DIN 43 650) / ISO 4400			
Power supply	10...30 V DC (12...30 V for output 0...5 / 10 V)			
Temperatures	Medium: -20°C up to 100°C, ambient: -25°C up to 80°C			
Protection class	IP 65 according to EN 60529 / IEC 529			
Price in €	496,29			
Ranges Range ID	0...100 mbar = 710 0...400 mbar = 740	0...160 mbar = 716 0...600 mbar = 760	0...250 mbar = 725	
Price in €	322,13	369,94	322,13	
Ranges Ranges ID	-1...0 bar = 801 -1...+1,5 bar = 803 -1...+9 bar = 809	-1...+0,6 bar = 802 -1...+3 bar = 804 -1...+15 bar = 815	on request -1...+5 bar = 805 -1...+24 bar = 824	
Price in €	307,82	355,52	307,82	
Ranges Ranges ID	0...1 bar = 001 0...2,5 bar = 003 0...6 bar = 006 0...40 bar = 040 0...250 bar = 250	0...1,6 bar = 002 0...4 bar = 004 0...10 bar = 010 0...60 bar = 060 0...400 bar = 400	on request 0...6 bar = 006 0...16 bar = 016 0...100 bar = 100 0...600 bar = 600	

Article-no: Type + Range ID + output signal

Example: SD-40 010 420

Surcharges see page 110

Pressure sensor with front flush diaphragm in ceramic



Accuracy 0,5 % according to IEC 61298-2

Special features

High overload capacity

The long-term stable membrane is substantially insensitive to mechanical contact.

Applications

Machinery and plant engineering

Environmental technology

Coating industry

Usage

For highly viscous and crystallizing media

For all gaseous and liquid pressure media, which do not attack the measuring system.



DG 3

Front flush pressure measurement with approx 1 mm set back membrane			
Type	SD-45		SD-47
Conn.position			
	Data sheet SD 450		Data sheet SD 470
Connection	G 1/2" CrNi-Steel 316L with key size27		G 3/4" CrNi-Steel 316L with key size32
Accuracy	0.5 % of full scale		
Output signal	4...20 mA		
Sensor element	Thick layer-ceramic in monolithic construction		
Wetted parts	Ceramic (Al ₂ O ₃), O-Ring Viton (FKM) CrNi-Steel 316L		
Electr. connection	With square plug connector EN 175301-803 (DIN 43 650) / ISO 4400		
Power supply	10...30 V DC (12...30 V for output 0...5 / 10 V)		
Temperatures	Medium: -20°C up to 100°C, ambient: -25°C up to 80°C		
Protection class	IP 65 according to EN 60529 / IEC 529		
Price in €	312,49		343,65
Ranges Range ID	-400...0 mbar = 540 -600...0 mbar = 560 -1...0 bar = 801 -1...+0,6 bar = 802		
Price in €	300,62		331,57
Ranges Range ID	0...400 mbar = 740 0...600 mbar = 760 0...1.0 bar = 001 0...1.6 bar = 002		
Price in €	312,49		343,65
Ranges Range ID	-1...+1.5 bar = 803 -1...+3 bar = 804 -1...+5 bar = 805 -1...+9 bar = 809 -1...+15 bar = 815		
Price in €	300,62		331,57
Ranges Range ID	0...2.5 bar = 003 0...4 bar = 004 0...6 bar = 006 0...10 bar = 010 0...16 bar = 016 0...25 bar = 025		
Price in €			331,57
Ranges Range ID	0...40 bar = 040 0...60 bar = 060		

Article-no: Type + Range ID + output signal

Example: SD-45 010 420

Surcharges see page 110

Pressure sensor with front flush diaphragm in ceramic



Accuracy 0,25 % and 0,5 % according to IEC 61298-2

Special features

High overload capacity
The long-term stable membrane is substantially insensitive to mechanical contact.



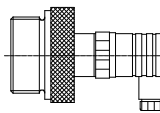
Applications

Process monitoring
Fill level measurement
Chemical industry
Paints and varnishes

Usage

For highly viscous and crystallizing media
For all gaseous and liquid pressure media,
which do not attack the measuring system.

DG 3

Front flush measuring of low pressures		
Type	SD-50	SD-52
Conn.position		
Data sheet SD 510		
Connection	G 1 1/2 CrNi-Steel 316L	
Accuracy	0.5 % of full scale	0.25 % of full scale
Output signal	4...20 mA	
Sensor element	Capacitive ceramic sensor	
Wetted parts	Ceramic (Al2O3), O-Ring Viton (FKM) CrNi-Steel 316L	
Electr. connection	With square plug connector EN 175301-803 (DIN 43 650) / ISO 4400	
Power supply	12...30 V DC	
Temperatures	Medium: -25°C up to 125°C, ambient: -25°C up to 85°C	
Protection class	IP 65 according to EN 60529 / IEC 529	
Price in €	669,65	687,45
Ranges Range ID	-40...0 mbar = 504 -60...0 mbar = 506 -100...0 mbar = 510 -160...0 mbar = 516 -250...0 mbar = 525 -400...0 mbar = 540 -600...0 mbar = 560	-600...0 mbar = 560
Price in €	642,20	660,00
Ranges Range ID	0...40 mbar = 704 0...60 mbar = 706 0...100 mbar = 710 0...160 mbar = 716 0...250 mbar = 725 0...400 mbar = 740 0...600 mbar = 760	0...600 mbar = 760
Price in €	669,65	687,45
Ranges Range ID	-1...0 bar = 801 -1...+0.6 bar = 802 -1...+5 bar = 805 -1...+9 bar = 809	-1...+3 bar = 804
Price in €	642,20	660,00
Ranges Range ID	0...1.0 bar = 001 0...1.6 bar = 002 0...2.5 bar = 003 0...4 bar = 004 0...6 bar = 006 0...10 bar = 010	

Change on 16.02.2026

Article-no: Type + Range ID + output signal
Example: SD-50 010 420
Surcharges see page 110

Submersible pressure transmitter for level measurement with stainless steel or ceramic measuring cell



Accuracy 0.25 % and 0.5 % according to IEC 61298-2

Special features

Low temperature error
Very good long term stability

Applications

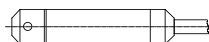
Water preparation
Depth measurements in fountains
and in open waters
Environmental technology

Usage

For measuring filling level and level measurements
in water and clean to slightly polluted liquids.
For media which do not attack the measuring system,
do not crystallize or react viscous.



DG 3

	With stainless steel measuring cell		With ceramic measuring cell	
Type	SD-60	SD-61	SD-65	SD-66
Conn.position				
	Data sheet SD 610		Data sheet SD 650	
Accuracy	0.5 % of full scale	0.25 % of full scale	0.5 % of full scale	
Output signal	4...20 mA			
Diameter	27 mm		27 mm	39,5 mm
Sensor element	Piezoresistive stainless steel measuring cell		Thick layer-ceramic in monolithic construction	
Wetted parts	CrNi-Steel 316L, O-ring viton (FKM)		Ceramic (Al2O3), O-ring viton (FKM) CrNi-Steel 316L	
Electr. connection	PVC-cabel 7,4 mm, with integrated air tube as a reference relating to the surrounding air pressure			
Power supply	10...30 V DC (12...30 V for Output 0...5 / 10 V)			
Temperatures	-10°C to 70°C			
Protection class	IP 65 according to EN 60529 / IEC 529			
Preis in €				543,99
Ranges Range ID	0...40 mbar = 704 0...60 mbar = 704			
Preis in €	470,11			543,99
Ranges Range ID	0...100 mbar = 710 0...160 mbar = 716 0...250 mbar = 725			
Preis in €	470,11	489,19	350,86	543,99
Ranges Range ID	0...400 mbar = 740 0...600 mbar = 760			
Preis in €	470,11	489,19	350,86	
Ranges Range ID	0...1 bar = 001 0...1.6 bar = 002 0...2.5 bar = 003 0...4 bar = 004 0...6 bar = 006 0...10 bar = 010 0...16 bar = 016 0...25 bar = 025			

Accessories for stainless steel probe	Artikel-Nr.	Preis in €
Terminal Box With integrated pressure balance	AKL 01	99,11
Terminal clamp CrNi-Steel Suitable for all probes with cable (Ø 5.5...10.5 mm)	ASK 03	33,00

Article-no: Type + Range ID + output signal

Example: SD-60 010 420

Surcharges see page 110

Pressure sensor with internal diaphragm for the measurement of very low pressure



Accuracy 0.5 % according to IEC 61298-2

Special features

Excellent linearity
Short response time
For dynamic and static measurements

Applications

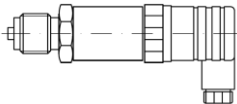
Clean room and medical technology
Filter monitoring
Heating-ventilation-air conditioning

Usage

For non-aggressive gases,
dry, clean air and low pressures.



DG 3

Measuring of low pressures in clean, dry gases			
Type	SD-70		SD-71
Conn.position			
Data sheet SD 710			
Connection	G 1/2 B CrNi-Steel 316L, key size 27		G 1/4 B CrNi-Steel 316L, key size 27
Accuracy	0.5 % of full scale		
Output signal	4...20 mA		
Sensor element	Piezoresistive sensor made of silicon		
Wetted parts	CrNi Steel 316L, silicon, epoxy or RTV, mineral glass with O-ring Viton (FKM)		
Electr. connection	With square plug connector EN 175301-803 (DIN 43 650) / ISO 4400		
Power supply	10...30 V DC (12...30 V for output 0...5 / 10 V)		
Temperatures	Medium: -20°C to 100°C, ambient: -25°C to 80°C		
Protection class	IP 65 according to EN 60529 / IEC 529		
Price in €	270,94		270,94
Ranges Range ID	-10...0 mbar = 501 -40...0 mbar = 504	-16...0 mbar = 502 -60...0 mbar = 506	-25...0 mbar = 503
Price in €	270,94		270,94
Ranges Range ID	-10...+15 mbar = 515 -20...+40 mbar = 524	-15...+10 mbar = 551 -40...+20 mbar = 542	-20...+20 mbar = 522
Price in €	256,52		256,52
Ranges Range ID	0...10 mbar = 701 0...40 mbar = 704	0...16 mbar = 702 0...60 mbar = 706	0...25 mbar = 703

Article-no: Type + Range ID + output signal

Example: SD-70 706 420

Surcharges see page 110

Pressure sensor for food industry with union nut according to DIN 11 851



Accuracy 0,5 % according to IEC 61298-2

Special features

The integrated diaphragm seal separated the medium by a membran from the pressure sensor.

Quick-connect union nut

Applications

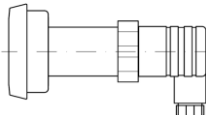
Pharmacy
Food Industry

Usage

For highly viscous and crystallizing media
For all gaseous and liquid pressure media,
which do not attack the measuring system.



DG 3

Version	With conical coupling and union nut			
Type	SD-140 25	SD-140 32	SD-140 40	SD-140 50
Conn.position				
	Data sheet SD 140			
Connection	DN 25	DN 32	DN 40	DN 50
PN	PN 40	PN 40	PN 40	PN 25
Diaphragm-Dia.	28 mm	34 mm	38 mm	48 mm
Filling liquid	Food oil, FDA-conform			
Accuracy	0.5 % of full scale			
Output signal	4...20 mA			
Sensor element	Stainless steel measuring cell, to 25 bar piezoresistiv, from 40 bar thin film technology			
Wetted parts	CrNi-Steel 1.4435 (316L)			
Electr. connection	with square plug connector EN 175301-803 (DIN 43 650) / ISO 4400			
Power supply	10...30 V DC (12...30 V for Output 0...5 / 10 V)			
Temperatures	Medium: -20°C to 120°C, ambient: -25°C to 80°C			
Protection class	IP 65 according to EN 60529 / IEC 529			
Price in €	514,21	530,85	534,45	539,22
Ranges Range ID	0...100 mbar = 710 0...400 mbar = 740	0...160 mbar = 716 0...600 mbar = 760	0...250 mbar = 725	
Price in €	384,14	402,06	419,87	437,78
Ranges Range ID	-1...0 bar = 801 -1...+1.5 bar = 803 -1...+9 bar = 809	-1...+0.6 bar = 802 -1...+3 bar = 804 -1...+15 bar = 815	-1...+5 bar = 805 -1...+24 bar = 824	
Price in €	370,05	387,75	405,66	423,58
Ranges Range ID	0...1 bar = 001 0...6 bar = 006	0...1.6 bar = 002 0...10 bar = 010	0...2,5 bar = 003 0...16 bar = 016	0...4 bar = 004 0...25 bar = 025
Price in €	370,05	387,75	405,66	
for ranges	0...40 bar			

Article-no: Type + Range ID + output signal

Example: SD-140 25 010 420

Surcharges see page 110

Pressure sensor for food industry with collar connecting sleeve and union nut according to SMS-standard



Accuracy 0,5 % according to IEC 61298-2

Special features

The integrated diaphragm seal separated the medium by a membran from the pressure sensor.

Quick-connect union nut

Applications

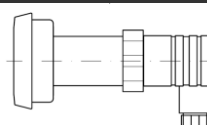
Pharmacy
Food Industry

Usage

For highly viscous and crystallizing media
For all gaseous and liquid pressure media,
which do not attack the measuring system.



DG 3

Version	With collar connecting sleeve and union nut			
Type	SD-141 25	SD-141 40	SD-141 50	SD-141 65
Conn.position				
	Data sheet SD 141			
Connection	1"	1 1/2"	2"	2 1/2"
PN	PN 40	PN 40	PN 40	PN 25
Diaphragm-Diam.	24 mm	34 mm	46 mm	52 mm
Filling liquid	Food oil, FDA-conform			
Accuracy	0.5 % of full scale			
Output signal	4...20 mA			
Sensor element	Stainless steel measuring cell, to 25 bar piezoresistiv, from 40 bar thin film technology			
Wetted parts	CrNi-Steel 1.4435 (316L)			
Electr. connection	With square plug connector EN 175301-803 (DIN 43 650) / ISO 4400			
Power supply	10...30 V DC (12...30 V for Output 0...5 / 10 V)			
Temperatures	Medium: -20°C to 120°C, ambient: -25°C to 80°C			
Protection class	IP 65 according to EN 60529 / IEC 529			
Price in €	514,21	530,85	534,45	539,22
Ranges Range ID	0...100 mbar = 710 0...400 mbar = 740	0...160 mbar = 716 0...600 mbar = 760	0...250 mbar = 725	
Price in €	384,14	402,06	419,87	437,78
Ranges Range ID	-1...0 bar = 801 -1...+1.5 bar = 803 -1...+9 bar = 809	-1...+0.6 bar = 802 -1...+3 bar = 804 -1...+15 bar = 815	-1...+5 bar = 805 -1...+24 bar = 824	
Price in €	369,83	387,75	405,56	423,58
Ranges Range ID	0...1 bar = 001 0...6 bar = 006	0...1.6 bar = 002 0...10 bar = 010	0...2.5 bar = 003 0...16 bar = 016	0...4 bar = 004 0...25 bar = 025
Price in €	369,83	387,75	405,56	
for ranges	0...40 bar			

Article-no: Type + Range ID + Output signal

Example: SD-141 25 010 420

Surcharges see page 110

Pressure sensor for food industry with collar connecting sleeve and union nut according to DS 722-standard



Accuracy 0,5 % according to IEC 61298-2

Special features

The integrated diaphragm seal separated the medium by a membran from the pressure sensor.

Quick-connect union nut

Applications

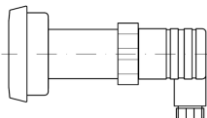
Pharmacy
Food Industry

Usage

For highly viscous and crystallizing media
For all gaseous and liquid pressure media,
which do not attack the measuring system.



DG 3

Version	With collar connecting sleeve and union nut			
Type	SD-142 25	SD-142 32	SD-142 40	SD-142 50
Conn.position				
	Data sheet SD 142			
Connection	DN 25	DN 32	DN 40	DN 50
PN	PN 40	PN 40	PN 40	PN 25
Diaphragm-Diam.	24 mm	28 mm	34 mm	46 mm
Filling liquid	Food oil, FDA-conform			
Accuracy	0.5 % of full scale			
Output signal	4...20 mA			
Sensor element	Stainless steel measuring cell, to 25 bar piezoresistiv, from 40 bar thin film technology			
Wetted parts	CrNi-Steel 1.4435 (316L)			
Electr. connection	With square plug connector EN 175301-803 (DIN 43 650) / ISO 4400			
Power supply	10...30 V DC (12...30 V for Output 0...5 / 10 V)			
Temperatures	Medium: -20°C to 120°C, ambient: -25°C to 80°C			
Protection class	IP 65 according to EN 60529 / IEC 529			
Price in €	514,21	530,85	534,45	539,22
Ranges	0...100 mbar = 710	0...160 mbar = 716	0...250 mbar = 725	
Range ID	0...400 mbar = 740	0...600 mbar = 760		
Price in €	384,14	402,06	419,87	437,78
Ranges	-1...0 bar = 801	-1...+0.6 bar = 802		
Range ID	-1...+1.5 bar = 803	-1...+3 bar = 804	-1...+5 bar = 805	
	-1...+9 bar = 809	-1...+15 bar = 815	-1...+24 bar = 824	
Price in €	369,83	387,75	405,56	423,58
Ranges	0...1 bar = 001	0...1.6 bar = 002	0...2.5 bar = 003	0...4 bar = 004
Range ID	0...6 bar = 006	0...10 bar = 010	0...16 bar = 016	0...25 bar = 025
Price in €	369,83	387,75	405,56	
for ranges	0...40 bar			

Article-no: Type + Range ID + Output signal

Example: SD-142 25 010 420

Surcharges see page 110

Pressure sensor for food industry with collar connecting sleeve and union nut according to IDF-Standard



Accuracy 0,5 % according to IEC 61298-2

Special features

The integrated diaphragm seal separated the medium by a membran from the pressure sensor.

Quick-connect union nut

Applications

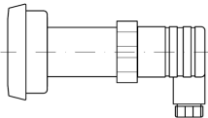
Pharmacy
Food industry

Usage

For highly viscous and crystallizing media
For all gaseous and liquid pressure media,
which do not attack the measuring system.



DG 3

Version	With collar connecting sleeve and union nut		
Type	SD-143 25	SD-143 40	SD-143 50
Conn.position			
	Data sheet SD 143		
Connection	1"	1 1/2"	2"
PN	PN 40		
Diaphragm-Diam.	24 mm	34 mm	45 mm
Filling liquid	Food oil, FDA-conform		
Accuracy	0.5 % of full scale		
Output signal	4...20 mA		
Sensor element	Stainless steel measuring cell, to 25 bar piezoresistiv, from 40 bar thin film technology		
wetted parts	CrNi-Steel 1.4435 (316L)		
electr. connection	With square plug connector EN 175301-803 (DIN 43 650) / ISO 4400		
Power supply	10...30 V DC (12...30 V for Output 0...5 / 10 V)		
Temperatures	Medium: -20°C to 120°C, ambient: -25°C to 80°C		
Protection class	IP 65 according to EN 60529 / IEC 529		
Price in €	514,21	530,85	539,22
Ranges Range ID	0...100 mbar = 710 0...400 mbar = 740	0...160 mbar = 716 0...600 mbar = 760	0...250 mbar = 725
Price in €	384,14	402,06	437,78
Ranges Range ID	-1...0 bar = 801 -1...+1.5 bar = 803 -1...+9 bar = 809	-1...+0.6 bar = 802 -1...+3 bar = 804 -1...+15 bar = 815	-1...+5 bar = 805 -1...+24 bar = 824
Price in €	369,83	387,75	423,58
Ranges Range ID	0...1 bar = 001 0...6 bar = 006	0...1,6 bar = 002 0...10 bar = 010	0...2,5 bar = 003 0...16 bar = 016 0...4 bar = 004 0...25 bar = 025
Price in €	369,83	387,75	423,58
For ranges	0...40 bar		

Article-no: Type + Range ID + output signal

Example: SD-143 25 010 420

Surcharges see page 110

Pressure sensor for Pharma industry with Clamp connection according to ISO 2852



Accuracy 0,5 % according to IEC 61298-2

Special features

The integrated diaphragm seal separated the medium by a membran from the pressure sensor.
Quick connection with clamp bracket *)

Applications

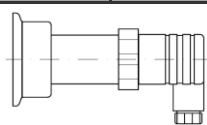
Pharmacy
Food Industry

Usage

For highly viscous and crystallizing media
For all gaseous and liquid pressure media,
which do not attack the measuring system.



DG 3

Version	With clamp connection			
Type	SD-150 25	SD-150 40	SD-150 50	SD-150 65
Conn.position				
	Data sheet SD 150			
Connection	DN 25 (1")	DN 38 (1 1/2")	DN 51 (2")	DN 63,5 (2 1/2")
PN	PN 40	PN 40	PN 40	PN 25
Diaphragm-Diam.	23 mm	34 mm	45 mm	55 mm
Filling liquid	Food oil, FDA-conform			
Accuracy	0.5 % of full scale			
Output signal	4...20 mA			
Sensor element	Stainless steel measuring cell, to 25 bar piezoresistiv, from 40 bar thin film technology			
Wetted parts	CrNi-Steel 1.4435 (316L)			
Electr. connection	With square plug connector EN 175301-803 (DIN 43 650) / ISO 4400			
Power supply	10...30 V DC (12...30 V for Output 0...5 / 10 V)			
Temperatures	Medium: -20°C to 120°C, ambient: -25°C to 80°C			
Protection class	IP 65 according to EN 60529 / IEC 529			
Price in €	514,21	530,85	534,45	539,22
Ranges Range ID	0...100 mbar = 710 0...400 mbar = 740	0...160 mbar = 716 0...600 mbar = 760	0...250 mbar = 725	
Price in €	384,14	402,06	419,87	437,78
Ranges Range ID	-1...0 bar = 801 -1...+1.5 bar = 803 -1...+9 bar = 809	-1...+0.6 bar = 802 -1...+3 bar = 804 -1...+15 bar = 815	-1...+5 bar = 805 -1...+24 bar = 824	
Price in €	369,94	387,75	405,56	423,58
Ranges Range ID	0...1 bar = 001 0...6 bar = 006	0...1.6 bar = 002 0...10 bar = 010	0...2.5 bar = 003 0...16 bar = 016	0...4 bar = 004 0...25 bar = 025
Price in €	369,94	387,75	405,56	
For ranges	0...40 bar			

Article-no: Type + Range ID + Output signal

Example: SD-150 25 010 420

Surcharges see page 110

*) Clamp and sealing are not included with

Pressure sensor for Pharma industry with Clamp connection according to DIN 32 676



Accuracy 0.5 % according to IEC 61298-2

Special features

The integrated diaphragm seal separated the medium by a membran from the pressure sensor.
Quick connection with clamp bracket *)

Applications

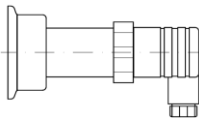
Pharmacy
Food Industry

Usage

For highly viscous and crystallizing media
For all gaseous and liquid pressure media,
which do not attack the measuring system.



DG 3

Version	With clamp connection			
Type	SD-152 25	SD-152 32	SD-152 40	SD-152 50
Conn.position				
	Data sheet SD 152			
Connection	DN 25	DN 32	DN 40	DN 50
PN	PN 40	PN 40	PN 40	PN 25
Diaphragm-Diam.	23 mm	28 mm	34 mm	45 mm
Filling liquid	Food oil, FDA-conform			
Accuracy	0.5 % of full scale			
Output signal	4...20 mA			
Sensor element	Stainless steel measuring cell, to 25 bar piezoresistiv, from 40 bar thin film technology			
Wetted parts	CrNi-Steel 1.4435 (316L)			
Electr. connection	With square plug connector EN 175301-803 (DIN 43 650) / ISO 4400			
Power supply	10...30 V DC (12...30 V for Output 0...5 / 10 V)			
Temperatures	Medium: -20°C to 120°C, ambient: -25°C to 80°C			
Protection class	IP 65 according to EN 60529 / IEC 529			
Price in €	514,21	530,85	534,45	539,22
Ranges	0...100 mbar = 710	0...160 mbar = 716	0...250 mbar = 725	
Range ID	0...400 mbar = 740	0...600 mbar = 760		
Price in €	384,25	402,06	419,97	437,78
Ranges	-1...0 bar = 801	-1...+0,6 bar = 802		
Range ID	-1...+1,5 bar = 803	-1...+3 bar = 804	-1...+5 bar = 805	
	-1...+9 bar = 809	-1...+15 bar = 815	-1...+24 bar = 824	
Price in €	369,94	387,75	405,66	423,58
Ranges	0...1 bar = 001	0...1,6 bar = 002	0...2,5 bar = 003	0...4 bar = 004
Range ID	0...6 bar = 006	0...10 bar = 010	0...16 bar = 016	0...25 bar = 025
Price in €	369,94	387,75	405,66	
For ranges	0...40 bar			

Article-no: Type + Range ID + output signal

Example: SD-152 25 010 420

Surcharges see page 110

*) clamp and sealing are not included with

Surcharges for Pressure sensors

Price in €						
Pressure sensor type	SD-25 SD-26 SD-27 SD-28	SD-30 SD-31 SD-32 SD-33	SMR-36	SD-36 SD-37	SD-38 SD-39	SD-40 SD-41 SD-42
Output 0...5 V, 3-wire	13,99	13,99	51,83	13,99		13,99
Output 0...10 V, 3-wire	13,99	13,99	51,83	13,99	14,31	13,99
Output 0...20 mA	13,99	13,99	51,83	13,99		13,99
Absolute pressure		29,89		29,89		29,89
Oil- and grease free for oxygen, from 1,6 bar	29,89	29,89	29,89	29,89		
With ATEX-approval	on re.	on re.		on re.	on re.	on re.
Round plug M 12x1, 4-pole, IP 67	6,57	6,57		6,57	6,57	6,57
IP 67 screwed cable gland	13,57	13,57	13,89	13,89		15,05
With 2 meter fixed connected, shielded PVC cable						
per meter shielded PVC cable, grey	3,29	3,29	3,39	3,39		3,39
SD FG 01 - Field case in CrNi-steel, IP 67	142,04	142,04		142,04	142,04	142,04
SD FG 02 - Field case in CrNi-steel, IP 67	196,84	196,84		196,84		196,84
With adjustment of zero point and span						
Thin-film-measuring-cell welded (up to 600 bar), except ATEX		48,00				
With temperature compensation element up to 300°C		132,71				132,71

Price in €						
Pressure sensor type	SD-45 SD-47	SD-50 SD-52	SD-60 SD-61	SD-65	SD-66	SD-70 SD-71
Pressure connection in PVC		33,39				
Output 0...5 V, 3-wire	13,99	13,99	13,99			13,99
Output 0...10 V, 3-wire	13,99	13,99	13,99			13,99
Output 0...20 mA	13,99		13,99		13,99	13,99
Absolute pressure	on re.					
Oil- and grease free for oxygen	29,89					
With ATEX-approval	on re.	on re.	on re.	on re.	on re.	on re.
Round plug M 12x1, 4-pole, IP 67	6,57	6,57				6,57
IP 67 screwed cable gland	13,89	13,89				13,89
With 2 meter fixed connected, shielded PVC cable						
Per meter shielded PVC cable, grey	3,39	3,39	0,00	0,00	0,00	3,39
Per meter PVC cable, with integrated air tube			5,72	5,72	5,72	
As a reference for atmospheric pressure						
SD FG 01 - Field case in CrNi-steel, IP 67	148,82	148,82				148,82

Price in €						
Pressure sensor type	SD-140	SD-141	SD-142	SD-143	SD-150	SD-152
Output 0...5 V, 3-wire	13,99	13,99	13,99	13,99	13,99	13,99
Output 0...10 V, 3-wire	13,99	13,99	13,99	13,99	13,99	13,99
Absolute pressure	on re.	on re.	on re.	on re.	on re.	on re.
With ATEX-approval	on re.	on re.	on re.	on re.	on re.	on re.
Round plug M 12x1, 4-pole, IP 67	6,57	6,57	6,57	6,57	6,57	6,57
IP 67 screwed cable gland	13,89	13,89	13,89	13,89	13,89	13,89
With 2 meter fixed connected, shielded PVC cable						
Per meter shielded PVC cable, grey	3,39	3,39	3,39	3,39	3,39	3,39
SD FG 02 - Field case in CrNi-steel, IP 67	206,38	206,38	206,38	206,38	206,38	206,38
With adjustment of zero point and span						
SD-FG 03 - Field case in CrNi-steel, IP 67	237,55	237,55	237,55	237,55	237,55	237,55
With adjustment of zero point and span						
With silicone encapsulation						
With temperature compensation element up to 300°C	132,71	132,71	132,71	132,71	132,71	132,71

Differential-pressure sensor with internal diaphragm made of silicon



Accuracy 1.0 % according to IEC 61298-2

Special features

High durability
For dynamic and static measurements

Applications

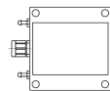
Clean room and medical technology
Filter monitoring
Valve and damper control
Fan and blower control

Usage

For non-corrosive gas,
dry, clean air
and low pressures.



DG 3

	Low pressures and clean, dry gases			
Type	SDD-80	SDD-81	SDD-82	SDD-83
Conn.position				
	Data sheet SD 810			
Connection	2 x Hose nozzle, brass nickel-plated, 4 / 6 mm external diameter			
Accuracy	1.0 % of full scale			
Output signal	4...20 mA, 2-wire	4...20 mA, 3-wire	4...20 mA, 3-wire	4...20 mA, 3-wire
Display	Without	Without	LED 3,5-digit 8 mm in red	
Switch output	Without	Open-collector, npn, via potentiometer		Without
Switch capacity		max. 100 mA, < 35 V DC		
Sensor element	Piezoresistive silicon sensor			
Wetted parts	Silicon, ceramic Al2O3, PVC, brass , viton (FKM)			
Case	Plastic (ABS), approx. 81 x 83 x 41 mm			
Electr. connection	Screw terminals 1.5 mm ², cable entry M 12x1.5 made of polyamide			
Power supply	18...30 V DC			
Temperatures	Medium: 0°C to 50°C, ambient: -10°C to 70°C			
Protection class	IP 65 according to EN 60529 / IEC 529			
Price in €	225,46	237,55	304,33	292,35
Ranges Range ID	0... 1 mbar = 601 0...10 mbar = 701 0...100 mbar = 710	0...2.5 mbar = 603 0...25 mbar = 703 0...250 mbar = 725	0... 5 mbar = 705 0... 50 mbar = 705 0...500 mbar = 750	
Price in €	225,46	237,55	304,33	292,35
Ranges Range ID	0...1 bar = 001	0...2.5 bar = 003		

Article-no: Type + Range ID + output signal

Example: SDD-80 710 420

Surcharges see page 112

Surcharges for Pressure sensors



DG 3

Price in €

Pressure sensor-type	SDD-80 SDD-82	SDD-81 SDD-83
Output 0...10 V, 3-wire	14,31	
Gold-plated contacts	4,88	
Automatic zero point adjustment	53,64	

Differential-Pressure sensor with internal and front flush diaphragm made of stainless steel



Accuracy 1 % according to IEC 61298-2

Special features

Winner of the Innovation Award 2006

Patent-No: 10 2005 043 752

No expensive valve blocks required, low installation effort

With min.-and max. value storage

With zero point adjustment



Applications

Machinery and plant engineering

Filter monitoring

Water resources

Usage

For all gaseous and liquid pressure media, which do not attack the measuring system, do not crystallize or react viscous.

DG 3

	Internal diaphragm	Front flush diaphragm
Type	SDD-30	SDD-40
Conn.position		
	Data sheet SD 301	
Static pressures	10 x Full scale value	
Connection	2 x G 1/2 B CrNi-Steel 316L with key size 27	2 x G 1/2 B Front flush CrNi-Steel 316L with key size 27
Accuracy	1 % Of full scale	
Display	LCD Blue-white, two-line with backlight	
Output signal	4...20 mA, 3-wire system	
Sensor element	Stainless steel measuring cell, to 25 bar static pressure piezoresistiv, from 40 bar thin film technology	
Wetted parts	CrNi-Steel Piezoresistive stainless steel measuring cell with O-ring viton (FKM)	
Case	Anodized aluminum	
Electr. connection	Via round plug M12x1, 4-pole	
Power supply	14...30 V DC	
Temperatures	Medium: -20°C to 100°C, ambient: -25°C to 60°C	
Protection class	IP 65 according to EN 60529 / IEC 529	
Price in €	880,90	
Ranges Range ID	0...40 mbar = 704 0...60 mbar = 706 0...100 mbar = 710 0...160 mbar = 716	
Price in €	829,47	
Ranges Range ID	0...250 mbar = 725 0...400 mbar = 740 0...1 bar = 001 0...1.6 bar = 002 0...2.5 bar = 003 0...4 bar = 004 0...6 bar = 006 0...10 bar = 010 0...16 bar = 016 0...25 bar = 025 0...40 bar = 040 0...60 bar = 060 0...100 bar = 100	
Price in €	1186,10	
Price in €	1139,37	

Article-no: Type + Range ID + output signal

Example: SDD-30 010 420

Surcharges see page 114

Surcharges for Pressure sensors



DG 3

Price in €		
Pressure sensor-type	SDD-30	SDD-40
Output 0 ... 5 V	77,59	77,59
Output 0...10 V	77,59	77,59
Oil and grease free for oxygen, from 250 mbar	62,12	
	0,00	0,00
1 Switch contact as switches, switching capacity 6 A 250 V AC	26,29	26,29
2 Switch contacts as switches, switching capacity 6 A 250 V AC	52,58	52,58
CANopen	on re.	on re.
With two external pressure sensors And back flange	232,56	280,37
With a second current output, for one pressure side	57,24	57,24
IP 67 screwed cable gland With 2 meter fixed connected, shielded PVC cable	13,89	13,89
Per meter shielded PVC cable, gray	3,39	3,39
	0,00	0,00
Back flange made of CrNi-Steel	17,28	17,28
Process connection		
G 1/4 B		
1/4 NPT	31,06	
1/2 NPT	57,35	
Front flush DIN-flange DN 25, PN 40		703,73
Front flush DIN-flange DN 25, PN 100		763,41
Front flush DIN-flange DN 50, PN 40		809,95
Front flush DIN-flange DN 50, PN 63		1279,63
Front flush DIN-flange DN 50, PN 100		1391,99
Front flush DIN-flange DN 50, PN 160		1419,45
Front flush ASME B16,5-flange 1", Class 150		703,73
Front flush ASME B16,5-flange 1", Class 300		703,73
Front flush ASME B16,5-flange 2", Class 150		809,95
Front flush ASME B16,5-flange 2", Class 300		809,95

Digital pressure gauge with internal diaphragm made of stainless steel



Accuracy 0.1 % according to IEC 61298-2

Special features

Temperature compensation
With min.-and max value
With zero point adjustment

Applications

Machinery and plant engineering
Hydraulic systems
Environmental Technology
Laboratory sector

Usage

For industrial applications requiring
high accuracy and long-term stability.
For all gaseous and liquid pressure media,
which do not attack the measuring system,
do not crystallize or react viscous.



DG 3

	Precision measurements			
Type	SD-130			
Conn.position				
	Data sheet SD 130			
Connection	G 1/2 B, CrNi-Steel 316L, key size 27			
Accuracy	0.1 % of full scale			
Display	LCD blue-white, 5 1/2 digits, two lines with backlight			
Output signal	4...20 mA, 3-wire system			
Sensor element	Stainless steel measuring cell			
Wetted parts	CrNi-Steel 316L Piezoresistive stainless steel measuring cell with O-ring viton (FKM)			
Case	Anodized aluminum			
Electr. connection	Via round plug M 12x1, 4-pole			
Power supply	14...30 V DC *)			
Temperatures	Medium: -20°C to 100°C, ambient: -25°C to 60°C			
Protection class	IP 65 according to EN 60529 / IEC 529			
Price in €	574,88			
Ranges Range ID	-100...0 mbar = 510 -400...0 mbar = 540 -1...0 bar = 801 -1...+3 bar = 805 -1...+15 bar = 815	-160...0 mbar = 516 -600...0 mbar = 560 -1...+0,6 bar = 802 -1...+5 bar = 805 -1...+24 bar = 824	-250...0 mbar = 525 -1...+1,5 bar = 803 -1...+9 bar = 809	
Price in €	559,46			
Ranges Range ID	0...100 mbar = 710 0...600 mbar = 760 0...1 bar = 001 0...6 bar = 006 0...40 bar = 040 0...250 bar = 250	0...160 mbar = 716 0...1,6 bar = 002 0...10 bar = 010 0...60 bar = 060 0...400 bar = 400	0...250 mbar = 725 0...2,5 bar = 003 0...16 bar = 016 0...100 bar = 100 0...600 bar = 600	0...400 mbar = 740 0...4 bar = 004 0...25 bar = 025 0...160 bar = 160 0...1.000 bar = 910

Article-no: Type + Range ID + output signal

Example: SD-130 010 420

Surcharges see page 117

*) A power supply is NOT included, the price is on page 117

Digital pressure gauge with internal diaphragm made of stainless steel



Accuracy 0.25 % and 0,5% according to IEC 61298-2

Special features

With min.-and max value
With zero point adjustment
Gehäuse dreh- und schwenkbar

Applications

Machinery and plant engineering
Hydraulic systems
Environmental Technology
Laboratory sector

Usage

For industrial applications requiring
high accuracy and long-term stability.
For all gaseous and liquid pressure media,
which do not attack the measuring system,
do not crystallize or react viscous.



DG 3

	Digitalmanometer			
Typ	SD-134		SD-135	
Conn.position				
	Datenblatt SD 134			
Connection	G 1/4 B, CrNi-Steel 316L, key size 27			
Accuracy	0.5 % of full scale		0.25 % of full scale	
Display	2-line LC display, 4.5-digit 7-segment display			
Pressure units	bar, mbar, psi, InHg, cmHg, mmHg, hPa, kPa, MPa, mH ₂ O, InH ₂ O When changing the unit, it may not be possible to display all positions - please enquire!			
Sensor element	Thick layer-ceramic in monolithic construction		Stainless steel measuring cell	
Wetted parts	CrNi-Steel 316L, O-ring viton (FKM) Ceramic (Al ₂ O ₃)		CrNi-Steel 316L, O-ring viton (FKM)	
Case	PA 6.6, polycarbonate, rotatable			
Supply	2 Piece, 3.6 V Lithium battery (type 1/2 AA)			
Operational life	of battery: Standby mode: approx. 5 years			
Temperatures	Medium: -20°C to 85°C, ambient: -25°C to 70°C			
Protection class	IP 65 according to EN 60529 / IEC 529			
Preis in €			on re.	
Ranges Range ID	-100...0 mbar = 510 -160...0 mbar = 516 -250...0 mbar = 525			
Preis in €	on re.		on re.	
Ranges Range ID	-400...0 mbar = 540 -600...0 mbar = 560 -1...0 bar = 801 -1...+1.5 bar = 803 -1...+3 bar = 804 -1...+5 bar = 805 -1...+9 bar = 809 -1...+15 bar = 815 -1...+24 bar = 824			
Preis in €			448,95 (only accuracy 0.5 %)	
Ranges Range ID	0...100 mbar = 710 0...160 mbar = 716 0...250 mbar = 725			
Preis in €	340,50		448,95	
Ranges Range ID	0...400 mbar = 740 0...600 mbar = 760 0...1 bar = 001 0...1.6 bar = 002 0...2.5 bar = 003 0...4 bar = 004 0...6 bar = 006 0...10 bar = 010 0...16 bar = 016 0...25 bar = 025 0...40 bar = 040 0...60 bar = 060 0...100 bar = 100 0...160 bar = 160 0...250 bar = 250 0...400 bar = 400 0...600 bar = 600			

Article-no:

Type + Range ID

Example:

SD-135 010 420

Surcharges see page 117

Surcharges for Digital pressure gauges



DG 3

Price in €			
Pressure sensor-type	SD-130	SD-134	SD-135
Output 0...5 V	57,24		
Output 0...10 V	57,24		
Oil and grease free for oxygen	29,89	on re.	on re.
	0,00		
1 Switch contact as switches, switching capacity 6 A 250 V AC	26,29		
2 Switch contacts as switches, switching capacity 6 A 250 V AC	52,58		
CANopen	on re.		
IP 67 screwed cable gland	13,89		
With 2 meter fixed connected, shielded PVC cable			
Per meter shielded PVC cable, gray	3,39		
Back flange made of CrNi-steel	17,28		
Process connection G 1/4 B	0,00		
Process connection G 1/2 B		0,00	0,00
Plug-in power supply, 230 V 50 Hz - 24 V/DC 750 mA	net 19,90		

Resistance thermometers for screwing in stainless steel



Accuracy class B according to DIN EN 60 751

Special features

Universal temperature sensor
Short response time

Applications

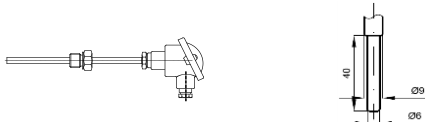
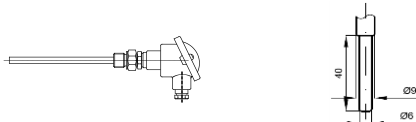
Machinery and plant engineering
Environmental Technology
Chemical and petrochemical industry

Usage

For measuring temperatures
in pipes and tanks



DG 4

	With neck tube			Without neck tube		
Type	ST-20	ST-21	ST-22	ST-24	ST-25	ST-26
Conn.position						
	Data sheet ST 210					
Connection	G 1/2" with key size 27, CrNi-Steel 316L					
Accuracy	class F 0.3		class W 0.3	class F 0.3		class W 0.3
Sensor element	1 x Pt 100, 3-wire					
Wetted parts	CrNi-Steel 316L					
Electr. connection	Ceramic-clamp in connection head, with threaded connection M 20x1.5					
Protection tube	9 x 1 mm	6 x 1 mm	9 x 1 mm reduc. to 6 mm 40 mm	9 x 1 mm	6 x 1 mm	9 x 1 mm reduc. to 6 mm 40 mm
Measuring inset Diameter	6 mm Exchangeable	3 mm	3 mm	6 mm	3 mm	3 mm
Protection class	IP 54 according to EN 60529 / IEC 529					
	range: -50...+550°C					
Price in €	101,44	110,80	136,53	79,54	82,65	107,38
Sensor length	63 mm					
Price in €	102,61	111,97	137,69	80,71	83,93	108,65
Sensor length	100 mm					
Price in €	105,36	117,38	140,45	83,46	89,34	111,72
Sensor length	160 mm					
Price in €	108,33	120,35	142,89	86,43	91,78	114,16
Sensor length	200 mm					
Price in €	110,13	122,98	144,48	88,23	94,19	115,33
Sensor length	250 mm					
Price in €	112,57	125,42	146,81	90,67	96,42	117,66
Sensor length	300 mm					

Article-no: Type + sensor length

Example: ST-20 160

Surcharges see page 121

Resistance thermometers for screwing in stainless steel in Low-Cost-version



Accuracy class F 0,3 and W 0,3 according DIN EN 60 751

Special features

Affordable temperature sensor
Universal temperature sensor
Short response time

Applications

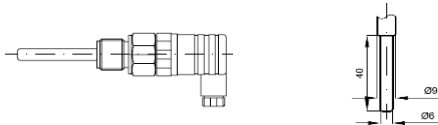
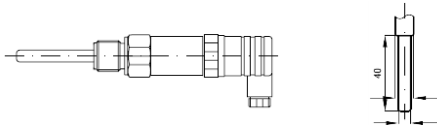
Machinery and plant engineering
Environmental Technology
Chemical and petrochemical industry

Usage

For measuring temperatures
in pipes and tanks



DG 4

	With integrated transmitter					
Type	ST-30	ST-32	ST-34	ST-40	ST-42	ST-44
Conn.position						
	Data sheet ST 230			Data sheet ST 240		
Output signal	4...20 mA					
Power supply	10...30 V DC / 14...30 V DC for output 0...10 V					
Measuring insert	Exchangeable					
Connection	G 1/2" with key size 27, CrNi-Steel 316L					
Accuracy	Class F 0.3		Class W 0.3	Class F 0.3		Class W 0.3
Sensor element	1 x Pt 100, 3-wire					
Wetted parts	CrNi-Steel 316L					
Electr. connection	With square plug connector EN 175301-803 (DIN 43 650) / ISO 4400					
Protection tube	6 x 0.75 mm	8 x 1 mm	6 x 0.75 mm reduc. to 3 mm 20 mm	6 x 0.75 mm	8 x 1 mm	9 x 1 mm reduc. to 6 mm 40 mm
Measuring insert- Diameter	4 mm Exchangeable	5 mm	1.5 mm Fixed	4 mm Exchangeable	5 mm	1.5 mm Fixed
Protection class	IP 65 according to EN 60529 / IEC 529					
	range: -50...+150°C			range: 0...+100°C or range: 0...+120°C		
Price in €	60,31	64,45	88,30	141,12	145,25	160,27
Sensor length	63 mm					
Price in €	61,48	65,72	89,46	142,18	146,42	161,44
Sensor length	100 mm					
Price in €	63,81	68,69	91,90	144,51	149,39	163,77
Sensor length	160 mm					
Price in €	66,25	71,02	94,23	146,95	151,72	166,21
Sensor length	200 mm					
Price in €	68,69	74,62	95,51	148,68	154,62	167,48
Sensor length	250 mm					

Article-no: Type + Sensor length

Example: ST-30 160

Surcharges see page 121

Resistance thermometers for screwing in stainless steel in Low-Cost-version with round plug M 12x1, 4-pole



Accuracy class F 0,3 and W 0,3 according DIN EN 60 751

Special features

Affordable temperature sensor
Universal temperature sensor
Short response time

Applications

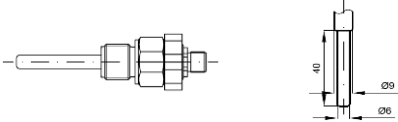
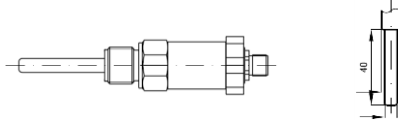
Machinery and plant engineering
Environmental Technology
Chemical and petrochemical industry

Usage

For measuring temperatures
in pipes and tanks



DG 4

	With integrated transmitter					
Type	ST-35	ST-36	ST-37	ST-45	ST-46	ST-47
Conn.position						
	Data sheet ST 230			Data sheet ST 240		
Output signal				4...20 mA		
Connection	G 1/2" with key size 27, CrNi-Steel 316L					
Accuracy	Class F 0.3		Class W 0.3	Class F 0.3		Class W 0.3
Power supply				10...30 V DC / 14...30 V DC for output 0...10 V		
Sensor element	1 x Pt 100, 3-wire					
Wetted parts	CrNi-Steel 316L					
Protection tube	6 x 0.75 mm	8 x 1 mm	6 x 0.75 mm reduc. to 3 mm 15 mm	6 x 0.75 mm	8 x 1 mm	6 x 0.75 mm reduc. to 6 mm 15 mm
Measuring insert-Diameter	3.5 mm Exchangeable	5 mm	1.5 mm Fixed	3.5 mm Exchangeable	5 mm	1.5 mm Fixed
Electr. connection	Round plug M 12x1, 4-pole					
Protection class	IP 67 according to EN 60529 / IEC 529					
	range: -50...+150°C			range: 0...+100°C or range: 0...+120°C		
Price in €	67,42	69,96	88,93	139,39	141,83	165,68
Sensor length	63 mm					
Price in €	69,86	72,40	91,37	141,83	144,27	168,12
Sensor length	100 mm					
Price in €	72,30	74,84	93,81	144,27	146,71	170,56
Sensor length	160 mm					
Price in €	74,74	77,28	96,25	146,71	149,15	173,00
Sensor length	200 mm					
Price in €	77,18	79,72	98,69	149,15	151,59	175,44
Sensor length	250 mm					

Article-no: Type + Sensor length
Example: ST-35 160 oder ST-45 160 420
Surcharges see page 121

Surcharges for Resistance thermometers

DG 4

Price in €				
Resistance thermometers-Type	ST-20 ST-21 ST-22	ST-24 ST-25 ST-26	ST-30 bis ST-37	ST-40 bis ST-47
1 x Pt 100 4-wire system	7,74	7,74		
2 x Pt 100 in 3-wire system	11,98	11,98		
1 x Pt 100 in 3-wire system, class A	4,88	4,88		
2 x Pt 100 in 3-wire system, class A	14,31	14,31		
Sensor length, for each additional 100 mm	7,74	7,74	7,74	7,74
Connection head BUZ	23,11	23,11		
Connection head BUZ-H	26,82	26,82		
Ausgang 0...10V				14,31
Head transmitter with output 4...20 mA	91,35	91,35		
Head transmitter with output 4...20 mA, with ATEX approval Inclusive BUZ-H head	208,61	208,61		
With ATEX approval	27,50	27,50	27,50	27,50
Screwed cable gland with fixed wire			6,04	6,04
Per meter shielded PVC cable, gray			3,60	3,60
Connection thread G 1/4"	2,65	2,65	2,65	2,65

Digital plug-display



Accuracy 0,1 % according to IEC 61298-2

Special features

Converter to be plugged directly
No external power required
Freely scalable display
Display by 330 ° turnable

Please order the sensor separately!



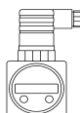
Applications

Machinery and plant engineering
Environmental Technology

Usage

To display the measured values on site and for subsequent installation on the measuring point

DG 4

				With ATEX approval	
Type	SA-10	SA-11	SA-12	SA-10 EX	SA-11 EX
Version					
	Data sheet SA 110				
Electr. connection	With square plug connector EN 175301-803 (DIN 43 650) / ISO 4400			With square plug connector EN 175301-803 (DIN 43 650) zone (0) 1: II (1) 2 G EEx ia IIC T4	
Accuracy	0.1 % of full scale +/- 1 Digit				
Input signal	4...20 mA 2-wire		0...10 V 3-wire	4...20 mA 2-wire	
Display	LED, 4 digits 7 mm high in red Digital attenuation from 0,2 ...30 seconds, adjustable				
Display rate	From 0...10 seconds adjustable				
Case	ABS, dimensions: 47 x 47 x 68 mm				
Switch output	Without	1 PNP-Open-collector-switch output max. 125 mA	Without	Without	1 PNP-Open-collector-switch output max. 125 mA
Power supply	By the sensor, voltage drop 6 V		12...36 V DC	By the sensor, voltage drop 6 V	
Temperatures	-25°C to 85°C				
Protection class	IP 65 according to EN 60529 / IEC 529				
Price in €	185,18	200,13	200,13	220,16	234,47

Surcharges

Type	M 12x1	M 12x1	M 12x1	M 12x1	M 12x1
	electr. connection with M12x1-plug, 5-polig				
Price in €	38,27	38,27	38,27	38,27	38,27

Type			K 1		
	1 Switch output PNP-Open, max 125 mA and electr. connection with M12x1-plug, 5-pole				
Price in €			52,58		

Type		K 2			
	2. Switch output PNP-Open, max 125 mA and electr. connection with M12x1-plug, 5-pole				
Price in €		52.58			



PRESSURE SWITCHES

FOR ALL REQUIREMENTS

Pressure switch with Bourdon tube measure element in industry - and stainless steel version - adjustable



Accuracy class 1.6 according to EN 837-1

Special features

- Robust version
- High reliability and long-term stability
- Switching point adjustable

Applications

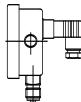
- Machinery and plant construction
- Hydraulic plants
- Pneumatic plants

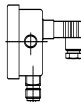
Usage

For switching control voltages in machinery and equipment.
For all gaseous and liquid pressure media, which do not attack the measuring system, do not crystallize or react viscous.



DG 6

	Industry version					
Type	SC-20 04	SC-20 10	SC-20 40	SC-20 100	SC-20 250	SC-20 400
Connection						
	Data sheet SC 120					
Setting ranges	from 1 bar up to 4 bar	from 3 bar up to 10 bar	from 3 bar up to 40 bar	from 30 bar up to 100 bar	from 50 bar up to 250 bar	from 100 bar up to 400 bar
Release point	approx. 10...15 % of the top setting value					
Case	CrNi-Steel					
Measure element	Copper alloy					
Viewing glass	Laminated safety glass					
Switching mode	1 Changeover contact, potential free					
Switching power	5 A, 250 V AC					
Electr. connection	Via connector according to DIN 43 650-C, PG 7					
Connection	G 1/4 B, copper alloy					
Protection class	IP 65 according to EN 60529 / IEC 529					
Price in €	65,79	65,79	65,79	73,70	77,32	77,32

	stainless steel version					
Type	SC-30 04	SC-30 10	SC-30 40	SC-30 100	SC-30 250	SC-30 400
Connection						
	Data sheet SC 130					
Setting ranges	from 1 bar up to 4 bar	from 3 bar up to 10 bar	from 3 bar up to 40 bar	from 30 bar up to 100 bar	from 50 bar up to 250 bar	from 100 bar up to 400 bar
Release point	about 10 .. 15% of the top setting value					
Case	CrNi-Steel					
Measure element	CrNi-Steel 316L					
Viewing glass	Laminated safety glass					
Switching mode	1 Changeover contact, potential free					
Switching power	5 A, 250 V AC					
Electr. connection	Via connector according to DIN 43 650-C, PG 7					
Connection	G 1/4 B, CrNi-Steel 316L					
Protection class	IP 65 according to EN 60529 / IEC 529					
Price in €	113,15	113,15	113,15	121,06	128,75	128,75

Article no: Type
Example: SC-20 10

Pressure switch for low pressure measurements in industry version - fixed setting



Special features

Inexpensive pressure switch
Low construction height and light weight
Switching point fixed setting

Applications

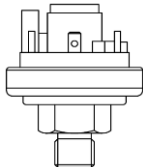
Machinery and plant construction
Pneumatic plants
Air-conditioning and ventilation technology

Usage

For switching control voltages in machinery and equipment.
For all gaseous and liquid pressure media,
which do not attack the measuring system.



DG 6

	Industry version					
Type	SC-50 0.2 V	SC-50 0.9 V	SC-50 0.2	SC-50 01	SC-50 03	SC-50 12
Connection						
	Data sheet SC 150					
Setting ranges	from -5 mbar up to-200 mbar	from -200 mbar up to-900 mbar	from 5 mbar up to200 mbar	from 200 mbar up to1.000 mbar	from 500 mbar up to3000 mbar	from 1 bar up to12 bar
Release point						
Range start	2.5 mbar	50 mbar	2.5 mbar	50 mbar	200 mbar	0.2 bar
End of range	50 mbar	150 mbar	50 mbar	150 mbar	600 mbar	1.5 bar
Accuracy	+/- 10% of the switching point					
Overload limit	0.5 bar	1 bar	0.5 bar	1 bar	10 bar	25 bar
Case	Copper alloy					
Measure element	NBR-membrane					
Switching mode	1 Changeover contact, potential free					
Switching power	6 A, 250 V AC and 2 A, 24 V DC (optionally gold-plated contacts 30/100 mA, 24 V DC)					
Electr. connection	2 Piece flat plug 6,3 x 0,8 according to DIN 46 244					
Connection	G 1/4 B, copper alloy Optional: M 10x1 or G 1/8 on request					
Mounting position	Arbitrary, below 100 mbar is the mounting position to specify					
Protection class	IP 00 according to EN 60529 / IEC 529, with protection cap IP 54 or IP 65					
	Prices from 1 to 9 pieces, without discount					
Price in €	50,75	50,75	40,02	40,02	43,29	55,61

Accessories for pressure switch SC-50

	Au	Au	Au	Au	Au	Au
	Gold-plated switching contacts, Switching power 30 / 100 mA, 24 V DC					
Price in €	2,26	2,26	2,26	2,26	2,26	2,26
type	SK 6345	SK 6345	SK 6345	SK 6345	SK 6345	SK 6345
	Protection cap made of rubber for pressure switch type SC-50 IP 54					
Price in €	4,18	4,18	4,18	4,18	4,18	4,18
Type	SK 6372	SK 6372	SK 6372	SK 6372	SK 6372	SK 6372
	Protection cap with screwed cable gland M 16x 1,5 for pressure switch type SC-50 IP 65					
Price in €	11,64	11,64	11,64	11,64	11,64	11,64

Article no: type Example: SC-50 01

Pressure switch for low pressure measurements in stainless steel version - fixed setting



Special features

Inexpensive pressure switch
Low construction height and light weight
Switching point fixed setting

Applications

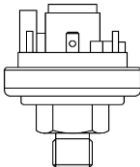
Machinery and plant construction
Chemical and petrochemical industry
Pharmacy

Usage

For switching control voltages in machinery and equipment.
For all gaseous and liquid pressure media,
which do not attack the measuring system.



DG 6

	Stainless steel version					
Type	SC-53 0.2 V	SC-53 0.9 V	SC-53 0.2	SC-53 01	SC-53 03	SC-53 12
Connection						
	Data sheet SC 153					
Setting ranges	from -5 mbar up to-200 mbar	from -200 mbar up to-900 mbar	from 5 mbar up to200 mbar	from 200 mbar up to1.000 mbar	from 500 mbar up to3000 mbar	from 1 bar up to12 bar
Release point						
Range start	2.5 mbar	50 mbar	2.5 mbar	50 mbar	200 mbar	0.2 bar
End of range	50 mbar	150 mbar	50 mbar	150 mbar	600 mbar	1,5 bar
Accuracy	+/- 10% of the switching point					
Overload limit	0.5 bar	1 bar	0.5 bar	1 bar	10 bar	25 bar
Case	CrNi-Steel (V2A)					
Measure element	FKM-Membrane (viton)					
Switching mode	1 Changeover contact, potential free					
Switching power	6 A, 250 V AC und 2 A, 24 V DC (optionally gold-plated contacts 30/100 mA, 24 V DC)					
Electr. connection	2 Piece flat plug 6,3 x 0,8 according to DIN 46 244					
Connection	G 1/4 B, CrNi-steel					

Accessories for Pressure switch SC-53

	Au	Au	Au	Au	Au	Au
	Gold-plated switching contacts, Switching power 30 / 100 mA, 24 V DC					
Price in €	2,26	2,26	2,26	2,26	2,26	2,26
type	SK 6345	SK 6345	SK 6345	SK 6345	SK 6345	SK 6345
	protection cap made of rubber for pressure switch type SC-53 IP 54					
Price in €	4,18	4,18	4,18	4,18	4,18	4,18
type	SK 6372	SK 6372	SK 6372	SK 6372	SK 6372	SK 6372
	protection cap with screwed cable gland M 16x 1,5 for pressure switch type SC-53 IP 65					
Price in €	11,64	11,64	11,64	11,64	11,64	11,64

Article no: Type Example: SC-53 01

Vacuum pressure switch for low pressure measurements in industry version - adjustable



Special features

inexpensive pressure switch
low construction height and light weight
switching point adjustable

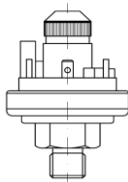
Applications

Machinery and plant construction
Pneumatic plants
Air-conditioning and ventilation technology

Usage

For switching control voltages in machinery and equipment.
For all gaseous and liquid pressure media, which do not attack the measuring system.

DG 6

	industry version							
Type	SC-60 0.02	SC-60 0.05	SC-60 0,1	SC-60 0.125	SC-60 0.2	SC-60 0.3	SC-60 0.5	SC-60 0.7
Connection								
	Data sheet SC 160							
Setting ranges								
from	-5 mbar	-10 mbar	-25 mbar	-50 mbar	-75 mbar	-100 mbar	2005 mbar	-300 mbar
to	-20 mbar	-50 mbar	-100 mbar	-125 mbar	-200 mbar	-300 mbar	-500 mbar	-700 mbar
Switch difference	3 mbar	5 mbar	10 mbar	20 mbar	25 mbar	30 mbar	75 mbar	75 mbar
Accuracy	+/- 10% of the switching point							
Overload limit	0.5 bar	0.5 bar	0,5 bar	0.5 bar	1 bar	1 bar	1 bar	1 bar
Case	Cupper alloy							
Measure element	NBR-membrane							
Switching mode	1 changeover contact, potential free							
Switching power	6 A, 250 V AC und 2 A, 24 V DC (optionally gold-plated contacts 30/100 mA, 24 V DC)							
Electr. connection	2 piece flat plug 6,3 x 0,8 according to DIN 46 244							
Connection	G 1/4 B, cupper alloy Optional: M 10x1 or G 1/8 on request							
Mounting position	arbitrary, below 100 mbar is the mounting position to specify							
Protection class	IP 00 according to EN 60529 / IEC 529, with protection cap IP 54 or IP 65							
	Prices from 1 to 9 pieces, without discount							
Price in €	66,35	66,35	66,35	66,35	66,35	66,35	66,35	66,35

Accessories for Pressure switch SC-60

	Au	Au	Au	Au	Au	Au	Au	Au
	Gold-plated switching contacts, Switching power 30 / 100 mA, 24 V DC							
Price in €	2,26	2,26	2,26	2,26	2,26	2,26	2,26	2,26
type	SK 6365	SK 6365	SK 6365	SK 6365	SK 6365	SK 6365	SK 6365	SK 6365
	Protection cap made of rubber for pressure switch type SC-60 IP 54							
Price in €	4,86	4,86	4,86	4,86	4,86	4,86	4,86	4,86
type	SK 6372	SK 6372	SK 6372	SK 6372	SK 6372	SK 6372	SK 6372	SK 6372
	Protection cap with screwed cable gland M 16x 1,5 for pressure switch type SC-60 IP 65							
Price in €	11,64	11,64	11,64	11,64	11,64	11,64	11,64	11,64

Article no: Type
Example: SC-60 0.1

Pressure switch for low pressure measurements in industry version - adjustable



Special features

Inexpensive pressure switch
Low construction height and light weight
Switching point adjustable

Applications

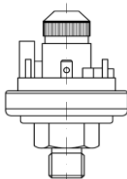
Machinery and plant construction
Pneumatic plants
Air-conditioning and ventilation technology

Usage

For switching control voltages in machinery and equipment.
For all gaseous and liquid pressure media,
which do not attack the measuring system.



DG 6

	Industry version							
Type	SC-61 0,02	SC-61 0,1	SC-61 0,25	SC-61 01	SC-61 1,5	SC-61 03	SC-61 06	SC-61 12
Connection								
	Data sheet SC 161							
Setting ranges								
from	5 mbar	25 mbar	50 mbar	250 mbar	500 mbar	1 bar	1 bar	7 bar
to	20 mbar	100 mbar	250 mbar	1 bar	1.5 bar	3 bar	6 bar	12 bar
Switch difference	3 mbar	10 mbar	20 mbar	150 mbar	250 mbar	500 mbar	0,5 -2 bar	0.5 -2 bar
Accuracy	+/- 10% of the switching point							
Overload limit	0.5 bar	0.5 bar	1 bar	10 bar	10 bar	10 bar	25 bar	25 bar
Case	Cupper alloy							
Measure element	NBR-membrane							
Switching mode	1 Changeover contact, potential free							
Switching power	6 A, 250 V AC und 2 A, 24 V DC (optionally gold-plated contacts 30/100 mA, 24 V DC)							
Electr. connection	2 Piece flat plug 6,3 x 0,8 according to DIN 46 244							
Connection	G 1/4 B, cupper alloy Optional: M 10x1 or G 1/8 on request							
Mounting position	Arbitrary, below 100 mbar is the mounting position to specify							
Protection class	IP 00 according to EN 60529 / IEC 529, with protection cap IP 54 or IP 65							
	Prices from 1 to 9 pieces, without discount							
Price in €	57,54	57,54	57,54	57,54	57,54	57,54	66,35	66,35

Accessories for Pressure switch SC-61

	Au	Au	Au	Au	Au	Au	Au	Au
	Gold-plated switching contacts, Switching power 30 / 100 mA, 24 V DC							
Price in €	2,26	2,26	2,26	2,26	2,26	2,26	2,26	2,26
Type	SK 6365	SK 6365	SK 6365	SK 6365	SK 6365	SK 6365	SK 6365	SK 6365
	Protection cap made of rubber for pressure switch type SC-61 IP 54							
Price in €	4,86	4,86	4,86	4,86	4,86	4,86	4,86	4,86
Type	SK 6372	SK 6372	SK 6372	SK 6372	SK 6372	SK 6372	SK 6372	SK 6372
	Protection cap with screwed cable gland M 16x 1,5 for pressure switch type SC-61 IP 65							
Price in €	11,64	11,64	11,64	11,64	11,64	11,64	11,64	11,64

Article no: Type
Example: SC-61 01

Vacuum pressure switch for low pressure measurements in stainless steel version - adjustable



Special features

Inexpensive pressure switch
Low construction height and light weight
Switching point adjustable

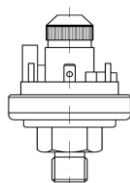
Applications

Machinery and plant construction
Chemical and petrochemical industry
Pharmacy

Usage

For switching control voltages in machinery and equipment.
For all gaseous and liquid pressure media,
which do not attack the measuring system.

DG 6

	Stainless steel version							
Type	SC-63 0.02	SC-63 0.05	SC-63 0.1	SC-63 0.125	SC-63 0.2	SC-63 0.3	SC-63 0.5	SC-63 0.7
Connection								
	Data sheet SC 163							
Setting ranges								
from	-5 mbar	-10 mbar	-25 mbar	-50 mbar	-75 mbar	-100 mbar	2005 mbar	-300 mbar
to	-20 mbar	-50 mbar	-100 mbar	-125 mbar	-200 mbar	-300 mbar	-500 mbar	-700 mbar
Switch difference	3 mbar	5 mbar	10 mbar	20 mbar	25 mbar	30 mbar	75 mbar	75 mbar
Accuracy	+/- 10% of the switching point							
Overload limit	0.5 bar	0.5 bar	0.5 bar	0.5 bar	1 bar	1 bar	1 bar	1 bar
Case	CrNi-Steel (V2A)							
Measure element	FKM-membrane (viton)							
Switching mode	1 Changeover contact, potential free							
Switching power								
Electr. connection	2 Piece flat plug 6,3 x 0,8 according to DIN 46 244							
Connection	G 1/4 B, copper alloy Optional: M 10x1 or G 1/8 on request							
Mounting position	Arbitrary, below 100 mbar is the mounting position to specify							
Protection class	IP 00 according to EN 60529 / IEC 529, with protection cap IP 54 or IP 65							
	Prices from 1 to 9 pieces, without discount							
Price in €	133,05	133,05	133,05	133,05	133,05	133,05	133,05	133,05

Accessories for Pressure switch SC-63

	Au	Au	Au	Au	Au	Au	Au	Au
	Gold-plated switching contacts, Switching power 30 / 100 mA, 24 V DC							
Price in €	2,26	2,26	2,26	2,26	2,26	2,26	2,26	2,26
Type	SK 6365	SK 6365	SK 6365	SK 6365	SK 6365	SK 6365	SK 6365	SK 6365
	Protection cap made of rubber for pressure switch type SC-63 IP 54							
Price in €	4,86	4,86	4,86	4,86	4,86	4,86	4,86	4,86
Type	SK 6372	SK 6372	SK 6372	SK 6372	SK 6372	SK 6372	SK 6372	SK 6372
	protection cap with screwed cable gland M 16x 1,5 for pressure switch type SC-63 IP 65							
Price in €	11,64	11,64	11,64	11,64	11,64	11,64	11,64	11,64

Article no: Type
Example: SC-63 0.1

Pressure switch for low pressure measurements in stainless steel version - adjustable



Special features

Inexpensive pressure switch
Low construction height and light weight
Switching point adjustable

Applications

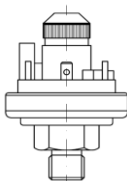
Machinery and plant construction
Pneumatic plants

Usage

For switching control voltages in machinery and equipment.
For all gaseous and liquid pressure media,
which do not attack the measuring system.



DG 6

	Stainless steel version							
Type	SC-64 0,02	SC-64 0,1	SC-64 0,25	SC-64 01	SC-64 1,5	SC-64 03	SC-64 06	SC-64 12
Connection								
	Data sheet SC 164							
Setting ranges								
from	5 mbar	25 mbar	50 mbar	250 mbar	500 mbar	1 bar	1 bar	7 bar
to	20 mbar	100 mbar	250 mbar	1 bar	1,5 bar	3 bar	6 bar	12 bar
Switch difference	3 mbar	10 mbar	20 mbar	150 mbar	250 mbar	500 mbar	0,5 -2 bar	0,5 -2 bar
Accuracy	+/- 10% of the switching point							
Overload limit	0,5 bar	0,5 bar	1 bar	10 bar	10 bar	10 bar	25 bar	25 bar
Case	CrNi-Steel (V2A)							
Measure element	FKM-Membrane (viton)							
Switching mode	1 Changeover contact, potential free							
Switching power	6 A, 250 V AC und 2 A, 24 V DC (optionally gold-plated contacts 30/100 mA, 24 V DC)							
Electr. connection	2 Piece flat plug 6,3 x 0,8 according to DIN 46 244							
Connection	G 1/4 B, copper alloy Optional: M 10x1 or G 1/8 on request							
Mounting position	Arbitrary, below 100 mbar is the mounting position to specify							
Protection class	IP 00 according to EN 60529 / IEC 529, with protection cap IP 54 or IP 65							
	Prices from 1 to 9 pieces, without discount							
Price in €	119,93	119,93	119,93	119,93	119,93	119,93	167,07	167,07

Accessories for Pressure switch SC-64

	Au	Au	Au	Au	Au	Au	Au	Au
	Gold-plated switching contacts, Switching power 30 / 100 mA, 24 V DC							
Price in €	2,26	2,26	2,26	2,26	2,26	2,26	2,26	2,26
Type	SK 6365	SK 6365	SK 6365	SK 6365	SK 6365	SK 6365	SK 6365	SK 6365
	protection cap made of rubber for pressure switch type SC-64 IP 54							
Price in €	4,86	4,86	4,86	4,86	4,86	4,86	4,86	4,86
Type	SK 6372	SK 6372	SK 6372	SK 6372	SK 6372	SK 6372	SK 6372	SK 6372
	protection cap with screwed cable gland M 16x 1,5 for pressure switch type SC-64 IP 65							
Price in €	11,64	11,64	11,64	11,64	11,64	11,64	11,64	11,64

Article no: Type
Example: SC-64 01

Differential pressure switch for low pressure measurements in industry version - adjustable



Special features

Inexpensive differential pressure switch
Switching point adjustable



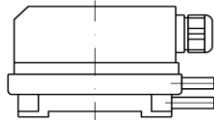
Applications

Air-conditioning and ventilation technology
Machinery and plant construction
Monitoring of air filters
Monitoring of air blowers

Usage

For switching control voltages in machinery and equipment.
For all gaseous pressure media,
which do not attack the measuring system
and do not crystallize.

DG 6

	Industry version					
type	SCD-70 0,002	SCD-70 0,004	SCD-70 0,005	SCD-70 0,01	SCD-70 0,025	SCD-70 0,04
Connection						
	Data sheet SC 170					
Setting ranges						
from	0.2 mbar	0.3 mbar	0.5 mbar	2 mbar	5 mbar	10 mbar
to	2 mbar	4 mbar	5 mbar	10 mbar	25 mbar	40 mbar
Switch difference	0.1 mbar	0.15 mbar	0.2 mbar	1 mbar	1.5 mbar	2.5 mbar
Accuracy	+/- 15% of the switching point					
Overload limit	100 mbar	100 mbar	100 mbar	100 mbar	100 mbar	100 mbar
Case	plastic					
Measure element	Silicone membrane					
Switching mode	1 Changeover contact, potential free					
Switching power	1 A, 250 V AC (optional 100 mA, 24 V DC)					
Electr. connection	2 Piece flat plug 6,3 x 0,8, according to DIN 46 244, with cable entry M 20 x1,5					
Connection	2 Hose connectors made of plastic, external diameter 6.0 mm					
Mounting position	Vertical, with connection bottom					
Protection class	IP 54 according to EN 60529 / IEC 529, with protection cap					
	Prices from 1 to 9 pieces, without discount					
Price in €	83,54	83,54	83,54	83,54	83,54	83,54

Article no: type
Example: SCD-70 0.01



ACCESSORIES

FROM A – Z

Accessories for the installation of measuring devices

Pressure gauge stopcocks and valves



DG 4

Price in €

Version						
Pressure gauge-stopcocks Sleeve - Sleeve						
	Sleeve	Sleeve	PN in bar	Material	DIN	Article no.
	G 1/4	G 1/4	6	Brass		ZH 1061
	G 3/8	G 3/8				ZH 1101
	G 1/2	G 1/2				ZH 1151
Pressure gauge-stopcocks Tension sleeve - tap						
	Tension Sleeve	Tap	PN in bar	Material	DIN	Article no.
	G 1/4	G 1/4	6	Brass	16 260	ZH 2061
	G 1/2	G 1/2	25		16 262	ZH 2151
Pressure gauge-stopcocks Tension sleeve - Tap with control connection M 20 x 1,5						
	Tension Sleeve	Tap	PN in bar	Material	DIN	Article no.
	G 1/2	G 1/2	25	Brass	16 263	ZH 3151
Pressure gauge-stopcocks Tension sleeve - tap and control connection 60 x 25 mm						
	Tension Sleeve	Tap	PN in bar	Material	DIN	Article no.
	G 1/2	G 1/2	25	Brass	16 263	ZH 4151
Pressure gauge-valves Tension sleeve - tap						
	Tension Sleeve	Tap	PN in bar	Material	DIN	Article no.
	G 1/2	G 1/2	250	brass	16 270	ZMV 101
	G 1/2	G 1/2	400	Steel		ZMV 102
	G 1/2	G 1/2	400	CrNi-Steel		ZMV 103
Pressure gauge-valves tension sleeve - tap with control connection M 20 x 1,5						
	Tension Sleeve	Tap	PN in bar	Material	DIN	Article no.
	G 1/2	G 1/2	250	Brass	16 271	ZMV 201
	G 1/2	G 1/2	400	Steel		ZMV 202
	G 1/2	G 1/2	400	CrNi-Steel		ZMV 203
Double-valves tension sleeve - tap with control connection M 20 x 1,5						
	Tension Sleeve	Tap	PN in bar	Material	DIN	Article no.
	G 1/2	G 1/2	250	Brass	16 272	ZMV 301
	G 1/2	G 1/2	400	Steel		ZMV 302
	G 1/2	G 1/2	400	CrNi-Steel		ZMV 303

Accessories for the installation of measuring devices

siphons



DG 4

Price in €

Version						
	Siphon U - form, marketable quality without sealing surface					
	Entrance	Discharge	PN in bar	Material		Article no.
	G 1/4	G 1/4	25	Steel		ZW 312
G 1/2	G 1/2	ZW 302				
	Siphon circle - form, marketable quality without sealing surface					
	Entrance	Discharge	PN in bar	Material		Article no.
	G 1/4	G 1/4	25	Steel		ZW 412
G 1/2	G 1/2	ZW 402				
	Siphon U - form A, tension sleeve - tap					
	Entrance	Discharge	PN in bar	Material	DIN	Article no.
	G 1/2	G 1/2	100	Steel	16 282	ZW 102
G 1/2	G 1/2	at 120 °C	CrNi-steel	ZW 103		
	Siphon circle - form C, tension sleeve - tap					
	Entrance	Discharge	PN in bar	Material	DIN	Article no.
	G 1/2	G 1/2	100	Steel	16 282	ZW 202
G 1/2	G 1/2	at 120 °C	CrNi-Steel	ZW 203		
	Siphon U - form B, tension sleeve - welding end					
	Entrance	Discharge	PN in bar	Material	DIN	Article no.
	Welding end	G 1/2	100	Steel	16 282	ZW 112
Welding end	G 1/2	at 120 °C	CrNi-Steel	ZW 113		
	Siphon circle - form D, tension sleeve - welding end					
	Entrance	Discharge	PN in bar	Material	DIN	Article no.
	Welding end	G 1/2	100	Steel	16 282	ZW 212
Welding end	G 1/2	at 120 °C	CrNi-Steel	ZW 213		
	Connection tube straight line form, tension sleeve - welding end					
	Entrance	Discharge	PN in bar	Material	DIN	Article no.
	Welding end	G 1/2	150	Steel		ZW 512
Welding end	G 1/2	at 250 °C	CrNi-Steel	ZW 513		
	Connection tube angular form, tension sleeve - welding end					
	Entrance	Discharge	PN in bar	Material	DIN	Article no.
	Welding end	G 1/2	150	Steel		ZW 612
Welding end	G 1/2	at 250 °C	CrNi-Steel	ZW 613		

Accessories for the installation of measuring devices

Connecting pipes



DG 4

Price in €

Accessories							
Version		Connection pipes					
	Sleeve	Tap	PN in bar	Material		Article no.	
	G 1/8	G 1/4	250	Brass		ZA 011	6,86
	G 1/4	G 1/8	250			ZA 021	6,86
	G 1/4	M 12 x 1.5	250			ZA 031	7,62
	G 1/4	G 3/8	250			ZA 041	6,86
	G 1/4	G 1/2	250			ZA 051	6,86
	G 3/8	G 1/2	250			ZA 071	6,86
	G 1/2	G 1/4	250			ZA 081	8,39
	G 1/2	G 3/8	250			ZA 091	10,13
	G 1/2	M 20 x 1.5	250			ZA 111	11,87
	1		CrNi-Steel	ZA 113		30,50	
	M 20 x 1.5	G 1/2	250	Brass		ZA 121	11,87
			1	CrNi-steel		ZA 123	30,50

	tension sleeve						
	Right	Left	PN in bar	Material	DIN	Article no.	
	G 1/4	G 1/4	250	Brass	16283	ZS 061	5,23
			250	Steel		ZS 062	3,70
			400	CrNi-Steel		ZS 063	16,77
	G 1/2	G 1/2	250	Brass		ZS 151	5,34
			600	Steel		ZS 152	3,70
			1	CrNi-Steel		ZS 153	19,17
	G 1/2	M 20 x 1.5	250	Brass		ZS 181	11,76
			600	Steel		ZS 182	8,28
			1	CrNi-Steel		ZS 183	19,17
	M 20 x 1.5	G 1/2	250	Brass		ZS 191	11,76
			600	Steel		ZS 192	8,28
			1	CrNi-Steel		ZS 193	19,17
	M 20 x 1.5	M 20 x 1.5	250	Brass		ZS 171	7,73
			600	Steel		ZS 172	6,32
			1	CrNi-Steel		ZS 173	19,17

	Screw connection for pipe connections					
	Connection		PN in bar	Material	Article no.	
	G 1/4 x 6 mm		315	Steel	ZAR 106	6,86
	G 1/2 x 6 mm		630		ZAR 107	8,49
	G 1/2 x 8 mm				ZAR 108	8,82
	G 1/2 x 10 mm				ZAR 109	9,04
	G 1/2 x 12 mm				ZAR 110	14,48

Accessories for the installation of measuring devices

Adapter, adapter sleeves and seals
weld sockets and weld end



DG 4

Price in €

Version								
	Connection			Material		Article no.		
	Sleeve	Tap						
	G 1/4	R 1/2		CrNi-steel		ZLV 06163		
	G 1/2	G 1/2		brass		ZLV 151		
	G 1/2	G 1/2		CrNi-steel		ZLV 153		
Union nut with fitting								
	Connection		PN in bar	Material	DIN	Article no.		
	G 1/4		250	Brass	16 284	ZÜ 061		
			400	CrNi-steel		ZÜ 063		
	G 1/2		250	Brass		ZÜ 151		
			600	Steel		ZÜ 152		
			1000	CrNi-steel		ZÜ 153		
	M 20 x 1.5		250	Brass		ZÜ 171		
			600	Steel		ZÜ 172		
			1000	CrNi-steel		ZÜ 173		
Weld sockets with sealing surface and seal								
	Connection			Material		Article no.		
	G 1/2 x 30 mm							
		G 1/2 x 50 mm				Steel	ZM 21532	
	CrNi-Steel					ZM 21533		
	G 1/2 x 80 mm			Steel		ZM 21552		
				CrNi-Steel		ZM 21553		
	G 1/2 x 100 mm			Steel		ZM 21582		
				CrNi-Steel		ZM 21583		
	G 1/2 x 150 mm			Steel		ZM 21502		
				CrNi-Steel		ZM 21503		
	G 1/2 x 200 mm			Steel		ZM 215152		
				CrNi-Steel		ZM 215153		
				Steel		ZM 215202		
	CrNi-Steel			ZM 215203				
Weld ends								
	Connection		PN in bar	Material	DIN	Article no.		
	G 1/4 left			Steel	16 282	ZSS 072		
	G 1/4 right			Steel		ZSS 062		
	G 1/2 left			Steel		ZSS 192		
				CrNi-Steel		ZSS 193		
	G 1/2 right			Steel		ZSS 152		
				CrNi-Steel		ZSS 153		

Accessories for the installation of measuring devices

Instrument holder , self-sealing nipple
pressure surge reducer and



DG 4

Price in €

Version							
Instrument holder							
	Connection		PN in bar	Material	DIN	Article no.	
	60 mm			Aluminum Black	16 281	ZMH 068	13,61
	100 mm					ZMH 108	16,23
	160 mm					ZMH 168	19,28
	60 mm			Cr-Ni-Steel		ZMH 063	27,66
	100 mm					ZMH 103	28,97
	160 mm					ZMH 163	32,13
	Between piece for instrument holder						
	Connection		PN in bar	Material	DIN	Article No.	
	G 1/4		400	CrNi-steel	16 281	ZZ 103	24,42
	G 1/2	250	Brass	ZZ 151		11,64	
		600	Steel	ZZ 152		9,61	
		1000	Cr-Ni-Steel	ZZ 153		25,70	
	M 20 x 1.5	250	Brass	ZZ 171		14,47	
		600	Steel	ZZ 172		11,30	
		1000	Cr-Ni-Steel	ZZ 173		31,42	
	Self-sealing nipple						
	Sleeve	Tap	PN in bar	Material		Article no.	
	G 1/8	G 1/4		Brass		ZSN 101	2,60
	G 1/4	G 3/8		Brass		ZSN 111	3,05
				Cr-Ni-steel		ZSN 113	25,59
	G 1/4	G 1/2		Brass		ZSN 151	3,39
Cr-Ni-steel				ZSN 153		25,59	
	Pressure surge reducer						
	Sleeve	Tap	PN in bar	Material		Article no.	
	G 1/2	G 1/2	250	Brass		ZDM 151	17,63
			400	Steel		ZDM 152	20,12
			400	Cr-Ni-steel		ZDM 153	45,76
	M 20 x 1.5	M 20 x 1.5	250	Brass		ZDM 171	on re.
	Push button valve (with DVGW - certificated PN 4)						
	Sleeve	Sleeve	PN in bar	Material		Article no.	
	G 1/4	G 1/4	10	Brass		ZDH 061	20,15
	G 1/2	G 1/2		Nickel plated		ZDH 151	20,15
G 1/2	G 1/2	Cr-Ni-Steel		ZDH 153		325,61	

Accessories for the installation of measuring devices

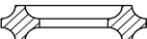
Protecting ring, seals

Cooling elements



DG 4

Price in €

	Cooling elements						
	Sleeve	Tap		Material	T max	Article No.	
	1/4"	1/4" NPT		Cr-Ni-Steel	250°C	ZKE 103 NPT	132,86
	G 1/2	G 1/2				ZKE 153	126,00
	G 1/2	1/2" NPT				ZKE 153 NPT	132,86
	M20x1,5	M20x1,5				ZKE 173	132,86
	Protection ring						
	ND			Material	Colour	Article No.	
	63			Rubber	red	ZSK 631	3,73
	63				blue	ZSK 632	3,73
	80				blue	ZSK 802	12,10
	100				blue	ZSK 102	13,11
	Seals						
	For thread		PN in bar	Material	DIN	Article no.	
	G 1/4 and M 12 x 1.5		1600	Copper	EN 837	ZD 064	0,60
			400	Fiber		ZD 068	0,55
			1600	Cr-Ni-Steel		ZD 063	1,80
			400	PTFE		ZD 069	0,60
	G 1/2 and M 20 x 1.5		1600	Copper		ZD 154	0,90
			400	Fiber		ZD 158	0,65
			1600	Cr-Ni-Steel		ZD 153	1,80
			400	PTFE		ZD 159	1,20
	Profile seal						
	For thread		PN in bar	Material		Article no.	
	G 1/4 and M 12 x 1.5		40	Copper		ZD 064 PR	1,13
	G 1/2 and M 20 x 1.5					ZD 154 PR	1,24
	Transport case for pressure gauge						
	Material		Inside Dimensions		Article no.		
	Plastic, black with 2 red closures		382 x 237 x 50 mm		ZMK 01		58,00

Scale division of pressure gauges



1. Pressure gauge with Bourdon tube ND 63, class 1.6

Ranges in bar		Number of divisions	Smallest division		Range in bar	Number of divisions	Smallest division
0...0.6	- 0.6...0	30	0,02		0...40	20	2
0...1	-1...0	20	0,05		0...60	30	2
0...1.6	-1...+0,6	32	0,05		0...100	20	5
0...2.5	-1...+1.5	25	0,1		0...160	32	5
0...4	-1...+3	20	0,2		0...250	25	10
0...6	-1...+5	30	0,2		0...400	20	20
0...10	-1...+9	20	0,5		0...600	30	20
0...16	-1...+15	32	0,5		0...1.000	20	50
0...25	-1...+24	25	1				

2. Pressure gauge with Bourdon tube ND 80 and 100, class 1.6

Pressure gauge with Bourdon tube ND 100 and 160, class 1.0

Pressure gauge with diaphragm measuring element ND 100 and 160, class 1.6

Pressure gauge with capsule measuring element ND 100 and 160, class 1.6

Range in bar (or mbar)		Number of divisions	Smallest division		Range in bar (or mbar)	Number of divisions	Smallest division
0...0.6	- 0.6...0	60	0,01		0...40	40	1
0...1	-1...0	50	0,02		0...60	60	1
0...1.6	-1...+0.6	32	0,05		0...100	50	2
0...2.5	-1...+1.5	50	0,05		0...160	32	5
0...4	-1...+3	40	0,1		0...250	50	5
0...6	-1...+5	60	0,1		0...400	40	10
0...10	-1...+9	50	0,2		0...600	60	10
0...16	-1...+15	32	0,5		0...1.000	50	20
0...25	-1...+24	50	0,5		0...1.600	32	50

3. Precision pressure gauge ND 160, class 0.6

Ranges in bar		Number of divisions	Smallest division		Range in bar	Number of divisions	Smallest division
0...0.6	- 0.6...0	120	0,005		0...40	200	0,2
0...1	-1...0	200	0,005		0...60	120	0,5
0...1.6	-1...+0.6	160	0,01		0...100	200	0,5
0...2.5	-1...+1.5	125	0,02		0...160	160	1
0...4	-1...+3	200	0,02		0...250	125	2
0...6	-1...+5	120	0,05		0...400	200	2
0...10	-1...+9	200	0,05		0...600	120	5
0...16	-1...+15	160	0,1		0...1.000	200	5
0...25	-1...+24	125	0,2		0...1.600	160	10

Conversion table for pressure units

$$p = \frac{F}{A}$$



	= bar	= mbar	= Pa	= kPa	= MPa	= psi	= kp/cm ²	= mm Hg	= in. H ₂ O	= in.Hg
1 bar	1	1	100	100	0,1	14,50380	102	750,064	401,463	29,52998
1 mbar	0,001	1	100	0,1	0,0001	0,0145038	102 * 10 ⁻³	0,750064	0,401436	29,52998 * 10 ⁻³
1 Pa	0,00001	0,01	1	0,001	0,000001	0,1450377 * 10 ⁻³	10,1972 * 10 ⁻⁶	7,50064 * 10 ⁻³	4,01463 * 10 ⁻³	0,295299 * 10 ⁻³
1 kPa	0,01	10	1	1	0,001	0,145038	0,0101972	7,50064	4,01463	0,295299
1 MPa	10	10	1.000.000	1	1	145,038	10,1972	7500,64	4014,63	295,2998
1 psi	0,0689476	68,94757	6894,757	6,894757	0,0068948	1	0,070307	51,71507	27,6799	2,03602
1 kp/cm ²	0,980665	980,665	98066,5	98,0665	0,0980665	14,22334	1	735,561	393,701	28,95902
1 mm Hg	1,33322 * 10 ⁻³	1,33322	133,322	0,133322	133,322 * 10 ⁻⁶	19,33672 * 10 ⁻³	1,35651 * 10 ⁻³	1	0,535239	39,36996 * 10 ⁻³
1 in. H ₂ O	0,0024909	2,49089	24,9089	0,249089	0,249089 * 10 ⁻³	36,12729 * 10 ⁻³	0,00254	1,86833	1	0,7355591
1 in.Hg	33,86389 * 10 ⁻³	33,86389	3386,389	3,386389	3,386389 * 10 ⁻³	0,4911542	0,034531	25,4	13,5951	1

Other conversions:

1 Pa = 1 N /m²
 1 hPa = 1 mbar
 1 mm Hg = 1 Torr
 1 psi = 1 lbf/in²

General Terms and Conditions of Sale and Delivery of Suchy Messtechnik GmbH

1. General

These General Terms and Conditions of Sale and Delivery apply only to businesses acting in the course of their commercial or independent professional activities and to legal entities under public law.

For all business relationships, including subsequent transactions, the Terms and Conditions of Sale of Suchy Messtechnik GmbH apply exclusively. Other terms and conditions, in particular the purchaser's terms of purchase, are not binding on Suchy Messtechnik GmbH, even if it does not expressly object to them. Any oral statements deviating from these Terms and Conditions of Sale, in particular promises made by representatives, require written confirmation.

Rights to which Suchy Messtechnik GmbH is entitled under statutory provisions or other agreements beyond these General Terms and Conditions of Sale and Delivery remain unaffected.

Offers, Scope of Services and Conclusion of Contract

Offers from Suchy Messtechnik GmbH are subject to change and non-binding.

An order is only considered accepted when it has been confirmed in writing by Suchy Messtechnik GmbH or when delivery has been made. Orders placed are irrevocable.

The scope of the contractually owed services is exclusively determined by the order confirmation. Suchy Messtechnik GmbH reserves the right to make changes to the design, choice of materials, specifications, and construction, even after sending an order confirmation, provided that these changes do not contradict either the order confirmation or the customer's specifications.

The documents underlying the offer or order confirmation, such as illustrations, drawings, dimensions, and weights, are generally to be understood as approximate values only, unless they are expressly designated as binding.

If, after conclusion of a contract, circumstances become known to us that call into question the customer's creditworthiness, such as the commencement of insolvency proceedings, delayed payments, adverse credit reports, or defaults on previous deliveries, we are entitled to refuse performance of the contract until adequate security is provided to us, in which case any delivery or performance deadlines will be extended accordingly. If the customer fails to comply with our request for security within a reasonable period, we are entitled to withdraw from the contract. In this case, the customer is not entitled to any compensation.

The customer's rights under the contract are non-transferable.

Prices

Prices are always quoted for delivery ex works, excluding packaging and transport. Value-added tax (VAT) at the applicable statutory rate will be added to the prices.

The price list valid on the day of delivery applies to the execution of the order, unless fixed prices for a specific period or for a specific item have been expressly agreed upon. Any additional costs incurred due to change requests from the customer after order confirmation will be invoiced.

Payment

Our invoices are payable within 14 days of the invoice date with a 2% discount on the net value of the goods, or within 30 days net. If the payment deadline is exceeded, we are entitled to charge default interest at a rate of 9% above the respective base interest rate per annum.

Shipping

If the customer does not provide specific instructions, we will ship the goods at our discretion. We assume no obligation whatsoever to use the cheapest shipping method. All shipments travel at the customer's expense and risk.

Delivery Time, Disruption, Delay

Suchy Messtechnik GmbH strives to meet the stated delivery deadlines. Delivery times are provided to the best of our knowledge, but are non-binding and subject to smooth business operations and the availability of the necessary materials from our suppliers.

Our delivery times are calculated from the date of order confirmation or clarification of all details and refer to the time of delivery ex works.

If delivery is not made on time, the customer may only withdraw from the contract or claim damages if we are responsible for the delay, the customer has previously granted us a reasonable grace period of at least 30 days, and this period has expired without remedy.

Force majeure, shortages of energy or raw materials, traffic disruptions, and official orders, as well as all other operational disruptions beyond our control, release us from our delivery obligations for the duration of the disruption and to the extent of its impact. They also entitle us to withdraw from the contract in whole or in part.

If the customer has placed an order on call-off, they must call off the delivery item – or, if multiple items are ordered, all items – within 12 months of the order date. Special conditions apply to development orders.

Transfer of Risk

The risk of accidental loss or accidental damage to the goods passes to the buyer upon delivery at the latest. If shipment of the goods to the buyer or to a third party is agreed upon, the risk passes upon handover of the goods to the carrier (freight forwarder, railway, etc.).

If the supplier takes back goods for reasons beyond its control, the buyer bears the risk until the goods are received by the supplier.

For customer-owned goods for which we provide a service, the buyer bears the risk until the goods are received by Suchy Messtechnik GmbH.

Claims for Defects

Any complaints regarding the quality or quantity of the goods must be submitted in writing within two weeks of receipt, stating the order details, invoice numbers, and including samples. Hidden defects must be reported in writing immediately upon discovery.

Defects in the goods delivered by the supplier that are reported to the supplier within 12 months of commissioning, but no later than 18 months after the transfer of risk, will be repaired or replaced by the supplier at its own discretion, even after repeated unsuccessful attempts at repair.

Suchy Messtechnik GmbH must be granted a reasonable amount of time and opportunity to do so. If the defect cannot be remedied within a reasonable period, the customer has the right to withdraw from the purchase agreement or demand a reduction in price. All claims arising from the warranty for defects that could have been detected by the customer with reasonable effort before installation or processing are void as soon as the product has been processed or installed.

Claims for damages by the customer – regardless of the legal basis, including claims arising from tort or consequential damages – are excluded. This exclusion does not apply if Suchy Messtechnik GmbH is guilty of intent or gross negligence, or if it is liable for breach of a material contractual obligation, or if liability is mandatory under the Product Liability Act.

General Terms and Conditions of Sale and Delivery of Suchy Messtechnik GmbH

Warranty claims do not cover natural wear and tear, damage occurring after the transfer of risk due to faulty or negligent handling, or use or assembly not in accordance with specifications or the contract. Liability for warranty claims is excluded if a defect is caused by unusual chemical, physical, or thermal influences that the customer did not inform us of at the time of contract conclusion.

The same applies to defects caused by repairs or modifications to the delivered item carried out by a third party.

Further claims by the customer, in particular for consequential damages, are excluded. This exclusion does not apply if Suchy Messtechnik GmbH is guilty of intent or gross negligence.

Liability of Suchy Messtechnik GmbH

Claims for damages and reimbursement of expenses by the customer – regardless of the legal basis, including claims arising from tort or for compensation for defects or consequential damages, for culpable breach of ancillary contractual obligations, or for lost profits – are excluded. This exclusion does not apply if Suchy Messtechnik GmbH is guilty of intent or gross negligence, or if it is liable for breach of a material contractual obligation, or if liability is mandatory under the Product Liability Act.

Suchy Messtechnik GmbH is liable for damages arising from the following causes:

Unsuitable or improper use, faulty assembly or commissioning by the customer or third parties, failure to observe the operating instructions, faulty or negligent handling, normal wear and tear, chemical, electrochemical, or electrical influences, unauthorized modifications or repairs.

Advice provided by the customer, particularly regarding the use of the delivered item, is binding on Suchy Messtechnik GmbH only if it has been given or confirmed in writing.

Product Liability

The customer shall not modify the products, and in particular, shall not alter or remove any existing warnings regarding hazards arising from improper use of the products. In the event of a breach of this obligation, the customer shall indemnify Suchy Messtechnik GmbH against any third-party product liability claims, unless the customer is not responsible for the modification of the products.

The customer shall immediately inform Suchy Messtechnik GmbH in writing of any risks associated with the use of the products and any potential product defects that come to their attention.

Confidentiality

The delivered product (hereinafter referred to as "reserved goods") remains the property of Suchy Messtechnik GmbH until full payment of all outstanding claims that Suchy Messtechnik GmbH has or acquires from the business relationship with the customer.

The customer is considered a gratuitous custodian for Suchy Messtechnik GmbH and is entitled to dispose of the reserved goods in the ordinary course of business, provided that the customer is willing and able to duly fulfill its obligations to us.

If the reserved goods are not paid for immediately by a third-party purchaser upon resale, the customer is obligated to resell them only under reservation of title. The right to resell the reserved goods automatically lapses if the customer suspends payments or defaults on payment to the supplier.

The customer hereby assigns to Suchy Messtechnik GmbH all claims, including securities and ancillary rights, arising from or in connection with the resale of goods subject to retention of title against the end customer or against third parties

The customer may not enter into any agreement with its customers that excludes or impairs the rights of Suchy Messtechnik GmbH in any way or that invalidates the advance assignment of the claim. In the event of the sale of goods subject to retention of title together with other items, the claim against the third-party purchaser is deemed assigned up to the amount of the delivery price agreed between Suchy Messtechnik GmbH and the customer, unless the invoice specifies the amounts attributable to the individual goods.

Pledges and transfers of ownership as security are only permitted with our consent. The buyer must defend against any third-party interference (attachments, etc.) with our ownership rights and notify us immediately. The customer hereby assigns to us, as security for our claims, all claims arising from the resale of the goods subject to retention of title, including ancillary and security rights, bills of exchange, and checks. If our goods subject to retention of title are sold after processing with other goods, the assignment is limited to the portion of our claim that corresponds to the value of the goods subject to retention of title in the total value of the processed goods at the time of processing.

If the customer includes claims from the resale of goods subject to retention of title in a current account relationship with its customers, it hereby assigns to Suchy Messtechnik GmbH any recognized final balance resulting in its favor up to the amount corresponding to the total amount of the claim from the resale of the goods subject to retention of title included in the current account relationship.

In the event of a breach of contract caused by the customer, in particular in the event of default in payment, Suchy Messtechnik GmbH is entitled to take back all goods subject to retention of title without having to withdraw from the contract beforehand. In this case, the customer is obligated to surrender the goods without further notice.

Confidentiality

The parties are obligated to maintain the confidentiality of all information that becomes accessible to them and is designated as confidential or is recognizable as a trade secret based on other circumstances, for a period of five years from the date of delivery. Unless required for the business relationship, they shall neither record, disclose, nor use such information.

This confidentiality obligation shall not apply if the information was demonstrably already known to the receiving party prior to the commencement of the contractual relationship, or was generally known or publicly accessible prior to the commencement of the contractual relationship, or becomes generally known or publicly accessible through no fault of the receiving party. The burden of proof lies with the receiving party.

Jurisdiction

The laws of the Federal Republic of Germany shall apply exclusively, excluding the United Nations Convention on Contracts for the International Sale of Goods (CISG).

The language of this contract is German. For all rights and obligations arising from this contract, the competent court of Suchy Messtechnik GmbH shall be the place of jurisdiction for both parties.

General Clause

The invalidity of individual provisions of these Terms and Conditions of Sale and Delivery shall not affect the validity of the remaining provisions. Should this provision be or become invalid, the contracting parties shall replace the invalid provision with a valid provision that comes as close as possible to the economic and legal purpose of the invalid provision.



AUF SIE EINGESTELLT



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Handelsregister: Chemnitz HRB 36960
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