

ARMANO



**Your Partner for Pressure and
Temperature Measurement**

Catalogue 2024

Your Partner for Pressure and Temperature Measurement Special Customer Requests Are Challenges We Readily Meet



ARMANO Messtechnik GmbH is an internationally operating, medium-sized, innovative company with two manufacturing plants in Germany.

Our product range comprises high-quality pressure and temperature measuring instruments as well as calibration devices for pressure measurement, which have an excellent reputation worldwide – for more than 100 years. We are proud to state that our customers appreciate our quality, our expertise as well as our flexibility and reliability.





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Catalogue 2024

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General Information

Our Model Overviews



Mechanical Pressure Measurement Bourdon Tube Pressure Gauges

0 – 0.6 bar to 0 – 6000 bar
gaseous or low-viscosity media

Model overview 1000



Mechanical Pressure Measurement Test Gauges

0 – 0.6 bar to 0 – 1600 bar
gaseous or low-viscosity media

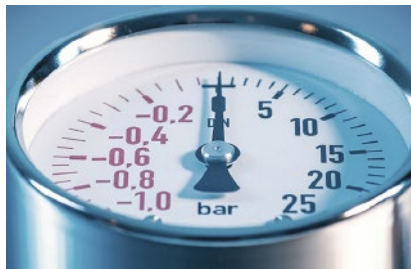
Model overview 2000



Mechanical Pressure Measurement Diaphragm Pressure Gauges (Horizontal)

0 – 10 mbar to 0 – 40 bar
gaseous, liquid, highly viscous or
crystallising media

Model overview 3000



Mechanical Pressure Measurement Diaphragm Pressure Gauges (Vertical)

0 – 0.6 bar to 0 – 40 bar
gaseous or liquid media

Model overview 4000



Mechanical Pressure Measurement Capsule Gauges for Low Pressure

0 – 2.5 mbar to 0 – 600 mbar
only for gaseous media

Model overview 6000



Chemical Seals

chemical seals extend the application range of
pressure gauges and pressure transmitters

Model overview 7000



**Mechanical
Temperature Measurement**

bimetal thermometers
gas-actuated thermometers
thermowells

Model overview 8000



**Electrical
Temperature Measurement**

resistance thermometers
thermocouples
digital thermometers

Model overview 8000E



Electronic Pressure Measurement

pressure transmitters, pressure gauges
process transmitters
electronic pressure switches

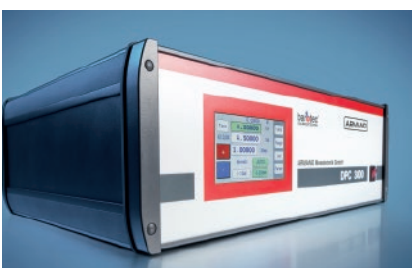
Model overview 9000



Limit Switch Contact Assemblies

for pressure gauges and thermometers

Model overview 9.1000



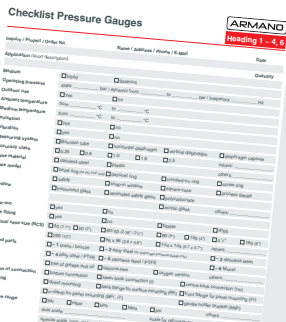
Calibration Technology

dead weight testers, comparison pumps
precision pressure controllers / calibrators
precision pressure indicators

Model overview 10000

General Information

Checklists for Enquiries and Orders

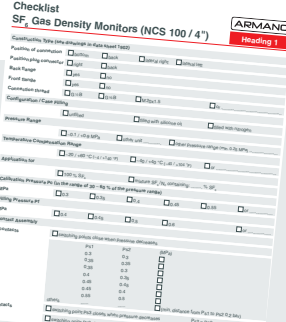


Checklist Pressure Gauges (Heading 1 - 4, 6)

This checklist covers various specifications for pressure gauges, including:

- Application (Process, Laboratory, etc.)
- Material (Stainless steel, Brass, etc.)
- Operating pressure and range
- Accuracy and tolerance
- Scale and dial type
- Mounting and connection details
- Special requirements like chemical seals or explosion protection

01



Checklist SF₆ Gas Density Monitors (NCS 100 / 4") (Heading 1)

This checklist details the requirements for SF₆ gas density monitors, including:

- Application and location
- Measurement range and accuracy
- Material and construction
- Electrical output and signal processing
- Special features like temperature compensation

01-1

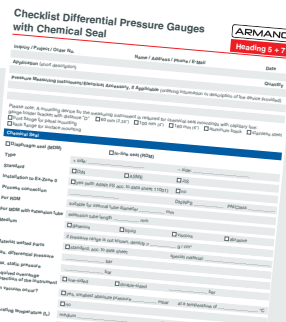


Checklist Pressure Measuring Instruments with Chemical Seal (Heading 7)

This checklist addresses the specific requirements for instruments with chemical seals, including:

- Application and process details
- Material compatibility with the process medium
- Seal type and configuration
- Accuracy and range
- Mounting and connection

07-01

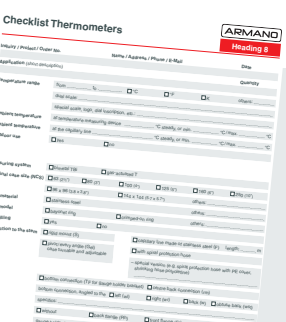


Checklist Differential Pressure Gauges with Chemical Seal (Heading 5 + 7)

This checklist covers differential pressure gauges with chemical seals, including:

- Application and process details
- Material and seal requirements
- Measurement range and accuracy
- Mounting and connection

07-05

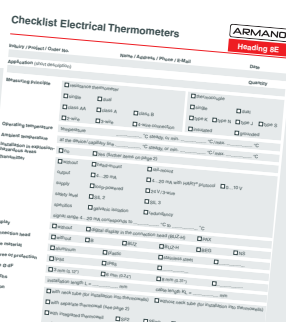


Checklist Thermometers (Heading 8)

This checklist details the requirements for various types of thermometers, including:

- Application and location
- Measurement range and accuracy
- Material and construction
- Electrical output and signal processing

08

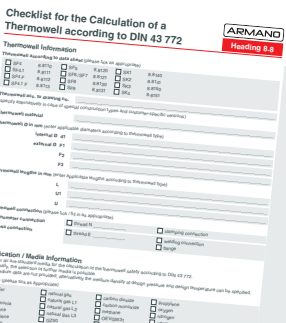


Checklist Electrical Thermometers (Heading 8E)

This checklist addresses the requirements for electrical thermometers, including:

- Application and location
- Measurement range and accuracy
- Material and construction
- Electrical output and signal processing

08E

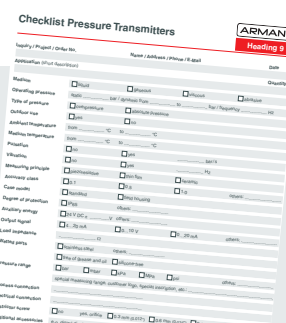


Checklist for the Calculation of a Thermowell according to DIN 43772 (Heading 8.8)

This checklist provides a structured approach to thermowell calculation, including:

- Thermowell information (Application, location, etc.)
- Thermowell calculation parameters (Length, diameter, etc.)
- Material and construction details
- Application and media information

08-8



Checklist Pressure Transmitters (Heading 9)

This checklist details the requirements for pressure transmitters, including:

- Application and process details
- Measurement range and accuracy
- Material and construction
- Electrical output and signal processing

09

Mechanical Pressure Measurement

Bourdon Tube Pressure Gauges – Standard



Model	RCh / RChG
Nominal size	100, 160, 250 mm
Version	bayonet ring case stainless steel
Data sheet	1201



Model	RChg / RChgG
Nominal size	100, 125, 160 mm
Version	crimped-on ring case stainless steel
Data sheet	1202



Model	RChg / RChgG 80
Nominal size	80 mm
Version	crimped-on ring case stainless steel
Data sheet	1203



Model	RCh / RChG 63
Nominal size	63 mm
Version	bayonet ring case stainless steel
Data sheet	1211



Model	RChg / RChgG 63
Nominal size	63 mm
Version	crimped-on ring case stainless steel
Data sheet	1212



Model	RChg / RChgG 40 – 3v
Nominal size	40 mm
Version	crimped-on ring case stainless steel welded
Data sheet	1221



Model	RChg / RChgG 50 – 3v
Nominal size	50 mm
Version	crimped-on ring case stainless steel welded
Data sheet	1231



Model	RChg / RChgG 50
Nominal size	50 mm
Version	crimped-on ring case stainless steel
Data sheet	1232

Mechanical Pressure Measurement

Bourdon Tube Pressure Gauges – Safety Pressure Gauges



Model	RSCh / RSChG
Nominal size	100, 160 mm
Version	bayonet ring case stainless steel safety version
Data sheet	1600



Model	RSChg / RSChgG 160 – 3v
Nominal size	160 mm
Version	crimped-on ring case stainless steel safety version welded
Data sheet	1602



Model	RSCh / RSChG 63
Nominal size	63 mm
Version	bayonet ring case stainless steel safety version
Data sheet	1610



Model	RSCh / RSChG
Nominal size	100, 160 mm
Version	bayonet ring case stainless steel safety version acc. to DIN 16001 high pressure connection
Data sheet	1640

Bourdon Tube Pressure Gauges – DW-Line



Model	RCh / RChG ...vDW
Nominal size	100, 160 mm
Version	bayonet ring case stainless steel welded
Data sheet	1201.7



Model	RCh / RChG 63 – 3vDW
Nominal size	63 mm
Version	bayonet ring case stainless steel welded
Data sheet	1211.7

Mechanical Pressure Measurement

Bourdon Tube Pressure Gauges – Low Cost



Model	RE
Nominal size	40, 50 mm
Version	steel case black snap-in polycarbonate window
Data sheet	1132



Model	RE 63 - 1
Nominal size	63 mm
Version	steel case black snap-in polycarbonate window
Data sheet	1110



Model	RE 100 - 1
Nominal size	100 mm
Version	steel case black snap-in polycarbonate window
Data sheet	1120



Model	RgG 63 - 1
Nominal size	63 mm
Version	crimped-on ring case stainless steel
Data sheet	1112

Mechanical Pressure Measurement

Bourdon Tube Pressure Gauges – Special



Model	RPG / RPPG 4 1/2"
Nominal size	4 1/2"
Version	with PBTP case acc. to US standard
Data sheet	1401



Model	RQS
Nominal size	96x96, 144x144 mm
Version	square case with front narrow rim, alloy steel black
Data sheet	1500



Model	RCaiCh 160
Nominal size	160 mm
Version	caisson gauge bayonet ring case stainless steel
Data sheet	1800



Model	RChG
Nominal size	100, 160 mm
Version	subsea gauge to a depth of 3000 m bayonet ring case stainless steel
Data sheet	1810

Mechanical Pressure Measurement

Bourdon Tube Pressure Gauges – Special



Model	Rg...Fz / RChg...Fz
Nominal size	60, 80, 100 mm
Version	combi gauge for rail cars
Data sheet	1901



Model	RChg 125 - 1 Fz
Nominal size	125 mm
Version	combi gauge for rail cars
Data sheet	1901.1



Model	RChg / RChgOe / RChgN
Nominal size	100 mm
Version	SF ₆ gas density monitor crimped-on ring case stainless steel with magnetic contact
Data sheet	1902

Mechanical Pressure Measurement

Bourdon Tube Pressure Gauges – Additional Electrical Accessories



Model	RCh / RChOe
Nominal size	100, 160 mm
Version	bayonet ring case stainless steel limit switch contact assembly
Data sheet	1201.90



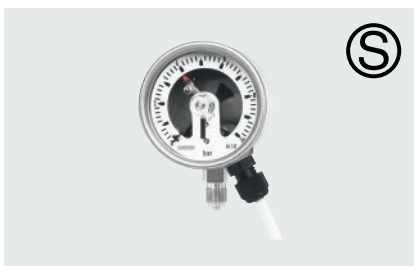
Model	RCh 63
Nominal size	63 mm
Version	bayonet ring case stainless steel reed switch
Data sheet	1211.94



Model	RQS
Nominal size	96x96, 144x144 mm
Version	square case with front narrow rim, alloy steel black limit switch contact assembly
Data sheet	1500.90



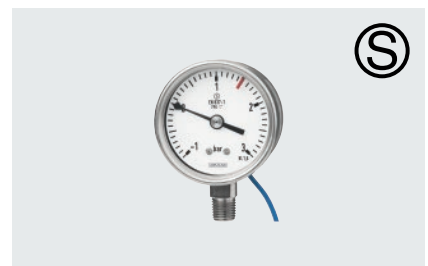
Model	RSCh / RSChOe
Nominal size	100, 160 mm
Version	bayonet ring case stainless steel, safety version limit switch contact assembly
Data sheet	1600.90



Model	RSCh 63
Nominal size	63 mm
Version	bayonet ring case stainless steel, safety version magnetic contact
Data sheet	1610.91



Model	RSCh 63
Nominal size	63 mm
Version	bayonet ring case stainless steel, safety version inductive or electronic contact
Data sheet	1610.92



Model	RSCh 63
Nominal size	63 mm
Version	bayonet ring case stainless steel, safety version reed switch
Data sheet	1610.94

Mechanical Pressure Measurement

Test Gauges



Model	RFCh / RFChG
Nominal size	100, 160, 250 mm
Version	bayonet ring case stainless steel
Data sheet	2201



Model	RFSch / RFSchG 160
Nominal size	160 mm
Version	bayonet ring case stainless steel, safety version
Data sheet	2600



Model	RFPCCh 160
Nominal size	160 mm
Version	bayonet ring case stainless steel as test pressure gauge with portable case
Data sheet	2102

Mechanical Pressure Measurement

Diaphragm Pressure Gauges (Horizontal) – Standard



Model	PCh / PChG
Nominal size	100, 160 mm
Version	bayonet ring case stainless steel
Data sheet	3201



Model	PCh 100 – 3 DG
Nominal size	100 mm
Version	bayonet ring case stainless steel dry measuring cell DryGenic
Data sheet	3202



Model	PSCh / PSChG
Nominal size	100, 160 mm
Version	bayonet ring case stainless steel, safety version
Data sheet	3600

Diaphragm Pressure Gauges (Horizontal) – Special



Model	APCh / APChG
Nominal size	100, 160 mm
Version	absolute pressure gauge bayonet ring case stainless steel
Data sheet	3901

Diaphragm Pressure Gauges (Horizontal) – Additional Electrical Accessories



Model	PCh / PChOe
Nominal size	100, 160 mm
Version	bayonet ring case stainless steel limit switch contact assembly
Data sheet	3201.90



Model	PSCh / PSChOe
Nominal size	100, 160 mm
Version	bayonet ring case stainless steel, safety version limit switch contact assembly
Data sheet	3600.90

Mechanical Pressure Measurement

Diaphragm Pressure Gauges (Vertical)



Model	PsP 60
Nominal size	60 mm
Version	bezel ring case black for various applications
Data sheet	4100



Model	PsPChg 80 - 3
Nominal size	80 mm
Version	for fire extinguishing pumps
Data sheet	4104



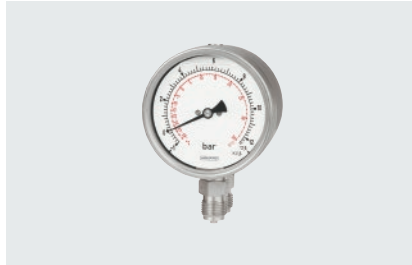
Model	PsPK 63 - 2
Nominal size	63 mm
Version	polyamide screw ring case black for chlorine metering services
Data sheet	4310

Mechanical Pressure Measurement

Duplex and Differential Pressure Gauges – with Bourdon Tube



Model	DRCh / DRChG / DiRCh / DiRChG
Nominal size	100, 160 mm
Version	with Bourdon tubes bayonet ring case stainless steel
Data sheet	5101



Model	DiRZCh / DiRZChG
Nominal size	100, 160 mm
Version	with Bourdon tubes bayonet ring case stainless steel
Data sheet	5111

Differential Pressure Gauges – Additional Electrical Accessories

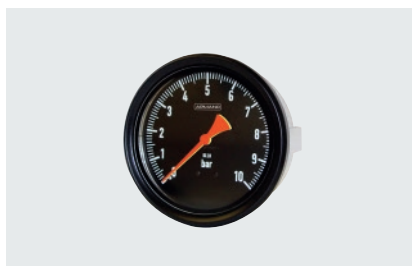


Model	DiRZCh / DiRZChOe 160
Nominal size	160 mm
Version	with Bourdon tubes bayonet ring case stainless steel limit switch contact assembly
Data sheet	5111.90

Duplex Gauges – Combi Gauges



Model	DRg...Fz / DRChg...Fz
Nominal size	60, 80, 100 mm
Version	with two measuring units for rail cars
Data sheet	5901



Model	DRChg 125 – 1 Fz
Nominal size	125 mm
Version	with two measuring units for rail cars
Data sheet	5901.1

Mechanical Pressure Measurement

Differential Pressure Gauges – with Diaphragm Capsule



Model	DiKPCh
Nominal size	100, 160 mm
Version	with diaphragm capsule bayonet ring case stainless steel
Data sheet	5601

Differential Pressure Gauges – with Diaphragm



Model	DiP1Ch / DiP1ChG
Nominal size	100, 160 mm
Version	with vertical diaphragms bayonet ring case stainless steel
Data sheet	5200



Model	DiP2Ch / DiP2ChG
Nominal size	100, 160 mm
Version	with horizontal diaphragm bayonet ring case stainless steel
Data sheet	5210

Mechanical Pressure Measurement

Capsule Gauges for Low Pressure – Standard



Model	KPCh / KPChG
Nominal size	100, 160, 250 mm
Version	bayonet ring case stainless steel
Data sheet	6201



Model	KPChg / KPChgG
Nominal size	100, 160 mm
Version	crimped-on ring case stainless steel
Data sheet	6202



Model	KPChg / KPChgG 80
Nominal size	80 mm
Version	crimped-on ring case stainless steel
Data sheet	6203



Model	KPCh / KPChG 63
Nominal size	63 mm
Version	bayonet ring case stainless steel
Data sheet	6211



Model	KPChE 63
Nominal size	63 mm
Version	stainless steel snap-in window
Data sheet	6211.1



Model	KPChg / KPChgG 63
Nominal size	63 mm
Version	crimped-on ring case stainless steel
Data sheet	6212



Model	KPChg 50
Nominal size	50 mm
Version	crimped-on ring case stainless steel
Data sheet	6232

Mechanical Pressure Measurement

Capsule Gauges for Low Pressure – Special



Model	KPQS
Nominal size	96x96, 144x144 mm
Version	square case galvanised steel
Data sheet	6500



Model	KPPG 4 1/2" - 3
Nominal size	4 1/2"
Version	process gauge case acc. to US standard
Data sheet	6401

Chemical Seal Mounting

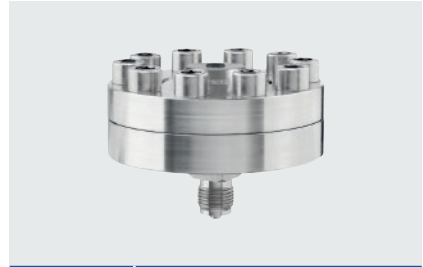
Diaphragm Seals – General Applications



Model	MDM 7210v
Version	PN 40, PN 100 male thread or flange
Data sheet	7210



Model	MDM 7210.L
Version	PN 100, optional PN 250 male thread lightweight version
Data sheet	7210.L



Model	MDM 7211v
Version	PN 250 male thread or flange
Data sheet	7211



Model	MDM 7280v
Version	PN 600 female thread
Data sheet	7280

Chemical Seal Mounting

Diaphragm Seals – For Food / Bio / Pharmaceutical Industries



Model	MDM 73.. / MDM 73..v
Version	for the food industry, especially hygienics connection for flat gasket or form sealing
Data sheet	7300



Model	MDM 73.. / MDM 73..v
Version	for the food industry, especially hygienics
Data sheet	7301



Model	MDM 73.. / MDM 73..v
Version	for the food industry, especially hygienics; for O-ring sealing DIN 11864-1, -2 and -3
Data sheet	7302



Model	MDM 73.. / MDM 73..v
Version	for the food industry, especially hygienics; for O-ring sealing NEUMO BioConnect®
Data sheet	7303

Chemical Seal Mounting

Diaphragm Seals – Thread Connection – For Mechanical and Plant Engineering



Model	MDM 7400
Version	with thread connection
Data sheet	7400



Model	MDM 7910v / MDM 7980v
Version	diaphragm seal compact type PN 250 or PN 600 male thread
Data sheet	7935



Model	MDM 7952
Version	diaphragm seal compact type PN 1000 high pressure connection
Data sheet	7952

Chemical Seal Mounting

Diaphragm Seals – Flange-type Chemical Seals According to DIN EN and ASME



Model MDM 7510v / MDM 7520v

Version acc. to DIN EN, ASME or JIS
membrane flush welded

Data sheet 7500



Model MDM 7511v / MDM 7521v

Version acc. to DIN EN, ASME
for small nominal widths with
large control volume

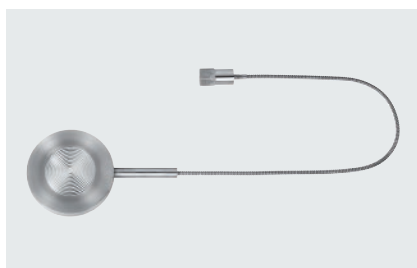
Data sheet 7501



Model MDM 7515v / MDM 7525v

Version with extension tube
acc. to DIN EN, ASME or JIS
membrane flush welded

Data sheet 7502



Model MDM 7550 – 7565

Version cellular type
with or without extension tube
sealing face acc. to
DIN EN, ASME

Data sheet 7505

Chemical Seal Mounting

In-line Seals – For Industrial Applications



Model	RDM 769..
Version	as flange / cellular type
Data sheet	7600

In-line Seals – For Food / Bio / Pharmaceutical Industries



Model	RDM 763..
Version	hygienic / aseptic connections for flat gasket and form sealing
Data sheet	7630



Model	RDM 763..
Version	hygienic / aseptic connections for O-ring sealing
Data sheet	7630



Chemical Seal Mounting

Special



Model	MDM 7190
Version	diaphragm seal plastic version, PN 10 female thread
Data sheet	7190



Model	MDM 7590
Version	diaphragm seal for pulp and paper industries DN 48, PN 40
Data sheet	7590



Model	RDM 7680
Version	with cutting ring fitting metal sealing Ermeto fitting M 18x1.5
Data sheet	7680



Model	MDM 7390v
Version	for homogenising machines
Data sheet	7390



Model	TDM 7710
Version	capsule seal thread connection PN 600
Data sheet	7710

Accessory



Model	SpR
Version	flushing ring for diaphragm seals
Data sheet	7.7001



Model	KEIRv
Version	cooling element for diaphragm and in-line seals
Data sheet	7.7002



Model	FLv/FL
Version	capillary line for diaphragm and in-line seals
Data sheet	7.7003

Electronic Pressure Measurement

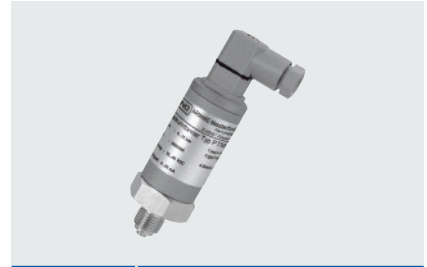
Pressure Transmitters – Analogue Output Signal



Model	PTM
Version	standard
Accuracy	≤0.5 % (≤250 mbar ≤ 1.0 %)
Pressure range	0 – 100 mbar to 0 – 1000 bar
Data sheet	9810



Model	PTMv
Version	welded
Accuracy	≤0.5 %
Pressure range	0 – 400 mbar to 0 – 100 bar
Data sheet	9810.2



Model	PTMk
Version	compact type
Accuracy	≤0.5 % (≤250 mbar ≤ 1.0 %)
Pressure range	0 – 100 mbar to 0 – 1000 bar
Data sheet	9810.1



Model	PTMFB
Version	standard
Accuracy	≤0.5 %
Pressure range	0 – 1 bar to 0 – 1000 bar
Data sheet	9810.3

Electronic Pressure Measurement

Pressure Transmitters – Analogue Output Signal



Model	CTMd
Version	general applications
Accuracy	≤ 1 %
Pressure range	0 – 1 bar to 0 – 100 bar
Data sheet	9821



Model	CTMc
Version	general applications field housing
Accuracy	≤ 0.2 % (≤ 60 mbar ≤ 0.5 %)
Pressure range	0 – 40 mbar to 0 – 60 bar
Data sheet	9820



Model	CTMcFB
Version	food / bio / pharma industries
Accuracy	≤ 0.2 % (≤ 60 mbar ≤ 0.5 %)
Pressure range	0 – 40 mbar to 0 – 60 bar
Data sheet	9820.3



Model	DTM
Version	standard welded
Accuracy	≤ 0.5 %
Pressure range	0 – 6 bar to 0 – 2500 bar
Data sheet	9830



Model	DTMFB
Version	membrane flush welded
Accuracy	≤ 0.5 %
Pressure range	0 – 10 bar to 0 – 1000 bar
Data sheet	9830.3



Model	DTMk
Version	compact type welded
Accuracy	≤ 0.5 %
Pressure range	0 – 6 bar to 0 – 1000 bar
Data sheet	9830.1

Electronic Pressure Measurement

Pressure Transmitters – Analogue Output Signal – Version



Model	PTMEx
Version	ex protection II 2G Ex ib IIC T6 Gb membrane placed inside
Accuracy	≤ 0.2 % (≥ 60 bar ≤ 0.3 %)
Pressure range	0 – 1 bar to 0 – 400 bar
Data sheet	9812



Model	PTMExFB
Version	ex protection II 2G Ex ib IIC T6 Gb membrane flush welded
Accuracy	≤ 0.2 %
Pressure range	0 – 1 bar to 0 – 60 bar
Data sheet	9812



Model	PTMExFG
Version	ex protection II 2G Ex ib IIC T6 Gb field housing
Accuracy	≤ 0.2 % (≥ 60 bar ≤ 0.3 %)
Pressure range	0 – 1 bar to 0 – 400 bar
Data sheet	9812



Model	PTMExFBFG
Version	ex protection II 2G Ex ib IIC T6 Gb membrane flush welded field housing
Accuracy	≤ 0.2 %
Pressure range	0 – 1 bar to 0 – 60 bar
Data sheet	9812

Electronic Pressure Measurement

Pressure Transmitters – Analogue Output Signal – Additional Digital Interface



Model	DIGPTMv
Version	digital precision transmitter welded
Accuracy	$\leq 0.08\%$
Pressure range	0 – 4 bar to 0 – 160 bar
Data sheet	9860.2



Model	DIGPTM
Version	digital precision transmitter
Accuracy	$\leq 0.1\%$ (DIGPTM005 $\leq 0.05\%$)
Pressure range	0 – 250 bar to 0 – 1000 bar
Data sheet	9860



Model	DIGDTMvUHP
Version	UHP transmitter welded
Accuracy	$\leq 0.2\%$
Pressure range	0 – 4 bar to 0 – 350 bar
Data sheet	9870.21



Model	DIGPTMvSF6
Version	SF ₆ gas density transmitter welded
Accuracy	$\leq 0.5\%$
Pressure range	SF ₆ standardised to 20 °C
Data sheet	9891

Electronic Pressure Measurement With Local Indicator



Model	DPG 300
Nominal size	63 mm
Version	digital pressure gauge battery-operated
Accuracy	≤ 0.5 %
Pressure range	0 – 1.6 bar to 0 – 250 bar
Data sheet	9661



Model	DPG 400
Nominal size	63 mm
Version	digital pressure gauge battery-operated
Accuracy	≤ 0.25 %
Pressure range	0 – 400 mbar to 0 – 600 bar
Data sheet	9662



Model	DPG 1030
Nominal size	100 mm
Version	digital precision pressure gauge LILLYpress PLUS with large graphic display battery-operated
Accuracy	≤ 1000 bar ±0.1 % FS (±0.05 % FS) > 1000 bar ±0.25 % FS (±0.1 % FS)
Pressure range	-1 / +1.5 bar to 0 – 3000 bar
Data sheet	9643



Model	DPG 2600
Nominal size	130 mm
Version	pressure reference with gauge design battery-operated
Accuracy	A ≤ 0.05 % A+ ≤ 0.02 %
Pressure range	-200 / +200 mbar to 0 – 1000 bar
Data sheet	9668

Electronic Pressure Measurement

With Local Indicator and Additional Analogue Output



Model	RSCh / RSChOe
Nominal size	100, 160 mm
Version	Bourdon tube pressure gauge with integrated pressure transmitter DMU
Accuracy	RSCh / RSChOe $\leq 1.0\%$ DMU $\leq 0.5\%$
Pressure range	0 – 600 mbar to 0 – 1600 bar
Data sheet	9631



Model	KPCh 100 – 3
Nominal size	100 mm
Version	capsule gauge for low pressure with integrated pressure transmitter DMU
Accuracy	KPCh $\leq 1.6\%$ DIGPTM $\leq 1\%$, $\leq 0.5\%$, $\leq 0.25\%$
Pressure range	0 – 2.5 mbar to 0 – 600 mbar
Data sheet	9632

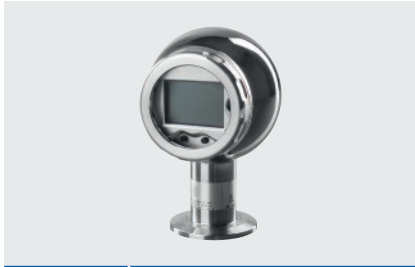


Model	DPG 1500
Nominal size	100 mm
Version	digital high-pressure gauge LILLYpress PLUS with large graphic display 4...20 mA
Accuracy	$\pm 0.25\%$ FS ($\pm 0.1\%$ FS)
Pressure range	0 – 1600 bar to 0 – 3000 bar
Data sheet	9651



Model	DPG 1510
Nominal size	100 mm
Version	digital precision pressure gauge LILLYpress PLUS with large graphic display 4...20 mA
Accuracy	$\pm 0.1\%$ FS ($\pm 0.05\%$ FS)
Pressure range	-1 / +1.5 bar to 0 – 1000 bar
Data sheet	9652

Electronic Pressure Measurement Process Transmitters



Model	PTFi
Version	field housing stainless steel 304 (1.4301) food / bio / pharma industries
Accuracy	≤ 0.1 %
Pressure range	0 – 400 mbar to 0 – 40 bar
Data sheet	9712



Model	PTPi
Version	case die-cast aluminum pressure process industry
Accuracy	≤ 0.075 %
Pressure range	-7 / +7 mbar to 0 – 1000 bar
Data sheet	9711



Model	PTDi
Version	case die-cast aluminum differential pressure process industry
Accuracy	≤ 0.075 %
Pressure range	-7 / +7 mbar to 0 – 70 bar
Data sheet	9721

Electronic Pressure Switches



Model	PS 300
Version	with IO-Link interface
Accuracy	≤ 0.5 % (≤ 1.0 %)
Pressure range	0 – 600 mbar to 0 – 600 bar
Data sheet	9621



Model	PS 400
Version	field housing stainless steel 316L
Accuracy	≤ 0.25 %
Pressure range	0 – 100 mbar to 0 – 600 bar
Data sheet	9622

Electronic Pressure Measurement

Limit Switch Contact Assemblies



Model	S
Version	low-action contact
Data sheet	9.1000



Model	M
Version	magnetic contact
Data sheet	9.1000



Model	I
Version	inductive contact
Data sheet	9.1000



Model	E
Version	electronic contact
Data sheet	9.1000



Model	P
Version	pneumatic contact
Data sheet	9.1000



Model	R
Version	reed switch
Data sheet	9.1000



Model	MS
Version	micro switch
Data sheet	9.1000

Electronic Pressure Measurement

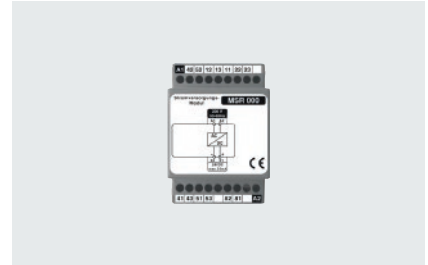
Accessory



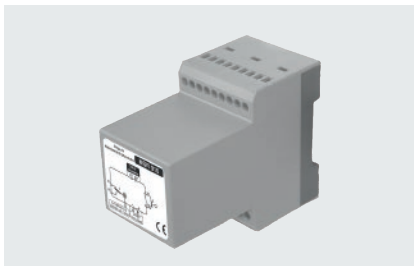
Model	DPM
Version	process-controlled digital indicator with integrated power supply, 4 digits
Data sheet	9910



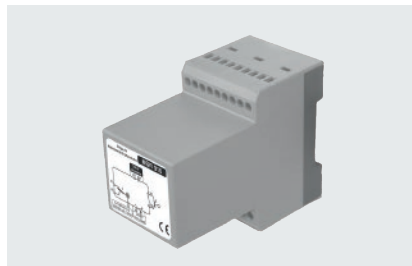
Model	DAS
Version	digital display and switching module, 4 digits, 2 limit switches, min / max storage
Data sheet	9912



Model	MSR-000
Version	power supply module not intrinsically safe
Data sheet	9981



Model	MSR
Version	pulse controlled multifunctional relay for limit switch contact assemblies S and M
Data sheet	9521



Model	MSR-I
Version	pulse controlled multifunctional relay for inductive limit switch contact assemblies
Data sheet	9531



Model	KFU8-SR-...W
Version	switch amplifier intrinsically safe for inductive limit switch contact assemblies
Data sheet	9533

Calibration Technology

Primary Standards – Dead Weight Testers



Model	PD 1
Version	pneumatic version 1 bar portable version
Data sheet	10311



Model	PD 6
Version	pneumatic version 6 bar
Data sheet	10312



Model	PD 10 / PD 25
Version	pneumatic version 10 bar, 25 bar
Data sheet	10313



Model	PD 60 / PD 100
Version	hydraulic version 60 bar, 100 bar
Data sheet	10315



Model	PD 600 / PD 1000
Version	hydraulic version 600 bar, 1000 bar
Data sheet	10316



Model	PD 2500
Version	hydraulic version 2500 bar
Data sheet	10317

Calibration Technology

Precision Standards – Precision Pressure Controllers / Calibrators



Model	DPC 3800
Version	precision pressure controller / calibrator absolute, gauge or differential pressure
Data sheet	10461



Model	DPC 3800 HD
Version	precision pressure controller / calibrator high pressure calibrations up to 2500 bar, gauge pressure
Data sheet	10462



Model	DPC 3800 HDG
Version	precision pressure controller / calibrator gauge and absolute pressure
Data sheet	10463



Model	DPC 4800
Version	automatic calibration system absolute, gauge or differential pressure
Data sheet	10465

Precision Standards – Precision Pressure Indicators



Model	DPG 3600
Version	digital precision pressure indicator absolute, gauge or differential pressure
Data sheet	10261



Model	DPG 3600 HD
Version	digital precision pressure indicator high pressure up to 5000 bar
Data sheet	10262

Calibration Technology

Test Benches – Comparison Pumps



Model	BHP 40
Version	hand test pump pneumatic version
Data sheet	10111



Model	BHP 700
Version	hand test pump hydraulic version
Data sheet	10112



Model	PH 60-P
Version	comparison pump 60 bar pneumatic version on a base plate
Data sheet	10151



Model	PS 60-P / PS 600-P
Version	comparison pump 60 bar, 600 bar hydraulic version on a base plate
Data sheet	10155



Model	PS 600-G / PS 1000-G
Version	comparison pump 600 bar, 1000 bar hydraulic version in a case
Data sheet	10156



Model	PS 2500-G
Version	comparison pump 2500 bar hydraulic version in a case
Data sheet	10157

Mechanical Temperature Measurement

Bimetal Thermometers



Model	TBiSch
Nominal size	63, 100, 160 mm
Version	bayonet ring case stainless steel rigid mount
Data sheet	8101



Model	TBiSchg / TBiSchgG
Nominal size	63, 80, 100, 125, 160 mm
Version	crimped-on ring case stainless steel rigid mount
Data sheet	8102



Model	TBiGelCh
Nominal size	63, 100, 160 mm
Version	bayonet ring case stainless steel pivot (every angle)
Data sheet	8111



Model	TBiGelChg / TBiGelChgG
Nominal size	63, 80, 100, 125, 160 mm
Version	crimped-on ring case stainless steel pivot (every angle)
Data sheet	8112



Model	TBiGelChg / TBiGelChgG
Nominal size	5"
Version	crimped-on ring case stainless steel pivot (every angle)
Data sheet	8114

Mechanical Temperature Measurement

Gas-actuated Thermometers



Model	TSCh / TSChG
Nominal size	63, 100, 160, 250 mm
Version	bayonet ring case stainless steel rigid mount
Data sheet	8201



Model	TSChg / TSChgG
Nominal size	63, 80, 100, 160 mm
Version	crimped-on ring case stainless steel rigid mount
Data sheet	8202



Model	TGeICh / TGeIChG
Nominal size	63, 100, 160 mm
Version	bayonet ring case stainless steel pivot (every angle)
Data sheet	8211



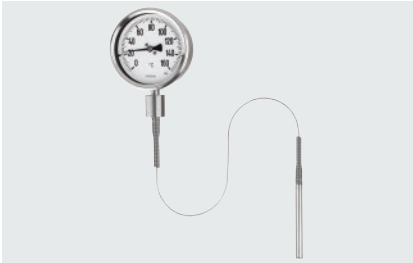
Model	TGeIChg / TGeIChgG
Nominal size	63, 80, 100, 160 mm
Version	crimped-on ring case stainless steel pivot (every angle)
Data sheet	8212



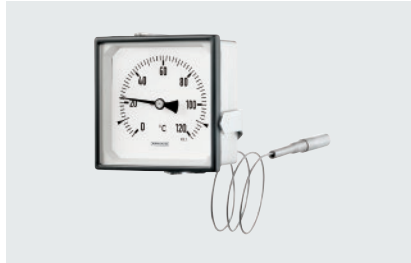
Model	TFCh / TFChG
Nominal size	63, 100, 160, 250 mm
Version	bayonet ring case stainless steel with capillary line
Data sheet	8221

Mechanical Temperature Measurement

Gas-actuated Thermometers – Special



Model	TFChg / TFChgG
Nominal size	63, 80, 100, 160 mm
Version	crimped-on ring case stainless steel with capillary line
Data sheet	8222



Model	TFQS
Nominal size	96x96, 144x144 mm
Version	square case front narrow rim black for switch panels
Data sheet	8225



Model	TAS
Nominal size	63, 80, 100 mm
Version	diesel exhaust thermometer rigid mount crimped-on ring case stainless steel
Data sheet	8291



Model	TAF
Nominal size	63, 80, 100 mm
Version	diesel exhaust thermometer with capillary line crimped-on ring case stainless steel
Data sheet	8292



Model	TRCh
Nominal size	100, 160 mm
Version	ambient temperature thermometer bayonet ring case stainless steel
Data sheet	8293

Mechanical Temperature Measurement

Additional Electrical Accessories



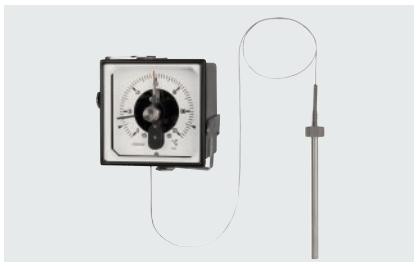
Model	TSCh / TSChOe
Nominal size	100, 160 mm
Version	bayonet ring case stainless steel rigid mount limit switch contact assembly
Data sheet	8201.90



Model	TGeICh
Nominal size	100, 160 mm
Version	bayonet ring case stainless steel pivot (every angle) limit switch contact assembly
Data sheet	8211.90



Model	TFCh / TFChOe
Nominal size	100, 160 mm
Version	bayonet ring case stainless steel with capillary line limit switch contact assembly
Data sheet	8221.90



Model	TFQS
Nominal size	96x96, 144x144 mm
Version	square case front narrow rim black limit switch contact assembly for switch panels
Data sheet	8225.90



Model	TRCh
Nominal size	100, 160 mm
Version	ambient temperature thermometer bayonet ring case stainless steel limit switch contact assembly
Data sheet	8293.90

Mechanical Temperature Measurement

Special Stems



Model	A3.2, A4.2, A4.3
Version	special stem for gas-actuated thermometers without bent tube
Data sheet	8299.1



Model	A2, A7, A7.1
Version	special stem for gas-actuated thermometers without bent tube connection screw fitting adjustable at the capillary line
Data sheet	8299.2



Model	A20.1, A20.11, A20.12, A20.3, A20.6
Version	special stem for gas-actuated thermometers process connections for food / bio / pharma industries
Data sheet	8299.3



Model	A1.1, A1.2
Version	special stem for gas-actuated thermometers contact stem
Data sheet	8299.4

Electrical Temperature Measurement

Digital Thermometer Models LILLY and LILLYplus



Model	TDSCCh
Nominal size	63, 100 mm
Version	with rigid temperature sensor
Data sheet	8301



Model	TDKCh
Nominal size	63, 100 mm
Version	with connection cable to the temperature sensor
Data sheet	8321



Model	TDPSCh 100
Nominal size	100 mm
Version	with rigid temperature sensor
Data sheet	8302



Model	TDPKCh 100
Nominal size	100 mm
Version	with connection cable to the temperature sensor
Data sheet	8322

Electrical Temperature Measurement Resistance Thermometers



Model	TPtMiA / TPtMiAT
Version	with mineral insulated stem without thermowell
Data sheet	8510



Model	TPtHoA / TPtHoAT
Version	for the installation into thermowells without neck tube
Data sheet	8520



Model	TPtHrA / TPtHrAT
Version	for the installation into thermowells with neck tube
Data sheet	8521



Model	TPtHoSrA / TPtHoSrAT
Version	with fabricated thermowell without neck tube
Data sheet	8530



Model	TPtSrA / TPtSrAT
Version	with fabricated thermowell acc. to DIN 43772
Data sheet	8531

Electrical Temperature Measurement

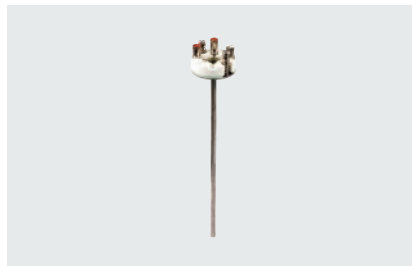
Resistance Thermometers



Model	TPtMfA / TPtMfAT
Version	in compact design
Data sheet	8551



Model	TPtMi
Version	sheathed resistance thermometer with connection cable or plug connector
Data sheet	8560



Model	TPtMiAo / TPtMiAoT
Version	measuring insert replacement part for the installation into connection heads
Data sheet	8561



Model	TPtRA / TPtRAT
Version	for ambient temperature measurement
Data sheet	8580



Model	TPtRG / TPtRGT
Version	for ambient temperature measurement
Data sheet	8581

Electrical Temperature Measurement Resistance Thermometers – Version



Model	TPtHrXdA / TPtHrXdAT
Version	flameproof enclosure for the installation into thermowells with neck tube
Data sheet	8525



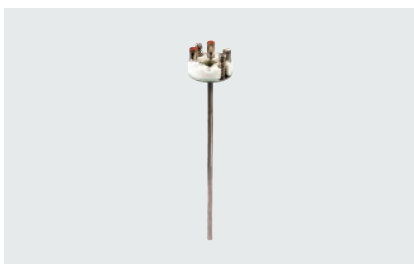
Model	TPtHrXiA / TPtHrXiAT
Version	intrinsically safe for the installation into thermowells with neck tube
Data sheet	8526



Model	TPtSrXdA / TPtSrXdAT
Version	flameproof enclosure with fabricated thermowell acc. to DIN 43772
Data sheet	8535



Model	TPtSrXiA / TPtSrXiAT
Version	intrinsically safe with fabricated thermowell acc. to DIN 43772
Data sheet	8536



Model	TPtMiXiAo / TPtMiXiAoT
Version	measuring insert intrinsically safe replacement part for the installation into connection heads
Data sheet	8566



Model	TPtPAXd
Version	with process display for the installation into thermowells
Data sheet	8590

Electrical Temperature Measurement

Thermocouples



Model	TTeMiA / TTeMiAT
Version	with mineral insulated stem without thermowell
Data sheet	8610



Model	TTeHoA / TTeHoAT
Version	for the installation into thermowells without neck tube
Data sheet	8620



Model	TTeHrA / TTeHrAT
Version	for the installation into thermowells with neck tube
Data sheet	8621



Model	TTeHoSrA / TTeHoSrAT
Version	with fabricated thermowell without neck tube
Data sheet	8630



Model	TTeSrA / TTeSrAT
Version	with fabricated thermowell acc. to DIN 43772
Data sheet	8631

Electrical Temperature Measurement

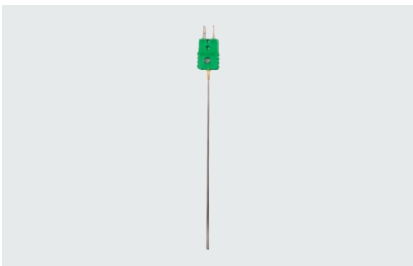
Thermocouples



Model	TTeMA / TTeMAT
Version	acc. to DIN EN 50446 straight construction type with metal protection tube
Data sheet	8650



Model	TTeKA / TTeKAT
Version	acc. to DIN EN 50446 straight construction type with ceramic protection tube
Data sheet	8651



Model	TTeMi
Version	sheathed thermocouple with connection cable or plug connector
Data sheet	8660



Model	TTeMiAo / TTeMiAoT
Version	measuring insert replacement part for the installa- tion into connection heads
Data sheet	8661



Model	TTeO / TTeOT
Version	for tube surface measurement
Data sheet	8670

Electrical Temperature Measurement

Thermocouples – Version



Model	TTeHrXdA / TTeHrXdAT
Version	flameproof enclosure for the installation into thermowells with neck tube
Data sheet	8625



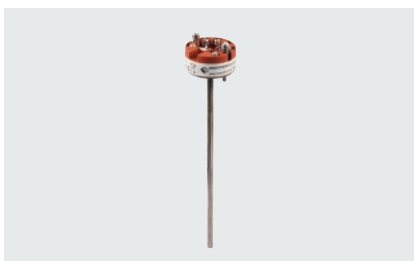
Model	TTeHrXiA / TTeHrXiAT
Version	intrinsically safe for the installation into thermowells with neck tube
Data sheet	8626



Model	TTeSrXdA / TTeSrXdAT
Version	flameproof enclosure with fabricated thermowell acc. to DIN 43772
Data sheet	8635



Model	TTeSrXiA / TTeSrXiAT
Version	intrinsically safe with fabricated thermowell acc. to DIN 43772
Data sheet	8636



Model	TTeMiXiAo / TTeMiXiAoT
Version	measuring insert intrinsically safe replacement part for the installation into connection heads
Data sheet	8666



Model	TTePAXd
Version	with process display for the installation into thermowells
Data sheet	8690

Thermowells

Standard



Model	SF4
Version	DIN 43772 form 4 solid drilled, weld-in for stems with male thread
Data sheet	8.8110



Model	SF4.1
Version	form 4.1 solid drilled, weld-in for stems with union nut
Data sheet	8.8111



Model	SF4F
Version	DIN 43772 form 4F with flange for stems with male thread
Data sheet	8.8112



Model	SF4.1F
Version	form 4.1F with flange for stems with union nut
Data sheet	8.8113



Model	SF5
Version	DIN 43772 form 5 fabricated, threaded for stems with male thread
Data sheet	8.8120



Model	SF6, SF7
Version	DIN 43772 form 6 and 7 solid drilled, threaded for stems with male thread
Data sheet	8.8121



Model	SF8
Version	DIN 43772 form 8 fabricated, threaded for stems with union nut
Data sheet	8.8130



Model	SF9
Version	DIN 43772 form 9 solid drilled, threaded for stems with union nut
Data sheet	8.8131

Thermowells

Special



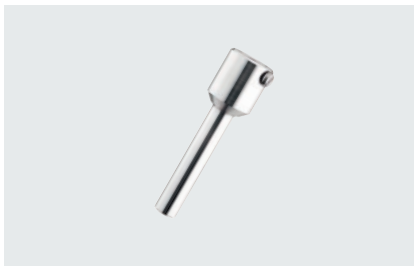
Model	SK1
Version	with clamping ring connection fabricated, threaded for plain stems
Data sheet	8.8140



Model	SK2
Version	with clamping ring connection solid drilled, threaded for plain stems
Data sheet	8.8141



Model	SK3.B
Version	for clamping the stem fabricated, threaded for plain bimetal stems
Data sheet	8.8150

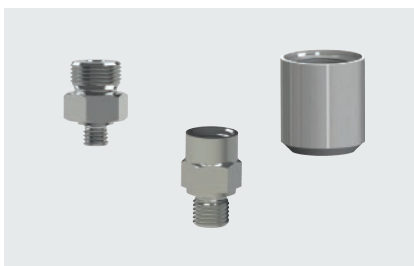


Model	SK4.B
Version	for clamping the stem solid drilled, weld-in for plain bimetal stems
Data sheet	8.8151

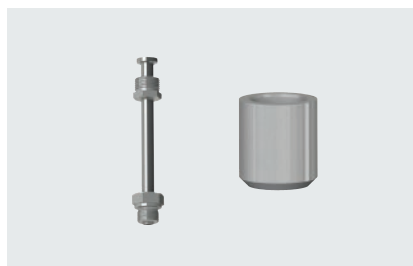


Model	SL1/SL11/SL12/SL3/SL6
Version	for food / bio / pharma industries for stems with union nut
Data sheet	8.8160

Accessory



Model	AV1 / AV2, S1
Version	connection screw fitting welding piece for thermometer stems and thermowells
Data sheet	8.8201



Model	HR, S2
Version	acc. to DIN 43772 neck tube welding piece for thermowells
Data sheet	8.8301

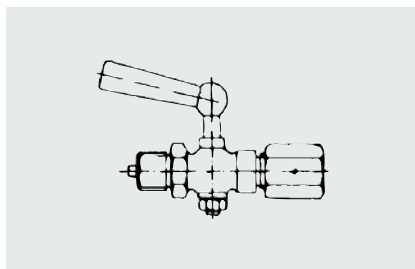
Accessory



Model	Adapt FS
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Version	flame arrester flame penetration protection with ATEX approval
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Data sheet	11001
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Model	Pressure Gauge Cocks
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Version	pressure gauge cock DIN 16262 pressure gauge cock with test connection DIN 16263
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Data sheet	11100
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Model	Ve
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Version	stop valve versions acc. to DIN 16270, DIN 16271 with male test connection and with test flange
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Data sheet	11200
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Model	Overrange Protection
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Version	pressure gauge overrange protector, adjustable
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Data sheet	11500
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Certificates and Approvals

Our company is certified according to the highest quality standards and our product portfolio meets the highest quality demands. We do not only manufacture according to product-specific instrument standards, we also offer versions with special approvals for application areas with specific requirements. The ARMANO Messtechnik GmbH is certified according to DIN EN ISO 9001.



Location Beierfeld

Certificate DIN EN ISO 9001
 ARMANO Messtechnik GmbH
 Location Beierfeld



Location Wesel

Certificate DIN EN ISO 9001
 ARMANO Messtechnik GmbH
 Location Wesel



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