KOBOLD Messring GmbH

Manufacturer of
Innovative Instrumentation

Product Summary

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- Flow
- Pressure
- Level
- Temperature
- pH-Value/Redox
- Conductivity
- Humidity
- Turbidity
- Density
- Rotation
- Time












M-Zert
Zertifiziertes QM-System
DIN EN ISO 9001
Zertifikat-Nr. 01017

HART COMMUNICATION FOUNDATION
PROFIBUS
Fieldbus FOUNDATION
EHEDG COMPANY MEMBER

ATEX Ex CE 0158
PED GL CE 0098

KOBOLD

measuring
•
monitoring
•
analysing

Flowmeters/-switches

Variable Area-Plastic-Low Volume
Model: KSV

Water: 0,25 – 1,5 L/h ... 10 – 80 L/h
Air: 20 – 80 L_N/h ... 0,5 – 2,5 m^3_N/h
t_{max} 120 °C; p_{max} 6 bar
Connection: ⅛ NPT female thread
Accuracy: ± 6 % of full scale

Variable Area-Plastic-Low Volume
Model: KFR

Water: 5 – 50 mL/min ... 5 – 75 L/min
Air: 0,05 – 0,5 LN/min ... 400 – 4000 L_N/min
t_{max} 65 °C; p_{max} 6,5 bar
Connection: ⅛ NPT, 1 NPT female thread
Accuracy: ±2 – 5 % of full scale

Variable Area-Plastic
Model: KSK

Water: 1,5 – 11 L/h ... 100 – 1000 L/h
Air: 0,15 – 0,45 m^3_N/h ... 20 – 105 m^3_N/h
t_{max} 140 °C; p_{max} PN 10
Connection: G ¼...1 female, glue-in connection
Accuracy: Cl. 4 according to VDI

Variable Area-Plastic
Model: KSM

Water: 15 – 150 L/h ... 8000 – 60000 L/h
Air: 0,8 – 5 m^3_N/h ... 100 – 860 m^3_N/h
t_{max} 140 °C; p_{max} 16 bar
Connection: G ½...3½ female/male thread
Accuracy: ± 4 % of full scale

Variable Area-Low Volume-Switch
Model: KSR,SVN

Water: 2 – 250 mL/min
Air: 3 – 360 L_N/h
t_{max} 70 °C; p_{max} 16 bar
Connection: G ¼, ¼ NPT female thread

Variable Area-Low Volume
Model: KDF, KDG

Water: 0,002 – 0,02 L/h ... 16 – 160 L/h
Air: 0,03 – 0,3 L_N/h ... 500 – 5000 L_N/h
t_{max} 100 °C; p_{max} 10 bar
Connection: G ¼, ¼ NPT female thread
Accuracy: Cl. 2,5 according to VDI

Variable Area-Glass Cone
Model: UMR,UXR

Water: 5 – 50 L/h ... 15 – 150 L/h
Air: 0,2 – 2 m^3_N/h ... 0,3 – 3 m^3_N/h
t_{max} 100 °C; p_{max} 6 bar
Connection: G ¼ female thread
Accuracy: ± 2,5 – 4 % of full scale

Variable Area-Glass Cone-Thread Connection
Model: URM

Water: 2 – 20 L/h ... 3 – 30 m^3/h
Air: 30 – 300 L_N/h ... 50 – 500 m^3_N/h
t_{max} 100 °C; p_{max} 10 bar
Connection: G ¼...3, DIN 11851, hose connection
Accuracy: ± 2,5 – 4 % of full scale

Variable Area-Glass Cone
Model: URR

Water: 6 – 60 L/h ... 300 – 3000 L/h
Air: 200 – 2000 L_N/h ... 5000 – 50000 L_N/h
t_{max} 80 °C; p_{max} 6 bar
Connection: G 1...1½ male thread, PVC glue-in connection DN 15...25
Accuracy: ± 2,5 – 4 % of full scale

Variable Area-Glass Cone
Model: URB

Water: 10 – 100 L/h ... 100 – 1000 L/h
Air: 0,32 – 3,2 m^3_N/h ... 3,2 – 32 m^3_N/h
t_{max} 65 °C; p_{max} 6 bar
Connection: G ½...1¼ male thread
Accuracy: ± 2,5 – 4 % of full scale

Variable Area-Glass Cone
Model: UVR,UTR

Water: 60 – 600 L/h ... 200 – 2000 L/h
Air: 2 – 20 m^3_N/h ... 5 – 50 m^3_N/h
t_{max} 100 °C; p_{max} 6 bar
Connection: G ⅜, G ½ female thread
Accuracy: ± 2,5 – 4 % of full scale

Variable Area-Glass Cone-Loose Flange
Model: URL

Water: 4 – 40 L/h ... 0,25 – 2,5 m^3/h
Air: 0,2 – 2 m^3_N/h ... 10 – 100 m^3_N/h
t_{max} 100 °C; p_{max} 6 bar
Connection: Flange DN 15...40
Accuracy: ±2,5 – 4 % of full scale

Variable Area-Glass Cone
Model: V31

Water: 10 – 100 L/h ... 1000 – 10000 L/h
t_{max} 80 °C; p_{max} PN 40
Connection: G ¼...2 female thread, flange DN 15...50, ANSI ½"...2"
Accuracy: Cl. 1,6 according to VDI

Variable Area-Glass Cone-Fixed Flange
Model: URK

Water: 10 – 100 L/h ... 4 – 40 m^3/h
Air: 0,2 – 2 m^3_N/h ... 40 – 400 m^3_N/h
t_{max} 100 °C; p_{max} 12 bar
Connection: Flange DN 15...80, ANSI ½"...3"
Accuracy: ±2,5 – 4 % of full scale

Variable Area-Glass Cone-Table Mounting
Model: URA

Water: 10 – 100 L/h
Air: 0,2 – 2 m^3_N/h
t_{max} 60 °C; p_{max} 6 bar
Connection: G ¼ female thread
Accuracy: ± 2,5 – 4 % of full scale

Variable Area-Glass Cone for Compressors
Model: UTS

Air: 0,3 – 3 m^3_N/h
t_{max} 55 °C; p_{max} 3 bar
Connection: M18x1,5, axial special connection
Accuracy: ± 2,5 – 4 % of full scale

Variable Area
Model: DSV-1

Water: 0,25 – 1,25 L/min ... 10 – 130 L/min
Air: on request
t_{max} 100 °C; p_{max} 10 bar
Connection: G ¼...1¼, ¼...1¼ NPT female
Accuracy: ± 4 % of full scale

Variable Area
Model: DSV-3

Water: 0,25 – 1,25 L/min ... 10 – 130 L/min
Air: on request
t_{max} 100 °C; p_{max} 10 bar
Connection: G ¼...1¼, ¼...1¼ NPT female
Accuracy: ± 4 % of full scale

Variable Area Switch-Low Volume
Model: SWK-13

Water: 0,05 – 0,1 L/min ... 13 – 24 L/min
Air: on request
t_{max} 60 °C; p_{max} 6 bar
Connection: G ½ female thread
Accuracy: ± 4 % of full scale

Variable Area Switch-Low Volume
Model: SWK-1

Water: 0,05 – 0,1 L/min ... 13 – 24 L/min
Air: on request
t_{max} 100 °C; p_{max} 250 bar
Connection: G ½ female thread
Accuracy: ± 4 % of full scale

Variable Area-Low Volume
Model: SWK-2

Water: 0,05 – 0,1 L/min ... 13 – 24 L/min
Air: on request
t_{max} 100 °C; p_{max} 250 bar
Connection: G ½ female thread
Accuracy: ± 4 % of full scale

Variable Area-All Metal-Low Volume
Model: KDS,BGK

Water: 0,1 – 1 L/h ... 20 – 200 L/h
Air: 3 – 30 LN/h ... 600 – 6000 LN/h
t_{max} 130 °C; p_{max} PN 64
Connection: ¼ NPT, flange DN 10...25, ANSI ½"...1"
Accuracy: ± 3 % of full scale

Variable Area-All Metall-Low Volume
Model: KMI

Water: 0,1 – 1 L/h ... 25 – 250 L/h
Air: 4 – 37,5 L_N/h ... 800 – 7000 L_N/h
t_{max} 120 °C; p_{max} PN 160
Connection: G ¼, G ⅜, ¼ NPT, ⅜ NPT female
Accuracy: Cl. 2,5 according to VDI

Variable Area-All Metal
Model: BGN

Water: 0,5 – 5 L/h ... 13000 – 130000 L/h
Air: 0,015 – 0,15 m³N/h ...
240 – 2400 m³N/h
t_{max} 350 °C; p_{max} PN 40
Connection: Flange DN 15...150, ANSI ¾...6"
Accuracy: ± 1,6 – 2,2 % of full scale

Variable Area-All Metal
Model: BGN-High Pressure

Water: 0,5 – 5 L/h ... 13000 – 130000 L/h
Air: 0,015 – 0,15 m³N/h ...
240 – 2400 m³N/h
t_{max} 350 °C; p_{max} 600 bar
Connection: Flange DN 15...150, ANSI ¾...6"
Accuracy: ± 1,6 – 2,2 % of full scale

Variable Area-All Metal
Model: DSS

Water: 0,05 – 1 L/min ... 10 – 110 L/min
t_{max} 100 °C; p_{max} 350 bar
Connection: G ¼...1¼, ¼...1¼ NPT female thread
Accuracy: ± 5 % of full scale

Variable Area-All Metal
Model: SMV

Water: 0,1 – 1 L/min ... 10 – 110 L/min
t_{max} 100 °C; p_{max} 350 bar
Connection: G ¼...1¼, ¼...1¼ NPT female thread
Accuracy: ± 5 % of full scale

Displacer-All Metal
Model: SMO,SMW

Water: 0,2 – 3 L/min ... 10 – 120 L/min
t_{max} 100 °C; p_{max} 350 bar
Connection: G ¼...1, ¼...¾ NPT female thread
Accuracy: ± 5 % of full scale

Variable Area All Metal - Mounting Position Independent
Model: BGF

Water: 10 – 100 L/h ... 4000 – 40000 L/h
Air: 0,3 – 3 m³N/h ... 110 – 1100 m³N/h
t_{max} 350 °C; p_{max} PN 40
Connection: Flange DN 15...80, ANSI ¾"...3"
Accuracy: ± 1,6 according to VDI

Displacer Switch - Mounting Position Independent
Model: SMN

Water: 1 – 100 L/min
t_{max} 100 °C; p_{max} 350 bar
Connection: 1 NPT, G 1 female thread
Accuracy: ± 5 % of full scale

Viscosity Compensated-Plastic
Model: VKP

Water: 2 – 20 L/min ... 20 – 100 L/min
Oil: 1 – 18 L/min ... 10 – 75 L/min
t_{max} 120 °C; p_{max} 16 bar
Connection: G ½, G ¾ female/male thread, G 1, 1 NPT male thread, solded or glue-in connection
Accuracy: ± 5 % of full scale

Viscosity Compensated
Model: VKG

Viscosity range: 1 – 540 mm²/s
Oil: 0,1 – 0,45 L/min ... 5 – 80 L/min
t_{max} 100 °C; p_{max} 12 bar
Connection: G ¼...1, ¼...1 NPT
Accuracy: ± 4 % of full scale

Flowmeters/-switches

Viscosity Comp. All Metal
Model: VKM

Viscosity range: 1 – 540 mm²/s
Oil: 0,01 – 0,07 L/min ... 8 – 80 L/min
t_{max} 100 °C; p_{max} 350 bar
Connection: G ¼...1, ¼...1 NPT
Accuracy: ± 4 % of full scale

Viscosity Comp. All Metal
Model: VKM with ADI

Viscosity range: 1 – 540 mm²/s
Oil: 0,01 – 0,07 L/min ... 8 – 80 L/min
t_{max} 100 °C; p_{max} 350 bar
Connection: G ¼...1, ¼...1 NPT
Accuracy: ± 4 % of full scale

Viscosity Comp. All Metal
Model: VKA

Viscosity range: 30 – 540 mm²/s
Oil: 0,1 – 0,4 L/min ... 30 – 100 L/min
t_{max} 100 °C; p_{max} 250 bar
Connection: G ¼...1, ½ NPT, ¾ NPT female thread
Accuracy: ± 4 % of full scale

Manifold Valves For Multiple Installation
Model: BVB

t_{max} 100 °C; p_{max} PN 64
Connection: 1 NPT, G ½ female thread

Paddle Switch
Model: PSR

Water: 2,3 – 4,7 L/min ... 47,6 – 67,2 L/min
t_{max} 110 °C; p_{max} 100 bar
Connection: G ¼...1½, ¼...1½ NPT female thread

Paddle Switch
Model: PSE

Water: 68 – 90 L/min ... 383 – 533 L/min
t_{max} 110 °C; p_{max} 100 bar
Connection: G ½, ½ NPT male thread

Paddle Switch-Polysulfone
Model: PPS

Water: 18 – 36 L/min ... 72 – 108 L/min
t_{max} 105 °C; p_{max} 10 bar
Connection: G 1, 1 NPT male thread
Accuracy: ± 20 % of reading

Paddle Switch-Air
Model: LPS

Air: 1 – 8 m/s
t_{max} 85 °C; p_{max} atmospheric
Connection: Flange

Paddle Bellow Switch
Model: FPS

Water: 0,17 – 0,85 m³/h ...
72,6 – 165,7 m³/h
t_{max} 120 °C; p_{max} 30 bar
Connection: G ½, G ¾ female thread, G 1, 1 NPT male thread

Paddle Bellow Switch
Model: DWN

Water: 1 – 5 L/min ... 900 – 3600 m³/h
t_{max} 100 °C; p_{max} PN 16
Connection: G ⅜...2, ⅜...2 NPT IG, Flange DN 15...200, ANSI ½"...8"
Accuracy: ± 3 – 5 % of full scale

Paddle Bellow Meter/Switch
Model: DWU

Water: 1 – 5 L/min ... 900 – 3600 m³/h
t_{max} 100 °C; p_{max} PN 16
Connection: G ⅜...2, ⅜...2 NPT female thread, flange DN 10...50, ANSI ⅜...2", weld-on flange DN 40...500
Accuracy: ± 3 – 5 % of full scale

Paddle Torsion-Meter/Switch
Model: DPT-...C3

Water: 5 – 30 L/min ... 850 – 1900 L/min
t_{max} 80 °C; p_{max} PN 40
Connection: G ⅜...3, ⅜...3 NPT female
Accuracy: ± 3 % of full scale

Paddle Torsion-Meter/Switch
Model: DPT-...K

Water: 5 – 30 L/min ... 850 – 1900 L/min
t_{max} 80 °C; p_{max} PN 40
Connection: G ⅜...3, ⅜...3 NPT female
Accuracy: ± 3 % of full scale

Buffle Flap Meter/Switch
Model: DWD

Water: 1 – 10 L/min ... 360 – 3600 m³/h
t_{max} 120 °C; p_{max} 25 bar
Connection: G ⅜...2, ⅜...2 NPT female thread, flange DN 10...50, ANSI ⅜...2", weld-on flange DN 40...500
Accuracy: ± 1,5 % of full scale

Flap Meter/Switch
Model: TSK

Water: 0,5 – 3,5 m³/h ... 200 – 1500 m³/h
t_{max} 300 °C; p_{max} PN 40
Connection: wafer flange DN 25...500, ANSI 1"...20"
Accuracy: ± 2 % of reading

Flow, Humidity and Temperature Hand-Held Measuring Unit
Model: HND-F115

Measuring range: 0,05...5 m/s Water; 0,55...20 m/s Air
Humidity: 0...100% rH
Temperature: -40...+120 °C, -80...250 °C
Accuracy: from ±0,1%

Turbine Wheel-Pulse Output
Model: DRS-...F5

Water: 2 – 40 L/min
t_{max} 80 °C; p_{max} 200 bar
Connection: G ½, G ¾, ¾ NPT
Accuracy: ± 1,5 % of full scale

Turbine Wheel-Analogue Output
Model: DRS-...L3

Water: 2 – 40 L/min
t_{max} 80 °C; p_{max} 200 bar
Connection: G ½, G ¾, ¾ NPT
Accuracy: ± 1,5 % of full scale

Turbine Wheel-Analogue Output
Model: DRS-...L4 with AUF

Water: 2 – 40 L/min
t_{max} 80 °C; p_{max} 200 bar
Connection: G ½, G ¾, ¾ NPT
Accuracy: ± 1,5 % of full scale

Turbine Wheel-Pointer Indicator
Model: DRS-...Z3

Water: 2 – 40 L/min
t_{max} 80 °C; p_{max} 200 bar
Connection: G ½, G ¾, ¾ NPT
Accuracy: ± 1,5 % of full scale

Turbine Wheel-Compact Eletronic
Model: DRS-...C3

Water: 2 – 40 L/min
t_{max} 80 °C; p_{max} 200 bar
Connection: G ½, G ¾, ¾ NPT
Accuracy: ± 1,5 % of full scale

Turbine Wheel-Counter
Model: DRS with ZED

Water: 2 – 40 L/min
t_{max} 80 °C; p_{max} 200 bar
Connection: G ½, G ¾, ¾ NPT
Accuracy: ± 1,5 % of full scale

Turbine Wheel-Pulse Output
Model: TUR-1

Water: 0,2 – 5 m³/h ... 2,5 – 100 m³/h
t_{max} 70 °C; p_{max} 10 bar
Connection: Flange DN 25...100
Accuracy: ± 1 % of full scale

Turbine Wheel-Analogue Output
Model: TUR-2...M

Water: 0,2 – 5 m³/h ... 2,5 – 100 m³/h
t_{max} 70 °C; p_{max} 10 bar
Connection: Flange DN 25...100
Accuracy: ± 1 % of full scale

Turbine Wheel-Pointer Indicator
Model: TUR-2...Z3

Water: 0,2 – 5 m³/h ... 2,5 – 100 m³/h
t_{max} 70 °C; p_{max} 10 bar
Connection: Flange DN 25...100
Accuracy: ± 1 % of full scale

Turbine Wheel-Compact Electr.
Model: TUR-2...C3

Water: 0,2 – 5 m³/h ... 2,5 – 100 m³/h
t_{max} 70 °C; p_{max} 10 bar
Connection: Flange DN 25...100
Accuracy: ± 1 % of full scale

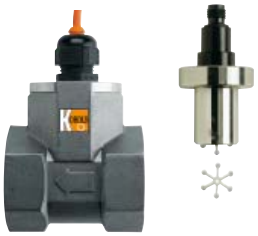
Turbine Wheel-Digital Display
Model: TUR-2...K

Water: 0,2 – 5 m³/h ... 2,5 – 100 m³/h
t_{max} 70 °C; p_{max} 10 bar
Connection: Flange DN 25...100
Accuracy: ± 1 % of full scale

Turbine Wheel-Dosing Electronic
Model: TUR-2...A

Water: 0,2 – 5 m³/h ... 2,5 – 100 m³/h
t_{max} 70 °C; p_{max} 10 bar
Connection: Flange DN 25...100
Accuracy: ± 1 % of full scale

Turbine Wheel-Pulse-Analogue Output
Model: DPE



Water: 5 – 30 L/min ... 50 – 750 L/min
t_{max} 80 °C; p_{max} PN 40
Connection: G ½...3, ½...3 NPT female thread, weld-on sleeve DN 25...80
Accuracy: ± 2,5 % of full scale

Turbine Wheel-Analogue Output
Model: DPE with AUF

Water: 5 – 30 L/min ... 50 – 750 L/min
t_{max} 80 °C; p_{max} PN 40
Connection: G ½...3, ½...3 NPT female thread, weld-on sleeve DN 25...80
Accuracy: ± 2,5 % of full scale

Turbine Wheel-Pointer Indicator
Model: DPE-...Z3

Water: 5 – 30 L/min ... 50 – 750 L/min
t_{max} 80 °C; p_{max} PN 40
Connection: G ½...3, ½...3 NPT female thread, weld-on sleeve DN 25...80
Accuracy: ± 2,5 % of full scale

Turbine Wheel-Compact Electr.
Model: DPE-...C3

Water: 5 – 30 L/min ... 50 – 750 L/min
t_{max} 80 °C; p_{max} PN 40
Connection: G ½...3, ½...3 NPT female thread, weld-on sleeve DN 25...80
Accuracy: ± 2,5 % of full scale

Flowmeters/-switches

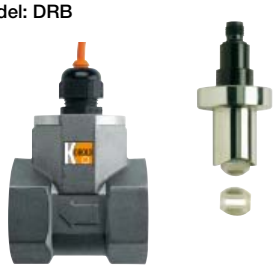
Turbine Wheel-Digital Display
Model: DPE with ADI

Water: 5 – 30 L/min ... 50 – 750 L/min
t_{max} 80 °C; p_{max} PN 40
Connection: G ½...3, ½...3 NPT female thread, weld-on sleeve DN 25...80
Accuracy: ± 2,5 % of full scale

Turbine Wheel-Dosing Electronic
Model: DPE with ZED

Water: 5 – 30 L/min ... 50 – 750 L/min
t_{max} 80 °C; p_{max} PN 40
Connection: G ½...3, ½...3 NPT female thread, weld-on sleeve DN 25...80
Accuracy: ± 2,5 % of full scale

Turbine Wheel-Pulse-Analogue Output
Model: DRB



Water: 5 – 30 L/min ... 50 – 750 L/min
t_{max} 80 °C; p_{max} 16 bar
Connection: G ½...3, ½...3 NPT female thread, weld-on sleeve DN 25...80
Accuracy: ± 3 % of full scale

Turbine Wheel-Analogue Output
Model: DRB with AUF

Water: 5 – 30 L/min ... 50 – 750 L/min
t_{max} 80 °C; p_{max} 16 bar
Connection: G ½...3, ½...3 NPT female thread, weld-on sleeve DN 25...80
Accuracy: ± 3 % of full scale

Turbine Wheel-Pointer Indicator
Model: DRB-...Z3

Water: 5 – 30 L/min ... 50 – 750 L/min
t_{max} 80 °C; p_{max} 16 bar
Connection: G ½...3, ½...3 NPT female thread, weld-on sleeve DN 25...80
Accuracy: ± 3 % of full scale

Turbine Wheel-Compact Electr.
Model: DRB-...C3

Water: 5 – 30 L/min ... 50 – 750 L/min
t_{max} 80 °C; p_{max} 16 bar
Connection: G ½...3, ½...3 NPT female thread, weld-on sleeve DN 25...80
Accuracy: ± 3 % of full scale

Turbine Wheel-Digital Display
Model: DRB with ADI

Water: 5 – 30 L/min ... 50 – 750 L/min
t_{max} 80 °C; p_{max} 16 bar
Connection: G ½...3, ½...3 NPT female thread, weld-on sleeve DN 25...80
Accuracy: ± 3 % of full scale

Turbine Wheel-Dosing Electronic
Model: DRB with ZED

Water: 5 – 30 L/min ... 50 – 750 L/min
t_{max} 80 °C; p_{max} 16 bar
Connection: G ½...3, ½...3 NPT female thread, weld-on sleeve DN 25...80
Accuracy: ± 3 % of full scale

Turbine Wheel-Pulse Output
Model: TUV

Water: 0,3 – 1,5 L/min ... 35 – 400 L/min
t_{max} 350 °C; p_{max} 640 bar
Connection: G ¼...1½ female thread
Accuracy: ± 1 % of reading

Turbine Wheel-Pulse Output
Model: SFL

Water: 0,5 – 20 L/min
t_{max} 90 °C; p_{max} 250 bar
Connection: G ⅜
Accuracy: ± 1 % of full scale

Turbine Wheel-Counter Electr.
Model: DOT

Water: 0,11 – 1,1 m³/h ... 700 – 7000 m³/h
t_{max} 120 °C; p_{max} 250 bar
Connection: G ½...2, ½...2 NPT, flange DN 5...500
Accuracy: ±0,5% (linearity)

Turbine Wheel Flowmeter/ Counter, Battery powered
Model: EDM

Water: 4 – 40 L/min ... 80 – 800 L/min
t_{max} 60 °C; p_{max} 100 bar
Connection: Rc ½...2 female thread
Accuracy: ± 1,5 % of full scale

Turbine Wheel-Low Volume
Model: PEL-L

Water: 0,006 – 0,1 L/min ... 10 – 500 L/min
t_{max} 135 °C; p_{max} 345 bar
Connection: R ½...1¼, within-flange DN 40/50, glue-in conn. DN 15...50
Accuracy: ± 1,25 % of full scale

Turbine Wheel-Low Volume
Model: PEL-M

Water: 0,006 – 0,1 L/min ... 10 – 500 L/min
t_{max} 135 °C; p_{max} 345 bar
Connection: R ½...1¼, within-flange DN 40/50, glue-in conn. DN 15...50
Accuracy: ± 1,25 % of full scale

Rotating Vane-Low Volume
Model: DPM-...F5

Water: 0,015 – 0,7 L/min ... 0,05 – 5 L/min
t_{max} 80 °C; p_{max} 16 bar
Connection: G ⅛, G ¼, ⅛ NPT, ¼ NPT female thread
Accuracy: ± 1 – 2,5 % of full scale

Rotating Vane-Low Volume
Model: DPM-...L3

Water: 0,015 – 0,7 L/min ... 0,05 – 5 L/min
t_{max} 80 °C; p_{max} 16 bar
Connection: G ⅛, G ¼, ⅛ NPT, ¼ NPT female thread
Accuracy: ± 1 – 2,5 % of full scale

Rotating Vane-Low Volume
Model: DPM-...L4 with AUF

Water: 0,015 – 0,7 L/min ... 0,05 – 5 L/min
t_{max} 80 °C; p_{max} 16 bar
Connection: G ⅛, G ¼, ⅛ NPT, ¼ NPT
Accuracy: ± 1 – 2,5 % of full scale

Rotating Vane-Low Volume
Model: DPM-...Z3

Water: 0,015 – 0,7 L/min ... 0,05 – 5 L/min
t_{max} 80 °C; p_{max} 16 bar
Connection: G ⅛, G ¼, ⅛ NPT, ¼ NPT
Accuracy: ± 1 – 2,5 % of full scale

Rotating Vane-Low Volume
Model: DPM-...C3

Water: 0,015 – 0,7 L/min ... 0,05 – 5 L/min
t_{max} 80 °C; p_{max} 16 bar
Connection: G ⅛, G ¼, ⅛ NPT, ¼ NPT
Accuracy: ± 1 – 2,5 % of full scale

Rotating Vane-Low Volume
Model: DPM with ZED

Water: 0,015 – 0,7 L/min ... 0,05 – 5 L/min
t_{max} 80 °C; p_{max} 16 bar
Connection: G ⅛, G ¼, ⅛ NPT, ¼ NPT
Accuracy: ± 1 – 2,5 % of full scale

Rotating Vane-Low Volume
Model: DPL-...F5

Water: 0,025 – 0,5 L/min ... 1 – 25 L/min
t_{max} 70 °C; p_{max} 10 bar
Connection: G ½ male thread
Accuracy: ± 2,5 % of full scale

Rotating Vane-Low Volume
Model: DPL-...L3

Water: 0,025 – 0,5 L/min ... 1 – 25 L/min
t_{max} 70 °C; p_{max} 10 bar
Connection: G ½ male thread
Accuracy: ± 2,5 % of full scale

Rotating Vane-Low Volume
Model: DPL-...L4 with AUF

Water: 0,025 – 0,5 L/min ... 1 – 25 L/min
t_{max} 70 °C; p_{max} 10 bar
Connection: G ½ male thread
Accuracy: ± 2,5 % of full scale

Rotating Vane-Low Volume
Model: DPL-...Z3

Water: 0,025 – 0,5 L/min ... 1 – 25 L/min
t_{max} 70 °C; p_{max} 10 bar
Connection: G ½ male thread
Accuracy: ± 2,5 % of full scale

Rotating Vane-Low Volume
Model: DPL-...C3

Water: 0,025 – 0,5 L/min ... 1 – 25 L/min
t_{max} 70 °C; p_{max} 10 bar
Connection: G ½ male thread
Accuracy: ± 2,5 % of full scale

Rotating Vane-Low Volume
Model: DPL with ZED

Water: 0,025 – 0,5 L/min ... 1 – 25 L/min
t_{max} 70 °C; p_{max} 10 bar
Connection: G ½ male thread
Accuracy: ± 2,5 % of full scale

Rotating Vane-Low Volume
Model: KFF-1, KFG-1

Water: 15 – 100 mL/min ... 1 – 10 L/min
Air: 10 – 50 mL$_N$/min ... 100 – 500 L$_N$/min
t_{max} 50 °C; p_{max} 35 bar
Connection: Hose connection ⅛"...½"
Accuracy: ± 3 % of full scale

Rotating Vane-Low Volume
Model: KFF-3, KFG-3

Water: 15 – 100 mL/min ... 0,2-5 L/min
Air: 10 – 50 mL$_N$/min ... 0,4-2 L$_N$/min
t_{max} 50 °C; p_{max} 35 bar
Connection: Hose connection ⅛"...½"
Accuracy: ± 3 % of full scale

Rotating Vane-Low Volume
Model: DTK

Water: 0,05 – 0,6 L/min ... 1 – 12 L/min
t_{max} 140 °C; p_{max} 30 bar
Connection: G ¼, ¼ NPT female thread
Accuracy: ± 2 % of full scale

Rotating Vane-Low Volume-Pulse Output
Model: DF-H

Water: 0,08 – 0,5 L/min ... 40 – 160 L/min
t_{max} 80 °C; p_{max} 100 bar
Connection: G ¼...1½, ¼...1½ NPT, flange DN 15...50, ANSI ½"...2"
Accuracy: ± 2,5 % of full scale

Rotating Vane-Low Volume-Analogue Output
Model: DF-MA

Water: 0,08 – 0,5 L/min ... 40 – 160 L/min
t_{max} 80 °C; p_{max} 100 bar
Connection: G ¼...1½, ¼...1½ NPT, flange DN 15...50, ANSI ½"...2"
Accuracy: ± 2,5 % of full scale

Rotating Vane Switch-Low Volume
Model: DF-WM

Water: 0,08 – 0,5 L/min ... 40 – 160 L/min
t_{max} 80 °C; p_{max} 100 bar
Connection: G ¼...1½, ¼...1½ NPT, flange DN 15...50, ANSI ½"...2"
Accuracy: ± 2,5 % of full scale

Flowmeters/-switches

Rotating Vane-Low Volume-Digital Display
Model: DF-K

Water: 0,08 – 0,5 L/min ... 40 – 160 L/min
t_{max} 80 °C; p_{max} 100 bar
Connection: G ¼...1½, ¼...1½ NPT, flange DN 15...50, ANSI ½"...2"
Accuracy: ± 2,5 % of full scale

Rotating Vane-Low Volume-Counter
Model: DF-Z

Water: 0,08 – 0,5 L/min ... 40 – 160 L/min
t_{max} 80 °C; p_{max} 100 bar
Connection: G ¼...1½, ¼...1½ NPT, flange DN 15...50, ANSI ½"...2"
Accuracy: ± 2,5 % of full scale

Rotating Vane-Low Volume-Dosing Electronic
Model: DF-D

Water: 0,08 – 0,5 L/min ... 40 – 160 L/min
t_{max} 80 °C; p_{max} 100 bar
Connection: G ¼...1½, ¼...1½ NPT, flange DN 15...50, ANSI ½"...2"
Accuracy: ± 2,5 % of full scale

Rotating Vane-Pulse Output
Model: DFT-11

Water: 0,2 – 2 L/min ... 3 – 60 L/min
t_{max} 80 °C; p_{max} 16 bar
Connection: G ¼...¾, ¼...¾ NPT
Accuracy: ± 2,5 % of full scale

Rotating Vane-Pulse Output
Model: DFT-13

Water: 0,2 – 2 L/min ... 3 – 60 L/min
t_{max} 80 °C; p_{max} 16 bar
Connection: G ¼...¾, ¼...¾ NPT
Accuracy: ± 2,5 % of full scale

Rotating Vane-Digital Display
Model: DFT-13...K

Water: 0,2 – 2 L/min ... 3 – 60 L/min
t_{max} 80 °C; p_{max} 16 bar
Connection: G ¼...¾, ¼...¾ NPT
Accuracy: ± 2,5 % of full scale

Rotating Vane-Pulse-Analogue Output
Model: DRH-...F, DRH-...L

Water: 0,2 – 0,8 L/min ... 2,5 – 50 L/min
t_{max} 80 °C; p_{max} 100 bar
Connection: G ⅜, G 1, ⅜ NPT, 1 NPT
Accuracy: ± 2,5 % of full scale

Rotating Vane-Analogue Output
Model: DRH with AUF

Water: 0,2 – 0,8 L/min ... 2,5 – 50 L/min
t_{max} 80 °C; p_{max} 100 bar
Connection: G ⅜, G 1, ⅜ NPT, 1 NPT
Accuracy: ± 2,5 % of full scale

Rotating Vane-Pointer Indicator
Model: DRH-...Z3

Water: 0,2 – 0,8 L/min ... 2,5 – 50 L/min
t_{max} 80 °C; p_{max} 100 bar
Connection: G ⅜, G 1, ⅜ NPT, 1 NPT
Accuracy: ± 2,5 % of full scale

Rotating Vane-Compact Electr.
Model: DRH-...C3

Water: 0,2 – 0,8 L/min ... 2,5 – 50 L/min
t_{max} 80 °C; p_{max} 100 bar
Connection: G ⅜, G 1, ⅜ NPT, 1 NPT
Accuracy: ± 2,5 % of full scale

Rotating Vane-Digital Display
Model: DRH with ADI

Water: 0,2 – 0,8 L/min ... 2,5 – 50 L/min
t_{max} 80 °C; p_{max} 100 bar
Connection: G ⅜, G 1, ⅜ NPT, 1 NPT
Accuracy: ± 2,5 % of full scale

Rotating Vane-Counter
Model: DRH with ZED

Water: 0,2 – 0,8 L/min ... 2,5 – 50 L/min
t_{max} 80 °C; p_{max} 100 bar
Connection: G ⅜, G 1, ⅜ NPT, 1 NPT
Accuracy: ± 2,5 % of full scale

Rotating Vane-Pulse Output
Model: DRG

Water: 0,5 – 12 L/min ... 10 – 140 L/min
t_{max} 80 °C; p_{max} 40 bar
Connection: G ⅛...1, ⅛...1 NPT
Accuracy: ± 3 % of full scale

Rotating Vane-Analogue Output
Model: DRG with AUF

Water: 0,5 – 12 L/min ... 10 – 140 L/min
t_{max} 80 °C; p_{max} 40 bar
Connection: G ⅛...1, ⅛...1 NPT
Accuracy: ± 3 % of full scale

Rotating Vane-Pointer Indicator
Model: DRG-...Z3

Water: 0,5 – 12 L/min ... 10 – 140 L/min
t_{max} 80 °C; p_{max} 40 bar
Connection: G ⅛...1, ⅛...1 NPT
Accuracy: ± 3 % of full scale

Rotating Vane-Compact Electr.
Model: DRG-...C3

Water: 0,5 – 12 L/min ... 10 – 140 L/min
t_{max} 80 °C; p_{max} 40 bar
Connection: G ⅛...1, ⅛...1 NPT
Accuracy: ± 3 % of full scale

Rotating Vane-Digital Display
Model: DRG with ADI

Water: 0,5 – 12 L/min ... 10 – 140 L/min
t_{max} 80 °C; p_{max} 40 bar
Connection: G ⅛...1, ⅛...1 NPT
Accuracy: ± 3 % of full scale

Rotating Vane-Dosing Electronic
Model: DRG with ZED

Water: 0,5 – 12 L/min ... 10 – 140 L/min
t_{max} 80 °C; p_{max} 40 bar
Connection: G ⅛...1, ⅛...1 NPT
Accuracy: ± 3 % of full scale

Rotating Vane-Pulse Output
Model: DOW

Water: 1 – 70 L/min
t_{max} 90 °C; p_{max} 10 bar
Connection: G ¾ male thread, ¾ NPT
Accuracy: ± 1,5 % of reading

Rotating Vane-Insertion Version
Model: DOR

Water: 0,36 – 6300 L/s ... 0,3 – 10 m/s
t_{max} 200 °C; p_{max} 80 bar
Connection: G 1½, G 2, 1½ NPT, 2 NPT
for tubes Ø40...2500 mm
Accuracy: ±1,5% (linearity)

Dual-Ring Piston-Pendulum-Low Volume
Model: LFM

Water: 0,005 – 0,25 L/min
t_{max} 70 °C; p_{max} 100 bar
Connection: G ⅛, Swagelok 6 mm
Accuracy: ± 2,5 % of reading

Ring Piston Counter
Model: DRZ with AUF

Viscosity range: 5 – 100 mm²/s
Oil: 6 – 420 L/h
t_{max} 80 °C; p_{max} 40 bar
Connection: G ⅛, G ¼, ⅛ NPT, ¼ NPT
Accuracy: ± 1 % of reading

Ring Piston Counter
Model: DRZ-...C3

Viscosity range: 5 – 100 mm²/s
Oil: 6 – 420 L/h
t_{max} 80 °C; p_{max} 40 bar
Connection: G ⅛, G ¼, ⅛ NPT, ¼ NPT
Accuracy: ± 1 % of reading

Ring Piston Counter
Model: DRT

Viscosity range: 5 – 100 mm²/s
Oil: 10 – 500 L/h ... 700 – 20000 L/h
t_{max} 150 °C; p_{max} 300 bar
Connection: G ½...2, ½...2 NPT,
flange DN 15...50, Tri-Clamp
Accuracy: ± 0,5 – 1 % of reading

Oval Gear-Counter-Pulse Output
Model: DOM-...F4

Viscosity range: 0 – 1200 mPas
Oil: 0,5 – 36 L/h ... 150 – 2500 L/min
t_{max} 120 °C; p_{max} 400 bar
Connection: G ⅛...4 female thread
Accuracy: ± 0,2 – 1 % of reading

Oval Gear-Counter-Pulse Output
Model: DOM-...LCD

Viscosity range: 0 – 1200 mPas
Oil: 0,5 – 36 L/h ... 150 – 2500 L/min
t_{max} 120 °C; p_{max} 400 bar
Connection: G ⅛...4 female thread
Accuracy: ± 0,2 – 1 % of reading

Oval Gear-Counter-Mechanical
Model: DOM-...mech

Viscosity range: 0 – 1200 mPas
Oil: 0,5 – 36 L/h ... 150 – 2500 L/min
t_{max} 120 °C; p_{max} 400 bar
Connection: G ⅛...4 female thread
Accuracy: ± 0,2 – 1 % of reading

Oval Gear With Air Eliminator
Model: DOM with ZAL

Viscosity range: 0 – 1200 mPas
Oil: 10 – 150 L/min ... 150 – 2500 L/min
t_{max} 70 °C; p_{max} 10 bar
Connection: Flange DN 20...50,
ANSI ¾"...2"
Accuracy: ± 0,2 – 1 % of reading

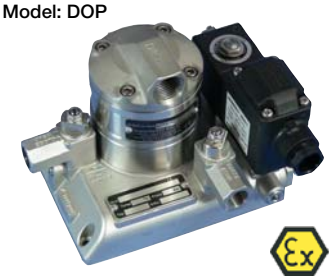
Dosing Unit-Rotating Vane
Model: DOB

Water: 1 – 70 L/min
t_{max} 80 °C; p_{max} 10 bar
Connection: G ¾ male thread,
¾ NPT male thread
Accuracy: ± 1,5 % of reading

Dosing Unit-Mechanical
Model: DOL

Viscosity range: 0 – 1200 mPas
Oil: 0,5 – 36 L/h ... 150 – 2500 L/min
t_{max} 120 °C; p_{max} 400 bar
Connection: G ⅛...4 female thread
Accuracy: ± 0,2 – 1 % of reading

Dosing Unit-Oval Gear For Additives
Model: DOP



Water: 0,01 – 1 L/min ... 0,25 – 10 L/min
t_{max} 100 °C; p_{max} 20 bar
Connection: ⅜ NPT
Accuracy: ± 0,5 % of reading

Oval Gear Meter
Model: OVZ-...I4

Viscosity range: 10 – 800 mm²/s
Oil: 0,3 – 8 L/min ... 1,6 – 40 L/min
t_{max} 80 °C; p_{max} 40 bar
Connection: G ¼...¾, ¼...¾ NPT
Accuracy: ± 2,5 % of full scale

Flowmeters/-switches

Oval Gear-Analogue Output
Model: OVZ-...L4 with AUF

Viscosity range: 10 – 800 mm²/s
Oil: 0,3 – 8 L/min ... 1,6 – 40 L/min
t_{max} 80 °C; p_{max} 40 bar
Connection: G ¼...¾, ¼...¾ NPT
Accuracy: ± 2,5 % of full scale

Oval Gear-Pointer Indicator
Model: OVZ-...Z3

Viscosity range: 10 – 800 mm²/s
Oil: 0,3 – 8 L/min ... 1,6 – 40 L/min
t_{max} 80 °C; p_{max} 40 bar
Connection: G ¼...¾, ¼...¾ NPT
Accuracy: ± 2,5 % of full scale

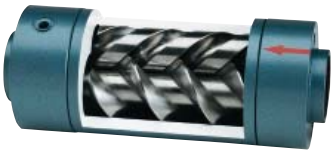
Oval Gear-Compact Electr.
Model: OVZ-...C3

Viscosity range: 10 – 800 mm²/s
Oil: 0,3 – 8 L/min ... 1,6 – 40 L/min
t_{max} 80 °C; p_{max} 40 bar
Connection: G ¼...¾, ¼...¾ NPT
Accuracy: ± 2,5 % of full scale

Oval Gear-Dosing Electronic
Model: OVZ with ZED

Viscosity range: 10 – 800 mm²/s
Oil: 0,3 – 8 L/min ... 1,6 – 40 L/min
t_{max} 80 °C; p_{max} 40 bar
Connection: G ¼...¾, ¼...¾ NPT
Accuracy: ± 2,5 % of full scale

Screw-Spindle-Meter
Model: OMG



Viscosity range: 1 – 5000 mm²/s
Oil: 0,1 – 10 L/min ... 50 – 5000 L/min
t_{max} 200 °C; p_{max} 420 bar
Connection: G ½...6 female thread, flange DN 15...150
Accuracy: ± 0,3 % of reading

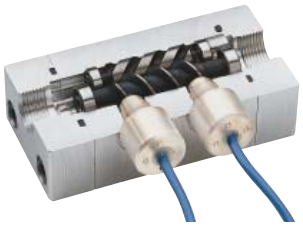
Screw-Spindle-Dosing Electronic
Model: OMG with ADI-Z

Viscosity range: 1 – 5000 mm²/s
Oil: 0,1 – 10 L/min ... 50 – 5000 L/min
t_{max} 200 °C; p_{max} 420 bar
Connection: G ½...6 female, flange DN 15...150
Accuracy: ± 0,3 % of reading

Screw-Spindle-Counter
Model: OMG with ZED

Viscosity range: 1 – 5000 mm²/s
Oil: 0,1 – 10 L/min ... 50 – 5000 L/min
t_{max} 200 °C; p_{max} 420 bar
Connection: G ½...6 female thread, flange DN 15...150
Accuracy: ± 0,3 % of reading

Screw-Spindle-Meter
Model: OME



Viscosity range: 1 – 5000 mm²/s
Oil: 0,2 – 10 L/min ... 2 – 100 L/min
t_{max} 100 °C; p_{max} 40 bar
Connection: G ½...1 female thread, flange DN 15...25
Accuracy: ± 0,3 % of reading

Screw-Spindle-Dosing Electronic
Model: OME with ADI-Z

Viscosity range: 1 – 5000 mm²/s
Oil: 0,2 – 10 L/min ... 2 – 100 L/min
t_{max} 100 °C; p_{max} 40 bar
Connection: G ½...1 female, flange DN15...25
Accuracy: ± 0,3 % of reading

Screw-Spindle-Counter
Model: OME with ZED

Viscosity range: 1 – 5000 mm²/s
Oil: 0,2 – 10 L/min ... 2 – 100 L/min
t_{max} 100 °C; p_{max} 40 bar
Connection: G ½...1 female, flange DN15...25
Accuracy: ± 0,3 % of reading

Gear Wheel-Meter
Model: DZR

Viscosity range: 20 – 5000 mm²/s
Oil: 0,008 – 2 L/min ... 3 – 700 L/min
t_{max} 150 °C; p_{max} 400 bar
Connection: G ⅜...1 female thread
Accuracy: ± 0,3 – 1 % of reading

Gear Wheel-Dosing Electronic
Model: DZR with ADI-Z

Viscosity range: 20 – 5000 mm²/s
Oil: 0,008 – 2 L/min ... 3 – 700 L/min
t_{max} 150 °C; p_{max} 400 bar
Connection: G ⅜...1 female thread
Accuracy: ± 0,3 – 1 % of reading

Gear Wheel-Counter
Model: DZR with ZED

Viscosity range: 20 – 5000 mm²/s
Oil: 0,008 – 2 L/min ... 3 – 700 L/min
t_{max} 150 °C; p_{max} 400 bar
Connection: G ⅜...1 female thread
Accuracy: ± 0,3 – 1 % of reading

Gear Wheel-Meter
Model: KZA

Viscosity range: 20 – 4000 mm²/s
Oil: 0,02 – 4 L/min ... 1 – 200 L/min
t_{max} 80 °C; p_{max} 160 bar
Connection: G ¼...1 female thread
Accuracy: ± 0,3 – 3 % of reading

Gear Wheel-Dosing Electronic
Model: KZA with ADI

Viscosity range: 20 – 4000 mm²/s
Oil: 0,02 – 4 L/min ... 1 – 200 L/min
t_{max} 80 °C; p_{max} 160 bar
Connection: G ¼...1 female thread
Accuracy: ± 0,3 – 3 % of reading

Gear Wheel-Counter
Model: KZA with ZED

Viscosity range: 20 – 4000 mm²/s
Oil: 0,02 – 4 L/min ... 1 – 200 L/min
t_{max} 80 °C; p_{max} 160 bar
Connection: G ¼...1 female thread
Accuracy: ± 0,3 – 3 % of reading

Calorimetric Indicator/Switch
Model: KAL-D

Water: 0,04 – 2 m/s
t_{max} 80 °C; p_{max} 40 bar
Connection: G ¼...1½, ¼...¾ NPT, M12, Tri-Clamp

Calorimetric Indicator/ Switch
Model: KAL-K

Water: 0,04 – 2 m/s
t_{max} 120 °C; p_{max} 100 bar
Connection: G ¼...1½, ¼...¾ NPT, M12, Tri-Clamp

Calorimetric Indicator/ Switch
Model: KAL-A(K)

Water: 0,04 – 2 m/s
t_{max} 120 °C; p_{max} 100 bar
Connection: G ¼...1½, ¼...¾ NPT, M12, Tri-Clamp
Accuracy: ± 10 % of reading

Calorimetric Indicator/ Switch
Model: KAL, KAL-E

Water: 0,04 – 2 m/s
t_{max} 120 °C; p_{max} 100 bar
Connection: G ¼...1½, ¼...¾ NPT, M12, Tri-Clamp

Calorimetric Flowmeter/Switch
Model: DVK

Air: 1 – 10 L_N/min ... 600 – 12000 L_N/h
t_{max} 50 °C; p_{max} 15 bar
Connection: G ¼...2
Accuracy: 5 % of full scale

Calorimetric Indicator/ Switch
Model: KAL-L

Air: 1 – 20 m/s
t_{max} 120 °C; p_{max} 8 bar
Connection: G ½, Rp ½, M18, flange, smooth shaft
Accuracy: 10 % of reading

Mass-Flowmeter-Thermal
Model: DGM

Air: 0,04 – 6 m^3_N/h
t_{max} 40 °C; p_{max} 0,1 bar
Connection: G 1, G 1¼ male thread
Accuracy: Cl. 1,5

Mass-Flowmeter-Thermal
Model: DMW

Air: 5 – 100 mL_N/min ... 380 – 7500 L_N/min
t_{max} 50 °C; p_{max} 10 bar
Connection: G ¼...1 female thread
Accuracy: 3 % of full scale

Mass-Flowmeter-Thermal
Model: MAS

Air: 0 – 10 mL_N/min ... 0 – 500 L_N/min
t_{max} 50 °C; p_{max} 35 bar
Connection: ¼ NPT female thread, Swagelok
Accuracy: ± 1,5 % of full scale

Mass-Meter/Controller-Thermal
Model: MFC

Air: 0 – 10 mL_N/min ... 0 – 50 L_N/min
t_{max} 50 °C; p_{max} 35 bar
Connection: ¼ NPT female thread, Swagelok
Accuracy: ± 1,5 % of full scale

Mass-Meter/Controller-Thermal
Model: DMS

Air: 0 – 10 mL_N/min ... 0 – 185 L_N/min
t_{max} 50 °C; p_{max} 35 bar
Connection: ¼...½ FNPT female thread, clamp connection
Accuracy: ± 1 % of full scale

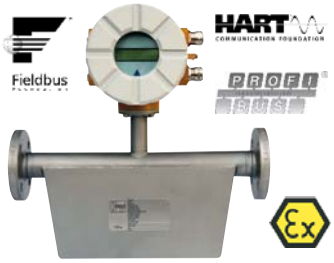
Mass-Flowmeter-Thermal
Model: KES

Air: 0 – 4,7 m/s ... 0 – 94 m/s
Connection: ¼...8 NPT, clamp connection with ½ NPT, 1 NPT (insert version)
Accuracy: ±1,0% of full scale
±0,5% of reading

Mass Flowmeter-Coriolis
Model: TME

Water: 0 – 60 kg/h ... 0 – 60000 kg/h
t_{max} 180 °C; p_{max} PN 40
Connection: Flange DN 10...80, ANSI ½"...3"
Accuracy: ± 0,15 – 0,5 % of reading

Mass Flowmeter-Coriolis
Model: TMU



Water: 0 – 60 kg/h ... 0 – 1900000 kg/h
t_{max} 260 °C; p_{max} PN 40
Connection: Flange DN 10...300, ANSI ½"...12"
Accuracy: ± 0,1 % of reading

Mass Flowmeter-Coriolis with Heating
Model: TMU-...AC

Water: 0 – 60 kg/h ... 0 – 1900000 kg/h
t_{max} 260 °C; p_{max} PN 40
Connection: Flange DN 10...300, ANSI ½"...12"
Accuracy: ± 0,1 % of reading

Mass Flowmeter-Coriolis
Model: TM

Water: 0 – 0,8 kg/h ... 0 – 65000 kg/h
t_{max} 260 °C; p_{max} PN 40
Connection: ¼...½ NPT, flange DN 10...100, ANSI ½"...4"
Accuracy: ± 0,1 % of reading

Flowmeters/-switches

Mass Flowmeter-Coriolis
Model: TMR

Viscosity range: 0,3 – 50000 mPas
Water: 0 – 120 kg/h ... 0 – 120000 kg/h
t_{max} 260 °C; p_{max} PN 40
Connection: Flange DN 20...100, ANSI ¾"...4"
Accuracy: ± 0,1 – 0,15 % of reading

Orifice Diff. Pressure Flowmeter
Model: RCD-...Z

Water: 3 – 27 L/min ... 300 – 2300 L/min
Air: 6 – 42 m^3_N/h ... 500 – 2800 m^3_N/h
t_{max} 100 °C; p_{max} PN 40
Connection: G ½...3, ½...3 NPT female
Accuracy: ± 3 % of full scale

Orifice Diff. Pressure Flowmetere
Model: RCD-...C3

Water: 3 – 27 L/min ... 300 – 2300 L/min
Air: 6 – 42 m^3_N/h ... 500 – 2800 m^3_N/h
t_{max} 100 °C; p_{max} PN 40
Connection: G ½...3, ½...3 NPT female
Accuracy: ± 3 % of full scale

Orifice Diff. Pressure Flowmeter
Model: RCD-...K

Water: 3 – 27 L/min ... 300 – 2300 L/min
Air: 6 – 42 m^3_N/h ... 500 – 2800 m^3_N/h
t_{max} 100 °C; p_{max} PN 40
Connection: G ½...3, ½...3 NPT female
Accuracy: ± 3 % of full scale

Electromagnetic-Insertion
Model: PIT

Water: 0 – 10 m/s
t_{max} 150 °C; p_{max} PN 40
Connection: Flange DN 40...80, ANSI 2"...3"
Accuracy: ±1,5% of reading
±0,5% of full scale

Electromagnetic-Insertion
Model: PIT-U

Water: 0 – 10 m/s
t_{max} 100 °C; p_{max} PN 40
Connection: Flange DN 40...80, ANSI 2"...3"
Accuracy: ±1,5% of reading
±0,5% of full scale

Electromagnetic Meter
Model: DMH

Water: 0 – 0,4 m^3/h ... 0 – 2500 m^3/h
t_{max} 150 °C; p_{max} PN 40
Connection: flange DN 15...300, ANSI ¾"...12"
Accuracy: ±0,3% of reading
±0,01% x Qmax

Electromagnetic for Partly Filled Systems
Model: DUW

Water: 0 – 6 m/s
t_{max} 50 °C
Accuracy: ± 1 % of reading

Electromagnetic-Switch
Model: MIK-...S3

High Quality - Low Cost

Water: 0,05 – 1 L/min ... 40 – 800 L/min
t_{max} 80 °C; p_{max} 10 bar
Connection: G ½...2¾ male thread
Accuracy: ± 2 % of full scale

Electromagnetic-Analogue Output
Model: MIK-...L4 with AUF

High Quality - Low Cost

Water: 0,05 – 1 L/min ... 40 – 800 L/min
t_{max} 80 °C; p_{max} 10 bar
Connection: G ½...2¾ male thread
Accuracy: ± 2 % of full scale

Electromagnetic-Pulse Output
Model: MIK-...F3

High Quality - Low Cost

Water: 0,05 – 1 L/min ... 40 – 800 L/min
t_{max} 80 °C; p_{max} 10 bar
Connection: G ½...2¾ male thread
Accuracy: ± 2 % of full scale

Electromagnetic-Compact Electr.
Model: MIK-...C3

High Quality - Low Cost

Water: 0,05 – 1 L/min ... 40 – 800 L/min
t_{max} 80 °C; p_{max} 10 bar
Connection: G ½...2¾ male thread
Accuracy: ± 2 % of full scale

Electromagnetic-Counter
Model: MIK-...E

High Quality - Low Cost

Water: 0,05 – 1 L/min ... 40 – 800 L/min
t_{max} 80 °C; p_{max} 10 bar
Connection: G ½...2¾ male thread
Accuracy: ± 2 % of full scale

Electromagnetic-Dosing Electr.
Model: MIK-...G

High Quality - Low Cost

Water: 0,05 – 1 L/min ... 40 – 800 L/min
t_{max} 80 °C; p_{max} 10 bar
Connection: G ½...2¾ male thread
Accuracy: ± 2 % of full scale

Vortex-Switch
Model: DVZ-...S3

High Quality - Low Cost

Water: 0,5 – 4,5 L/min ... 10 – 100 L/min
t_{max} 80 °C; p_{max} 10 bar
Accuracy: ± 2,5 % of full scale

Vortex-Analogue Output
Model: DVZ-...L

High Quality - Low Cost

Water: 0,5 – 4,5 L/min ... 10 – 100 L/min
t_{max} 80 °C; p_{max} 10 bar
Accuracy: ± 2,5 % of full scale

Vortex-Analogue Output
Model: DVZ-...L4 with AUF
High Quality - Low Cost

Water: 0,5 – 4,5 L/min ... 10 – 100 L/min
t_{max} 80 °C; p_{max} 10 bar
Accuracy: ± 2,5 % of full scale

Vortex-Pulse Output
Model: DVZ-...F3
High Quality - Low Cost

Water: 0,5 – 4,5 L/min ... 10 – 100 L/min
t_{max} 80 °C; p_{max} 10 bar
Accuracy: ± 2,5 % of full scale

Vortex-Compact Electronic
Model: DVZ-...C3
High Quality - Low Cost

Water: 0,5 – 4,5 L/min ... 10 – 100 L/min
t_{max} 80 °C; p_{max} 10 bar
Accuracy: ± 2,5 % of full scale

Vortex-Counter
Model: DVZ-...E
High Quality - Low Cost

Water: 0,5 – 4,5 L/min ... 10 – 100 L/min
t_{max} 80 °C; p_{max} 10 bar
Accuracy: ± 2,5 % of full scale

Vortex-Dosing Electronic
Model: DVZ-...G
High Quality - Low Cost

Water: 0,5 – 4,5 L/min ... 10 – 100 L/min
t_{max} 80 °C; p_{max} 10 bar
Accuracy: ± 2,5 % of full scale

Vortex-Meter
Model: PWL

Air: 3 – 23 m^3_N/h ... 1562 – 18350 m^3_N/h
t_{max} 400 °C; p_{max} PN 40
Connection: flange DN 15...300,
ANSI ¾“...12“
Accuracy: ± 1 % of reading

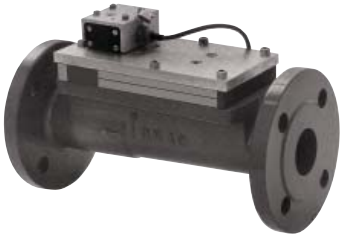
Oscillation-Meter/Switch
Model: DOG-1

Air: 0,2 – 20 m^3_N/h ... 160 – 16000 m^3_N/h
t_{max} 120 °C; p_{max} PN 40
Connection: Flange DN 25...400,
ANSI 1“...16“
Accuracy: ± 1,5 % of reading

Oscillation-Meter/Switch
Model: DOG-3

Air: 0,4 – 20 m^3_N/h ... 400 – 20000 m^3_N/h
t_{max} 120 °C; p_{max} PN 40
Connection: Within flange DN 25...400,
ANSI 1“...16“
Accuracy: ± 1,5 % of reading

Oscillation-Meter/Switch
Model: DOG-2



Water: 0,075 – 3,75 m^3/h ...
70 – 3500 m^3/h
t_{max} 120 °C; p_{max} PN 40
Connection: Flange DN 25...400,
ANSI 1“...16“
Accuracy: ± 0,5 % of reading

Ultrasonic Clamp-On-Meter
Model: DUM

Water: 0 – 20 m/s
t_{max} 200 °C
Connection: Flange DN 10...80,
ANSI ½“...3“
Accuracy: ± 1 – 3 % of reading

Ultrasonic-Switch
Model: DUK-...S3
High Quality - Low Cost

Water: 0,08 – 20 L/min ... 2,5 – 630 L/min
t_{max} 90 °C; p_{max} 10 bar
Connection: G ½...3 female thread
Accuracy: ± 1,5 % of full scale

Ultrasonic-Analogue Output
Model: DUK-...L4 with AUF
High Quality - Low Cost

Water: 0,08 – 20 L/min ... 2,5 – 630 L/min
t_{max} 90 °C; p_{max} 10 bar
Connection: G ½...3 female thread
Accuracy: ± 1,5 % of full scale

Ultrasonic-Pulse Output
Model: DUK-...F3
High Quality - Low Cost

Water: 0,08 – 20 L/min ... 2,5 – 630 L/min
t_{max} 90 °C; p_{max} 10 bar
Connection: G ½...3 female thread
Accuracy: ± 1,5 % of full scale

Ultrasonic-Compact Electr.
Model: DUK-...C3
High Quality - Low Cost

Water: 0,08 – 20 L/min ... 2,5 – 630 L/min
t_{max} 90 °C; p_{max} 10 bar
Connection: G ½...3 female thread
Accuracy: ± 1,5 % of full scale

Ultrasonic-Counter/Dosing
Model: DUK-...E,G
High Quality - Low Cost

Water: 0,08 – 20 L/min ... 2,5 – 630 L/min
t_{max} 90 °C; p_{max} 10 bar
Connection: G ½...3 female thread
Accuracy: ± 1,5 % of full scale

Ultrasonic-Digital Display
Model: DUK-...K
High Quality - Low Cost

Water: 0,08 – 20 L/min ... 2,5 – 630 L/min
t_{max} 90 °C; p_{max} 10 bar
Connection: G ½...3 female thread
Accuracy: ± 1,5 % of full scale

Flow Indicators

Flow Indicator with Rotor
Model: DAA, DAH

Water: 0,4 – 4 L/min ... 8 – 100 L/min
t_{max} 100 °C; p_{max} 16 bar
Connection: G ¼...1½, ¼...1½ NPT female

Flow Indicator with Rotor
Model: DAR-1

t_{max} 260 °C; p_{max} 40 bar
Connection: G ¼...2, ¼...2 NPT female

Flow Indicator with Rotor
Model: DAR-2

t_{max} 260 °C; p_{max} 40 bar
Connection: Flange DN 15...200,
ANSI ½“...8“

Flow Indicator with Rotating Vane
Model: DAF-1

Water: 0,03 – 0,1 L/min ... 5 – 150 L/min
t_{max} 110 °C; p_{max} 16 bar
Connection: G ⅛...1½, ⅛...1½ NPT female

Flow Indicator with Rotor
Model: DAF-2

Water: 0,03 – 0,1 L/min ... 5 – 150 L/min
t_{max} 110 °C; p_{max} 16 bar
Connection: Flange DN 15...50,
ANSI ½“...2“

Flow Indicator with Rotor
Model: DKF

Water: 0,14 – 2 L/min ... 1,8 – 83 L/min
t_{max} 120 °C; p_{max} 6 bar
Connection: G ⅛...1, ⅛...1 NPT female

Flow Indicator with Rotor
Model: DIH

Water: 0,2 – 0,5 L/min ... 1 – 50 L/min
t_{max} 80 °C; p_{max} 16 bar
Connection: G ⅜, G 1 female thread

Flow Indicator with Rotor
Model: DIG

Water: 0,5 – 12 L/min ... 3 – 80 L/min
t_{max} 80 °C; p_{max} 16 bar
Connection: G ⅛...1, ⅛...1 NPT female

Flow Indicator with Flap
Model: DAK-1

t_{max} 280 °C; p_{max} 40 bar
Connection: G ¼...2, ¼...2 NPT female

Flow Indicator with Flap
Model: DAK-2

t_{max} 280 °C; p_{max} 40 bar
Connection: Flange DN 15...200,
ANSI ½“...8“

Flow Indicator with Flap
Model: DAZ

Water: 2,1 – 17 L/min ... 2,1 – 24 L/min
t_{max} 200 °C; p_{max} 16 bar
Connection: G ½...1 female thread

Flow Indicator with Ball
Model: DAB

t_{max} 100 °C; p_{max} 6 bar
Connection: G ¾...3 female thread

Flow Indicator with Ball
Model: DKB

Water: 0,05 – 15 L/min ... 0,14 – 105 L/min
t_{max} 120 °C; p_{max} 6 bar
Connection: G ⅛...1, ⅛...1 NPT female

Flow Indicator with Drip Tube
Model: DAT-1

t_{max} 280 °C; p_{max} 40 bar
Connection: G ¼...2, ¼...2 NPT female

Flow Indicator with Drip Tube
Model: DAT-2

t_{max} 280 °C; p_{max} 40 bar
Connection: Flange DN 15...200,
ANSI ½“...8“

Flow Indicator-Sight Glass
Model: UFJ

t_{max} 100 °C; p_{max} 10 bar

Bourdon Tube Pressure Gauges
Model: MAN-R,-Q

Measuring range: -1 – 0 bar ... 0 – 1000 bar
Housing: Ø 63, 100, 160 mm
Overload protected: 1,15 ... 1,3 times
Connection: G ¼, G ½ male thread
Accuracy: Cl. 1,0; 1,6

All Stainless Steel Bourdon Tube Pressure Gauge
Model: MAN-R

Measuring range: -1 – 0 bar ... 0 – 1000 bar
Housing: Ø 63, 100, 160 mm
Connection: G ¼, G ½ male thread
Accuracy: Cl. 1,0; 1,6

All Stainless Steel Bourdon Tube Pressure Gauge for Exceptional Safety
Model: MAN-R...S

Measuring range: -1 – 0 bar ... 0 – 600 bar
Housing: Ø 63, 100, 160 mm
Connection: G ¼, G ½ male thread
Accuracy: Cl. 1,0; 1,6

Bourdon Tube-Refrigeration
Model: MAN-T

Measuring range: -1 – 9 bar ... -1 – 40 bar
Housing: Ø 63, 80, 100 mm
Connection: 7/16-20 UNF, G ¼ male
Accuracy: Cl. 1,0; 1,6

Capsule Element Pressure Gauges
Model: MAN-K

Measuring range: -10 – 600 mbar
Housing: Ø 63, 80, 100, 160 mm
Overload protected: 0,9-10 times
Connection: G ¼, G ½ male thread
Accuracy: Cl. 1,6

Diaphragm Pressure Gauges
Model: MAN-P

Measuring range: -16 – 0 mbar; 0 – 40 bar
Housing: Ø 100, 160 mm
Overload protected: 1,15-1,3 times
Connection: G ½ male thread
Accuracy: Cl. 1,6

All Stainless Steel Pressure Transducer
Model: MAN-ZF

Measuring range: -1 – 0 bar ... 0 – 600 bar
Housing: Ø 100 mm
Overload protected: 0,9-1,0 times
Connection: G ½ male thread
Accuracy: Cl. 1,0

Press. Gaug. Digital with Ceramic Sensor Element, Battery Powered
Model: MAN-SD

Measuring range: -1 bar ... 1600 bar
Display: LC-Display
Overload protected: 1,3-3 times
Connection: G ¼, G ½, ¼ NPT, ½ NPT male
Accuracy: Cl. 0,5

Pressure Gauges Digital with Ceramic Sensor Element
Model: MAN-LD

Measuring range: -1 bar ... 1600 bar
Display: LC-Display
Overload protected: 1,3-3 times
Connection: G ¼, G ½, ¼ NPT, ½ NPT male thread
Accuracy: Cl. 0,5

Pressure Gauges with Ceramic/ -Thin Film Cell
Model: PDC

Measuring range: 0 – 2 bar ... 0 – 700 bar
Display: 2 x 4½-digit LCD, illuminated
Overload protected: 2 times – max. 1000 bar
Connection: G ¼, ¼ NPT male thread
Accuracy: ± 0,5 % of full scale ... ±1 Digit

Pressure Gauges Digital with Ceramic Sensor Element
Model: MAN-SF26

Measuring range: -1 – 0 bar ... 0 – 1600 bar
Display: 4-digit LED
Overload protected: 2 times
Connection: G ½ male thread
Accuracy: Cl. 0,5

U-Pipe Pressure Gauges
Model: PUM

Measuring range: 0 – 50 mbar ... 0 – 100 mbar
Scale division: 2 mm
Hose connection: Ø 10 mm
Overload protected: 1,0 times
Accuracy: ± 0,2 mbar

Differential Pressure Gauge Digital with Ceramic Sensor Element
Model: MAN-BF26

Measuring range: -1 – 0 bar ... 0 – 1600 bar
Display: 4-digit LED
Overload protected: 2 times
Connection: G ½ male thread
Accuracy: Cl. 0,5

Differential Pressure Gauge Digital with Ceramic Sensor Element
Model: MAN-BF28V

Measuring range: -1 – 0 bar ... 0 – 1600 bar
Display: 4-digit LED
Overload protected: 2 times
Connection: G ½ male thread
Accuracy: Cl. 0,5

Differential Pressure Gauge with Bourdon Tube
Model: MAN-DF, -DG

Measuring range: 0 – 0,6 bar ... 0 – 600 bar
Overload protected: 1,3 times – (short time)
Connection: G ½ male thread
Accuracy: Cl. 1,6

Differential Pressure Gauge with Bourdon Tube
Model: MAN-DG12R

Measuring range: 0 – 1 bar ... 0 – 60 bar
Housing: Ø 160 mm
Overload protected: 1,3 times – (short time)
Connection: G ½ male thread
Accuracy: Cl. 1,6

Pressure Gauges

Differential Pressure Gauge with Diaphragm
Model: MAN-Dx2A

Measuring range: 0 – 25 mbar; 0 – 25 bar
Housing: Ø 100, 160 mm
Connection: G ¼ female thread
Accuracy: Cl. 1,6

Differential Pressure Gauge with Diaphragm
Model: MAN-Dxx5

Measuring range: 0 – 16 mbar; 0 – 25 bar
Housing: Ø 100, 160 mm
Connection: G ¼ female thread
Accuracy: Cl. 1,6

Differential Pressure Gauge with Diaphragm
Model: MAN-DF2G, -DG2G

Measuring range: 0 – 60 mbar; 0 – 40 bar
special versions up to PN 400
Housing: Ø 100, 160 mm
Connection: G ½ female thread
Accuracy: Cl. 1,6

Hand-Held Pressure Measuring Device for Differential Pressure for 2 External Sensors
Model: HND-P215

Measuring range: -2,5 mbar ... 400 bar
depending on sensor
Option: logger, alarm, control function
Accuracy: ± 0,1 % of full scale

Hand-Held Pressure Measuring Device for Differential Pressure for 2 Integrated Sensors
Model: HND-P126, -P236

Measuring range: -100 ... +2000 mbar
Option: logger, alarm
Accuracy: ± 0,2 % of full scale

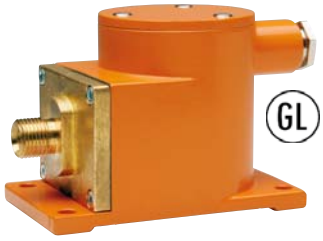
Differential Pressure Sensor
Model: PMP

Measuring range: 0 – 50 mbar
Power supply: 24 $V_{AC/DC}$, 110 V_{AC}, 230 V_{AC}
Display: 4-digit LED
Connection: hose connection 6 x 8 mm

Differential Pressure Transmitter
Model: PAD
High Quality - Low Cost

Measuring range: 0,0075 – 41370 kPa
Power supply: 18-45 V_{DC}
Connection: ¼ NPT, ½ NPT
Accuracy: ± 0,075% of measuring range

Pressure Transmitter for Harsh Conditions
Model: PNK



Measuring range: -1 – 0 bar ... 0 – 100 bar
Overload protection: 1,6 times
Connection: M16x1,5 with sealing cone,
Adapter: R ¼, R ½, ½ NPT male thread
Accuracy: ± 1 % of full scale

Test Pressure Gauge with Bourdon Tube
Model: MAN-F

Measuring range: -0,6 – 0 bar ...
0 – 2500 bar
Housing: Ø 160, 250 mm
Overload protected: 1,0 times – (calm)
Connection: G ½ male thread
Accuracy: Cl. 0,25; 0,6

Test Pressure Gauge with Bourdon Tube in Case
Model: MAN-FG1B

Measuring range: -0,6 – 0 bar ...
0 – 600 bar
Housing: Ø 160, 250 mm
Overload protected: 1,0 times – (calm)
Connection: M20x1,5
Accuracy: Cl. 0,6

Pressure Gauge with Membrane Diaphragm Seal
Model: MAN-RF...D

Measuring range: -1 – 3 bar ... 0 – 40 bar
Housing: Ø 100 mm
Overload protected: 1,3 times
Connection: flange Ø 85 mm
Accuracy: Cl. 1,6

Diaphragm, Capsule, and Inline Diaphragm Seals for Pressure Gauges
Model: DRM

Measuring range: 0 – 1 bar ... 0 – 1600 bar
Filling: glycerine, paraffin- and silicone oil
diverse thread and flange connection
Tri-Clamp, DIN 11851, SMS- and IDF-Norm
Accuracy: Cl. 1,6

All Stainless Steel Bourdon Tube Pressure Gauge with Membrane Diaphragm
Model: MAN-RD...DRM-600

Measuring range: 0 – 6 bar ... 0 – 1600 bar
Housing: Ø 63 mm
Connection: G / NPT-thread; M 20x1,5;
M 48x3
Accuracy: Cl. 1,6

Contact Pressure Gauges with Membrane Diaphragm Seal
Model: MAN-RF...M...DRM-601

Measuring range: 0 – 6 bar ... 0 – 1600 bar
Housing: Ø 100 mm
Connection: G ½...1½ male thread
Accuracy: Cl. 1,6

Pressure Gauge with Diaphragm Seal DIN 11851 and Cool. Element
Model: MAN-RF...MZB-711...DRM-602

Measuring range: 0 – 1 bar ... 0 – 40 bar
Housing: Ø 100 mm
Connection: DIN 11851 DN 20...100
Accuracy: Cl. 1,6

All Stainless Steel Pressure Gauge with Membrane Diaphragm
Model: MAN-RF...M1...DRM-628

Measuring range: 0 – 1 bar ... 0 – 40 bar
Housing: Ø 100, 160 mm
Connection: flange DN 25...100
Accuracy: Cl. 1,6

All Stainless Steel Pressure Gauge with In-Line Diaphragm

Model: MAN-RF...DRM-502

Measuring range: 1,6 – 40 bar ...
2,5 – 40 bar
Connection: Tri-Clamp ½"...2",
hygienic connection ISO DN 15...50
Accuracy: Cl. 1,6

Contact Press. Gaug. with Membrane Diaphragm Seal DIN 11851

Model: MAN-RF...M21...DRM-602

Measuring range: 0 – 1 bar ... 0 – 40 bar
Connection: Union nut DIN 11851
DN 20...100
Accuracy: Cl. 1,6

Pressure Gauge with Membrane Diaphragm Seal, DIN 11851

Model: MAN-RF...DRM-603

Measuring range: 0 – 1 bar ... 0 – 40 bar
Connection: Union nut DIN 11851
DN 25...100
Accuracy: Cl. 1,6

Pressure Gauge with Diaphragm Seal Clamp Connection

Model: MAN-RF...DRM-613

Measuring range: 0 – 2,5 bar ... 0 – 10 bar
Housing: Ø 100 mm
Connection: Tri-Clamp 1"...3"
Accuracy: Cl. 1,6

Pressure Gauges with Diaphragm for PCB Manufacture

Model: MAN...

Measuring range: 0 – 1 bar ... 0 – 25 bar
Connection: G ¾ male thread
Accuracy: Cl. 1,6

Digital Pressure Gauges with Diaphragm Seals for Homogenizing Machines

Model: MAN-SD...DRM-189

Measuring range: 0 – 100 bar ...
0 – 1000 bar
Membrane: flush mounted
Connection: for block flange
Accuracy: Cl. 1,6

Digital Pressure Gauge with Membrane Diaphragm Seal PVC

Model: MAN-SD...DRM-630

Measuring range: 0 – 1,6 bar ... 0 – 10 bar
Housing: Ø 74 mm
Connection: G ¼, G ½, ½ NPT IG
Accuracy: Cl. 1,6

Pressure Sensor with Membrane Diaphragm Seal PP

Model: SEN...DRM-631

Measuring range: 0 – 1,6 bar ... 0 – 10 bar
Connection: G ¼, G ½, ½ NPT female
Accuracy: Cl. 1,6

Pressure Gauge with Membrane Diaphragm Seal, PVDF

Model: MAN-RD...DRM-632

Measuring range: 0 – 1,6 bar ... 0 – 16 bar
Housing: Ø 63 mm
Connection: G ¼, G ½, ½ NPT female
Accuracy: Cl. 1,6

Pressure Sensor with Plug-on Display and Process Assembly

Model: SEN-86 with AUF, KUG-S

Measuring range: -1 – 0 bar ... 0 – 600 bar
Overload protected: 1,5-2 times
Connection: G ½ male thread
Accuracy: Cl. 0,5; 1,0

Press. Sensor with Ceramic Cell

Model: PDA

Measuring range: -1 – 0 bar ... 0 – 400 bar
Display: 3-digit LED
Connection: G ¼, G ½, ¼ NPT,
½ NPT male thread
Accuracy: ± 0,5 – 1 % of full scale

Press. Switch with Ceramic Cell

Model: PDD

Measuring range: -1 – 0 bar ... 0 – 400 bar
Display: 3-digit LED
Connection: G ¼, G ½, ¼ NPT,
½ NPT male thread
Accuracy: ± 0,5 – 1 % of full scale

Electronic Pressure Switch-Thin Film/Ceramic

Model: PSC

Measuring range: -1 – 2 bar ... 0 – 700 bar
Display: 4-digit LED
Connection: G ¼, G ½, ¼ NPT,
½ NPT male thread
Accuracy: ± 1 % of full scale ... ±1 Digit

Pressure Sensor with Ceramic Cell and Plug-On Display AUF

Model: SEN-86 with AUF

Measuring range: -1 – 0 bar ... 0 – 600 bar
Display: 4-digit LED
Overload protected: 1,5-2 times
Connection: G ½ male thread
Accuracy: Cl. 0,5; 1,0

Pressure Sensor with Ceramic Cell and Plug-On Display AUF

Model: SEN-87 with AUF

Measuring range: -1 – 0 bar ... 0 – 600 bar
Display: 4-digit LED
Overload protected: 1,5-2 times
Connection: G ¼ male thread
Accuracy: Cl. 0,5; 1,0

Pressure Sensor Compact Piezoresistive

Model: SEN-3272

Measuring range: 0 – 1 bar ... 0 – 6 bar
Membrane: internal
Overload protected: 2 times
Connection: G ¼ male thread
Accuracy: Cl. 1,0

Pressure Measurement/ Monitoring

Pressure Sensor Compact Piezoresistive
Model: SEN-3247,-3249

Measuring range: -1 – 0 bar ... 0 – 25 bar
Membrane: internal
Overload protected: 2-3,5 times
Connection: G ¼ male thread
Accuracy: ± 0,5 – 1 % of full scale

Pressure Sensor Industrial Piezoresistive
Model: SEN-3276,-3277

Measuring range: -1 – 0 bar ... 0 – 25 bar
Membrane: internal
Overload protected: 2-3,5 times
Connection: G ½ male thread
Accuracy: ± 0,25 – 0,5 % of full scale

Pressure Sensor Industrial Piezoresistive
Model: SEN-3251,-3252

Measuring range: -1 – 0 bar ... 0 – 25 bar
Membrane: flush mounted
Overload protected: 2-3,5 times
Connection: G ½, G 1 male thread
Accuracy: ± 0,25 – 0,5 % of full scale

Pressure Sensor Industrial Piezoresistive
Model: SEN-3245,-3248

Measuring range: 0 – 0,25 bar ... 0 – 16 bar
Membrane: internal
Overload protected: 3,5 times
Connection: G ½ male thread
Accuracy: ± 0,25 – 0,5 % of full scale

Pressure Sensor Industrial Piezoresistive
Model: SEN-3255,-3256

Measuring range: 0 – 0,25 bar ... 0 – 16 bar
Membrane: flush mounted
Overload protected: 3,5 times
Connection: G ½, G 1 male thread
Accuracy: 0,25 – 0,5 % of full scale

Press. Sensor Compact Thin Film
Model: SEN-3373

Measuring range: 0 – 10 bar ... 0 – 600 bar
Membrane: internal
Overload protected: 2 times
Connection: G ¼ male thread
Accuracy: Cl. 1,0

Press. Sensor Compact Thin Film
Model: SEN-3349

Measuring range: 0 – 40 bar ... 0 – 1000 bar
Membrane: internal
Overload protected: 1,5-3 times
Connection: G ¼ male thread
Accuracy: Cl. 0,5

Press. Sensor Industrial Thin Film
Model: SEN-3376,-3377

Measuring range: 0 – 40 bar ... 0 – 1000 bar
Membrane: internal
Overload protected: 1,5-3 times
Connection: G ½ male thread
Accuracy: Cl. 0,25; 0,5

Pressure Sensor Precision Piezoresistive/Thin Film
Model: SEN-3382

Measuring range: -1 – 0 bar ... 0 – 1000 bar
Membrane: internal
Overload protected: 1,5-3 times
Connection: G ½ male thread
Accuracy: Cl. 0,1

Press. Sensor Piezoresistive/Thin Film
Model: SEN-3344,-3386

Measuring range: 0 – 40 bar ... 0 – 600 bar
Membrane: flush mounted
Overload protected: 2 times
Connection: G ½ male thread
Accuracy: Cl. 0,25; 0,5

Pressure Hand-Held Unit for External Sensors
Model: HND-P210

Measuring range: -2,5 mbar ... 400 bar (sensor dependent)
Option: logger, alarm, control function
Accuracy: ± 0,1 % of full scale

Pressure Hand-Held Unit with Integrated Sensors
Model: HND-P129, -P239

Measuring range: 0 ... 1300 mbar
Option: logger, alarm, control function
Accuracy: 0,2 % of full scale

Pressure Switch with Hall Sensor
Model: PDL-0

Switching range: -0,9 – -0,05 bar ... 2,5 – 25 bar
Switching function: N/O / N/C
Connection: G ¼, ¼ NPT male thread
Repeatability: < 1% of full scale

Pressure Switch with Hall Sensor
Model: PDL-1

Switching range: 3 – 60 bar ... 30 – 600 bar
Switching function: N/O / N/C
Connection: G ¼, ¼ NPT male thread
Repeatability: < 1% of full scale

Pressure Gauges Accessories
Model: MZB

Shut off cocks and valves, syphons, trottle and overpressure protection equipment, adapters

Sandwich Plug-On Display
Model: AUF

Input: 4-20 mA loop powered
Option: Open-Collector

Level Switches

Float Magnet Switch
Model: N

Density: 0,5 kg/dm³
t_{max} 150 °C; p_{max} 100 bar
G ⅛...1 male thread

Float Magnet Switch
Model: NS

Density: 0,6 kg/dm³
t_{max} 150 °C; p_{max} 100 bar
G ⅜ male thread

Float Bypass Switch
Model: NBA/NBE

Density: 0,65 kg/dm³
t_{max} 90 °C; p_{max} 10 bar
G ⅜ female, R ½ male

Plastic Level Switch
Model: NKP

Density: 0,6 kg/dm³
t_{max} 100 °C; p_{max} 10 bar

Float Switch
Model: RFS

Density: 0,7 kg/dm³
t_{max} 120 °C; p_{max} 5 bar
½ NPT male thread

Float Switch
Model: NV

Density: 0,7 kg/dm³
t_{max} 110 °C; p_{max} 16 bar
G ¾ male, M27x1,5 male

Float Switch
Model: NSP

Density: 0,8 kg/dm³
t_{max} 85 °C; p_{max} 2 bar
Cable

Float Switch
Model: NSM, NAB

Density: 0,5 kg/dm³
t_{max} 95 °C; p_{max} 3 bar
Cable

Float Switch
Model: NEC

Density: 0,7 kg/dm³
t_{max} 95 °C; p_{max} 5,5 bar
Cable

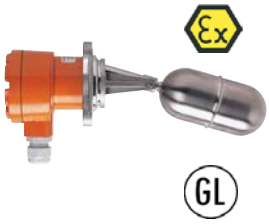
Float Switch
Model: NST

Density: 0,79 kg/dm³
t_{max} 150 °C; p_{max} 1 bar
Cable

Float Switch
Model: NSE

Density: 0,8 kg/dm³
t_{max} 150 °C; p_{max} 15 bar
G ½ male thread

Dual Magnet Float Switch
Model: NGS



Density: 0,7 kg/dm³
t_{max} 250 °C; p_{max} 25 bar
Square box flange, DIN-flange, BSP 2“, 2 NPT

Conductive Switch
Model: NES

t_{max} 150 °C; p_{max} 30 bar
G ½, G 1½ male thread

Conductive Suspended Electrodes
Model: NEH

t_{max} 150 °C; p_{max} 6 bar
G ½, G 1½ male thread

Conductive Switch § 19 WHG
Model: NEW

t_{max} 60 °C; p_{max} atmospheric
G 1, G 1½ male thread

Conductive Switch
Model: NEK

t_{max} 85 °C; p_{max} 20 bar
G ¾ male thread, ¾ NPT male
Open-Collector or relay

Conductive Switch
Model: LNK

Measuring range: 4 – 1500 mm
t_{max} 150 °C; p_{max} 10 bar
G ½, G 1 male thread, hygienic installation system LZE
Open-Collector

Conductive Switch Compact Probe
Model: LNK-K

Measuring range: 4 – 1500 mm
t_{max} 150 °C; p_{max} 10 bar
G ½ male thread, hygienic installation system LZE
Open-Collector

Electrode Relays for Conductive Switches
Model: NE-104, -304

2 limit contacts or
2 Min/Max control switches
Switch capacity: max. 250 V_{AC}, 5 A, 600 VA

Electrode Relay § 19 WHG
Model: NE-204

2 limit contacts or
2 Min/Max control switches
Switch capacity: max. 250 V_{AC}, 5 A, 600 VA

Level Switches/-transmitters

Head Mounted Transmitter for Conductive Probes
Model: LNR

t_{max} 80 °C
Open-Collector

Microwave Switch
Model: LNM

t_{max} 100 °C (150 °C for CIP);
p_{max} 10 bar
G ½, M12x1,5 male thread,
hygienic installation system LZE
Open-Collector

Capacitive Switch Liquids
Model: LNZ

t_{max} 100 °C (150 °C for CIP);
p_{max} 10 bar
G ½ male thread, hygienic
installation system LZE
Open-Collector

Capacitive Switch Liquids
Model: NCW

t_{max} 125 °C; p_{max} 10 bar
G 1, G 2 male thread,
Adapter: G 1¼, G 1½, round
flange, weld-in sleeve
1 relay, SPDT

Ultrasonic Switch Liquids
Model: NQ-1000

t_{max} 125 °C; p_{max} 70 bar
R 1 male thread
1 switch output

Optical Switch Liquids
Model: OPT

t_{max} 80 °C; p_{max} 10 bar
G ½, ½ NPT male thread or M14
with bulkhead nut
Open-Collector

Vibration Switch Liquids
Model: NWS

t_{max} 130 °C (150 °C for CIP;
p_{max} 50 bar
R-/NPT-thread, DIN-/ANSI-flange,
Tri-Clamp, milk connection DIN
11851, Aseptic DIN 11864,
DRD-flange

Vibration Switch Liquids
Model: NWS-*2*ES...**

t_{max} 130 °C (150 °C for CIP);
p_{max} 50 bar
R-/NPT-thread, DIN-/ANSI-flange,
Tri-Clamp, milk connection DIN
11851, Aseptic DIN 11864,
DRD-flange

Vibration Switch Liquids
Model: NWS-*2*F...**

t_{max} 130 °C (150 °C for CIP);
p_{max} 50 bar
R-/NPT-thread, DIN-/ANSI-flange,
Tri-Clamp, san. connection
DIN 11851, Aseptic DIN 11864,
DRD-flange

Vibration Switch Bulk Material
Model: NSV

Switching range: 230 – 3000 mm
Density: 0,06 kg/dm³
t_{max} 80 °C; p_{max} atmospheric
G 1½ AG
1 relay, SPDT

Vibration Switch Bulk Material
Model: NVI

Switching range: 235 mm
Density: 0,05 kg/dm³
t_{max} 160 °C; p_{max} 25 bar
G 1½, 1½ NPT AG
1 relay, SPDT

Diaphragm Switch Bulk Materials
Model: NMF

t_{max} 200 °C; p_{max} 1 bar (overpres-
sure secure
Flange

Rotation Vane Switch Bulk Materials
Model: NIR

Switching range: 120 – 4000 mm
t_{max} 80 °C; p_{max} 0,5 bar
G 1 male, Adapter: G 1¼, G 1½,
round flange, weld-in sleeve
1 relay, SPDT

Rotation Vane Switch Bulk Materials
Model: NIR-8

Switching range: 60 – 4000 mm
t_{max} 200 °C; p_{max} 0,5 bar
G 1 male Adapter: G 1¼, G 1½,
round flange, weld-in sleeve
1 relay, SPDT

Capacitive Switch Bulk Materials
Model: NSC

Switching range: 265 – 3000 mm
t_{max} 80 °C; p_{max} 0,5 bar
G 1 male, Adapter: G 1¼, G 1½,
round flange, weld-in sleeve
1 relay, SPDT

Capacitive Switch Bulk Materials
Model: NTS

tmax 120 °C; pmax 25 bar
R 1 male,
Adapter: R 1½, G 1½ male
1 switch output

Float Transducer-Reed Chain
Model: NM

Measuring range: 300 – 6000 mm
Density: 0,6 kg/dm³
t_{max} 130 °C; p_{max} 20 bar
G ⅜...2 male thread,
flange DN 50...100
Accuracy: ±10 mm

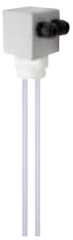
Float Transducer-Reed Chain with Transmitter
Model: NM and ADI

Measuring range: 300 – 6000 mm
Density: 0,6 kg/dm³
t_{max} 130 °C; p_{max} 20 bar
G ⅜...2 male, flange DN50...100
Accuracy: ±10 mm

Float Magnetostrictive
Model: NMT

Measuring range: 300 – 4000 mm
Density: 0,7 kg/dm³
t_{max} -20 – 70 °C; p_{max} PN 10
G 2, 2 NPT AG
Accuracy: ±1 mm

Capacitive Measurement
Model: NMC



Measuring range: 265 – 4000 mm
t_{max} 125 °C; p_{max} 10 bar PN 10
G 1, G 2 male thread,
Adapter: G 1¼, G 1½, round
flange, weld-in sleeve
Accuracy: ±2 mm

Level Gauges/Transmitters

Potentiometric Measurement
Model: LNP

Measuring range: 200 – 2000 mm
t_{max} 150 °C; p_{max} 10 bar
G 1, 1 NPT male thread
Analogue output
Accuracy: ± 1 % of full scale

Bypass Glass Gauge
Model: SZM

Measuring range: 370 – 3080 mm
t_{max} 0 – 100 °C; p_{max} 6 bar
Flange DN 15...32

Bypass Ball Indicator
Model: NBK

Measuring range: 300 – 6000 mm
over 6000 mm 2-piece or multipart
t_{max} 400 °C; p_{max} PN 100
DIN-/ANSI-Flange, R-/NPT-thread
Accuracy: ±1 mm (transm.)

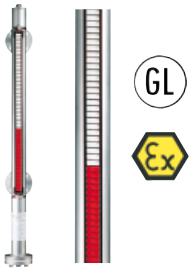
Mini Bypass with Roller Indicator
Model: NBK-M

Measuring range: 200 – 3000 mm
Density: 0,8 kg/dm³
t_{max} 200 °C; p_{max} PN 40
Flange DN 10...25, ANSI ½"...1"
Accuracy: ±1 mm (transm.)

Bypass with Roller Ind.
Model: NBK-03,-06,-07,-10

Measuring range: 300 – 6000 mm
over 6000 mm 2-piece or multipart
t_{max} 400 °C; p_{max} PN 100
DIN-/ANSI-Flange, R-/NPT-thread
Accuracy: ±1 mm (transm.)

Bypass with Roller Ind.
Model: NBK-ATEX,-GL



Measuring range: 300 – 6000 mm
over 6000 mm 2-piece or multipart
t_{max} 400 °C; p_{max} PN 100
DIN-/ANSI-Flange, R-/NPT-thread
Accuracy: ±1 mm (transm.)

Bypass Over-Top Tank-Measurement
Model: NBK-04

Measuring range: 300 – 4000 mm
Density: 0,43 kg/dm³
t_{max} 120 °C; p_{max} PN 16
Flange DN 50, 65 ANSI 2", 2½"
Accuracy: ±1 mm (transm.)

Bypass Over-Top Tank-Measurement
Model: NBK-04 ATEX

Measuring range: 300 – 4000 mm
Density: 0,43 kg/dm³
t_{max} 120 °C; p_{max} PN 16
Flange DN 50, 65 ANSI 2", 2½"
Accuracy: ±1 mm (transm.)

Bypass Over-Top Tank Measurement
Model: NBK-15,-16,-17

Measuring range: 200 – 4000 mm
Density: 0,57 kg/dm³
t_{max} 80 °C; p_{max} 4 bar
Flange DN 20...50, ANSI ¾"...2"
Accuracy: ±10 mm

Bypass Over-Top Tank-Measurement - Low Cost
Model: NBK-01

Measuring range: 300 – 6000 mm
over 6000 mm 2-piece or multipart
t_{max} 400 °C; p_{max} PN 100
R ½...1¼, ½...1¼ NPT male
Accuracy: ±1 mm (transm.)

Bypass Roll Meas. Rope
Model: NBK-19

Measuring range: 0,2 – 4,8 m
Density: 1 kg/dm³
t_{max} 60 °C; p_{max} atmospheric
Accuracy: ± 1 mm (transm.)

Limit Contact for Bypass Measurement
Model: NBK-R

t_{max} 100 °C
Switch capacity:
60 W/VA, 230 $V_{AC/DC}$, 1 A

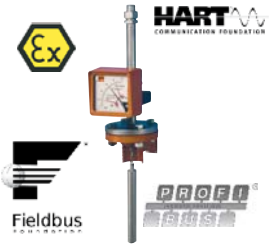
Limit Contact for Bypass Measurement
Model: NBK-RT

t_{max} 400 °C
Switch capacity: 80 VA,
250 $V_{AC/DC}$, 1 A

Limit Contact for Bypass Measurement
Model: NBK-RA

t_{max} 85 °C
Switch capacity: 45 VA,
230 $V_{AC/DC}$, 0,6 A

Displacement Meas.
Model: BA



Measuring range: 300 – 6000 mm
Density: 0,4 kg/dm³
t_{max} 250 °C; p_{max} PN 400
Flange DN 50, ANSI 2"
Analogue output, 2 limit contacts
Accuracy: ± 5 mm

Radar Level Sensor
Model: NRM

Measuring range: 0,2 – 70 m
t_{max} -60 – 400 °C; p_{max} 160 bar
G 1½, 1½ NPT male,
flange DN 50...150, ANSI 2...8"
Analogue output
Accuracy: from ± 3 mm

Ultrasonic Measurement
Model: NUS

Measuring range: 0,25 – 5 m
(liquids, up to 3,5 m bulk materials)
t_{max} 80 °C; p_{max} 3 bar
G 1½, G 2, 1½ NPT, 2 NPT male
Analogue output
Accuracy: ± 0,25 % of full scale

Ultrasonic Measurement
Model: NUS-8

Measuring range: 0,25 – 8 m
(liquids, up to 3,5 m bulk materials)
t_{max} 80 °C; p_{max} 3 bar
G 1½, G 2, 1½ NPT, 2 NPT male
Analogue output
Accuracy: ± 0,25 % of full scale

Deep-Well Probe
Model: NTB

Measuring range: 0 – 200 m
(water column)
Density: 1 kg/dm³
Cable length 200 m
Accuracy: ± 0,5 % of full scale

Hydrostatic Diaphragm Measurement
Model: NPF

Measuring range: 0 – 6000 mm
Density: 1 kg/dm³
t_{max} 80 °C
G ½ male thread
Accuracy: ± 1,6 % of full scale

Temperature Switches/-indicators

Bi-metal Switch
Model: TWR

Switching range: 30 – 120 °C
t_{max} 150 °C; p_{max} 64 bar
G ¾ male thread

Thermal Reed Switch
Model: TRS

Switching range: 10 – 120 bar
t_{max} 120 °C; p_{max} 25 bar
G ¼...1, ¼...1 NPT

Temperature Switch Digital
Model: TDD-1, -3, -5, -7

Measuring range: -20 – 120 °C
t_{max} 125 °C; p_{max} 80 bar
G ½, G ¾, ½ NPT, ¾ NPT male
Accuracy: ± 0,5 °C

Temperature Switch Digital
Model: TDD-...D6

Measuring range: -50 – 125 °C
t_{max} 125 °C; p_{max} 80 bar
M20x1,5
Accuracy: ± 0,5 °C

V-Form-Machinery Glass Thermometer
Model: TGL

Measuring range: -60 – 40 °C ...
0 – 200 °C
G ½, ½ NPT male thread
Accuracy: ± 1 % of full scale

V-Form-Machinery Glass Thermometer
Model: TGK

Measuring range: -60 – 40 °C ...
0 – 200 °C
G ½, ½ NPT male thread
Accuracy: ± 1 % of full scale

Bi-metal Thermometer
Model: TBI

Measuring range: -30 – 50 °C ...
0 – 500 °C
p_{max} 25 bar
G ½ male thread, welding sleeve
Accuracy: Cl. 1,0 acc. to VDI

Shaft Thermometers according to DIN 16205
Model: TNS

Measuring range: -40 – 40 °C ...
0 – 600 °C
p_{max} 25 bar
G ½...1, ½...1 NPT, DIN 11851, Tri-Clamp, helix probe
Accuracy: Cl. 1,0 ; 1,6

Capillary Thermometer according to DIN 16206
Model: TNF

Measuring range: -40 – 40 °C ...
0 – 600 °C
p_{max} 25 bar
G ½...1, ½...1 NPT, DIN 11851, Tri-Clamp, helix probe
Accuracy: Cl. 1,0 ; 1,6

Safety Thermometer with Contacts
Model: TNS,TNF

Measuring range: -40 – 40 °C ...
0 – 600 °C
p_{max} 25 bar
G ½...1, ½...1 NPT, DIN 11851, Tri-Clamp, helix probe
Accuracy: Cl. 1,0 ; 1,6

Shaft Thermometer For Diesel Engines
Model: TND

Measuring range: 0 – 600 °C ...
0 – 800 °C
p_{max} 25 bar
G ½, G ¾ male thread
Accuracy: Cl. 1,0 ; 1,6

Thermowells for Shaft and Capillary Thermometer
Model: TSH

p_{max} 25 bar
G ½ male thread, welding sleeve

Electronic Temperature Sensor
Model: TDA

Measuring range: -50 – 125 °C
p_{max} 80 bar
G ½, G ¾, ½ NPT, ¾ NPT male
Accuracy: ± 0,5 °C

Infrared Hand-Held Thermometer
Model: TIR-HN

Measuring range: -32 – 400 °C ...
-32 – 900 °C
Accuracy: ±1%...2% of reading

Infrared Fixed Thermometer
Model: TIR-SA

Measuring range: 0 – 120 °C ...
100 – 500 °C
Accuracy: ± 1,5 % of full scale

Infrared Fixed Thermometer
Model: TIR-S

Measuring range: -20 – 300 °C ...
1100 – 2500 °C
Analogue output
Accuracy: ± 1,5 % of full scale

Precision Hand-Held Thermometer
Model: HND-T120

Measuring range: -50...+1150 °C
Sensor: Type K (NiCr-Ni)
Accuracy: 0,1 – 1,5 % of reading

Precision Hand-Held Thermometer
Model: HND-T125

Measuring range: -50...+1150 °C
Sensor: Type K (NiCr-Ni)
Accuracy: ± 0,1 – 1,5 % of reading

Precision Hand-Held Thermometer
Model: HND-T105, -T205, -T110

Measuring range: -65...+1768 °C)
Sensor: Pt 100 or thermocouple types K, N, S
Option: Logger, alarm, control function
Accuracy: ± 0,03 % of full scale

Double/Diff. Hand-Held Thermometer
Model: HND-T115, -T215

Measuring range: -220 ...+1750 °C
Sensor: thermocouple types K, N, S, J, T
Accuracy: ± 0,03 % of full scale

Temperature Indicators

Digital Thermometer
Model: DTM

Measuring range: -30 – 40 °C ... 0 – 400 °C
pmax 25 bar
G ½...1, ½...1 NPT
Analogue output, limit switches
Accuracy: Cl. 0,5

Temperature Sensor
Model: TSA

Measuring range: -40 – 150 °C
t_{max} 150 °C; p_{max} 25 bar
G ¼...1, ¼...1 NPT
Accuracy: from 0,7°C

Resistance Thermometer
Model: TNK

Measuring range: -80 – 150 °C
t_{max} 150 °C; p_{max} 50 bar
M18x1,5; G ½; ½ NPT
Accuracyt: Cl. A or B

Screw-In Resistance Thermometer
Model: TMA with AUF and KUG-S

Measuring range: 0 – 50 °C ... -200 – 600 °C
p_{max} 36 bar
Accuracy: Cl. B

Res. Temperature Probe with Connection Box
Model: LTS-A

Measuring range: -50 – 250 °C
p_{max} 10 bar
G ½, M12x1,5 male thread, hygienic installation system LZE
Accuracy: Cl. A

Resistance Temperature Probe, Compact Version
Model: LTS-K

Measuring range: -50 – 250 °C
p_{max} 10 bar
G ½, M12x1,5 male, LZE
Pt 100, 4...20 mA
Accuracy: Cl. A

Temperature Transducer Head Mounting
Model: TUM-K

Measuring range: -270 – 1300 °C
... -50 – 1750 °C
Analogue output

Temperature Transducer Rail or Wall Mounting
Model: TUM-S

Measuring range: -270 – 1300 °C
... -50 – 1750 °C
Analogue output

Screw-In Resistance Thermometer
Model: TWD-B9

Measuring range: -80 – 600 °C
p_{max} 25 bar (40 bar)
G ½...1, ½...1 NPT
Analogue output
Accuracy: Cl. A or B

DIN Weld-In and Insertion Resistance Thermometer
Model: TWD-D, -F

Measuring range: -80 – 600 °C
p_{max} 25 bar (40 bar)
Analogue output
Accuracy: Cl. A or B

Pipe Resistance Thermometer
Model: TWP

Measuring range: -20 – 200 °C
Union nut DIN 11851 DN 25...100
Accuracy: Cl. A or B

Insertion Resistance Thermometer
Model: TWE-5

Measuring range: -20 – 350 °C
Accuracy: Cl. A or B

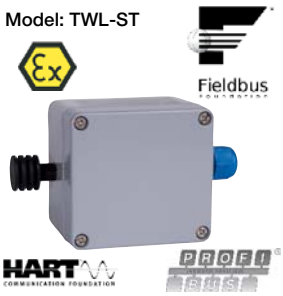
Sheath Resistance Thermometer
Model: TWM

Measuring range: -20 – 600 °C
Accuracy: Cl. A or B

Resistance Temperature Measuring Unit
Model: TWL

Measuring range: -200 – 750 °C
p_{max} 250 bar
⅛ NPT female thread
Pt 100, 4...20 mA
Accuracy: Cl. A or B

Room Thermometer
Model: TWL-ST



Measuring range: -20 – 60 °C
p_{max} atmospheric
⅛ NPT female thread
Pt 100, 4...20 mA
Accuracy: Cl. A or B

Contact Resistance Thermometer
Model: TWA

Measuring range: -20 – 260 °C
Accuracy: Cl. A or B

Weld-In and Insertion Thermocouples acc. DIN
Model: TTD

Measuring range: -200 – 1150 °C
p_{max} 25 bar (40 bar)
G ½ male thread
Accuracy: Cl. 1,0

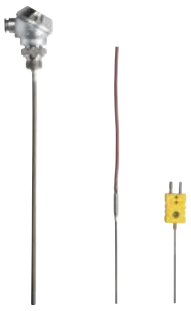
Screw-In Thermocouples with Compensating Lead
Model: TTE-1

Measuring range: -200 – 600 °C
G ½, M10x1
Accuracy: Cl. 1,0

Immersion and Insertion Thermocouples
Model: TTL

Measuring range: -200 – +1600 °C
p_{max} 250 bar
Thread, flange, weld-in sleeve
4...20 mA,
Accuracy: Cl. 1,0 or 2,0

Sheath-Thermocouples
Model: TTM



Measuring range: -50 – 1100 °C
Accuracy: Cl. 1,0

Analysis

Transmitter for pH-Value and ORP
Model: APM-Z, ARM-Z

Outputs: 2 analogue outputs,
1 binary output
Switch output:
2 relays with adjustable setpoints

Transmitter for pH-Value and ORP
Model: APM-X

Outputs: 2 analogue outputs,
1 binary output
Switch output:
2 relays with adjustable setpoints

pH-Combined Electrodes
Model: APS

Measuring range: pH 1...12
t_{max} 80 °C; p_{max} 6 bar
Diaphragm: PTFE-ring or ceramic
Electrode also in plastic housing

pH-, Redox- and Temperature Hand-Held Meas.
Model: HND-R

Measuring range: pH: 0...14;
Redox: -1999...+2000 mV
Temperature: -100... +250 °C
Accuracy: ± 0,01 pH;
± 0,1% of reading

Transmitter for Specific Conductivity
Model: ACM-Z

Outputs: 2 analogue outputs,
1 binary output
Measuring range: 0...200 mS/cm
Switch output:
2 relays with adjustable setpoints

Transmitter for Conductivity and Resistance
Model: ACM-X

Outputs: 2 analogue outputs,
1 binary output
Switch output:
2 relays with adjustable setpoints

Conductive Conductivity Measuring Cells
Model: ACS

Measuring range: 0,04 µS/cm...
20 mS/cm
t_{max} 150 °C; p_{max} 6 bar
Process connection G 1, ½ NPT
Accuracy: ± 1 % of reading

Inductive Conductivity Measuring Cell
Model: ACS-X0I

Measuring range: 50 µS/cm...
2000 mS/cm
t_{max} 125 °C; p_{max} 16 bar
Process connection G ¾, 1 NPT
Accuracy: ±5µS/cm + 0,5 of read.

Inductive Conductivity Measuring System
Model: LCI

Measuring range: 0...2000 mS/cm
t_{max} 150 °C; p_{max} 10 bar
integrated Pt 100
Accuracy: ± 0,5 – 1 % of full scale

Hand-Held Conductivity Measuring Unit
Model: HND-C

Measuring range: 0...200 µS/cm -
0... 200 mS/cm
Options: Resistance; salinity, TDS
Accuracy: from ±0,1%

Humidity/Temperature Transmitter
Model: AFK-G2

Measuring range: 0...100% rH;
-60...200 °C
t_{max} 200 °C; p_{max} 25 bar
Outputs: 2 x 4...20 mA
Accuracy: ±2 % rH

Humidity Transmitter with Display
Model: AFA-G

Measuring range: 5...95 % rH;
0...60 °C
t_{max} 80 °C
Outputs: 4...20 mA
Accuracy: ± 2 % rH

Humidity/Temperature Transmitter
Model: AFK-E

Measuring range: 0...100 % rH;
-40...+180 °C
t_{max} 180 °C; p_{max} 15 bar
Outputs: analogue outputs and switches
Accuracy: ± 1,6 % of reading % rH

Hygrostat, Humity Annex Switch
Model: AFS-G1, AFS-G2, AFS-G3

Measuring range: 30...100% rH
t_{max} 60 °C
Switch output: 1 SPDT
Accuracy: 3 % rH

Hand-Held Humidity Precision Measuring Unit
Model: HND-F

Measuring range: 0...2000 mS/cm
t_{max} 150 °C; p_{max} 10 bar
Material: PEEK / PVDF
Integrated Pt 100
Accuracy: ± 0,1 - 0,2 % of reading

Turbidity Measuring System
Model: ATA-K

Measuring range: 0...500 ppm;
0...4 CU
t_{max} 100 °C; p_{max} 16 bar
Output: 4...20 mA
Accuracy: ± 2 % of full scale

Turbidity Measuring System
Model: ATS-K

Measuring range: 0...10 - 200
FTU; 0...25 - 500 ppm
t_{max} 150 °C; p_{max} 16 bar
Output: 4...20 mA
Accuracy: ± 2 % of full scale

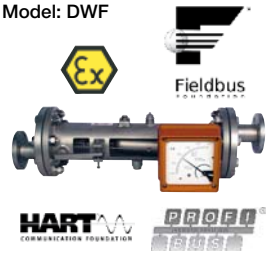
Transmitter for Turbidity Measuring System
Model: ATT-K

Output: 4...20 mA
Switching Output: 2 Alarm contacts (potential-free SPDT), 1 Alarm (lamp and function control)

Turbidity Probe
Model: ATL

Measuring range: 0...500 ppm;
0...4 CU
t_{max} 90 °C; p_{max} 10 bar
Outputs: 4...20 mA
Accuracy: ± 2 % of full scale

Density Meter
Model: DWF



Measuring range: 700-1900 g/L
t_{max} 150 °C
Process connection
Flange DN 20...50, ANSI ¾"...2"
Accuracy: ± 1,25...6 g/L

Food and Pharmaceutical

Caliometric Meter/Switch
Model: KAL-K4440

Water: 0,04 – 2 m/s
t_{max} 120 °C; p_{max} 100 bar
Connection: G ¼...1½, ¼...¾ NPT, M12, Tri-Clamp

Rotating Vane - Low Volume
Model: DPL

Water: 0,025 – 0,5 L/min ... 1 – 25 L/min
t_{max} 70 °C; p_{max} 10 bar
Connection: G ½ male thread
Accuracy: ± 2,5 % of full scale

Variable Area-Plastic
Model: KSM

Water: 15 – 150 L/h ... 8000 – 60000 L/h
Air: 0,8 – 5 m³N/h ... 100 – 860 m³N/h
t_{max} 140 °C; p_{max} 16 bar
Connection: G ½...3½ female/male thread
Accuracy: ± 4 % of full scale

Variable Area-All Metal
Model: BGN-...E

Water: 0,5 – 5 L/h ... 13000 – 130000 L/h
Air: 0,015 – 0,15 m³N/h ... 240 – 2400 m³N/h
t_{max} 350 °C; p_{max} PN 40
Connection: Union nut DIN 11851
DN 20...100
Accuracy: ± 1,6 – 2,2 % of full scale

Electromagnetic Measurement
Model: MIK

High Quality - Low Cost

Water: 0,05 – 1 L/min ... 40 – 800 L/min
t_{max} 80 °C; p_{max} 10 bar
Connection: G ½...2¾ male thread
Accuracy: ± 2 % of full scale

Electromagnetic Measurement
Model: DMH

Water: 0 – 0,4 m³/h ... 0 – 2500 m³/h
t_{max} 150 °C; p_{max} PN 40
Connection: flange DN 15...300, ANSI ¾"...12"
Accuracy: ± 0,3% of reading
± 0,01% x Qmax

Contact Pressure Gauge with Diaphragm Seal, DIN 11851
Model: MAN-RF...M21...DRM-602

Measuring range: 0 – 1 bar ... 0 – 40 bar
Housing: Ø 100, 160 mm
Connection: Union nut DIN 11851
DN 20...100
Accuracy: Cl. 1,6

Pressure Gauge with Diaphragm Seal, DIN 11851
Model: MAN-RF...DRM-603

Measuring range: 0 – 1 bar ... 0 – 40 bar
Connection: Union nut DIN 11851
DN 25...100
Accuracy: Cl. 1,6

Pressure Gauge with Diaphragm Seal Clamp Connection
Model: MAN-RF...DRM-613

Measuring range: 0 – 2,5 bar ... 0 – 10 bar
Housing: Ø 100, 160 mm
Connection: Tri-Clamp 1"...3"
Accuracy: Cl. 1,6

Pressure Gauges Digital with Diaphragm Seals for Homogenizing Machines
Model: MAN-SD...DRM-189

Measuring range: 0 – 100 bar ... 0 – 1000 bar
Housing: Ø 74 mm
Connection: for block flange
Accuracy: Cl. 1,6

All Stainless Steel Bourdon Tube Pressure Gauge
Model: MAN-R

Measuring range: -1 – 0 bar ... 0 – 1000 bar
Housing: Ø 63, 100, 160 mm
Overload potection.: 1,15-1,3 times
Connection: G ¼, G ½ male thread
Accuracy: Cl. 1,0; 1,6

All Stainless Steel Bourdon Tube Pressure Gauge for Ex. Safety
Model: MAN-R...S

Measuring range: -1 – 0 bar ... 0 – 600 bar
Housing: Ø 63, 100, 160 mm
Overload potection.: 1-1,3 times
Connection: G ¼, G ½ male thread
Accuracy: Cl. 1,0; 1,6

Pressure Sensor with Ceramic Cell and Plug-On Display AUF
Model: SEN-87 with AUF

Measuring range: -1 – 0 bar ... 0 – 600 bar
Display: 4-digit LED
Overload potection.: 1,5-2 times
Connection: G ¼ male thread
Accuracy: Cl. 0,5; 1,0

Digital Pressure Gauges with Ceramic Sensor Element
Model: MAN-SD,-LD

Measuring range: -1 – 0 °C ... 0 – 1600 °C
Housing: Ø 74 mm
Display: LC-Display
Overload potection.: 1,3-3 times
Conn.: G ¼, G ½, ¼ NPT, ½ NPT male
Accuracy: Cl. 0,5

Digital Pressure Gauges with Ceramic Sensor Element
Model: MAN-SF,-BF

Measuring range: -1 – 0 bar ... 0 – 1600 bar
Housing: Ø 100 mm
Overload potection.: 2 times
Connection: G ½ male thread
Accuracy: Cl. 0,5

Pressure Switch with Ceramic Sensor Element
Model: PDD-1, -2

Measuring range: -1 – 0 bar ... 0 – 400 bar
Overload potection.: 1,5-2 times
Conn.: G ¼, G ½, ¼ NPT, ½ NPT male
Accuracy: ± 0,5 – 1 % of full scale

Food and Pharmaceutical

Pressure Switch with Ceramic Sensor Element
Model: PDD-5, -7

Measuring range: -1 – 0 bar ... 0 – 400 bar
Overload protection: 1,5-2 times
Conn.: G ¼, G ½, ¼ NPT, ½ NPT male
Accuracy: ± 0,5 – 1 % of full scale

Pressure Sensor with Ceramic Sensor Element
Model: PDA

Measuring range: -1 – 0 bar ... 0 – 400 bar
Connection: G ¼, G ½, ¼ NPT,
½ NPT male thread
Accuracy: ± 0,5 – 1 % of full scale

Conductive Switch
Model: LNK

Measuring range: 4 – 1500 mm
t_{max} 150 °C; p_{max} 10 bar
G ½ male G 1 male, LZE
Open-Collector

Head Mounted Transmitter for Conductive Probes
Model: LNR

t_{max} 80 °C
Open-Collector

Conductive Switch-Compact Probe
Model: LNK-K

Measuring range: 4 – 1500 mm
t_{max} 150 °C; p_{max} 10 bar
G ½ male thread, LZE
Open-Collector

Microwave Switch
Model: LNM

t_{max} 100 °C (150 °C for CIP) ; p_{max} 10 bar
G ½, M12x1,5 male thread, LZE
Open-Collector

Conductive Switch Liquids
Model: LNZ

t_{max} 100 °C (150 °C for CIP); p_{max} 10 bar
G ½ male thread, LZE
Open-Collector

Vibration Switch Liquids
Model: NWS-*2*ES...**

t_{max} 130 °C (150 °C for CIP); p_{max} 50 bar
R-/NPT-thread, DIN-/ANSI-flange,
Tri-Clamp, milk connection DIN 11851,
Aseptic DIN 11864, DRD-flange

Bypass Roller Indicator
Model: NBK-03,-06,-07,-10

Measuring range: 300 – 6000 mm
over 6000 mm 2-piece or multipart
t_{max} 400 °C; p_{max} PN 100
DIN-/ANSI-Flange, R-/NPT-thread
Accuracy: ± 1 mm (transm.)

Potentiometric Measurement
Model: LNP

Measuring range: 200 – 2000 mm
t_{max} 150 °C; p_{max} 10 bar
G 1, 1 NPT male thread
Accuracy: ± 1 % of full scale

Vibration Switch Bulk Materials
Model: NSV

Switching range: 230 – 3000 mm
Density: 0,06 kg/dm³
t_{max} 80 °C; p_{max} atmospheric
G 1½ male
1 relay, SPDT

Capacitive Switch Bulk Materials
Model: NSC

Switching range: 265 – 3000 mm
t_{max} 80 °C; p_{max} 0,5 bar
G 1 male thread, Adapter: G 1¼, G 1½,
round flange, weld-in sleeve
1 relay, SPDT

Rot. Vane Switch Bulk Materials
Model: NIR-722...NF1, NIR-722...VG6

Switching range: 120 – 4000 mm
t_{max} 80 °C; p_{max} 0,5 bar
G 1 male thread, Adapter: G 1¼, G 1½,
round flange, weld-in sleeve
1 relay, SPDT

Rot. Vane Switch Bulk Materials
Model: NIR-7200NG6, NIR-7220XF2

Switching range: 120 – 4000 mm
t_{max} 80 °C; p_{max} 0,5 bar
G 1 male thread, Adapter: G 1¼, G 1½,
round flange, weld-in sleeve
1 relay, SPDT

Resistance Temperature Probe with Connection Box
Model: LTS-A

Measuring range: -50 – 250 °C
p_{max} 10 bar
G ½, M12x1,5 male thread, LZE
Pt 100, 4...20 mA
Accuracy: Cl. A

Resistance Temperature Probe, Compact Version
Model: LTS-K

Measuring range: -50 – 250 °C
p_{max} 10 bar
G ½, M12x1,5 male thread, LZE
Pt 100, 4...20 mA
Accuracy: Cl. A

Food and Pharmaceutical

Shaft Thermometers acc. DIN 16205
Model: TNS

Measuring range: -40 – 40 °C ... 0 – 600 °C
p_{max} 25 bar
G ½...1, ½...1 NPT, DIN 11851, Tri-Clamp, helix probe
Accuracy: Cl. 1,0 ; 1,6

Capillary Thermometer acc. DIN 16206
Model: TNF

Measuring range: -40 – 40 °C ... 0 – 600 °C
p_{max} 25 bar
G ½...1, ½...1 NPT, DIN 11851, Tri-Clamp, helix probe
Accuracy: Cl. 1,0 ; 1,6

Digital-Thermometer
Model: DTM

Measuring range: -30 – 40 °C ... 0 – 400 °C
p_{max} 25 bar
G ½...1, ½...1 NPT
Analogue output, 2 limit contacts
Accuracy: Cl. 0,5

Thermowells for Shaft and Capillary Thermometer
Model: TSH

p_{max} 25 bar
G ½ male thread, welding sleeve

Inductive Conductivity Measuring System
Model: LCI

Measuring range: 0...2000 mS/cm
t_{max} 150 °C; p_{max} 10 bar
integrated Pt 100
Accuracy: ± 0,5 – 1 % of full scale

Turbidity Probe
Model: ATL

Measuring range: 0...500 ppm; 0...4 CU
t_{max} 90 °C; p_{max} 10 bar
Output: 4...20 mA
Accuracy: ± 2 % of full scale

Humidity/Temperature Meas.
Model: AFH-G

Measuring range: 30...100 % rH; -30...80 °C
t_{max} 80 °C
Outputs: 2 x 4...20 mA
Accuracy: >40% rH: ± 2,5% rH;
<40% rH: 3,5% rH

Humidity/Temperature Meas.
Model: AFK-G

Measuring range: 0...100 % rH;
-25...+125 °C
t_{max} 125 °C
Outputs: 2 x 4...20 mA
Accuracy: ± 2% rH

Humidity/Temperature Meas.
Model: AFK-G2

Measuring range: 0...100% rH; -60...200 °C
t_{max} 200 °C; p_{max} 25 bar
Outputs: 2 x 4...20 mA
Accuracy: ± 2% rH

Humidity Annex Switch
Model: AFS-G3

Measuring range: 30...100% rH
t_{max} 60 °C
Accuracy: ± 3% rH

Precision Hand-Held Thermometer
Model: HND-T105, -T205, -T110

Measuring range: - -65...+1768 °C
Sensor: Pt 100 or thermocouple types K, N, S
Option: Logger, alarm, control function
Accuracy: 0,03 % of full scale

Hand-Held Humidity Precision Measuring Unit
Model: HND-F

Measuring range: 0...100 % weight moisture
Option: Logger, alarm
Accuracy: 0,1 – 0,2 % of reading

Hand-Held Humidity Precision Measuring Unit
Model: HND-F110

Measuring range: 0...100 % weight moisture
Accuracy: from ± 0,2%

pH-, Redox- and Temperature Hand-Held Measuring Unit
Model: HND-R

Measuring range: pH: 0...14;
Redox: -1999...+2000 mV;
Temperature: -100...+250 °C
Accuracy: ± 0,01 pH; ± 0,1% of full scale

Electronic Multi-channel Data Logger
Model: ZLS

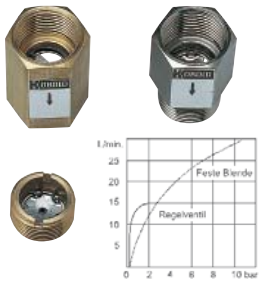
Input: 4-20 mA, Pt 100, Pt 500, Pt 1000 interface, sensor supply

Hygienic Mounting Systems
Model: LZE

t_{max} 250 °C; p_{max} 10 bar
M16x1,5 with sealing cone,
Adapter: R ¼, R ½, ½ NPT male thread
Seals: metallic, PEEK-ring

Assemblies

Flow Regulators
Model: REG



Viscosity range: 1 – 30 mm²/s
Flow rates: 0,5 – 40 L/min
t_{max} 300 °C; p_{max} 200 bar
G ½, G ¾, ¾ NPT

Flow Regulators - Multiple Element
Model: REG-8

Viscosity range: 1 – 30 mm²/s
Flow rates: 0,5 – 280 L/min
t_{max} 300 °C; p_{max} 200 bar
Flange DN 20...50

Flow Regulators - Multiple Element
Model: REG-9

Viscosity range: 1 – 30 mm²/s
Flow rates: 0,5 – 280 L/min
t_{max} 300 °C; p_{max} 200 bar
G 1½...G 2½

Brass Ball Valves
Model: KUG-TB, -VN, -VC

t_{max} 160 °C; p_{max} PN 40
G ¼...3
hand lever

Stainless Steel Ball Valves
Model: KUG-ZE, -KD

t_{max} 180 °C; p_{max} PN 64
G ¼...4 female thread
1-, 2- and 3-piece versions

Flange Ball Valves
Model: KUG-VK

t_{max} 180 °C; p_{max} PN 40
Flange DN 15...200
according to DIN 3202 F4/5

Stainless Steel-Flange-Ball Valves
Model: KUG-VK

t_{max} 180 °C; p_{max} PN 40
Flange DN 15...200
according to DIN 3202 F4/5

Ball Valves Shut-off for Measuring Device
Model: KUG-S

t_{max} 120 °C; p_{max} PN 25
G ½...2 female thread
Sensor mounting: G ¼, G ½

Ball Valves with Pneumatic Actuator
Model: KUP

Control pressure: 2 – 10 bar
Angle of traverse 90°
Torque: 5...30 Nm/bar

Brass Ball Valves with Pneumatic Actuator
Model: KUP-KA, KUP-VN

t_{max} 120 °C; p_{max} PN 16
G ½...4 female thread
Control pressure:: 6 – 8 bar
Single or Double acting
T- and L-bore

Stainless Steel-Ball Valves with Pneumatic Actuator
Model: KUP-ZA, -VH, VN, -PD

G ½...4 female thread
Control pressure:: 2 – 10 bar
Single and Double acting
T- and L-bore

Flange Ball Valves with Pneumatic Actuator
Model: KUP-VO

t_{max} 160 °C; p_{max} PN 16
Flange DN 15...200
Control pressure:: 6 – 8 bar
Single or double acting

Stainless Steel-Flange-Ball Valves with Pneumatic Actuator
Model: KUP-VK

t_{max} 160 °C; p_{max} PN 16
Flange DN 15...200
Control pressure:: 6 – 8 bar
Single or double acting

Accessoires for Pneumatic Actuator
Model: KUP-RE

3/2- and 5/2-way solenoid valve
several voltages, mechanical limit switch and proximity switch

Electric Actuators
Model: KUE

Power supply: 24 V_{DC}, 230 V_{AC}
additional limit switch, overload protection, optical position indicator, emergency manual operation

Brass Ball Valves with Electric Actuator
Model: KUE-KA, -VN

t_{max} 120 °C; p_{max} PN 16
G ¼...2
Power Supply: 24 V_{DC}, 230 V_{AC}
Through hole-, T- and L-bore

St. Steel-Flange-Ball Valves with Electric Actuator
Model: KUE-VH, -ZA, -PD

t_{max} 120 °C; p_{max} PN 16
G ½...G 2 female thread, weld-on sleeve DN 15...50
Power Supply: 24 V_{DC}, 230 V_{AC}
Through hole-, T- and L-bore

Brass Ball Valves with Electric Actuator
Model: KUE-CO

t_{max} 120 °C; p_{max} PN 6
G ½...2 female thread
Power Supply: 24 V_{DC}, 230 V_{AC}
full-bore

Flange Ball Valve with Electric Actuators
Model: KUE-VO

t_{max} 120 °C; p_{max} PN 16
Flange DN 20...50
Power Supply: 24 V_{DC}, 230 V_{AC}
according to DIN 3202 F4

Stainless Steel-Flange Ball Valve with Electric Actuators
Model: KUE-VK

t_{max} 160 °C; p_{max} PN 16
Flange DN 15...50
Power Supply: 24 V_{DC}, 230 V_{AC}
full-bore

Assemblies, Control Devices and Relays

Butterfly Valves
Model: KLA

t_{max} 200 °C; p_{max} PN 16
Flange DN 40...300
Seals: NBR, FKM, PTFE

Butterfly Valves with Pneumatic Actuator
Model: KLP

t_{max} 200 °C; p_{max} PN 16
Flange DN 40...300
Seals: EPDM, FKM
Control pressure: 6 – 8 bar
Double acting or spring resetting

Butterfly Valves with Electric Actuator
Model: KLE

t_{max} 200 °C; p_{max} PN 16
Flange DN 40...80
Seals: EPDM, FKM
incl. optical position indicator
emergency manual operation
2 additional limit switches

Needle Valve
Model: NAD-AC

t_{max} 100 °C; p_{max} PN 100
G ⅛...2 female thread

Outlet Globe Valves
Model: NAD-AB, -BF

t_{max} 130 °C; p_{max} PN 16
G ¼...3

Angle Seat Valves
Model: NAD-AD, -BE

t_{max} 180 °C; p_{max} PN 16
G ⅜...3 female thread

Needle Valve, Stainless Steel
Model: NAD-M, -Z

t_{max} 120 °C; p_{max} PN 250
G ⅛...1¼, ⅛...1 NPT

Check Valves
Model: KUR-TD, KUR-MR

t_{max} 110 °C; p_{max} PN 25
G ¼...4 female thread

Threaded Magnetic Filter
Model: MFR

t_{max} 200 °C; p_{max} PN 16
Rp ½...3 female thread
Filter grade: 280 µm

Flange Magnetic Filter
Model: MFF

t_{max} 200 °C; p_{max} PN 16
R ½...3, solding connection
22...35 mm, flange DN 50...200
Filter grade: 750 µm

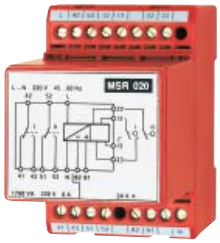
Magnetic Filter Dirt Trap
Model: MFR-IG, MFR-EA

t_{max} 180 °C; p_{max} PN 40
G ⅜...2 female thread
Filter grade: 250 µm

Air Eliminator
Model: ZAL

t_{max} 70 °C; p_{max} 10 bar
Flange DN 20...50, ANSI ¾"...2"
Filter grade: 40 – 200 µm

Contact Protection Relay
Model: MSR



Input: potential-free contacts
1 or 2 relay outputs, SPDT

Isolation Switching Amplifier for Initiators
Model: KFD-2, KFA-6

Input: Initatoren (Namur),
potential-free contacts
1 relay, SPDT

Sandwich Plug-On Display
Model: AUF

Input: 4-20 mA loop powered
Option: Open-Collector

KOBUS KOBOLD-BUS-System
Model: BUS

2-wire, Min/Max-values availlable
configuration with RS232
Plug- & Play-Software

Digital-Panel Mount-Indicators
Model: DAG

Input: current, voltage,
Temperatur, frequency
Analogue output, 2 limit contacts,
Min/Max-memory

Universal Indicator
Model: ADI-B...X

Input: current, voltage, frequency
Analogue output, 2 limit contacts,
sensor supply

Universal Indicator
Model: ADI-D...X

Input: current, voltage, frequency
Analogue output, 2 limit contacts,
sensor supply

Universal Indicator
Model: ADI-K...X

Input: current, voltage, frequency
Analogue output, 2 limit contacts,
sensor supply

Control Devices, Relays and Rotatary Encoders

Universal Indicator
Model: ADI-B...F

Input: current, voltage, frequency
Analogue output, 2 limit contacts, sensor supply

Universal Indicator
Model: ADI-D...S

Input: current, voltage, frequency
Analogue output, 2 limit contacts, sensor supply

Universal Indicator
Model: ADI-K...R

Input: current, voltage, frequency
Analogue output, 2 limit contacts, sensor supply

Universal Dosing Unit
Model: ADI-Z

Input: frequency, temperature, pressure
2 limit contacts

Electronic for Measuring and Monitoring
Model: ZED-K

Input: frequency
Analogue output, 2 limit contacts, sensor supply

Counter Electronics
Model: ZED-Z

Input: frequency
Analogue output, 2 limit contacts, sensor supply

Batch Controller
Model: ZED-D

Input: frequency
Analogue output, 2 limit contacts, sensor supply

Industrial Dosing, Counter- and Flow Indicator
Model: DAG-AXI

Input: frequency
4 limit contacts

Electronic Multi-Channel-Data Logger
Model: ZLS

Input: 4-20 mA, Pt 100, Pt 500, Pt 1000
interface, sensor supply

Compact Continuous Line and Dotted-Line Recorder
Model: KLS

Input: current, voltage, Pt 100, Pt 500, Pt 1000, thermocouples
4 limit contacts, interface

Micro Totaliser
Model: ZMZ-1S

Input: pulse totaliser

Mini Pulse Totaliser
Model: ZMZ-2S

Input: pulse totaliser
with hand zero point adjustment

Robust Counter for Bracket Mounting
Model: ZMZ-2R

Input: pulse totaliser
with/without hand zero point adjustment

Micro Totaliser For Rail Mounting
Model: ZMZ-9S

Input: pulse totaliser
DIN-rail mounting

Batch Counter with Indicated Preset
Model: ZMZ-5V

Input: pulse totaliser
1 relay, SPDT
Batch counter with hand zero point adjustment

Electronic Preset Totaliser
Model: ZEZ-2B

Input: pulse totaliser
1 relay N/C / N/O
Preset value with 6 keys adjustable

Miniature Incremental Rotary Encoder
Model: ZDI-AW

Max. number of revolutions: 12000 RPM
Max. impulse frequency: 160 kHz
t_{max} -20 – 85 °C

Miniature Incremental Rotary Encoder
Model: ZDI-AH

Max. number of revolutions: 12000 RPM
Max. impulse frequency: 160 kHz
t_{max} -20 – 85 °C

Incremental Rotary Encoder
Model: ZDI-BW

Max. number of revolutions: 12000 RPM
Max. impulse frequency: 300 kHz
t_{max} -20 – 70 °C

Incremental Rotary Encoder
Model: ZDI-BH

Max. number of revolutions: 12000 RPM
Max. impulse frequency 300 kHz
t_{max} -20 – 70 °C:

Rotary Encoders, Time Measurement

Incremental Rotary Encoder
Model: ZDI-CH

Max. number of revolutions:
6000 RPM
Max. impulse frequency: 300 kHz
t_{max} -20 – 70 °C

Incremental Rotary Encoder
Model: ZDI-DH

Max. number of revolutions:
6000 RPM
Max. impulse frequency: 300 kHz
RS422 or push-pull
t_{max} -20 – 80 °C

EX-Incremental Rotary Encoder
Model: ZDI-E

Max. number of revolutions:
6000 RPM
Max. impulse frequency: 300 kHz
RS422 or push-pull
t_{max} -20 – 60 °C

Absolute Rotary Encoder Singleturn
Model: ZDA-SW

Max. number of revolutions:
12000 RPM
Resolution: 13 bit
Parallel interface
t_{max} -20 – 80 °C

Absolute Rotary Encoder Singleturn
Model: ZDA-SH

Max. number of revolutions:
6000 RPM
Resolution: 14 bit
Parallel interface
t_{max} -20 – 80 °C

Absolute Rotary Encoder Multiturn
Model: ZDA-M

Max. number of revolutions:
6000 RPM
Resolution: 25 bit
SSI-interface, programmable
t_{max} -20 – 70 °C

EX Absolute Rotary Encoder, Singleturn
Model: ZDA-E

Max. number of revolutions:
6000 RPM
Resolution: 14 bit
Parallel interface
t_{max} -20 – 60 °C

Accessoires Rotary Encoder
Model: ZDZ

Plug
metal bellow clutches, flange,
Stator-coupling, fixing set

Electronic Service Hour Meter
Model: ZEC-1Z

Input: time totaliser
Display: 6-digit LED
optocoupler
Housing: 48 x 24 mm

Electronic Service Hour Meter
Model: ZEC-1K

Input: time totaliser, pulse totaliser
Display: 6-digit LED
Housing: 48 x 24 mm

Electronic Service Hour Meter
Model: ZEC-1M

Input: time totaliser, pulse totaliser,
Positionsanzeige, frequency
Display: 6-digit LED
optocoupler
Housing: 48 x 24 mm

Electronic Service Hour Meter
Model: ZEC-4Z

Input: time totaliser
Display: 6-digit LED
optocoupler
Housing: 96 x 48 mm

Electronic Service Hour Meter
Model: ZEC-4K

Input: time totaliser, pulse totaliser
Display: 6-digit LED
Housing: 96 x 48 mm

Electronic Service Hour Meter
Model: ZEC-4M

Input: time totaliser, pulse totaliser,
position indication, frequency
Display: 6-digit LED
optocoupler
Housing: 96 x 48 mm

Micro Service Hour Meter
Model: ZBS-1S

Input: time totaliser
Display: 7-digit
Housing: 32 x 15 mm

Mini Service Hour Meter
Model: ZBS-2S

Input: time totaliser
Display: 7-digit, 8-digit
Housing: 36 x 26 mm

Small Service Hour Meter
Model: ZBS-3S

Input: time totaliser
Display: 7-digit, 8-digit
Housing: 48 x 24 mm

Standard Hour Meter
Model: ZBS-4S

Input: time totaliser
Display: 7-digit, 8-digit
Housing: 48 x 48 mm

Combination of Time And Pulse Totaliser
Model: ZBS-4K

Input: time totaliser, pulse totaliser
Display: 7-digit, 8-digit
Housing: 48 x 48 mm

Service Hour Meter for DIN-Rail Mounting
Model: ZBS-9S

Input: time totaliser
Display: 6-digit
Housing: clip-on mounting