

PRODUCT SUMMARY

FLOW • Level • Pressure • Temperature • Analytics • Accessories





KOBOLD Instruments

For more than 35 years, KOBOLD has been a world leader in process measurement and control solutions. We offer one of the industry's broadest lines of sensors, switches, and transmitters to measure and control flow, pressure, level, and temperature. The KOBOLD brand is synonymous with quality, craftsmanship, technological advancement, and cost effectiveness. With in-house engineering and manufacturing, we are able to customize products to match your application. Our people and our products will go the extra mile for you. Our engineers and customer service representatives are ready to help you find the ideal KOBOLD solution for your most demanding applications.

KOBOLD's Product Line Includes:

•	Flow	Pages	6 - 19
•	Level	Pages	20 - 24
•	Pressure	Pages	25 - 29
•	Temperature	Pages	30 - 32
•	Analytics	Page	33
•	Accessories	Pages	34 - 35











The KOBOLD Group's production plants are located all over the world

Feature Icons: Look for our new "at a glance" icons in our product listings



Quality High Quality/ COST S LOW COST



Sensor Supply



Configurable Outputs



Stainless Steel Design



Installation Under **Process Conditions**



Operational with Gloves



For Chemicals



Scalable Analog Output



Temperature and Pressure Measurement



Shock Resistant



Rotatable Display



Temperature and Flow Measurement



Heating Jacket



Configurable Display



Patented



Battery Powered/ External Power Supply



Bi-directional



Space Saver



Battery Powered



Resettable and **Grand Total**





Product Table

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DRG

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KDG

Ryton® is a registered trademark of Chevron Phillips Chemical Company. Monel® is a registered trademark of Special Metals Corporation.



EW KOBOLD Products

Magnetic Inductive Flowmeter



Stainless Steel



Flow and Temperature Measurement



Switching Function



Resettable and **Grand Total**



2 Configurable **Outputs**



Operational with Gloves



Rotating Color Display



Space Saver



Learn More on Page 17

PSD Digital Pressure Sensor

- Economical Solution for Liquids or Gases
- Analog Output, Switchable 4-20 mA or 0-10 V
- **Switching Output with 2 PNP Transistors**
- Easy to Read and Program LED Display
- **Rotatable Display and Electrical Connection**
- Ranges Available from 0...30 to 0...7500 PSI





Learn More on Page 29



Featured Product Groups

Monitoring Bulk Media? Meet Our Solutions

NIR-9: Rotating Vane Switches

NMF: Membrane Switches

NSC: Capacitive Switches

NSV: Vibrating Switches

Learn More on Page 22



Communication for Process Automation

KOBOLD Offers Many Models With Communication Protocol





KSR/SVN

Flow Switch for Liquid or Gas Stainless Steel, Glass



Water: 0.03...4 GPH Air: 0.1...13 SCFH t_{max} 160 °F; p_{max} 230 PSIG Connection: 1/4" NPT

KSV

Economical Micro-Flowmeter

Bodies: Polysulfone Fittings: Stainless Steel or Brass



Water: 0.04...0.4 GPH to 2...20 GPH Air: 0.3...3 SCFH to 10...100 SCFH t_{max} 250 °F; p_{max} 87 PSIG Connection: 1/8" NPT Accuracy: ± 6% of Full Scale

KFR

Acrylic Flowmeter for Liquid or Gas Acrylic





 $\label{eq:water: 0.2...2} Water: 0.2...2 GPH to 2...20 GPM \\ Air: 0.1...1 SCFH to 10...100 SCFM \\ t_{max} 150 \,^\circ\!\!F; p_{max} 100 PSIG \\ Connection: 1/8" NPT, 1/4" NPT, 1" NPT \\ Accuracy: <math>\pm 2 - 5\%$ of Full Scale

KSK

All-Plastic Flowmeter with Optional SwitchPolyamide, Polysulfone

Polyamide, Polysullone



Water: 0.006...0.05 GPM to 11.8...60 GPM
Air: 0.06...0.27 SCFM to 3.5...18.3 SCFM
t_{max} 180 °F; p_{max} 145 PSIG
Connection: 3/8"...1" NPT
or Socket Glue-in Connection
Accuracy: Cl. 4 According to VDI

KSM

All-Plastic Flowmeter with Optional Switch Polyamide, Polysulfone



Water: 0.06...0.66 GPM to 35...264 GPM
Air: 0.5...3 SCFM to 50...400 SCFM
t_{max} 140 °F; p_{max} 145 PSIG
Connection: 1*...2-1/2" NPT
or Socket Glue-in Connection
Accuracy: Cl. 4 According to VDI

URB

Glass Tube Flowmeter



Water: 2.6...26 GPH to 26...260 GPH
Air: 11...110 SCFH to 110...1,100 SCFH
t_{max} 150 °F; p_{max} 43 PSIG
Connection: 1/2"...1-1/4" NPT
Accuracy: Cl. 4 According to VDI

KDF-2/KDG-2

Micro-Flowmeter and Switch

Stainless Steel

ATEX



Water: 0.025...2.5 l/h to 16...160 l/h Air: 0.5...5 Nl/h to 500...5,000 Nl/h t_{max} 100 °C; p_{max} 16 bar Connection: 1/4" NPT, G 1/4, 8 mm Hose Accuracy: ± 2.5 % $q_{s} = 50$ %

KDF-9/KDG-9

Micro-Flowmeter with Switch

Stainless Steel



 $\label{eq:water: 0.02...0.25 l/h to 10...100 l/h} % \begin{subarray}{ll} Air: 2...20 Nl/h to 300...3000 Nl/h & t_{max} 100\,^{\circ}\text{C}; p_{max}16 \ bar & \text{Connection: 1/4" NPT, G 1/4, 8 mm Hose Accuracy: $\pm 3 \ \% \ q_{_{G}} = 50 \ \% \end{subarray}$

SWK

Compact Variable Area Flowmeters and Switches

Brass, Stainless Steel, PVC



 $\begin{tabular}{lll} Water: 0.05...0.1 L/min to 13...24 L/min \\ t_{max} 210 °F; p_{max} 3,600 PSIG \\ Connection: G 1/2 \\ Accuracy: <math>\pm 4\%$ of Full Scale \\ \end{tabular}



URM

Glass Tube Flowmeter Stainless Steel, PVC



Water: 0.06...0.6 GPH to 11....110 GPM
Air: 0.11....1.1 SCFH to 30...300 SCFM
t_{max} 210 °F; p_{max} 230 PSI
Connection: 1/4"...3" NPT
Accuracy: Cl. 4 According to VDI

URK

Variable Area Flowmeter with Fixed Flange Stainless Steel



Water: 0.004...0.04 GPM to 66...220 GPM
Air: 0.011...0.11 SCFM to 30...300 SCFM
t_{max} 210 °F; p_{max} 230 PSIG
Connection: 1/2"...3" ANSI
Accuracy: Cl. 4 According to VDI

URL

Glass Tube Flowmeter with Flange PVC, PTFE



Water: 0.26...2.6 GPH to 66...660 GPH
Air: 0.35...3.5 SCFH to 350...3,500 SCFH
t_{max} 212 °F; p_{max} 85 PSIG
Connection: 1/2"...1-1/2" ANSI
Accuracy: CI. 4 According to VDI

V31

High Accuracy Variable Area Flowmeter/Switch Stainless Steel, PVC, PVDF





ATEX

Water: 0.3...3.3 GPH to 4.4...44 GPM
Air: 0.088...0.88 SCFM to 10.6...106 SCFM
t_{max} 176 °F; p_{max} 210 PSIG
Connection: 1/4"...2" NPT, 1/2"...1" ANSI
Accuracy: ±1.6% Liquids, ±2.5% Gases (VDI)

KDS

All Metal, Low Volume Variable Area Flowmeter

Stainless Steel



Water: 0.026...0.26 GPH to 5...50 GPH
Air: 0.1...1 SCFH to 20...200 SCFH
t_{max} 260 °F; p_{max} 580/910 PSIG
Connection: 1/4" NPT
Accuracy: ± 3% of Full Scale
Options: Analog Output, Inductive Contacts

BGK

All Metal, Low Volume Variable Area Flowmeter

Stainless Steel



ATEV





Water: 0.026...0.26 GPH to 5...50 GPH
Air: 0.1...1 SCFH to 20...200 SCFH
t_{max} 260 °F; p_{max} 580 PSIG
Connection: 1/2"...1" ANSI
Accuracy: ± 3% of Full Scale
Options: Analog Output, Inductive Contacts

USR

Glass Tube Flowmeters and Manifold Valves for Liquids

Brass



Water: 0.01...0.1 to 0.25...2.5 GPM

t_{max} 210 °F; p_{max} 230 PSIG
Inlet Connection: 1" NPT

Outlet Connection: 1/4" or 3/8" NPT, or Hose Conn.

Accuracy: Cl. 2.5 According to VDI

UVR/UTR

Glass Tube Variable Area Flowmeter with Needle Valve

Stainless Steel, POM



Water: 2.6...26 GPH to 52.8...528 GPH Air: 3.5...35 SCFH to 176...1,760 SCFH t_{max} 210 °F; p_{max} 145 PSI Connection: 3/8" NPT, 1/2" NPT Accuracy: Cl. 4 According to VDI

UTS

Variable Area Flowmeter for Gas Burners

Brass



Air: 0.40...4.0 SCFH to 10...100 SCFH t_{max} 150 °F; p_{max} 45 PSIG Connection: 1/4" NPT, G 1/4, M18x1.5 Accuracy: Cl. 4 According to VDI



BGN

All Metal Armored Variable Area Flowmeter

Stainless Steel, Special Materials on Request

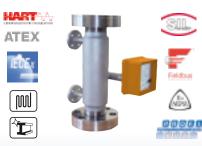


Water: 0.002...0.02 GPM to 60...570 GPM
Air: 0.008...0.08 SCFM to 140...1,400 SCFM
t_{max} 660 °F; p_{max} 580 PSIG
Connection: 1/2"...6" ANSI, 1/4"...2" NPT
Options: Analog Output 4-20 mA, Contacts
Accuracy: ±1.6 - 2.2% of Full Scale

BGN - HIGH PRES.

All Metal, High Pressure, Armored Variable Area Flowmeter

Stainless Steel, Special Materials on Request



Water: 0.002...0.02 GPM to 60...570 GPM
Air: 0.008...0.08 SCFM to 140...1,400 SCFM
t_{max} 660 °F; p_{max} 8,700 PSIG
Connection: 1/2"...6" ANSI
Options: Analog Output, BUS-Interface, Heat Jacket
Accuracy: ±1.6 – 2.2% of Full Scale

BGF

All Metal Variable Area Flowmeter Horizontal or Vertical Flow

Stainless Steel, Special Materials on Request













Water: 0.044...0.44 GPM to 26.4...264 GPM
Air: 0.17...1.7 SCFM to 100...1000 SCFM
t_{max} 390 °F; p_{max} 580 PSIG
Connection: 1/2"...3" ANSI, 1/4"...2" NPT
Options: Analog Output, BUS-Interface, Heat Jacket
Accuracy: ±1.6% of Full Scale

SV

Float Type Flowmeters and Switches Brass, Stainless Steel



Water: 0.075...0.35 GPM to 2.5...40 GPM Air: 0.25...1.25 SCFM to 10...150 SCFM t_{max} 210 °F; p_{max} 145 PSIG Connection: 1/4"...1-1/4" NPT Accuracy: ± 5% of Full Scale

S-SERIES

All Metal Variable Area Flow Switch for Liquids or Gases Brass, Stainless Steel



Water: 0.075...0.25 GPM to 1...14 GPM Air: 0.2...1.1 SCFM to 3...70 SCFM t_{max} 240 °F; p_{max} 5,000 PSIG Connection: 1/4"...3/4" NPT Accuracy: ± 5% of Full Scale

SMV

High Pressure, All Metal Flowmeter and Switch

Brass, Stainless Steel



 $\label{eq:water: 0.05...0.15 GPM to 4...40 GPM} % \begin{tabular}{ll} Air: 0.25...1.2 SCFM to 5...130 SCFM to 5...141 SCAN T$

SMO/SMW

High Pressure All Metal Flowmeter and Switch, Horizontal or Vertical Flow Brass, Stainless Steel



Water: 0.04...0.6 GPM to 8...34 GPM
Air: 0.2...3.5 SCFM to 30...130 SCFM
t_{max} 210 °F; p_{max} 5,000 PSIG
Connection: 1/4" ...3/4" NPT
Accuracy: ± 5% of Full Scale

SMN

All Metal Flow Switch for Liquids Horizontal or Vertical Flow

Brass, Stainless Steel



 $\begin{array}{c} \text{Water: 0.4...13 GPM} \\ \text{t_{max} 210 °F; p_{max} 5,000 PSIG} \\ \text{Connection: 1" NPT} \\ \text{Accuracy: $\pm 5\%$ of Full Scale} \end{array}$

VKP

Economical Plastic Flowmeter and Switch

Polysulfone



 $\label{eq:water: 0.5...5} \ensuremath{\mathsf{GPM}} \ensuremath{\mathsf{to}} \ensuremath{\mathsf{5...26}} \ensuremath{\mathsf{GPM}} \ensuremath{\mathsf{to}} \ensuremath{\mathsf{3...20}} \ensuremath{\mathsf{GPM}} \ensuremath{\mathsf{tmax}} \ensuremath{\mathsf{250}} \ensuremath{\mathsf{er}} \ensuremath{\mathsf{Fp}} \ensuremath{\mathsf{max}} \ensuremath{\mathsf{230}} \ensuremath{\mathsf{PSIG}} \ensuremath{\mathsf{CNnmax}} \ensuremath{\mathsf{24.5}} \ensuremath{\mathsf{CNnmax}} \ensuremath{\mathsf{CNnmax}} \ensuremath{\mathsf{24.5}} \ensuremath{\mathsf{CNnmax}} \ensuremath{\mathsf{NPT}} \ensuremath{\mathsf{NPT}}, \ensuremath{\mathsf{Solder}} \ensuremath{\mathsf{CNnmax}} \ensuremath{\mathsf{24.5}} \ensuremath{\mathsf{CNnmax}} \ensuremath{\mathsf{24.5}} \ensuremath{\mathsf{NPT}} \ensurem$



VKG

Viscosity Compensated Flowmeter and Switch Brass, Stainless Steel

Viscosity Range: 1...540 cSt Oil: 0.03...0.12 GPM to 2...21 GPM t_{max} 210 °F; p_{max} 175 PSIG Connection: 1/4"...1" NPT Accuracy: ± 5% of Full Scale

BVB



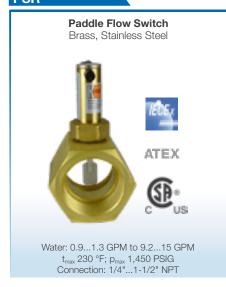
PPS



VKM

All Metal Viscosity Compensated Flowmeter and Switch Brass, Stainless Steel ATEX Viscosity Range: 1...540 cSt Oil: 0.03...0.12 GPM to 2...20 GPM t_{max} 210 °F; p_{max} 5,000 PSIG Connection: 1/4"...1" NPT Accuracy: ± 5% of Full Scale

PSR



LPS



VKA



PS/PSE







DWN/DWS

Paddle Bellows Flowmeter and Switch Brass, Stainless Steel, PVC



Water: 0.8...14.5 GPM to 13.2...158 GPM t_{max} 210 °F; p_{max} 230 PSIG Connection: 1/2"...2" NPT, 1/2"...2" ANSI Accuracy: ± 3 - 5% of Full Scale

DWD

Paddle Bellows Flowmeter and Switch Brass, Stainless Steel, PVC



Water: 0.26...2.6 GPM to 1,580...15,800 GPM t_{max} 250 °F; p_{max} 360 PSIG Connection: 3/8"...2" NPT, 3/8"...2" ANSI, Weld-on Flange 1-1/2"...20" Pipe Accuracy: ±1.5% of Full Scale

DRS

OEM Turbine Flow Sensor Brass, Stainless Steel, PPO



Accuracy: ±1.5% of Full Scale

DWU

Paddle Bellows Flowmeter and Switch Brass, Stainless Steel, PVC



Liquid: 0.26...1.3 GPM to 3,600...15,800 GPM t_{max} 210 °F; p_{max} 230 PSIG Connection: 3/8"...2" NPT, 1/2" ...2" ANSI, Weld-on Flange for 1-1/2"...24" Pipe Accuracy: ± 3 - 5% of Full Scale

TSK

Flap Style Flowmeter

Steel, Stainless Steel, PP, PVDF, Hastelloy®



Water: 6.6...26.4 GPM to 880...6,600 GPM t_{max} 570 °F; p_{max} 580 PSIG Connection: 1-1/2"...20" ANSI Wafer Accuracy: ± 2.5% of Full Scale

TUR

All Plastic Turbine Flowmeter PVC, PVDF



Water: 5...88 GPM to 11...440 GPM t_{max} 160 °F; p_{max} 145 PSIG Connection: 2" or 4" ANSI Accuracy: ±1% of Full Scale

DPT

Target Type Flowmeter

Brass, Stainless Steel



Water: 1.5...8 GPM to 225...500 GPM t_{max} 175 °F; p_{max} 580 PSIG Connection: 3/8"...3" NPT Accuracy: ± 3% of Full Scale

HND-F

Flow, Humidity, and Temperature Hand-**Held Measuring Unit**



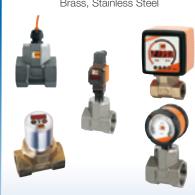
Measuring Range: Water: 0.16...16 ft/sec Air: 1.8...65 ft/sec Humidity: 0...100% rH Temperature: -40...250 °F, -110...480 °F Accuracy: from ±0.1% of Full Scale

DPE

Î

Paddle Wheel Flowmeter

Brass, Stainless Steel



Water: 1.5...8 GPM to 15...200 GPM t_{max} 175 °F; p_{max} 580 PSIG Connection: 1/2"...3" NPT Accuracy: ± 2.5% of Full Scale



DRB



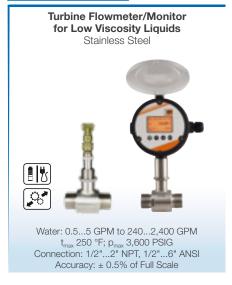
TUV



SFL



DOT



EDM





PEL-L





Water: 0.006...0.1 to 10...500 l/min $\rm t_{max}$ 135 °C; $\rm p_{max}$ 345 bar Connection: R 1/4...R 1/2, Wafer Flange DN 40/50, 1/2" Glue-in Connection, Hose-Connection Accuracy: ± 1.25% of Reading

PEL-M







DPL



Water: 0.4...8 GPH to 16...400 GPH t_{max} 160 °F; p_{max} 145 PSIG Connection: G 1/2, Hose Barb Accuracy: ± 2.5% - 5% of Full Scale

DF



DRG



KFF-1/KFG-1

Low Volume, Rotating Vane Flowmeter Brass, PTFE, PPS



Water: 13...100 mL/min to 1...10 L/min Air: 20...100 mL_N/min to 100...500 L_N/min to 100...500 L_N/m Accuracy: ± 3% of Full Scale

DFT

Compact Paddle Wheel Flow Sensor Brass



t_{max} 180 °F; p_{max} 230 PSIG Connection: 1/4"...3/4" NPT Accuracy: ± 2.5% of Full Scale

DTK

Pelton Wheel Flow Sensor Stainless Steel



Water: 0.8...9.5 GPH to 16...190 GPH t_{max} 280 °F; p_{max} 430 PSIG Connection: 1/4" NPT Accuracy: ± 2% of Full Scale

KFF-3/KFG-3

Low Volume, Rotating Vane Flowmeter Brass, PPS



Water: 13...100 mL/min to 1...10 L/min Air: 20...100 mL $_{\rm N}$ /min to 100...500 L $_{\rm N}$ /min t $_{\rm max}$ 120 °F; $p_{\rm max}$ 500 PSIG Connection: 1/8"...1/2" Compression Accuracy: ± 3% of Full Scale

DRH

Paddle Wheel Flow Sensor

POM, PVDF, Brass, Stainless Steel









Water: 0.05...0.2 GPM to 0.66...13.2 GPM t_{max} 175 °F; p_{max} 580 PSIG Connection: 3/8" NPT, 1" NPT Accuracy: ± 2.5% of Full Scale

LFM

Dual-Ring Piston Pendulum Flowmeter Stainless Steel



Water: 0.005...0.25 l/min t_{max} 80 °C; p_{max} 100 bar Connection: 1/8" NPT, G 1/8, Swagelok® 6 mm Accuracy: ± 2.5 % of Reading



DOR

Insertion Paddle Wheel Flowmeter Stainless Steel



Water: 5.5...180 GPM to 25,000...800,000 GPM, 1...33 ft/sec t_{max} 300 °F; p_{max} 1,160 PSIG Connection: 1-1/2" NPT, 2" NPT Linearity: ±1.5% of Full Scale

DRZ

Rotary Piston Flowmeter Brass





Viscosity Range: 5...100 cSt Oil: 1.6...110 GPH t_{max} 175 °F; p_{max} 580 PSIG Connection: 1/8" NPT, 1/4" NPT Accuracy: ±1% of Reading

OVZ

Economical Oval-Gear Flowmeter for Oils

POM, Aluminum









Viscosity Range: 10...800 cSt
Oil: 0.08...2.1 GPM to 0.42...10.6 GPM
tmax 175 °F; pmax 580 PSIG
Connection: 1/4"...3/4" NPT
Accuracy: ± 2.5% of Full Scale

DON

Positive Displacement Flowmeter Aluminum, Stainless Steel



Viscosity Range: 0...1,000,000 cP Oil: 0.13...9.5 GPH to 40...660 GPM t_{max} 300 °F; p_{max} 1,450 PSIG Connection: 1/8"...4" NPT, ANSI 1"...4" Accuracy: ± 0.2 - 1% of Reading

DON-H

Positive Displacement Flowmeter for High Pressures

Aluminum, Stainless Steel







Viscosity Range: 0...1,000,000 cP
Oil: 0.13...9.5 GPH to 0.26...10.6 GPM
t_{max} 250 °F; p_{max} 5,800 PSIG
Connection: 1/8"...1/2" NPT
Accuracy: ± 0.2 - 1% of Reading

DOE

OEM Oval Wheel Flowmeter Aluminum, Stainless Steel



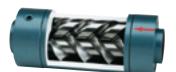




Viscosity Range: 0...1,000 cP Oil: 0.14...9.5 GPH to 0.27...10.56 GPM Connection: 1/8"...1/2" NPT, G 1/8...1/2 Accuracy: ± 1 % of Reading

OMG

Screw Type Flowmeter Cast Iron, Stainless Steel





Viscosity Range: 1...5,000 cSt
Oil: 0.026...2.6 GPM to 13...1,300 GPM
t_{max} 390 °F; p_{max} 6,000 PSIG
Connection: 1/2"...3" NPT, 1/2"...6" ANSI
Accuracy: ± 0.3% of Reading

OME

Helical Gear Flowmeter Aluminum





Viscosity Range: 1...5,000 cSt
Oil: 0.03...2.6 GPM to 0.92...92 GPM
t_{max} 250 °F; p_{max} 600 PSIG
Connection: 1/2"...1-1/2" NPT
Accuracy: ± 0.3% of Reading

DZR

Gear Wheel Flowmeter Cast Iron, Stainless Steel



-♦



Viscosity Range: 20...5,000 cSt
Oil: 0.008...2 l/min to 3...700 l/min
t_{max} 150 °C; p_{max} 400 bar
Connection: G 1/8...1

Accuracy: \pm 0.3 - 1% of Reading



KZA

Gear Wheel Flowmeter Aluminum



Viscosity Range: 20...4,000 cSt
Oil: 0.02...4 l/min to 1...200 l/min
t_{max} 80 °C; p_{max} 160 bar
Connection: G 1/4...1
Accuracy: ± 0.3 - 3% of Reading

KAL-K

Thermal Flow Switch Stainless Steel



KAL/KAL-E

Temperature Compensating Thermal Flow Switch Brass, Stainless Steel



ZDM

Positive Displacement Flowmeter Cast Iron, Stainless Steel



Viscosity Range: 0.3...1,000,000 cSt
Oil: 0.0005...0.5 GPM to 0.4...138 GPM
t_{max} 410 °F; p_{max} 6,500 PSIG
Connection: 3/8"...1-1/2" NPT
Accuracy: ± 0.3% of Reading

KAL-A

Thermal Flow Sensor Stainless Steel



Water: 0.15...6.6 ft/sec t_{max} 175 °F; p_{max} 1,450 PSIG Connection: 1/2"...3/4" NPT, 1-1/2" Tri-Clamp® Linearity: ±10% of Full Scale

DVK

Calorimetric Switch, Flowmeter, and Totalizer Stainless Steel



Air: 1...10 LPM to 600...12,000 LPM t_{max} 50 °C; p_{max} 15 bar Connection: G 1/4...G 2 Accuracy: ± 5% of Full Scale

KAL-D

Compact Thermal Flow Switch Stainless Steel



Water: 0.15...6.6 ft/sec t_{max} 175 °F; p_{max} 580 PSIG Connection: 1/4"or 1/2" NPT, M12 x 1

KAL-L

Thermal Air Flow Sensor Brass



Air: 3.3...65 ft/sec t_{max} 250 °F; p_{max} 120 PSIG Connection: 1/2" NPT, Duct Flange Accuracy: ±10% of Reading

KAH

Air Velocity Sensor Polycarbonate



Air: 0...2,000/3,000/4,000 ft/min Output Signal: 0-10 V_{DC} or 4-20 mA Supply Voltage: 24 $V_{AC/DC}$ Connection: Mounting Adapter Accuracy: \pm (0.2 m/s + 3% of Reading)



MAS

Mass Flowmeter for Gases Polyamide, Stainless Steel



Air: 0...10 SCCM to 0...500 SLPM t_{max} 120 °F; p_{max} 500 PSIG Connection: 1/4" NPT, 1/2" NPT; 1/4" or 1/2" Swagelok[®] Accuracy: ±1.5% of Full Scale

DMS

Digital Mass Flowmeter and Regulator Stainless Steel



 $\begin{array}{c} \text{Air: 0.1...3.7 to 0...185 NL/min} \\ t_{\text{max}} \ 120 \ ^{\circ}\text{F; p}_{\text{max}} \ 500 \ \text{PSIG} \\ \text{Connection:} \\ 1/4 \ ^{\circ}\text{ or } 1/2 \ ^{\circ}\text{NPT, } 1/8 \ ^{\circ}\text{...} 1/2 \ ^{\circ}\text{ Compression} \\ \text{Accuracy: } \pm 1\% \ \text{of Full Scale} \end{array}$

DMW



KME

Compact Inline Flowmeter Aluminum



Air: 0.12...44.4 to 1.3...500 SCFM t_{max} 140 °F; p_{max} 230 PSIG Connection: 1/2"...2" NPT Accuracy: ± 3.0% of Reading, ± 0.3% of FS

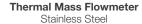
KMT-1/-2/-3





Air: 0.32...63 to 3.5...1,400 Nm/s t_{max} 176 °F; p_{max} 230 PSIG Connection: 1/2" ...2" NPT with Ball Valve Accuracy: ±1.5% of Reading, + (0.5 - 0.8 of Full Scale)

KMT-4





Air: 2.8...1,397 to 263...263,350 Nm³/s $t_{\text{max}} 80 \, ^{\circ}\text{C; p}_{\text{max}} 16 \text{ bar}$ Connection: R 1/2, Male for Insertion (DN 65 ... DN 700) Accuracy: $\pm 1.5\%$ of Reading, $\pm 0.8\%$ of Full Scale

KEC

Thermal Energy Flowmeter Stainless Steel



Air: 0.33...300 ft/sec to 0.33...735 ft/sec t_{max} 350 °F; p_{max} 1,450 PSIG Connection: 1/2"...2" NPT, 1/2"...3" ANSI Accuracy: \pm 1.5% of Reading, \pm 0.3% of FS

HPC

Mini Coriolis Mass Flowmeter Stainless Steel



Water: 0...44 lbs/hr to 0...350 lbs/hr t_{max} 350 °F; p_{max} 5,800/8,700 PSIG Connection: 1/2" NPT, Gryolock/Swagelok Accuracy: ±0.15% of Reading

TME/UMC-4

Coriolis Mass Flowmeter Stainless Steel



Water: 2.2....22 lbs/min to 220...2,200 lbs/min t_{max} 350 °F; p_{max} 580 PSIG Connection: 1/2"...3" ANSI Accuracy: ± 0.15% of Reading ± Zero-point Stability



TMU/UMC-4





Water: 0...1,320 lbs/hr to 0...2,200 tons/hr t_{max} 500 °F; p_{max} 580 PSIG Connection: 1/2"...16" ANSI, 1/4" NPT, 1/2" NPT Accuracy: $\pm 0.1\%$ of Reading \pm Zero-point Stability

TMU/UMC-3

Coriolis Mass Flowmeter Stainless Steel, Hastelloy®



Water: 0...1,320 lbs/hr to 0...2,200 tons/hr t_{max} 500 °F; p_{max} 580 PSIG Connection: 1/2"...12" ANSI Accuracy: ±0.1% of Reading ± Zero-point Stability

TMU-..AC

Coriolis Mass Flowmeter with Heating Jacket

Stainless Steel, Hastelloy®



t_{max} 500 °F; p_{max} 580 PSIG Connection: 1/2"...12" ANSI Accuracy: ±0.1% of Reading ± Zero-point Stability

TM/UMC-3

Coriolis Mass Flowmeter Stainless Steel, Hastelloy®, Monel®, Tantalum, Nickel



Water: 0.003...0.3 lbs/min to 220...2,400 lbs/min t_{max} 500 °F; p_{max} 580 PSIG Connection: 1/4"...1/2" NPT, 1/2"...4" ANSI Accuracy: ±0.1% of Reading ± Zero-point Stability

KPL

Differential Pressure Orifice Plate Steel, Stainless Steel, Hastelloy-C®, Titanium, Monel®, Tantalum



Ranges: for Liquids, Gases, Steam Connection: ANSI 2"...24", DN 50...600 t_{max} 500 °C; p_{max} PN 420 According to ISO 5167-1

ANU

Differential Pressure Pitot Tube Stainless Steel



Shown with Model PAD Connection: 1"...2" NPT, G1...2, DN ANSI 1"...4", 25...100 Probe Length: 50...8000 mm (2"...315") t_{max} 900 °C; p_{max} PN 250

DUS

Differential Pressure Nozzle Steel, Stainless Steel



t_{max} 560 °C; p_{max} 420 bar

DVT

Differential Pressure Venturi Tube Steel, Stainless Steel



KEL

Differential Pressure Flowmeters

Brass, Stainless Steel





Water: 0.1...0.5 GPM to 400...2,000 GPM t_{max} 250 °F; p_{max} 230 PSIG Connection: 1/2"...1-1/2" NPT, 1/2"...8" ANSI Wafer Accuracy: ± 2 - 5% of Full Scale



RCD

Differential Pressure Flowmeter Brass, Stainless Steel



Water: 0.2...0.88 GPM to 100...600 GPM t_{max} 210 °F; p_{max} 580 PSIG Connection: 1/2"...3" NPT Accuracy: ± 3% of Full Scale

RCM

Direct Reading Flowmeter Bronze, Monel®, Stainless Steel



Water: 0.3...2 GPM to 400...3,000 GPM Air: 1.5...10 SCFM to 3,000...20,000 SCFM t_{max} 350 °F; p_{max} 400 PSIG Connection: 1/4"...3" NPT, 1/2"...8" ANSI Wafer Accuracy: ± 3% of Full Scale

MIM

All-Metal Electromagnetic Flowmeter Stainless Steel



@ 10-Link













t_{max} 158 °F; p_{max} 230 PSIG Connection: 1/4"...3/4" NPT Accuracy: $< \pm (0.8\% \text{ of Reading} + 0.5\% \text{ of Full Scale})$

MIK

Economical Magmeter

PPS/Stainless Steel, PVDF/Hastelloy®/Tantalum



Water: 0.18...7.8 GPH to 9.5...180 GPM t_{max} 176 °F; p_{max} 145 PSIG Connection: 1/4"...2" NPT or Glue Socket Accuracy: ± 2% of Full Scale

PIT

Insertion Magnetic Flowmeter Stainless Steel, PTFE or PFA Clad



t_{max} 300 °F; p_{max} 580 PSIG Connection: Weld-on, 2" or 3" ANSI Accuracy: $\pm 1.5\%$ of Reading, $\pm 0.5\%$ of Full Scale

PITE

Insertion Magnetic Flowmeter Stainless Steel, PTFE or PFA Clad



Water: 3.3...33 ft/sec t_{max}100 °C; p_{max} PN 16 Connection: ANSI 3"...16", Weld-on Nozzle ø 40 mm, Sensor with Union Nut M52x2 for Pipelines DN 80...400 Accuracy: ± 1.5% of Full Scale

DMH

Magnetic-Inductive Flowmeter Lining: Hard or Soft Rubber, PTFE/PFA



Water: 0.29...26.4 GPM to 431.6...43,333 GPM t_{max} 300 °F; p_{max} 580 PSIG Connection: 1/2"...24" ANSI Accuracy: ± 0.3% of Full Scale ± 0.01% x Qmax

DVZ

Vortex Flowmeter, Switch, Transmitter, and Totalizer

PPS/Brass, PPS/Stainless Steel



Water: 0.13...1.2 GPM to 2.6...26.5 GPM t_{max} 176 °F; p_{max} 290 PSIG Connection: 1/4"...1" NPT Accuracy: ± 2.5% of Full Scale

DVH

Multivariable Vortex Flowmeter Stainless Steel



Water: 0.89...22 GPM to 141...4,270 GPM Air: 1.8...18 SCFM to 2,071...203,000 SCFM t_{range} -328...750 °F; p_{max} 1,450 PSIG Connection: 1/2"...8" ANSI Option: Integrated Temperature and Pressure Sensor, Wafer Type Accuracy: ±1% Reading for Gas & Steam, ± 0.7% Reading for Liquids



DVE

Vortex Flowmeter Stainless Steel



Water: 5.2...157 to 284...8,537 m³/h
Air: 889...1,463 Nm³/h to
26,915...2,467,081 Nm³/h
t_{max} 400 °C; p_{max} 100 bar
Connection: 2" NPT, ANSI 2"
Suitable for Pipe Sizes 3"...24"
Option: Integrated Temp. and Pressure Sensor,
Installation/Removal Device
Accuracy: ±1.2% of Reading (Water),
±1.5% of Reading (Gas/Steam)

DOG-4

Oscillation Flowmeter for Gases Stainless Steel



Air: 0.12...12 m³/h to 60...6,000 m³/h
Pressure Drop Max: 50 mbar
t_{max} 120 °C (for EX 60°C); p_{max} PN 40
Connection:
ANSI 1"...8", Flange DN 25...200

ANSI 1"...8", Flange DN 25...200 Accuracy: \pm 1.5% of Reading

DOG-5

Oscillation Flowmeter for Gases Stainless Steel



 $\begin{array}{lll} Water: 0.075...3.75 \text{ m}^3\text{/h to } 70...3,500 \text{ m}^3\text{/h} \\ t_{max} \ 120\,^\circ\text{C}; p_{max}\text{PN } 40 \\ \text{Connection:} \\ \text{ANSI 1"} ... 8", Flange DN 25...200 \\ \text{Accuracy: } \pm 0.5\% \text{ of Measured Value} \end{array}$

DUK

Compact Ultrasonic Flowmeter

Brass, Stainless Steel



Water: 0.02...5 GPM to 0.6...160 GPM Turndown Ratio: 250 to 1 $t_{\text{max}}\ 248\ ^{\circ}\text{F; }p_{\text{max}}\ 230\ PSIG \\ \text{Connection: }1/2"...3"\ NPT \\ \text{Accuracy: }\pm\ 0.7\%\ \text{of Reading }\pm\ 0.7\%\ \text{of Full Scale}$

DUC

Clamp-on Ultrasonic Flowmeter for Portable or Stationary Installations



t_{ranga} -40...300 °F
Flow Velocities: 0...98 ft/sec
Pipe Sizes: 3/8"...20 ft
For Use with Common Pipe Materials with Ultrasonic
Conductive Properties like Steel and Plastic
Heat Quantity Measurement
Accuracy: up to 1%

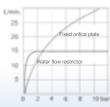
REG

Automatic Flow Regulating Valve

Brass, Stainless Steel







Viscosity Range: 1...30 cSt Flow Rates: 0.13...10.56 GPM t_{max} 572 °F; p_{max} 2,900 PSIG Connection: 3/4" NPT

REG-8/-9

Automatic Flow Regulating Valve Stainless Steel



Viscosity Range: 1...30 cSt Flow Rates: 0.25...74 GPM t_{max} 570 °F; p_{max} 2,900 PSIG Connection: 3/4"...2" ANSI Wafer, 1-1/2"...2-1/2" BSP

DAA/DAH

Flow Indicator with or without Rotor and Self-Cleaning Mechanism

Brass, Stainless Steel



Water: 0.1...1.0 GPM to 2.12...26.4 GPM t_{max} 212 °F; p_{max} 232 PSIG Connection: 1/4"...1-1/2" NPT

DAF

Paddle Wheel Flow Indicator for Liquids

Brass, Stainless Steel, Polysulfone



Water: 0.16...0.16 GPH to 100...2,400 GPH t_{max} 230 °F; p_{max} 235 PSIG Connection: 1/8"...1-1/2" NPT



DIH

Rotating Vane Flow Indicator Brass, Stainless Steel, POM, PVDF



Water: 0.05...0.13 GPM to 0.26...13.2 GPM t_{max} 176 °F; p_{max} 230 PSIG Connection: 3/8" or 1" NPT

DIG

Rotating Vane Flow Indicator PP, Brass, Stainless Steel



Water: 0.13...3.2 GPM to 0.79...21 GPM t_{max} 176 °F; p_{max} 230 PSIG Connection: 1/8"...1" NPT

DAB

Flow Indicator with Ball Bronze



t_{max} 100 °C; p_{max} 6 bar Connection: G 3/4...G 3

DKB

Flow Indicator with Ball
Brass



Water: 0.014...4 GPM to 0.047...27 GPM Air: 0.11...14 to 0.32...88 SCFM t_{max} 250 °F; p_{max} 85 PSIG Connection: 1/8"...1" NPT

DKF

Paddle Wheel Flow Indicator for Liquids
Brass



Water: 0.04...0.5 GPM to 0.5...22 GPM t_{max} 250 °F; p_{max} 85 PSIG Connection: 1/8"...1" NPT

DAZ

Referencing Flap Flow Indicator Red Brass



 t_{max} 390 °F; p_{max} 230 PSIG Connection: 1/2"...1" NPT

DAK

Flow Indicator with Flap

Grey Cast Iron, Cast Steel, Stainless Steel





t_{max} 530 °F; p_{max} 580 PSIG Connection: 1/4"...2" NPT, 1/2"...8" ANSI

DAR

Flow Indicator with Rotor

Grey Cast Iron, Cast Steel, Stainless Steel





 t_{max} 500 °F; p_{max} 580 PSIG Connection: 1/4"...2" NPT, 1/2"...8" ANSI

DAT

Flow Indicator with Drip Tube

Grey Cast Iron, Cast Steel, Stainless Steel





t_{max} 530 °F; p_{max} 580 PSIG Connection: 1/4"...2" NPT, 1/2"...8" ANSI



M-SERIES





NCS

Magnetic Float Switch Stainless Steel



Specific Gravity_{min}: 0.65 t_{max} 300 °F; p_{max} 400 PSIG Connection: 1/8" NPT, 1/4" NPT

NCP

Magnetic Float Switch Polypropylene



Specific Gravity_{min}: 0.81 t_{max} 225 °F; p_{max} 100 PSIG Connection: 1/8" NPT, 1/4" PF

OEM

OEM Level Switches Stainless Steel, Polypropylene, **PVDF**



Specific Gravity_{min}: 0.55 t_{max} 250 °F; p_{max} 425 PSIG Connection: 1/2" NPT, 1/8" PF

NKP

Side-Mount Plastic Level Switch Polypropylene, PVDF

Density: 0.5 kg/dm³

t_{max} 300 °F; p_{max} 1,450 PSIG Connection: NPT, DIN/ANSI Flange



Specific Gravity_{min}: 0.6 t_{max} 212 °F; p_{max} 145 PSIG Connection: 1/2" NPT, Bulkhead

RFS

Side-Mount Level Switch Stainless Steel



Specific Gravity_{min}: 0.7 t_{max} 248 °F; p_{max} 72 PSIG Connection: 1/2" NPT

NV

Side-Mount Level Switch Brass, Stainless Steel



Specific Gravity_{min}: 0.63 t_{max} 230 °F; p_{max} 230 PSIG Connection: 3/4" NPT

NCM

Custom Mini Multipoint Switch Brass, NBR, PP, Stainless Steel



t_{max} 300 °F; p_{max} 400 PSIG Connection: 1/8"...1" NPT, 5/16 Tube End

NCG

Custom Multipoint Level Switch PVC, Stainless Steel, NBR, PP



NBA/NBE

Bypass Level Switch Aluminum, Stainless Steel



Density: 0.65 kg/dm³ t_{max} 90°C; p_{max} 10 bar Connection: G 3/8 Female, R 1/2 Male

NSP/NSM

Float Level Switch Polyethylene, Polypropylene



Specific Gravity_{min}: 0.6 t_{max} 185 °F; p_{max} 30 PSIG Connection: Cable

NEC/NAB

Float Level Switch Polypropylene, Hypalon®



Connection: Cable

3" ANSI Flange, 1/2" Tube End



NST

Float Level Switch



Specific Gravity_{min}: 0.79 t_{max} 302 °F; p_{max} 15 PSIG Connection: Cable

NSE

Float Level Switch Stainless Steel



Specific Gravity_{min}: 0.8 t_{max} 302 °F; p_{max} 220 PSIG Connection: 1/2" NPT

NGS

Heavy Duty Level Switch Stainless Steel



Consider Carriety 10.7

Specific Gravity_{min}: 0.7 t_{max} 480 °F; p_{max} 360 PSIG Connection: 2" NPT, Square Flange, DIN-Flange

NEK/NEL/NES

Conductive Level Switch

Fitting: SS, Polypropylene, PTFE Electrode: SS, Hastelloy®, Titanium Electrode Coating: Polyolefin, PTFE



t_{max} 300 °F; p_{max} 440 PSIG Connection: 1/2" NPT, 1-1/2" NPT Up to Six Switch Points

NEH

Cable-Suspended Conductive Level Switch

Fitting: Polypropylene, PTFE Electrode: SS, Hastelloy®, Titanium Electrode Coating: Neoprene, PVC



t_{max} 300 °F; p_{max} 90 PSIG Connection: 1/2" NPT, 1-1/2" NPT Up to Six Switch Points

NE-104/-304

Power Supply Relays for Conductive Switches





1 or 2 Limit Contacts or 1 or 2 Min/Max Control Switches Switch Capacity: Max. 250 V_{AC}, 5 A, 600 VA

NEK

Compact Conductive Level Switch Polypropylene, PPS



Conductivity_{min}: 100 µS/cm t_{max} 185 °F; p_{max} 290 PSIG Connection: 3/4" NPT, R 3/4 Open-Collector or Relay

LNK/LNR

Conductive Switch with Head Mounted Transmitter

Stainless Steel, PEEK



Conductivity_{min}: 10 µS/cm t_{max} 212/176 °F; p_{max} 145 PSIG Connection: G 1/2, G 1, Tri-Clamp® Open-Collector Electrode Length: 1/8" to 59"

LNK-K

Compact Conductive Level Switch Stainless Steel, PEEK



Conductivity_{min}: 10 µS/cm t_{max} 300 °F; p_{max} 145 PSIG Connection: G 1/2, Tri-Clamp®

LNM

Microwave Level Switch Stainless Steel, PEEK



Dielectric Constant_{min}: 20 t_{max} 212 °F; p_{max} 145 PSIG Connection: G 1/2, Tri-Clamp® Open-Collector

LNZ

Capacitive Level Limit Switch Stainless Steel, PEEK



Dielectric Constant_{min}: 20 t_{max} 212 °F; p_{max} 145 PSIG Connection: G 1/2, Tri-Clamp® Open-Collector

NCW/NCW-H

Capacitive Level Switch Stainless Steel, PVDF



Dielectric Constant_{min}: 1.5 t_{max} 194/257 °F; p_{max} 145/435 PSIG Connection: 1" NPT, G 1, G 2 Adapter: 2" NPT, G 1-1/4, G 1-1/2, Weld-in Sleeve Relay



OPT



Open-Collector

TED



NSD



NK-8000



NWP

NVI



NWS



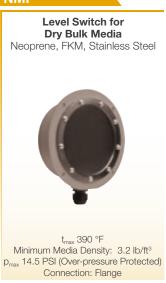
NDT







NMF









NSC

Capacitive Level Switch for Bulk Media Stainless Steel, Polypropylene



Dielectric Constant_{min}: 1.5 Switching Range: 10"....49 ft t_{range} -4....176°F; p_{max} 7 PSIG Connection: 1" NPT, 2" NPT, G 1 Adapter: G 1-1/4, G 1-1/2, Round Flange

NGM

Guided Wave Radar Level Transmitter Stainless Steel, PTFE



t_{max} 480 °F; p_{max} 580 PSIG Connection: Thread, Flange Rigid Probe, Concentric Probe, Cable Analog Output and Switching Output Accuracy: ±3 mm of Measured Value

NGR

Guided Wave Radar Transmitter Stainless Steel



Measuring Range: 4"...78" t_{max} 212°F; p_{max} 145 PSIG Connection: 3/4" NPT, G 3/4 Male Analog Output, Switching Outputs Sensor Accuracy: ±0.2

MM

Reed Chain Level Sensor Stainless Steel, PVC, PP, PVDF



Max. Measuring Length: 19.6 ft

Density: 0.4 kg/dm³

t_{max} 265°F; p_{max} 435 PSI

connection: 3/8" ... 2" NPT,

1-1/2" ... 4" ANSI

Accuracy: ± 0.5% for L < 6.2 Feet

NML-308

Liquid Level Transducer Polyethylene, PVC, PP, PTFE



NML-310

Liquid Level Transducer Polyethylene, PVC, PP, PTFE



Specific Gravity_{min}: 0.8 Length_{max}: 12"...108" t_{max} 250°F; p_{max} 40 PSIG Connection: 2" NPT, 2"...4" ANSI

NMT

Magnetostrictive Level Transmitter

Stainless Steel



Specific Gravity_{min}: 0.7...1.0 Measuring Range: 12"...157" t_{range} -4...158 °F; p_{max} 145 PSIG Connection: 2" NPT, G 2 Output: Analog 4-20 mA, 4-wire

NMC

Capacitive Level Transmitter Stainless Steel, PVDF





Measuring Range: 11"...157"
Dielectric Constant_{min}; 1.5
t_{max} 257 °F; p_{max} 435 PSIG
Connection: 1" NPT, 2" NPT, G 1, G 2
Adapter: G 1-1/4, G 1-1/2,

ATEX

Weld-in Sleeve Output: Analog 4-20 mA, 2 Wire

NRF

Capacitive Level and Temperature Transmitter Stainless Steel, PTFE

t_{max} 250°F; p_{max} 25 PSIG Connection: 1-1/4" NPT or 1-1/2" NPT



Rigid Probe and Suspended Cable Designs Length_{max}: 200 ft. t_{range} -100...350 °F; p_{max} 500 PSIG Connection: 3/4" NPT, 1-1/2" NPT, 1-1/2" ... 2" Tri-Clamp®

NRF-1F

Capacitive Level Transmitter with Integrated Concentric Grounding Probe

Stainless Steel, PTFE



Max. Length: 10 ft t_{max} 350 °F; p_{max} 14.5...100 PSIG Connection: 3/4" or 1-1/2" NPT Output: 4-20 mA Accuracy: ± 1% of Span

NRF-2/-3

Capacitive Level and Temperature Transmitter

Stainless Steel, PTFE



Measuring Length_{max}: 12 ft t_{range} -100...350 °F p_{max} 100 PSIG Connection: 3/4" NPT, 1-1/2"...3" Tri-Clamp® Output: 4–20 mA, RTD

PAD-N

Differential Pressure Transmitter with Diaphragm Seal

Stainless Steel, Monel®, Tantalum, Hastelloy®, PTFE



Level: 0...2,500 mmWC to 0...150 mWC

t_{max} 200 °C

Connection: Flange via Neck Tube

DN 50 or Bigger

Accuracy: ±0.075% of Calibrated Span

+ Influence of Diaphragm Seal



SZM







NBK-M



NBK-03 to -33



NBK-04



NBK-16/-17



BA



NUS-4



NUS-7



NEO



KPW







MAN-R

Bourdon Tube Pressure Gauges Brass



Measuring Range:
-30"...0" Hg to 0...14,500 PSIG
Housing Ø: 63, 80, 100, 160 mm
Overload Protection: 1.15 - 1.3 Times
Connection: 1.14" NPT, 1/2" NPT
Accuracy: ±1.0% or ±1.6% of Full Scale

MAN-R

Bourdon Tube Pressure Gauges Stainless Steel



Measuring Range:
-30"...0" Hg to 0...14,500 PSIG
Housing Ø: 63, 80, 100, 160 mm
Overload Protection: 1.15 - 1.3 Times
Connection: 1/4" NPT, 1/2" NPT
Accuracy: ±1.0% or ±1.6% of Full Scale

MAN-N...S

Bourdon Tube Pressure Gauges



Measuring Range:
-30"...0" Hg to 0...30,000 PSIG
Housing Ø: 63, 100, 150 mm
Overload Protection: 1.15 - 1.25 Times
Connection: 1/4" NPT, 1/2" NPT
Accuracy: ±1.0% or ±1.6% of Full Scale

MAN-T

Bourdon Tube Pressure Gauges for Refrigeration

Brass, Stainless Steel



Measuring Range: -1...9 to -1...40 bar Housing Ø: 63, 100, 160 mm Overload Protection: 1.0 Times Connection: 7/16-20 UNF, G 1/4 Accuracy: ±1.0% or ±1.6% of Full Scale

MAN-K

Capsule Element Pressure Gauge Brass. Stainless Steel



Measuring Range: -10...0 to 0...600 mbar
Housing Ø: 63, 80, 100, 160 mm
Overload Protection: 1.3 - 10 Times
Connection: G 1/4, G 1/2
Accuracy: ±1.6% of Full Scale

MAN-P

Diaphragm Pressure Gauge Stainless Steel



Measuring Range: -16...0 to 0...40 bar Housing Ø: 100, 160 mm Overload Protection: 1.15 - 1.3 Times Connection: 1/2" NPT Optional: Contact Accuracy: ±1.6% of Full Scale

MAN-ZF

Pressure Gauge with Transducer Stainless Steel





Measuring Range:
-30"...0" Hg to 0...8,700 PSIG
Housing Ø: 100 mm
Overload Protection: 0.9 - 1.0 Times
Connection: 1/2" NPT
2-wire, 4-20 mA Output
Accuracy: ±1.0% of Full Scale

DSD

LCD Pressure Gauge with Ceramic Sensing Element Battery Powered

Stainless Steel/PA Fiberglass Reinforced



Measuring Range:
-30"...0" Hg to 0...20,000 PSIG
Housing Ø: 80 mm
Overload Protection: 1.3 - 3 Times
Connection: 1/4" NPT, 1/2" NPT
Accuracy: ± 0.5% of Full Scale

MAN-LD

LCD Pressure Gauge with Ceramic Sensing Element Externally Powered

Stainless Steel/PA Fiberglass Reinforced



overload Protection: 1.74" NPT, 1/2" NPT
Accuracy: ± 0.5% of Full Scale

MAN-F

Test Pressure Gauge with Bourdon Tube Aluminum



Measuring Range:
-8.5"...0" Hg to 0...8,700 PSIG
Housing 0: 160, 250 mm
Overload Protection: 0.9 - 1.3 Times
Connection: 1/2" NPT
Accuracy: ± 0.25% or
± 0.6% of Full Scale

PDC

LCD Pressure Gauge with Ceramic or Thin Film Sensing Element - Battery Powered

Stainless Steel



Measuring Range:
0...30 PSIG to 0...10,000 PSIG
Housing Ø: 80 mm
Overload Protection:
2 Times or 14,500 PSIG Max.
Connection: 1/4" NPT
Accuracy: ± 0.5% of Full Scale ±1 Digit

MAN-U

Differential Pressure Gauge with Double Diaphragm

Stainless Steel



Measuring Range:
0...100 mbar to 0...25 bar
Static Pressure on Both Sides: 200 bar
Housing Ø: 100 or 150 mm
Connection: 1/4" NPT, 1/2" NPT
Accuracy: Cl. 1.6



DSF26

LED Pressure Gauge with Ceramic Sensing ElementStainless Steel/PA Fiberglass



Measuring Range:
-14.7...5,800 PSIG
Housing Ø: 100 mm
Overload Protection: 1.5 - 2 Times
Connection: 1/4"...3/4" NPT
4-20 mA and Relay Contacts
Accuracy: ± 0.5% of Full Scale ± 1 Digit

MAN-BF20

LED Differential Pressure Gauge with Ceramic Sensing Element

Stainless Steel/PA Fiberglass Reinforced



Measuring Range:
-30"...0" Hg to 0...23,000 PSID
Housing Ø: 100 mm
Overload Protection: 2 Times
Connection: 1/2" NPT
4-20 mA and Relay Contacts
Accuracy: ± 0.5% of Full Scale

MAN-BF26

LED Differential Pressure Gauge with Ceramic Sensing Element

Stainless Steel/PA Fiberglass Reinforced



Measuring Range:
-30"...0" Hg to 0...23,000 PSID
Housing Ø: 100 mm
Overload Protection: 2 Times
Connection: 1/4" NPT, 1/2" NPT
4-20 mA and Relay Contacts
Accuracy: ± 0.5% of Full Scale

MAN-DG12R

Differential Pressure Gauge with Bourdon Tube

Aluminum, Steel



Measuring Range:
0...15 PSID to 0...870 PSID
Housing Ø: 160 mm
Connection: on Request
Optional: Contacts
Accuracy: ±1.6% of Full Scale

DRM

Diaphragm, Capsule, and In-Line Diaphragm Seals for Pressure Gauges and Transmitters

Stainless Steel, Special Materials upon Request



Measuring Range:
-30"...0" Hg to 0...23,000 PSIG
Fill Liquids: Glycerine,
Paraffin, or Silicone
Connection: NPT, BSP, ANSI,
Tri-Clamp®, or Other
Sanitary Connections

DRM

Flange Diaphragm Seals Stainless Steel, Monel®, Tantalum, Hastelloy®, PTFE



Standard Version up to 350 °C/40 bar: ANSI 1" ... 4", DN 25 ... DN 100 Special Version up to 400 bar: ANSI 8", up to DN 200 Flanges According to BS, JIS, and GOST Standards Optional: Extended Diaphragm

DRM 626/627

Membrane Diaphragm Seals Stainless Steel, Tantalum, ECTFE



Measuring Range: 0...0.6 to 0...250 bar Housing Ø: 90 mm Filling: Glycerine, Paraffin, Silicone Oil Membrane Option: Tantalum, ECTFE

MAN/MZB/DRM

Pressure Gauge with Sanitary Diaphragm Seal and Cooling Element

Stainless Steel



MAN-RF..MZB-711..DRM-602 Meas. Range: 0...15 to 0...580 PSIG Housing Ø: 100 mm Connection: Tri-Clamp®, DIN 11851, Hygienic Connection, IDF, SMS Accuracy: ±1.6% of Full Scale

MAN/DRM

Pressure Gauge with Tri-Clamp® Diaphragm Seal Stainless Steel



MAN-RF...DRM-613 Meas. Range: 0...15 to 0145 PSIG Housing Ø: 100 mm Connection: 1"...3" Tri-Clamp® Accuracy: ±1.6% of Full Scale

MAN/DRM

Pressure Gauge with Membrane Diaphragm Stainless Steel



MAN-RF...M1...DRM-620 Meas. Range: 0...1 to 0...40 bar Housing Ø: 100 mm, 160 mm Connections: Diverse Thread and Flange Options, Tri-Clamp®, DIN 11851, SMS and IDF Norm Accuracy: ±1.6% of Full Scale

MAN/DRM

Pressure Gauge with Inline Diaphragm Stainless Steel

Ctair iicoc Ctac



MAN-RF...DRM-502
Meas. Range: 1.6...40 to 2.5...40 bar
Housing Ø: 100 mm, 160 mm
Connection: 1/2"...2" Tri-Clamp®,
Hygenic ISO DN 15...50
Accuracy: ±1.6% of Full Scale

MAN/DRM

Pressure Gauge with Membrane Diaphragm Seal

Stainless Steel



MAN-RF...DRM-603 Meas. Range: 0...1 to 0...40 bar Housing Ø: 100 mm Connection: DIN 11851 DN 25...100 Accuracy: ±1.6% of Full Scale



MAN/DRM

All Stainless Steel Bourdon **Tube Pressure Gauge with** Membrane Diaphragm Stainless Steel



MAN-RD..DRM-600 Meas. Range: 0...85 to 0...14,500 PSIG Housing Ø: 63 mm Connection: 1/2"...1-1/4" NPT Accuracy: ±1.6% of Full Scale

MAN/DRM

Pressure Gauge with Membrane Diaphragm Seal - Plastic **PVDF**



MAN-RD...DRM-632 Meas. Range: 0...20 to 0...230 PSIG Housing Ø: 63 mm Connection: 1/2" NPT Accuracy: ±1.6% of Full Scale

DSD/SEN/DRM

Pressure Gauge or Sensor with Membrane Diaphragm Seal PVC or Polypropylene



DSD...DRM-630 and SEN...DRM-631 Meas. Range: 0...20 to 0...145 PSIG Housing Ø: 74 mm Connection: 1/2" NPT Accuracy: ±1.0% of Full Scale

SEN/DRM-600

Pressure Sensor with Diaphragm Seal Stainless Steel



Measuring Range: 0...6 to 0...600 bar $t_{\rm max}$ 70 °C Connection: G 1/2....G 1-1/2 (SS) Optional AUF Plug-on Display Accuracy: ±1.0% of Full Scale

PUM

U-Pipe Pressure Indicator Glass



Indicating Ranges: 250 up to 1500 mm WC or 10" up to 60" WC Scale Division: 2 mm Hose Connection Ø: 7 mm

MZB

Pressure Sensing Accessories Brass, Steel, Stainless Steel



Block and Bleed Valves, Gauge Swivels, Snubbers, Cooling Elements, and Steam Siphons

MZB-712

Pressure Sensing Accessories Stainless Steel



T Fittings: 1/4", 3/8", or 1/2" NPT; G 1/4...G1/2, 7/16-20 UNF DIN 3866,

PMP

Differential Pressure Sensor and Controller for Filters



Measuring Range: 0...20" H,0 Power Supply: 24 V_{AC/DC}, 110 V_{AC}, 230 V_{AC} Display: 4-Digit LED Connection: 1/4" NPT or 6x8 mm Tube Accuracy: ±1.0% of Full Scale

PAD

Differential Pressure Transmitter





Measuring Range: 0.3"...6" WC to 60...6,000 PSIG Power Supply: 18-45 V_{DC} Connection: 1/4" NPT, 1/2" NPT Accuracy: ± 0.075% of Full Scale

PAD-N

Differential Pressure Transmitter with Diaphragm Seal

Stainless Steel, Monel®, Tantalum, Hastelloy®, PTFE





ATEX

Measuring Range: 0 ... 250 mbar to 0 ... 206.80 bar t_{max} 200 °C Connection: Flange, Threaded, Clamp-on, and In-line Diaphragm Seal (Nominal Size 15...100) Accuracy: ± 0.075% of Calibrated Span + Influence of Diaphragm Seal

PNK

Pressure Transmitter for High Vibration Brass

G 1/2 DIN 3852-E, M 20x1.5



Measuring Range: -30...0" Hg to 0...1,450 PSIG Overload Protection: 1.6 Times Connection: M16 x 1.5 (NPT with Adapter) Accuracy: ±1.0% of Full Scale

PDA

Pressure Transmitter with Ceramic Sensing Element

Stainless Steel



Measuring Range: -30...0" Hg to 0...5,800 PSIG Display: 3-Digit LED Power Supply: 24 V_{DC} Connection: 1/4" NPT, 1/2" NPT Accuracy: ± 0.5% - 1.0% of Full Scale



HND-P105/-210

Hand-Held Pressure Indicator for External Sensors



Measuring Range: -14.5...40 PSIG to 0...5,800 PSIG (Dependent on Associated Sensor) Optional: Data Log, Alarm, Control Functions Accuracy: \pm 0.1% of Full Scale

HND-P121/-123

Hand-Held Differential Pressure Indicator with 2 **Integrated Sensors**



Measuring Range: -0.0145...0.36 PSID to -1.45 ... 29 PSID Optional: Data Log, Alarm, Control Functions Accuracy: ± 0.2% - 0.4% of Full Scale

HND-P129/-239

Hand-Held Differential Pressure Indicator with 1 Integrated Sensor



Measuring Range: 0...15 PSIG Optional: Data Log, Alarm, Control Functions Accuracy: ± 0.2% of Full Scale

KPG

Pressure Transmitter with Thin Film Sensing Element Stainless Steel



Measuring Range: -30"...0" Hg to 0...145,000 PSIG Overload Protection: 1.2 - 3 Times Connection: 1/4" NPT, 1/2" NPT Accuracy: ± 0.125% - 0.25% of Full Scale

KPK

Pressure Transmitter with Thin Film Sensing Element Stainless Steel



Measuring Range: -30"...0" Hg to 0...15,000 PSIG Overload Protection: 1.5 - 2 Times Connection: 1/4" NPT Accuracy: ± 0.25% - 0.5% of Full Scale

KPA

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OEM Pressure Transmitter with Heat-Fused Sensing Element Stainless Steel



Measuring Range: 0...50 PSIG to 0...10,000 PSIG Overload Protection: 2 Times Connection: 1/4" NPT Accuracy: ± 0.25% of Full Scale

KP46

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Explosion Proof Pressure Transmitter CSA/US Approved

Stainless Steel



Measuring Range: 0...50 PSIG to 0...20,000 PSIG Overload Protection: 2 Times Connection: 1/4" NPT, 1/2" NPT Accuracy: ± 0.25% BFSL

SEN-86/-87

Pressure Transmitter with **Ceramic Element** Stainless Steel



Measuring Range: -30"...0" Hg to 0...10,000 PSIG Optional AUF Display: 4-Digit LED Overload Protection: 1.5 - 2 Times Connection: 1/2" NPT, 1/4" NPT Accuracy: ± 0.5% - 1.0% of Full Scale

SEN-96

Pressure Sensor with Ceramic Element Stainless Steel



Measuring Range: -30"...0" Hg to 0...6,000 PSIG Output: 4-20 mA, 0-5 V_{DC}, 0-10 V_{DC} Connection: 1/4" NPT, 1/2" NPT,

G 1/4, G 1/2 Accuracy: ± 0.5 - 0.75 % of Full Scale

SEN-98/-99

Pressure Sensor with Ceramic Element Stainless Steel



Measuring Range: -30"...0" Hg to 0...8,700 PSIG, 0...14.5 to 0...360 PSIA Overload Protection: 1.3 - 5 Times Connection: 1/4" NPT, 1/2" NPT, G 1/4, G 1/2 Accuracy: ± 0.25 of Span

AUF

Compact In-line Display for Transmitters



ATEX

For Transmitters with DIN 43650A Plugs Input: 4-20 mA, 2-wire or 3-wire User Programmable Optional Transistor Switch Custom Housing Colors for OEM Quantities

PAS

Pressure Transmitter High Accuracy

Stainless Steel



Measuring Range: -14.5...21.7 to 0...8,700 PSIG Power Supply: 12-45 V_{DC} Connection: 1/2" NPT Accuracy: ± 0.075% of Full Scale



PAS-N

Pressure Transmitter with Diaphragm Seal

Stainless Steel, Monel®, Tantalum, Hastelloy®, PTFE



Measuring Range: 0...250 mbar to 0...600 bar t_{max} 350 °C Connection: Thread or Flange (Nominal Size 15...100) Accuracy: ±0.075% of Calibrated Span + Influence of Diaphragm Seal

PAS-N

Pressure Transmitter with Diaphragm Seal

Stainless Steel, Monel®, Tantalum, Hastelloy®, PTFE



Measuring Range: 0...250 mbar to 0...600 bar $t_{max}350\,^{\circ}C$ Connection: Thread or Flange (Nominal Size 15...100) Accuracy: ±0.075% of Calibrated Span + Influence of Diaphragm Seal

PSD

Electronic Pressure Transmitter/Switch

Stainless Steel



NFC **)))**



Range: 0...30 to 0...7.500 PSI Output: 4-20 mA or 0-10 V_{DC} Output: 2x PNP Switches Display: 4-Digit LED Connection: 1/4" NPT Accuracy: ± 0.5% of Full Scale

PDD

Pressure Transmitter with Ceramic Sensing Element

Stainless Steel



Measuring Range: -30"...0" Hg to 0...5,800 PSIG Display: 3-Digit LED Power Supply: 24 V_{DC} Connection: 1/4" NPT. 1/2" NPT Accuracy: ± 0.5% - 1.0% of Full Scale

KRT

Pressure Switch-Heavy Duty Bellows Type Brass



Switching Range: -14.5...0 PSIG to 135...435 PSIG Overpressure: 1.5 - 5 Times Repeatability: ± 0.25% of Full Scale

KAS/KPS

Pressure Switch-Heavy Duty **Bellows Type** Brass



Switching Range: 0...2.5 PSIG to 6...60 bar Overpressure: 5 - 10 Times Connection: 1/4" NPT Repeatability: ± 0.25% of Full Scale

KPH

Pressure Switch - Industrial Diaphragm/Piston Type Aluminum



Switching Range: -14.5...0 PSIG to 580...6,100 PSIG Overpressure: 1.4 - 5 Times Connection: 1/4" NPT Repeatability: ± 3 - 4% of Full Scale

KPH300

Pressure Switch - OEM **Diaphragm Type** Zinc-Plated Steel





Switching Range: 3...30 PSIG to 450...4,600 PSIG Overpressure: 1.2 - 9 Times Connection: 1/4" NPT Repeatability: ± 2% of Setpoint

KPF

Pressure Switch - OEM Diaphragm Type

Brass, Stainless Steel



Switching Range: 4.3...13 PSIG to 725...1,450 PSIG Overpressure: 1,450 PSIG Connection: 1/4" NPT Repeatability: ± 5% of Full Scale

SCH

Mechanical Pressure Switches

Copper, Brass, SS, NBR



For Overpressure, Vacuum Pressure and Differential Pressure es: -1...0.1 bar to -250...100 mbar, 1...16 mbar to 16...63 bar Connection: NPT and G Threaded

SCH-27

Mechanical Pressure Switch Stainless Steel



I Switching Range: 0.7...6 mbar to 8...160 PSIG Switching Function: Micro Switch Connection: 1/2" NPT Female, 1/4" NPT Female, 1/2" NPT Male, G 1/2 Male Repeatability: < 1% of Full Setting Value

SCH-28

Mechanical Differential Pressure Switch Stainless Steel



Ī Switching Range: 0.1...1 bar to 0.2...10 bar Switching Function: Micro Switch Connection: 1/2" NPT Female, 1/4" NPT Female, 1/2" NPT Male, G 1/2 Male Repeatability: < 1% of Full Setting Value



Temperature

TWR

Temperature Switch for Liquids Brass, Stainless Steel



Switching Range: 86...248°F t_{max} 250 °F; p_{max} 920 PSIG Connection: 3/4" NPT

TRS

Thermal Reed Temperature Switch Brass, Stainless Steel



Switching Range: 50...248°F t_{range} -40...250°F; p_{max} 360 PSIG Connection: 1/4"...1" NPT

TDD

Digital Temperature Switch Stainless Steel





Switching Range: -58...250 °F t_{max} 250 °F; p_{max} 1,150 PSIG Connection: 1/2" NPT, 3/4" NPT, G 1/2, G 3/4, M25x1.5 2 Transistor Switches

TDD-..D6

Digital Temperature Switch Stainless Steel



Switching Range: -58...250°F t_{max} 250°F; p_{max} 1,150 PSIG Connection: 6 mm dia. Smooth Probe 2 Transistor Switches

DTS

Temperature Switch Brass



Measuring Range: -10...200 °C Connection: 1/2" NPT

TNS

Gas Filled Rigid Stem Thermometer Stainless Steel



Measuring Range: -40...1,100 °F p_{max} 350 PSIG Connection: 1/2"...1" NPT, G 1/2...G 1 Switch Options: Magnetic, Sliding, Inductive, or Pneumatic

TNF

Gas Filled Capillary Thermometer Stainless Steel



Measuring Range: -40...1,100 °F p_{max} 350 PSIG Connection: 1/2"...1" NPT, G 1/2...G 1 Switch Options: Magnetic, Sliding, Inductive, or Pneumatic

DTM

Digital Temperature Indicator/Transmitter Stainless Steel



Measuring Range: -30...750 °F

p_{max} 350 PSIG

Connection: 1/2"...1" NPT, G1/2...G 1

Analog Output, Limit Switches

TSH

Thermowells for Stem and Capillary Thermometers Stainless Steel



p_{max} 360 PSIG Connection: 1/2"...1" NPT, Weld Stub

TDA

Digital Temperature Sensor Stainless Steel



Measuring Range: -58...250 °F p_{max} 1,150 PSIG Connection: 1/2" NPT, 3/4" NPT, G1/2, G 3/4 Output: 4-20 mA, 3-wire, Transistor Switch

TDA-..D6

Digital Temperature Sensor Stainless Steel



Measuring Range: -58...250°F
p_{max} 1,150 PSIG
Connection: 6 mm dia. Smooth Probe
Output: 4-20 mA, 3-wire,
Transistor Switch

TNK

RTD Temperature Sensors Brass, Bronze, Stainless Steel



 $\label{eq:measuring} \begin{aligned} &\text{Measuring Range: -112...302 °F} \\ &t_{\text{max}}302 °F; \ p_{\text{max}}725 \ PSIG \\ &\text{Connection: 1/2" NPT, G 1/2, M18x1.5} \end{aligned}$

Temperature



TSP

Temperature Sensor for Pipes Brass, Stainless Steel



Measuring Range: -40...300 °F p_{max} 750 PSIG Connection: 1/4"...1-1/2" NPT Output: 4-20 mA, Pt100 RTD

TSR

RTD Temperature Probes Stainless Steel



Measuring Range: -320...400°F p_{max} 1,450 PSIG Connection: 1/2" or 3/4" NPT, 1-1/2" Tri-Clamp® Output: 4-20 mA, Pt 100 RTD

TST

Integrated Programmable Temperature Transmitter

Stainless Steel



Measuring Range: -58...1,100°F p_{max} 1,500 PSIG Connection: 1/4" or 1/2" NPT, 1-1/2"...3" Tri-Clamp[©] Output: 4–20 mA, 2-wire

TSA

Resistive Temperature Sensor Brass, Stainless Steel



Measuring Range: -40...150 °C p_{max} 25 bar Connections: 1/4...1-1/2 NPT, G 1/4...1-1/2

TGK/TGL

Glass Thermometer

Aluminum or Plastic Casing, Brass



Measuring Range: -76...390°F Connection: 1/2" NPT, G 1/2 Accuracy: ±1% of Full Scale

DTB

Digital Thermometer -High Accuracy, Battery Powered Stainless Steel



Measuring Range: -50..400°F (-50...200°C) Display in Either °F or °C Connection: 1/4"...3/4" NPT Battery Life: up to 5 Years

TIR-FA

Stationary Infrared Thermometer

Stainless Steel



Measuring Range:
0...120°C to 100...500°C
10 mV/K or Voltage Model J, K
Accuracy:
±1.5% of Measuring Range or 2.5°C

TIR-SN/-FS/-FG

Stationary Infrared Thermometer

Stainless Steel



Measuring Range:
-20...300°C to 1100...2,500°C
Analog Output
Accuracy: ±1.5% of Measuring
Range/°C
0.8...1% of Reading +1°C

HND-T120/-125

Precision Hand-Held Thermometer



Measuring Range: -50...1,150 °C Sensor: Type K Thermocouple Power Supply: Battery or External Accuracy: 0.1% - 1.5% of Reading

HND-T110/-T115

Precision Hand-Held Thermometers



Measuring Range: -220...1,768 °C Sensor: Type K, N, S, J, T Thermocouples or Pt 100, 4-wire Power Supply: Battery or External Accuracy: ± 0.03% of Full Scale

TWL-ST

Room Thermometer Aluminum



ATEX HAR

Measuring Range: -20...60 °C p_{max} Atmospheric Wall Socket Pt 100, 4-20 mA Accuracy: Cl. A or B

TBI

Bimetallic Thermometer Stainless Steel





Measuring Range: -30...500 °C p_{max} 360 PSIG Installed in Thermowell Connection: G 1/2



Temperature

TBE

Bi-Metal Thermometer Stainless Steel



Measuring Ranges: -50...50 °C to 0...600 °C p_{max} 15 bar Fittings: 1/2"...3/4" NPT, G 1/2...G 3/4, (Fixed, Rotatable, Slidable) Accuracy: Cl. 1.0

TND

Shaft Thermometer for Diesel Engines Steel, Stainless Steel Measuring Range: 0...800 °C Pmax 25 bar Fittings: G 1/2, G 3/4

ST



TMA/MMA (AUF)



MMA/AUF/KUG





Measuring Range: -200...400 °C p_{max} 36 bar Accuracy: < 0.5% of Span

LTS

Resistance Temperature Probe

Accuracy: Cl. 1.0 or 1.6



MWD





Measuring Ranges: from -324 up to 1112 °F p_{max} 435 PSI Accuracy: Cl. A or B

DTE

Digital Thermometer Stainless Steel



Measuring Ranges: -200...850 °C p_{max} 34 bar Display: 6-Digit LCD Fittings: 1/4"...1/2" NPT, G 1/4...G 1/2, Compression Fitting Accuracy: ± 0.1% of Reading + 0.2°C

TWL/TTL

Resistance Thermometers Stainless Steel



Measuring Range: -200...1,100 °C p_{max} 3,625 PSIG Sensor: Pt100, 4-20 mA Connection: 1/2"...1" NPT, G 1/2...1, DIN 15 - 50 Flanges Output: Analog 4-20 mA

TWM

Sheath Resistance Thermometer Stainless Steel

Connection: G 1/2, M12x1.5



Measuring Range: -20...600 °C Sensor: Pt100, 2-, 3-, or 4-wire Connection: Cable, Connector, Connection Head

TWA

Contact Resistance Thermometer

Aluminum, Stainless Steel



Measuring Range: -20...260 °C Accuracy: Pt 100, Class B

TWL

Thermowells for Thermometers Stainless Steel, Special Materials

t_{max} 800 °C

p_{max} 250 bar Types: Thread, Flange, Welding Sleeve

Analysis



LCI

Inductive Conductivity Measuring System PEEK, PVDF, Stainless Steel



Measuring Range: 0...2,000 mS/cm t_{max} 120 °C; p_{max} 10 bar Integrated Pt 100 Accuracy: ± 1.0% of Full Scale

ACS

Conductive/Inductive Conductivity Measuring Cells Stainless Steel, PEEK



Measuring Range: 0.05 μS/cm... 1,000 mS/cm t_{max} 135 °C; p_{max} 16 bar Process Connection: 1/2" NPT, 1" NPT, G1,G 3/4

Accuracy: ± 0.5% - 1.0% of Reading

APM-1/ACM-1

Transmitter for pH-Value, ORP, Conductivity





2 Analog Outputs, Switch Output: 2 Relays with Adjustable Setpoints

HND-C/HND-R

Hand-Held Measuring Unit Conductivity, pH, Redox, Temperature



pH Measuring Range: 0...14 Measuring Range: 0...200 µS/cm to 0...200 mS/cm

Redox: -1999...2,000 mV Temperature: -100...250 °C Accuracy: ± 0.01 pH; ± 0.1% of Full Scale

APM-Z

pH-Value Transmitter



Measuring Range: pH -1 up to 14 Display of pH-value and Temperature with LEDs, Analog Actual-value Output Scalable, 2 Relays for Control Functions, (PID) Programmable

APS

pH-Combined ElectrodesGlass, Plastic



Measuring Range: pH 0...14 t_{max} 80 °C; p_{max} 10 bar Diaphragm: PTFE-ring or Ceramic

HND-F

Hand-Held Humidity Precision Measuring Unit



Range: 0...100% Weight Moisture Option: Logger, Alarm Accuracy: 0.1% - 0.2% of Reading

AFK-E

Humidity/Temperature Transmitter



 $\label{eq:max_max_max_max_max_max} \begin{tabular}{ll} Measuring Range: 0 ... 100% rH; \\ -40 ... 180 °C \\ t_{max} 180 °C; p_{max} 15 bar \\ Outputs: Analog Outputs and Switches \\ \end{tabular}$

AFA-G AND AUF

Humidity Transmitter with Display



Measuring Range: 0...100% rH; 0...60 °C t_{max} 60 °C Outputs: 4-20 mA Accuracy: ± 2% rH

AFS

Hygrostat, Humidity Annex Switch



 $\begin{array}{c} \text{Measuring Range: } 35...100\% \text{ rH} \\ t_{\text{max}} \ 60 \ ^{\circ}\text{C} \\ \text{Switch Output: } 1 \ \text{SPDT} \\ \text{Accuracy: } 3\% \text{ rH} \end{array}$

AFK

Humidity/Temperature Transmitter



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

DWF

Density Meter Stainless Steel













Measuring Range: 700 ...1,900 g/L t_{max} 150 °C Process Connection: Flange ANSI 1"...2", DN 25 ... 50 Optional: Transmitter Contacts



Accessories

REG

Automatic Flow Regulating Valve Brass, Stainless Steel





Viscosity: Max. 30 cSt t_{max} 572 °F; p_{max} 2,900 PSIG Connection: 3/4" NPT

REG-8

Automatic Flow Regulating Valve Brass, Stainless Steel



Viscosity: Max. 30 cSt t_{max} 500 °F; p_{max} 2,900 PSIG Connection: 3/4"...2" ANSI Wafer

NVM/NAD

Stainless Steel Needle Valve



Connection: 1/8"...1-1/4" NPT, G 1/8...G 1-1/4

MFR

Magnetic Filter Brass



t_{max} 392 °F; p_{max} 230 PSIG Connection: G 1/4...G 4

SCI

Frequency to Current Converter



Compact DIN Rail Mounting Option Explosion-proof Enclosure Available Magnetic or High-level Pulse Inputs 4-20 mA Loop Powered

RL

Power Supply, Latching and **Isolation Relay**



Power: 110 $\rm V_{AC}$, 230 $\rm V_{AC}$, 24 $\rm V_{DC}$ Excitation: 24 $\rm V_{DC}$, 120 mA Regulated Input: Dry Contact or NPN/PNP, 15 mA Max Output: SPDT Relay, 10A@240V_{AC} 8A@24V_{DC}

KFD-2/KFA-5

Instrinsically Safe Relay/Power Supply



Standard Rail Mounting

 $24~{\rm V_{DC}}$ or 110 ${\rm V_{AC}}$ Power SPDT Relay Output

MSR

Contact Protection and Latching Relay



For Protection of Reed Contacts 8A Max. Switching Capability 1 or 2 SPDT Contacts

AUF

Compact In-line Display for Transmitters



For Transmitters with DIN 43650A Plugs Input: 4-20 mA, 2-wire or 3-wire User Programmable
Optional Transistor Switch
Custom Housing Colors for OEM Quantities

Accessories



INT/MRT

Integrating Rate Meter, **Totalizer and Batcher**



Display Values: Rate, Total, Batch Display Type: 0.55" Red LED 5 Digit Rate, 6 Digit Total, 6 Digit Batch Power Input: 110 V_{AC}, 220 V_{AC}, 12 - 24 V_{DC} Panel Mount: NEMA 4x Front Panel

DAG-T4/-Z2

Universal Panel Meter or Counter Electronics/Batch Controller





DAG-T4 Input: Current, Voltage, Pt 100, Thermocouples DAG-Z2 Input: Frequency Both: Limit Contacts, Sensor Supply

ADI-1

Universal Input LED Display Controller







Display: 5-digit with 270° Bargraph Input: Current, Voltage, Frequency Analog Output, 2 Limit Contacts, Sensor Supply

MPT/MPV

Universal/Process Panel Displays Ratemeter or Dual Line Rate and Total



MPT: Accepts Current, Voltage, TC, and RTD Inputs, Max/Min Display, Relays and 4-20 mA Options, Modbus®

MPV: Pulse or Analog Outputs, Displays both Rate and Total, 32 Point Linearization, Modbus®, Gate Function, Open Channel Flow

ZED

LCD Indicating Display and Controller



Input: Frequency Output: Analog, 2 Limit Contacts, Sensor Supply

ZLS-2

Multi-Channel Datalogger Display



Input: 4-20 mA, or Pt 100, Pt 500, Pt 1000 Interface, Sensor Supply

DAG-A/-S/-M

Digital Indication Units









Input: Current, Voltage, Temperature, Frequency, Resistance Analog Output, Limit Contacts Min/Max-Memory

ZOK

Totalizer, Batching, and **Monitoring Electronics**



Battery Powered

ZOE

Rate and Totalizing Display



Frequency Input, Pulse Output Sensor Supply or Battery Powered



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