



# PRODUCT CATALOG

**VARIABLE AREA FLOW METERS** 

**CONSTANT FLOW REGULATORS** 

**SEAL WATER FLOW METERS** 

**OVAL GEAR FLOW METERS AND DISPLAYS** 

**OIL LUBRICATION FLOW MONITORING SYSTEMS** 

**OIL ANALYZERS** 

**DIFFERENTIAL PRESSURE METERS** 

**CHECK VALVES** 

# Quality Products From a Trusted Manufacturer

Welcome to Kytola<sup>®</sup> Instruments. Kytola develops and manufactures reliable and high-quality flow measuring and monitoring instruments for the industry and for the equipment and machine builders. The key applications are found in pulp and paper, energy, chemical, mining, steel and food industries.

Our goal is to help you, our customers, succeed by providing solutions to process and application challenges. We do this by designing and delivering reliable quality products. Our products are precision manufactured to help make your processes and systems more efficient. This catalog only shows a small portion of our capabilities. If you do not see what you want, please do not hesitate to contact us. We can custom manufacture nearly all of our products to suit your needs and specifications.

Our products are manufactured at our facility located in Muurame, Finland. This facility also houses our corporate, research, development and testing centers. Having these departments within one location allows us to quickly react to specific customer product requirements and ever changing market needs and conditions.

We also stock select products in locations worldwide, which allows us to efficiently meet our customers' demand for short product lead-time all the while maintaining superior customer service. Based on your process and system needs, our technical support specialists will only suggest instrumentation to help you with your specific application requirements.

Our catalog serves as the basis of our commitment to exceptional product quality, reliability and customer service.

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# QUALITY PRODUCTS FROM A TRUSTED MANUFACTURER

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## **MODEL A**

### **Key Features:**

- · High quality acrylic flow meter
- Clear, easy to read scale
- Inductive low and/or high flow alarm (option)
- Maximum pressure 20 bar
- Maximum temperature 75°C

# **Applications:**

- Water treatment
- Sealing water measurements
- Gas flow measurements

# **Measuring Range:**

- Water +20°C
- min 2–20 mL/min, max 0.5–6.5 L/min
- Air +20°C / 101.3 kPa
- min 0.1–0.9 NL/min, max 20–220 NL/min
- Other water and air ranges, and scales for alternative liquids and gases also available

#### **Body:**

• Acrylic (PMMA)

#### **Connections:**

• BSP 3/8" (Adapters available for NPT)

#### Height 130 mm

2

# **Options:**

Please contact us for available options.

# **MODEL C**

# **Key Features:**

- · High quality acrylic flow meter
- Clear, easy to read scale
- Maximum pressure 20 bar
- Maximum temperature 75°C

#### **Applications:**

- Water treatment
- Sealing water measurements
- Gas flow measurements

# Measuring Range:

- Water +20°C
- min 0.5–5 L/min, max 5–30 L/min • Air +20°C / 101.3 kPa
- Air +20°C / 101.3 kPa min 20–200 NL/min, max 100–1000 NL/min
- Other water and air ranges, and scales for alternative liquids and gases also available

#### Body

Acrylic (PMMA)

# **Connections:**

BSP 3/4" (Adapters available for NPT)

# Height 165 mm

**Options:** Please contact us for available options.

# **MODEL D**

# **Key Features:**

- High quality acrylic flow meter
- Clear, easy to read scale
- Maximum pressure 20 bar
- Maximum temperature 75°C

# **Applications:**

- Water treatment
- Sealing water measurements
- Gas flow measurements

# Measuring Range:

- Water +20°C
- min 7.5-40 L/min, max 10-100 L/min
- Air +20°C / 101.3 kPa min 200–1200 NL/min, max 500–2500 NL/min
- Other water and air ranges, and scales for alternative liquids and gases also available

# **Body:**

Acrylic (PMMA)

#### **Connections:**

• BSP 1" (Adapters available for NPT)

#### **Options:**

Please contact us for available options.

Height 210 mm



# **MODEL BA**

# **Key Features:**

- · High quality acrylic flow meter
- Connections for plastic hose
- Needle valve
- Maximum pressure 10 bar
- Maximum temperature 75°C

#### **Applications:**

- Gas flows for analyzers
- Air purging for enclosures
- Gas purging for differential pressure measurements

# **Measuring Range:**

 Air +20°C / 101.3 kPa min 0.2–1.5 NL/min, max 0.5–7.5 NL/min

#### Rody

Acrylic (PMMA)

#### Connections

 Rapid fittings for outside diameter 6 mm and inner diameter 4 mm hose

#### Options:

Please contact us for available options.

# **MODEL E**

#### **Key Features:**

- High quality acrylic flow meter
- Available in single-tube and multi-tube versions
- Flow adjustment valve
- Inductive low and/or high flow alarm (option)
- Maximum pressure 20 bar
- Maximum temperature 75°C

# **Applications:**

- Water and air purging
- Shield gas measurements
- Other gas and liquid measurements

#### **Measuring Range:**

- Water +20°C
- min 2-16 mL/min, max 0.5-2.5 L/min
- Air +20°C / 101.3 kPa min 0.1–0.8 NL/min, max 10–90 NL/min
- Other water and air ranges, and scales for alternative liquids and gases also available

#### **Body:**

Acrylic (PMMA)

#### **Connections:**

• BSP 1/4" (Adapters available for NPT)

Height 128mm

# **Options:**

Please contact us for available options.

# **MODEL L**

Height

~94 mm

#### **Key Features:**

- Sturdy, industrial flow meter
- Flow adjustment valve
- Clear, easy to read scale
- Maximum pressure 20 bar
- Maximum temperature 80°C

# Applications: • Water and a

- Water and air purging
   Saaling liquid manitoris
- Sealing liquid monitoring

# **Measuring Range:**

- Water +20°C
- min 2–18 mL/min, max 0.5–3 L/min
- Air +20°C / 101.3 kPa min 0.1–0.9 NL/min, max 10–110 NL/min
- Other water and air ranges, and scales for alternative liquids and gases also available

#### **Body**:

 Acrylic (PMMA), Grilamid (PA-12) or Trogamid (PA6-3-T)

### Connections:

• BSP or NPT 1/4"

#### **Options:**

Please contact us for available options.



Height ~272 mm max

# MODEL KPM

# **Key Features:**

- Solid, compact construction
- Clog resistant flow adjustment valve
- Built-in tube cleaner
- All models are alarm-ready
- Excellent corrosion and heat resistance
- Maximum pressure 20 bar
- Maximum temperature 100° C

# **Applications:**

- Industrial water purging
- Contaminated water

# **Measuring Range:**

 Water +20°C min 0.025 – 0.4 L/min, max 0.05 –1 L/min

# Body:

POM or PVDF

# **Connections:**

• BSP/NPT 1/4" or 3/8"/10 mm compression fittings

# Options:





#### **MODEL HV**

#### **Key Features:**

- Sturdy, industrial flow meter
- Good corrosion resistance
- Threaded or socket type connections
- Inductive low and/or high flow alarm (option)
- Maximum pressure 10 bar @ 20°C (10 bar @ 80°C)
- Maximum temperature 50°C @ 2 bar (120°C @ 2 bar)

### **Applications:**

- Process and chemical industries
- Water treatment plants
- Agricultural applications
- Flow measurement in PVC piping
- Reverse osmosis

#### **Measuring Range:**

- Water +20°C
- min 0.02–0.11 m³/h, max 0.3–1.8 m³/h
- Air +20°C / 101.3 kPa
- min 0.015-0.07 Nm³/min, max 0.2-0.9 Nm³/min
- Other water and air ranges also available

#### Flow Tube:

• Grilamid (PA-12) or PES

#### **Connections:**

• BSP/NPT 1/2" or 20 mm socket type connection

# **MODEL HK**

### **Key Features:**

- Sturdy, industrial flow meter
- Good corrosion resistance
- Threaded or socket type connections
- Inductive low and/or high flow alarm (option)
- Maximum pressure
   10 bar @ 20°C (10 bar @ 80°C)
- Maximum temperature 50°C @ 2 bar (120°C @ 2 bar)

# **Applications:**

- Process and chemical industries
- Water treatment plants
- Agricultural applications
- Flow measurement in PVC piping
- Reverse osmosis

# **Measuring Range:**

- Water +20°C min 0.3–1.2 m³/h, max 1–4.75 m³/h
- Air +20°C / 101.3 kPa
- min 0.14–0.6 Nm³/min, max 0.4–2.2 Nm³/min
- Other water and air ranges also available

#### Flow Tube:

• Grilamid (PA-12) or PES

#### Connections:

Height 282 mm

max

• BSP/NPT 3/4" or 25 mm socket type connection



#### •

# **MODEL HT**

#### **Key Features:**

- Sturdy, industrial flow meter
- Good corrosion resistance
- Threaded or socket type connections
- Inductive low and/or high flow alarm (option)
- Maximum pressure
- 10 bar @ 20°C (10 bar @ 80°C)
- Maximum temperature 50°C @ 2 bar (120°C @ 2 bar)

#### **Applications:**

- Process and chemical industries
- Water treatment plants
- Agricultural applications
- Flow measurement in PVC piping
- Reverse osmosis

# **Measuring Range:**

- Water +20°C
- min 0.5–3 m³/h, max 4–22 m³/h
- Air +20°C / 101.3 kPa
- min 0.35-2 Nm³/min, max 2-14 Nm³/min
- Other water and air ranges also available

# Flow Tube:

• Grilamid (PA-12) or PES

#### Connections

• BSP/NPT 11/4" or 50 mm socket type connection

Height 395 mm max



# **MODEL KL**



# **Key Features:**

- Sturdy, industrial flow meter with protected flow tube
- Large selection of materials
- No flow adjusting valve
- Inductive low and/or high flow alarm (option)
- Maximum pressure 30 bar
- Maximum temperature 80°C (120°C)

#### **Applications:**

- Water treatment
- Oil measurements
- Sealing water measurements of vacuum pumps

#### **Measuring Range:**

- Water +20°C
- min 7.5–40 L/min, max 10–120 L/min
- Air +20°C / 101.3 kPa min 200–1200 NL/min, max 400–3000 NL/min
- Other water and air ranges, and scales for alternative liquids and gases also available

#### Flow Tube:

• Grilamid (PA-12) or PES

#### **Connections:**

• BSP or NPT 1"

# Options:

Please contact us for available options.

# **MODEL K**



Height

310 mm

# **Key Features:**

- Sturdy, industrial flow meter with protected flow tube
- Large selection of materials
- Flow adjusting valve on outlet
- Inductive low and/or high flow alarm (option)
- Maximum pressure 30 bar
- Maximum temperature 80°C (120°C)

#### **Applications:**

- Water treatment
- Oil measurements
- Sealing water measurements of vacuum pumps

#### **Measuring Range:**

- Water +20°C min 7.5–40 L/min, max 10–120 L/min
- Air +20°C / 101.3 kPa min 200–1200 NL/min, max 400–2800 NL/min
- Other water and air ranges, and scales for alternative liquids and gases also available

#### Flow Tube:

• Grilamid (PA-12) or PES

#### **Connections:**

• BSP or NPT 1"

### **Options:**

Please contact us for available options.

# **MODEL KD**

Height 310 mm



#### **Key Features:**

- Sturdy, industrial flow meter with protected flow tube
- Large selection of materials
- Flow adjusting valve on inlet
- Inductive low and/or high flow alarm (option)
- Maximum pressure 30 bar
- Maximum temperature 80°C (120°C)

#### **Applications:**

• Measuring and monitoring gas flows

# **Measuring Range:**

 Air +20°C / 101.3 kPa min 200–1200 NL/min, max 400–3000 NL/min

# Flow Tube:

• Grilamid (PA-12) or PES

#### **Connections:**

BSP or NPT 1"

#### **Options**

Please contact us for available options.

Height 310 mm



# **MODEL TL**

#### **Key Features:**

- · Sturdy, industrial flow meter
- Protected flow tube
- Inductive low and/or high flow alarm (option)
- Maximum pressure 20 bar
- Maximum temperature 80°C (120°C)

#### **Applications:**

- Flush water applications
- Lubrication oil measurement for gear boxes
- Sealing water measurement for vacuum pumps

#### **Measuring Range:**

- Water +20°C
  - min 7.5-55 L/min, max 50-400 L/min
- Air +20°C / 101.3 kPa
- min 0.3-1.9 Nm³/min, max 1-12 Nm³/min Other water and air ranges, and scales for alternative liquids and gases also available

#### Flow Tube:

Grilamid (PA-12) or PES

#### **Connections:**

• BSP or NPT 2"

#### **Options:**

Please contact us for available options.

## **MODEL TLFH**

# **Key Features:**

- · Sturdy, industrial flow meter
- Protected flow tube
- Inductive low and/or high flow alarm (option)
- Maximum pressure 16 bar
- Maximum temperature 80°C (120°C)

#### **Applications:**

- Water treatment
- Flush water applications
- · Sealing water measurement for vacuum pumps

#### **Measuring Range:**

- Water +20°C
  - min 7.55-55 L/min, max 50-400 L/min
- Air +20°C / 101.3 kPa min 0.3-2 Nm³/min, max 1-12 Nm³/min
- Other water and air ranges, and scales for alternative liquids and gases also available

#### Flow Tube:

• Grilamid (PA-12) or PES

# **Connections:** Height 317 mm

• DN 50 or ANSI 2" flanges

Please contact us for available options.

Height

373 mm

# **MODEL TTFH**

# **Key Features:**

- Sturdy, industrial flow meter
- Protected flow tube
- Inductive low flow alarm (option)
- Maximum pressure 16 bar
- Maximum temperature 75°C

# **Applications:**

- Water treatment
- Power plants
- Swimming pools

#### **Measuring Range:**

 Water +20°C min 75-600 L/min, max 100-1000 L/min

#### Flow Tube:

Acrylic (PMMA)

#### **Connections:**

DN 80 flanges

#### **Options:**



Height 381 mm



# **MODEL VL**

#### **Key Features:**

- · Sturdy, industrial flow meter with protected flow tube
- Large selection of materials
- No flow adjusting valve
- Inductive low and/or high flow alarm (notion)
- Maximum pressure 30 bar
- Maximum temperature 80°C (120°C)

- Sealing and cooling water measurements
- Flush water applications
- Lubrication oil measurements
- Gas flow measurements

#### **Measuring Range:**

- Water +20°C min 0.4-2 L/min, max 5-30 L/min
- Air +20°C / 101.3 kPa min 15-75 NL/min, max 150-900 NL/min
- Other water and air ranges, and scales for alternative liquids and gases also available

#### Flow Tube:

Grilamid (PA-12) or PES

#### **Connections:**

• BSP or NPT 1/2"

#### **Options:**

Please contact us for available options.

# **MODEL VE**

10

8

6

4

Height ~246 mm

max

# **Key Features:**

- Sturdy, industrial flow meter with protected flow tube
- Large selection of materials
- Flow adjusting valve on outlet
- Inductive low and/or high flow alarm (option)
- Maximum pressure 30 bar
- Maximum temperature 80°C (120°C)

- Sealing and cooling water measurements
- Flush water applications
- Lubrication oil measurements
- Gas flow measurements

#### **Measuring Range:**

- Water +20°C min 0.4-2 L/min, max 5-30 L/min
- Air +20°C / 101.3 kPa min 15-70 NL/min, max 150-700 NL/min
- Other water and air ranges, and scales for alternative liquids and gases also available

#### Flow Tube:

Grilamid (PA-12) or PES

#### **Connections:**

• BSP or NPT 1/2"

#### **Options:**

Please contact us for available options.



Height 202 mm

# **MODEL VD**

### **Key Features:**

- · Sturdy, industrial flow meter with protected flow tube
- Large selection of materials
- Flow adjusting valve on inlet
- Inductive low and/or high flow alarm (option)
- Maximum pressure 30 bar
- Maximum temperature 80°C (120°C)

# **Applications:**

- Sealing and cooling water measurements
- Flush water applications
- Gas flow measurements

#### Measuring Range:

- Water +20°C
- min 0.4-2 L/min, max 5 32.5 L/min
- Air +20°C / 101.3 kPa min 15-75 NL/min, max 150-900 NL/min
- Other water and air ranges, and scales for alternative liquids and gases also available

#### Flow Tube:

Grilamid (PA-12) or PES

# **Connections:**

BSP or NPT 1/2"



Height 218mm



#### **MULTI-TUBE FLOW METERS**

#### **MODEL ExK**



Height 128 mm

#### **Key Features:**

- High quality acrylic flow meter
- Available in single-tube and multi-tube versions (max 12 tubes)
- Flow adjustment valve
- Maximum pressure 20 bar
- Maximum temperature 75°C

#### **Applications:**

- Water and air purging
- Shield gas measurements
- Other gas and liquid measurements

# **Measuring Range:**

- Water +20°C
- min 2-16 mL/min, max 0.5-2.5 L/min
- Air +20°C / 101.3 kPa
- min 0.1-0.8 NL/min, max 10-90 NL/min
- Other water and air ranges, and scales for alternative liquids and gases also available

#### **Body:**

Acrylic (PMMA)

# **Connections:**

 BSP 1/2" common inlet, BSP 1/4" separate outlets (Adapters available for NPT)

## **Options:**

Please contact us for available options.

# **MODEL VEX**



Height ~263 mm max

#### **Key Features**

- Sturdy, industrial flow meter with protected flow tubes
- Available in single-tube and multi-tube versions (max 7 tubes)
- Flow adjustment valves on outlet
- Inductive low flow alarm (option)
- Maximum pressure 30 bar
- Maximum temperature 80°C (120°C)

# **Applications:**

- Sealing and cooling water measurements
- Flush water applications
- Lubrication oil measurements
- Gas flow measurements

#### **Measuring Range:**

- Water +20°C min 0.4–2 L/min, max 5–30 L/min
- Air +20°C / 101.3 kPa min 15-70 NL/min, max 150-700 NL/min
- Other water and air ranges, and scales for alternative liquids and gases also available

#### Flow Tube:

• Grilamid (PA-12) or PES

# **Connections:**

 BSP/NPT 3/4" common inlet, BSP/NPT 1/2" separate outlets

#### **Options:**



# METAL TUBE FLOW METERS

# **MODEL MP**



# **Key Features:**

- Stainless steel wetted parts
- High pressure and temperature resistance
- Withstands aggressive media
- Maximum pressure: 235 bar
- Maximum temperature: 150°C

#### **Applications**

- Chemical and petrochemical industries
- Power plants
- General flow measurements

# **Measuring Range:**

- Water +20°C
- min 1–10 L/h, max 40–400 L/h • Air +20°C / 101.3 kPa

min 3 – 300 NL/h, max 1000 – 12000 NL/h

#### **Connections:**

• BSP/NPT 1/4" or 1/2" depending on range

#### **Options:**

Please contact us for available options.

# **MODEL MP WITH VALVE**



Height 140 mm

# **Key Features:**

- Stainless steel wetted parts
- High pressure and temperature resistance
- Withstands aggressive media
- Flow adjusting valve
- Panel mounting
- Maximum pressure: 100 bar
- Maximum temperature: 150°C

#### **Applications**

- Chemical and petrochemical industries
- Power plants
- General flow measurements

#### **Measuring Range:**

- Water +20°C
- min 1–10 L/h, max 40–400 L/h
- Air +20°C / 101.3 kPa min 3 – 300 NL/h, max 1000 –12000 NL/h

#### Connections

• BSP/NPT 1/4" or 1/2" depending on range

#### **Options**



#### **MODEL 2851**

#### **Key Features:**

- Provides constant flow of liquids or gases regardless of pressure variations
- High performance, reliable operation
- Stainless steel construction
- Can be used with Model L flow meter

#### **Applications:**

- · Control of sealwater or flushwater
- Water or air purging

# Flow Range:

- Water +20°C
- min 15-85 mL/min, max 0.5-3 L/min
- Air +20°C / 101.3 kPa min 0.5 –2.5 NL/min, max 10 –110 NL/min
- Air scale has always to be calibrated according to the actual inlet pressure and temperature.

# Maximum differential pressure

• 20 bar

#### **Body:**

• AISI 316

#### **Connections:**

BSP or NPT 1/4"

#### **Options:**

Please contact us for available options.

#### **MODEL 3630**

Height

132 mm

#### **Key Features:**

- Provides constant flow of liquids or gases regardless of pressure variations
- High performance, reliable operation
- Aluminium or stainless steel construction
- Can be used with Model L flow meter

# **Applications:**

- Water or air purging
- Gas purging in Δp measurements
- Hydrostatic density measurements

# Flow Range:

- Water +20°C min 0.01 – 0.13 L/min, max 0.2 – 1.6 L/min
- Air max 60 NL/min at 6 barg
- Air scale has always to be calibrated according to the actual inlet pressure and temperature.

#### Maximum differential pressure

10 bar

#### **Body:**

• AISI 316 or aluminium

#### **Connections:**

• BSP or NPT 1/4"

#### **Options:**

Please contact us for available options.

# **MODEL 2914**

Height

132 mm

# **Key Features:**

- Provides constant flow of liquids regardless of pressure variations
- Needle valve for flow rate adjustment
- High performance, reliable operation
- Stainless steel construction
- Can be used with Model VL flow meter

# **Applications:**

- Control of sealwater and flushwater
- Water purging
- Batching of liquids

#### Flow Range:

 Water +20°C max 20 L/min

# Maximum differential pressure

• 12 bar (20 bar on request)

#### Body

• AISI 316

#### **Connections:**

BSP or NPT 1/2"

#### Options

Please contact us for available options.



Height ~300 mm



# **MODEL SLM**



#### **Key Features:**

- Solid, compact construction
- Clog resistant flow control valve
- Built-in tube cleaner
- All models are alarm-ready
- Compatibility with all seal types
- Corrosion resistant materials

#### **Applications:**

- Single and double mechanical seals
- Gland packings
- Flushing and purge water applications

# **Measuring Range:**

- Water +20°C
- $\min 0.025 0.4 \text{ L/min, max 1--13 L/min}$
- Other water ranges also available

#### **Body:**

• POM or PVDF

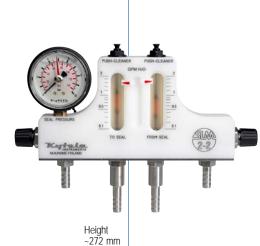
#### **Connections:**

- 10 mm hose barb connectors, standard
- Other type of connectors also available

#### **Options**

Please contact us for available options.

# **MODEL SLMx-2**



max

# **Key Features:**

- Solid, compact construction
- Clog resistant flow regulating valve
- Built-in tube cleaner
- All models are alarm-ready
- Corrosion resistant materials

# **Applications:**

Double mechanical seals

# Measuring Range:

- Water +20°C
- min 0.05 1.0 L/min, max 0.5–8.0 L/min
- Other water ranges also available

# Body:

POM or PVDF

#### Connections

- 10 mm hose barb connectors, standard
- Other type of connectors also available

#### **Options**



#### **MODEL SR SINGLE**

#### **Key Features:**

- Large viscosity range 30-1000 cSt
- Independent of oil viscosity changes
- Pulse output
- Sturdy construction
- Flow adjusting valve
- Maximum pressure 10 bar (20 bar on request)
- Maximum temperature 80°C

#### **Applications:**

- · Lubrication oil monitoring
- · Industrial oil flow monitoring
- Process control

#### Measuring Range:

Oil

min 1-10 L/min, max 10-100 L/min

• Other ranges also available

Aluminium

#### **Connections:**

• BSP/NPT 1" or 1 1/2" depending on range

#### **Options:**

• Please contact us for available options.

#### **MODEL SR-x SINGLE**

#### **Key Features:**

- Large viscosity range 30—1000 cSt
- Independent of oil viscosity changes
- Pulse output
- Sturdy construction
- Flow adjusting valve
- Service valve
- Maximum pressure 10 bar (20 bar on request)
- Maximum temperature 80°C

# **Applications:**

- Lubrication oil monitoring
- Industrial oil flow monitoring
- Process control

#### **Measuring Range:**

• Oil

min 0.1-1 L/min, max 0.6-6 L/min

• Other ranges also available

#### **Body:**

Height

73 mm

• Aluminium

#### **Connections:**

• BSP or NPT 1/2"

#### **Options:**

• Please contact us for available options.



Height 160 mm

# **MODEL 2950**

# **Key Features:**

- Large viscosity range 30-1000 cSt
- Independent of oil viscosity changes
- Pulse output
- Sturdy construction
- No flow adjusting valve
- Maximum pressure 10 bar (20 bar on request)
- Maximum temperature 80°C

#### **Applications:**

- Lubrication oil monitoring
- · Industrial oil flow monitoring
- Process control

# **Measuring Range:**

- min 0.1-1 L/min, max 10-100 L/min
- Other ranges also available

#### **Body:**

Aluminium

## **Connections:**

• BSP or NPT 1/4", 3/4", 1" or 1 1/2" depending on range

### **Options:**

- ATEX approved models for safe use in explosion hazard environment
- Please contact us for available options.



Height 109 mm max



#### **MODEL SRx-x MULTI-BLOCK**

#### **Key Features:**

- 4, 6 or 8 point block
- Large viscosity range 30—1000 cSt
- Independent of oil viscosity changes
- Pulse outputs
- Sturdy construction
- Flow adjusting valves
- Service valves
- Maximum pressure 10 bar (20 bar on request)
- Maximum temperature 80°C

### **Applications:**

- Lubrication oil monitoring
- Industrial oil flow monitoring
- Process control

#### **Measuring Range:**

Oi

min 0.1-1 L/min, max 0.6-6 L/min

• Other ranges also available

#### **Body:**

Aluminium

#### **Connections:**

• BSP or NPT 1/2" outlets

#### **Options:**

• Please contact us for available options.

# **MODEL 6210**

Height

129 mm

### **Key Features:**

- Large viscosity range 30—1000 cSt
- Independent of viscosity changes
- Chemical resistant materials
- Pulse output
- No flow adjusting valve
- Maximum pressure 10 bar
- Maximum temperature 80°C

#### **Applications:**

- Polymer injection
- Flocculent flow control
- Viscous chemical dosage

# Measuring Range:

- Min 0.1-1 L/min, max 3-30 L/min
- Other ranges also available

# **Body:**

PVC or PVDF

#### **Connections:**

• BSP 1/4" or 3/4" depending on range (Adapters available for NPT)

#### Ontions

Please contact us for available options.

Height 125 mm max

0

#### **OVAL MIN-E LOCAL DISPLAY**

#### **Key Features:**

- Clear scalable display
- Instant and cumulative flow measurement
- Multiple flow units
- Multiple flow alarm levels
- Visible alarm indication
- Multi-level configuration
- Pulse input
- Alarm relay
- mA outputs

# **Applications:**

- Lubrication oil flow monitoring
- Industrial flow monitoring
- Process control

#### **Technical Specifications:**

- Single or multi-channel models
- Kytola coil, NAMUR or NPN sensor inputs
- Modbus RTU (RS485) communication

#### Housing

Height

100 mm

Anodized aluminium, IP65

# **Supply Voltage:**

• 24 VDC







#### **OVAL D MEASURING STATION**

#### **Key Features:**

- Stainless steel housing
- Clear display
- Communication with upper level systems
- Alarm relays: high flow, low flow, very low flow and one programmable
- Alarm inhibits
- Alarm groups

#### **Applications:**

- Lubrication oil monitoring
- Industrial oil flow monitoring
- Process control

#### **Technical Specifications:**

- Maximum 48 points (96 points on special request)
- Modbus RTU (RS485) communication
- Kytola coil or NAMUR sensor inputs

#### **Housing:**

Height 250 mm

• Brushed stainless steel, IP65

# **Supply Voltage:**

 24 VDC/0.6 A or 110–240 VAC / 50–60 Hz

#### **OVAL MIN-E LOCAL DISPLAY**

#### **Key Features:**

- Clear scalable display
- Instant/cumulative flow measurement
- Multiple flow units
- Multiple flow alarm levels
- Visible alarm indication
- Multi-level configuration
- Pulse input
- Alarm relay
- mA outputs

#### **Applications:**

- Lubrication oil flow monitoring
- Industrial flow monitoring
- Process control

# **Technical Specifications:**

- Single or multi-channel models
- Kytola coil, NAMUR or NPN sensor inputs
- Modbus RTU (RS485) communication

# Housing

Height

100 mm

Anodized aluminium, IP65

# **Supply Voltage:**

24 VDC

# KVM CONTROL ROOM SOFTWARE

## **Key Features:**

- Easy on-site start-up and commissioning
- User friendly operation
- Reliable operation and runtime control

#### **Applications:**

- · Lubrication oil monitoring
- · Industrial oil flow monitoring
- Process control





Panel with OVAL D, SR blocks, and SR single meters, (see pages 11–12).



#### FLOW METER MODEL VEx-A

# **Key Features:**

- Sturdy, industrial flow meter with protected flow tubes
- Flow adjustment valves on outlet
- Inductive low flow alarm (option)
- Maximum pressure 30 bar
- Maximum temperature 80°C

#### **Applications:**

 Central lubrication oil monitoring in pulp&paper and steel mills

# **Measuring Range:**

Oil 220 cSt

100% flow min 0.13 L/min, max 7.2 L/min

• Oil 125 cSt

100% flow min 0.23 L/min, max 12.5 L/min

#### Flow Tubes:

• Grilamid (PA-12)

#### **Connections:**

- Single tube: BSP or NPT 1/2"
- Multi-tube: BSP/NPT 3/4" common inlet, BSP/NPT 1/2" separate outlets

### **Options:**

Please contact us for available options.

### FLOW METER MODEL K

# **Key Features:**

- · Sturdy, industrial flow meter with protected flow tube
- Flow adjusting valve on outlet
- Inductive low and/or high flow alarm (option)
- Maximum pressure 30 bar
- Maximum temperature 80°C (120°C)

#### **Applications:**

• Central lubrication oil monitoring in pulp&paper and steel mills

# Measuring Range: • Oil 220 cSt

- - 100% flow min 9 L/min, max 27.5 L/min
- Oil 125 cSt

100% flow min 14 L/min, max 40 L/min

#### Flow Tube:

Grilamid (PA-12) or PES

#### **Connections:**

• BSP or NPT 1"

#### **Options:**

Please contact us for available options.

#### Height 310 mm

#### FLOW METER MODEL TL

Height ~263 mm

max

# **Key Features:**

- · Sturdy, industrial flow meter
- Protected flow tube
- Inductive low and/or high flow alarm (option)
- Maximum pressure 20 bar
- Maximum temperature 80°C (120°C)

### **Applications:**

• Central lubrication oil monitoring in pulp&paper and steel mills

# **Measuring Range:**

- Oil 220 cSt
- 100% flow min 26.8 L/min, max 130 L/min
- Oil 125 cSt
  - 100% flow min 33.5 L/min, max 190 L/min

#### Flow Tube:

• Grilamid (PA-12) or PES

#### Connections:

• BSP or NPT 2" (DN 50 or ANSI 2" flanges)

# **Options:**

Please contact us for available options.





Height 180 mm max

#### **ALARM AMPLIFIER MODEL NK**

# **Key Features:**

- Connections for 1—30 NAMUR sensors dependent upon model
- Function indicator LED's in front panel
- Potential free change-over switch
- Common group alarm, if one or more sensor alarms

# **Applications:**

- Indication of low flow alarm in oil lubrication systems
- Indication of low/high flow alarm, in sealing and cooling water systems
- Gas flow alarm
- Typically used with models V, K and TL

•24 VDC, 110 VAC or 220 VAC, dependent upon model

#### **Output:**

One change-over switch, 230 VAC, 5 A

### Inputs:

•Inductive proximity sensors according to NAMUR norm (DIN 19234)



# **OILAN A4 WATER IN OIL ANALYZER**



#### **Key Features:**

- On-line measurement
- Measures the absolute water content in oil (ppm)
- For mineral oils as well as some synthetic oils
- Serial communication with upper level systems
- 4—20 mA output
- Alarm output
- Monitoring and calibration with Kytola software

# **Applications:**

- Paper machine oil lubrication systems
- Ship propulsion systems
- Oil rig propulsion systems
- Steel mills
- Mining

# **Technical Specifications:**

- Measuring range 0—5 000 ppm (0–20 000 ppm on request)
- Accuracy ±30 ppm within the calibrated measuring range and under calibration conditions
- Oil viscosity 10—680 cSt
- Ambient temperature +5°C...+60°C
- Oil sample temperature +5°C...+60°C
- Oil sample pressure 1–10 bar

#### **Housing:**

Aluminium

#### **Connection:**

• BSP or NPS 1/4" female adapters



# **MODEL DPA**

# **Key Features:**

- Clear and easy to read
- Red metering liquid provides good contrast
- Robust construction
- Metering liquid does not blow out during momentary overloads
- Due to the construction metering liquid does not evaporate during overloads

#### **Applications:**

- Air conditioning strainers
- Blowers
- Dust filters
- Pressurized enclosures
- Draught measurement in furnaces
- Laboratories

# **Measuring Range:**

• Min 0-100 Pa, max 0-500 Pa

Acrylic (PMMA)

#### **Connection:**

• For 4-6 mm inside diameter hose

# **MODEL DPP**

Height 317-840 mm

# **Key Features:** contrast

- Clear and easy to read
- Red metering liquid provides good
- Robust construction

#### **Applications:**

- Air conditioning strainers
- Blowers
- Dust filters
- Pressurized enclosures
- Laboratories
- Flow rate and velocity measurement
- Annealing furnaces

# **Measuring Range:**

• Min 0-1 kPa, max 0-5 kPa

Acrylic (PMMA)

### **Connection:**

• For 4–6 mm inside diameter hose



Height 137 mm



# **MODEL 2680A**

# **Key Features:**

- Robust stainless steel construction
- Protects measurement equipment
- Closes if flow stops or reverses
- Can be mounted in any position
- Easily removed
- Withstands corrosive media

# **Applications:**

- Liquid feed lines
- Gas feed lines
- Pressurized sealing water systems

# **Opening Pressure:**

• 0.15—0.25 bar

# **Body:**

AISI 316

#### **Connection:**

• BSP 1/4"—BSP 1" (male inlet, female outlet)

#### **MODEL 2680B**

# **Key Features:**

- Robust stainless steel construction
- Protects measurement equipment
- Closes if flow stops or reverses
- Can be mounted in any position
- Easily removed
- Withstands corrosive media



Height 55-75mm

# **Applications:**

- Liquid feed lines
- Gas feed lines
- Pressurized sealing water systems

# Opening Pressure: • 0.15—0.25 bar

- -

#### **Body:**

• AISI 316

#### Connection:

 BSP 1/4"—BSP 1" (female inlet and outlet)

Height 46-70 mm

# **MODEL CV**

# **Key Features:**

- Robust stainless steel construction
- Protects measurement equipment
- Closes if flow stops or reverses
- Can be mounted in any position
- Easily removed
- Withstands corrosive media

## **Applications:**

- Liquid feed lines
- Gas feed lines
- Pressurized sealing liquid water systems

#### **Opening Pressure:**

• 0.25 bar

#### **Body:**

• AISI 316

#### **Connection:**

• Inlet for 10 mm hose, outlet BSP 1/4"-1/2" (Inlet for 3/8" hose, outlet NPT 1/4"-1/2")





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