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

We are happy to present our product catalogue with Kytola Instrument Oy’s reliable and high quality flow measuring and monitoring instruments. Our legacy is based on long-term experience of designing and manufacturing tailor-made equipment for most industrial branches and for equipment and machine builders, OEM’s. The key applications are found in pulp and paper, energy, chemical, mining, steel and food industries.

Our goal is to help all our customers to succeed and further improve their operational reliability by providing proven solutions to process and application challenges. We do this by designing and delivering accurate quality products that are made to endure the demanding conditions in industrial environments and perform reliably.

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 find exactly what you are looking for, please do not hesitate to contact us. We are known for being agile and solution-orientated. It is everyday business to us to customize our products to suit most needs and specifications.

Our products are designed and manufactured at our premises in Muurame, Finland. This facility also houses our corporate headquarters, 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 together with superior customer service. Based on your process and system needs, our technical support specialists suggest instrumentation to help you with your specific application requirements. In other words: you present your needs and challenges and we provide a cost-efficient and tailored solution.

We look forward to serving you.

Sales phone: +358 20 779 0690
Email: sales@kytola.com
www.kytola.com
VARIABLE AREA FLOW METERS  
SINGLE TUBE

**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 / 1.013 bar (abs)
  - 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:**
- G 3/8”

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

**Height**
- 130 mm

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**B**

**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 / 1.013 bar (abs)
  - 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:**
- G 1” (Adapters available for NPT)

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

**Height**
- 210 mm

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**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 / 1.013 bar (abs)
  - 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:**
- G 3/4” (Adapters available for NPT)

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

**Height**
- 165 mm

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**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 / 1.013 bar (abs)
  - 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:**
- G 1” (Adapters available for NPT)

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

**Height**
- 210 mm
### VARIABLE AREA FLOW METERS

#### 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 / 1.013 bar (abs)
  - 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:**
- G 1/4” (Adapters available for NPT)

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

#### EA

**Key Features:**
- High quality acrylic flow meter
- Adjustable alarm
- Flow adjustment valve
- Various alarm sensor choices
- Maximum pressure 10 bar
- Maximum temperature 75°C

**Applications:**
- Heat treatment ovens
- Automatic welding lines

**Measuring Range:**
- Water +20°C
  - min 2–16 mL/min, max 0.5–2.5 L/min
- Air +20°C / 1.013 bar (abs)
  - 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:**
- G 1/4” (Adapters available for NPT)

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

#### L

**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 air purging
- Sealing liquid monitoring

**Measuring Range:**
- Water +20°C
  - min 2–18 mL/min, max 0.5–3.5 L/min
- Air +20°C / 1.013 bar (abs)
  - min 0.1–0.9 NL/min, max 15–110 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:**
- G or NPT 1/4”

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

#### 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:**
- G/NPT 1/4” or 3/8” or 10 mm compression fittings

**Options:**
Please contact us for available options.
**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 / 1.013 bar (abs)
    - 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:**
- G/NPT 1/2" or 20 mm socket type connection

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**HV**

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**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 / 1.013 bar (abs)
    - 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:**
- G/NPT 3/4" or 25 mm socket type connection

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**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 / 1.013 bar (abs)
    - 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:**
- G/NPT 1/4" or 50 mm socket type connection
**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 / 1.013 bar (abs)
  - min 200–1200 NL/min,
  - max 400–3000 NL/min

**Flow Tube:**
- Grilamid (PA-12) or PES

**Connections:**
- G or NPT 1”

**Options:**
- Please contact us for available options.
### 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 / 1.013 bar (abs)
  - 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:**
- G or NPT 2"

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

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### 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 7.5–55 L/min, max 50–400 L/min
- Air +20°C / 1.013 bar (abs)
  - 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:**
- DN 50 or ANSI 2” flanges

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

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### 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:**
- Please contact us for available options.
# VARIABLE AREA FLOW METERS

## SINGLE TUBE

### 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 (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 / 1.013 bar (abs)
  - 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:**
- G or NPT 1/2”

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

### VE

**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:**
- 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 / 1.013 bar (abs)
  - 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:**
- G or NPT 1/2”

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

### 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 7.5–32.5 L/min
- **Air** +20°C / 1.013 bar (abs)
  - 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:**
- G or NPT 1/2”

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

### VLFH

**Key Features:**
- Sturdy, industrial flow meter with protected flow tube
- Large selection of materials
- 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
- 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 / 1.013 bar (abs)
  - 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:**
- DN 15 or DN 25 flanges
- ANSI 1/2” or ANSI 1” flanges

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

**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 / 1.013 bar (abs)
  - 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:**
- G 1/2” common inlet, G 1/4” separate outlets
  (Adapters available for NPT)

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

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**VEx**

**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 / 1.013 bar (abs)
  - 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:**
- G/NPT 3/4” common inlet, G/NPT 1/2” separate outlets

**Options:**
Please contact us for available options.
### VARIABLE AREA FLOW METERS

#### METAL TUBE

#### MP

**Key Features:**
- Stainless steel wetted parts
- High pressure and temperature resistance
- Withstands aggressive media
- Maximum pressure 235 bar
- Maximum temperature 150°C without alarms

**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 / 1.013 bar (abs)
  - min 60–320 NL/h, max 1000–12000 NL/h

**Connections:**
- G/NPT/Rc 1/4” or 1/2” depending on range

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

#### MP WITH VALVE

**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 without alarms

**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 / 1.013 bar (abs)
  - min 60–320 NL/h, max 1000–12000 NL/h

**Connections:**
- G/NPT 1/4” or 1/2” depending on range

**Options:**
Please contact us for available options.
CONSTANT FLOW REGULATORS

**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 – 80 mL/min, max 0.5 – 3.5 L/min
  - Air +20°C / 1.013 bar (abs)
  - min 0.5 – 2.5 NL/min, max 15 – 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:**
- G or NPT 1/4"

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

**2914**

**Key Features:**
- Provides constant flow of liquids or gases regardless of pressure variations
- Needle valve for flow 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
- Air +20°C / 1.013 bar (abs)
  - min 0.5 – 2.5 NL/min, max 15 – 110 NL/min
- Air scale has always to be calibrated according to the actual inlet pressure and temperature.

**Maximum differential pressure**
- 12 bar (20 bar on request)

**Body:**
- AISI 316

**Connections:**
- G or NPT 1/2"

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

**3630**

**Key Features:**
- Provides constant flow of liquids or gases regardless of pressure variations
- Adjustable alarm
- High performance, reliable operation
- Aluminium or stainless steel construction
- Supplied with Model L flow meter

**Applications:**
- Water or air purging
- Gas purging in Δp measurements
- Hydrostatic density measurements

**Flow Range:**
- Water max 1.5 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:**
- G or NPT 1/4"

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

**3631**

**Key Features:**
- Provides constant flow of liquids or gases regardless of pressure variations
- Aluminium or stainless steel construction
- Supplied with Model L flow meter

**Applications:**
- Water purging for instruments
- Air purging in level measurements
- Gas purging in Δp measurements

**Flow Range:**
- Water max 1.5 L/min
  - Air max 60 NL/min at 6 barg
- Air scale has always to be calibrated according to the actual medium, inlet pressure and temperature.

**Maximum differential pressure**
- 10 bar

**Body:**
- AISI 316 or aluminium

**Connections:**
- G or NPT 1/4"

**Options:**
- Please contact us for available options.
SEAL WATER FLOW METERS

SLM

Key Features:
• Solid, compact construction
• Clog resistant flow adjusting 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 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.

SLMx-2

Key Features:
• Solid, compact construction
• Clog resistant flow adjusting 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:
Please contact us for available options.
OVAL GEAR FLOW METERS AND DISPLAYS

SR SINGLE

Key Features:
- Large viscosity range 30—1000 cSt
- Independent of oil viscosity changes
- Pulse output
- Sturdy construction
- Flow adjusting valve
- Service valve (SR-1...6)
- 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
  - SR-1...6: min 0.1–1 L/min, max 0.6–6 L/min
  - SR-10...120: min 1–10 L/min, max 10–120 L/min
- Other ranges also available

Body:
- Aluminium

Connections:
- SR-1...6: G/NPT ½”
- SR-10...120: G/NPT 1” or 1 ½” depending on range

Options:
Please contact us for available options.

SRx-x MULTI-CHANNEL MODEL

Key Features:
- 4, 6 or 8 channels
- 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:
- Oil
  - Min 0.1–1 L/min, max 0.6–6 L/min
- Other ranges also available

Body:
- Aluminium

Connections:
- G or NPT 1/2” outlets

Options:
Please contact us for available options.
OVAL GEAR FLOW METERS AND DISPLAYS

SRO

Key Features:
- Large viscosity range 30—1000 cSt
- Independent of viscosity and temperature changes
- Pulse output
- Accuracy ±0.5% of reading
- Maximum pressure 10 bar
- Maximum temperature 80°C

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

Measuring Range:
- Oil
  - min 10–120 L/min
  - max 20–200 L/min

Body:
- Aluminium

Connections:
- G or NPT 1½”

Options:
- Alternative sensors

OVAL D2 MEASURING STATION

Key Features:
- Painted or 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 64 points
- Modbus RTU (RS485)
- USB port for local configuration
- Kytola coil, NAMUR sensor inputs

Housing:
- Painted or 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, NPN or PNP sensor inputs
- Modbus RTU (RS485) communication

Housing:
- Painted aluminium, IP65

Supply Voltage:
- 24 VDC

Height: 250 mm

Height: 100 mm
OIL LUBRICATION FLOW MONITORING SYSTEMS

INSTALLATION PANELS

**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

SR OVAL GEAR METERS

**Key Features:**
- Single or multi-channel (4, 6, 8) model
- Large viscosity range 30—1000 cSt
- Independent of oil viscosity changes
- Pulse outputs
- Sturdy construction
- Flow adjusting 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:**
- Min 0.1 – 1 L/min, max 10–120 L/min

OVAL D2 MEASURING STATION

**Key Features:**
- Painted or stainless steel housing
- Communication with upper level systems
- Alarm relays: high flow, low flow, very low flow and one programmable
- Alarm inhibits and groups

**Applications:**
- Lubrication oil flow monitoring
- Industrial oil flow monitoring
- Process control

**Technical Specifications:**
- Maximum 64 points
- Modbus RTU (RS485) communication
- USB port for local configuration
- Kytola coil or NAMUR sensor inputs

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 oil flow monitoring
- Process control

**Technical Specifications:**
- Single or multi-channel models
- Kytola coil, NAMUR, NPN or PNP sensor inputs
- Modbus RTU (RS485) communication

OVAL D2 with stainless steel housing

SRV UPGRADE BLOCK

**Key Features:**
- Optimized for upgrading the existing Model V variable area flow meter to oval gear meters
- Single or multi-channel (max 7) models
- Independent of oil viscosity changes
- Oval Min-E Local Display can be mounted on the meter block or as a separate unit

**Applications:**
- Lubrication oil flow monitoring
- Industrial oil flow monitoring
- Process control

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
OIL LUBRICATION FLOW MONITORING SYSTEMS

FLOW METER 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:
- Lubrication oil flow monitoring in pulp & paper, steel and other industries

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: G or NPT 1/2”
- Multi-tube: G/NPT 3/4” common inlet, G/NPT 1/2” separate outlets

Options:
Please contact us for available options.

FLOW METER 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:
- Lubrication oil flow monitoring in pulp & paper, steel and other industries

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:
- G or NPT 1”

Options:
Please contact us for available options.

FLOW METER 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:
- Lubrication oil flow monitoring in pulp & paper, steel and other industries

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:
- G or NPT 2” (DN 50 or ANSI 2” flanges)

Options:
Please contact us for available options.

ALARM AMPLIFIER NK

Key Features:
- Connections for 1—30 NAMUR sensors dependent upon model
- Function indicator LEDs 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

Supply:
- 24 VDC, 115 VAC or 230 VAC, dependent upon model

Output:
- One change-over switch, 230 VAC, 5 A

Inputs:
- Inductive proximity sensors according to NAMUR norm (EN 60947)
OIL ANALYZERS

OILAN 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 (Modbus)
- 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
- 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:
- G or NPS 1/4” female adapters

OILCOL OIL COLOR ANALYZER

Key Features:
- Online oil color analyzer
- ASTM D1500 color scale
- Online measurement with a response time of 4 s
- Sturdy construction
- Serial communication (Modbus)
- 4 — 20 mA output
- Monitoring with Kytola software

Applications:
Wide variety of liquid petroleum products:
- Lubricating oils
- Heating oils
- Diesel fuel oils
- Mineral insulating oils
- Hydraulic oils

Technical Specifications:
- Measuring range ASTM D1500 scale from 0.5 to 8.0
- Accuracy ±0.3 (as the ASTM scale step is 0.5)
- Oil viscosity 0—500 cSt
- Oil and ambient temperature −20°C...+60°C
(−20°C...+70°C with air cooling option)
- Maximum pressure 20 bar

Housing:
- Aluminium

Connection:
- 10 mm or 3/8” compression fitting
DIFFERENTIAL PRESSURE METERS

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

Body:
- Acrylic (PMMA)

Connection:
- For 4–6 mm inside diameter hose

DPP

Key Features:
- Clear and easy to read
- Red metering liquid provides good contrast
- Robust construction

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

Measuring Range:
- Min 0–1 kPa, max 0–5 kPa

Body:
- Acrylic (PMMA)

Connection:
- For 4–6 mm inside diameter hose

CHECK VALVES

2680A / 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

Applications:
- Liquid feed lines
- Gas feed lines
- Pressurized sealing liquid systems

Opening Pressure:
- 0.15–0.25 bar

Body:
- AISI 316

Connection:
- G 1/4” – G 1”
 2680A: male inlet, female outlet
 2680B: female inlet and outlet

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 systems

Opening Pressure:
- 0.25 bar

Body:
- AISI 316

Connection:
- Inlet for 10 mm hose, outlet G 1/4”–1/2”
  (Inlet for 3/8” hose, outlet NPT 1/4”–1/2”)
**Start-up Assistance**

Kytola offers a comprehensive commissioning and start-up package with in-depth training to operators.

Kytola assistance ensures a smooth start up and efficient use of the Oval Flow lubrication monitoring system from the very first moment.

**Maintenance and Service Agreement**

Kytola is dedicated to contribute to the maximum runnability of its customer’s machinery.

By signing a Maintenance and Service agreement with Kytola, one ensures best possible operation of their Kytola products and systems.