



FLOW METERS



Kytola
INSTRUMENTS





Kytola Instruments, located in Muurame in Central Finland is the world market leader in lubrication and seal water monitoring. Key applications are found in the pulp and paper, mining, steel and chemical industries.

Kytola's products are mainly designed to help detect excess consumption of water, oil, air or other mediums. We apply the most modern manufacturing methods in our production and all manufacturing by - products are always recycled.

In Finland, the Kytola Group consists of Kytola Instruments Oy, Cubes and Tubes Oy and OK-Vise Oy. Internationally, we have Kytola Instruments AB in Sweden, Kytola Mess- und Regeltechnik GmbH in Germany and Kytola Instruments Ltd in North America.

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FLOW METERS



Model A

Measuring range H₂O +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 NI/min
Max 20 - 220 NI/min

Body Acrylic (PMMA)

Connection BSP 3/8 (use thread adapters for NPT connections)



Model C

Measuring range H₂O +20°C
Min 0,5 - 5 l/min
Max 5 - 30 l/min

Air +20°C/101,3 kPa
Min 25 - 250 NI/min
Max 100 - 1000 NI/min

Body Acrylic (PMMA)

Connection BSP 3/4 (use thread adapters for NPT connections)



Model D

Measuring range H₂O +20°C
Min 7,5 - 40 l/min
Max 10 - 100 l/min

Air +20°C/101,3 kPa
Min 200 - 1200 NI/min
Max 500 - 2500 NI/min

Body Acrylic (PMMA)

Connection BSP 1 (use thread adapters for NPT connections)



Model BA

Measuring range Air +20°C/101,3 kPa
Min 0,2 - 1,5 NI/min
Max 0,5 - 7,5 NI/min

Body Acrylic (PMMA) / Aluminium

Connection for ø 6/4 hose



Model E

Measuring range H₂O +20°C
Min 2 - 16 ml/min
Max 0,4 - 2,4 l/min

Air +20°C/101,3 kPa
Min 0,1 - 0,8 NI/min
Max 10 - 90 NI/min

Body Acrylic (PMMA)

Connection BSP 1/4 (use thread adapters for NPT connections)



Model HV

Measuring range H₂O +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

Flowtube Grilamid (PA-12), PES

Connectors PVC

Connection BSP 1/2 or NPT 1/2 or I.D. 20 mm



Model HK

Measuring range H₂O +20°C
Min 0,3 - 1,2 m³/h
Max 1 - 4,75 m³/h

Air +20°C/101,3 kPa
Min 0,15 - 0,6 Nm³/min
Max 0,4 - 2,2 Nm³/min

Flowtube Grilamid (PA-12), PES

Connectors PVC

Connection BSP 3/4 or NPT 3/4 or I.D. 25 mm



Model HT

Measuring range H₂O +20°C
Min 0,5 - 3 m³/h
Max 4 - 22 m³/h

Air +20°C/101,3 kPa
Min 0,4 - 2 Nm³/min
Max 2 - 14 Nm³/min

Flowtube Grilamid (PA-12), PES

Connectors PVC

Connection BSP 1 1/4 or NPT 1 1/4 or I.D. 50 mm



Model K

Measuring range H₂O +20°C
Min 7,5 - 40 l/min
Max 10 - 120 l/min

Air +20°C/101,3 kPa
Min 200 - 1200 NI/min
Max 400 - 2600 NI/min

Flowtube Grilamid (PA-12), PES

End blocks Aluminum, AISI 316, Nylon (PA 6.6)

Connection BSP 1 or NPT 1

US conversion units for flow volume
1) air 1 SCFM = 26.286 NI/min
2) water 1 USGPM = 3.785 Litres/min

Temperature +20°C = 68°F



Model **KL**

Measuring range H₂O +20°C
Min 7,5 - 40 l/min
Max 10 - 110 l/min

Air +20°C/101,3 kPa
Min 200 - 1200 NI/min
Max 400 - 3000 NI/min

Flowtube Grilamid (PA-12),
PES

End blocks Aluminum, AISI 316,
Nylon (PA 6.6)

Connection BSP 1 or NPT 1



Model **L**

Measuring range H₂O +20°C
Min 2 - 18 ml/min
Max 0,5 - 3 l/min

Air +20°C/101,3 kPa
Min 0,1 - 0,9 NI/min
Max 10 - 110 NI/min

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

Connection NPT 1/4 or BSP 1/4



Model **TL**

Measuring range H₂O +20°C
Min 7,5 - 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

Flowtube Grilamid (PA-12),
PES

Body AISI 316

Connector Aluminum, AISI 316

Connection BSP 2 or NPT 2



Model **TLFH**

Measuring range H₂O +20°C
Min 7,5 - 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

Flowtube Grilamid (PA-12),
PES

Body AISI 316

Connection DN 50 or ANSI 2
flanges



Model **TTFH**

Measuring range H₂O +20°C
Min 75 - 600 l/min
Max 100 - 1300 l/min

Flowtube Acrylic (PMMA)

Body AISI 316

Connection ANSI 4" or
DN 80 flanges



Model **VD**

Measuring range H₂O +20°C
Min 0,4 - 2 l/min
Max 5 - 32,5 l/min

Air +20°C/101,3 kPa
Min 15 - 75 NI/min
Max 100 - 1100 NI/min

Flowtube Grilamid (PA-12),
PES

End blocks Aluminum, AISI 316,
Nylon (PA 6.6)

Connection BSP 1/2 or NPT 1/2



Model **VE**

Measuring range H₂O +20°C
Min 0,4 - 2 l/min
Max 5 - 30 l/min

Air +20°C/101,3 kPa
Min 15 - 70 NI/min
Max 150 - 700 NI/min

Flowtube Grilamid (PA-12),
PES

End blocks Aluminum, AISI 316,
Nylon (PA 6.6)

Connection BSP 1/2 or NPT 1/2



Model **VL**

Measuring range H₂O +20°C
Min 0,4 - 2 l/min
Max 5 - 30 l/min

Air +20°C/101,3 kPa
Min 15 - 75 NI/min
Max 150 - 900 NI/min

Flowtube Grilamid (PA-12),
PES

End blocks Aluminum, AISI 316,
Nylon (PA 6.6)

Connection BSP 1/2 or NPT 1/2

CONSTANT FLOW REGULATORS



Model 2850

Flow range 0,01 - 2,3 l/min H₂O
0,5 - 100 NI/min air (6 barg)

Max differential pressure 20 bar

Max pressure 20 bar

Body AISI 316

Connection BSP 1/4 or NPT 1/4



Model 3630

Flow-range 0,01 - 1,5 l/min H₂O
0,5 - 60 NI/min air (6 barg)

Max differential pressure 10 bar

Max pressure 20 bar

Body Aluminum, AISI 316

Connection BSP 1/4 or NPT 1/4



Model 2914

Flow-range 0,5 - 14 l/min H₂O

Max differential pressure 12 bar (20 bar on request)

Max pressure 20 bar

Body AISI 316

Connection BSP 1/2 or NPT 1/2

MULTITUBE FLOWMETERS



E5K

Model **ExK**

x = number of flowtubes

Measuring range H₂O +20°C
Min 2 - 16 ml/min
Max 0,4 - 2,4 l/min

Air +20°C/101,3 kPa
Min 0,1 - 0,8 NI/min
Max 10 - 90 NI/min

Body Acrylic (PMMA)

Model **VEx**

x = number of flowtubes

Measuring range H₂O +20°C
Min 0,4 - 2 l/min
Max 5 - 30 l/min

Air +20°C/101,3 kPa
Min 15 - 70 NI/min
Max 150 - 700 NI/min

Flowtube Grilamid (PA-12),
PES

End blocks Aluminum, AISI 316,
Nylon (PA 6.6)



VE6A

DIFFERENTIAL PRESSURE GAUGES



Model **DPP**

Measuring range Min 0 - 1 kPa
Max 0 - 5 kPa

Body Acrylic (PMMA)

Connection for 4-6 mm hose
(inside diameter)



Model **DPA**

Measuring range Min 0 - 100 Pa
Max 0 - 500 Pa

Body Acrylic (PMMA)

Connection for 4-6 mm hose
(inside diameter)

CHECK VALVES



Model **2680A**

Opening pressure 0,15 bar - 0,25 bar

Body AISI 316

Connection BSP 1/4 - BSP 1 1/4



Model **2680B**

Opening pressure 0,15 bar - 0,25 bar

Body AISI 316

Connection BSP 1/4 - BSP 1 1/4



Model **CV**

Opening pressure 0,25 bar

Body AISI 316

Connection for 10 mm hose and
BSP 1/4 - BSP 1/2,
3/8" hose and
NPT 1/4 - NPT 1/2

OVAL GEAR FLOWMETERS



SR-30

Model **SR-x**

Panel Mounting
x = flow range

Measuring range Min 1 - 10 l/min Oil
Max 10 - 100 l/min Oil

Body Aluminum



SR6

Model **SRx**

Panel Mounting
x = number of measuring points

Measuring range Min 0,1 - 1 l/min Oil
Max 0,6 - 6 l/min Oil

Body Aluminum



2950

Model **2950**

Measuring range Min 0,1 - 1 l/min Oil
Max 10 - 100 l/min Oil

Body Aluminum



2951

Model **2951**

Measuring range Min 0,1 - 1 l/min Oil
Max 10 - 100 l/min Oil

Body Aluminum



6210

Model **6210**

Measuring range Viscosity > 30 cSt
Min 0,1 - 1 l/min
Max 3 - 30 l/min

Body PVC or PVDF

SLM

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Sealing liquid monitor for pumps

The SLM is designed for applications where uninterrupted seal water flow is required.

Models	SLM 1	0,05 - 1 l/min	SLM 15	1 - 15 USGPH
	SLM 3	0,1 - 3 l/min	SLM 50	2 - 50 USGPH
	SLM 8	0,5 - 8 l/min	SLM 2	0,1 - 2,0 USGPM
	SLM 13	1 - 13 l/min	SLM 35	0,25 - 3,5 USGPM

Features

- Reliable operation
- Solid, compact construction
- Clog resistant flow regulating valve
- Built-in tube cleaner
- Alarm ready
- Compatibility with all seal types



OILAN

Oil moisture analyser for lubrication systems.

The Oilan is an on-line oil moisture analyser which measures changes in oil moisture content of lubrication oil.

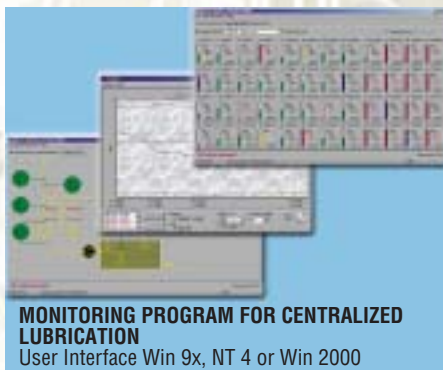
Measuring range 0 - 5000 ppm or
0 - 20 000 ppm, 1% = 10 000 ppm

Supply 110 VAC or 230 VAC

Output Signal 4 - 20 mA



CENTRAL LUBRICATION INSTRUMENTS



MONITORING PROGRAM FOR CENTRALIZED LUBRICATION
User Interface Win 9x, NT 4 or Win 2000



THIRD PARTY CONNECTION



OVAL MEASURING STATION
16, 32 or 48 measuring points/station
Supply 85 - 264 VAC



OVAL I/O
16, 32 or 48 measuring points/station
Supply 24 VDC, option 85 - 264 VAC



NK x ALARM AMPLIFIER
x = the number of sensors (2/6/12/24/30)
Supply 24 VAC/VDC, 110/230 VAC
Relay Output 10A, 250 VAC



SR6



SR-30



OILAN

Kytola's centralized oil lubrication monitoring system can be used with the conventional variable area flow meters (VE, KA, TLA) or the oval gear meters (SR).

The system has been designed so that measurement or alarm signals can easily be passed on to upper level systems, such as PLC's, DCS's etc.

The flow meter panels are delivered to the customer completely wired and tested.



KA



TLA



VE6A



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