



Flow Meter

Model: Turbo Lux 3 Digital

Product Description

Turbo Lux 3 Digital is flow meter for use in test pipes of stationary water extinguishing systems. It can be installed on existing Turbo Lux 3 measurement orifices already in operation by replacing the display unit only.

Features

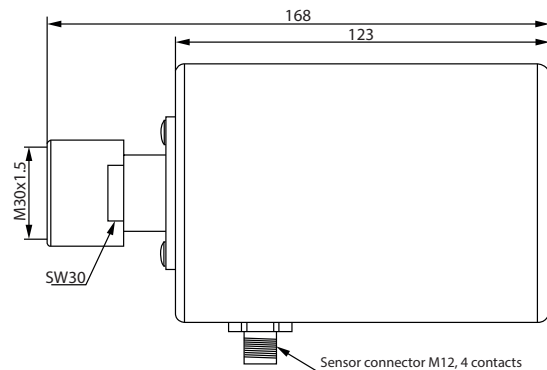
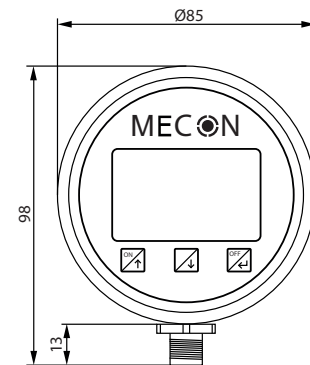
- A meter for all nominal sizes and flow ranges
 - Flow range from 75 ... 38,000 l/min. (20 ... 10,000 USgpm)
 - Nominal sizes from DN50 / 2" to DN300 / 12" (universal use)
- Simple operation via three key pads
- Simple conversion to digital display via screw connection
- Permanent display of actual flow rate, pump power and nominal size
- Good readability due to attenuation of the measured value and readable from up to 5 m
- Measurement accuracy $\pm 2.0\%$ (FM)
- Analogue output 4 ... 20 mA (only with 24 V DC supply)
- Languages: English, French, German
- Maintenance free

Approvals

FM Approved

Technical Specifications

Measuring Transducer	
Display	2.4 inch illuminated graphical LCD
Connection	M12 x 1 (4-pole)
Weight (incl mains adapter)	Approx. 1.3 kg (2.8 lb)
Material	Aluminium
Properties	
Analogue Output	4 ... 20 mA
Power Supply	12 ... 24 V DC Battery operation (in preparation)
Power Consumption	Max. 1.0 Watt
Ambient Temperature	1°C to 50°C (34°F to 140°F)
Storage Temperature	-20°C to 60°C (-13°F to 140°F)
Protection Class	IP 54
Attenuation	3s
Max Working Pressure	DN50 (2") to DN200 (8") - 34.5 bar (500 psi) DN250 (10") to DN300 (12") - 16 bar (232 psi)
Certificates	FM Approval Class: 1046



Manufactured by Mecon who hold FM Approval

Flow Meter

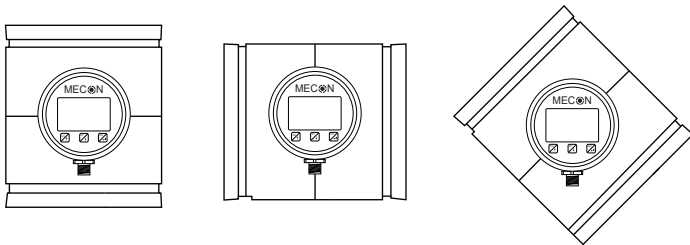
Model: Turbo Lux 3 Digital

Installation and mode of operation

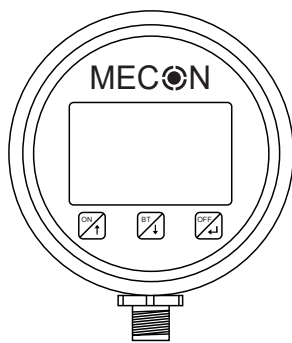
The digital indicator can be used together with every Turbo-Lux® 3 measurement orifice. Before removing the cap, the pipeline must be emptied to prevent liquid from escaping. The digital indicator is mounted and screwed on with the help of the screw cap.

It should be attached in a way that it is easy to read after installation. The positioning of the Turbo-Lux® 3 Digital is not of importance here. If possible, the screw cap or cap should only be tightened by hand.

The digital indicator determines the differential pressure generated in the measurement orifice. The microprocessor shows the current measured value on the display, based on the installed and configured nominal size of the measurement orifice and the rated power of the pump.



To show the measured values and installation, the Turbo-Lux® 3 Digital is equipped with a back-lit LCD display. Without the need for any other equipment, the operator can easily adjust the parameters of the transducer using three operating keys.



ON Button
- Switch on the digital indicator
- Up arrow



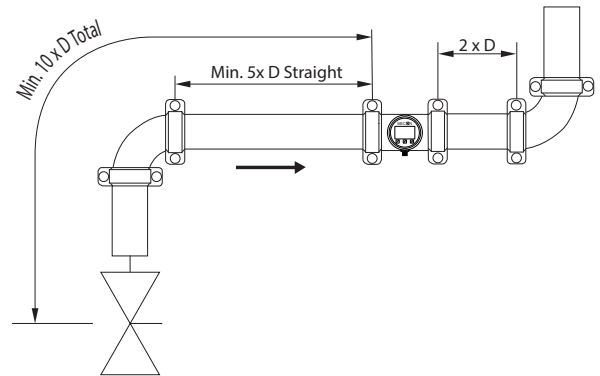
Middle Button
- Down arrow



OFF Button
- Confirm selection
- Pressing and holding cancels the selected function
- Pressing and holding in start mode switches it off

Installation of the orifice plate

At least 5x D (D=pipe diameter) straight section of the pipe must be maintained before the orifice plate and 2x D after. Total 10x D inlet path is required if a valve, pump or pipe fitting is mounted before the flow meter.



Couplings

Do not use installation ready couplings with Turbo Lux 3.

The rubber gasket on installation ready couplings is affecting the measurements of Turbo Lux 3.

Installation Ready



Standard

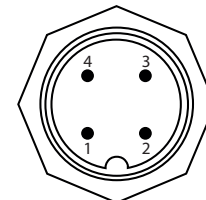


Electrical Connection

M12 x 1 (4-pole plug)

- 2 pins voltage supply

- 2 pins analogue, active 4 ... 20 mA power output



Connection plug, pin assignment

Pin	Leads	Function
1	Brown	L_out-
2	White	L_out+
3	Blue	0V
4	Black	12 - 24V



Data Sheet 6.23

Issue B



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Ordering Codes

Ordering Codes	Description
RDT3MDIND	Turbo Lux 3 Digital Indicator
RDT3MD050/75-375	Flowmeter Turbolux3 grooved 2" / DN50 (60,3mm) 75-375 LPM
RDT3MD076/150-750	Flowmeter Turbolux3 grooved 2 1/2" / DN65 (76,1mm) 150-750 LPM
RDT3MD080/220-1100	Flowmeter Turbolux3 grooved 3" / DN80 (88,9mm) 220-1100 LPM
RDT3MD080/300-1500	Flowmeter Turbolux3 grooved 3" / DN80 (88,9mm) 300-1500 LPM
RDT3MD100/380-1900	Flowmeter Turbolux3 grooved 4" / DN100 (114,3mm) 380-1900 LPM
RDT3MD100/460-2300	Flowmeter Turbolux3 grooved 4" / DN100 (114,3mm) 460-2300 LPM
RDT3MD100/600-3000	Flowmeter Turbolux3 grooved 4" / DN100 (114,3mm) 600-3000 LPM
RDT3MD100/680-3400	Flowmeter Turbolux3 grooved 4" / DN100 (114,3mm) 680-3400 LPM
RDT3MD165/760-3800	Flowmeter Turbolux3 grooved 6" / DN150 (165,1mm) 760-3800 LPM
RDT3MD165/1130-5650	Flowmeter Turbolux3 grooved 6" / DN150 (165,1mm) 1130-5650 LPM
RDT3MD165/1500-7500	Flowmeter Turbolux3 grooved 6" / DN150 (165,1mm) 1500-7500 LPM
RDT3MD165/1900-9500	Flowmeter Turbolux3 grooved 6" / DN150 (165,1mm) 1900-9500 LPM
RDT3MD168/760-3800	Flowmeter Turbolux3 grooved 6" / DN150 (168,3mm) 760-3800 LPM
RDT3MD168/1130-5650	Flowmeter Turbolux3 grooved 6" / DN150 (168,3mm) 1130-5650 LPM
RDT3MD168/1500-7500	Flowmeter Turbolux3 grooved 6" / DN150 (168,3mm) 1500-7500 LPM
RDT3MD168/1900-9500	Flowmeter Turbolux3 grooved 6" / DN150 (168,3mm) 1900-9500 LPM
RDT3MD200/2200-11000	Flowmeter Turbolux3 grooved 8" / DN200 (219,1mm) 2200-11000 LPM
RDT3M200/3000-15000	Flowmeter Turbolux3 grooved 8" / DN200 (219,1mm) 3000-15000 LPM
RDT3MD200/3800-19000	Flowmeter Turbolux3 grooved 8" / DN200 (219,1mm) 3800-19000 LPM
RDT3MD200/4500-22500	Flowmeter Turbolux3 grooved 8" / DN200 (219,1mm) 4500-22500 LPM
RDT3MD250/5300-26500	Flowmeter Turbolux3 grooved 10" / DN250 (273,0mm) 5300-26500 LPM
RDT3MD250/6000-30000	Flowmeter Turbolux3 grooved 10" / DN250 (273,0mm) 6000-30000 LPM
RDT3MD250/6800-34000	Flowmeter Turbolux3 grooved 10" / DN250 (273,0mm) 6800-34000 LPM
RDT3MD300/7600-38000	Flowmeter Turbolux3 grooved 12" / DN300 (323,9mm) 7600-38000 LPM
RDT3MDPSUPPLYGBV	Plug in power supply (UK)
RDT3MDPSUPPLYECV	Plug in power supply (Europe)
RDT3MD5MCABLE	5m Connection cable, power and analogue output
RDT3MDCONNECTOR	M12 Round connector
RDT3MCPAP	Replacement cap (incl. gasket)

Codes for the flowmeter do not include digital indicator which has to be ordered separately
Digital indicator is compatible with all sizes and flow ranges

Manufactured by Mecon who hold FM Approval

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