

Gas Flow Meter MQM with mechanical counter

DUNGS®
Combustion Controls

GAS FLOW METER MQM

**Manufacturer / Owner
of EU-Type Examination Certificate**
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Technical description

The MQM Quantometer is a turbine wheel gas meter that registers the operating volume using a 8-digit mechanical counter.

The MQM is a volume flow meter. The flow of the measured gas causes the turbine wheel to rotate.

Via pulses the operating volume can be transferred to an electronic volume corrector and converted to normal or standard conditions.

Threaded connection

Rp 1 & Rp 1 ½, acc. ISO 7/1:
max. operating pressure 4 bar

Flanged connection

DN 25 to DN 150, acc. DIN EN 1092-1:
max. operating pressure 16 bar.

Application

The MQM is for operational gas-volume measurement and is suitable for gases of families 1, 2, 3 and other neutral gaseous media. MQM is not an official calibrated counter. It is used for internal controlling processes, most suitable for industrial thermoprocessing facilities.

Approvals

EU type testing certificate as per:
• EU-Pressure Equipment Directive

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Specification	
Meter size	G 10 to G 1000
Flow rates	16 to 1600 m³/h
Nominal sizes	Rp 1 to Rp 1 ½ & DN 25 to DN 150
Max. operating pressure	Threaded version: 4 bar Flanged version: 16 bar
Measuring ratio	Rp 1 to DN 50 (G 40): 1:10 DN 50 (G 65) to DN 150: 1:20
Ambient temperature	-20 °C to + 55 °C
Degree of protection	IP 65
Materials	- Housing: Aluminium alloy - Display unit: Polymer material - Turbine wheel: Aluminium alloy
Installation position	Horizontal, vertical
Connections	Pressure: 1 x NPT ¼ Temperature: 1 x G ¼ (suitable thermowell available as accessory)
Recommended straight piping in nominal size of meter	inlet ≥ 3 x DN outlet ≥ 2 x DN
Special features	Display unit rotatable (355°) Maintenance free based on permanent lubrication of ball bearings

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Following basis versions are available:

Article designation	Order No.	Size (inlet/outlet)	G-Type	Max. operation pressure	Measurement range min. $\dot{V}_b$ [m³/h]	Measurement range max. $\dot{V}_b$ [m³/h]	Pulse generator
MQM Rp 1 (1.6-16)	292732	Rp 1	10	4 bar	1.6	16	LF
MQM Rp 1 (2.5-25)	292733	Rp 1	16	4 bar	2.5	25	
MQM Rp 1 (4.0-40)	292734	Rp 1	25	4 bar	4.0	40	
MQM Rp 1 (6.5-65)	292735	Rp 1	40	4 bar	6.5	65	
MQM Rp 1½ (6.5-65)	292736	Rp 1½	40	4 bar	6.5	65	
MQM DN 25 (1.6-16)	292737	DN 25	10	16 bar	1.6	16	
MQM DN 25 (2.5-25)	292738	DN 25	16	16 bar	2.5	25	
MQM DN 25 (4.0-40)	292739	DN 25	25	16 bar	4.0	40	
MQM DN 25 (6.5-65)	292740	DN 25	40	16 bar	6.5	65	
MQM DN 50 (6.5-65)	292741	DN 50	40	16 bar	6.5	65	
MQM DN 50 (5.0-100)	292742	DN 50	65	16 bar	5.0	100	
MQM DN 80 (8.0-160)	292743	DN 80	100	16 bar	8.0	160	
MQM DN 80 (12.5-250)	291770	DN 80	160	16 bar	12.5	250	
MQM DN 80 (20-400)	291879	DN 80	250	16 bar	20.0	400	
MQM DN 100 (12.5-250)	292744	DN 100	160	16 bar	12.5	250	
MQM DN 100 (20-400)	292745	DN 100	250	16 bar	20.0	400	
MQM DN 100 (32-650)	292746	DN 100	400	16 bar	32.0	650	
MQM DN 150 (32-650)	292747	DN 150	400	16 bar	32.0	650	
MQM DN 150 (50-1000)	292748	DN 150	650	16 bar	50.0	1000	
MQM DN 150 (80-1600)	292749	DN 150	1000	16 bar	80.0	1600	

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Following options are available*

Option	Additional feature	Explanation
Option 1	HF 1 pulse generator	Higher frequency of measuring, allows the determination of the actual gas flow in high resolution
Option 2	Oil pump	For additional, manual lubrication at biogas applications
Option 3	3.1 approval material batch	Confirms the technically specified parameters for the specific batch

* each option can be included independent from another

Accessories

Article designation	Order no.	Explanation	Suitable for
Thermowell MQM/MQMe (small)	300005	for mounting of temperature sensor	Rp 1 to DN 50
Thermowell MQM/MQMe (medium)	300267	for mounting of temperature sensor	DN 80, DN 100
Thermowell MQM/MQMe (large)	300268	for mounting of temperature sensor	DN 150

Technical Information based on:
Revision: Product information 09.2019
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Head Offices and Factory

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