

# Turbine Gas Meter TRZ 04



PRODUCT INFORMATION

**Reliable Measurements of Gas**



## TURBINE GAS METER TRZ 04

New design with new meter head and MID approval

### News about TRZ

Also proven devices can be improved. So we have optimized the mechanical turbine meter TRZ 03 (also TRZ 03-K) mechanically and have equipped it with a new meter head (type "G"). This is not only a visual change, but by new gears in measuring element and meter head the reduction ratios and torques change, which leads to a better measuring behaviour in the lower flow range. An additionally carried out fluidic optimization results in a higher accuracy and linearity.

The TRZ 04 will be first introduced for the diameters DN 50 to DN 200. Then in the medium term all nominal diameters up to DN 600 will be available.

### Features of meter head "G"

- universal meter head
- can be read with an angle (under 45°)
- rotatable by 355° (without breaking a seal)
- plastic case (standard), optional with a cover from aluminium
- 2 x reed contact
- tamper contact
- protection class: IP 66 / IP 67
- built-in encoder of type ENCO 08 (option), approved for Ex zone 1
- optionally with mechanical drive shaft (in connection with an aluminium cover)

### Approval

The TRZ 04 is approved for custody transfer metering within the EU in compliance with MID. The reference number for approval is as follows: **T10417**.

### HF pulse transmitters

In addition to the meter head the TRZ 04 can be supplied with HF pulse transmitters HF2 and HF3 in digital technology, which scan the turbine wheel or the reference wheel. This new pulse transmitters are especially temperature-stable and provide a digital NAMUR signal.

### Meter features

The other features are largely the same as for the TRZ 03, but with some improvements.

- Nominal size: DN 50 through DN 200
- Pressure rating PN 10 through PN 100 / ANSI 600
- Measuring ranges up to 1:160, depending on nominal size and operating pressure, with flow rates up to 2500 m<sup>3</sup>/h
- Operating temperature range: -25°C to +55°C, low temperature design on request
- Intrinsically safe pulse transmitters, usable in zone 1
- DIN / DVGW-certified
- Installation with 2 x DN inlet pipe
- Compact version TRZ 04-K for secondary metering
- Horizontal or vertical gas flow
- Special design for aggressive gases is available

DN mm	G-value	Q <sub>max</sub> (m <sup>3</sup> /h)	Q <sub>min</sub> (m <sup>3</sup> /h)	Q <sub>t</sub> (m <sup>3</sup> /h)	Q <sub>min</sub> , depending on minimum operating pressure p <sub>min</sub> (m <sup>3</sup> /h)													
					1:20		1:30		1:50		1:80		1:100		1:120		1:160	
					Q <sub>min</sub>	p <sub>min</sub>	Q <sub>min</sub>	p <sub>min</sub>	Q <sub>min</sub>	p <sub>min</sub>	Q <sub>min</sub>	p <sub>min</sub>	Q <sub>min</sub>	p <sub>min</sub>	Q <sub>min</sub>	p <sub>min</sub>	Q <sub>min</sub>	p <sub>min</sub>
50	G 65	100	5	20	5	4												
80	G 100	160	8	32	5	15	3.2	50										
	G 160	250	13	50	8	3	5	10	3.2	50								
	G 250	400	20	80	13	3	8	10	5	25								
100	G 160	250	13	50	8	3	5	25										
	G 250	400	20	80	13	3	8	10	5	25								
	G 400	650	32	130	20	3	13	4	8	10	6.5	15	5	25				
150	G 400	650	32	130	20	3	13	10	8	25	6.5	40						
	G 650	1000	50	200	32	3	20	4	13	10	10	15	8	25				
	G 1000	1600	80	320	50	3	32	4	20	10	16	15	13	25	10	40		
200	G 1000	1600	80	320	50	3	32	4	20	10	16	15	13	25	10	40		
	G 1600	2500	130	500	80	3	50	4	32	10	25	15	20	25	16	40		