

STAINLESS STEEL TURBINE TRANSMITTERS





Pressure



Level



Temperature





Datalogger **Control and** Automation

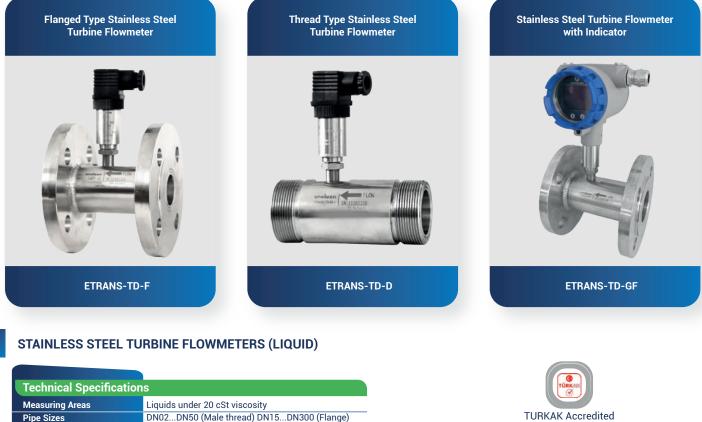






TURBINE FLOWMETERS

Turbine flowmeters work by using the energy of the fluid passing through it to move a rotor within the fluid passing through. There are blades on this rotor that they use the fluid to create a rotation and move the rotor around in. The rotor blades are attached to a rod, which is able to spin through the use of bearings. The speed of blades can be monitored by attaching a magnet onto. Using the magnetic method, the magnets are attached onto the blades and as they spin, they pass a small piece of metal embedded at a certain point within the flowmeter itself. This way, using the time it takes between each time the magnet connects with the piece of metal, the speed of the fluid can be judged accurately. The brilliance of this system is that these sensors can work whichever way the fluid flows through the turbine flowmeter. Due to its compact electronices and complete stainless steel mechanical design it is suitable to use in harsh conditions with multiple output versions.



TURKAK Accredited Calibration Opportunity



STAINLESS STEEL TURBINE FLOWMETERS (GAS)

0,036...1.400 m³/h

-20°C ... 120°C

Up to 63 Bar

Ex d IIC T6 Gb

Local Display OLED

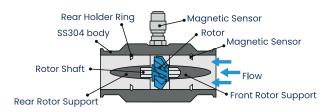
±0,5% (Standard), ±0,2% (Optional) of M.V.

Pulse, 4...20 mA, 0...10 V, RS485 (selectable)

5...24 VDC, 3.6 V Lithium Battery

IP65, IP67 (Depend on electronics)

Technical Specifications				
Measuring Areas	All homogenius gases			
Pipe Sizes	DN15DN300 (Flange)			
Measuring Range	1,54.000 nm³/h (0,125 m/s)			
Accuracy	±1% F.S.			
Process Temperature	-20°C 120°C			
Process Pressure	Up to 63 Bar			
Power Supply	524 VDC, 3.6 V Lithium Battery			
Protection Class	IP65, IP67 (Depend on electronics)			
ATEX Class	Ex d IIC T6 Gb			
Output	Pulse, 420 mA, 010 V, RS485 (selectable)			
Special Option	Local Display OLED			



Measuring Range

Process Pressure

Protection Class ATEX Class

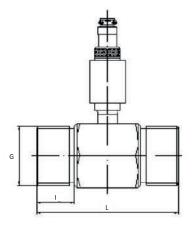
Power Supply

Output **Special Option**

Process Temperature

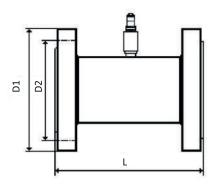
Accuracy

INFORMATION OF THREADED-TYPE CONNECTION



Connection Size	Measuring Range m3/h	Average Pulse/Litre	G (mm)	l (mm)	L (mm)	Weight (kg)
DN4	0.04-0.2	9900	3/8"	7	40	0.4
DN6	0.1-0.6	10000	3/8"	11	50	0.4
DN10	0.2-1.2	3600	1/2"	16	60	0.5
DN15	0.6-6	900	1"	18	75	0.8
DN20	0.8-8	600	1"	23	100	0.9
DN25	1.0-10	336	11/4"	23	100	0.9
DN32	1.6-16	135	11/2"	25	120	1.00
DN40	2-20	89	2"	32	120	1.1

INFORMATION OF FLANGED-TYPE CONNECTION



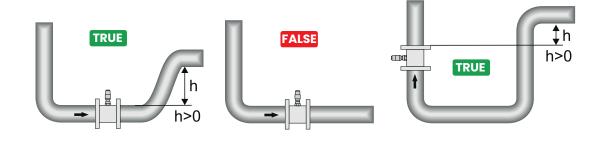
Connection Size	Measuring Range m3/h	Average Pulse/Litre	D1 (mm)	D2 (mm)	L (mm)	Weight (kg)
DN40	2.5-25.0	89	150	110	140	6
DN50	4.0-40	41	160	125	150	6,5
DN65	6.0-60	17	182	145	180	7,5
DN80	10-100	11	200	160	200	8,5
DN100	16-160	7.5	235	180	220	11
DN150	40-400	2.1	275	240	300	14
DN200	80-800	1.8	340	295	360	19

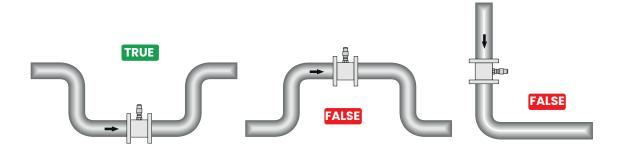
enelsan We Measure



PASLANMAZ ÇELİK TÜRBİN DEBİMETRE MONTAJ KOŞULLARI

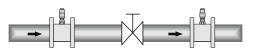
- Flowmeters should be installed in a sheltered place, where they will not be affected by electrical and gas installations.
- > Flowmeter should be mounted away from devices that can generate vibration and electromagnetic fields.
- In order to avoid false pulse detection, large motors that may generate electrical noise and strong cable lines should not be mounted close.
- It is recommended to make a by-pass line for maintenance and repairat the place where the flowmeter will be mounted.
- Since there are mechanical parts inside the flowmeter, it is necessary to use a filter before the flowmeter or to make sure that there are no solid parts in the fluid.
- ► The flow direction should be the same as the arrow direction on the flowmeter.
- The line where the flow meter will be installed must pass fully.







FALSE



Pipe Connection Type	Straight Pipe Distance			
Pipe connection Type	Input	Output		
Concentric Shrink Tube	15D	5D		
Concentric Expanding Pipe	35D	5D		
90° Elbow	20D	5D		
90° Double Elbow (Same Plane)	25D	5D		
90° Double Elbow (Different Plane)	30D	5D		
Valve (Full Open)	20D	5D		
Valve (Half Open)	40D	5D		





OPTIONS

	Pulse output 8 - 32 VDC Supply -40°c/120°c Temp. %0,5 Accuracy	+ <u>5 24V DC</u>
	Exproof Pulse Output 8 - 32 VDC Supply -40C +120C Temp. %0,5 Accuracy	
	Exproof 4-20 mA output 10 - 30 VDC Supply -30C +120C Temp. %0,5 Accuracy	
	LCD Indicator with battery 3.6V Lithium -20C +100C Temp.	3.6 V
	Exproof LCD Indicator 4-20 mA Output 9 - 27 VDC Supply -40C +120C Temp. %0,5 Accuracy	+ 🛞 🛞
COBSS2 COB 175 Fra Fax Fa Flowmater&Controller	Panel-type Indicator Rs485/Relay output Opt.: 4-20mA 220VAC / 24VDC supply	+20 VDC GND Input 1 Input 2

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