



TrigasDM

Flow <u>Conditioner</u>

Flow Conditioner Datasheet



Flow meter manufacture

As a specialist in flow measurement technology, TrigasDM supplies high-quality measuring instruments, electronics and calibrators for liquids and gases.

Made in Germany

Our products are exclusively developed and manufactured in Neufahrn, 20 km north of Munich, ensuring world-class technical know-how for our customers.



Contact

We are proud of our high-quality products and friendly customer service and welcome you as a valued customer to our growing family. You can benefit from our long-standing experience and our comprehensive technical support.

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This user manual contains information on the description, operation / commissioning and maintenance of the TrigasDM turbine flow meter. For special applications, repair or further information on this or other products, please contact TrigasDM directly.

Flow Conditioner Datasheet



Description

TrigasDM Flow Conditioners are designed to minimize or eliminate the influence of upstream flow disturbances to the performance of flowmeters. Velocity profile distortion or swirling flow can be generated as a result of pipe bends, valves, pumps, temperature sensors, pressure taps, etc., all of which are commonly present in piping installations.

The cross shape of the vane straightening element inside the upstream conditioner (TFx-8 or 1/2" and up) has been chosen to produce the best combination of effective flow conditioning and minimum pressure loss. Together, the upstream and downstream flow conditioners result in significant improvement in the reliability of flow measurement.

Upstream flow conditioners are at least 10 pipe diameters in length while downstream conditioners are 5 pipe diameters long. This is the recommended configuration of international organizations.

Applications

Flow conditioners are recommended for all applications where flow measurement accuracy is critical:

Installations where adequate pipe straight runs are not practical

Flow measurement or calibration test stands

Custody transfer applications

Etc.

Construction

TrigasDM flow conditioners are offered with standard 37° AN/JIC flared ends. This configuration makes it simple to adapt to other types of fittings or flanges. As a further enhancement, AN nuts and sleeves are made of aluminum to prevent galling. A pressure port is optional on upstream conditioners, while a temperature port is an option on downstream conditioners. Appropriate caps are provided, in the event the ports are not used.

Installation

Care must be taken to ensure that the upstream flow conditioner is installed so that the vane is removed from the flowmeter as far as possible.

Dimensions

					Upstream				Downstream	
Turbine	Outside-Ø Pipe		Tubing	Max. Pressure	Pipe Lenght	Blade position	Blade lenght	Connection	Pipe Lenght	Connection
Туре	["]	[mm]	F [mm]	[bar]	B [mm]	E [mm]	[mm]	A [mm]	C [mm]	D [mm]
N/A	3/8"	9,65	0,89	258	127 ± 3	N/A	N/A	33	95 ± 3	48
2-8, 4-8, 6-8, 8-8, -08	1/2"	12,70	0,89	193	127 ± 3	32	25	33	95 ± 3	48
-10	5/8"	15,75	0,89	155	160 ± 3	38	51	34	95 ± 3	48
-12	3/4"	19,05	1,24	173	190 ± 3	38	76	38	95 ± 3	48
-16	1"	25,40	1,65	175	255 ± 3	13	127	57	127 ± 3	64
-20	1 1/4"	31,75	1,65	140	318 ± 3	13	127	89	160 ± 3	80
-24	1 1/2"	38,10	1,65	117	381 ± 3	13	152	108	190 ± 3	95
-32	2"	50,80	1,65	88	508 ± 3	13	203	146	255 ± 3	127



Higher pressure ratings upon request