Special Documentation **Promag W 10, 300, 400, 500**

Inlet and outlet runs 0 x DN



About this document

Document function

This manual is Special Documentation and does not replace the Operating Instructions included in the scope of supply. It is a part of the Operating Instructions and contains additional information on the "Mounting/installation, inlet and outlet runs" section.

Associated documentation

This Special Documentation is an integral part of the following Operating Instructions:

Promag W	10	300	400	500	
HART	BA02070D	BA01918D	BA01063D	BA01400D	
Modbus RS485	BA02073D	BA01939D	BA01231D	BA01403D	
EtherNet/IP	-	BA01937D	BA01214D	BA01722D	
PROFIBUS DP	-	BA01940D	BA01234D	BA01868D	
PROFIBUS PA	-	BA01928D	-	BA01406D	
PROFINET	-	BA01941D	-	BA01725D	
FOUNDATION Fieldbus	-	BA01938D	-	BA01481D	

Inlet and outlet runs

Depending on the device design and the installation location, inlet and outlet runs may not be necessary or they can be shorter compared with a standard device.



Maximum measured error

When the device is installed with the inlet and outlet runs described in this Special Documentation, a maximum measured error of ± 0.5 % of the reading ± 1 mm/s (0.04 in/s) can be guaranteed.

Devices and possible order options

Order code for "Design"		Promag W				
Option	Description	Design	10	300	400	500
С	Fixed flange, constricted measuring tube, 0 x DN inlet/outlet runs	Constricted measuring tube ¹⁾	-	X	X	X
Н	Lap joint flange, 0 x DN inlet/outlet runs	Full Bore ²⁾	Х	Х	Х	Х
I	Fixed flange, 0 x DN inlet/outlet runs		Х	Х	Х	Х
J	Fixed flange, short installed length, 0 x DN inlet/outlet runs		Х	Х	Х	Х
К	Fixed flange, long installed length, 0 x DN inlet/outlet runs		Х	Х	Х	Х

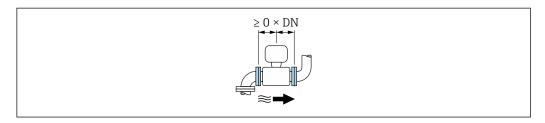
^{1) &}quot;Constricted measuring tube" stands for a reduction of the internal diameter of the measuring tube. The reduced internal diameter causes a higher flow velocity inside the measuring tube.

^{(2) &}quot;Full Bore" stands for the full diameter of the measuring tube. There is no pressure loss with a full diameter.

Installation without inlet and outlet runs

Installation before or after bends

Installation without inlet and outlet runs is possible: devices with the order code for "Design", option C, H, I, J and K.



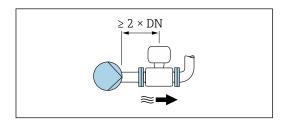
Installation downstream of pumps

Install devices after pumps to avoid negative pressure.

Installation without inlet and outlet runs is possible: devices with the order code for "Design", option C. H and I.



In the case of devices with the order code for "Design", option J and K, an inlet run of only $\geq 2 \times DN$ must be taken into consideration.



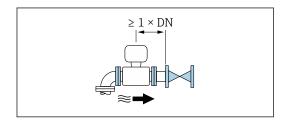
Installation upstream of valves

Ideally, devices should be installed upstream of valves in order to avoid turbulence in the measuring tube

Installation without inlet and outlet runs is possible: devices with the order code for "Design", option C, H and I.



In the case of devices with the order code for "Design", option J and K, an outlet run of only $\geq 1 \times DN$ must be taken into consideration.

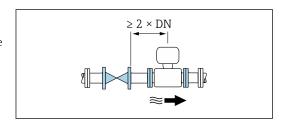


Installation downstream of valves

Installation without inlet and outlet runs is possible if the valve is 100% open during operation: devices with the order code for "Design", option C, H and I.



In the case of devices with the order code for "Design", option J and K, an inlet run of only ≥ 2 x DN must be taken into consideration if the valve is 100% open during operation.



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