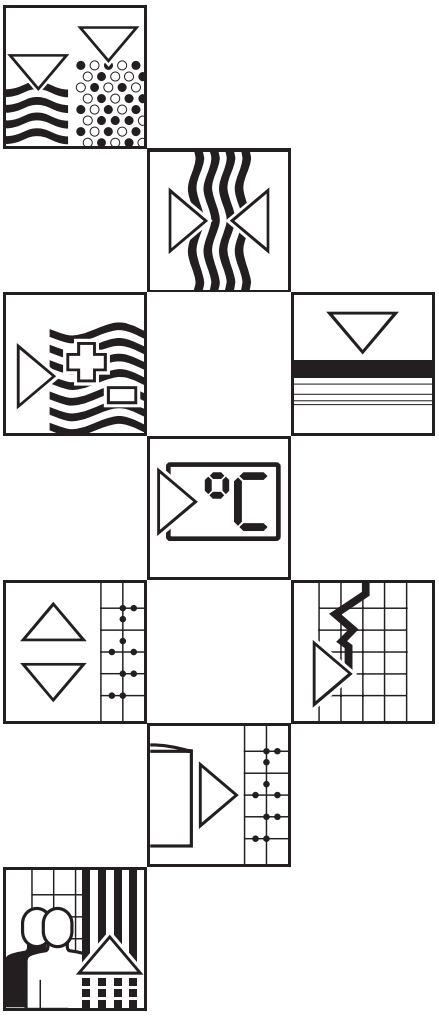
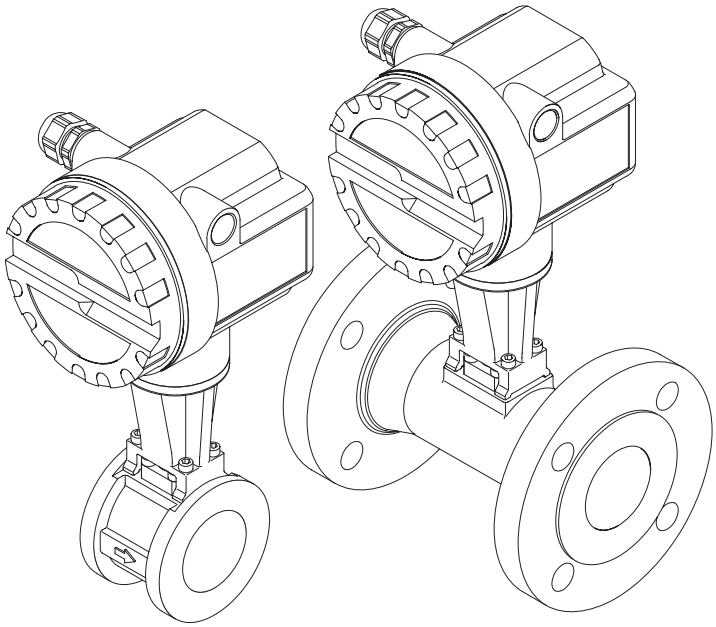
BA 034D/06/en/03.00
No. 50085726
CV 5.0

prowirl 77
Vortex Flow Measuring System (Version: PFM)

Operating Manual





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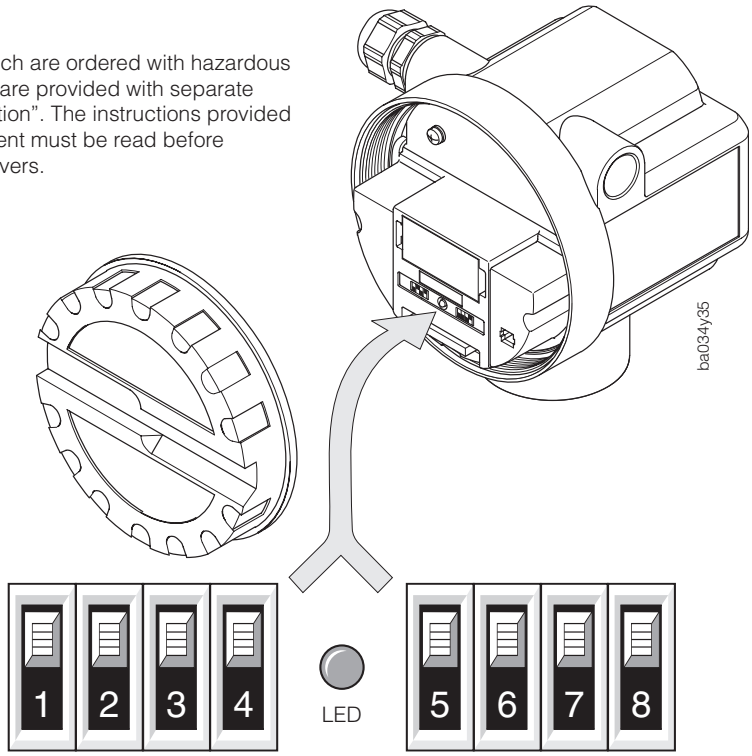
Switch settings for PFM version (for copying)

Warning!

Warning!
Instruments which are ordered with hazardous area approvals are provided with separate "Ex documentation". The instructions provided in this supplement must be read before opening any covers.



Switch positions:

OFF = 0

ON = 1

The dip switches shown above are to be set according to the application (gas/liquid) and the nominal diameter of the instrument.

Switch settings for liquid measurement

	DIP switch number								
Nominal diameter	**1**	**2**	**3**	**4**		**5**	**6**	**7**	**8**
DN 15	1	0	0	1		0	1	0	0
DN 25, DN 40	1	0	1	0		1	1	1	0
DN 50	1	0	1	1		1	1	1	0
DN 80	0	0	1	0		1	1	1	0
DN 100	0	0	1	0		1	1	1	0
DN 150...300	0	0	1	1		1	1	1	0

Switch settings for steam and gas measurement

	DIP switch number								
Nominal diameter	**1**	**2**	**3**	**4**		**5**	**6**	**7**	**8**
DN 15, DN 25	1	0	0	0		0	0	0	0
DN 40	0	0	0	0		0	0	0	0
DN 50	0	0	0	0		0	0	1	0
DN 80	0	1	1	1		0	0	1	0
DN 100, DN 150	1	0	0	1		0	1	0	0
DN 200...300	1	1	1	0		0	1	1	0

Contents

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1 Safety Instructions

1.1 Correct usage

- Prowirl 77 is only to be used for measuring the volumetric flow rate of saturated steam, superheated steam, gases and liquids.
- The manufacturer assumes no liability for damage caused by incorrect use of the instrument.
- Instruments which are ordered with hazardous area approvals are supplied with separate “Ex documentation”, which is an integral part of this Operating Manual. The instructions and connected loads provided in this supplement must be closely observed! An appropriate pictogram is shown on the front page of the Ex documentation according to the approval given and the test centre.

1.2 Dangers and notes

All instruments are designed to meet state-of-the-art safety requirements, have been tested, and have left the works in an operationally perfectly safe condition.
The devices were developed according to EN 61010 “Protection Measures for Electrical Equipment for Measurement, Control, Regulation and Laboratory Procedures”. A hazardous situation may occur if the flowmeter is not used for the purpose it was designed for or is used incorrectly. Please carefully note the information provided in this Operating Manual indicated by the pictograms:

Warning!
A “warning” indicates actions or procedures which, if not performed correctly, may lead to personal injury or a safety hazard.
Please strictly observe the instructions supplied and proceed carefully.

Warning!

Caution!
A “caution” indicates actions or procedures which, if not performed correctly, may lead to faulty operation or destruction of the instrument. Please strictly observe the respective instructions.

Caution!

Note!
A “note” indicates actions or procedures which, if not performed correctly, may indirectly affect operation or lead to an unexpected instrument response.

Note!

1.3 Operational safety

- The Prowirl 77 measuring system fulfills the general safety regulations according to EN 61010 and the interference immunity regulations (EMC) according to European standard EN 50081 Part 1 and 2 / EN 50082 Part 1 and 2 as well as NAMUR recommendations.
- Housing ingress protection IP 67 according to EN 60529.