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UK METERING

Woltaris WPH

Woltmann meter WPH

Industrial water meters

The series Woltaris WPH ensures accurate and reliable metering over time across a wide range of applications for water distribution networks, bulk billing and process control characterized of high, relatively constant flow rates.

Woltaris WPH operates according to the Woltmann measuring principle using a horizontal propeller, having a dry register and magnetic coupling. Due to the sealed register dirty water cannot influence the reading accuracy.

Nominal diameter **DN 50÷250 mm**

Permanent flow **Qn 15÷600 m³/h**

Metrology class: **B-H/V**

Maximum admissible temperature: **Max. 50°C**

Nominal pressure: **Max. 16 bar**

Key benefits:

» **Lowest head loss** than most mechanical meters with moving parts
» Highly accurate measurements **under extreme conditions**
» **High overload capability**, **wide measurement range and low starting flow rate**
» Body made of high-quality **grey cast iron** with **epoxy coating.**
» The measuring insert replaceable without removing the body. Easy on-site maintenance.
» No reading impairment by fogging of the transparent cover.
» 360° orientable register for optimum legibility
» Meters can be upgraded (in terms of AMR) on site without breaking the meter seal
» Materials **authorised for potable water**
» Compliance with the standards: **ISO 4064**

Communication and remote reading:

Reed Contact or opto-electronical transmitter

» Built-in pulser version, **Woltaris WPHI**
» Retrofit pulser version, **Woltaris WPH-N**
» **radio**: **Woltaris WPH** pulser version can be integrated into AMR systems by a **meter interface unit split-version FSM-WM.**

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Installation requirements:

Meets and exceeds all relevant metrological standards including ISO 4064 class B, EEC.

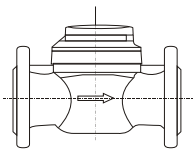
» The meter must be protected against pressure shocks in the pipe. Therefore the inlet section should be **3 x DN** (**5 x DN** if pipe elbows are fitted before the meter) and the outlet section **2 x DN**.

» If the specified sections cannot be provided or in case of specific flow disturbances, **a flow straighteners** is recommended or the length of this pipe section will be extended.

» A **strainer** will be installed upstream of the meter to prevent failure of the measuring elements. All Woltmann meters installed without strainer will lose automatically the guaranty.

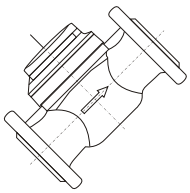
» Other accessories upon request: flanges, adjustable adapter piece.

» For installation in **horizontal, vertical or inclined pipelines.**



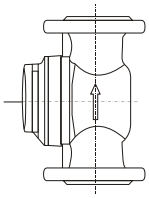
Horizontal

Counter upwards or sidewards



Inclined

Counter horizontal



Vertical

Counter horizontal

Register:

Qn 15÷100 m³/h: **6-rollers display** (m³)+ 3 graded scales with pointers for sub-multiples of m³

Qn > 100 m³/h: **6-rollers display** (10 x m³)+ 3 graded scales with pointers (1 for m³ and 2 for sub-multiples of m³)

Qn = 500 m³/h: **6-rollers display** (10 x m³)+ 2 graded scales with pointers (1 for m³ and 1 for sub-multiples of m³)

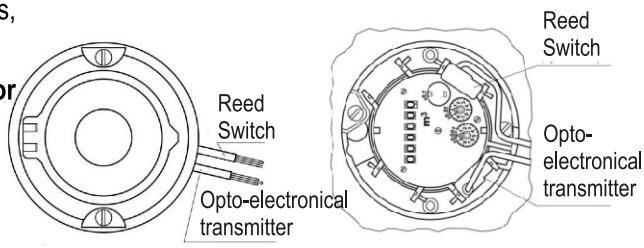
Communication and remote reading:

Woltaris series is optionally (on request) equipped with **pulse output (Reed Switch or opto-electronical transmitter)** which allow remote transmission of the data.

a)Reed Switch technical features:

» Contact rating: max 10 W
» Maximum Switched Voltage: max 200 V
» Switching current: max 0,5 A
» Flood proof: **IP68**
» Length of the cable **2,0 m (standard)**

DN [mm]	m³/pulse	
	recomm.	optional
40, 50, 65, 80, 100, 125	1	0,1; 0,025; 0,25
150, 200, 250, 300, 400, 500	10	1; 0,25; 2,5



b)Opto-electronical transmitter technical feature

» Supply voltage: Us 5 /± 5%/ V
» Supply current: Is<30 mA /Io=0 mA/
» Low-level output voltage: UoL<0,25V /Io=-10 mA/
» High-level output voltage UoH<4,0V /Io=10 mA/
» Admissible output current: Iom<50 mA
» Length of the cable **2,0 m (standard)**

DN [mm]	l/pulse
40, 50, 65, 80, 100, 125	1
150, 200, 250	10
300	105,2632
500	100

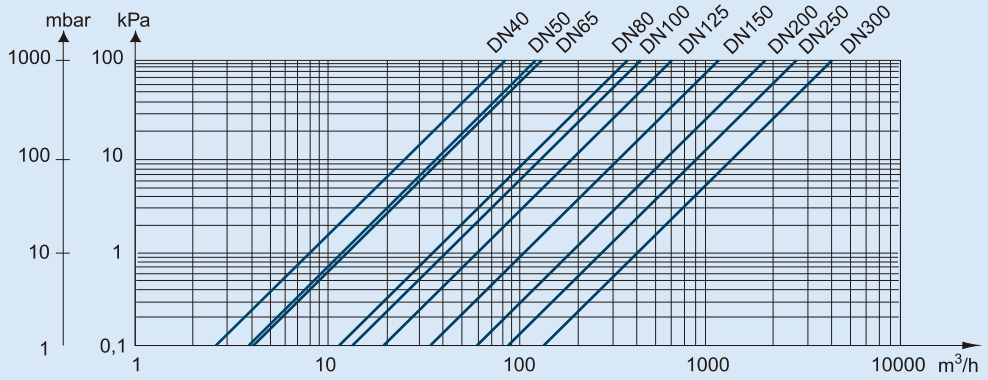
Remote reading

Woltaris WPH pulser version can be integrated into AMR systems by a **meter interface unit split-version FSM-WM.**

» Wireless technology certified compliant with current telecommunications regulations in the 868,3 MHz license-free ISM frequency bands.
» Pocket PC with Windows CE, etc.
» Parametrization on site upon client's request
» Flexible user-configurable software

Further information in the leaflet "Reed Pulsor"

Typical head loss curve

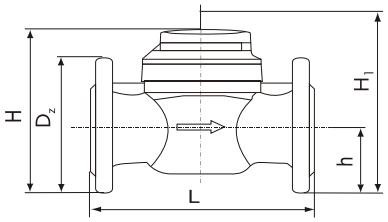


Technical features

Nominal width	DN	mm	40	50	65	80	100	125	150	200	250	300
Nominal flow rate acc. ISO 4064	Qn	m^3/h	15	15/25	25/50	40	60	100	150	250	400	600
Maximum flow rate	-	m^3/h	60	90	120	200	300	350	600	1000	1600	2000
Max. working flow rate	Qmax	m^3/h	30	50	60	120	230	250	400	750	1100	1400
Transition flow rate	Qt	m^3/h	0,9	0,9	1,2	0,8	1,8	2	4	6	11	15
Minimum flow rate	Qmin	m^3/h	0,35	0,35	0,45	0,5	0,6	1,5	1,8	4	6	12
Starting flow rate	-	m^3/h	0,15	0,15	0,2	0,25	0,25	0,5	1,0	1,5	3	8
Flow rate at 0.1 bar head loss	-	m^3/h	26	38	40	100	128	170	310	550	800	1250
Register capacity	max.	m^3	999 999						9 999 999			
	min.	m^3	0,0005						0,005			0,05
Dimensions [1]	L	mm	200	200	200	225[3]	250	250	300	350	450	500
	h	mm	65	72	83	95	105	120	135	160	193	230
	H	mm	177	187	197	219	229	257	357	382	427	497
	H1[2]	mm	277	287	297	339	349	377	582	607	652	722
	Dz	mm	150	165	185	200	220	250	285	340	400	460
Weight	-	kg	7,9	9,9	10,6	13,3	15,6	18,1	40,1	51,1	75,1	103

1) Flange connection (PN10 or PN16) according to ISO 7005-2, DIN 2501.
2) Height for extension of measuring insert.
3) Optional overall length: 200 mm on request.

Dimensions



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» All our products have attained **type approvals** imposed by international legislation issued by: Service Public Federal Economie Bruxelles, PTB (Physikalisch-Technische Bundesanstalt Germany), by Russian Research Institute for Metrological Service "VNIIMS", etc.

» **Approvals of the raw materials suitable for contact with drinking water,** issued by Ministry of Health, Hygiene Institut Karlsruhe Hygiene-Institut des Ruhrgebietes Gelsenkirchen IRH Env. Nancy, by Russian Research Institute for Metrological Service "VNIIMS", etc.

» Contor Group is one **of the first enterprises of his branch** who achieved the **Quality management system approval & CE Type evaluation certificates** for the its products **according to MID** (issued by PTB (Physikalisch-Technische Bundesanstalt) Braunschweig, Germany)

UK METERING
Unit 33 | Wilford Industrial Estate | Ruddington Lane | Nottingham | NG11 7EP
Office Tel: 01159 819 755; Office Fax: 01159 455 247
E-mail: sales@uk-metering.net; www.uk-metering.net

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