

WILO vortex flow sensor properties

Main features

Supply voltage	5 VDC
Output signal	Square pulse signal 0/5 VCD from 20 to 270 Hz (DN15)
Connector	3 poles RAST 2.5mm
Inlet pipe	x 5 diameters
Connection pipe-sensor	By clip

Reliability

Comprehensive sensor qualification was carried out in Wilo Intec laboratory.

- > Thermal shocks
- > Cycled pressure
- > Plastic ageing
- > Soiling
- > Life span test



Multi loop soiling bench

Contact information

WILO INTEC

50, av Casella
F-18700 Aubigny sur Nère
Tel: +33 2 48 81 62 62
Fax: +33 2 48 58 20 29
www.wilointec.com
information@wilointec.com

Vincent FLEURIER

Sales Manager France & Spain
Tel: +33 2 48 81 62 74
Fax: +33 2 48 58 20 29
vincent.fleurier@wilointec.com

Dario FRAZZA

Sales Manager Italy
Tel: +39 335 762 6181
Fax: +39 059 286 0855
dario.frazza@wilointec.com

Thomas MERSCHEIM

Sales Manager Germany
Tel: +49 172 352 3933
Fax: +49 231 410 2578
thomas.merscheid@wilo.com

Kevin PADMORE

Sales Manager UK
Tel: +44 776 801 8879
Fax: +44 128 373 2380
kevin.padmore@wilointec.com

Ronald RIJKHOFF

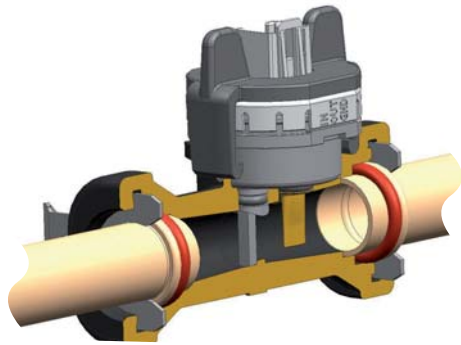
Sales Manager Benelux
Tel: +31 653 126 749
Fax: +31 889 456 199
ronald.rijkhoff@wilo.nl



WILO vortex flow sensor

WILO vortex flow sensor overview

System integration



Technical overview

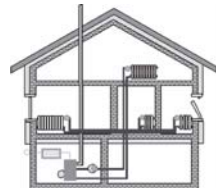
This flow sensor is based on the principle of Karman's vortex trail.

The shedding of vortices on the damming body in the flow is directly proportional to the speed of the flow. A piezoelectric paddle detects the generated vortex and analyzes the values with the integrated electronics.

Applications



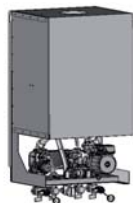
Heat pump



Central heating system



Solar system



Boiler

WILO vortex flow sensor benefits

Highlights

- > High accuracy
- > Robust design
- > Low pressure drop
- > User friendly with "plug and count" concept
- > Easy to remove

Karman's vortex trail



The distinct benefits

- > Excellent media and mechanical resistance (measuring element overmoulded)
- > Excellent EMC-characteristics
- > Wide application temperature range (up to 120°C)
- > Suitable for drinking-water applications



WILO vortex flow sensor performances



Size	Min flow	Max flow
DN8	60 l/h (1 l/min)	850 l/h (14 l/min)
DN10	100 l/h (1.7 l/min)	1500 l/h (25 l/min)
DN15	210 l/h (3.5 l/min)	3000 l/h (50 l/min)
DN20	300 l/h (5 l/min)	5000 l/h (85 l/min)

Response time

A change of flow speed is detected within 100ms

Accuracy

Up to 50% of max flow: accuracy < 1% of full scale
 From 50% of max flow: accuracy < 2% of measured value
All data provided for temperature range from 5°C to 80°C

Optional cost optimised temperature measurement
 PT1000 integrated inside damming body

Current consumption and load

Current consumption < 4mA
 Load > 10kOhm

Materials

Materials in contact with the medium sensor paddle made of ETFE (Tefzel®)
 Composite casing body, WRAS approved
 O-ring EPDM (Peroxyde)

General remark

The indications in this data sheet are valid for water containing usual concentration of additives and up to 5% of glycol.
 For higher concentration, please contact us.