

## Flow switch

## QVE1900

for liquids for piping DN 32...200

### Use

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In HVAC plants to monitor the flow of fluids in hydraulic systems, especially in refrigeration, heat pump and heating plants, e.g. for use with condensers, boilers, heat exchangers, etc.

### Ordering

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When ordering, please provide the name and product number:  
flow switch **QVE1900**

### Mechanical design

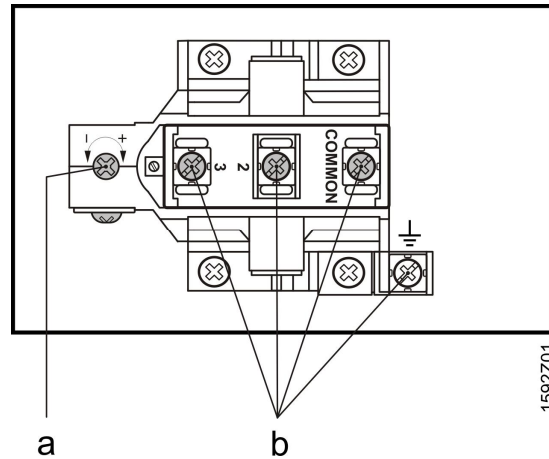
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The unit comprises a base with attached screw-in body R1 (refer to "Dimensions") and cover.

The base houses the microswitch, transfer lever with adjusting screw (for switch-on/switch-off point), a paddle holder and an opening for the cable entry. Four paddles of various lengths and attaching screws for mounting the paddles are enclosed.

The cover is secured to the base with two screws.

## Setting element and connection terminals



### Legend:

- a Adjusting screw for switch-on/off values
- b Connection terminals

The unit is supplied with the switch-on/off values set to the minimum (See the next section "Notes")

### Notes

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#### Engineering

- On site, a T-junction R1" per EN DIN 10241 required (steel fittings with threads) and EN DIN 10242 (threaded fitting from malleable casting) required.
- All dimensions and data provided in the table of switching values are based on water at 20 °C, the use of T-junctions and **horizontal** piping.
- Before and after the mounting location of the flow switch, a smoothing path of at least 10 times or 5 times the nominal pipe diameter required.

#### Fitting

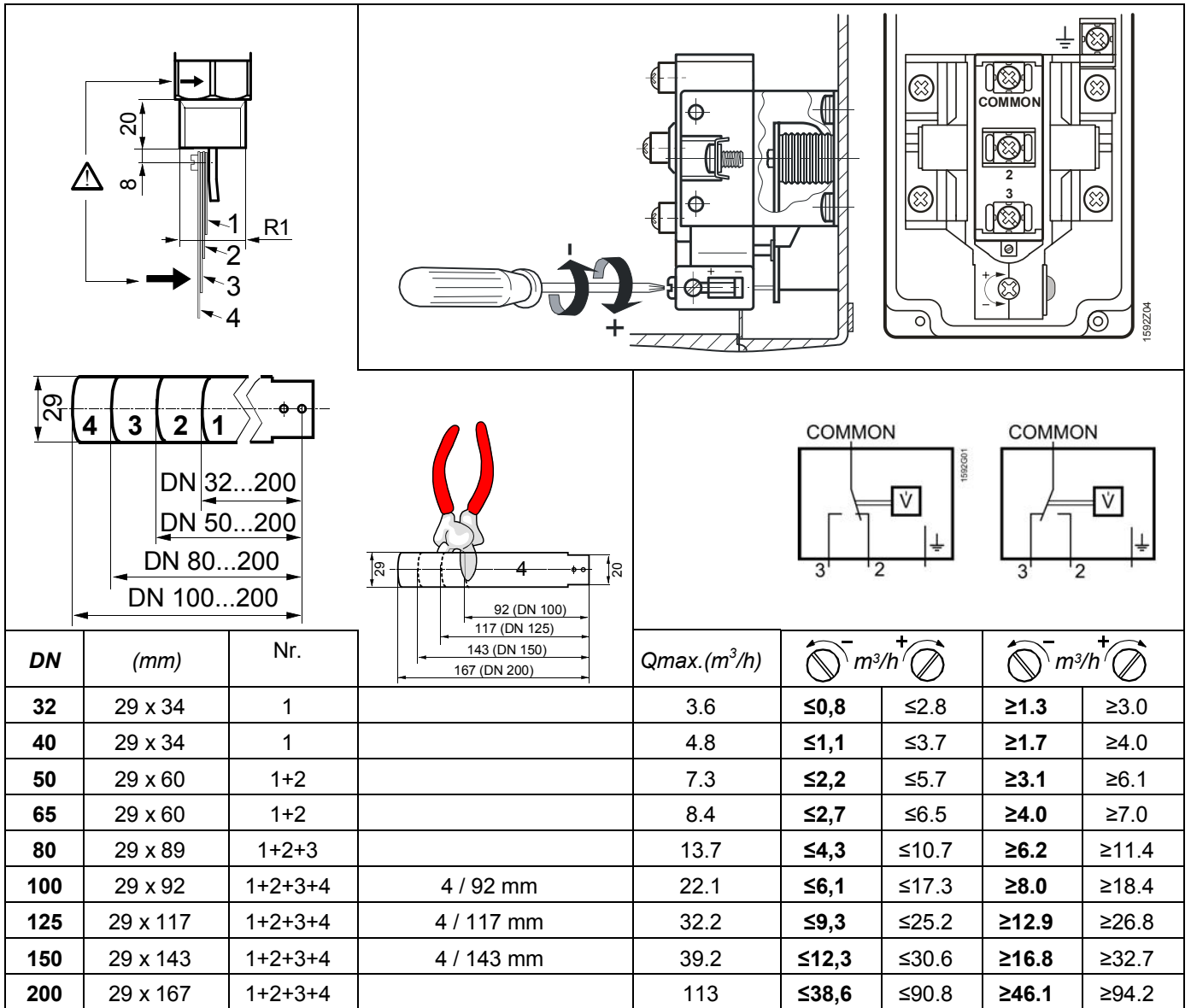
- Mount the enclosed cable gland and fit the T-junction R1" on-site prior to mounting the device.
- Insert vertically in the horizontal piping.
- Note the flow direction during installation (the screw-in body R1 has an arrow).
- For reasons of stability, the short paddles may not be removed with the larger pipe diameters.

#### Installation

- Observe all local regulations from the electrical utilities or waterworks as applicable.
- Allow for an extra loop of the connecting cable to ensure the switching value can be adjusted.

#### Commissioning

- A higher switch-off value can be set by turning the adjusting screw for the switch-on/off value clockwise.
- When mounting the flow switch in vertical piping, you must compensate for the weight of the paddles on the adjusting screw for the switch-on/off values (Orientation not recommended, see fitting instructions).



### Disposal



The device is considered an electronics device for disposal in terms of European Directive 2012/19/EU and may not be disposed of as domestic garbage.

- Dispose of the device through channels provided for this purpose.
- Comply with all local and currently applicable laws and regulations..

## Technical data

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Functional data	Field of use	
	Suitable media	All liquids (not suitable for ammonia)
	Piping diameter	DN 32...200
	Type of switch	Microswitch with single-pole changeover, potential free
	Contact rating	AC 250 V, 15 (8) A
	Adjustment of switching point	manual, supplied with minimum switch-on/off values
	Setting range	Refer to switching value table
	Perm. medium temperature	-20...+120 °C (medium must be antifreeze)
	Perm. operating pressure	PN 10
	Protective data	Degree of protection
Safety class		I per EN 60335-1

Environmental conditions  
Standards, directives, and approvals

General environmental conditions

Operation and storage  
Product standard

-20...+85 °C

EN 60730-1.

Automatic electronic controls for household and similar use.

EU conformity (CE)

CM1E1592xx\*)

Electromagnetic compatibility

For residential, commercial, and industrial environments.

\*) Related documents can be downloaded at the following Internet address:

<http://siemens.com/bt/download>

Materials / colors

Housing base

Bayblend T85 / color RAL 7015

Cover

ABS / color RAL 5007

Screw-in body R1"

Brass

Paddle

High-grade steel (V2A)

Flow switch, overall

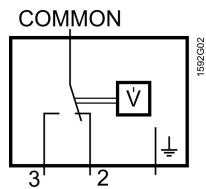
Silicon free

Dimensions (weight)

Without packaging

0.570 kg

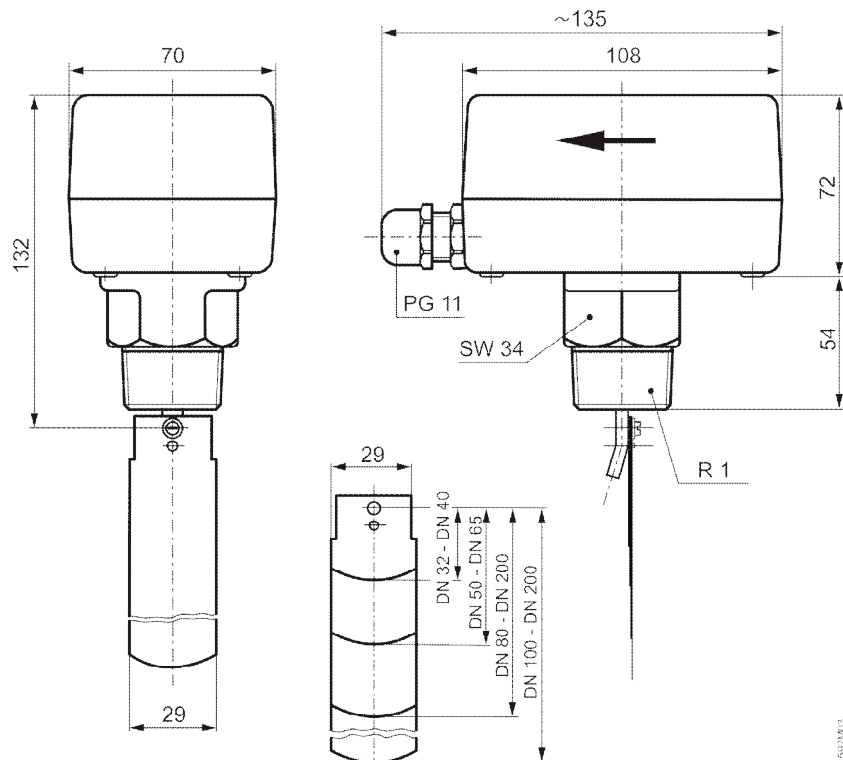
### Internal diagram



COMMON – 3 Flow velocity  $\geq$  Switch-on value

COMMON – 2 No flow or flow velocity has fallen below the adjusted switch-off value

### Dimensions



Dimensions in mm

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