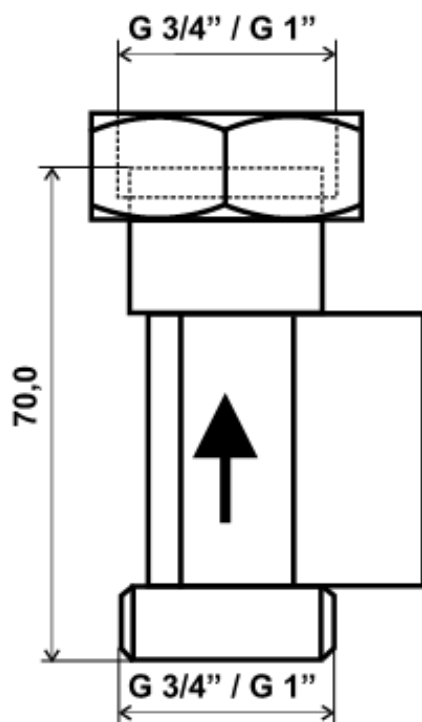




Flow switch

The STS flow switch is available in 4 versions:



STS01DC-1"
STS01DC-3/4" DC version (1" or 3/4" thread)

as a signal generator to standard controller inputs up to 30 V=
~, thread G 1"

STS03AC-1"
STS03AC-3/4" AC version (1" or 3/4" thread)

for direct switching of circulation pumps on the 230 V~ mains
up to 0.5 A (permanent load), minimum load of **only 2 W**
required, thread G 1"

The STS03AC flow switches have been optimised and ap-
proved for high efficiency pumps.

The STS03AC also worked on asynchronous pumps (up to
110 W) in the laboratory.

When used with other consumers (relays, valves, etc.), express
approval from Technische Alternative RT GmbH is required.

Installation position: Vertically, in the cold water line

When installing the flow switch, make sure that the **hexagon nut points upwards** as shown in the fig-
ure. The water must flow through the sensor from **bottom to top** as indicated by the arrow.

The detector (black plastic part) can be fitted on the brass part in any direction.

Technical data

Response quantity: < 2 l/min
typically 1.3 l/min

Temperature range: -10 to +80 °C

Max. operating pressure: 10 bar

Pressure drop at 1000 l/h: 0.1 bar
2000 l/h: 0.4 bar
3200 l/h: 1 bar

Mounting position: vertical +/- 10°

Cable length: 2 m

Materials used: brass CW617N, plastic NORYL 731S-701-1977

Drinking water approval: KTW / W270 for the individual parts

IP rating: IP65

Max. breaking capacity

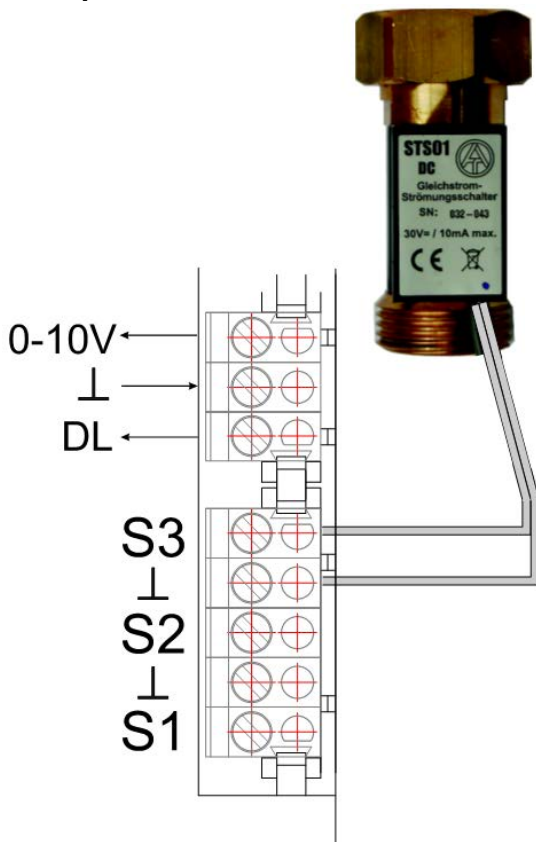
STS01DC: 30 V=~/
10 mA

STS03AC: 250 V~/ 0.5 A

Electrical connection

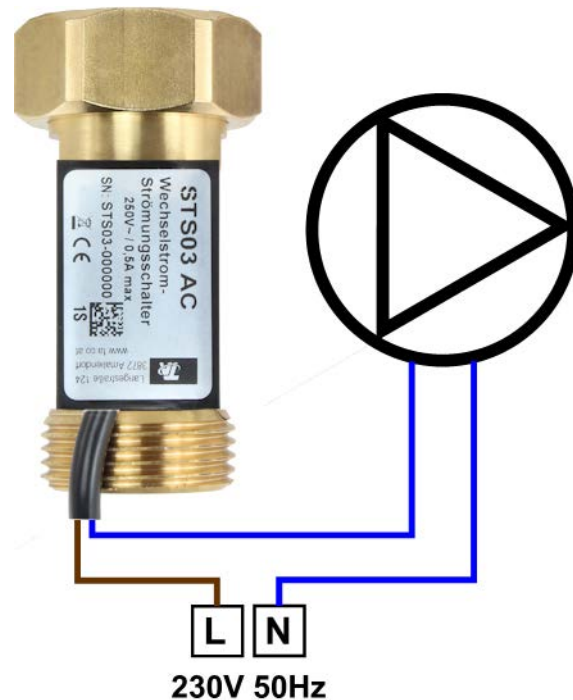
STS01DC

Example: Connection to ESR31 controller



Connection is always established to a sensor input and the sensor earth.
The polarity of the connections is reversible, there is no required polarity to be observed.

STS03AC



The polarity of the connections is reversible, there is no required polarity to be observed.

Compliant with the following standards:

EN 61000-6-3: 2007
+ A1: 2011
+ AC2012

Electromagnetic compatibility (EMC) – Part 6-3: Generic standards – Emission standard for residential, commercial and light-industrial environments

EN 61000-6-2: 2005
+ AC2005

Electromagnetic compatibility (EMC) – Part 6-2
Generic standards – Immunity for industrial environments

EN 50581: 2012

Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances

In addition, the flow switch complies with the UBA (Environment Agency Austria) guideline with regard to drinking water and is ÜA certified (compliance Austria).



Subject to technical modifications as well as typographical and printing errors. These instructions are only valid for devices with the corresponding firmware version. Our products are subject to constant technical advancement and further development. We therefore reserve the right to make changes without prior notice.

© 2025