

## PADDLE FLOW SWITCH

### TAS SERIES

#### Product Description:

This device serves as a flow monitor via magnetic triggering of a reed switch by liquid flow.

Basically the device consists of a brass body, tube housing, paddle arm, balance arm, magnet and a reed switch assembly.

The liquid fluid which flows inside the body moves the flat surface of the paddle arm and therefore a magnet which is assembled at the end of same paddle arm.

Moved magnet triggers the reed switch which is assembled in the brass tube.

By this way reed switch contact changes its situation from open to close or close to open according to brass tube position.

This situation change is transmitted via a cable to a control panel which final user sees whether there is a flow or not in the line.

#### Applications:

Cooling and lubricant circuits,  
Dry running protection for pumps,  
Prevention of low water levels,  
Monitoring of pipe fracture.

#### General Features:

Nickel plated brass material  
Female threaded connection  
Low pressure loss  
Compact design  
Replaceable stainless steel paddle  
Switching ranges are given in the following table for various piping sizes.

#### Technical Characteristics:

<b>Switch</b>	: Reed switch
<b>Nominal Size</b>	: DN10 - DN15 - DN20 - DN25
<b>Threaded Connection</b>	: Female G3/8", G1/2", G3/4", G1"
<b>Switching Range</b>	: 3.5 ...18 l/min H <sub>2</sub> O ( for details see table of ranges in below )
<b>Qmax</b>	: to 60 l/min
<b>Tolerance</b>	: ±15 % of full scale value
<b>Pressure Rating</b>	: PN25
<b>Medium Temperature</b>	: -20 °C / 80 °C with NBR sealing -20 °C / 110 °C with FKM sealing
<b>Media</b>	: Water ( on request oils, gases and aggressive media )
<b>Installation Position</b>	: Standard is horizontal inlet. Other positions are possible however installation position affects switching point.

#### Electrical Characteristics:

<b>Switching Voltage</b>	: max 200 V DC / 250 V AC
<b>Switching Current</b>	: max 1.5 A
<b>Switching Capacity</b>	: max 50 W / VA
<b>Protection Class</b>	: IP68
<b>Electrical Connection</b>	: cable 1,5 m, on request longer cable length



#### Switching Ranges:

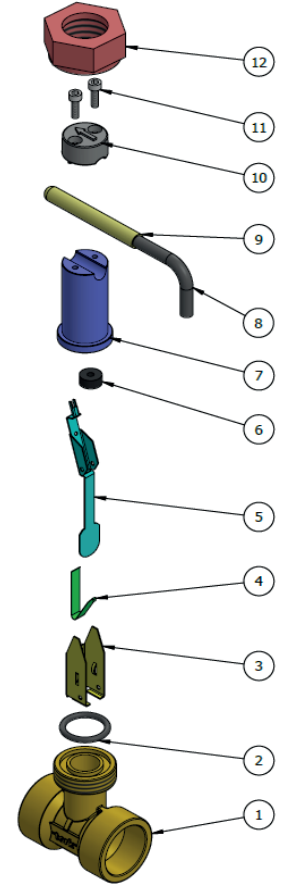
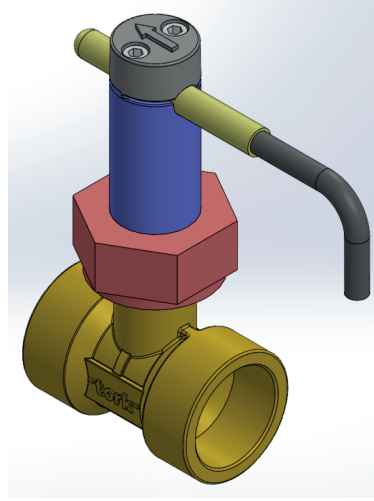
G	DN	Switch Range l/min H <sub>2</sub> O	Qmax l/min (recommended) H <sub>2</sub> O
G3/8"	DN10	3.0 - 6.4	10
G1/2"	DN15	3.4 - 6.7	20
G3/4"	DN20	7.1 - 10	40
G1"	DN25	8.2 - 15	60

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#### Material List:

Part No	Part Name	Material	Qtty
1	Body	Nickel Plated Brass	1
2	O-ring	NBR-FKM	1
3	Balance Arm	AISI 304	1
4	Leaf Spring	AISI 304	1
5	Paddle Arm	AISI 304	1
6	Magnet	Hard Ferrite	1
7	Housing Tube	Nickel Plated Brass	1
8	Cable	-	1
9	Brass Tube With Reed Switch Inside	-	1
10	Cap	Polypropylene	1
11	Screw	AISI 304	1
12	Nut	Nickel Plated Brass	1



#### Dimensions:

Product Code	D	A	B mm	C	AF	Weight kg
T-AS-10GB	G3/8"	50	82	10	20	0.280
T-AS-15GB	G1/2"		82	10		0.285
T-AS-20GB	G3/4"		89	12	26	0.310
T-AS-25GB	G1"		87	12	34	0.365

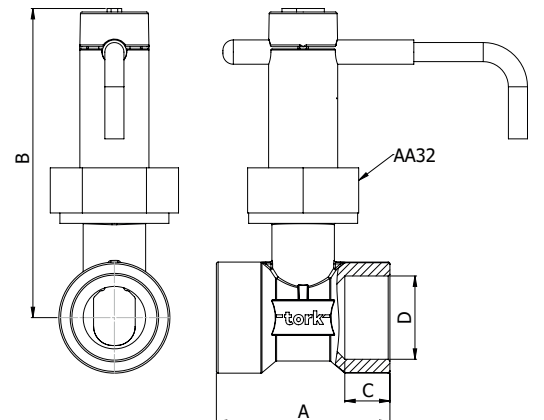
### T-AS-10GB

TORK PRODUCT CODE

SIZE	
10	DN10
15	DN15
20	DN20
25	DN25

THREAD TYPE	
G	British Pipe BSPP
N	American Pipe NPT

MATERIAL	
B	Brass
S	Stainless Steel

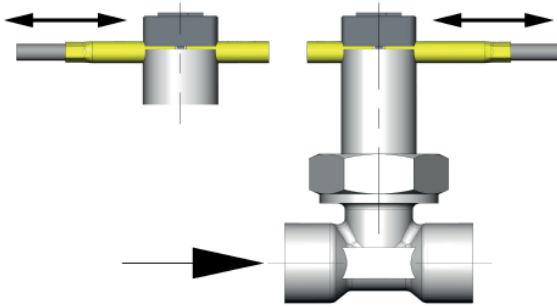


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#### Adjustment Of Switching Point:

To be able to adjust switching point, loosen bolts at the top of the plastic cap and move the contact tube to the required direction by hand until getting contact and then tighten the bolts at the top of the plastic cap again.



#### Normally Open (NO) Contact:

To be able to get NO contact, contact tube must be mounted in flow direction. Minimum switching point can be set by moving contact tube in flow direction and maximum switching point can be set by moving contact tube against flow direction.

#### Normally Closed (NC) Contact:

To be able to get NC contact, contact tube must be mounted against flow direction. Minimum switching point can be set by moving contact tube in flow direction and maximum switching point can be set by moving contact tube against flow direction.

