



# DP-20/30

## Vane operated Flowswitch



## Features

/ Easy to assemble

/ Cost-effective

/ Reliable

/ Excellent strength

/ For fluids and air

## Description:

The DP-20 model is unique due to its simple but reliable design. An external magnet actuates a switch that is fully protected within a leak-proof housing. The body and the vane are manufactured of chemically resistant polyphenylene sulphide. The vane which can be shortened has well-sculpted divisions for pipes of DN 25 to DN 150.

The DP-30 model is smaller and more compact than the DP-20 and it is available in brass or stainless steel versions on account of which the switch can be deployed for pressure levels up to 138 bar. A unique switch setting enables a quick change-over of the contact function. By releasing two screws and subsequently shifting the shedded reed contact either of the NC-contact or the NO-contact functions can be selected. The vane has a shortening pattern that indicates at which point it must be separated for the 6 pipe nominal diameters of 1/2" to 2".

The DP-20 as well as the DP-30 indicate the correct flow direction of the medium over an indexing arrow on the body side.

## Application:

Vane switches offer a simple and cost-effective method of monitoring the flow of a medium. The vane moved by dynamic pressure switches an electrical contact magnetically when the flow exceeds or falls a certain value. This type of monitoring flow is successfully used in the entire industry wherever the media being monitored do not indicate any significant levels of pollution or too high speeds of flow.



# DP-20 Vane Operated Flowswitch made from Plastic

## Technical Specifications:

### Wetted materials /

Vane and body:	PPS
Pin and spring:	316 SS or Inconel®
Magnet:	Ceramic 8

**max. Pressure /** 10 bar

**max. Media-temp. /** +100°C

**Process connection /** 1" NPT-male

**Weight /** 130 g

**Installation /** with arrow in direction of flow

**Mounting position /** Actuation/deactuation flow rates are based on horizontal pipe position and are nominal values. The device can not be used vertically.

## Electrical Specifications:

### Contact /

<b>Standard</b>	max. 5 A at 250 VAC resistive max. 3 A at 30 VDC inductive
<b>Gold:</b>	max. 1 A at 125 VAC resistive max. 0.5 A at 30 VDC conductive

**Function /** single-pole change-over contact, optionally gold-plated

**Connection /** three 18-AWG wires, 460 mm long

## Flow range:

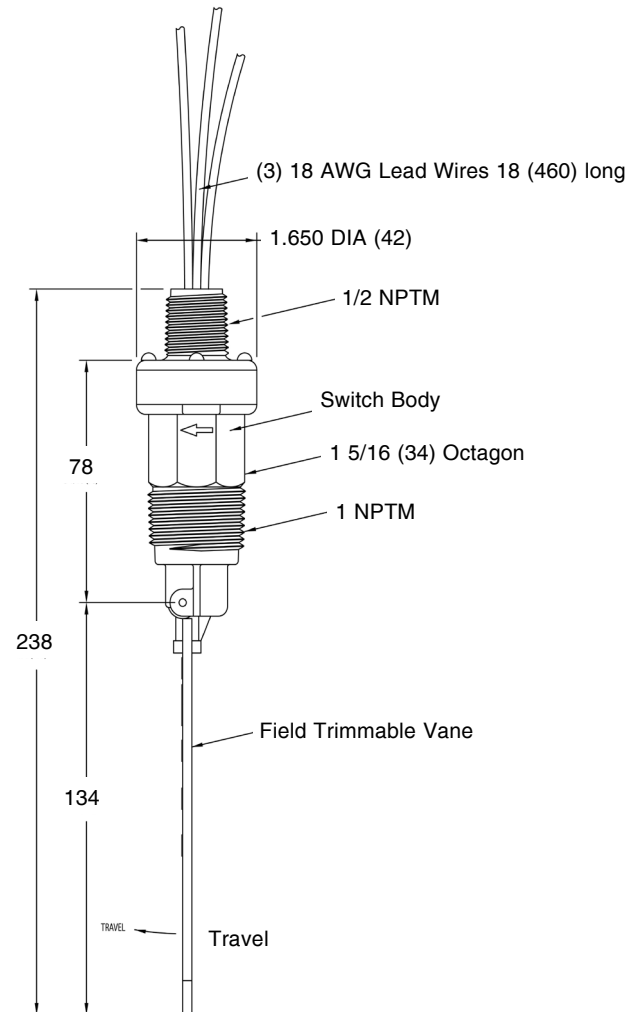
Pipe size	Flow range for cold water in l/min on-off	Flow range for air in l/min on-off
1"	40.9-34.6	1105-923
1 ¼"	37.2-31.4	1062-912
1 ½"	32.4-25.7	945-757
2"	41.2-33.4	1218-1042
3"	48.8-33.5	1493-1100
4"	79.7-52.2	2482-1802
6"	170.2-124.7	4775-3890

values measured on horizontal pipe

## Ordering Codes:

<b>Order Number</b>	<b>DP-20.</b>	<b>1.</b>	<b>2</b>
<b>DP-20 Vane Operated Flowswitch</b>			
<b>Electrical connection /</b>			
1 = cable			
2 = IP65 clamp-on housing			
<b>Contacts /</b>			
1 = standard			
2 = gold			

## Dimensions in mm:





# DP-30 Vane Operated Flowswitch made from Metal

## Technical Specifications:

### Wetted materials /

Vane: 301 SS  
 Body: Brass or 303 SS  
 Pin and magnet: Keramik 8

### max. Pressure /

Brass: 69 bar,  
 Stainless steel: 138 bar

### max. Media-temp. /

+93°C

### Weight /

160 g

### Process connection /

½" male NPT or ½" male BSPT

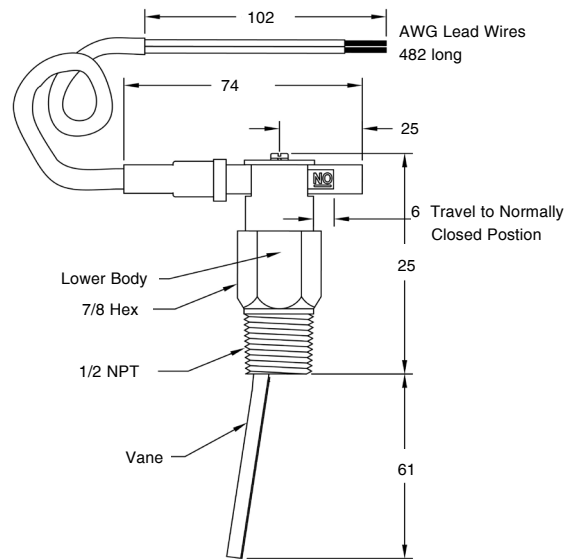
### Installation /

with arrow in direction of flow

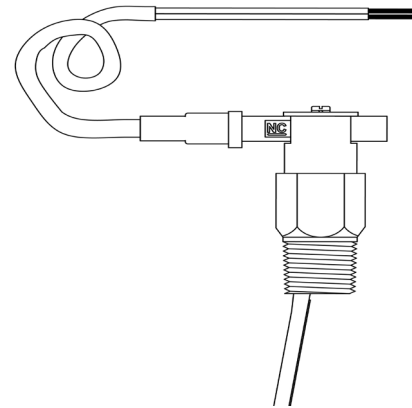
### Mounting position /

any, values values based on horizontal pipe position, in the same way as for the DP-20

## Dimensions in mm:



Normally open position



Normally closed position

## Electrical Specifications:

### Contact /

max. 0.5 A/ 120 VAC  
 or 1.5A/ 24VDC

### Function /

NC-contact or NO-contact,  
 hermetically sealed in PP

### Electrical connection /

Two 18-AWG wires, 483 mm long

### Protection class /

IP66

## Flow range:

Pipe size	Flow range for cold water in l/min on-off, normally open	Flow range for cold water in l/min on-off, normally closed	Flow range for air in l/min on-off, normally open	Flow range for air in l/min on-off, normally closed
½"	9.8 - 8.7	9.8 - 9.5	291.7-250	288-260
¾"	11.7 - 10.2	11.7 - 10.6	368.3-328	365-328
1"	18.2 - 17	18.2 - 16.7	543.3-498	535-498
1 ¼"	23.5 - 21.2	23.1 - 21.2	701.7-628	693-637
1 ½"	31 - 29.1	31 - 29.1	946.7-883	935-867
2"	36 - 34.4	36 - 34.1	1422-1370	1422-1352

## Ordering Codes:

Order Number

DP-30.

1. 2

DP-30 Vane Operated Flowswitch

### Material /

1 = brass  
 2 = stainless steel

### Process connection /

1 = ½ male NPT  
 2 = ½ male BSPT

