

# TURCK

## AC Self-Contained Flow Monitors



### FCS-N1/2 A4P-ARX-B3141 FCS-N1/2 A4P-ARX-B1151

- Self-contained compact housing for monitor and signal processor
- Pressure resistance up to 870 psi
- Enclosure meets IP 67, NEMA 1, 3, 4, 4x, 12, 13
- Maximum setpoint accuracy during changes in flow temperature
- Simple adjustment by means of potentiometer
- Relay output for 250 VAC/4 A, N.O.

With the FCS series self-contained devices, the flow monitor and the signal processor are incorporated in one compact housing. This device is ideal for monitoring liquid flow speed in the 2 to 295 ft/min range.

The flow monitor is designed to be installed directly into a pipeline, with the sensing probe inserted into the flow. This makes it suitable for various pipe diameters.

The unit provides 1/2 NPT thread mounting and is rated for pressures up to 870 psi. The probe is made of 316TI stainless steel and the housing is made of plastic.

Switch actuation point adjustments (in reference to flow rate) are achieved by means of a potentiometer located under the protective screw cap on the front of the device.

Each of the six LEDs display the difference between the actual flow speed in comparison to the flow speed that the setpoint is adjusted to.

Red LED: flow is below set point

Yellow LED: flow is at or above set point

Green LEDs: degree of deviation in excess from setting  
(1, 2, 3 or 4 LEDs are on or illuminated)

When the red LED illuminates, the relay output is de-energized; when the yellow LED illuminates, the relay output is energized.

## Flow Monitors AC Self Contained with Relay Output FCS-N1/2 A4P-ARX-B3141 FCS-N1/2 A4P-ARX-B1151

<b>Type</b>	FCS-N1/2 A4P-ARX-B3141	FCS-N1/2 A4P-ARX-B1151
ID Number	M6871037	M6871025
<b>Operating Voltage</b>	115 VAC $\pm$ 15%	115 VAC $\pm$ 15%
Power / Current consumption	$\leq$ 40 mA	$\leq$ 40 mA
<b>Output</b>	relay output, N.O.	relay output, N.O.
Switching current	$\leq$ 4 A	$\leq$ 4 A
Switching voltage	$\leq$ 250 VAC / 60 VDC	$\leq$ 250 VAC / 60 VDC
Switching capacity	$\leq$ 1000 VA / 60 W	$\leq$ 1000 VA / 60 W
<b>Temperature Range</b> (flow)	-20° to +80°C (-4° to +176°F) cont.	-20° to +80°C (-4° to +176°F) cont.
<b>Operating Range</b> (flow rate)		
Water	1-150 cm/s (2-295 ft/min)	1-150 cm/s (2-295 ft/min)
Oil	3-300 cm/s (6-590 ft/min)	3-300 cm/s (6-590 ft/min)
Repeatability	$\pm$ 5% of full range	$\pm$ 5% of full range
<b>Time Delay Before Availability</b>	2-15 s (8 s typical)	2-15 s (8 s typical)
Switch ON time (above setpoint)	1-13 s (2 s typical)	1-13 s (2 s typical)
Switch OFF time (below setpoint)	1-15 s (2 s typical)	1-15 s (2 s typical)
Temperature gradient	max. 250°C/min. (450°F/min.)	max. 250°C/min. (450°F/min.)
<b>Pressure Rating</b>	1450 psi (100 bar)	1450 psi (100 bar)
<b>LED Indications</b>		
Below setpoint, output de-energized	red	red
At setpoint, output energized	yellow	yellow
Above setpoint, output energized	green (4), in addition to yellow LED	green (4), in addition to yellow LED
<b>Probe Material</b> (DIN 2 462/17 440)	316TI stainless steel (1.4571)	316TI stainless steel (1.4571)
Enclosure (DIN 40 050)	IP 67, NEMA 1,3,4,4x,12,13	IP 67, NEMA 1,3,4,4x,12,13
Temperature rating	-25° to +80°C (-13° to +176°F)	-25° to +80°C (-13° to +176°F)
Torque	100 Nm (73.7 ft-lb)	100 Nm (73.7 ft-lb)
<b>Housing Material</b>	PBT	PBT
Enclosure (DIN 40 050)	IP 67, NEMA 1,3,4,4x,12,13	IP 67, NEMA 1,3,4,4x,12,13
Operating temperature	-25° to +60°C (-13° to +140°F)	-25° to +60°C (-13° to +140°F)
<b>Connection</b>	4-wire <i>microfast</i> quick disconnects KB 4T-*/S727 or WKB 4T-*/S727 (Page 67) * = Length in meters	5-wire <i>minifast</i> quick disconnects RKM 50-* or WKM 50-* (Page 69) * = length in meters

