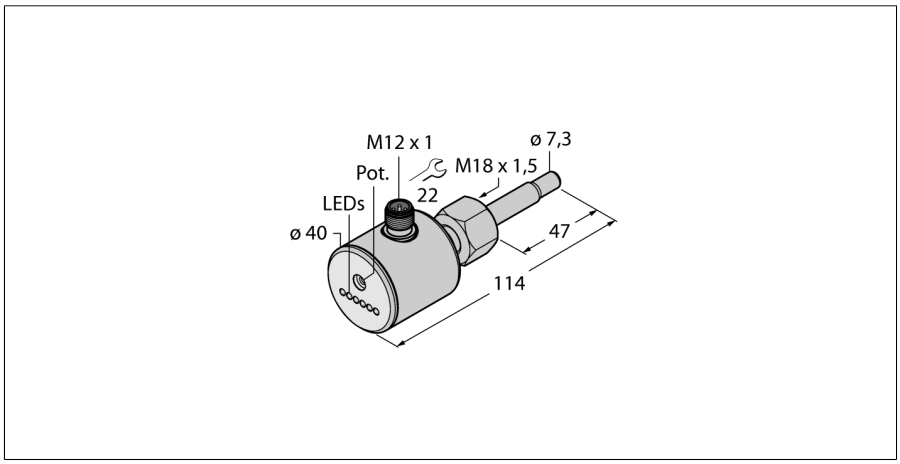
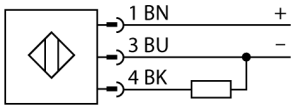
Freely rotatable FCST flow sensor monitoring of flow velocity transistor output 24 VDC PNP NO FCST-A4-AP8X-H1141



- **Termodinamik çalışma prensibi**
- **Akış izleme**
- **Potansiyometre ile ayarlanır**
- **Göstergeler için LED bandı**
- **Transistör anahtarlama çıkışı**
- **24 VDC PNP NO**
- **Serbest bir şekilde ayarlanabilen anahtarlama noktası**
- **Freely rotatable sensor**
- **Plugged in with adapter**
- **Screw-in adapter, M18 x 1.5**

Tip kodu	FCST-A4-AP8X-H1141
İdent no.	6870265
Montaj koşulları	Daldırma sensörü
Water Operating Range	1…150 cm/sn
Oil Operating Range	3…300 cm/sn
Bekleme süresi	tip. 8 sn (2…15 sn)
Açma süresi	tip. 2 sn (1…15 sn)
Sıcaklık gradyanı	≤ 250 K/dk
Medium temperature	-20…+80 °C
Ambient temperature	-20…+80 °C
Çalışma voltajı	19.2…28.8 VDC
Akım tüketimi	≤ 70 mA
Çıkış işlevi	PNP, NA kontak
Anahtarlama akımı	400 mA
IP Derecesi	IP67
Gövde malzemesi	Paslanmaz çelik, V4A (1.4404)
Sensor material	paslanmaz çelik, V4A (1.4571)
Seal	FPM
Elektriksel bağlantı	Konektörler, M12 × 1
Basınç dayanımı	100 bar
İşlem bağlantısı	M18 × 1,5 dişi diş

Kablo Bağlantı Şeması



İşlevsel prensip

FCST akış sensörleri termodinamik prensibe göre çalışır.

Modüler takma konsepti sayesinde, akış kanalı içinde işlem bağlantısından bağımsız olarak serbest bir şekilde hizalanabilirler. Modüler konsept, akışın izlenmesi için çok önemli olan sensörün montajı ve tam hizalanmasını kolaylaştırır.

Adaptörler, tüm standart endüstriyel diş boyutlarında mevcuttur. Böylece sensör adaptör sistemi, herhangi bir uygulama gerekliliği için kolaylıkla ayarlanabilir. Ayrıca modüler konsept, sistemi yüksek basınçlara karşı son derece dayanıklı hale getirir.

Özellikle entegre sinyal işlemcisi bulunan akış sensörleri, modüler FCST konseptinden faydalanır. Serbest bir şekilde ayarlanabilen sensör sayesinde, LED ekranı okumak her zaman kolaydır ve analog sinyal veya anahtarlama noktasının ayarı için olan potansiyometreler daima erişim dahilindedir.

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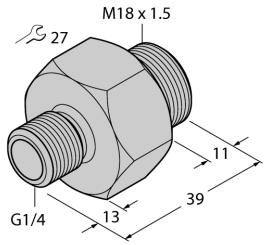
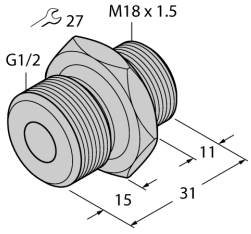
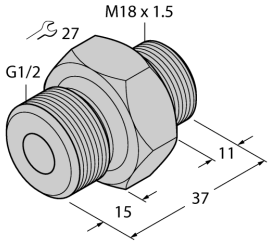
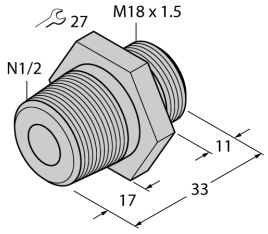
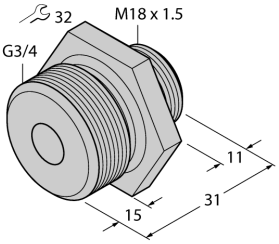
Freely rotatable FCST flow sensor monitoring of flow velocity transistor output 24 VDC PNP NO FCST-A4-AP8X-H1141

	Optionally available: Screw-in adapter, stainless steel, M18 x 1.5 on G1/4 FCA-FCST-G1/4-A4 Ident-no. 6870290	
	Optionally available: Screw-in adapter, stainless steel, M18 x 1.5 on G1/2 FCA-FCST-G1/2-A4 Ident-no. 6870291	
	Optionally available: Screw-in adapter, stainless steel, M18 x 1.5 on G1/2 FCA-FCST-G1/2-A4/L037 Ident-no. 6870292	
	Optionally available: Screw-in adapter, stainless steel, M18 x 1.5 on G1/2 FCA-FCST-N1/2-A4 Ident-no. 6870293	
	Optionally available: Screw-in adapter, stainless steel, M18 x 1.5 on G3/4 FCA-FCST-G3/4-A4 Ident-no. 6870294	

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Freely rotatable FCST flow sensor monitoring of flow velocity transistor output 24 VDC PNP NO FCST-A4-AP8X-H1141

LED display

LED	Color	Status	Description
LED 1	red	on	The flow has failed or dropped below the default setpoint. Switching output 1 is not switched.
LED 2	yellow	on	The setpoint is reached. Switching output 1 is switched.
LED 3 … 6	green	on	The adjusted setpoint is exceeded. The number of illuminated LEDs is a measure of the relative exceedance of the setpoint. Switching output 1 is switched.

Mounting instructions

Mounting adapter	The freely rotatable flow sensors are mounted with the FCA-FCST adapter. The adapter is screwed in a T-piece or a welding sleeve and sealed accordingly. When assembling adapters with cylindrical thread, use the enclosed seal (e.g. G1/4, G1/2, G3/4, etc.). Mounting adapters with NPT-thread are generally delivered without seal (e.g. N1/2). Use hemp or teflon tape The sensor is fixed in the adapter by means of a captive nut fitted between the upper housing part and the cone seat.
Mounting position	In order to minimize potential misinterpretations due to disturbance, it is recommended to position the sensor with a minimum separation distance of 3 x di before and 5 x di after bends, changes in cross section, valves, etc.. ■ If the flow channel is not completely filled with the medium, it is recommended to install the sensor from underneath. ■ If deposits are likely to built up, it is recommended to install the sensor on the side. It is important to note that deposits can also form on the tip, which may affect the monitoring results. Therefore, it is recommended to clean the sensor at regular intervals and to select the associated service interval accordingly. ■ If blistering is to be expected, ensure that there is no air bubble located in the area of the tip when installing the sensor. ■ If the sensor is mounted in vertical piping systems, it is recommended to position the sensor within the riser.
Correct installation	To retrieve the full performance potential of the sensor, it must be aligned correctly. In particular when monitoring bad heat-conductive media such as oils, liquids with high solids, abrasive media, etc., when exposed to fast temperature changes (K/min) and, in general, near components with analog output. Correct installation is ensured, as soon as the effective flow direction of the application matches the direction of flow indicated by the "arrow" on the sensor.

Adjustment guidelines

Switching outputs	Setup with resting medium	■ Install sensor in the flow channel, switch on the device and wait for standby time. ■ Set the potentiometer S1 so that the red LED just turns on. In the case of two switching outputs also valid for S2. ■ When the medium starts to flow, at least one green LED should be on.
	Setup with flowing medium	■ Install sensor in the flow channel, set flow and turn on the device. Wait for standby time. ■ Set potentiometer S1 so that one or two green LEDs are on. In the case of two switching outputs also valid for S2. ■ When the medium stops flowing, the red LED must turn on.

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