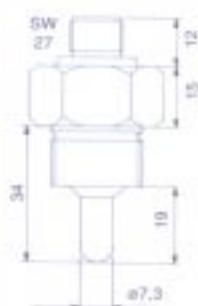


Monitoring sensors for fluids

- High chemical resistance through metal-ceramic
- Resistant against abrasive media
- Anticoating surface
- Temperature range -20...+80°C
- Pressure-tight up to 100 bar



STA 421 S-B3



G 1/2

These sensors are made of titanium and are coated with a metal-ceramic material layer. Coated sensors display chemical resistance practically equal to chemical characteristics of PTFE or Hastelloy. Unlike PTFE sensors, coated special sensors display the same temperature behaviour as stainless steel sensors, with high temperature gradients.

The high surface hardness of the coating protects the sensor against abrasion, thus considerably increasing its durability. The perfectly smooth surface virtually eliminates deposits.

TYPE	ID-NO.	DESIGN
STA 421 S-B3	P10622	G 1/2 Titanium/B3 Universal plug system M 12x1
STA 421 K-B3	P10623	G 1/2 Titanium/B3 2 m PTFE-cable

Combination sensor-amplifier

	SKZ 400...	SKM 420...	SKV 480...
STA...	●	●	●

Note

Different designs, materials or electrical data are available on request.

FLOW CONTROLLER

Chemical Sensors • Series 400



Technical Data

STA 421...	
	Nominal flow
Detection range	
Water	1...150 cm/s 20 cm/s
Oil	3...300 cm/s 60 cm/s
Temperature range	-20...+80°C (medium), 120°C on request
Temperature gradient	250°C/min
Temperature-step time	typ. 12 s
Standby time	typ. 8 s (2...15 s)
Switching delay on	typ. 2 s (1...13 s)
Switching delay off	typ. 2 s (1...15 s)
Compressive strength	100 bar
Protection (DIN 40500)	IP 68 (fixed-cable) IP 67 (plug)
Material Sensor	Titanium/B3
Tightening torque	100 Nm
Plug	Universal plug system, M12x1
Fixed cable	2m PVC-cable 4x0.25 mm ²

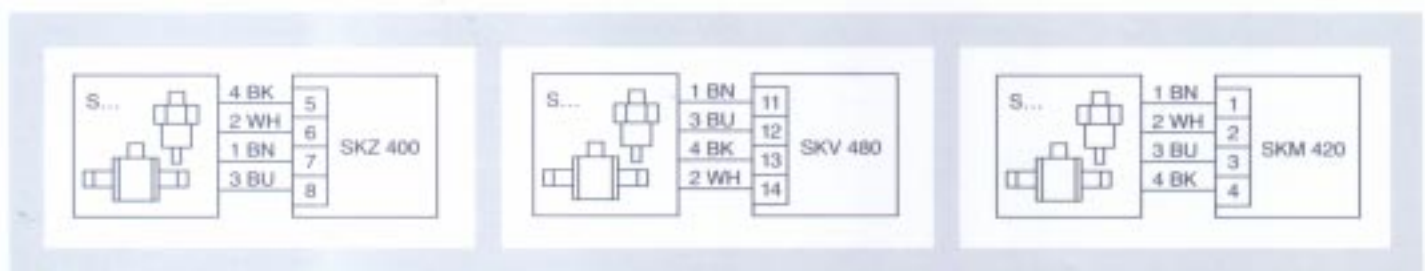
Chemical resistance of B3-coating

Medium	Cl ₂	HCl	Br ₂	HBr	F ₂	HF	HA (general)	NaOH	Saltw. (Kestern)	red. media	HNO ₃	H ₂ SO ₄ (25%)
resistance	+++	+++	+++	+++	+	+	+++	++	+++	++	++	+++

HA in general = Acid. acid in different concentrations
 Saltw. Kestern = Saltw.-Kesternich-Test
 Resistance = proofed up to 30°C

Coating properties
 The coating is hard, resistant to wear and resistant to abrasive substances in media like for example chalk, mud, sand and fiber.

Connection



Code: BK = black BN = brown BU = blue GN = green YE = yellow GY = grey PK = pink WH = white