Pressure transmitter TST-SMC

Measuring range 0 … 1000 bar
Integrated CANopen interface (CANopen 2.0 A – optional B)

Applications

- General industrial applications
- Automotive engineering
- Hydraulics and pneumatics
- Plant engineering and automation technology
- Environmental and climate technology

Description

- Integrated CANopen interface according to standard 2.0 A (optional B) with data rate up to 1 Mbit / s
- No internal transfer medium (“dry” measuring cell, completely welded)
- Measuring ranges 0 … 1 bar up to 0 … 1000 bar
- Media temperature -40 … +125 °C
- Protection class up to IP67
- Compact and robust stainless steel housing
- High reliability

Standard pressure ranges											
Measuring range	**P(bar)**	**1,0**	**1,6**	**2,0**	**2,5**	**4,0**	**6,0**	**10,0**	**16**	**20**	**25**
Overload pressure	P(bar)	6	6	6	6	10	20	20	40	40	100
Bursting Pressure	P(bar)	9	9	9	9	15	30	30	60	60	150
Measuring range	**P(bar)**	**40**	**60**	**100**	**160**	**200**	**250**	**400**	**600**	**1000**	
Overload pressure	P(bar)	100	200	200	400	400	500	750	840	1200	
Bursting Pressure	P(bar)	150	300	300	600	600	1000	1000	1050	1500	

Technical data	Type: TST-SMC
Electrical parameters	
Output signal* CAN Protocol Operating voltage U_B current consumption	CAN-interface according to DIN ISO 11898 CAN 2.0 A (optional CAN 2.0 B) CANopen or J1939 according to DIN ISO 11898 10 … 32 V DC < 30 mA
Response time* (10 … 90%)	< 1ms
Electric strength	350 V DC
Accuracy specifications	
BFSL (Best Fit Straight Line) **Total error at RT** Stability per year	≤± 0,15 % of range ≤**± 0,50 % of range**– including nonlinearity, hysteresis, zero point and full scale error (according to IEC 61298-2). Optional total error ≤± 0,25 % of range available ≤± 0,10 % of range

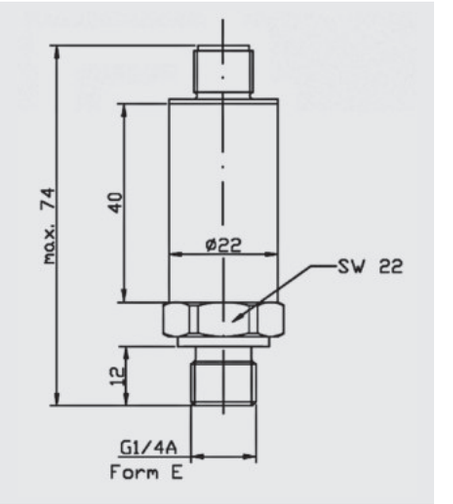
* Other response times on request.

Pressure transmitter TST-SMC

Measuring range 0 … 1000 bar
Integrated CANopen interface (CANopen 2.0 A – optional B)

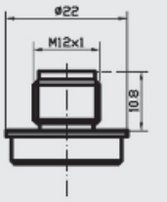
Technical data	Type: TST-SMC
Temperature ranges	
Media temperature	-40 ... +125 °C
Ambient temperature	-40 ... +105 °C
Storage temperature	-40 ... +105 °C
Compensated temperature range	-20 ... +85 °C
Temperature coefficient zero point	≤± 0,15 / 10K % of range
Temperature coefficient range	≤± 0,15 / 10K % of range
Total Error	At -40 °C - 2,00 % of range
	At +105 °C - 2,00 % of range
Mechanical parameters	
Sensor element	Stainless steel on media side
Material of parts with contact to measuring medium	CrNiCuNb 17-4 PH / 1.4542
Housing	Stainless steel
Process connection	G 1/4" E, G 1/4" B, G 1/2" B, 1/4" NPT, others upon request
Electrical connection	Connector M12x1, others upon request
Weight	80-120 g according to layout
Shock resistance	1000 g according to IEC 68-2-32
Vibration resistance	30 g according to IEC 68-2-6 and IEC 68-2-36
CE conformity	EMC Directive 2004/108/EC
IP protection class	Corresponding to the used and connected mating connector
Optional	With throttle

Dimensional drawing



Connector

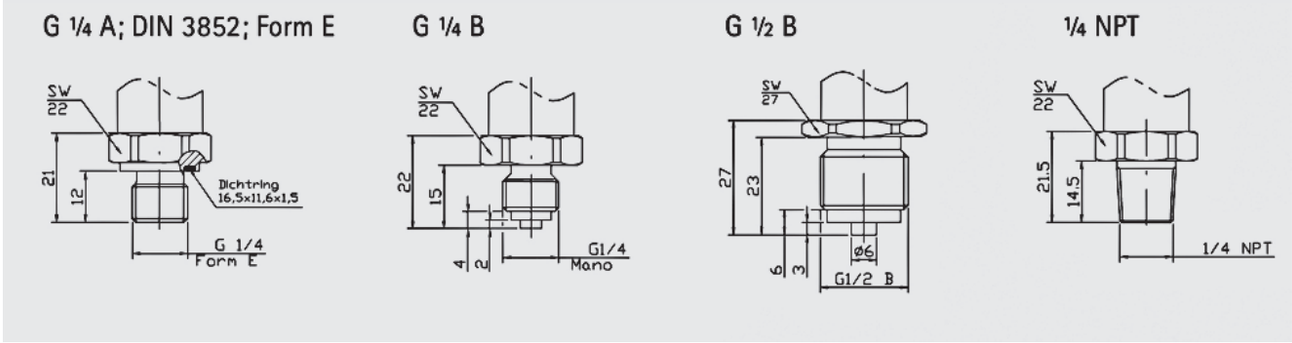
Connector
M12x1(S763)



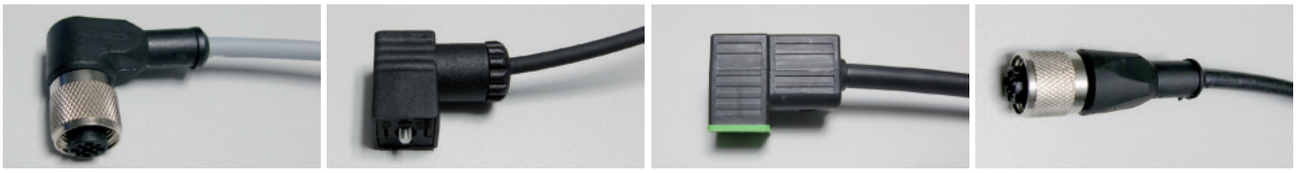
Pressure transmitter TST-SMC

Measuring range 0 … 1000 bar
Integrated CANopen interface (CANopen 2.0 A – optional B)

Process connectors



Assembled cable and connection accessories



Type	Length	Specification	Part No.: straight	angled
M12x1 (S763) 4- pin	-	connector M12x1 for self-connection	1070039	1070038
	-	connector M12x1 self-connection, shielded	1070030	1070031
	2 m	cable: PUR	1070044	-
	5 m	cable: PUR, halogen-free	1070023	1070025
	5 m	cable: PUR, shielded, halogen-free	1070032	1070033
MVS / C, 3-pin +PE	3 m	cable: PUR, connector MVS / C	-	1070021

Special types upon request.