PSCG / TSCG

G1/4“ • Measuring range to 400 bar (5800 PSI) • Temperature measuring range - 40 ... +125 °C (-40 ... 257 °F)

Technical Features

- Pressure and Combined Temp. / Press. sensor also suitable for mobile applications
- Exceptional Long Term Stability
- High Proof Pressures with All Stainless Steel Wetted Parts
- Broad Choice of Outputs, Electrical Connectors, and Pressure Ports
- Dual Pressure and Temperature sensing option
- Service-life more than 100 million pressure cycles
- Certificationc CE, UL, CRN, RoHS

Functional Description

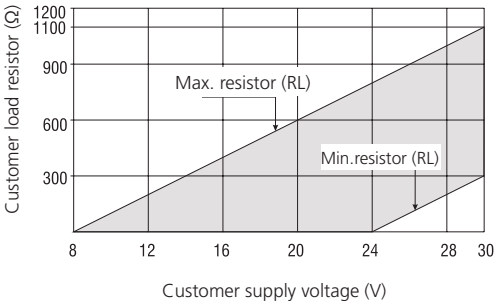
PSCG / TSCG Sensor offers high level of stability, reliability and service-life with more than 100 million pressure cycles in small package size. A broad choice of electrical and pressure connections allow stock configurations to suit most applications without any modification.

Technical Data

Measuring range pressure	bar (PSI)	0 - 100 (0 -1450)	0 - 250 (0 - 3600)	0 - 400 (0 - 5800)	
Temperature measuring range	°C (°F)	- 40 ... + 125 (-40 …. +257)			
Maximal pressure	bar (PSI)	300 (4350)	750 (11000)	1200 (17500)	
Burst pressure	bar (PSI)	2000 (29000)	2500 (36000)	4000 (60000)	
Parameters					
Accuracy		PSCG - 0.25 % FS of the span > 60 bar (1000 PSI) 0.50 % FS of the span < 60 bar (1000 PSI) TSCG - 3.50 % FS of the span			
Thermal Error		2 % FS / 100 °C of the span < 60 bar (1000 PSI)			
Zero Tolerance		0.50 % of the span > 60 bar (1000 PSI) 1.00 % of the span < 60 bar (1000 PSI)			
Span Tolerance		0.50 % of the span > 60 bar (1000 PSI) 1.00 % of the span < 60 bar (1000 PSI)			
Response time		1 ms			
Service-Life		> 10^8 cycles			
Connecting thread	A	G1/4“			
Weight		50 - 150 g configuration dependet			
Environmental conditions					
Compensated temperatures	°C (°F)	-40 …. +125 (-40 …. +257)			
Operating temperatures	°C (°F)	-40 …. +125 (-40 …. +257)			
Wetted parts		17-4 PH Stainless Steel			
Housing		304 Stainless Steel			
EMC resistance		100 V / m			
Approvals		CE, UL, CRN			
Vibration resistance		40 g, 20-1000 Hz sinus MIL-STD-810E			
Shock resistance		IEC 68-2-32 procedure 1			
Enclosure type		IP 67			
Electrical connections					
Output signals for PSCG		4 – 20 mA	0 – 5 V DC	1 – 5 V DC	0 - 10 V DC
Output signals for TSCG		-	-	1 – 5 V DC	-
Supply Voltage	V DC	8 – 30			
Output - Ratiometric	mA	4,5			
Supply voltage - Ratiometric	V DC	5±10 %			

Charakteristic

Current Output Mode (Load Resistor Range)



	Datasheet	Typ
General Technical Information	GI 0060	Products and operating conditions

Minimum Resistor Value [Ω] = 50∗(+V – 24) valid for +V > 24 V
Maximum Resistor Value [Ω] = 50∗(+V – 8) valid for +V > 8 V

Ordering Code / Table of possible setups

□ - □ - □ □ -1

Connection to the circuit
G1/4"-19 Integral Face-Seal

Pressure sensor **PSCG**
Combined temperature and pressure sensor **TSCG**

Electrical Connection**

M	M12x1
A	AMP Superseal 1.5
D	Deutsch DT04-4P
MP	Packard MetriPack

**TSCG is avaiable to use only in execution M, D

Output signal*

Current 4 - 20 mA	**1**
Voltage 0 - 5 V DC	**2**
Voltage 1 - 5 V DC	**3**
Voltage 0 - 10 V DC	**4**

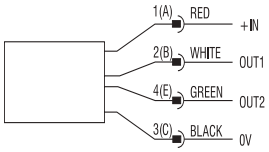
*TSCG - only available output signal is type 3

Measuring range

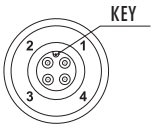
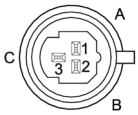
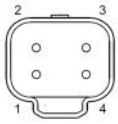
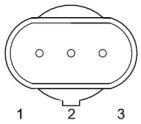
100	0 - 100 bar (0 - 1450 PSI)
250	0 - 250 bar (0 - 3630 PSI)
400	0 - 400 bar (0 - 5800 PSI)

Electrical connection

Wiring Diagram



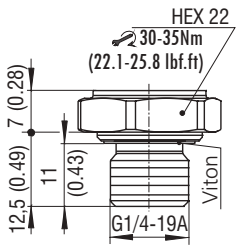
Electrical Connection

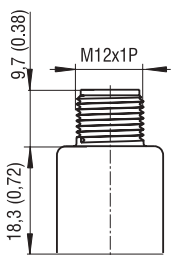
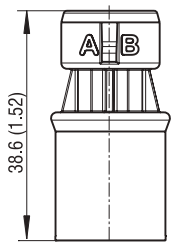
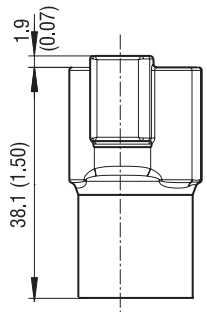
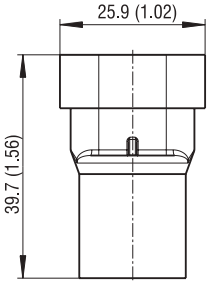
	M12x1 **M**		Packard MetriPack **MP**		Deutsch DT04-4P **D**		AMP Superseal 1.5 **A**	
								
PIN	Voltage Mode	Current Mode	Voltage Mode	Current Mode	Voltage Mode	Current Mode	Voltage Mode	Current Mode
1 (A)	+IN	+IN	0V	0V	0V	0V	V_{out}	Do Not Connect
2 (B)	$V_{OUT}1$ (pressure)	Do Not Connect	+IN	+IN	+IN	+IN	0V	0V
3 (C)	0V	0V	Vout	Do Not Connect	PE or $V_{OUT}2$ (temp)*	PE	+IN	+IN
4 (E)	PE or $V_{OUT}2$ (temp)*	PE	-	-	$V_{OUT}1$ (pressure)	Do Not Connect	-	-

*This pin is used for temperature sensing output when this option is utilized. Otherwise, the pin is used for PE.

Dimensions in milimeters (in)

Connection to the circuit **1**



M12x1 - M **M**	Packard MetriPack **MP**	Deutsch DT04-4P **D**	AMP Superseal 1.5 **A**
			

Electrical enclosure IP 67 is reached only in the case that the connector socket is properly fastened.