



SCP

Compact Pressure Sensors

Catalog



ENGINEERING YOUR SUCCESS.

Application

The SCP pressure sensor belongs to the Parker family of accessories provided to complement electronic control systems. The SCP sensor family is a range of 0-5 V pressure transmitters for mobile hydraulic applications.

These transmitters are available in three standard pressure ranges; 35 bar (507 psi), 250 bar (3625 psi) and 500 bar (7250 psi). The sensors feature compact construction, high linearity and excellent electromagnetic interference resistance.

Properties

Reliability

The SCP has stainless steel construction for strength. The sensor cells use thin film technology with no internal o-rings or fluid. The high pressure capability makes the sensor very robust and able to withstand heavy vibrations.

Electromagnetic Immunity

The design of the SCP separates the sensor electronics from the connector. This ensures a high level of EMI protection.

Installation

The interface type of the SCP is a SAE 6 (9/16"-18UNF) thread with o-ring seal. The connector is a sealed, Deutsch DT type and is integrated into the sensor body.

The sealed connector gives the sensor protection for exposed outdoor applications. The SCP is easy to install and remove, even in field conditions.

General

Weight	80 g
Media Temperature	-40 °C to 125 °C
Operating temperature	-40 °C to 105 °C
Storage temperature	-40 °C to 125 °C
Pressure range	see code in table below
Load Change	>100 Million

Over pressure

code "035"	Max 70 bar
code "250"	Max 500 bar
code "500"	Max 1000 bar

Burst pressure

code "035"	Min 105 bar
code "250"	Min 750 bar
code "500"	Min 1500 bar

Accuracy

Total error (-40°C to 125°C)	Max 2% FS
Total error (-10°C to 50°C)	Max 1.5 % FS
Total error (25°C)	Max 0.5 % FS
Repeatability	≤0.3% FS

Electrical specifications

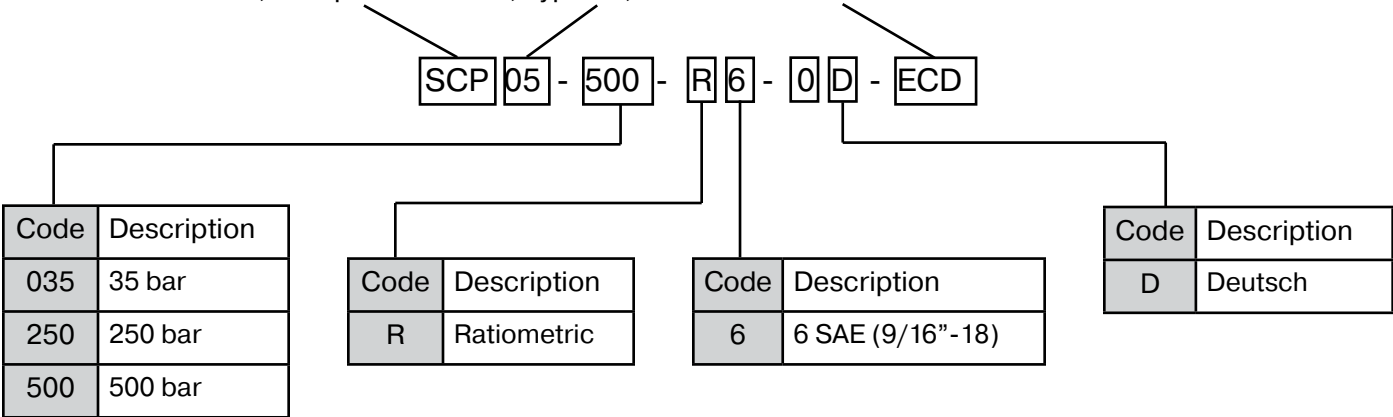
Output at FS ¹⁾	4.5 V (90%)
Zero output ¹⁾	0.5 V (10%)
Supply Voltage (Vs)	5.0 Vdc +/- 10%
Load resistor	Max 4.7kohm
Current supply	Max 6 mA
Response time	Max 1 msec

1) The output is ratiometric (code "R") to supply voltage, Vs.

Threaded interface code "6"	SAE 6, 9/16"-18 UNF
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Connector Integral to sensor	see code in table below
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Model code: Sensor, Compact Pressure, Type 05, Electronic Controls Division

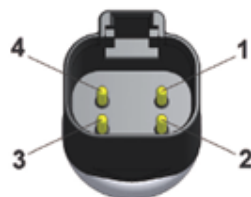


Environmental protection

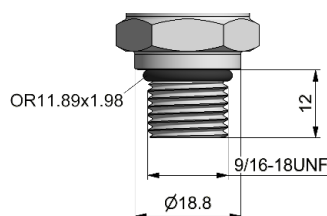
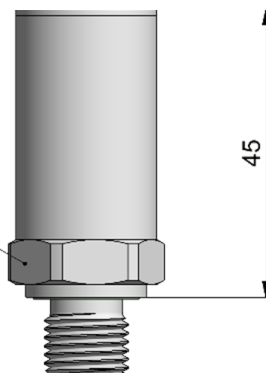
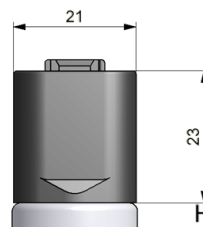
Mechanical environment
IEC 60068-2-6 Fh (vibration)
IEC 60068-2-27 Es (shock)

Conformity

CE	EN 61326-1 EN 61326-3-1
RoHs	Yes
MTTFd	>100 years



Pin1= Output Signal 0.5 - 4.5VDC
Pin2= Power Supply +5VDC
Pin3= GND
Pin4= NC (not used)



units = mm

Ordering part numbers ²⁾

Part number

2820012ECD
2820013ECD
2820016ECD

2) Other configurations possible, consult factory.



WARNING - USER RESPONSIBILITY

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

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WARNING - California Proposition 65

This product can expose you to chemicals including NICKEL COMPOUNDS which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov



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