SCP
Compact Pressure Sensors
Catalog HY33-2379/US
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 50 g
Operating temperature -40 °C to 125 °C
Storage temperature -40 °C to 125 °C
Pressure range see code in table below
Over pressure code “035” Max 70 bar
code “250” Max 500 bar
code “500” Max 1000 bar
Burst pressure code “035” Min 140 bar
code “250” Min 1000 bar
code “500” Min 2000 bar

Accuracy
Total error (-40°C to 125°C) Max 2.5 % FS
Total error (-25°C to 100°C) Max 1.5 % FS
Repeatability Max 0.2 %

Electrical specifications
Output at FS 1) 4.5 V (90%)
Zero output 1) 0.5 V (10%)
Supply Voltage (Vs) 5.0 Vdc
Load resistor Min 10 kΩ
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

Connector
Integral to sensor see code in table below

Model code: Sensor, Compact Pressure, Type 05, Electronic Controls Division

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>035</td>
<td>35 bar</td>
</tr>
<tr>
<td>250</td>
<td>250 bar</td>
</tr>
<tr>
<td>500</td>
<td>500 bar</td>
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<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>R</td>
<td>Ratiometric</td>
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<tr>
<td>6</td>
<td>6 SAE (9/16&quot;-18)</td>
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<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>D</td>
<td>Deutsch</td>
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</tbody>
</table>
Environmental protection

EMI
EN 61000-6-2 (interference resistance)
EN 61000-6-3 (interference emissions)

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

Climate environment
EN/IEC 60529 (IP67)

Ordering part numbers 2)

<table>
<thead>
<tr>
<th>Model code</th>
<th>Part number</th>
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<tbody>
<tr>
<td>SCP05-035-R6-0D-ECD</td>
<td>2820012</td>
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<tr>
<td>SCP05-500-R6-0D-ECD</td>
<td>2820013</td>
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<tr>
<td>SCP05-250-R6-0D-ECD</td>
<td>2820016</td>
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</table>

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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