|                       | SCPT   | SCPT-CAN   | SCT  | SCRPM  |
|-----------------------|--|--|--|--|
| Intended use          | Contract of the Contract of th |  |  | 1  |
|                       | Measurement of pressure and temperature in standard applications   | Measurement of pressure and temperature in standard applications   | Measurement of pressure under high operating pressures   | Contactless RPM (speed) measurements   |
|                       | <ul> <li>✓ Stainless steel cell</li> <li>✓ Higher burst pressure</li> <li>✓ Resistant to pressure peaks</li> </ul>   | <ul> <li>✓ Stainless steel cell</li> <li>✓ Higher burst pressure</li> <li>✓ Resistant to pressure peaks</li> <li>✓ CAN bus connection</li> </ul> | <ul> <li>✓ Unique resistance to pressures up to 630 bar</li> <li>✓ Compact size</li> <li>✓ Fast reaction time</li> </ul> | <ul> <li>✓ Opto-electronic<br/>measurement</li> <li>✓ Installation or adjustment<br/>is not necessary</li> </ul> |
| Measuring range       | -115/060/150/400/<br>600/1.000 bar   | -116/060/160/400/<br>600/1.000 bar   | -25+125 °C   | 5010.000 RPM   |
| Hydraulic connection  | 1/2" BSPP  |  | M10x1  |  |
| Accuracy              | < ±0,5 % FS  |  | < ±1 % FS  | < ±0,5 % FS  |
| Electrical connection | 5 pin push-pull  | 5 pin M12x1  | 5 pin push-pull  | Fixed cable  |
| Application           | Test bench, process engineering, materials handling, loading and lifting systems, general machinery construction and pneumatic or hydraulic installation construction  Mobile hydraulics/ Industrial conveyor vehicles/utility vehicles/construction machinery/ agricultural machinery   |  |  |  |
| Order code            | SCPT-xxx-02-02   | SCPT-xxx-C2-05   | SCT-150-xx-02  | SCRPM-xxx  |
| Refer to page         | 38-40  | 41-42  | 43-46  | 47-49  |



- Robust stainless steel design
- Response times of 1 ms
- Capturing of pressure peaks
- Accuracy ± 0,25 % typ.
- **■** Flexible operation
- SCPT series

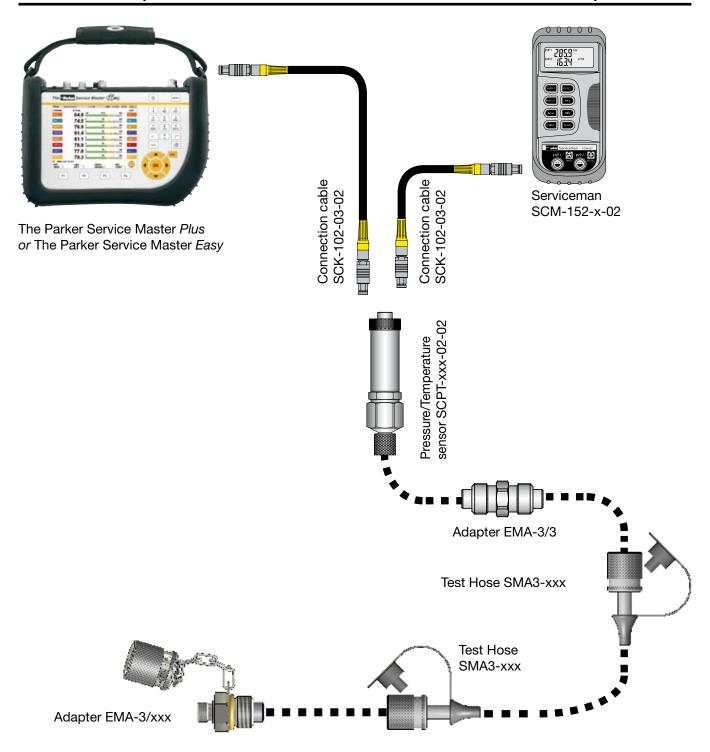


Fast response times guarantee the safe capture of pressure peaks in hydraulic systems. The robust stainless steel construction allows a variety of applications, for example cooling water or pneumatics.

All pressure sensors are delivered with a diagnosis adapter (M16x2) installed. Connection to the hydraulic system takes place quickly and safely. Times for installation are reduced.

| Pressure measurements           |                               |  |
|---------------------------------|-------------------------------|--|
| -1 015 bar                      | Pneumatics/ low pressure      |  |
| 0 060 bar                       | Medium pressure               |  |
| 0 150 bar                       | Medium pressure               |  |
| 0 400 bar                       | Operating pressure hydraulics |  |
| 0 600 bar                       | High pressure                 |  |
| 0 1.000 bar High pressure peaks |                               |  |
| Temperature measurements        |                               |  |
| -25+105 °C Oil temperature      |                               |  |





## **Pressure/Temperature measurement SCPT**

There is a selection of various measuring ranges for the measuring of pressures. Sensors can be used for pneumatic applications and also for measuring pressure peaks up to 1000 bar. The pressure/temperature sensors of the SCPT series have a temperature channel which is retrieved via the TEMP key.

## **Diagnostic adapters**

All pressure sensors in a measurement case (kit) are provided with a factory-assembled SCA-1/2-EMA-3 diagnostic adapter. The pressure sensors can be adapted to all standard measuring connections with the help of diagnostic couplings supplied.

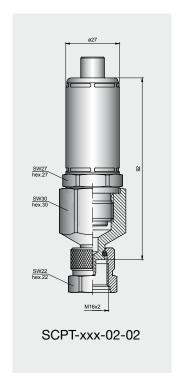
They are perfectly suitable for a quick and flexible diagnoses in hydraulic applications.



| SCPT Pressure/Temperature Sensor 1/2" BSPP male incl. Adapter SCA-1/2-EMA-3 | #              |
|---|----------------|
| -1015 bar/0060 bar/0150 bar/<br>0400 bar/0600 bar/01.000 bar                | SCPT-xxx-02-02 |

| SCPT Pressure/Temperature Sensor 1/2" BSPP male incl. Adapter SCA-1/2-PQC | #                  |
|---|--------------------|
| -1015 bar/0060 bar/0150 bar/<br>0400 bar/0600 bar                         | SCPT-xxx-02-02-PQC |

| SCK Connection cable Serviceman/The Parker Service Master Family | #             |
|--|---------------|
| 3 m (male 5 pin - male 5 pin)                                    | SCK-102-03-02 |
| 5 m Extension (male 5 pin - female 5 pin)                        | SCK-102-05-12 |



| #   | SCPT-015 | SCPT-060 | SCPT-150 | SCPT-400 | SCPT-600 | SCPT-1000 |
|---|----------|----------|----------|----------|----------|-----------|
| Measuring Range (bar)                                     | -1015    | 0060     | 0150     | 0400     | 0600     | 01.000    |
| Overload Pressure P <sub>max</sub> (bar)                  | 30       | 120      | 300      | 800      | 1.200    | 1.200     |
| Burst Pressure (bar)                                      | 150      | 500      | 900      | 1.200    | 1.800    | 2.500     |
| Temperature Measuring Range (°C)<br>Accuracy (± 1,5 %) FS | -25+105  | -25+105  | -25+105  | -25+105  | -25+105  | -25+105   |

FS = Full Scale Range

| Accuracy              | typ. ±0,25 %<br>max. ±0,5 % + 0,2 %/year |  |
|-----------------------|--|--|
| Response Time (ms)    | 1  |  |
| Electrical connection | 5 pin connector                          |  |
| Pressure Port         | 1/2" BSPP                                |  |
| Housing               | Stainless Steel 1.4301                   |  |
| Weight (g)            | 200                                      |  |

| Seal                           | FKM         |
|--------------------------------|-------------|
| Ambient Temperature Range (°C) | -25+80      |
| Storage Temperature Range (°C) | -20+80      |
| T <sub>max</sub> Fluid (°C)    | +105        |
| Reliability Cycles (10°)       | 100         |
| Shock Load                     | IEC 68-2-29 |



- Robust stainless steel design
- Response times of 1 ms
- Capturing of pressure peaks
- State-of-the-art CAN bus technology
- Simple wiring with SPEEDCON®
- Long cable lengths up to 100 m
- Sensor identification LED (SIL)



All the advantages of the analog SCPT sensors are combined with state-of-the-art CAN bus technology. Simple wiring with up to 8 sensors on one bus cable and the SPEEDCON® quick-plug screw connection. Plug & Play functionality without much configuration efforts.

All pressure sensors are delivered with a diagnosis adapter (M16x2) installed. Connection to the hydraulic system takes place quickly and safely. Times for installation are reduced.

| Pressure measurements           |                               |  |  |
|---------------------------------|-------------------------------|--|--|
| -1 016 bar                      | Pneumatics/ low pressure      |  |  |
| 0 060 bar                       | Medium pressure               |  |  |
| 0 160 bar                       | Medium pressure               |  |  |
| 0 400 bar                       | Operating pressure hydraulics |  |  |
| 0 600 bar                       | High pressure                 |  |  |
| 0 1.000 bar High pressure peaks |                               |  |  |
| Temperature measurements        |                               |  |  |
| -25+105 °C Oil temperature      |                               |  |  |

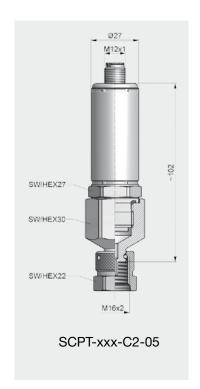
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| SCPT Pressure/Temperature Sensor CAN 1/2" BSPP male incl. Adapter SCA-1/2-EMA-3 | #              |
|---|----------------|
| -1016 bar/0060 bar/0160 bar/<br>0400 bar/0600 bar/01.000 bar                    | SCPT-xxx-C2-05 |

| SCPT Pressure/Temperature Sensor 1/2" BSPP male incl. Adapter SCA-1/2-PQC | #                  |
|---|--------------------|
| -1016 bar/0060 bar/0160 bar/<br>0400 bar/0600 bar                         | SCPT-xxx-C2-05-PQC |

| SCK Connection cable CAN The Parker Service Master Plus | #                |
|---|------------------|
| 2 m   | SCK-401-02-4F-4M |
| 5 m   | SCK-401-05-4F-4M |
| 10 m  | SCK-401-10-4F-4M |



| #  | SCPT-016 | SCPT-060 | SCPT-160 | SCPT-400 | SCPT-600 | SCPT-1000 |
|--|----------|----------|----------|----------|----------|-----------|
| Measuring Range (bar)  | -1016    | 0060     | 0160     | 0400     | 0600     | 01.000    |
| Overload Pressure P <sub>max</sub> (bar)                       | 32       | 120      | 320      | 800      | 1.200    | 1.200     |
| Burst Pressure (bar)   | 150      | 500      | 900      | 1.200    | 1.800    | 2.500     |
| Temperature Measuring Range (°C)<br>Accuracy ±2K typ./±3K max. | -25+105  | -25+105  | -25+105  | -25+105  | -25+105  | -25+105   |

| Accuracy              | typ. ±0,25 %<br>max. ±0,5 % + 0,2 %/year |  |  |
|-----------------------|--|--|--|
| Response Time (ms)    | 1  |  |  |
| Electrical connection | 5 pin, M12x1, connector                  |  |  |
| Pressure Port         | 1/2" BSPP                                |  |  |
| Housing               | Stainless Steel 1.4301                   |  |  |
| Weight (g)            | 200                                      |  |  |
| Seal                  | FKM                                      |  |  |

| Ambient Temperature Range (°C) | -25+85                 |  |  |
|--------------------------------|------------------------|--|--|
| Storage Temperature Range (°C) | -25+85                 |  |  |
| T <sub>max</sub> Fluid (°C)    | +105                   |  |  |
| Reliability Cycles (10°)       | 100                    |  |  |
| Shock Load                     | IEC 68-2-29            |  |  |
| Vibration Resistance           | IEC 68-2-6<br>10500 Hz |  |  |

