

## 9 Pressure/temperature measurement SCPT analogue

### Pressure / temperature measurement SCPT analogue

- Robust stainless steel design
- Response times of 1 ms
- Capturing of pressure peaks
- Accuracy  $\pm 0.5\%$
- Laser-welded and labelled



Fast response times guarantee reliable detection of disruptive pressure peaks in the hydraulic system. The robust stainless steel design allows a variety of applications such as for cooling water or in compressed air systems.

All pressure sensors are delivered with a diagnosis adapter (M16x2) installed. Fast and safe connection to the hydraulic system is ensured. Installation times are reduced.

#### Pressure measurement

-1 ... 015 bar	Pneumatics/negative pressure
0 ... 060 bar	Medium pressure range
0 ... 150 bar	Medium pressure range
0 ... 400 bar	Hydraulic operating pressure
0 ... 600 bar	High pressure
0 ... 1000 bar	High pressure peaks

#### Temperature measurement

-25...+105 °C	Temperature
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### Functional description



The Parker Service Master CONNECT SCM-600-xx with input module analogue SCMI-600-01 or SCMI-600-03



Parker Serviceman Plus SCM-155-0-02

Connection cable  
SCK-102-xx-02

Connection cable  
SCK-102-xx-02

Pressure/temperature sensor  
SCPT-xxx-02-02

Adapter SCA-EMA-3/3

Measuring hose  
SMA3-xxx

Measurement  
connection  
EMA-3/xxx

#### Pressure/temperature meter SCPT

There is a selection of different measuring ranges for measuring pressure. Sensors can be used for pneumatic applications and also for measuring pressure peaks of up to 1,000 bar.

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## Technical data

Type	SCPT-015	SCPT-060	SCPT-150	SCPT-400	SCPT-600	SCPT-1000
Measuring range (bar) (psi)	-1...015 -14.5...217	0...060 0...870	0...150 0...2320	0...400 0...5800	0...600 0...8700	0...1000* 0...14500
Overload pressure P <sub>max</sub> (bar) (psi)	32 464	120 1740	320 4640	800 11600	1000 14500	1000 14500
Burst pressure (bar) (psi)	180 2610	550 7970	1000 14500	1200 17400	2000 29000	2000 29000
Temperature measurement range (°C) (°F) Accuracy ± 3 K	-25...+105 -13...+221	-25...+105 -13...+221	-25...+105 -13...+221	-25...+105 -13...+221	-25...+105 -13...+221	-25...+105 -13...+221

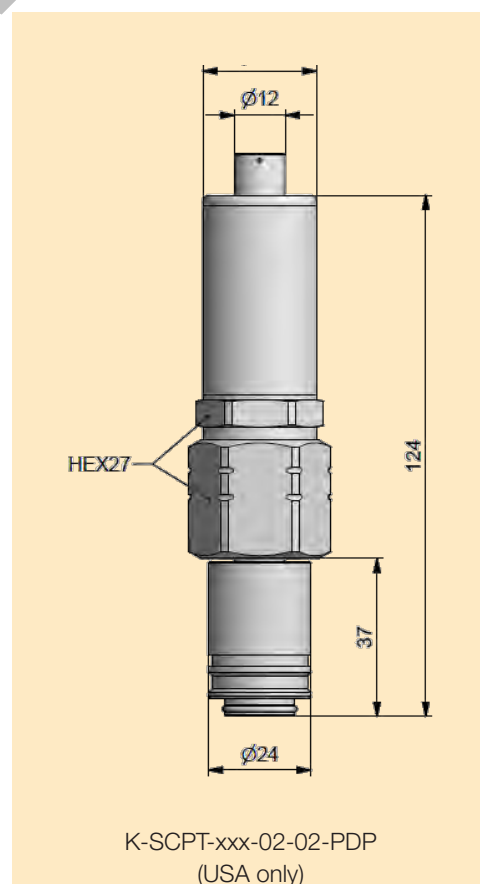
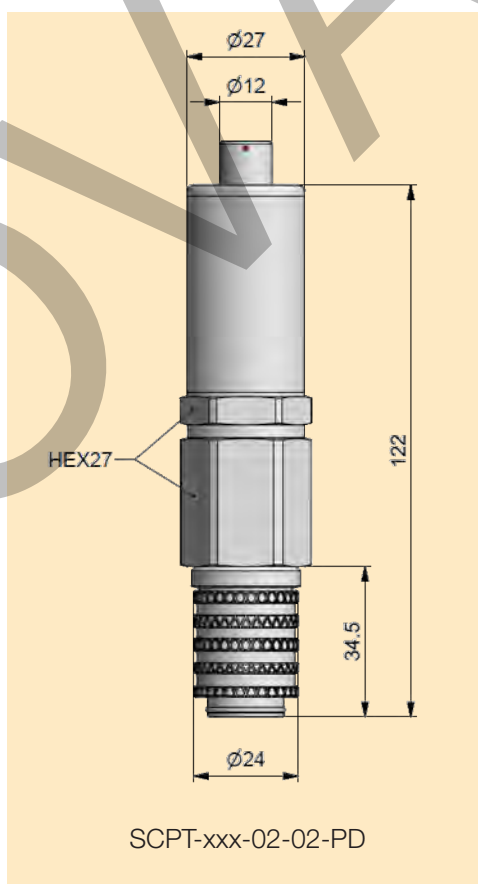
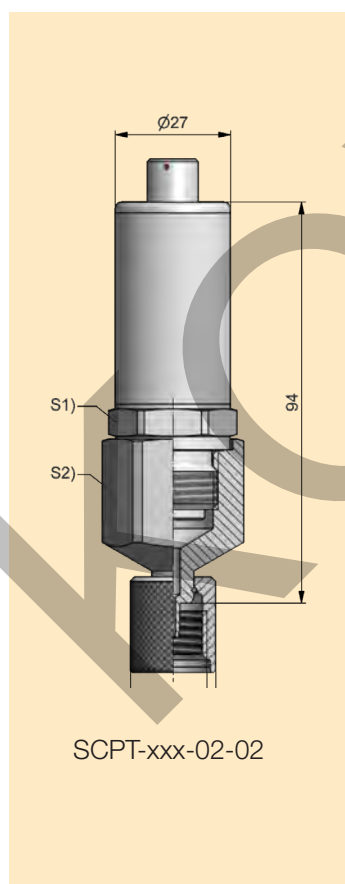
\* P<sub>N</sub> 630 bar, for pressure peaks up to 1000 bar

Accuracy		Ambient conditions	
Accuracy FS	max. ±0.5 % + 0.2 %/year	Ambient temperature (°C) (°F)	-25...+85 -13...+185
Response time	1 ms	Storage temperature (°C) (°F)	-25...+85 -13...+185
Connections		Media temperature (°C) (°F)	-25...+105 -13...+221
Electrical connection	5-pin, plug-in connection	Load change	100 mil.
Process connection	1/2" BSPP	Shock load	50 g/11 ms IEC 60068-2-27
Material		Vibrations	20 g IEC 60068-2-6
Housing	Stainless steel		
Seal	FKM		
Weight	approx. 275 g		
Protection class	IP54 EN 60529		

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## Supply range and accessories

<b>SCPT pressure/temperature sensor 1/2" BSPP male incl. adapter SCA-1/2-EMA-3</b>	<b>Order designation</b>
-1...015 bar/0...060 bar/0...150 bar/0...400 bar/0...600 bar/0...1000 bar	SCPT-xxx-02-02
<b>SCPT pressure/temperature sensor 1/2" BSPP male incl. adapter SCA-1/2-PD</b>	<b>Order designation</b>
-1...015 bar/0...060 bar/0...150 bar/0...400 bar/0...600 bar	SCPT-xxx-02-02-PD
<b>SCPT pressure/temperature sensor 1/2" BSPP male incl. adapter PDP288 (USA only)</b>	<b>Bestellbezeichnung</b>
-1...015 bar/0...060 bar/0...150 bar/ 0...400 bar/0...600 bar	SCPT-xxx-02-02-PDP
<b>SCPT pressure/temperature sensor with calibration certificate as per ISO 9001</b>	<b>Order designation</b>
SCPT pressure/temperature sensor incl. adapter SCA-1/2-EMA-3	K-SCPT-xxx-02-02
SCPT pressure/temperature sensor incl. PD adapter	K-SCPT-xxx-02-02-PD
SCPT pressure/temperature sensor incl. PDP288 adapter (USA only)	K-SCPT-xxx-02-02-PDP
<b>SCK connection cables analogue</b>	<b>Order designation</b>
3 m (male 5 pin - male 5 pin)	SCK-102-03-02
5 m (male 5 pin - male 5 pin)	SCK-102-05-02
5-m extension cable (male 5 pin - female 5 pin)	SCK-102-05-12



# 10 Pressure/temperature measurement SCPT CAN

## Pressure/temperature measurement SCPT CAN

- Robust stainless steel design
- Response times of 1 ms
- Capturing of pressure peaks
- Future-proof CAN bus technology
- Simple wiring with SPEEDCON®
- Sensor identification light ring
- Suitable for long cables
- Accuracy  $\pm 0.5\%$
- Laser-welded and labelled



All the advantages of analogue SCPT sensors combined with future-proof CAN bus technology. Simple wiring thanks to the SPEEDCON quick plug-in screw connection®. Plug & Play functionality without lots of configuration.

All pressure sensors are delivered with a diagnosis adapter (M16x2) installed. Fast and safe connection to the hydraulic system is ensured. Installation times are reduced.

### Pressure measurement

-1 ... 016 bar	Pneumatics/negative pressure
0 ... 060 bar	Medium pressure range
0 ... 160 bar	Medium pressure range
0 ... 400 bar	Hydraulic operating pressure
0 ... 600 bar	High pressure
0 ... 1000 bar	High pressure peaks

### Temperature measurement

-25...+105 °C	Temperature
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# 10 Pressure/temperature measurement SCPT CAN

## Technical data

Type	SCPT-016	SCPT-060	SCPT-160	SCPT-400	SCPT-600	SCPT-1000
Measuring range (bar) (psi)	-1...016 -14.5...232	0...060 0...870	0...160 0...2320	0...400 0...5800	0...600 0...8700	0...1000* 0...145000
Overload pressure P <sub>max</sub> (bar) (psi)	32 464	120 1740	320 4640	800 11600	1000 14500	1000 14500
Burst pressure (bar) (psi)	180 2610	550 7970	1000 14500	1700 17400	2000 29000	2000 29000
Temperature measurement range (°C) (°F)	-25...+105 -13...+221	-25...+105 13...+221	-25...+105 13...+221	-25...+105 13...+221	-25...+105 13...+221	-25...+105 13...+221
Accuracy ± 3 K						

\* P<sub>N</sub> 630 bar, for pressure peaks up to 1000 bar

Accuracy		Ambient conditions	
Accuracy	± 0.5 % + 0.2 %/year	Ambient temperature (°C) (°F)	-25...+85 13...+185
Response time	1 ms	Storage temperature (°C) (°F)	-25...+85 13...+185
Connections		Media temperature (°C) (°F)	-25...+105 13...+221
Electrical connection	5 pin, M12x1, plug	Load change	100 mil.
Process connection	1/2" BSPP	Shock load	50 g/11 ms IEC 60068-2-27
Material		Vibration	20 g IEC 60068-2-6
Housing	Stainless steel		
Seal	FKM		
Weight	270 g		
Protection class	IP67 EN 60529		

# 10 Pressure/temperature measurement SCPT CAN

## Supply range and accessories

SCPT pressure/temperature sensor CAN 1/2" BSPP male incl. adapter SCA-1/2-EMA-3	Order designation
-1...016 bar/0...060 bar/0...160 bar/0...400 bar/0...600 bar/0...1000 bar	SCPT-xxx-C2-05
SCPT pressure/temperature sensor CAN 1/2" BSPP male incl. adapter SCA-1/2-PD	Order designation
-1...016 bar/0...060 bar/0...160 bar/0...400 bar/0...600 bar	SCPT-xxx-C2-05-PD
SCPT pressure/temperature sensor 1/2" BSPP external incl. adapter PDP288 (USA only)	Order designation
-1...015 bar/0...060 bar/0...150 bar/ 0...400 bar/0...600 bar	SCPT-xxx-C2-05-PDP
SCPT pressure/temperature sensor CAN with calibration certificate as per ISO 9001	Order designation
SCPT pressure/temperature sensor CAN incl. adapter SCA-1/2-EMA-3	K-SCPT-xxx-C2-05
SCPT pressure/temperature sensor CAN incl. PD adapter	K-SCPT-xxx-C2-05-PD
SCPT pressure/temperature sensor CAN incl. PDP288 adapter (USA only)	K-SCPT-xxx-C2-05-PDP
SCK connection cables CAN*	Order designation
0.5 m (male 5 pin - female 5 pin)	SCK-401-0.5-4F-4M
2 m (male 5 pin - female 5 pin)	SCK-401-02-4F-4M
5 m (male 5 pin - female 5 pin)	SCK-401-05-4F-4M
10 m (male 5 pin - female 5 pin)	SCK-401-10-4F-4M
Y-junction CAN	SCK-401-Y
Y-junction CAN incl. 0.3-m cable	SCK-401-0.3-Y
T-junction CAN	SCK-401-T
Terminating resistor** CAN (female 5 pin - female 5 pin)	SCK-401-R
* Other lengths available on request	
** Each CAN network requires a terminating resistor	

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## Dimensional drawings

