

7 Pressure measurement SCP analogue

Pressure measurement SCP analogue

- Small size
- 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

7 Pressure measurement SCP analogue

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 sensor
SCP-xxx-74-02

Adapter SCA-EMA-3/3

Measuring hose
SMA3-xxx

Measurement connection
EMA-3/xxx

Pressure meter SCP

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.

7 Pressure measurement SCP analogue

Technical data

Type	SCP-015	SCP-060	SCP-150	SCP-400	SCP-600	SCP-1000
Measuring range (bar) (psi)	-1...015 -14.5...218	0...060 0...870	0...150 0...2320	0...400 0...5800	0...600 0...8700	0...1000* 0...14500
Overload pressure P _{max} (bar) (psi)	40 464	200 2900	500 7250	800 11600	1000 14500	1000 14500
Burst pressure (bar) (psi)	60 870	1000 14500	2000 29000	2000 29000	2000 29000	2000 29000

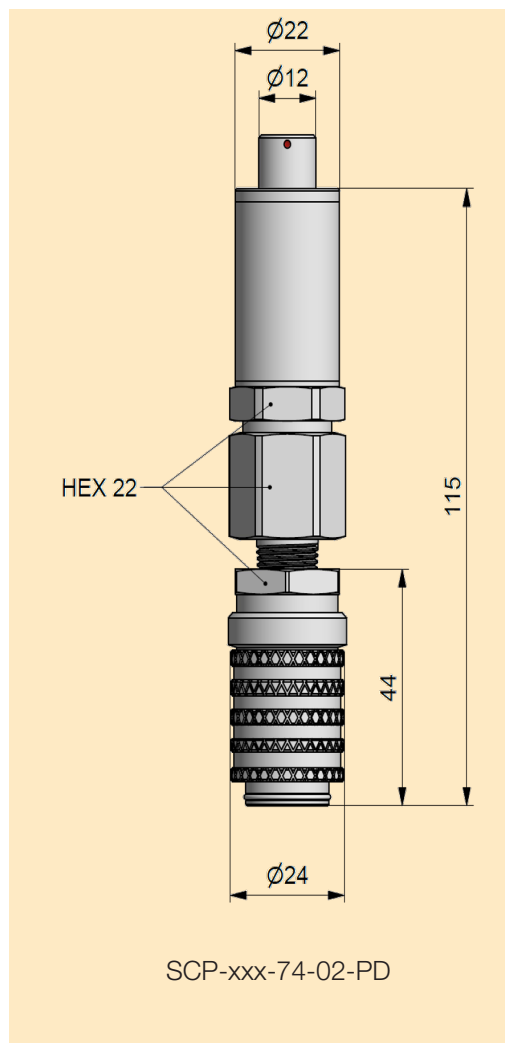
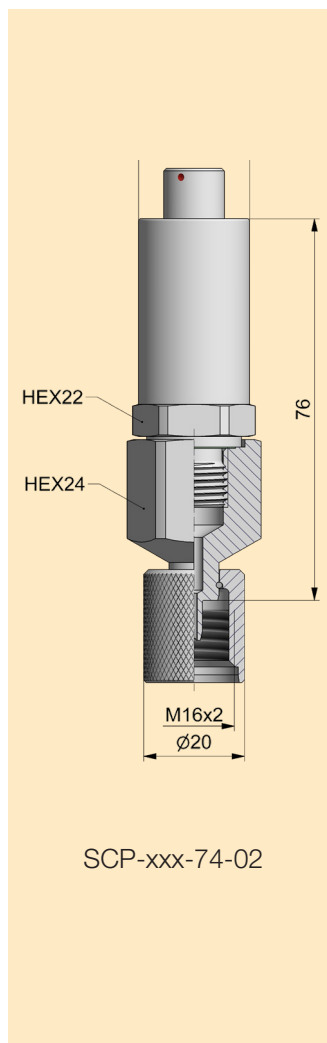
* P_N 630 bar, for pressure peaks up to 1000 bar

Accuracy		Ambient conditions	
Accuracy FS	± 0.5 % + 0.2 %/year	Ambient temperature (°C) (°F)	-25...+85 -13...+185
Response time	2 ms	Storage temperature (°C) (°F)	-20...+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	1/4" BSPP	Shock load	50 g/11 ms IEC 60068-2-27
Material		Vibrations	20 g as per IEC 60068-2-6
Housing	Stainless steel		
Seal	FKM		
Weight	approx. 200 g		
Protection class	IP54 EN 60529		

7 Pressure measurement SCP analogue

Supply range and accessories

SCP pressure sensor 1/4" BSPP male incl. adapter SCA-1/4-EMA-3	Order designation
-1...015 bar/0...060 bar/0...150 bar/0...400 bar/0...600 bar/0...1000 bar	SCP-xxx-74-02
SCP pressure sensor 1/4" BSPP male incl. adapter SCA-1/4-PQC	Order designation
-1...015 bar/0...060 bar/0...150 bar/ 0...400 bar/0...600 bar	SCP-xxx-74-02-PD
SCP pressure sensor with calibration certificate as per ISO 9001	Order designation
SCP pressure sensor incl. adapter SCA-1/4-EMA-3	K-SCP-xxx-74-02
SCP pressure sensor incl. PD adapter	K-SCP-xxx-74-02-PD
SCK connection cables analogue	Order designation
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 (male 5 pin - female 5 pin)	SCK-102-05-12



8 Pressure measurement SCP CAN

Pressure measurement SCP CAN

- Small size
- Robust stainless steel design
- Response times of 1 ms
- Capturing of pressure peaks
- Accuracy $\pm 0.5\%$
- SPEEDCON® quick plug-in screw connection
- Sensor identification light ring
- Suitable for long cables
- Laser-welded and labelled



All the advantages of analogue SCP 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 ... 004 bar	Pneumatics/negative pressure
-1 ... 010 bar	Pneumatics/negative pressure
-1 ... 016 bar	Pneumatics/negative pressure
0 ... 025 bar	Lower pressure range
0 ... 060 bar	Medium pressure range
0 ... 160 bar	Medium pressure range
0 ... 250 bar	Medium pressure range
0 ... 400 bar	Hydraulic operating pressure
0 ... 600 bar	High pressure
0 ... 1000 bar	High pressure peaks

SPEEDCON® is a registered trademark of PHOENIX CONTACT GmbH & Co. KG

8 Pressure measurement SCP CAN

Functional description



The Parker Service Master CONNECT
SCM-600-00 or SCM-600-0A

Connection cable
SCK-401-xx-4F-4M



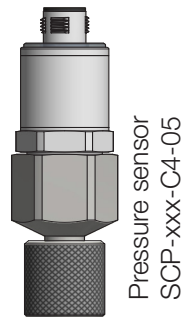
Connection cable
SCK-401-xx-4F-4M



Parker Serviceman
Plus SCM-155-2-05



Terminating
resistor
SCK-401-R



Pressure sensor
SCP-xxx-C4-05

Adapter SCA-EMA-3/3

Measuring hose
SMA3-xxx

Measurement
connection
EMA-3/xxx

Pressure meter SCP

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.

8 Pressure measurement SCP CAN

Technical data

Type	SCP-004	SCP-010	SCP-016	SCP-025	SCP-060
Measuring range (bar) (psi)	-1...004 -14.5...58	-1...010 -14.5...145	-1...016 -14.5...232	0...025 0...363	0...060 0...870
Overload pressure Pmax (bar) (psi)	20 290	20 290	32 464	50 725	120 1740
Burst pressure (bar) (psi)	100 1450	100 1450	160 2320	250 3625	550 7970

* P_N 630 bar, for pressure peaks up to 1000 bar

Type	SCP-160	SCP-250	SCP-400	SCP-600	SCP-1000
Measuring range (bar) (psi)	0...160 0...2320	0...250 0...3625	0...400 0...5800	0...600 0...8700	0...1000* 0...14500
Overload pressure Pmax (bar) (psi)	320 4640	500 7250	800 11600	1000 14500	1000 14500
Burst pressure (bar) (psi)	1000 14500	1700 24650	2000 29000	2000 29000	2000 29000

* P_N 630 bar, for pressure peaks up to 1000 bar

Accuracy	
Accuracy FS	± 0.5 % + 0.2 %/year
Response time	1 ms
Connections	
Electrical connection	M12, 5 pin
Process connection	1/4" BSPP
Material	
Housing	Stainless steel
Seal	FKM
Weight	approx. 195 g
Protection class	IP67 EN 60529

Ambient conditions	
Ambient temperature (°C) (°F)	-25...+85 -13...+185
Storage temperature (°C) (°F)	-25...+85 -13...+185
Media temperature (°C) (°F)	-25...+105 -13...+221
Load change	100 mil.
Shock load	50 g/11 ms IEC 60068-2-27
Vibrations	20 g IEC 60068-2-6

8 Pressure measurement SCP CAN

Supply range and accessories

SCP pressure sensor CAN 1/4" BSPP male incl. adapter SCA-1/4-EMA-3	Order designation
-1...004 bar/-1...010 bar/-1...016 bar/ 0...025 bar/0...060 bar/0...160 bar/ 0...250 bar/ 0...400 bar/0...600 bar/0...1000 bar	SCP-xxx-C4-05
SCP pressure sensor CAN 1/4" BSPP male incl. adapter SCA-1/4-PD	Order designation
-1...004 bar/-1...010 bar/-1...016 bar/0...060 bar/0...160 bar/0...400 bar/0...600 bar	SCP-xxx-C4-05-PD
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	
SCP pressure sensor CAN with calibration certificate as per ISO 9001	Order designation
SCP pressure sensor CAN incl. adapter SCA-1/4-EMA-3	K-SCP-xxx-C4-05
SCP pressure sensor CAN incl. PD adapter	K-SCP-xxx-C4-05-PD

