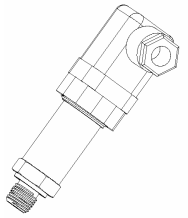
SCP-Mini

The SCP-Mini pressure transmitters contain only a small number of active components, such as the sensor element, a signal processing ASIC and a U/I converter circuit.Calibration takes place electronically, so that the pressure transmitters display a comparably small total error and are stable in the long term. The hermetically welded thin film-measuring cell ensures a high degree of long term resistance to leakage and stability. The ASIC is a programmable precision CMOS ASIC with EEPROM data storage and analogue signal path, which is suitable for an extended operating temperature range.
The special steel membrane is completely vacuum-tight, burst-proof and can be used with all standard media in hydraulics, pneumatics, environmental tech-nology, process technology, semi-conductor technology and automotive engineering, in as far as they are compatible with special steel. This thereby covers use in standard applications in mobile hydraulics and in other areas of application.
The great exactness and the robust, compact structure guarantee a broad range of possible uses in industry. On the basis of the combinability of different mechanical and electronic connections, a variety of different pressure transmitters is offered.

Pressure range
004; 006; 010; 016; 025;
040; 060; 100; 160, 250;
400; 600 bar

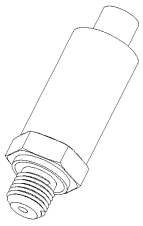
DIN EN 175301-803 Form A, G1/4 (BSPP), class 0,5%

0...20 mA	**SCP-XXX-14-06**
4...20 mA, 3-wire	**SCP-XXX-24-06**
4...20 mA, 2-wire	**SCP-XXX-34-06**
0...10 V	**SCP-XXX-44-06**



M12 Socket Connector, G1/4 (BSPP), class 0,5%

0...20 mA	**SCP-XXX-14-07**
4...20 mA, 3-wire	**SCP-XXX-24-07**
4...20 mA, 2-wire	**SCP-XXX-34-07**
0...10 V	**SCP-XXX-44-07**



Connection cable & Connector

Connection cable, screened **SCK-400-XX-XX**
(one side with blank wires)

Cable length in m
02 = 2 m ; **05** = 5 m ; **10** = 10 m

Socket connection
45 M12 Connector, straight
55 M12 Connector, 90° elbow
56 DIN EN 175301-803 Form A Plug

Separate Connector

M12 Connector, straight	**SCK-145**
M12 Connector, 90° elbow	**SCK-155**
DIN EN 175301-803 Form A Plug	**SCK-006**

SCP-Mini

SCP-	004	006	010	016	025	040	060	100	160	250	400	600
Pressure range (bar) 0...	4	6	10	16	25	40	60	100	160	250	400	600
	relative pressure						absolute pressure					
Overload pressure max. (bar)	2-times											2-times
Burst-pressure min. (bar)	3-times											2,5-times

Pressure port
Connection to measuring media
Threaded stud
G1/4A
DIN 3852 T11, Form E
Drilling
0,6mm
Seal
Seal DIN 3869-14-FKM
Materials: Viton,
Stainless Steel 1.4301,
1.4542,1.4548, 17-4PH

Electrical Connection
Short-circuit protection*1
Polarity-reversal protection
Protectionclass 3

Plug connector
4-pin, M12x1, IP 67 *2
4-pin, DIN EN 175301-803 Form A, IP65 *2

Accuracy
Characteristic curve deviation
Max. ≤± 0,5 %FS
Total error *3 at -20...85°C
Typ. ≤± 0,7 %FS, max. ≤±1 %FS

Thermal coefficient
Zero point
Max. ≤± 0,3 %FS/10 K
Sensitivity
Max. ≤± 0,3 %FS/10 K

Environmental conditions
Working temperature range
-40...+85 °C
Fluid temperature range
-40...+125 °C
Compensated range
-20...+85 °C
Storage temperature
-40...+125 °C

General
Response time
typ. 0,5 ms ; max. 1 ms
Long-term stability
< 0,1 %FS/a
Load alternating cycles
>20 Mio.
Weight
ca. 80 g

Vibration resistance
IEC 60068-2-6:
± 5 mm / 10 Hz...32 Hz
200 m/s² / 32 Hz...2 kHz

Shock resistance
IEC 60068-2-29: 500 m/s² 11 ms
IEC 60068-2-32:
1 m (free-fall onto steel plate) *4

EM-according *5
DIN EN 61000-6-3
DIN EN 61000-6-2

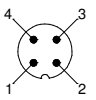
*1 with outputsignal 0..10V short-circuit protection short-time
*2 in connected situation
*3 including non-linearity, hysterese, repeatability, Calibration, temperature influence
*4 not for electriacl Connector (plug)
*5 Details see declaration-sheet

Output signal	0..20 mA 3-wire	4..20 mA 3-wire	4..20 mA 2-wire	0...10 V
Auxiliary power +Ub (U_{DC})	9..30 V	9..30 V	12...30 V	12...30 V
Load impedance max.				
	(Ub-9 V)/28 mA	(Ub-9 V)/30 mA	(Ub-12 V)/20 mA	≥5 kOhm

Connection Transmitter (ViewTransmitter):

DIN Plug

Connector M12



PIN	0...20 mA 3-wire	4...20 mA 3-wire	4...20 mA 2-wire	0...10 V
1	P-Signal	P-Signal	P-Signal	P-Signal
2	0 V / GND	0 V / GND	n.c.	0 V / GND
3	+Ub	+Ub	+Ub	+Ub
⏚	NC: Do Not connect!			

PIN	0...20 mA 3-wire	4...20 mA 3-wire	4...20 mA 2-wire	0...10 V
1	+Ub	+Ub	+Ub	+Ub
2	P-Signal	P-Signal	P-Signal	P-Signal
3	0 V / GND	0 V / GND	n.c.	0 V / GND
4	n.c.	n.c.	n.c.	n.c.