12 Temperature measurement SCT analogue

Temperature measurement SCT analogue

- High-pressure-resistant temperature sensors
- For measuring temperatures up to 1,000°C
- Flexible operation
- Inline or probe-type sensor



In hydraulics, temperature measurements serve to locate faults and avoid the kind of damage caused by excessive temperatures in critical parts such as pumps and proportional valves.

To obtain the exact temperature, the measurement is done directly in the tube or hose line.

The inline sensors from the SCT-190 series can also be used in the turbine flow meters SCFT-xxx-02-02 to measure temperatures.

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12 Temperature measurement SCT analogue

Function specifications



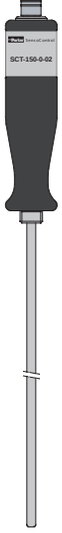
The Parker Service Master *Plus*
SCM-500-01-xx or
The Parker Service Master *Easy*
SCM-330/340

Connection cable
SCK-102-03-02

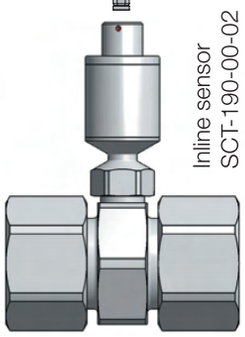
Connection cable
SCK-102-03-02



Parker Serviceman
Plus SCM-155-0-02



Hand probe SCT-150-0-02



Inline sensor
SCT-190-00-02

IN-LINE adapter
SCA-GMA3/20S/T

Hand probe SCT-150 (-25 °C...+125 °C)

Temperatures in tanks and containers are measured with the hand probe SCT-150-0-02

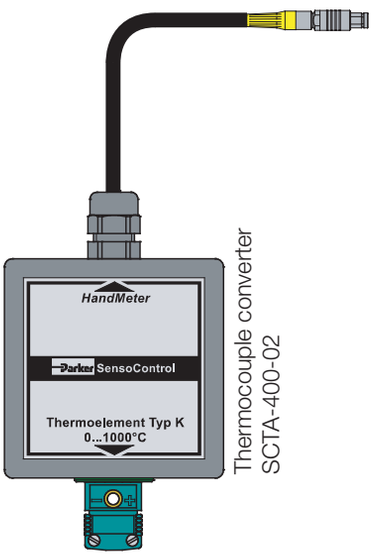
Inline sensor SCT-190 (-40 °C...+150 °C)

The inline sensor SCT-190-00-02 can be adapted to the hydraulic system up to a system pressure of 630 bar. The male stud is compatible with the measuring connections of the GMA3/20 series and with the turbine flow meter SCFT-xxx.

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Function specifications



Thermocouple converter
SCTA-400-02



Thermocouple sensor
SCT-400-K-01



The Parker Service Master *Plus*
SCM-500-01-xx or
The Parker Service Master *Easy*
SCM-330/340

Thermocouple sensor SCT-400-K-01 with thermocouple converter SCTA-400-02

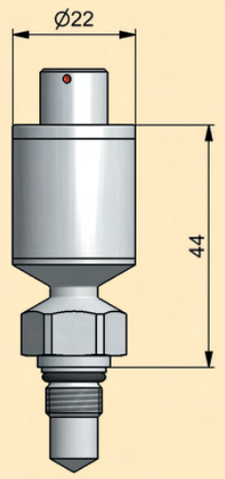
High-temperature-proof thermocouple sensors are used for the measurement of exhaust-gas temperatures of up to 1,000 °C in diesel engines.

The thermocouple converter SCTA-400 -02 is compatible with all thermocouple sensors of K type.

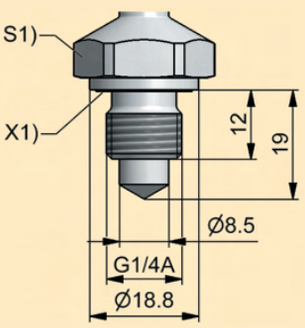
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12 Temperature measurement SCT analogue

Technical data

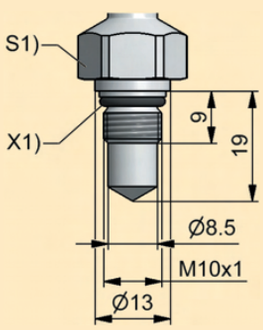


Inline sensor



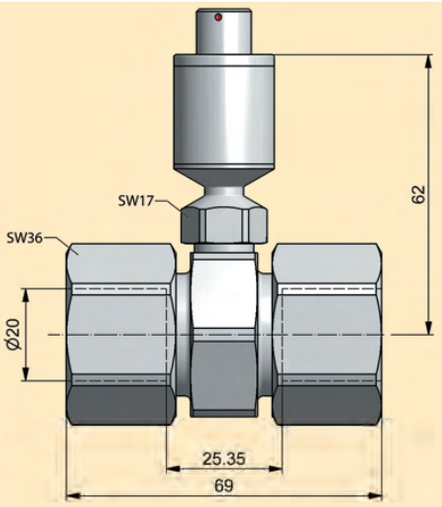
SCT-190-04-02

G1/4" connection
S1) = SW22
X1) = ED Seal 14x1.5

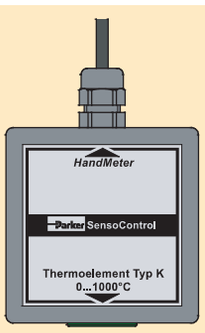


SCT-190-00-02

M10x1 connection
S1) = SW17
X1) = O-ring 7.65x1.78



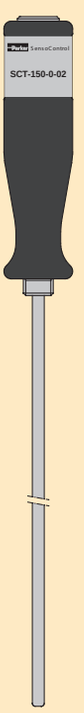
Inline sensor
SCT-190-00-02
with IN-LINE adapter
SCA-GMA3/20S/T



Thermocouple converter
SCTA-400-02



Thermocouple
sensor
SCT-400-K-01



Probe
SCT-150-0-02

Sensors

12 Temperature measurement SCT analogue

Technical data

Type	SCT-190-04-02	SCT-190-00-02	SCT-150-0-02	SCT-400-K-01	SCTA-400-02
Accuracy					
Measuring range (°C)	-40 ... +150	-40 ... +150	-25...+125	0…+1,000	0…+1,000
Accuracy	± 1.0% FS*	± 1.0% FS*	±1.5 K	±1.5 K	±1.0 % FS*
Response time	$T_{50} \leq 4s$, $T_{90} \leq 14s$	$T_{50} \leq 4s$, $T_{90} \leq 12s$	$T_{90} \leq 9.1s$	$T_{90} \leq 5s$	-
Material					
Housing	Stainless steel	Stainless steel	Probe: stainless steel Grip: Delrin	Stainless steel with 2-m fixed cable	ABS with 30-cm fixed cable
Seal	FKM**	FKM**	-	-	-
Weight (g)	70	55	120	150	-
Parts in contact with media	Stainless steel	Stainless steel	Stainless steel	Stainless steel	-
Ambient conditions					
Ambient temperature (°C)	-40 … +85 @ $m_{eas.T} \leq 85$	-40 … +85 @ $m_{eas.T} \leq 85$	-25...+70	-20...+150	0...+50
Storage temperature (°C)	-40 … +85	-40 … +85	-25...+80	-20...+80	-25...+60
Operating pressure (bar)	630	630	-	-	-
Overload pressure (bar)	800	800	-	-	-
Burst pressure (bar)	2,000	2,000	-	-	-

* FS = Full scale (measuring range end value)
** for temperatures of -25...+150 °C, other materials on request

Supply range and accessories

SCT temperature sensors	Order code
Inline sensor (M10x1)	SCT-190-00-02
Inline sensor (G1/4" BSPP male)	SCT-190-04-02
Hand probe	SCT-150-0-02
IN-LINE adapter tube assembly (M10x1)	SCA-GMA3/20S/T

SCT temperature sensor (T_{max} = 1,000 °C)	Order code
Thermocouple converter	SCTA-400-02
Thermocouple sensor	SCT-400-K-01

SCK analogue connection cable	Order code
3 m (male 5 pin - male 5 pin)	SCK-102-03-02
5-m extension cable (male 5 pin - female 5 pin)	SCK-102-05-12

SCT temperature sensors with calibration certificate as per ISO 9001*	Order code
Inline sensor (M10x1)	K-SCT-190-00-02
Inline sensor (G1/4" BSPP male)	K-SCT-190-04-02
Hand probe	K-SCT-150-0-02

* calibrated range -25...+100 °C

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