16 Turbine flow meter SCFTT CAN

Turbine flow meter SCFTT CAN

- Turbine flow meter with integrated temperature sensor in CAN bus technology
- 6 measuring ranges of up to 750 l/min
- Simple installation
- High-pressure-resistant up to 480 bar
- Low flow resistance
- Built-in pressure and temperature measurement connections
- Suitable for reverse-mode operation
- Simple wiring with SPEEDCON®
- Suitable for long cables
- Sensor identification LED

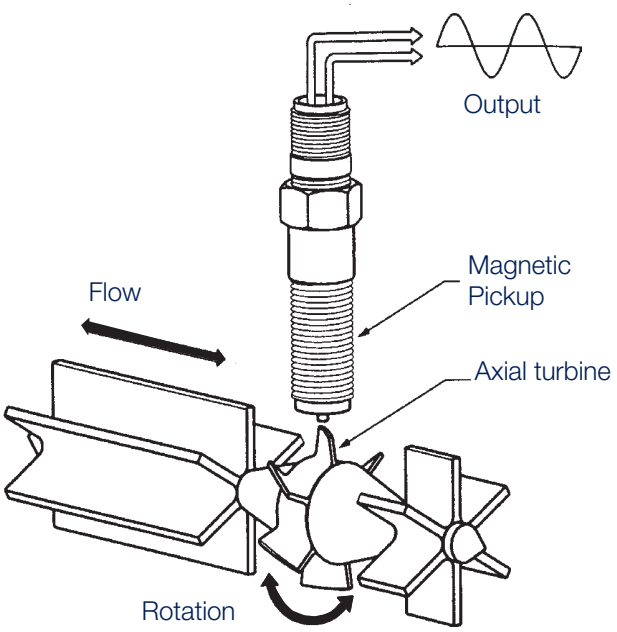
Flow measurement with low flow resistance. Combined p, T and Q measurement possible with additional sensors.

Function

A turbine wheel is driven by the oil flow. The frequencies thus produced are processed by digital electronics. The influence of turbulent flow effects is compensated for.
Because of the low flow resistance Q_R the hydraulic circuit operates with very low losses.

For pressure measurement the turbine is equipped with an EMA-3 quick coupling.

Oil temperatures are measured directly in the oil flow in the turbine flow meter. Consequently all the important measurement parameters are available at one measuring location.



Applications

- Mobile diagnostic
- p-Q measurement
- Hydraulic tests with load valve

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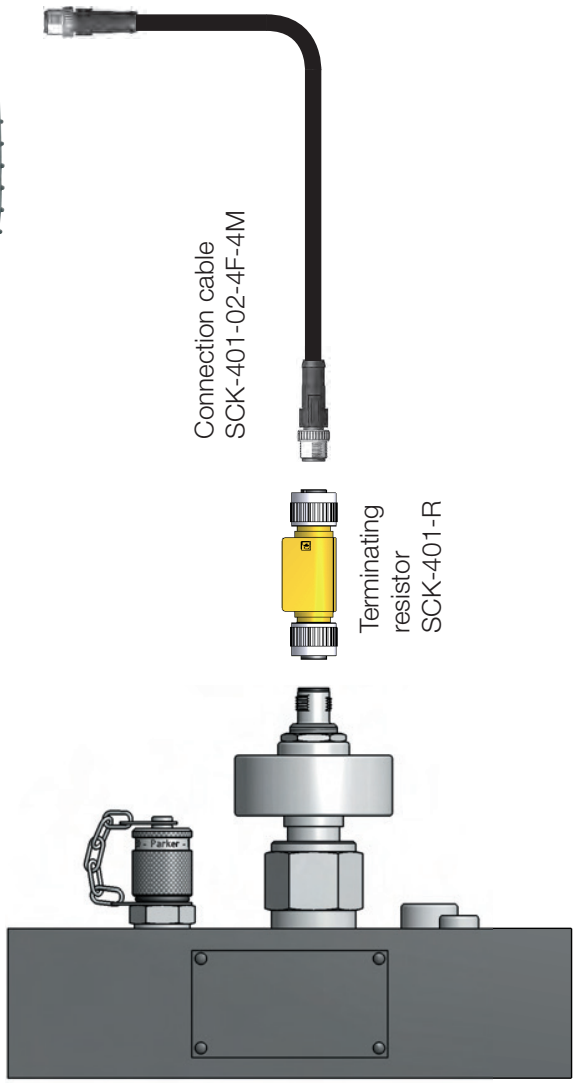
Sensors

Function specifications

The Parker Service Master *Plus*
SCM-500-xx-xx or
Parker Serviceman Plus
SCM-155-02-05



Turbine flow meter SCFTT-xxx-C2-05

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Technical data

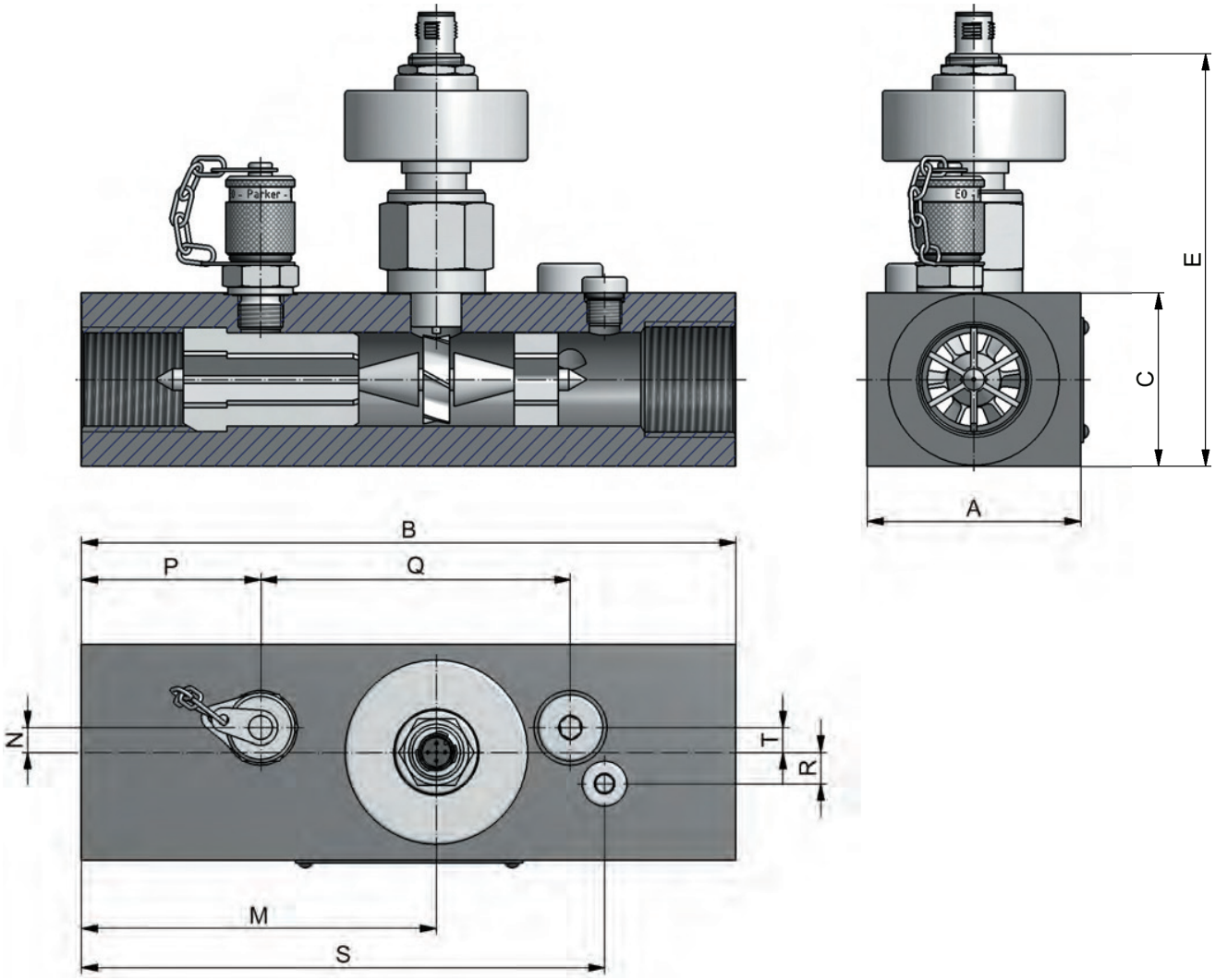
Type	SCFTT-015	SCFTT-060	SCFTT-150	SCFTT-300	SCFTT-600	SCFTT-750
Flow range Q_N (l/min)	1…015	3…060	5...150	8...300	15...600	20...750
Accuracy (± %) FS/IR @ 21cSt.	1.0 FS	1.0 IR*	1.0 IR*	1.0 IR*	1.0 IR*	1.0 IR*
Operating pressure PN (bar)	350	350	350	350	290	400
Ports (A-B)	1/2“ BSPP	3/4“ BSPP	3/4“ BSPP	1“ BSPP	1-1/4“ BSPP	1-7/8“ UNF
Pressure drop ΔP_{max} (bar) @ (FS)	1.5	1.5	1.5	4	5	5
Weight (g)	650	750	750	1,200	1,800	2,100

FS = Full Scale
IR = Indicated Reading
* = for measurements ≥ 15 % FS, for measurements < 15 % FS accuracy 0.15 % FS

Response time	50 ms
Accuracy of temperature measurement	± 2 K
Q_{max}	Q_N x 1.1 l/min
Overload pressure Pmax	P_N x 1.2 bar
Ports: **Temperature port (SCT-190)** **Pressure port (EMA3 port)** **Pressure port (VSTI)**	 M10x1 M16x2 1/4“ BSPP
Housing	Aluminium
Seal	FKM
Parts in contact with media	Aluminium, steel, FKM
Type of protection	IP66 EN 60529

Ambient temperature (°C)	-10...+50
Storage temperature (°C)	-20...+80
Media temperature (°C)	-20...+90
Filtration	25 µm (10 µm for SCFT-015)
Viscosity range (cSt.) (calibrated at 21 cSt., other viscosities on request)	10..100

Dimensional drawings



Type	SCFTT-015	SCFTT-060	SCFTT-150	SCFTT-300	SCFTT-600	SCFTT-750
A	37	62	62	62	62	100
B	136	190	190	190	212	212
C	37	50	50	50	75	75
E	105	118	118	119	137	141
M	70	103	103	103	127	126
N	N/A	5	5	7	9	12
P	25	52	52	52	62	60
Q	N/A	90	90	90	106	104
R	N/A	5	5	9	11	10
S	115	157	157	152	168	181
T	N/A	9	9	10	9	12

All dimensions in mm

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Supply range and accessories

SCFTT-CAN turbine flow meter	Order code
1.0...15/3...60/5...150/8...300/15...600/20...750 l/min	SCFTT-xxx-C2-05

SCK connection cables CAN*	Order code
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
20 m (male 5 pin - female 5 pin)	SCK-401-20-4F-4M
CAN Y-junction	SCK-401-Y
CAN Y-junction incl. 0.3-m cable	SCK-401-0.3-Y
CAN T-junction	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.

SCFT CAN turbine flow meter with calibration certificate as per ISO 9001	Order code
1.0...15/3...60/5...150/8...300/15...600/20...750 l/min	K-SCFTT-xxx-C2-05