

## 15 Turbine flow meter SCFT analogue

### Turbine flow meter SCFT analogue

- 6 measuring ranges of up to 750 l/min
- Easy installation
- High-pressure resistant up to 480 bar
- Low flow resistance
- Built-in pressure and temperature measurement connections
- Suitable for reverse-mode operation



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

#### Function

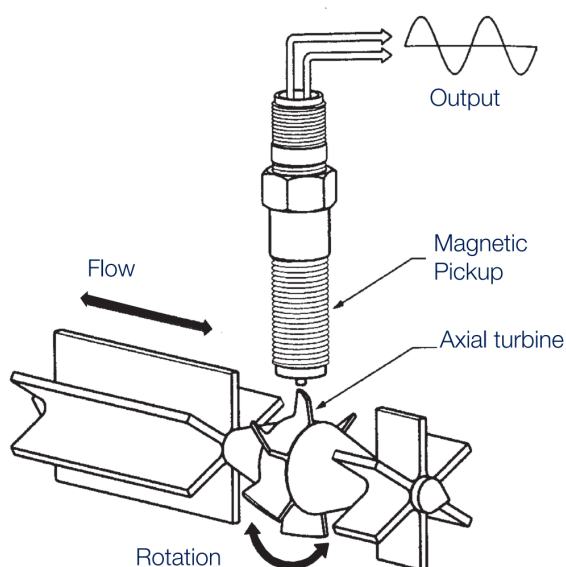
A turbine wheel is driven by the oil flow. The frequencies thus produced are processed by digital electronics. The influence of turbulent flow effects is compensated for. Because of the low flow resistance  $Q_R$  the hydraulic circuit operates with very low losses.

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

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

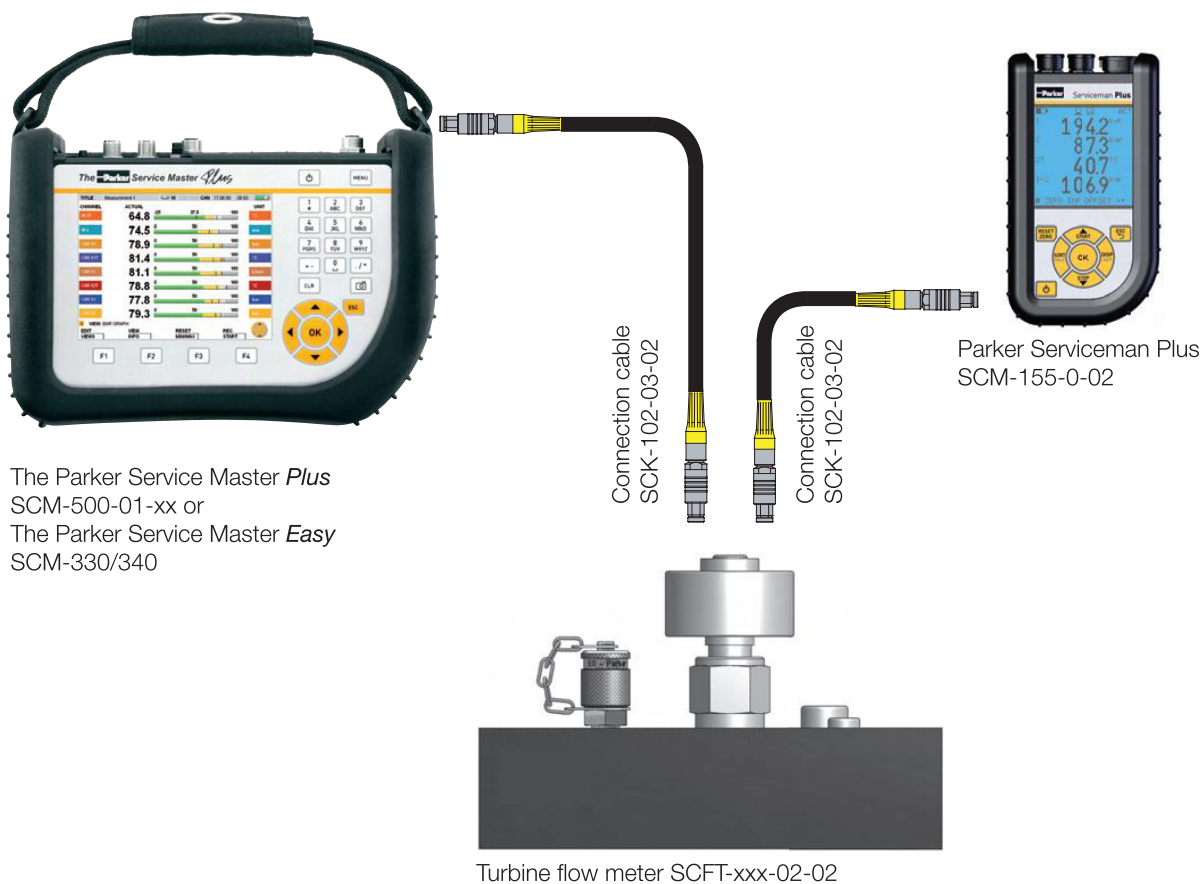
#### Applications

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



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### Function specifications



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

Parker Serviceman Plus  
SCM-155-0-02

Turbine flow meter SCFT-xxx-02-02

Sensors



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### Technical data

| Type                                              | SCFT-015  | SCFT-060  | SCFT-150  | SCFT-300 | SCFT-600    | SCFT-750   |
|---------------------------------------------------|-----------|-----------|-----------|----------|-------------|------------|
| Flow range $Q_N$ (l/min)                          | 1...015   | 3...060   | 5...150   | 8...300  | 15...600    | 20...750   |
| Accuracy ( $\pm$ %) FS/IR @ 21cSt.                | 1.0 FS    | 1.0 IR*   | 1.0 IR*   | 1.0 IR*  | 1.0 IR*     | 1.0 IR*    |
| Operating pressure $P_N$ (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 $\Delta P_{max}$ (bar) @ FS*, 21cSt | 1.5       | 1.5       | 1.5       | 4        | 5           | 5          |
| Weight (g)                                        | 650       | 750       | 750       | 1,200    | 1,800       | 2,100      |

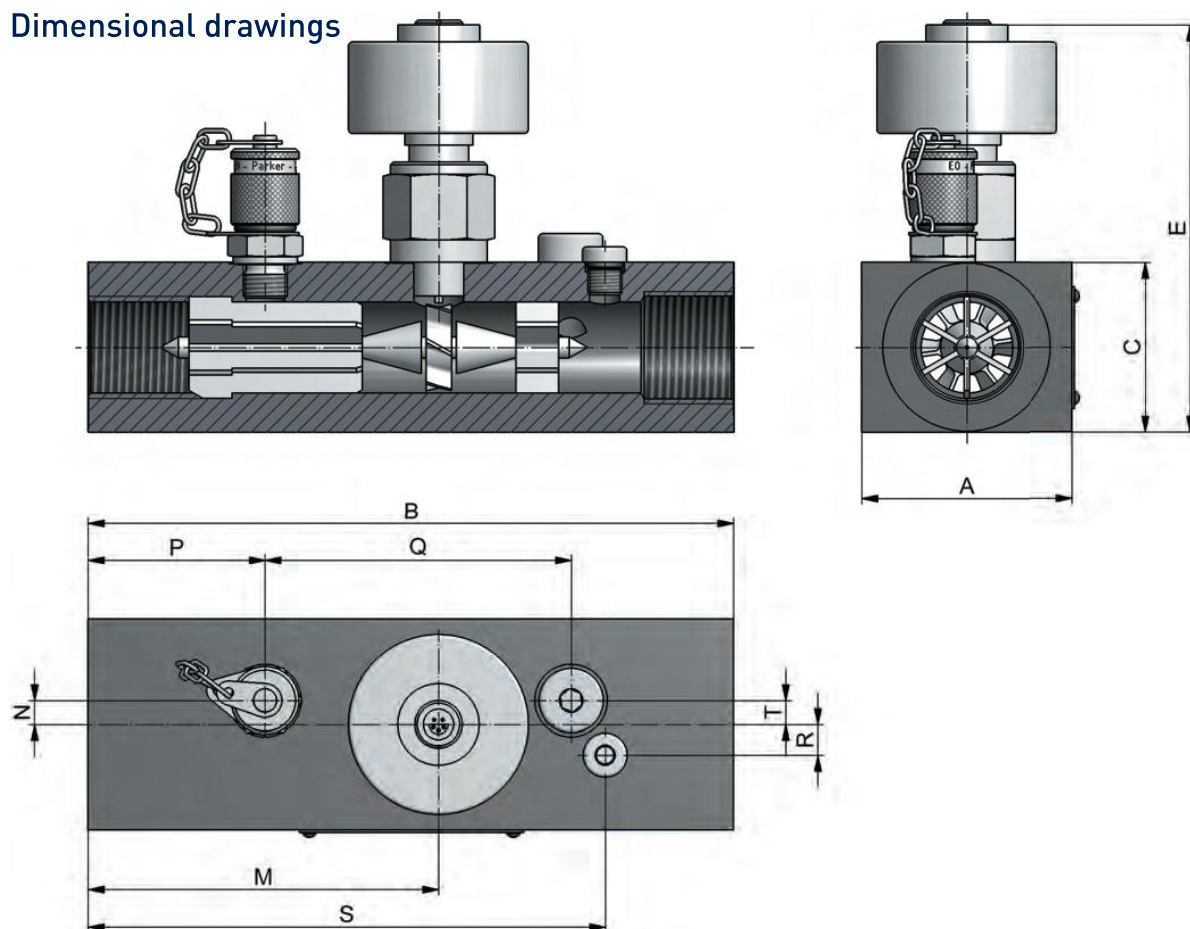
FS = Full Scale (measuring range end value)  
IR = Indicated Reading (measured value displayed)  
\* = for measurements  $\geq 15$  % FS, for measurements  $< 15$  % FS accuracy 0.15 % FS

|                             |                        |
|-----------------------------|------------------------|
| Response time               | 50 ms                  |
| $Q_{max}$                   | $Q_N \times 1.1$ l/min |
| Overload pressure $P_{max}$ | $P_N \times 1.2$ bar   |
| Ports:                      |                        |
| Temperature port (SCT-190)  | M10x1                  |
| Pressure port (EMA3 port)   | M16x2                  |
| Pressure port (VSTI)        | 1/4" BSPP              |
| Housing                     | Aluminium              |
| Seal                        | FKM                    |
| Parts in contact with media | Aluminium, steel, FKM  |
| Type of protection          | IP54 EN 60529          |

|                                                                                 |                                         |
|---------------------------------------------------------------------------------|-----------------------------------------|
| Ambient temperature (°C)                                                        | -10...+50                               |
| Storage temperature (°C)                                                        | -20...+80                               |
| Media temperature (°C)                                                          | -20...+90                               |
| Filtration                                                                      | 25 $\mu$ m<br>(10 $\mu$ m for SCFT-015) |
| Viscosity range (cSt.)<br>(calibrated at 21 cSt., other viscosities on request) | 10..100                                 |

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### Dimensional drawings



Sensors

| Type | SCFT-015 | SCFT-060 | SCFT-150 | SCFT-300 | SCFT-600 | SCFT-750 |
|------|----------|----------|----------|----------|----------|----------|
| A    | 37       | 62       | 62       | 62       | 62       | 100      |
| B    | 136      | 190      | 190      | 190      | 212      | 212      |
| C    | 37       | 50       | 50       | 50       | 75       | 75       |
| E    | 108      | 121      | 121      | 125      | 140      | 143      |
| 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

| SCFT turbine flow meter                                              | Order code       |
|----------------------------------------------------------------------|------------------|
| 1.0...15/3...60/5...150/8...300/15...600/20...750 l/min              | SCFT-xxx-02-02   |
| SCK analogue connection cable                                        | Order code       |
| 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    |
| SCFT 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-SCFT-xxx-02-02 |