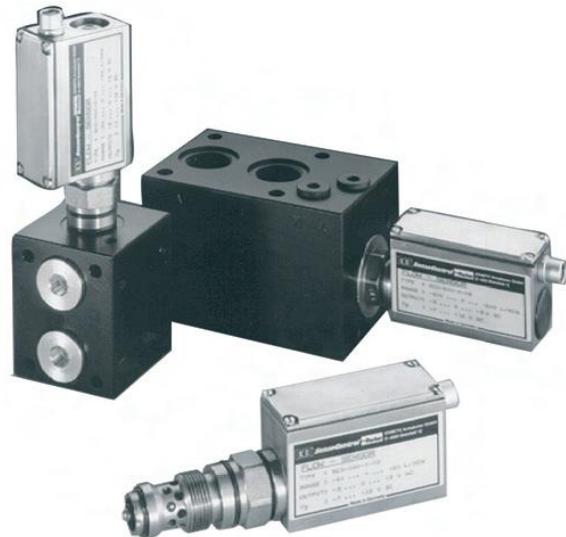


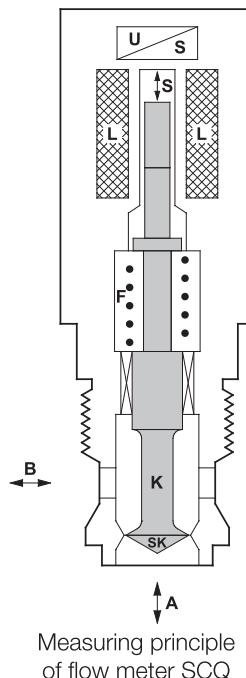
18 Flow meter SCQ analogue

Flow meter SCQ analogue

- Spring/piston system
- Flow measurement with direction indication
- Response time ≤ 2 ms
- Compact design
- Pressure resistant up to 420 bar
- Wide range of viscosities
- With connector block
- p,T and Q measurement possible



Flow measurement with direction indication for mobile and stationary measurement



Function

When there is a flow from A-B or B-A, the piston (K) is moved. When at rest, the spring (F) and piston (K) are in equilibrium. The path change S is proportional to the flow volume and is converted into a measured value by the integrated electronics. From the change in direction of the piston (B to A), flow directions can be indicated (e.g. -45.8 l/min.). The response time of the piston movement is less than 2 ms.

Application

In the field of high pressure hydraulics, the rapid capture of the flow volume is of great significance. Due to the fast response time of the flow meter, the dynamic behaviour of hydraulic systems is measured.

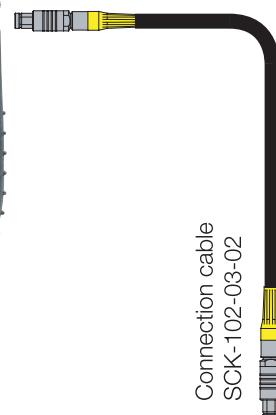
The indication of direction is helpful when searching for faults in hydraulic systems. Rapid load changes, which can cause damage for example in valves and pumps, can be determined. Installation with a connection block permits the combined measurement of p, T and Q. With the IN-LINE adapter for tube or hose connection, the flow meter can quickly be installed in the hydraulic system. Robust design enables use in extreme conditions such as high load changes or rates of pressure increase.

18 Flow meter SCQ analogue

Function specifications



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



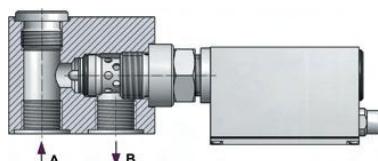
Connection cable
SCK-102-03-02



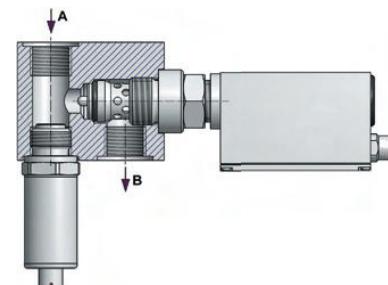
Parker Serviceman Plus
SCM-155-0-02



Flow meter
SCQ-xxxx-0-02



Flow meter SCQ
in connection block SCAQ



Flow meter SCQ with
pressure/temperature sensor SCPT
in connection block SCAQ

Sensors

18 Flow meter SCQ analogue

Technical data

| Type | SCQ-060 | SCQ-150 |
|---------------------------|-----------------|-------------------|
| Flow range Q _N | -60...+60 l/min | -150...+150 l/min |
| Q _{max} | -66...+66 l/min | -165...+165 l/min |
| Media connection | M24 (NG10) | M42 (NG16) |
| Weight (g) | 670 | 1,050 |

| Accuracy | |
|-------------------------------------|------------------|
| Deviation from characteristic curve | ±2 % FS @ 46cSt. |
| Response time | 2 ms |
| Thermal drift | ±0.05 % FS*/°C |
| Repeat accuracy | ±0.5 % FS* |
| Resistance to pressure | |
| Pressure range | 3...420 bar |
| Operating pressure P _N | 315 bar |
| Overload pressure P _{max} | 420 bar |
| Pressure drop ΔP (bar) @ (FS*) | see diagram |
| Material | |
| Housing | Steel |
| Seal | NBR |
| Parts in contact with media | Steel, NBR |
| Type of protection | IP54 EN 60529 |

* FS = Full Scale (measuring range end value)

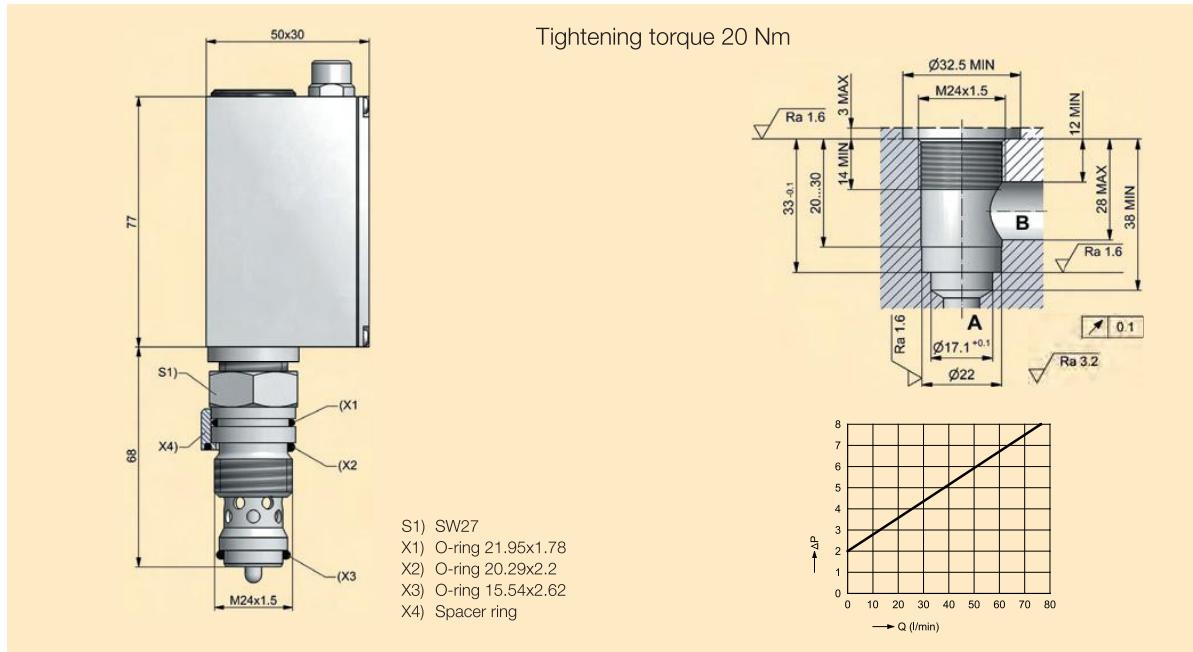
| Ambient conditions | |
|----------------------------------------------------|------------------|
| Ambient temperature (°C) | +10...+60 |
| Storage temperature (°C) | -20...80 |
| Media temperature (°C) | +80 |
| Filtration | 25 µm |
| Viscosity range | 15...100 cSt. |
| Electrical connection to handheld measuring device | |
| Plug connection | 5 pin, push-pull |
| Electromagnetic compatibility | |
| Interference emissions | EN 61000-6-3 |
| Interference resistance | EN 61000-6-2 |



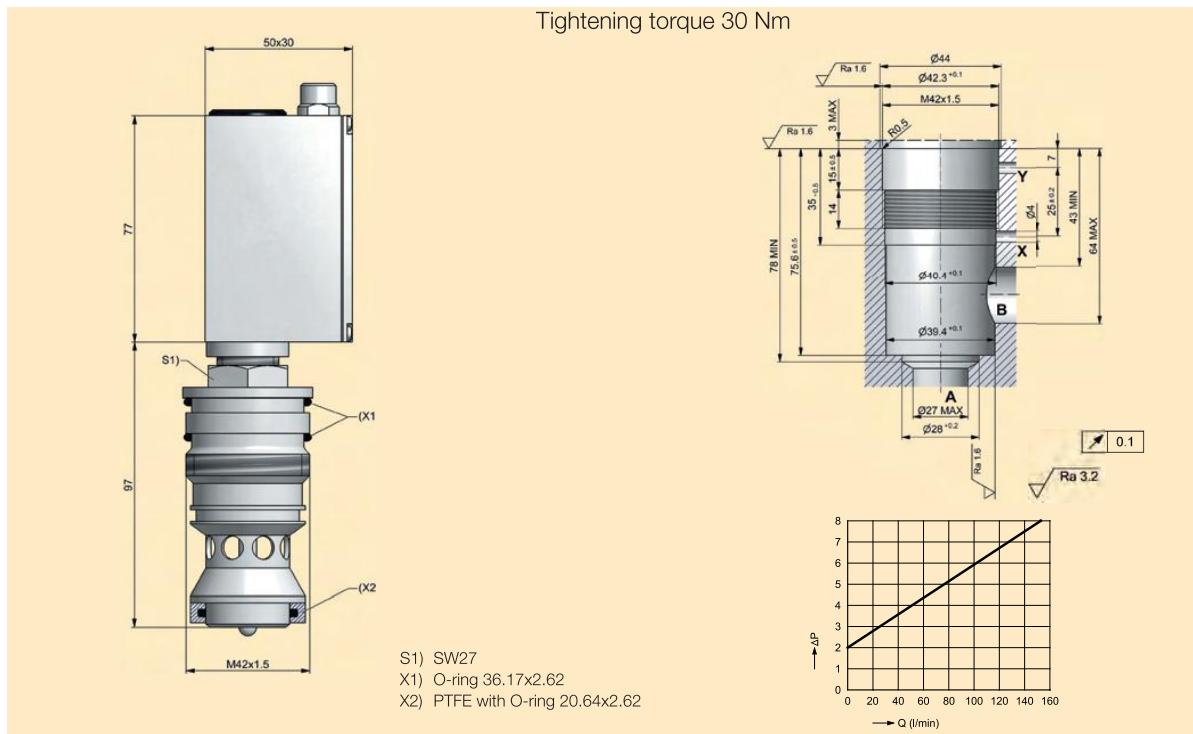
18 Flow meter SCQ analogue

Dimensional drawings

Port dimensions and pressure drop graph SCQ-060



Port dimensions and pressure drop graph SCQ-150

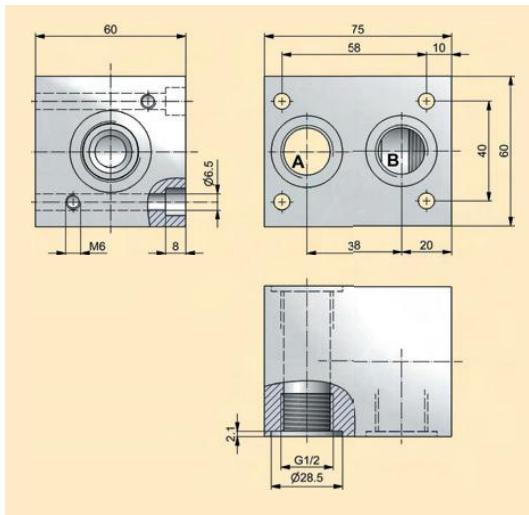


Sensors

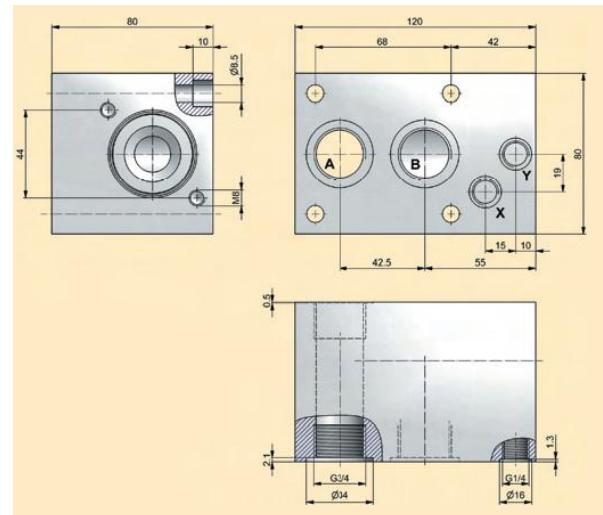
18 Flow meter SCQ analogue

Dimensional drawings

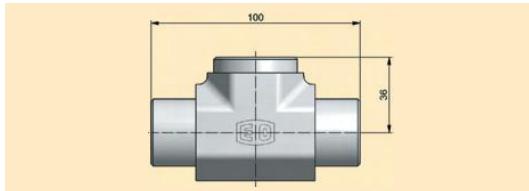
Connection block SCAQ-060



Connection block SCAQ-150



IN-LINE adapter SCAQ-GIR1/2



18 Flow meter SCQ analogue

Supply range and accessories

| SCQ flow sensor (0...±60 l/min) | Order code |
|---------------------------------------------------------------------|-------------------|
| 0...60 l/min (incl. spacer ring) | SCQ-060-0-02 |
| Spacer ring (O-ring SCQ-060) | SC-910 |
| Seal set for SCQ-060 | SC-911 |
| SCAQ-IN-LINE adapter (60 l/min) | Order code |
| 1/2" BSPP female (A-B) and M24 female for SCQ-060 | SQAQ-GIR1/2CFX |
| SCAQ connector block (60 l/min) | Order code |
| 1/2" BSPP female (A-B) and M24 female for SCQ-060 | SCAQ-060 |
| with screw plug: | |
| 1/2" BSPP male port (A-B) | SCQ-R1/2-ED |
| SCQ flow sensor (0...±150 l/min) | Order code |
| 0...150 l/min | SCQ-150-0-02 |
| Seals for SCQ-150 | SC-912 |
| SCAQ connector block (150 l/min) | Order code |
| 3/4" BSPP female (A-B) and M42 female for SCQ-150 | SCAQ-150 |
| with screw plugs: 3/4" BSPP male (A-B) | SCQ-R3/4-ED |
| 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 |
| SCQ flow sensor with calibration certificate as per ISO 9001 | Order code |
| 0...60 l/min (incl. spacer ring) | K-SCQ-060-0-02 |
| 0...150 l/min | K-SCQ-150-0-02 |

Sensors

