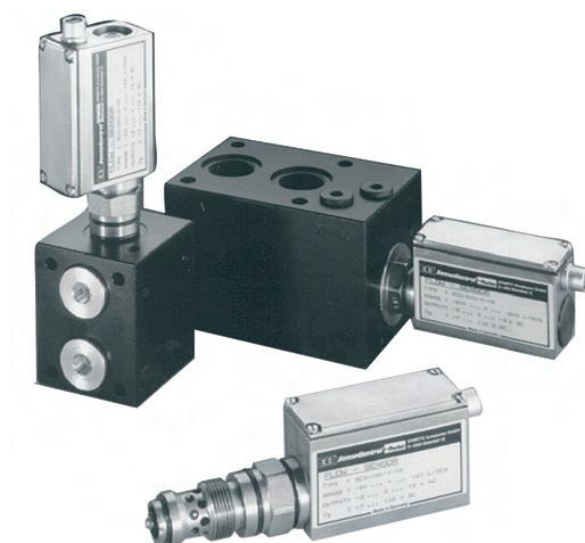


18 Flow meter SCQ analogue

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

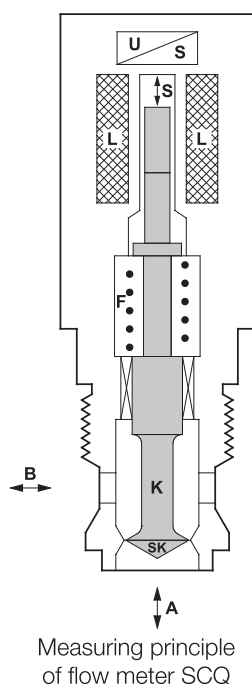
Function

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

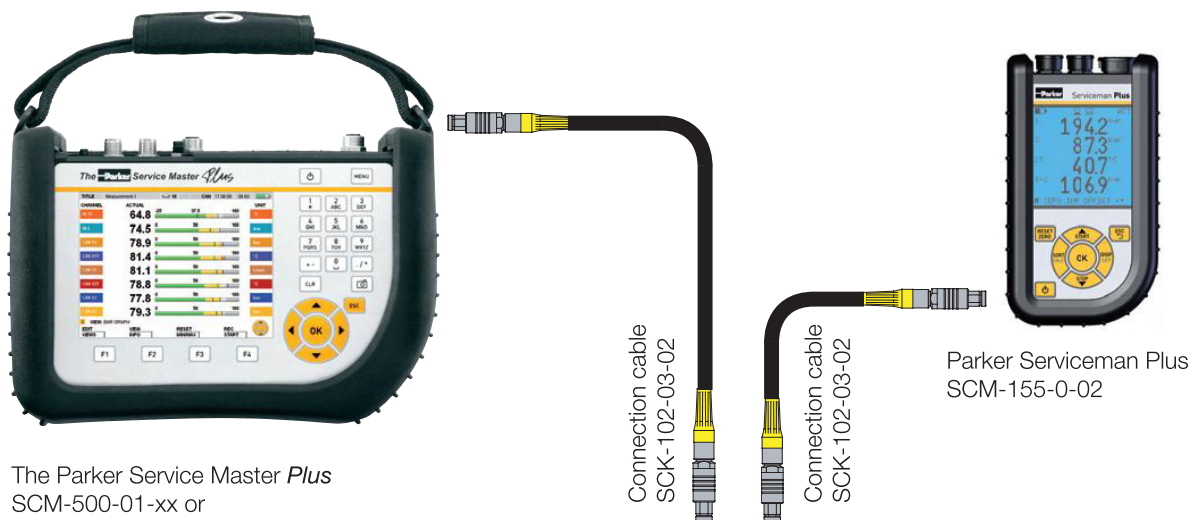
In the field of high pressure hydraulics, the rapid capture of the flow volume is of great significance. Due to the fast response time of the flow meter, the dynamic behaviour of hydraulic systems is measured.

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.

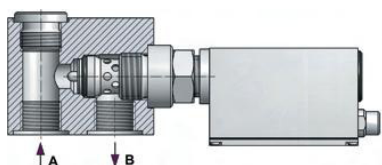


18 Flow meter SCQ analogue

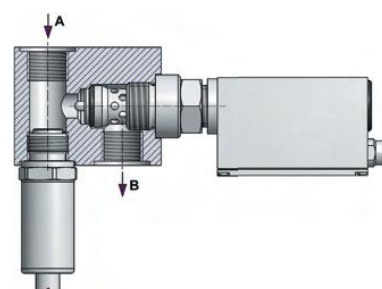
Function specifications



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



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
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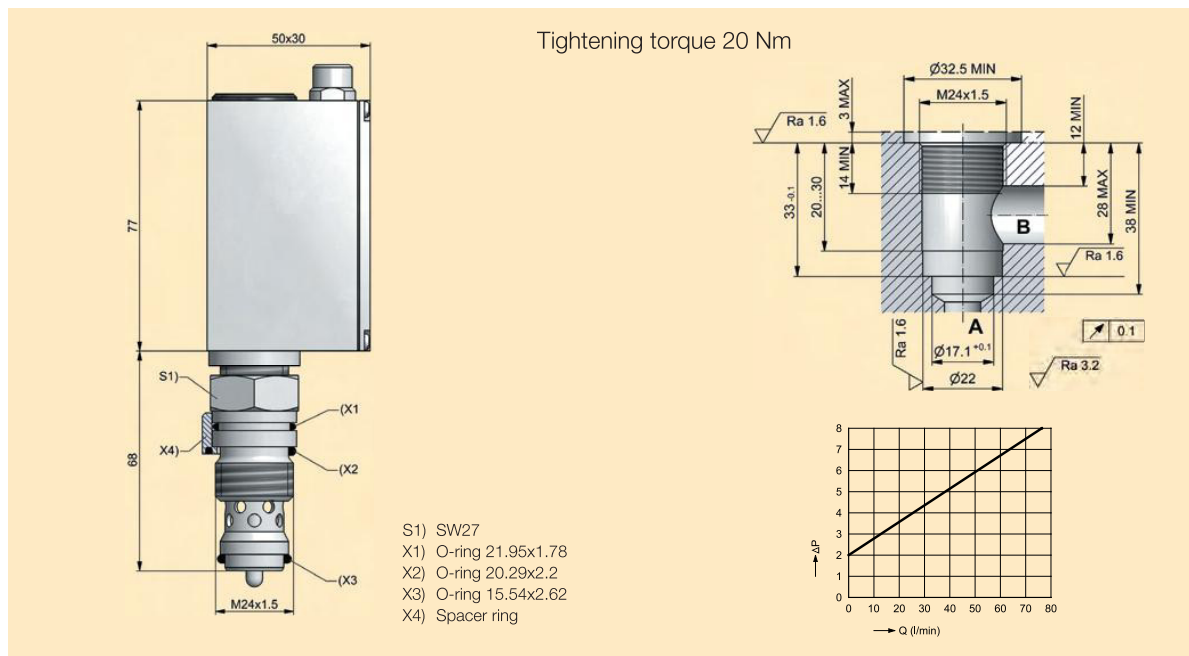
Electromagnetic compatibility

Interference emissions	EN 61000-6-3
Interference resistance	EN 61000-6-2

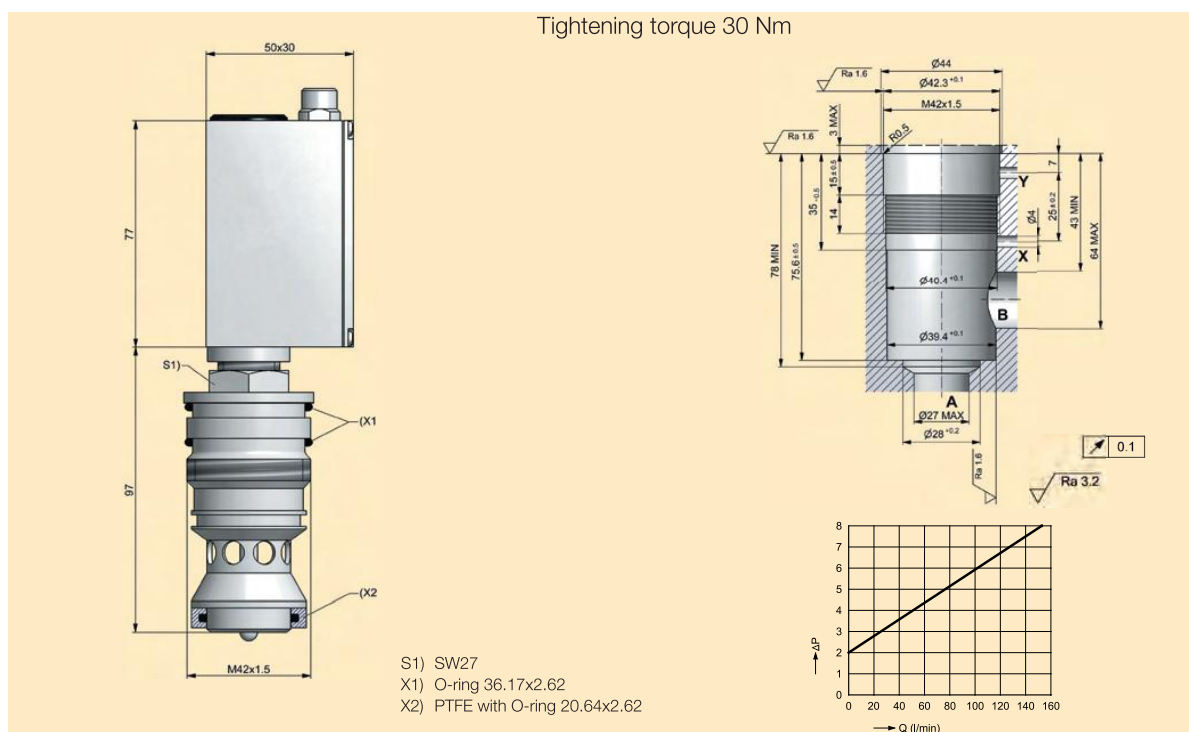
18 Flow meter SCQ analogue

Dimensional drawings

Port dimensions and pressure drop graph SCQ-060



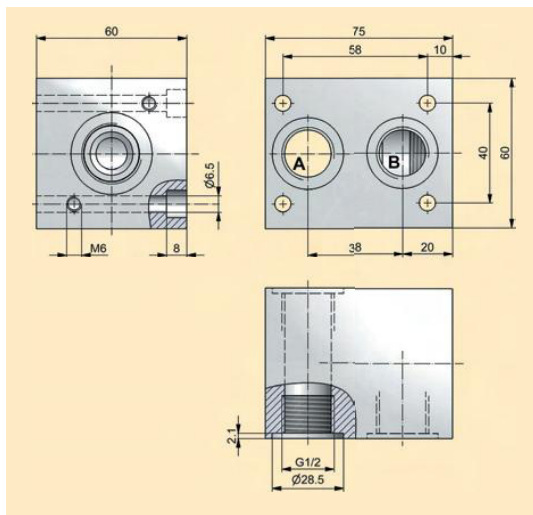
Port dimensions and pressure drop graph SCQ-150



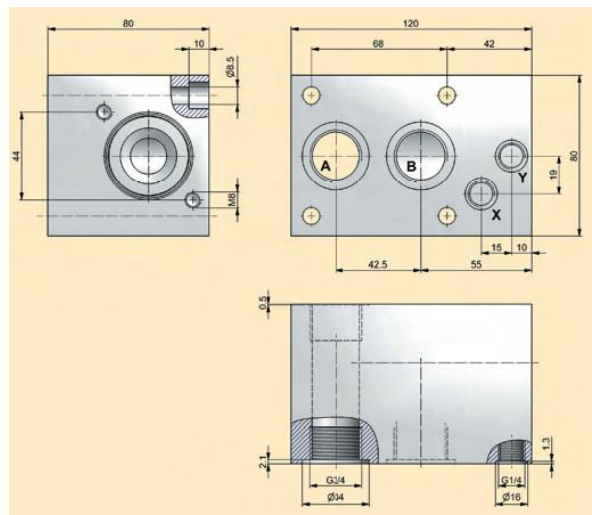
18 Flow meter SCQ analogue

Dimensional drawings

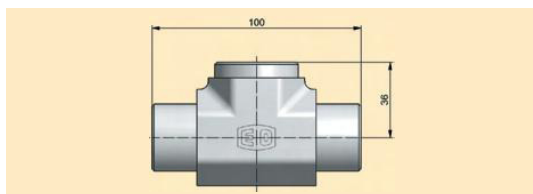
Connection block SCAQ-060



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		SCAQ-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