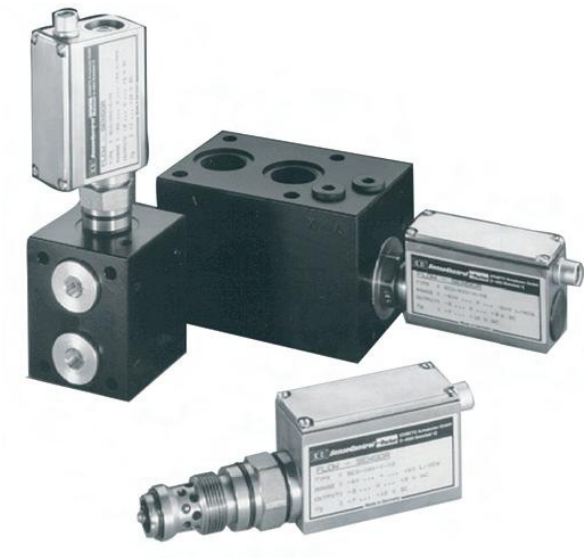
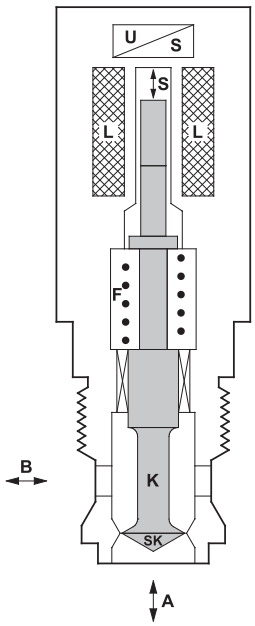
18 Flow meter SCQ analogue

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





Measuring principle of flow meter SCQ

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.

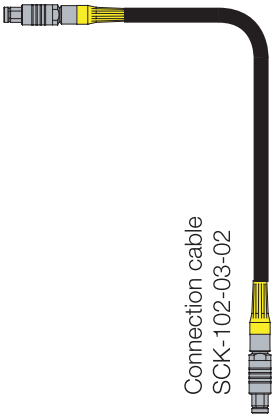
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18 Flow meter SCQ analogue

Function specifications



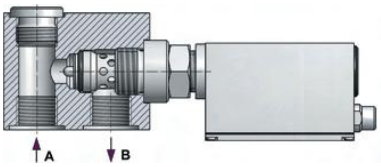
The Parker Service Master *Plus*
SCM-500-01-xx or
The Parker Service Master *Easy*
SCM-330/340



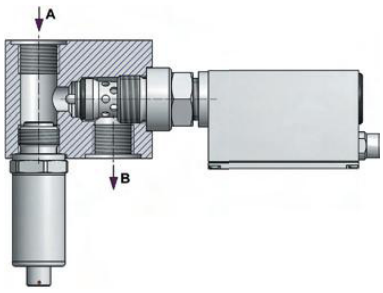


Parker Serviceman Plus
SCM-155-0-02





Flow meter SCQ
in connection block SCAQ



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

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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)

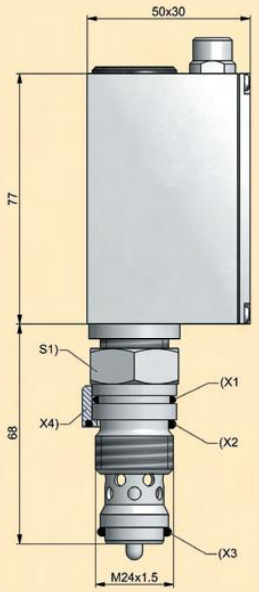
Ambient conditions	
Ambient temperature (°C)	+10…+60
Storage temperature (°C)	-20…80
Media temperature (°C)	+80
Filtration	25 µm
Viscosity range	15…100 cSt.
Electrical connection to handheld measuring device	
Plug connection	5 pin, push-pull
Electromagnetic compatibility	
Interference emissions	EN 61000-6-3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

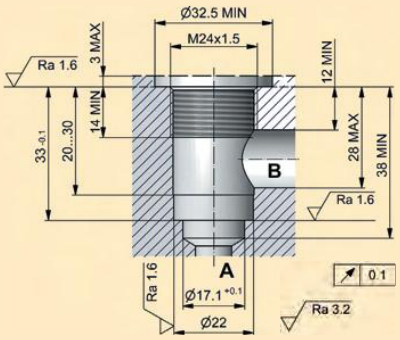
18 Flow meter SCQ analogue

Dimensional drawings

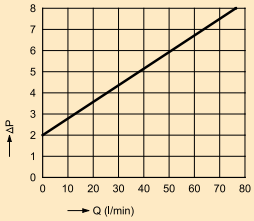
Port dimensions and pressure drop graph SCQ-060

Tightening torque 20 Nm



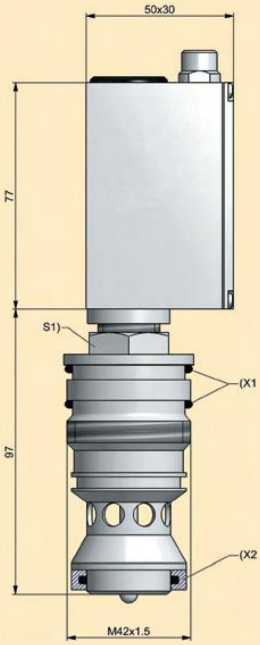


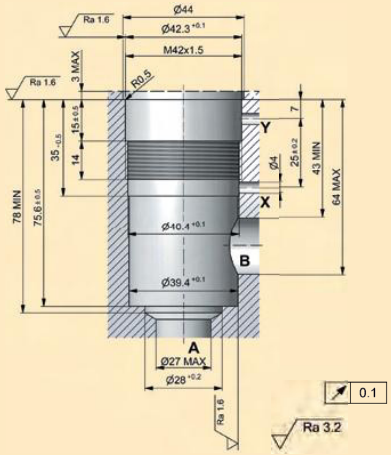
S1) SW27
X1) O-ring 21.95x1.78
X2) O-ring 20.29x2.2
X3) O-ring 15.54x2.62
X4) Spacer ring



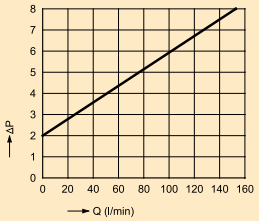
Port dimensions and pressure drop graph SCQ-150

Tightening torque 30 Nm





S1) SW27
X1) O-ring 36.17x2.62
X2) PTFE with O-ring 20.64x2.62



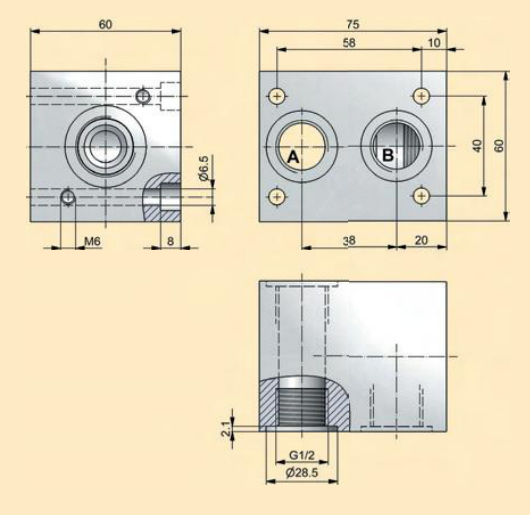
Sensors

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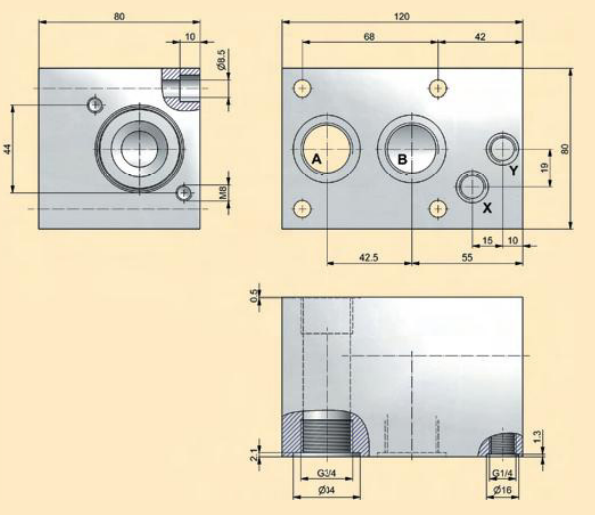
18 Flow meter SCQ analogue

Dimensional drawings

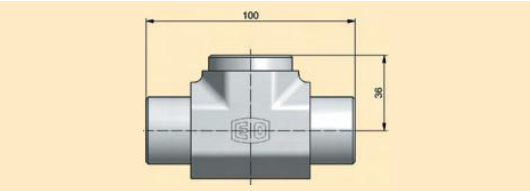
Connection block SCAQ-060



Connection block SCAQ-150



IN-LINE adapter SCAQ-GIR1/2



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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

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