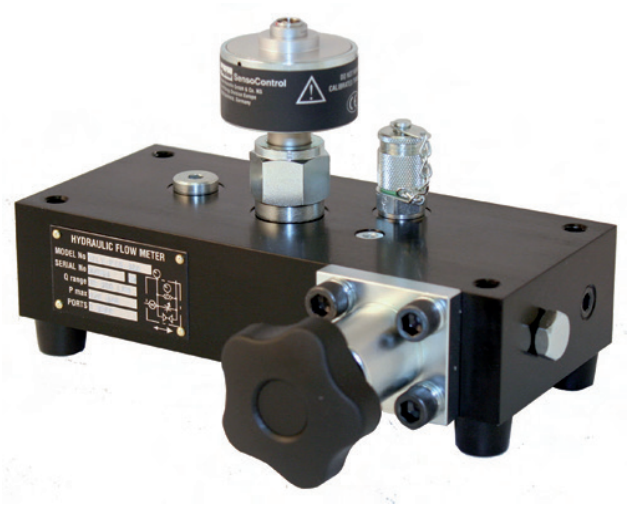
Hydraulic testers SCLV analogue and CAN

- Pressure, temperature and flow measuring device
- 2 measuring ranges of up to 750 l/min
- High-pressure-resistant up to 480 bar
- Integrated overload protection
- Reverse-mode operation (direction of flow A - B)
- Also with CAN bus connection
- CAN version with integrated temperature sensor



Measurement of pressure, temperature and flow

Special features:

- Easy to use in both flow directions; integrated oil bypass protects the system, testing device and operator from surge pressures
- User-selectable flow direction enables smooth connection and simple measuring
- Can be put into use quickly with pumps, valves, motors, cylinders and hydrostatic drives

The hydraulic testers are designed for testing the functionality of motors, pumps, valves and hydrostatic drives. These easy-to-use hydraulic testers can help locate faults in a hydraulic system.

These hydraulic testers can be used for precisely measuring pressure, temperature and flow. The testers are also helpful when performing hydraulic system maintenance, locating error sources on directional control valves and making valve adjustments.

The pressure-load valve with its integrated bypass-blow-out discs makes it possible to build up pressure progressively in order to check the flow in an entire working area.

Integrated safety shut-off (blow-out discs)

The load valve is fitted with two safety blow-out discs. The device is protected by this safety mechanism. These discs break and the load valve becomes inactive whenever the maximum permitted operating pressure (P_{max}) is exceeded. The complete flow then runs off to the tank.

Read the operating manual carefully before replacing the blow-out discs.

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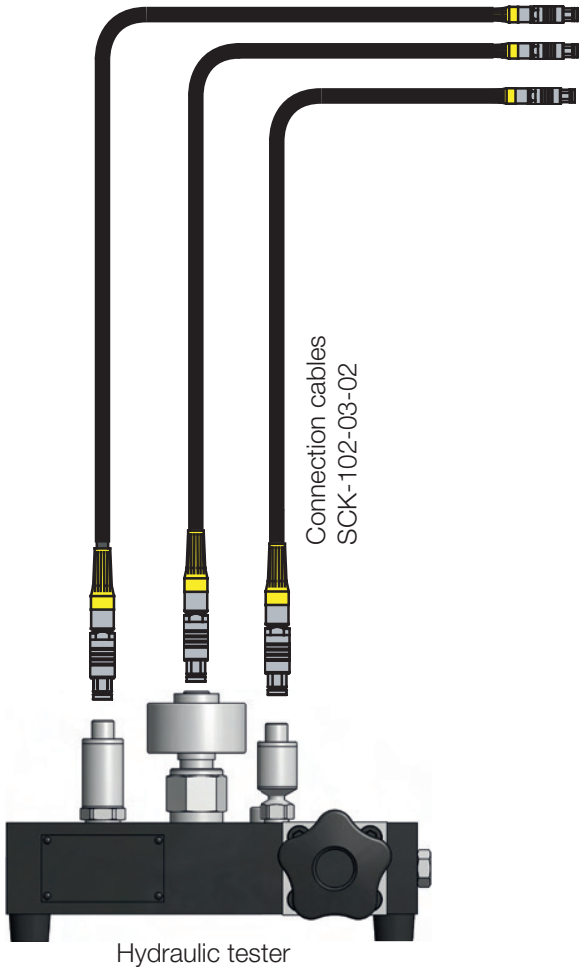
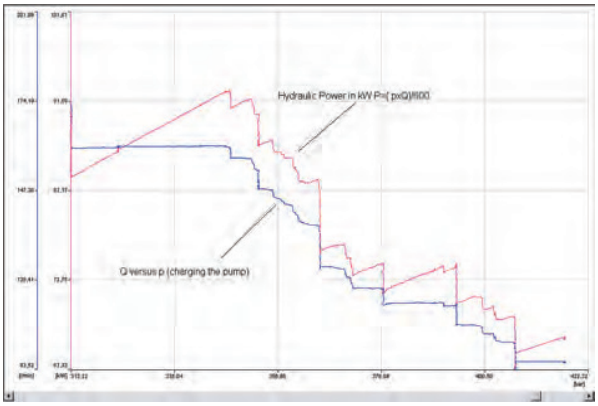
Function specifications

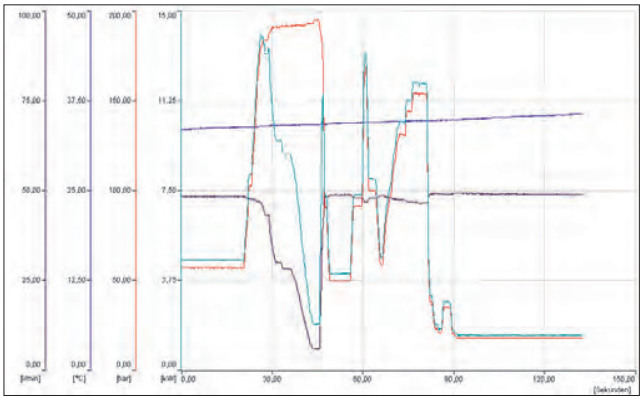


Hydraulic tester
SCLV-PTQ-xxx

Pressure, volume flow and temperature measurement with the Parker Serviceman Plus, The Parker Service Master ***Easy*** SCM-330/340 or Service Master ***Plus*** SCM-500-01-xx and the HydraulicTester SCLV-PTQ

The p-Q diagram (right) shows the power determined. Especially in hydraulic pump (load sensing) systems, this analysis is necessary for rotational-speed-dependent loads. The evaluation with the PC software **SensoWin®** is quick and easy.





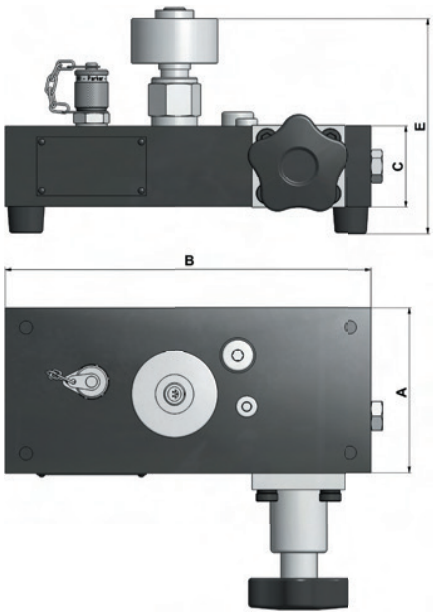
The hydraulic power of a system can be analysed by a combined measurement of pressure and volume flow (left).

The graph shows an application with a hydraulic tester SCLV-PTQ. Pressure is generated in the system with the installed pressure load valve.

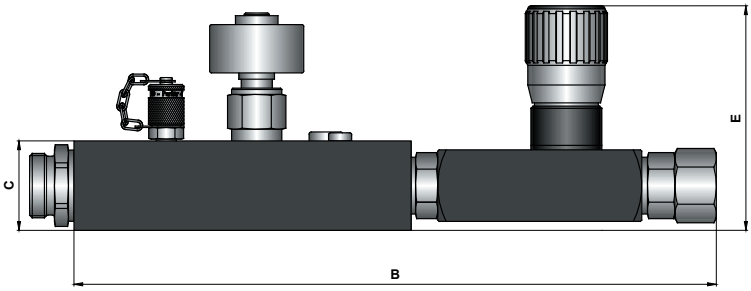
In the evaluation, power is calculated from the flow volume and pressure of the pump.

Technical data

Hydraulic tester
SCLV-PTQ-xxx



Turbine flow meter incl. throttle check valve
SCFT-150-DRV



Type	SCFT-150-DRV	SCLV-PTQ-300	SCLV-PTQ-750
A	62	98	117
B	370	222	235
C	50	50	75
E	130	135	150

Type	SCFT-150-DRV	SCLV-PTQ-300	SCLV-PTQ-750
Flow range Q_N (l/min)	6…150	10…300	20…750
Accuracy (± %) IR** @ 21cSt.	1.0	1.0 (> 20 l/min)	1.0 (> 25 l/min)
Operating pressure PN (bar)	350	350	400
Safety shut-off (Blow-out disc)	–	420 bar	480 bar
Ports (A - B)	3/4“ BSPP	1“ BSPP	1-7/8“ UNF
Pressure drop Δ P_{max} (bar) @ (FS*) 21cSt.	15	4	5
Weight (kg)	4.2	5.5	8.9

* FS = Full Scale (measuring range end value)
** IR = Indicated Reading (measured value displayed)

Response time	50 ms
Accuracy of temperature measurement only with CAN	± 2 K
Q_{max}	Q_N x 1.1 l/min
Overload pressure P_{max}	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

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

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Supply range and accessories

SCLV-PTQ hydraulic tester with pressure load valve	Order code
10…300 l/min, P_{max} = 420 bar	SCLV-PTQ-300
10…300 l/min, P_{max} = 420 bar, with CAN bus connection	SCLVT-PTQ-300-C2-05
20...750 l/min, P_{max} = 480 bar	SCLV-PTQ-750
20...750 l/min, P_{max} = 480 bar, with CAN bus connection	SCLVT-PTQ-750-C2-05

SCLV-PTQ blow-out discs	Order code
for 10…300 l/min, P_{max} = 420 bar (4 blow-out discs)	SCLV-DISC-300
for 20...750 l/min, P_{max} = 480 bar (4 blow-out discs)	SCLV-DISC-800

SCFT turbine flow meter incl. throttle check valve	Order code
6...150 l/min, P_{max} = 400 bar	SCFT-150-DRV
6...150 l/min, P_{max} = 400 bar, with CAN bus connection	SCFTT-150-DRV-C2-05

SCK analogue connection cables	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

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.