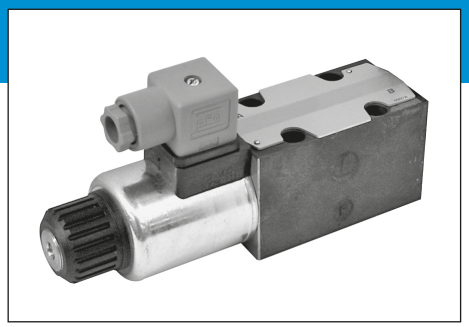
XQP3... Open loop 2/3 way proportional pressure compensated flow regulators

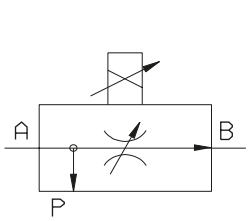


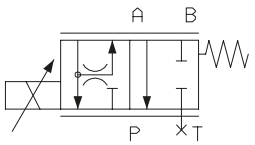
The open loop proportional flow regulator is 2 and 3 way compensated with priority function. It is designed to regulate flow in proportion to an applied electrical current (REM or SE3AN power amplifier). Flow regulation is load independent - B port. Load compensation is achieved by a spool compensator which holds the pressure drop constant across the proportional spool.

Valves are available in the following versions (see hydraulic symbol):
- 2 way pressure compensated - 3 way pressure compensated with priority function.
- 3 way pressure compensated with priority and venting function.

XQP3...	
Standard connectors	Sect. L 15
"D15P" Proport. Solenoids	Sect. G 17
REMSRA...	Sect. H 4
BC06XQP3...	Sect. F 13

Hydraulic symbols





• In order to obtain the 2 way pressure compensated version the cavities P and T have be closed on the subplate.

• In order to obtain the 3 way pressure compensated version the cavity T have be closed on the subplate.

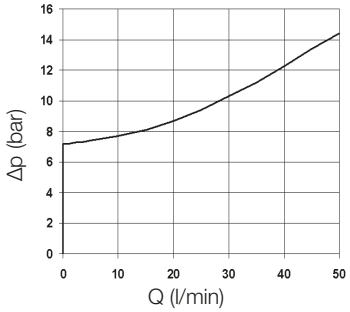
Ordering code

XQP	Open loop 2/3 way proportional compensated flow regulator
3	CETOP 3/NG6
C	2/3 way compensation with priority function
3	3 way version (standard) For to obtain 2-way version the P line must be closed on the subplate
*	Nominal flow rates **F** = 6 l/min **G** = 12 l/min **H** = 22 l/min **I** = 32 l/min **L** = 40 l/min
*	**S** = without decompression **D** = with decompression
*	Max. current to solenoid **E** = 2.35 A **F** = 1.76 A **G** = 0.88 A
**	Variants (*): **S1** = No variant **P2** = Rotary emergency **R5** = Rotary emergency 180° **SV** = FKM
2	Serial No.

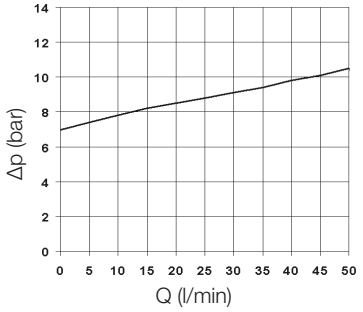
(*) All variants are considered without connectors. The connectors must be order separately.
See Sect. L 15.

Diagrams

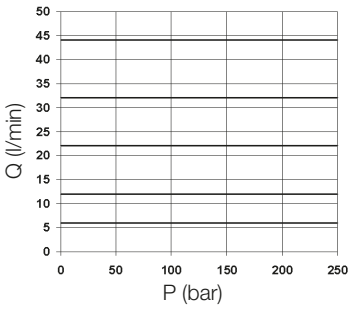
Δp - Flow rate A → B (with 5 l/min to P)



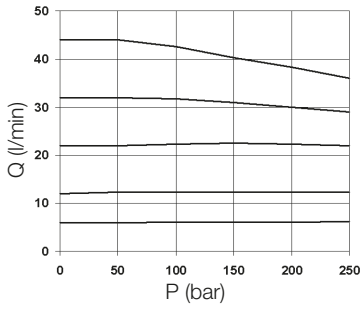
Δp - Secondary line flow (A → P free)



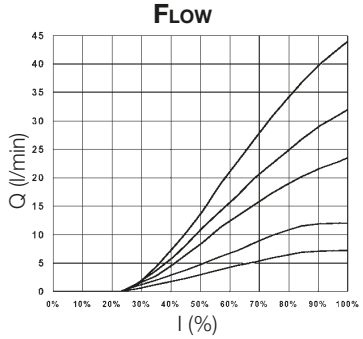
Flow rate
Back pressure on priority line



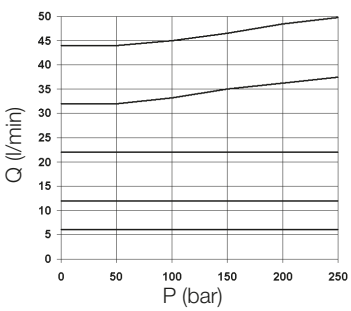
Flow rate
Back pressure on secondary line



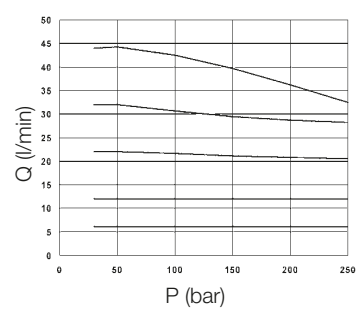
Input signal
Flow



2 way compensation
(A 270 bar - B variable)



2 way compensation
(A variable - B 30 bar)



The fluid used is a mineral based oil with a viscosity of 46 mm²/s at 40°C.
The tests have been carried out at with a fluid of a 40°C.

OPERATING SPECIFICATIONS

Max. operat. pressure ports A/B /P see note (*) With T port blocked on subplate			250 bar
Regulated flow rate			6 / 12 / 22 / 32 / 40 l/min
Pressure bleed drain flow			max 0,7 l/min
Relative duty cycle			Continuous 100% ED
Type of protection (in relation to the connector used)			IP 65
Flow rate gain			See diagram "Input signal flow"
Fluid viscosity			10 ÷ 500 mm^2/s
Fluid temperature			-20°C ÷ 75°C
Ambient temperature			-20°C ÷ 70°C
Max. contamination level			from class 7 to 9 in accordance with NAS 1638 with filter $\beta_{10}\geq 75$
Weight			1,7 Kg
Max. current	**2.33A**	**1.76 A**	**0.88 A**
Solenoid coil resistance at 25°C (77°F)	2.25 Ohm	4.0 Ohm	16.0 Ohm
Hysteresis with Δp 7 bar	≤5%	<5%	<8%
Response to step Δp = 7 bar			
0 ÷ 100%	32 ms	40 ms	85 ms
100% ÷ 0	33 ms	33 ms	33 ms
Frequency response -3db (Input signal 50% ± 25% Vmax.)	22Hz	22Hz	12Hz

(*) Pressure dynamic allowed for 2 millions of cycles

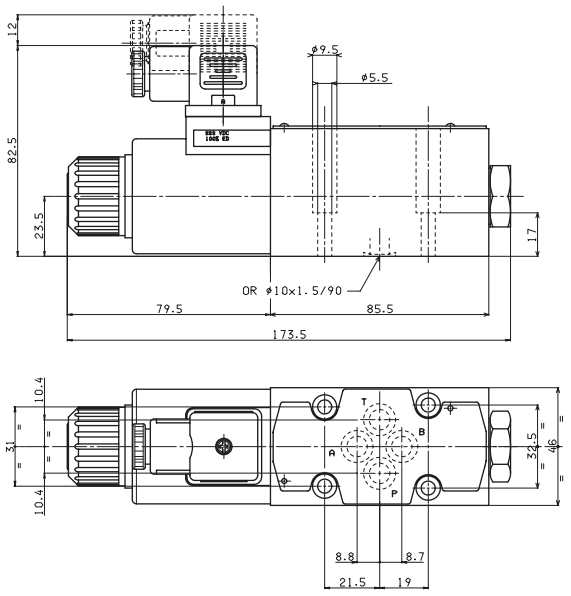
Operating specifications are valid for fluids with 46 mm^2/s viscosity at 40°C, using specified electronic control units.

Performance data are carried out using the specified power amplifier SE3AN... powered to 24V.

AMPLIFIER UNIT AND CONTROL

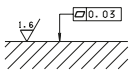
REMSRA...**
Electronic card for control single proportional solenoid valve.
Recommended dither frequency 100 Hz.

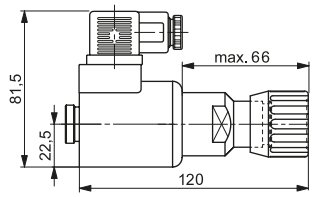
OVERALL DIMENSIONS



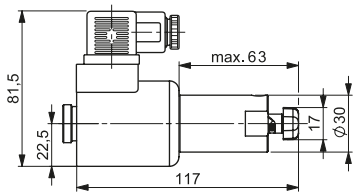
Fixing screws ISO 4762 M5x25
(min. 8.8 material screws are recommended)
Tightening torque 4 ÷ 5 Nm / 0.4 ÷ 0.5 Kgm

Support plane specifications





P2 Rotary emergency (1)

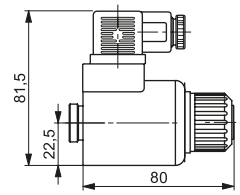


R5 Rotary emergency 180° (2)

(1) **P2** - Adjustable hand emergency.

(2) **R5** - Two positions hand emergency. The regulated flow with emergency actuated can be less than nominal value.





"D15P" PROPORTIONAL SOLENOIDS

Type of protection (in relation to connector used)	IP 66
Duty cycle	100% ED
Insulation class wire	H
Weight (coil)	0,354 Kg
Weight (solenoid)	0,608 Kg