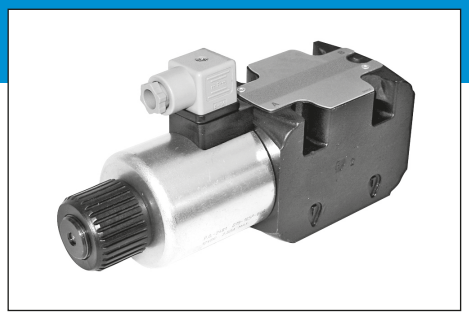
XQP5 Open loop 2/3 way proportional pressure compensated flow regulators Cetop 5



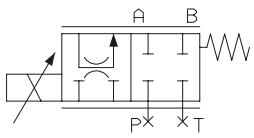
XQP5...	
Standard connectors	Sect. L 15
"D19P" Proport. Solenoids	Sect. G 19
REMSRA...	Sect. H 4

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 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.

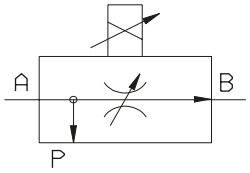
Symbols

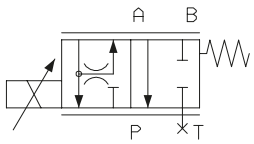
Hydraulic



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

Simplified type





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

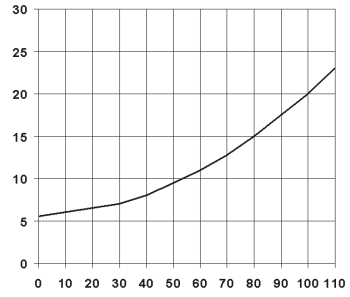
Ordering code

XQP	Open loop 2/3 way proportional compensated flow regulator
5	CETOP 5/NG10
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 **E** = 45 l/min **F** = 75 l/min **G** = 105 l/min
*	**S** = without decompression **D** = with decompression
*	Voltage **F** = 12V DC **G** = 24V DC
**	Variant (*): **S1** = No variant (without connectors) **SV** = FKM **P2** = Rotary emergency
1	Serial No.

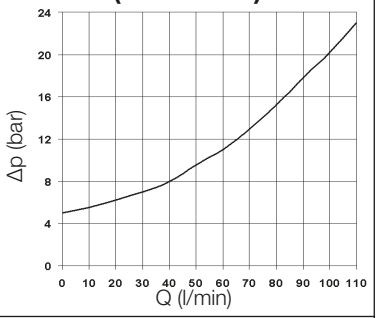
(*) All variants are considered without connectors. The connectors must be order separately.
See Sect. L 15.

Diagrams

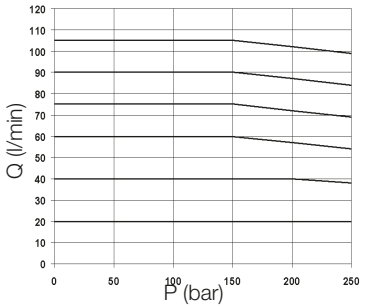
Δp - Flow rate A → B (with 5 l/min to P)



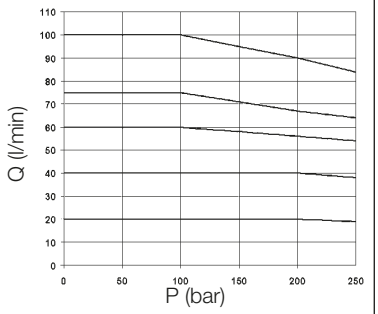
Δp - Secondary line flow (A → P free)



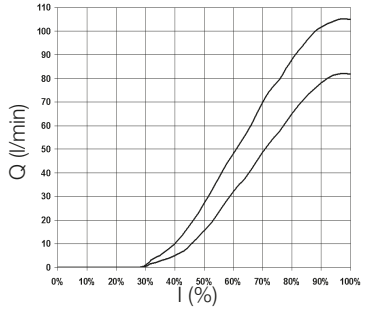
Flow rate
Back pressure on priority line



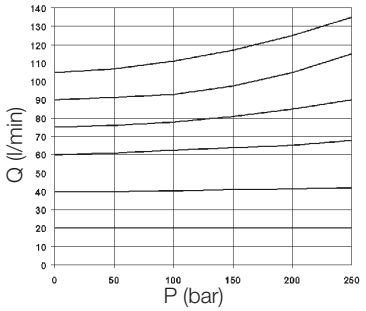
Flow rate
Back pressure on secondary line



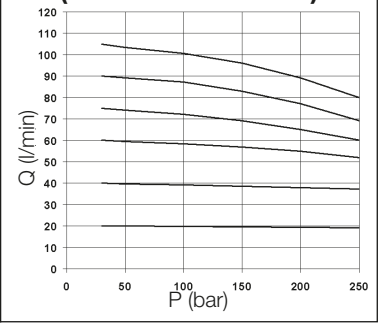
Input signal
Flow



2 way pressure compensated
(A 270 bar - B variable)



2 way pressure compensated
(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. operating pressure ports A/B /P (*)	250 bar
Regulated flow rate	75 / 105 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 mm²/s
Fluid temperature	-20°C ÷ 75°C
Ambient temperature	-20°C ÷ 60°C
Max. contamination level	from class 7 to 9 in accordance with NAS 1638 with filter $\beta_{10} \geq 75$
Weight	4,97 Kg

	12V	**24V**
Type of voltage		
Max. current	2.5 A	1.25 A
Solenoid coil resistance at 20°C (68°F)	2.85 Ohm	11.4 Ohm
Hysteresis with Δp 7 bar	<5%	<8%
Response to step Δp = 7 bar (P/A)		
0 ÷ 100%	~ 65 ms	-
100% ÷ 0	~ 30 ms	-
Frequency response -3db (Input signal 50% ± 25% Vmax.)	7Hz	-

AMPLIFIER UNIT AND CONTROL

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

(*) Pressure dynamic allowed for 2 millions of cycles. T ports closed on the subplate.

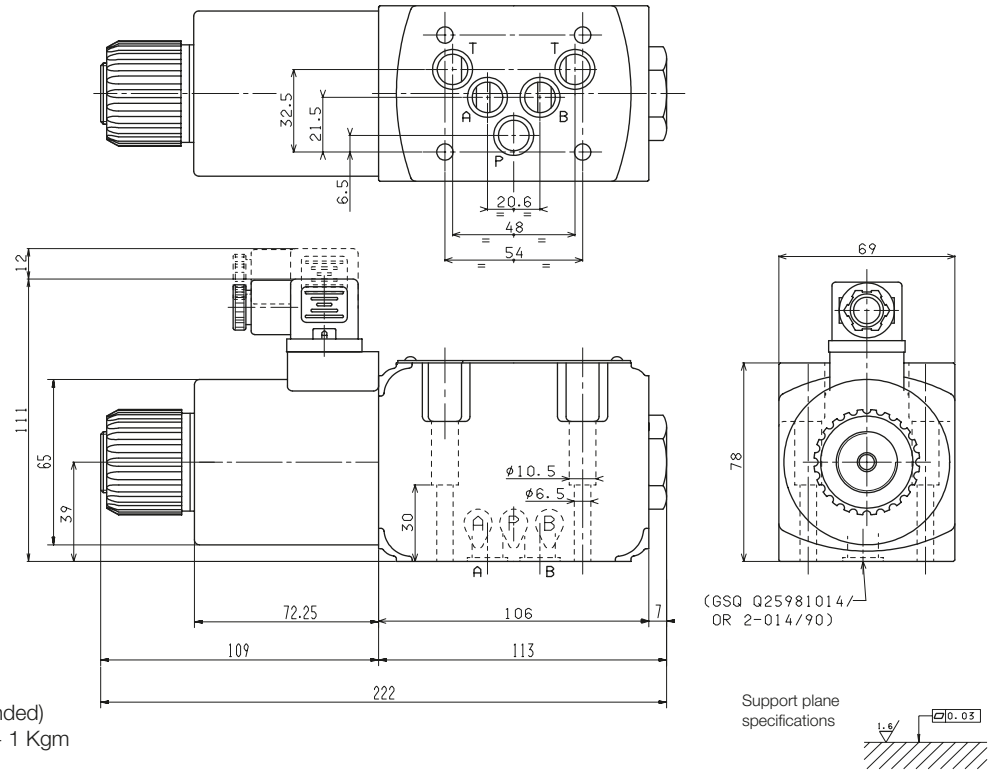
Operating specifications are valid for fluids with 46 mm²/s viscosity at 40°C, using specified electronic control units.

Performance data are carried out using the specified power amplifier type REMSRA... power supplied at 24V.

OVERALL DIMENSIONS

E = Manual override

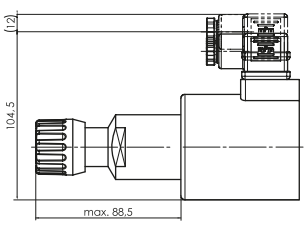
GSQ = Square section seal



Fixing screws ISO 4762 M6x40
(12.9 material screws are recommended)
Tightening torque 8 ÷ 10 Nm / 0.8 ÷ 1 Kgm

Support plane specifications





"D19P" PROPORTIONAL SOLENOIDS

Type of protection (in relation to connector used)	IP 65
Ambient temperature	-54°C ÷ 60°C
Duty cycle	100% ED
Insulation class wire	H
Weight	1,58 Kg