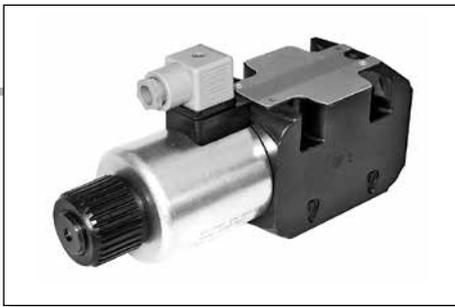


# XQP5 OPEN LOOP 2/3 WAY PROPORTIONAL PRESSURE COMPENSATED FLOW REGULATORS CETOP 5

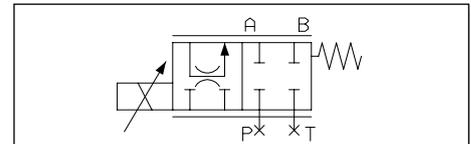


<b>XQP5...</b>	
STANDARD CONNECTORS	CAP. I • 20
"D19P" PROPORT. SOLENOIDS	CAP. VIII • 22
REMSRA...	CAP. IX • 4

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):

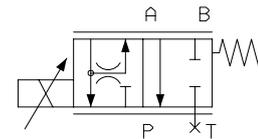
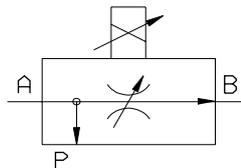
- 2 way pressure compensated
- 3 way pressure compensated with priority function.
- 3 way pressure compensated with priority and venting function.



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

## SYMBOLS HYDRAULIC

### SIMPLIFIED TYPE



• In order to obtain the 3 way pressure compensated version the cavities T have to 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

**\*\***

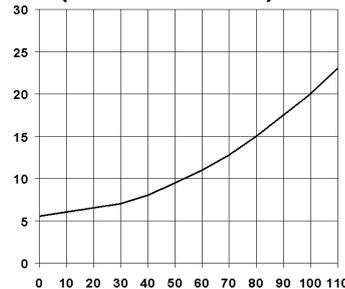
Variant (\*):  
**S1** = No variant (without connectors)  
**SV** = Viton  
**P2** = Rotary emergency

**1**

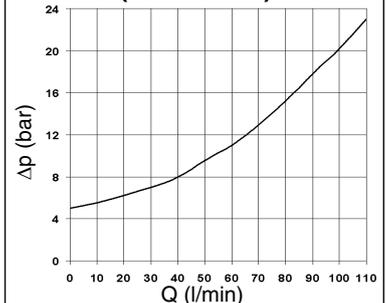
Serial No.

## DIAGRAMS

$\Delta P$  - FLOW RATE A  $\rightarrow$  B  
(WITH 5 l/min TO P)

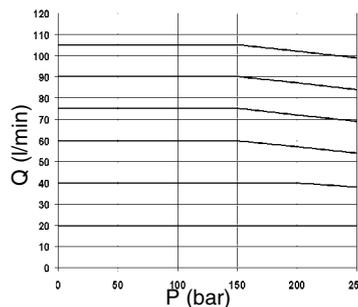


$\Delta P$  - SECONDARY LINE FLOW  
(A  $\rightarrow$  P FREE)



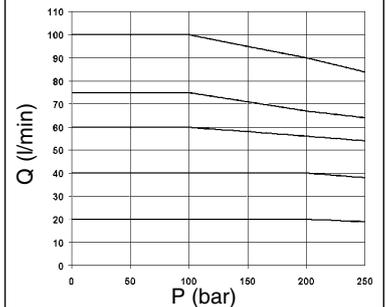
### FLOW RATE

BACK PRESSURE ON PRIORITY LINE

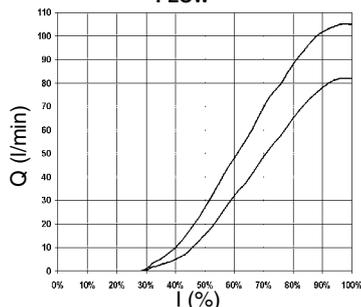


### FLOW RATE

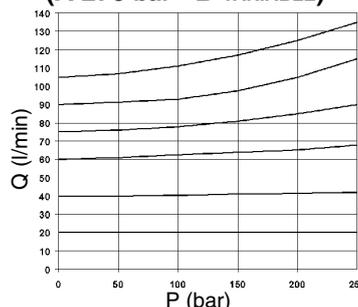
BACK PRESSURE ON SECONDARY LINE



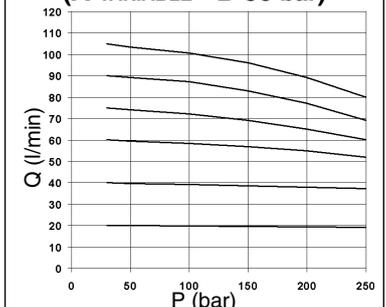
INPUT SIGNAL  
FLOW



2 WAY PRESSURE COMPENSATED  
(A 270 bar - B VARIABLE)



2 WAY PRESSURE COMPENSATED  
(A VARIABLE - B 30 bar)



(\* All variants are considered without connectors. The connectors must be order separately. See Cap. I • 20.

The fluid used is a mineral based oil with a viscosity of 46 mm<sup>2</sup>/s at 40°C. The tests have been carried out at with a fluid of a 40°C.

# XQP5 OPEN LOOP 2/3 WAY PROPORTIONAL PRESSURE COMPENSATED FLOW REGULATORS CETOP 5

## OPERATING SPECIFICATIONS

Max. operating pressure ports A/B / P (*)	250 bar
Regulated flow rate	75 / 105 l/min
Decompression 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 <sup>2</sup> /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

Type of voltage	<b>12V</b>	<b>24V</b>
Max. current	2.5 A	1.25 A
Solenoid coil resistance at 20°C (68°F)	2.85 Ohm	11.4 Ohm
Hysteresis with $\Delta p$ 7 bar	<5%	<8%
Response to step $\Delta p = 7$ 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.

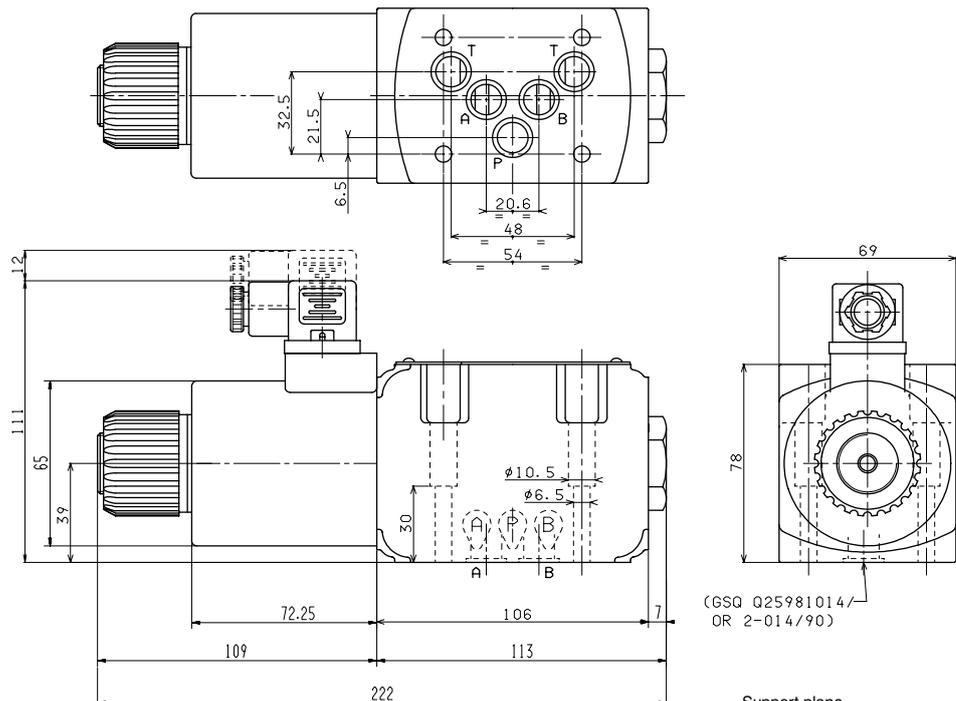
**Operating specifications are valid for fluids with 46 mm<sup>2</sup>/s viscosity at 40°C, using specified electronic control units.**

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

## OVERALL DIMENSIONS

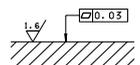
E = Manual override

GSQ = Square section seal

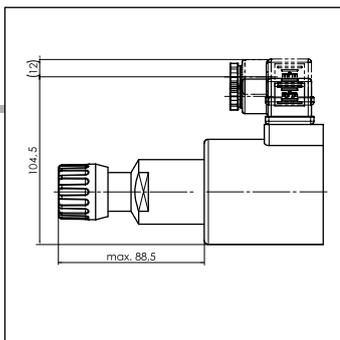


Fixing screws UNI 5931 M6x40  
(12.9 material screws are recommended)  
Tightening torque 8 ÷ 10 Nm / 0.8 ÷ 1 Kgm

Support plane specifications



8



## "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