



XQP.5. OPEN LOOP 2/3 WAY PROPORTIONAL

PRESSURE COMPENSATED FLOW REGULATORS CETOP 5



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.

XQP.5...

STANDARD CONNECTORS	CH. I PAGE 19
"D19P" PROPORT. SOLENOIDS	CH. VIII PAGE 23
REM.S.RA...	CH. IX PAGE 4

ORDERING CODE

XQP

5

C

3

1

Open loop 2/3 way proportional compensated flow regulator

CETOP 5/NG10

2/3 way compensation with priority function

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

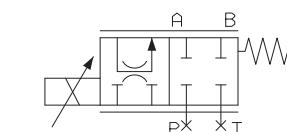
P2 = Rotary emergency

Serial No.

(*) All variants are considered without connectors. The connectors must be order separately.
See Ch. I Page 19

XQP.5. OPEN LOOP 2/3 WAY PROPORTIONAL

PRESSURE COMPENSATED FLOW REGULATORS CETOP 5

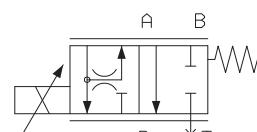
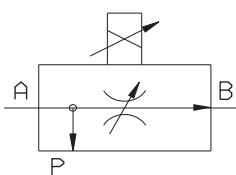


- In order to obtain the 2 way pressure compensated version the cavities P and T have be closed on the subplate.

SYMBOLS

HYDRAULIC

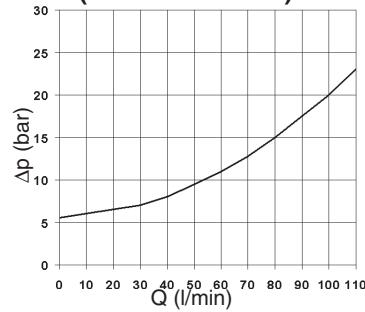
SIMPLIFIED TYPE



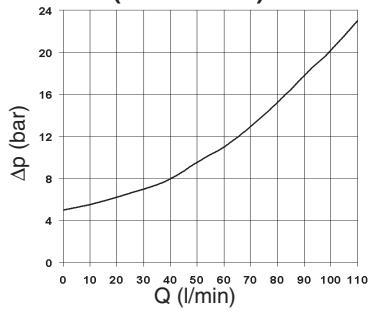
- In order to obtain the 3 way pressure compensated version the cavities T have be closed on the subplate.

DIAGRAMS

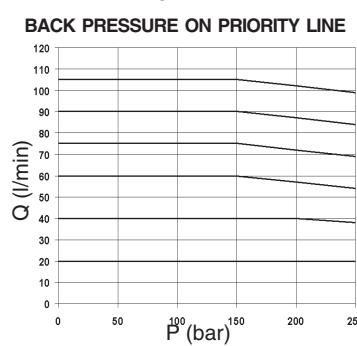
ΔP - FLOW RATE A → B (WITH 5 l/min TO P)



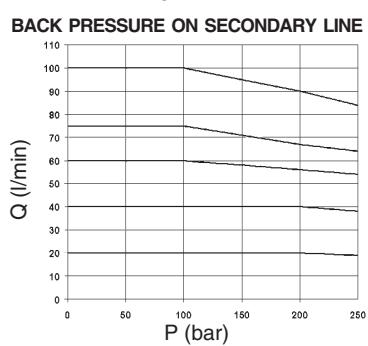
ΔP - SECONDARY LINE FLOW (A → P FREE)



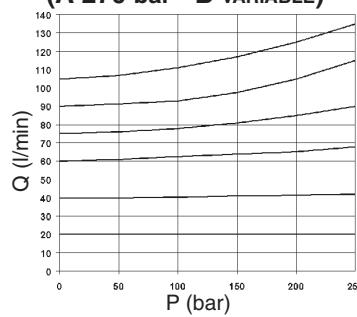
FLOW RATE BACK PRESSURE ON PRIORITY LINE



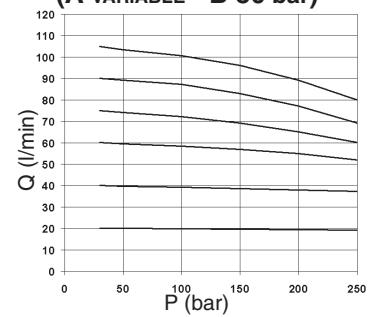
FLOW RATE BACK PRESSURE ON SECONDARY LINE



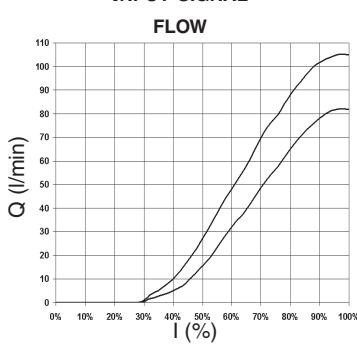
2 WAY PRESSURE COMPENSATED (A 270 bar - B VARIABLE)



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



INPUT SIGNAL FLOW



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.

XQP.5. 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 ² /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	12V
Max. current	2.5 A
Solenoid coil resistance at 20°C (68°F)	2.85 Ohm
2.85 Ohm	11.4 Ohm
Hysteresis with Δp 7 bar	<5%
Response to step $\Delta p = 7$ bar (P/A)	<8%
0 ÷ 100%	~ 65 ms
100% ÷ 0	~ 30 ms
Frequency response -3db (Input signal 50% ± 25% Vmax.)	7Hz

AMPLIFIER UNIT AND CONTROL

REM.S.RA.***

Electronic regulator for control single proportional solenoid valve

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

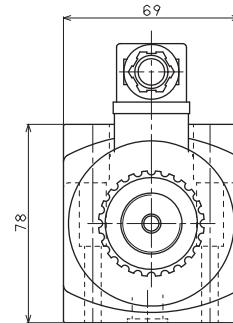
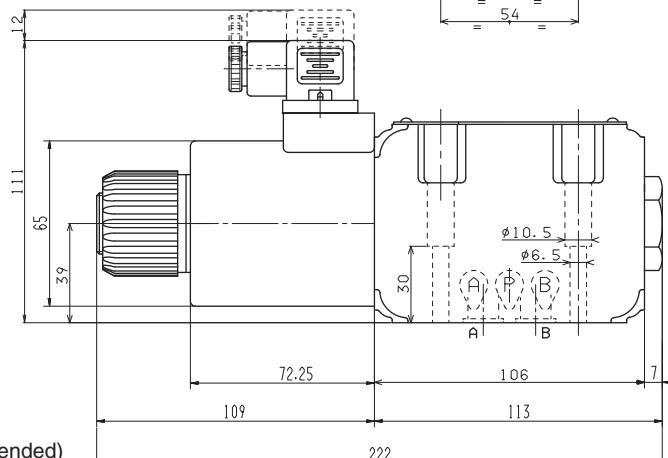
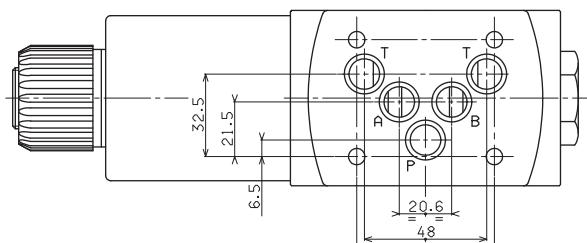
Operating specifications are valid for fluids with 46 mm²/s viscosity at 40°C, using specified ARON electronic control units.

Performance data are carried out using the specified Aron power amplifier type REM.S.RA... power supplied at 24V.

OVERALL DIMENSIONS

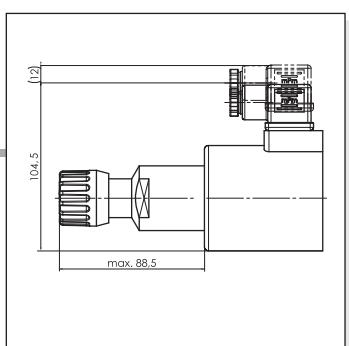
E = Manual override

GSQ = Square section seal



(GSQ Q2598101
OR 2-014/90)

Support plane



"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

ETD19P - 01/2002/e