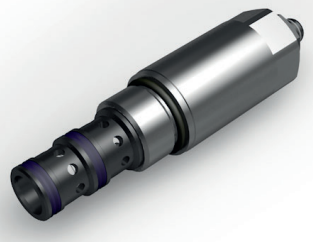
3-WAY PRESSURE COMPENSATOR FLOW REGULATOR
QV3-78
50 l/min 35 MPa (350 bar)

1 DESCRIPTION

Cartridge valve designed to keep constant flow rate, regardless of system pressure, from 1 to 3 while excess fluid is discharged through port 2 back to the tank. This valve is designed for speed control of actuators in all applications where a minimum fluctuation of velocity is acceptable during actuator transitories. Regulated flow increased with clockwise rotation of the adjusting screw. When port 2 is blocked the valve acts as a priority flow regulator or a 2-way flow regulator. When flow goes from 3 -> 1 the valve acts as a flow restrictor (pressure compensator spool inactive).



2 ORDERING CODE

(1)		(2)		(3)		(4)
QV3	-	78	/		-	

(1) QV3 : 3-way pressure compensated flow regulator

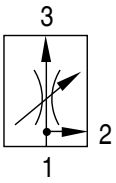
(2) 78: 7/8”-14 UNF (SAE10) cavity

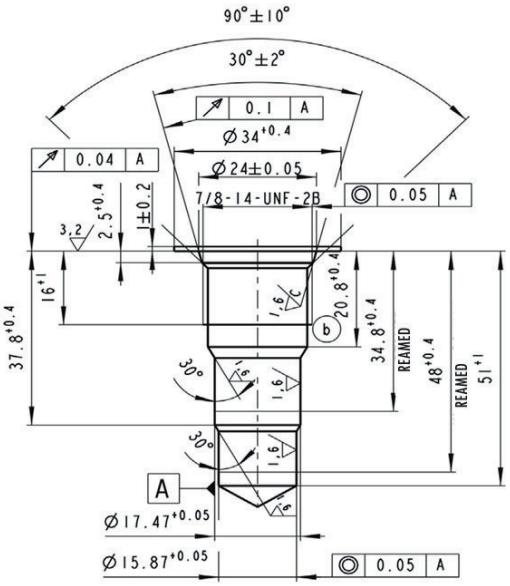
(3) Regulated flow range
- 10: 5-10 l/min
- 14: 6-14 l/min
- 22: 11-22 l/min
- 30 : 17-30 l/min

(4) Options and varians:
- V: viton seals

3 TECHNICAL DATA

Max. flow rate	50 l/min
Max. operating pressure	350 bar
Fluid temperature range (NBR)	-20...+50 °C
Ambient temperature range	-30...+80 °C
Weight	0,24 kg



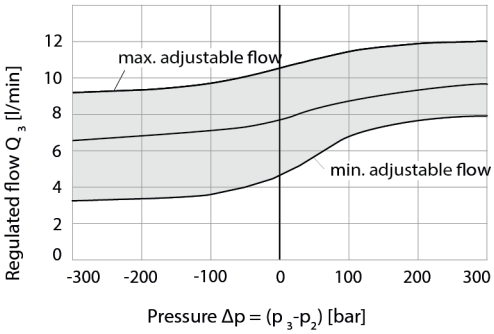


4 TYPICAL DIAGRAMS

Typical regulated flow related to input pressure, measured with mineral oil @ 40 cSt and with Q=50 l/min

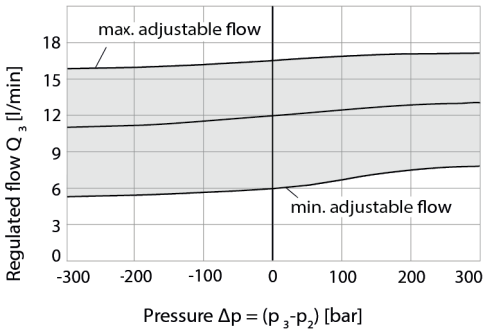
Flow rate 10

By-pass pressure higher than regulated pressure $p_2 > p_3$ | Regulated pressure higher than by-pass pressure $p_3 > p_2$



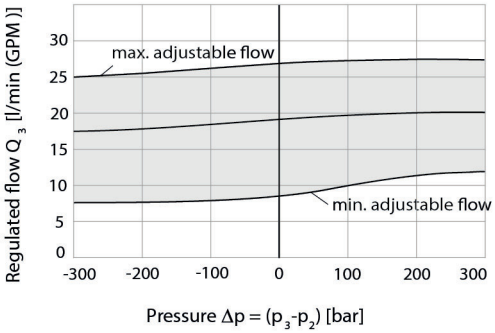
Flow rate 14

By-pass pressure higher than regulated pressure $p_2 > p_3$ | Regulated pressure higher than by-pass pressure $p_3 > p_2$



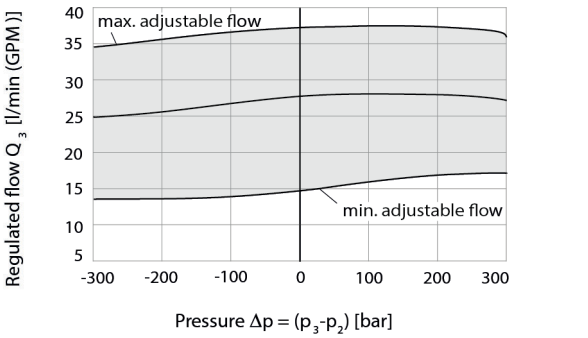
Flow rate 22

By-pass pressure higher than regulated pressure $p_2 > p_3$ | Regulated pressure higher than by-pass pressure $p_3 > p_2$



Flow rate 30

By-pass pressure higher than regulated pressure $p_2 > p_3$ | Regulated pressure higher than by-pass pressure $p_3 > p_2$



5 INSTALLATION DIMENSIONS