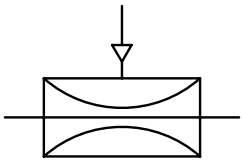
FLOW CONTROL VALVE / PINCH VALVE / 2-PORT / 2-WAY VALVE Q

Prop.-V. 11

Description	The flow control valve functions as a pinch valve in a new design of housing with full flow cross-section. Since the straight valve passage has neither constrictions nor back-points, there is no danger of clogging or blockage. Frictional loss is at a minimum.
Media	Compressed air, non-corrosive gases, liquids or other paste-like or powdery media. Solids are enclosed by the flexible sleeve at shut-off.
Sleeve	Highly flexible with double-woven reinforcement in eight different grades. Sleeve simple to change.
Pressures	Operating pressure: max. 4.0 bar Pilot pressure: max. 6.5 Differential pressure: max. 2.5 bar Closing pressure: P_1 + 2.5 bar to DN32, P_1 + 2 bar from DN40 on
Vacuum	If vacuum is greater than -100 mbar, vacuum compensation should be provided on the control side.
Accuracy	In the flow range of 0 to 70% the accuracy of the linearity of pilot pressure to flow is approx. 10%.
Mounting position	any
Temperature range	0 °C to max. 100 °C / 32 °F to max. 212 °F, subject to sleeve material
Material	Body: POM at model QP or aluminium die-cast at model QS Sleeve: depending on selected version



DN10 up to DN150

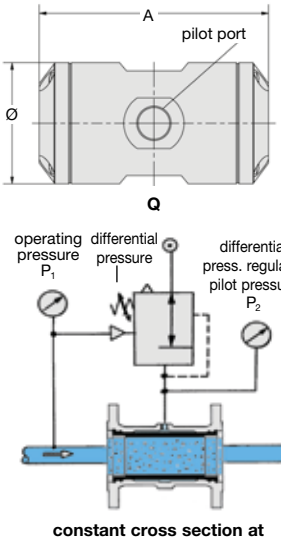
Dimensions A mm	Ø mm	Nominal size DN	Volume of control chamber l	Pilot port G	Operating pressure max. bar	Connection thread G / flange	Order number
Flow control valve				operating pressure max. 4 bar, pilot pressure max. 2.5 bar above operating pressure			**Q**
80	44	10	0.03	G¼	4	G⅜	**QP10 -03NR**
95	50	15	0.04	G¼	4	G½	**QP15 -04NR**
110	58	20	0.05	G¼	4	G¾	**QP20 -06NR**
125	65	25	0.07	G¼	4	G1	**QP25 -08NR**
140	83	32	0.10	G¼	4	G1¼	**QP32 -10NR**
150	95	40	0.13	G¼	4	G1½	**QP40 -12NR**
200	100	50	0.23	G¼	4	G2	**QS50 -16NR**
240	134	65	0.49	G¼	4	G2½	**QS65 -20NR**
290	154	80	0.95	G¼	4	G3	**QS80 -24NR**
280	220	100	1.80	G⅜	4	flange	**QS100-FLNR**
350	250	125	3.30	G⅜	4	flange	**QS125-FLNR**
420	285	150	6.40	G⅜	4	flange	**QS150-FLNR**

Special options, add the appropriate letter

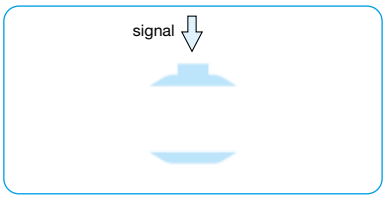
flange connection	according to DIN 2532, PN10	from G1¼ on	Q . . . **-FL** . .
sleeve NR	natural rubber, black	80 °C / 176 °F	Q . . . - . . **NR**
sleeve NRL	rubber, suitable for food, black	70 °C / 158 °F	Q . . . - . . **NL**
sleeve NRLH	rubber, suitable for food, light	70 °C / 158 °F	Q . . . - . . **NH**
sleeve NBR	nitrile rubber / Buna-N, suitable for food	80 °C / 176 °F	Q . . . - . . **NB**
sleeve EPDM	ethylene-prophylene rubber, suitable for food, black	100 °C / 212 °F	Q . . . - . . **EP**
sleeve FKM	fluorine rubber, black	100 °C / 212 °F	Q . . . - . . **FK**
sleeve CR	chloroprene rubber / neoprene, black	80 °C / 176 °F	Q . . . - . . **CR**
sleeve CSM	natural rubber, chlorosulphonylpolyethylene	80 °C / 176 °F	Q . . . - . . **CS**

closing sequence

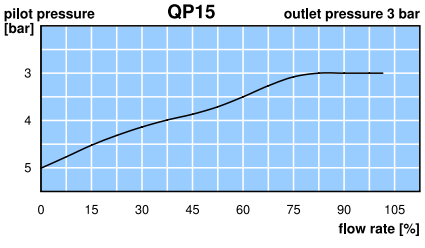
solenoid valve control



constant cross section at changing pressure



cross section



QP made of POM, DN10 - DN25

QP made of POM, DN32 - DN40

QS50 made of aluminium with POM thread

QS100 made of aluminium die-cast

Stainless steel pinch valves: see chapter for stainless steel devices

PDF CAD
www.aircom.net

Order example: QP10-03NR