

BENCOR (Pty) Ltd.

Metering valves



Flow control valves type SE and SEH with electro-proportional actuation

The SE and SEH type flow control valves are intended for smooth velocity control of hydraulic actuators independent of pressure. They may be utilized as 2-way or 3-way flow control valves and are available with an adjustable metering orifice. The adjustment of this orifice is either directly electro-proportional (type SE) or electro-proportional piloted (type SEH). The orifice can be open or blocked in the idle position. This feature enables pre-defined acceleration and braking sequences within automatic working cycles.



A piloted pressure limiting valve, a solenoid actuated idle circulation valve (for 3-way controllers only), and a by-pass check valve are available. In addition, a bridge circuit utilizing check valves to enable arbitrary flow direction (for 2-way controllers only) is available as an option.

Nomenclature: 2-way flow control valve
3-way flow control valve

Design: Individual valve for pipe mounting or manifold mounting

Adjustability: Electro-proportional

p_{max}: 315 bar

Q_{max}: 0,1 ... 120 l/min

Basic types and general parameters

Basic type and size	Flow		Oper. pressure p _{max} (bar)	Tapped ports ³⁾	Symbol	
	2-way	3-way			Q _{max} (l/min) ¹⁾	2-way
directly actuated	SE 2-3	SE 3-3	0,3 ... 50	300	G 1/2	pipe mounting
hydraulically piloted	SE 2-4	---	0,6 ... 70	300	G 3/4	manifold mounting
	---	SE 3-4	0,6 ... 90	300	G 3/4	
hydraulically piloted	SEH 2-2	SEH 3-2	0,1 ... 30	315	G 3/8	manifold mounting
	SEH 2-3 ⁴⁾	SEH 3-3	0,3 ... 50	300	G 1/2	
	---	SEH 3-4	0,6 ... 90	300	G 3/4	
	---	SEH 3-5	1,0 ... 120	300	G 1	

¹⁾ different Q_{max} available, see "Available orifices"

²⁾ no Z-port with type SEH 3-2

³⁾ for pipe mounting versions only

⁴⁾ for manifold mounting versions only

Available orifices

Q _{max} (l/min)	3	6	10	15	22	30	36	50	70	90	120	open orifice, when deenergized
	3 F	6 F	10 F	15 F	22 F	30 F	36 F	50 F	70 F	90 F	120 F	blocked orifice, when deenergized

Solenoid voltage

- 12V DC, 24V DC
- Other voltage on request

- Control via proportional amplifier (see also "Further information")