



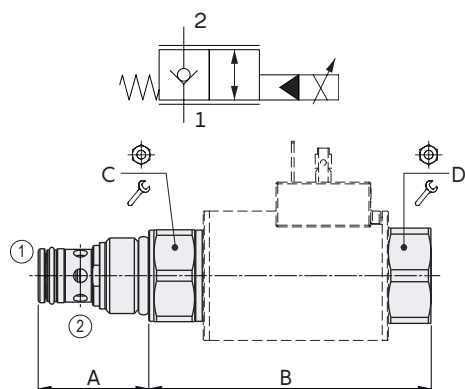
EC..T type needle valves - 2 way

- Poppet type
- Driven by proportional solenoid
- Excellent low flow metering capability
- To be combined with an external compensator
- From SAE08 to SAE16 cavities

Technical specifications and diagrams are measured with mineral oil of 46 cSt viscosity at 40°C (104°F) temperature.

		EC08T	EC10T	EC12T	EC16T
Nominal flow ⁽¹⁾	with 5 bar (72.5 psi) stand-by	35 l/min (9.2 US gpm)	44 l/min (11.6 US gpm)	55 l/min (15.5 US gpm)	70 l/min (18.5 US gpm)
	with 10 bar (145 psi) stand-by	44 l/min (11.6 US gpm)	58 l/min (15.3 US gpm)	70 l/min (18.5 US gpm)	97 l/min (25.6 US gpm)
Max. pressure		350 bar (5100 psi)			
Oil leakage	at 350 bar (5100 psi)	0.25 cm ³ /min (0.015 in ³ /min)	0.25 cm ³ /min (0.015 in ³ /min)	0.25 cm ³ /min (0.015 in ³ /min)	0.35 cm ³ /min (0.021 in ³ /min)
Fluid		mineral based or synthetic hydraulic fluid with lubricating properties			
Viscosity		12-200 cSt			
Max level of contamination		18/16/13 ISO4406			
Fluid temperature		with NBR seals+Polyurethane with FPM seals			
Environmental temp. for working conditions		from -25°C (-13°F) to 90°C (194°F) from -20°C (-4°F) to 110°C (230°F)			
Cavity		SAE 08/2	SAE 10/2	SAE 12/2	SAE 16/2
Coil type ⁽²⁾		BH			
Nominal voltages		12VDC - 24VDC ± 10%			
Power rating		33 W (BH)			
Max. control current		12V -> 1.70A - 24V -> 0.85A (BH)			
Dither frequency		from 100 Hz to 120 Hz			
Weight		0.275 kg (0.61 lb)	0.310 kg (0.68 lb)	0.390 kg (0.86 lb)	0.490 kg (1.08 lb)

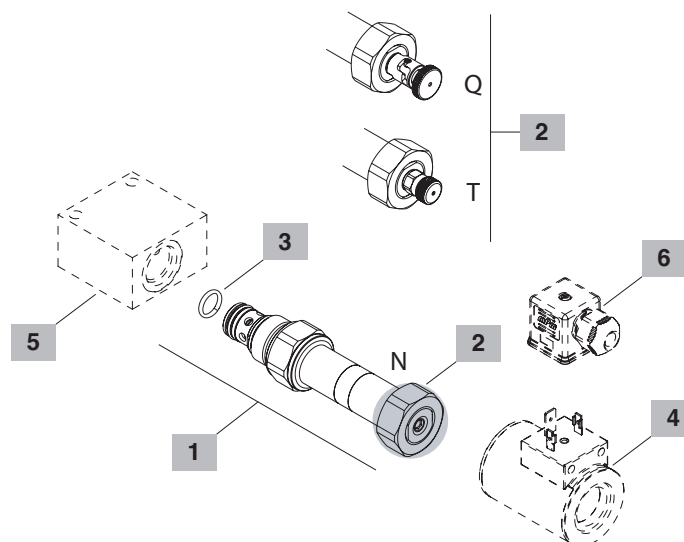
NOTE - For different conditions, please contact Walvoil Sales Dpt. - ⁽¹⁾ Values are checked with cartridge in parallel with compensator - ⁽²⁾ For coils further features see from page 201.



Valve type	A		B		C		D	
	mm	in	mm	in	mm	in	mm	in
EC08T	28.1	1.11	83	3.27	97.5	3.84	105.6	4.16
EC10T	32.5	1.28	83	3.27	97.5	3.84	105.6	4.16
EC12T	45	1.77	82.5	3.25	97	3.82	105.1	4.14
EC16T	45.6	1.80	81	3.19	95.5	3.76	103.6	4.08

Ordering codes and description composition

EC10T/AONB



1 Cartridges

TYPE	CODE	DESCRIPTION
SAE cavity 08/2		
EC08T/AONB	OEC08002056	Without emergency
EC08T/AOTB	OEC08002058	Screw type emergency
EC08T/AOQB	OEC08002073	"Push&twist" emergency
SAE cavity 10/2		
EC10T/AONB	OEC10002025	Without emergency
EC10T/AOTB	OEC10002027	Screw type emergency
EC10T/AOQB	OEC10002029	"Push&twist" emergency
SAE cavity 12/2		
EC12T/AONB	OEC12002018	Without emergency
EC12T/AOTB	OEC12002019	Screw type emergency
EC12T/AOQB	OEC12002020	"Push&twist" emergency
SAE cavity 16/2		
EC16T/AONB	OEC16002033	Without emergency
EC16T/AOTB	OEC16002035	Screw type emergency
EC16T/AOQB	OEC16002038	"Push&twist" emergency

2 Emergency

TYPE	DESCRIPTION
N	Without emergency
T	Screw type emergency
Q	"Push&twist" emergency

3 Seals

TYPE	DESCRIPTION
B	NBR (Buna)+Polyurethane o-ring seals, std configuration
V	FPM (Viton) o-ring seals, contact Sales Dept

4 Coils

TYPE	CODE	DESCRIPTION
BH12VDC	4SLD001200A	12VDC-ISO4400 coil

For complete coils list see from page 201

5 Valve body

TYPE	CODE	DESCRIPTION
SAE08/2-G 3/8	3CC0820C11	Aluminium body for cavity 08 valve, G 3/8 std thread
SAE10/2-G 3/8	3CC1020C11	Aluminium body for cavity 10 valve, G 3/8 std thread
SAE12/2-G 1/2	3CC1220D11	Aluminium body for cavity 12 valve, G 1/2 std thread
SAE16/2-G 3/4	3CC1620E11	Aluminium body for cavity 16 valve, G 3/4 std thread

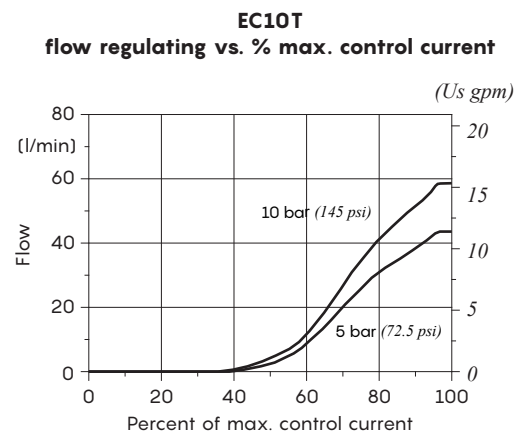
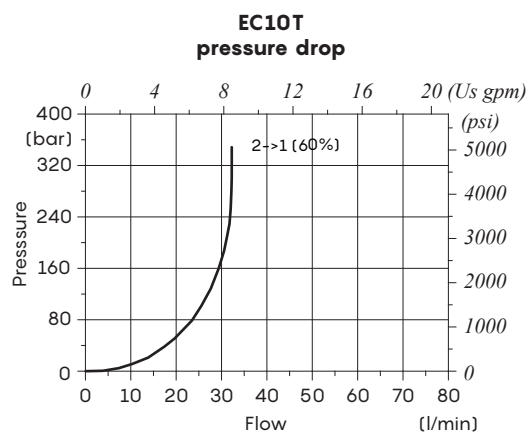
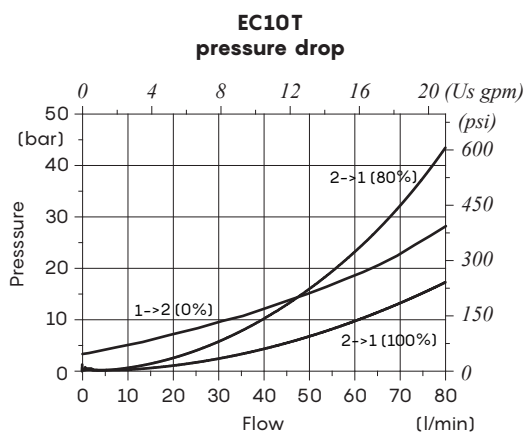
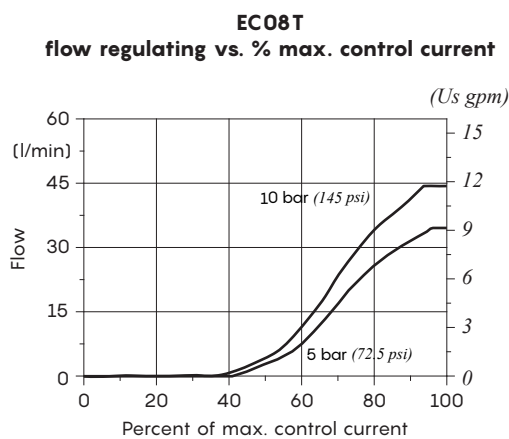
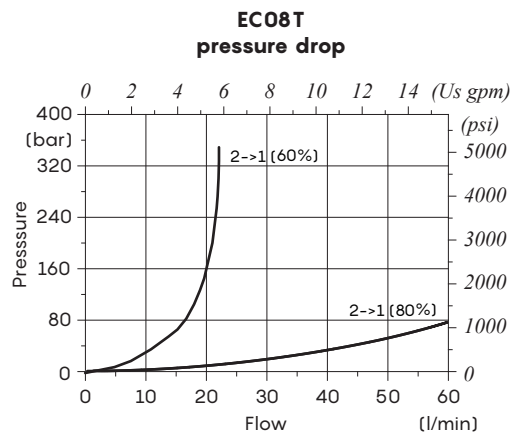
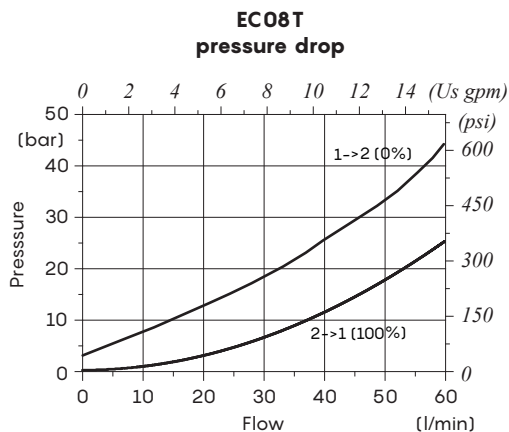
Note: aluminium body can stand up to 210 bar (3050 psi)
For steel bodies or different threading see from page 208

6 Connector

TYPE	CODE	DESCRIPTION
ISO4400	4CN1009995B	Connector

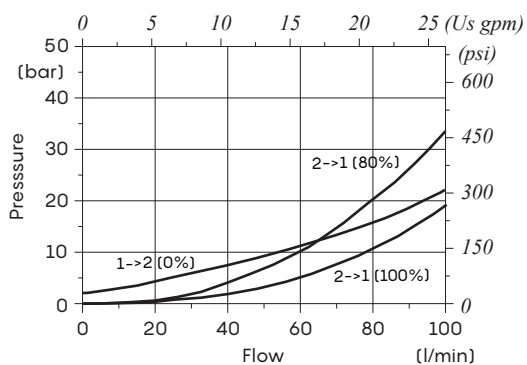
For complete connectors list see from page 201

Rating diagrams

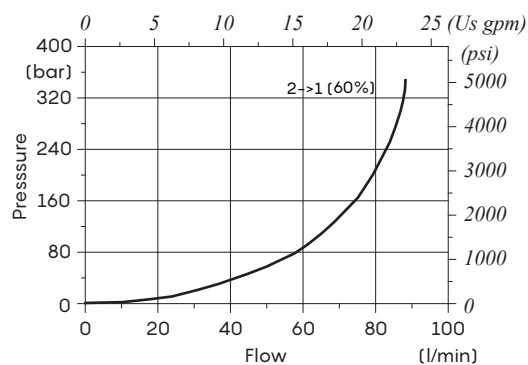


Rating diagrams

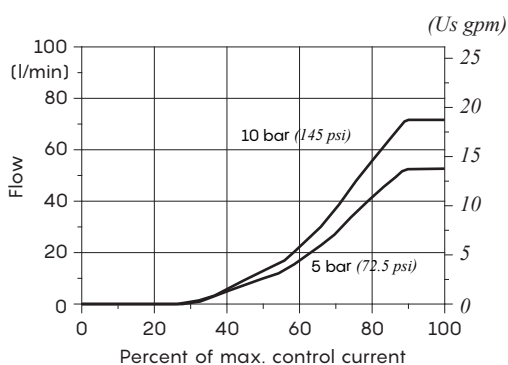
**EC12T
pressure drop**



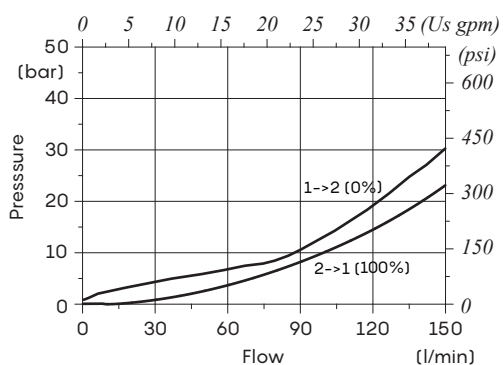
**EC12T
pressure drop**



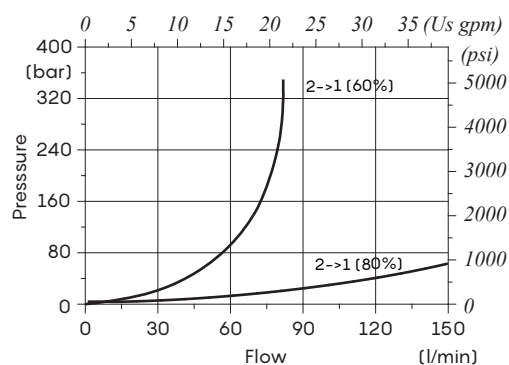
**EC12T
flow regulating vs. % max. control current**



**EC16T
pressure drop**



**EC16T
pressure drop**



**EC16T
flow regulating vs. % max. control current**

