



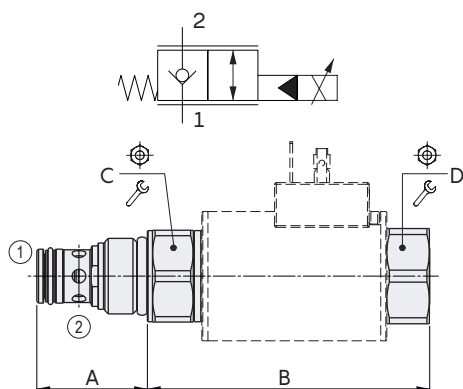
EC..T type needle valves - 2 way

- 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 cm³/min (0.015 in³/min)	0.25 cm³/min (0.015 in³/min)	0.25 cm³/min (0.015 in³/min)	0.35 cm³/min (0.021 in³/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	from -25°C (-13°F) to 90°C (194°F) from -20°C (-4°F) to 110°C (230°F)			
Environmental temp. for working conditions		from -20°C (-4°F) to 60°C (140°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)

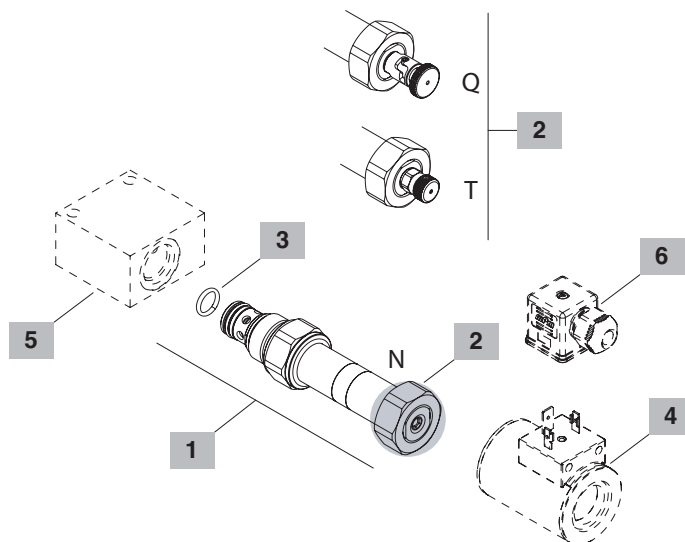
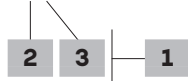
NOTE - For different conditions, please contact Walvoil Sales Dpt. - ⁽¹⁾ Values are checked with cartridge in parallel with compensator
- ⁽²⁾ For coils further features see from page 201.



Valve type	A		B						C			D		
	N / O without emergency		T screw		Q pull type with detent									
	mm	in	mm	in	mm	in	mm	in	Nm	lbft	Nm	lbft		
EC08T	28.1	1.11	83	3.27	97.5	3.84	105.6	4.16	27	50	37	28	5	3.7
EC10T	32.5	1.28	83	3.27	97.5	3.84	105.6	4.16	27	50	37	28	5	3.7
EC12T	45	1.77	82.5	3.25	97	3.82	105.1	4.14	32	85	63	28	5	3.7
EC16T	45.6	1.80	81	3.19	95.5	3.76	103.6	4.08	32	85	63	28	5	3.7

Ordering codes and description composition

EC10T/A0NB

**1 Cartridges**

TYPE	CODE	DESCRIPTION
SAE cavity 08/2		
EC08T/A0NB	OEC08002056	Without emergency
EC08T/A0TB	OEC08002058	Screw type emergency
EC08T/A0QB	OEC08002073	"Push&twist" emergency
SAE cavity 10/2		
EC10T/A0NB	OEC10002025	Without emergency
EC10T/A0TB	OEC10002027	Screw type emergency
EC10T/A0QB	OEC10002029	"Push&twist" emergency
SAE cavity 12/2		
EC12T/A0NB	OEC12002018	Without emergency
EC12T/A0TB	OEC12002019	Screw type emergency
EC12T/A0QB	OEC12002020	"Push&twist" emergency
SAE cavity 16/2		
EC16T/A0NB	OEC16002033	Without emergency
EC16T/A0TB	OEC16002035	Screw type emergency
EC16T/A0QB	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-SAE8	3CC0820K11	Aluminium body for cavity 08 valve, SAE8 std thread
SAE10/2-SAE8	3CC1020K11	Aluminium body for cavity 10 valve, SAE8 std thread
SAE12/2-SAE10	3CC1220L11	Aluminium body for cavity 12 valve, SAE10 std thread
SAE16/2-SAE12	3CC1620M11	Aluminium body for cavity 16 valve, SAE12 std thread

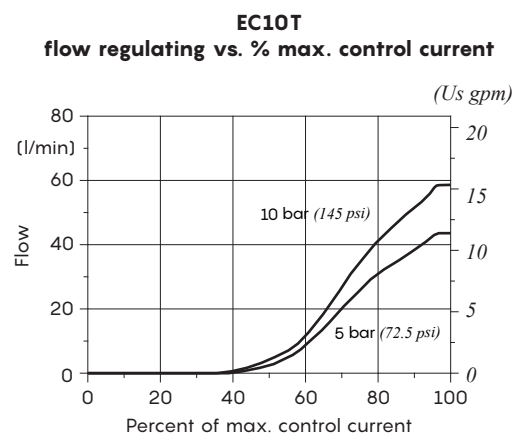
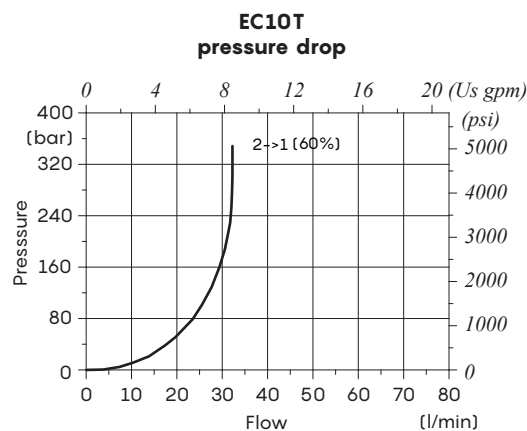
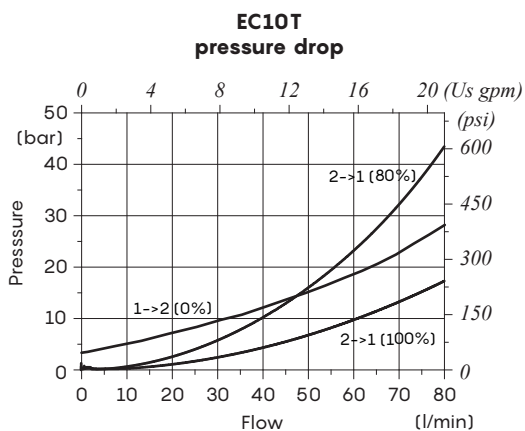
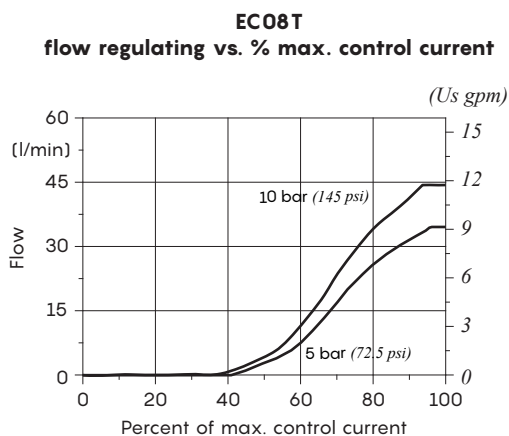
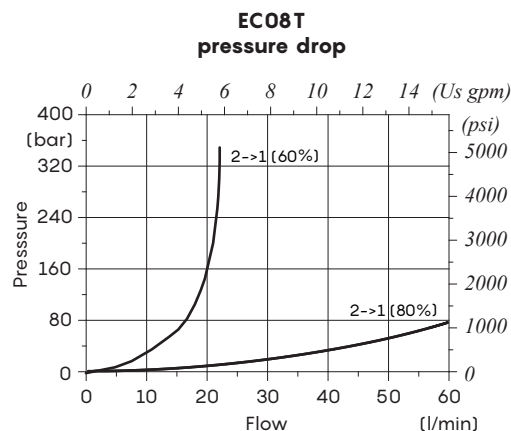
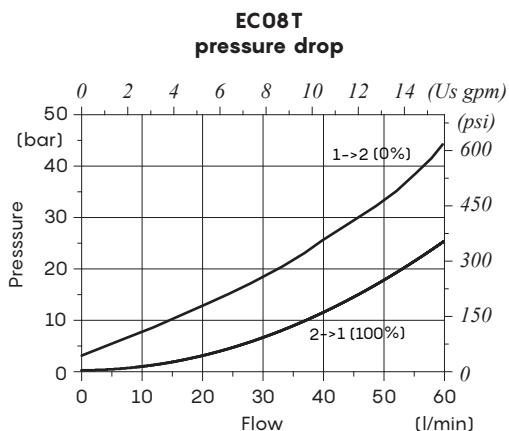
Note: aluminium body can stand up to 210 bar (3050 psi)
For steel bodies or different threading see from page 208

6 Connector

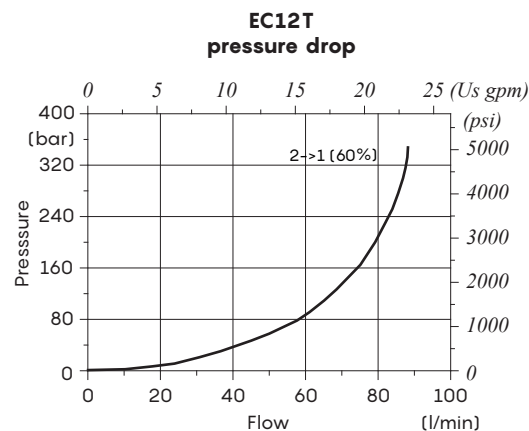
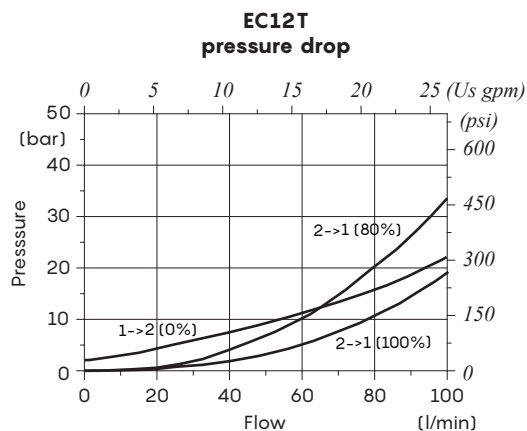
TYPE	CODE	DESCRIPTION
ISO4400	4CN1009995B	Connector

For complete connectors list see from page 201

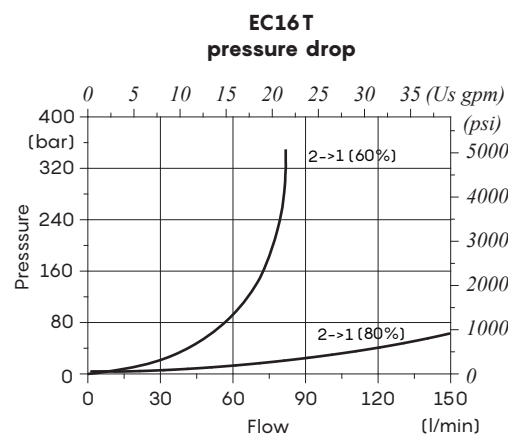
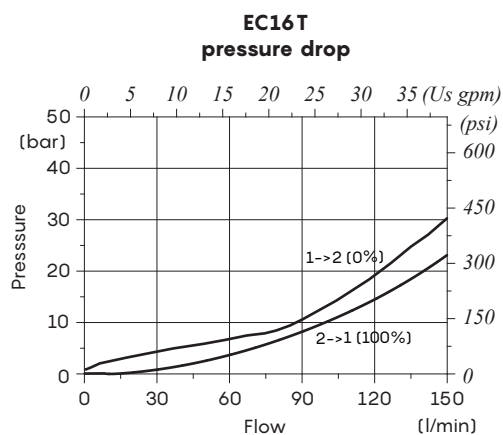
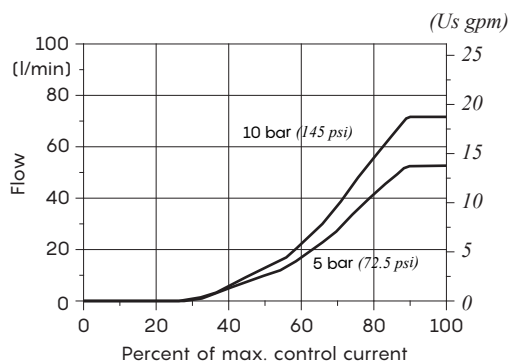
Rating diagrams



Rating diagrams



EC12T flow regulating vs. % max. control current



EC16T flow regulating vs. % max. control current

