



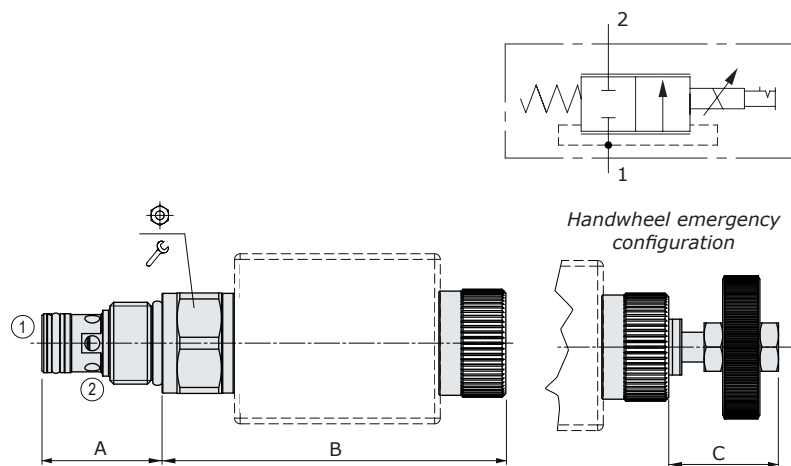
## EE..X type flow restrictor - 2 way

- Solenoid proportional type
- To be combined with an external compensator
- SAE10 and SAE12 cavities

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

	EE10X	EE12X	
Nominal flow <sup>(1)</sup>	with 10 bar (145 psi) stand-by	40 l/min (10.6 US gpm)	60 l/min (15.8 US gpm)
Max. pressure		315 bar (4600 psi)	315 bar (4600 psi)
Oil leakage	at 150 bar (2175 psi)	150 cm <sup>3</sup> /min (9.1 in <sup>3</sup> /min)	200 cm <sup>3</sup> /min (9.1 in <sup>3</sup> /min)
Fluid		mineral based oil	
Viscosity		12-200 cSt	
Max level of contamination		18/16/13 ISO4406	
Fluid temperature	with NBR seals with FPM seals	from -20°C (-4°F) to 80°C (176°F)	from -20°C (-4°F) to 100°C (212°F)
Environmental temp. for working conditions		from -20°C (-4°F) to 50°C (122°F)	
Cavity		SAE 10/2	SAE 12/2
Coil type <sup>(2)</sup>		BQP19 or BH	
Nominal voltages		12 VDC - 24 VDC ± 10%	
Power rating		22,8 W (12 VDC) 22,5 W (24 VDC)	
Max control current		12 V -> 1.25 A - 24 V -> 0.63 A (BQP19) 12 V -> 1.70 A - 24 V -> 0.85 A (BH)	
Dither frequency		150 Hz	
Weight		0.3 kg (0.66 lb) kg	

NOTE - For different conditions, please contact Walvoil Sales Dpt. - <sup>(1)</sup> Values are checked with cartridge in parallel with compensator - <sup>(2)</sup> For coils further features see from page 206.

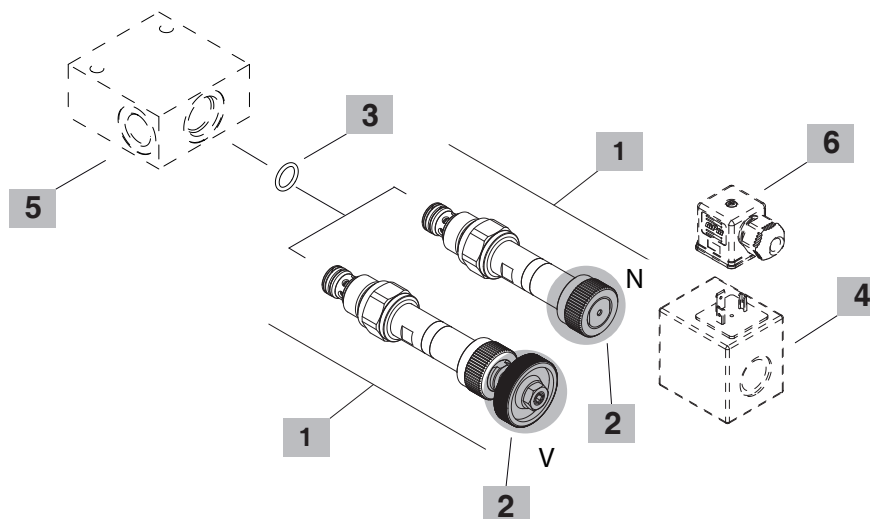
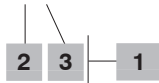


Valve type	A		B		C		⊕	⊖	
	mm	in	mm	in	mm	in			
EE10X	32.3	1.27	92.4	3.64	29.5	1.16	27	50	37
EE12X	45	1.77	94.9	3.74	29.5	1.16	32	80	59

For dimensions with different type of emergency see page 213

Ordering codes and description composition

EE10X/22NB



**1 Cartridges**

TYPE	CODE	DESCRIPTION
<b>SAE cavity 10/2</b>		
EE10X/22NB	0EE10002009	Without emergency
EE10X/22VB	0EE10002008	Handwheel emergency
<b>SAE cavity 12/2</b>		
EE12X/20NB	0EE12002007	Without emergency
EE12X/20VB	0EE12002009	Handwheel emergency

**2 Emergency**

TYPE	DESCRIPTION
N	Without emergency
V	Handknob emergency

**3 Seals**

TYPE	DESCRIPTION
B	<b>NBR (Buna)</b> Std configuration without addition
V	For valve with <b>FPM (Viton)</b> o-ring seals, contact Sales Dept.

**4 Coils**

TYPE	CODE	DESCRIPTION
<b>BQP19 12VDC</b>	4SL5000126	Coil 12VDC-ISO4400

For complete coils list see from page 206  
It is possible also combine coils BH

**5 Valve body**

TYPE	CODE	DESCRIPTION
<b>SAE 10/2-SAE8</b>	3CC1020K11	Aluminium body for cavity 10 valve, SAE8 std thread
<b>SAE 12/2-SAE10</b>	3CC1220L11	Aluminium body for cavity 12 valve, SAE10 std thread

Note: aluminium body can stand up to 210 bar (3050 psi)  
For steel bodies or different threading see from page 215

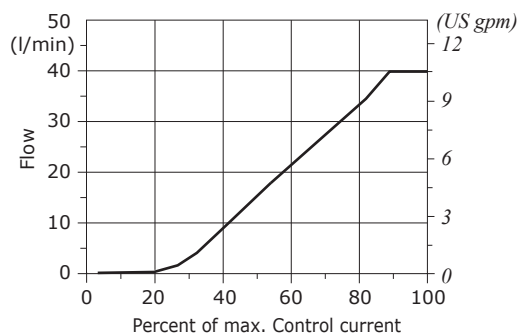
**6 Connector**

TYPE	CODE	DESCRIPTION
<b>ISO4400</b>	4CN1009995	Connector

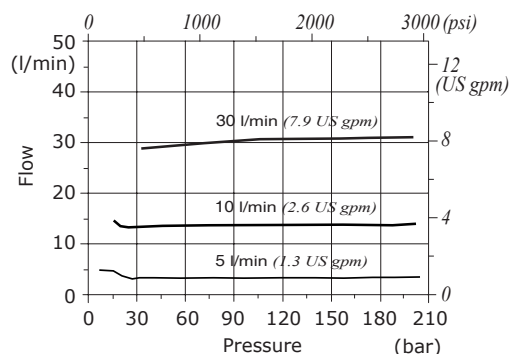
For complete connectors list see from page 206

**Curve caratteristiche**

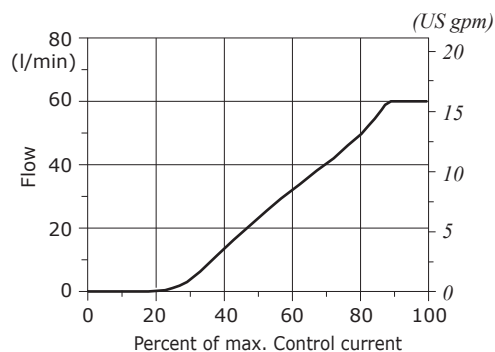
**EE10X**  
flow regulating vs. % max. control current



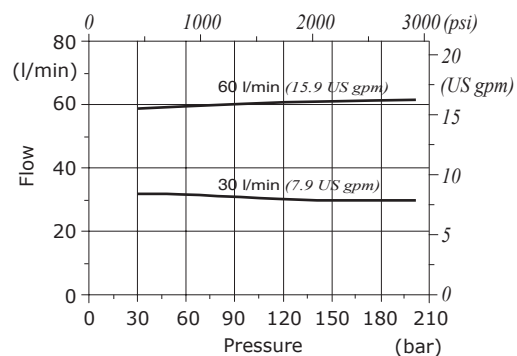
**EE10X**  
\*pressure compensation diagram 1→2



**EE12X**  
flow regulating vs. % max. control current



**EE12X**  
\*\*pressure compensation diagram 1→2



\*Compensation diagram were detected with the cartridge combined with a VPR/3/ET 38-12 compensator with 10 bar (145 psi) stand by  
 \*\*Compensation diagram were detected with the cartridge combined with a VPR/3/ET 38-12 compensator with 7 bar (102 psi) stand by