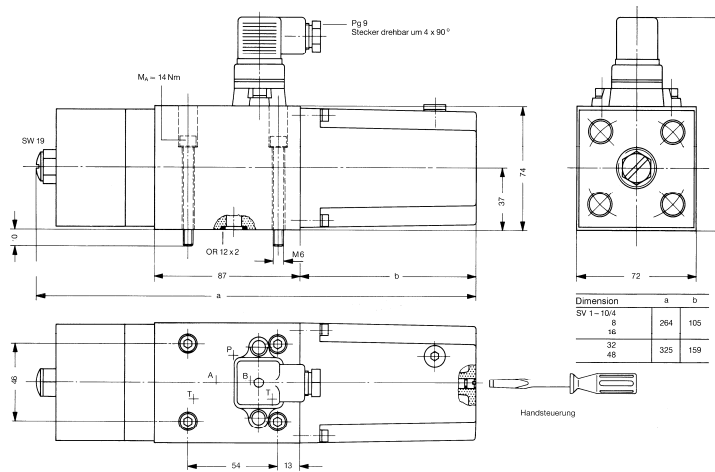
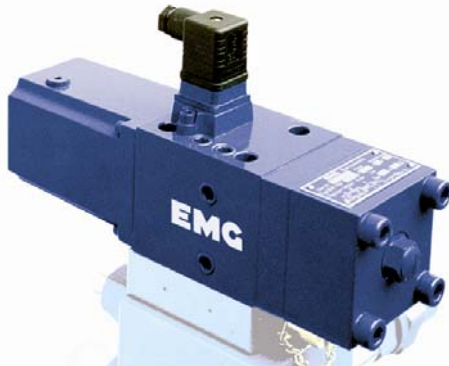


View



Application/Functional Description

Function: 4/3 way proportional valve, two-stage

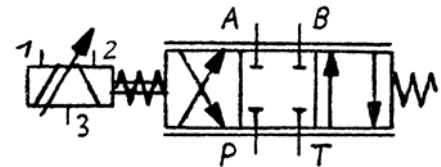
Drive: Electro-magnetic rotating drive with return springs (patented)

Hydraulic connection: ISO 4401 NG10 /Cetop 5

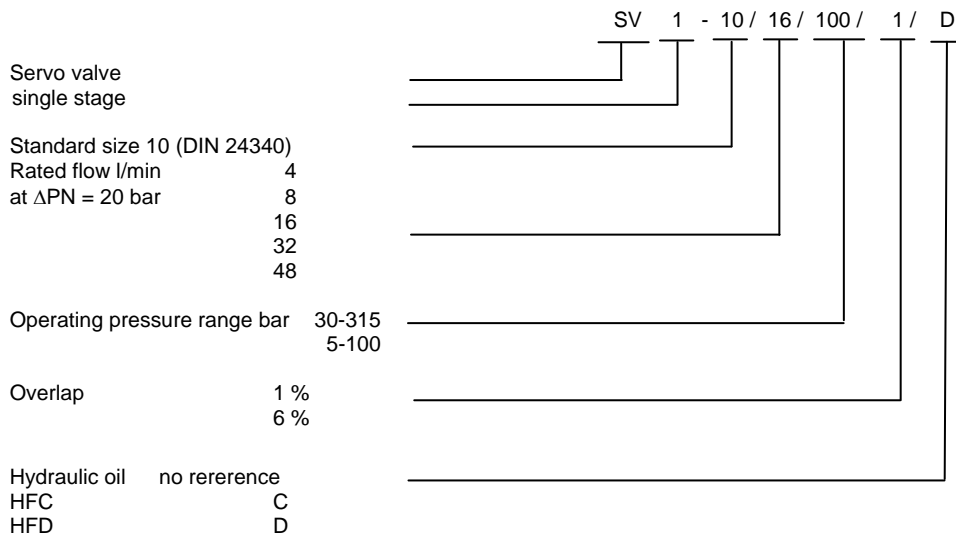
Dimensions/Weight: HxWxL 127x72x264(325) mm
6.5 kg oder 7.5 kg (according to the design)

Application: The servovalve SV2-10 controls proportional to an electrical input value (+/-300 mA or +/-10 V) an output value (oil flow) at a constant pressure drop via the internal control edges.

Hydraulic symbol:



Type code



Hydraulic details	SV 1-10/...	4	8	16	32	48	
Operating pressure range p_s	30 ... 315 5 ... 100	bar bar					
max. permissible reverse pressure p_T	30	bar					
Rated flow Q_N	at $\Delta p_N = 20$ bar at $\Delta p_N = 70$ bar	l/min l/min	4 7	8 13	16 24	32 46 48 70	
external leakage	0						
Operating temperature range	-20 ... +80	°C					
Typical internal leakage flow Q_{O2} at $p_s = 100$ bar; $I = 0$ mA; $t = 50$ °C; $Q_A = 0$ l/min; $Q_B = 0$ l/min							
SV 1-10 / .. / 315 / 6	SV 1-10 / .. / 210 / 6 / Ex	l/min	0.15	0.25	0.4	0.7	1
.. / 315 / 1	/ 210 / 1 / Ex	l/min	0.25	0.4	0.7	1	1.5
.. / 100 / 6	/ 100 / 6 / Ex	l/min	0.25	0.4	0.7	1	1.5
.. / 100 / 1	/ 100 / 1 / Ex	l/min	0.4	0.6	1	1.5	2.2
.. / 50 / 6	/ 50 / 6 / Ex	l/min	0.4	0.7	1.2	1.8	2.8
.. / 50 / 1	/ 50 / 1 / Ex	l/min	0.7	1.2	1.8	2.8	3.8
Hysteresis ¹⁾		%	<2	<2	<2.5	<2.5	<2.5
Reversal error		%	<0.1	<0.1	<0.2	<0.2	<0.2
Response sensitivity		%	<0.1	<0.1	<0.2	<0.2	<0.2
Flow non-linearity		%	<2	<3	<4	<5	<6
Flow asymmetry		%	<5	<5	<5	<5	<5
Typical relative pressure increase $\frac{\Delta p_L / p_s}{\Delta I / I_N}$							
SV 1-10 / .. / 315 / 6	SV 1-10 / .. / 210 / 6 / Ex	14					
.. / 315 / 1	/ 210 / 1 / Ex	25					
.. / 100 / 6	/ 100 / 6 / Ex	12					
.. / 100 / 1	/ 100 / 1 / Ex	20					
.. / 50 / 6	/ 50 / 6 / Ex	12					
.. / 50 / 1	/ 50 / 1 / Ex	20					
Overlap SV 1-10 / .. / ... / 1	0.5 ... 2.5	%					
/6	4 ... 8	%					
Zero point temperature drift	no measurable, theoretically zero						
Recommended pressure medium ²⁾	Hydraulic oil H - L 46						
Recommended filtering	Pressure filter without by-pass, with contamination $\beta_{10} \geq 75$ for all operational conditions						
¹⁾ mainly magnetic			²⁾ other pressure medium on request HFC, HFD				

Elektrical details	SV 1-10/...	4	8	16	32	48	
Connection 1 - 2:							
Rated current	mA	±300	±300	±300	±300	±1000	
Rated dither signal	50 Hz 150 HZ	mA mA	10 20	10 20	20 40	20 40	40 80
Resistance		Ω	40	40	40	44	11
Inductance		H	0.16	0.16	0.16	0.2	0.05
Connection 1 - 3:							
Rated current	mA	±600	±600	±600	±600	-	
Rated dither signal	50 Hz 150 HZ	mA mA	20 40	20 40	40 80	40 80	- -
Resistance		Ω	20	20	20	22	-
Inductance		H	0.08	0.08	0.08	0.1	
Plug and socket	3 pole socket A with protection contact, DIN 43650. For valves to be used in explosive atmosphere with Ex-certified four-pole PE-connector.						
Enclosure	IP 65 (when plug and socket are assembled)						
Elektrical connections	