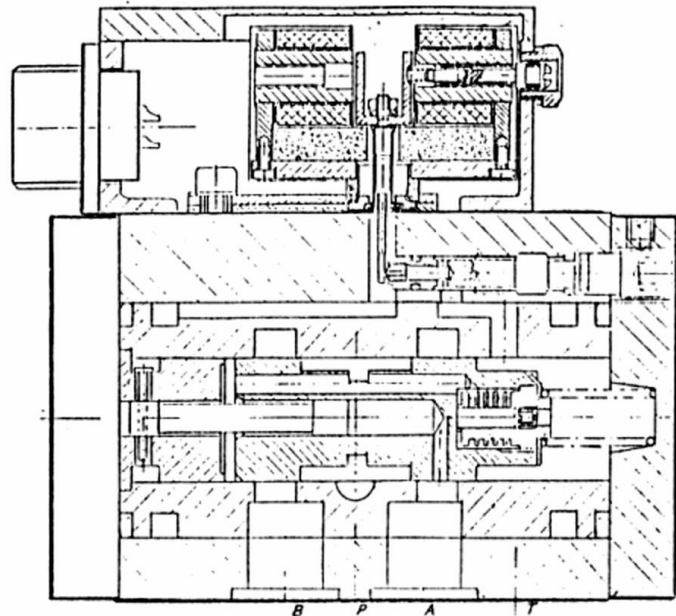
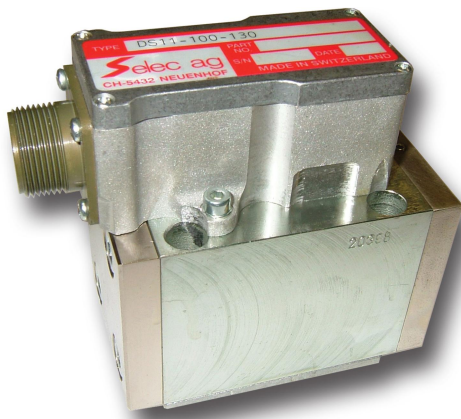


Valve features

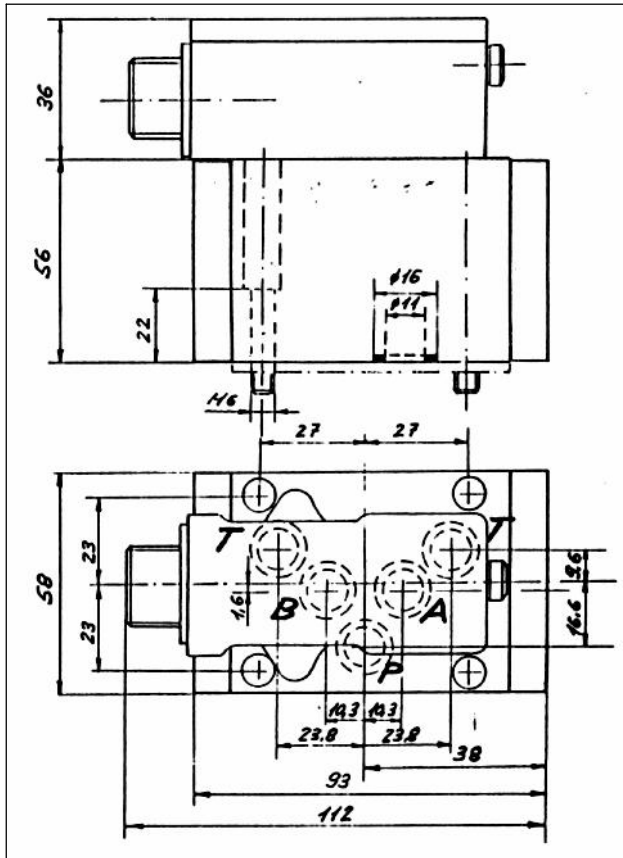
- Servovalve for position-, force- or pressure regulation
- Two stage servovalve with mechanical feedback
- First stage nozzle / flapper
- Dry isolated torque motor
- Fully iron
- Rugged, long-life design
- Port pattern NG 10 / Cetop 05 for 4-ports
- High resolution
- High pressure application
- Easy field maintenance



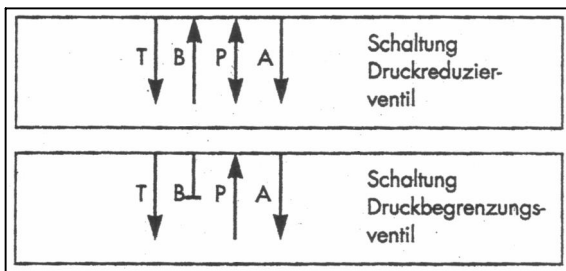
Technical data DS11

Port pattern	Cetop 05 / NG 10
Rated Flow $\pm 10\%$ at 1000 psi ΔP Drop – cis at 70 bar ΔP drop – L/min	79.16 200
Frequency response at 90° Phase Shift , 210bar, at 40% amplitude – Hz	80
Step response in milli seconds	12
Leakage at 1000 psi, 50 cSt, cis 70 bar, 50 cSt, L/min	122.03 2
Maximum pressure, port P, A, B psi / bar	4500 / 315 (5000 psi / 350 bar on request)
Maximum pressure, port T psi / bar	1450 / 100
Temperature range F° / C°	4 to 194 / -20 to +90
Fluid viscosity	20 to 380 cSt
Resolution	0,2%
Hysteresis	<0.3%
Null point shift for pressure change of 20%	1%
Null point shift for viscosity change of 30 cSt	1.5%
Electrical feedback	No / amplifier electronics available
Electrical connector	4 pin / MS3106R14S-2S
Amplifier electronics	External amplifier electronics available (AE-1)
Weight	2.4 kg

Dimensions



Hydraulic Schema



Electrical Data

Coil	Typ	40	80	100	130	200
Parallel connection	max. J [mA]	52	104	130	170	350
	max. U [V]	32	16	10	8	5
Serial connection	max. J [mA]	27	53	66	86	175
	max. U [V]	63	31	21	15	9
Resistance per coil at	70° [Ω]	1200	300	160	90	24

Coil 130mA standard. Coil 40 mA, 80 mA, 100 mA, 200 mA on request.

Application examples

Breaking system cable cars, traction application, press, pulp-paper and textile machinery, industrial automation, plastic molding, agriculture machinery, m.m.

Ordering information

Model Number	1...	2...	3...	4...	5...	6...	7...																
<table border="1"> <thead> <tr> <th colspan="2">1 Size/Type Mountin</th> </tr> </thead> <tbody> <tr><td>S 1-4</td><td></td></tr> <tr><td>S 25</td><td></td></tr> <tr><td>S 100</td><td></td></tr> <tr><td>S 120</td><td></td></tr> <tr><td>S 300</td><td></td></tr> <tr><td>DS 6</td><td></td></tr> <tr><td>DS 11</td><td></td></tr> </tbody> </table>	1 Size/Type Mountin		S 1-4		S 25		S 100		S 120		S 300		DS 6		DS 11								
1 Size/Type Mountin																							
S 1-4																							
S 25																							
S 100																							
S 120																							
S 300																							
DS 6																							
DS 11																							
<table border="1"> <thead> <tr> <th colspan="2">2 Pilot Drain Arrangement</th> </tr> </thead> <tbody> <tr> <td>N</td> <td>Internal drain/internal pilot (Std.) (for Size 03, 05 & 07)</td> </tr> <tr> <td>Y</td> <td>Internal pilot/external drain (Size 07 only)</td> </tr> <tr> <td>X</td> <td>External pilot/external drain (Size 07 only)</td> </tr> </tbody> </table>	2 Pilot Drain Arrangement		N	Internal drain/internal pilot (Std.) (for Size 03, 05 & 07)	Y	Internal pilot/external drain (Size 07 only)	X	External pilot/external drain (Size 07 only)															
2 Pilot Drain Arrangement																							
N	Internal drain/internal pilot (Std.) (for Size 03, 05 & 07)																						
Y	Internal pilot/external drain (Size 07 only)																						
X	External pilot/external drain (Size 07 only)																						
<table border="1"> <thead> <tr> <th colspan="2">3 Operating Pressure</th> </tr> </thead> <tbody> <tr><td>040</td><td>580 PSI (40 Bar)</td></tr> <tr><td>070</td><td>1000 PSI (70 Bar)</td></tr> <tr><td>140</td><td>2000 PSI (140 Bar)</td></tr> <tr><td>210</td><td>3000 PSI (210 Bar)</td></tr> <tr><td>315</td><td>5000 PSI (315 Bar)</td></tr> </tbody> </table>	3 Operating Pressure		040	580 PSI (40 Bar)	070	1000 PSI (70 Bar)	140	2000 PSI (140 Bar)	210	3000 PSI (210 Bar)	315	5000 PSI (315 Bar)											
3 Operating Pressure																							
040	580 PSI (40 Bar)																						
070	1000 PSI (70 Bar)																						
140	2000 PSI (140 Bar)																						
210	3000 PSI (210 Bar)																						
315	5000 PSI (315 Bar)																						
						<table border="1"> <thead> <tr> <th colspan="2">7 Splash water</th> </tr> </thead> <tbody> <tr><td>S</td><td>Splash water resistant (IP xxx)</td></tr> <tr><td>N</td><td>Not splash water resistant</td></tr> </tbody> </table>	7 Splash water		S	Splash water resistant (IP xxx)	N	Not splash water resistant											
7 Splash water																							
S	Splash water resistant (IP xxx)																						
N	Not splash water resistant																						
						<table border="1"> <thead> <tr> <th colspan="2">6 Customer made</th> </tr> </thead> <tbody> <tr><td>C</td><td>Customer made modif. edition</td></tr> <tr><td>N</td><td>Normal edition</td></tr> </tbody> </table>	6 Customer made		C	Customer made modif. edition	N	Normal edition											
6 Customer made																							
C	Customer made modif. edition																						
N	Normal edition																						
						<table border="1"> <thead> <tr> <th colspan="2">5 Torque Motor Coil</th> </tr> </thead> <tbody> <tr><td>040</td><td>40 ma</td></tr> <tr><td>080</td><td>80 ma</td></tr> <tr><td>100</td><td>100 ma</td></tr> <tr><td>130</td><td>130 ma (Standard)</td></tr> <tr><td>200</td><td>200 ma</td></tr> </tbody> </table>	5 Torque Motor Coil		040	40 ma	080	80 ma	100	100 ma	130	130 ma (Standard)	200	200 ma					
5 Torque Motor Coil																							
040	40 ma																						
080	80 ma																						
100	100 ma																						
130	130 ma (Standard)																						
200	200 ma																						
						<table border="1"> <thead> <tr> <th colspan="2">4 Seal Material</th> </tr> </thead> <tbody> <tr><td>V</td><td>Viton (Standard) fluorocarbon</td></tr> <tr><td>E</td><td>EDPM</td></tr> </tbody> </table>	4 Seal Material		V	Viton (Standard) fluorocarbon	E	EDPM											
4 Seal Material																							
V	Viton (Standard) fluorocarbon																						
E	EDPM																						