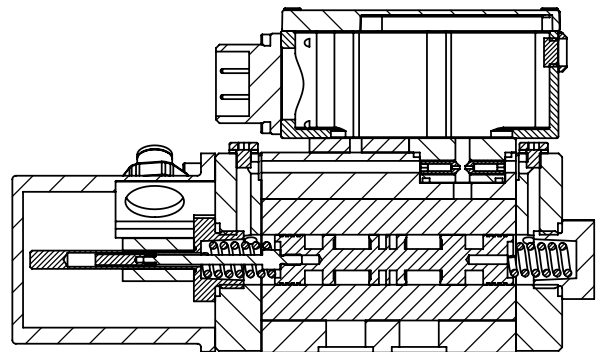
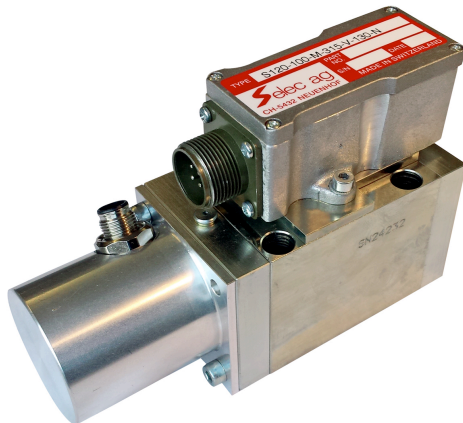


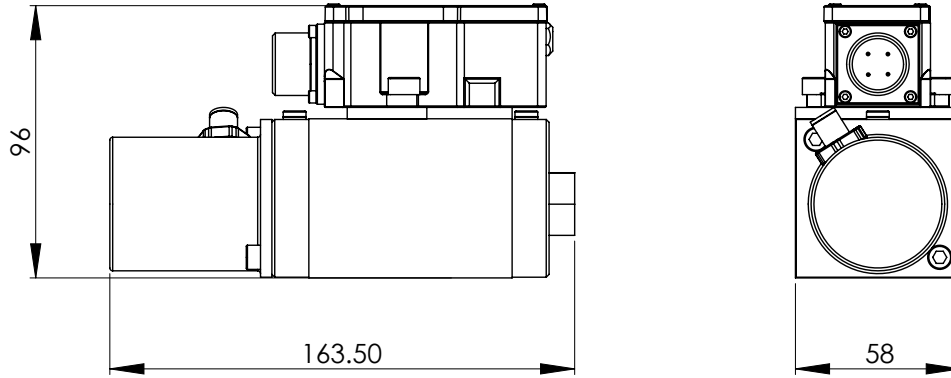
**Characteristics of S120**

- Servovalve for position-, force-, pressure- or speed control
- Two stage servovalve with spool position feedback LVDT
- Fully iron
- Rugged, long-life design
- ISO 4401 port pattern for 4-ports
- 2 minutes filter exchange

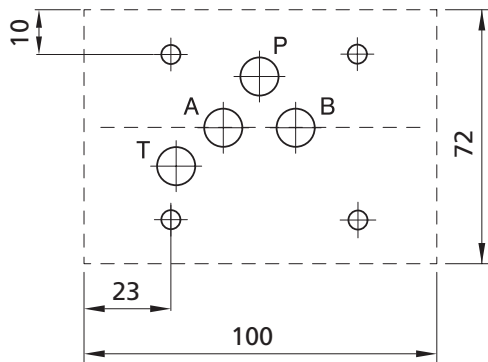

**Technical data S120**

Nominal size	60	60	80	80	100	100
Version	Standard	Pro	Standard	Pro	Standard	Pro
Attachment pattern	ISO 4401-05-05-0-94 without X-Port					
Nominal flow at 70bar Delta p over two steering edges	60 L/min	60 L/min	80 L/min	80 L/min	100 L/min	100 L/min
Frequency response at 90° Phase shift, 210bar, at 10% Amplitude	58Hz	120Hz	58Hz	120Hz	58Hz	120Hz
Step response at 210bar, 100% amplitude	See diagramm page 3					
Leackage prestage at 210bar, 40cStk	1.1 L/min	2.0 L/min	1.2 L/min	2.1 L/min	1.3 L/min	2.3 L/min
Leackage spool at 210bar, 40cStk	3.1L/min	3.1 L/min	3.8 L/min	3.8 L/min	4.5 L/min	4.5 L/min
Max pressure in P, B, A	315bar					
Max. pressure in T	50bar					
Temperature range	-20 to +90°C					
Fluid viscosity	20 to 380 cSt					
Requested purity-class of hydraulic oil	ISO 4406:18/16/13					
Resolution	0.1% of rated signal					
Hysteresis	<0.3%					
Null point shift with pressure change of 20%	<0.5%					
Null point shift with temperature change of 40°C	1.5%					
Valve connector	4 Pin MS3106A 14S-2S / 8 Pin M12					
Customer signals	+/-10Volt, +/-10mA, 4....20mA, other on request					
Fail-safe spool position	Mid-position or P→B/ A→T or P→A/ B→T					
Power supply voltage	24VDC, Min. 22VDC, max. 27VDC					
Max. current consumption	250mA					
Installation position	any					
Weight	2.6 Kg					

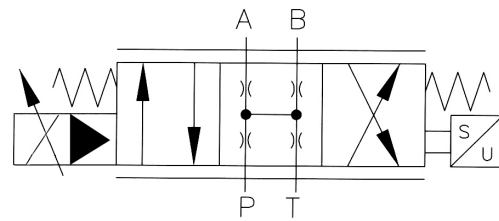
**Dimensions**



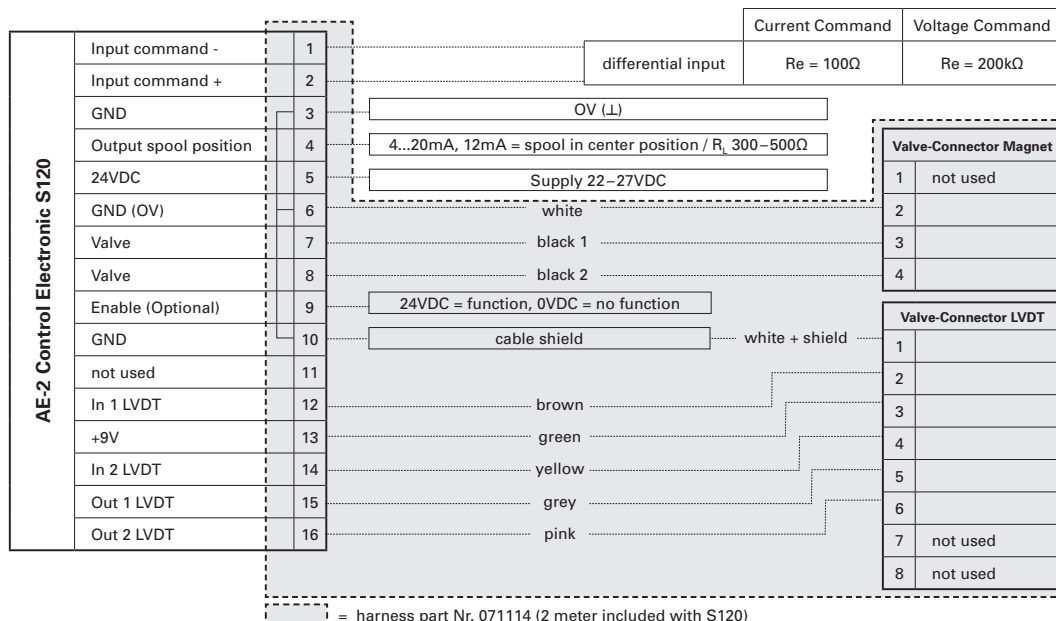
**Connection (View application)**  
ISO 4401-05-05-0-94, without X-connection



**Hydraulic Schema**



**Electrical Connectionplan**

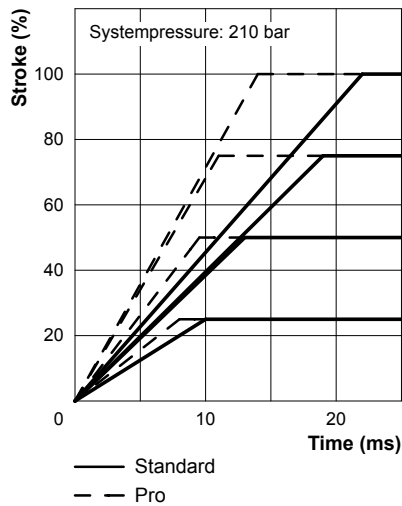


**Electrical Data**

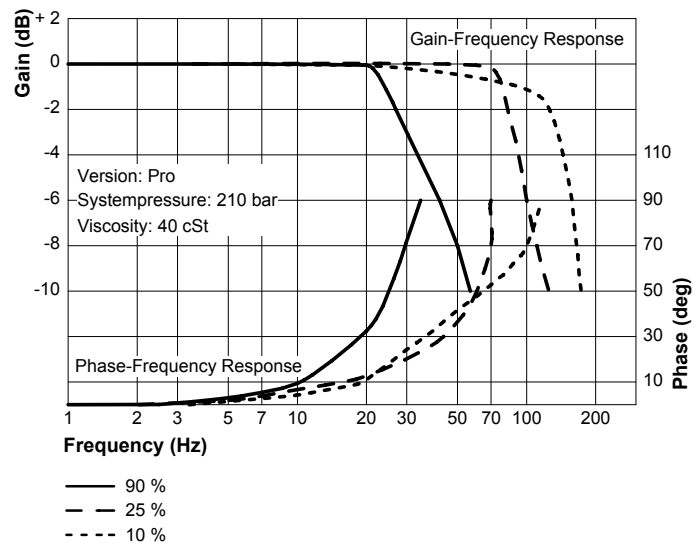
Coil	Typ	40	80	100	130	200
Parallel connection	max. J [mA]	52	104	130	170	350
	max. U [V]	32	16	10	8	5
Serial connection	max. J [mA]	27	53	66	86	175
	max. U [V]	63	31	21	15	9
Resistance per coil at	70° [Ω]	1200	300	160	90	24

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

**Step Response**



**Frequency Response**



# Orderinformation

**S120**

Code	Version
<b>S</b>	Standard
<b>P</b>	Pro

Code	Customer design
<b>C</b>	Customer design
<b>N</b>	Standard design

Code	Spool
<b>Z</b>	Zero Overlap
<b>Y</b>	2% Overlap
<b>X</b>	10% Overlap
<b>V</b>	3 way

Code	Spulen Magnetsystem
<b>40</b>	40 mA
<b>80</b>	80 mA
<b>100</b>	100 mA
<b>130</b>	130 mA (Standard)
<b>200</b>	200 mA

Code	Flow at 70 bar $\Delta$
<b>60</b>	60 L/Min
<b>80</b>	80 L/Min
<b>100</b>	100 L/Min

Code	Seal material
<b>V</b>	Viton (FPM, FKM)
<b>N</b>	NBR

Code	Fail safe spool position
<b>A</b>	P → B / A → T
<b>B</b>	P → A / B → T
<b>M</b>	No flow

Code	Input pressure in P
<b>70</b>	70 bar
<b>140</b>	140 bar
<b>210</b>	210 bar
<b>315</b>	315 bar