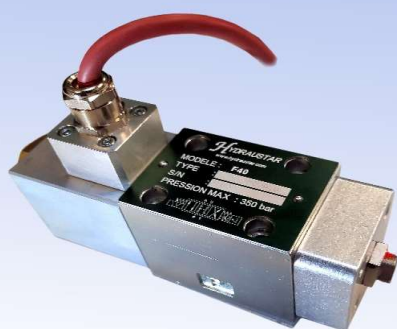


series
F40V
 Servo proportional valve
 Rated flows up to 40 l/m



Features

- Direct drive bi-directional linear motor
- Maximum operating pressure 350 bar
- 3-way or 4-way options
- Linear & dual-gain flow curve options
- Spool in bushing design
- 3 command signal options
- High temperature version
- Fail-safe spool position
- NG6 / Cetop 3 pattern



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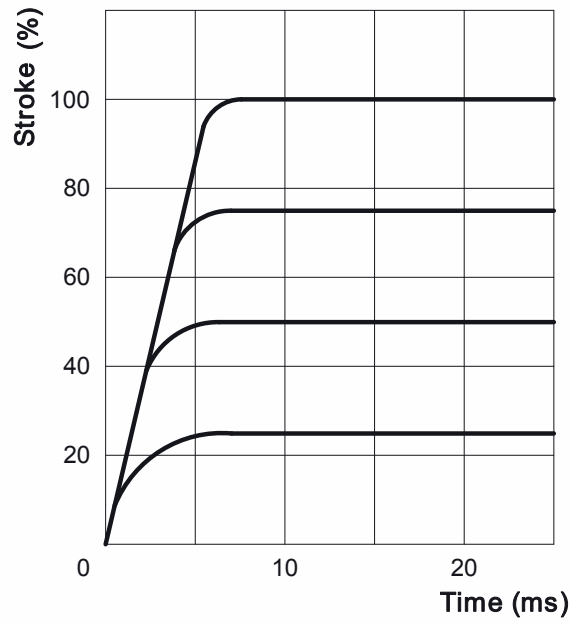
ST-F40-2016.1-Fr

Technical data

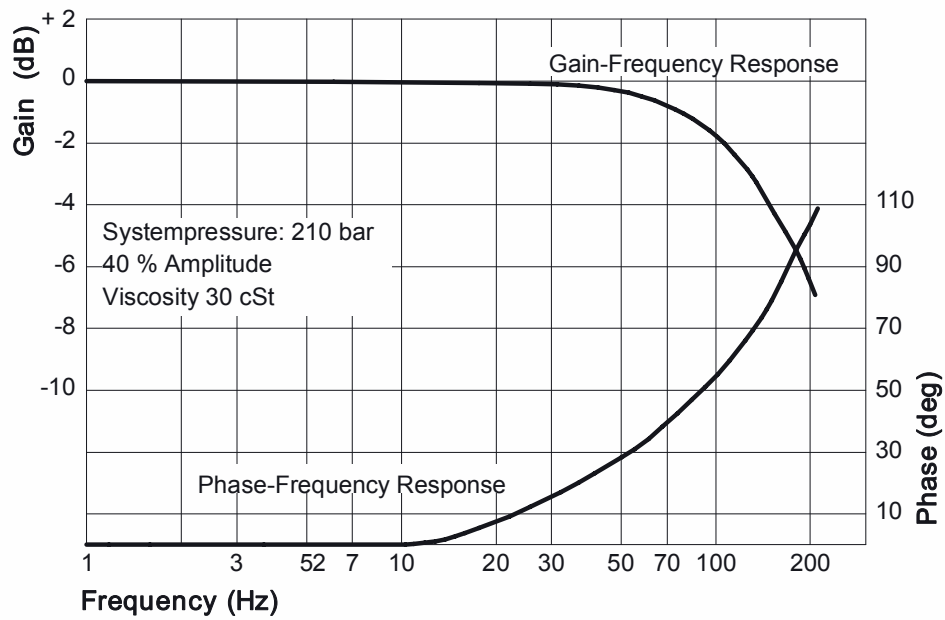
Hydraulic

Nominal flow ratings [±10%]	at 70 bar Δp	1, 2, 5, 10, 20, 40 l/m		
Operating pressure (max)	Ports	P, A, B	T without Y	T with Y
		350 bar	250 bar	350 bar
Fluid viscosity range (recommended)		10 to 360 mm²/s (cSt)		
Fluid type		Mineral oil to ISO 11158, DIN 51524 or equivalent others on request		
Fluid cleanliness	ISO 4406: 1999 - NAS 1638			
	Nominal flow > 2 l/mn	16/13 ISO - < 7 NAS		
	Nominal flow <5 l/mn	14/12 ISO - < 6 NAS		
Operational parameters				
Hysteresis		≤ 5% avec dither / PWM signal (200 Hz)		
Threshold		≤ 1%		
Null shift	ΔT 40°C	≤ 5%		
Internal leakage	140 bar supply (0.5% overlap)			
	5, 10, 20 l/m	≤ 0.6 l/min		
	40 l/m	≤ 1.0 l/min		
Load pressure difference	>1% input	≥ 30% of supply pressure can be as high as 100%		
Response time	0-90% rated spool stroke	< 10 ms		
Max. valve flow		75 l/m		
Mounting pattern		ISO 4401-03-03-0-94		
Mounting position		Any, fixed or movable		
Weight	F40V	1,7 kg		
	F40VT	1.7 kg		
Connector (other on request)		DIN 43650-1		
Design protection	EN 60529	IP 67		
Shipping protection		Sealed base plate		
Seal material options		NBR, FPM		
Electronic (optionnal)		Ref. AE-D1. Nominal current : +/-1,8 A		
Temperature range	F40V	-20 to 70 °C		
	F40VT	-20 to 160 °C		

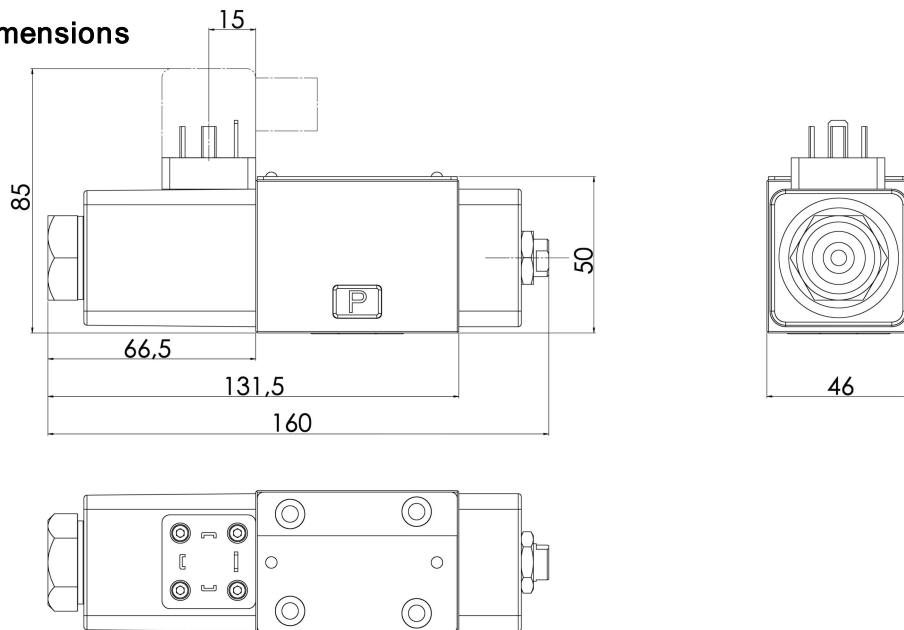
Step Response



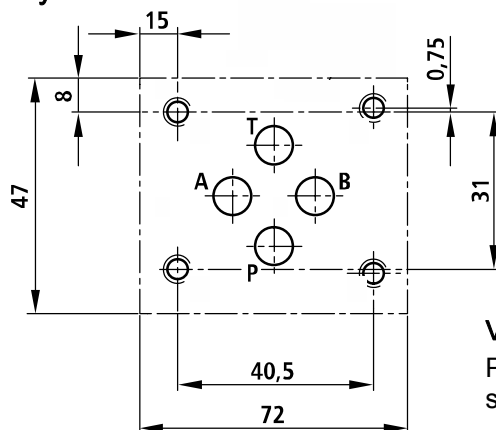
Frequency Response



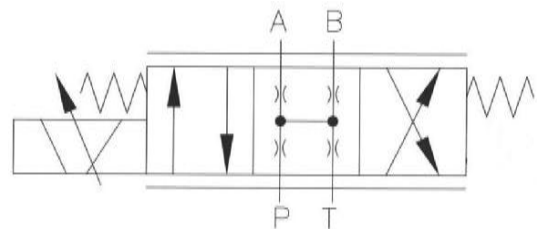
Dimensions



Hydraulic attachment

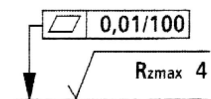


Hydraulic schema



Valve attachment-surface

Please assure the following valve attachment-surface quality:



Electrical Connection

Pin 1*	Coil
Pin 2	Not used
Pin 3	Coil
PE 	Protected earth

*Positive command signal on Pin 1
shows flow $P \rightarrow A$ and $B \rightarrow T$

*Negative command signal on Pin 1
shows flow $P \rightarrow B$ and $A \rightarrow T$

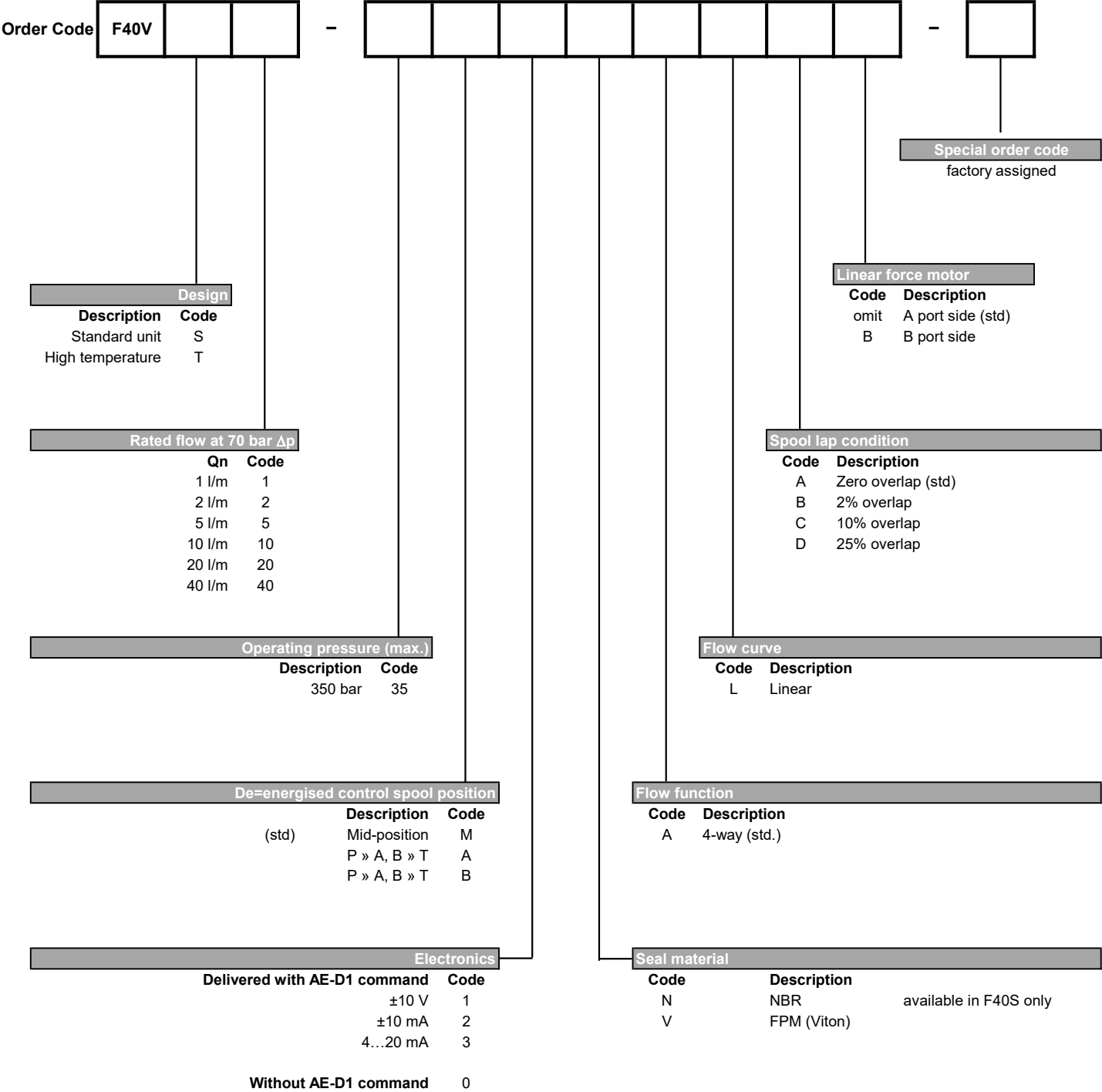
Installation instructions

Torque for valvefixing-screws

The required torque for the M5 x 50 screw is 7.6Nm. No dirt or grease allowed!

Oil filtration

In pressureline P, just befor the valve, the <10um absolut filtration must be installed.
Previous flushing of all oil trough filter and flushingplate is recommended.
Please ask for the flushing plate.



Linear force motor

Code

Description

omit

A port side (std)

B

B port side

Spool lap condition

Code

Description

A

Zero overlap (std)

B

2% overlap

C

10% overlap

D

25% overlap

Flow curve

Code

Description

L

Linear

Flow function

Code

Description

A

4-way (std.)

Seal material

Code

Description

N

NBR

V

FPM (Viton)

available in F40S only

Special order code

factory assigned