

Linear actuator DSZY6-LT-POT (Limit switches and potentiometer)

The electric linear actuators DSZY6 are operated with alternating current. The DSZY6 linear actuator is available in four different models:

- DSZY6-STD (Standard)
(standard for all applications without position feedback)
- DSZY6-POT
(with potentiometer for absolute position feedback)
- DSZY6-LT
(with integrated limit switches)
- **DSZY6-LT-POT**
(with potentiometer and integrated limit switches)

Equipped with a ball screw spindle (Ball screw), it is a durable and robust AC linear drive. Thanks to the ball threaded spindle, it achieves high self-locking.

In addition, mechanical overload protection has been integrated. The motor is also protected by a temperature overload protection.

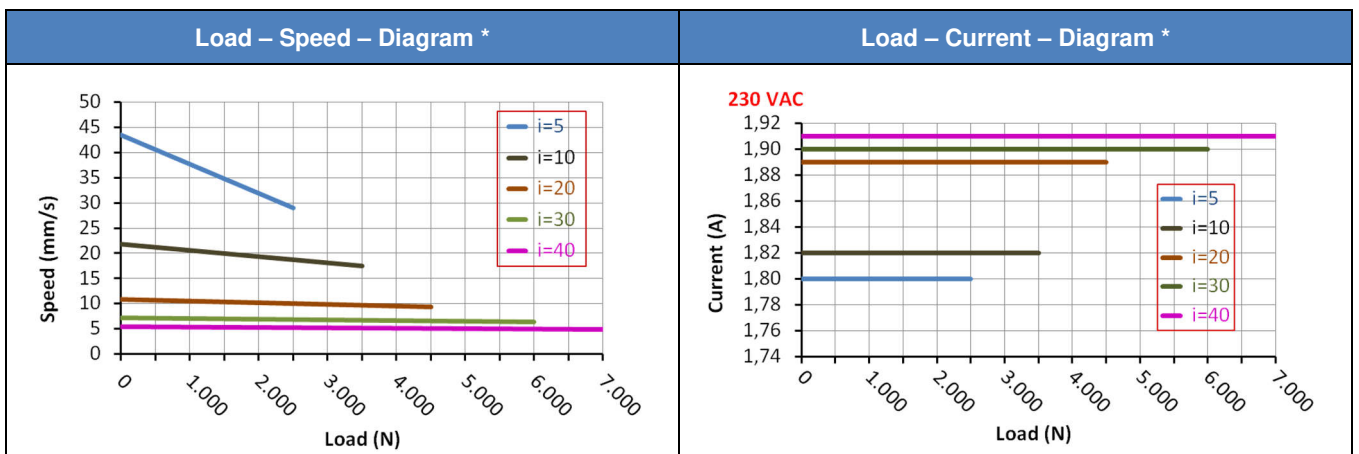


Type code (all options can be combined)

DSZY6	-	230	-	10	-	203	-	LT-POT	-	IP65
Type		Input voltage		Gear reduction i		Stroke		Model		IP Code
		230 Vac		05 10 20 30 40		102 mm 153 mm 203 mm 254 mm 305 mm 457 mm 610 mm		LT-POT: with integrated limit switches and potentiometer for position feedback		

Performance data: Load – Speed – Current

Gear reduction i	Dynamic load (N)	Static load (N)	Typical speed * (mm/s)		Typical current * (A)	
			minimum load	maximum load	minimum load	maximum load
5	2,500	approx. 5,000	43.5	29.0	1.80	1.80
10	3,500	approx. 6,000	21.8	17.5	1.82	1.82
20	4,500	approx. 8,000	10.8	9.3	1.89	1.89
30	6,000	approx. 11,000	7.2	6.3	1.90	1.90
40	7,000	13,600	5.4	4.9	1.91	1.91



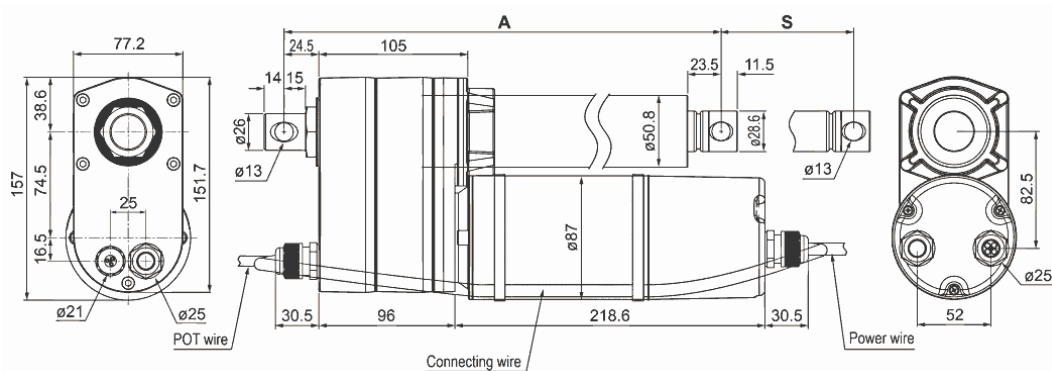
(* Average values)

Additional technical specifications

- Thrust and tensile load up to 7,000 N
- Static load: 13,600 N (at $i=40$)
- Duty cycle 25 % (e.g. 4 min continuous operation – 12 min pause)
- Zinc alloy casing
- Stainless steel outer tube
- IP Code IP65 for all models (in idle state)
- Working temperature -25 °C to +65 °C
- CE - EMV 2014/30/EU (EN 61000-6-3:2007+A1:2011)

Dimensions

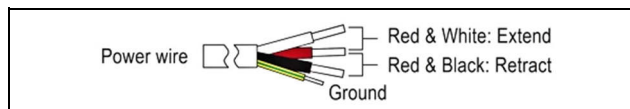
Dimensions (length) in mm							
Stroke ± 5 mm	102	153	203	254	305	457	610
(A) retracted	399	450	501	552	680	832	985
(A+S) extended	501	603	704	806	985	1,289	1,595



Weight

Stroke in mm	Type	102	153	203	254	305	457	610
Weight in kg (incl. packing) approx.	LT-POT			8.5	9.3			12.1

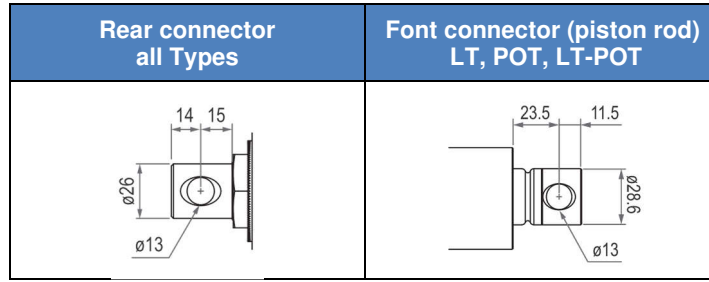
Pin assignment



Potentiometer

Power				Potentiometer (10 kOhm)				
Red	Black	White	GND	Blue	Yellow	White		
				Data	Vcc	GND		
Stroke (mm)	102	153	203	254	305	457	610	
Resistor value (kOhm)	0.3 - 8.1	0.3 - 8.7	0.3 - 9.2	0.3 - 7.4	0.3 - 8.8	0.3 - 9.4	0.3 - 9.9	

Front and rear connector



Fastening to the gearbox cover

Note: As an example in 0° orientation

The mounting holes on the piston rod and on the gearbox cover are designed in the 0° orientation as standard. Optionally, a different angle (see picture) can be selected for the gearbox cover and piston rod. The angle between the selectable stages is 30° in each case.

Option C1 to C5 is appended to the type code: DSZY6.....-C34
The 1st number stands for the gearbox cover. The 2nd number stands for the piston rod.

Mounting material

Clamp DSZY2/3/5/6/8-H01	Mounting bracket DSZY2/3/5/6/8-H02

Installation instructions

It must be ensured that the load is not greater than shown in the diagram. To protect against overload, the voltage must be switched off when the maximum rated current is reached. This can be read in the load-current diagram depending on the selected reduction ratio. Please note the correct supply voltage, which is indicated on the electric linear actuator.

The piston rod is secured against twisting.

The load must always be centered in the direction of movement. Transverse forces must be avoided. They shorten the service life and can impede the function or lead to irreparable damage in extreme cases.

The actuator has a mechanical overload clutch. The activation of this clutch is expressed in a loud rattling sound.

CAUTION: The overload clutch is not designed for permanent use. Rather, it is intended for emergencies if, for example, the power monitoring fails. For the standard version of the actuator the use of external limit switches is therefore strongly recommended.

CAUTION: Please note the correct wiring for retraction or extension. The connection diagram can be found at the top of the specification sheet.

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