

Linear actuator DSZY5-POT (Potentiometer)

The electric linear actuators DSZY5 are operated with alternating current. The DSZY5 linear actuator is available in four different models:

- DSZY5-STD (Standard)
(standard for all applications without position feedback)
- **DSZY5-POT**
(with potentiometer for absolute position feedback)
- DSZY5-LT
(with integrated limit switches)
- DSZY5-LT-POT
(with potentiometer and integrated limit switches)

Equipped with a trapezoidal screw spindle (ACME screw), it is a durable and robust AC linear drive. Thanks to the trapezoidal threaded spindle, it achieves high self-locking. In addition, mechanical overload protection has been integrated.

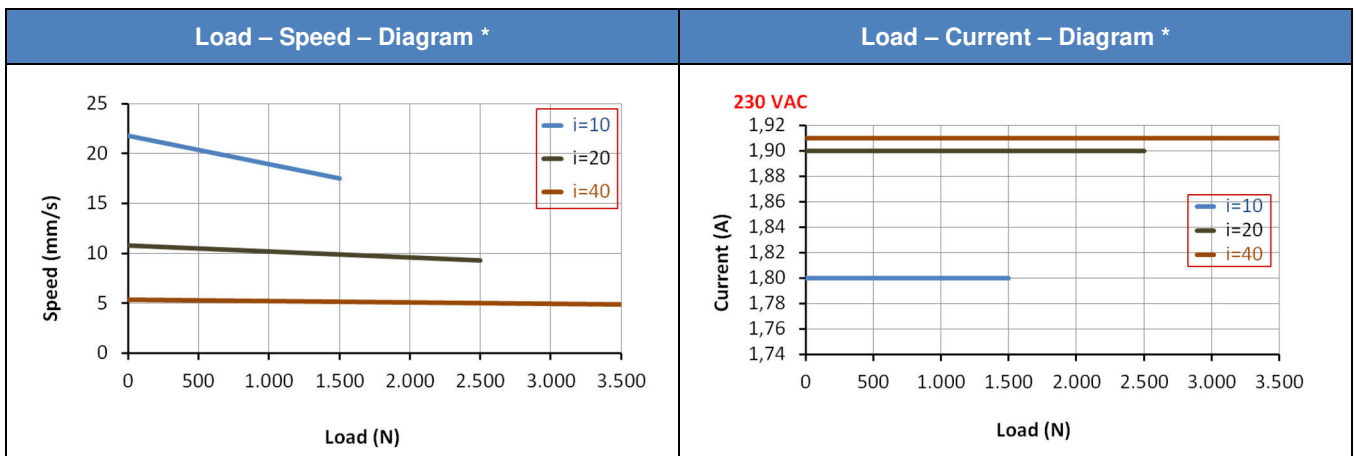


Type code (all options can be combined)

DSZY5	-	230	-	10	-	203	-	POT	-	IP65
Type	Input voltage	Gear reduction i	Stroke	Model	IP Code					
	230 Vac	10 20 40	102 mm 153 mm 203 mm 254 mm 305 mm 457 mm 610 mm	POT: Potentiometer (with 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
10	1,500	approx. 2,500	21.8	17.5	1.80	1.80
20	2,500	approx. 3,500	10.8	9.3	1.90	1.90
40	3,500	4,500	5.4	4.9	1.91	1.91



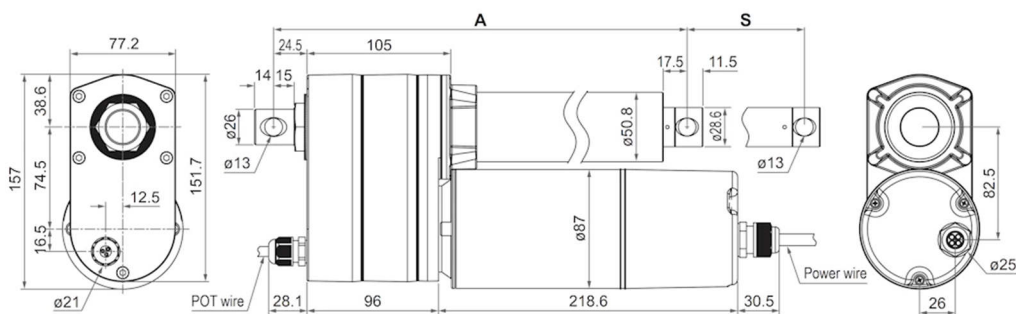
(* Average values)

Additional technical specifications

- Thrust and tensile load up to 3,500 N
- Static load: 4,500 N (at $i=40$)
- Duty cycle 25 % (e.g. 4 min continuous operation – 12 min pause)
- Zinc alloy casing
- Steel outer tube
- IP Code IP65 for all models (in idle state)
- Working temperature -25 °C - 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	302	353	404	454	505	708	861
(A+S) extended	404	506	607	708	810	1,165	1,471



Weight

Stroke in mm	Type	102	153	203	254	305	457	610
Weight in kg (incl. packing) approx.	POT						9.4	

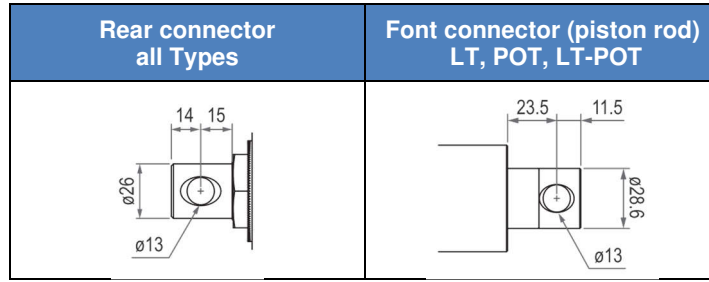
Pin assignment

	Gear ratio: 10 – 20
	Gear ratio: 40

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: DSZY5.....-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.

 MSW Motion Control GmbH	Drive System Europe by MSW® A trade mark of MSW Motion Control GmbH	
	MSW Motion Control GmbH Vertriebsgesellschaft Schloßstr. 32/34, 33824 Werther (Westf.) Germany	anfrage@msw-motion.de www.msw-motion.de Phone: +49 (0)5203 919200