Linear actuator DSZY3-POT (Potentiometer)

DSZY3 electric linear actuators are required in a wide variety of applications. Therefore, it is available in six models:

- DSZY3-STD (Standard)
 (for all applications without position feedback)
- DSZY3-POT

 (with potentiometer for absolute position feedback)
- DSZY3-HS2

 (with 2-channel Hall sensor for incremental position feedback)
- DSZY3-LT (with integrated limit switches)
- 5. DSZY3-LT-POT
- 6. DSZY3-LT-HS2

Equipped with a ball screw spindle (Ball screw), it is a durable and robust DC linear drive, thus achieving high self-locking. In addition, mechanical overload protection has been integrated.

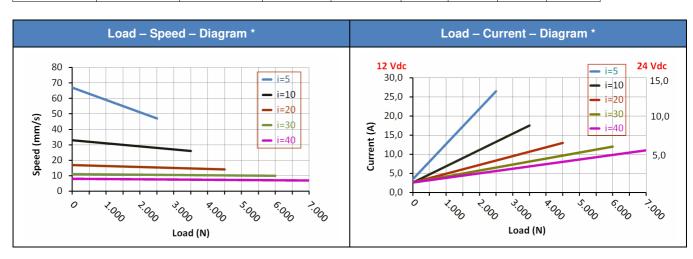


Type code (all options can be combined)

DSZY3 -	12	- 10 -	203	- POT	IP65
Туре	Input voltage 12 Vdc 24 Vdc	Gear reduction i 05 10 20 30 40	Stroke 102 mm 153 mm 203 mm 254 mm 305 mm 457 mm 610 mm	Model POT: Potentiometer (without limit switches, with position feedback)	IP Code

Performance data: Load - Speed - Current

Gear	load load		Typical (mr	Typical current * (A)				
reduction i			minimum	maximum	minimum laod		maximum load	
	(/	(/	laod	d load		24 Vdc	12 Vdc	24 Vdc
5	2,500	approx. 5,000	67.1	47.2	3.4	2.6	26.4	13.2
10	3,500	approx. 6,000	33.5	26.7	2.6	1.6	17.6	8.8
20	4,500	approx. 8,000	16.8	14.3	2.6	1.6	13.2	6.6
30	6,000	approx. 11,000	11.2	9.8	2.6	1.6	12.1	6.1
40	7,000	13,600	8.4	7.4	2.6	1.6	11.0	5.5



(*) Average values

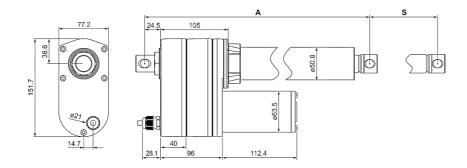


Additional technical specifications

- Thrust and tensile load up to 7,000 N
- Static load up to 13,600 N (at i=40)
- Working temperature -25 C° to +65 C°
- Duty cycle 25 % (2 min continuous operation – 6 min pause)
- Zinc alloy casing
- Stainless steel piston rod
- IP Code IP65 for all models (in idle state)
- CE EMV 2014/30/EU (EN 61000-6-3:2007+A1:2011)
- EN -61000-6-1:2007
- IEC 61000-4-2:2008
- IEC 61000-4-3:2006+A1:2007+A2:2100
- IEC 61000-4-8:2009

Dimensions

Dimensions (length) in mm (Tolerance ± 5 mm)										
Stroke (S) ± 3 mm 102 153 203 254 305 457 610										
(A) retracted	342	393	444	495	546	775	928			
(A+S) extended	444	546	647	749	851	1,232	1,538			



Weight

Stroke in mm	Туре	102	153	203	254	305	457	610
Weight in kg (incl. packing) approx.	POT			6.2	6.5	6.8	7.6	

Pin assignment

Gear reduction i	05 - 10 - 20 - 30 - 40					
Red	Red wire to Vdc "+" and black wire to					
Black	Vdc "-": Piston rod extends					

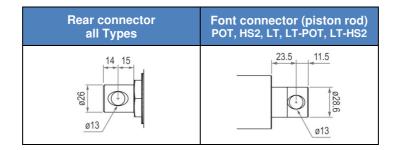
Potentiometer

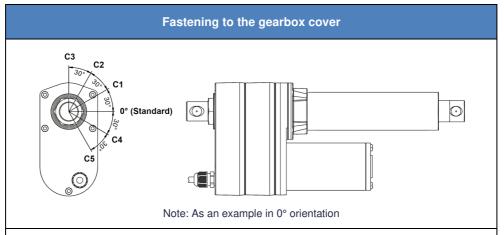
Po	wer	Poten	itiometer (1	$\mathbb{B}^{\bigvee} \mathbb{W}$	
Red	Black	White	Yellow	Blue	
neu	Diack	GND	Vcc	Data	

Stroke (mm)	102	153	203	254	305	457	610	B W-\\\-\-\Y
Resistor value (kOhm) Tolerance: ±0.3 kΩ	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	Actuator extends

Potentiometer: 10 kOhm at 10 turns - Total resistance tolerance: ±5 % - Vcc max. 70 Vdc

Front and rear connector



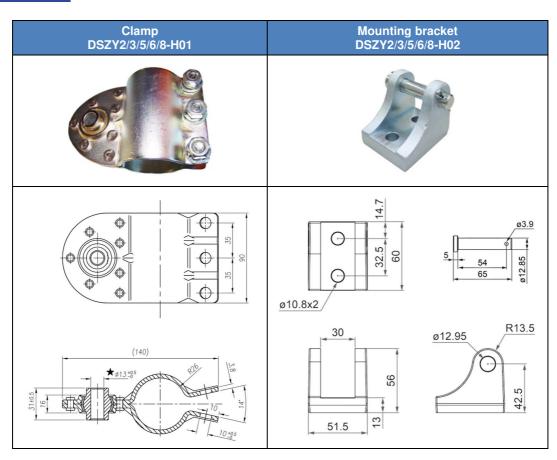


The mounting holes on the piston rod and on the gearbox cover are designed in the 0° orientation as standard. Optionally, a different angle (see picture) can be selected for the gearbox cover and piston rod. The angle between the selectable stages is 30° in each case.

Option C1 to C5 is appended to the type code: DSZY3.....-C34

The 1st number stands for the gearbox cover. The 2nd number stands for the piston rod.

Mounting material





Installation instructions

Please note the correct supply voltage as indicated on the electric linear actuator. 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 current is reached. This can be read in the diagram depending on the selected reduction ratio.

The piston rod is secured against rotation.

In an emergency, the linear actuator is protected by a mechanical overload clutch. The response of this clutch is expressed in a loud rattling tone.

CAUTION: The overload coupling is not designed for continuous use. Instead, it is intended for emergencies, for example, if current monitoring fails. The use of external limit switches is therefore strongly recommended in the standard model.

CAUTION: Please observe the correct wiring for the retraction or extension (see pin assignment in the data sheet).

The load should always be centered in the direction of movement. Transverse forces must be avoided. They always shorten the service life and can impede the function or even destroy the device in extreme cases.



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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

Errors and technical changes excepted.

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