# Linear actuator DSZY5-LT-POT (Limit switches + 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, adjustable limit switches)
- DSZY5-LT-POT
   (with potentiometer and integrated, adjustable 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. The motor is also protected by a temperature overload protection.

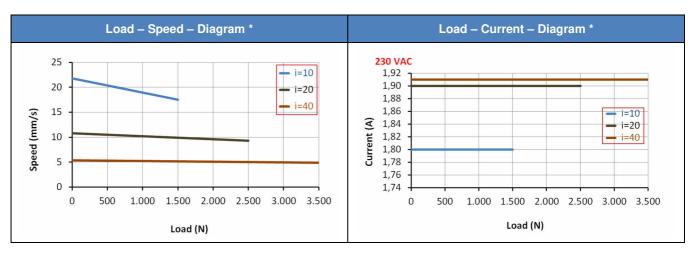


### Type code (all options can be combined)

DSZY5 -	230	- 10	-	203	- LT-POT	-	IP65
Туре	Input voltage 230 Vac	Gear reduction i 10 20 40		Stroke 102 mm 153 mm 203 mm 254 mm 305 mm 457 mm 610 mm	Model LT-POT: limit switches and potentiometer for position feedback		IP Code

#### Performance data: Load - Speed - Current

Gear	Dynamic load	Static load	Typical (mn		Typical current * (A)		
reduction i	(N)	(N)	minimum laod	maximum load	minimum laod	maximum load	
10	1,500	approx. 2,500	26.5	22.9	2.8	3.1	
20	2,500	approx. 3,500	13.1	11.8	2.7	2.7	
40	3,500	4,500	6.6	6.0	2.7	2.7	



(\*) Average values



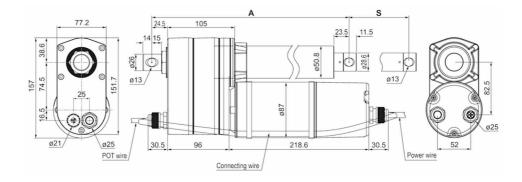
## **Additional technical specifications**

- 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**

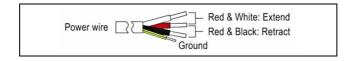
Dimensions (length) in mm										
Stroke ± 5 mm	102	153	203	254	305	457	610			
(A) retracted	359	410	460	511	613	765	918			
(A+S) extended	461	563	663	765	918	1,222	1,528			



#### Weight

Stroke in mm	Туре	102	153	203	254	305	457	610
Weight in kg (incl. packing) approx.	LT-POT							11,0

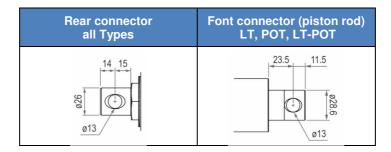
#### Pin assignment

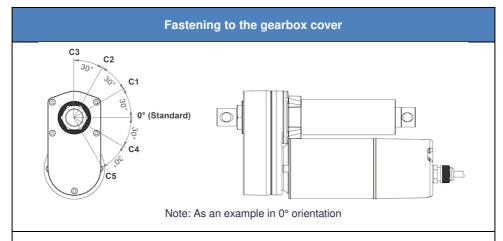


#### **Potentiometer**

	Power				Po	tentiom	eter (10 k	(E	$\mathbb{B}^{\bigvee}_{\mathbb{W}}$		
	Red Black		White	GND	Blue	Y	ellow	White			
	nea	DIACK	wille	GND	Data	a	Vcc	GND			
										T	
	Stroke (mm)		102	153	203	254	305	457	610	B W-\\-\-\Y	
R	Resistor value (kOhm)		n) 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	

#### Front and rear connector



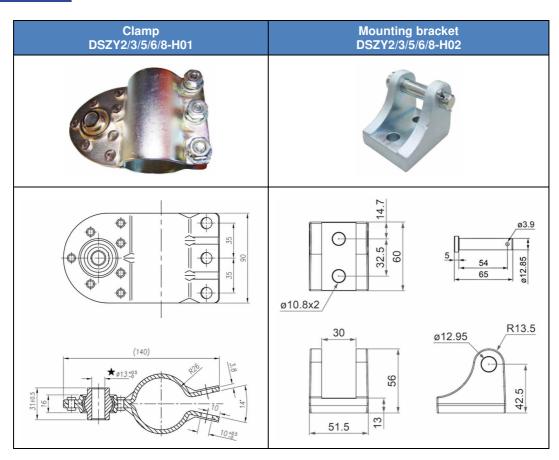


The mounting holes on the piston rod and on the gearbox cover are designed in the 0° orientation as standard. Optionally, a different angle (see picture) can be selected for the gearbox cover and piston rod. The angle between the selectable stages is 30° in each case.

Option C1 to C5 is appended to the type code: DSZY5.....-C34

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

#### **Mounting material**





#### **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.

The integrated limit switches can be set by the customer. You can find instructions about this on our homepage. The maximum stroke is always set in the delivery state.



# **Drive System Europe by MSW®**

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Errors and technical changes excepted.

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