

## 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 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.

LT-POT  
CE



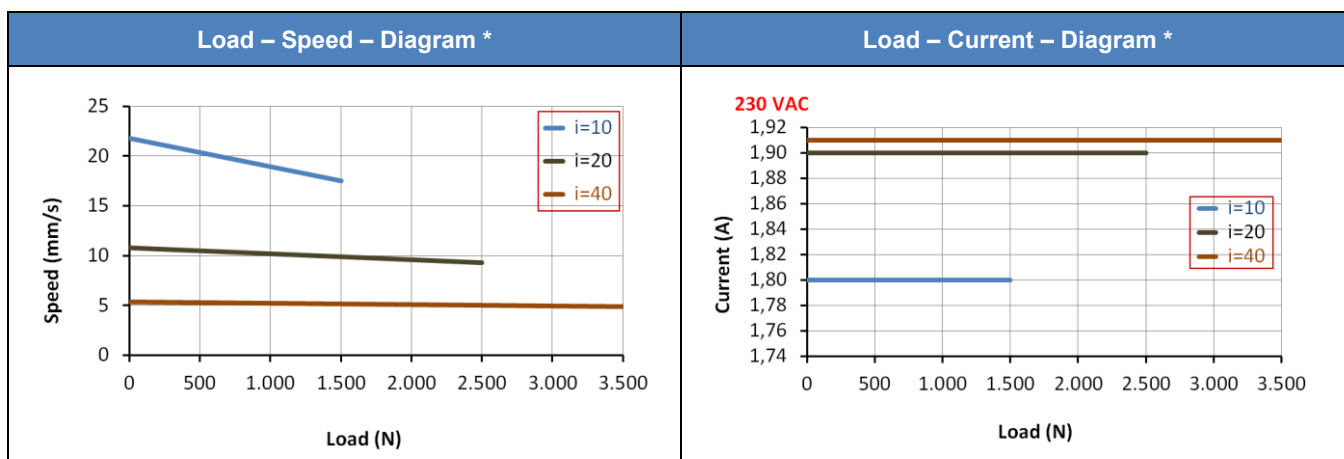
**DSZY5**

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

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

### 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



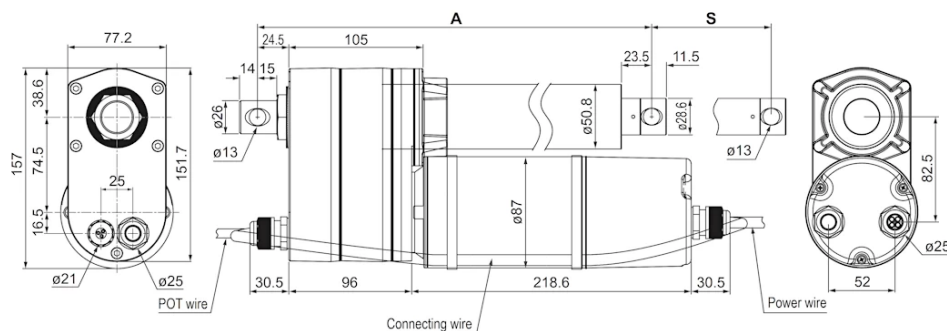
(\*) Average values at room temperature with a constant load.

## 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

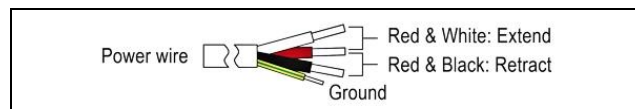
Dimensions (length) in mm							
Stroke ± 5 mm	102	153	203	254	305	457	610
(A) retracted	359	410	460	511	613	765	918
(A+S) extended	461	563	663	765	918	1,222	1,528




## Weight


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

## Pin assignment

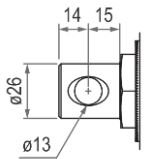
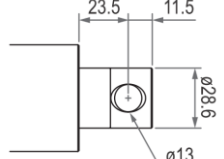


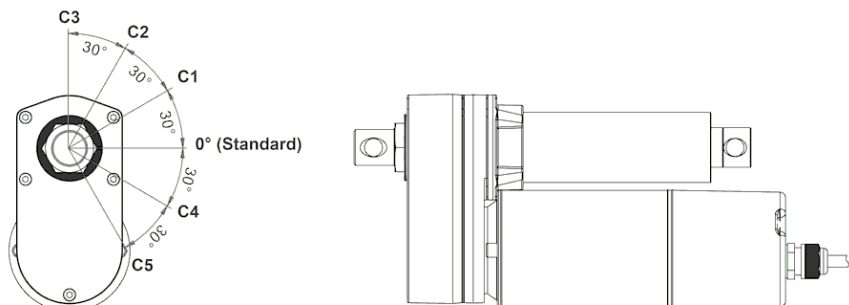
## Potentiometer

Power				Potentiometer (10 kOhm)			
Red	Black	White	GND	Blue	Yellow	White	
				Data	Vcc	GND	



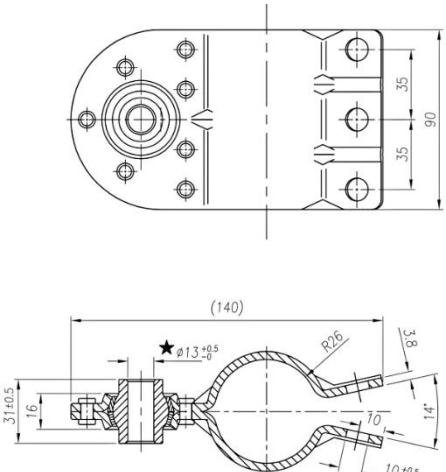
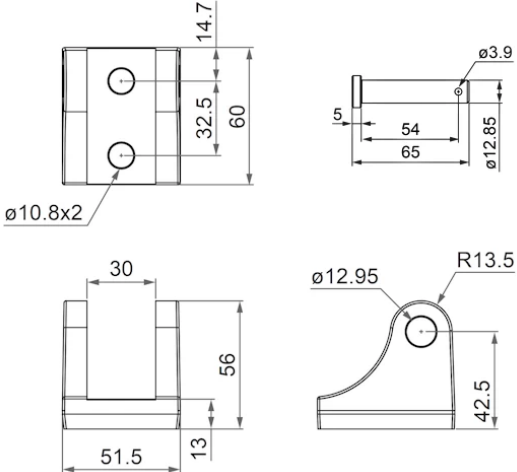
Stroke (mm)	102	153	203	254	305	457	610	
Resistor value (kOhm)	0.3 - 8.1	0.3 - 8.7	0.3 - 9.2	0.3 - 7.4	0.3 - 8.8	0.3 - 9.4	0.3 - 9.9	

## Front and rear connector

Rear connector all Types	Font connector (piston rod) LT, POT, LT-POT
	

Fastening to the gearbox cover	
 <p>Note: As an example in 0° orientation</p> <p>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.</p> <p>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.</p>	

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