# Linear actuator DSZY6-POT (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)



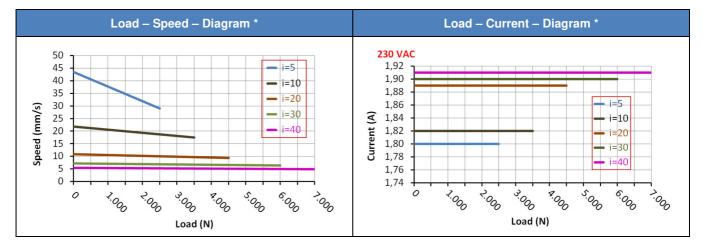
DRIVE SYSTEM EUROPE

by MSW®

DSZY6	- 230	- 10		203	- POT	IP65
Туре	Input	Gea		Stroke	Model	IP Code
	voltage	e reducti	oni	102 mm	POT: Potentiometer	
	230 Va	05		153 mm	(with potentiometer for	
		10		203 mm	position feedback)	
		20		254 mm		
		30		305 mm		
		40		457 mm		
				610 mm		

#### Performance data: Load – Speed – Current

Gear	Dynamic Ioad	Static Ioad	Typical (mr	speed * n/s)	Typical current * (A)		
reduction i	(N)	(N)	minimum laod	maximum load	minimum laod	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

- $\bullet\,$  Thrust and tensile load up to 7,000 N
- Static load: 13,600 N (at i=40)

**Dimensions** 

- Duty cycle 25 % (e.g. 4 min continuous operation 12 min pause)
- Zinc alloy casing Stainless steel outer tube
- CE EMV 2014/30/EU

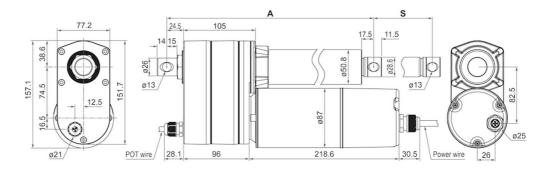
by MSW \*

(EN 61000-6-3:2007+A1:2011)

**DRIVE SYSTEM EUROPE** 

Dimensions (length) in mm Stroke ± 5 mm (A) retracted 342 393 444 495 546 775 928 (A+S) extended 444 546 647 749 851 1,232 1,538

IP Code IP65 for all models (in idle state)
Working temperature -25 °C to +65 °C



#### **Weight**

Stroke in mm	Туре	102	153	203	254	305	457	610
Weight in kg (incl. packing) approx.	POT			8.3	9.1			11.9

## Pin assignment

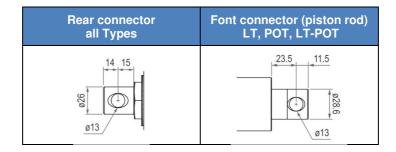
Power wire Red & White: Extend Red & Black: Retract Ground	Gear ratio: 05 – 10 – 20
Power wire Red & Black: Extend Red & Black: Extend Red & White: Retract Ground	Gear ratio: 30 – 40

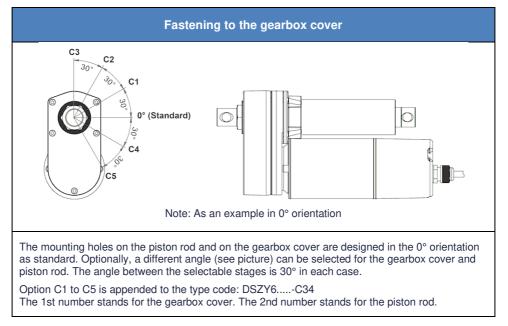
## **Potentiometer**

	Power				Po	Potentiometer (10 kOhm)				$\mathbb{B}$ $\mathbb{Y}$ $\mathbb{W}$		
	Red Black		White	GND	Blue	e Y	ellow	White				
	Rea	DIACK	white	GND	Data	ι	Vcc	GND		└└─┘ <b>╞─</b> ┛─┘		
Г												
	Stroke (mm)		102	153	203	254	305	457	610	B W		
	Resistor v	alue (kOhn	) 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		

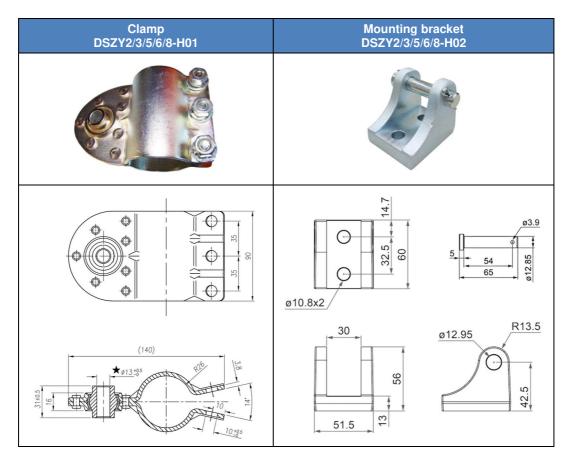


#### Front and rear connector





## 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.



MSW Motion Control GmbH

Drive System Europe by MSW<sup>®</sup>

A trade mark of MSW Motion Control GmbH

MSW Motion Control GmbH Vertriebsgesellschaft

Germany

anfrage@msw-motion.de www.msw-motion.de Phone: +49 (0)5203 919200

Errors and technical changes excepted.

Schloßstr. 32/34, 33824 Werther (Westf.)

Version: 03 March 2023

© MSW Motion Control GmbH Vertriebsgesellschaft

Page 4 of 4