

## Linear actuator DSZY30

Electric linear actuators are used in different applications. The electric actuator DSZY30 is a special version, where the motor is not laterally but axially mounted to the piston rod.

Equipped with an acme screw (ACME screw), it is a small, compact and lightweight DC linear drive.

Due to an integrated diode circuit, a rapid direction reversal is ensured by simple voltage reversal of the DC motor.

It is standard, that all types have two integrated non-adjustable limit switches, which are directly connected with the DC motor.

Overloading of the actuator can be avoided by separate monitoring and limiting of the current with the motor control.



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

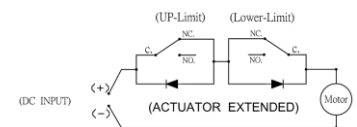
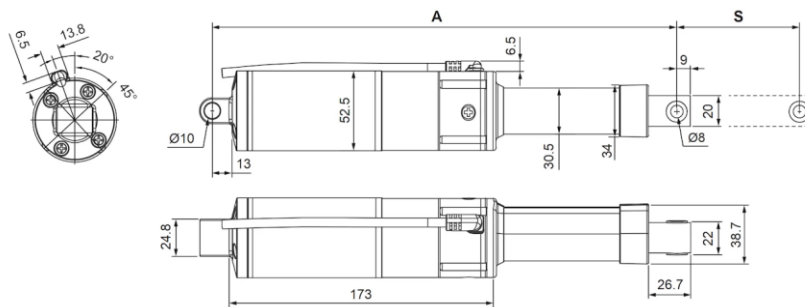
					Optional		
DSZY30	- 12	- AC	- 200	- IP54	- C	A	6
Type	Input Voltage	Spindle	Stroke	IP Code	Front connector		Rear connector
		AC	50 mm		(piston rod)		(gear cover)
	12 Vdc	A8	100 mm				
	24 Vdc	A6	150 mm		1 = plastic slot		6 = Standard
			200 mm		3 = standard		
			250 mm		9 = spherical rod eye		
			300 mm		A = metal slot		

## Additional technical specifications

- push/pull load up to 1,000 N
- Static load up to 4,000 N (at spindle type A6)
- Noise level  $\leq 65$  dB
- Aluminium outer tube and push rod
- Voltage 12 Vdc or 24 Vdc
- Operating temperature  $-26^{\circ}\text{C} - 65^{\circ}\text{C}$
- IP Code IP54 (in idle state)
- Duty cycle 10 % or 2 min continuous operation in 18 min
- CE
- EMC Directive 2014/30/EU and 2004/108/EC

## Dimensions

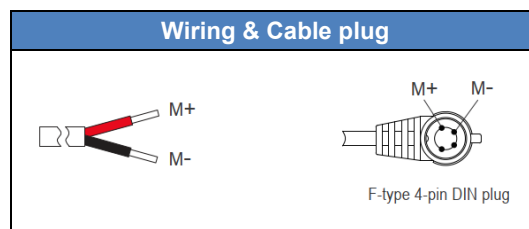
Front connector	Dimensions (length) in mm						
	Stroke (S) $\pm 3$ mm	50	100	150	200	250	300
Type: 3 (standard)	(A) retracted	306	356	406	456	506	556
	(A+S) extended	356	456	556	656	756	856
Type: 9	(A) retracted	332	382	432	482	532	582
	(A+S) extended	382	482	582	682	782	882
Type: 1 o. A	(A) retracted	315	365	415	465	515	565
	(A+S) extended	365	465	565	665	765	865



Red wire on "+" and black wire on "-": Actuator extends.

Black wire on "+" and red wire on "-": Actuator retracts.

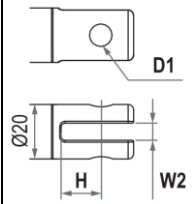
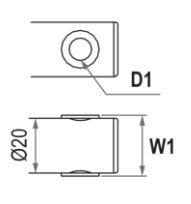
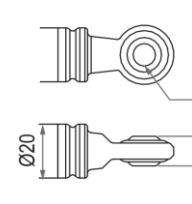
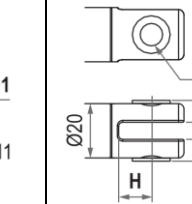
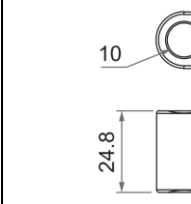
Cable length: 1,000 mm



## Weight

Stroke in mm	50	100	150	200	250	300
Weight in kg	1.300	1.380		1.530		1.700

## Front and rear connector


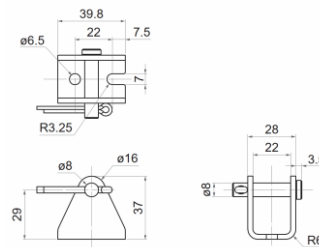
Front connector (piston rod)				Rear connector (gear cover)
1 = plastic slot	3 = standard (metal)	6 = spherical rod eye (metal)	A = metal slot	6 = standard (plastic)
				
D1=8 mm H=15 mm W2=6 mm	D1=8 mm W1=22 mm	D1=8 mm	D1 = 8 mm H = 13,5 mm W1=22 mm W2=6 mm	

### CAUTION:

C36 is standard and will not be specified in the type code.

If at least one connector is changed, option C must be attached to the type code (e.g. DSZY30...-IP54-C91)

## Mounting material

Mounting bracket DSZY1-H02	
 <p><b>Caution:</b> only suitable for piston rod</p>	

## 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 extends when the red wire is connected to positive and the black wire to negative. For the retraction of the piston rod, positive must be reversed with negative. The movement always stops automatically when the built-in limit switches are reached or when the voltage is interrupted. The limit switches cannot be changed by the customer.

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 piston rod tube is screwed onto the spindle nut via a thread. It is therefore possible, if necessary, to rotate the piston rod and thus the fastening eye by max. 180° into the desired position.

If no rotational forces act on the piston rod, the latter retains its orientation and does not rotate.

**CAUTION:** The limit switches have no on/off function for the linear actuator. Therefore, the voltage must be immediately disconnected after the limit switches have been triggered, or the piston must be moved out of the end position in a timely manner.

**NOTE on inrush current:** An increased inrush current is generated for a period of approx. 0.2 seconds when the linear actuator starts up. Under the maximum possible load, the inrush current can reach around three to four times the typical rated current. It is important to take this into account when selecting a power supply unit, plug connector, relay etc. or control unit.

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