

Linear actuator DSZY12-LT-ER2

DSZY12 electric linear actuators are required in a wide variety of applications. Therefore, it is available in three models:

1. **DSZY12-LT-ER2**
(with internal limit switches and external, adjustable limit switches)
2. **DSZY12-LT-HS-ER2**
(additionally with Hall sensor for incremental position feedback)
3. **DSZY12-LT-POT-ER2**
(additionally with potentiometer for absolute position feedback)

Equipped with a trapezoidal screw spindle (ACME screw), it is a durable and robust DC linear drive, thus achieving high self-locking. In addition, mechanical overload protection has been integrated. All models contain internal limit switches as well as external quick and easy adjustable limit switches (reed sensors).

Limit switch LT-ER2

CE



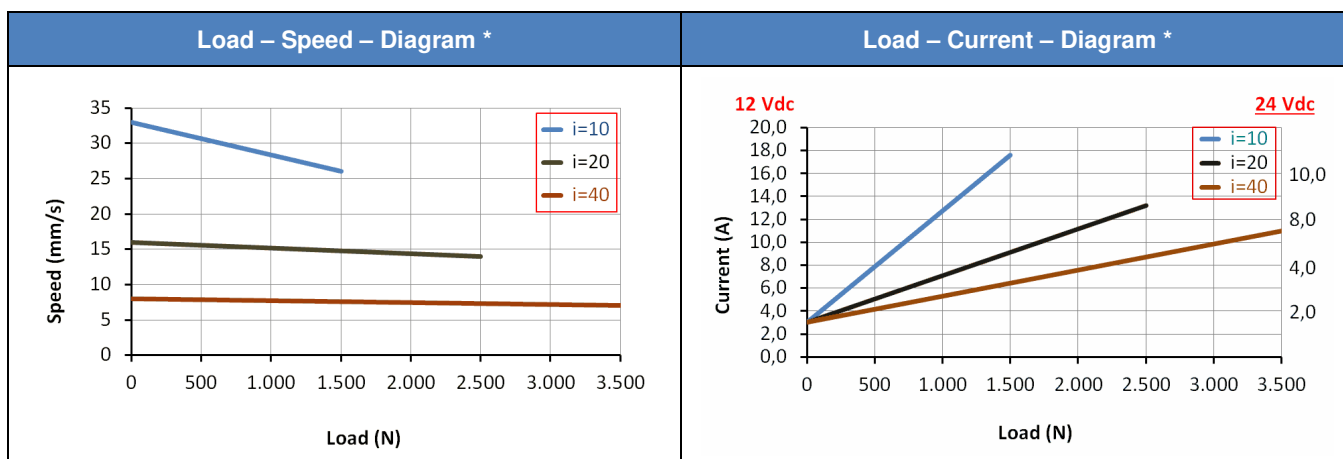
DSZY12

Type code (all options can be combined)

DSZY12 -	12	-	10	-	200	-	LT	-	ER2-NC	-	IP66
Type	Input Voltage		Gear reduction i		Stroke		Model		External limit switches		IP Code
	12 Vdc		10		100 mm		LT: integrated limit switches (without position feedback)		- ER2-NC (normally close)		optionally: IP69K
	24 Vdc		20		150 mm				- ER2 - NO (normally open)		
			40		200 mm						
					300 mm						
					450 mm						
					600 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	
					12 Vdc	24 Vdc	12 Vdc	24 Vdc
10	1,500	approx. 2,500	33.5	26.7	2.6	1.6	17.6	8.8
20	2,500	approx. 3,500	16.8	14.3	2.6	1.6	13.2	6.6
40	3,500	4,500	8.4	7.4	2.6	1.6	11.0	5.5



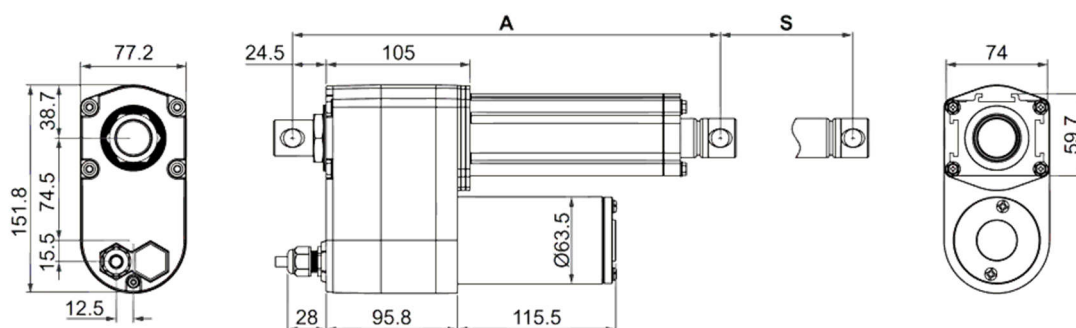
(*) Average values

Additional technical specifications

- Thrust and tensile load up to 3,500 N
- Static load up to 4,500 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) - optionally: IP69K
- Mechanical overload clutch
- CE - EMV 2014/30/EU
- EN - 55014-1:2017
- EN - 55014-2:2015

Dimensions

Dimensions (length) in mm (Tolerance ± 5 mm)						
Stroke (S)	100	150	200	300	450	600
(A) retracted	362	412	462	612	762	912
(B) extended	462	562	662	912	1,212	1,512



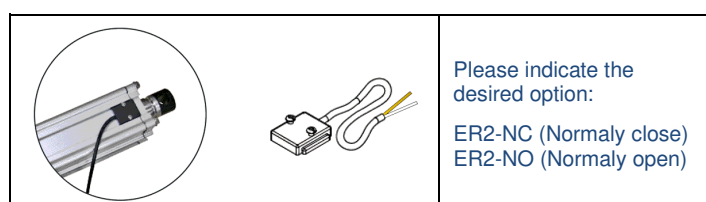
Weight

Stroke in mm	Type	100	150	200	300	450	600
Weight in kg (incl. packing) approx.	LT-ER2						

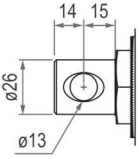
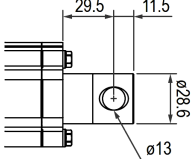
Pin assignment

Gear reduction i	10 – 20 – 40
Red	Red wire to Vdc „+“ and black wire to Vdc „-“:
Black	Pistoon rod extends

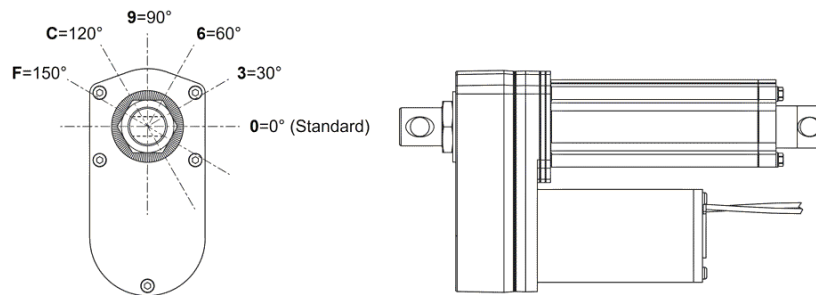
External limit switches ER2 (reed sensors)



Front and rear connector

Rear connector all Types	Front connector LT
	

Rear connector (Fastening to the gearbox cover)



Note: As an example in 0° orientation

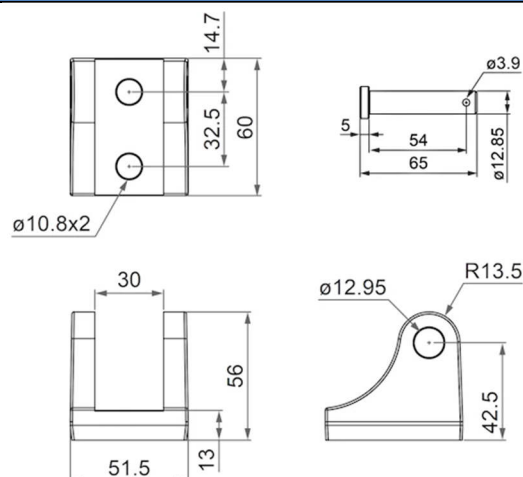
The mounting holes on the piston rod and on the gearbox cover are designed in the 0° orientation as standard. Optionally, a different angle (see picture) can be selected for the gearbox cover and piston rod. The angle between the selectable stages is 30° in each case.

Option 0 to F is appended to the type code: e.g. DSZY12...-F6

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

Mounting material

Mounting bracket DSZY2/3/5/6/8-H02



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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