Linear actuator DSZY3-HS2 (2-channel Hall sensor)

DSZY3 electric linear actuators are required in a wide variety of applications. Therefore, it is available in six models:

- DSZY3-STD (Standard)
 (for all applications without position feedback)
- DSZY3-POT (with potentiometer for absolute position feedback)
- DSZY3-HS2

 (with 2-channel Hall sensor for incremental position feedback)
- DSZY3-LT (with integrated, adjustable limit switches)
- 5. DSZY3-LT-POT
- 6. DSZY3-LT-HS2

Equipped with a ball screw spindle (Ball screw), it is a durable and robust DC linear drive, thus achieving high self-locking. In addition, mechanical overload protection has been integrated.

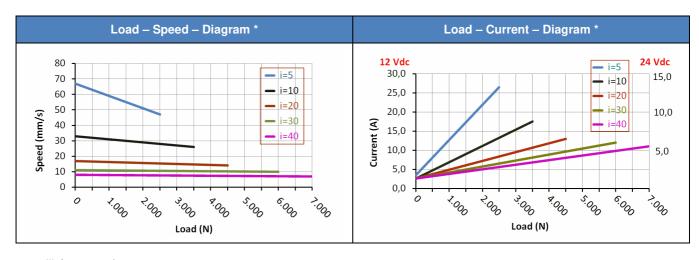


Type code (all options can be combined)

DSZY3 - 12 -	10 -	203	HS2	IP65
Type Input voltage 12 Vdc 24 Vdc	Gear reduction i 05 10 20 30 40	Stroke 102 mm 153 mm 203 mm 254 mm 305 mm 457 mm	Model HS2: 2-channel Hall sensor (without limit switches, with position feedback)	IP Code

Performance data: Load - Speed - Current

Gear	Gear Dynamic Static			speed * n/s)	Typical current * (A)				
reduction i	load (N)	load (N)	minimum	nimum maximum		ım laod	maximum load		
	(,	(1.1)	laod	load	12 Vdc	24 Vdc	12 Vdc	24 Vdc	
5	2,500	approx. 5,000	67.1	47.2	3.4	2.6	26.4	13.2	
10	3,500	approx. 6,000	33.5	26.7	2.6	1.6	17.6	8.8	
20	4,500	approx. 8,000	16.8	14.3	2.6	1.6	13.2	6.6	
30	6,000	approx. 11,000	11.2	9.8	2.6	1.6	12.1	6.1	
40	7,000	13,600	8.4	7.4	2.6	1.6	11.0	5.5	



(*) Average values

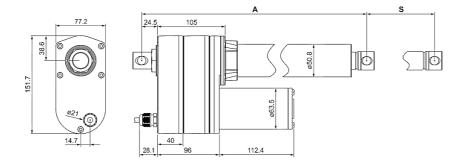


Additional technical specifications

- Thrust and tensile load up to 7,000 N
- Static load up to 13,600 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)
- CE EMV 2014/30/EU (EN 61000-6-3:2007+A1:2011)
- EN -61000-6-1:2007
- IEC 61000-4-2:2008
- IEC 61000-4-3:2006+A1:2007+A2:2100
- IEC 61000-4-8:2009

Dimensions

Dimensions (length) in mm (Tolerance ± 5 mm)							
Stroke (S) ± 3 mm	102	153	203	254	305	457	610
(A) retracted	342	393	444	495	546	775	928
(A+S) extended	444	546	647	749	851	1,232	1,538



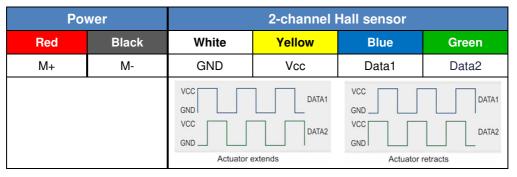
Weight

Stroke in mm	Туре	102	153	203	254	305	457	610
Weight in kg (incl. packing) approx.	HS2			6.0				

Pin assignment

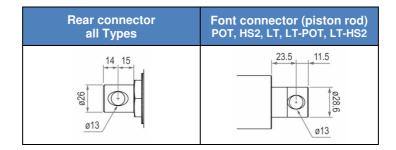
Gear reduction i	05 - 10 - 20 - 30 - 40					
Red	Red wire to Vdc "+" and black wire to					
Black	Vdc "-": Piston rod extends					

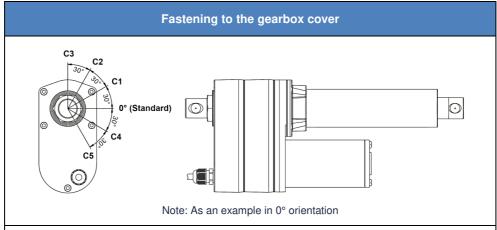
2-channel Hall sensor



Voltage input range: Vcc: 3.5 - 26 Vdc - Output voltage of signal: Data1 / Data2 = Vcc Pulse: 0.787 pulses/mm resp. 1.27 mm/pulse - Hall sensor resolution: 20 ppi

Front and rear connector



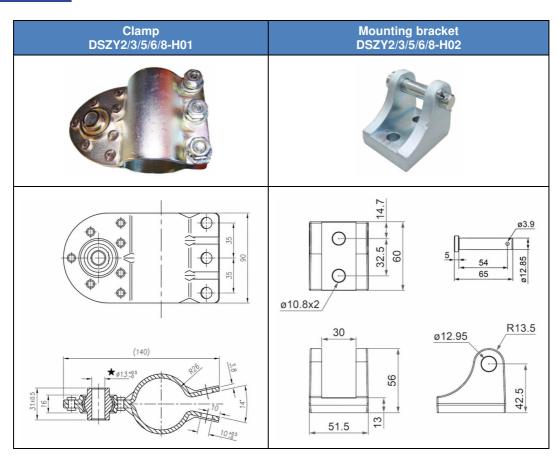


The mounting holes on the piston rod and on the gearbox cover are designed in the 0° orientation as standard. Optionally, a different angle (see picture) can be selected for the gearbox cover and piston rod. The angle between the selectable stages is 30° in each case.

Option C1 to C5 is appended to the type code: DSZY3.....-C34

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

Mounting material





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.



Drive System Europe by MSW®

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Errors and technical changes excepted.

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