



Selection table



Applications



Motor type Step motor

Transmission Ball screw

Sensor switch Reed switch

Anti-rotation Linear bushing

Weight

Unit: kg

Stroke Size	30	50	75
16	0.95	1.08	—
20	1.40	1.63	1.90

Features

- High anti-rotation accuracy.
- Compact and lightweight.
- Capable of withstanding torque and lateral force.
- Three installation directions.
- Excellent repeatability.
- Magnetic as standard.
- Built-in motor and controller for an all-in-one, space-saving design.
- Easy operation via I/O signal control for fast setup and use.

Specification

Model	MEGSZ	
Size	16	20
Positioning repeatability (mm)	±0.02	
Lead (mm)	1	2
Ball screw (ø)	4	6
Stroke (mm)	30 / 50	30 / 50 / 75
Anti-rotation tolerance (°)	±0.06	
Sensor switch	RDC(V), RQC(V)	
With step motor	□28	□35
Max. speed (mm/s)	≤ 50	≤ 100
Rated moment load *1 (N.m)	0.7	2
Rated axial load *1 (kg)	0.7	0.95
Max. thrust *2 (N)	225	680
Supply voltage (V)	DC 24 ±10%	
Power consumption (W)	≤ 15	≤ 25

*1. The rated load refers to a 10,000 km estimated service life. Please refer to page "Capacity" for information on other load conditions. For static and dynamic load and moment calculations, refer to the MCGS series .

*2. The actual push/pull force may vary depending on operating speed, acceleration/deceleration, load conditions, stroke, mounting orientation, external guide conditions, mechanical resistance, supply voltage, temperature rise, lubrication condition, and operating environment. The actual push/pull force may deviate from the stated value by ±20%.

Order example

MEGSZ — 20 L02 — 30 — BC — N 015

Model

Size

Ball screw lead

16	L01	1 mm
20	L02	2 mm

Stroke

30	30 mm
50	50 mm
75 *	75 mm

*Only for size 20.

I/O type

N	NPN
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Motor position

BC	Direct connection
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Cable length
(Power + I/O + RS485)

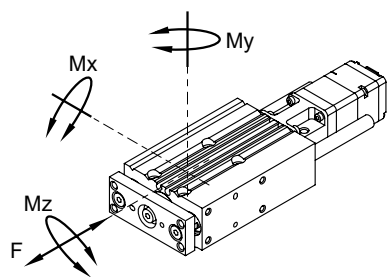
005	0.5 m
015	1.5 m (Standard)

Mechanical life – Load relationship chart

The predicted service life under axial load F and moment M is shown in the charts.

$$M = M_x + M_y + M_z$$

* M is the total moment applied.



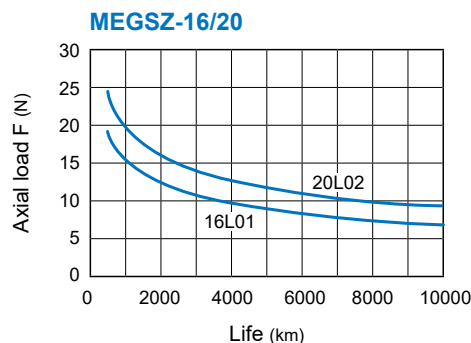
Linear & motor speed – Axial output force chart

Push/pull force – Current (torque) ratio relationship chart

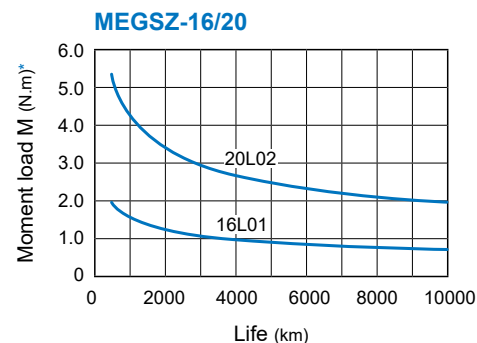
Pin assignment of cable (Power + I/O + RS485)

PIN No.	Function	Description	Color
1	VCC (24VDC)	PWR+	Red
2	GND	PWR-	Black
3	Input Com+		Red
4	Input 1	Move to Pos1	Black
5	Input 2	Move to Pos2	Red
6	Input 3	Stop / Alarm Reset	Yellow

Mechanical life – Axial load relationship chart

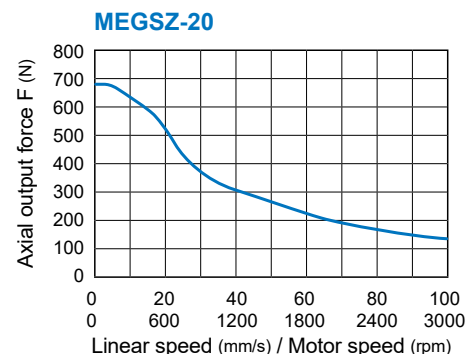
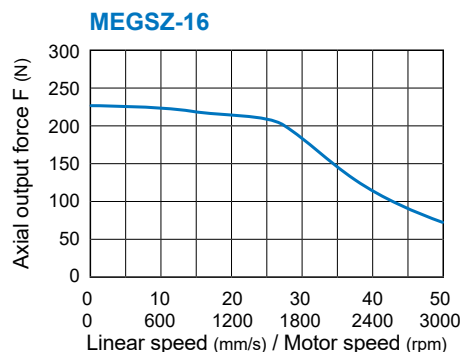


Mechanical life – Moment load relationship chart

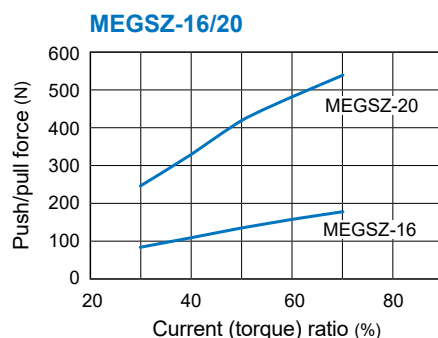


* Note: Use the max value M when the rod is fully extended.

Linear & motor speed – Axial output force relationship chart



Push/pull force – Current (torque) ratio relationship chart



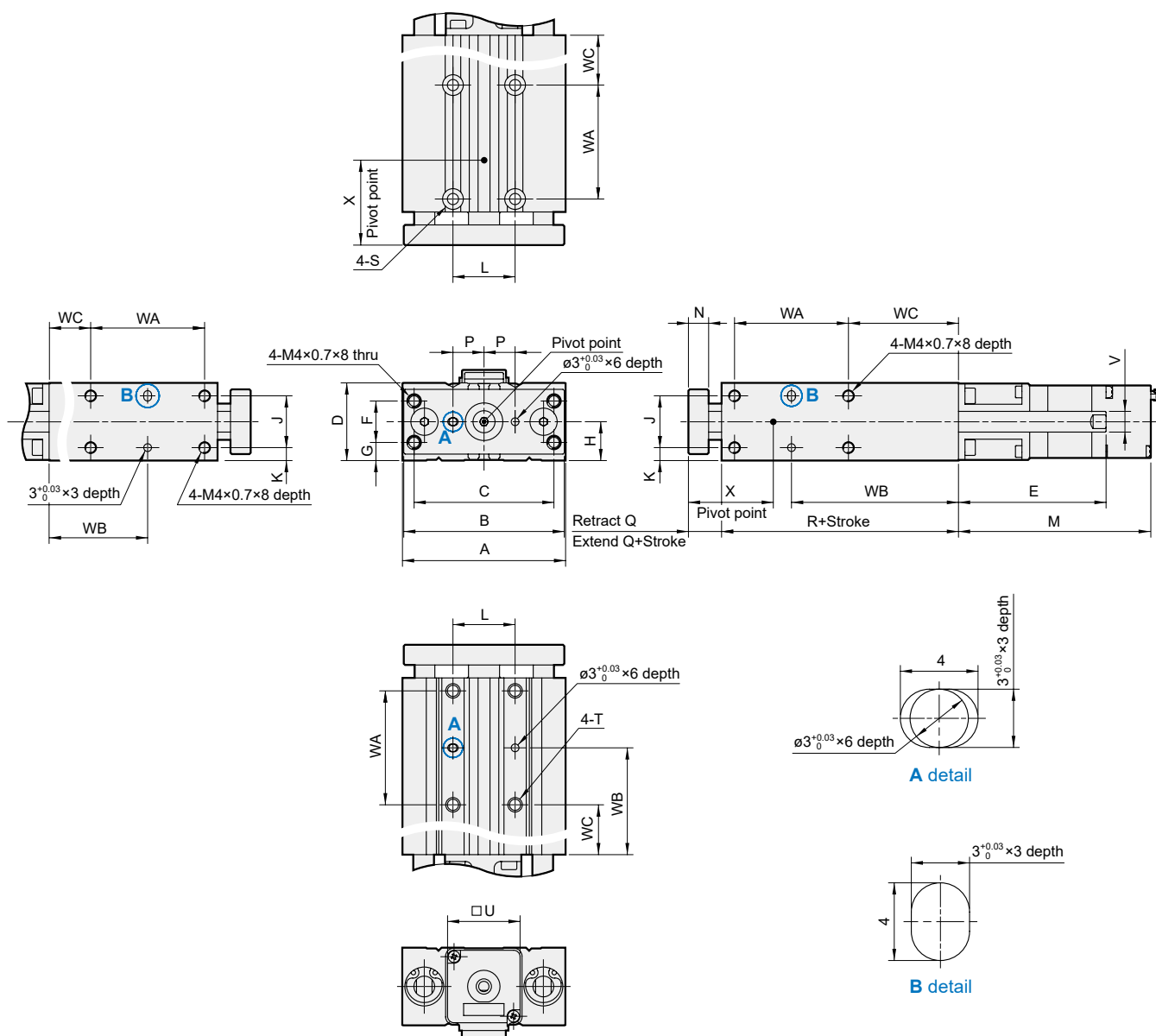
Caution

The force-speed curve applies to Position Mode only and indicates the available push/pull force at different operating speeds. It shall not be used for force setting or force estimation in Push Mode. In Push Mode, the push/pull force is primarily determined by the push-current setting. Refer to the "Push/Pull Force-Current Ratio Chart."

The actual push/pull force may vary depending on operating speed, acceleration/deceleration, load conditions, stroke, mounting orientation, external guide conditions, mechanical resistance, supply voltage, temperature rise, lubrication condition, and operating environment. The actual push/pull force may deviate from the stated value by $\pm 20\%$.

The related values and curves are provided for product selection and performance trend evaluation only and should not be used as the sole basis for precise force measurement, force control, or safety protection decisions.

PIN No.	Function	Description	Color
7	Output 3	Alarm	Red
8	Output 2	Pos2 Reached	Green
9	Output 1	Pos1 Reached	Red
10	Output Com-		Black
11	RS485A		Red
12	RS485B		Black



Code Size	A	B	C	D	F	G	H	J	K	L	M	N	P	Q	R	S	T	U	V
16	63	62	54	30	16	7	15	20	5	24	75	8	12	13	41.5	$\phi 4.3$ thru, c'bore $\phi 8 \times 4.5$ dp	M5x0.8x10 dp	28	8
20	84	81	70	36	18	9	18	28	4	28	104	10	14	16	41.0	$\phi 5.2$ thru, c'bore $\phi 9.5 \times 5.5$ dp	M6x1.0x12 dp	35	10

Code Stroke Size	E			WA			WB			WC			X
	30	50	75	30	50	75	30	50	75	30	50	75	
16	32.5	52.5	—	24	44	—	54.5	64.5	—	42.5	42.5	—	28
20	35	55	80	24	44	44	42	52	77	30	30	55	33.5