

Motor type Step motor

Transmission Trapezoidal screw + belt

Feature

- Patented lever-lock mechanism.
- Proximity sensors are available.
- Magnetic as standard.
- Adjustable shock absorbers provide good capacity for different applications.

Specification

| Model | MESBE |
|----------------------------------|-------------------------------------|
| Size | 50 |
| Stroke (mm) | 30 |
| Repeatability (mm) | ±0.1 |
| Ball screw lead (mm) | 1.5 |
| Ascend / descend time (s) | 1 |
| Max. operating frequency (c.p.m) | 5.5 |
| Ambient temperature | 0~+55°C (No freezing) |
| Ambient humidity (RH) | 35~85% (No condensation) |
| Motor size | □42 |
| Rated voltage | DC 24V±10% |
| Cushion | Adjustable shock absorber |
| Sensor switch | RDFE(V) (Please refer to page 5-11) |
| Proximity sensor | RJY (Please refer to page 5-**) |
| Weight (g) | 2000 |

Order example

MESBE - 50 - 30 - L - S - CK10 03 N 01

| Model | Size | Stroke | Lever Lock | Roller Material | Controller | I/O type | I/O cable length |
|-------|------|----------|-------------------------------|------------------|--------------|----------|--------------------|
| MESBE | 50 | 30 30 mm | - Without L Lock mechanism | - POM S Steel | CK10 CM20 | N NPN | 01 1.5 m 03 3 m |

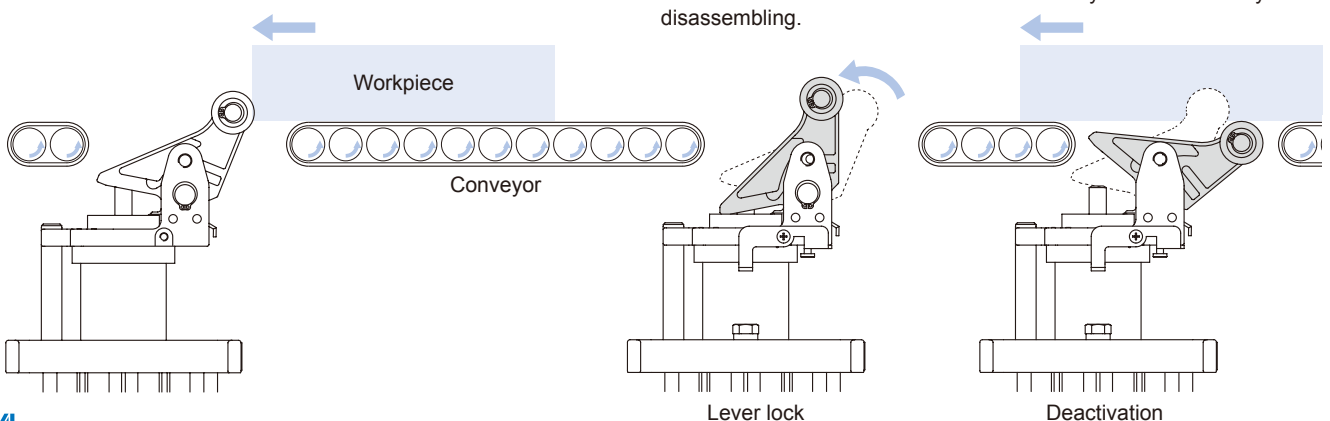
* Standard: 1.5 m

| Actuator cable length | |
|-----------------------|-------|
| 01 | 1.5 m |
| 03 | 3 m |
| 05 | 5 m |

* Standard: 3 m

Intended use

Stopping transferred workpiece.



Lock & Deactivation mechanism

Lock mechanism prevents the light-weight workpiece from moving back by the force of shock absorber after damping.

Deactivation mechanism can deactivate the cylinder without any disassembling.

Thread (×2)

For inductive proximity sensor.

Guide rod

For protection against rotation.

Knurled cap

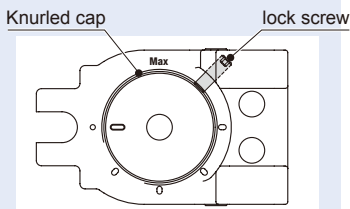
Step 1

Turn knurled cap until the desired cushioning is reached.

- Max mark: Cushion becomes harder.
- 0 mark: Cushion becomes softer.

Step 2

Tighten lock screw.
Tightening torque: 2 N.m



Through hole (×4)

For mounting.

Sensor switch groove (×4)

Stop roller (×2)

Roller toggle lever

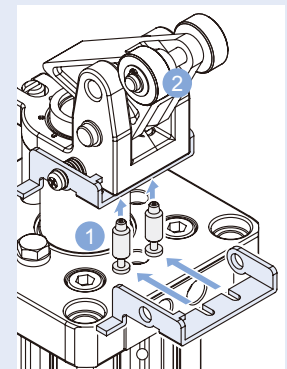
(Optional)

Lock mechanism

For activating / deactivating lever position locking mechanism.

For $\varnothing 50$, two pins for lever lock and deactivation mechanism are delivered for every L type MESBE.

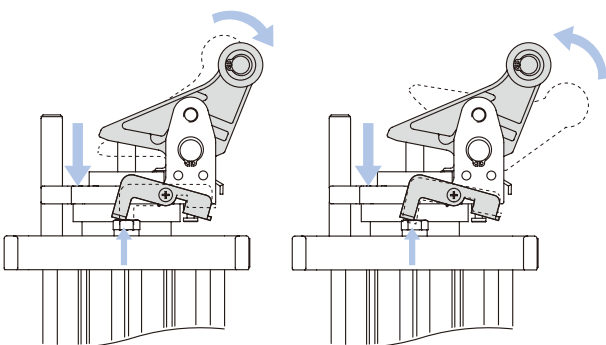
The pin for lever lock function is installed before delivery. The other pin is attached in the package. Please see the assembling guide below for installing.



- 1 Lever-lock function
- 2 Free-pass function

1 Unlock bolt (Accessories)

The locking / deactivation mechanism of MESBE*-L* can be unlocked/reactivated by return the piston rod.



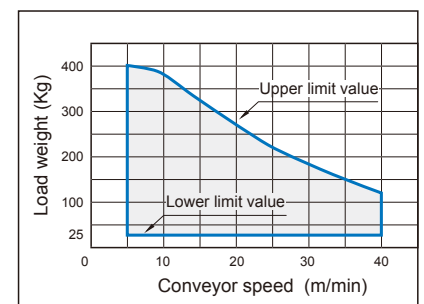
Unlocking locked lever

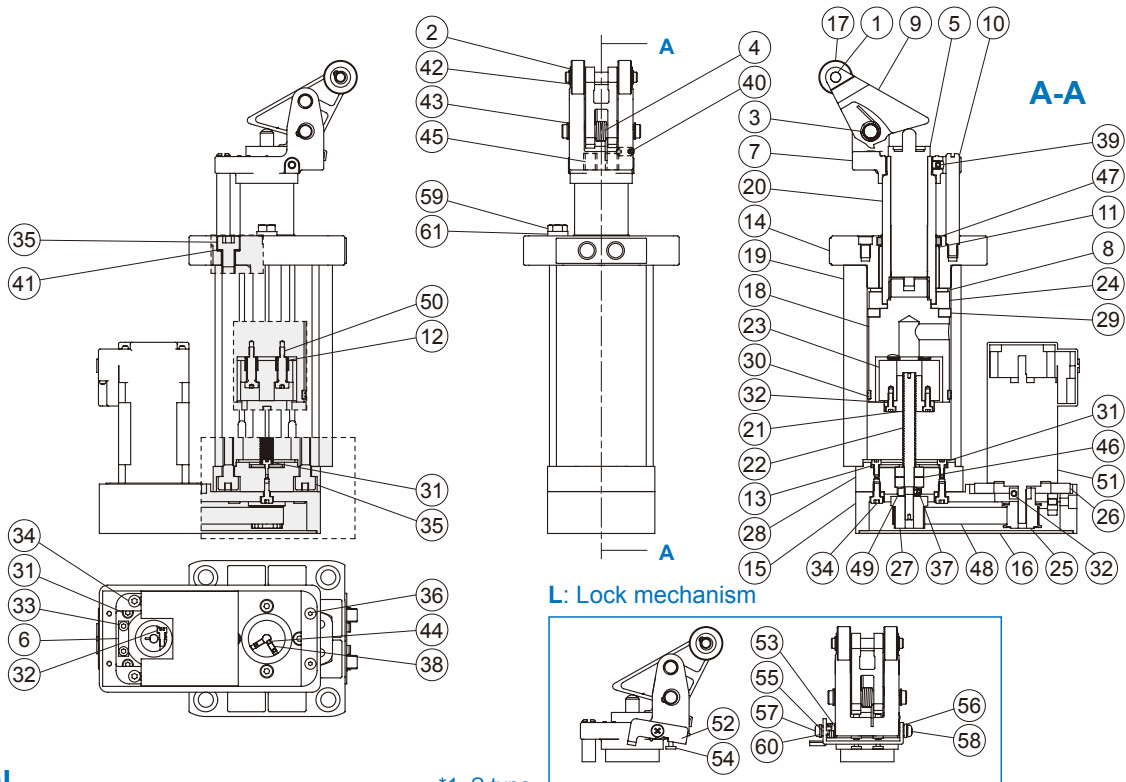
Unlocking free-pass

Load-speed chart for conveyor transmission

The chart is applied with the situation of friction coefficient $\mu = 0.1$

$\varnothing 50-30$





Material

*1. S type.

| No. | Part name | Material | Q'y |
|-----|-----------------------|----------------|-----|
| 1 | Roller pin | Steel | 1 |
| 2 | Roller Washer | Steel | 2 |
| 3 | Lever Pin | Steel | 1 |
| 4 | Lever spring | Steel | 1 |
| 5 | Adjustable absorber | - | 1 |
| 6 | Adjustment Block | Aluminum alloy | 1 |
| 7 | Lever holder | Steel | 1 |
| 8 | Cushion pad | NBR | 1 |
| 9 | Lever | Steel | 1 |
| 10 | Guide rod | Steel | 1 |
| 11 | Bush | Resin | 1 |
| 12 | Spring | Steel | 4 |
| 13 | Bearing cap | Steel | 1 |
| 14 | Cover | Aluminum alloy | 1 |
| 15 | Motor connector | Aluminum alloy | 1 |
| 16 | Cover | Aluminum alloy | 1 |
| 17 | Roller | Alloy steel *1 | 2 |
| | | Resin | 2 |
| 18 | Piston | Aluminum alloy | 1 |
| 19 | Housing | Aluminum alloy | 1 |
| 20 | Piston rod | Steel | 1 |
| 21 | ACME Screw (with nut) | Copper alloy | 1 |
| 22 | | Steel | 1 |
| 23 | Piston connector | Aluminum alloy | 1 |
| 24 | Magnet holder | Aluminum alloy | 1 |
| 25 | Driving wheel | Aluminum alloy | 1 |
| 26 | Motor holder | Aluminum alloy | 1 |
| 27 | Driven wheel | Aluminum alloy | 1 |
| 28 | Housing holder | Aluminum alloy | 1 |
| 29 | Magnet ring | Magnet | 1 |
| 30 | Wear ring | Resin | 1 |

| No. | Part name | Material | Q'y |
|-----|---------------------|-----------------|-----|
| 31 | | Stainless steel | 8 |
| 32 | | Steel | 5 |
| 33 | Hexagon bolt | Stainless steel | 2 |
| 34 | | Stainless steel | 8 |
| 35 | | Stainless steel | 8 |
| 36 | Screw | Stainless steel | 4 |
| 37 | Screw | Stainless steel | 2 |
| 38 | | Stainless steel | 2 |
| 39 | Screw | Steel | 1 |
| 40 | | Steel | 1 |
| 41 | Spring washer | Steel | 4 |
| 42 | Stop ring | Steel | 2 |
| 43 | | Steel | 2 |
| 44 | Feather key | Steel | 1 |
| 45 | Rod bush | Resin | 2 |
| 46 | Ball bearing | Steel | 2 |
| 47 | Dust-proof seal | NBR | 1 |
| 48 | Timing belt | Resin | 1 |
| 49 | Screw | Steel | 1 |
| 50 | Screw | Steel | 4 |
| 51 | Step motor | - | 1 |
| 52 | Lever lock | Steel | 1 |
| 53 | Spring | Steel | 1 |
| 54 | Locating pin | Steel | 2 |
| 55 | Collar | Steel | 1 |
| 56 | Collar #2 | Steel | 1 |
| 57 | Screw | Steel | 1 |
| 58 | Screw (with washer) | Steel | 1 |
| 59 | Screw | Steel | 1 |
| 60 | Spring washer | Steel | 1 |
| 61 | Flat washer | Steel | 1 |

