

## Linear actuator DSZY1

Electric linear actuators are used in many different applications.

DSZY1 Standard is equipped with a rugged acme screw with high static force. It is a small, compact and lightweight dc-linear drive.

Internal diodes allow the easy change of direction by reversing the power-supply. All DSZY1-actuators have two end-switches integrated ( not possible to adjust ).

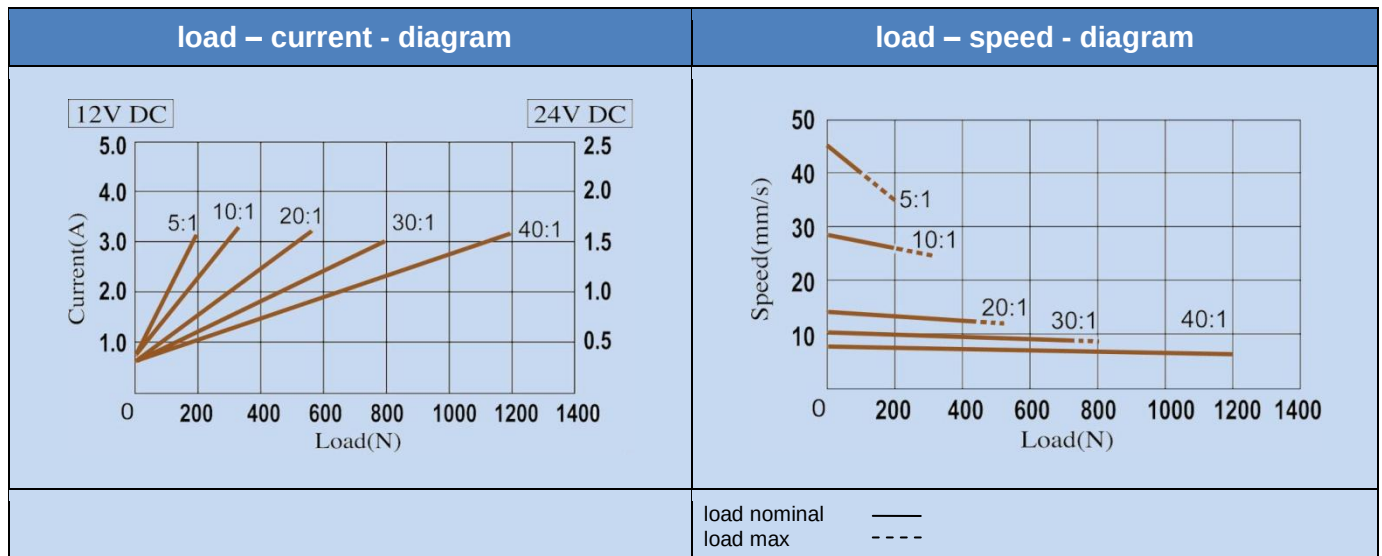
An overload-protection can be made by using a current control.



### Model code

| DSZY1 | - | 12      | - | 10             | - | A    | - | 200    | - | IP65            |
|-------|---|---------|---|----------------|---|------|---|--------|---|-----------------|
| typ   |   | voltage |   | gear reduction |   | ACME |   | stroke |   | protection type |
|       |   | 12V     |   | 5              |   |      |   | 50mm   |   |                 |
|       |   | 24V     |   | 10             |   |      |   | 100mm  |   |                 |
|       |   |         |   | 20             |   |      |   | 150mm  |   |                 |
|       |   |         |   | 30             |   |      |   | 200mm  |   |                 |
|       |   |         |   | 40             |   |      |   | 250mm  |   |                 |
|       |   |         |   |                |   |      |   | 300mm  |   |                 |

### Diagram

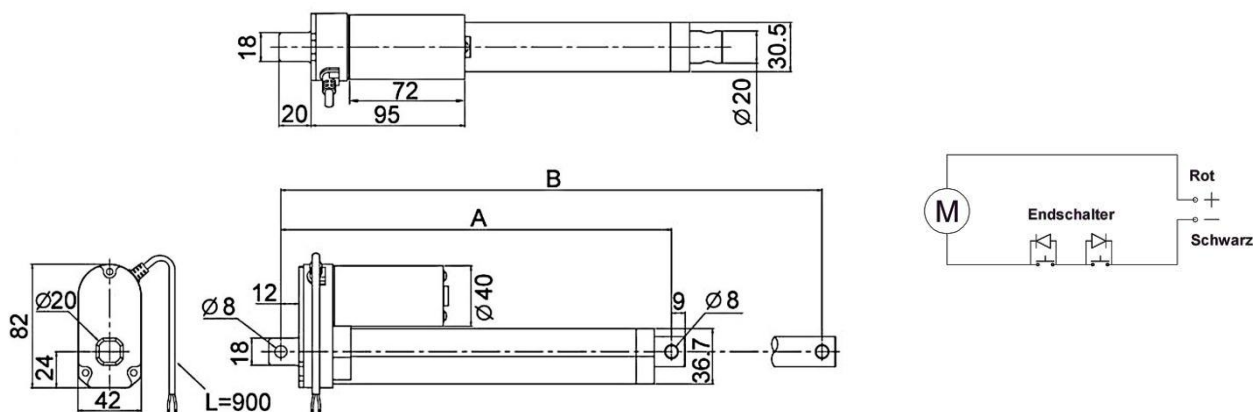


### Additional technical data

- push/pull force up to 1200N
- static force 2000N
- Operating temperature -26C°- 65C°
- Duty cycle 25%
- Zinc alloy housing
- Aluminium outer tube and stroke rod
- Voltage 12 or 24 VDC
- Options: potentiometer and hall sensors
- Protection type IP65

## Dimension

| Linear actuator       | Length                  | Mass in mm |     |     |     |     |     |
|-----------------------|-------------------------|------------|-----|-----|-----|-----|-----|
|                       | Stroke $\pm 3\text{mm}$ | 50         | 100 | 150 | 200 | 250 | 300 |
| DSZY1 - type standard | A                       | 158        | 209 | 260 | 311 | 362 | 413 |
|                       | B                       | 208        | 309 | 410 | 511 | 612 | 713 |



## Mounting instruction

Please make sure, that load is not bigger than shown in the diagram speed/load. If overload is possible in the application, please use a separate current control to switch off at too high current (= too high load). Nominal current, depending on ratio, is shown in the diagram current / load.

Please use the right voltage supply as it is shown on the actuator. For extending the piston rod connect the red cable with plus and the black cable with minus. Movement is stopped automatically at the end of the stroke. For moving back, reverse the polarity (change plus and minus). Endswitches are not adjustable by themselves.

Load should be centered in moving direction, shear forces should be avoid because of shortening the lifetime. Big shear forces can destroy the actuator! Be carefull.



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## Installation manual DSZY1

Make sure the actuator is not connected electrically when installed.  
 Make sure you use the correct DC voltage.  
 Actuator force must not be over loaded. Please refer to the model number and it's force specification.  
 To avoid over load disconnect the actuator if the current exceed it's maximum rating.

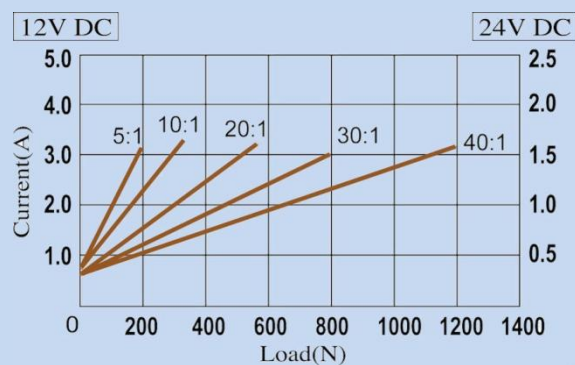
The load should be centered on the operating direction. Side load is NOT good for the actuator.  
 In case the actuator rod is exposed to side load the service life time will be reduced.

Standard

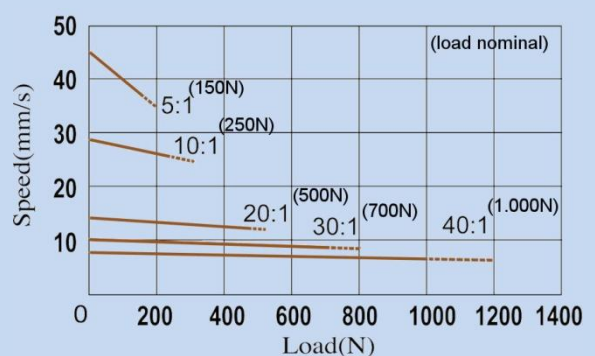


**DSZY1**

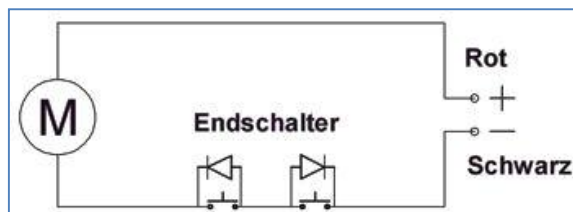
load – current - diagram



load – speed - diagram



load nominal —  
 load max ----



The actuator will extend when the red wire connects to plus and the black wire connects to negative. In order to retract or extract again the supply voltage polarity must be reverted.

The actuator have integrated limit switches that will stop the rod when it reach it's end position of extraction or retraction.