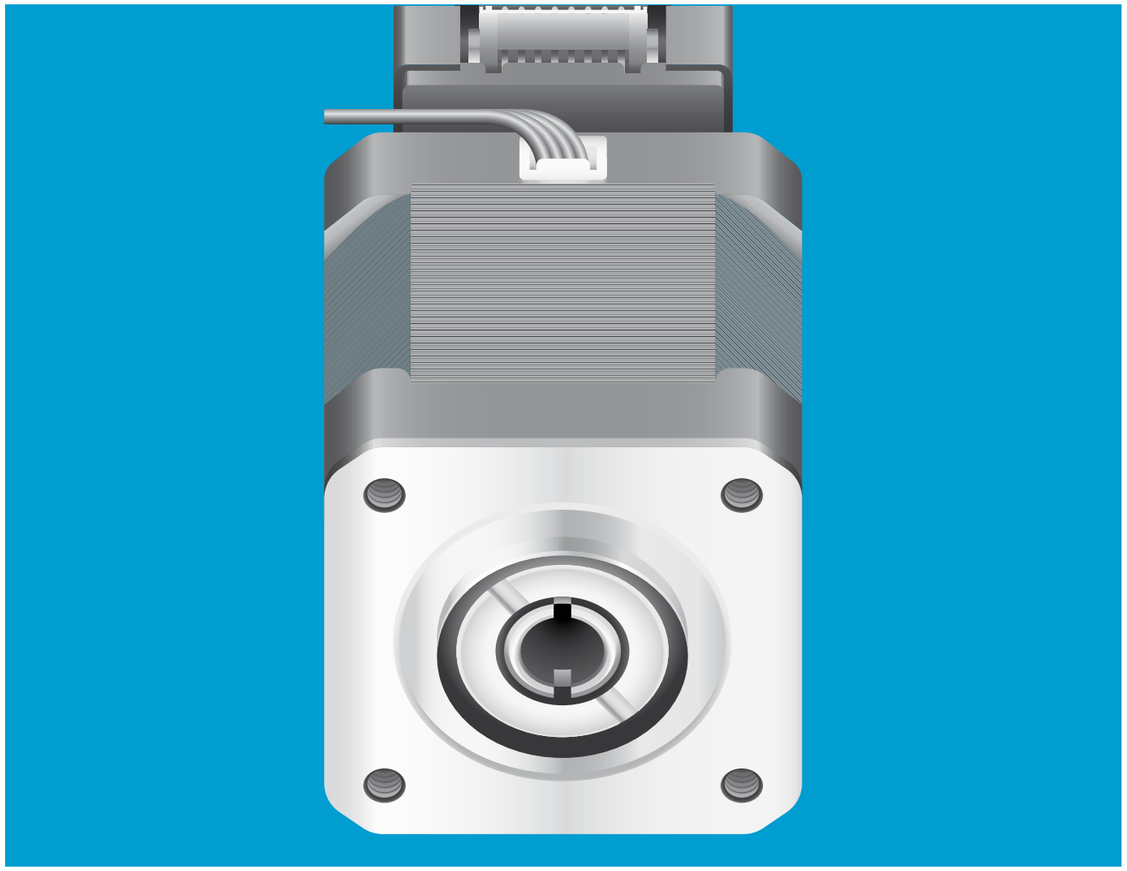
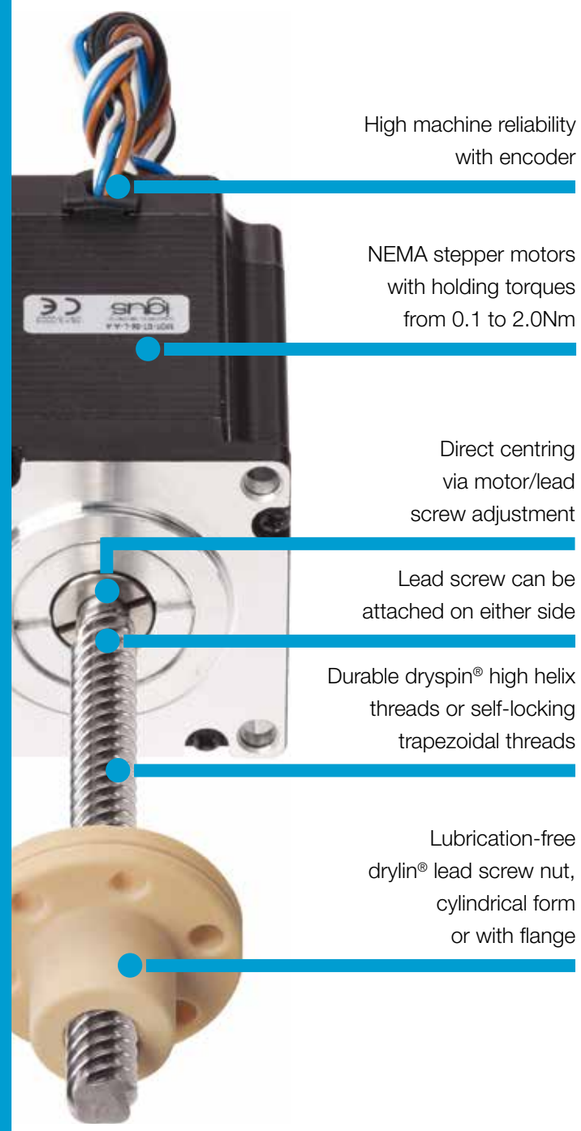
## My sketches



# drylin® electric drive technology – Lead screw motors

- Seven lead screw types with 0.8–50mm pitch
- Maximum precision by centring the lead screw
- The lead screw can be attached on either side
- Space-saving, versatile
- Available for delivery ready for connection with drylin® SAWC and SLN linear units




# Efficient, precise and compact – drylin® lead screw motors

drylin® with the lead screw motor range is the optimum solution for systems that need a stepper motor and integrated lead screw. The stand-alone versions have a compact design and are available with NEMA stepper motors with or without an encoder. The lead screw is centred and, in combination with the dryspin® high helix thread technology, the system has a long service life.

- 3 stepper motor sizes
- Lubrication-free drylin® lead screw technology
- Available ready to connect

### Typical application areas

- Medical technology
- Tool building
- Laboratory technology

**Available from stock**
Detailed information about delivery time online.

**Price breaks online**
No minimum order value. No minimum order quantity.

**Product finder**
▶ www.igus.eu/drylinE-finder





drylin® cantilever axis

## Stand-alone solution for customer requirements – with or without encoder

- Stepper motors in three different sizes with stranded wire and 0.1–2Nm holding torque
- Seven lead screw types with 0.8–50mm pitch
- Maximum precision by centring the lead screw with a motor/lead screw fit
- Matching lead screw nuts in the drylin® product range
- When using a stepper motor without an encoder the lead screw can be attached on either side
- Space-saving, versatile
- Available for delivery ready for connection with drylin® SAWC, SLN and SLT linear axes

### Technical data and dimensions [mm] – lead screw motors

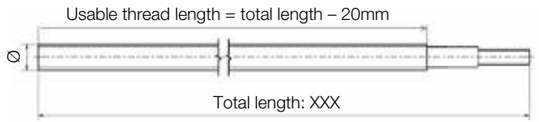
| Part No. | Motor size | Distance over hubs [mm] | Holding torque [Nm] | Shaft load axial [N] | Encoder Optional |
|---|---|---|---|---|---|
| **MOT-ST-28-L-A-A** | NEMA11 | 28 | 0.1 | 50 | No |
| **MOT-ST-28-L-A-B** | NEMA11 | 28 | 0.06 | 50 | No |
| **MOT-ST-28-L-C-A** | NEMA11 | 28 | 0.1 | 50 | Yes |
| **MOT-ST-28-L-C-B** | NEMA11 | 28 | 0.06 | 50 | Yes |
| **MOT-ST-42-L-A-A** | NEMA17 | 42 | 0.5 | 100 | No |
| **MOT-ST-42-L-A-B** | NEMA17 | 42 | 0.2 | 100 | No |
| **MOT-ST-42-L-C-A** | NEMA17 | 42 | 0.5 | 100 | Yes |
| **MOT-ST-42-L-C-B** | NEMA17 | 42 | 0.2 | 100 | Yes |
| **MOT-ST-56-L-A-A** | NEMA23 | 56 | 2.0 | 500 | No |
| **MOT-ST-56-L-A-B** | NEMA23 | 56 | 1.0 | 500 | No |
| **MOT-ST-56-L-C-A** | NEMA23 | 56 | 2.0 | 500 | Yes |
| **MOT-ST-56-L-C-B** | NEMA23 | 56 | 1.0 | 500 | Yes |

| Part No. | Installation size | B1 | B2 ±0.2 | D2 Ø ±0.025 | D3 Ø | D4 Ø | D5 Ø | L2 | L3 | L4 |
|---|---|---|---|---|---|---|---|---|---|---|
| **Without encoder** | | | | | | | | | | |
| **MOT-ST-28-L-A-B** | short (S) | 28.2 | 23.00 | 22.00 | M2.5 | – | – | 31.5 | 2.0 | 0 |
| **MOT-ST-28-L-A-A** | medium (M) | 28.2 | 23.00 | 22.00 | M2.5 | 19.05 | 2 x M2.5–2 | 51.0 | 2.0 | 0 |
| **MOT-ST-42-L-A-B** | short (S) | 42.3 | 31.00 | 22.00 | M3 | – | – | 30.5 | 2.0 | 0 |
| **MOT-ST-42-L-A-A** | medium (M) | 42.3 | 31.00 | 22.00 | M3 | 19.05 | 2 x M2.5–2 | 49.0 | 2.0 | 0 |
| **MOT-ST-56-L-A-B** | short (S) | 56.4 | 47.14 | 38.10 | 5 | – | – | 50.0 | 1.6 | 5 |
| **MOT-ST-56-L-A-A** | medium (M) | 56.4 | 47.14 | 38.10 | 5 | 20.9 | 6 x M2–2 | 76.0 | 1.6 | 5 |
| **With encoder** | | | | | | | | | | |
| **MOT-ST-28-L-C-B** | short (S) | 28.2 | 23.00 | 22.00 | M2.5 | – | – | 47.2 | 2.0 | 0 |
| **MOT-ST-28-L-C-A** | medium (M) | 28.2 | 23.00 | 22.00 | M2.5 | – | – | 66.2 | 2.0 | 0 |
| **MOT-ST-42-L-C-B** | short (S) | 42.3 | 31.00 | 22.00 | M3 | – | – | 46.2 | 2.0 | 0 |
| **MOT-ST-42-L-C-A** | medium (M) | 42.3 | 31.00 | 22.00 | M3 | – | – | 65.0 | 2.0 | 0 |
| **MOT-ST-56-L-C-B** | short (S) | 56.4 | 47.14 | 38.10 | 5 | – | – | 65.7 | 1.6 | 5 |
| **MOT-ST-56-L-C-A** | medium (M) | 56.4 | 47.14 | 38.10 | 5 | – | – | 92.0 | 1.6 | 5 |

# drylin® | Lead screw motors | Product range

## Lead screw with precision machined ends

- Material: stainless steel
- Lead screw needs to be secured with an adhesive
- Ready to fit




### Technical data – high helix thread with dryspin® technology

| Part No. | Motor size | Distance over hubs [mm] | Thread type | Lead screw Ø [mm] | Pitch P | Max. Length |
|---|---|---|---|---|---|---|
| **DST-LS-MOT-6.35X2.54-R-XXX-ES** | NEMA11 | 28 | DST | 6.35 | 2.54 | 300 |
| **DST-LS-MOT-6.35X25.4-R-XXX-ES** | NEMA11 | 28 | DST | 6.35 | 25.4 | 300 |
| **DST-LS-MOT-10X12-R-XXX-ES** | NEMA17/23 | 42 / 56 | DST | 10 | 12 | 500 |
| **DST-LS-MOT-10X25-R-XXX-ES** | NEMA17/23 | 42 / 56 | DST | 10 | 25 | 500 |
| **DST-LS-MOT-10X50-R-XXX-ES** | NEMA17/23 | 42 / 56 | DST | 10 | 50 | 500 |
| **DST-LS-MOT-14X25-R-1000-ES** | NEMA17/23 | 42 / 56 | DST | 14 | 25 | 500 |

### Technical data – trapezoidal lead screw

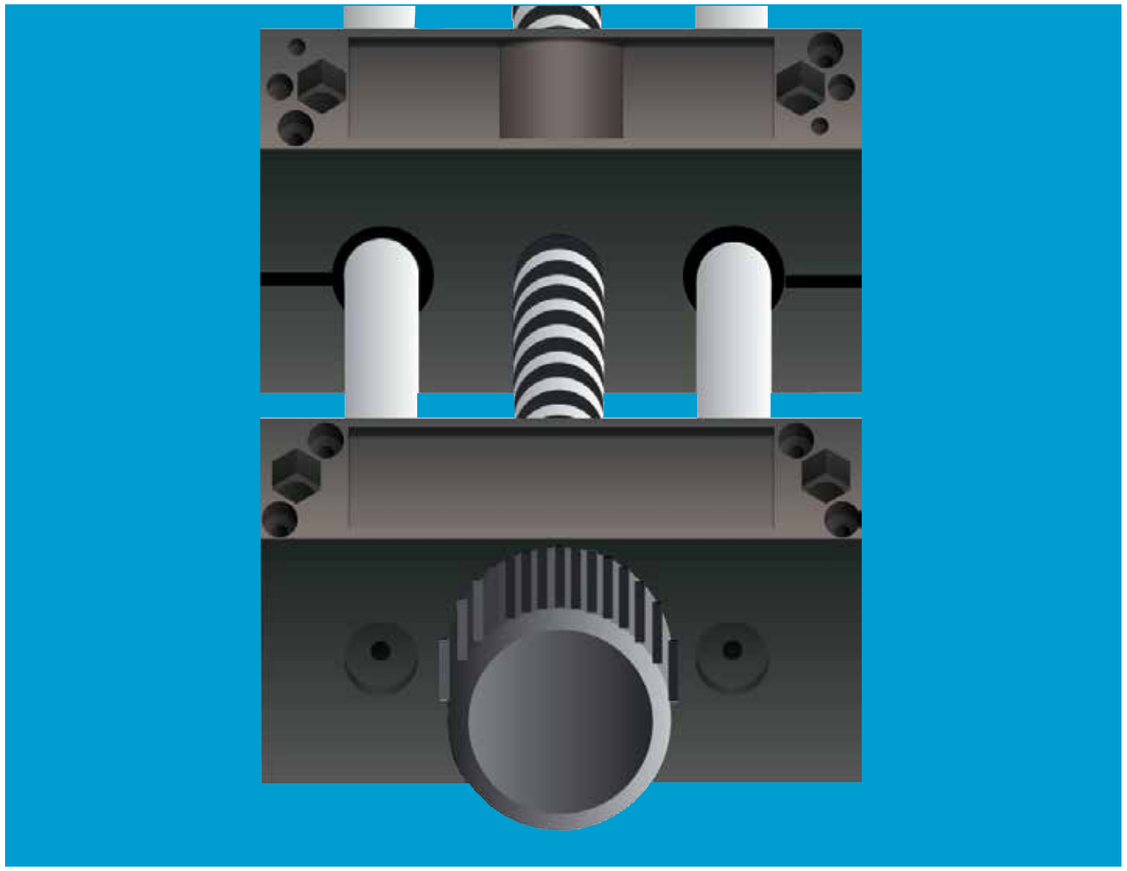
| Part No. | Motor size | Distance over hubs [mm] | Thread type | Lead screw Ø [mm] | Pitch P | Max. Length |
|---|---|---|---|---|---|---|
| **PTGSG-MOT-M5X0,8-R-XXX-ES** | NEMA11 | 28 | M5 | 5 | 0.8 | 250 |
| **PTGSG-MOT-08X1,5-R-XXX-ES** | NEMA17/23 | 42 / 56 | Tr | 8 | 1.5 | 300 |
| **PTGSG-MOT-10X2-R-XXX-ES** | NEMA17/23 | 42 / 56 | Tr | 10 | 2 | 500 |
| **PTGSG-MOT-12X3-R-XXX-ES** | NEMA17/23 | 42 / 56 | Tr | 12 | 3 | 500 |
| **PTGSG-MOT-12X6P3-R-XXX-ES** | NEMA17/23 | 42 / 56 | Tr | 12 | 6P3 | 500 |

XXX: Lead screw length

If desired by the factory, please order using the following assembly number:
Assembly front: MONT004F000 (flange side)
Assembly back: MONT004B000 (assembly not possible with a motor with an encoder)

Lead screw needs to be secured with an adhesive (Loctite 648)!

Curing time: after 6 hours approximately 50%
after 24 hours 100%



## drylin® general drive technology – econ entry-level series

- Cost-effective linear modules
- Drive: Trapezoidal and high helix lead screws, toothed belt
- Lightweight construction
- Corrosion-resistant
- For positioning and adjusting tasks