

**Screw driven guided linear unit**

Linearantrieb mit Rundspindel und integrierter Kugelumlaufführung  
 Attuatori lineari a vite e guida a ricircolo di sfere

**TECHNICAL DATA | TECHNISCHE DATEN | DATI TECNICI**

|  |     |                 |        |      |
|--|-----|-----------------|--------|------|
| Size - Baugröße - Taglia   |     |                 | 42x45  |      |
| Max. speed* - Max. Geschwindigkeit* - Velocità max*                        | m/s |                 | 0,75*  |      |
| Max. stroke length - Max. Hub - Corsa max                                  | mm  |                 | 1000   |      |
| Min. stroke length - Min. Hub - Corsa min                                  | mm  | 100             | 100    |      |
| Pitch - Spindelsteigung - Passo vite                                       | mm  | 5               | 10     |      |
| Screw diameter - Spindeldurchmesser - Diametro vite                        | mm  |                 | 12     |      |
| Base weight - Gewicht bei 0mm Hub - Peso corsa 0 mm                        | Kg  |                 | 1,8    |      |
| Add for 100 mm of stroke - Gewicht bei 100mm Hub - Peso corsa 100 mm       | Kg  |                 | 0,45   |      |
| Max. load** - Max. Belastung** - Carico max**                              | Fx  | N               | 980    | 750  |
|  | Fy  | N               | 1250   | 1250 |
|  | Fz  | N               | 1250   | 1250 |
| Moments* - Max. Belastungsmoment* - Momenti max*                           | Mx  | Nm              | 20     | 20   |
|  | My  | Nm              | 45     | 45   |
|  | Mz  | Nm              | 45     | 45   |
| Inertia moment profile - Flächenträgheitmoment - Momento d'inerzia profilo | Ix  | cm <sup>4</sup> | 15,1   |      |
| Inertia moment profile - Flächenträgheitmoment - Momento d'inerzia profilo | Iy  | cm <sup>4</sup> | 15,5   |      |
| Repeatability - Wiederholgenauigkeit - Ripetibilità                        | mm  |                 | ± 0,02 |      |
| Screw class ***- klasse Kugelgewinde*** - Classe vite***                   |     |                 | T7     |      |
| No load torque - Leerlaufmoment - Coppia resistente                        | Nm  | 0,2             | 0,15   |      |

\* It depends from stroke and the spindle lead  
 \* In Abhängigkeit von Hub und Spindelsteigung  
 \* Valore indicativo, dipende dalla corsa e dal passo vite

\*\* Max values for dynamic conditions. Please refer to the following formula when combined loads are applied.

\*\* Für die Ermittlung der maximalen dynamischen Tragzahlen bei kombinierten Kraftangriffspunkten, nutzen Sie bitte die nebenstehende Berechnungsformel.

\*\* Valori massimi in condizioni dinamiche. In presenza di carichi combinati riferirsi alla formula per la verifica dei carichi massimi da applicare.

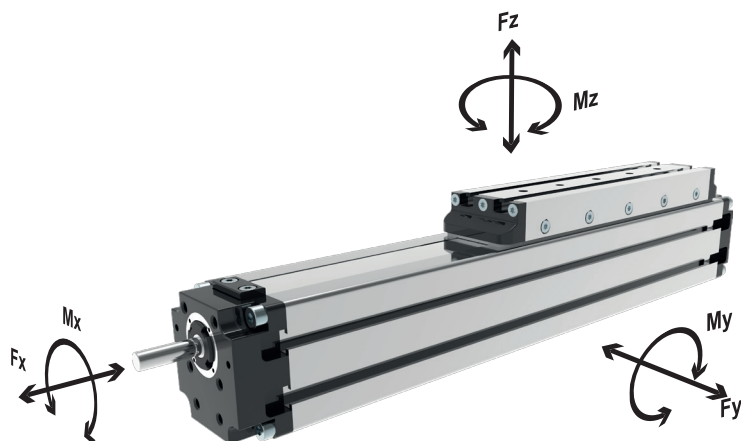
$$\frac{F_{yA}}{F_y} + \frac{F_{zA}}{F_z} + \frac{M_{xA}}{M_x} + \frac{M_{yA}}{M_y} + \frac{M_{zA}}{M_z} \leq 1$$

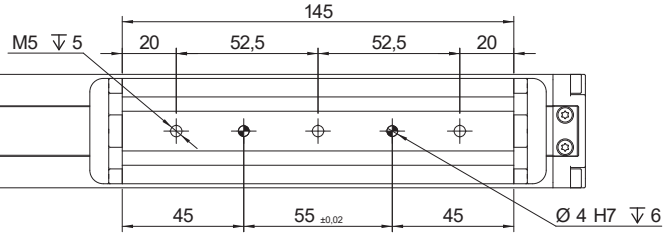
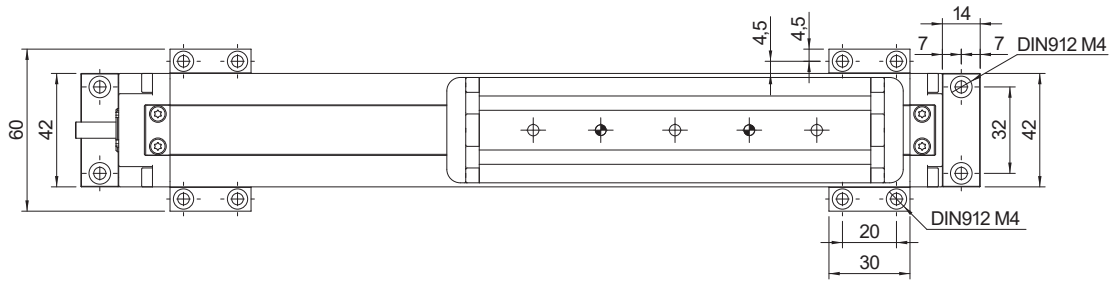
The A letters show the calculated value.  
 Der A Parameter entspricht dem errechneten Wert.  
 La lettera A indica i valori complessivi calcolati

\*\*\* Different types of screws are available, rolled or ground with different tolerances and trapezoidal screws.

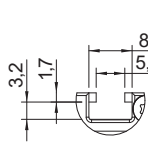
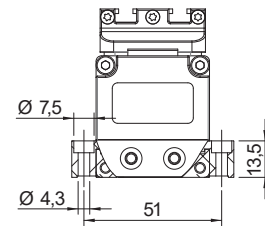
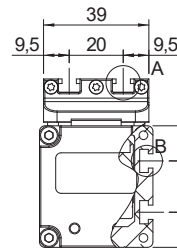
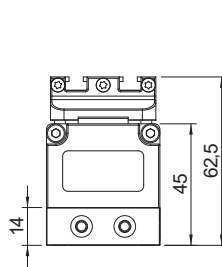
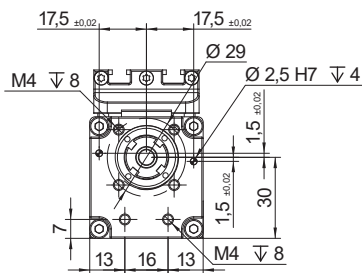
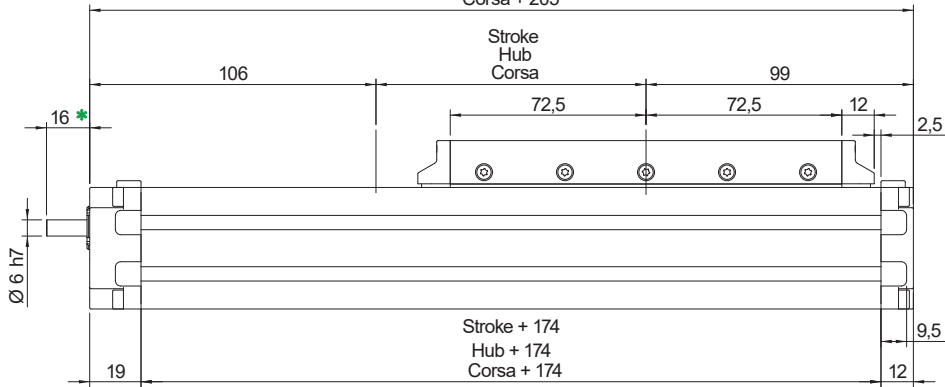
\*\*\* Verschiedene Spindelvarianten sind verfügbar. Kugelrollspindeln geschliffen in verschiedenen Genauigkeitsklassen sowie Trapezspindeln.

\*\*\* Tipologie di viti disponibili: rullate, rettifiche con diversi classi di precisione e trapezoidali.

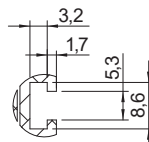




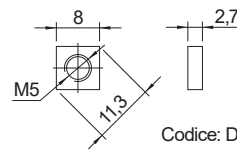
Stroke + 205  
Hub + 205  
Corsa + 205



View A  
Ansicht A  
Vista A

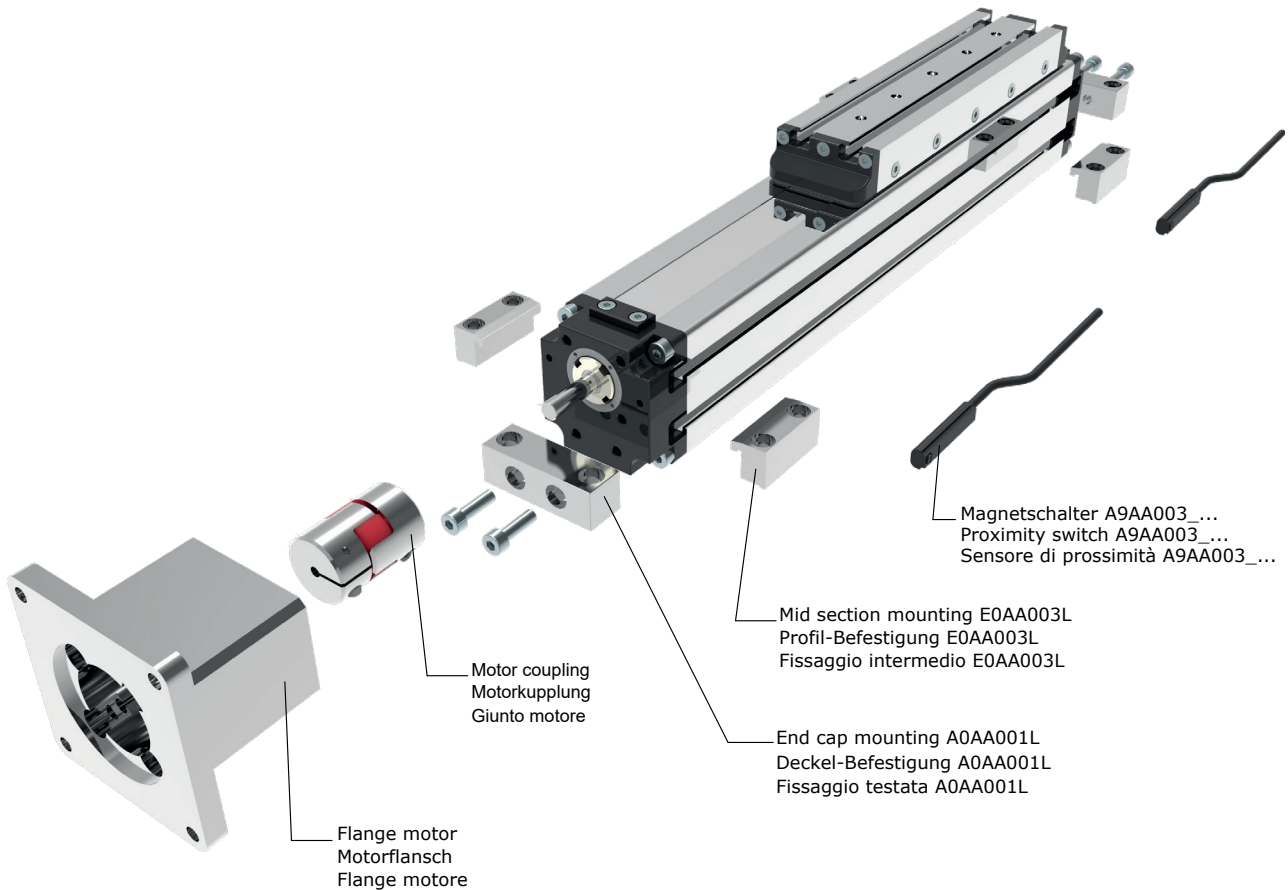


View B  
Ansicht B  
Vista B



Codice: DQM05-01  
Part. n: DQM05-01  
Bestellcode: DQM05-01

\* Measure likely to change according to customer request  
Messen sich wahrscheinlich ändern nach Kundenwunsch  
Misura suscettibile di modifica su richiesta del cliente



**ORDERING INFORMATION** | Bestallangaben Baureihe | Codici per l'ordinazione

<sup>1</sup>Proximity switch A9AA003\_... | <sup>1</sup>Magnetschalter A9AA003\_... | <sup>1</sup>Sensore di prossimità A9AA003\_...

| Part nr.   Ident nr.   Cod. | Cable   Kabel   Cavo   | Output   Ausgangfunktion   Uscita |
|-----------------------------|--|-----------------------------------|
| A9AA003_01                  | with 2 mt cable   mit 2 mt kabel   con cavo 2 mt                           | PNP                               |
| A9AA003_02                  | with 2 mt cable   mit 2 mt kabel   con cavo 2 mt                           | NPN                               |
| A9AA003_03                  | 200 mm with M8 plug in   mit 200 mm kabel und M8 stecker   200 mm conn. M8 | PNP                               |
| A9AA003_04                  | 200 mm with M8 plug in   mit 200 mm kabel und M8 stecker   200 mm conn. M8 | NPN                               |
| A9AA003_NC                  | with 2 mt cable   mit 2 mt kabel   con cavo 2 mt                           | NC                                |

**MTV42-0500-12 05-R A**

**Series MTV**  
Serie MTV  
Serie MTV

**Size 42x45**  
Baugröße 42x45  
Grandezza 42x45

**Stroke mm**  
Hub mm  
Corsa mm

**Screw diam.**  
Durchmesser Spindle  
Dim. Vite Ø12 mm

**Screw pitch**  
Spindelsteigung  
Passo vite  
05 = 5 mm  
10 = 10 mm

**Shaft** | Versionen Antriebswelle | Versione Albero

A: Without key shaft | Ohne Passfeder | Senza chiavetta  
B: With key shaft | Mit Passfeder | Con sede chiavetta

**Screw type** | Spindeltyp | Vite tipo

R: Rolled screw with ball recirculating  
Kugelrollspindel | Rullata a ricircolo di sfere  
T: Trapezoidal screw | Trapez spindel | Vite trapezia  
G: Grounded | Kugelgewinde | Vite rettificata