

2

Nadelrollengelagerte Schlittenführungen
Needle Roller Bearing Slides

Einsatzgebiete

Bearbeitungs-, Bewegungs- und Positionieraufgaben.
Horizontal und vertikal einsetzbar.

Konstruktionsvorteile

Leichtgängige Bewegung – hohe Verfahrensgeschwindigkeit – hohe Lebensdauer – hohe Belastbarkeit – hohe Starrheit.

Schlittenausführung

Grauguss EN-GJL-250 (Standardausführung), auf Anfrage Aluminium. Auf Wunsch Oberfläche chemisch vernickelt (Grauguss), harteloxiert (Aluminium).

Die Angaben über Gewicht und Belastungen gelten für Schlitten in Grauguss-Ausführung. Bei Aluminium-Schlitten verringern sich die Angaben um ca. 50%.

Kombinationen verschiedener Typen und Größen möglich.

Auf Anfrage Länge und Hub in Zwischengrößen lieferbar.

Zubehör

Umfangreiches Zubehör für alle Einsatzmöglichkeiten (siehe Zubehörprogramm).

Applications

Accurate positioning and movement in machining and inspection operations. Suitable for horizontal and vertical operation.

Design advantages

Smooth movement – high speeds – long life-time – high-load carrying capacity – high rigidity.

Slide construction

Grey cast iron (EN-GJL-250), upon request in Aluminium. Upon request electroless nickel plating (grey cast iron), hard anodised (Aluminium).

The approx. weight and load capacity is for cast iron slides. For aluminium slides the approximate weight and load capacity will decrease by approx. 50%.

Various models and sizes may be compounded.

Other dimensions and travels are available upon request.

Accessories

Many accessories are available for different applications (see accessories).

Nadelrollengelagerte Schlittenführungen Needle Roller Bearing Slides



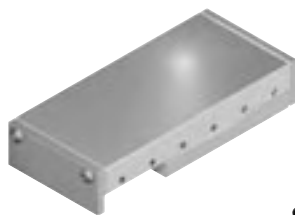
2

Nadelrollengelagerte Schlittenführungen
Needle Roller Bearing Slides

NO

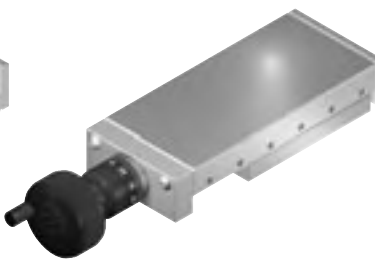


NP



Größen 1-28 | Seite 2.04
Size 1-28 | page 2.04

NL

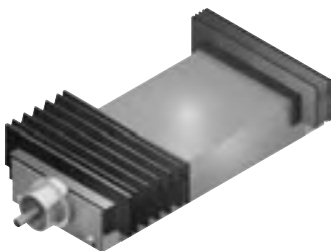


Größen 01-014 | Seite 2.06
Size 01-014 | page 2.06

NM

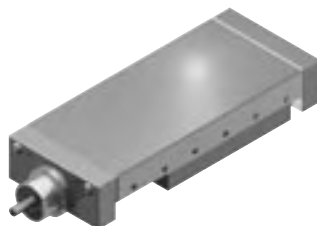


NE,U



Größen 1-28 | Seite 2.08
Size 1-28 | page 2.08

NE



Größen 01-027 | Seite 2.10
Size 01-027 | page 2.10

NO

offene Ausführung
open type

NP

Grundausführung, ohne Spindel, ohne Spindelmutter
plain without lead screw, without nut

NL

mit Handrad, Spindel und Spindelmutter
with hand-wheel, lead screw and nut

NM

mit Mikrometerrandel, Spindel und Spindelmutter
with knurled micrometer knob, lead screw and nut

NE

zum Anbau von Motoren
for motorized applications

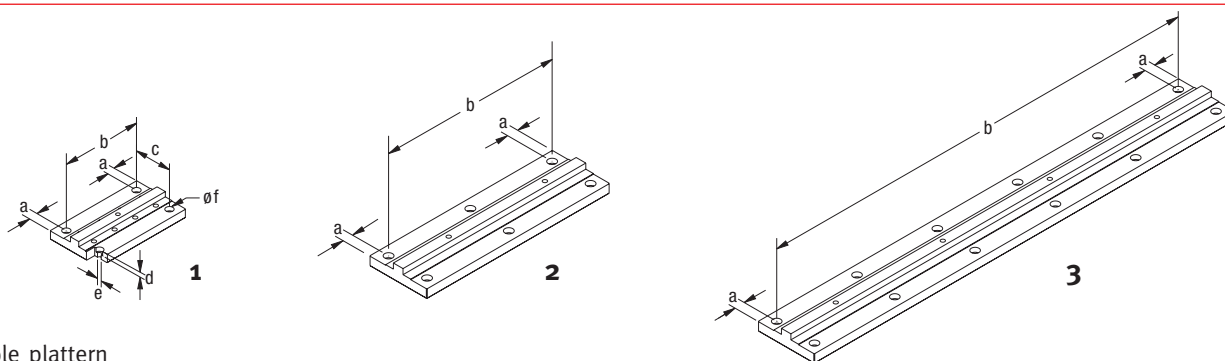
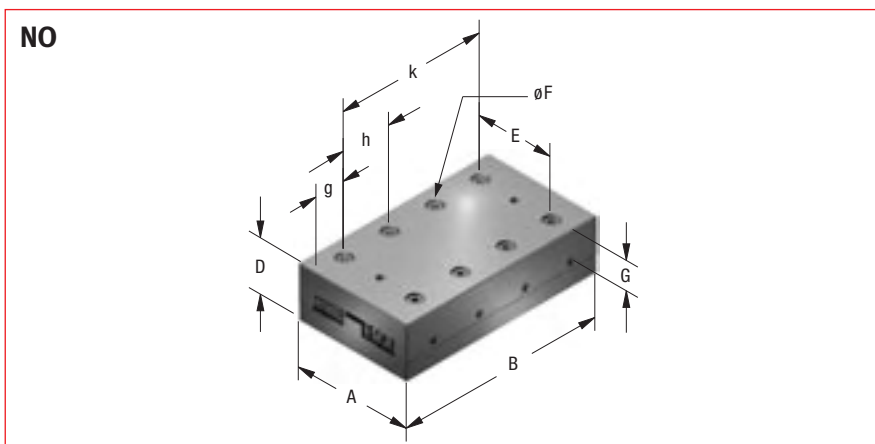
**Belastung
load capacity**

Die Belastungsangaben gelten bei ganzflächiger Belastung und ganzflächiger Schlittenbefestigung bei mittig stehendem Schlitten. Gültig für Einzelschlitten.

Indicated load capacities are based on full surface loading and full surface slide mounting with slide in centre position. All load indications apply to single slides.

NO
Langer Hub bei kurzer Schlittenlänge.

NO
Extended travel at short slide length.



Befestigung
Mounting hole pattern

| Größe Size | Hub Travel | | | | | | | | | | Gewicht Weight | Belastung Load capacity | Momente Torque | | | Befestigung Mounting hole pattern | | | | | | | | |
|---------------|---------------|------------|------------|-----------|-----------|-----------|-------------|-----------|------------|--------------|-------------------|-------------------------------|-------------------|--------------|--------------|--------------------------------------|-----------|-----------------------------|-----------|------------|------------|-----------|---|---|
| | A | B | C | D | E | F | G | g | h | k | | | NO kg | NO N | NO Nm | Mx dyn | My dyn | Mz dyn | Nr. | a | b | c | d | e |
| 01 | 100 | 110 | 60 | 45 | 64 | 11 | 23,5 | 30 | 50 | 1 x h | 3,1 | 9700 | 215,0 | 104,0 | 104,0 | 1 | 10 | 1 x 90 | 60 | 6,5 | 6,6 | 11 | | |
| 02 | 100 | 160 | 95 | 45 | 64 | 11 | 23,5 | 30 | 50 | 2 x h | 4,5 | 14300 | 320,0 | 230,0 | 230,0 | 1 | 10 | 1 x 140 | 60 | 6,5 | 6,6 | 11 | | |
| 03 | 100 | 210 | 130 | 45 | 64 | 11 | 23,5 | 30 | 50 | 3 x h | 5,9 | 18800 | 420,0 | 410,0 | 410,0 | 2 | 10 | 1 x 50 / 1 x 90 / 1 x 50 | 60 | 6,5 | 6,6 | 11 | | |
| 04 | 100 | 260 | 165 | 45 | 64 | 11 | 23,5 | 30 | 50 | 4 x h | 7,2 | 23400 | 525,0 | 645,0 | 645,0 | 2 | 10 | 1 x 50 / 1 x 140 / 1 x 50 | 60 | 6,5 | 6,6 | 11 | | |
| 05 | 100 | 310 | 200 | 45 | 64 | 11 | 23,5 | 30 | 50 | 5 x h | 8,6 | 28600 | 640,0 | 950,0 | 950,0 | 2 | 10 | 1 x 50 / 1 x 190 / 1 x 50 | 60 | 6,5 | 6,6 | 11 | | |
| 06 | 100 | 360 | 235 | 45 | 64 | 11 | 23,5 | 30 | 50 | 6 x h | 10,0 | 33100 | 745,0 | 1285,0 | 1285,0 | 3 | 10 | 2 x 50 / 1 x 140 / 2 x 50 | 60 | 6,5 | 6,6 | 11 | | |
| 07 | 100 | 410 | 265 | 45 | 64 | 11 | 23,5 | 30 | 50 | 7 x h | 11,4 | 37700 | 845,0 | 1695,0 | 1695,0 | 3 | 10 | 2 x 50 / 1 x 190 / 2 x 50 | 60 | 6,5 | 6,6 | 11 | | |
| 08 | 145 | 210 | 130 | 60 | 98 | 15 | 32,0 | 55 | 100 | 1 x h | 11,8 | 18800 | 675,0 | 410,0 | 410,0 | 1 | 55 | 1 x 100 | 90 | 8,5 | 9,0 | 15 | | |
| 09 | 145 | 310 | 180 | 60 | 98 | 15 | 32,0 | 55 | 100 | 2 x h | 17,3 | 29700 | 1070,0 | 1035,0 | 1035,0 | 1 | 55 | 1 x 200 | 90 | 8,5 | 9,0 | 15 | | |
| 010 | 145 | 410 | 350 | 60 | 98 | 15 | 32,0 | 55 | 100 | 3 x h | 22,8 | 32000 | 1150,0 | 1200,0 | 1200,0 | 2 | 55 | 3 x 100 | 90 | 8,5 | 9,0 | 15 | | |
| 011 | 145 | 510 | 450 | 60 | 98 | 15 | 32,0 | 55 | 100 | 4 x h | 28,3 | 38800 | 1400,0 | 1795,0 | 1795,0 | 2 | 55 | 1 x 100 / 1 x 200 / 1 x 100 | 90 | 8,5 | 9,0 | 15 | | |
| 012 | 145 | 610 | 550 | 60 | 98 | 15 | 32,0 | 55 | 100 | 5 x h | 33,8 | 46300 | 1665,0 | 2540,0 | 2540,0 | 2 | 55 | 5 x 100 | 90 | 8,5 | 9,0 | 15 | | |
| 013 | 145 | 710 | 650 | 60 | 98 | 15 | 32,0 | 55 | 100 | 6 x h | 39,3 | 53100 | 1915,0 | 3375,0 | 3375,0 | 3 | 55 | 2 x 100 / 1 x 200 / 2 x 100 | 90 | 8,5 | 9,0 | 15 | | |
| 014 | 145 | 810 | 750 | 60 | 98 | 15 | 32,0 | 55 | 100 | 7 x h | 44,8 | 60600 | 2180,0 | 4375,0 | 4375,0 | 2 | 55 | 7 x 100 | 90 | 8,5 | 9,0 | 15 | | |
| 015 | 145 | 910 | 850 | 60 | 98 | 15 | 32,0 | 55 | 100 | 8 x h | 50,3 | 67400 | 2425,0 | 5455,0 | 5455,0 | 3 | 55 | 3 x 100 / 1 x 200 / 3 x 100 | 90 | 8,5 | 9,0 | 15 | | |
| 016 | 145 | 1010 | 950 | 60 | 98 | 15 | 32,0 | 55 | 100 | 9 x h | 55,8 | 74900 | 2695,0 | 6705,0 | 6705,0 | 2 | 55 | 9 x 100 | 90 | 8,5 | 9,0 | 15 | | |



2

Nadelrollengelagerte Schlittenführungen
Needle Roller Bearing Slides

NP | NL | NM Schlittenführungen (Größen 1 - 28) Slides (size 1 - 28)

NP

Schlitten (Grundauführung) ohne Spindel, ohne Spindelmutter.

NL

Schlitten mit Handrad, Spindel und Spindelmutter.

NM

Schlitten mit Mikrometerrandel, Spindel und Spindelmutter.

NCP | NCL | NCM

Feststehender Kreuzschlitten. Mittig verbohrt (Standardausführung).

Bei außermittiger Montage bitte Maß V und W angeben.

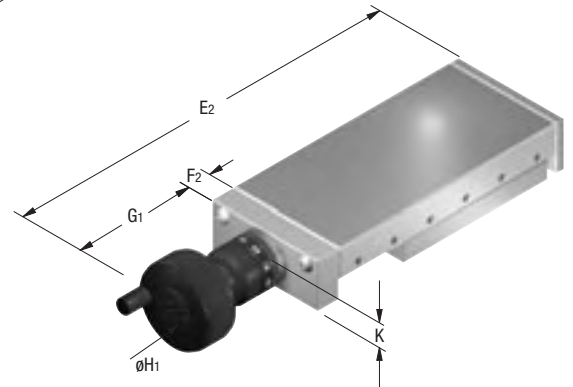
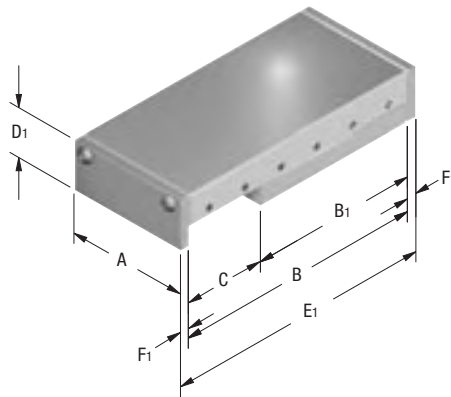
N CSP | NCSL | NCSM

Kreuzschlitten mit Drehteller. Mittig verbohrt (Standardausführung).

Bei außermittiger Montage bitte Maß V und W angeben.

Metrische Standardspindeln gehärtet und geschliffen. Steigungsgenauigkeit $\pm 0,02$ mm je 300 mm Hub. Sonderspindeln auf Anfrage.

NP



NL

NP

Standard (plain) without lead screw, without nut.

NL

with hand-wheel, with lead screw, with nut.

NM

with knurled micrometer knob, with lead screw, with nut.

NCP | NCL | NCM

fixed compound XY-slide. Centre-mounting (standard). Please advise dimensions V and W when off-centre mounting is required.

N CSP | NCSL | NCSM

compound XY-slide with swivel plate. Centre-mounting (standard). Please advise dimensions V and W when off-centre mounting is required.

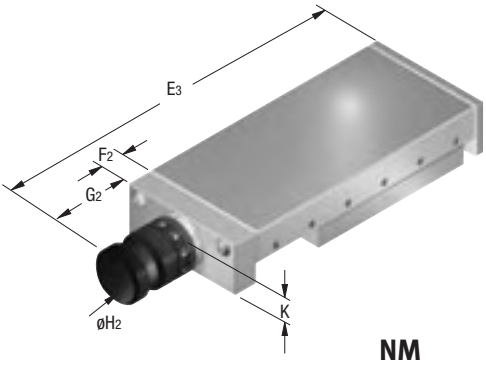
Metric standard lead screws are hardened and ground. Pitch accuracy is $\pm 0,02$ mm per 300 mm of travel. Higher accuracy lead screws are available upon request.

| Größe Size | Hub Travel | | | | ohne Balg without bellows | | | | | | ohne Balg without bellows | |
|---------------|---------------|------|----------------|-----|------------------------------|----------------|----------------|----------------|----------------|----------------|------------------------------|----------------|
| | A | B | B ₁ | C | D ₁ | D ₂ | D ₃ | E ₁ | E ₂ | E ₃ | F ₁ | F ₂ |
| 1 | 300 | 410 | 308 | 100 | 75 | 150 | 190 | 430 | 607 | 538 | 10 | 20 |
| 2 | 300 | 510 | 308 | 200 | 75 | 150 | 190 | 530 | 707 | 638 | 10 | 20 |
| 3 | 300 | 610 | 308 | 300 | 75 | 150 | 190 | 630 | 807 | 738 | 10 | 20 |
| 4 | 300 | 710 | 308 | 400 | 75 | 150 | 190 | 730 | 907 | 838 | 10 | 20 |
| 5 | 300 | 610 | 408 | 200 | 75 | 150 | 190 | 630 | 807 | 738 | 10 | 20 |
| 6 | 300 | 710 | 408 | 300 | 75 | 150 | 190 | 730 | 907 | 838 | 10 | 20 |
| 7 | 300 | 810 | 408 | 400 | 75 | 150 | 190 | 830 | 1007 | 938 | 10 | 20 |
| 8 | 300 | 910 | 408 | 500 | 75 | 150 | 190 | 930 | 1107 | 1038 | 10 | 20 |
| 9 | 300 | 1010 | 408 | 600 | 75 | 150 | 190 | 1030 | 1207 | 1138 | 10 | 20 |
| 10 | 300 | 1110 | 408 | 700 | 75 | 150 | 190 | 1130 | 1307 | 1238 | 10 | 20 |
| 11 | 300 | 1210 | 408 | 800 | 75 | 150 | 190 | 1230 | 1407 | 1338 | 10 | 20 |
| 12 | 300 | 810 | 508 | 300 | 75 | 150 | 190 | 830 | 1007 | 938 | 10 | 20 |
| 13 | 300 | 910 | 508 | 400 | 75 | 150 | 190 | 930 | 1107 | 1038 | 10 | 20 |
| 14 | 300 | 1010 | 508 | 500 | 75 | 150 | 190 | 1030 | 1207 | 1138 | 10 | 20 |
| 15 | 300 | 1110 | 508 | 600 | 75 | 150 | 190 | 1130 | 1307 | 1238 | 10 | 20 |
| 16 | 300 | 1210 | 508 | 700 | 75 | 150 | 190 | 1230 | 1407 | 1338 | 10 | 20 |
| 17 | 400 | 610 | 408 | 200 | 102 | 204 | 244 | 650 | 868 | 783 | 20 | 30 |
| 18 | 400 | 710 | 408 | 300 | 102 | 204 | 244 | 750 | 968 | 883 | 20 | 30 |
| 19 | 400 | 810 | 408 | 400 | 102 | 204 | 244 | 850 | 1068 | 983 | 20 | 30 |
| 20 | 400 | 910 | 408 | 500 | 102 | 204 | 244 | 950 | 1168 | 1083 | 20 | 30 |
| 21 | 400 | 1010 | 408 | 600 | 102 | 204 | 244 | 1050 | 1268 | 1183 | 20 | 30 |
| 22 | 400 | 1110 | 408 | 700 | 102 | 204 | 244 | 1150 | 1368 | 1283 | 20 | 30 |
| 23 | 400 | 1210 | 408 | 800 | 102 | 204 | 244 | 1250 | 1468 | 1383 | 20 | 30 |
| 24 | 400 | 810 | 508 | 300 | 102 | 204 | 244 | 850 | 1068 | 983 | 20 | 30 |
| 25 | 400 | 910 | 508 | 400 | 102 | 204 | 244 | 950 | 1168 | 1083 | 20 | 30 |
| 26 | 400 | 1010 | 508 | 500 | 102 | 204 | 244 | 1050 | 1268 | 1183 | 20 | 30 |
| 27 | 400 | 1110 | 508 | 600 | 102 | 204 | 244 | 1150 | 1368 | 1283 | 20 | 30 |
| 28 | 400 | 1210 | 508 | 700 | 102 | 204 | 244 | 1250 | 1468 | 1383 | 20 | 30 |



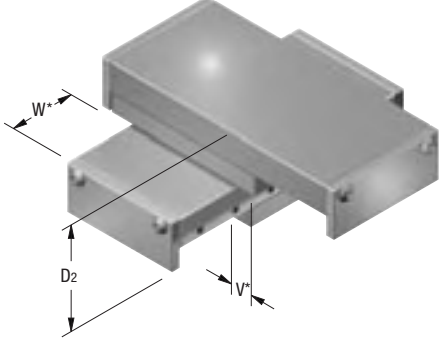
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Nadelrollengelagerte Schlittenführungen
Needle Roller Bearing Slides



NM

NCP



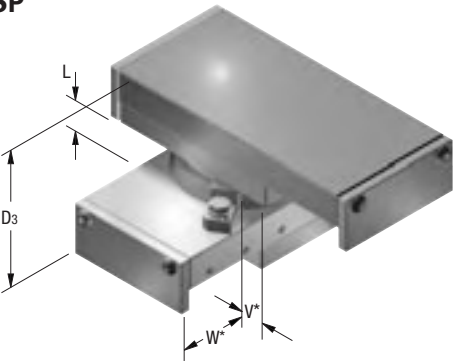
NCL



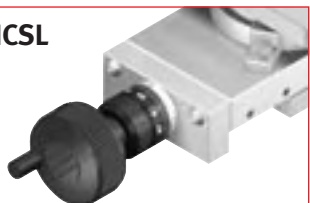
NCM



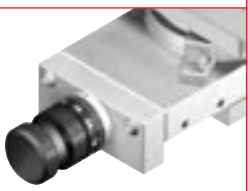
NCSP



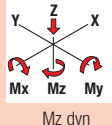
NCSL



NCSM



| mit Balg with bellows | | | | | | Spindel Ø x Steigung Lead screw Ø x pitch | | | Gewicht Weight NP | Belastung Load capacity NP NL NM | Momente Torque NP NL NM | | |
|--------------------------|-----------|--------------|--------------|------------|-----------|--|-------------|-----------|-------------------------|--|-----------------------------------|---------------|---------------|
| F1 | F2 | G1 | G2 | H1 | H2Ø | | K | L | kg | N | Mx dyn | My dyn | Mz dyn |
| 70 | 70 | 166,5 | 97,5 | 125 | 68 | Tr. 26 x 4 | 35,0 | 30 | 65 | 21000 | 5520,0 | 2100,0 | 2100,0 |
| 70 | 70 | 166,5 | 97,5 | 125 | 68 | Tr. 26 x 4 | 35,0 | 30 | 70 | 21000 | 5520,0 | 2100,0 | 2100,0 |
| 70 | 70 | 166,5 | 97,5 | 125 | 68 | Tr. 26 x 4 | 35,0 | 30 | 78 | 21000 | 5520,0 | 2100,0 | 2100,0 |
| 70 | 70 | 166,5 | 97,5 | 125 | 68 | Tr. 26 x 4 | 35,0 | 30 | 85 | 21000 | 5520,0 | 2100,0 | 2100,0 |
| 70 | 70 | 166,5 | 97,5 | 125 | 68 | Tr. 26 x 4 | 35,0 | 30 | 88 | 30200 | 7440,0 | 4060,0 | 4060,0 |
| 70 | 70 | 166,5 | 97,5 | 125 | 68 | Tr. 26 x 4 | 35,0 | 30 | 94 | 30200 | 7440,0 | 4060,0 | 4060,0 |
| 70 | 70 | 166,5 | 97,5 | 125 | 68 | Tr. 26 x 4 | 35,0 | 30 | 100 | 30200 | 7440,0 | 4060,0 | 4060,0 |
| 90 | 90 | 166,5 | 97,5 | 125 | 68 | Tr. 26 x 4 | 35,0 | 30 | 108 | 30200 | 7440,0 | 4060,0 | 4060,0 |
| 100 | 100 | 166,5 | 97,5 | 125 | 68 | Tr. 26 x 4 | 35,0 | 30 | 115 | 30200 | 7440,0 | 4060,0 | 4060,0 |
| 100 | 100 | 166,5 | 97,5 | 125 | 68 | Tr. 26 x 4 | 35,0 | 30 | 122 | 30200 | 7440,0 | 4060,0 | 4060,0 |
| 110 | 110 | 166,5 | 97,5 | 125 | 68 | Tr. 26 x 4 | 35,0 | 30 | 128 | 39200 | 7440,0 | 4060,0 | 4060,0 |
| 70 | 70 | 166,5 | 97,5 | 125 | 68 | Tr. 26 x 4 | 35,0 | 30 | 111 | 39200 | 9290,0 | 6600,0 | 6600,0 |
| 70 | 70 | 166,5 | 97,5 | 125 | 68 | Tr. 26 x 4 | 35,0 | 30 | 118 | 39200 | 9290,0 | 6600,0 | 6600,0 |
| 90 | 90 | 166,5 | 97,5 | 125 | 68 | Tr. 26 x 4 | 35,0 | 30 | 125 | 39200 | 9290,0 | 6600,0 | 6600,0 |
| 100 | 100 | 166,5 | 97,5 | 125 | 68 | Tr. 26 x 4 | 35,0 | 30 | 132 | 39200 | 9290,0 | 6600,0 | 6600,0 |
| 100 | 100 | 166,5 | 97,5 | 125 | 68 | Tr. 26 x 4 | 35,0 | 30 | 137 | 39200 | 9290,0 | 6600,0 | 6600,0 |
| 70 | 70 | 208,0 | 123,0 | 200 | 84 | Tr. 32 x 4 | 43,5 | 40 | 169 | 44300 | 13000,0 | 5920,0 | 5920,0 |
| 70 | 70 | 208,0 | 123,0 | 200 | 84 | Tr. 32 x 4 | 43,5 | 40 | 182 | 44300 | 13000,0 | 5920,0 | 5920,0 |
| 90 | 90 | 208,0 | 123,0 | 200 | 84 | Tr. 32 x 4 | 43,5 | 40 | 195 | 44300 | 13000,0 | 5920,0 | 5920,0 |
| 90 | 90 | 208,0 | 123,0 | 200 | 84 | Tr. 32 x 4 | 43,5 | 40 | 208 | 44300 | 13000,0 | 5920,0 | 5920,0 |
| 100 | 100 | 208,0 | 123,0 | 200 | 84 | Tr. 32 x 4 | 43,5 | 40 | 222 | 44300 | 13000,0 | 5920,0 | 5920,0 |
| 100 | 100 | 208,0 | 123,0 | 200 | 84 | Tr. 32 x 4 | 43,5 | 40 | 235 | 44300 | 13000,0 | 5920,0 | 5920,0 |
| 110 | 110 | 208,0 | 123,0 | 200 | 84 | Tr. 32 x 4 | 43,5 | 40 | 249 | 44300 | 13000,0 | 5920,0 | 5920,0 |
| 90 | 90 | 208,0 | 123,0 | 200 | 84 | Tr. 32 x 4 | 43,5 | 40 | 210 | 58150 | 16430,0 | 9750,0 | 9750,0 |
| 90 | 90 | 208,0 | 123,0 | 200 | 84 | Tr. 32 x 4 | 43,5 | 40 | 225 | 58150 | 16430,0 | 9750,0 | 9750,0 |
| 100 | 100 | 208,0 | 123,0 | 200 | 84 | Tr. 32 x 4 | 43,5 | 40 | 238 | 58150 | 16430,0 | 9750,0 | 9750,0 |
| 100 | 100 | 208,0 | 123,0 | 200 | 84 | Tr. 32 x 4 | 43,5 | 40 | 251 | 58150 | 16430,0 | 9750,0 | 9750,0 |
| 110 | 110 | 208,0 | 123,0 | 200 | 84 | Tr. 32 x 4 | 43,5 | 40 | 265 | 58150 | 16430,0 | 9750,0 | 9750,0 |



NP | NL | NM Schlittenführungen (Größen 01 - 014) Slides (size 01 - 014)

NP

Schlitten (Grundauführung) ohne Spindel und ohne Spindelmutter.

NL

Schlitten mit Handrad, Spindel und Spindelmutter.

NM

Schlitten mit Mikrometerrandel, Spindel und Spindelmutter.

NCP | NCL | NCM

Feststehender Kreuzschlitten. Mittig verbohrt (Standardausführung).

Bei außermittiger Montage bitte Maß V und W angeben.

NCSP | NCSL | NCSM

Kreuzschlitten mit Drehteller. Mittig verbohrt (Standardausführung).

Bei außermittiger Montage bitte Maß V und W angeben.

Metric standard lead screws are hardened and ground. Pitch accuracy is +/- 0,02 mm per 300 mm Hub. Sonderspindeln auf Anfrage.

Standard Befestigungsbohrbild (siehe Zubehör).

NP

Standard (plain) without lead screw, without nut.

NL

with hand-wheel, with lead screw, with nut.

NM

with knurled micrometer knob, with lead screw, with nut.

NCP | NCL | NCM

fixed compound XY-slide. Centre-mounting (standard). Please advise dimensions V and W when off-centre mounting is required.

NCSP | NCSL | NCSM

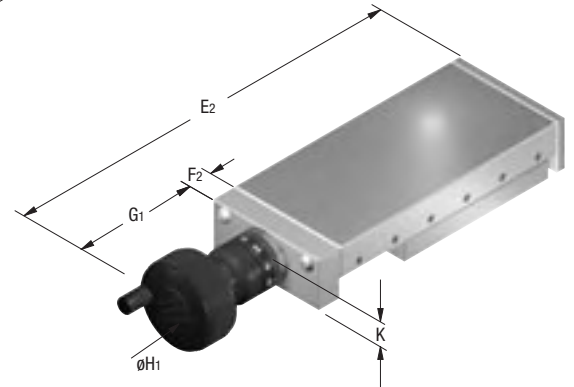
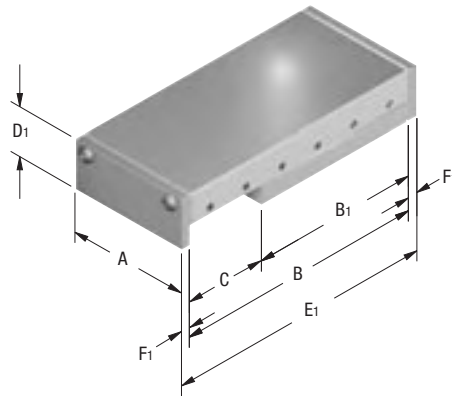
compound XY-slide with swivel plate. Centre-mounting (standard).

Please advise dimensions V and W when off-centre mounting is required.

Metric standard lead screws are hardened and ground. Pitch accuracy is +/- 0,02 mm per 300 mm of travel. Higher accuracy lead screws are available upon request.

Standard mounting holes (see accessories).

NP



NL

| Größe Size | Hub Travel | | | | ohne Balg without bellows | | | | | |
|---------------|---------------|------------|----------------|------------|------------------------------|----------------|----------------|----------------|----------------|----------------|
| | A | B | B ₁ | C | D ₁ | D ₂ | D ₃ | E ₁ | E ₂ | E ₃ |
| 01 | 150 | 203 | 152 | 50 | 50 | 100 | 120 | 219 | 334 | 297 |
| 02 | 150 | 305 | 203 | 100 | 50 | 100 | 120 | 321 | 436 | 399 |
| 03 | 150 | 406 | 304 | 100 | 50 | 100 | 120 | 422 | 537 | 500 |
| 04 | 150 | 305 | 152 | 150 | 50 | 100 | 120 | 321 | 436 | 399 |
| 05 | 150 | 406 | 253 | 150 | 50 | 100 | 120 | 422 | 537 | 500 |
| 06 | 150 | 406 | 203 | 200 | 50 | 100 | 120 | 422 | 537 | 500 |
| 07 | 150 | 406 | 152 | 250 | 50 | 100 | 120 | 422 | 537 | 500 |
| 08 | 200 | 305 | 203 | 100 | 58 | 116 | 136 | 321 | 436 | 399 |
| 09 | 200 | 406 | 253 | 150 | 58 | 116 | 136 | 422 | 537 | 500 |
| 010 | 200 | 457 | 304 | 150 | 58 | 116 | 136 | 473 | 588 | 551 |
| 011 | 200 | 510 | 304 | 200 | 58 | 116 | 136 | 526 | 641 | 604 |
| 012 | 200 | 610 | 406 | 200 | 58 | 116 | 136 | 626 | 741 | 704 |
| 013 | 200 | 510 | 253 | 250 | 58 | 116 | 136 | 526 | 841 | 604 |
| 014 | 200 | 610 | 304 | 300 | 58 | 116 | 136 | 626 | 741 | 704 |

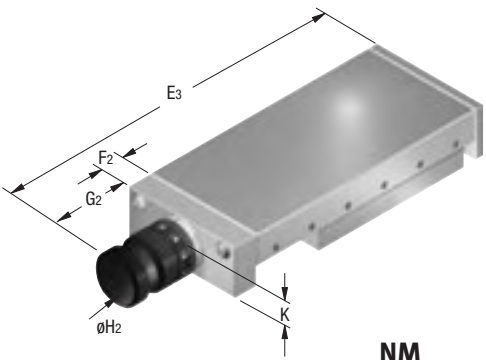
*Handrad (für Größe 6-10 Ø 63 mm, für Größe 11-14 Ø 80 mm möglich)

*hand-wheels (for sizes 6-10 with Ø 63 mm, and for sizes 11-14 with Ø 80 mm possible)



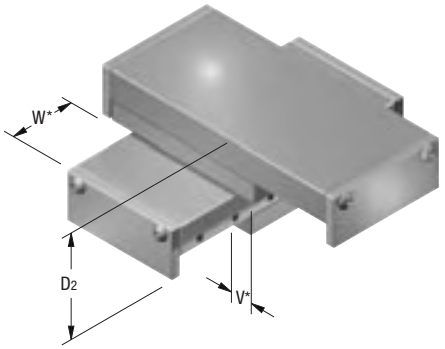
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Nadelrollengelagerte Schlittenführungen
Needle Roller Bearing Slides

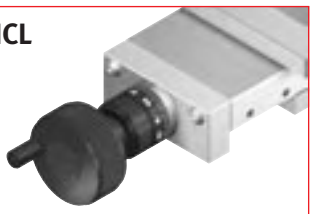


NM

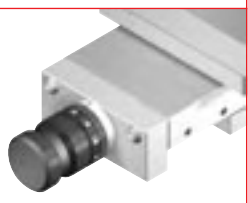
NCP



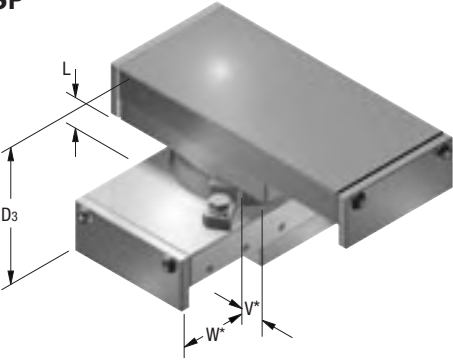
NCL



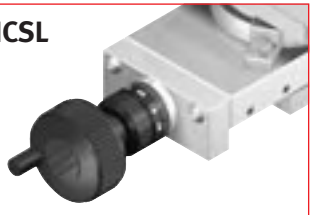
NCM



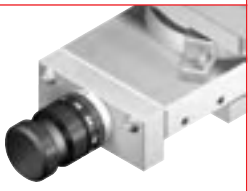
NCSP



NCSL

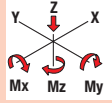


NCSM



ohne Balg
without bellows

| F1 | F2 | G1 | G2 | H1 | H2ø | Spindel Ø x Steigung Lead screw Ø x pitch | K | L | Gewicht Weight NP | Belastung Load capacity NP NL NM | Momente Torque NP NL NM | | |
|----------|-----------|------------|-----------|--------------|-----------|--|-------------|-----------|-------------------------|--|-----------------------------------|--------------|--------------|
| | | | | | | | | | | | Nm | | |
| | | | | | | | | | | | Mx dyn | My dyn | Mz dyn |
| 8 | 16 | 107 | 70 | 106 * | 48 | M 20 x 1 | 24,3 | 20 | 10,0 | 21100 | 940,0 | 435,0 | 435,0 |
| 8 | 16 | 107 | 70 | 106 * | 48 | M 20 x 1 | 24,3 | 20 | 13,2 | 28600 | 1270,0 | 800,0 | 800,0 |
| 8 | 16 | 107 | 70 | 106 * | 48 | M 20 x 1 | 24,3 | 20 | 18,0 | 42900 | 1910,0 | 1830,0 | 1830,0 |
| 8 | 16 | 107 | 70 | 106 * | 48 | M 20 x 1 | 24,3 | 20 | 12,5 | 21100 | 940,0 | 435,0 | 435,0 |
| 8 | 16 | 107 | 70 | 106 * | 48 | M 20 x 1 | 24,3 | 20 | 16,5 | 35400 | 1570,0 | 1250,0 | 1250,0 |
| 8 | 16 | 107 | 70 | 106 * | 48 | M 20 x 1 | 24,3 | 20 | 15,0 | 28600 | 1270,0 | 800,0 | 800,0 |
| 8 | 16 | 107 | 70 | 106 * | 48 | M 20 x 1 | 24,3 | 20 | 13,5 | 21100 | 940,0 | 435,0 | 435,0 |
| 8 | 16 | 107 | 70 | 106 * | 48 | M 20 x 1 | 28,3 | 20 | 21,0 | 22000 | 1150,0 | 720,0 | 720,0 |
| 8 | 16 | 107 | 70 | 106 * | 48 | M 20 x 1 | 28,3 | 20 | 26,0 | 35400 | 2215,0 | 1250,0 | 1250,0 |
| 8 | 16 | 107 | 70 | 106 * | 48 | M 20 x 1 | 28,3 | 20 | 30,0 | 42900 | 2680,0 | 1830,0 | 1830,0 |
| 8 | 16 | 107 | 70 | 106 * | 48 | M 20 x 1 | 28,3 | 20 | 31,5 | 42900 | 2680,0 | 1830,0 | 1830,0 |
| 8 | 16 | 107 | 70 | 106 * | 48 | M 20 x 1 | 28,3 | 20 | 40,0 | 57200 | 3575,0 | 3275,0 | 3275,0 |
| 8 | 16 | 107 | 70 | 106 * | 48 | M 20 x 1 | 28,3 | 20 | 29,0 | 35400 | 2215,0 | 1250,0 | 1250,0 |
| 8 | 16 | 107 | 70 | 106 * | 48 | M 20 x 1 | 28,3 | 20 | 34,5 | 42900 | 2680,0 | 1830,0 | 1830,0 |



2

Nadelrollengelagerte Schlittenführungen
Needle Roller Bearing Slides

NE | NCE zum Anbau von Motoren (Größen 1 - 28) for motorized applications (size 1 - 28)

NE

Lieferbar je nach Einsatz
Montageart **U** = umgekehrt montiert (Standard)
Montageart **N** = normal montiert.

Spindelausführung

Präzisions-Rollenspindeln (Standardausführung).
Hohe Belastung. Drehzahl bis 3000 1/min.
Hohe Steifigkeit. Lange Lebensdauer.
Steigungsgenauigkeit +/- 0,015 mm je 300 mm Hub.
Verfahrgeschwindigkeit je nach Spindelsteigung und Antrieb max. 20 m/min.
Positioniergenauigkeit je nach Spindelausführung und Rückmeldesystem max. 0,001 mm.
Auf Wunsch Kugelgewindespindeln.
Mittlere Belastung. Hoher Wirkungsgrad.
Drehzahl bis 2000 1/min. Steigungsgenauigkeit +/- 0,015 mm je 300 mm Hub.
Andere Gewindesteigungen und Steigungsgenauigkeiten auf Anfrage.

Antriebsmöglichkeiten

Schritt-, Servo- oder Gleichstrommotoren.
Motoradapter nach Kundenwunsch.

Endschaltereinbau

Die angegebenen Hübe sind mechanische Hübe.
Beim Einbau von Endschalter verkürzt sich der Hub C um ca. 20 mm.
Nullpunktschalter werden außen in Verbindung mit Nutenleiste und Nocken angebaut.

NE

For different applications
in inverse mounting **U** (standard)
or normal mounting **N**.

Spindle design

Planetary roller screw (standard) with high-load capacity, Speeds up to 3000 RPM. High rigidity and long-life. Pitch accuracy is +/- 0,015 mm per 300 mm travel. Travel speed depending on lead screw pitch and drive max. 20 m/min. Positioning accuracy of max. 0,001 mm is available depending on the lead screw and positioning feedback system used.
Upon request precision ball screws with medium-load capacity, high efficiency. Speeds up to 2000 RPM. Pitch accuracy is +/- 0,015 mm per 300 mm travel.
Lead screws with other pitch and higher accuracy lead screws are available upon request.

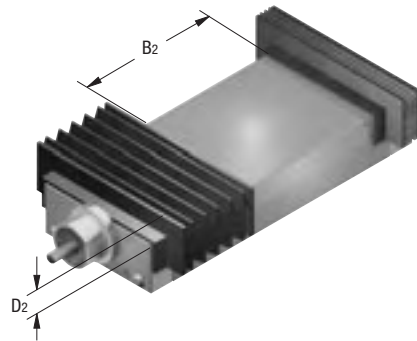
Means of drive

Stepper-, Servo- or AC-motors. Motor flanges and couplings are available upon request.

Limit switches installation

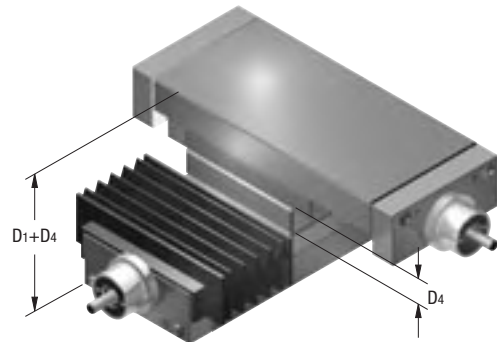
The specified travels are mechanical travels.
When limit switches are installed, the travel C becomes approx. 20 mm shorter.
The home switch will be mounted externally on the side along with a guide bar and adjustable actuators.

NE, U



mit Balgabdeckung
with bellows covers

NCE, U



Y-Achse mit Balgabdeckung
y-axis with bellows covers

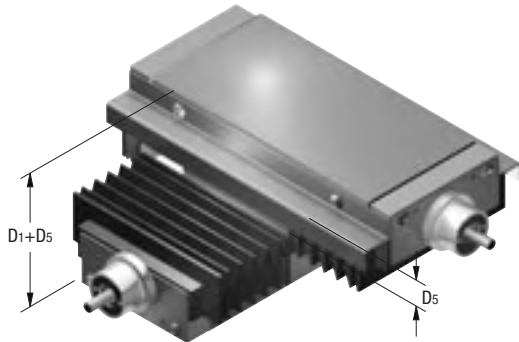
| Größe Size | Größe Size | | | | | | Hub Travel | Hub Travel | | | |
|---------------|---------------|----------------|------|----------------|----------------|-----|---------------|---------------|----------------|--------------------------------|----------------|
| | A | A ₁ | B | B ₁ | B ₂ | C | | D | D ₂ | D ₁ +D ₄ | D ₄ |
| 1 | 300 | 375 | 410 | 308 | 280 | 100 | 75 | 32 | 185 | 35 | |
| 2 | 300 | 375 | 510 | 308 | 280 | 200 | 75 | 32 | 185 | 35 | |
| 3 | 300 | 375 | 610 | 308 | 280 | 300 | 75 | 32 | 185 | 35 | |
| 4 | 300 | 375 | 710 | 308 | 280 | 400 | 75 | 32 | 185 | 35 | |
| 5 | 300 | 375 | 610 | 408 | 380 | 200 | 75 | 32 | 150 | - | |
| 6 | 300 | 375 | 710 | 408 | 380 | 300 | 75 | 32 | 150 | - | |
| 7 | 300 | 375 | 810 | 408 | 380 | 400 | 75 | 32 | 150 | - | |
| 8 | 300 | 375 | 910 | 408 | 380 | 500 | 75 | 32 | 150 | - | |
| 9 | 300 | 375 | 1010 | 408 | 380 | 600 | 75 | 32 | 150 | - | |
| 10 | 300 | 375 | 1110 | 408 | 380 | 700 | 75 | 32 | 150 | - | |
| 11 | 300 | 375 | 1210 | 408 | 380 | 800 | 75 | 32 | 150 | - | |
| 12 | 300 | 375 | 810 | 508 | 480 | 300 | 75 | 32 | 150 | - | |
| 13 | 300 | 375 | 910 | 508 | 480 | 400 | 75 | 32 | 150 | - | |
| 14 | 300 | 375 | 1010 | 508 | 480 | 500 | 75 | 32 | 150 | - | |
| 15 | 300 | 375 | 1110 | 508 | 480 | 600 | 75 | 32 | 150 | - | |
| 16 | 300 | 375 | 1210 | 508 | 480 | 700 | 75 | 32 | 150 | - | |
| 17 | 400 | 480 | 610 | 408 | 380 | 200 | 102 | 37 | 244 | 40 | |
| 18 | 400 | 480 | 710 | 408 | 380 | 300 | 102 | 37 | 244 | 40 | |
| 19 | 400 | 480 | 810 | 408 | 380 | 400 | 102 | 37 | 244 | 40 | |
| 20 | 400 | 480 | 910 | 408 | 380 | 500 | 102 | 37 | 244 | 40 | |
| 21 | 400 | 480 | 1010 | 408 | 380 | 600 | 102 | 37 | 244 | 40 | |
| 22 | 400 | 480 | 1110 | 408 | 380 | 700 | 102 | 37 | 244 | 40 | |
| 23 | 400 | 480 | 1210 | 408 | 380 | 800 | 102 | 37 | 244 | 40 | |
| 24 | 400 | 480 | 810 | 508 | 480 | 300 | 102 | 37 | 204 | - | |
| 25 | 400 | 480 | 910 | 508 | 480 | 400 | 102 | 37 | 204 | - | |
| 26 | 400 | 480 | 1010 | 508 | 480 | 500 | 102 | 37 | 204 | - | |
| 27 | 400 | 480 | 1110 | 508 | 480 | 600 | 102 | 37 | 204 | - | |
| 28 | 400 | 480 | 1210 | 508 | 480 | 700 | 102 | 37 | 204 | - | |



2

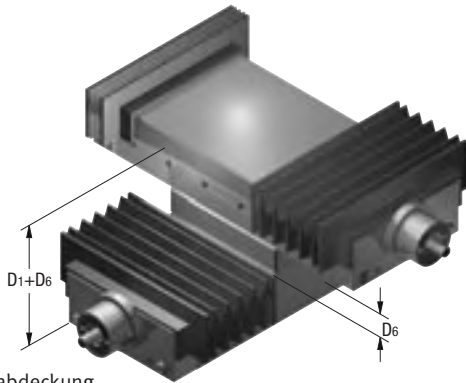
Nadelrollengelagerte Schlittenführungen
Needle Roller Bearing Slides

NCE, U



X- und Y- Achse mit Balgabdeckung und Zwischenplatte
x- and y-axis with bellows covers and intermediate plate

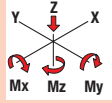
NCE, U



X- und Y- Achse mit Balgabdeckung
x- and y-axis with bellows covers



| D1+D5 | D5 | D1+D6 | D6 | ohne Balg without bellows | mit Balg with bellows | F | Rollenspindel Ø x Steigung Planetary roller screw Ø x pitch | Gewicht Weight NE kg | Belastung Load capacity NE N | Momente Torque NE Nm | My dyn | Mz dyn |
|------------|-----------|------------|-----------|---------------------------------|-----------------------------|-----------|--|--------------------------------------|---|--------------------------------------|---------------|---------------|
| 220 | 70 | 185 | 35 | 20 | 70 | 26 | 23 x 4 | 70,0 | 21000 | 5520,0 | 2100,0 | 2100,0 |
| 220 | 70 | 185 | 35 | 20 | 70 | 26 | 23 x 4 | 75,0 | 21000 | 5520,0 | 2100,0 | 2100,0 |
| 220 | 70 | 185 | 35 | 20 | 70 | 26 | 23 x 4 | 83,0 | 21000 | 5520,0 | 2100,0 | 2100,0 |
| 220 | 70 | 185 | 35 | 20 | 70 | 26 | 23 x 4 | 90,0 | 21000 | 5520,0 | 2100,0 | 2100,0 |
| 185 | 35 | 150 | - | 20 | 70 | 26 | 23 x 4 | 93,0 | 30200 | 7440,0 | 4060,0 | 4060,0 |
| 185 | 35 | 150 | - | 20 | 70 | 26 | 23 x 4 | 98,0 | 30200 | 7440,0 | 4060,0 | 4060,0 |
| 185 | 35 | 150 | - | 20 | 70 | 26 | 23 x 4 | 105,0 | 30200 | 7440,0 | 4060,0 | 4060,0 |
| 185 | 35 | 150 | - | 20 | 90 | 26 | 23 x 4 | 113,0 | 30200 | 7440,0 | 4060,0 | 4060,0 |
| 185 | 35 | 150 | - | 20 | 100 | 26 | 23 x 4 | 120,0 | 30200 | 7440,0 | 4060,0 | 4060,0 |
| 185 | 35 | 150 | - | 20 | 100 | 26 | 23 x 4 | 127,0 | 30200 | 7440,0 | 4060,0 | 4060,0 |
| 185 | 35 | 150 | - | 20 | 110 | 26 | 23 x 4 | 133,0 | 30200 | 7440,0 | 4060,0 | 4060,0 |
| 150 | - | 150 | - | 20 | 70 | 26 | 23 x 4 | 115,0 | 39200 | 9290,0 | 6600,0 | 6600,0 |
| 150 | - | 150 | - | 20 | 70 | 26 | 23 x 4 | 123,0 | 39200 | 9290,0 | 6600,0 | 6600,0 |
| 150 | - | 150 | - | 20 | 90 | 26 | 23 x 4 | 130,0 | 39200 | 9290,0 | 6600,0 | 6600,0 |
| 150 | - | 150 | - | 20 | 100 | 26 | 23 x 4 | 137,0 | 39200 | 9290,0 | 6600,0 | 6600,0 |
| 150 | - | 150 | - | 20 | 100 | 26 | 23 x 4 | 142,0 | 39200 | 9290,0 | 6600,0 | 6600,0 |
| 284 | 80 | 229 | 25 | 30 | 70 | 34 | 30 x 4 | 174,0 | 44300 | 13000,0 | 5920,0 | 5920,0 |
| 284 | 80 | 229 | 25 | 30 | 70 | 34 | 30 x 4 | 186,0 | 44300 | 13000,0 | 5920,0 | 5920,0 |
| 284 | 80 | 229 | 25 | 30 | 90 | 34 | 30 x 4 | 200,0 | 44300 | 13000,0 | 5920,0 | 5920,0 |
| 284 | 80 | 229 | 25 | 30 | 90 | 34 | 30 x 4 | 213,0 | 44300 | 13000,0 | 5920,0 | 5920,0 |
| 284 | 80 | 229 | 25 | 30 | 100 | 34 | 30 x 4 | 227,0 | 44300 | 13000,0 | 5920,0 | 5920,0 |
| 284 | 80 | 229 | 25 | 30 | 100 | 34 | 30 x 4 | 240,0 | 44300 | 13000,0 | 5920,0 | 5920,0 |
| 284 | 80 | 229 | 25 | 30 | 110 | 34 | 30 x 4 | 254,0 | 44300 | 13000,0 | 5920,0 | 5920,0 |
| 244 | 40 | 204 | - | 30 | 90 | 34 | 30 x 4 | 215,0 | 58150 | 16430,0 | 9750,0 | 9750,0 |
| 244 | 40 | 204 | - | 30 | 90 | 34 | 30 x 4 | 230,0 | 58150 | 16430,0 | 9750,0 | 9750,0 |
| 244 | 40 | 204 | - | 30 | 100 | 34 | 30 x 4 | 243,0 | 58150 | 16430,0 | 9750,0 | 9750,0 |
| 244 | 40 | 204 | - | 30 | 100 | 34 | 30 x 4 | 256,0 | 58150 | 16430,0 | 9750,0 | 9750,0 |
| 244 | 40 | 204 | - | 30 | 110 | 34 | 30 x 4 | 270,0 | 58150 | 16430,0 | 9750,0 | 9750,0 |



NE | NCE zum Anbau von Motoren (Größen 01 - 027) for motorized applications (size 01 - 027)

NE

Lieferbar je nach Einsatz
Montageart **N** = normal montiert
Montageart **U** = umgekehrt montiert.

Spindelausführung

Präzisions-Rollenspindeln (Standardausführung).
Hohe Belastung. Drehzahl bis 3000 1/min.
Hohe Steifigkeit. Lange Lebensdauer.
Steigungsgenauigkeit +/- 0,015 mm je 300 mm
Hub. Verfahrensgeschwindigkeit je nach Spindel-
steigung und Antrieb max. 20 m/min.
Positioniergenauigkeit je nach Spindelaus-
führung und Rückmeldesystem max. 0,001 mm.
Auf Wunsch Kugelgewindespindeln.
Mittlere Belastung. Hoher Wirkungsgrad.
Drehzahl bis 2000 1/min. Steigungsgenauigkeit
+/- 0,015 mm je 300 mm Hub.
Andere Gewindesteigungen und Steigungs-
genauigkeiten auf Anfrage.

Antriebsmöglichkeiten

Schritt-, Servo- oder Gleichstrommotoren.
Motoradapter nach Kundenwunsch.

Endschaltereinbau

Die angegebenen Hübe sind mechanische
Hübe.
Beim Einbau von Endschalter verkürzt sich der
Hub C um ca. 20 mm.
Nullpunktschalter werden außen in Verbindung
mit Nutenleiste und Nocken angebaut.

Standard Befestigungsbohrbild (siehe Zubehör).

NE

For different applications
in normal mounting **N**
or inverse mounting **U**.

Spindle design

Planetary roller screw (standard) with high-load
capacity, Speeds up to 3000 RPM. High rigidity
and long-life. Pitch accuracy is +/- 0,015 mm
per 300 mm travel. Travel speed depending
on lead screw pitch and drive max. 20 m/min.
Positioning accuracy of max. 0,001 mm
is available depending on the lead screw and
positioning feedback system used.
Upon request precision ball screws with
medium-load capacity, high efficiency. Speeds
up to 2000 RPM. Pitch accuracy is +/- 0,015 mm
per 300 mm travel.
Lead screws with other pitch and higher accu-
racy lead screws are available upon request.

Means of drive

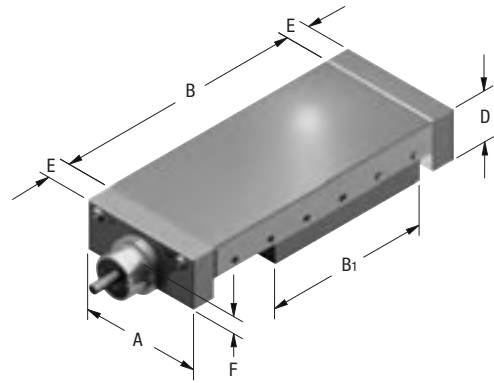
Stepper-, Servo- or AC-motors. Motor flanges
and couplings are available upon request.

Limit switches installation

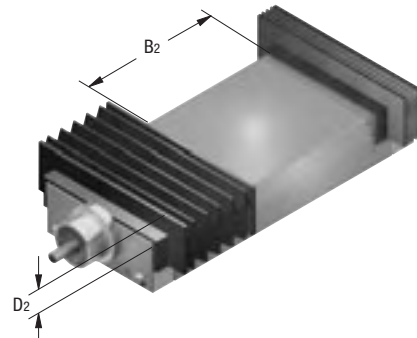
The specified travels are mechanical travels.
When limit switches are installed, the travel C
becomes approx. 20 mm shorter.
The home switch will be mounted externally on
the side along with a guide bar and adjustable
actuators.

Standard mounting holes (see accessories).

NE, N



NE, U

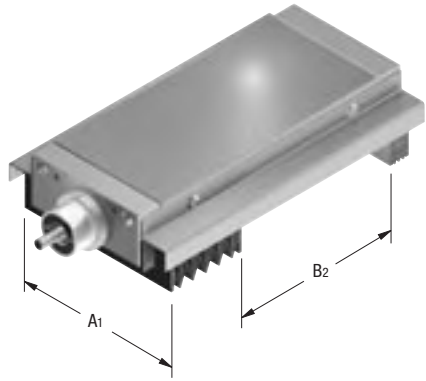


mit Balgabdeckung
with bellows covers

| Größe Size | | | | | | Hub Travel | | |
|---------------|------------|----------------|------------|----------------|----------------|---------------|-----------|----------------|
| | A | A ₁ | B | B ₁ | B ₂ | C | D | D ₂ |
| 01 | 150 | 200 | 203 | 152 | 120 | 50 | 50 | 24 |
| 02 | 150 | 200 | 285 | 152 | 120 | 100 | 50 | 24 |
| 03 | 150 | 200 | 305 | 203 | 150 | 100 | 50 | 24 |
| 04 | 150 | 200 | 406 | 304 | 250 | 100 | 50 | 24 |
| 05 | 150 | 200 | 305 | 152 | 130 | 150 | 50 | 24 |
| 06 | 150 | 200 | 406 | 253 | 190 | 150 | 50 | 24 |
| 07 | 150 | 200 | 406 | 203 | 150 | 200 | 50 | 24 |
| 08 | 150 | 200 | 406 | 152 | 130 | 250 | 50 | 24 |
| 09 | 150 | 200 | 530 | 203 | 150 | 300 | 50 | 24 |
| 010 | 150 | 200 | 650 | 203 | 150 | 400 | 50 | 24 |
| 011 | 150 | 200 | 770 | 203 | 150 | 500 | 50 | 24 |
| 012 | 150 | 200 | 880 | 203 | 150 | 600 | 50 | 24 |
| 014 | 200 | 250 | 335 | 220 | 200 | 100 | 58 | 24 |
| 015 | 200 | 250 | 406 | 253 | 200 | 150 | 58 | 24 |
| 016 | 200 | 250 | 457 | 304 | 250 | 150 | 58 | 24 |
| 017 | 200 | 250 | 460 | 220 | 200 | 200 | 58 | 24 |
| 018 | 200 | 250 | 510 | 304 | 250 | 200 | 58 | 24 |
| 019 | 200 | 250 | 610 | 406 | 350 | 200 | 58 | 24 |
| 020 | 200 | 250 | 520 | 253 | 200 | 250 | 58 | 24 |
| 021 | 200 | 250 | 580 | 220 | 200 | 300 | 58 | 24 |
| 022 | 200 | 250 | 610 | 304 | 200 | 300 | 58 | 24 |
| 023 | 200 | 250 | 700 | 220 | 200 | 400 | 58 | 24 |
| 024 | 200 | 250 | 820 | 220 | 200 | 500 | 58 | 24 |
| 025 | 200 | 250 | 940 | 220 | 200 | 600 | 58 | 24 |
| 026 | 200 | 250 | 1070 | 220 | 200 | 700 | 58 | 24 |
| 027 | 200 | 250 | 1185 | 220 | 200 | 800 | 58 | 24 |



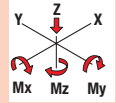
NE, N



mit Balgabdeckung
with bellows covers



| E | F | Rollenspindel | Kugelumlaufspindel | Gewicht Weight | Belastung Load capacity | Momente Torque | | |
|-----------|-------------|---|--|-------------------|----------------------------|-------------------|--------------|--------------|
| | | Ø x Steigung Planetary roller screw Ø x pitch | Ø x Steigung Ballscrew Ø x pitch | | | NE Nm | My dyn | Mz dyn |
| 16 | 19,0 | 15 x 2 / 15 x 4 | 20 x 4 | 10,0 | 21100 | 940,0 | 435,0 | 435,0 |
| 16 | 19,0 | 15 x 2 / 15 x 4 | 20 x 4 | 12,0 | 21100 | 940,0 | 435,0 | 435,0 |
| 16 | 19,0 | 15 x 2 / 15 x 4 | 20 x 4 | 13,2 | 28600 | 1270,0 | 800,0 | 800,0 |
| 16 | 19,0 | 15 x 2 / 15 x 4 | 20 x 4 | 18,0 | 42900 | 1910,0 | 1830,0 | 1830,0 |
| 30 | 19,0 | 15 x 2 / 15 x 4 | 20 x 4 | 12,5 | 21100 | 940,0 | 435,0 | 435,0 |
| 16 | 19,0 | 15 x 2 / 15 x 4 | 20 x 4 | 16,5 | 35400 | 1570,0 | 1250,0 | 1250,0 |
| 16 | 19,0 | 15 x 2 / 15 x 4 | 20 x 4 | 15,0 | 28600 | 1270,0 | 800,0 | 800,0 |
| 35 | 19,0 | 15 x 2 / 15 x 4 | 20 x 4 | 13,5 | 21100 | 940,0 | 435,0 | 435,0 |
| 16 | 19,0 | 15 x 2 / 15 x 4 | 20 x 4 | 19,0 | 28600 | 1270,0 | 800,0 | 800,0 |
| 16 | 19,0 | 15 x 2 / 15 x 4 | 20 x 4 | 19,5 | 28600 | 1270,0 | 800,0 | 800,0 |
| 16 | 19,0 | 15 x 2 / 15 x 4 | 20 x 4 | 21,0 | 28600 | 1270,0 | 800,0 | 800,0 |
| 16 | 19,0 | 15 x 2 / 15 x 4 | 20 x 4 | 22,5 | 28600 | 1270,0 | 800,0 | 800,0 |
| 16 | 21,5 | 15 x 2 / 15 x 4 | 20 x 4 | 22,5 | 28600 | 1270,0 | 800,0 | 800,0 |
| 16 | 21,5 | 15 x 2 / 15 x 4 | 20 x 4 | 26,0 | 35400 | 2215,0 | 1250,0 | 1250,0 |
| 16 | 21,5 | 15 x 2 / 15 x 4 | 20 x 4 | 30,0 | 42900 | 2680,0 | 1830,0 | 1830,0 |
| 16 | 21,5 | 15 x 2 / 15 x 4 | 20 x 4 | 25,5 | 28600 | 1785,0 | 800,0 | 800,0 |
| 16 | 21,5 | 15 x 2 / 15 x 4 | 20 x 4 | 31,5 | 42900 | 2680,0 | 1830,0 | 1830,0 |
| 16 | 21,5 | 15 x 2 / 15 x 4 | 20 x 4 | 40,0 | 57200 | 3575,0 | 3275,0 | 3275,0 |
| 16 | 21,5 | 15 x 2 / 15 x 4 | 20 x 4 | 29,0 | 35400 | 2215,0 | 1250,0 | 1250,0 |
| 16 | 21,5 | 15 x 2 / 15 x 4 | 20 x 4 | 29,0 | 28600 | 1785,0 | 800,0 | 800,0 |
| 16 | 21,5 | 15 x 2 / 15 x 4 | 20 x 4 | 34,5 | 42900 | 2680,0 | 1830,0 | 1830,0 |
| 16 | 21,5 | 15 x 2 / 15 x 4 | 20 x 4 | 32,0 | 28600 | 1785,0 | 800,0 | 800,0 |
| 16 | 21,5 | 15 x 2 / 15 x 4 | 20 x 4 | 35,5 | 28600 | 1785,0 | 800,0 | 800,0 |
| 16 | 21,5 | 15 x 2 / 15 x 4 | 20 x 4 | 38,5 | 28600 | 1785,0 | 800,0 | 800,0 |
| 16 | 21,5 | 15 x 2 / 15 x 4 | 20 x 4 | 42,0 | 28600 | 1785,0 | 800,0 | 800,0 |
| 16 | 21,5 | 15 x 2 / 15 x 4 | 20 x 4 | 45,0 | 28600 | 1785,0 | 800,0 | 800,0 |



Nadelrollengelagerte Schlittenführungen

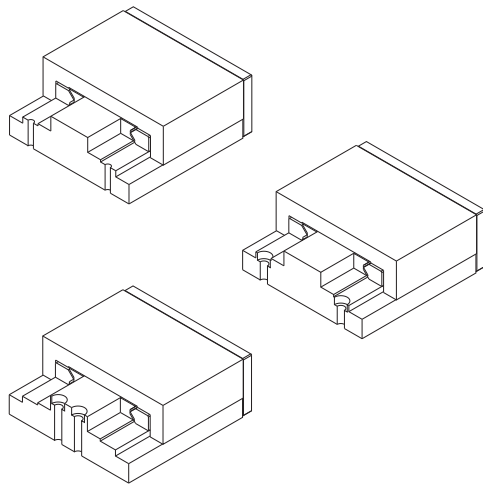
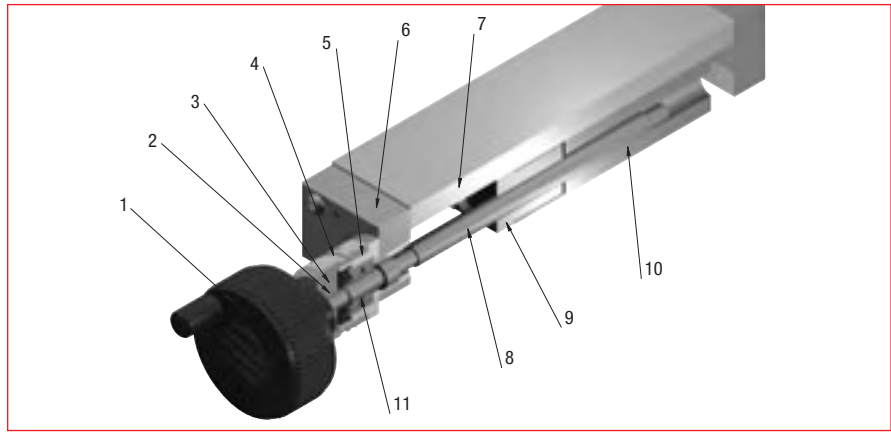
Needle Roller Bearing Slides

Beispiele für Befestigungsbohrungen

Bohrungen zur Befestigung der Schlittenführung nach Angaben bzw. Zeichnung auf Kundenwunsch.

Examples for mounting holes

Upon request Mounting holes are available according to customer's drawing.



| Schnitt durch Schlittenführung mit Spindel und Spindelmutter | | Sectional view of the slide with spindle and spindle nut | |
|--|------------------------|--|--------|
| 1 | Handrad | Hand-wheel | |
| 2 | Druckring | Pressure ring | |
| 3 | Spannring | Locking ring | |
| 4 | Skala | Graduated dial | |
| 5 | Spindellagergehäuse | Duplex bearing | |
| 6 | Endplatte | End plate | |
| 7 | Schlittenführung | Außenteil | saddle |
| 8 | Spindel | Lead screw | |
| 9 | Spindelmutter | Nut | |
| 10 | Schlittenführung | Innenteil | base |
| 11 | gepaartes Spindellager | Spindle bearing | |



2