

# Lineareinheit LX Hub/Tragzahl/Zulässiges Moment

| Hub           |                            |               |                              |      |      |      |       |       |       |       |       |           |           |           |           |           |           | (mm) |
|---------------|----------------------------|---------------|------------------------------|------|------|------|-------|-------|-------|-------|-------|-----------|-----------|-----------|-----------|-----------|-----------|------|
| Typ           | Mit Schmierstoffeinheit MX | Führungswagen | Führungsschienenlänge L (mm) |      |      |      |       |       |       |       |       |           |           |           |           |           |           |      |
|               |                            |               | 75                           | 80   | 100  | 125  | 150   | 175   | 200   | 250   | 300   | 350(340)* | 400(390)* | 450(440)* | 500(490)* | 550(540)* | 600(590)* |      |
| LX15<br>S.375 | -                          | Lang 1 Stk.   | 26.9                         | -    | 51.9 | 76.9 | 101.9 | 126.9 | 151.9 | -     | -     | -         | -         | -         | -         | -         | -         |      |
|               | MX                         | Lang 1 Stk.   | -                            | -    | 43.9 | 68.9 | 93.9  | 118.9 | 143.9 | -     | -     | -         | -         | -         | -         | -         | -         |      |
|               | -                          | Lang 1 Stk.   | -                            | 16.5 | 36.5 | -    | 86.5  | -     | 136.5 | 186.5 | 236.5 | -         | -         | -         | -         | -         | -         |      |
| LX20<br>S.377 | MX                         | Lang 1 Stk.   | -                            | -    | -    | -    | 76.5  | -     | 126.5 | 176.5 | 226.5 | -         | -         | -         | -         | -         | -         |      |
|               | -                          | Lang 2 Stk.   | -                            | -    | -    | -    | -     | -     | 79.5  | 129.5 | 179.5 | -         | -         | -         | -         | -         | -         |      |
|               | -                          | Lang 1 Stk.   | -                            | -    | 17   | -    | 67    | -     | 117   | 167   | 217   | 267       | 317       | -         | -         | -         | -         |      |
| LX26<br>S.381 | MX                         | Lang 1 Stk.   | -                            | -    | -    | -    | -     | -     | 105   | 155   | 205   | 255       | 305       | -         | -         | -         | -         |      |
|               | -                          | Lang 2 Stk.   | -                            | -    | -    | -    | -     | -     | -     | 91    | 141   | 191       | 241       | -         | -         | -         | -         |      |
|               | -                          | Lang 1 Stk.   | -                            | -    | -    | -    | 29    | 54    | -     | 104   | 154   | 204       | 254       | 304       | 354       | 404       | 454       |      |
| LX30<br>S.385 | -                          | Kurz, 1 Stk.  | -                            | -    | -    | -    | 54.5  | 79.5  | -     | 129.5 | 179.5 | 229.5     | 279.5     | 329.5     | 379.5     | 429.5     | 479.5     |      |
|               | MX                         | Lang 1 Stk.   | -                            | -    | -    | -    | -     | -     | -     | 90    | 140   | 190       | 240       | 290       | 340       | 390       | 440       |      |
|               | MX                         | Kurz, 1 Stk.  | -                            | -    | -    | -    | -     | 65.5  | -     | 115.5 | 165.5 | 215.5     | 265.5     | 315.5     | 365.5     | 415.5     | 465.5     |      |
|               | -                          | Lang 2 Stk.   | -                            | -    | -    | -    | -     | -     | -     | -     | 116   | 166       | 216       | 266       | 316       | 366       | 416       |      |
|               | -                          | Kurz, 2 Stk.  | -                            | -    | -    | -    | -     | 17    | -     | 67    | 117   | 167       | 217       | 267       | 317       | 367       | 417       |      |
| LX45<br>S.389 | -                          | Lang 1 Stk.   | -                            | -    | -    | -    | -     | -     | -     | -     | -     | 210.4     | 260.4     | 310.4     | 360.4     | 410.4     | 460.4     |      |
|               | -                          | Kurz, 1 Stk.  | -                            | -    | -    | -    | -     | -     | -     | -     | -     | -         | 247.9     | 297.9     | 347.9     | 397.9     | 447.9     |      |
|               | MX                         | Lang 1 Stk.   | -                            | -    | -    | -    | -     | -     | -     | -     | -     | -         | 194.4     | 244.4     | 294.4     | 344.4     | 394.4     |      |
|               | MX                         | Kurz, 1 Stk.  | -                            | -    | -    | -    | -     | -     | -     | -     | -     | -         | 231.9     | 281.9     | 331.9     | 381.9     | 431.9     |      |
|               | -                          | Lang 2 Stk.   | -                            | -    | -    | -    | -     | -     | -     | -     | -     | -         | 88.8      | 138.8     | 188.8     | 238.8     | 288.8     |      |
| -             | Kurz, 2 Stk.               | -             | -                            | -    | -    | -    | -     | -     | -     | -     | -     | 163.8     | 213.8     | 263.8     | 313.8     | 363.8     | 413.8     |      |

☞ Effektivhub wird in Werten mit einer Spanne von 2.5mm von jedem Ende angegeben.  
\* ( ) ist die Länge der Schiene LX45.

| Typ    | Führungswagen | Führungsschiene            |                            |                     | Kugelgewindetrieb          |                             |               |               |             |                    | Lager (Festlagerseite) Achsrichtung |                                  |
|--------|---------------|----------------------------|----------------------------|---------------------|----------------------------|-----------------------------|---------------|---------------|-------------|--------------------|-------------------------------------|----------------------------------|
|        |               | Dynamische Grundlast C (N) | Statische Grundlast C0 (N) | Radiales Spiel (µm) | Dynamische Tragzahl Ca (N) | Statische Grundlast C0a (N) | Wellen-Ø (mm) | Steigung (mm) | Kern-Ø (mm) | Ø Kugelmittle (mm) | Dynamische Tragzahl Ca (N)          | Zulässige statische Last P0a (N) |
| LX1502 | Lang          | 2072                       | 3701                       | -3~0                | 208                        | 265                         | 5             | 2             | 4.534       | 5.15               | 678                                 | 415                              |
| LX2001 | Lang          | 3277                       | 6199                       | -3~0                | 482                        | 642                         | 6             | 1             | 5.3         | 6.15               | 730                                 | 461                              |
| LX2005 | Lang          | 3277                       | 6199                       | -3~0                | 822                        | 1026                        | 6             | 5             | 4.918       | 6.3                | 730                                 | 461                              |
| LX2602 | Lang          | 6522                       | 11871                      | -4~0                | 1712                       | 2251                        | 8             | 2             | 6.4         | 8.3                | 1637                                | 1205                             |
| LX2605 | Lang          | 6522                       | 11871                      | -4~0                | 1600                       | 2097                        | 8             | 5             | 6.46        | 8.3                | 1637                                | 1205                             |
| LX2610 | Lang          | 6522                       | 11871                      | -4~0                | 782                        | 961                         | 8             | 10            | 6.46        | 8.3                | 1637                                | 1205                             |
| LX3005 | Lang          | 9732                       | 17218                      | -4~0                | 1831                       | 2389                        | 10            | 5             | 8.2         | 10.3               | 2702                                | 2197                             |
| LX3010 | Lang          | 9732                       | 17218                      | -4~0                | 1129                       | 1386                        | 10            | 10            | 8.2         | 10.3               | 2702                                | 2197                             |
| LX3005 | Kurz          | 6305                       | 9271                       | -4~0                | 1831                       | 2389                        | 10            | 5             | 8.2         | 10.3               | 2702                                | 2197                             |
| LX3010 | Kurz          | 6305                       | 9271                       | -4~0                | 1129                       | 1386                        | 10            | 10            | 8.2         | 10.3               | 2702                                | 2197                             |
| LX4510 | Lang          | 18450                      | 32441                      | -6~0                | 4167                       | 5945                        | 15            | 10            | 11.7        | 15.5               | 4355                                | 4106                             |
| LX4520 | Lang          | 18450                      | 32441                      | -6~0                | 2499                       | 3381                        | 15            | 20            | 11.7        | 15.5               | 4355                                | 4106                             |
| LX4510 | Kurz          | 11826                      | 17175                      | -6~0                | 4167                       | 5945                        | 15            | 10            | 11.7        | 15.5               | 4355                                | 4106                             |
| LX4520 | Kurz          | 11826                      | 17175                      | -6~0                | 2499                       | 3381                        | 15            | 20            | 11.7        | 15.5               | 4355                                | 4106                             |

☞ Tragzahlen in den Schienen-Spalten gelten für einen Führungswagen.  
☞ Zum Ermitteln einer tatsächlichen Lebensdauer verwenden Sie bitte unsere technische Berechnungssoftware.

| Typ  | Anz. Führungswagen | Anz. Führungswagen | Zulässiges statisches Moment (N · m) |      |      |
|------|--------------------|--------------------|--------------------------------------|------|------|
|      |                    |                    | Ma                                   | Mb   | Mc   |
| LX15 | 1                  | Lang               | 13                                   | 13   | 41   |
| LX20 | 1                  | Lang               | 27                                   | 27   | 93   |
|      | 2                  |                    | 353                                  | 353  | 186  |
| LX26 | 1                  | Lang               | 70                                   | 70   | 225  |
|      | 2                  |                    | 902                                  | 902  | 450  |
| LX30 | 1                  | Lang               | 126                                  | 126  | 387  |
|      | 2                  |                    | 1515                                 | 1515 | 774  |
| LX30 | 1                  | Kurz               | 63                                   | 63   | 208  |
|      | 2                  |                    | 579                                  | 579  | 417  |
| LX45 | 1                  | Lang               | 291                                  | 291  | 972  |
|      | 2                  |                    | 3945                                 | 3945 | 1944 |
| LX45 | 1                  | Kurz               | 145                                  | 145  | 515  |
|      | 2                  |                    | 1444                                 | 1444 | 1029 |

\*Werte für Ausführungen mit zwei Führungswagen gelten, wenn sich die beiden Führungswagen berühren.  
Die obige Tabelle enthält Referenzwerte im Stillstand.  
Zum Ermitteln einer tatsächlichen Lebensdauer verwenden Sie bitte unsere Technische Berechnungssoftware.

| Typ  | Querschnittsträgheitsmoment (mm <sup>4</sup> ) |                      | Schwerpunkt (mm) | Gewicht (kg/100mm) |
|------|------------------------------------------------|----------------------|------------------|--------------------|
|      | Ix                                             | Iy                   |                  |                    |
| LX15 | 1.0×10 <sup>3</sup>                            | 1.7×10 <sup>4</sup>  | 3.4              | 0.13               |
| LX20 | 3.2×10 <sup>3</sup>                            | 5.2×10 <sup>4</sup>  | 4.4              | 0.22               |
| LX26 | 1.0×10 <sup>4</sup>                            | 1.4×10 <sup>5</sup>  | 6.1              | 0.37               |
| LX30 | 2.5×10 <sup>4</sup>                            | 3.1×10 <sup>5</sup>  | 7.8              | 0.60               |
| LX45 | 8.8×10 <sup>4</sup>                            | 10.4×10 <sup>5</sup> | 11.0             | 1.10               |

IX: Querschnittsträgheitsmoment um X-Achse IY: Querschnittsträgheitsmoment um Y-Achse

| Werkstoff           |  | Grundkörper (Führungsschiene) |                             | Führungswagen     | Motorhalterung              | Lagereinheit Loslagerseite | Abdeckung         | Anschlag | Kugelgewindetrieb geschliffen (Erdanschluss) |
|---------------------|--|-------------------------------|-----------------------------|-------------------|-----------------------------|----------------------------|-------------------|----------|----------------------------------------------|
| Bauteile            |  | LX15                          | LX20/26/30/45               |                   |                             |                            |                   |          |                                              |
| Werkstoff           |  | rostfreier Stahl              | Unlegierter Stahl           | SCM-Werkstoff     | EN AC-46100 Äquiv.          | EN AW-5052 Äquiv.          | EN AW-6063 Äquiv. | NBR      | EN 1.7242 Äquiv.                             |
| Oberflächenbehandl. |  | LTBC-Beschichtung             |                             | LTBC-Beschichtung | Einbrennlackierung, schwarz | schwarz eloxiert           | schwarz eloxiert  | -        | -                                            |
| Härte               |  | -                             | Induktionsgehärtet HRC58-64 | HRC58-62          | -                           | -                          | -                 | -        | HRC58-62                                     |

# Lineareinheit LX Gesamtgewicht/Trägheitsmoment

| Gesamtgewicht |                     |                              |      |      |      |      |           |           |           |           |            |            |            |            |            | (kg)                      |             |      |
|---------------|---------------------|------------------------------|------|------|------|------|-----------|-----------|-----------|-----------|------------|------------|------------|------------|------------|---------------------------|-------------|------|
| Typ           | Führungswagen       | Führungsschienenlänge L (mm) |      |      |      |      |           |           |           |           |            |            |            |            |            | Führungswagen 1 Stk. (kg) |             |      |
|               |                     | 75                           | 80   | 100  | 125  | 150  | 175       | 200       | 250       | 300       | 350 (340)* | 400 (390)* | 450 (440)* | 500 (490)* | 550 (540)* |                           | 600 (590)*  |      |
| LX15          | Lang 1 Stk.         | 0.13                         | -    | 0.17 | 0.22 | 0.29 | 0.35      | 0.38      | -         | -         | -          | -          | -          | -          | -          | 0.035                     |             |      |
| LX15C         | Lang 1 Stk.         | 0.18                         | -    | 0.22 | 0.28 | 0.35 | 0.41      | 0.45      | -         | -         | -          | -          | -          | -          | -          | 0.075                     |             |      |
| LX20          | Lang, 1 Stk./2 Stk. | -                            | 0.40 | 0.45 | -    | 0.58 | -         | 0.70/0.79 | 0.83/0.92 | 0.96/1.05 | -          | -          | -          | -          | -          | 0.09                      |             |      |
| LX20C         | Lang, 1 Stk./2 Stk. | -                            | 0.51 | 0.56 | -    | 0.69 | -         | 0.81/0.97 | 0.94/1.10 | 1.07/1.23 | -          | -          | -          | -          | -          | 0.16                      |             |      |
| LX26          | Lang, 1 Stk./2 Stk. | -                            | -    | 0.87 | -    | 0.95 | -         | 1.16      | 1.37/1.57 | 1.58/1.78 | 1.79/1.99  | 2.00/2.20  | -          | -          | -          | 0.2                       |             |      |
| LX26C         | Lang, 1 Stk./2 Stk. | -                            | -    | 1.07 | -    | 1.15 | -         | 1.36      | 1.57/1.89 | 1.78/2.10 | 1.99/2.31  | 2.20/2.52  | -          | -          | -          | 0.32                      |             |      |
| LX30          | Lang, 1 Stk./2 Stk. | -                            | -    | -    | -    | 1.30 | 1.47      | -         | 1.81      | 2.14      | 2.48/2.79  | 2.81/3.12  | 3.15/3.46  | 3.48/3.79  | 3.82/4.13  | 4.16/4.47                 | 4.49/4.80   | 0.31 |
|               | Kurz, 1 Stk./2 Stk. | -                            | -    | -    | -    | 1.18 | 1.35/1.53 | -         | 1.68/1.86 | 2.02/2.20 | 2.35/2.53  | 2.69/2.87  | 3.03/3.21  | 3.36/3.54  | 3.70/3.88  | 4.03/4.21                 | 4.37/4.55   | 0.18 |
| LX30C         | Lang, 1 Stk./2 Stk. | -                            | -    | -    | -    | 1.75 | 1.92      | -         | 2.25      | 2.59      | 2.92/3.49  | 3.26/3.83  | 3.59/4.16  | 3.93/4.50  | 4.26/4.83  | 4.60/5.17                 | 4.94/5.51   | 0.57 |
|               | Kurz, 1 Stk./2 Stk. | -                            | -    | -    | -    | 1.50 | 1.66/1.98 | -         | 2.00/2.32 | 2.34/2.66 | 2.67/2.99  | 3.01/3.33  | 3.34/3.66  | 3.68/4.00  | 4.01/4.33  | 4.35/4.67                 | 4.69/5.01   | 0.32 |
| LX45          | Lang, 1 Stk./2 Stk. | -                            | -    | -    | -    | -    | -         | -         | -         | -         | 5.77/6.69  | 6.37/7.29  | 6.98/7.90  | 7.58/8.50  | 8.18/9.10  | 8.78/9.70                 | 9.29/10.29  | 0.92 |
|               | Kurz, 1 Stk./2 Stk. | -                            | -    | -    | -    | -    | -         | -         | -         | -         | 5.38/5.91  | 5.98/6.51  | 6.58/7.11  | 7.18/7.71  | 7.78/8.31  | 8.38/8.92                 | 8.89/9.49   | 0.53 |
| LX45C         | Lang, 1 Stk./2 Stk. | -                            | -    | -    | -    | -    | -         | -         | -         | -         | 6.59/8.09  | 7.23/8.73  | 7.86/9.36  | 8.49/9.99  | 9.13/10.63 | 9.76/11.26                | 10.39/11.89 | 1.5  |
|               | Kurz, 1 Stk./2 Stk. | -                            | -    | -    | -    | -    | -         | -         | -         | -         | 5.94/6.78  | 6.57/7.41  | 7.20/8.04  | 7.84/8.68  | 8.47/9.31  | 9.10/9.94                 | 9.73/10.57  | 0.84 |

\* ( ) ist die Länge der Schiene LX45.

| Zusätzliches Gewicht der Schmierstoffeinheit mit MX-Ausführung |                           |
|----------------------------------------------------------------|---------------------------|
| Typ                                                            | Zusätzliches Gewicht (kg) |
| LX15(C)                                                        | 0.002                     |
| LX20(C)                                                        | 0.004                     |
| LX26(C)                                                        | 0.007                     |
| LX30(C)                                                        | 0.011                     |
| LX45(C)                                                        | 0.024                     |

| Trägheitsmoment |                                      |                    |                              |       |         |         |         |         |         |         |           |           |           |           |           |           |           | (10-4kg · cm <sup>2</sup> ) |
|-----------------|--------------------------------------|--------------------|------------------------------|-------|---------|---------|---------|---------|---------|---------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------------------------|
| Typ             | Steigung Mit oder ohne Abdeckung (c) | Führungs-<br>wagen | Führungsschienenlänge L (mm) |       |         |         |         |         |         |         |           |           |           |           |           |           |           |                             |
|                 |                                      |                    | 75                           | 80    | 100     | 125     | 150     | 175     | 200     | 250     | 300       | 350(340)* | 400(390)* | 450(440)* | 500(490)* | 550(540)* | 600(590)* |                             |
| LX15            | 02/02C                               | Lang 1 Stk.        | 23/23                        | -     | 24/24   | 25/25   | 26/26   | 27/27   | 28/28   | -       | -         | -         | -         | -         | -         | -         | -         |                             |
|                 | 01/01C                               | Lang 1 Stk.        | -                            | 47/47 | 49/49   | -       | 53/53   | -       | 58/58   | -       | -         | -         | -         | -         | -         | -         | -         |                             |
| LX20            | 01/01C                               | Lang 2 Stk.        | -                            | -     | -       | -       | -       | -       | 58/58   | -       | -         | -         | -         | -         | -         | -         | -         |                             |
|                 | 05/05C                               | Lang 1 Stk.        | -                            | -     | 54/59   | -       | 59/63   | -       | 63/68   | 68/73   | 73/77     | -         | -         | -         | -         | -         | -         |                             |
|                 | 05/05C                               | Lang 2 Stk.        | -                            | -     | -       | -       | -       | -       | 69/78   | 74/83   | 78/88     | -         | -         | -         | -         | -         | -         |                             |
|                 | 02/02C                               | Lang 1 Stk.        | -                            | -     | 140/141 | -       | 155/156 | -       | 169/170 | 184/185 | 198/199   | -         | -         | -         | -         | -         | -         |                             |
| LX26            | 02/02C                               | Lang 2 Stk.        | -                            | -     | -       | -       | -       | -       | -       | 186/188 | 200/202   | -         | -         | -         | -         | -         | -         |                             |
|                 | 05/05C                               | Lang 1 Stk.        | -                            | -     | -       | -       | 166/173 | -       | 180/188 | 194/202 | 209/216   | 223/231   | 238/245   | -         | -         | -         | -         |                             |
|                 | 05/05C                               | Lang 2 Stk.        | -                            | -     | -       | -       | -       | -       | -       | 207/222 | 222/237   | 236/251   | 251/266   | -         | -         | -         | -         |                             |
|                 | 10/10C                               | Lang 1 Stk.        | -                            | -     | -       | -       | 204/234 | -       | 219/249 | 233/263 | 248/278   | 262/292   | 277/307   | -         | -         | -         | -         |                             |
|                 | 05/05C                               | Lang 1 Stk.        | -                            | -     | -       | 436/452 | 454/471 | -       | 491/507 | 528/544 | 565/581   | 602/618   | 638/655   | 675/692   | 712/729   | 749/765   | 786/802   |                             |
|                 | 05/05C                               | Lang 2 Stk.        | -                            | -     | -       | -       | -       | -       | -       | -       | 584/617   | 621/654   | 658/691   | 695/728   | 732/764   | 768/801   | 805/838   |                             |
|                 | 05/05C                               | Kurz, 1 Stk.       | -                            | -     | -       | 428/436 | 446/455 | -       | 483/492 | 520/528 | 557/565   | 594/602   | 630/639   | 667/676   | 704/713   | 741/750   | 778/787   |                             |
|                 | 05/05C                               | Kurz, 2 Stk.       | -                            | -     | -       | 474/475 | 531/548 | 568/585 | 605/622 | 642/659 | 679/696   | 716/733   | 753/770   | 789/807   | -         | -         | -         |                             |
| LX30            | 10/10C                               | Lang 1 Stk.        | -                            | -     | -       | -       | 513/579 | -       | 550/616 | 587/653 | 624/690   | 661/727   | 698/764   | 735/800   | 772/837   | 808/874   | 845/911   |                             |
|                 | 10/10C                               | Lang 2 Stk.        | -                            | -     | -       | -       | -       | -       | -       | 702/833 | 739/870   | 776/907   | 812/944   | 849/981   | 886/1018  | 923/1054  | -         |                             |
|                 | 10/10C                               | Kurz, 1 Stk.       | -                            | -     | -       | -       | 482/516 | -       | 518/553 | 555/590 | 592/626   | 629/663   | 666/700   | 703/737   | 740/774   | 777/811   | 813/848   |                             |
|                 | 10/10C                               | Kurz, 2 Stk.       | -                            | -     | -       | -       | 591/596 | -       | 564/633 | 601/670 | 638/707   | 675/743   | 712/780   | 749/817   | 785/854   | 822/891   | 859/928   |                             |
|                 | 10/10C                               | Lang 1 Stk.        | -                            | -     | -       | -       | -       | -       | -       | -       | 2528/2674 | 2723/2869 | 2918/3064 | 3113/3259 | 3308/3454 | 3503/3649 | -         |                             |
|                 | 10/10C                               | Lang 2 Stk.        | -                            | -     | -       | -       | -       | -       | -       | -       | 2762/3053 | 2957/3249 | 3152/3444 | 3347/3639 | 3543/3834 | 3738/4029 | -         |                             |
|                 | 10/10C                               | Kurz, 1 Stk.       | -                            | -     | -       | -       | -       | -       | -       | -       | 2429/2507 | 2624/2702 | 2820/2897 | 3015/3092 | 3210/3287 | 3405/3482 | -         |                             |
|                 | 10/10C                               | Kurz, 2 Stk.       | -                            | -     | -       | -       | -       | -       | -       | -       | 2565/2720 | 2760/2915 | 2955/3110 | 3150/3305 | 3345/3500 | 3540/3695 | -         |                             |
| LX45            | 20/20C                               | Lang 1 Stk.        | -                            | -     | -       | -       | -       | -       | -       | -       | 3242/3825 | 3437/4020 | 3632/4215 | 3827/4410 | 4022/4605 | 4217/4800 | -         |                             |
|                 | 20/20C                               | Lang 2 Stk.        | -                            | -     | -       | -       | -       | -       | -       | -       | 4179/5344 | 4374/5539 | 4569/5734 | 4764/5929 | 4959/6124 | 5154/6319 | -         |                             |
|                 | 20/20C                               | Kurz, 1 Stk.       | -                            | -     | -       | -       | -       | -       | -       | -       | 2847/3157 | 3042/3352 | 3237/3547 | 3432/3742 | 3627/3937 | 3823/4132 | -         |                             |
|                 | 20/20C                               | Kurz, 2 Stk.       | -                            | -     | -       | -       | -       | -       | -       | -       | 3389/4008 | 3584/4203 | 3779/4399 | 3974/4594 | 4169/4789 | 4364/4989 | -         |                             |