

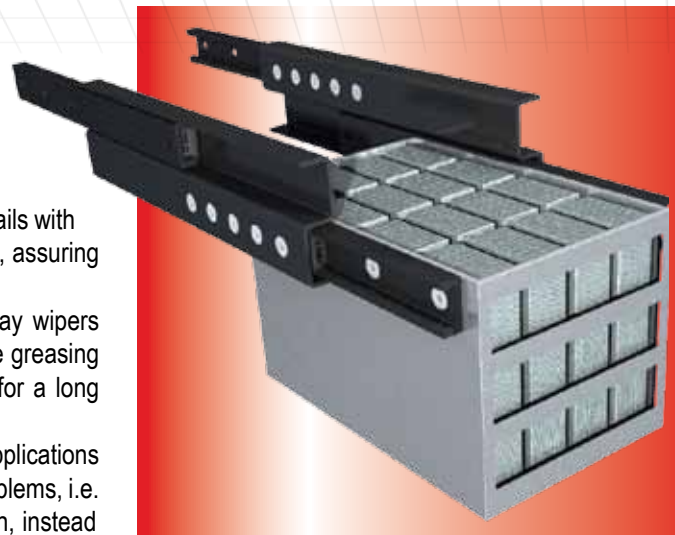
The TLR slides are the world's only telescopic slides system which incorporates self-aligning feature to absorb parallelism errors of the mounting surfaces, when used in pair.

The TLR slides are designed for heavy duty High-Tech telescopic applications, with precise motorized movement, requiring constant smooth sliding performance with no play. Recommend for high frequency applications.

The high performance is provide by use of double-row precision bearings, strong rails with hardened and honed raceways, fixed to a rigid intermediate S-shaped steel plate, assuring high load capacities and low flexion at even fully extended position.

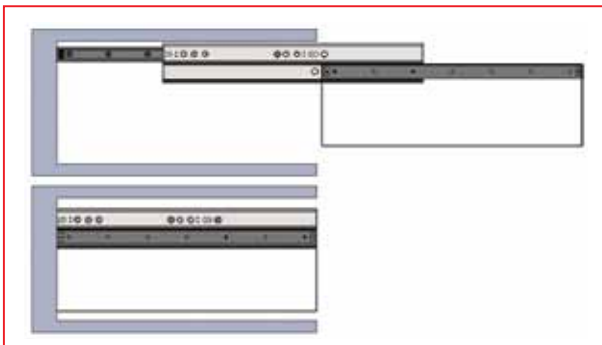
The TLR slides guarantee maintenance free operation, thanks to strong raceway wipers and longitudinal seals for dust and impurity protection. An integrated lubed for-life greasing system, assuring a constant thin layer of lubrication on the raceway surfaces, for a long operation period.

TLR system offers unique possibilities and benefits for all kind of automation applications with variable strokes, for which a ball-cage slide often have ball-cage creeping problems, i.e. friction problems to reach full extension, as ball-cage is forced out to end position, instead of rolling.



TLRX slides for corrosive ambients

For corrosive ambients is available TLRX, with all components and intermediate element in INOX, except the rails, which have T RACE NOX anti-corrosion treatment; a oxidation treatment and impregnation in hot oil, to offer a good corrosion resistance.

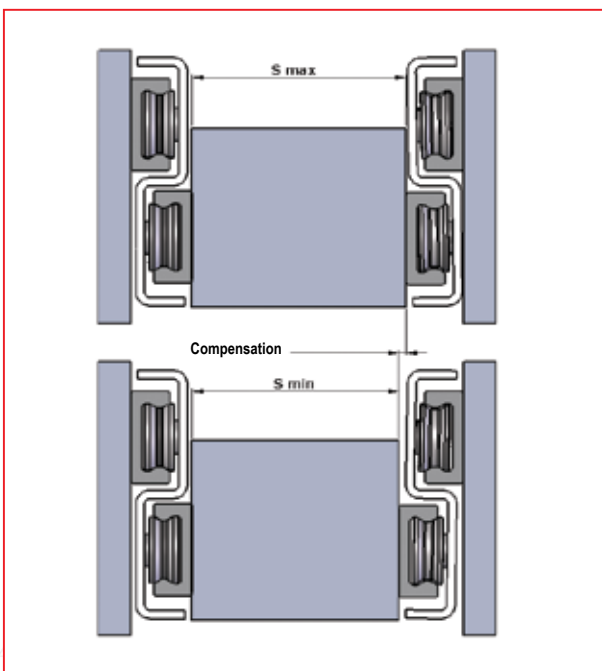


Extension

The TLR slides allow for an extension equal to the closed slide plus a small constant. The extension is obtained by movement of the intermediate element and the lower rail, while the upper rail is fixed to structure.

As it can be seen on left figure, the movement of the lower rail is more than the upper rail, due to optimizing of load capacity and the fact that the rollers are positioned on the intermediate element to offer max load capacity in this position. Hereby the TLR slides are asymmetric, so the slides must be ordered as left side slide TLRS and right side slide TLRD and when installed the product code must be on top side.

The load capacities are all indicated per single rail, with centered load position, equal to half the rail in extended position.



Self-aligning capacity

When TLR slides are used in pair, they offer the possibility to absorb minor structural errors or non-precise installation, which otherwise would much increase the required force for moving the mobile part, in both extending and closing direction. A typical problem for ball-cage telescopic slides.

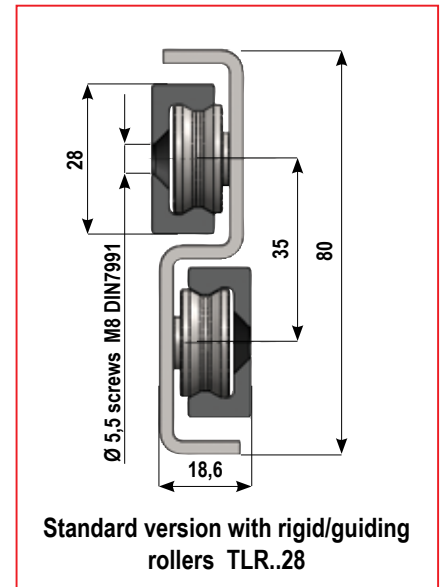
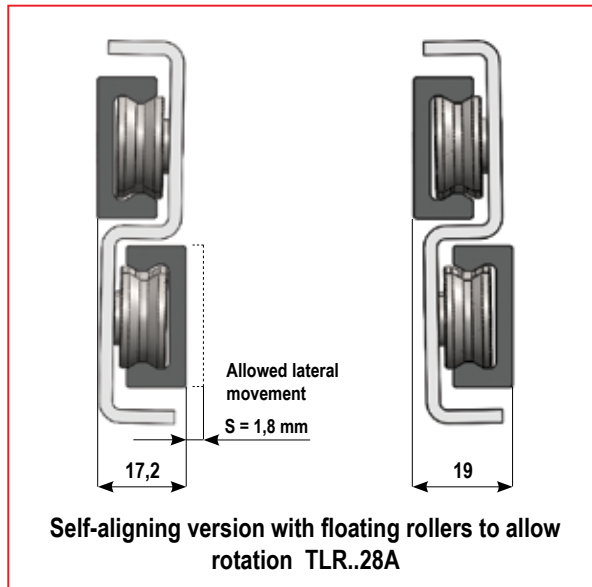
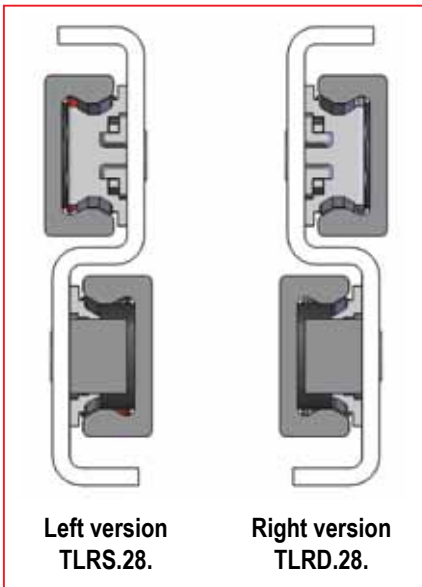
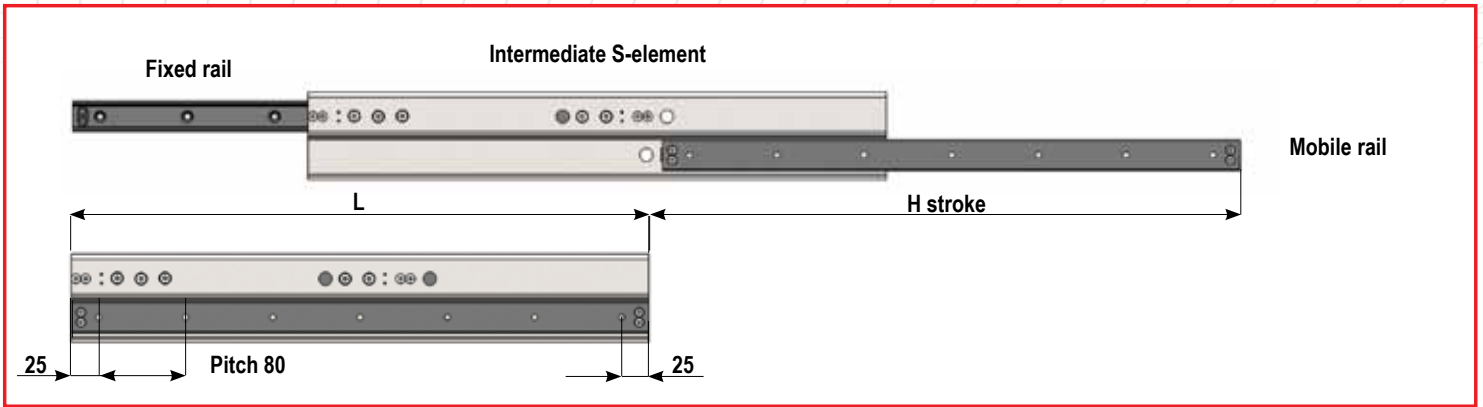
Using a pair of self-aligning TLR slides, smooth low friction movement is assured, along with a more easy installation and/or less precise workings of structure, i.e. cost savings. The self-aligning feature is obtained by having a combination of floating rollers and guiding rollers in the TLR..A. i.e. allowing for a minor rotation of the rails, maintaining the preload in both upper and lower rails of the TLR..A slide.

The suffix A in TLR..A, indicates "Aligning" The concept is well illustrated in the catalogue section MONORACE , for which the base components have their origin.

To be noted that the rotation of the TLR..A slide hereby changes the nominal value of 18,6mm to 17,2mm (S min) – 19,0mm (S max) while compensating dimensional errors on mobile structure or distance errors between the two lateral sides of fixed structure, for which the upper rails are fixed. Herewith avoiding binding-problems, with would much increased friction force, with consequent reduced load capacity and expected life-time.

The TLR..A is in general always used in pair with a standard TLR, to assure good lateral stability. However good self-aligning can also be obtained for movement of vertical panels, with use of TLR..A at top to absorb some mis-alignment, and with some retainer guidance at lower part. Please refer to page 26, for further information.

Roller telescopic slides TLR.28, TLR.X28



| Code | Lenght. L (mm) | Stroke H (mm) | Coeff. dynamic C (N) | Load capacity Co rad (N) | Weight (kg) |
|---------------|----------------|---------------|----------------------|--------------------------|-------------|
| TLR..28.-370 | 370 | 380 | 1578 | 798 | 2,1 |
| TLR..28.-450 | 450 | 460 | 1859 | 940 | 2,5 |
| TLR..28.-530 | 530 | 540 | 2044 | 1034 | 2,9 |
| TLR..28.-610 | 610 | 620 | 2711 | 1371 | 3,3 |
| TLR..28.-690 | 690 | 700 | 2933 | 1483 | 3,7 |
| TLR..28.-770 | 770 | 780 | 3083 | 1560 | 4,1 |
| TLR..28.-850 | 850 | 860 | 3180 | 1608 | 4,5 |
| TLR..28.-930 | 930 | 940 | 3259 | 1631 | 4,9 |
| TLR..28.-1010 | 1010 | 1020 | 3325 | 1519 | 5,3 |
| TLR..28.-1090 | 1090 | 1100 | 3380 | 1421 | 5,7 |
| TLR..28.-1170 | 1170 | 1180 | 3428 | 1334 | 6,1 |
| TLR..28.-1250 | 1250 | 1260 | 3469 | 1258 | 6,5 |
| TLR..28.-1330 | 1330 | 1340 | 3505 | 1190 | 6,9 |
| TLR..28.-1410 | 1410 | 1420 | 3537 | 1129 | 7,3 |
| TLR..28.-1490 | 1490 | 1500 | 3565 | 1073 | 7,7 |

For corrosive ambients is available TLRX28, with all components and intermediate element in INOX, except the rail, which have T RACE NOX anti-corrosion treatment; a oxidation treatment and impregnation in hot oil, to offer a good corrosion resistance. Same dimension and performance as standard version TLR28.

Order code ex. :

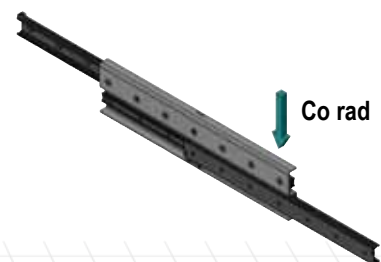
TLRD28-370 = standard rigid right slide, length 370mm

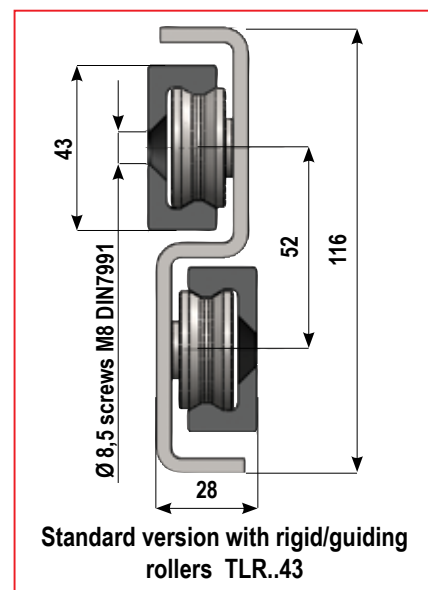
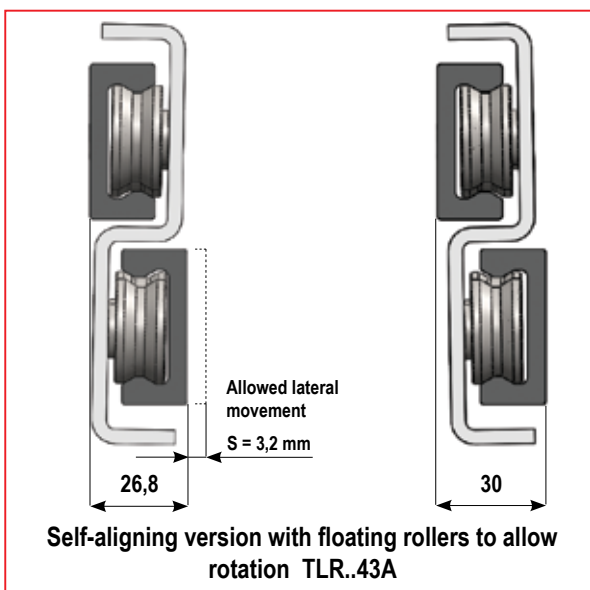
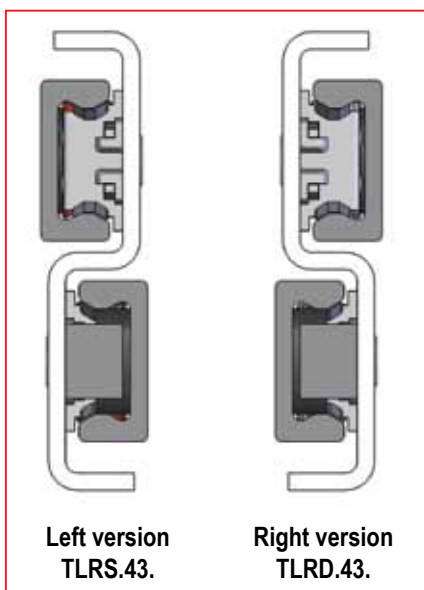
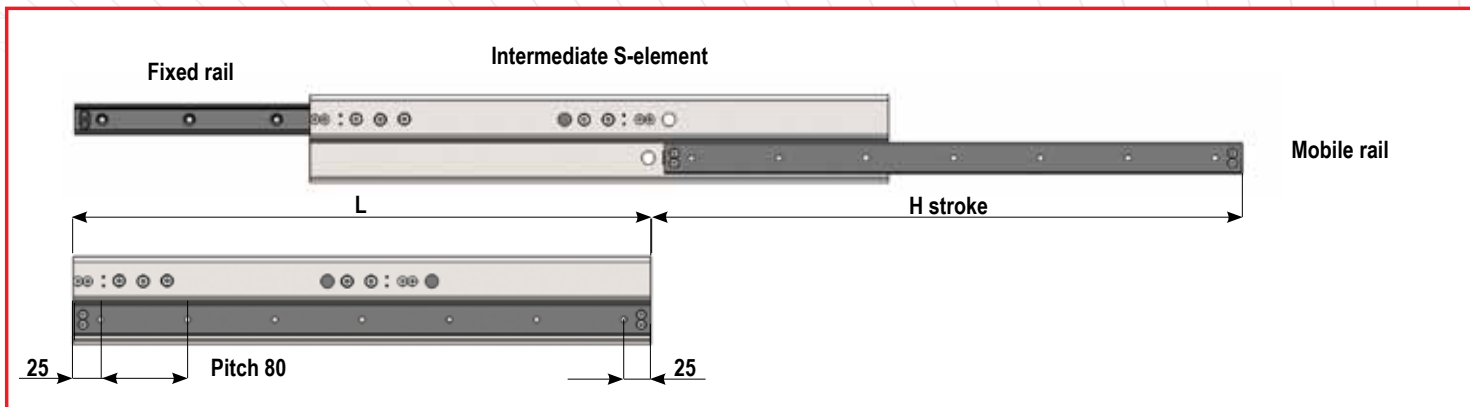
TLRS28A-370 = self-aligning left slide, length 370mm

TLRD28A-370 = self-aligning INOX right slide, length 370mm

The above listed load capacities Co rad, are per single slide, with the load centered, i.e. in the middle of the extended lower rail, P. In case the load is not centered, ex. The load is more towards tip, the load capacity is reduced, - please refer to page 26. For further info and flexion "f" indications.

TLR slides must be installed with the code mark and upper rail at top-side, while mobile part is fixed to lower rail.





| Code | Lenght. L (mm) | Stroke H (mm) | Coeff. dynamic C (N) | Load capacity Co rad (N) | Weight (kg) |
|---------------|----------------|---------------|----------------------|--------------------------|-------------|
| TLR..43.-530 | 530 | 540 | 4074 | 2078 | 6,4 |
| TLR..43.-610 | 610 | 620 | 4241 | 2163 | 7,3 |
| TLR..43.-690 | 690 | 700 | 6154 | 3139 | 8,2 |
| TLR..43.-770 | 770 | 780 | 6553 | 3342 | 9,1 |
| TLR..43.-850 | 850 | 860 | 6869 | 3504 | 10 |
| TLR..43.-930 | 930 | 940 | 7127 | 3635 | 10,9 |
| TLR..43.-1010 | 1010 | 1020 | 7340 | 3744 | 11,8 |
| TLR..43.-1090 | 1090 | 1100 | 7520 | 3835 | 12,7 |
| TLR..43.-1170 | 1170 | 1180 | 7673 | 3784 | 13,6 |
| TLR..43.-1250 | 1250 | 1260 | 7806 | 3574 | 14,5 |
| TLR..43.-1330 | 1330 | 1340 | 7922 | 3386 | 15,4 |
| TLR..43.-1410 | 1410 | 1420 | 8024 | 3217 | 16,3 |
| TLR..43.-1490 | 1490 | 1500 | 8114 | 3064 | 17,2 |
| TLR..43.-1570 | 1570 | 1580 | 8195 | 2925 | 18,1 |
| TLR..43.-1650 | 1650 | 1660 | 8267 | 2798 | 19 |
| TLR..43.-1730 | 1730 | 1740 | 8333 | 2682 | 19,9 |
| TLR..43.-1810 | 1810 | 1820 | 8392 | 2574 | 20,8 |
| TLR..43.-1890 | 1890 | 1900 | 8447 | 2476 | 21,7 |
| TLR..43.-1970 | 1970 | 1980 | 8496 | 2384 | 22,6 |

For corrosive ambients is available TLRX43, with all components and intermediate element in INOX, except the rail, which have T RACE NOX anti-corrosion treatment; a oxidation treatment and impregnation in hot oil, to offer a good corrosion resistance. Same dimension and performance as standard version TLR43 .

Order code ex. :

TLRD43-530 = standard rigid right slide, length 530mm

TLRS43A-530 = self-aligning left slide, length 530mm

TLRDX43A-530 = self-aligning INOX right slide, length 530mm

The listed load capacities Co rad, are per single slide, with the load centered, i.e. in the middle of the extended lower rail, P. In case the load is not centered, ex. The load is more towards tip, the load capacity is reduced, - please refer to page 26. For further info and flexion "F" indications.

TLR slides must be installed with the code mark and upper rail at top-side, while mobile part is fixed to lower rail.

