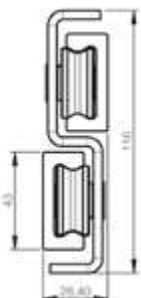
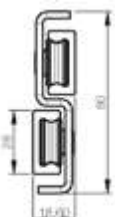


# TELESCOPIC SLIDES RANGE

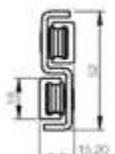
## "HIGH PERFORMANCE" ROLLER TELESCOPIC SLIDES



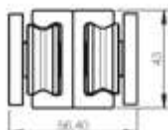
**TLRD43  
TLRS43**



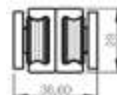
**TLRD28  
TLRS28**



**TLRD18  
TLRS18**



**TLQ43**

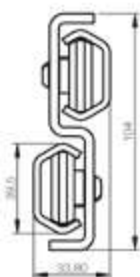


**TLQ28**

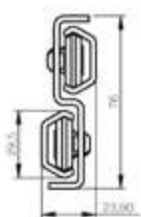


**TLQ18FF**

## "COST EFFECTIVE" ROLLER TELESCOPIC SLIDES



**TLND40  
TLNS40**



**TLND30  
TLNS30**

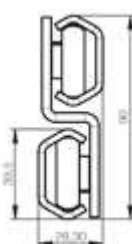


**TQN40**

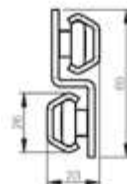


**TQN30**

### VERSIONI INOX



**TLAX40**



**TLAX26**

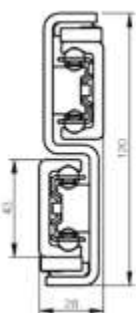


**TQAX40**

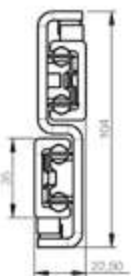


**TQAX26**

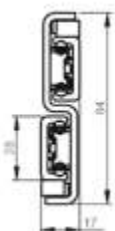
## "HEAVY LOADS" BALLCAGE TELESCOPIC SLIDES



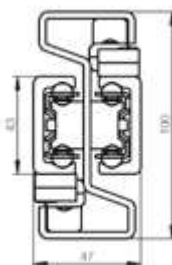
**TLS43  
TLS43D**



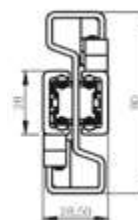
**TLS35  
TLS35D**



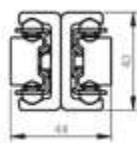
**TLS28  
TLS28D**



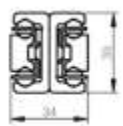
**TSH43**



**TSH28**



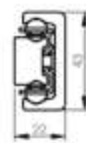
**TSQ43  
TSQR43**



**TSQ35D  
TSQ35**



**TSQ28  
TSQR28**



**SR43  
SRE43**

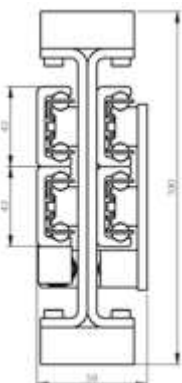


**SR35  
SRE35**

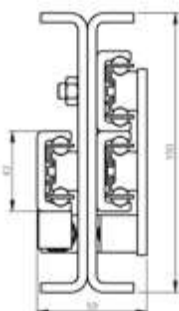


**SR28  
SRE28**

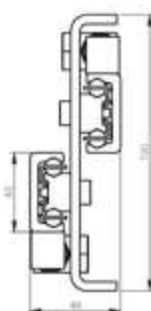
## "EXTREME LOADS" BALLCAGE TELESCOPIC SLIDES



**TH4D190  
TH4S190**



**TH3D150  
TH3S150**



**TH2D150  
TH2S150**

## HIGH PERFORMANCE

TLR and TLQ series represent the markets highest performance telescopic slides, with top features for all kinds of industrial high frequency applications, including variable and vertical stroke : Hardened and honed raceways – Double row ball-bearings – Wipers with incorporated pre-oiled felt for raceway lubrication - Suitable for harsh ambient environment as with rollers, so much less sensitive than ball-cage slides .

TLR-series offers unique Self-Aligning capacity when used in pairs.

TLQ-series offers the unique possibility for the individual customer setting of desired stroke.

## COST EFFECTIVE

The new roller telescopic slides TLN and TQN offer many of the technological advantages from the top-range slides, but with a more simplified construction to offer a range of Cost-Effective roller telescopics with good load capacities for industrial applications. All models are available in KB-version for high corrosion resistance. The complete INOX slides TLAX and TQAX are available in P-version with rails and intermediate S-element electro-polished for very high corrosion resistance.



# BALL CAGE TELESCOPIC SLIDES

## HEAVY LOADS


































The classic TLS, THS and TQS are robust ball-cage telescopics slides for general heavy duty industrial applications, which require high loads capacities, low flexion and smooth movement. The SR semi-telescopic slide is the base components of the full telescopics, now offered in two versions, with 50% or 75% extension of its length, to one or two sides. The SR semi-telescopic slides are hardened rails; patented T RACE NOX-treatment for high depth nitride hardening with black oxidation, assuring long lifetime without wear and a good corrosion resistance, much superior performance compared to traditional zinc-plated slides.

## EXTREME LOADS

New TH2-3-4 series offer the markets highest load capacities ball-cage slides, - 2,5m extension with 4000Kg for a pair. Extreme load capacities with very limited flexion at competitive prices due to modular components for the complete TH-system. The base component is the SR43 semi-telescopic ball-cage slide, with more than a decade of approved problem-free installations around the world for heavy duty applications. The introduction of the TH Series sees new special robust impact absorbing rubber stoppers between the rails and intermediate element to assure a smooth and silent dragging of the intermediate element.



# TELESCOPIC SLIDES RANGE

|   | Series      | Size | Height -Width | Base rail   | Movement type   | Length min-max | Extension                 | Single/Double extension        | Max (N) load capacity single rail |
|---|-------------|------|---------------|---|---|----------------|---------------------------|--------------------------------|-----------------------------------|
|    | TLR         | 18   | 52 x 15,2     |    |    | 290-770        | 100%                      | single                         | 652                               |
|   |             | 28   | 80 x 18,6     |   |   | 370-1490       |                           |                                | 1631                              |
|   |             | 43   | 116 x 28,4    |   |   | 530-1970       |                           |                                | 3835                              |
|    | TLN         | 30   | 76 x 23,9     |    |    | 370-1490       | 100%                      | single                         | 1350                              |
|   |             | 40   | 104 x 33,8    |   |   | 450-1970       |                           |                                | 2750                              |
|    | TLAX        | 26   | 65 x 23       |    |    | 300-1200       | 100%                      | single                         | 664                               |
|   |             | 40   | 90 x 28,3     |   |   | 500-1600       | 100%                      | single                         | 1210                              |
|    | TLQ         | 18   | 18 x 29,4     |    |    | 370-770        | variable from 80% to 120% | single                         | 473                               |
|   |             | 28   | 28 x 36,6     |   |   | 450-1490       |                           |                                | 1029                              |
|   |             | 43   | 43 x 56,4     |   |   | 610-1970       |                           |                                | 2489                              |
|    | TQN         | 30   | 29,5 x 40     |   |   | 450-1490       | variable from 80% to 120% | single                         | 420                               |
|   |             | 40   | 39,5 x 57,3   |   |   | 610-1970       |                           |                                | 1100                              |
|  | TQAX        | 26   | 26 x 44       |  |  | 400-1200       | variable from 80% to 120% | single                         | 533                               |
|   |             | 40   | 39,5 x 57,3   |   |   | 600-1600       |                           |                                | 1157                              |
|  | TLS         | 28   | 84 x 17       |  |  | 290-1490       | 100%                      | single and bilateral version D | 2220                              |
|   |             | 35   | 104 x 22,5    |   |   | 450-1730       |                           |                                | 3500                              |
|   |             | 43   | 120 x 28      |   |   | 530-1970       |                           |                                | 4840                              |
|  | TSH         | 28   | 80 x 28,5     |  |  | 290-1490       | 100%                      | single and bilateral           | 2546                              |
|   |             | 43   | 100 x 47      |   |   | 530-1970       |                           |                                | 2919                              |
|  | TH2         |      | 150 x 49      |  |  | 770-1970       | 100%                      | single                         | 7979                              |
|   | TH3         | 43   | 150 x 59      |   |   | 770-2295       |                           |                                | 11994                             |
|   | TH4         |      | 190 x 59      |   |   | 1010-2450      |                           |                                | 19286                             |
|  | TSQ<br>TSQR | 28   | 28 x 26       |  |  | 130-1170       | 100%                      | bilateral and single R version | 1173                              |
|   |             | 35   | 35 x 34       |   |   | 210-1490       |                           |                                | 2000                              |
|   |             | 43   | 43 x 44       |   |   | 210-1970       |                           |                                | 3158                              |
|  | SR<br>SRE   | 28   | 28 x 13       |  |  | 130-1170       | 50% e 75% E version       | bilateral and single R version | 7400                              |
|   |             | 35   | 35 x 17       |   |   | 210-1490       |                           |                                | 9000                              |
|   |             | 43   | 43 x 22       |   |   | 210-1970       |                           |                                | 11800                             |

## MATERIALS AND TREATMENTS CHARACTERISTICS

|   |  |
|---|--|
| <b>Standard version</b>                         | Rails with "T RACE – NOX" treatment; high depth nitride hardening and black oxidation treatment. The rails are cut to size after treatment, so the rail ends are protected by protective spray. The rollers are core hardened steel, while the intermediate steel S-element is protected with black epoxy electrocoating - "T RACE e-coating".   |
| <b>KB VERSION<br/>High corrosion resistance</b> | Standard product but with additional black "T RACE e-coating" of the rails, for high corrosion resistance (min 700hours resistance in salt fog). The rail has no e-coating on the raceway contact area with the rollers/balls, as masked before e-coating. The raceways are anyhow with standard oxidation while the oiled raceways assure lubrication and corrosion protection of raceways. |

| Hardning treatment     | Resistance to salt fog               | Position use           | Vertical rigidity | Horizontal rigidity | Speed - Silent | Rubber stoppers | Suitable for variable stroke | Suitable for vertical stroke | Presence of lubricating wipers | Self-Alingning |
|------------------------|--------------------------------------|------------------------|-------------------|---------------------|----------------|-----------------|------------------------------|------------------------------|--------------------------------|----------------|
| T RACE-NOX 1.0<br>**** | 120 HOURS<br>KB VERSION<br>700 HOURS | horizontal             | 29                | 1                   | ****           | ●               | ●                            | .                            | ●                              | ●              |
|                        |                                      |                        | 110               | 5                   |                |                 |                              |                              |                                |                |
|                        |                                      |                        | 473               | 26                  |                |                 |                              |                              |                                |                |
| T RACE-NOX<br>***      | 120 HOURS<br>KB VERSION<br>700 HOURS | horizontal             | 84                | 3                   | ****           | ●               | ●                            | .                            | .                              | .              |
|                        |                                      |                        | 322               | 14                  |                |                 |                              |                              |                                |                |
| .                      | 500 HOURS<br>P VERSION<br>1000 HOURS | horizontal             | 34                | 7                   | ****           | ●               | ●                            | .                            | .                              | .              |
|                        |                                      |                        | 113               | 30                  |                |                 |                              |                              |                                |                |
| T RACE-NOX 1.0<br>**** | 120 HOURS<br>KB VERSION<br>700 HOURS | horizontal<br>vertical | 3                 | 2                   | ***            | ●               | ●                            | ●                            | ●                              | .              |
|                        |                                      |                        | 16                | 5                   |                |                 |                              |                              |                                |                |
|                        |                                      |                        | 90                | 28                  |                |                 |                              |                              |                                |                |
| T RACE-NOX<br>***      | 120 HOURS<br>KB VERSION<br>700 HOURS | horizontal<br>vertical | 11                | 5                   | ***            | ●               | ●                            | ●                            | .                              | .              |
|                        |                                      |                        | 36                | 19                  |                |                 |                              |                              |                                |                |
| .                      | 500 HOURS<br>P VERSION<br>1000 HOURS | horizontal<br>vertical | 8                 | 5                   | ****           | ●               | ●                            | ●                            | .                              | .              |
|                        |                                      |                        | 36                | 19                  |                |                 |                              |                              |                                |                |
| T RACE-NOX 1.0<br>**** | 120 HOURS<br>KB VERSION<br>700 HOURS | horizontal             | 151               | 5                   | ***            | ●               | .                            | .                            | .                              | .              |
|                        |                                      |                        | 384               | 15                  |                |                 |                              |                              |                                |                |
|                        |                                      |                        | 698               | 31                  |                |                 |                              |                              |                                |                |
| T RACE-NOX 1.0<br>**** | 120 HOURS<br>KB VERSION<br>700 HOURS | horizontal             | 169               | 14                  | ***            | ●               | .                            | .                            | .                              | .              |
|                        |                                      |                        | 488               | 69                  |                |                 |                              |                              |                                |                |
| T RACE-NOX 1.0<br>**** | 120 HOURS<br>KB VERSION<br>700 HOURS | horizontal             | 1331              | 41                  | ***            | .               | .                            | .                            | .                              | .              |
|                        |                                      |                        | 2691              | 115                 |                |                 |                              |                              |                                |                |
|                        |                                      |                        | 10000             | 343                 |                |                 |                              |                              |                                |                |
| T RACE-NOX 1.0<br>**** | 120 HOURS<br>KB VERSION<br>700 HOURS | horizontal             | 12                | 3                   | ***            | ●               | .                            | .                            | .                              | .              |
|                        |                                      |                        | 35                | 10                  |                |                 |                              |                              |                                |                |
|                        |                                      |                        | 70                | 17                  |                |                 |                              |                              |                                |                |
| T RACE-NOX 1.0<br>**** | 120 HOURS<br>KB VERSION<br>700 HOURS | horizontal             | .                 | .                   | ***            | ●               | .                            | .                            | .                              | .              |
|                        |                                      |                        | .                 | .                   |                |                 |                              |                              |                                |                |
|                        |                                      |                        | .                 | .                   |                |                 |                              |                              |                                |                |

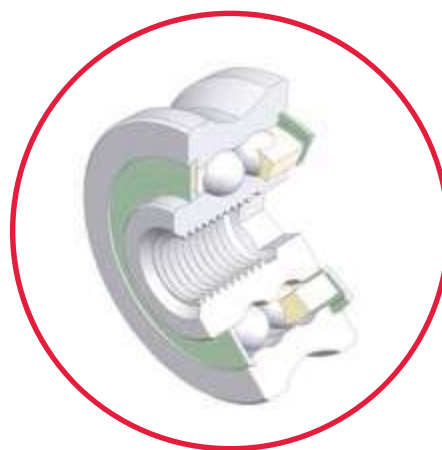
**P VERSION**  
**Electro polished**

 Standard version, but with rails and intermediate S-element completely Electro-Polished for very high corrosion resistance, 1000 hours in salt fog .  
 The Electro Polishing also gives the product a very shiny surface.

# HIGH PERFORMANCE ROLLER TELESCOPIC SLIDES

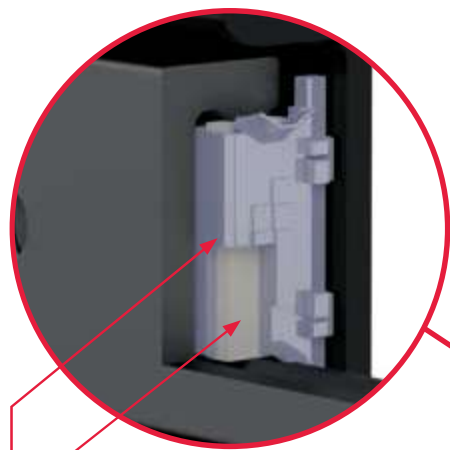
Cold drawn steel rails with Patented **T RACE-NOX 1.0** treatment for high depth nitride hardening and with black oxidation, assuring long lifetime without wear and a good corrosion resistance.

- **HIGH HARDNESS**
- **DURABLE** for high load/frequency
- **LONG LIFE**
- **GOOD CORROSION RESISTANCE** also on the raceways, tested for 120 hours in salt fog.



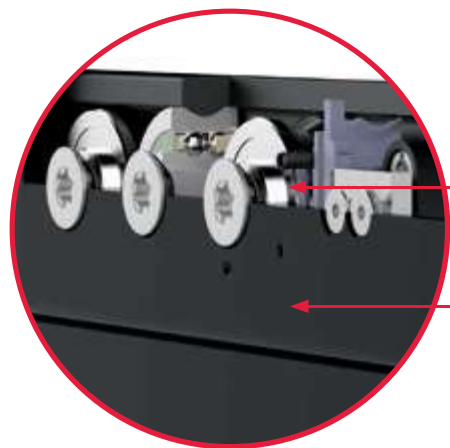
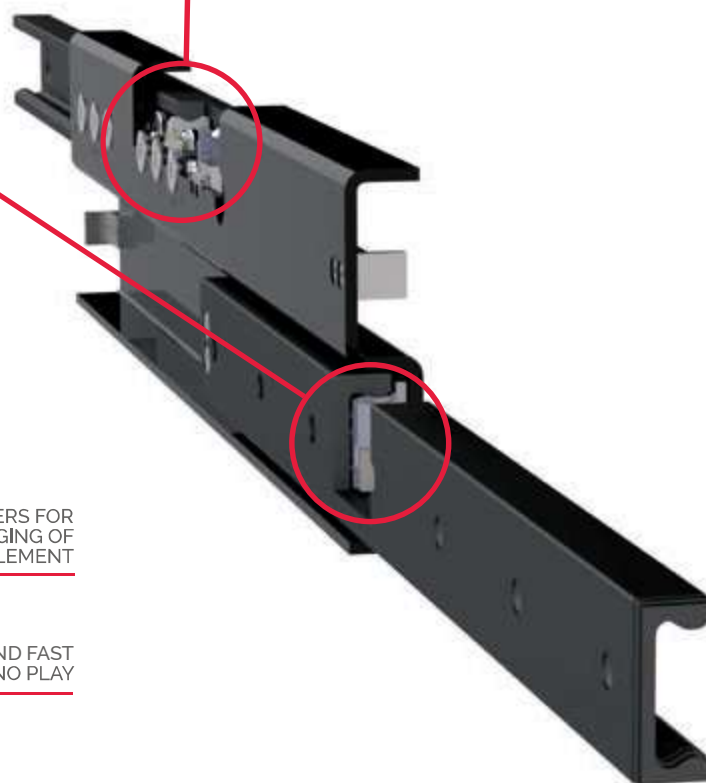
Strong double row ball-bearings, 2RS seals and lubricated for life.

- **ECCENTRIC ROLLERS FOR PRELOAD SETTING FOR SMOOTH PLAY-FREE RUNNING.**



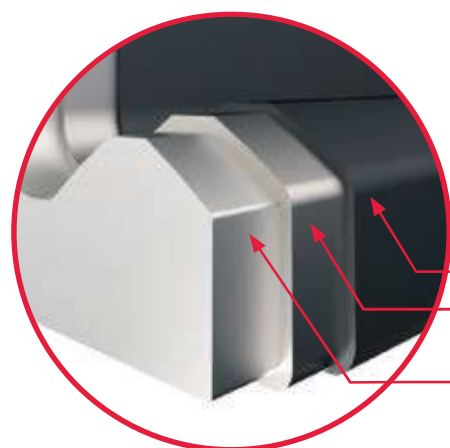
WIPERS WITH INCORPORATED PRE-OILED FELT FOR OPTIMUM LONG TERM RACEWAY LUBRICATION, ASSURING LOW MAINTENANCE

INTERNAL STRONG WIPERS FOR GOOD RACEWAY CLEANING



ROBUST RUBBER STOPPERS FOR SMOOTH DRAGGING OF INTERMEDIATE ELEMENT

SILENT AND FAST MOVEMENT WITH NO PLAY



BLACK OXIDATION WITH MICRO OIL IMPREGNATION, **T RACE-NOX 1.0**, ANTI-CORROSION TREATMENT

HIGH DEPTH NITRIDING TECHNOLOGY **T RACE-NOX 1.0**

HIGH STRENGTH COLD DRAWN STEEL ALLOY PROFILE



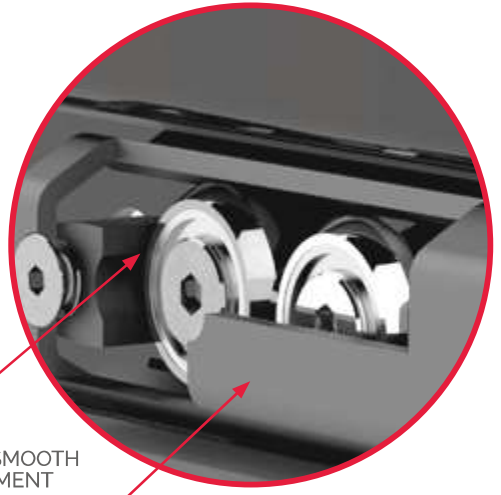
# COST EFFECTIVE ROLLER TELESCOPIC SLIDES TLN, TQN SERIES



Roll formed steel rails, nitride hardened and post black oxidation, patented **T RACE-NOX** treatment, for efficient corrosion protection.

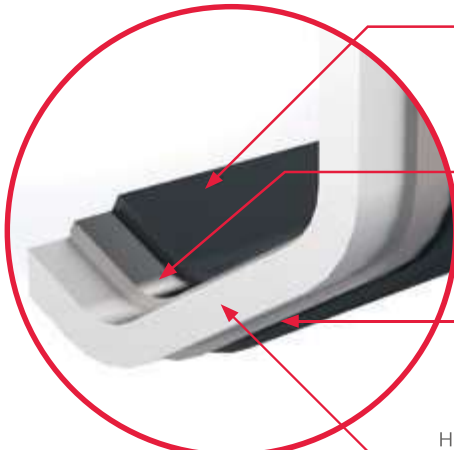
- **HARDENED RACEWAYS**
- **DURABLE FOR HIGH LOAD/FREQUENCY**
- **GOOD LIFETIME**
- **GOOD CORROSION RESISTANCE, also on the raceways, tested for 120hours in salty fog.**

Available also in complete INOX AISI304, TLAX,TQAX, which again can be offered in Electro-Polished version for most critical outdoor applications.



ROBUST RUBBER STOPPERS FOR SMOOTH DRAGGING OF INTERMEDIATE ELEMENT

SILENT AND FAST MOVEMENT WITH NO PLAY

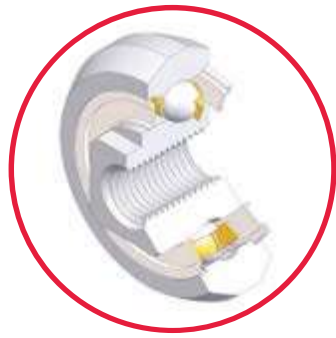


ANTI-CORROSION TREATMENT: BLACK OXIDATION WITH MICRO OIL IMPREGNATION

NITRIDE HARDENING TECHNOLOGY, T RACE-NOX TREATMENT

OPTIONAL SURFACE COATINGS: T RACE E-COATING 1.0, T RACE C-COLOR 1.0 and T RACE P-POLISHING

HIGH RESISTANCE ROLL FORMED STEEL PROFILE



Single row ball-bearings, 2Z seals and lubricated for life.

- **ECCENTRIC ROLLERS FOR PRELOAD**
- **SETTING OF SMOOTH PLAY-FREE RUNNING**

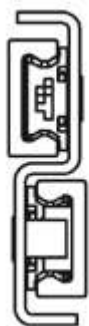
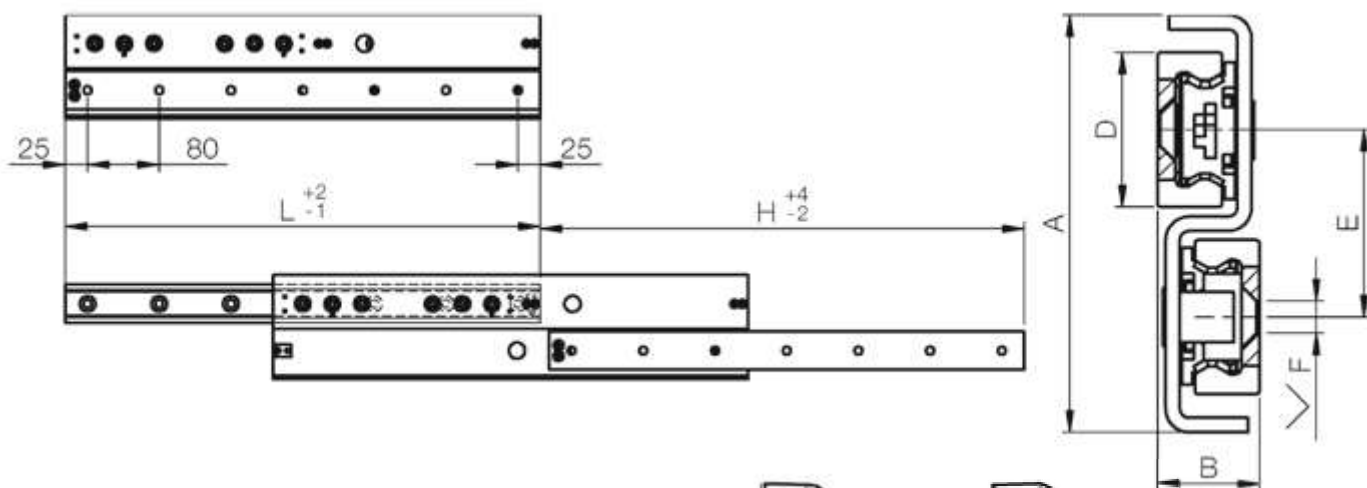


## OPTIONAL SURFACE TREATMENT

**T RACE e-coating 1.0:** glossy black epoxy electro coating for high corrosion resistance, tested for 700 hours in salt fog.

**T RACE c-color 1.0:** powder coating in RAL-colors for customized coloured rails with high corrosion resistance.

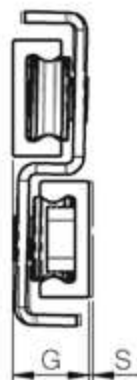
# HIGH PERFORMANCE ROLLER TELESCOPIC SLIDES TLR SERIES



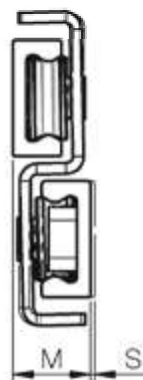
LEFT SIDE VERSION TLRs



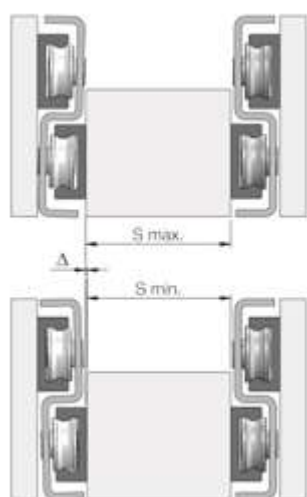
RIGHT SIDE VERSION TLRD



SELF-ALIGNING VERSION  
with floating rollers TLR..A



| Code  | A (mm) | B (mm) | D (mm) | E (mm) | F (mm)                     | G (mm) | M (mm) | S (mm) |
|-------|--------|--------|--------|--------|----------------------------|--------|--------|--------|
| TLR18 | 52     | 15,2   | 18     | 25     | Ø 4,5 for screw M4 DIN7991 | 14,7   | 15,7   | 1      |
| TLR28 | 80     | 18,6   | 28     | 35     | Ø 5,5 for screw M5 DIN7991 | 17,2   | 19     | 1,8    |
| TLR43 | 116    | 28,4   | 43     | 52     | Ø 8,5 for screw M8 DIN7991 | 26,8   | 30     | 3,2    |



### SELF-ALIGNING CAPABILITY

When TLR slides are used in pairs, 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. Such "binding-problems" for installation on non precise structures, common for ball-cage slides and can be eliminated/much reduced with a pair of self-aligning TLR..A slides. A problem of heavy binding will consequently much reduce load capacity and expected life-time. The self-aligning capacity is obtained by having a combination of floating and guiding rollers in the TLR..A, i.e. allowing for a minor rotation of the rails whilst maintaining the preload in both upper and lower rails.

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 ex. of the TLR28A slide hereby changes the nominal value of 18,6mm to 17,2mm ( S min ) – 19,0mm ( S max ) while compensating dimensional errors on mobile structures or distance errors between the two lateral sides of fixed structures, for which the upper rails are fixed to. The TLR..A is in general always used as a pair with a standard TLR, to assure good lateral stability. However good self-aligning can also be obtained for movement of vertical panels, with the use of TLR..A at the top to absorb some mis-alignment, and with some retainer guidance at lower part.

| ORDER CODE     | VERSION | CHARACTERISTICS   |
|----------------|---------|---|
| TLRD43-1010    | BASIC   | Cold drawn steel rails with patented "T RACE-NOX 1.0"; high depth nitride hardening and black oxidation treatment. The rails are cut to size after treatment, so the rail ends are protected by protective spray. The rollers are core hardened steel, while the intermediate steel S-element is protected with black epoxy electro coating - "T RACE e-coating 1.0" .  |
| TLRD43-1010-KL | KL      | As a basic TLR product but with additional black "T RACE e-coating 1.0" on the rails, for high corrosion resistance (min 700 hours resistance in salt fog). The rail has no T RACE e-coating on the raceway contact area with the rollers, as masked before the treatment. The raceways are anyhow with standard oxidation while the wipers with incorporated pre-oiled felt assure lubrication and corrosion protection of raceways. |
| TLRD43-1010-KB | KB      | As the version KL but with the rollers made in stainless steel AISI440C   |

| Code        | Lenght L (mm) | Stroke H (mm) | Dynamic coefficient C (N) | Capacity load Co rad (N) | Weight (kg) |
|-------------|---------------|---------------|---------------------------|--------------------------|-------------|
| TLR.18.-290 | 290           | 290           | 731                       | 355                      | 0,9         |
| TLR.18.-370 | 370           | 370           | 969                       | 470                      | 1,2         |
| TLR.18.-450 | 450           | 450           | 1.115                     | 541                      | 1,4         |
| TLR.18.-530 | 530           | 530           | 1.214                     | 589                      | 1,6         |
| TLR.18.-610 | 610           | 610           | 1.286                     | 623                      | 1,9         |
| TLR.18.-690 | 690           | 690           | 1.324                     | 642                      | 2,1         |
| TLR.18.-770 | 770           | 770           | 1.344                     | 652                      | 2,3         |

| Code         | Lenght L (mm) | Stroke H (mm) | Dynamic coefficient C (N) | Capacity load Co rad (N) | Weight (kg) |
|--------------|---------------|---------------|---------------------------|--------------------------|-------------|
| TLR.28.-370  | 370           | 380           | 1.578                     | 798                      | 2,1         |
| TLR.28.-450  | 450           | 460           | 1.860                     | 941                      | 2,5         |
| TLR.28.-530  | 530           | 540           | 2.045                     | 1.034                    | 2,9         |
| TLR.28.-610  | 610           | 620           | 2.711                     | 1.372                    | 3,3         |
| TLR.28.-690  | 690           | 700           | 2.933                     | 1.484                    | 3,7         |
| TLR.28.-770  | 770           | 780           | 3.084                     | 1.560                    | 4,1         |
| TLR.28.-850  | 850           | 860           | 3.180                     | 1.609                    | 4,5         |
| TLR.28.-930  | 930           | 940           | 3.259                     | 1.632                    | 4,9         |
| TLR.28.-1010 | 1010          | 1020          | 3.325                     | 1.519                    | 5,3         |
| TLR.28.-1090 | 1090          | 1100          | 3.381                     | 1.421                    | 5,7         |
| TLR.28.-1170 | 1170          | 1180          | 3.428                     | 1.335                    | 6,1         |
| TLR.28.-1250 | 1250          | 1260          | 3.469                     | 1.258                    | 6,5         |
| TLR.28.-1330 | 1330          | 1340          | 3.505                     | 1.190                    | 6,9         |
| TLR.28.-1410 | 1410          | 1420          | 3.537                     | 1.129                    | 7,3         |
| TLR.28.-1490 | 1490          | 1500          | 3.565                     | 1.074                    | 7,7         |

| Code         | Lenght L (mm) | Stroke H (mm) | Dynamic coefficient C (N) | Capacity load Co rad (N) | Weight (kg) |
|--------------|---------------|---------------|---------------------------|--------------------------|-------------|
| TLR.43.-530  | 530           | 540           | 4.075                     | 2.078                    | 6,4         |
| TLR.43.-610  | 610           | 620           | 4.241                     | 2.163                    | 7,3         |
| TLR.43.-690  | 690           | 700           | 6.155                     | 3.139                    | 8,2         |
| TLR.43.-770  | 770           | 780           | 6.554                     | 3.343                    | 9,1         |
| TLR.43.-850  | 850           | 860           | 6.870                     | 3.504                    | 10          |
| TLR.43.-930  | 930           | 940           | 7.127                     | 3.635                    | 10,9        |
| TLR.43.-1010 | 1010          | 1020          | 7.341                     | 3.744                    | 11,8        |
| TLR.43.-1090 | 1090          | 1100          | 7.520                     | 3.836                    | 12,7        |
| TLR.43.-1170 | 1170          | 1180          | 7.674                     | 3.784                    | 13,6        |
| TLR.43.-1250 | 1250          | 1260          | 7.807                     | 3.574                    | 14,5        |
| TLR.43.-1330 | 1330          | 1340          | 7.922                     | 3.386                    | 15,4        |
| TLR.43.-1410 | 1410          | 1420          | 8.024                     | 3.217                    | 16,3        |
| TLR.43.-1490 | 1490          | 1500          | 8.115                     | 3.065                    | 17,2        |
| TLR.43.-1570 | 1570          | 1580          | 8.195                     | 2.925                    | 18,1        |
| TLR.43.-1650 | 1650          | 1660          | 8.268                     | 2.798                    | 19          |
| TLR.43.-1730 | 1730          | 1740          | 8.333                     | 2.682                    | 19,9        |
| TLR.43.-1810 | 1810          | 1820          | 8.393                     | 2.575                    | 20,8        |
| TLR.43.-1890 | 1890          | 1900          | 8.447                     | 2.476                    | 21,7        |
| TLR.43.-1970 | 1970          | 1980          | 8.497                     | 2.384                    | 22,6        |

## TECHNICAL CHARACTERISTICS

TLR telescopic roller slides are composed from the same basic components as the MR family. Strong double row ball-bearings and patented T RACE-NOX 1.0 treatment; high depth nitride hardened rails with black oxidation, assembled to a rigid intermediate S-shaped element, provide excellent smooth and play-free running performance, along with high load capacities and low flexion. Strong wipers with incorporated pre-oiled felt assure good cleaning and proper lubrication of the raceways for long lifetime with reduced maintenance.

The intermediate element is dragged out/in by strong rubber damping stoppers thus much reducing any bumping impact from the intermediate element during opening/closing. TLR slides are also suitable in dusty ambient environments where ball-cage slides tend to fail when impurities contaminate and permeate into the ball-cage's small ball arrangement. The slides feature a Unique Self-Aligning feature when TLR rails are used in a pair, see description page 14.

**INDUSTRIAL AUTOMATION:** TLR slides are especially recommended for high frequency applications, where long service requirements and low maintenance are necessary. Roller telescopics are superior for motorized automation with or without variable stroke-cycles, to eliminate the typical problem of ball-cage creeping that subsequently can cause serious motor jamming-problems, when increased motor power is instantly required to re-position the ball-cage.

The materials and surface treatments assure a general high standard of corrosion resistance. With additional black electro coating, **KL or KB -version**, the TLR slider becomes suitable for outdoor applications or very humid ambient. Upon request, customized versions with longer extension or both customized length and stroke are available.

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

