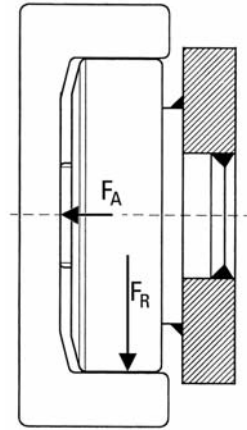


## Sizes – Bearings and Profiles

Size	Outer Ø	Radial load $F_R$ kN	Axial load $F_A$ kN	U-profiles Nb
50	52.5	5.30	2.00	ZUP 050.0730
60	62.5	8.87	2.95	ZUP 060.0700
70	70.1	11.40	3.15	ZUP 070.0700
80	77.7	12.87	5.00	ZUP 080.0700
90	88.4	20.37	5.10	ZUP 090.0700
110	107.7	24.06	8.90	ZUP 110.0700
120	123	33.44	9.80	ZUP 120.0700
150	149	51.94	17.4	ZUP 150.0700
180	180	76	23	ZUP 180.0700

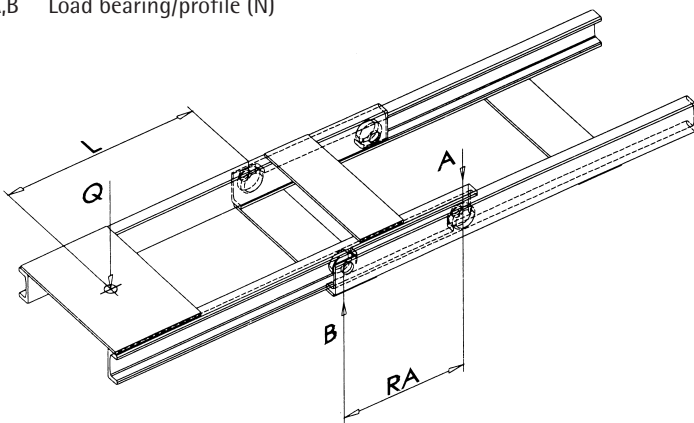
The load data in this table are calculated based on Hertzian pressure, bearing/profiles.  
At speeds  $n > 10$  rpm, please apply the safety factor.



**Caution:**  
In order to avoid indentations or pressure points on the profiles, a surface pressure of 860 N/mm<sup>2</sup> should not be exceeded.

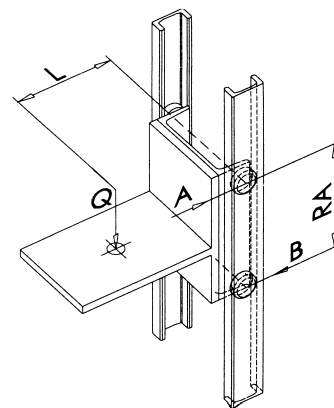
## Technical specifications

- Q Load including own weight (N)
- L Load centre "LSP" (mm)
- RA Bearing spacing (mm)
- A,B Load bearing/profile (N)



$$A = \frac{Q \times L}{RA \times 2} \text{ (N)}$$

$$B = A + \frac{Q}{2} \text{ (N)}$$



$$A = B = \frac{Q \times L}{RA \times 2} \text{ (N)}$$

## Technical Description

### Guide bearings

#### Tolerances

The cylindrical roller bearings used are made to DIN 620. Tolerance class PN (PO), load factors to ISO 76 and 281/1.

#### Materials

Outer ring: Steel 20CrMnTi, case hardened, surface hardness 62-2 HRC  
 Inner ring: Roller bearing steel UNI 100Cr6, hardness 62-2 HRC  
 Weld-on pin: S355 J2G3, suitable for welding, tolerance band of the pin diameter = 0 / -0.05 mm

#### Seal

ZRS seal  
 Labyrinth / elastomer seal, sealed for life

#### Screws

TORX / screw locking DIN 267-28 polyamide spot coating, eliminates jamming

#### Operating temperature

Generally from -40°C to +120°C, can operate briefly up to +150°C.  
 High-temperature bearings up to +250°C

#### Suitability for relubrication

For extended life the bearings are suitable for relubrication. The delivery holes for relubrication are sealed with M6 threaded plugs. The bearings are supplied without a grease nipple. The bearings should be lubricated at the delivery holes using a grease gun.

#### Lubricant

The standard type of bearings should be lubricated with lithium grease grade 3.

#### Note

The contact faces of the bearings have a convex finish. Bearings with diameter <100 mm should be dismantled before welding is performed.

### Guide profiles

#### Materials

Standard profiles: 18MnNb6  
 Micro-alloy fine grain steel improved with addition of niobium (Nb) and vanadium (V), higher wear resistance, fine-grain structure, highly suitable for welding

#### Lubrication instructions

Before use, the contact surfaces of the guide profiles must first be cleaned and then smeared with grease.  
 Normal commercially-available grease is sufficient.

