

**SX011832-A-VSP-PRL50**

Crossed roller bearing

Crossed roller bearingsdimension series 18 to
DIN 616

Technical information



Your current product variant

| | | |
|---------|-----------|--|
| Preload | VSP+PRL50 | Preloaded, axial and radial run-out reduced by 50% |
|---------|-----------|--|

Main Dimensions & Performance Data

| | | |
|----------------|-----------|----------------------------------|
| d ₁ | 160 mm | Bore Diameter |
| | 0,004 mm | Bore diameter upper tolerance |
| | -0,021 mm | Bore diameter lower tolerance |
| D _a | 200 mm | Outside Diameter |
| | 0 mm | Outside diameter upper tolerance |
| | -0,029 mm | Outside diameter lower tolerance |
| H | 20 mm | Height of the assembled bearing |
| h _i | 20 mm | Height inner ring |
| | 0,1 mm | Width upper tolerance |
| | -0,1 mm | Width lower tolerance |
| ≈m | 1,581 kg | Weight |



Dimensions

| | | |
|-----------|-----------|---|
| D_i | 180,8 mm | Inner diameter outer ring |
| D_M | 180 mm | Rolling element pitch circle diameter |
| d_a | 179,2 mm | Outer diameter inner ring |
| h | 20 mm | Height of individual ring |
| | 0 mm | Height of individual ring upper tolerance |
| | -0,025 mm | Height of individual ring lower tolerance |
| r_{min} | 1,1 mm | Chamfer dimension |
| S | 1,5 mm | Diameter of lubrication hole |

Temperature range

| | | |
|-----------|--------|----------------------------|
| T_{min} | -30 °C | Operating temperature min. |
| T_{max} | 80 °C | Operating temperature max. |

Calculation factors

| | | |
|-----------------|-----------|--|
| | 0,008 mm | Running accuracy, radial |
| | 0,005 mm | Running accuracy, axial |
| VSP_{min} | 0,005 mm | Minimum bearing preload |
| VSP_{max} | 0,02 mm | Maximum bearing preload |
| C_a | 69.000 N | Basic dynamic load rating, axial |
| C_{0a} | 255.000 N | Basic static load rating, axial |
| C_r | 49.000 N | Basic dynamic load rating, radial (for radial load only) |
| C_{0r} | 126.000 N | Basic static load rating, radial (for radial load only) |
| $N_{G\ oil}$ | 425 1/min | Limiting speed for oil lubrication with preload |
| $N_{G\ Grease}$ | 210 1/min | Limiting speed for grease lubrication with preload |
| | 61832 | Dimensions identical to ISO dimension series 18 |



Characteristics



Radial load



Axial load in one direction



Axial load in two directions



Grease Lubrication



Oil Lubrication



Not sealed



Small design envelope