

Spindle ball bearings (HY)* S 61805 C



Precision class P4 / ABEC7

Components

| | |
|------------------------------|---------------------------------|
| Bearing designation: | (HY)* S 61805 C |
| Bearing design: | S |
| Series / size: | 61805 |
| Ball material: | Steel 100Cr6 |
| Ball material HY : | Ceramic Si3N4 |
| Cage: | TA (TXM available upon request) |
| Precision: | P4 (HG, UP, P2 upon request) |
| Main dimensions [d x D x B]: | 25 x 37 x 7 mm |

Technical data (Standard bearings)

| | |
|------------------------------|-------|
| Static load capacity C_0 : | 2750 |
| Dynamic load capacity C: | 3650 |
| Speed limit n_{Fett} : | 41250 |
| Speed limit n_{Oj} : | 55000 |

Technical data (Hybrid bearings)*

| | |
|----------------------------------|---------|
| Static load capacity C_{0HY} : | 1930 |
| Dynamic load capacity C_{HY} : | 3650 |
| Speed limit n_{Fett} : | 51562.5 |
| Speed limit n_{Oj} : | 68750 |

Pre-tension

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|------------------------------|---------------|
| Light (L): | 19 N |
| Axial rigidity (C_{ax}): | 21 N/ μ m |
| Medium (M): | 55 N |
| Axial rigidity (C_{ax}): | 33 N/ μ m |
| Heavy (S): | 110 N |
| Axial rigidity (C_{ax}): | 46 N/ μ m |
| Spring preload (Ff): | 95 N |

The given speed limits apply to individual bearings with spring preload. Correction factors must be considered for all properties which deviate from this.

* All ball bearings are also available as hybrid ball bearings (HY).