

**FAG****16003-A**

Deep groove ball bearing

Deep groove ball bearing 160..-A, single row,
steel sheet metal cage

Technical information

**Your current product variant**

| | | |
|----------------------------------|--------------|---|
| Changed internal design | A | Design variant A |
| Sealing | Without | Not sealed |
| Cage | JN | Steel sheet metal |
| Tolerance class | PN | Normal (ISO 492:2023) |
| Dimensional / heat stabilization | SN | Rings dimensional stabilized up to 120° |
| Lubricant | Without | Bearing not greased |
| Radial internal clearance | CN (Group N) | Normal internal clearance |
| Bore type | Z | Cylindrical |

Main Dimensions & Performance Data

| | | |
|----------|--------------|-----------------------------------|
| d | 17 mm | Bore diameter |
| D | 35 mm | Outside diameter |
| B | 8 mm | Width |
| C_r | 6,400 N | Basic dynamic load rating, radial |
| C_{0r} | 3,250 N | Basic static load rating, radial |
| C_{ur} | 207 N | Fatigue load limit, radial |
| n_G | 31,000 1/min | Limiting speed |
| n_{gr} | 17,700 1/min | Reference speed |
| m | 0.032 kg | Weight |



Mounting dimensions

| | | |
|--------------|--------|--------------------------------------|
| $d_{a \min}$ | 19 mm | Minimum diameter shaft shoulder |
| $D_{a \max}$ | 33 mm | Maximum diameter of housing shoulder |
| $r_{a \max}$ | 0.3 mm | Maximum fillet radius |

Dimensions

| | | |
|------------|----------|------------------------------|
| r_{\min} | 0.3 mm | Minimum chamfer dimension |
| D_1 | 29.46 mm | Shoulder diameter outer ring |
| D_2 | 31.65 mm | Caliber diameter outer ring |
| d_1 | 22.8 mm | Shoulder diameter inner ring |

Temperature range

| | | |
|------------|--------|----------------------------|
| T_{\min} | -30 °C | Operating temperature min. |
| T_{\max} | 120 °C | Operating temperature max. |

Calculation factors

| | | |
|-------|------|--------------------|
| f_0 | 14.3 | Calculation factor |
|-------|------|--------------------|

Characteristics

| | |
|---|------------------------------|
|  | Radial load |
|  | Axial load in one direction |
|  | Axial load in two directions |
|  | Grease Lubrication |
|  | Oil Lubrication |
|  | Not sealed |