

剖分式调心滚子轴承  
Split Spherical Roller Bearing

在难于接近的位置快速更换轴承  
Quick-Replace of Bearing at An Unattainable Place



由于更换非剖分式调心滚子轴承需要大量附加工作（包括齿轮或联轴器的拆卸、传动装置的拆卸以及轴动力装置的拆卸），因此主要使用剖分式调心滚子轴承。  
剖分式调心滚子轴承的使用降低了机器和设备的停机时间。

Replace non-split bearing will cause much extra work, like dismounting of gear, couplings, transmission and drive etc, therefore, in those places hard to attain, split bearing is the best choice.

节约成本  
Cost-Saving

由于停机减少，剖分调心滚子轴承能够大大降低安装成本。  
在新的设计中，剖分式调心滚子轴承在大多数情况下可以节约成本，这是因为简化了设备并且减少了所需的装配作业。

Due to reduced downtime of machine, split bearing can reduce the mounting cost greatly.

Those cost-saving is attributed to simplified equipment and less assembling work.

应用实例  
Application Example

剖分式调心滚子轴承主要用于难于接近的几个点和位置所支撑的轴。典型应用范围包括输送设备、材料处理设备、通风设备、轧钢、船舶和造纸。

Split bearing is mainly used on the shafts which are supported by several unattainable points or positions, including transmission equipment, material processing equipment, ventilation equipment, milling, vessel and paper making industry.

采矿和材料加工领域的应用实例：  
Example of mining and material processing:

|           |                                      |
|-----------|--------------------------------------|
| 斗轮挖掘机和取料机 | Bucket wheel excavator and Reclaimer |
| 绞盘各滑轮     | Winch and Pulley                     |
| 蜗杆输送机     | Worm conveyer                        |
| 斗轮和皮带输送机  | Bucket wheel and Belt conveyer       |
| 混合和搅拌设备   | Mixing equipment                     |
| 磨机和破碎机    | Grinder and crusher                  |
| 烧结设备、鼓形窖  | Sintering equipment                  |
| 风扇和通风机    | Fan and ventilator                   |
| 除尘设备      | Dust-cleaning equipment              |
| 传动装置和传动轴  | Transmission apparatus and shaft     |

当量动载荷  
Equivalentent dynamic load

$$P = 1.1 ( F_r + Y_1 \cdot F_a ) \quad [ \text{kN} ] \quad F_a / F_r \leq e$$
$$P = 1.1 ( 0.67 \cdot F_r + Y_2 \cdot F_a ) \quad [ \text{kN} ] \quad F_a / F_r > e$$

当量动载荷  
Equivalentent dynamic load

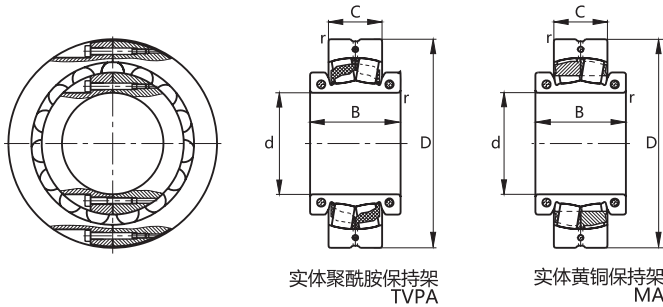
$$P_0 = ( F_{0r} + Y_0 \cdot F_{0a} ) \quad [ \text{kN} ]$$

为防止内圈在轴的圆周方向滑动，P/Cr必须≤ 0.2。  
若实际速度大大低于极限速度，则允许使用较高值。在这种情况下，请联系我们。

To prevent the sliding of the inner ring in the circum-ferential direction on the shaft, P/Cr must be ≤ 0.2.

A higher value is allowed to use only under the condition that the actual speed is greatly less than the limit speed. In this case, please contact us

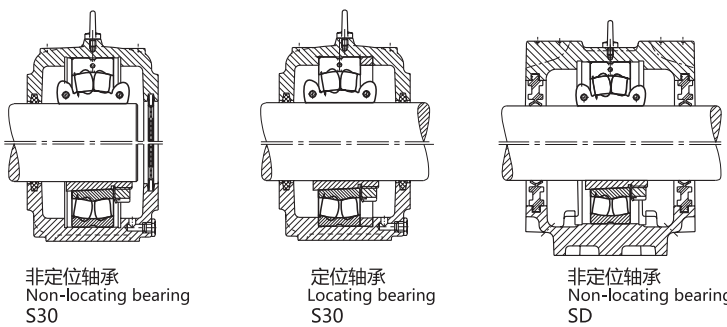
- \* ) 对于不带轴向支撑的内圈
- \* \* )若内部尺寸相同，轴承也可安装在其它制造商生产的轴承座中。  
SNV轴承座的密封件、盖和定位环：请参见样本。
- 1 ) 不带吊环的轴承座
- \* )For the inner ring without axial support
- \* \* )If internal dimensions of the bearing are the same, the bearing can also be mounted in other bearing housing.  
Seals, shields and locating ring of SNV bearing housing: See catalogue--rolling bearings
- 1 ) Bearing block without hand ring



实体聚酰胺保持架  
TVPA

实体黄铜保持架  
MA

| 基本尺寸<br>Basic Size |     |     |     |                | 基本额定负荷<br>Basic load rating |                                | 计算系数<br>Calculation factors |                |                |                | 疲劳载荷<br>极限值<br>Fatigue load<br>limited value | 型号Designation                               |
|--------------------|-----|-----|-----|----------------|-----------------------------|--------------------------------|-----------------------------|----------------|----------------|----------------|----------------------------------------------|---------------------------------------------|
| d                  | D   | C   | B   | 最小<br>min<br>r | 动态<br>dynamic<br>C          | 静态<br>static<br>C <sub>0</sub> | e                           | Y <sub>1</sub> | Y <sub>2</sub> | Y <sub>0</sub> | C <sub>ur</sub>                              | -                                           |
| mm                 |     |     |     |                | kN                          |                                | -                           |                |                |                |                                              | -                                           |
| 100                | 180 | 56  | 90  | 2              | 310                         | 430                            | 0.28                        | 2.37           | 3.53           | 2.32           | 40                                           | 231SM100-MA<br>222SM100-TVPA                |
|                    | 200 | 53  | 92  | 2.1            | 360                         | 465                            | 0.24                        | 2.84           | 4.23           | 2.78           | 39.5                                         |                                             |
| 110                | 180 | 46  | 86  | 2              | 270                         | 390                            | 0.23                        | 2.9            | 4.31           | 2.83           | 29.5                                         | 230SM110-MA<br>231SM110-MA<br>222SM110-TVPA |
|                    | 200 | 62  | 102 | 2              | 390                         | 570                            | 0.28                        | 2.41           | 3.59           | 2.35           | 39                                           |                                             |
|                    | 215 | 58  | 98  | 2.1            | 455                         | 585                            | 0.25                        | 2.71           | 4.04           | 2.65           | 47                                           |                                             |
| 115                | 200 | 52  | 90  | 2              | 305                         | 455                            | 0.22                        | 3.04           | 4.53           | 2.97           | 35                                           | 230SM115-MA<br>231SM115-MA<br>222SM115-TVPA |
|                    | 210 | 64  | 104 | 2              | 490                         | 710                            | 0.28                        | 2.39           | 3.56           | 2.34           | 49.5                                         |                                             |
|                    | 230 | 64  | 104 | 3              | 540                         | 720                            | 0.25                        | 2.71           | 4.04           | 2.65           | 53                                           |                                             |
| 125                | 210 | 53  | 94  | 2              | 390                         | 600                            | 0.23                        | 2.95           | 4.4            | 2.89           | 44                                           | 230SM125-MA<br>231SM125-MA<br>222SM125-TVPA |
|                    | 225 | 68  | 110 | 2.1            | 510                         | 750                            | 0.28                        | 2.45           | 3.64           | 2.39           | 51                                           |                                             |
|                    | 250 | 68  | 110 | 3              | 630                         | 880                            | 0.26                        | 2.62           | 3.9            | 2.56           | 60                                           |                                             |
| 135                | 225 | 56  | 100 | 2.1            | 405                         | 620                            | 0.22                        | 3.07           | 4.57           | 3              | 46                                           | 230SM135-MA<br>231SM135-MA<br>222SM135-TVPA |
|                    | 250 | 80  | 123 | 2.1            | 570                         | 850                            | 0.27                        | 2.49           | 3.71           | 2.43           | 57                                           |                                             |
|                    | 270 | 73  | 122 | 3              | 735                         | 1020                           | 0.25                        | 2.67           | 3.97           | 2.61           | 73                                           |                                             |
| 140                | 240 | 60  | 106 | 2.1            | 450                         | 680                            | 0.22                        | 3.1            | 4.62           | 3.03           | 51                                           | 230SM140-MA<br>231SM140-MA<br>222SM140-TVPA |
|                    | 270 | 86  | 135 | 2.1            | 710                         | 1040                           | 0.29                        | 2.32           | 3.45           | 2.26           | 87                                           |                                             |
|                    | 290 | 80  | 124 | 3              | 850                         | 1200                           | 0.25                        | 2.69           | 4              | 2.63           | 83                                           |                                             |
| 150                | 260 | 67  | 112 | 2.1            | 510                         | 800                            | 0.22                        | 3.1            | 4.62           | 3.03           | 57                                           | 230SM150-MA<br>231SM150-MA<br>222SM150-TVPA |
|                    | 280 | 88  | 133 | 2.1            | 710                         | 1040                           | 0.29                        | 2.32           | 3.45           | 2.26           | 87                                           |                                             |
|                    | 310 | 86  | 128 | 4              | 965                         | 1370                           | 0.26                        | 2.64           | 3.93           | 2.58           | 94                                           |                                             |
| 160                | 280 | 74  | 123 | 2.1            | 640                         | 1000                           | 0.23                        | 2.98           | 4.44           | 2.92           | 96                                           | 230SM160-MA<br>231SM160-MA<br>222SM160-TVPA |
|                    | 300 | 96  | 140 | 2.1            | 830                         | 1220                           | 0.29                        | 2.32           | 3.45           | 2.26           | 100                                          |                                             |
|                    | 320 | 86  | 131 | 4              | 965                         | 1370                           | 0.26                        | 2.64           | 3.93           | 2.58           | 94                                           |                                             |
| 170                | 290 | 75  | 120 | 2.1            | 780                         | 1250                           | 0.23                        | 2.9            | 4.31           | 2.83           | 113                                          | 230SM170-MA<br>231SM170-MA<br>222SM170-TVPA |
|                    | 320 | 104 | 142 | 2.1            | 915                         | 1430                           | 0.28                        | 2.37           | 3.53           | 2.32           | 114                                          |                                             |
|                    | 340 | 92  | 142 | 4              | 1140                        | 1630                           | 0.25                        | 2.71           | 4.04           | 2.65           | 111                                          |                                             |
| 180                | 310 | 82  | 134 | 2.1            | 800                         | 1270                           | 0.23                        | 2.98           | 4.44           | 2.92           | 115                                          | 230SM180-MA<br>231SM180-MA<br>222SM180-MA   |
|                    | 340 | 112 | 160 | 3              | 1020                        | 1530                           | 0.29                        | 2.32           | 3.45           | 2.26           | 119                                          |                                             |
|                    | 360 | 98  | 154 | 4              | 1140                        | 1630                           | 0.25                        | 2.71           | 4.04           | 2.65           | 104                                          |                                             |
| 200                | 340 | 90  | 136 | 3              | 965                         | 1530                           | 0.23                        | 2.9            | 4.31           | 2.83           | 136                                          | 230SM200-MA                                 |

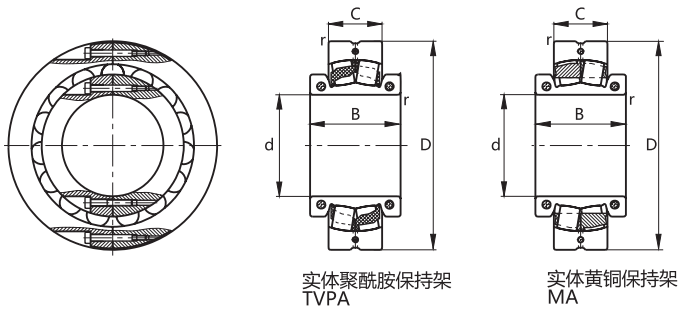


非定位轴承  
Non-locating bearing  
S30

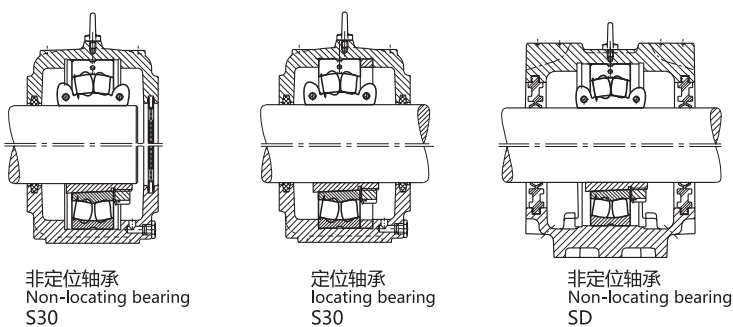
定位轴承  
Locating bearing  
S30

非定位轴承  
Non-locating bearing  
SD

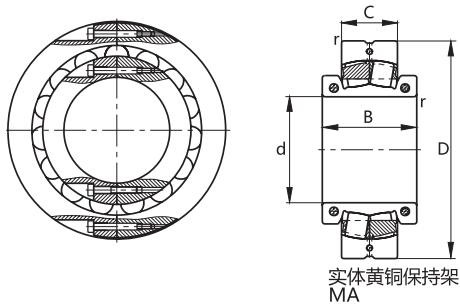
| 尺寸<br>Dimensions | 允许的轴向载荷 <sup>1)</sup><br>ermitted axial load <sup>1)</sup><br>最大max<br>F <sub>a</sub><br>kN | 根限转速<br>Limit Speed<br>min <sup>-1</sup> | 螺钉锁紧扭矩<br>Screw tightening<br>torque<br>M <sub>i</sub><br>M <sub>s</sub><br>Nm Nm | 更换带配套的非剖分调心滚子轴承<br>Replace non-split spherical roller bearing<br>with withdrawal sleeves<br>轴承<br>Bearing<br>适配套<br>Withdrawal sleeves | 适宜的轴承座 <sup>2)</sup><br>Suitable bearing<br>housing <sup>2)</sup> | 质量<br>Mass<br>kg     |
|------------------|---------------------------------------------------------------------------------------------|------------------------------------------|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|----------------------|
| 100              | 7.6<br>13.8                                                                                 | 1100<br>1500                             | 14<br>35<br>4<br>14                                                               | 23122K<br>22222K<br>H3122<br>H322                                                                                                      | SNV200 1)                                                         | 6.8<br>8.88          |
| 110              | 7.6<br>14<br>13.8                                                                           | 1100<br>1000<br>1300                     | 14<br>35<br>35<br>8<br>14                                                         | 23024K<br>23124K<br>22224K<br>H3024<br>H3124<br>H3124                                                                                  | S3024-H-N-FZ 1)<br>SNV215                                         | 5.26<br>9.51<br>10.6 |
| 115              | 7.6<br>7.6<br>13.8                                                                          | 1100<br>900<br>1200                      | 14<br>14<br>35<br>8.5<br>4<br>14                                                  | 23026K<br>23126K<br>22226K<br>H3026<br>H3126<br>H3126                                                                                  | S3026-H-N-FZ 1)<br>SNV230                                         | 9.5<br>11.2<br>14.3  |
| 125              | 7.6<br>13.8<br>13.8                                                                         | 950<br>850<br>1100                       | 14<br>35<br>35<br>4<br>8.5<br>14                                                  | 23028K<br>23128K<br>22228K<br>H3028<br>H3128<br>H3128                                                                                  | S3028-H-N-FZ 1)<br>SNV250                                         | 10<br>13.5<br>17.9   |
| 135              | 13.8<br>22.2<br>22.2                                                                        | 950<br>800<br>1000                       | 35<br>69<br>69<br>8.5<br>14<br>35                                                 | 23030K<br>23130K<br>22230K<br>H3030<br>H3130<br>H3130                                                                                  | S3030-H-N-FZ 1)<br>SNV270                                         | 13<br>19.5<br>24.1   |
| 140              | 13.8<br>21.7<br>22.2                                                                        | 900<br>700<br>950                        | 35<br>69<br>69<br>8.5<br>12.4<br>35                                               | 23032K<br>23132K<br>22232K<br>H3032<br>H3132<br>H3132                                                                                  | S3032-H-N-FZ 1)<br>SNV290                                         | 15.5<br>25.8<br>28.5 |
| 150              | 13.8<br>22<br>22.2                                                                          | 800<br>700<br>900                        | 35<br>69<br>69<br>8.5<br>35<br>35                                                 | 23034K<br>23134K<br>22234K<br>H3034<br>H3134<br>H3134                                                                                  | S3034-H-N-FZ<br>SD3134-H-TS<br>SD534-N-FZ                         | 17.4<br>28<br>35.5   |
| 160              | 22.2<br>22<br>22.2                                                                          | 750<br>670<br>900                        | 69<br>69<br>69<br>14<br>35<br>35                                                  | 23036K<br>23136K<br>22236K<br>H3036<br>H3136<br>H3136                                                                                  | S3036-H-N-FZ<br>SD3136-H-TS<br>SD536-N-FZ                         | 24.4<br>32.7<br>37.6 |
| 170              | 22.2<br>22<br>22.2                                                                          | 700<br>630<br>800                        | 69<br>69<br>69<br>14<br>35<br>35                                                  | 23038K<br>23138K<br>22238K<br>H3038<br>H3138<br>H3138                                                                                  | S3038-H-N-FZ<br>SD3138-H-TS<br>SD538-N-FZ                         | 23.6<br>40.6<br>43.6 |
| 180              | 22<br>22<br>22.2                                                                            | 670<br>600<br>600                        | 69<br>69<br>69<br>14<br>35<br>35                                                  | 23040K<br>23140K<br>22240K<br>H3040<br>H3140<br>H3140                                                                                  | S3040-H-N-FZ<br>SD3140-H-TS<br>SD540-N-FZ                         | 30<br>56.4<br>52.7   |
| 200              | 22                                                                                          | 630                                      | 69<br>35                                                                          | 23044K<br>H3044X                                                                                                                       | S3044-H-N-FZ                                                      | 45                   |



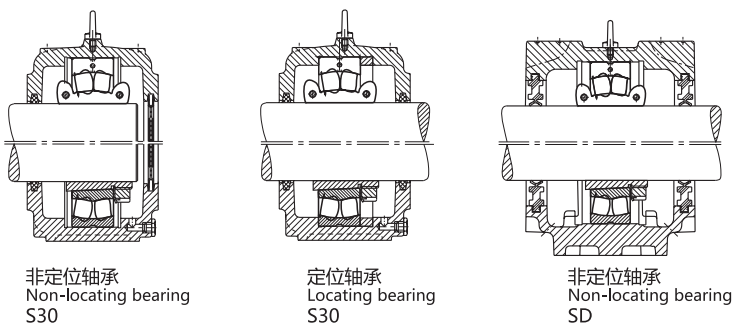
| 基本尺寸<br>Basic Size    |     |     |     |                | 基本额定负荷<br>Basic load rating |                                | 计算系数<br>Calculation factors |                |                |                | 疲劳载荷<br>极限值<br>Fatigue load<br>limited value | 型号Designation                                                  |
|-----------------------|-----|-----|-----|----------------|-----------------------------|--------------------------------|-----------------------------|----------------|----------------|----------------|----------------------------------------------|----------------------------------------------------------------|
| d                     | D   | C   | B   | 最小<br>min<br>r | 动态<br>dynamic<br>C          | 静态<br>static<br>C <sub>0</sub> | e                           | Y <sub>1</sub> | Y <sub>2</sub> | Y <sub>0</sub> | C <sub>ur</sub>                              | -                                                              |
| mm                    |     |     |     |                | kN                          |                                | -                           |                |                |                |                                              | -                                                              |
| <b>200</b><br>(cont.) | 370 | 120 | 175 | 4              | 1320                        | 2040                           | 0.31                        | 2.21           | 3.29           | 2.16           | 151                                          | <b>231SM200-MA</b><br><b>222SM200-MA</b>                       |
|                       | 400 | 108 | 162 | 4              | 1340                        | 1900                           | 0.25                        | 2.69           | 4              | 2.63           | 121                                          |                                                                |
| <b>220</b>            | 360 | 92  | 156 | 3              | 1100                        | 1830                           | 0.23                        | 2.9            | 4.31           | 2.83           | 152                                          | <b>230SM220-MA</b><br><b>231SM220-MA</b><br><b>222SM220-MA</b> |
|                       | 400 | 128 | 190 | 4              | 1630                        | 2600                           | 0.3                         | 2.25           | 3.34           | 2.2            | 191                                          |                                                                |
|                       | 440 | 120 | 170 | 4              | 1460                        | 2080                           | 0.25                        | 2.71           | 4.04           | 2.65           | 126                                          |                                                                |
| <b>240</b>            | 400 | 104 | 160 | 4              | 1220                        | 2120                           | 0.22                        | 3.04           | 4.53           | 2.97           | 177                                          | <b>230SM240-MA</b><br><b>231SM240-MA</b><br><b>222SM240-MA</b> |
|                       | 440 | 144 | 210 | 4              | 1860                        | 3050                           | 0.3                         | 2.28           | 3.39           | 2.23           | 218                                          |                                                                |
|                       | 480 | 130 | 200 | 5              | 1860                        | 2600                           | 0.26                        | 2.64           | 3.93           | 2.58           | 157                                          |                                                                |
| <b>260</b>            | 420 | 106 | 170 | 4              | 1460                        | 2450                           | 0.23                        | 2.95           | 4.4            | 2.89           | 200                                          | <b>230SM260-MA</b><br><b>231SM260-MA</b><br><b>222SM260-MA</b> |
|                       | 460 | 146 | 190 | 5              | 2280                        | 3800                           | 0.3                         | 2.23           | 3.32           | 2.18           | 255                                          |                                                                |
|                       | 500 | 130 | 200 | 5              | 2200                        | 3100                           | 0.25                        | 2.67           | 3.97           | 2.61           | 182                                          |                                                                |
| <b>280</b>            | 460 | 118 | 176 | 4              | 1600                        | 2800                           | 0.22                        | 3.04           | 4.53           | 2.97           | 228                                          | <b>230SM280-MA</b><br><b>231SM280-MA</b><br><b>222SM280-MA</b> |
|                       | 500 | 160 | 218 | 5              | 2320                        | 3900                           | 0.29                        | 2.32           | 3.45           | 2.26           | 265                                          |                                                                |
|                       | 540 | 140 | 200 | 5              | 2400                        | 3550                           | 0.24                        | 2.79           | 4.15           | 2.73           | 212                                          |                                                                |
| <b>300</b>            | 480 | 121 | 186 | 4              | 1860                        | 3200                           | 0.23                        | 2.9            | 4.31           | 2.83           | 255                                          | <b>230SM300-MA</b><br><b>231SM300-MA</b><br><b>222SM300-MA</b> |
|                       | 540 | 176 | 225 | 5              | 2750                        | 4750                           | 0.29                        | 2.3            | 3.42           | 2.25           | 305                                          |                                                                |
|                       | 580 | 150 | 212 | 5              | 2650                        | 4050                           | 0.24                        | 2.84           | 4.23           | 2.78           | 228                                          |                                                                |



| 尺寸<br>Dimensions      | 允许的轴向载荷 <sup>1)</sup><br>ermitted axial load <sup>1)</sup><br>最大max<br>F <sub>a</sub><br>kN | 根限转速<br>Limit Speed<br>min <sup>-1</sup> | 螺钉锁紧扭矩<br>Screw tightening<br>torque<br>M <sub>i</sub> M <sub>s</sub><br>Nm Nm |          | 更换带配套的非剖分调心滚子轴承<br>Replace non-split spherical roller bearing<br>with withdrawal sleeves<br>轴承 适配套<br>Bearing withdrawal sleeves |                  | 适宜的轴承座 <sup>2)</sup><br>Suitable bearing<br>housing <sup>2)</sup> | 质量<br>Mass<br>kg |
|-----------------------|---------------------------------------------------------------------------------------------|------------------------------------------|--------------------------------------------------------------------------------|----------|----------------------------------------------------------------------------------------------------------------------------------|------------------|-------------------------------------------------------------------|------------------|
| <b>200</b><br>(cont.) | 32<br>32                                                                                    | 530<br>560                               | 120<br>120                                                                     | 69<br>69 | 23144K<br>22244K                                                                                                                 | H3144X<br>H3144X | SD3144-H-TS<br>SD544-N-FZ                                         | 61.8<br>69.6     |
| <b>220</b>            | 32                                                                                          | 560                                      | 120                                                                            | 35       | 23048K                                                                                                                           | H3048            | S3048-H-N-FZ                                                      | 42.6             |
|                       | 32                                                                                          | 480                                      | 120                                                                            | 69       | 23148K                                                                                                                           | H3148X           | SD3148-H-TS                                                       | 86               |
|                       | 32                                                                                          | 500                                      | 120                                                                            | 69       | 22248K                                                                                                                           | H3148X           | SD548-N-FZ                                                        | 90.9             |
| <b>240</b>            | 32                                                                                          | 560                                      | 120                                                                            | 69       | 23052K                                                                                                                           | H3052            | S3052-H-N-FZ                                                      | 57.4             |
|                       | 32                                                                                          | 450                                      | 120                                                                            | 69       | 23152K                                                                                                                           | H3152X           | SD3152-H-TS                                                       | 118              |
|                       | 60                                                                                          | 450                                      | 295                                                                            | 120      | 22252K                                                                                                                           | H3152X           | SD552-N-FZ                                                        | 136              |
| <b>260</b>            | 32                                                                                          | 500                                      | 120                                                                            | 35       | 23056K                                                                                                                           | H3056            | S3056-H-N-FZ                                                      | 63.6             |
|                       | 32                                                                                          | 400                                      | 120                                                                            | 35       | 23156K                                                                                                                           | H3156X           | SD3156-H-TS                                                       | 109              |
|                       | 60                                                                                          | 430                                      | 295                                                                            | 69       | 22256K                                                                                                                           | H3156X           | SD556-N-FZ                                                        | 147              |
| <b>280</b>            | 32                                                                                          | 480                                      | 120                                                                            | 69       | 23060K                                                                                                                           | H3060            | S3060-H-N-FZ                                                      | 96               |
|                       | 44                                                                                          | 400                                      | 190                                                                            | 120      | 23160K                                                                                                                           | H3160HG          | SD3160-H-TS                                                       | 160              |
|                       | 60                                                                                          | 430                                      | 295                                                                            | 120      | 22260K                                                                                                                           | H3160HG          | SD560-N-FZ                                                        | 157              |
| <b>300</b>            | 32                                                                                          | 430                                      | 120                                                                            | 69       | 23064K                                                                                                                           | H3064HG          | S3064-H-N-FZ                                                      | 108              |
|                       | 60                                                                                          | 360                                      | 295                                                                            | 120      | 23164K                                                                                                                           | H3164HG          | SD3164-H-TS                                                       | 184              |
|                       | 60                                                                                          | 380                                      | 295                                                                            | 120      | 22264K                                                                                                                           | H3164HG          | SD564-N-FZ                                                        | 214              |

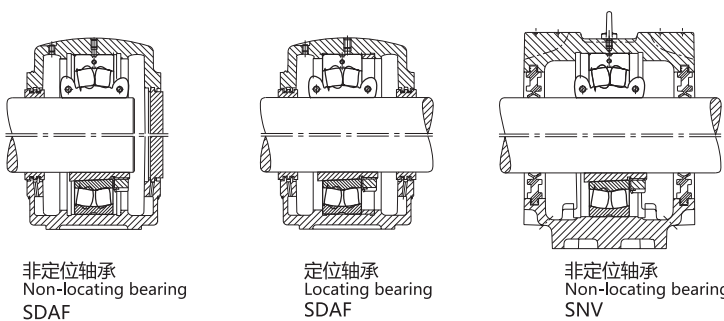
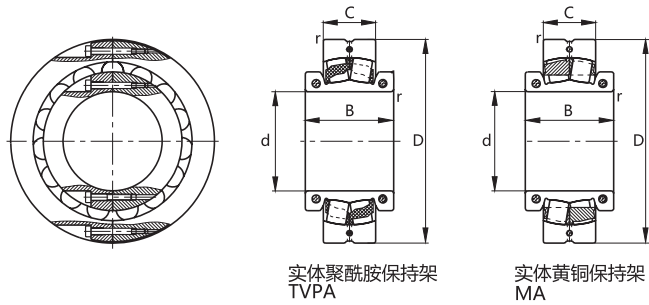


| 基本尺寸<br>Basic Size |     |     |     |                | 基本额定负荷<br>Basic load rating |                                | 计算系数<br>Calculation factors |                |                |                | 疲劳载荷<br>极限值<br>Fatigue load<br>limited value | 型号Designation |
|--------------------|-----|-----|-----|----------------|-----------------------------|--------------------------------|-----------------------------|----------------|----------------|----------------|----------------------------------------------|---------------|
| d                  | D   | C   | B   | 最小<br>min<br>r | 动态<br>dynamic<br>C          | 静态<br>static<br>C <sub>0</sub> | e                           | Y <sub>1</sub> | Y <sub>2</sub> | Y <sub>0</sub> | C <sub>ur</sub>                              | -             |
| mm                 |     |     |     |                | kN                          |                                | -                           |                |                |                |                                              | -             |
| 320                | 520 | 133 | 200 | 5              | 2040                        | 3650                           | 0.22                        | 3.04           | 4.53           | 2.97           | 285                                          | 230SM320-MA   |
|                    | 580 | 190 | 258 | 5              | 3100                        | 5200                           | 0.3                         | 2.26           | 3.37           | 2.21           | 325                                          | 231SM320-MA   |
|                    | 620 | 165 | 230 | 6              | 3100                        | 4750                           | 0.24                        | 2.76           | 4.11           | 2.7            | 270                                          | 222SM320-MA   |
| 340                | 540 | 134 | 205 | 5              | 2360                        | 4150                           | 0.22                        | 3.01           | 4.48           | 2.94           | 315                                          | 230SM340-MA   |
|                    | 600 | 192 | 270 | 5              | 3900                        | 6800                           | 0.3                         | 2.25           | 3.34           | 2.2            | 410                                          | 231SM340-MA   |
|                    | 650 | 170 | 240 | 6              | 3450                        | 5100                           | 0.25                        | 2.69           | 4              | 2.63           | 280                                          | 222SM340-MA   |
| 360                | 560 | 135 | 218 | 5              | 2550                        | 4650                           | 0.22                        | 3.1            | 4.62           | 3.03           | 350                                          | 230SM360-MA   |
|                    | 620 | 194 | 270 | 5              | 3900                        | 6950                           | 0.3                         | 2.28           | 3.39           | 2.23           | 420                                          | 231SM360-MA   |
| 380                | 600 | 148 | 225 | 5              | 2700                        | 5100                           | 0.21                        | 3.2            | 4.77           | 3.13           | 390                                          | 230SM380-MA   |
|                    | 650 | 200 | 270 | 6              | 4050                        | 7200                           | 0.28                        | 2.39           | 3.56           | 2.34           | 440                                          | 231SM380-MA   |
| 400                | 620 | 150 | 225 | 5              | 3100                        | 5700                           | 0.22                        | 3.1            | 4.62           | 3.03           | 420                                          | 230SM400-MA   |
|                    | 700 | 224 | 285 | 6              | 4400                        | 7650                           | 0.28                        | 2.39           | 3.56           | 2.34           | 480                                          | 231SM400-MA   |
| 410                | 650 | 157 | 225 | 5              | 3100                        | 5850                           | 0.21                        | 3.2            | 4.77           | 3.13           | 425                                          | 230SM410-MA   |
| 420                | 650 | 157 | 235 | 5              | 3100                        | 5850                           | 0.21                        | 3.2            | 4.77           | 3.13           | 425                                          | 230SM420-MA   |



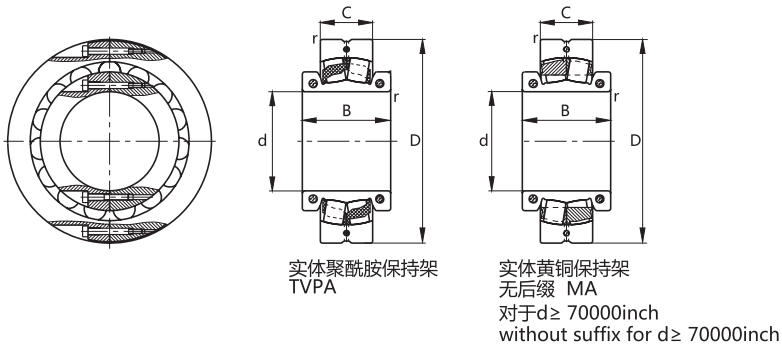
| 尺寸<br>Dimensions | 允许的轴向载荷 <sup>1)</sup><br>ermitted axial load <sup>1)</sup><br>最大max<br>F <sub>a</sub><br>kN | 根限转速<br>Limit Speed<br>min <sup>-1</sup> | 螺钉锁紧扭矩<br>Screw tightening<br>torque<br>M <sub>i</sub> M <sub>s</sub><br>Nm Nm |     | 更换带配套的非剖分调心滚子轴承<br>Replace non-split spherical roller bearing<br>with withdrawal sleeves<br>轴承 适配套<br>Bearing Withdrawal sleeves |              | 适宜的轴承座 <sup>2)</sup><br>Suitable bearing<br>housing <sup>2)</sup> | 质量<br>Mass<br>kg |
|------------------|---------------------------------------------------------------------------------------------|------------------------------------------|--------------------------------------------------------------------------------|-----|----------------------------------------------------------------------------------------------------------------------------------|--------------|-------------------------------------------------------------------|------------------|
| 320              | 60                                                                                          | 430                                      | 295                                                                            | 69  | 23068K                                                                                                                           | H3068HG      | S3068-H-N-FZ                                                      | 122              |
|                  | 60                                                                                          | 340                                      | 295                                                                            | 190 | 23168K                                                                                                                           | H3168HG      | SD3168-H-TSTS                                                     | 226              |
|                  | 60                                                                                          | 360                                      | 295                                                                            | 120 | 22268K                                                                                                                           | H3168HG      |                                                                   | 245              |
| 340              | 60                                                                                          | 380                                      | 295                                                                            | 69  | 23072K                                                                                                                           | H3072HG      | S3072-H-N-FZ                                                      | 150              |
|                  | 60                                                                                          | 300                                      | 295                                                                            | 70  | 23172K                                                                                                                           | H3172HG      | SD3172-H-TS                                                       | 314              |
|                  | 60                                                                                          | 340                                      | 295                                                                            | 120 | 22272K                                                                                                                           | H3172HG      |                                                                   | 267              |
| 360              | 60                                                                                          | 380                                      | 295                                                                            | 69  | 23076K                                                                                                                           | H3076HG      | S3076-H-N-FZ                                                      | 165              |
|                  | 60                                                                                          | 300                                      | 295                                                                            | 69  | 23176K                                                                                                                           | H3176HG      | SD3176-H-TS                                                       | 292              |
| 380              | 60                                                                                          | 380                                      | 295                                                                            | 120 | 23080K                                                                                                                           | H3080HG      | S3080-H-N-FZ                                                      | 187              |
|                  | 60                                                                                          | 300                                      | 295                                                                            | 120 | 23180K                                                                                                                           | H3180HG      | SD3180-H-TS                                                       | 326              |
| 400              | 60                                                                                          | 340                                      | 295                                                                            | 69  | 23084K                                                                                                                           | H3084XHG     | S3084-H-N-FZ                                                      | 214              |
|                  | 60                                                                                          | 280                                      | 295                                                                            | 190 | 23184K                                                                                                                           | H3184HG      | SD3184-H-TS                                                       | 371              |
| 410              | 60                                                                                          | 340                                      | 295                                                                            | 120 | 23088K                                                                                                                           | H3088HG      | S3088-H-N-FZ                                                      | 246              |
| 420              | 60.5                                                                                        | 340                                      | 295                                                                            | 120 | 23088K                                                                                                                           | AHX3088GH 1) |                                                                   | 246              |



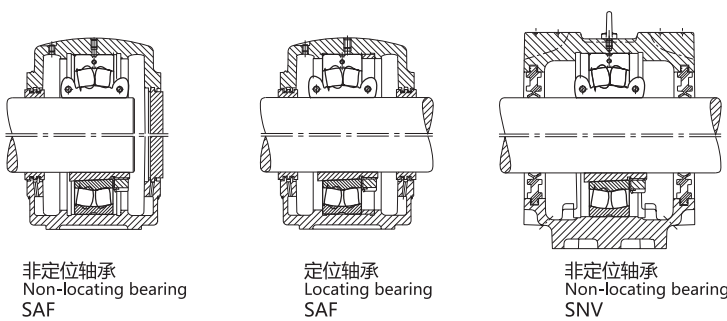


| 基本尺寸<br>Basic Size |        |     |    |     |                | 基本额定负荷<br>Basic load rating |                                | 计算系数<br>Calculation factors |                |                |                | 疲劳载荷<br>极限值<br>Fatigue load<br>limited value | 型号Designation |
|--------------------|--------|-----|----|-----|----------------|-----------------------------|--------------------------------|-----------------------------|----------------|----------------|----------------|----------------------------------------------|---------------|
| d                  | d      | D   | C  | B   | 最小<br>min<br>r | 动态<br>dynamic<br>C          | 静态<br>static<br>C <sub>0</sub> | e                           | Y <sub>1</sub> | Y <sub>2</sub> | Y <sub>0</sub> | C <sub>ur</sub>                              | -             |
| mm                 | inch   |     |    |     |                | kN                          |                                | -                           |                |                |                |                                              | -             |
| 100.013            | 3.9375 | 200 | 53 | 92  | 2.1            | 360                         | 465                            | 0.24                        | 2.84           | 4.23           | 2.78           | 39.5                                         | 222S.315      |
| 101.6              | 4.0000 | 200 | 53 | 92  | 2.1            | 360                         | 465                            | 0.24                        | 2.84           | 4.23           | 2.78           | 39.5                                         | 222S.400      |
| 106.363            | 4.1875 | 215 | 58 | 98  | 2.1            | 455                         | 585                            | 0.25                        | 2.71           | 4.04           | 2.65           | 47                                           | 222S.403      |
| 112.713            | 4.4375 | 230 | 64 | 104 | 3              | 540                         | 720                            | 0.25                        | 2.71           | 4.04           | 2.65           | 53                                           | 222S.407      |
| 114.3              | 4.5000 | 230 | 64 | 104 | 3              | 540                         | 720                            | 0.25                        | 2.71           | 4.04           | 2.65           | 53                                           | 222S.408      |
| 125.413            | 4.9375 | 250 | 68 | 110 | 3              | 630                         | 880                            | 0.26                        | 2.62           | 3.9            | 2.56           | 60                                           | 222S.415      |
| 125.413            | 4.9375 | 250 | 68 | 110 | 3              | 585                         | 780                            | 0.26                        | 2.62           | 3.9            | 2.56           | 53                                           | 222S.415-MA   |
| 127                | 5.0000 | 250 | 68 | 110 | 3              | 630                         | 880                            | 0.26                        | 2.62           | 3.9            | 2.56           | 60                                           | 222S.500      |
| 131.763            | 5.1875 | 270 | 73 | 122 | 3              | 735                         | 1020                           | 0.25                        | 2.67           | 3.97           | 2.61           | 73                                           | 222S.503      |
| 138.113            | 5.4375 | 290 | 80 | 124 | 3              | 850                         | 1200                           | 0.25                        | 2.69           | 4              | 2.63           | 83                                           | 222S.507      |
| 138.113            | 5.4375 | 290 | 80 | 124 | 3              | 780                         | 1060                           | 0.25                        | 2.69           | 4              | 2.63           | 74                                           | 222S.507-MA   |

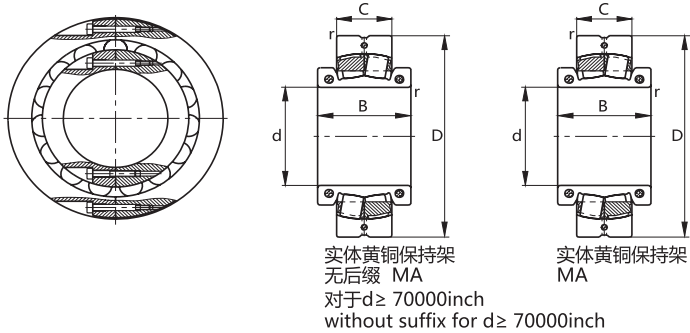
| 允许的轴向载荷 <sup>1)</sup><br>ermitted axial load <sup>1)</sup><br>最大max<br>F <sub>a</sub><br>kN | 根限<br>转速<br>Limit<br>peed<br>min <sup>-1</sup> | 螺钉锁紧扭矩<br>Screw tightening<br>torque<br>M <sub>i</sub> M <sub>s</sub><br>Nm Nm |    | 更换带适配套的非剖分调心滚子轴承<br>Replace non-split spherical roller bearing<br>with withdrawal sleeves<br>轴承 适配套 适配套<br>Bearing Withdrawal sleeves Withdrawal sleeves |           |           | 适宜的轴承座 <sup>2)</sup><br>Suitable bearing<br>housing <sup>2)</sup> |        | 质量<br>Mass<br>kg |
|---------------------------------------------------------------------------------------------|------------------------------------------------|--------------------------------------------------------------------------------|----|----------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-----------|-------------------------------------------------------------------|--------|------------------|
|                                                                                             |                                                |                                                                                |    |                                                                                                                                                          |           |           |                                                                   |        |                  |
| 13.8                                                                                        | 1500                                           | 35                                                                             | 14 | 22222K                                                                                                                                                   | SNW22.315 | H322.315  | SAF522                                                            | SNV200 | 8.88             |
| 13.8                                                                                        | 1500                                           | 35                                                                             | 14 | 22222K                                                                                                                                                   | SNW22.400 | H322.400  | SAF522/4                                                          | SNV200 | 8.83             |
| 13.8                                                                                        | 1300                                           | 35                                                                             | 14 | 22224K                                                                                                                                                   | SNW24.403 | H3124.403 | SAF524                                                            | SNV215 | 11               |
| 13.8                                                                                        | 1200                                           | 35                                                                             | 14 | 22226K                                                                                                                                                   | SNW26.407 | H3126.407 | SAF526                                                            | SNV230 | 14.7             |
| 13.8                                                                                        | 1200                                           | 35                                                                             | 14 | 22226K                                                                                                                                                   | SNW26.408 | H3126.408 | SAF526/4.1/2                                                      | SNV230 | 14.4             |
| 13.8                                                                                        | 1100                                           | 35                                                                             | 14 | 22228K                                                                                                                                                   | SNW28.415 | H3128.415 | SAF528                                                            | SNV250 | 17.8             |
| 13.8                                                                                        | 850                                            | 35                                                                             | 14 | 22228K                                                                                                                                                   | SNW28.415 | H3128.415 | SAF528                                                            | SNV250 | 17.9             |
| 13.8                                                                                        | 1100                                           | 35                                                                             | 14 | 22228K                                                                                                                                                   | SNW28.500 | H3128.500 | SAF528/5                                                          | SNV250 | 17.5             |
| 22.2                                                                                        | 1000                                           | 69                                                                             | 35 | 22230K                                                                                                                                                   | SNW30.503 | H3130.503 | SAF530                                                            | SNV270 | 25.2             |
| 22.2                                                                                        | 950                                            | 69                                                                             | 35 | 22232K                                                                                                                                                   | SNW32.507 | H3132.507 | SAF532                                                            | SNV290 | 28.9             |
| 22.2                                                                                        | 750                                            | 69                                                                             | 35 | 22232K                                                                                                                                                   | SNW32.507 | H3132.507 | SAF532                                                            | SNV290 | 31.3             |



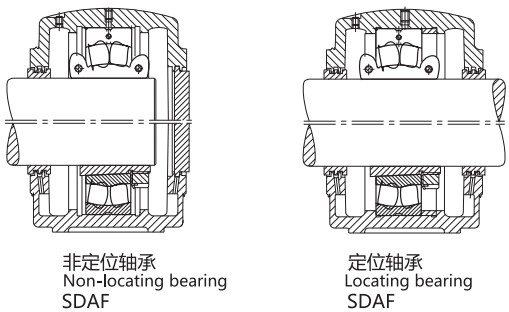
| 基本尺寸<br>Basic Size |        |     |     |     |                | 基本额定负荷<br>Basic load rating |                                | 计算系数<br>Calculation factors |                |                |                | 疲劳载荷<br>极限值<br>Fatigue load<br>limited value | 型号Designation |
|--------------------|--------|-----|-----|-----|----------------|-----------------------------|--------------------------------|-----------------------------|----------------|----------------|----------------|----------------------------------------------|---------------|
| d                  | d      | D   | C   | B   | 最小<br>min<br>r | 动态<br>dynamic<br>C          | 静态<br>static<br>C <sub>0</sub> | e                           | Y <sub>1</sub> | Y <sub>2</sub> | Y <sub>0</sub> | C <sub>ur</sub>                              | -             |
| mm                 | inch   |     |     |     |                | kN                          |                                | -                           |                |                |                |                                              | -             |
| 139.7              | 5.5000 | 240 | 60  | 106 | 2.1            | 450                         | 680                            | 0.22                        | 3.1            | 4.62           | 3.03           | 51                                           | 230S.508-MA   |
| 139.7              | 5.5000 | 290 | 80  | 124 | 3              | 850                         | 1200                           | 0.25                        | 2.69           | 4              | 2.63           | 83                                           | 222S.508      |
| 150.813            | 5.9375 | 310 | 86  | 128 | 4              | 965                         | 1370                           | 0.26                        | 2.64           | 3.93           | 2.58           | 94                                           | 222S.515      |
| 152.4              | 6.0000 | 310 | 86  | 128 | 4              | 965                         | 1370                           | 0.26                        | 2.64           | 3.93           | 2.58           | 94                                           | 222S.600      |
| 163.513            | 6.4375 | 280 | 74  | 123 | 2.1            | 640                         | 1000                           | 0.23                        | 2.98           | 4.44           | 2.92           | 96                                           | 230S.607-MA   |
|                    | 6.4375 | 300 | 96  | 140 | 2.1            | 830                         | 1220                           | 0.29                        | 2.32           | 3.45           | 2.26           | 100                                          | 231S.607-MA   |
|                    | 6.4375 | 320 | 86  | 131 | 4              | 965                         | 1370                           | 0.26                        | 2.64           | 3.93           | 2.58           | 94                                           | 222S.607      |
| 165.1              | 6.5000 | 320 | 86  | 131 | 4              | 965                         | 1370                           | 0.26                        | 2.64           | 3.93           | 2.58           | 94                                           | 222S.608      |
| 176.213            | 6.9375 | 340 | 92  | 142 | 4              | 1140                        | 1630                           | 0.25                        | 2.71           | 4.04           | 2.65           | 111                                          | 222S.615      |
| 177.8              | 7.0000 | 290 | 75  | 120 | 2.1            | 780                         | 1250                           | 0.23                        | 2.9            | 4.31           | 2.83           | 113                                          | 230S.700      |
| 182.563            | 7.1875 | 360 | 98  | 154 | 4              | 1140                        | 1630                           | 0.25                        | 2.71           | 4.04           | 2.65           | 104                                          | 222S.703      |
| 190.5              | 7.5000 | 400 | 108 | 162 | 4              | 1340                        | 1900                           | 0.25                        | 2.69           | 4              | 2.63           | 121                                          | 222S.708      |
| 201.613            | 7.9375 | 400 | 108 | 162 | 4              | 1340                        | 1900                           | 0.25                        | 2.69           | 4              | 2.63           | 121                                          | 222S.715      |
| 203.2              | 8.0000 | 400 | 108 | 162 | 4              | 1340                        | 1900                           | 0.25                        | 2.69           | 4              | 2.63           | 121                                          | 222S.800      |
| 214.313            | 8.4375 | 360 | 92  | 156 | 3              | 1100                        | 1830                           | 0.23                        | 2.9            | 4.31           | 2.83           | 152                                          | 230S.807      |
| 215.9              | 8.5000 | 360 | 92  | 156 | 3              | 1100                        | 1830                           | 0.23                        | 2.9            | 4.31           | 2.83           | 152                                          | 230S.808      |
| 228.6              | 9.0000 | 360 | 92  | 156 | 3              | 1100                        | 1830                           | 0.23                        | 2.9            | 4.31           | 2.83           | 152                                          | 230S.900      |
| 239.713            | 9.4375 | 440 | 144 | 210 | 4              | 1860                        | 3050                           | 0.3                         | 2.28           | 3.39           | 2.23           | 218                                          | 231S.907      |
| 241.3              | 9.5000 | 400 | 104 | 160 | 4              | 1220                        | 2120                           | 0.22                        | 3.04           | 4.53           | 2.97           | 177                                          | 230S.908      |
| 260                | 9.9375 | 460 | 146 | 190 | 5              | 2280                        | 3800                           | 0.3                         | 2.23           | 3.32           | 2.18           | 255                                          | 231S.915      |



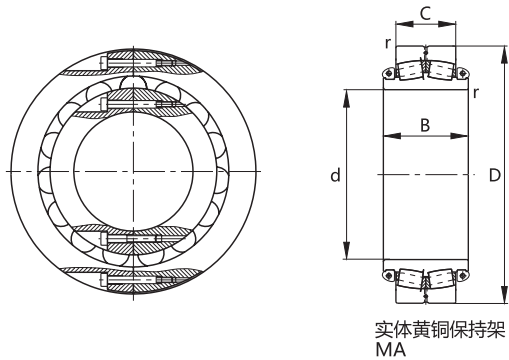
| 允许的轴向载荷 <sup>1)</sup><br>ermitted axial load <sup>1)</sup><br>最大max<br>F <sub>a</sub><br>kN | 根限<br>转速<br>Limit<br>peed<br>min <sup>-1</sup> | 螺钉锁紧扭矩<br>Screw tightening<br>torque<br>M <sub>i</sub> M <sub>s</sub><br>Nm      Nm |                      | 更换带适配套的非剖分调心滚子轴承<br>Replace non-split spherical roller bearing<br>with withdrawal sleeves<br>轴承      适配套      适配套<br>Bearing      Withdrawal      Withdrawal<br>sleeves      sleeves |                                                      |                                                  | 适宜的轴承座 <sup>2)</sup><br>Suitable bearing<br>housing <sup>2)</sup> | 质量<br>Mass<br><br>kg         |
|---------------------------------------------------------------------------------------------|------------------------------------------------|-------------------------------------------------------------------------------------|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|--------------------------------------------------|-------------------------------------------------------------------|------------------------------|
| 13.8<br>22.2                                                                                | 900<br>950                                     | 35<br>69                                                                            | 8.5<br>35            | 23032K<br>22232K                                                                                                                                                                     | SNP3032.508<br>SNW32.508                             | H3032.508<br>H3132.508                           | SAF032K/5.1/2<br>SAF532/5.1/2      SNV290                         | 13.7<br>28.6                 |
| 22.2<br>22.2                                                                                | 900<br>900                                     | 69<br>69                                                                            | 35<br>35             | 22234K<br>22234K                                                                                                                                                                     | SNW34.515<br>SNW34.600                               | H3134.515<br>H3134.600                           | SAF534<br>SAF534/6                                                | 35.5<br>36.5                 |
| 22.2<br>22.2<br>22.2<br>22.2                                                                | 750<br>670<br>900<br>900                       | 69<br>69<br>69<br>69                                                                | 14<br>35<br>35<br>35 | 23038K<br>23136K<br>22236K<br>22236K                                                                                                                                                 | SNP3036.607<br>SNP3136.607<br>SNW36.607<br>SNW36.608 | H3038.607<br>H3136.607<br>H3136.607<br>H3136.608 | SAF038K/6.7/16<br>SDAF3136K/6.7/16<br>SAF536<br>SAF536/6.1/2      | 24.4<br>34.4<br>37.5<br>37.8 |
| 22.2<br>22.2                                                                                | 800<br>700                                     | 69<br>69                                                                            | 35<br>14             | 22238K<br>23038K                                                                                                                                                                     | SNW38.615<br>SNP3038.700                             | H3138.615<br>H3038.700                           | SAF538<br>SAF038K/7                                               | 44.2<br>21.1                 |
| 22.2                                                                                        | 600                                            | 69                                                                                  | 35                   | 22240K                                                                                                                                                                               | SNW40.703                                            | H3140.703                                        | SAF540                                                            | 59                           |
| 32                                                                                          | 560                                            | 120                                                                                 | 69                   | 22244K                                                                                                                                                                               | SNW44.708                                            | H3144X.708                                       | SAF544/7.1/2                                                      | 73.3                         |
| 32<br>32                                                                                    | 560<br>560                                     | 120<br>120                                                                          | 69<br>69             | 22244K<br>22244K                                                                                                                                                                     | SNW44.715<br>SNW44.800                               | H3144X.715<br>H3144X.800                         | SAF544<br>SAF544/8                                                | 75.4<br>74.7                 |
| 32<br>32                                                                                    | 560<br>560                                     | 120<br>120                                                                          | 35<br>35             | 23048K<br>23048K                                                                                                                                                                     | SNP3048.807<br>SNP3048.808                           | H3048.807<br>H3048.808                           | SAF048K/8.7/16<br>SAF048K/8.1/2                                   | 54.7<br>58.9                 |
| 32                                                                                          | 560                                            | 120                                                                                 | 35                   | 23048K                                                                                                                                                                               | SNP3048.900                                          | H3048.900                                        | SAF048K/9                                                         | 52.8                         |
| 32                                                                                          | 450                                            | 120                                                                                 | 69                   | 23152K                                                                                                                                                                               | SNP3152.907                                          | H3152X.907                                       | SDAF3152K/9.7/16                                                  | 113                          |
| 32                                                                                          | 560                                            | 120                                                                                 | 69                   | 23052K                                                                                                                                                                               | SNP3052.908                                          | H3052X.908                                       | SAF052K/9.1/2                                                     | 56.8                         |
| 32                                                                                          | 400                                            | 120                                                                                 | 35                   | 23156K                                                                                                                                                                               | SNP3156.915                                          | H3156X.915                                       | SDAF3156K/9.15/16                                                 | 116                          |



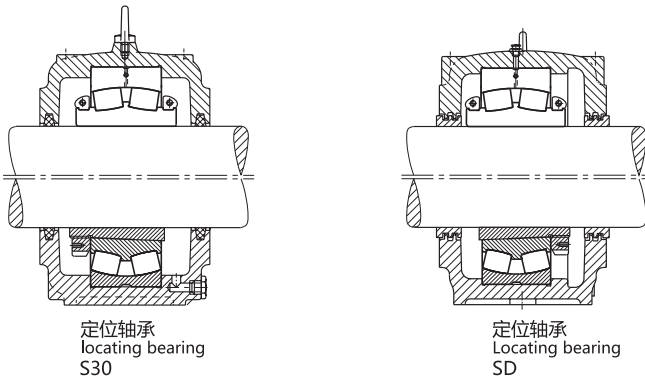
| 基本尺寸<br>Basic Size |      |     |     |     |                | 基本额定负荷<br>Basic load rating |                                | 计算系数<br>Calculation factors |                |                |                | 疲劳载荷<br>极限值<br>Fatigue load<br>limited value | 型号Designation                  |
|--------------------|------|-----|-----|-----|----------------|-----------------------------|--------------------------------|-----------------------------|----------------|----------------|----------------|----------------------------------------------|--------------------------------|
| d                  | d    | D   | C   | B   | 最小<br>min<br>r | 动态<br>dynamic<br>C          | 静态<br>static<br>C <sub>0</sub> | e                           | Y <sub>1</sub> | Y <sub>2</sub> | Y <sub>0</sub> | C <sub>ur</sub>                              | -                              |
| mm                 | inch |     |     |     |                | kN                          |                                | -                           |                |                |                |                                              | -                              |
| 254                | 10   | 420 | 106 | 170 | 4              | 1460                        | 2450                           | 0.23                        | 2.95           | 4.4            | 2.89           | 200                                          | <b>230S.1000</b>               |
| 266.7              | 10.5 | 420 | 106 | 170 | 4              | 1460                        | 2450                           | 0.23                        | 2.95           | 4.4            | 2.89           | 200                                          | <b>230S.1008</b>               |
| 279.4              | 11   | 460 | 118 | 176 | 4              | 1600                        | 2800                           | 0.22                        | 3.04           | 4.53           | 2.97           | 228                                          | <b>230S.1100</b>               |
|                    | 11   | 500 | 160 | 218 | 5              | 2320                        | 3900                           | 0.29                        | 2.32           | 3.45           | 2.26           | 265                                          | <b>231S.1100</b>               |
| 304.8              | 12   | 480 | 121 | 186 | 4              | 1860                        | 3200                           | 0.23                        | 2.9            | 4.31           | 2.83           | 255                                          | <b>230S.1200</b>               |
|                    | 12   | 540 | 176 | 225 | 5              | 2750                        | 4750                           | 0.29                        | 2.3            | 3.42           | 2.25           | 305                                          | <b>231S.1200</b>               |
| 330.2              | 13   | 540 | 134 | 205 | 5              | 2360                        | 4150                           | 0.22                        | 3.01           | 4.48           | 2.94           | 315                                          | <b>230S.1300</b>               |
|                    | 13   | 600 | 192 | 270 | 5              | 3900                        | 6800                           | 0.3                         | 2.25           | 3.34           | 2.2            | 410                                          | <b>231S.1300</b>               |
| 355.6              | 14   | 560 | 135 | 218 | 5              | 2550                        | 4650                           | 0.22                        | 3.1            | 4.62           | 3.03           | 350                                          | <b>230S.1400</b>               |
|                    | 14   | 620 | 194 | 270 | 5              | 3900                        | 6950                           | 0.3                         | 2.28           | 3.39           | 2.23           | 420                                          | <b>231S.1400</b>               |
| 381                | 15   | 600 | 148 | 225 | 5              | 2700                        | 5100                           | 0.21                        | 3.2            | 4.77           | 3.13           | 390                                          | <b>230S.1500</b>               |
|                    | 15   | 650 | 200 | 270 | 6              | 4050                        | 7200                           | 0.28                        | 2.39           | 3.56           | 2.34           | 440                                          | <b>231S.1500</b>               |
| 406.4              | 16   | 650 | 157 | 225 | 5              | 3100                        | 5850                           | 0.21                        | 3.2            | 4.77           | 3.13           | 425                                          | <b>230S.1600</b>               |
|                    | 16   | 720 | 226 | 315 | 6              | 5400                        | 9650                           | 0.29                        | 2.3            | 3.42           | 2.25           | 570                                          | <b>231S.1600</b> <sup>1)</sup> |



| 允许的轴向载荷 <sup>1)</sup><br>ermitted axial load <sup>1)</sup><br>最大max<br>F <sub>a</sub><br>kN | 根限<br>转速<br>Limit<br>peed<br>min <sup>-1</sup> | 螺钉锁紧扭矩<br>Screw tightening<br>torque<br>M <sub>i</sub> M <sub>s</sub><br>Nm Nm |     | 更换带适配套的非剖分调心滚子轴承<br>Replace non-split spherical roller bearing<br>with withdrawal sleeves<br>轴承 适配套 适配套<br>Bearing Withdrawal sleeves Withdrawal sleeves | 适宜的轴承座 <sup>2)</sup><br>Suitable bearing<br>housing <sup>2)</sup> | 质量<br>Mass<br>kg |
|---------------------------------------------------------------------------------------------|------------------------------------------------|--------------------------------------------------------------------------------|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|------------------|
| 32                                                                                          | 500                                            | 120                                                                            | 35  | 23056K SNP3056.1000 H3056.1000                                                                                                                           | SAF056K/10                                                        | 71.2             |
| 32                                                                                          | 500                                            | 120                                                                            | 35  | 23056K SNP3056.1008 H3056.1008                                                                                                                           | SAF056K/10.1/2                                                    | 59.7             |
| 32                                                                                          | 480                                            | 120                                                                            | 69  | 23060K SNP3060.1100 H3060.1100                                                                                                                           | SDAF060K/11                                                       | 91.7             |
| 44                                                                                          | 400                                            | 190                                                                            | 120 | 23160K SNP3160.1100 H3160HG.1100                                                                                                                         | SDAF3160K/11                                                      | 160              |
| 32                                                                                          | 430                                            | 120                                                                            | 69  | 23064K SNP3064.1200 H3064HG.1200                                                                                                                         | SDAF064K/12                                                       | 96.5             |
| 60                                                                                          | 360                                            | 295                                                                            | 120 | 23164K SNP3164.1200 H3164HG.1200                                                                                                                         | SDAF3164K/12                                                      | 184              |
| 60                                                                                          | 380                                            | 295                                                                            | 69  | 23072K SNP3072.1300 H3072HG.1300                                                                                                                         | SDAF072K/13                                                       | 165              |
| 60                                                                                          | 300                                            | 295                                                                            | 35  | 23172K SNP3172.1300 H3172HG.1300                                                                                                                         | SDAF3172K/13                                                      | 288              |
| 60                                                                                          | 380                                            | 295                                                                            | 69  | 23076K SNP3076.1400 H3076HG.1400                                                                                                                         | SDAF076K/14                                                       | 158              |
| 60                                                                                          | 300                                            | 295                                                                            | 69  | 23176K SNP3176.1400 H3176HG.1400                                                                                                                         | SDAF3176K/14                                                      | 273              |
| 60                                                                                          | 380                                            | 295                                                                            | 120 | 23080K SNP3080.1500 H3080HG.1500                                                                                                                         | SDAF080K/15                                                       | 192              |
| 60                                                                                          | 300                                            | 295                                                                            | 120 | 23180K SNP3180.1500 H3180HG.1500                                                                                                                         | SDAF3180K/15                                                      | 296              |
| 60                                                                                          | 340                                            | 295                                                                            | 120 | 23088K SNP3088.1600 H3088HG.1600                                                                                                                         | SDAF088K/16                                                       | 225              |
| 96                                                                                          | 260                                            | 580                                                                            | 120 | 23188K SNP3188.1600 H3188HG.1600                                                                                                                         | SDAF3188K/16                                                      | 547              |



| 基本尺寸<br>Basic Size |     |     |     |                | 基本额定负荷<br>Basic load rating |                                | 计算系数<br>Calculation factors |                |                |                | 疲劳载荷<br>极限值<br>Fatigue load<br>limited value | 型号Designation |
|--------------------|-----|-----|-----|----------------|-----------------------------|--------------------------------|-----------------------------|----------------|----------------|----------------|----------------------------------------------|---------------|
| d                  | D   | C   | B   | 最小<br>min<br>r | 动态<br>dynamic<br>C          | 静态<br>static<br>C <sub>0</sub> | e                           | Y <sub>1</sub> | Y <sub>2</sub> | Y <sub>0</sub> | C <sub>ur</sub>                              | -             |
| mm                 |     |     |     |                | kN                          |                                | -                           |                |                |                |                                              | -             |
| 400                | 620 | 200 | 290 | 5              | 3750                        | 8000                           | 0.32                        | 2.13           | 3.17           | 2.08           | 630                                          | 240SM400-MA   |
| 410                | 720 | 226 | 315 | 6              | 5400                        | 9650                           | 0.29                        | 2.3            | 3.42           | 2.25           | 570                                          | 231SM410-MA   |
| 430                | 760 | 240 | 344 | 6              | 5500                        | 10400                          | 0.29                        | 2.33           | 3.47           | 2.28           | 600                                          | 231SM430-MA   |
| 450                | 700 | 165 | 245 | 6              | 3650                        | 6950                           | 0.21                        | 3.2            | 4.77           | 3.13           | 495                                          | 230SM450-MA   |
| 470                | 720 | 167 | 260 | 6              | 3600                        | 7500                           | 0.23                        | 2.9            | 4.31           | 2.83           | 425                                          | 230SM470-MA   |
|                    | 830 | 325 | 420 | 7.5            | 7800                        | 16000                          | 0.39                        | 1.75           | 2.61           | 1.71           | 1140                                         | 241SM470-MA   |
| 500                | 780 | 185 | 270 | 6              | 4150                        | 8500                           | 0.2                         | 3.34           | 4.98           | 3.27           | 590                                          | 230SM500-MA   |
|                    | 870 | 335 | 450 | 7.5            | 8500                        | 17600                          | 0.39                        | 1.73           | 2.58           | 1.69           | 1280                                         | 241SM500-MA   |
| 530                | 750 | 140 | 225 | 5              | 2750                        | 6550                           | 0.18                        | 3.85           | 5.73           | 3.76           | 365                                          | 239SM530-MA   |
|                    | 820 | 195 | 300 | 6              | 4650                        | 9650                           | 0.23                        | 2.95           | 4.4            | 2.89           | 700                                          | 230SM530-MA   |
|                    | 920 | 355 | 500 | 7.5            | 9150                        | 19300                          | 0.38                        | 1.77           | 2.64           | 1.73           | 1390                                         | 241SM530-MA   |
| 560                | 800 | 150 | 235 | 5              | 2900                        | 7100                           | 0.17                        | 3.95           | 5.88           | 3.86           | 530                                          | 239SM560-MA   |
| 600                | 850 | 165 | 250 | 5              | 3900                        | 8800                           | 0.18                        | 3.66           | 5.46           | 3.58           | 540                                          | 239SM600-MA   |
| 630                | 980 | 230 | 355 | 7.5            | 6400                        | 13700                          | 0.22                        | 3.01           | 4.48           | 2.94           | 950                                          | 230SM630-MA   |



| 基本尺寸<br>Basic Size | 允许的轴向载荷 <sup>1)</sup><br>ermitted axial load <sup>1)</sup><br>最大max | 根限<br>转速<br>Limit<br>peed | 螺钉锁紧扭矩<br>Screw tightening<br>torque |                      | 更换带适配套的非剖分调心滚子轴承<br>Replace non-split spherical roller bearing<br>with withdrawal sleeves |                              | 适宜的轴承座 <sup>2)</sup><br>Suitable bearing<br>housing <sup>2)</sup> | 质量<br>Mass |
|--------------------|---------------------------------------------------------------------|---------------------------|--------------------------------------|----------------------|-------------------------------------------------------------------------------------------|------------------------------|-------------------------------------------------------------------|------------|
| d<br>mm            | F <sub>a</sub><br>kN                                                | min <sup>-1</sup>         | M <sub>i</sub><br>Nm                 | M <sub>a</sub><br>Nm | 轴承<br>Bearing                                                                             | 适配套<br>Withdrawal<br>sleeves |                                                                   | kg         |
| 400                | 60                                                                  | 190                       | 295                                  | 69                   | 24084K30                                                                                  | H24084HG                     |                                                                   | 385        |
| 410                | 60                                                                  | 260                       | 295                                  | 120                  | 23188K                                                                                    | H3188HG                      | SD3188-H-TS                                                       | 566        |
| 430                | 94.2                                                                | 300                       | 580                                  | 295                  | 23192K                                                                                    | H3192HG                      |                                                                   | 624        |
| 450                | 60                                                                  | 300                       | 190                                  | 190                  | 23096K                                                                                    | H3096HG                      | S3096-H-N-FZ                                                      | 291        |
|                    | 60                                                                  | 190                       | 295                                  | 120                  | 230/500K                                                                                  | H30/500HG                    |                                                                   | 354        |
| 470                | 60                                                                  | 530                       | 1000                                 | 295                  | 241/500K30                                                                                | H240/500HG                   |                                                                   | 725        |
|                    | 60                                                                  | 300                       | 295                                  | 120                  | 230/530K                                                                                  | H30/530HG                    |                                                                   | 344        |
| 500                | 60                                                                  | 530                       | 1000                                 | 295                  | 241/530K30                                                                                | H240/530HG                   |                                                                   | 725        |
|                    | 60                                                                  | 170                       | 295                                  | 69                   | 239/560K                                                                                  | H39/560HG                    |                                                                   | 295        |
|                    | 94.2                                                                | 160                       | 580                                  | 120                  | 230/560K                                                                                  | H30/560HG                    |                                                                   | 556        |
| 530                | 135                                                                 | 500                       | 2000                                 | 295                  | 241/560K30                                                                                | H240/560HG                   |                                                                   | 1380       |
|                    | 60                                                                  | 170                       | 295                                  | 69                   | 239/600K                                                                                  | H39/600HG                    |                                                                   | 347        |
| 600                | 60                                                                  | 160                       | 295                                  | 69                   | 239/630K                                                                                  | H39/630HG                    |                                                                   | 411        |
| 630                | 94.2                                                                | 160                       | 1000                                 | 120                  | 230/670K                                                                                  | H30/670HG                    |                                                                   | 973        |