

Fig. 1

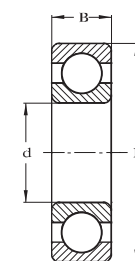


Fig. 2

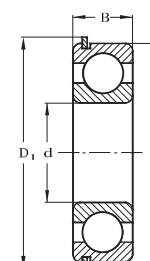


Fig. 3

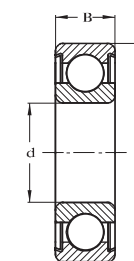


Fig. 4

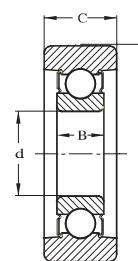


Fig. 5

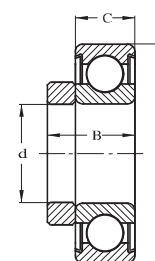


Fig. 6

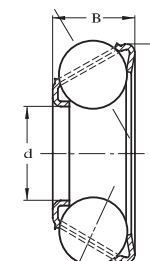


Fig. 7

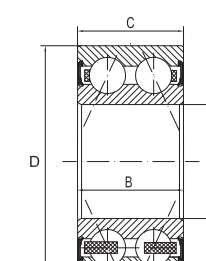
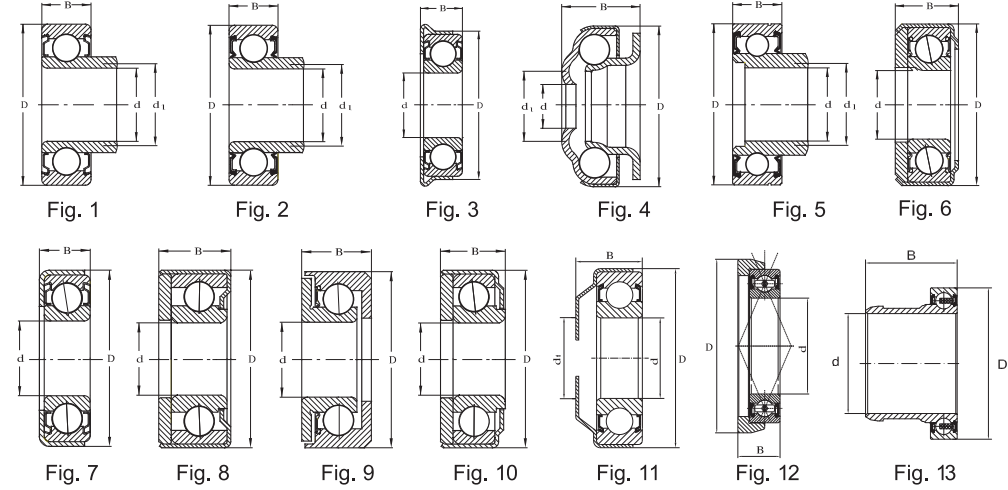
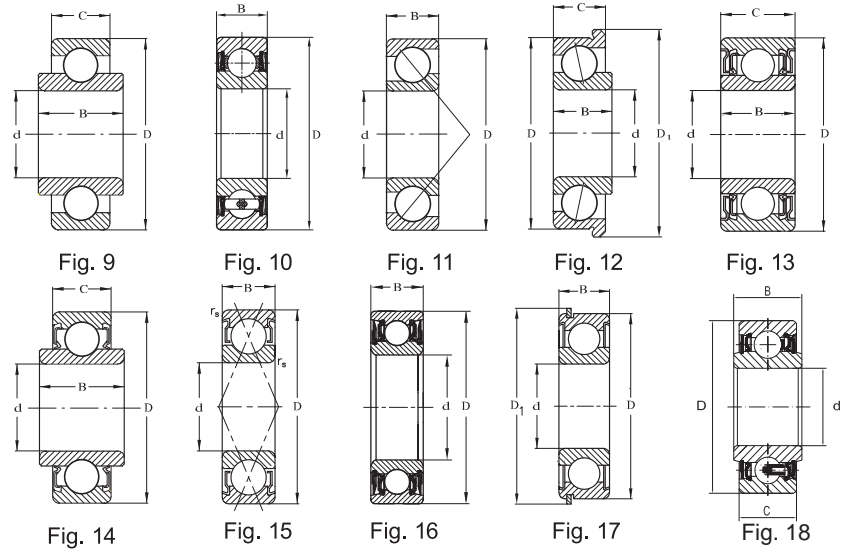


Fig. 8

| DIMENSIONS<br>WYMIARY GŁÓWNE |        |                |        |       | BASIC<br>LOAD RATING<br>NOŚNOŚĆ |                                       | BEARING<br>DESIGNATIONS<br>OZNACZENIE PODSTAWOWE | MASS<br>MASA | FIG No<br>NR RYS. |
|------------------------------|--------|----------------|--------|-------|---------------------------------|---------------------------------------|--|--------------|-------------------|
| d                            | D      | D <sub>1</sub> | B      | C     | dynamic<br>dynamiczna<br>C      | static<br>statyczna<br>C <sub>0</sub> | ~  |              |                   |
| mm                           |        |                |        |       | kN                              |                                       | kg   |              |                   |
| 25.000                       | 52     |                | 25     | 15    | 19.7                            | 13.1                                  | 113-1048   | 0.171        | 1                 |
|                              | 62     |                | 12     |       | 16.6                            | 9.6                                   | 68305  | 0.173        | 2                 |
|                              | 62     |                | 14     |       | 20.6                            | 11.2                                  | 68341  | 0.190        | 2                 |
| 28.000                       | 67     | 73.6           | 18     |       | 25.0                            | 13.8                                  | 114-618 NR                                       | 0.289        | 3                 |
|                              | 28.575 | 71.425         | 20.638 |       | 28.2                            | 15.8                                  | MS-11  | 0.330        | 2                 |
| 28.580                       | 71.425 | 20.638         |        |       | 29.7                            | 15.7                                  | CBK-296  | 0.306        | 2                 |
| 30.000                       | 42     |                | 7      | 6     | 4.1                             | 3.3                                   | 113-817  | 0.250        | 9                 |
|                              | 55     |                | 16     |       | 13.8                            | 8.3                                   | 113-945-2RS3-2BRS3                               | 0.150        | 16                |
|                              | 57     |                | 16     |       | 13.2                            | 8.3                                   | 113-867TNG 2RSRS6                                | 0.177        | 16                |
|                              | 62     |                | 16     |       | 22.5                            | 14.7                                  | 133-759  | 0.212        | 11                |
|                              | 62     |                | 16     |       | 16.0                            | 10.3                                  | 113-1065-2RS3-2BRS8                              | 0.250        | 16                |
|                              | 75     | 80.4           | 19     |       | 30.0                            | 16.1                                  | CBK-083-2RSP66                                   | 0.380        | 17                |
|                              | 65     |                | 21     |       | 25.0                            | 13.8                                  | CBK-086 B  | 0.300        | 4                 |
|                              | 84     |                | 19     | 27.3  | 28.2                            | 15.8                                  | CBK-468  | 0.623        | 5                 |
| 34.800                       | 72     |                | 31.5   | 21.5  | 25.7                            | 15.3                                  | 114-755-2RS                                      | 0.440        | 6                 |
| 35.000                       | 55     |                | 20     | 20    | 14.96                           | 12.82                                 | 133-01810  |              | 8                 |
|                              | 62     |                | 16     |       | 16.8                            | 10.3                                  | 113-818-2RS3                                     | 0.179        | 10                |
|                              | 72     |                | 25     | 25    | 25.7                            | 15.3                                  | 114-865-2RS3-2Z*                                 | 0.406        | 13                |
|                              | 85     | 91.6           | 23     |       | 33.5                            | 18.3                                  | 114-942-2RSNR                                    | 0.606        | 17                |
|                              | 93.5   |                | 21     | 37.25 | 25.8                            | 18.3                                  | 11/6307-2RSA R5-20*                              | 1.020        | 5                 |
|                              | 96.25  |                | 21     | 37.25 | 25.8                            | 18.3                                  | 12/6307-2RS R5-20*                               | 1.240        | 5                 |
|                              | 97     |                | 21     | 37.25 | 25.8                            | 18.3                                  | 12/6307-2RSA R5-20                               | 1.240        | 5                 |
| 37.000                       | 55     |                | 11.25  |       | 22.5                            | 14.8                                  | CBK-361  | 0.061        | 7                 |
| 38.892                       | 80     |                | 27.5   | 21    | 32.5                            | 19.0                                  | 114-743-2RSRC5                                   | 0.460        | 14                |
| 40.000                       | 80     |                | 27     | 21    | 29.1                            | 17.9                                  | 114-732-2RSR                                     | 0.425        | 14                |



| DIMENSIONS     |     |                |    |    | BASIC LOAD RATING |                | BEARING DESIGNATIONS             | MASS  | FIG No  | DIMENSIONS     |       |        | PRESSURE DIAMETER | BASIC LOAD RATING |                | BEARING DESIGNATIONS  | MASS  | FIG No  |
|----------------|-----|----------------|----|----|-------------------|----------------|----------------------------------|-------|---------|----------------|-------|--------|-------------------|-------------------|----------------|-----------------------|-------|---------|
| WYMIARY GŁÓWNE |     |                |    |    | NOŚNOŚĆ           |                | OZNACZENIE PODSTAWOWE            | MASA  | NR RYS. | WYMIARY GŁÓWNE |       |        | NOŚNOŚĆ           | NOŚNOŚĆ           |                | OZNACZENIE PODSTAWOWE | MASA  | NR RYS. |
| d              | D   | D <sub>1</sub> | B  | C  | dynamic           | static         |                                  | ~     |         | d              | D     | B      | d <sub>1</sub>    | dynamic           | static         |                       | ~     |         |
| mm             |     |                |    |    | kN                |                |                                  | kg    |         | mm             |       |        | mm                | kN                |                |                       | kg    |         |
|                |     |                |    |    | C                 | C <sub>0</sub> |                                  |       |         |                |       |        |                   | C                 | C <sub>0</sub> |                       |       |         |
| <b>45.000</b>  | 75  |                | 19 | 16 | 21.0              | 15.2           | <b>114-751-2RS</b>               | 0.400 | 14      | <b>29.500</b>  | 52.7  | 15.000 | 34.0              | 11.9              | 8.0            | <b>173-722</b>        | 0.069 | 4       |
|                | 75  |                | 19 |    | 21.0              | 15.2           | <b>114-878BTNG2RS-2RS3S0</b>     | 0.280 | 16      | <b>30.000</b>  | 55.0  | 13.000 | 34.0              | 13.2              | 8.3            | <b>CBK-206-2Z</b>     | 0.135 | 1       |
|                | 75  |                | 19 |    | 21.0              | 15.2           | <b>114-879BTNG2RS-2RS3S0</b>     | 0.270 | 16      |                | 55.0  | 13.000 | 34.0              | 13.2              | 8.3            | <b>CBK-206-2RS</b>    | 0.135 | 2       |
|                | 85  |                | 50 | 19 | 32.7              | 20.5           | <b>114-771</b>                   | 0.630 | 9       | <b>31.500</b>  | 52.7  | 15.000 | 39.5              | 11.9              | 8.0            | <b>173-723</b>        | 0.068 | 4       |
|                | 85  |                | 27 | 21 | 32.7              | 20.5           | <b>88509</b>                     | 0.580 | 14      | <b>32.000</b>  | 58.0  | 14.500 |                   | 13.2              | 8.3            | <b>CBK-182A</b>       | 0.130 | 3       |
| <b>50.000</b>  | 75  |                | 19 |    | 22.1              | 15.2           | <b>114-1110TNG 2RS3-2BRS3</b>    | 0.270 | 16      | <b>35.900</b>  | 62.0  | 14.000 | 39.5              | 16.0              | 10.3           | <b>CBK-269</b>        | 0.153 | 1       |
|                | 80  |                | 16 |    | 33.0              | 31.0           | <b>134-956-ZZ</b>                | 0.260 | 15      |                | 62.0  | 14.000 | 39.5              | 16.0              | 10.3           | <b>CBK-269ZRS</b>     | 0.153 | 1       |
|                | 80  |                | 16 |    | 33.0              | 31.0           | <b>134-956-2RS</b>               | 0.260 | 15      | <b>37.000</b>  | 62.0  | 14.000 | 39.5              | 16.0              | 10.3           | <b>CBK-269X1</b>      | 0.170 | 1       |
| <b>52.413</b>  | 90  |                | 30 | 22 | 28.3              | 21.3           | <b>114-1310-2RS-2BRS-R33-43*</b> | 0.602 | 18      |                | 62.0  | 14.000 | 39.5              | 11.6              | 8.2            | <b>CBK-302</b>        | 0.150 | 5       |
|                | 90  |                | 18 |    | 28.3              | 21.3           | <b>114-741</b>                   | 0.392 | 2       | <b>42.000</b>  | 62.0  | 32.550 |                   | 12.1              | 8.9            | <b>VE535D5100</b>     | 0.151 | 13      |
| <b>55.000</b>  | 90  |                | 22 |    | 29.6              | 21.3           | <b>114-1015-2RS-2BRS</b>         | 0.450 | 16      | <b>50.000</b>  | 81.6  | 25.000 |                   | 21.8              | 16.6           | <b>114-733</b>        | 0.440 | 6       |
|                | 100 |                | 21 |    | 66.3              | 55.0           | <b>134-955-ZZ</b>                | 0.604 | 15      |                | 90.5  | 22.000 |                   | 33.0              | 31.0           | <b>174-1075</b>       | 0.445 | 12      |
| <b>60.000</b>  | 110 |                | 55 | 22 | 35.3              | 36.0           | <b>114-772</b>                   | 1.148 | 9       | <b>50.500</b>  | 90.0  | 49.700 |                   | 25.8              | 18.0           | <b>VE535G5100</b>     |       | 13      |
|                | 80  |                | 12 |    | 20.2              | 19.2           | <b>114-940TN</b>                 | 0.109 | 2       | <b>52.388</b>  | 84.5  | 18.000 |                   | 21.8              | 16.6           | <b>CBK-197</b>        | 0.330 | 7       |
|                | 110 |                | 26 |    | 46.1              | 33.1           | <b>114-1019-2RSR2-2BRS2</b>      | 0.850 | 16      |                | 84.3  | 27.000 | 54.0              | 21.8              | 16.6           | <b>114-791-2Z</b>     | 0.380 | 11      |
| <b>70.000</b>  | 110 |                | 26 |    | 39.7              | 31.0           | <b>114-980-2RSR2-2BRS2</b>       | 0.760 | 16      | <b>52.413</b>  | 91.6  | 22.800 |                   | 28.3              | 21.3           | <b>114-742</b>        | 0.560 | 8       |
|                | 115 |                | 26 |    | 39.7              | 31.0           | <b>114-1151-2RSR2-2BRS2</b>      | 0.930 | 16      | <b>55.000</b>  | 92.0  | 28.500 |                   | 28.3              | 21.3           | <b>114-744TNRS</b>    | 0.660 | 9       |
| <b>75.000</b>  | 115 |                | 26 |    | 41.6              | 33.5           | <b>114-1046-2RSR2-2BRS2</b>      | 0.810 | 16      | <b>63.505</b>  | 100.0 | 21.971 |                   | 30.5              | 25.2           | <b>CBK-297</b>        | 0.560 | 10      |
| <b>85.000</b>  | 115 |                | 26 |    | 19.2              | 19.8           | <b>114-1079TNG 2RSR2-2BRS2</b>   | 0.680 | 16      | <b>65.000</b>  | 100.0 | 21.971 |                   | 30.5              | 25.2           | <b>CBK-297X1</b>      | 0.535 | 10      |
| <b>110.000</b> | 160 |                | 30 |    | 43.6              | 44.5           | <b>115-1189TNG 2RS</b>           | 1.750 | 4       | <b>75.000</b>  | 117.0 | 27.000 |                   | 39.5              | 33.5           | <b>114-740</b>        | 0.870 | 6       |
| <b>140.000</b> | 215 | 225            | 43 | 38 | 116.0             | 139.0          | <b>CBK-031P6</b>                 | 7.450 | 12      | <b>78.000</b>  | 115.0 | 55.000 |                   | 47.6              | 39.8           | <b>VE535A6400</b>     |       | 13      |

**SUFFIX** Characters placed after basic designation  
Znaki umieszczone za oznaczeniem podstawowym

- \*R5-20 – Bearing with radial clearance 5-20 μm
- \*R5-20 – Łożysko z luzem promieniowym 5-20μm
- \*R33-43 – Bearing with radial clearance 33-43μm
- \*R33-43 – Łożysko z luzem promieniowym 33-43μm
- \*2RS3-2Z – Bearing with seals and shields
- \*2RS3-2Z – Łożysko z uszczelnieniem RS3 i blaszką ochronną Z

**SUFFIX** Characters placed after basic designation  
Znaki umieszczone za oznaczeniem podstawowym

- A** – Changed internal design
- A - Zmiana konstrukcji wewnętrznej
- 2Z** – Bearing with two shields
- 2Z - Łożysko z uszczelnieniem blaszkami ochronnymi
- 2RS** – Bearing with two rubber seals
- 2RS - Łożysko z uszczelnieniami gumowymi
- TNRS** – Bearing with plastic cage and rubber seals
- TNRS - Łożysko z koszykiem plastikowym i uszczelnieniem gumowym

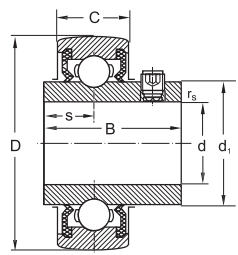


Fig. 1

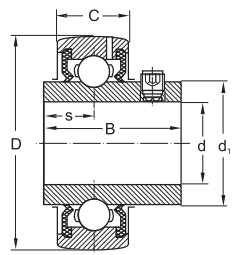


Fig. 2

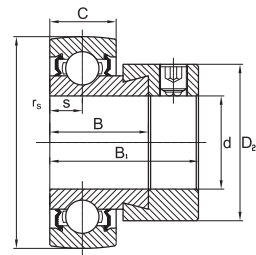


Fig. 3

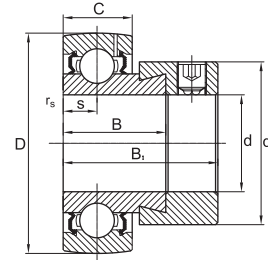


Fig. 4

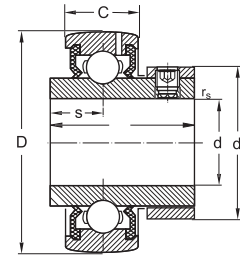


Fig. 5

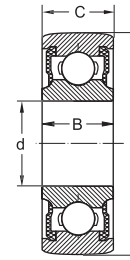


Fig. 6



| SHAFT<br>WAŁEK | DIMENSIONS<br>WYMIARY GŁÓWNE |       |      |                |    |                |      |                |                | BASIC LOAD RATING<br>NOŚNOŚĆ |                                       | MASS<br>MASA | FIG No<br>NR RYS. | DESIGNATION<br>OZNACZENIE wg |        |
|----------------|------------------------------|-------|------|----------------|----|----------------|------|----------------|----------------|------------------------------|---------------------------------------|--------------|-------------------|------------------------------|--------|
|                | d                            | D     | B    | B <sub>1</sub> | C  | r <sub>s</sub> | S    | d <sub>1</sub> | d <sub>2</sub> | dynamic<br>dynamiczna<br>C   | static<br>statyczna<br>C <sub>0</sub> |              |                   | ~                            | FŁT    |
|                | mm                           |       |      |                |    |                |      |                |                | kN                           |                                       | kg           |                   |                              |        |
| 20             | 20                           | 47.0  | 31.0 |                | 16 | 1              | 12.7 |                |                | 12.80                        | 6.65                                  | 0.160        | 2                 | FC204                        | UC204  |
|                | 20                           | 47.0  | 31.0 |                | 14 | 0.6            |      |                |                | 12.80                        | 6.55                                  | 0.140        | 4                 | FD204                        |        |
| 25             | 25                           | 52.0  | 34.1 |                | 17 | 1.0            | 14.3 |                |                | 14.00                        | 7.85                                  | 0.200        | 2                 | FC205                        | UC205  |
|                | 25                           | 52.0  | 34.1 |                | 15 | 0.6            |      |                |                | 14.00                        | 7.80                                  | 0.170        | 4                 | FD205                        |        |
| 30             | 25                           | 52.0  | 15.0 |                | 15 | 1.0            |      |                |                | 14.00                        | 7.80                                  | 0.129        | 6                 | K6205 2RS                    |        |
|                | 30                           | 62.0  | 39.1 |                | 19 | 1.0            | 15.9 | 40.70          |                | 19.50                        | 11.35                                 | 0.320        | 1                 | C206                         |        |
| 35             | 30                           | 62.0  | 39.1 |                | 19 | 1.0            | 15.9 | 40.70          |                | 19.50                        | 11.35                                 | 0.320        | 2                 | FC206                        | UC206  |
|                | 30                           | 62.0  | 23.8 | 35.7           | 18 | 1.0            | 9.0  |                | 45.00          | 19.50                        | 11.35                                 | 0.300        | 3                 | D206                         | SA206M |
| 40             | 30                           | 62.0  | 23.8 | 35.7           | 16 | 1.0            | 9.0  |                | 45.00          | 19.50                        | 11.35                                 | 0.300        | 4                 | FD206                        |        |
|                | 30                           | 62.0  | 16.0 |                | 16 | 1.0            |      |                |                | 19.50                        | 11.35                                 | 0.180        | 6                 | K62062RS                     |        |
| 45             | 35                           | 72.0  | 42.9 |                | 20 | 1.1            | 17.5 | 46.90          |                | 19.70                        | 15.30                                 | 0.570        | 1                 | C207                         |        |
|                | 35                           | 72.0  | 42.9 |                | 20 | 1.1            | 17.5 | 46.90          |                | 19.70                        | 15.30                                 | 0.570        | 2                 | FC207                        | UC207  |
| 50             | 35                           | 72.0  | 25.4 | 38.9           | 19 | 1.1            | 9.5  |                | 56.50          | 19.70                        | 15.30                                 | 0.480        | 3                 | D207                         | SA207M |
|                | 35                           | 72.0  | 25.4 | 38.9           | 17 | 1.1            | 9.5  |                | 56.50          | 19.70                        | 15.30                                 | 0.480        | 4                 | FD207                        |        |
| 55             | 35                           | 72.0  | 42.9 |                | 20 | 1.1            | 17.5 |                | 58.90          | 19.70                        | 15.30                                 | 0.590        | 5                 | FB207                        |        |
|                | 35                           | 72.0  | 17.0 |                | 17 | 1.1            |      |                |                | 19.70                        | 15.30                                 | 0.290        | 6                 | K62072RS                     |        |
| 60             | 35                           | 72.0  | 17.0 |                | 17 | 1.1            |      |                |                | 19.70                        | 15.30                                 | 0.290        | 6                 | K6207K 2RS                   |        |
|                | 40                           | 80.0  | 49.2 |                | 21 | 1.1            | 19.0 | 52.40          |                | 22.40                        | 17.90                                 | 0.640        | 2                 | FC208                        | UC208  |
| 65             | 40                           | 80.0  | 29.7 | 43.7           | 18 | 1.1            | 11.0 |                | 60.00          | 22.40                        | 17.90                                 | 0.590        | 4                 | FD208                        |        |
|                | 40                           | 80.0  | 49.2 |                | 19 | 1.1            | 19.0 |                | 66.50          | 22.40                        | 17.90                                 | 0.720        | 5                 | FB208                        |        |
| 70             | 40                           | 80.0  | 18.0 |                | 18 | 1.1            |      |                |                | 22.40                        | 17.90                                 | 0.320        | 6                 | K62082RS                     |        |
|                | 40                           | 80.0  | 18.0 |                | 18 | 1.1            |      |                |                | 22.40                        | 17.90                                 | 0.320        | 6                 | K6208K 2RS                   |        |
| 75             | 40                           | 110.0 | 52.0 |                | 32 | 1.5            | 22.0 | 67.50          |                | 62.00                        | 37.10                                 | 1.840        | 1                 | 114-981 2RS 2Z               |        |
|                | 40                           | 90.0  | 23.0 |                | 23 | 1.5            |      |                |                | 40.70                        | 23.90                                 | 0.630        | 6                 | K6308 2RS                    |        |
| 80             | 40                           | 90.0  | 52.0 |                | 28 | 1.1            | 19.0 | 55.20          |                | 40.70                        | 23.90                                 | 1.117        | 1                 | 114-708(728) 2RS             |        |
|                | 45                           | 85.0  | 49.2 |                | 22 | 1.1            | 19.0 | 57.40          |                | 25.20                        | 20.50                                 | 0.680        | 2                 | FC209                        | UC209  |
| 85             | 45                           | 85.0  | 29.7 | 43.7           | 19 | 1.1            | 11.0 |                | 63.50          | 25.20                        | 20.50                                 | 0.660        | 4                 | FD209                        |        |
|                | 45                           | 85.0  | 19.0 |                | 19 | 1.1            |      |                |                | 32.70                        | 20.50                                 | 0.370        | 6                 | K6209 2RS                    |        |
| 90             | 45                           | 85.0  | 30.0 |                | 22 | 1.0            | 15.0 | 56.57          |                | 25.20                        | 20.50                                 | 0.550        | 1                 | 114-802K                     |        |
|                | 45                           | 100.0 | 25.0 |                | 25 | 1.5            |      |                |                | 40.60                        | 31.70                                 | 0.800        | 6                 | K6309 2RS                    |        |
| 95             | 50                           | 90.0  | 20.0 |                | 20 | 1.1            |      |                |                | 20.00                        | 23.20                                 | 0.440        | 6                 | K6210 2RS                    |        |
|                | 50                           | 90.0  | 51.6 |                | 24 | 1.1            | 19.0 | 62.40          |                | 35.10                        | 23.20                                 | 0.800        | 2                 | FC210                        | UC210  |
| 100            | 50                           | 90.0  | 30.2 | 43.7           | 20 | 1.1            | 11.0 |                | 69.90          | 35.10                        | 23.10                                 | 0.910        | 4                 | FD210                        |        |
|                | 50                           | 90.0  | 51.6 |                | 22 | 1.1            | 19.0 |                | 79.00          | 35.10                        | 23.20                                 | 1.000        | 5                 | FB210                        |        |
| 105            | 55                           | 100.0 | 55.6 |                | 25 | 1.5            | 22.2 | 68.70          |                | 33.40                        | 29.20                                 | 1.110        | 2                 | FC211                        | UC211  |
|                | 55                           | 100.0 | 55.6 |                | 25 | 1.5            | 22.2 |                | 88.00          | 33.40                        | 29.20                                 | 1.350        | 5                 | FB211                        |        |

# Truck and Support rollers, Must Guide bearings

łożyska kulkowe - Rolki toczne i prowadzące

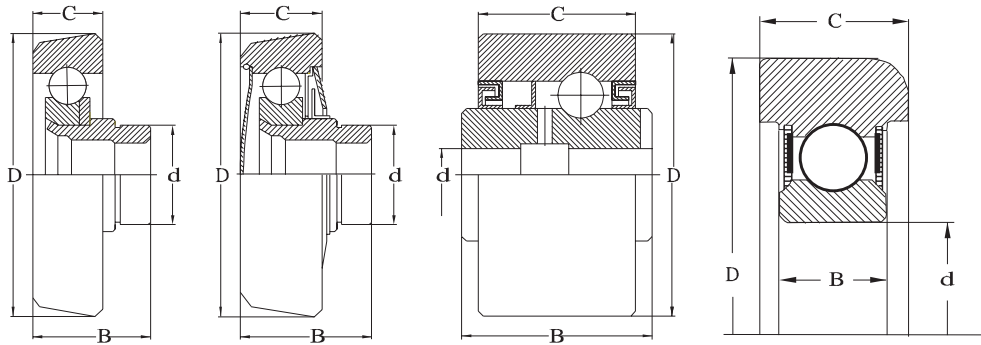


Fig. 1

Fig. 2

Fig. 3

Fig. 4

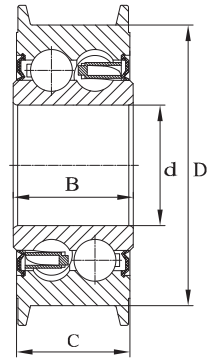


Fig. 5

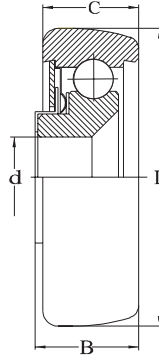


Fig. 6

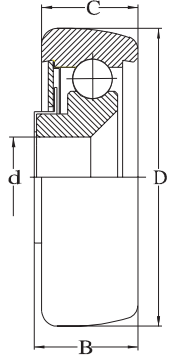


Fig. 7

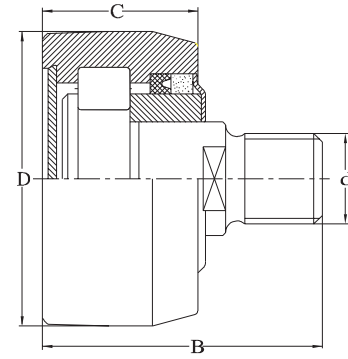


Fig. 8

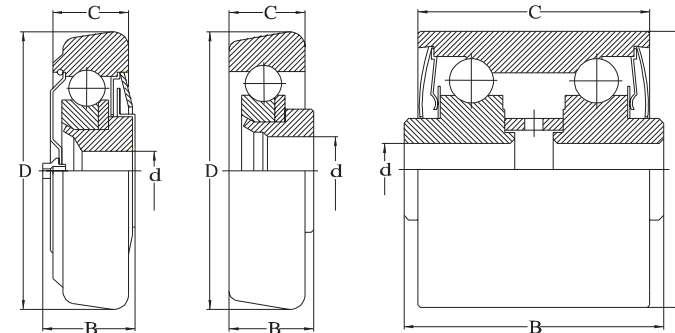


Fig. 9

Fig. 10

Fig. 11

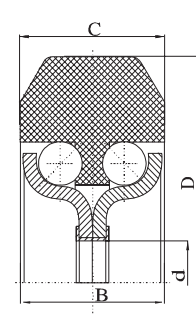


Fig. 12

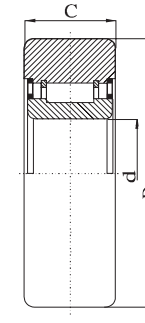


Fig. 13

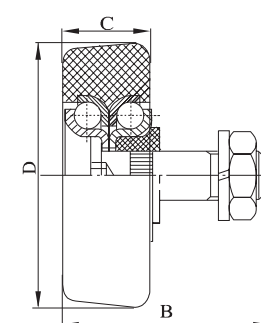


Fig. 14



| DIMENSIONS     |         |      |      | BASIC LOAD RATING |                | BEARING DESIGNATIONS | MASS  | FIG No | DIMENSIONS     |                |      |                | BASIC LOAD RATING |                    | BEARING DESIGNATIONS    | MASS  | FIG No |
|----------------|---------|------|------|-------------------|----------------|----------------------|-------|--------|----------------|----------------|------|----------------|-------------------|--------------------|-------------------------|-------|--------|
| WYMIARY GŁÓWNE |         |      |      | NOŚNOŚĆ           |                |                      |       |        | WYMIARY GŁÓWNE |                |      |                | NOŚNOŚĆ           |                    |                         |       |        |
| d              | D       | B    | C    | dynamic           | static         |                      |       |        | d              | D              | B    | C              | dynamic           | static             |                         |       |        |
| mm             |         |      |      | C                 | C <sub>0</sub> |                      |       |        | C              | C <sub>0</sub> | C    | C <sub>0</sub> | C                 | C <sub>0</sub>     |                         |       |        |
|                |         |      |      | kN                |                |                      | kg    |        | mm             |                |      |                | kN                |                    |                         | kg    |        |
| 9.55           | 50.500  | 15.3 | 16   |                   |                | <b>NG-2WHEEL</b>     | 0.051 | 12     | 45.00          | 95.000         | 41.0 | 38             | 52.0              | 39.9               | <b>174-1057 TNG-2RS</b> | 1.270 | 5      |
| 12.20          | 71.400  | 55.5 | 52   | 50.0              | 37.0           | <b>124-659DV-2Z</b>  | 1.151 | 11     | 50.00          | 114.000        | 25.0 | 30             | 53.0              | 31.7               | <b>114-851-2RS</b>      | 1.440 | 4      |
|                | 71.400  | 71.0 | 65.1 | 50.0              | 37.0           | <b>124-662DV-2Z</b>  | 1.440 | 11     |                | 115.000        | 25.0 | 30             | 53.0              | 31.7               | <b>114-850-2RS</b>      | 1.460 | 4      |
| 14.05          | 63.000  | 44.0 | 34.5 | 16.0              | 7.9            | <b>CBK-191</b>       | 0.669 | 3      | 50.00          | 116.000        | 25.0 | 30             | 53.0              | 31.7               | <b>114-886-2RS</b>      | 1.500 | 4      |
| 16.00          | 59.000  | 20.5 | 19   | 14.0              | 7.9            | <b>CBK-274B</b>      | 0.227 | 6      |                | 117.000        | 25.0 | 32             | 53.0              | 31.7               | <b>114-902-2RS</b>      | 1.630 | 4      |
|                | 59.000  | 20.5 | 19   | 14.0              | 7.9            | <b>CBK-274C</b>      | 0.227 | 7      | 118.000        | 25.0           | 32   | 53.0           | 31.7              | <b>114-903-2RS</b> | 1.670                   | 4     |        |
| 16.05          | 76.000  | 50.0 | 39   | 28.2              | 15.8           | <b>CBK-196</b>       | 1.046 | 3      | 50.00          | 119.000        | 25.0 | 32             | 53.0              | 31.7               | <b>114-947-2RS</b>      | 1.710 | 4      |
|                | 60.325  | 46.8 | 19.3 |                   |                | <b>FW-100-2-3/8</b>  | 0.163 | 14     |                | 120.000        | 25.0 | 32             | 53.0              | 31.7               | <b>114-948-2RS</b>      | 1.760 | 4      |
| 20.00          | 52.000  | 59.0 | 30.6 | 25.0              | 21.7           | <b>CBK-320</b>       | 0.512 | 8      | 50.00          | 129.000        | 27.0 | 34             | 62.0              | 37.9               | <b>115-914-2RS</b>      | 2.090 | 4      |
|                | 80.000  | 52.0 | 27   | 21.2              | 10.9           | <b>CBK-188</b>       | 0.780 | 2      |                | 130.000        | 27.0 | 34             | 62.0              | 37.9               | <b>115-915-2RS</b>      | 2.140 | 4      |
| 23.00          | 80.000  | 52.0 | 27   | 30.3              | 18.7           | <b>CBK-188 VA*</b>   | 0.840 | 1      | 50.00          | 131.000        | 27.0 | 34             | 62.0              | 37.9               | <b>115-916-2RS</b>      | 2.190 | 4      |
|                | 82.000  | 26.5 | 24   | 23.7              | 13.4           | <b>CBK-189</b>       | 0.566 | 9      |                | 132.000        | 27.0 | 34             | 62.0              | 37.9               | <b>115-946-2RS</b>      | 2.250 | 4      |
| 25.40          | 82.000  | 26.5 | 24   | 34.4              | 23.4           | <b>CBK-189 V*</b>    | 0.620 | 10     | 50.00          | 136.652        |      | 46.304         | 144.0             | 231.0              | <b>675-815-2RS</b>      | 3.860 | 13     |
|                | 82.000  | 29.5 | 27   | 28.2              | 15.8           | <b>CBK-243 B</b>     | 0.620 | 6      |                | 149.000        | 31.0 | 36             | 82.0              | 52.0               | <b>115-933</b>          | 2.987 | 4      |
| 28.00          | 82.000  | 29.5 | 27   | 28.2              | 15.8           | <b>CBK-243 C</b>     | 0.620 | 7      | 50.00          | 150.000        | 31.0 | 36             | 82.0              | 52.0               | <b>115-934</b>          | 3.051 | 4      |
|                | 134.000 | 33.5 | 30   | 43.4              | 29.2           | <b>CBK-195A</b>      | 2.330 | 9      |                | 151.000        | 31.0 | 36             | 82.0              | 52.0               | <b>115-935</b>          | 3.115 | 4      |
| 40.00          | 99.000  | 23.0 | 27   | 40.7              | 23.9           | <b>114-841-2RS</b>   | 1.125 | 4      | 50.00          | 174.625        |      | 61.925         | 279.0             | 424.0              | <b>675-846-2RS</b>      | 8.300 | 13     |
|                | 100.000 | 23.0 | 27   | 40.7              | 23.9           | <b>114-842-2RS</b>   | 1.125 | 4      |                |                |      |                |                   |                    |                         |       |        |
|                | 101.000 | 23.0 | 27   | 40.7              | 23.9           | <b>114-869-2RS</b>   | 1.004 | 4      |                |                |      |                |                   |                    |                         |       |        |
|                | 102.000 | 23.0 | 27   | 40.7              | 23.9           | <b>114-870-2RS</b>   | 1.036 | 4      |                |                |      |                |                   |                    |                         |       |        |

\*Bearings without cage with full quantity of rolling elements | \*Łożyska bez kosza z pełną ilością wałków

Bearings without cage with full quantity of rolling elements

Łożyska bez koszyka z pełną ilością wałków

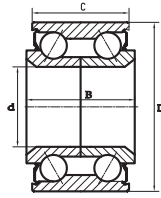


Fig. 1

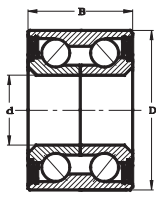


Fig. 2

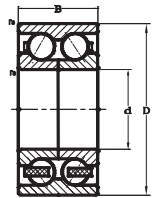


Fig. 3

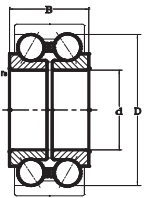


Fig. 4

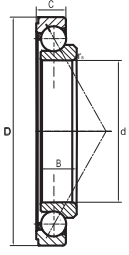


Fig. 5

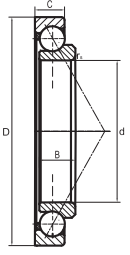


Fig. 6

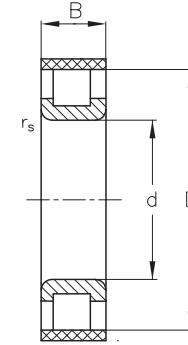


Fig. 1

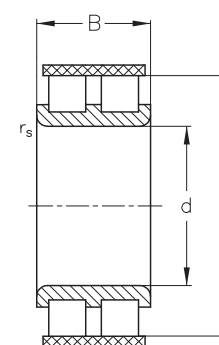


Fig. 2



| SHAFT<br>WAŁEK | DIMENSIONS<br>WYMIARY GŁÓWNE |         |        |      |                | BASIC<br>LOAD RATING<br>NOŚNOŚĆ |                          | LIMITING<br>SPEEDS<br>OBROTY GRANICZNE |                | DESIGNATION<br>FŁT<br>OZNACZENIE FŁT | MASS<br>MASA | FIG No<br>NR RYS. | DIMENSIONS<br>WYMIARY GŁÓWNE |       |      |                | DESIGNATIONS<br>FŁT<br>OZNACZENIE | BASIC<br>LOAD RATING<br>NOŚNOŚĆ |                          | LIMITING SPEEDS<br>OBROTY GRANICZNE |                | MASS<br>MASA | FIG No<br>NR RYS. |
|----------------|------------------------------|---------|--------|------|----------------|---------------------------------|--------------------------|--|----------------|--------------------------------------|--------------|-------------------|------------------------------|-------|------|----------------|-----------------------------------|---------------------------------|--------------------------|-------------------------------------|----------------|--------------|-------------------|
|                | d                            | D       | B      | C    | r <sub>s</sub> | dynamic<br>C                    | static<br>C <sub>0</sub> | grease<br>w smarze                     | oil<br>w oleju |                                      |              |                   | d                            | D     | B    | r <sub>s</sub> |                                   | dynamic<br>C                    | static<br>C <sub>0</sub> | grease<br>w smarze                  | oil<br>w oleju |              |                   |
|                | mm                           |         |        |      |                | kN                              |                          | r/min                                  |                |                                      | kg           |                   | mm                           |       |      |                |                                   | kN                              |                          | r/min                               |                | kg           |                   |
| 30             | 30                           | 60.000  | 37.000 | 37.0 | 2.5            | 37.80                           | 31.10                    | 7 000                                  |                | CBK-199TNG                           | 0.450        | 1                 | 12                           | 23.77 | 10   | 1.8            | 262-1098                          | 9.25                            | 8.71                     |                                     |                | 0.020        | 1                 |
|                | 30                           | 60.000  | 37.000 | 37.0 | 2.5            | 37.80                           | 31.00                    | 7 000                                  |                | CBK-199BTNG                          | 0.420        | 2                 | 15                           | 25.93 | 10.5 | 0.3            | 262-345                           | 10.80                           | 10.90                    |                                     |                |              | 1                 |
|                | 30                           | 60.030  | 37.000 | 37.0 | 2.5            | 37.80                           | 31.10                    | 7 000                                  |                | CBK-441TNG                           | 0.440        | 1                 | 18                           | 30.52 | 13.0 | 2.0            | 263-899                           | 19.9                            | 21.2                     | 4 600                               | 6 200          | 0.044        | 1                 |
|                | 30                           | 60.030  | 37.000 | 37.0 | 3.2            | 37.80                           | 31.10                    | 7 000                                  |                | CBK-441BTNG                          | 0.440        | 2                 | 19                           | 33.84 | 19.0 | 2.0            | 236-811                           | 37.0                            | 45.2                     | 3 900                               | 5 200          | 0.074        | 1                 |
|                | 30                           | 60.030  | 37.000 | 37.0 | 0.3            | 37.80                           | 31.10                    | 7 000                                  |                | 133-637TNG-2RS                       | 0.420        | 1                 | 20                           | 33.83 | 18.0 | 0.3            | 263-346                           | 26.1                            | 28.8                     | 3 900                               | 5 200          |              | 1                 |
| 34             | 34                           | 64.000  | 37.000 | 37.0 | 2.4            | 42.20                           | 35.40                    | 6 300                                  |                | 133-639BATNG                         | 0.430        | 2                 | 24                           | 36.81 | 16.0 | 2.6            | 263-919                           | 27.5                            | 27.9                     | 3 900                               | 5 200          | 0.061        | 1                 |
|                | 34                           | 66.000  | 37.000 | 37.0 | 2.4            | 42.20                           | 35.40                    | 6 300                                  |                | 134-1009TNG 2RS                      | 0.520        | 2                 |                              | 33.90 | 16.0 | 2.6            | 263-1023                          | 27.0                            | 30.0                     | 3 900                               | 5 200          | 0.070        | 1                 |
|                | 34                           | 64.000  | 37.000 | 37.0 | 2.4            | 42.20                           | 35.40                    | 6 300                                  |                | 133-639BATNG-2RS-2BRS6               | 0.430        | 2                 |                              | 40.25 | 26.0 | 2.5            | 263-904                           | 44.0                            | 59.8                     | 3 400                               | 4 600          | 0.140        | 2                 |
| 35             | 35                           | 66.000  | 33.000 | 33.0 | 2.5            | 39.90                           | 34.70                    | 6 300                                  |                | 134-781TNG-2RS                       | 0.460        | 1                 | 25                           | 40.18 | 24.0 | 2.5            | 263-810                           | 53.7                            | 77.2                     | 3 400                               | 4 600          | 0.130        | 1                 |
|                | 35                           | 68.000  | 37.000 | 37.0 | 2.5            | 43.60                           | 37.20                    | 6 300                                  |                | 134-643TNG-2RS                       | 0.530        | 1                 |                              | 42.51 | 12.0 | 2.6            | 263-1122                          | 21.9                            | 21.8                     | 3 100                               | 4 100          | 0.070        | 1                 |
|                | 35                           | 68.000  | 37.000 | 37.0 | 2.5            | 43.60                           | 37.20                    | 6 300                                  |                | 134-738PTNG-2RS-2BRS6                | 0.530        | 2                 |                              | 42.51 | 12.0 | 2.6            | 263-1063                          | 20.7                            | 20.1                     | 3 100                               | 4 100          | 0.060        | 1                 |
| 37             | 35                           | 68.015  | 37.000 | 37.0 | 2.5            | 41.70                           | 35.50                    | 6 300                                  |                | 134-863TNG-2RS                       | 0.563        | 1                 | 30                           | 46.52 | 18.0 | 3.0            | 263-898                           | 45.0                            | 48.1                     | 3 100                               | 4 100          | 0.130        | 1                 |
|                | 37                           | 72.000  | 37.000 | 37.0 | 2.4            | 44.20                           | 39.70                    | 5 000                                  |                | 134-964PTNG-2RS-2BRS                 | 0.577        | 1                 |                              | 46.52 | 18.0 | 3.0            | 263-1294                          | 45.0                            | 48.1                     | 3 100                               | 4 100          | 0.156        | 1                 |
|                | 39                           | 68.000  | 37.000 | 37.0 | 3.2            | 39.80                           | 36.30                    | 5 600                                  |                | 134-746BDTNG-2RS                     | 0.420        | 2                 |                              | 42.51 | 16.0 | 2.5            | 263-1021                          | 31.2                            | 34.4                     | 3 100                               | 4 100          | 0.095        | 1                 |
| 39             | 39                           | 72.000  | 37.000 | 37.0 | 2.4            | 44.20                           | 39.70                    | 5 000                                  |                | 134-725PTNG-2RS-2BRS                 | 0.500        | 2                 | 32                           | 40.25 | 26.0 | 2.5            | 263-1092                          | 44.0                            | 59.8                     | 3 100                               | 4 100          | 0.130        | 2                 |
|                | 40                           | 72.000  | 37.000 | 37.0 | 2.4            | 44.20                           | 39.70                    | 5 000                                  |                | 134-797BTNG-2RS                      | 0.520        | 2                 |                              | 42.55 | 18.0 | 3.0            | 263-1105                          | 40.5                            | 47.8                     | 3 100                               | 4 100          | 0.110        | 1                 |
| 42             | 42                           | 80.000  | 42.000 | 42.0 | 2.4            | 65.00                           | 55.50                    | 5 000                                  |                | 134-739BTNG-2RS                      | 0.753        | 2                 | 35                           | 49.60 | 26.0 | 3.0            | 263-920                           | 57.1                            | 70.4                     | 2 800                               | 3 800          | 0.200        | 2                 |
|                | 42                           | 80.030  | 42.000 | 42.0 | 2.4            | 65.00                           | 55.50                    | 5 000                                  |                | 134-806BTNG-2RS                      | 0.750        | 2                 |                              | 49.60 | 26.0 | 3.0            | 263-922                           | 57.1                            | 70.4                     | 2 800                               | 3 800          | 0.188        | 2                 |
| 48             | 48                           | 82.000  | 37.000 | 33.0 | 3.2            | 53.00                           | 50.00                    | 5 000                                  |                | 134-905TNGRS6RS                      | 0.631        | 1                 | 38                           | 49.60 | 26.0 | 2.5            | 263-940                           | 64.7                            | 82.1                     | 2 800                               | 3 800          |              | 1                 |
|                | 100                          | 125.000 | 29.000 | 1.0  | 34.30          | 43.70                           | 3 200                    |  | 135-1042TNG    | 0.640                                | 3            | 49.60             |                              | 25.0  | 3.0  | 263-1089       | 57.1                              | 70.4                            | 2 800                    | 3 800                               | 0.183          | 2            |                   |
| 110            | 110                          | 140.000 | 30.000 | 30.0 | 1.0            | 43.00                           | 57.00                    | 2 800                                  | 3 400          | 135-954TNG                           | 0.908        | 3                 | 40                           | 50.74 | 14.0 | 3.0            | 263-1305                          | 31.1                            | 30.9                     | 2 800                               | 3 800          |              | 1                 |
|                | 130                          | 172.000 | 38.000 | 38.0 | 1.0            | 86.70                           | 109.80                   | 2 300                                  | 2 700          | 135-929TNG                           | 1.870        | 3                 |                              | 54.01 | 31.0 | 3.0            | 263-809                           | 90.5                            | 131.0                    | 2 800                               | 3 800          | 0.320        | 1                 |
| 150            | 150                          | 198.000 | 20.000 | 20.0 | 1.5            | 90.30                           | 112.00                   | 2 200                                  |                | 135-1398TNG                          | 1.430        | 5                 | 35                           | 51.75 | 29.0 | 3.0            | 263-1017                          | 71.5                            | 95.5                     | 2 600                               | 3 500          | 0.232        | 2                 |
|                | 150                          | 198.000 | 20.000 | 20.0 | 1.5            | 90.30                           | 112.00                   | 2 200                                  |                | 135-1471TNG                          | 1.450        | 6                 |                              | 46.60 | 25.0 | 3.0            | 263-1022                          | 54.3                            | 82.5                     | 2 600                               | 3 500          | 0.159        | 2                 |
| 160            | 160                          | 204.576 | 53.000 | 1.8  | 171.00         | 263.00                          | 2 200                    |  | 166-1012TNG    | 2.620                                | 4            | 38                | 46.60                        | 28.0  | 3.0  | 263-1062A      | 52.2                              | 78.5                            | 2 600                    | 3 500                               |                | 2            |                   |
|                | 190                          | 254.035 | 70.126 | 2.5  | 281.00         | 440.00                          | 1 700                    |  | 166-997TNG     | 5.290                                | 4            |                   | 52.09                        | 26.5  | 3.0  | 263-1361       | 60.3                              | 86.0                            | 2 600                    | 3 500                               |                | 2            |                   |
| 200            | 200                          | 280.446 | 93.126 | 2.5  | 385.00         | 620.00                          | 1 500                    |  | 167-994TNG     | 9.220                                | 4            | 40                | 52.95                        | 28.0  | 3.0  | 263-921        | 59.2                              | 97.0                            | 2 500                    | 3 400                               | 0.195          | 2            |                   |
|                | 230                          | 311.446 | 91.626 | 3.0  | 405.00         | 700.00                          | 1 400                    |  | 167-995TNG     | 10.640                               | 4            |                   | 57.81                        | 34.0  | 3.2  | 263-1177       | 86.0                              | 141.0                           | 2 300                    | 3 000                               | 0.291          | 2            |                   |
| 230            |                              |         |        |      |                |                                 |                          |  |                |                                      |              |                   | 61.74                        | 28.0  | 2.5  | 236-941        | 87.0                              | 118.3                           | 2 300                    | 3 000                               |                | 1            |                   |
|                |                              |         |        |      |                |                                 |                          |  |                |                                      |              |                   | 61.74                        | 28.0  | 3.5  | 263-918        | 70.6                              | 90.6                            | 2 300                    | 3 000                               | 0.279          | 2            |                   |
|                |                              |         |        |      |                |                                 |                          |  |                |                                      |              |                   | 61.74                        | 32.0  | 3.0  | 263-917        | 85.4                              | 115.8                           | 2 300                    | 3 000                               | 0.329          | 2            |                   |
|                |                              |         |        |      |                |                                 |                          |  |                |                                      |              |                   | 61.74                        | 38.0  | 1.1  | 263-962        | 101.0                             | 143.0                           | 2 300                    | 3 000                               | 0.377          | 2            |                   |
|                |                              |         |        |      |                |                                 |                          |  |                |                                      |              |                   | 75.63                        | 78.0  | 1.1  | 264-175        | 248.0                             | 325.0                           | 1 800                    | 2 500                               |                | 2            |                   |

**Bearings without cage with full quantity of rolling elements**

Łożyska bez koszyka z pełną ilością wałków

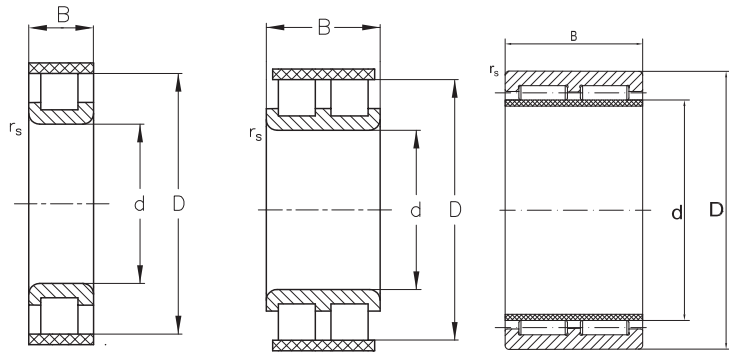
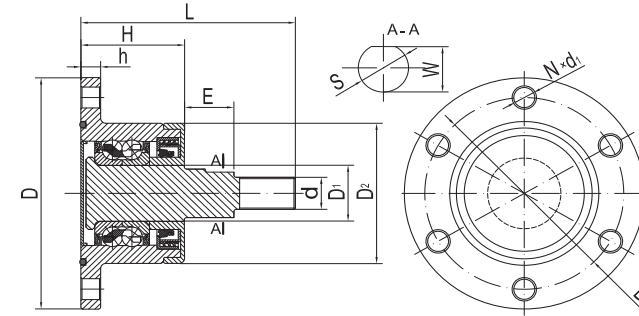


Fig. 1

Fig. 2

FIG 3



| DIMENSIONS<br>WYMIARY GŁÓWNE |        |      |                       | DESIGNATIONS<br>FŁT<br>OZNACZENIE | BASIC<br>LOAD RATING<br>NOŚNOŚĆ |                                       | LIMITING SPEEDS<br>OBROTY GRANICZNE |                | MASS<br>MASA<br>~ | FIG No<br>NR RYS. | DIMENSIONS<br>WYMIARY GŁÓWNE |       |                |                |                |    |      |                |   |       |      | BASIC<br>LOAD RATING<br>NOŚNOŚĆ |      | DESIGNATION<br>OZNACZENIE |                            |                                       |
|------------------------------|--------|------|-----------------------|-----------------------------------|---------------------------------|---------------------------------------|-------------------------------------|----------------|-------------------|-------------------|------------------------------|-------|----------------|----------------|----------------|----|------|----------------|---|-------|------|---------------------------------|------|---------------------------|----------------------------|---------------------------------------|
| d                            | D      | B    | r <sub>s</sub><br>min |                                   | dynamic<br>dynamiczna<br>C      | static<br>statyczna<br>C <sub>0</sub> | grease<br>w smarze                  | oil<br>w oleju |                   |                   | d                            | D     | D <sub>1</sub> | D <sub>2</sub> | D <sub>3</sub> | S  | W    | d <sub>1</sub> | N | L     | h    | H                               | E    |                           | dynamic<br>dynamiczna<br>C | static<br>statyczna<br>C <sub>0</sub> |
| mm                           |        |      |                       | kN                                |                                 | r/min                                 |                                     | kg             |                   | mm                |                              |       |                |                |                |    |      |                |   |       | kN   |                                 |      |                           |                            |                                       |
| 42                           | 60.75  | 37.0 | 3.0                   | 263-924                           | 100.7                           | 156.9                                 | 2 300                               | 3 000          | 0.347             | 2                 | M22x1.5                      | 117.0 | 30             | 81             | 98             | 28 | 25.7 | M12x1.25       | 4 | 101.5 | 10   | 60.0                            | 13.2 | 47.50                     | 37.50                      | PR040/4x98                            |
| 44                           | 62.97  | 37.0 | 2.5                   | 263-1020                          | 103.5                           | 164.4                                 | 2 100                               | 2 800          | 0.370             | 2                 | M22x1.5                      | 142.0 | 30             | 81             | 115            |    |      | M12x1.25       | 6 | 102.0 | 10   | 60.0                            | 14.6 | 46.80                     | 36.60                      | PR050/6x115                           |
| 45                           | 66.85  | 37.5 | 3.5                   | 263-923                           | 106.0                           | 157.0                                 | 2 100                               | 2 800          | 0.428             | 2                 | M24x1.5                      | 145.0 | 35             | 86             | 116            | 30 | 28.0 | 13             | 5 | 127.5 | 10   | 60.5                            | 30.0 | 49.80                     | 40.20                      | PR050N/5x116                          |
| 50                           | 83.88  | 85.0 | 1.1                   | 264-176                           | 275.0                           | 380.0                                 |                                     |                | 1.820             | 2                 | M24x1.5                      | 140.0 | 35             | 89             | 118            | 30 | 28.0 | 13             | 5 | 98.5  | 10.5 | 52.5                            | 18.0 | 49.80                     | 40.20                      | PR050N/5x118                          |
|                              | 69.67  | 37.5 | 2.5                   | 263-1382                          | 108.3                           | 180.8                                 | 1 800                               | 2 500          |                   | 2                 | M22x1.5                      | 117.0 | 30             | 81             | 98             | 28 | 25.7 | M12x1.25       | 6 | 101.5 | 10.0 | 60.0                            | 13.2 | 47.50                     | 37.50                      | PR060/6x98                            |
|                              | 69.67  | 42.5 | 6.0                   | 264-428                           | 118.0                           | 202.0                                 | 1 800                               | 2 500          |                   | 2                 | M24x1.5                      | 145.0 | 35             | 86             | 120            | 30 | 28.0 | 13             | 6 | 127.5 | 10   | 60.5                            | 30.0 | 49.80                     | 40.20                      | PR060N/6x120                          |
|                              | 72.33  | 40.0 | 1.1                   | 263-1024                          | 131.0                           | 195.0                                 | 1 800                               | 2 500          | 0.489             | 2                 | M22x1.5                      | 117.0 | 30             | 81             | 98             | 28 | 25.7 | M12x1.25       | 5 | 101.5 | 10   | 60.0                            | 13.2 | 47.50                     | 37.50                      | PR120/5x98                            |
|                              | 72.33  | 42.0 | 1.1                   | 263-963                           | 131.0                           | 195.0                                 | 1 800                               | 2 500          | 0.500             | 2                 | M24x1.5                      | 145.0 | 35             | 86             | 120            | 30 | 28.0 | 13             | 6 | 127.5 | 10   | 60.5                            | 30.0 | 49.80                     | 40.20                      | PR120/5x98                            |
|                              | 94.75  | 44.0 | 6.2                   | 264-1018                          | 178.0                           | 237.0                                 | 1 400                               | 1 900          | 1.270             | 2                 | M22x1.5                      | 117.0 | 30             | 81             | 98             | 28 | 25.7 | M12x1.25       | 5 | 101.5 | 10   | 60.0                            | 13.2 | 47.50                     | 37.50                      | PR120/5x98                            |
| 72.00                        | 31.0   | 4.0  | 264-1064              | 114.8                             | 178.7                           | 1 800                                 | 2 500                               | 0.391          | 2                 |                   |                              |       |                |                |                |    |      |                |   |       |      |                                 |      |                           |                            |                                       |
| 55                           | 94.80  | 100  | 1.1                   | 264-177                           | 330                             | 475                                   | 1400                                | 1900           | 2.43              | 2                 |                              |       |                |                |                |    |      |                |   |       |      |                                 |      |                           |                            |                                       |
| 65                           | 110.00 | 110  | 1.5                   | 264-178                           | 455                             | 660                                   | 1400                                | 1900           | 3.63              | 2                 |                              |       |                |                |                |    |      |                |   |       |      |                                 |      |                           |                            |                                       |
| 70                           | 85.00  | 44   | 1.0                   | 264-604                           | 130                             | 312                                   |                                     |                |                   | 3                 |                              |       |                |                |                |    |      |                |   |       |      |                                 |      |                           |                            |                                       |
| 75                           | 127.55 | 120  | 2.0                   | 265-175                           | 550                             | 860                                   |                                     |                |                   | 2                 |                              |       |                |                |                |    |      |                |   |       |      |                                 |      |                           |                            |                                       |
| 80                           | 141.92 | 130  | 2.0                   | 265-180                           | 730                             | 1110                                  |                                     |                |                   | 2                 |                              |       |                |                |                |    |      |                |   |       |      |                                 |      |                           |                            |                                       |
| 95                           | 155.87 | 150  | 2.0                   | 265-181                           | 860                             | 1400                                  |                                     |                |                   | 2                 |                              |       |                |                |                |    |      |                |   |       |      |                                 |      |                           |                            |                                       |