

## Item description/product images

**Description****Material:**

Hub aluminium.

Coupling spider polyurethane.

**Version:**

Hub bright.

Coupling spider blue Shore 80A.

Coupling spider yellow Shore 92A.

Coupling spider red Shore 98A.

**Note:**

Elastomer dog coupling consisting of two hubs and an elastomer coupling spider. They are suitable for compensating axial, radial and angular misalignments and for cushioning vibrations and torque shocks.

The polyurethane coupling spiders are available in various hardness grades. As the hardness of the coupling spider increases, the torque and stiffness transmitted increases, and as the hardness decreases, the displacement capacity and cushioning increases.

Pre-tensioning of the spiders in the coupling hubs make this variant play-free.

Supplied unassembled.

**Temperature range:**

Blue Shore 80A: -50 °C to +80 °C. Briefly -60 °C to +120 °C.

Yellow Shore 92A: -30 °C to +90 °C. Briefly -50 °C to +120 °C.

Red Shore 98A: -30 °C to +90 °C. Briefly -40 °C to +120 °C.

**Assembly:**

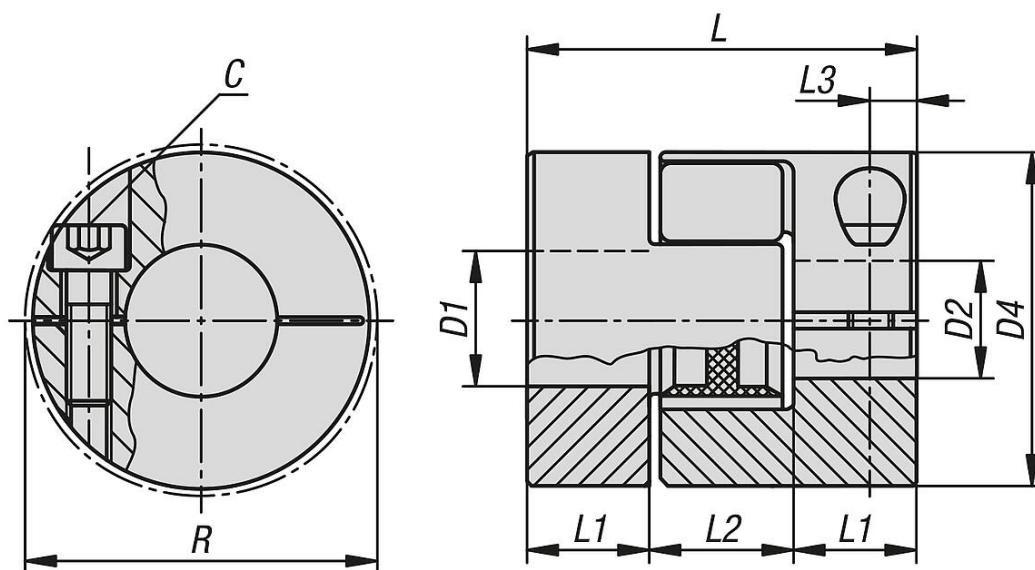
The elastomer dog couplings have an H7 tolerance. The recommended clearance tolerance is 0.02 - 0.05 mm. This tolerance and lubricating the shaft journals aids assembly and removal.

For installation, the hubs of the elastomer dog coupling are simply pushed onto the shafts and secured with clamp hubs.

**On request:**

Desired hub holes D1 and D2 separately with tolerance class or tolerance zone.  
DIN 6885 keyway.

## Drawings



## Overview of items

| Order No.            | Size | Component colour                                                                                      | Moment of inertia (gm <sup>2</sup> ) | Torsional stiffness static (Nm/wheel) | Torsional stiffness dynamic Nm/wheel | Spring stiffness radial (N/mm) | max. shaft offset radial (mm) |
|----------------------|------|-------------------------------------------------------------------------------------------------------|--------------------------------------|---------------------------------------|--------------------------------------|--------------------------------|-------------------------------|
| 23022-10-07800220404 | 7    | Base / magnet 245013<br>Assembly / Clamping joint 244030<br>Fixing element / dial gauge holder 246018 | 0,000195                             | 8,6                                   | 26                                   | 114                            | 0,15                          |
| 23022-10-07800220405 | 7    | Base / magnet 245013<br>Assembly / Clamping joint 244030<br>Fixing element / dial gauge holder 246018 | 0,000195                             | 8,6                                   | 26                                   | 114                            | 0,15                          |
| 23022-10-07800220406 | 7    | Base / magnet 245013<br>Assembly / Clamping joint 244030<br>Fixing element / dial gauge holder 246018 | 0,000195                             | 8,6                                   | 26                                   | 114                            | 0,15                          |
| 23022-10-07800220505 | 7    | Base / magnet 245013<br>Assembly / Clamping joint 244030<br>Fixing element / dial gauge holder 246018 | 0,000195                             | 8,6                                   | 26                                   | 114                            | 0,15                          |
| 23022-10-07800220506 | 7    | Base / magnet 245013<br>Assembly / Clamping joint 244030<br>Fixing element / dial gauge holder 246018 | 0,000195                             | 8,6                                   | 26                                   | 114                            | 0,15                          |
| 23022-10-07800220606 | 7    | Base / magnet 245013<br>Assembly / Clamping joint 244030<br>Fixing element / dial gauge holder 246018 | 0,000195                             | 8,6                                   | 26                                   | 114                            | 0,15                          |
| 23022-10-09800300404 | 9    | Base / magnet 245013<br>Assembly / Clamping joint 244030<br>Fixing element / dial gauge holder 246018 | 0,00107                              | 17,2                                  | 52                                   | 125                            | 0,2                           |
| 23022-10-09800300606 | 9    | Base / magnet 245013<br>Assembly / Clamping joint 244030<br>Fixing element / dial gauge holder 246018 | 0,00107                              | 17,2                                  | 52                                   | 125                            | 0,2                           |
| 23022-10-09800300608 | 9    | Base / magnet 245013<br>Assembly / Clamping joint 244030<br>Fixing element / dial gauge holder 246018 | 0,00107                              | 17,2                                  | 52                                   | 125                            | 0,2                           |
| 23022-10-09800300609 | 9    | Base / magnet 245013<br>Assembly / Clamping joint 244030<br>Fixing element / dial gauge holder 246018 | 0,00107                              | 17,2                                  | 52                                   | 125                            | 0,2                           |
| 23022-10-09800300808 | 9    | Base / magnet 245013<br>Assembly / Clamping joint 244030<br>Fixing element / dial gauge holder 246018 | 0,00107                              | 17,2                                  | 52                                   | 125                            | 0,2                           |
| 23022-10-09800300809 | 9    | Base / magnet 245013<br>Assembly / Clamping joint 244030<br>Fixing element / dial gauge holder 246018 | 0,00107                              | 17,2                                  | 52                                   | 125                            | 0,2                           |
| 23022-10-09800300909 | 9    | Base / magnet 245013<br>Assembly / Clamping joint 244030<br>Fixing element / dial gauge holder 246018 | 0,00107                              | 17,2                                  | 52                                   | 125                            | 0,2                           |
| 23022-10-12800340404 | 12   | Base / magnet 245013<br>Assembly / Clamping joint 244030                                              | 0,00304                              | 84,3                                  | 252                                  | 274                            | 0,2                           |

## Overview of items

| Order No.            | Size | Component colour                                                                                      | Moment of inertia (gm <sup>2</sup> ) | Torsional stiffness static (Nm/wheel) | Torsional stiffness dynamic Nm/wheel | Spring stiffness radial (N/mm) | max. shaft offset radial (mm) |
|----------------------|------|-------------------------------------------------------------------------------------------------------|--------------------------------------|---------------------------------------|--------------------------------------|--------------------------------|-------------------------------|
|                      |      | Fixing element / dial gauge holder 246018                                                             |                                      |                                       |                                      |                                |                               |
| 23022-10-12800340606 | 12   | Base / magnet 245013<br>Assembly / Clamping joint 244030<br>Fixing element / dial gauge holder 246018 | 0,00304                              | 84,3                                  | 252                                  | 274                            | 0,2                           |
| 23022-10-12800340608 | 12   | Base / magnet 245013<br>Assembly / Clamping joint 244030<br>Fixing element / dial gauge holder 246018 | 0,00304                              | 84,3                                  | 252                                  | 274                            | 0,2                           |
| 23022-10-12800340610 | 12   | Base / magnet 245013<br>Assembly / Clamping joint 244030<br>Fixing element / dial gauge holder 246018 | 0,00304                              | 84,3                                  | 252                                  | 274                            | 0,2                           |
| 23022-10-12800340808 | 12   | Base / magnet 245013<br>Assembly / Clamping joint 244030<br>Fixing element / dial gauge holder 246018 | 0,00304                              | 84,3                                  | 252                                  | 274                            | 0,2                           |
| 23022-10-12800340810 | 12   | Base / magnet 245013<br>Assembly / Clamping joint 244030<br>Fixing element / dial gauge holder 246018 | 0,00304                              | 84,3                                  | 252                                  | 274                            | 0,2                           |
| 23022-10-12800341010 | 12   | Base / magnet 245013<br>Assembly / Clamping joint 244030<br>Fixing element / dial gauge holder 246018 | 0,00304                              | 84,3                                  | 252                                  | 274                            | 0,2                           |
| 23022-10-14800350404 | 14   | blue                                                                                                  | 0,00381                              | 60,2                                  | 180                                  | 153                            | 0,21                          |
| 23022-10-14800350808 | 14   | blue                                                                                                  | 0,00381                              | 60,2                                  | 180                                  | 153                            | 0,21                          |
| 23022-10-14800350810 | 14   | blue                                                                                                  | 0,00381                              | 60,2                                  | 180                                  | 153                            | 0,21                          |
| 23022-10-14800350812 | 14   | blue                                                                                                  | 0,00381                              | 60,2                                  | 180                                  | 153                            | 0,21                          |
| 23022-10-14800350814 | 14   | blue                                                                                                  | 0,00381                              | 60,2                                  | 180                                  | 153                            | 0,21                          |
| 23022-10-14800351010 | 14   | blue                                                                                                  | 0,00381                              | 60,2                                  | 180                                  | 153                            | 0,21                          |
| 23022-10-14800351012 | 14   | blue                                                                                                  | 0,00381                              | 60,2                                  | 180                                  | 153                            | 0,21                          |
| 23022-10-14800351014 | 14   | blue                                                                                                  | 0,00381                              | 60,2                                  | 180                                  | 153                            | 0,21                          |
| 23022-10-14800351212 | 14   | blue                                                                                                  | 0,00381                              | 60,2                                  | 180                                  | 153                            | 0,21                          |
| 23022-10-14800351214 | 14   | blue                                                                                                  | 0,00381                              | 60,2                                  | 180                                  | 153                            | 0,21                          |
| 23022-10-14800351414 | 14   | blue                                                                                                  | 0,00381                              | 60,2                                  | 180                                  | 153                            | 0,21                          |
| 23022-10-19800661010 | 19   | Base / magnet 245013<br>Assembly / Clamping joint 244030<br>Fixing element / dial gauge holder 246018 | 0,0404                               | 618                                   | 1065                                 | 582                            | 0,15                          |
| 23022-10-19800661212 | 19   | Base / magnet 245013<br>Assembly / Clamping joint 244030<br>Fixing element / dial gauge holder 246018 | 0,0404                               | 618                                   | 1065                                 | 582                            | 0,15                          |
| 23022-10-19800661214 | 19   | Base / magnet 245013<br>Assembly / Clamping joint 244030<br>Fixing element / dial gauge holder 246018 | 0,0404                               | 618                                   | 1065                                 | 582                            | 0,15                          |
| 23022-10-19800661215 | 19   | Base / magnet 245013<br>Assembly / Clamping joint 244030<br>Fixing element / dial gauge holder 246018 | 0,0404                               | 618                                   | 1065                                 | 582                            | 0,15                          |
| 23022-10-19800661216 | 19   | Base / magnet 245013<br>Assembly / Clamping joint 244030<br>Fixing element / dial gauge holder 246018 | 0,0404                               | 618                                   | 1065                                 | 582                            | 0,15                          |
| 23022-10-19800661414 | 19   | Base / magnet 245013<br>Assembly / Clamping joint 244030<br>Fixing element / dial gauge holder 246018 | 0,0404                               | 618                                   | 1065                                 | 582                            | 0,15                          |
| 23022-10-19800661415 | 19   | Base / magnet 245013<br>Assembly / Clamping joint 244030<br>Fixing element / dial gauge holder 246018 | 0,0404                               | 618                                   | 1065                                 | 582                            | 0,15                          |
| 23022-10-19800661416 | 19   | Base / magnet 245013<br>Assembly / Clamping joint 244030<br>Fixing element / dial gauge holder 246018 | 0,0404                               | 618                                   | 1065                                 | 582                            | 0,15                          |
| 23022-10-19800661515 | 19   | Base / magnet 245013<br>Assembly / Clamping joint 244030<br>Fixing element / dial gauge holder 246018 | 0,0404                               | 618                                   | 1065                                 | 582                            | 0,15                          |
| 23022-10-19800661516 | 19   | Base / magnet 245013<br>Assembly / Clamping joint 244030<br>Fixing element / dial gauge holder 246018 | 0,0404                               | 618                                   | 1065                                 | 582                            | 0,15                          |
| 23022-10-19800661616 | 19   | Base / magnet 245013<br>Assembly / Clamping joint 244030<br>Fixing element / dial gauge holder 246018 | 0,0404                               | 618                                   | 1065                                 | 582                            | 0,15                          |
| 23022-10-24800781515 | 24   | Base / magnet 245013<br>Assembly / Clamping joint 244030<br>Fixing element / dial gauge holder 246018 | 0,175                                | 860                                   | 1390                                 | 840                            | 0,2                           |
| 23022-10-24800781818 | 24   | Base / magnet 245013<br>Assembly / Clamping joint 244030<br>Fixing element / dial gauge holder 246018 | 0,175                                | 860                                   | 1390                                 | 840                            | 0,2                           |

## Overview of items

| Order No.            | Size | Component colour                                                                                      | Moment of inertia (gm <sup>2</sup> ) | Torsional stiffness static (Nm/wheel) | Torsional stiffness dynamic (Nm/wheel) | Spring stiffness radial (N/mm) | max. shaft offset radial (mm) |
|----------------------|------|-------------------------------------------------------------------------------------------------------|--------------------------------------|---------------------------------------|----------------------------------------|--------------------------------|-------------------------------|
| 23022-10-24800781819 | 24   | Base / magnet 245013<br>Assembly / Clamping joint 244030<br>Fixing element / dial gauge holder 246018 | 0,175                                | 860                                   | 1390                                   | 840                            | 0,2                           |
| 23022-10-24800781820 | 24   | Base / magnet 245013<br>Assembly / Clamping joint 244030<br>Fixing element / dial gauge holder 246018 | 0,175                                | 860                                   | 1390                                   | 840                            | 0,2                           |
| 23022-10-24800781825 | 24   | Base / magnet 245013<br>Assembly / Clamping joint 244030<br>Fixing element / dial gauge holder 246018 | 0,175                                | 860                                   | 1390                                   | 840                            | 0,2                           |
| 23022-10-24800781919 | 24   | Base / magnet 245013<br>Assembly / Clamping joint 244030<br>Fixing element / dial gauge holder 246018 | 0,175                                | 860                                   | 1390                                   | 840                            | 0,2                           |
| 23022-10-24800781920 | 24   | Base / magnet 245013<br>Assembly / Clamping joint 244030<br>Fixing element / dial gauge holder 246018 | 0,175                                | 860                                   | 1390                                   | 840                            | 0,2                           |
| 23022-10-24800781925 | 24   | Base / magnet 245013<br>Assembly / Clamping joint 244030<br>Fixing element / dial gauge holder 246018 | 0,175                                | 860                                   | 1390                                   | 840                            | 0,2                           |
| 23022-10-24800782020 | 24   | Base / magnet 245013<br>Assembly / Clamping joint 244030<br>Fixing element / dial gauge holder 246018 | 0,175                                | 860                                   | 1390                                   | 840                            | 0,2                           |
| 23022-10-24800782025 | 24   | Base / magnet 245013<br>Assembly / Clamping joint 244030<br>Fixing element / dial gauge holder 246018 | 0,175                                | 860                                   | 1390                                   | 840                            | 0,2                           |
| 23022-10-24800782525 | 24   | Base / magnet 245013<br>Assembly / Clamping joint 244030<br>Fixing element / dial gauge holder 246018 | 0,175                                | 860                                   | 1390                                   | 840                            | 0,2                           |
| 23022-10-28800901919 | 28   | Base / magnet 245013<br>Assembly / Clamping joint 244030<br>Fixing element / dial gauge holder 246018 | 0,377                                | 1370                                  | 2350                                   | 990                            | 0,2                           |
| 23022-10-28800902424 | 28   | Base / magnet 245013<br>Assembly / Clamping joint 244030<br>Fixing element / dial gauge holder 246018 | 0,377                                | 1370                                  | 2350                                   | 990                            | 0,2                           |
| 23022-10-28800902828 | 28   | Base / magnet 245013<br>Assembly / Clamping joint 244030<br>Fixing element / dial gauge holder 246018 | 0,377                                | 1370                                  | 2350                                   | 990                            | 0,2                           |
| 23022-10-28800903232 | 28   | Base / magnet 245013<br>Assembly / Clamping joint 244030<br>Fixing element / dial gauge holder 246018 | 0,377                                | 1370                                  | 2350                                   | 990                            | 0,2                           |
| 23022-10-05920150303 | 5    | Drive                                                                                                 | 0,000036                             | 5,16                                  | 16                                     | 154                            | 0,06                          |
| 23022-10-05920150304 | 5    | Drive                                                                                                 | 0,000036                             | 5,16                                  | 16                                     | 154                            | 0,06                          |
| 23022-10-05920150305 | 5    | Drive                                                                                                 | 0,000036                             | 5,16                                  | 16                                     | 154                            | 0,06                          |
| 23022-10-05920150404 | 5    | Drive                                                                                                 | 0,000036                             | 5,16                                  | 16                                     | 154                            | 0,06                          |
| 23022-10-05920150405 | 5    | Drive                                                                                                 | 0,000036                             | 5,16                                  | 16                                     | 154                            | 0,06                          |
| 23022-10-05920150505 | 5    | Drive                                                                                                 | 0,000036                             | 5,16                                  | 16                                     | 154                            | 0,06                          |
| 23022-10-07920220404 | 7    | Drive                                                                                                 | 0,000195                             | 14,3                                  | 43                                     | 219                            | 0,1                           |
| 23022-10-07920220405 | 7    | Drive                                                                                                 | 0,000195                             | 14,3                                  | 43                                     | 219                            | 0,1                           |
| 23022-10-07920220406 | 7    | Drive                                                                                                 | 0,000195                             | 14,3                                  | 43                                     | 219                            | 0,1                           |
| 23022-10-07920220505 | 7    | Drive                                                                                                 | 0,000195                             | 14,3                                  | 43                                     | 219                            | 0,1                           |
| 23022-10-07920220506 | 7    | Drive                                                                                                 | 0,000195                             | 14,3                                  | 43                                     | 219                            | 0,1                           |
| 23022-10-07920220606 | 7    | Drive                                                                                                 | 0,000195                             | 14,3                                  | 43                                     | 219                            | 0,1                           |
| 23022-10-09920300404 | 9    | Drive                                                                                                 | 0,00107                              | 31,5                                  | 95                                     | 292                            | 0,15                          |
| 23022-10-09920300606 | 9    | Drive                                                                                                 | 0,00107                              | 31,5                                  | 95                                     | 292                            | 0,15                          |
| 23022-10-09920300608 | 9    | Drive                                                                                                 | 0,00107                              | 31,5                                  | 95                                     | 292                            | 0,15                          |
| 23022-10-09920300609 | 9    | Drive                                                                                                 | 0,00107                              | 31,5                                  | 95                                     | 292                            | 0,15                          |
| 23022-10-09920300808 | 9    | Drive                                                                                                 | 0,00107                              | 31,5                                  | 95                                     | 292                            | 0,15                          |
| 23022-10-09920300809 | 9    | Drive                                                                                                 | 0,00107                              | 31,5                                  | 95                                     | 292                            | 0,15                          |
| 23022-10-09920300909 | 9    | Drive                                                                                                 | 0,00107                              | 31,5                                  | 95                                     | 292                            | 0,15                          |
| 23022-10-12920340404 | 12   | Drive                                                                                                 | 0,00304                              | 160,4                                 | 482                                    | 470                            | 0,14                          |
| 23022-10-12920340606 | 12   | Drive                                                                                                 | 0,00304                              | 160,4                                 | 482                                    | 470                            | 0,14                          |
| 23022-10-12920340608 | 12   | Drive                                                                                                 | 0,00304                              | 160,4                                 | 482                                    | 470                            | 0,14                          |
| 23022-10-12920340610 | 12   | Drive                                                                                                 | 0,00304                              | 160,4                                 | 482                                    | 470                            | 0,14                          |
| 23022-10-12920340808 | 12   | Drive                                                                                                 | 0,00304                              | 160,4                                 | 482                                    | 470                            | 0,14                          |
| 23022-10-12920340810 | 12   | Drive                                                                                                 | 0,00304                              | 160,4                                 | 482                                    | 470                            | 0,14                          |
| 23022-10-12920341010 | 12   | Drive                                                                                                 | 0,00304                              | 160,4                                 | 482                                    | 470                            | 0,14                          |
| 23022-10-14920350404 | 14   | yellow                                                                                                | 0,00381                              | 114,6                                 | 344                                    | 336                            | 0,15                          |
| 23022-10-14920350808 | 14   | yellow                                                                                                | 0,00381                              | 114,6                                 | 344                                    | 336                            | 0,15                          |

## Overview of items

| Order No.            | Size | Component colour | Moment of inertia (gm <sup>2</sup> ) | Torsional stiffness static (Nm/wheel) | Torsional stiffness dynamic (Nm/wheel) | Spring stiffness radial (N/mm) | max. shaft offset radial (mm) |
|----------------------|------|------------------|--------------------------------------|---------------------------------------|----------------------------------------|--------------------------------|-------------------------------|
| 23022-10-14920350810 | 14   | yellow           | 0,00381                              | 114,6                                 | 344                                    | 336                            | 0,15                          |
| 23022-10-14920350812 | 14   | yellow           | 0,00381                              | 114,6                                 | 344                                    | 336                            | 0,15                          |
| 23022-10-14920350814 | 14   | yellow           | 0,00381                              | 114,6                                 | 344                                    | 336                            | 0,15                          |
| 23022-10-14920351010 | 14   | yellow           | 0,00381                              | 114,6                                 | 344                                    | 336                            | 0,15                          |
| 23022-10-14920351012 | 14   | yellow           | 0,00381                              | 114,6                                 | 344                                    | 336                            | 0,15                          |
| 23022-10-14920351014 | 14   | yellow           | 0,00381                              | 114,6                                 | 344                                    | 336                            | 0,15                          |
| 23022-10-14920351212 | 14   | yellow           | 0,00381                              | 114,6                                 | 344                                    | 336                            | 0,15                          |
| 23022-10-14920351214 | 14   | yellow           | 0,00381                              | 114,6                                 | 344                                    | 336                            | 0,15                          |
| 23022-10-14920351414 | 14   | yellow           | 0,00381                              | 114,6                                 | 344                                    | 336                            | 0,15                          |
| 23022-10-19920661010 | 19   | Drive            | 0,0404                               | 1090                                  | 1815                                   | 1120                           | 0,1                           |
| 23022-10-19920661212 | 19   | Drive            | 0,0404                               | 1090                                  | 1815                                   | 1120                           | 0,1                           |
| 23022-10-19920661214 | 19   | Drive            | 0,0404                               | 1090                                  | 1815                                   | 1120                           | 0,1                           |
| 23022-10-19920661215 | 19   | Drive            | 0,0404                               | 1090                                  | 1815                                   | 1120                           | 0,1                           |
| 23022-10-19920661216 | 19   | Drive            | 0,0404                               | 1090                                  | 1815                                   | 1120                           | 0,1                           |
| 23022-10-19920661414 | 19   | Drive            | 0,0404                               | 1090                                  | 1815                                   | 1120                           | 0,1                           |
| 23022-10-19920661415 | 19   | Drive            | 0,0404                               | 1090                                  | 1815                                   | 1120                           | 0,1                           |
| 23022-10-19920661416 | 19   | Drive            | 0,0404                               | 1090                                  | 1815                                   | 1120                           | 0,1                           |
| 23022-10-19920661515 | 19   | Drive            | 0,0404                               | 1090                                  | 1815                                   | 1120                           | 0,1                           |
| 23022-10-19920661516 | 19   | Drive            | 0,0404                               | 1090                                  | 1815                                   | 1120                           | 0,1                           |
| 23022-10-19920661616 | 19   | Drive            | 0,0404                               | 1090                                  | 1815                                   | 1120                           | 0,1                           |
| 23022-10-24920781515 | 24   | Drive            | 0,175                                | 2300                                  | 5130                                   | 1900                           | 0,15                          |
| 23022-10-24920781818 | 24   | Drive            | 0,175                                | 2300                                  | 5130                                   | 1900                           | 0,15                          |
| 23022-10-24920781819 | 24   | Drive            | 0,175                                | 2300                                  | 5130                                   | 1900                           | 0,15                          |
| 23022-10-24920781820 | 24   | Drive            | 0,175                                | 2300                                  | 5130                                   | 1900                           | 0,15                          |
| 23022-10-24920781825 | 24   | Drive            | 0,175                                | 2300                                  | 5130                                   | 1900                           | 0,15                          |
| 23022-10-24920781919 | 24   | Drive            | 0,175                                | 2300                                  | 5130                                   | 1900                           | 0,15                          |
| 23022-10-24920781920 | 24   | Drive            | 0,175                                | 2300                                  | 5130                                   | 1900                           | 0,15                          |
| 23022-10-24920781925 | 24   | Drive            | 0,175                                | 2300                                  | 5130                                   | 1900                           | 0,15                          |
| 23022-10-24920782020 | 24   | Drive            | 0,175                                | 2300                                  | 5130                                   | 1900                           | 0,15                          |
| 23022-10-24920782025 | 24   | Drive            | 0,175                                | 2300                                  | 5130                                   | 1900                           | 0,15                          |
| 23022-10-24920782525 | 24   | Drive            | 0,175                                | 2300                                  | 5130                                   | 1900                           | 0,15                          |
| 23022-10-28920901919 | 28   | Drive            | 0,377                                | 4080                                  | 6745                                   | 1780                           | 0,15                          |
| 23022-10-28920902424 | 28   | Drive            | 0,377                                | 4080                                  | 6745                                   | 1780                           | 0,15                          |
| 23022-10-28920902828 | 28   | Drive            | 0,377                                | 4080                                  | 6745                                   | 1780                           | 0,15                          |
| 23022-10-28920903232 | 28   | Drive            | 0,377                                | 4080                                  | 6745                                   | 1780                           | 0,15                          |
| 23022-10-38921142020 | 38   | yellow           | 1,139                                | 6525                                  | 12000                                  | 2350                           | 0,17                          |
| 23022-10-38921142828 | 38   | yellow           | 1,139                                | 6525                                  | 12000                                  | 2350                           | 0,17                          |
| 23022-10-38921143232 | 38   | yellow           | 1,139                                | 6525                                  | 12000                                  | 2350                           | 0,17                          |
| 23022-10-38921143838 | 38   | yellow           | 1,139                                | 6525                                  | 12000                                  | 2350                           | 0,17                          |
| 23022-10-42921262525 | 42   | yellow           | 2,505                                | 10870                                 | 20500                                  | 4100                           | 0,19                          |
| 23022-10-42921263232 | 42   | yellow           | 2,505                                | 10870                                 | 20500                                  | 4100                           | 0,19                          |
| 23022-10-42921263838 | 42   | yellow           | 2,505                                | 10870                                 | 20500                                  | 4100                           | 0,19                          |
| 23022-10-42921264545 | 42   | yellow           | 2,505                                | 10870                                 | 20500                                  | 4100                           | 0,19                          |
| 23022-10-48921402525 | 48   | yellow           | 4,175                                | 12968                                 | 22800                                  | 4500                           | 0,23                          |
| 23022-10-48921403838 | 48   | yellow           | 4,175                                | 12968                                 | 22800                                  | 4500                           | 0,23                          |
| 23022-10-48921404545 | 48   | yellow           | 4,175                                | 12968                                 | 22800                                  | 4500                           | 0,23                          |
| 23022-10-48921405050 | 48   | yellow           | 4,175                                | 12968                                 | 22800                                  | 4500                           | 0,23                          |
| 23022-10-07980220404 | 7    | bright (black)   | 0,000195                             | 22,9                                  | 69                                     | 421                            | 0,1                           |
| 23022-10-07980220405 | 7    | bright (black)   | 0,000195                             | 22,9                                  | 69                                     | 421                            | 0,1                           |
| 23022-10-07980220406 | 7    | bright (black)   | 0,000195                             | 22,9                                  | 69                                     | 421                            | 0,1                           |
| 23022-10-07980220505 | 7    | bright (black)   | 0,000195                             | 22,9                                  | 69                                     | 421                            | 0,1                           |
| 23022-10-07980220506 | 7    | bright (black)   | 0,000195                             | 22,9                                  | 69                                     | 421                            | 0,1                           |
| 23022-10-07980220606 | 7    | bright (black)   | 0,000195                             | 22,9                                  | 69                                     | 421                            | 0,1                           |
| 23022-10-09980300404 | 9    | bright (black)   | 0,00107                              | 51,6                                  | 155                                    | 518                            | 0,1                           |
| 23022-10-09980300606 | 9    | bright (black)   | 0,00107                              | 51,6                                  | 155                                    | 518                            | 0,1                           |
| 23022-10-09980300608 | 9    | bright (black)   | 0,00107                              | 51,6                                  | 155                                    | 518                            | 0,1                           |
| 23022-10-09980300609 | 9    | bright (black)   | 0,00107                              | 51,6                                  | 155                                    | 518                            | 0,1                           |
| 23022-10-09980300808 | 9    | bright (black)   | 0,00107                              | 51,6                                  | 155                                    | 518                            | 0,1                           |
| 23022-10-09980300809 | 9    | bright (black)   | 0,00107                              | 51,6                                  | 155                                    | 518                            | 0,1                           |
| 23022-10-09980300909 | 9    | bright (black)   | 0,00107                              | 51,6                                  | 155                                    | 518                            | 0,1                           |
| 23022-10-12980340404 | 12   | bright (black)   | 0,00304                              | 240,7                                 | 718                                    | 846                            | 0,08                          |
| 23022-10-12980340606 | 12   | bright (black)   | 0,00304                              | 240,7                                 | 718                                    | 846                            | 0,08                          |
| 23022-10-12980340608 | 12   | bright (black)   | 0,00304                              | 240,7                                 | 718                                    | 846                            | 0,08                          |
| 23022-10-12980340610 | 12   | bright (black)   | 0,00304                              | 240,7                                 | 718                                    | 846                            | 0,08                          |

## Overview of items

| Order No.            | Size | Component colour | Moment of inertia (gm <sup>2</sup> ) | Torsional stiffness static (Nm/wheel) | Torsional stiffness dynamic (Nm/wheel) | Spring stiffness radial (N/mm) | max. shaft offset radial (mm) |
|----------------------|------|------------------|--------------------------------------|---------------------------------------|----------------------------------------|--------------------------------|-------------------------------|
| 23022-10-12980340808 | 12   | bright (black)   | 0,00304                              | 240,7                                 | 718                                    | 846                            | 0,08                          |
| 23022-10-12980340810 | 12   | bright (black)   | 0,00304                              | 240,7                                 | 718                                    | 846                            | 0,08                          |
| 23022-10-12980341010 | 12   | bright (black)   | 0,00304                              | 240,7                                 | 718                                    | 846                            | 0,08                          |
| 23022-10-14980350404 | 14   | red              | 0,00381                              | 171,9                                 | 513                                    | 654                            | 0,09                          |
| 23022-10-14980350808 | 14   | red              | 0,00381                              | 171,9                                 | 513                                    | 654                            | 0,09                          |
| 23022-10-14980350810 | 14   | red              | 0,00381                              | 171,9                                 | 513                                    | 654                            | 0,09                          |
| 23022-10-14980350812 | 14   | red              | 0,00381                              | 171,9                                 | 513                                    | 654                            | 0,09                          |
| 23022-10-14980350814 | 14   | red              | 0,00381                              | 171,9                                 | 513                                    | 654                            | 0,09                          |
| 23022-10-14980351010 | 14   | red              | 0,00381                              | 171,9                                 | 513                                    | 654                            | 0,09                          |
| 23022-10-14980351012 | 14   | red              | 0,00381                              | 171,9                                 | 513                                    | 654                            | 0,09                          |
| 23022-10-14980351014 | 14   | red              | 0,00381                              | 171,9                                 | 513                                    | 654                            | 0,09                          |
| 23022-10-14980351212 | 14   | red              | 0,00381                              | 171,9                                 | 513                                    | 654                            | 0,09                          |
| 23022-10-14980351214 | 14   | red              | 0,00381                              | 171,9                                 | 513                                    | 654                            | 0,09                          |
| 23022-10-14980351414 | 14   | red              | 0,00381                              | 171,9                                 | 513                                    | 654                            | 0,09                          |
| 23022-10-19980661010 | 19   | bright (black)   | 0,0404                               | 1512                                  | 2540                                   | 2010                           | 0,06                          |
| 23022-10-19980661212 | 19   | bright (black)   | 0,0404                               | 1512                                  | 2540                                   | 2010                           | 0,06                          |
| 23022-10-19980661214 | 19   | bright (black)   | 0,0404                               | 1512                                  | 2540                                   | 2010                           | 0,06                          |
| 23022-10-19980661215 | 19   | bright (black)   | 0,0404                               | 1512                                  | 2540                                   | 2010                           | 0,06                          |
| 23022-10-19980661216 | 19   | bright (black)   | 0,0404                               | 1512                                  | 2540                                   | 2010                           | 0,06                          |
| 23022-10-19980661414 | 19   | bright (black)   | 0,0404                               | 1512                                  | 2540                                   | 2010                           | 0,06                          |
| 23022-10-19980661415 | 19   | bright (black)   | 0,0404                               | 1512                                  | 2540                                   | 2010                           | 0,06                          |
| 23022-10-19980661416 | 19   | bright (black)   | 0,0404                               | 1512                                  | 2540                                   | 2010                           | 0,06                          |
| 23022-10-19980661515 | 19   | bright (black)   | 0,0404                               | 1512                                  | 2540                                   | 2010                           | 0,06                          |
| 23022-10-19980661516 | 19   | bright (black)   | 0,0404                               | 1512                                  | 2540                                   | 2010                           | 0,06                          |
| 23022-10-19980661616 | 19   | bright (black)   | 0,0404                               | 1512                                  | 2540                                   | 2010                           | 0,06                          |
| 23022-10-24980781515 | 24   | bright (black)   | 0,175                                | 3700                                  | 8130                                   | 2940                           | 0,11                          |
| 23022-10-24980781818 | 24   | bright (black)   | 0,175                                | 3700                                  | 8130                                   | 2940                           | 0,11                          |
| 23022-10-24980781819 | 24   | bright (black)   | 0,175                                | 3700                                  | 8130                                   | 2940                           | 0,11                          |
| 23022-10-24980781820 | 24   | bright (black)   | 0,175                                | 3700                                  | 8130                                   | 2940                           | 0,11                          |
| 23022-10-24980781825 | 24   | bright (black)   | 0,175                                | 3700                                  | 8130                                   | 2940                           | 0,11                          |
| 23022-10-24980781919 | 24   | bright (black)   | 0,175                                | 3700                                  | 8130                                   | 2940                           | 0,11                          |
| 23022-10-24980781920 | 24   | bright (black)   | 0,175                                | 3700                                  | 8130                                   | 2940                           | 0,11                          |
| 23022-10-24980781925 | 24   | bright (black)   | 0,175                                | 3700                                  | 8130                                   | 2940                           | 0,11                          |
| 23022-10-24980782020 | 24   | bright (black)   | 0,175                                | 3700                                  | 8130                                   | 2940                           | 0,11                          |
| 23022-10-24980782025 | 24   | bright (black)   | 0,175                                | 3700                                  | 8130                                   | 2940                           | 0,11                          |
| 23022-10-24980782525 | 24   | bright (black)   | 0,175                                | 3700                                  | 8130                                   | 2940                           | 0,11                          |
| 23022-10-28980901919 | 28   | bright (black)   | 0,377                                | 6410                                  | 9920                                   | 3200                           | 0,11                          |
| 23022-10-28980902424 | 28   | bright (black)   | 0,377                                | 6410                                  | 9920                                   | 3200                           | 0,11                          |
| 23022-10-28980902828 | 28   | bright (black)   | 0,377                                | 6410                                  | 9920                                   | 3200                           | 0,11                          |
| 23022-10-28980903232 | 28   | bright (black)   | 0,377                                | 6410                                  | 9920                                   | 3200                           | 0,11                          |
| 23022-10-38981142020 | 38   | red              | 1,139                                | 11800                                 | 21850                                  | 4400                           | 0,12                          |
| 23022-10-38981142828 | 38   | red              | 1,139                                | 11800                                 | 21850                                  | 4400                           | 0,12                          |
| 23022-10-38981143232 | 38   | red              | 1,139                                | 11800                                 | 21850                                  | 4400                           | 0,12                          |
| 23022-10-38981143838 | 38   | red              | 1,139                                | 11800                                 | 21850                                  | 4400                           | 0,12                          |
| 23022-10-42981262525 | 42   | red              | 2,505                                | 21594                                 | 37692                                  | 5940                           | 0,14                          |
| 23022-10-42981263232 | 42   | red              | 2,505                                | 21594                                 | 37692                                  | 5940                           | 0,14                          |
| 23022-10-42981263838 | 42   | red              | 2,505                                | 21594                                 | 37692                                  | 5940                           | 0,14                          |
| 23022-10-42981264545 | 42   | red              | 2,505                                | 21594                                 | 37692                                  | 5940                           | 0,14                          |
| 23022-10-48981402525 | 48   | red              | 4,175                                | 25759                                 | 49400                                  | 6820                           | 0,16                          |
| 23022-10-48981403838 | 48   | red              | 4,175                                | 25759                                 | 49400                                  | 6820                           | 0,16                          |
| 23022-10-48981404545 | 48   | red              | 4,175                                | 25759                                 | 49400                                  | 6820                           | 0,16                          |
| 23022-10-48981405050 | 48   | red              | 4,175                                | 25759                                 | 49400                                  | 6820                           | 0,16                          |

| Order No.            | max. shaft offset axial (mm) | max. angular offset (°) | Max. torque Nm | Coupling spider hardness | Nom. torque Nm |
|----------------------|------------------------------|-------------------------|----------------|--------------------------|----------------|
| 23022-10-07800220404 | +0,6 / -0,3                  | 1,1                     | 1,4            | 80 Shore A               | 0,7            |
| 23022-10-07800220405 | +0,6 / -0,3                  | 1,1                     | 1,4            | 80 Shore A               | 0,7            |
| 23022-10-07800220406 | +0,6 / -0,3                  | 1,1                     | 1,4            | 80 Shore A               | 0,7            |
| 23022-10-07800220505 | +0,6 / -0,3                  | 1,1                     | 1,4            | 80 Shore A               | 0,7            |
| 23022-10-07800220506 | +0,6 / -0,3                  | 1,1                     | 1,4            | 80 Shore A               | 0,7            |
| 23022-10-07800220606 | +0,6 / -0,3                  | 1,1                     | 1,4            | 80 Shore A               | 0,7            |
| 23022-10-09800300404 | +0,8 / -0,4                  | 1,1                     | 3,6            | 80 Shore A               | 1,8            |
| 23022-10-09800300606 | +0,8 / -0,4                  | 1,1                     | 3,6            | 80 Shore A               | 1,8            |

## Overview of items

| Order No.            | max. shaft offset<br>axial<br>(mm) | max.<br>angular offset<br>(°) | Max.<br>torque<br>Nm | Coupling spider<br>hardness | Nom. torque<br>Nm |
|----------------------|------------------------------------|-------------------------------|----------------------|-----------------------------|-------------------|
| 23022-10-09800300608 | +0,8 / -0,4                        | 1,1                           | 3,6                  | 80 Shore A                  | 1,8               |
| 23022-10-09800300609 | +0,8 / -0,4                        | 1,1                           | 3,6                  | 80 Shore A                  | 1,8               |
| 23022-10-09800300808 | +0,8 / -0,4                        | 1,1                           | 3,6                  | 80 Shore A                  | 1,8               |
| 23022-10-09800300809 | +0,8 / -0,4                        | 1,1                           | 3,6                  | 80 Shore A                  | 1,8               |
| 23022-10-09800300909 | +0,8 / -0,4                        | 1,1                           | 3,6                  | 80 Shore A                  | 1,8               |
| 23022-10-12800340404 | +0,9 / -0,4                        | 1,1                           | 6                    | 80 Shore A                  | 3                 |
| 23022-10-12800340606 | +0,9 / -0,4                        | 1,1                           | 6                    | 80 Shore A                  | 3                 |
| 23022-10-12800340608 | +0,9 / -0,4                        | 1,1                           | 6                    | 80 Shore A                  | 3                 |
| 23022-10-12800340610 | +0,9 / -0,4                        | 1,1                           | 6                    | 80 Shore A                  | 3                 |
| 23022-10-12800340808 | +0,9 / -0,4                        | 1,1                           | 6                    | 80 Shore A                  | 3                 |
| 23022-10-12800340810 | +0,9 / -0,4                        | 1,1                           | 6                    | 80 Shore A                  | 3                 |
| 23022-10-12800341010 | +0,9 / -0,4                        | 1,1                           | 6                    | 80 Shore A                  | 3                 |
| 23022-10-14800350404 | +1 / -0,5                          | 1,1                           | 8                    | 80 Shore A                  | 4                 |
| 23022-10-14800350808 | +1 / -0,5                          | 1,1                           | 8                    | 80 Shore A                  | 4                 |
| 23022-10-14800350810 | +1 / -0,5                          | 1,1                           | 8                    | 80 Shore A                  | 4                 |
| 23022-10-14800350812 | +1 / -0,5                          | 1,1                           | 8                    | 80 Shore A                  | 4                 |
| 23022-10-14800350814 | +1 / -0,5                          | 1,1                           | 8                    | 80 Shore A                  | 4                 |
| 23022-10-14800351010 | +1 / -0,5                          | 1,1                           | 8                    | 80 Shore A                  | 4                 |
| 23022-10-14800351012 | +1 / -0,5                          | 1,1                           | 8                    | 80 Shore A                  | 4                 |
| 23022-10-14800351014 | +1 / -0,5                          | 1,1                           | 8                    | 80 Shore A                  | 4                 |
| 23022-10-14800351212 | +1 / -0,5                          | 1,1                           | 8                    | 80 Shore A                  | 4                 |
| 23022-10-14800351214 | +1 / -0,5                          | 1,1                           | 8                    | 80 Shore A                  | 4                 |
| 23022-10-14800351414 | +1 / -0,5                          | 1,1                           | 8                    | 80 Shore A                  | 4                 |
| 23022-10-19800661010 | +1,2 / -0,5                        | 1,1                           | 12                   | 80 Shore A                  | 6                 |
| 23022-10-19800661212 | +1,2 / -0,5                        | 1,1                           | 12                   | 80 Shore A                  | 6                 |
| 23022-10-19800661214 | +1,2 / -0,5                        | 1,1                           | 12                   | 80 Shore A                  | 6                 |
| 23022-10-19800661215 | +1,2 / -0,5                        | 1,1                           | 12                   | 80 Shore A                  | 6                 |
| 23022-10-19800661216 | +1,2 / -0,5                        | 1,1                           | 12                   | 80 Shore A                  | 6                 |
| 23022-10-19800661414 | +1,2 / -0,5                        | 1,1                           | 12                   | 80 Shore A                  | 6                 |
| 23022-10-19800661415 | +1,2 / -0,5                        | 1,1                           | 12                   | 80 Shore A                  | 6                 |
| 23022-10-19800661416 | +1,2 / -0,5                        | 1,1                           | 12                   | 80 Shore A                  | 6                 |
| 23022-10-19800661515 | +1,2 / -0,5                        | 1,1                           | 12                   | 80 Shore A                  | 6                 |
| 23022-10-19800661516 | +1,2 / -0,5                        | 1,1                           | 12                   | 80 Shore A                  | 6                 |
| 23022-10-19800661616 | +1,2 / -0,5                        | 1,1                           | 12                   | 80 Shore A                  | 6                 |
| 23022-10-24800781515 | +1,4 / -0,5                        | 1                             | 34                   | 80 Shore A                  | 17                |
| 23022-10-24800781818 | +1,4 / -0,5                        | 1                             | 34                   | 80 Shore A                  | 17                |
| 23022-10-24800781819 | +1,4 / -0,5                        | 1                             | 34                   | 80 Shore A                  | 17                |
| 23022-10-24800781820 | +1,4 / -0,5                        | 1                             | 34                   | 80 Shore A                  | 17                |
| 23022-10-24800781825 | +1,4 / -0,5                        | 1                             | 34                   | 80 Shore A                  | 17                |
| 23022-10-24800781919 | +1,4 / -0,5                        | 1                             | 34                   | 80 Shore A                  | 17                |
| 23022-10-24800781920 | +1,4 / -0,5                        | 1                             | 34                   | 80 Shore A                  | 17                |
| 23022-10-24800781925 | +1,4 / -0,5                        | 1                             | 34                   | 80 Shore A                  | 17                |
| 23022-10-24800782020 | +1,4 / -0,5                        | 1                             | 34                   | 80 Shore A                  | 17                |
| 23022-10-24800782025 | +1,4 / -0,5                        | 1                             | 34                   | 80 Shore A                  | 17                |
| 23022-10-24800782525 | +1,4 / -0,5                        | 1                             | 34                   | 80 Shore A                  | 17                |
| 23022-10-28800901919 | +1,5 / -0,7                        | 1,3                           | 92                   | 80 Shore A                  | 46                |
| 23022-10-28800902424 | +1,5 / -0,7                        | 1,3                           | 92                   | 80 Shore A                  | 46                |
| 23022-10-28800902828 | +1,5 / -0,7                        | 1,3                           | 92                   | 80 Shore A                  | 46                |
| 23022-10-28800903232 | +1,5 / -0,7                        | 1,3                           | 92                   | 80 Shore A                  | 46                |
| 23022-10-05920150303 | +0,4 / -0,2                        | 1                             | 0,6                  | 92 Shore A                  | 0,5               |
| 23022-10-05920150304 | +0,4 / -0,2                        | 1                             | 0,6                  | 92 Shore A                  | 0,5               |
| 23022-10-05920150305 | +0,4 / -0,2                        | 1                             | 0,6                  | 92 Shore A                  | 0,5               |
| 23022-10-05920150404 | +0,4 / -0,2                        | 1                             | 0,6                  | 92 Shore A                  | 0,5               |
| 23022-10-05920150405 | +0,4 / -0,2                        | 1                             | 0,6                  | 92 Shore A                  | 0,5               |
| 23022-10-05920150505 | +0,4 / -0,2                        | 1                             | 0,6                  | 92 Shore A                  | 0,5               |
| 23022-10-07920220404 | +0,6 / -0,3                        | 1                             | 2,4                  | 92 Shore A                  | 1,2               |
| 23022-10-07920220405 | +0,6 / -0,3                        | 1                             | 2,4                  | 92 Shore A                  | 1,2               |
| 23022-10-07920220406 | +0,6 / -0,3                        | 1                             | 2,4                  | 92 Shore A                  | 1,2               |
| 23022-10-07920220505 | +0,6 / -0,3                        | 1                             | 2,4                  | 92 Shore A                  | 1,2               |
| 23022-10-07920220506 | +0,6 / -0,3                        | 1                             | 2,4                  | 92 Shore A                  | 1,2               |
| 23022-10-07920220606 | +0,6 / -0,3                        | 1                             | 2,4                  | 92 Shore A                  | 1,2               |
| 23022-10-09920300404 | +0,8 / -0,4                        | 1                             | 6                    | 92 Shore A                  | 3                 |
| 23022-10-09920300606 | +0,8 / -0,4                        | 1                             | 6                    | 92 Shore A                  | 3                 |
| 23022-10-09920300608 | +0,8 / -0,4                        | 1                             | 6                    | 92 Shore A                  | 3                 |

## Overview of items

| Order No.            | max. shaft offset<br>axial<br>(mm) | max.<br>angular offset<br>(°) | Max.<br>torque<br>Nm | Coupling spider<br>hardness | Nom. torque<br>Nm |
|----------------------|------------------------------------|-------------------------------|----------------------|-----------------------------|-------------------|
| 23022-10-09920300609 | +0,8 / -0,4                        | 1                             | 6                    | 92 Shore A                  | 3                 |
| 23022-10-09920300808 | +0,8 / -0,4                        | 1                             | 6                    | 92 Shore A                  | 3                 |
| 23022-10-09920300809 | +0,8 / -0,4                        | 1                             | 6                    | 92 Shore A                  | 3                 |
| 23022-10-09920300909 | +0,8 / -0,4                        | 1                             | 6                    | 92 Shore A                  | 3                 |
| 23022-10-12920340404 | +0,9 / -0,4                        | 1                             | 10                   | 92 Shore A                  | 5                 |
| 23022-10-12920340606 | +0,9 / -0,4                        | 1                             | 10                   | 92 Shore A                  | 5                 |
| 23022-10-12920340608 | +0,9 / -0,4                        | 1                             | 10                   | 92 Shore A                  | 5                 |
| 23022-10-12920340610 | +0,9 / -0,4                        | 1                             | 10                   | 92 Shore A                  | 5                 |
| 23022-10-12920340808 | +0,9 / -0,4                        | 1                             | 10                   | 92 Shore A                  | 5                 |
| 23022-10-12920340810 | +0,9 / -0,4                        | 1                             | 10                   | 92 Shore A                  | 5                 |
| 23022-10-12920341010 | +0,9 / -0,4                        | 1                             | 10                   | 92 Shore A                  | 5                 |
| 23022-10-14920350404 | +1 / -0,5                          | 1                             | 15                   | 92 Shore A                  | 7,5               |
| 23022-10-14920350808 | +1 / -0,5                          | 1                             | 15                   | 92 Shore A                  | 7,5               |
| 23022-10-14920350810 | +1 / -0,5                          | 1                             | 15                   | 92 Shore A                  | 7,5               |
| 23022-10-14920350812 | +1 / -0,5                          | 1                             | 15                   | 92 Shore A                  | 7,5               |
| 23022-10-14920350814 | +1 / -0,5                          | 1                             | 15                   | 92 Shore A                  | 7,5               |
| 23022-10-14920351010 | +1 / -0,5                          | 1                             | 15                   | 92 Shore A                  | 7,5               |
| 23022-10-14920351012 | +1 / -0,5                          | 1                             | 15                   | 92 Shore A                  | 7,5               |
| 23022-10-14920351014 | +1 / -0,5                          | 1                             | 15                   | 92 Shore A                  | 7,5               |
| 23022-10-14920351212 | +1 / -0,5                          | 1                             | 15                   | 92 Shore A                  | 7,5               |
| 23022-10-14920351214 | +1 / -0,5                          | 1                             | 15                   | 92 Shore A                  | 7,5               |
| 23022-10-14920351414 | +1 / -0,5                          | 1                             | 15                   | 92 Shore A                  | 7,5               |
| 23022-10-19920661010 | +1,2 / -0,5                        | 1                             | 24                   | 92 Shore A                  | 12                |
| 23022-10-19920661212 | +1,2 / -0,5                        | 1                             | 24                   | 92 Shore A                  | 12                |
| 23022-10-19920661214 | +1,2 / -0,5                        | 1                             | 24                   | 92 Shore A                  | 12                |
| 23022-10-19920661215 | +1,2 / -0,5                        | 1                             | 24                   | 92 Shore A                  | 12                |
| 23022-10-19920661216 | +1,2 / -0,5                        | 1                             | 24                   | 92 Shore A                  | 12                |
| 23022-10-19920661414 | +1,2 / -0,5                        | 1                             | 24                   | 92 Shore A                  | 12                |
| 23022-10-19920661415 | +1,2 / -0,5                        | 1                             | 24                   | 92 Shore A                  | 12                |
| 23022-10-19920661416 | +1,2 / -0,5                        | 1                             | 24                   | 92 Shore A                  | 12                |
| 23022-10-19920661515 | +1,2 / -0,5                        | 1                             | 24                   | 92 Shore A                  | 12                |
| 23022-10-19920661516 | +1,2 / -0,5                        | 1                             | 24                   | 92 Shore A                  | 12                |
| 23022-10-19920661616 | +1,2 / -0,5                        | 1                             | 24                   | 92 Shore A                  | 12                |
| 23022-10-24920781515 | +1,4 / -0,5                        | 1                             | 70                   | 92 Shore A                  | 35                |
| 23022-10-24920781818 | +1,4 / -0,5                        | 1                             | 70                   | 92 Shore A                  | 35                |
| 23022-10-24920781819 | +1,4 / -0,5                        | 1                             | 70                   | 92 Shore A                  | 35                |
| 23022-10-24920781820 | +1,4 / -0,5                        | 1                             | 70                   | 92 Shore A                  | 35                |
| 23022-10-24920781825 | +1,4 / -0,5                        | 1                             | 70                   | 92 Shore A                  | 35                |
| 23022-10-24920781919 | +1,4 / -0,5                        | 1                             | 70                   | 92 Shore A                  | 35                |
| 23022-10-24920781920 | +1,4 / -0,5                        | 1                             | 70                   | 92 Shore A                  | 35                |
| 23022-10-24920781925 | +1,4 / -0,5                        | 1                             | 70                   | 92 Shore A                  | 35                |
| 23022-10-24920782020 | +1,4 / -0,5                        | 1                             | 70                   | 92 Shore A                  | 35                |
| 23022-10-24920782025 | +1,4 / -0,5                        | 1                             | 70                   | 92 Shore A                  | 35                |
| 23022-10-24920782525 | +1,4 / -0,5                        | 1                             | 70                   | 92 Shore A                  | 35                |
| 23022-10-28920901919 | +1,5 / -0,7                        | 1                             | 190                  | 92 Shore A                  | 95                |
| 23022-10-28920902424 | +1,5 / -0,7                        | 1                             | 190                  | 92 Shore A                  | 95                |
| 23022-10-28920902828 | +1,5 / -0,7                        | 1                             | 190                  | 92 Shore A                  | 95                |
| 23022-10-28920903232 | +1,5 / -0,7                        | 1                             | 190                  | 92 Shore A                  | 95                |
| 23022-10-38921142020 | +1,8 / -0,7                        | 1                             | 380                  | 92 Shore A                  | 190               |
| 23022-10-38921142828 | +1,8 / -0,7                        | 1                             | 380                  | 92 Shore A                  | 190               |
| 23022-10-38921143232 | +1,8 / -0,7                        | 1                             | 380                  | 92 Shore A                  | 190               |
| 23022-10-38921143838 | +1,8 / -0,7                        | 1                             | 380                  | 92 Shore A                  | 190               |
| 23022-10-42921262525 | +2 / -1                            | 1                             | 830                  | 92 Shore A                  | 265               |
| 23022-10-42921263232 | +2 / -1                            | 1                             | 830                  | 92 Shore A                  | 265               |
| 23022-10-42921263838 | +2 / -1                            | 1                             | 830                  | 92 Shore A                  | 265               |
| 23022-10-42921264545 | +2 / -1                            | 1                             | 830                  | 92 Shore A                  | 265               |
| 23022-10-48921402525 | +2,1 / -1                          | 1                             | 620                  | 92 Shore A                  | 310               |
| 23022-10-48921403838 | +2,1 / -1                          | 1                             | 620                  | 92 Shore A                  | 310               |
| 23022-10-48921404545 | +2,1 / -1                          | 1                             | 620                  | 92 Shore A                  | 310               |
| 23022-10-48921405050 | +2,1 / -1                          | 1                             | 620                  | 92 Shore A                  | 310               |
| 23022-10-07980220404 | +0,6 / -0,3                        | 1                             | 4                    | 98 Shore A                  | 2                 |
| 23022-10-07980220405 | +0,6 / -0,3                        | 1                             | 4                    | 98 Shore A                  | 2                 |
| 23022-10-07980220406 | +0,6 / -0,3                        | 1                             | 4                    | 98 Shore A                  | 2                 |
| 23022-10-07980220505 | +0,6 / -0,3                        | 1                             | 4                    | 98 Shore A                  | 2                 |

## Overview of items

| Order No.            | max. shaft offset<br>axial<br>(mm) | max.<br>angular offset<br>(°) | Max.<br>torque<br>Nm | Coupling spider<br>hardness | Nom. torque<br>Nm |
|----------------------|------------------------------------|-------------------------------|----------------------|-----------------------------|-------------------|
| 23022-10-07980220506 | +0,6 / -0,3                        | 1                             | 4                    | 98 Shore A                  | 2                 |
| 23022-10-07980220606 | +0,6 / -0,3                        | 1                             | 4                    | 98 Shore A                  | 2                 |
| 23022-10-09980300404 | +0,8 / -0,4                        | 0,9                           | 10                   | 98 Shore A                  | 5                 |
| 23022-10-09980300606 | +0,8 / -0,4                        | 0,9                           | 10                   | 98 Shore A                  | 5                 |
| 23022-10-09980300608 | +0,8 / -0,4                        | 0,9                           | 10                   | 98 Shore A                  | 5                 |
| 23022-10-09980300609 | +0,8 / -0,4                        | 0,9                           | 10                   | 98 Shore A                  | 5                 |
| 23022-10-09980300808 | +0,8 / -0,4                        | 0,9                           | 10                   | 98 Shore A                  | 5                 |
| 23022-10-09980300809 | +0,8 / -0,4                        | 0,9                           | 10                   | 98 Shore A                  | 5                 |
| 23022-10-09980300909 | +0,8 / -0,4                        | 0,9                           | 10                   | 98 Shore A                  | 5                 |
| 23022-10-12980340404 | +0,9 / -0,4                        | 0,9                           | 18                   | 98 Shore A                  | 9                 |
| 23022-10-12980340606 | +0,9 / -0,4                        | 0,9                           | 18                   | 98 Shore A                  | 9                 |
| 23022-10-12980340608 | +0,9 / -0,4                        | 0,9                           | 18                   | 98 Shore A                  | 9                 |
| 23022-10-12980340610 | +0,9 / -0,4                        | 0,9                           | 18                   | 98 Shore A                  | 9                 |
| 23022-10-12980340808 | +0,9 / -0,4                        | 0,9                           | 18                   | 98 Shore A                  | 9                 |
| 23022-10-12980340810 | +0,9 / -0,4                        | 0,9                           | 18                   | 98 Shore A                  | 9                 |
| 23022-10-12980341010 | +0,9 / -0,4                        | 0,9                           | 18                   | 98 Shore A                  | 9                 |
| 23022-10-14980350404 | +1 / -0,5                          | 0,9                           | 25                   | 98 Shore A                  | 12,5              |
| 23022-10-14980350808 | +1 / -0,5                          | 0,9                           | 25                   | 98 Shore A                  | 12,5              |
| 23022-10-14980350810 | +1 / -0,5                          | 0,9                           | 25                   | 98 Shore A                  | 12,5              |
| 23022-10-14980350812 | +1 / -0,5                          | 0,9                           | 25                   | 98 Shore A                  | 12,5              |
| 23022-10-14980350814 | +1 / -0,5                          | 0,9                           | 25                   | 98 Shore A                  | 12,5              |
| 23022-10-14980351010 | +1 / -0,5                          | 0,9                           | 25                   | 98 Shore A                  | 12,5              |
| 23022-10-14980351012 | +1 / -0,5                          | 0,9                           | 25                   | 98 Shore A                  | 12,5              |
| 23022-10-14980351014 | +1 / -0,5                          | 0,9                           | 25                   | 98 Shore A                  | 12,5              |
| 23022-10-14980351212 | +1 / -0,5                          | 0,9                           | 25                   | 98 Shore A                  | 12,5              |
| 23022-10-14980351214 | +1 / -0,5                          | 0,9                           | 25                   | 98 Shore A                  | 12,5              |
| 23022-10-14980351414 | +1 / -0,5                          | 0,9                           | 25                   | 98 Shore A                  | 12,5              |
| 23022-10-19980661010 | +1,2 / -0,5                        | 0,9                           | 42                   | 98 Shore A                  | 21                |
| 23022-10-19980661212 | +1,2 / -0,5                        | 0,9                           | 42                   | 98 Shore A                  | 21                |
| 23022-10-19980661214 | +1,2 / -0,5                        | 0,9                           | 42                   | 98 Shore A                  | 21                |
| 23022-10-19980661215 | +1,2 / -0,5                        | 0,9                           | 42                   | 98 Shore A                  | 21                |
| 23022-10-19980661216 | +1,2 / -0,5                        | 0,9                           | 42                   | 98 Shore A                  | 21                |
| 23022-10-19980661414 | +1,2 / -0,5                        | 0,9                           | 42                   | 98 Shore A                  | 21                |
| 23022-10-19980661415 | +1,2 / -0,5                        | 0,9                           | 42                   | 98 Shore A                  | 21                |
| 23022-10-19980661416 | +1,2 / -0,5                        | 0,9                           | 42                   | 98 Shore A                  | 21                |
| 23022-10-19980661515 | +1,2 / -0,5                        | 0,9                           | 42                   | 98 Shore A                  | 21                |
| 23022-10-19980661516 | +1,2 / -0,5                        | 0,9                           | 42                   | 98 Shore A                  | 21                |
| 23022-10-19980661616 | +1,2 / -0,5                        | 0,9                           | 42                   | 98 Shore A                  | 21                |
| 23022-10-24980781515 | +1,4 / -0,5                        | 0,9                           | 120                  | 98 Shore A                  | 60                |
| 23022-10-24980781818 | +1,4 / -0,5                        | 0,9                           | 120                  | 98 Shore A                  | 60                |
| 23022-10-24980781819 | +1,4 / -0,5                        | 0,9                           | 120                  | 98 Shore A                  | 60                |
| 23022-10-24980781820 | +1,4 / -0,5                        | 0,9                           | 120                  | 98 Shore A                  | 60                |
| 23022-10-24980781825 | +1,4 / -0,5                        | 0,9                           | 120                  | 98 Shore A                  | 60                |
| 23022-10-24980781919 | +1,4 / -0,5                        | 0,9                           | 120                  | 98 Shore A                  | 60                |
| 23022-10-24980781920 | +1,4 / -0,5                        | 0,9                           | 120                  | 98 Shore A                  | 60                |
| 23022-10-24980781925 | +1,4 / -0,5                        | 0,9                           | 120                  | 98 Shore A                  | 60                |
| 23022-10-24980782020 | +1,4 / -0,5                        | 0,9                           | 120                  | 98 Shore A                  | 60                |
| 23022-10-24980782025 | +1,4 / -0,5                        | 0,9                           | 120                  | 98 Shore A                  | 60                |
| 23022-10-24980782525 | +1,4 / -0,5                        | 0,9                           | 120                  | 98 Shore A                  | 60                |
| 23022-10-28980901919 | +1,5 / -0,7                        | 0,9                           | 320                  | 98 Shore A                  | 160               |
| 23022-10-28980902424 | +1,5 / -0,7                        | 0,9                           | 320                  | 98 Shore A                  | 160               |
| 23022-10-28980902828 | +1,5 / -0,7                        | 0,9                           | 320                  | 98 Shore A                  | 160               |
| 23022-10-28980903232 | +1,5 / -0,7                        | 0,9                           | 320                  | 98 Shore A                  | 160               |
| 23022-10-38981142020 | +1,8 / -0,7                        | 0,9                           | 650                  | 98 Shore A                  | 325               |
| 23022-10-38981142828 | +1,8 / -0,7                        | 0,9                           | 650                  | 98 Shore A                  | 325               |
| 23022-10-38981143232 | +1,8 / -0,7                        | 0,9                           | 650                  | 98 Shore A                  | 325               |
| 23022-10-38981143838 | +1,8 / -0,7                        | 0,9                           | 650                  | 98 Shore A                  | 325               |
| 23022-10-42981262525 | +2 / -1                            | 0,9                           | 900                  | 98 Shore A                  | 450               |
| 23022-10-42981263232 | +2 / -1                            | 0,9                           | 900                  | 98 Shore A                  | 450               |
| 23022-10-42981263838 | +2 / -1                            | 0,9                           | 900                  | 98 Shore A                  | 450               |
| 23022-10-42981264545 | +2 / -1                            | 0,9                           | 900                  | 98 Shore A                  | 450               |
| 23022-10-48981402525 | -2,1 / -1                          | 0,9                           | 1050                 | 98 Shore A                  | 525               |
| 23022-10-48981403838 | -2,1 / -1                          | 0,9                           | 1050                 | 98 Shore A                  | 525               |
| 23022-10-48981404545 | -2,1 / -1                          | 0,9                           | 1050                 | 98 Shore A                  | 525               |

## Overview of items

| Order No.            | max. shaft offset<br>axial<br>(mm) | max.<br>angular offset<br>(°) | Max.<br>torque<br>Nm | Coupling spider<br>hardness | Nom. torque<br>Nm |
|----------------------|------------------------------------|-------------------------------|----------------------|-----------------------------|-------------------|
| 23022-10-48981405050 | -2,1 / -1                          | 0,9                           | 1050                 | 98 Shore A                  | 525               |

| Order No.            | max.<br>rpm | C<br>(ISO 4029) | D1<br>(H7) | D2<br>(H7) | D1/D2<br>min. | D1/D2<br>max. | D4 | L  | L1 | L2 | L3  | R    | Tightening<br>torque of<br>screws Nm |
|----------------------|-------------|-----------------|------------|------------|---------------|---------------|----|----|----|----|-----|------|--------------------------------------|
| 23022-10-07800220404 | 27000       | M2              | 4          | 4          | 4             | 7             | 14 | 22 | 7  | 8  | 3,5 | 15   | 0,43                                 |
| 23022-10-07800220405 | 27000       | M2              | 4          | 5          | 4             | 7             | 14 | 22 | 7  | 8  | 3,5 | 15   | 0,43                                 |
| 23022-10-07800220406 | 27000       | M2              | 4          | 6          | 4             | 7             | 14 | 22 | 7  | 8  | 3,5 | 15   | 0,43                                 |
| 23022-10-07800220505 | 27000       | M2              | 5          | 5          | 4             | 7             | 14 | 22 | 7  | 8  | 3,5 | 15   | 0,43                                 |
| 23022-10-07800220506 | 27000       | M2              | 5          | 6          | 4             | 7             | 14 | 22 | 7  | 8  | 3,5 | 15   | 0,43                                 |
| 23022-10-07800220606 | 27000       | M2              | 6          | 6          | 4             | 7             | 14 | 22 | 7  | 8  | 3,5 | 15   | 0,43                                 |
| 23022-10-09800300404 | 19000       | M2,5            | 4          | 4          | 4             | 11            | 20 | 30 | 10 | 10 | 5   | 23,4 | 0,85                                 |
| 23022-10-09800300606 | 19000       | M2,5            | 6          | 6          | 4             | 11            | 20 | 30 | 10 | 10 | 5   | 23,4 | 0,85                                 |
| 23022-10-09800300608 | 19000       | M2,5            | 6          | 8          | 4             | 11            | 20 | 30 | 10 | 10 | 5   | 23,4 | 0,85                                 |
| 23022-10-09800300609 | 19000       | M2,5            | 6          | 9          | 4             | 11            | 20 | 30 | 10 | 10 | 5   | 23,4 | 0,85                                 |
| 23022-10-09800300808 | 19000       | M2,5            | 8          | 8          | 4             | 11            | 20 | 30 | 10 | 10 | 5   | 23,4 | 0,85                                 |
| 23022-10-09800300809 | 19000       | M2,5            | 8          | 9          | 4             | 11            | 20 | 30 | 10 | 10 | 5   | 23,4 | 0,85                                 |
| 23022-10-09800300909 | 19000       | M2,5            | 9          | 9          | 4             | 11            | 20 | 30 | 10 | 10 | 5   | 23,4 | 0,85                                 |
| 23022-10-12800340404 | 16000       | M3              | 4          | 4          | 4             | 12            | 25 | 34 | 11 | 12 | 5   | 27,2 | 2                                    |
| 23022-10-12800340606 | 16000       | M3              | 6          | 6          | 4             | 12            | 25 | 34 | 11 | 12 | 5   | 27,2 | 2                                    |
| 23022-10-12800340608 | 16000       | M3              | 6          | 8          | 4             | 12            | 25 | 34 | 11 | 12 | 5   | 27,2 | 2                                    |
| 23022-10-12800340610 | 16000       | M3              | 6          | 10         | 4             | 12            | 25 | 34 | 11 | 12 | 5   | 27,2 | 2                                    |
| 23022-10-12800340808 | 16000       | M3              | 8          | 8          | 4             | 12            | 25 | 34 | 11 | 12 | 5   | 27,2 | 2                                    |
| 23022-10-12800340810 | 16000       | M3              | 8          | 10         | 4             | 12            | 25 | 34 | 11 | 12 | 5   | 27,2 | 2                                    |
| 23022-10-12800341010 | 16000       | M3              | 10         | 10         | 4             | 12            | 25 | 34 | 11 | 12 | 5   | 27,2 | 2                                    |
| 23022-10-14800350404 | 13000       | M3              | 4          | 4          | 4             | 16            | 30 | 35 | 11 | 13 | 5   | 32,2 | 2                                    |
| 23022-10-14800350808 | 13000       | M3              | 8          | 8          | 4             | 16            | 30 | 35 | 11 | 13 | 5   | 32,2 | 2                                    |
| 23022-10-14800350810 | 13000       | M3              | 8          | 10         | 4             | 16            | 30 | 35 | 11 | 13 | 5   | 32,2 | 2                                    |
| 23022-10-14800350812 | 13000       | M3              | 8          | 12         | 4             | 16            | 30 | 35 | 11 | 13 | 5   | 32,2 | 2                                    |
| 23022-10-14800350814 | 13000       | M3              | 8          | 14         | 4             | 16            | 30 | 35 | 11 | 13 | 5   | 32,2 | 2                                    |
| 23022-10-14800351010 | 13000       | M3              | 10         | 10         | 4             | 16            | 30 | 35 | 11 | 13 | 5   | 32,2 | 2                                    |
| 23022-10-14800351012 | 13000       | M3              | 10         | 12         | 4             | 16            | 30 | 35 | 11 | 13 | 5   | 32,2 | 2                                    |
| 23022-10-14800351014 | 13000       | M3              | 10         | 14         | 4             | 16            | 30 | 35 | 11 | 13 | 5   | 32,2 | 2                                    |
| 23022-10-14800351212 | 13000       | M3              | 12         | 12         | 4             | 16            | 30 | 35 | 11 | 13 | 5   | 32,2 | 2                                    |
| 23022-10-14800351214 | 13000       | M3              | 12         | 14         | 4             | 16            | 30 | 35 | 11 | 13 | 5   | 32,2 | 2                                    |
| 23022-10-14800351414 | 13000       | M3              | 14         | 14         | 4             | 16            | 30 | 35 | 11 | 13 | 5   | 32,2 | 2                                    |
| 23022-10-19800661010 | 10000       | M6              | 10         | 10         | 10            | 22            | 40 | 66 | 25 | 16 | 12  | 47   | 15                                   |
| 23022-10-19800661212 | 10000       | M6              | 12         | 12         | 10            | 22            | 40 | 66 | 25 | 16 | 12  | 47   | 15                                   |
| 23022-10-19800661214 | 10000       | M6              | 12         | 14         | 10            | 22            | 40 | 66 | 25 | 16 | 12  | 47   | 15                                   |
| 23022-10-19800661215 | 10000       | M6              | 12         | 15         | 10            | 22            | 40 | 66 | 25 | 16 | 12  | 47   | 15                                   |
| 23022-10-19800661216 | 10000       | M6              | 12         | 16         | 10            | 22            | 40 | 66 | 25 | 16 | 12  | 47   | 15                                   |
| 23022-10-19800661414 | 10000       | M6              | 14         | 14         | 10            | 22            | 40 | 66 | 25 | 16 | 12  | 47   | 15                                   |
| 23022-10-19800661415 | 10000       | M6              | 14         | 15         | 10            | 22            | 40 | 66 | 25 | 16 | 12  | 47   | 15                                   |
| 23022-10-19800661416 | 10000       | M6              | 14         | 16         | 10            | 22            | 40 | 66 | 25 | 16 | 12  | 47   | 15                                   |
| 23022-10-19800661515 | 10000       | M6              | 15         | 15         | 10            | 22            | 40 | 66 | 25 | 16 | 12  | 47   | 15                                   |
| 23022-10-19800661516 | 10000       | M6              | 15         | 16         | 10            | 22            | 40 | 66 | 25 | 16 | 12  | 47   | 15                                   |
| 23022-10-19800661616 | 10000       | M6              | 16         | 16         | 10            | 22            | 40 | 66 | 25 | 16 | 12  | 47   | 15                                   |
| 23022-10-24800781515 | 7000        | M6              | 15         | 15         | 15            | 32            | 55 | 78 | 30 | 18 | 12  | 56,4 | 15                                   |
| 23022-10-24800781818 | 7000        | M6              | 18         | 18         | 15            | 32            | 55 | 78 | 30 | 18 | 12  | 56,4 | 15                                   |
| 23022-10-24800781819 | 7000        | M6              | 18         | 19         | 15            | 32            | 55 | 78 | 30 | 18 | 12  | 56,4 | 15                                   |
| 23022-10-24800781820 | 7000        | M6              | 18         | 20         | 15            | 32            | 55 | 78 | 30 | 18 | 12  | 56,4 | 15                                   |
| 23022-10-24800781825 | 7000        | M6              | 18         | 25         | 15            | 32            | 55 | 78 | 30 | 18 | 12  | 56,4 | 15                                   |
| 23022-10-24800781919 | 7000        | M6              | 19         | 19         | 15            | 32            | 55 | 78 | 30 | 18 | 12  | 56,4 | 15                                   |
| 23022-10-24800781920 | 7000        | M6              | 19         | 20         | 15            | 32            | 55 | 78 | 30 | 18 | 12  | 56,4 | 15                                   |
| 23022-10-24800781925 | 7000        | M6              | 19         | 25         | 15            | 32            | 55 | 78 | 30 | 18 | 12  | 56,4 | 15                                   |
| 23022-10-24800782020 | 7000        | M6              | 20         | 20         | 15            | 32            | 55 | 78 | 30 | 18 | 12  | 56,4 | 15                                   |
| 23022-10-24800782025 | 7000        | M6              | 20         | 25         | 15            | 32            | 55 | 78 | 30 | 18 | 12  | 56,4 | 15                                   |
| 23022-10-24800782525 | 7000        | M6              | 25         | 25         | 15            | 32            | 55 | 78 | 30 | 18 | 12  | 56,4 | 15                                   |
| 23022-10-28800901919 | 6000        | M8              | 19         | 19         | 19            | 37            | 65 | 90 | 35 | 20 | 15  | 72,6 | 40                                   |
| 23022-10-28800902424 | 6000        | M8              | 24         | 24         | 19            | 37            | 65 | 90 | 35 | 20 | 15  | 72,6 | 40                                   |
| 23022-10-28800902828 | 6000        | M8              | 28         | 28         | 19            | 37            | 65 | 90 | 35 | 20 | 15  | 72,6 | 40                                   |
| 23022-10-28800903232 | 6000        | M8              | 32         | 32         | 19            | 37            | 65 | 90 | 35 | 20 | 15  | 72,6 | 40                                   |
| 23022-10-05920150303 | 38000       | M1,6            | 3          | 3          | 2             | 5             | 10 | 15 | 5  | 5  | 2,5 | 11,4 | 0,25                                 |
| 23022-10-05920150304 | 38000       | M1,6            | 3          | 4          | 2             | 5             | 10 | 15 | 5  | 5  | 2,5 | 11,4 | 0,25                                 |

## Overview of items

| Order No.            | max.<br>rpm | C<br>(ISO 4029) | D1<br>(H7) | D2<br>(H7) | D1/D2<br>min. | D1/D2<br>max. | D4 | L   | L1 | L2 | L3  | R    | Tightening<br>torque of<br>screws Nm |
|----------------------|-------------|-----------------|------------|------------|---------------|---------------|----|-----|----|----|-----|------|--------------------------------------|
| 23022-10-05920150305 | 38000       | M1,6            | 3          | 5          | 2             | 5             | 10 | 15  | 5  | 5  | 2,5 | 11,4 | 0,25                                 |
| 23022-10-05920150404 | 38000       | M1,6            | 4          | 4          | 2             | 5             | 10 | 15  | 5  | 5  | 2,5 | 11,4 | 0,25                                 |
| 23022-10-05920150405 | 38000       | M1,6            | 4          | 5          | 2             | 5             | 10 | 15  | 5  | 5  | 2,5 | 11,4 | 0,25                                 |
| 23022-10-05920150505 | 38000       | M1,6            | 5          | 5          | 2             | 5             | 10 | 15  | 5  | 5  | 2,5 | 11,4 | 0,25                                 |
| 23022-10-07920220404 | 27000       | M2              | 4          | 4          | 4             | 7             | 14 | 22  | 7  | 8  | 3,5 | 15   | 0,43                                 |
| 23022-10-07920220405 | 27000       | M2              | 4          | 5          | 4             | 7             | 14 | 22  | 7  | 8  | 3,5 | 15   | 0,43                                 |
| 23022-10-07920220406 | 27000       | M2              | 4          | 6          | 4             | 7             | 14 | 22  | 7  | 8  | 3,5 | 15   | 0,43                                 |
| 23022-10-07920220505 | 27000       | M2              | 5          | 5          | 4             | 7             | 14 | 22  | 7  | 8  | 3,5 | 15   | 0,43                                 |
| 23022-10-07920220506 | 27000       | M2              | 5          | 6          | 4             | 7             | 14 | 22  | 7  | 8  | 3,5 | 15   | 0,43                                 |
| 23022-10-07920220606 | 27000       | M2              | 6          | 6          | 4             | 7             | 14 | 22  | 7  | 8  | 3,5 | 15   | 0,43                                 |
| 23022-10-09920300404 | 19000       | M2,5            | 4          | 4          | 4             | 11            | 20 | 30  | 10 | 10 | 5   | 23,4 | 0,85                                 |
| 23022-10-09920300606 | 19000       | M2,5            | 6          | 6          | 4             | 11            | 20 | 30  | 10 | 10 | 5   | 23,4 | 0,85                                 |
| 23022-10-09920300608 | 19000       | M2,5            | 6          | 8          | 4             | 11            | 20 | 30  | 10 | 10 | 5   | 23,4 | 0,85                                 |
| 23022-10-09920300609 | 19000       | M2,5            | 6          | 9          | 4             | 11            | 20 | 30  | 10 | 10 | 5   | 23,4 | 0,85                                 |
| 23022-10-09920300808 | 19000       | M2,5            | 8          | 8          | 4             | 11            | 20 | 30  | 10 | 10 | 5   | 23,4 | 0,85                                 |
| 23022-10-09920300809 | 19000       | M2,5            | 8          | 9          | 4             | 11            | 20 | 30  | 10 | 10 | 5   | 23,4 | 0,85                                 |
| 23022-10-09920300909 | 19000       | M2,5            | 9          | 9          | 4             | 11            | 20 | 30  | 10 | 10 | 5   | 23,4 | 0,85                                 |
| 23022-10-12920340404 | 16000       | M3              | 4          | 4          | 4             | 12            | 25 | 34  | 11 | 12 | 5   | 27,2 | 2                                    |
| 23022-10-12920340606 | 16000       | M3              | 6          | 6          | 4             | 12            | 25 | 34  | 11 | 12 | 5   | 27,2 | 2                                    |
| 23022-10-12920340608 | 16000       | M3              | 6          | 8          | 4             | 12            | 25 | 34  | 11 | 12 | 5   | 27,2 | 2                                    |
| 23022-10-12920340610 | 16000       | M3              | 6          | 10         | 4             | 12            | 25 | 34  | 11 | 12 | 5   | 27,2 | 2                                    |
| 23022-10-12920340808 | 16000       | M3              | 8          | 8          | 4             | 12            | 25 | 34  | 11 | 12 | 5   | 27,2 | 2                                    |
| 23022-10-12920340810 | 16000       | M3              | 8          | 10         | 4             | 12            | 25 | 34  | 11 | 12 | 5   | 27,2 | 2                                    |
| 23022-10-12920341010 | 16000       | M3              | 10         | 10         | 4             | 12            | 25 | 34  | 11 | 12 | 5   | 27,2 | 2                                    |
| 23022-10-14920350404 | 13000       | M3              | 4          | 4          | 4             | 16            | 30 | 35  | 11 | 13 | 5   | 32,2 | 2                                    |
| 23022-10-14920350808 | 13000       | M3              | 8          | 8          | 4             | 16            | 30 | 35  | 11 | 13 | 5   | 32,2 | 2                                    |
| 23022-10-14920350810 | 13000       | M3              | 8          | 10         | 4             | 16            | 30 | 35  | 11 | 13 | 5   | 32,2 | 2                                    |
| 23022-10-14920350812 | 13000       | M3              | 8          | 12         | 4             | 16            | 30 | 35  | 11 | 13 | 5   | 32,2 | 2                                    |
| 23022-10-14920350814 | 13000       | M3              | 8          | 14         | 4             | 16            | 30 | 35  | 11 | 13 | 5   | 32,2 | 2                                    |
| 23022-10-14920351010 | 13000       | M3              | 10         | 10         | 4             | 16            | 30 | 35  | 11 | 13 | 5   | 32,2 | 2                                    |
| 23022-10-14920351012 | 13000       | M3              | 10         | 12         | 4             | 16            | 30 | 35  | 11 | 13 | 5   | 32,2 | 2                                    |
| 23022-10-14920351014 | 13000       | M3              | 10         | 14         | 4             | 16            | 30 | 35  | 11 | 13 | 5   | 32,2 | 2                                    |
| 23022-10-14920351212 | 13000       | M3              | 12         | 12         | 4             | 16            | 30 | 35  | 11 | 13 | 5   | 32,2 | 2                                    |
| 23022-10-14920351214 | 13000       | M3              | 12         | 14         | 4             | 16            | 30 | 35  | 11 | 13 | 5   | 32,2 | 2                                    |
| 23022-10-14920351414 | 13000       | M3              | 14         | 14         | 4             | 16            | 30 | 35  | 11 | 13 | 5   | 32,2 | 2                                    |
| 23022-10-19920661010 | 10000       | M6              | 10         | 10         | 10            | 22            | 40 | 66  | 25 | 16 | 12  | 47   | 15                                   |
| 23022-10-19920661212 | 10000       | M6              | 12         | 12         | 10            | 22            | 40 | 66  | 25 | 16 | 12  | 47   | 15                                   |
| 23022-10-19920661214 | 10000       | M6              | 12         | 14         | 10            | 22            | 40 | 66  | 25 | 16 | 12  | 47   | 15                                   |
| 23022-10-19920661215 | 10000       | M6              | 12         | 15         | 10            | 22            | 40 | 66  | 25 | 16 | 12  | 47   | 15                                   |
| 23022-10-19920661216 | 10000       | M6              | 12         | 16         | 10            | 22            | 40 | 66  | 25 | 16 | 12  | 47   | 15                                   |
| 23022-10-19920661414 | 10000       | M6              | 14         | 14         | 10            | 22            | 40 | 66  | 25 | 16 | 12  | 47   | 15                                   |
| 23022-10-19920661415 | 10000       | M6              | 14         | 15         | 10            | 22            | 40 | 66  | 25 | 16 | 12  | 47   | 15                                   |
| 23022-10-19920661416 | 10000       | M6              | 14         | 16         | 10            | 22            | 40 | 66  | 25 | 16 | 12  | 47   | 15                                   |
| 23022-10-19920661515 | 10000       | M6              | 15         | 15         | 10            | 22            | 40 | 66  | 25 | 16 | 12  | 47   | 15                                   |
| 23022-10-19920661516 | 10000       | M6              | 15         | 16         | 10            | 22            | 40 | 66  | 25 | 16 | 12  | 47   | 15                                   |
| 23022-10-19920661616 | 10000       | M6              | 16         | 16         | 10            | 22            | 40 | 66  | 25 | 16 | 12  | 47   | 15                                   |
| 23022-10-24920781515 | 7000        | M6              | 15         | 15         | 15            | 32            | 55 | 78  | 30 | 18 | 12  | 56,4 | 15                                   |
| 23022-10-24920781818 | 7000        | M6              | 18         | 18         | 15            | 32            | 55 | 78  | 30 | 18 | 12  | 56,4 | 15                                   |
| 23022-10-24920781819 | 7000        | M6              | 18         | 19         | 15            | 32            | 55 | 78  | 30 | 18 | 12  | 56,4 | 15                                   |
| 23022-10-24920781820 | 7000        | M6              | 18         | 20         | 15            | 32            | 55 | 78  | 30 | 18 | 12  | 56,4 | 15                                   |
| 23022-10-24920781825 | 7000        | M6              | 18         | 25         | 15            | 32            | 55 | 78  | 30 | 18 | 12  | 56,4 | 15                                   |
| 23022-10-24920781919 | 7000        | M6              | 19         | 19         | 15            | 32            | 55 | 78  | 30 | 18 | 12  | 56,4 | 15                                   |
| 23022-10-24920781920 | 7000        | M6              | 19         | 20         | 15            | 32            | 55 | 78  | 30 | 18 | 12  | 56,4 | 15                                   |
| 23022-10-24920781925 | 7000        | M6              | 19         | 25         | 15            | 32            | 55 | 78  | 30 | 18 | 12  | 56,4 | 15                                   |
| 23022-10-24920782020 | 7000        | M6              | 20         | 20         | 15            | 32            | 55 | 78  | 30 | 18 | 12  | 56,4 | 15                                   |
| 23022-10-24920782025 | 7000        | M6              | 20         | 25         | 15            | 32            | 55 | 78  | 30 | 18 | 12  | 56,4 | 15                                   |
| 23022-10-24920782525 | 7000        | M6              | 25         | 25         | 15            | 32            | 55 | 78  | 30 | 18 | 12  | 56,4 | 15                                   |
| 23022-10-28920901919 | 6000        | M8              | 19         | 19         | 19            | 37            | 65 | 90  | 35 | 20 | 15  | 72,6 | 40                                   |
| 23022-10-28920902424 | 6000        | M8              | 24         | 24         | 19            | 37            | 65 | 90  | 35 | 20 | 15  | 72,6 | 40                                   |
| 23022-10-28920902828 | 6000        | M8              | 28         | 28         | 19            | 37            | 65 | 90  | 35 | 20 | 15  | 72,6 | 40                                   |
| 23022-10-28920903232 | 6000        | M8              | 32         | 32         | 19            | 37            | 65 | 90  | 35 | 20 | 15  | 72,6 | 40                                   |
| 23022-10-38921142020 | 5000        | M8              | 20         | 20         | 20            | 48            | 80 | 114 | 45 | 24 | 20  | 83,3 | 40                                   |
| 23022-10-38921142828 | 5000        | M8              | 28         | 28         | 20            | 48            | 80 | 114 | 45 | 24 | 20  | 83,3 | 40                                   |
| 23022-10-38921143232 | 5000        | M8              | 32         | 32         | 20            | 48            | 80 | 114 | 45 | 24 | 20  | 83,3 | 40                                   |

## Overview of items

| Order No.            | max.<br>rpm | C<br>(ISO 4029) | D1<br>(H7) | D2<br>(H7) | D1/D2<br>min. | D1/D2<br>max. | D4  | L   | L1 | L2 | L3  | R    | Tightening<br>torque of<br>screws Nm |
|----------------------|-------------|-----------------|------------|------------|---------------|---------------|-----|-----|----|----|-----|------|--------------------------------------|
| 23022-10-38921143838 | 5000        | M8              | 38         | 38         | 20            | 48            | 80  | 114 | 45 | 24 | 20  | 83,3 | 40                                   |
| 23022-10-42921262525 | 4000        | M10             | 25         | 25         | 25            | 50            | 95  | 126 | 50 | 26 | 20  | 95   | 84                                   |
| 23022-10-42921263232 | 4000        | M10             | 32         | 32         | 25            | 50            | 95  | 126 | 50 | 26 | 20  | 95   | 84                                   |
| 23022-10-42921263838 | 4000        | M10             | 38         | 38         | 25            | 50            | 95  | 126 | 50 | 26 | 20  | 95   | 84                                   |
| 23022-10-42921264545 | 4000        | M10             | 45         | 45         | 25            | 50            | 95  | 126 | 50 | 26 | 20  | 95   | 84                                   |
| 23022-10-48921402525 | 3750        | M12             | 25         | 25         | 25            | 57            | 105 | 140 | 56 | 28 | 22  | 105  | 145                                  |
| 23022-10-48921403838 | 3750        | M12             | 38         | 38         | 25            | 57            | 105 | 140 | 56 | 28 | 22  | 105  | 145                                  |
| 23022-10-48921404545 | 3750        | M12             | 45         | 45         | 25            | 57            | 105 | 140 | 56 | 28 | 22  | 105  | 145                                  |
| 23022-10-48921405050 | 3750        | M12             | 50         | 50         | 25            | 57            | 105 | 140 | 56 | 28 | 22  | 105  | 145                                  |
| 23022-10-07980220404 | 27000       | M2              | 4          | 4          | 4             | 7             | 14  | 22  | 7  | 8  | 3,5 | 15   | 0,43                                 |
| 23022-10-07980220405 | 27000       | M2              | 4          | 5          | 4             | 7             | 14  | 22  | 7  | 8  | 3,5 | 15   | 0,43                                 |
| 23022-10-07980220406 | 27000       | M2              | 4          | 6          | 4             | 7             | 14  | 22  | 7  | 8  | 3,5 | 15   | 0,43                                 |
| 23022-10-07980220505 | 27000       | M2              | 5          | 5          | 4             | 7             | 14  | 22  | 7  | 8  | 3,5 | 15   | 0,43                                 |
| 23022-10-07980220506 | 27000       | M2              | 5          | 6          | 4             | 7             | 14  | 22  | 7  | 8  | 3,5 | 15   | 0,43                                 |
| 23022-10-07980220606 | 27000       | M2              | 6          | 6          | 4             | 7             | 14  | 22  | 7  | 8  | 3,5 | 15   | 0,43                                 |
| 23022-10-09980300404 | 19000       | M2,5            | 4          | 4          | 4             | 11            | 20  | 30  | 10 | 10 | 5   | 23,4 | 0,85                                 |
| 23022-10-09980300606 | 19000       | M2,5            | 6          | 6          | 4             | 11            | 20  | 30  | 10 | 10 | 5   | 23,4 | 0,85                                 |
| 23022-10-09980300608 | 19000       | M2,5            | 6          | 8          | 4             | 11            | 20  | 30  | 10 | 10 | 5   | 23,4 | 0,85                                 |
| 23022-10-09980300609 | 19000       | M2,5            | 6          | 9          | 4             | 11            | 20  | 30  | 10 | 10 | 5   | 23,4 | 0,85                                 |
| 23022-10-09980300808 | 19000       | M2,5            | 8          | 8          | 4             | 11            | 20  | 30  | 10 | 10 | 5   | 23,4 | 0,85                                 |
| 23022-10-09980300809 | 19000       | M2,5            | 8          | 9          | 4             | 11            | 20  | 30  | 10 | 10 | 5   | 23,4 | 0,85                                 |
| 23022-10-09980300909 | 19000       | M2,5            | 9          | 9          | 4             | 11            | 20  | 30  | 10 | 10 | 5   | 23,4 | 0,85                                 |
| 23022-10-12980340404 | 16000       | M3              | 4          | 4          | 4             | 12            | 25  | 34  | 11 | 12 | 5   | 27,2 | 2                                    |
| 23022-10-12980340606 | 16000       | M3              | 6          | 6          | 4             | 12            | 25  | 34  | 11 | 12 | 5   | 27,2 | 2                                    |
| 23022-10-12980340608 | 16000       | M3              | 6          | 8          | 4             | 12            | 25  | 34  | 11 | 12 | 5   | 27,2 | 2                                    |
| 23022-10-12980340610 | 16000       | M3              | 6          | 10         | 4             | 12            | 25  | 34  | 11 | 12 | 5   | 27,2 | 2                                    |
| 23022-10-12980340808 | 16000       | M3              | 8          | 8          | 4             | 12            | 25  | 34  | 11 | 12 | 5   | 27,2 | 2                                    |
| 23022-10-12980340810 | 16000       | M3              | 8          | 10         | 4             | 12            | 25  | 34  | 11 | 12 | 5   | 27,2 | 2                                    |
| 23022-10-12980341010 | 16000       | M3              | 10         | 10         | 4             | 12            | 25  | 34  | 11 | 12 | 5   | 27,2 | 2                                    |
| 23022-10-14980350404 | 13000       | M3              | 4          | 4          | 4             | 16            | 30  | 35  | 11 | 13 | 5   | 32,2 | 2                                    |
| 23022-10-14980350808 | 13000       | M3              | 8          | 8          | 4             | 16            | 30  | 35  | 11 | 13 | 5   | 32,2 | 2                                    |
| 23022-10-14980350810 | 13000       | M3              | 8          | 10         | 4             | 16            | 30  | 35  | 11 | 13 | 5   | 32,2 | 2                                    |
| 23022-10-14980350812 | 13000       | M3              | 8          | 12         | 4             | 16            | 30  | 35  | 11 | 13 | 5   | 32,2 | 2                                    |
| 23022-10-14980350814 | 13000       | M3              | 8          | 14         | 4             | 16            | 30  | 35  | 11 | 13 | 5   | 32,2 | 2                                    |
| 23022-10-14980351010 | 13000       | M3              | 10         | 10         | 4             | 16            | 30  | 35  | 11 | 13 | 5   | 32,2 | 2                                    |
| 23022-10-14980351012 | 13000       | M3              | 10         | 12         | 4             | 16            | 30  | 35  | 11 | 13 | 5   | 32,2 | 2                                    |
| 23022-10-14980351014 | 13000       | M3              | 10         | 14         | 4             | 16            | 30  | 35  | 11 | 13 | 5   | 32,2 | 2                                    |
| 23022-10-14980351212 | 13000       | M3              | 12         | 12         | 4             | 16            | 30  | 35  | 11 | 13 | 5   | 32,2 | 2                                    |
| 23022-10-14980351214 | 13000       | M3              | 12         | 14         | 4             | 16            | 30  | 35  | 11 | 13 | 5   | 32,2 | 2                                    |
| 23022-10-14980351414 | 13000       | M3              | 14         | 14         | 4             | 16            | 30  | 35  | 11 | 13 | 5   | 32,2 | 2                                    |
| 23022-10-19980661010 | 10000       | M6              | 10         | 10         | 10            | 22            | 40  | 66  | 25 | 16 | 12  | 47   | 15                                   |
| 23022-10-19980661212 | 10000       | M6              | 12         | 12         | 10            | 22            | 40  | 66  | 25 | 16 | 12  | 47   | 15                                   |
| 23022-10-19980661214 | 10000       | M6              | 12         | 14         | 10            | 22            | 40  | 66  | 25 | 16 | 12  | 47   | 15                                   |
| 23022-10-19980661215 | 10000       | M6              | 12         | 15         | 10            | 22            | 40  | 66  | 25 | 16 | 12  | 47   | 15                                   |
| 23022-10-19980661216 | 10000       | M6              | 12         | 16         | 10            | 22            | 40  | 66  | 25 | 16 | 12  | 47   | 15                                   |
| 23022-10-19980661414 | 10000       | M6              | 14         | 14         | 10            | 22            | 40  | 66  | 25 | 16 | 12  | 47   | 15                                   |
| 23022-10-19980661415 | 10000       | M6              | 14         | 15         | 10            | 22            | 40  | 66  | 25 | 16 | 12  | 47   | 15                                   |
| 23022-10-19980661416 | 10000       | M6              | 14         | 16         | 10            | 22            | 40  | 66  | 25 | 16 | 12  | 47   | 15                                   |
| 23022-10-19980661515 | 10000       | M6              | 15         | 15         | 10            | 22            | 40  | 66  | 25 | 16 | 12  | 47   | 15                                   |
| 23022-10-19980661516 | 10000       | M6              | 15         | 16         | 10            | 22            | 40  | 66  | 25 | 16 | 12  | 47   | 15                                   |
| 23022-10-19980661616 | 10000       | M6              | 16         | 16         | 10            | 22            | 40  | 66  | 25 | 16 | 12  | 47   | 15                                   |
| 23022-10-24980781515 | 7000        | M6              | 15         | 15         | 15            | 32            | 55  | 78  | 30 | 18 | 12  | 56,4 | 15                                   |
| 23022-10-24980781818 | 7000        | M6              | 18         | 18         | 15            | 32            | 55  | 78  | 30 | 18 | 12  | 56,4 | 15                                   |
| 23022-10-24980781819 | 7000        | M6              | 18         | 19         | 15            | 32            | 55  | 78  | 30 | 18 | 12  | 56,4 | 15                                   |
| 23022-10-24980781820 | 7000        | M6              | 18         | 20         | 15            | 32            | 55  | 78  | 30 | 18 | 12  | 56,4 | 15                                   |
| 23022-10-24980781825 | 7000        | M6              | 18         | 25         | 15            | 32            | 55  | 78  | 30 | 18 | 12  | 56,4 | 15                                   |
| 23022-10-24980781919 | 7000        | M6              | 19         | 19         | 15            | 32            | 55  | 78  | 30 | 18 | 12  | 56,4 | 15                                   |
| 23022-10-24980781920 | 7000        | M6              | 19         | 20         | 15            | 32            | 55  | 78  | 30 | 18 | 12  | 56,4 | 15                                   |
| 23022-10-24980781925 | 7000        | M6              | 19         | 25         | 15            | 32            | 55  | 78  | 30 | 18 | 12  | 56,4 | 15                                   |
| 23022-10-24980782020 | 7000        | M6              | 20         | 20         | 15            | 32            | 55  | 78  | 30 | 18 | 12  | 56,4 | 15                                   |
| 23022-10-24980782025 | 7000        | M6              | 20         | 25         | 15            | 32            | 55  | 78  | 30 | 18 | 12  | 56,4 | 15                                   |
| 23022-10-24980782525 | 7000        | M6              | 25         | 25         | 15            | 32            | 55  | 78  | 30 | 18 | 12  | 56,4 | 15                                   |
| 23022-10-28980901919 | 6000        | M8              | 19         | 19         | 19            | 37            | 65  | 90  | 35 | 20 | 15  | 72,6 | 40                                   |
| 23022-10-28980902424 | 6000        | M8              | 24         | 24         | 19            | 37            | 65  | 90  | 35 | 20 | 15  | 72,6 | 40                                   |

## Overview of items

| Order No.            | max.<br>rpm | C<br>(ISO 4029) | D1<br>(H7) | D2<br>(H7) | D1/D2<br>min. | D1/D2<br>max. | D4  | L   | L1 | L2 | L3 | R    | Tightening<br>torque of<br>screws Nm |
|----------------------|-------------|-----------------|------------|------------|---------------|---------------|-----|-----|----|----|----|------|--------------------------------------|
| 23022-10-28980902828 | 6000        | M8              | 28         | 28         | 19            | 37            | 65  | 90  | 35 | 20 | 15 | 72,6 | 40                                   |
| 23022-10-28980903232 | 6000        | M8              | 32         | 32         | 19            | 37            | 65  | 90  | 35 | 20 | 15 | 72,6 | 40                                   |
| 23022-10-38981142020 | 5000        | M8              | 20         | 20         | 20            | 48            | 80  | 114 | 45 | 24 | 20 | 83,3 | 40                                   |
| 23022-10-38981142828 | 5000        | M8              | 28         | 28         | 20            | 48            | 80  | 114 | 45 | 24 | 20 | 83,3 | 40                                   |
| 23022-10-38981143232 | 5000        | M8              | 32         | 32         | 20            | 48            | 80  | 114 | 45 | 24 | 20 | 83,3 | 40                                   |
| 23022-10-38981143838 | 5000        | M8              | 38         | 38         | 20            | 48            | 80  | 114 | 45 | 24 | 20 | 83,3 | 40                                   |
| 23022-10-42981262525 | 4000        | M10             | 25         | 25         | 25            | 50            | 95  | 126 | 50 | 26 | 20 | 95   | 84                                   |
| 23022-10-42981263232 | 4000        | M10             | 32         | 32         | 25            | 50            | 95  | 126 | 50 | 26 | 20 | 95   | 84                                   |
| 23022-10-42981263838 | 4000        | M10             | 38         | 38         | 25            | 50            | 95  | 126 | 50 | 26 | 20 | 95   | 84                                   |
| 23022-10-42981264545 | 4000        | M10             | 45         | 45         | 25            | 50            | 95  | 126 | 50 | 26 | 20 | 95   | 84                                   |
| 23022-10-48981402525 | 3750        | M12             | 25         | 25         | 25            | 57            | 105 | 140 | 56 | 28 | 22 | 105  | 145                                  |
| 23022-10-48981403838 | 3750        | M12             | 38         | 38         | 25            | 57            | 105 | 140 | 56 | 28 | 22 | 105  | 145                                  |
| 23022-10-48981404545 | 3750        | M12             | 45         | 45         | 25            | 57            | 105 | 140 | 56 | 28 | 22 | 105  | 145                                  |
| 23022-10-48981405050 | 3750        | M12             | 50         | 50         | 25            | 57            | 105 | 140 | 56 | 28 | 22 | 105  | 145                                  |