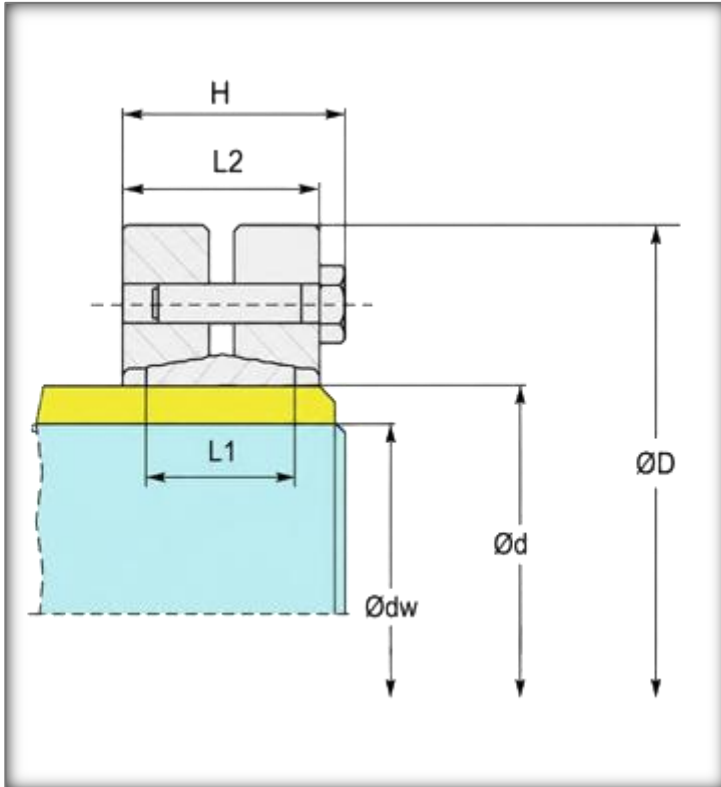


## SD-603



### SHRINK DISC-603

- Shrink disc are used together with gear boxes, disc coupling, flange coupling, sleeve coupling, press flywheels, clutches and composting rotor & wind turbines.
- Shrink discs are selected to transmit very high torques without the use of keys, or the occurrence of fretting corrosion or backlash. Selects only those shrink disc that provide high reliability & ease of maintenance.
- Reduce the shaft stress by removing key way or spline. This new design of shrink disc is made from high alloy forged rings and is practically indestructible.

| Size   | d (mm) | D (mm)2 | H (mm) | L1 (mm) | L2 (mm) | Shaft diameter dw (mm) | Transmissible torque M (Nm) | Axial force F (kN) | Clamping screw size | Tightening torque Ms (Nm) | Weight (kg) |
|--------|--------|---------|--------|---------|---------|------------------------|-----------------------------|--------------------|---------------------|---------------------------|-------------|
| SD-75  | 75     | 138     | 36     | 25      | 31      | 55                     | 2,450                       | 90                 | M8                  | 30                        | 2.4         |
|        | 75     | 138     | 36     | 25      | 31      | 60                     | 3,200                       | 100                | M8                  | 30                        | 2.4         |
|        | 75     | 138     | 36     | 25      | 31      | 65                     | 3,950                       | 120                | M8                  | 30                        | 2.4         |
| SD-80  | 80     | 145     | 36     | 25      | 31      | 60                     | 3,200                       | 100                | M8                  | 30                        | 2.6         |
|        | 80     | 145     | 36     | 25      | 31      | 65                     | 3,900                       | 120                | M8                  | 30                        | 2.6         |
|        | 80     | 145     | 36     | 25      | 31      | 70                     | 4,600                       | 130                | M8                  | 30                        | 2.6         |
| SD-90  | 90     | 155     | 43     | 30      | 38      | 65                     | 4,750                       | 140                | M8                  | 30                        | 3.4         |
|        | 90     | 155     | 43     | 30      | 38      | 70                     | 6,000                       | 170                | M8                  | 30                        | 3.4         |
|        | 90     | 155     | 43     | 30      | 38      | 75                     | 7,250                       | 190                | M8                  | 30                        | 3.4         |
| SD-100 | 100    | 185     | 55     | 39      | 50      | 75                     | 6,000                       | 180                | M8                  | 30                        | 4.5         |
|        | 100    | 185     | 55     | 39      | 50      | 80                     | 7,500                       | 200                | M8                  | 30                        | 4.5         |
|        | 100    | 185     | 55     | 39      | 50      | 85                     | 9,000                       | 200                | M8                  | 30                        | 4.5         |
| SD-110 | 110    | 185     | 55     | 39      | 50      | 80                     | 7,200                       | 190                | M10                 | 59                        | 6.1         |
|        | 110    | 185     | 55     | 39      | 50      | 85                     | 9,000                       | 220                | M10                 | 59                        | 6.1         |
|        | 110    | 185     | 55     | 39      | 50      | 90                     | 10,800                      | 240                | M10                 | 59                        | 6.1         |
| SD-115 | 115    | 185     | 55     | 39      | 49      | 80                     | 8,500                       | 210                | M10                 | 59                        | 6.0         |
|        | 115    | 185     | 55     | 39      | 49      | 85                     | 9,300                       | 210                | M10                 | 59                        | 6.0         |
|        | 115    | 185     | 55     | 39      | 49      | 90                     | 11,300                      | 250                | M10                 | 59                        | 6.0         |
| SD-120 | 120    | 215     | 57     | 42      | 51      | 80                     | 10,500                      | 260                | M10                 | 59                        | 9.2         |
|        | 120    | 215     | 57     | 42      | 51      | 85                     | 12,100                      | 280                | M10                 | 59                        | 9.2         |
|        | 120    | 215     | 57     | 42      | 51      | 90                     | 14,400                      | 320                | M10                 | 59                        | 9.2         |
| SD-125 | 125    | 215     | 57     | 42      | 51      | 80                     | 11,000                      | 250                | M10                 | 59                        | 8.9         |
|        | 125    | 215     | 57     | 42      | 51      | 85                     | 13,000                      | 280                | M10                 | 59                        | 8.9         |
|        | 125    | 215     | 57     | 42      | 51      | 90                     | 15,000                      | 210                | M10                 | 59                        | 8.9         |
| SD-130 | 130    | 215     | 57     | 42      | 51      | 90                     | 12,000                      | 260                | M10                 | 59                        | 8.5         |
|        | 130    | 215     | 57     | 42      | 51      | 98                     | 14,400                      | 300                | M10                 | 59                        | 8.5         |
|        | 130    | 215     | 57     | 42      | 51      | 100                    | 17,000                      | 340                | M10                 | 59                        | 8.5         |
| SD-140 | 140    | 230     | 67     | 46      | 59      | 95                     | 15,200                      | 310                | M12                 | 100                       | 10.9        |
|        | 140    | 230     | 67     | 46      | 59      | 100                    | 17,800                      | 340                | M12                 | 100                       | 10.9        |
|        | 140    | 230     | 67     | 46      | 59      | 105                    | 20,200                      | 380                | M12                 | 100                       | 10.9        |
| SD-155 | 155    | 265     | 71     | 50      | 63      | 105                    | 22,000                      | 380                | M12                 | 100                       | 16.2        |
|        | 155    | 265     | 71     | 50      | 63      | 110                    | 25,000                      | 410                | M12                 | 100                       | 16.2        |
|        | 155    | 265     | 71     | 50      | 63      | 115                    | 28,000                      | 450                | M12                 | 100                       | 16.2        |
| SD-160 | 160    | 265     | 71     | 50      | 63      | 110                    | 25,000                      | 390                | M12                 | 100                       | 15.6        |
|        | 160    | 265     | 71     | 50      | 63      | 115                    | 28,000                      | 430                | M12                 | 100                       | 15.6        |
|        | 160    | 265     | 71     | 50      | 63      | 120                    | 31,000                      | 470                | M12                 | 100                       | 15.6        |
| SD-165 | 165    | 290     | 80     | 56      | 70      | 115                    | 31,500                      | 540                | M16                 | 250                       | 22.0        |
|        | 165    | 290     | 80     | 56      | 70      | 120                    | 35,600                      | 590                | M16                 | 250                       | 22.0        |
|        | 165    | 290     | 80     | 56      | 70      | 125                    | 39,000                      | 620                | M16                 | 250                       | 22.0        |
| SD-170 | 170    | 290     | 80     | 56      | 70      | 120                    | 31,700                      | 520                | M16                 | 250                       | 21.4        |
|        | 170    | 290     | 80     | 56      | 70      | 125                    | 35,800                      | 570                | M16                 | 250                       | 21.4        |
|        | 170    | 290     | 80     | 56      | 70      | 130                    | 40,000                      | 610                | M16                 | 250                       | 21.4        |

| Size   | d (mm) | D (mm)2 | H (mm) | L1 (mm) | L2 (mm) | Shaft diameter dw (mm) | Transmissible torque M (Nm) | Axial force F (kN) | Clamping screw size | Tightening torque Ms (Nm) | Weight (kg) |
|--------|--------|---------|--------|---------|---------|------------------------|-----------------------------|--------------------|---------------------|---------------------------|-------------|
| SD-175 | 175    | 300     | 80     | 56      | 70      | 125                    | 40,000                      | 550                | M16                 | 250                       | 22.3        |
|        | 175    | 300     | 80     | 56      | 70      | 130                    | 44,000                      | 590                | M16                 | 250                       | 22.3        |
|        | 175    | 300     | 80     | 56      | 70      | 135                    | 48,000                      | 640                | M16                 | 250                       | 22.3        |
| SD-180 | 180    | 300     | 80     | 56      | 70      | 130                    | 44,700                      | 560                | M16                 | 250                       | 35.3        |
|        | 180    | 300     | 80     | 56      | 70      | 135                    | 48,100                      | 600                | M16                 | 250                       | 35.3        |
|        | 180    | 300     | 80     | 56      | 70      | 140                    | 52,700                      | 650                | M16                 | 250                       | 35.3        |
| SD-185 | 185    | 330     | 80     | 56      | 70      | 135                    | 55,200                      | 720                | M16                 | 250                       | 34.4        |
|        | 185    | 330     | 80     | 56      | 70      | 140                    | 60,600                      | 780                | M16                 | 250                       | 34.4        |
|        | 185    | 330     | 80     | 56      | 70      | 145                    | 65,400                      | 830                | M16                 | 250                       | 34.4        |
| SD-190 | 190    | 330     | 95     | 71      | 85      | 140                    | 60,900                      | 740                | M16                 | 250                       | 39.9        |
|        | 190    | 330     | 95     | 71      | 85      | 145                    | 66,000                      | 790                | M16                 | 250                       | 39.9        |
|        | 190    | 330     | 95     | 71      | 85      | 150                    | 66,200                      | 840                | M16                 | 250                       | 39.9        |
| SD-200 | 200    | 350     | 95     | 71      | 85      | 150                    | 65,600                      | 880                | M16                 | 250                       | 39.0        |
|        | 200    | 350     | 95     | 71      | 85      | 155                    | 76,500                      | 990                | M16                 | 250                       | 39.0        |
|        | 200    | 350     | 95     | 71      | 85      | 160                    | 81,500                      | 1,040              | M16                 | 250                       | 39.0        |
| SD-220 | 220    | 370     | 113    | 88      | 103     | 160                    | 78,200                      | 940                | M16                 | 250                       | 51.0        |
|        | 220    | 370     | 113    | 88      | 103     | 165                    | 84,900                      | 1,000              | M16                 | 250                       | 51.0        |
|        | 220    | 370     | 113    | 88      | 103     | 170                    | 90,300                      | 1,050              | M16                 | 250                       | 51.0        |
| SD-240 | 240    | 405     | 120    | 92      | 107     | 170                    | 1,00,000                    | 1,130              | M20                 | 490                       | 63.0        |
|        | 240    | 405     | 120    | 92      | 107     | 180                    | 1,08,500                    | 1,190              | M20                 | 490                       | 63.0        |
|        | 240    | 405     | 120    | 92      | 107     | 190                    | 1,16,400                    | 1,240              | M20                 | 490                       | 63.0        |
| SD-260 | 260    | 430     | 132    | 103     | 119     | 190                    | 1,20,000                    | 1,400              | M20                 | 490                       | 79.0        |
|        | 260    | 430     | 132    | 103     | 119     | 200                    | 1,38,000                    | 1,530              | M20                 | 490                       | 79.0        |
|        | 260    | 430     | 132    | 103     | 119     | 210                    | 1,56,000                    | 1,640              | M20                 | 490                       | 79.0        |
| SD-280 | 280    | 460     | 146    | 114     | 133     | 210                    | 1,64,500                    | 1,690              | M20                 | 490                       | 99.0        |
|        | 280    | 460     | 146    | 114     | 133     | 220                    | 1,84,500                    | 1,840              | M20                 | 490                       | 99.0        |
|        | 280    | 460     | 146    | 114     | 133     | 230                    | 2,04,500                    | 1,940              | M20                 | 490                       | 99.0        |
| SD-300 | 300    | 485     | 154    | 122     | 141     | 230                    | 2,17,000                    | 2,020              | M20                 | 490                       | 119.0       |
|        | 300    | 485     | 154    | 122     | 141     | 240                    | 2,45,000                    | 2,180              | M20                 | 490                       | 119.0       |
|        | 300    | 485     | 154    | 122     | 141     | 245                    | 2,73,000                    | 2,330              | M20                 | 490                       | 119.0       |
| SD-320 | 320    | 520     | 154    | 122     | 141     | 240                    | 3,10,000                    | 2,580              | M20                 | 490                       | 139.0       |
|        | 320    | 520     | 154    | 122     | 141     | 250                    | 3,40,000                    | 2,720              | M20                 | 490                       | 139.0       |
|        | 320    | 520     | 154    | 122     | 141     | 260                    | 3,73,000                    | 2,860              | M20                 | 490                       | 139.0       |
| SD-340 | 340    | 570     | 168    | 134     | 155     | 250                    | 3,94,500                    | 3,040              | M20                 | 490                       | 189.0       |
|        | 340    | 570     | 168    | 134     | 155     | 260                    | 4,30,500                    | 3,160              | M20                 | 490                       | 189.0       |
|        | 340    | 570     | 168    | 134     | 155     | 270                    | 4,66,500                    | 3,350              | M20                 | 490                       | 189.0       |
| SD-360 | 360    | 580     | 174    | 140     | 161     | 280                    | 5,07,500                    | 3,230              | M20                 | 490                       | 189.0       |
|        | 360    | 580     | 174    | 140     | 161     | 290                    | 5,50,500                    | 3,410              | M20                 | 490                       | 189.0       |
|        | 360    | 580     | 174    | 140     | 161     | 295                    | 5,72,500                    | 3,500              | M20                 | 490                       | 189.0       |

## Installation:

- Clean the hollow shaft bore and the shaft thoroughly to remove all dirt.
- Apply a light coat of oil to the hollow shaft at the point at which the shrink disc is positioned.
- Remove the wooden distance piece between flanges, which have been used for shipping purpose only.
- Put the shrink disc at proper location on hollow shaft.
- Tighten diametrically opposed clamping screws by hand whilst aligning the shaft coupling so that the clamping flanges lie parallel to each other.
- Tighten the clamping screws clockwise with full rightening torque  $M_s$  with a torque wrench.
- Tighten the clamping screws uniformly. Repeat the process until no screw turns at the full tightening torque of  $M_s$ .

## Remove shrink discs

- Part release the clamping screws evenly in stages in order to avoid any tilting of the clamping flanges.
- Do not remove clamping screws completely from threaded bores under any circumstances, as this poses the risk of injury.
- Solid shaft can be taken out of hollow shaft. Remove the shrink disc from the hollow shaft.