Curved-tooth Gear Coupling

RGF Size



Product Characteristics:

- Double-section type curved-tooth gear coupling
- Widely applicable in various mechanical & hydraulic fields
- Nylon & steel matched, maintenance-free
- > Able to offset axial, radial & angular misalignments
- > Axial plugging assembly, very convenient
- Fished product's bore tolerance as per ISO standard being H7, keyway width tolerance as per DIN6885/1 being JS9, additionally with taper bore & inch bore
 - Installation dimensions seen in following table:

Dimensions for Installation (mm)

| Si | ze | Fini | shed Product B | ore d1, d2 | e d1,d2 Dimensions (mm) | | | | | | | | | | Torque Rating |
|----------------|-------------------|----------------------|----------------|---------------------|-------------------------|-----|----|------|---|---------------------------------|-----|----|--|-----------------------|------------------|
| Common Size | Length' d Size | Pre- made Bore | | Max. Bore Diam'r | 11, 12 L0 | | L | M, N | E | Length'd Sleeve 11,12 max | D1 | D | Max. Bore Nylon Sleeve Weight kg | Total Weight kg | N. m |
| RGF-14 | RGF-14-L | - | Finished- | 14 | 23 | 50 | 37 | 6. 5 | 4 | 40 | 40 | 24 | 0. 02 | 0. 14 | 10 |
| RGF-19 | RGF-19-L | - | product bores | 19 | 25 | 54 | 37 | 8.5 | 4 | 40 | 48 | 30 | 0. 03 | 0. 21 | 16 |
| RGF-24 | RGF-24-L | I | can be custom | 24 | 26 | 56 | 41 | 7.5 | 4 | 50 | 52 | 36 | 0. 04 | 0. 25 | 20 |
| RGF-28 | RGF-28-L | - | -made. | 28 | 40 | 84 | 46 | 19 | 4 | 55 | 66 | 44 | 0. 07 | 0. 62 | 45 |
| RGF-32 | RGF-32-L | - | | 32 | 40 | 84 | 48 | 18 | 4 | 55 | 76 | 50 | 0. 09 | 0. 83 | 60 |
| RGF-38 | RGF-38-L | - | | 38 | 40 | 84 | 48 | 18 | 4 | 60 | 83 | 58 | 0. 11 | 1.04 | 80 |
| RGF-42 | RGF-42-L | — | | 42 | 42 | 88 | 50 | 19 | 4 | 60 | 92 | 65 | 0.14 | 1. 41 | 100 |
| RGF-48 | RGF-48-L | - | | 48 | 50 | 104 | 50 | 27 | 4 | 60 | 95 | 67 | 0. 16 | 1. 43 | 140 |
| RGF-55 | RGF-55-L | — | | 55 | 52 | 108 | 58 | 25 | 4 | 65 | 114 | 82 | 0. 26 | 2.50 | 240 |
| RGF-65 | RGF-65-L | - | | 65 | 55 | 114 | 68 | 23 | 4 | 70 | 132 | 95 | 0. 39 | 3. 58 | 380 |

RGF····L Size

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| | Finish | ed-product Bor | ∙e d1,d2 | | | | Dimena | | Veight at Max Diam'r | Torque Rating | | | | |
|---------|----------------------|----------------------------------|---------------------------|--------------|-----|-----|----------|----|--|---------------|-----|---------------------------------|-----------------------|------|
| Size | Pre- made Bore | Finished- product | Max Bore Diam' r | 11, 12 LO | | L | M, N | E | Length 'd Sleeve 11, 12 max | D1 | D | Nylon Sleeve Weight kg | Total Weight kg | N. m |
| RGF-80 | 25 | bores can be custom -made. | 80 | 90 | 186 | 93 | 46. 5 | 6 | - | 175 | 124 | 0. 91 | 10. 93 | 700 |
| RGF-100 | 35 | | 100 | 110 | 228 | 102 | 63 | 8 | - | 210 | 152 | 1. 36 | 19. 47 | 1200 |
| RGF-125 | 45 | | 125 | 140 | 290 | 134 | 78 | 10 | _ | 270 | 192 | 2. 97 | 40. 73 | 2500 |

Dimensions for Installation (mm)

Optional Bore Diameters Table (mm)

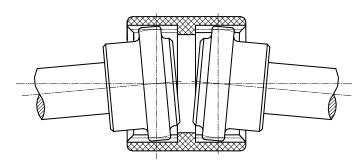
| Crowned Gear | Pre-Center Bore | | | | | Во | re [| Diar | nete | er di | H7 (| Ke | /wa | y D | IN6 | 885 | /1(0 | GB/ | T10 | 95-1 | 79) | JSS | an | d Ho | oldi | ing | Scr | ews |) | | | | Keyways with Bore |
|--------------|--------------------|---|---|---|---|----|------|------|------|-------|------|----|-----|-----|-----|-----|------|-----|-----|------|-----|-----|----|------|------|-----|-----|-----|----|----|----|---|-----------------------------|
| Size-1 | BX/Y | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 22 | 24 | 25 | 28 | 30 | 32 | 35 | 38 | 40 | 42 | 45 | 48 | 50 | 55 | 60 | # | Diam'r d (di |
| RGF-14-1 | B2.5/8 | * | * | * | * | * | * | * | * | * | | | | | | | | | | | | | | | | | | | | | | | or d2) |
| RGF-19-1 | B2.5/8 | | | * | * | * | * | * | * | * | * | * | * | * | * | | | | | | | | | | | | | | | | | | bigger than 65 are |
| RGF-24-1 | B3.15/10 | | | | | * | * | * | * | * | * | * | * | * | * | * | * | * | | | | | | | | | | | | | | | specially |
| RGF-28-1 | B3.15/10 | | | | | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | | | | | | | | | | | | | machined. |
| RGF-32-1 | B3.15/10 | | | | | | | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | | | | | | | | | | | |
| RGF-38-1 | B3.15/10 | | | | | | | | | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | | | | | | | | | |
| RGF-42-1 | B3.15/10 | | | | | | | | | | | | | | | * | * | * | * | * | * | * | * | * | * | * | | | | | | | |
| RGF-48-1 | B3.15/10 | | | | | | | | | | | | | | | * | * | * | * | * | * | * | * | * | * | * | * | * | | | | | |
| RGF-55-1 | B6.3/18 | | | | | | | | | | | | | | | | | | * | * | * | * | * | * | * | * | * | * | * | * | | | |
| RGF-65-1 | B6.3/18 | | | | | | | | | | | | | | | | | | * | * | * | * | * | * | * | * | * | * | * | * | * | * | |
| RGF-80-1 | Pre-bore 25 | | | | | | | | | | | | | | | | | | | | * | * | * | * | * | * | * | * | * | * | * | * | $65^{\sim}80$ |
| RGF-100-1 | Pre-bore 35 | | | | | | | | | | | | | | | | | | | | | | | | * | * | * | * | * | * | * | * | $65^{\sim}100$ |
| RGF-125-1 | Pre-bore 45 | | | | | | | | | | | | | | | | | | | | | | | | | | | | * | * | * | * | $65^{\sim}125$ |

Ordering Illustration:

| RGF-28 | d1, | d2, |
|-------------------------------|--|---|
| Coupling Size & Specification | Finished Product Bore Diam'r DIN6885 (Keyway width tolerance JS9) | Finished Product Bore Diam'r DIN6885 (Keyway width tolerance JS9) |

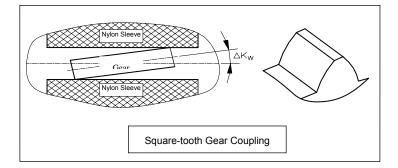
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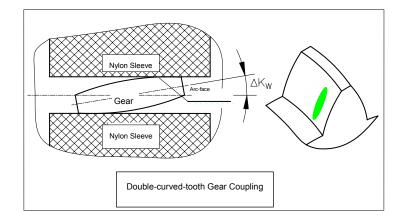


Gear couplings are applied to wrapping connector driving, and have a strong axial, radial and angular ability to

rectify a deviation. Since the structure of a double-curve tooth can effectively prevent the occurrence of a local stress concentration caused by angular and radial deviation, gear couplings will produce nearly no wear.



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The double-curve-tooth gear coupling avoids the stress concentration with a bigger tooth contact surface when an angular, radial installation deviation occurs.

The matching of steel curved-tooth gear and nylon sleeve in different materials assures that the friction between the contact surfaces of teeth in a continuous drive is very slight, and no maintenance is needed.

As coupling is the double-division type in structure, the stress caused by angular and radial errors can be ignored, and the angular velocity will have no periodical fluctuation.

couplings can be installed horizontally and vertically, no special tools are necessary.

Nylon toothed sleeves have the following characteristics:

- Excellent mechanical performance
- ■High rigidity
- ■High temperature resistance (+100°C)
- ■Not embrittled at low temperature
- Good slippery & frictional behavior
- Excellent electrical insulation behavior
- Chemical corrosion endurable
- High accuracy of processing

Wear resistance of REACH nylon toothed sleeves:

The surface of a nylon composite material (crystal structure) is smooth, hard, tough, stable in high heat, and can endure the corrosion of lubricating oil, fuel, hydraulic oil, solvent etc, so it is the ideal material for manufacturing couplings. There is a mutual friction wear produced between metal parts when they move along each other without lubrication, whereas no wearing occurs between smooth nylon and steel even without lubrication and maintenance.

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