## PROPERTIES

FEATURES

- very low mass and moment of inertia
- corrosion proof
- economically priced

MATERIAL

- Hubs: extremely rigid, glass fiber reinforced thermoplastic
- Elastomer: wear resistant thermally stable TPU


## DESIGN

Two highly concentric, precision molded hubs with curved jaws, keyways, and set screws, suitable for use in temperatures ranging from -20 to $+100^{\circ} \mathrm{C}$.


## MODEL MELP1

| SIZE |  | 2 |  |  | 10 |  |  | 20 |  |  | 60 |  |  | 150 |  |  | 300 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Elastomer insert |  | A | B | c | A | B | c | A | B | c | A | B | c | A | в | c | A | B | c |
| Rated torque (Nm) | $\mathrm{T}_{\mathrm{KN}}$ | 2 | 2.4 | 0.5 | 12.5 | 16 | 4 | 17 | 21 | 6 | 60 | 75 | 20 | 160 | 200 | 42 | 325 | 405 | 84 |
| Max. torque (Nm) | $T_{\text {Kmax }}$ | 4 | 4.8 | 1 | 25 | 32 | 6 | 34 | 42 | 12 | 120 | 150 | 35 | 320 | 400 | 85 | 650 | 810 | 170 |
| Overall length (mm) | A | 20 |  |  | 35 |  |  | 66 |  |  | 78 |  |  | 90 |  |  | 114 |  |  |
| Outside diameter (mm) | B | 17 |  |  | 32 |  |  | 42 |  |  | 56 |  |  | 66.5 |  |  | 82 |  |  |
| Mounting length (mm) | C | 6.5 |  |  | 12 |  |  | 25 |  |  | 30 |  |  | 35 |  |  | 45 |  |  |
| Inside diameter possible <br> from - to H8 <br> (mm) | $\mathrm{D}_{1 / 2}$ | 5-8 |  |  | 6-16 |  |  | 10-24 |  |  | 16-30 |  |  | 19-38 |  |  | 20-45 |  |  |
| Inside diameter of elastomer (mm) | $\mathrm{D}_{\mathrm{E}}$ | 6.2 |  |  | 14.2 |  |  | 19.2 |  |  | 27.2 |  |  | 30.2 |  |  | 38.2 |  |  |
| Set screw (ISO 4029) | E | M3 |  |  | M3 |  |  | M4 |  |  | M5 |  |  | M6 |  |  | M6 |  |  |
| Tightening torque of the clamping screw max. |  | 0.8 |  |  | 0.8 |  |  | 1.5 |  |  | 3 |  |  | 6 |  |  | 6 |  |  |
| Width elastomer insert (mm) | F | 5 |  |  | 9.5 |  |  | 12 |  |  | 14 |  |  | 15 |  |  | 18 |  |  |
| Distance (mm) | G | 3 |  |  | 3.5 |  |  | 4 |  |  | 6 |  |  | 7 |  |  | 7 |  |  |
| Moment of inertia per Hub | $J_{1} / J_{2}$ | 1.9 |  |  | 1.4 |  |  | 10 |  |  | 30 |  |  | 70 |  |  | 180 |  |  |
| Approx. weight (g) |  | 5.9 |  |  | 30 |  |  | 80 |  |  | 180 |  |  | 270 |  |  | 510 |  |  |
| Speed ( $\mathrm{min}^{-1}$ ) |  | 12,000 |  |  | 10,000 |  |  | 9,000 |  |  | 8,000 |  |  | 7,000 |  |  | 6,000 |  |  |
| Static torsional stiffness( $\mathrm{Nm} / \mathrm{rad}$ ) | $\mathrm{C}_{\mathrm{T}}$ | 50 | 115 | 1.7 | 260 | 600 | 90 | 1140 | 2500 | 520 | 3290 | 9750 | 1400 | 4970 | 10600 | 1130 | 12400 | 18000 | 1280 |
| Dynamic torsional <br> stiffness$\quad(\mathrm{Nm} / \mathrm{rad})$ <br> ) | $\mathrm{C}_{\text {Tdyn }}$ | 100 | 230 | 35 | 541 | 1650 | 224 | 2540 | 4440 | 876 | 7940 | 11900 | 1350 | 13400 | 29300 | 3590 | 23700 | 40400 | 6090 |
| Lateral (mm) | Max. values | 0.08 | 0.06 | 0.2 | 0.2 | 0.17 | 0.2 | 0.2 | 0.2 | 0.22 | 0.22 | 0.22 | 0.25 | 0.25 | 0.25 | 0.28 | 0.28 | 0.28 | 0.3 |
| Angular (Degree) |  | 1 |  |  | 1.5 |  |  | 1.5 |  |  | 1.5 |  |  | 1.5 |  |  | 1.5 |  |  |
| Axial (mm) |  | $\pm 1$ |  |  | $\pm 1$ |  |  | $\pm 1.5$ |  |  | $\pm 1.5$ |  |  | $\pm 2$ |  |  | $\pm 2$ |  |  |

[^0]
[^0]:    Static torsional stiffness at $50 \% \mathrm{~T}_{\mathrm{KN}}$ Dynamic torsional stiffness at $\mathrm{T}_{\mathrm{KN}}$

