# ST1

## With simple keyway mounting

### Feataures

- Compact, simple design
- Precise overload protection
- Torsionally stiff
- Integral bearing for overhung load support

### Material

Hardened steel (nitrocarburized surface)

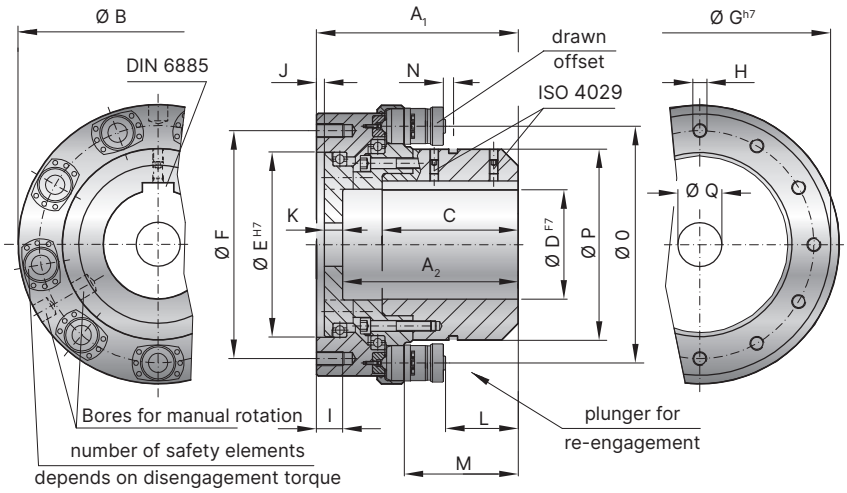
### Design

- **Drive side:** coupling hub with keyway connection (spline profile on request)
- **Driven side:** output flange with 12x fastening threads and integral bearings
- **Safety elements:** evenly spaced around the circumference; externally adjustable

## Model ST1 | Size 2 – 5

| Size | | | 2 | | | 5 | | |
|---|---|---|---|---|---|---|---|---|
| Adjustment range available from - to | (KNm) | | 0.2-0.5 | 0.5-1.0 | 1.0-1.5 | 0.7-2 | 1.2-4 | 3.2-5 |
| | | | 3×ST10 | 6×ST10 | 6×ST10 | 3×ST15 | 6×ST15 | 6×ST15 |
| Overall length | (mm) | $A_1$ | 120 | | | 150 | | |
| Bore depth | (mm) | $A_2$ | 100 | | | 124 | | |
| Outside diameter | (mm) | B | 198 | | | 220 | | |
| Fit length | (mm) | C | 100 | | | 121 | | |
| Bore diameter possible Ø to Ø F7 | (mm) | D | 30-75 | | | 40-90 | | |
| Flange centering diameter H7 | (mm) | E | 132 | | | 145 | | |
| Bolt circle diameter ±0,3 | (mm) | F | 162 | | | 170 | | |
| Flange outside diameter h7 | (mm) | G | 192 | | | 209 | | |
| Fastening threads | | H | 12xM10 | | | 12xM12 | | |
| Thread depth | (mm) | I | 15 | | | 20 | | |
| Fit length | (mm) | J | 3.5 | | | 4 | | |
| Wall thickness | (mm) | K | 15 | | | 21 | | |
| Distance | (mm) | L | 10.5 | | | 16.5 | | |
| Distance | (mm) | M | 51.5 | | | 66.5 | | |
| Actuation path | (mm) | N | 3.5 | | | 4.5 | | |
| Mounting diameter - elements | (mm) | O | 154 | | | 171 | | |
| Hub outside diameter | (mm) | P | 104 | | | 120 | | |
| Bore for fastening screw | (mm) | Q | max. Ø 75 | | | max. Ø 90 | | |
| Moment of inertia (approx.) D max. + max. sgmnt | ($10^{-3}$ kgm²) | | 77 | | | 151 | | |
| Speed max. | (1/min.) | | 7,000 | | | 6,000 | | |
| Allowable max. radial force standard* | (KN) | | 5 | | | 10 | | |
| Approx. weight at D max. + max. sgmnt | (kg) | | 15 | | | 24 | | |

* larger radial loads possible with special bearings




# Model ST1 | Size 10–25

| Size | | | 10 | | | 25 | | |
|---|---|---|---|---|---|---|---|---|
| Adjustment range available from - to | (KNm) | | 2-5 | 4-10 | 6-14 | 6-12 | 9-18 | 15-25 |
| | | | 3×ST15 | 6×ST15 | 9×ST15 | 6×ST15 | 9×ST15 | 12×ST15 |
| Overall length | (mm) | $A_1$ | 183 | | | 230 | | |
| Bore depth | (mm) | $A_2$ | 158 | | | 200 | | |
| Outside diameter | (mm) | B | 270 | | | 318 | | |
| Fit length | (mm) | C | 120 | | | 155 | | |
| Bore diameter possible Ø to Ø F7 | (mm) | D | 40-110 | | | 60-140 | | |
| Flange centering diameter H7 | (mm) | E | 170 | | | 210 | | |
| Bolt circle diameter ±0,3 | (mm) | F | 220 | | | 260 | | |
| Flange outside diameter h7 | (mm) | G | 259 | | | 298 | | |
| Fastening threads | | H | 12xM16 | | | 12xM16 | | |
| Thread depth | (mm) | I | 25 | | | 30 | | |
| Fit length | (mm) | J | 6 | | | 8 | | |
| Wall thickness | (mm) | K | 17 | | | 20 | | |
| Distance | (mm) | L | 45 | | | 80 | | |
| Distance | (mm) | M | 95 | | | 130 | | |
| Actuation path | (mm) | N | 4 | | | 4 | | |
| Mounting diameter - elements | (mm) | O | 220 | | | 270 | | |
| Hub outside diameter | (mm) | P | 170 | | | 218 | | |
| Bore for fastening screw | (mm) | Q | max. Ø 110 | | | max. Ø 140 | | |
| Moment of inertia (approx.) D max. + max. sgmnt | ($10^{-3}$ kgm²) | | 370 | | | 780 | | |
| Speed max. | (1/min.) | | 4,200 | | | 3,800 | | |
| Allowable max. radial force standard* | (KN) | | 20 | | | 30 | | |
| Approx. weight at D max. + max. sgmnt | (kg) | | 40 | | | 63 | | |

* larger radial loads possible with special bearings