

Full disengagement



with keyway connection

MODEL ST1

TORQUE LIMITER

Material:

High-strength, nitro-carburized steel

Design:

Drive side: Coupling hub with keyway connection or spline profile.

Driven side: Output flange with 12x fastening threads and integral bearings.

Torque modules: Evenly spaced around the circumference. Field adjustable within the selected range.

Temperature range:

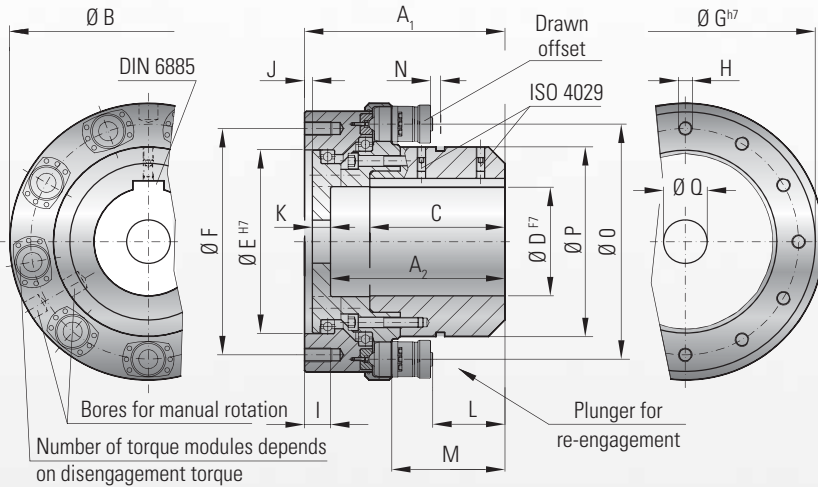
-30 to +120° C

Service life:

Infinite life and maintenance free when operated within the technical specifications.

Fit tolerance:

Tolerance between hub and shaft 0.02 – 0.07 mm



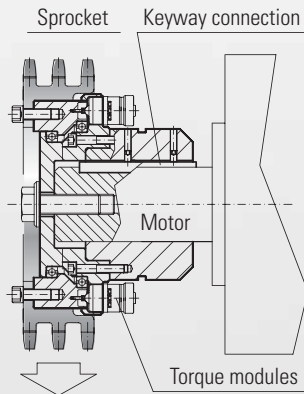
MODEL ST 1		Series											
		10			25			60			160		
Adjustment range available from - to (KNm)		1-6	2-10	6-18	2-8	4-15	10-25	8-18	15-35	30-60	20-50	40-100	80-160
		3 x ST 15	6 x ST 15	9 x ST 15	3 x ST 15	6 x ST 15	9 x ST 15	3 x ST 30	6 x ST 30	9 x ST 30	3 x ST 70	6 x ST 70	9 x ST 70
Overall length (mm)	A ₁	183			230			320			410		
Bore depth (mm)	A ₂	158			200			275			360		
Flange outside diameter (mm)	B	270			318			459			648		
Fit length (mm)	C	120			155			220			290		
Bore diameter possible Ø to Ø F7 (mm)	D	40-110			60-140			80-200			100-290		
Flange centering diameter H7 (mm)	E	170			210			300			450		
Bolt circle diameter ±0.3 (mm)	F	220			260			360			570		
Outside diameter h7 (mm)	G	259			298			418			618		
Fastening threads	H	12 x M16			12 x M16			12 x M20			12 x M24		
Thread depth (mm)	I	25			30			35			40		
Fit length (mm)	J	6			8			8			11		
Wall thickness (mm)	K	17			20			30			38		
Distance (mm)	L	45			83			96			134		
Distance (mm)	M	95			130			165			225		
Actuation path (mm)	N	4			4			7,5			10		
Bolt circle diameter - modules (mm)	O	220			270			376			532		
Hub outside diameter (mm)	P	170			218			295			418		
Bore for fastening screw (mm)	Q	max. 110			max. Ø 140			max. Ø 200			max. Ø 290		
Moment of inertia (approx.) D max. (10 ⁻³ kgm ²)		370			780			4600			24600		
Speed max. (1/min.)		4200			3800			2500			2000		
Allowable max. radial force standard* (KN)		40			60			100			200		
Approx. weight at D max. (kg)		40			63			179			463		

* higher radial force through additional bearing support.



MODEL ST1 / STN

Mounting example with sprocket and keyway connection

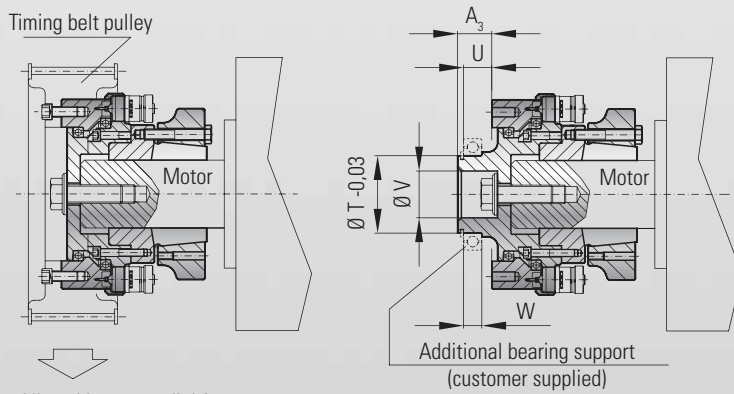


Ordering example

ST1 / 025 / 4-15 / 12 / 120 / 25 / xx

- Model
- Series
- Adjustment range (KNm)
- Disengagement torque (KNm)
- Bore \varnothing D H7
- Bore for fastening screw (\varnothing Q)
- Non-standard (e.g. stainless steel)

Mounting example with timing belt pulley and conical clamping hub



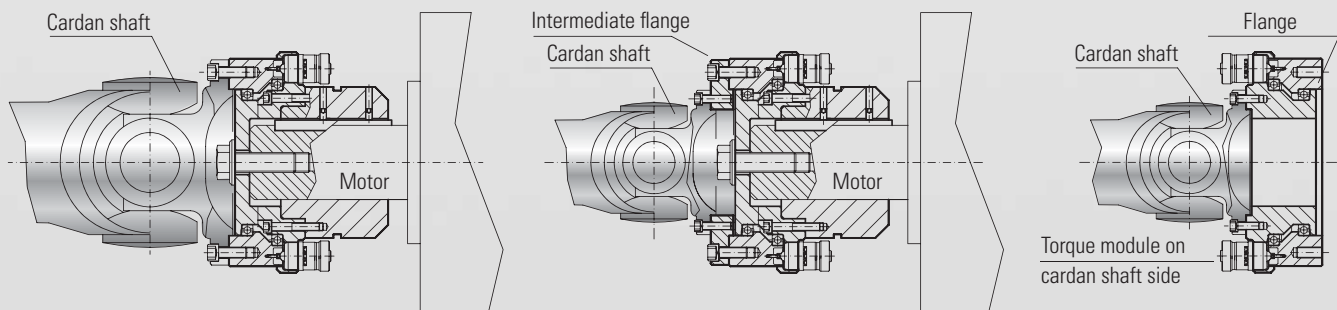
Allowable max. radial force

Ordering example

STN / 025 / 4-15 / 12 / 120 / 25 / xx

- Model
- Series
- Bore \varnothing D H7
- Bore for fastening screw (\varnothing Q)
- Adjustment range (KNm)
- Disengagement torque (KNm)
- Non-standard (e.g. stainless steel)

Mounting example for cardan shafts



Bolt circle and centering diameter are matched to the cardan shaft.

Mounting with intermediate flange.

Flange mounting on both sides possible.