

SP3

WITH EXTERNAL CLAMPING RING

60 – 500 Nm

NEW**High speed**

PROPERTIES

FEATURES

- ▶ very high balancing quality due to symmetrical design
- ▶ high operating speeds
- ▶ extremely smooth running

MATERIAL

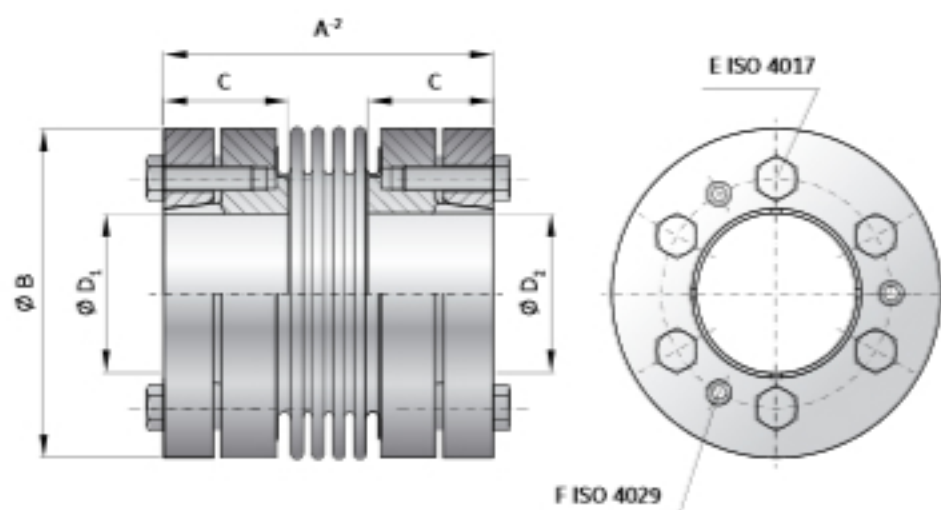
- ▶ **Bellows:** high grade stainless steel
- ▶ **Hubs and clamping ring:** steel

DESIGN

Two precision machined clamping ring hubs mounted concentrically to a flexible bellows. Brief overloads of up to 1.5x the rated torque are acceptable.

FIT CLEARANCE

Overall shaft / hub tolerance
0.01 - 0.025 mm



MODEL SP3

SIZE		60		150		200		300		500	
Rated torque	(Nm)	60		150		200		300		500	
Overall length	(mm)	A ²		75 87		76 88		89 103		97 111	
Outside diameter	(mm)	B		81		90		130		124	
Fit length	(mm)	C		30		32		36		40	
Inside diameter possible from Ø to Ø H7	(mm)	D ₁ /D ₂		18-35		20-42		22-55		25-60	
Fastening screw ISO 4017		6 x M5		6 x M6		6 x M6		6 x M8		6 x M8	
Tightening torque of the fastening screw	(Nm)	E		14		14		30		35	
Jack screw ISO 4017		3 x M5		3 x M6		3 x M6		3 x M8		3 x M8	
Outside diameter of hub	(mm)	G		81		90		130		122	
Moment of inertia	(10 ⁻³ kgm ²)	J _{ext}		1.6 1.62		2.42 2.52		6.38 6.56		10.35 10.67	
Approximate weight	(kg)			1.7 1.8		2.1 2.2		3.52 3.6		4.73 4.83	
Torsional stiffness	(10 ³ Nm/rad)	C _t		175 110		191 140		450 350		510 500	
Axial	± (mm)			2 3		2 3		2.5 3.5		2.5 3.5	
Lateral	± (mm)	max. values		0.2 0.25		0.25 0.3		0.25 0.3		0.3 0.35	
Angular	± (degree)			1 1.5		1 1.5		1 1.5		1 1.5	
Axial spring stiffness	(N/mm)	C _s		82 52		90 60		105 71		70 48	
Lateral spring stiffness	(N/mm)	C _l		1500 435		2040 610		3750 1050		2500 840	
Speed standard	(min ⁻¹)	n		16500		16500		13500		12500	

* Recommended fit pairing H7 / k6; H6 / j5 (short spindle), starting at Ø55 G7 / m6

ORDERING EXAMPLE	SP3	150	87	20	32	XX
Model	●					
Size		●				
Overall length mm			●			
Bore D1 H7				●		
Bore D2 H7					●	

Special designation only
(e.g. non-standard bore tolerance)

For custom features place an XX at the end of the part number and describe the special requirements (e.g. SP3 / 150 / 87 / 20 / 32 / XX)