EZV ADJUSTABLE LENGTH WITH FULLY SPLIT CLAMPING HUB 12.5 - 1,200 Nm

ABOUT

FEATURES

- telescoping for adjustable length and rotational orientation
- very easy to install and remove
- no intermediate support bearings required
- length ranges up to 4 meters

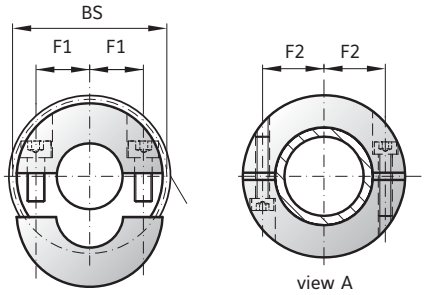
MATERIAL

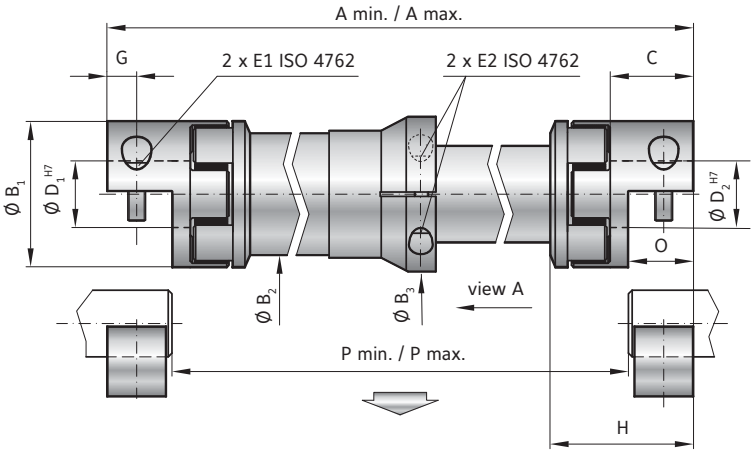
- **Hubs:** high strength aluminum
- **Intermediate tube:** highly straight and concentric aluminum tubing
- **Elastomer insert:** wear resistant, thermally stable TPU

DESIGN

Two fully split clamping hubs, with two clamping screws in each, and concave driving jaws. Backlash free, vibration damping, electrically isolating elastomer inserts press fit into the hubs. Precision intermediate tube with a high level of straightness and lateral stiffness. Outer tube clamps over inner tube to fix the overall length.

split clamping hub





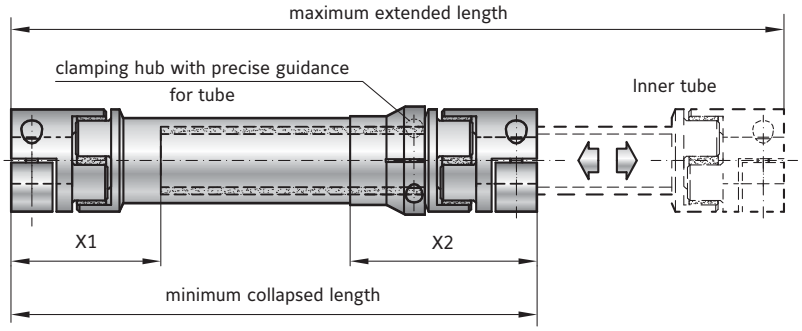
For details on the elastomer inserts see pages 66-67.

FUNCTIONAL DESCRIPTION

The maximum extended length relates to the minimum collapsed length. The formulas to the right can be used to determine the corresponding values.

Information on sizing, torsional stiffness, misalignment ratings, etc. can be found on pages 16-18.

Maximum extended length = (collapsed length x 2) - measurement (X1 + X2)



$$\text{Minimum collapsed length} = \frac{\text{maximum extended length} + \text{dimension (X1 + X2)}}{2}$$

MODEL EZV

SIZE			10		20		60		150		300		450	
Type (Elastomer insert)			A	B	A	B	A	B	A	B	A	B	A	B
Rated torque	(Nm)	T_{KN}	12.5	16	17	21	60	75	160	200	325	405	530	660
Max. torque*	(Nm)	T_{Kmax}	25	32	34	42	120	150	320	400	650	810	1060	1200
Inserted min. length from - to	(mm)	A_{min}	150 - 2,055		200 - 2,075		250 - 2,095		300 - 2,115		350 - 2,130		400 - 2,150	
Extended over all length from - to	(mm)	A_{max}	190 - 4,000		250 - 4,000		310 - 4,000		370 - 4,000		440 - 4,000		500 - 4,000	
Measurement	(mm)	X1+X2	115		156		197		240		280		312	
Outside diameter clamping hub	(mm)	B_1	32		42		56		66.5		82		102	
Outside diameter tube	(mm)	B_2	28		35		50		60		80		90	
Outside diameter center hub	(mm)	B_3	41.5		47		67		77		102		115	
Outside diameter with screwhead	(mm)	B_S	32		44.5		57		68		85		105	
Fit length	(mm)	C	20		25		40		47		55		65	
Inside diameter from Ø to Ø H7	(mm)	$D_{1/2}$	5 - 16		8 - 25		14 - 32		19 - 35		19 - 45		24 - 60	
Screw ISO 4762		E_1	M4		M5		M6		M8		M10		M12	
Tightening torque	(Nm)		4		8		15		35		70		120	
Screw ISO 4762		E_2	M4		M4		M5		M6		M8		M10	
Tightening torque	(Nm)		4		4.5		8		18		35		70	
Distance between centers	(mm)	$F_{10.5}$	10.5		15.5		21		24		29		38	
Distance between centers	(mm)	F_2	15		18		26		31		41		45	
Distance	(mm)	G	7.5		8.5		15		17.5		20		25	
Coupling length	(mm)	H	34		46		63		73		86		99	
Shaft average value	(mm)	N	26		33		49		57		67		78	
Length	(mm)	O	16.6		18.6		32		37		42		52	
Moment of inertia coupling half	(10^{-3} kgm²)	J_1/J_2	0.01		0.02		0.15		0.21		1.02		2.3	
Inertia of tube per meter	(10^{-3} kgm²)	J_3	0.075		0.183		0.66		1.18		2.48		10.6	
Combined dynamic torsional stiffness of the inserts	(Nm/rad)	C_{Tdyn}^{E}	270	825	1,270	2,220	3,970	5,950	6,700	14,650	11,850	20,200	27,700	40,600
Torsional stiffness of tube per meter	(Nm/rad)	C_T^{ZWR}	321		1,530		6,632		11,810		20,230		65,340	

*Maximum transmittable torque of the clamping hub depends on the bore diameter (see pages 70-71).

ORDERING EXAMPLE	EZV	20	1200	A	24	19.05	XX
Model	●						Special designation only (e.g. special bore tolerance).
Size		●					
Collapsed length			●				
Elastomer insert type				●			
Bore D1 H7					●		
Bore D2 H7						●	

For custom features place an XX at the end of the part number and describe the special requirements (e.g. EZV / 20 / 1200 / A / 24 / 19.05 / XX; XX=anodized aluminum)