

# Metal Bellows Coupling with intermediate Pipe I WDS-Ex

- backlash free, exact torque transfer • variable length up to 3 m
- very easy to fit with splitted hub design

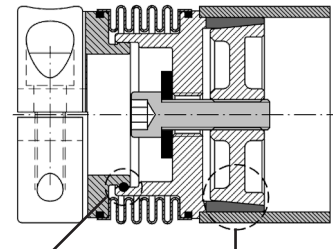
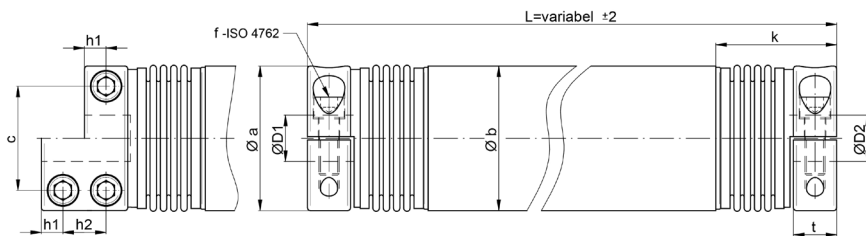


technical data:

WDS-Ex size	T <sub>N</sub> [Nm]	moment of inertia [10 <sup>-3</sup> kgm <sup>2</sup> ]				torsional stiffness [Nm/arcmin]				mass [kg]				max. speed approx. [1/min]			
		0,5m	1m	2m	3m	0,5m	1m	2m	3m	0,5m	1m	2m	3m	0,5m	1m	2m	3m
15	7,5	0,4	0,2	0,15	-	0,2	0,4	0,6	-	0,9	1,5	2,3	-	3900	880	370	-
50	25	1,5	0,8	0,6	0,5	0,9	1,6	2,2	2,9	1,8	3	4,3	5,5	6000	1300	550	300
100	50	2,6	1,5	1	0,8	1,8	2,9	4,1	5,3	2,5	4	5,5	7	7300	1600	670	360
200	100	5,9	3,5	2,5	1,9	5,3	9,1	13	17	3,8	6	8	10	8000	2100	900	500
400	200	17	10	7,5	6	12	21	31	40	7	11	15	19	8000	2700	1100	600

maximum axial shaft misalignment:  $\Delta A = \pm 1 \text{ mm}$  / maximum angular shaft misalignment:  $\alpha = 0,7^\circ$

maximum lateral shaft misalignment:  $\Delta R = \tan \alpha \cdot L_x$  mit  $L_x = L - (2 \cdot k) / \tan \alpha$



integrated cardanic intermediate tube support

coupling-pipe connection WDS: expanding cone clamp

maximum permissible temperature range:  
-20° celsius to a maximum of +100° celsius.

material specifications: hub: 3.1325, tube: EN AW-6060, bellows: 1.4571, screw: 1.7220 with zinc coating FK12.9, clamping cone: 1.0503 oxidized.

**note:** bellows and hubs are connected using a micro-plasma welding process.  
The couplings are supplied with H7 finished bores as standard.  
For the shaft fit, g6 is recommended.

dimensions [mm]: length dimensions according to DIN ISO 2768 cH

WDS-Ex size	Øa [mm]	Øb [mm]	c [mm]	f-T <sub>A</sub> [Nm]	h1/h2 [mm]	k [mm]	t [mm]	L <sub>min</sub> [mm]	ØD1/2 min. (H7) [mm]	ØD1/2 max. (H7) [mm]
15	36	35	21	M5 - 8	9/-	54	18	160	7,8	15
50	58	50	36	M8 - 35	13/-	67	26	190	11,7	25
100	75	60	47	M10 - 65	13/-	69	26	210	16,25	31
200	89	80	56	M12 - 115	14/-	77	28	220	24,7	34
400	109	100	72	M14 - 180	15/-	84	30	240	31,2	48

\*Øa: interfering edge - screw head

- larger lengths up to 6m and higher operating speeds available on request.
- Other sizes available upon request

order example: WDS -Ex 200 D1 = 32<sup>H7</sup> D2 = 35<sup>H7</sup> L = 800