

Metal Bellows Couplings with intermediate pipe | Series WD-VA

- stainless steel design up to 350°C
- backlash free, exact torque transfer
- variable length up to 3 m
- very easy to fit with splitted hub design

stainless
steel

technische Daten:

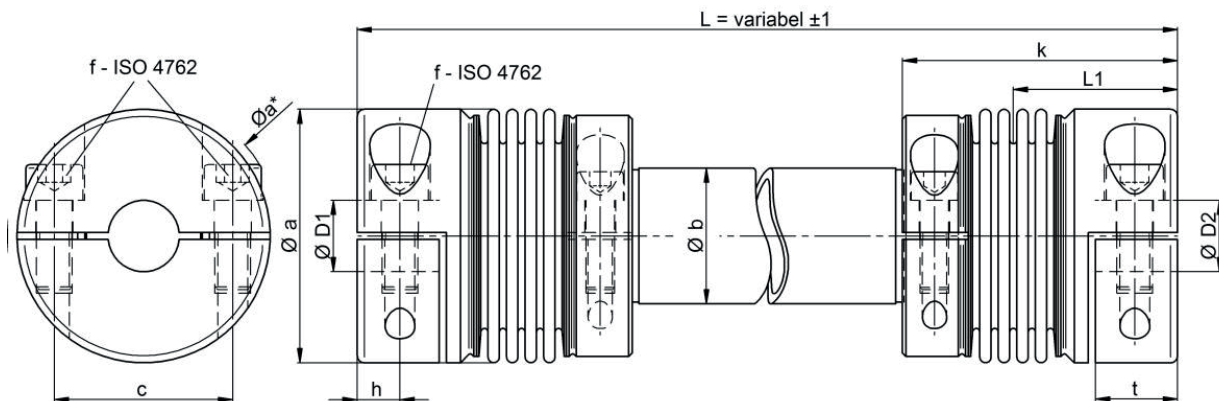
WD -VA size	T _N [Nm]	T _{max} [Nm]	torsional stiffness [Nm/arcmin]				moment of inertia [10 ⁻³ kgm ²]				mass [kg]				max. speed approx. [min ⁻¹]			
			0,5m	1m	2m	3m	0,5m	1m	2m	3m	0,5m	1m	2m	3m	0,5m	1m	2m	3m
10	10	14	0,22	0,11	0,06	0,04	0,07	0,09	0,13	0,17	0,8	1,2	2,2	3,1	6000	1550	350	150
50	50	70	1,6	0,88	0,46	0,31	0,63	0,81	1,18	1,55	1,9	2,9	5,0	7,0	6000	3400	740	310
120	120	160	3,7	2,0	1,0	0,7	2,1	2,5	3,2	3,9	3,3	4,6	7,3	9,9	6000	4700	1000	400
200	200	280	5,7	3,0	1,5	1,0	3,9	4,5	5,7	6,9	4,7	6,5	10	13	6000	5500	1100	470
350	350	480	9,7	4,8	2,4	1,6	8,4	9,3	11	13	8,4	9,3	12,3	16	6000	6000	1300	550
600	600	750	22	11	5,3	3,5	20	22	26	30	11,5	14	19	24	6000	6000	1700	700
1200	1200	1600	66	36	19	13	66	74	89	104	21	25	33	42	6000	6000	2650	1050

maximum axial shaft misalignment: $\Delta A = \pm 1,5 \text{ mm}$ / maximum angular shaft misalignment: $\alpha = 1^\circ$

maximum lateral shaft misalignment: $\Delta R = \tan \alpha \times L_x$ with $L_x = L - (2 \times L_1)$

Calculation example: WD-VA 100 / L=600mm

lateral shaft misalignment: with $L_x = 600 - (2 \times 43) = 514 \text{ mm}$; $\alpha = 1^\circ > \Delta R = \tan 1^\circ \times 514 \text{ mm} = 8,9 \text{ mm}$



update version

material:

bellows: stainless steel 1.4571 / A4

hubs: stainless steel 1.4301 / A2

intermediate pipe: stainless steel A2 bzw. A4

screws: ISO 4762 stainless steel / A4-80.

optional: ISO 4762 / 12.9

notice: connection between bellows
and hub with plasma welding-process

Dimensions [mm]: length dimensions according to DIN

WD-VA size	Øa	Øa*	Øb	c	f-tightening torque	h	L1	k ±1	t	ØD1/2 min	ØD1/2 max
10	34	36	16	21	M5 - 5 Nm	6,5	27	46	13	7	15
50	56	60	30	28	M8 - 24 Nm	9	35	63	17	12	28
120	71	76	38	38	M10 - 45 Nm	12	46	77	23	19	38
200	82	86	42	56	M12 - 80 Nm	13	50	86,5	25,5	22	42
350	101	103	48	68	M14 - 110Nm	15	56	97	30	30	50
600	122	124	60	80	M16 - 180 Nm	18	66	115	36	32	60
1200	157	161	89	110	M20 - 350 Nm	20	73	128	40	48	85

Øa: interfering edge – screw head

- clamping hubs with stainless steel screws A4/80 without EASY pin – regard reduced tightening torque!
- check torque transmission of shaft-hub-connection for shaft diameter smaller Dmin (request possible).
- optional coated screws of strength class 12.9 for higher clamping forces or torque - (see value in brackets).
- variable length up to 6m, and higher rotational speed on request

order example: WD - VA 200 D1 = 32 F6 D2 = 35 F6 L = 800