

► WDS SERIES BELLOWS DRIVE SHAFT COUPLING



Major Features

- Bellows drive shaft coupling with split hubs.
- Customized lengths up to 20 feet.
- High speeds, very low inertia.
- Compensation of high radial loads for prevention of premature bearing failure.

Material

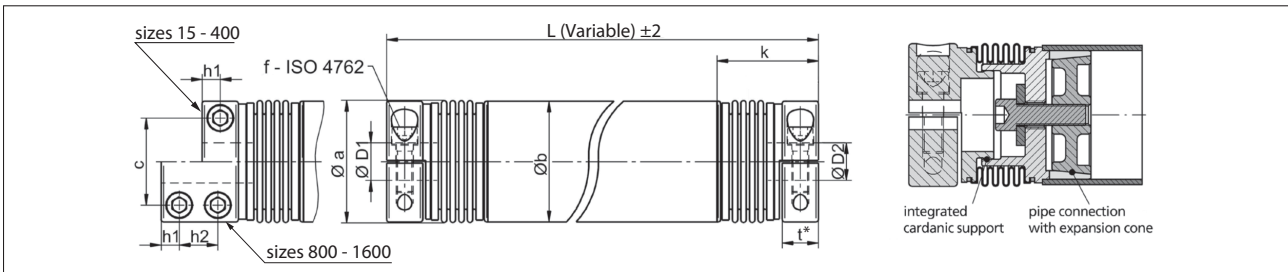
- Aluminum hubs (size 15-400)
- Steel hubs (size 800-1600)
- Stainless steel bellows; aluminum tubing

Technical Data

Size	Nominal Torque	Torsional Stiffness Nm/arcmin (lb-ft/deg)				Moment of Inertia 10 ⁻³ kgm ² (lb-in ²)				Maximum Speed (Approx.) rpm				Weight (Approximate) kg (lbs)			
	Nm (lb-in)	1 m	2 m	3 m	4 m	1 m	2 m	3 m	4 m	1 m	2 m	3 m	4 m	1 m	2 m	3 m	4 m
WDS-15	15 (133)	0.4 (18)	0.2 (8.9)	0.15 (6.6)	-	0.2 (0.68)	0.4 (1.4)	0.6 (2.1)	-	3900	880	370	-	0.9 (2.0)	1.5 (3.3)	2.3 (5.1)	-
WDS-50	50 (442)	1.5 (66)	0.8 (35)	0.6 (27)	0.5 (22)	0.9 (3.1)	1.5 (5.5)	2.3 (7.5)	-	6000	1300	550	300	1.8 (4.0)	3 (6.6)	4.3 (9.5)	5.5 (12)
WDS-100	100 (885)	2.6 (115)	1.5 (66)	1.0 (44)	0.8 (35)	1.8 (6.2)	2.9 (9.9)	4.1 (14)	5.3 (18)	7300	1600	670	360	2.5 (5.5)	4 (8.8)	5.5 (12)	7 (15)
WDS-200	200 (1770)	5.9 (261)	3.5 (155)	2.5 (111)	1.9 (84)	5.3 (18)	9.1 (31)	13 (44)	17 (58)	8000	2100	900	500	3.8 (8.4)	6 (13)	8 (18)	10 (22)
WDS-400	400 (3540)	17 (752)	10 (443)	7.5 (332)	6.0 (266)	12 (41)	21 (72)	31 (106)	40 (137)	8000	2700	1100	600	7 (15)	11 (24)	15 (33)	19 (42)
WDS-800	800 (7081)	26 (1151)	16 (708)	11 (487)	9 (398)	32 (109)	48 (164)	64 (219)	80 (273)	8000	3400	1400	760	15 (33)	20 (44)	25 (55)	30 (66)
WDS-1600	1600 (14161)	61 (2701)	37 (1637)	27 (1195)	21 (929)	116 (396)	150 (513)	190 (649)	230 (786)	8000	4800	2000	1100	31 (68)	38 (84)	44 (97)	51 (112)

Coupling must be selected so nominal torque is higher than highest operational torque of the application (i.e., during acceleration).
Bore diameters smaller than the minimum are possible but reliable transmission of nominal torque cannot be guaranteed.

Dimensions (mm)



Size	Øa	Øb	c	f - tightening torque**	h1	h2	k	t*	Lmin	ØD1/D2 min	ØD1/D2 max**
WDS-15	36	35	21	2x M5 - 8 Nm	9	-	54	18	160	6	15
WDS-50	58	50	36	2x M8 - 35 Nm	13	-	67	26	190	9	25
WDS-100	75	60	47	2x M10 - 65 Nm (50)*	13	-	69	26	210	12.5	31 (35)**
WDS-200	89	80	56	2x M12 - 115 Nm (80)*	14	-	77	28	220	19	34 (42)**
WDS-400	109	100	72	2x M14 - 180 Nm (140)*	15	-	84	30	240	24	48 (55)**
WDS-800	123	120	80	4x M12 - 115 Nm	13	22	101	45	300	24	65
WDS-1600	158	160	108	4x M16 - 290 Nm	18	30	125	64	360	35	85

Øa: bolt head interfering edge

*Minimum shaft engagement = $t \pm 1$ mm

**Larger hub bore diameter requires reduced tightening torque, shown in parentheses