

Connecting Shafts W, backlash free, with half shell clamp

Material: Hubs and tube made of aluminium (stainless steel on request).
Insert made of elastomere, shore hardness 64D.

- Zero backlash, insertable elastic connecting shaft.
- Vibration-damping, ideal for connecting of gearbox shafts.
- Compensation of large shaft misalignment.
- With half shell clamp hubs, ready-to-install, for rapid mounting / demounting without removal of the other units.

Temperature range: 0°C to +70°C (at lower charge: -20°C to + 100°C).

Every shaft will be custom made in short time.

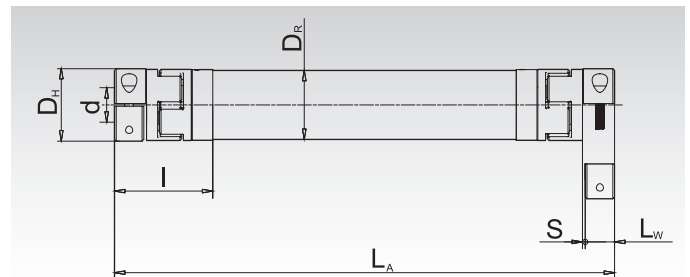
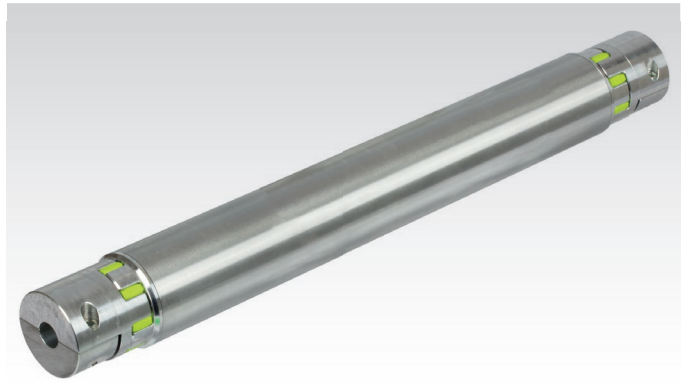
Delivery time: Regularly only 7 days.

Length: The total length L_A can be chosen stepless in a wide range.

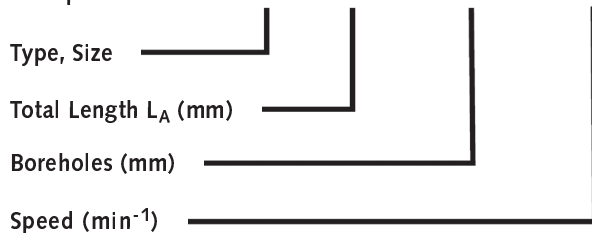
Boreholes: The bores can be chosen in a wide range.

Ordering details: Type, size - total length L_A - bore / bore - speed¹⁾.

The product no. will be created in accordance with the customer's specifications.



Example: **W1 - 0934 - 12 / 16 - 1500**



Note: Total length and speed must be specified with 4 digits.

Type Size	Torques		Length L_A for choosen mm	Boreholes d for choosen ³⁾ mm	D_H mm	D_R mm	l mm	L_W mm	s mm	Weight Couplings kg	Weight Tube kg/m
	$T_{K \text{ nom.}}^{2)}$ Nm	$T_{K \text{ max.}}^{2)}$ Nm									
W1	12	25	99-3000	9-16	32	30	34	15	1,5	0,14	0,58
W2	17	34	133-3000	11-22	42	40	46	17	1,5	0,36	0,76
W3	60	120	177-4500	11-32	56	60	63	30	2	0,94	0,97
W4	160	320	205-4500	12-32	67	60	73	35	2	1,42	0,97
W5	325	650	249-6000	16-45	82	80	84	40	2	2,98	2,00
W6	530	1060	283-6000	25-55	102	100	97	50	2	4,62	2,47

¹⁾ Each shaft will be tested at the specified speed. The max. speed depends on the size and on the total length L_A . See chart on next page.

²⁾ These torques can be endured by the insert. For the dimensioning, the max. torque rates of the clamp hubs must also be considered.

³⁾ Standard boreholes see next page. Other bores on request.

Further Details

Type Size	Screw Size DIN 912	Tightening Torque Nm	Torsion Insert Nm/rad	Stiffness dyn. Tube/m Nm/rad	Moment of inertia coupling ⁴⁾ 10^{-3} Kgm ²	Moment of inertia shaft/m 10^{-3} Kgm ²
W1	M4	4	1650	1104	0,01	0,11
W2	M5	8	2540	2332	0,08	0,2
W3	M6	15	7940	8292	0,24	0,8
W4	M8	35	13400	8292	0,01	0,8
W5	M10	70	23700	29102	2,4	3,0
W6	M12	120	55400	58178	6,0	5,8

Spare Part Inserts

Product-No.	Spare Part Insert	Type Size	\varnothing ca. mm	Weight g
605 164 14		W1	32	5
605 164 19		W2	42	7
605 164 24		W3	56	22
605 164 28		W4	67	32
605 164 38		W5	82	58
605 164 48		W6	102	98

⁴⁾ Moment for one coupling, calculated at the biggest borehole.

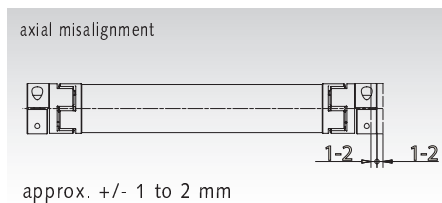
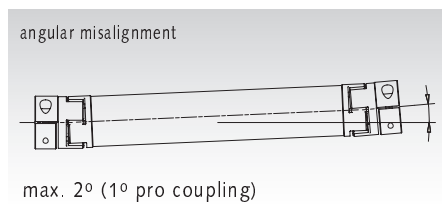
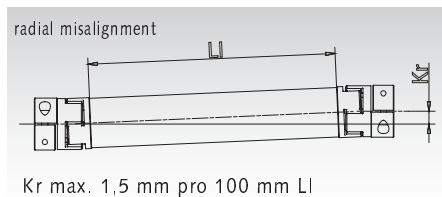
Connecting Shafts W, further details

Standard boreholes [mm] und maximum torques of the clamp hubs [Nm]

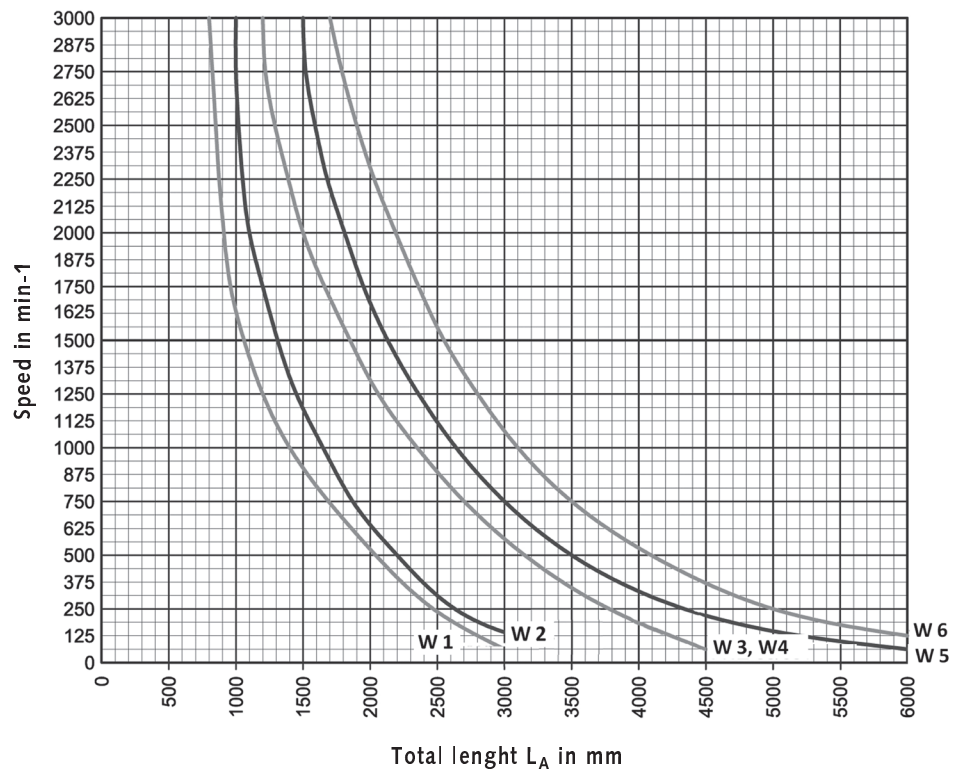
Size of connecting shaft	Standard boreholes [mm] ¹⁾																			
	9	11	12	14	16	18	19	20	22	24	25	28	30	32	38	40	42	45	48	55
1	21	26		22	37															
2		41		52	60		70	74	81											
3		60		76	87		103	109	120	131	136	153	164	175						
4			80		120	135		188	207		235			301						
5					325		386	406	447	487	508	568	609	650	772		854	915		
6											570	638		730	866	912	960	1030	1095	1250

¹⁾ Standard bores are only these bores, at whom there is a torque shown in the table.
Other boreholes on request.

Max. shaft disalignment



Max. speed in relation to the total length L_A



Further models on request

One side stiff:

One side stiff, other side with elastic coupling.
For example for use with a pillow block bearing at the stiff side.

Both sides stiff:

Both sides stiff, without any elastic coupling.
To use only, if there is no misalignment.

Stainless steel:

All models are also available in stainless steel (couplings and also the tube).