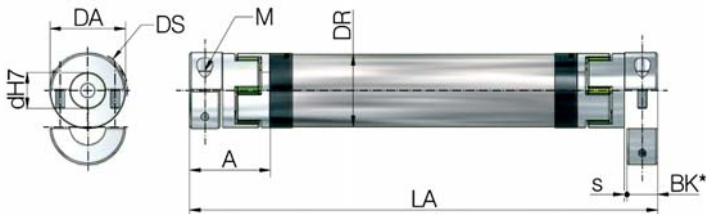


Connecting shaft VWZ



Standard bores "d" [mm]

VWZ-30	8, 9, 10, 11, 12, 14, 15, 16
VWZ-40	9, 10, 11, 12, 14, 15, 16, 18, 19, 20, 22
VWZ-60	10, 11, 12, 14, 15, 16, 18, 19, 20, 22, 24, 25, 28, 30, 32
VWZ-60V	12, 15, 16, 18, 20, 22, 24, 25, 28, 30, 32, 35
VWZ-80	16, 19, 20, 22, 24, 25, 28, 30, 32, 35, 38, 40, 42, 45
VWZ-100	25, 28, 32, 38, 40, 42, 45, 48, 50, 55

Dimensions, technical data

Size	Dimensions								Clamping screw		Moment of inertia		Torsional stiffness		Weight	
	DA [mm]	DS [mm]	DR [mm]	BK* [mm]	s [mm]	A [mm]	LA min [mm]	M 10.9	Tightening torque [Nm]	per coupling [10^{-3}kgm^2]	tube/m [10^{-3}kgm^2]	per star C_{dyn} [Nm/rad]	per tube/m C_{dyn} [Nm/rad]	both couplings [kg]	tube/m [kg]	
VWZ-30	32	32	30	15	1.5	34	99	M4	4	0.01	0.11	1375	1104	0.14	0.58	
VWZ-40	42	44.5	40	17	1.5	46	133	M5	8	0.08	0.2	3700	2332	0.36	0.76	
VWZ-60	56	57	60	30	2	63	177	M6	15	0.24	0.8	9917	8292	0.94	0.97	
VWZ-60V	67	68	60	35	2	73	205	M8	35	0.46	0.8	24417	8292	1.42	0.97	
VWZ-80	82	85	80	40	2	84	249	M10	70	2.4	3	33667	29102	2.98	2.00	
VWZ-100	102	105	100	50	2	97	283	M12	120	6	5.8	67667	58178	4.62	2.47	

*BK = shaft extension clamping length

Torques

Size	Elastomer star		Maximum transmittable torque by clamp hub depending on the bore diameter (clamp force)																Coupling type		
	Rated torque [Nm]	Max. torque [Nm]	Ø9 [Nm]	Ø11 [Nm]	Ø14 [Nm]	Ø16 [Nm]	Ø19 [Nm]	Ø20 [Nm]	Ø22 [Nm]	Ø24 [Nm]	Ø25 [Nm]	Ø28 [Nm]	Ø30 [Nm]	Ø32 [Nm]	Ø38 [Nm]	Ø40 [Nm]	Ø42 [Nm]	Ø45 [Nm]		Ø48 [Nm]	Ø55 [Nm]
VWZ-30	12	25	21	26	33	37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	KUZ-KK-16
VWZ-40	17	34	-	41	52	60	70	74	81	-	-	-	-	-	-	-	-	-	-	-	KUZ-KK-24
VWZ-60	60	120	-	60	76	87	104	109	120	131	136	153	164	175	-	-	-	-	-	-	KUZ-KK-32
VWZ-60V	160	320	-	-	-	120	-	188	206	-	235	-	-	301	-	-	-	-	-	-	KUZ-KK-35
VWZ-80	325	650	-	-	-	325	386	406	447	488	508	568	610	650	772	-	854	915	-	-	KUZ-KK-45
VWZ-100	530	1060	-	-	-	-	-	-	-	-	570	638	-	730	866	914	960	1029	1097	1250	KUZ-KK-60

The max. torque is limited either by the star or by the clamping force

Shafts with split shells

- Split shells permit easy radial insertion
- High concentricity
- High clamping forces
- Low moment of inertia

- Stepless adjustment facility thanks to the clamp hub rather than a fitted drive key
- Drive keyway available on request
- Material: High-tensile aluminium (stainless steel on request)

Elastomer star

- Permanently free of play, dampens vibration
- Shore hardness 64D
- Colour: ZIMM green
- Temperature range: 0°C to +70°C reduced to -20°C, to +100°C (Mx0.55)



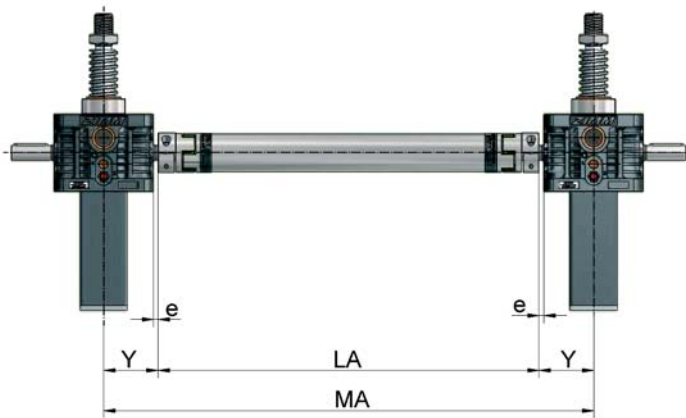
Ordering example:

VWZ-60-LA 1800-20/25

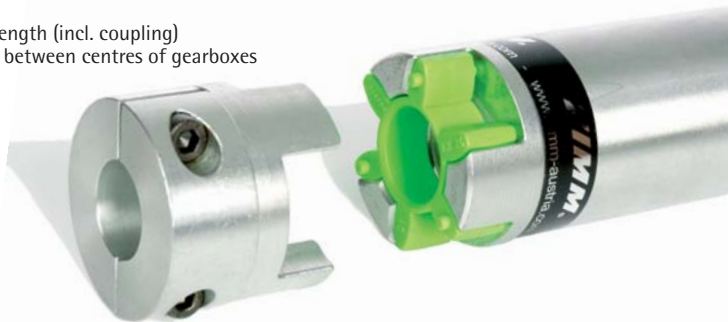
Size
Length
Bores for couplings

n=1500 rpm (specify the speed)

VWZ length calculation (identical for Z and GSZ)



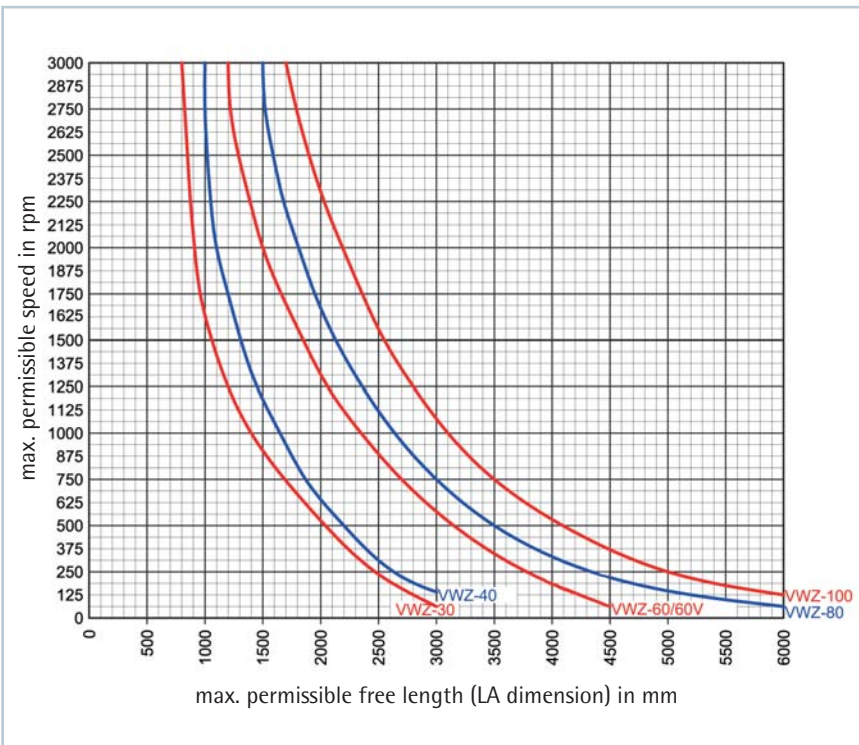
LA = External length (incl. coupling)
MA = Distance between centres of gearboxes



Screw jack	Connecting shaft	e	Y	A
GSZ-2	VWZ-30	6	31	34
Z-5	VWZ-30	9	45	34
Z-5	VWZ-40	7	43	46
Z-5	VWZ-60	2	38	63
Z-10	VWZ-30	12.5	55	34
Z-10	VWZ-40	10.5	53	46
Z-10	VWZ-60	2.5	45	63
Z-25	VWZ-40	28	80.5	46
Z-25	VWZ-60	15	67.5	63
Z-25	VWZ-80	5	57.5	84
Z-35	VWZ-40	28	84	46
Z-35	VWZ-60	15	71	63
Z-35	VWZ-60V*	10	66	73
Z-35	VWZ-80*	5	61	84
Z-50	VWZ-60	17.5	90	63
Z-50	VWZ-60V	12.5	85	73
Z-50	VWZ-80*	7.5	80	84
Z-100	VWZ-60	30	124	63
Z-100	VWZ-60V	25	119	73
Z-100	VWZ-80	20	114	84
Z-150	VWZ-60	30	130	63
Z-150	VWZ-60V	25	125	73
Z-150	VWZ-80	20	120	84
Z-250	VWZ-80	24	144	84
Z-250	VWZ-100	14	134	97
Z-350	VWZ-80	35	175	84
Z-350	VWZ-100	25	165	97
Z-500	VWZ-80	75	240	84
Z-500	VWZ-100	65	230	97

*cannot be fitted with pivot mounts LB

Maximum length - dependent on speed



max. permissible offset

Lateral offset:



Kr max. 1.5 mm per 100 mm LI

Angular offset:



max. 2° (1° per coupling)

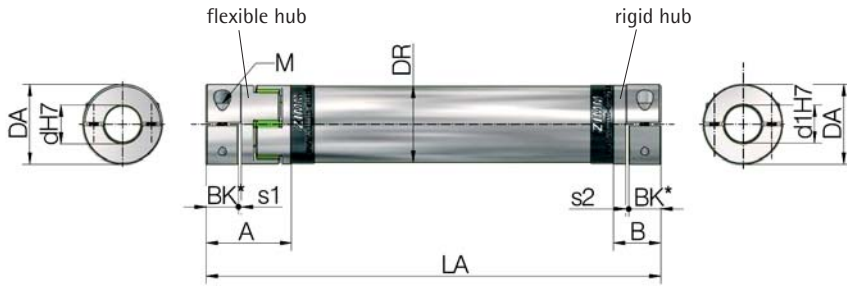
Axial offset:



ca. +/- 1 bis 2 mm



VWZ with rigid hub, for pedestal bearing use



Size	A	B	s1	s2	Bk*	d1	LA min
VWZ-30	34	20	2	1.2	15	15	85
VWZ-40	46	25	2	1.6	17	20	112
VWZ-60	63	40	2	2	30	20	154
VWZ-60V	73	42	2	2	35	30	175
VWZ-80	84	55	2	2	40	30	220
VWZ-100	97	65	2	2	50	50	251

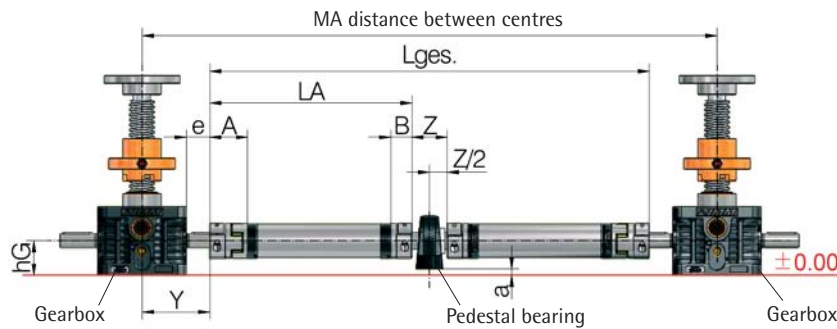
*BK=shaft extension clamping length



Pedestal bearing: YES/NO?

The installation situation is very important when selecting shaft dimensions. For example, the cost of a larger diameter connecting shaft not requiring additional pedestal bearing support can be considerably less than the cost of a smaller connecting shaft requiring costly sub-structures for the additional pedestal bearing.

For this version we use the rigid hub version so that no radial misalignment can occur in the pedestal bearing.



Gearbox	Connecting shaft	e	Y	A	B	Z	L _{wz}	d1	hG	hL	a
Z-5	VWZ-30	9	45	34	20	44	74	15	31	30.2	0.8
Z-5	VWZ-40	7	43	46	25	42	76	20	31	33.3	-2.3
Z-5	VWZ-60	2	38	63	40	42	102	20	31	33.3	-2.3
Z-10	VWZ-30	12.5	55	34	20	44	74	15	37	30.2	6.8
Z-10	VWZ-40	10.5	53	46	25	42	76	20	37	33.2	3.8
Z-10	VWZ-60	2.5	45	63	40	42	102	20	37	33.2	3.8
Z-25	VWZ-40	28	80.5	46	25	42	76	20	41	33.2	7.8
Z-25	VWZ-60	15	67.5	63	40	42	102	20	41	33.2	7.8
Z-25	VWZ-80	5	57.5	84	55	50	130	30	41	42.9	-1.9
Z-35	VWZ-40	28	84	46	25	42	76	20	50	33.2	16.8
Z-35	VWZ-60	15	71	63	40	42	102	20	50	33.2	16.8
Z-35	VWZ-60V*	10	66	73	42	60	130	30	50	42.9	7.1
Z-35	VWZ-80*	5	61	84	55	50	130	30	50	42.9	7.1
Z-50	VWZ-60	17.5	90	63	40	42	102	20	58	33.3	24.7
Z-50	VWZ-60V	12.5	85	73	42	60	130	30	58	42.9	15.1
Z-50	VWZ-80*	7.5	80	84	55	50	130	30	58	42.9	15.1
Z-100	VWZ-60	30	124	63	40	42	102	20	80	33.2	46.8
Z-100	VWZ-60V	25	119	73	42	60	130	30	80	42.9	37.1
Z-100	VWZ-80	20	114	84	55	50	130	30	80	42.9	37.1
Z-150	VWZ-60	30	130	63	40	42	102	20	92.5	33.2	59.3
Z-150	VWZ-60V	25	125	73	42	60	130	30	92.5	42.9	49.6
Z-150	VWZ-80	20	120	84	55	50	130	30	92.5	42.9	49.6
Z-250	VWZ-80	24	144	84	55	50	130	30	105	42.9	62.1
Z-250	VWZ-100	14	134	97	65	70	170	50	102	57.2	44.8
Z-350	VWZ-80	35	175	84	55	50	130	30	115	42.9	72.1
Z-350	VWZ-100	25	165	97	65	70	170	50	115	57.2	57.8
Z-500	VWZ-80	75	240	84	55	50	130	30	130	42.9	87.1
Z-500	VWZ-100	65	230	97	65	70	170	50	130	57.2	72.8

*cannot be fitted with pivot mounts LB



Ordering example:

VWZ-60-LA1800-25/20S

Size
Length
Bore 1st side
Bore 2nd side (S = rigid hub)

n=1500 rpm (specify the speed)