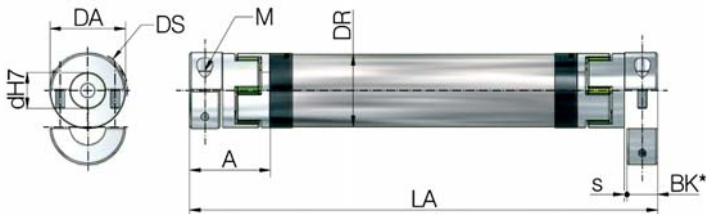


## Connecting shaft VWZ



### 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 [ $10^{-3} \text{kgm}^2$ ]	tube/m [ $10^{-3} \text{kgm}^2$ ]	per star $C_{\text{dyn}}$ [Nm/rad]	per tube/m $C_{\text{dyn}}$ [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)



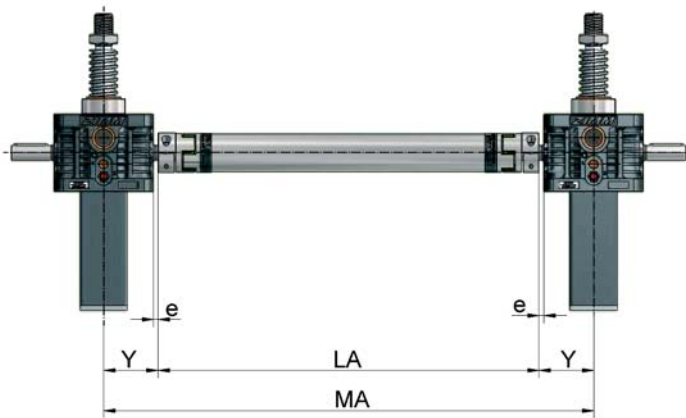
### Ordering example:

VWZ-60-LA 1800-20/25

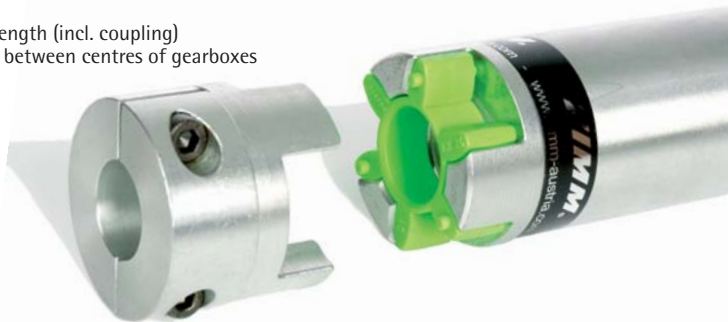
Size  
Length  
Bores for couplings

n=1500 rpm (specify the speed)

### VWZ length calculation (identical for Z and GSZ)



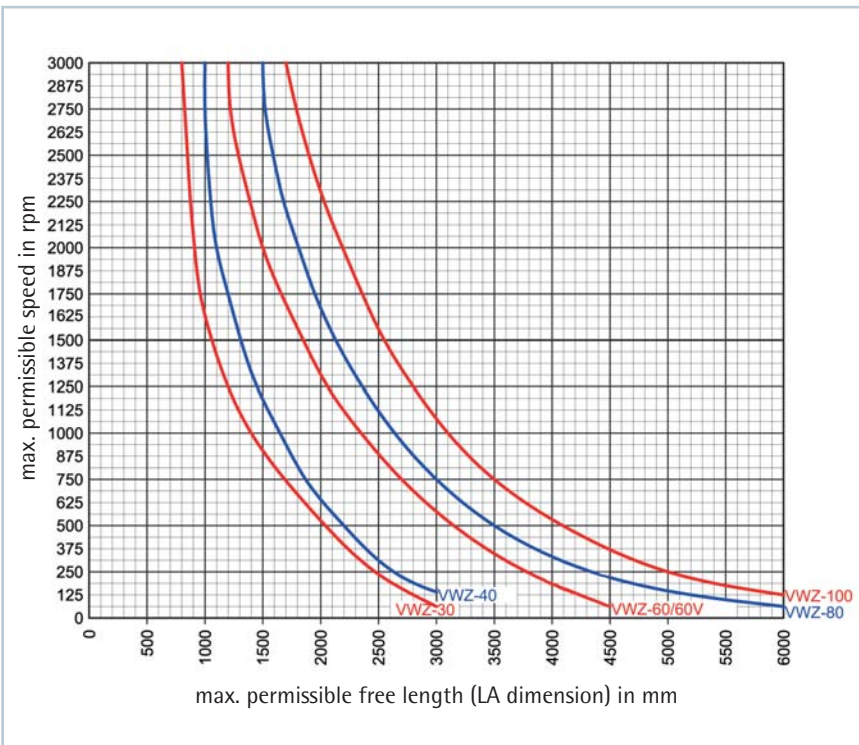
LA = External length (incl. coupling)  
MA = Distance between centres of gearboxes



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)

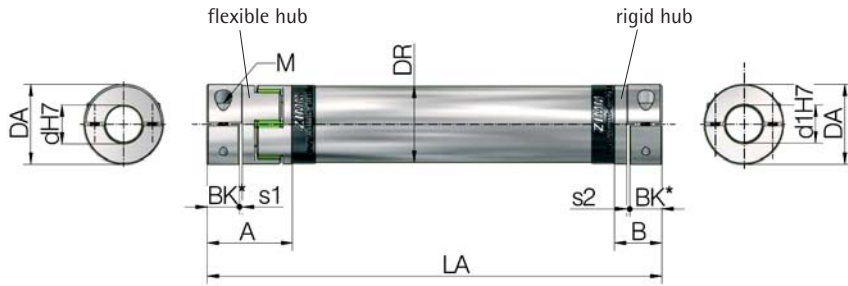
Axial offset:



ca. +/- 1 bis 2 mm

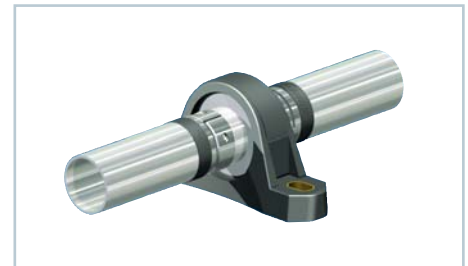


## VWZ with rigid hub, for pedestal bearing use



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

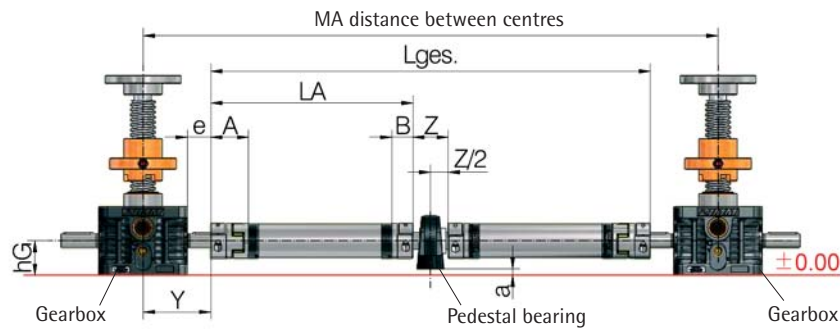
\*BK=shaft extension clamping length



### 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 <sub>wz</sub>	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

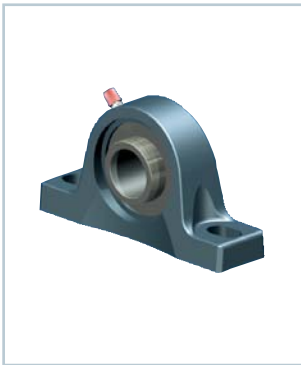
Length

Bore 1st side

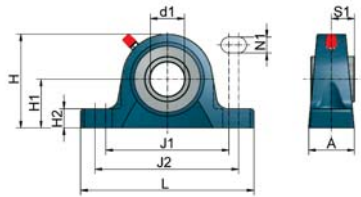
Bore 2nd side (S = rigid hub)

n=1500 rpm (specify the speed)

## Pedestal bearing, shaft extension



**Pedestal bearing STL**  
for connecting shaft VWZ

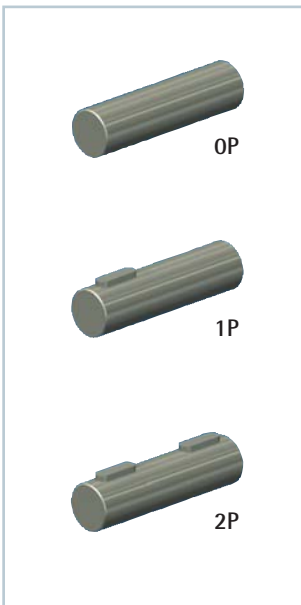
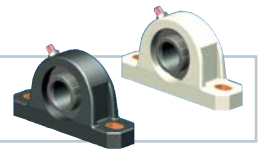


Part no.	d1	A	H	H1	H2	J1	J2	L	N1	S1	kg
STL-15-G	15	32	56	30.2	14	88	106	127	11.5	15.3	0.47
STL-20-G	20	32	65	33.3	14	88	106	127	11.5	18.3	0.59
STL-30-G	30	40	82.5	42.9	17	108	127	152	14	22.2	1.10
STL-40-G	40	48	99	49.2	19	125	146	175	14	30.2	1.85
STL-50-G	50	54	114.5	57.2	22	149	165	203	18	32.6	2.70

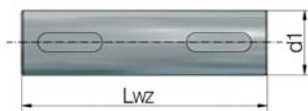
We use high-quality pedestal bearings.  
Housing material: Grey cast iron, primed in blue  
Bearing material: Roller bearing steel  
Temperature range: -30°C to +120°C



Pedestal bearings of plastic "black" or "white" (foodstuffs applications) on request.  
**CAUTION:** Dimensions may change!



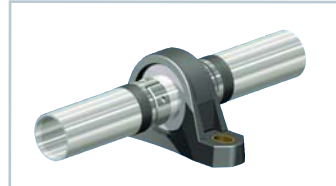
**Shaft extension**



Material: Steel, ground

Part no.	d1	Lwz	kg
WZ-15/74-?P	15	74	0.10
WZ-20/76-?P	20	76	0.19
WZ-20/102-?P	20	102	0.25
WZ-30/130-?P	30	130	0.72
WZ-40/170-?P	40	170	1.67
WZ-50/170-?P	50	170	2.61

### Examples:



VWZ with rigid hub, for pedestal bearings



Pedestal bearing with handwheel for driving the VWZ shaft

Shaft extension without fitted key (OP)

Shaft extensions with fitted key at one end (1P)



ZIMM VWZ shafts of 500 mm length and more are checked for concentricity as standard!

