

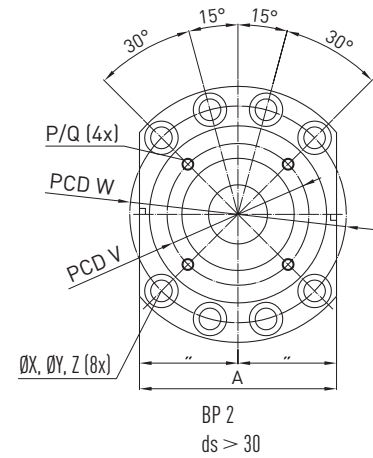
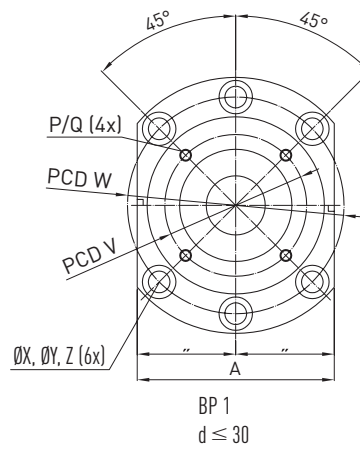
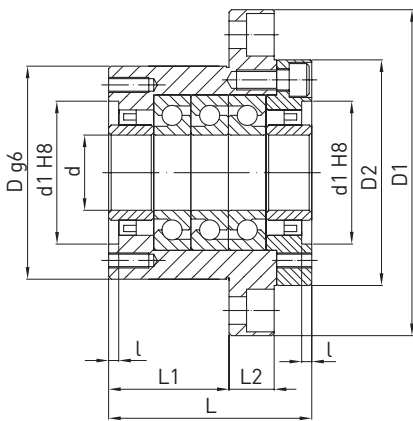
Ballscrews

Shaft ends and accessories

8.2 WBK bearing series

series are especially suited to use in heavy-duty ballscrews. Depending on the axial loads present, the WBK bearing units are available with the DF, DFD and DFF bearing arrangements. The bearings are lubricated for life.

The end machining processes suited to the WBK fixed bearing are types W1, W2 and W3 (Section 8.1).



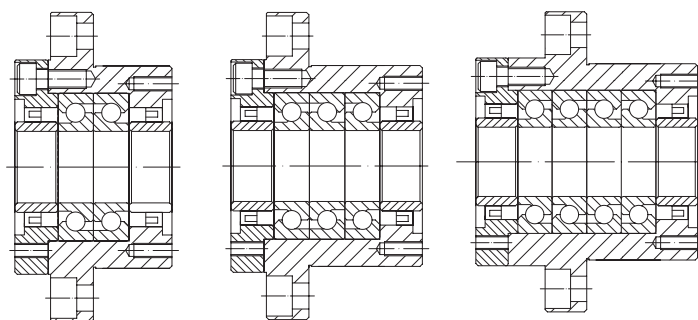
BP Hole pattern

Table 8.11 Bearing unit dimensions

Type	Shaft nominal Ø	d	D	D1	D2	L	L1	L2	A	W	Hole X	Counter bore Y	Counter bore depth Z	d1	l	V	P	Q
WBK15DF	20	15	70	106	72	60	32	15	80	88	9	14.0	8.5	45	3	58	M5	10
WBK17DF	25	17	70	106	72	60	32	15	80	88	9	14.0	8.5	45	3	58	M5	10
WBK20DF	25	20	70	106	72	60	32	15	80	88	9	14.0	8.5	45	3	58	M5	10
WBK25DF	32	25	85	130	90	66	33	18	100	110	11	17.5	11.0	57	4	70	M6	12
WBK25DFD	32	25	85	130	90	81	48	18	100	110	11	17.5	11.0	57	4	70	M6	12
WBK30DF	40	30	85	130	90	66	33	18	100	110	11	17.5	11.0	57	4	70	M6	12
WBK30DFD	40	30	85	130	90	81	48	18	100	110	11	17.5	11.0	57	4	70	M6	12
WBK35DF	45	35	95	142	102	66	33	18	106	121	11	17.5	11.0	69	4	80	M6	12
WBK35DFD	45	35	95	142	102	81	48	18	106	121	11	17.5	11.0	69	4	80	M6	12
WBK35DFF	45	35	95	142	102	96	48	18	106	121	11	17.5	11.0	69	4	80	M6	12
WBK40DF	50	40	95	142	102	66	33	18	106	121	11	17.5	11.0	69	4	80	M6	12
WBK40DFD	50	40	95	142	102	81	48	18	106	121	11	17.5	11.0	69	4	80	M6	12
WBK40DFF	50	40	95	142	102	96	48	18	106	121	11	17.5	11.0	69	4	80	M6	12

Unit: mm

Bearing arrangements

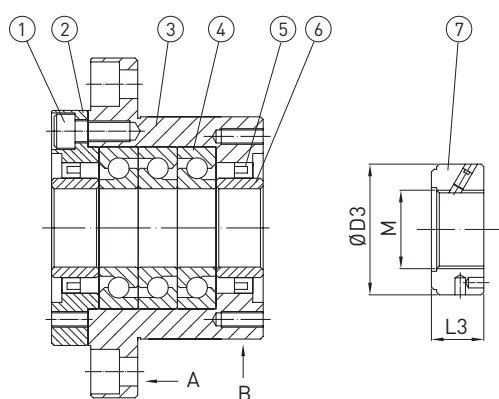


DF Type

DFD Type

DFF Type

Bearing structure



(1) Mounting bolt, (2) Bearing cover, (3) Bearing housing, (4) Bearing, (5) Seal, (6) Spacer, (7) Lock nut

Note:

1. Use reference planes A and B for alignment during assembly.
2. To ensure high accuracy, parts 1 – 6 must not be disassembled.

Table 8.12 Technical data of bearing

Type	Dynamic load rating C_{dyn} [kN]	Permissible axial load [kN]	Preload [kN]	Axial rigidity [N/ μ m]	Starting torque [Nm]	Lock nut				Weight [kg]	Article number
						M	D3	L3	Nut tightening torque [Nm]		
WBK15DF	21.9	26.6	2.15	750	0.19	M15 × 1	30	14	35	1.9	18-000023
WBK17DF	21.9	26.6	2.15	750	0.19	M17 × 1	32	16	42	1.9	18-000024
WBK20DF	21.9	26.6	2.15	750	0.19	M20 × 1	38	16	46	1.9	18-000025
WBK25DF	28.5	40.5	3.15	1,000	0.29	M25 × 1.5	38	18	87	3.1	18-000026
WBK25DFD	46.5	81.5	4.30	1,470	0.39	M25 × 1.5	38	18	87	3.4	18-000027
WBK30DF	29.2	43.0	3.35	1,030	0.30	M30 × 1.5	45	18	105	3.0	18-000028
WBK30DFD	47.5	86.0	4.50	1,520	0.40	M30 × 1.5	45	18	105	3.3	18-000029
WBK35DF	31.0	50.0	3.80	1,180	0.34	M35 × 1.5	52	18	340	3.4	18-000030
WBK35DFD	50.5	100.0	5.20	1,710	0.45	M35 × 1.5	52	18	340	4.3	18-000031
WBK35DFF	50.5	100.0	7.65	2,350	0.59	M35 × 1.5	52	18	340	5.0	18-000032
WBK40DF	31.5	52.0	3.90	1,230	0.36	M40 × 1.5	58	20	500	3.6	18-000033
WBK40DFD	51.5	104.0	5.30	1,810	0.47	M40 × 1.5	58	20	500	4.2	18-000034
WBK40DFF	51.5	104.0	7.85	2,400	0.61	M40 × 1.5	58	20	500	5.7	18-000035