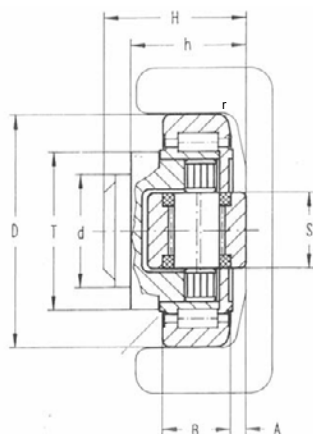
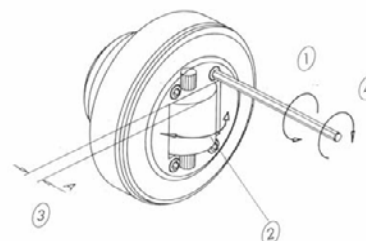


# WINKEL Combined Bearings

## Adjustable Eccentric Axial Bearing



**Adjusting The Eccentric Axial Bearing**  
Size W-4.455 thru W-4.463. All with 2RS Seals.



1. Loosen screws.
2. Turn axial bearing (eccentric axial will be turned).
3. Check distance A and Repeat Step 2 as needed.
4. Retighten screws.

Special Stud Extensions available on request.  
Bearings are lubricated for life

### Standard Adjustable Eccentric Axial Bearing

Bearing only Part No.	Bearing with Rectangular Flange Part No.	Bearing with Square Flange Part No.	Dimensions										Wt. kg	Profile Part No.
			A mm	B mm	d (-0.05mm)	D* mm	h mm	H mm	r mm	S mm	T mm	RPM max		
W-4.454	W-4.454/AP0	W-4.454/AP0-Q	4-5.5	20.0	30	62.5	30.5-32	37.5-39	3	20	42	900	0.53	W-0Nb
W-4.455	W-4.455/AP1	W-4.455/AP1-Q	4-5.5	23.0	35	70.1	36-37.5	44-45.5	4	20	48	800	0.80	W-1Nb W-3018
W-4.456	W-4.456/AP2	W-4.456/AP2-Q	3.5-5	23.0	40	78.0	37-38.5	48-49.5	4	26	54	800	1.00	W-2Nb
W-4.457	**	**	3.5-5	23.0	40	78.3	29-30.5	40-41.5	4	26	54	800	0.87	W-3019
W-4.458	W-4.458/AP3.1	W-4.458/AP3-Q	4-5.5	30.0	45	88.4	44-45.5	57-58.5	4	26	59	750	1.62	W-3Nb W-3020
W-4.459	**	**	4.5-6.5	26.0	50	101.6	33-35	46-48	3	30	69	700	1.74	W-2912
W-4.460	**	**	4-6	31.0	55	108.5	40-42	54-56	5	30	69	650	2.27	W-3100
W-4.461	W-4.461/AP4	W-4.461/AP4-Q	4-6	31.0	60	107.7	55-57	69-71	5	30	69	650	2.82	W-4Nb
W-4.462	W-4.462/AP4	W-4.462/AP4-Q	5-9	37.0	60	123.0	56-60	72.3-76.3	5	34	80	550	3.60	W-5Nb W-3353
W-4.463	W-4.463/AP6	W-4.463/AP6-Q	6-10	45.0	60	149.4	58.5-62.5	78.5-82.5	3	34	108	450	6.30	W-6Nb
W-4.085	—	W-4.085/AP90-Q	6.5-9.5	57.3	100	180.0	76.3-79.3	95.7-98.7	3	60	124	100	11.50	W-8Nb

### Profile & Bearing Load Ratings

CAD Drawing Download: [www.winkel.de](http://www.winkel.de)

Bearing only Part No.	Profile		Max Static Radial Load on Profile $F_R$ kN		Max Static Axial Load on Profile $F_A$ kN		Dynamic Load Capacity of Radial Brg $C$ kN	Static Load Capacity of Radial Brg $C_0$ kN	Dynamic Load Capacity of Axial Brg $C_A$ kN	Static Load Capacity of Axial Brg $C_{0A}$ kN
	C-Profile	I-Profile	C-Profile	I-Profile	C-Profile	I-Profile				
W-4.454	0 Nb	—	9.40	—	3.10	—	31.0	35.5	11	11
W-4.455	1 Nb	3018	11.30	11.30	3.73	3.73	45.5	51.0	11	11
W-4.456	2 Nb	—	11.72	—	3.87	—	48.0	56.8	18	18
W-4.457	—	3019	—	11.72	3.87	3.87	48.0	56.8	18	18
W-4.458	3 Nb	3020	20.47	20.47	6.76	6.76	68.0	72.0	23	23
W-4.459	—	2912	—	20.11	—	6.70	73.0	82.0	25	27
W-4.460	—	3100	—	21.68	—	7.16	81.0	95.0	31	36
W-4.461	4 Nb	—	21.68	—	7.16	—	81.0	95.0	31	36
W-4.462	5 Nb	3353	30.92	24.70	10.20	10.20	110.0	132.0	43	50
W-4.463	6 Nb	—	54.02	—	17.80	—	151.0	192.0	68	71
W-4.085	8 Nb	—	76.00	—	22.80	—	207.0	243.0	73	83

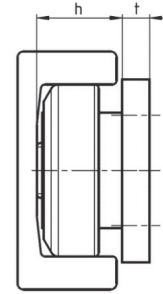
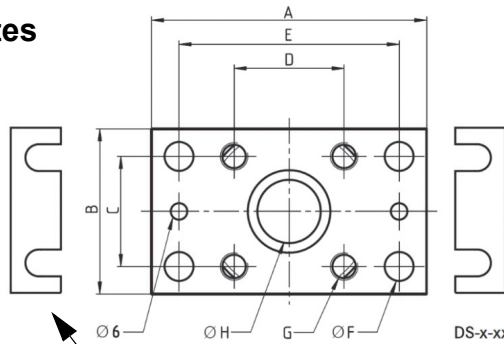
Note: \* OD has a slight crown to accommodate misalignments. \*\* Flange Plates available on request.

# WINKEL Combined Bearings

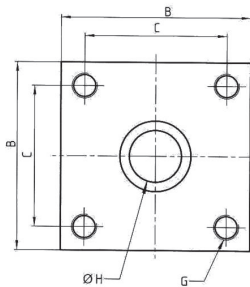
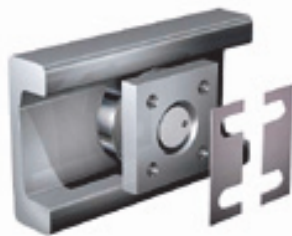
## Adjustable Eccentric Axial Bearing



### Rectangular Flange Plates



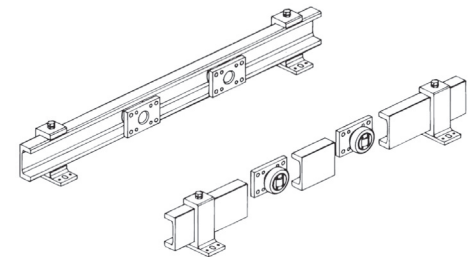
### Square Flange Plates



### Adjustment Shim

### Clamp Flange

### Flange Plate Detail



Bearing with Rectangular Flange Plate Part No.	Bearing with Square Flange Plate Part No.	Dimensions										Flange Plate Only	
		A mm	B mm	C mm	D mm	E mm	ØF mm	G	ØH mm	h mm	t mm	Rectangular Part No.	Square Part No.
W-4.454/AP0	W-4.454/AP0-Q	100	60	40	40	80	10.5	M10	30	30.5-32.0	10	W-AP0	W-AP0-Q
W-4.455/AP1	W-4.455/AP1-Q	120	80	50	50	90	12.5	M12	35	36.0-37.5	15	W-AP1	W-AP1-Q
W-4.456/AP2	W-4.456/AP2-Q	120	80	50	50	90	12.5	M12	40	37.0-38.5	15	W-AP2	W-AP2-Q
W-4.458/AP3.1	—	160	100	60	60	120	17.0	M16	45	44.0-45.5	20	W-AP3.1	—
—	W-4.458/AP3-Q	—	120	90	—	—	—	M16	45	44.0-45.5	20	—	W-AP3-Q
W-4.461/AP4	W-4.461/AP4-Q	180	120	80	80	140	17.0	M16	60	55.0-57.0	20	W-AP4	W-AP4-Q
W-4.462/AP4	W-4.462/AP4-Q	180	120	80	80	140	17.0	M16	60	56.0-60.0	20	W-AP4	W-AP4-Q
W-4.463/AP6	W-4.463/AP6-Q	200	150	100	100	160	17.0	M16	60	58.5-62.5	20	W-AP6	W-AP6-Q
—	W-4.485/AP90-Q	—	190	150	—	—	—	M20	100	64.5-67.5	28	—	W-AP90-Q

### Adjustment Shims for Flange Bearings

Bearing Size	0.5 mm Shim Part No.	1.0 mm Shim Part No.
W-4.454	W-DS-0-0.5	W-DS-0-1.0
W-4.455	W-DS-1-0.5	W-DS-1-1.0
W-4.456	W-DS-2-0.5	W-DS-2-1.0
W-4.458	W-DS-3-0.5	W-DS-3-1.0
W-4.461	W-DS-4-0.5	W-DS-4-1.0
W-4.462	W-DS-4-0.5	W-DS-4-1.0
W-4.463	W-DS-6-0.5	W-DS-6-1.0
W-4.485	W-DS-90-0.5	W-DS-90-1.0

### Clamp Flanges for Mounting Profile

Part No.	Profile Size
W-KF 0	0 NbV
W-KF 1	1 NbV
W-KF 2	2 NbV
W-KF 3	3 NbV
W-KF 4	4 NbV

See Clamp Flange Section for Dimensions

### Precision Adjustable Eccentric Axial Bearings requires Precision Profile

Bearing Only Part No. *	Bearing with Rectangular Flange Part No.	Bearing with Square Flange Part No.	D Bearing OD	Profile Size
W-PR4.454	W-PR4.454/AP0	W-PR4.454/AP0-Q	64.8	W-PR0 NbV
W-PR4.455	W-PR4.455/AP1	W-PR4.455/AP1-Q	73.8	W-PR1 NbV
W-PR4.456	W-PR4.456/AP2	W-PR4.456/AP2-Q	81.8	W-PR2 NbV
W-PR4.458	W-PR4.458/AP3.1	W-PR4.458/AP3-Q	92.8	W-PR3 NbV
W-PR4.461	W-PR4.461/AP4	W-PR4.461/AP4-Q	111.8	W-PR4 NbV
W-PR4.462	W-PR4.462/AP4	W-PR4.462/AP4-Q	127.8	W-PR5 NbV
W-PR4.463	W-PR4.463/AP6	W-PR4.463/AP6-Q	153.8	W-PR6 NbV
W-PR4.485	—	W-PR4.485/AP90-Q	184.8	W-PR8 NbV

Note: \*Precision (PR) Bearing fit within the profile is more precise.