Axial needle roller and cage assemblies

Type series AXK (steel version)

株式会社ファイブ・テック

FT Engineering

Axial needle roller and cage assemblies AXK

Description of construction

KMF axial needle and cage assemblies have the following characteristics:

- small hight
- high load capacity
- great stiffness

The needle rollers are contained and guided in the roller pockets in accordance with DIN 5402 / ISO 3096. 25 types with needle sizes Ø 2 mm and Ø 5 mm are available. The range of use includes shaft diameters between 12 and about 160 mm.

Installation

The surface of the running tracks should preferably be made as bearing running tracks. The stated load capacity in the table of measurements correspond to this bearing running track and are based on the following preconditions:

- Hardness of running track 670 + 170 HV (58 + 7 HRC)
- Surface quality max. Ra 0,8

The axial needle roller and cage assemblies must be guided on the shaft. In order to achieve a guide with little wear on the axial needle roller and cage assemblies, the guide surface should be polished. The tolerance h8 applies for the guide surface on the shaft.

Accuracy

The needle roller and cage assemblies are equipped with rollers of sort G2 (0,002 mm).
The diametral deviation is therefore a maximum of 0,002 mm.

Only rollers of one sort are used per axial roller and cage assembly.

If the adjoining structure is not suitable for providing running tracks, axial roller and cage assemblies can be combined with axial bearing washers type ASS.

Temperature

The temperature limits of the axial needle roller and cage assemblies in steel version in continious operation are –40°C and +150°C, considering the lubrication (grease or oil).

Example of order / inquiry:

Type AXK 90120 KMF-type AXK 4015 0090 S

Designation : AXK 4015 0090 S   Quantity : 300 off

Axial needle roller and cage assemblies (steel version)

Type sereis AXK

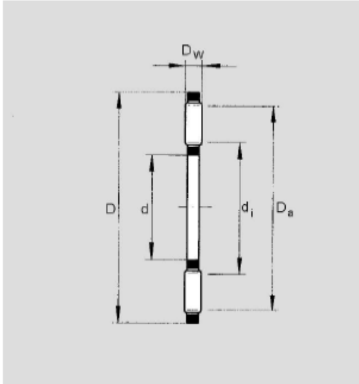

Table of dimensions [dimensions in mm]

Short sign	KMF-type	Weight	Raceway dimensions		Cage dimensions			Load capacity		Speed limit
		[g]	d_i	D_a	d E12	D	D_W	dyn. C [kN]	stat. C_0 [kN]	1) n_G min.$^{-1}$
AXK 1226	AXK 2007 0012 S	3	14	25	12	26	2	9,9	29	15.000
AXK 1528	AXK 2007 0015 S	4	17	27	15	28	2	11,3	36	13.000
AXK 1730	AXK 2007 0017 S	4	19	29	17	30	2	11,9	39,5	12.000
AXK 2035	AXK 2008 0020 S	5	22	34	20	35	2	13,1	46,5	10.000
AXK 2542	AXK 2009 0025 S	7	29	41	25	42	2	14,7	58	8.500
AXK 3047	AXK 2009 0030 S	8	34	46	30	47	2	16,3	70	7.500
AXK 3552	AXK 2009 0035 S	10	39	51	35	52	2	17,8	81	6.500
AXK 4060	AXK 3010 0040 S	16	45	58	40	60	3	28	114	6.000
AXK 4565	AXK 3010 0045 S	18	50	63	45	65	3	30	128	5.000
AXK 5070	AXK 3010 0050 S	20	55	68	50	70	3	32	143	4.800
AXK 5578	AXK 3012 0055 S	28	60	76	55	78	3	38	186	4.300
AXK 6085	AXK 3013 0060 S	33	65	83	60	85	3	44,5	234	4.000
AXK 6590	AXK 3013 0065 S	35	70	88	65	90	3	46,5	255	3.700
AXK 7095	AXK 4013 0070 S	60	74	93	70	95	4	54	255	3.500
AXK 75100	AXK 4013 0075 S	61	79	98	75	100	4	55	265	3.300
AXK 80105	AXK 4013 0080 S	63	84	103	80	105	4	56	280	3.100
AXK 85110	AXK 4013 0085 S	67	89	108	85	110	4	58	290	3.000
AXK 90120	AXK 4015 0090 S	86	94	118	90	120	4	73	405	2.700
AXK 100135	AXK 4018 0100 S	105	105	133	100	135	4	91	560	2.500
AXK 110145	AXK 4018 0110 S	122	115	143	110	145	4	97	620	2.300
AXK 120155	AXK 4018 0120 S	130	125	153	120	155	4	102	680	2.100
AXK 130170	AXK 5020 0130 S	205	136	167	130	170	5	133	840	1.900
AXK 140180	AXK 5020 0140 S	218	146	177	140	180	5	138	900	1.800
AXK 150190	AXK 5020 0150 S	231	156	187	150	190	5	143	960	1.700
AXK 160200	AXK 5020 0160 S	245	166	197	160	200	5	148	1.020	1.600

1) Speed limit for grease lubrication.
The permissible value for grease lubrication is 25% of those shown in the list.