Ball Screw Support Bearings

TAF-X Series

Nomenclature of Bearing Numbers

25 TAF 06 X □ DF □ /GM P5

- **Bore dimension (mm)**
- **Bearing type**
- **Outside diameter value**
- **Internal design Code**
- **Width code** (No code) : Standard; W1 : W ide (with seal)
- **Mounting code** U : Flush ground (single); DB : Back-to-back; DF : Face-to-face; DT : Tandem
- **Seal code** (No code) : Open type; -2LR : W ith two contact seals
- **Preload and other class codes** /GE : E preload; /GL : L preload; /GM : M preload
- **Tolerance class code** P5 : Standard (Equivalent JIS Class 5)

Features

- A large-diameter ball and large contact angle provides the high thrust load capacity needed for the high loads of the ball screw used in injection molding machines.
- A one-piece molded resin cage that combines both greater accuracy and strength, and the ability to withstand repeated high-speed switching between for ward and reverse.

Contact Angle

The contact angle is 55°.

Accuracy

Equivalent JIS Class 5 is standard. See page 14 for details.

Preload

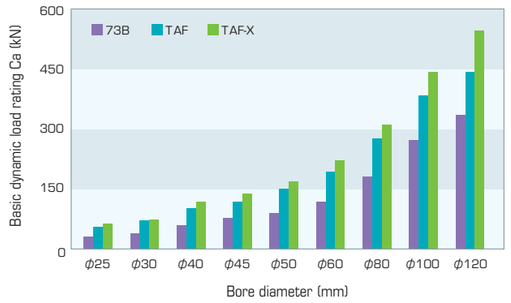
Three types of preload settings are available.
See page 24 for details.
Standard preloads are M-preloads if less than 80T AF17X, and
E-preloads if greater than 80T AF21X.

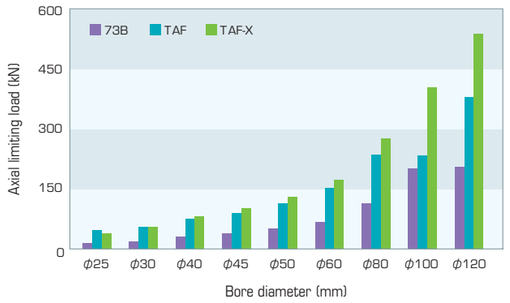
Cage

A ball guide polyamide resin cage is provided as standard.

With Seal

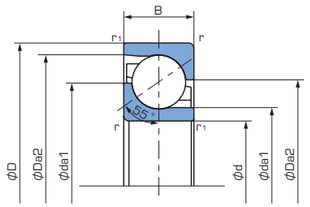
Contact seals are also available for improved intrusion protection and grease retention. (They are wider than open types.)





Ball Screw Support Bearings

TAF-X Series



Dynamic equivalent axial load $P_a = XF_r + YF_a$

No. of bearings in set		2	
Number of rows receiving axial load		1 row	2 rows
$F_a/F_r \leq 1.79$	X	1.60	–
	Y	0.56	–
$F_a/F_r > 1.79$	X	0.81	0.81
	Y	1	1

Bearing No.	Boundary dimensions (mm)					Basic dynamic load rating (1) Ca (kN)	Axial limiting load (2) (kN)		Limiting speed (3) (min⁻¹)	Reference dimensions (mm)				Mass (kg) (Reference)	Bearing No.
	d	D	B	r min	r1 min				Grease lubrication	da1	da2	Da1	Da2		
25TAF05X	25	52	15	1.0	0.6	38.0	25.7		7,700	38.7	31.6	39.7	48.0	0.140	**25TAF05X**
25TAF06X	25	62	17	1.1	0.6	64.5	40.5		6,800	43.0	32.7	44.5	56.6	0.230	**25TAF06X**
30TAF07X	30	72	19	1.1	0.6	78.5	56.9		5,800	50.4	38.8	52.1	65.8	0.357	**30TAF07X**
35TAF09X	35	90	23	1.5	1.0	119	85.5		4,600	64.3	50.8	66.3	82.2	0.713	**35TAF09X**
40TAF09X	40	90	23	1.5	1.0	119	85.5		4,600	64.3	50.8	66.3	82.2	0.650	**40TAF09X**
40TAF11X	40	110	27	2.0	1.0	173	131		3,700	79.2	62.4	81.7	101.0	1.28	**40TAF11X**
45TAF10X	45	100	25	1.5	1.0	139	103		4,100	71.8	56.9	74.0	91.1	0.880	**45TAF10X**
45TAF11X	45	110	27	2.0	1.0	173	131		3,700	79.2	62.4	81.7	101.0	1.21	**45TAF11X**
50TAF11X	50	110	27	2.0	1.0	173	131		3,700	79.2	62.4	81.7	101.0	1.15	**50TAF11X**
50TAF13X	50	130	31	2.1	1.1	225	174		3,100	94.1	74.7	96.9	119.5	1.98	**50TAF13X**
60TAF13X	60	130	31	2.1	1.1	225	174		3,100	94.1	74.7	96.9	119.5	1.77	**60TAF13X**
60TAF17X	60	170	39	2.1	1.1	315	280		2,400	123.8	99.3	127.4	155.8	4.42	**60TAF17X**
80TAF17X	80	170	39	2.1	1.1	315	280		2,400	123.8	99.3	127.4	155.8	3.76	**80TAF17X**
80TAF21X	80	215	47	3.0	1.1	445	405		1,900	155.2	125.0	160.5	196.2	8.54	**80TAF21X**
100TAF21X	100	215	47	3.0	1.1	445	405		1,900	155.2	125.0	160.5	196.2	7.53	**100TAF21X**
100TAF26X	100	260	55	3.0	1.1	550	540		1,500	187.1	153.4	193.3	234.9	14.7	**100TAF26X**
120TAF26X	120	260	55	3.0	1.1	550	540		1,500	187.1	153.4	193.3	234.9	13.2	**120TAF26X**

(Note 1) When the axial load is on a 2-row , 3-row , or 4-row arrangement, the values in the table should be multiplied by 1.62, 2.16, and 2.64 respectively .
(Note 2) When the axial load is on a 2-row , 3-row , or 4-row arrangement, the values in the table should be multiplied by 2, 3, and 4 respectively .
(Note 3) Limiting speed for standard preload.