



BALL SCREW SUPPORT BEARINGS



NIBC BALL SCREW SUPPORT BEARINGS

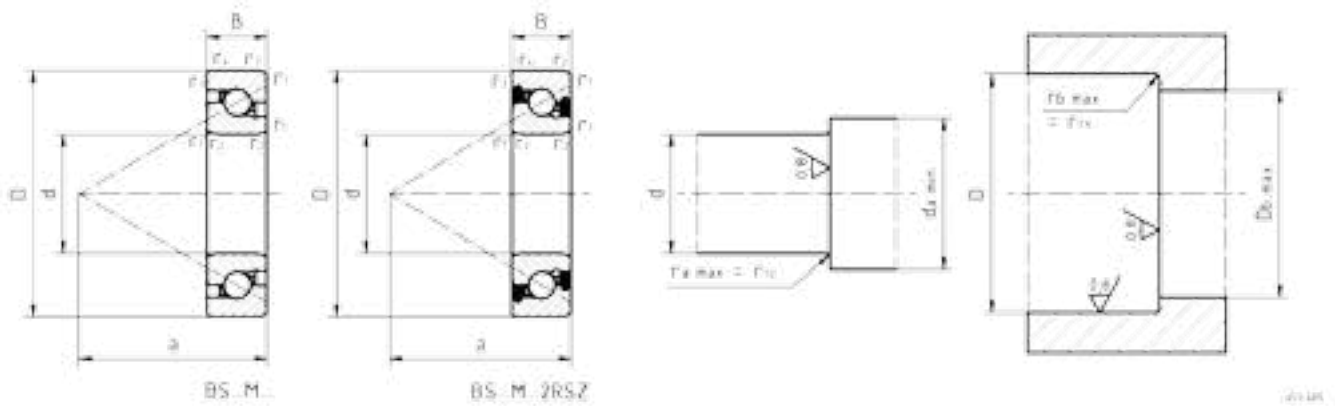


- High Axial Rigidity : Greater number of balls with polyamide cage provides increased rigidity
- Compact Design : 60° contact angle allows the bearing to carry thrust load & some amount of radial load. This allows to have a compact design.
- Low Noise: The high quality of surface roughness achieved on the races combined with polyamide cage enables these bearings to have low noise.
- Ease of Assembly: Initial pre-loading of bearing provides ease of assembly without any adjustment
- Pre-packed grease: The bearings are packed with a measured quantity of grease so that the bearings can be installed out of the box
- Interchangeability: The bearings are easily interchangeable with any reputed manufacturers without any modifications in design.
- Universal Ground Set: The bearings are available in universal ground set so that they can be mounted in any combination

FOR HIGH PRECISION BALL SCREWS

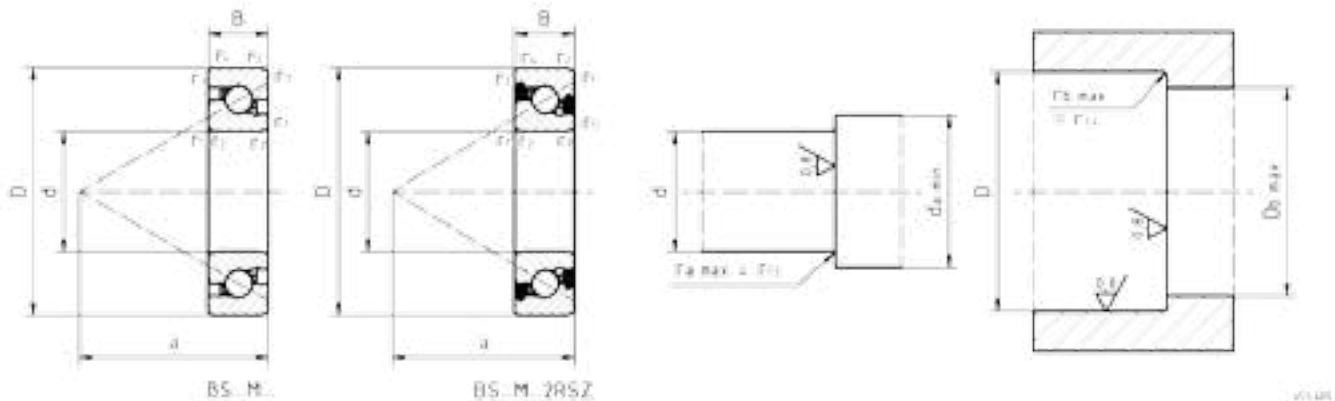


DIMENSIONAL TABLE



Basic Dimensions			Basic Designation	Load Ratings			Weight m kg	Mounting dimensions					
d	D mm	B		dyn. C_o	stat C_{oa}	fatigue limit C_μ		a	r_{12min}	r_{34min}	d_{amin}	d_{amax}	d_{bmax}
17	47	15	BS17M47	23,400	33,800	1,250	0.13	36.5	0.6	0.6	26	38	40
20	47	15	BS20M47	23,400	33,800	1,250	0.15	36.5	0.6	0.6	28	38	40
25	52	15	BS 25M52	24,900	39,400	1,460	0.22	39	1	0.6	34	44	45
25	62	15	BS25M62	28,200	49,800	1,840	0.27	46.5	1	0.6	34	52	54
30	62	15	BS30M62	28,200	49,800	1,840	0.25	46	1	0.6	38	52	54
30	72	15	BS30M72	30,600	62,100	2,300	0.32	56	1	0.6	39	63	64
35	72	15	BS35M72	30,600	62,100	2,300	0.29	56	1	0.6	43	63	64
35	100	20	BS35M100	63,100	1,33,000	4,930	1.05	75	1	0.6	47	86	89
40	72	15	BS40M72	30,600	62,100	2,300	0.28	56	1	0.6	48	63	64
40	90	20	BS40M90	54,000	1,13,800	4,210	0.64	71.5	1	0.6	49	80	82
40	100	20	BS40M100	63,100	1,33,000	4,930	1.00	75	1	0.6		86	89
45	75	15	BS45M75	44,300	85,700	3,170	0.29	60	1	0.6	53	65	67
45	100	20	BS45M100	63,100	1,33,000	4,930	0.95	75	1	0.6	54	86	89
50	90	20	BS50M90	54,000	1,13,800	4,210	0.60	71.5	1	0.6	59	80	82
50	100	20	BS50M100	64,300	1,40,000	5,190	0.89	75	1	0.6		86	89
55	90	15	BS55M90	47,900	1,05,600	3,910	0.42	73	1	0.6	64	78	81
55	100	20	BS55M100	64,300	1,40,000	5,190	0.71	75	1	0.6	65	86	89
55	120	20	BS55M120	86,200	1,89,500	7,020	1.43	88	1	0.6		106	108
60	120	20	BS60M120	89,300	1,91,400	7,090	1.36	88	1	0.6	70	100	108
75	110	15	BS75M110	52,000	1,34,400	4,980	0.48	89	1	0.6	85	98	100

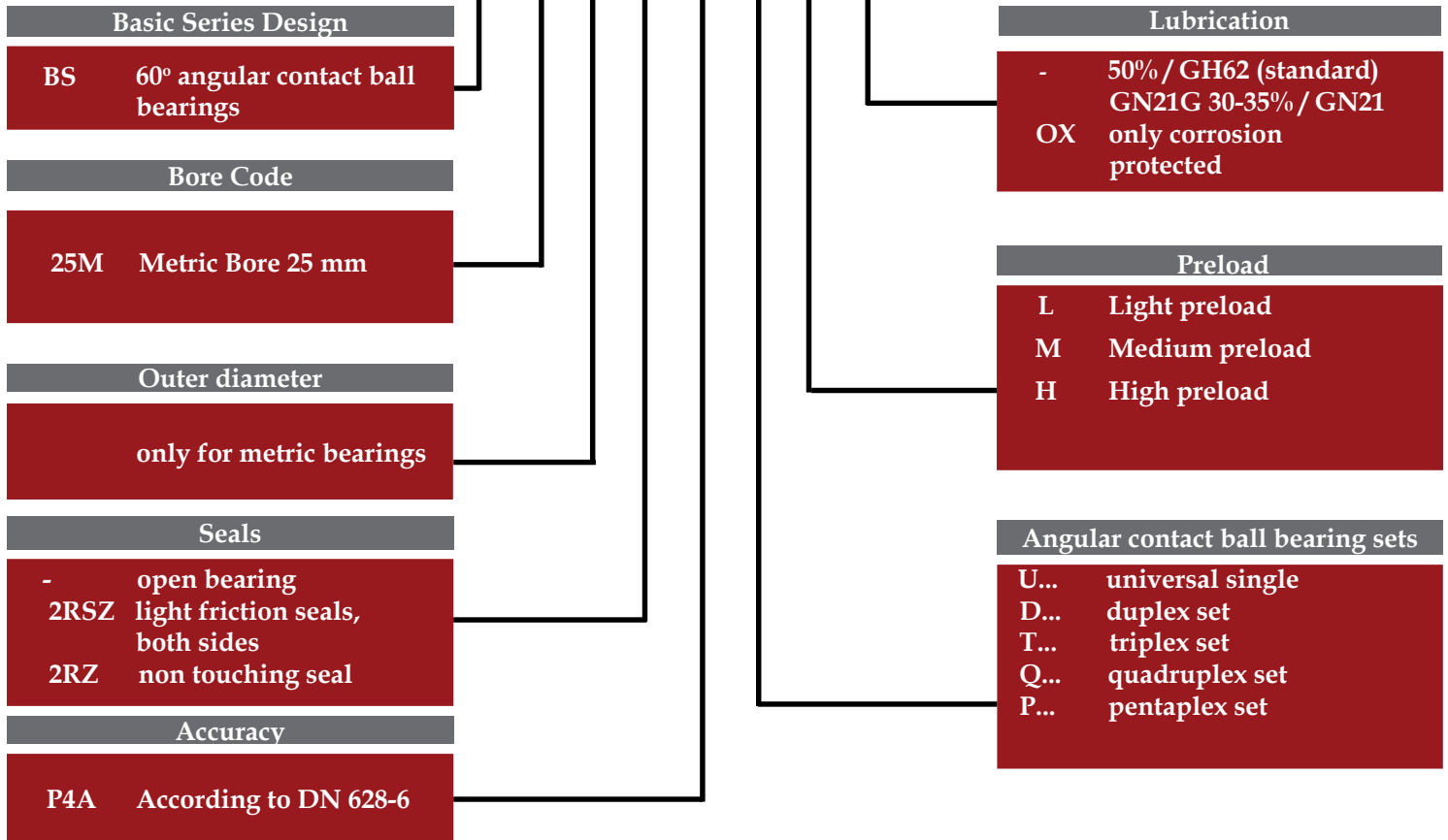
DIMENSIONAL TABLE



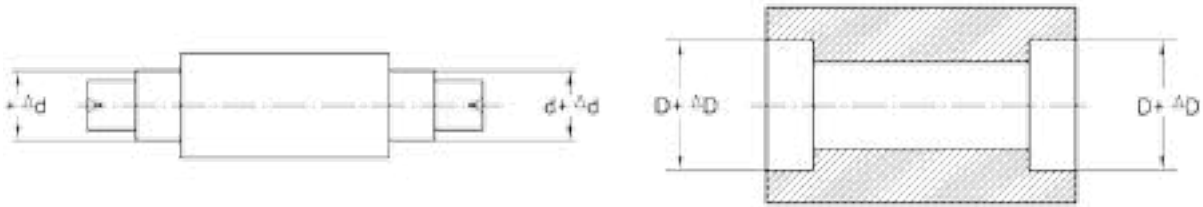
Basic Dimensions			Basic Designation	Preload F_V			Axial Stiffness S_{ax}			Speed with grease n_f			Drag Torque M_f		
d	D mm	B		L	M N	H	L	M N/ μ m	H	L	M N/ μ m	H	L	M N/ μ m	H
17	47	15	BS17M47	450	1,010	2,020	430	570	730	16,250	13,000	6,500	0.03	0.05	0.09
20	47	15	BS20M47	450	1,010	2,020	430	570	730	16,250	13,000	6,500	0.03	0.05	0.09
25	52	15	BS 25M52	520	1,070	2,340	480	640	810	14,000	11,200	5,600	0.03	0.06	0.11
25	62	15	BS25M62	660	1,490	2,980	580	760	970	11,750	9,400	4,700	0.05	0.08	0.15
30	62	15	BS30M62	660	1,490	2,980	580	760	970	11,750	9,400	4,700	0.05	0.08	0.15
30	72	15	BS30M72	820	1,850	3,700	710	940	1,200	9,750	7,800	3,900	0.06	0.10	0.19
35	72	15	BS35M72	820	1,850	3,700	710	940	1,200	9,750	7,800	3,900	0.06	0.10	0.19
35	100	20	BS35M100	1,760	3,960	7,920	1,000	1,350	1,700	7,500	6,000	3,000	0.19	0.31	0.62
40	72	15	BS40M72	820	1,850	3,700	710	940	1,200	9,750	7,800	3,900	0.06	0.10	0.19
40	90	20	BS40M90	1,500	3,380	6,760	950	1,250	1,580	8,000	6,400	3,200	0.15	0.25	0.49
40	100	20	BS40M100	1,760	3,960	7,920	1,000	1,350	1,700	7,500	6,000	3,000	0.11	0.31	0.62
45	75	15	BS45M75	1,130	2,540	5,080	780	1,030	1,300	9,250	7,400	3,700	0.19	0.25	0.34
45	100	20	BS45M100	1,760	3,960	7,920	1,000	1,350	1,700	7,500	6,000	3,000	0.06	0.31	0.62
50	90	20	BS50M90	1,500	3,380	6,760	950	1,250	1,580	8,000	6,400	3,200	0.15	0.25	0.49
50	100	20	BS50M100	1,850	4,160	8,320	1,080	1,420	1,800	7,500	6,000	3,000	0.10	0.17	0.33
55	90	15	BS55M90	1,390	3,130	6,260	920	1,220	1,540	8,000	6,400	3,200	0.14	0.22	0.44
55	100	20	BS55M100	1,850	4,160	8,320	1,080	1,420	1,800	7,500	6,000	3,000	0.10	0.17	0.33
55	120	20	BS55M120	2,500	5,630	11,260	1,220	1,610	2,050	6,000	4,800	2,400	0.33	0.53	1.05
60	120	20	BS60M120	2,530	5,690	11,380	1,200	1,580	2,000	6,000	4,800	2,400	0.34	0.55	1.10
75	110	15	BS75M110	1,770	3,980	7,960	1,200	1,590	2,020	5,750	4,600	2,300	0.17	0.27	0.54

DESIGNATION SYSTEM

BS 75 M 110 2RSZ .P4A .D .M .OX
 BS 30 M 62 .P4A .U .M
 BS 50 M 100 .P4A .Q .M
 BS 25 M 62 P4A .D .M .GH2G



TOLERANCES



Nominal Shaft Diameter d in mm	Tolerance Class	From incl	- 10	10 18	18 30	30 50	50 80	80 120	120 180
Shaft tolerance Δd_f fixed bearing	P4A	max min	-3 -7	-3 -7	-3 -7	-4 -8	-4 -9	-5 -10	-6 -12

Nominal Shaft Diameter d in mm	Tolerance Class	From incl	18 30	30 50	50 80	80 120	120 150	150 180	180 250
Housing tolerance ΔD_G in mm	P4A	max min	+5 0	+5 0	+5 0	+5 -1	+7 -1	+7 -2	+7 -2



WHY NIBC

NIBC Super precision 60° - angular contact thrust ball bearings are developed to meet the requirements of high thrust load for ball screw support applications. The large contact angle of 60° allows high thrust loads with great stiffness.

NIBC Super precision 60° - angular contact thrust ball bearings are manufactured for universal matching - they can be rearranged and mounted in any arrangement. Our ball screw support bearings have a medium or high preload and a V-marking.

The bore and outer diameter are manufactured to precision class P4A. The axial run out is restricted to P2. These bearings have a ball guided polyamide cage which can sustain a temperature of -30 to 120 °C. NIBC's ball screw support bearings are supplied with pre-packed grease GH62 for ready-to-use condition.

NRB-IBC Bearings Pvt Ltd is a joint venture of NRB Industrial Bearings Ltd, India and IBC Walzlager GmbH, Industrial Bearings and components Germany/IBC Industrial Bearings and Components AG, Switzerland. IBC manufactures super precision bearings mainly for the aerospace and machine tool industries.

NIBC, with its manufacturing plant in Shendra, Aurangabad, provides customers with application support, after sales support, faster delivery and competitive prices

The NIBC Advantage

- Dimensional accuracy of P4A and running accuracy class of P2A
- Can be used in Existing housing without any modifications
- Interchangeable with major manufacturers FAG, NSK, SKF, Nachi, etc
- Bore & diameters are micron coded
- Polyamide cages for Ball Screw Bearings
- Universally Ground Bearings.



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PUBLICATION NUMBER: PUB/NIBC-PB002

MANUFACTURING PLANT

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431007, INDIA**

<http://www.nibc.in>