

Marine Transmission Shaft Bearings

1. Scope

This Japanese Industrial Standard specifies marine transmission shaft bearings used for such operating gears as water sliding door, skylight, valves for ventilation, valves for piping, steering gear, main engine revolution indicator, etc. or transmission gears in ship.

2. Classification

The transmission shaft bearings shall be classified into five types A, B, H, Z and L.

3. Construction, Shape and Dimensions

The construction, shape and dimensions shall be as shown in Figs. 1 to 5.

4. Materials

The materials shall, as a rule, be as shown in Figs. 1 to 5.

5. Inspection

The transmission shaft bearings shall be subjected to the following items of inspection.

(1) Visual inspection

The appearance shall be free from any detrimental defect in use.

(2) Dimensional inspection

The dimensions of each part shall conform to the dimensions specified in 3.

6. Designation

The bearings shall be designated by the title, nominal size and class or symbol. JIS number may be used in place of the title.

Example: For a Type A or nominal size 20 mm:

Marine Transmission Shaft Bearing 20 Type A

or JIS F 7455-20A

or FB

A

20

nominal size

class

marine transmission shaft bearing

7. Marking

The following particulars shall be marked on the body:

(1) Nominal size

Example: 20

(2) Manufacturer's name or mark

Reference Standards:

JIS B 0203 — Taper Pipe Threads

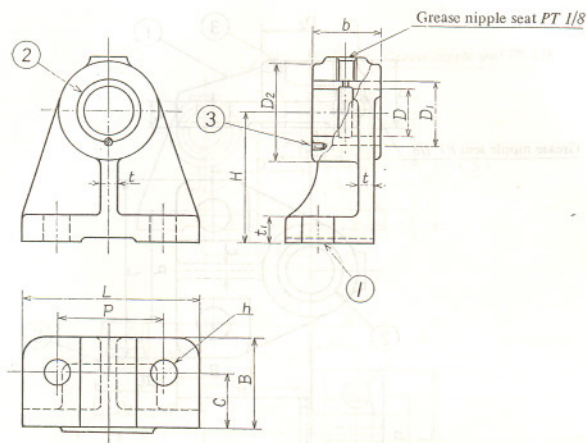
JIS B 0205 — Metric Coarse Screw Threads

JIS G 5501 — Gray Iron Castings

JIS H 3250 — Copper and Copper Alloy Rods and Bars

JIS H 3260 — Copper and Copper Alloy Wires

JIS H 5111 — Bronze Castings



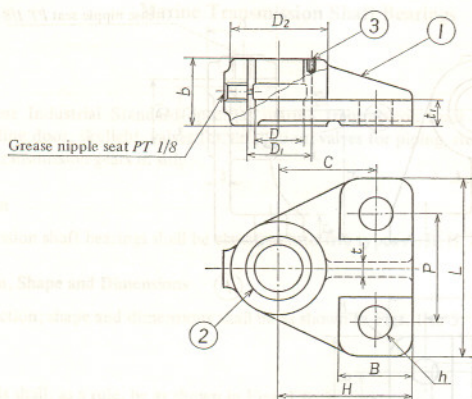
Unit: mm

Nominal size	Body and bush											Fixing bolt			Threads × length	Reference Calculated mass (kg)
	D	D ₁	D ₂	b	H	B	L	C	P	t	t ₁	Nomi. dia.	Hole h	No.		
20	20	26										M 12	15		M3×0.5×6	0.76
25	25	32	48	30	60	40	85	25	55	8	12	M 12	15			0.73
30	30	38										M 16	19	2	M4×0.7×8	1.70
35	35	44	64	40	80	55	110	32	70	10	14	M 16	19			1.63
40	40	50	72	45	90	60	120	35	75	11		16	M 20	23		2.24
45	45	55	80	50	95	65	130	38	80	12						2.72

- Remarks: 1. The threads of set screws shall conform to JIS B 0205.
2. The threads for grease nipple seats shall conform to JIS B 0203.

No.	Component	Material
1	Body	JIS G 5501 – FC 20
2	Bush	JIS H 5111 – BC 6 or JIS H 3250 – C 3771 BD
3	Set screw	JIS H 3260 – C 2700 W

Fig. 1 Bearing Type A



Unit: mm

Nominal size	Body and bush											Fixing bolt		Threads × length	Reference Calculated mass (kg)
	D	D ₁	D ₂	b	H	B	L	C	P	t	t ₁	Nomi. dia.	Hole h	No.	
20	20	26	48	30	60	30	85	45	55	8	12	M 12	15	2	0.61
25	25	32	64	40	80	40	110	60	70	10	14	M 16	19		0.58
30	30	38	72	45	90	45	120	68	75	11	16	M 20	23	2	1.33
35	35	44	80	50	95	50	130	72	80	12					1.26
40	40	50													1.78
45	45	55													2.22

- Remarks:
1. The threads of set screws shall conform to JIS B 0205.
 2. The threads for grease nipple seats shall conform to JIS B 0203.

No.	Component	Material
1	Body	JIS G 5501 – FC 20
2	Bush	JIS H 5111 – BC 6 or JIS H 3250 – C 3771 BD
3	Set screw	JIS H 3260 – C 2700 W

Fig. 2 Bearing Type B