

## SBT

Spherical Self Lubricating Standard

2023/03/22

## Feature of a Product

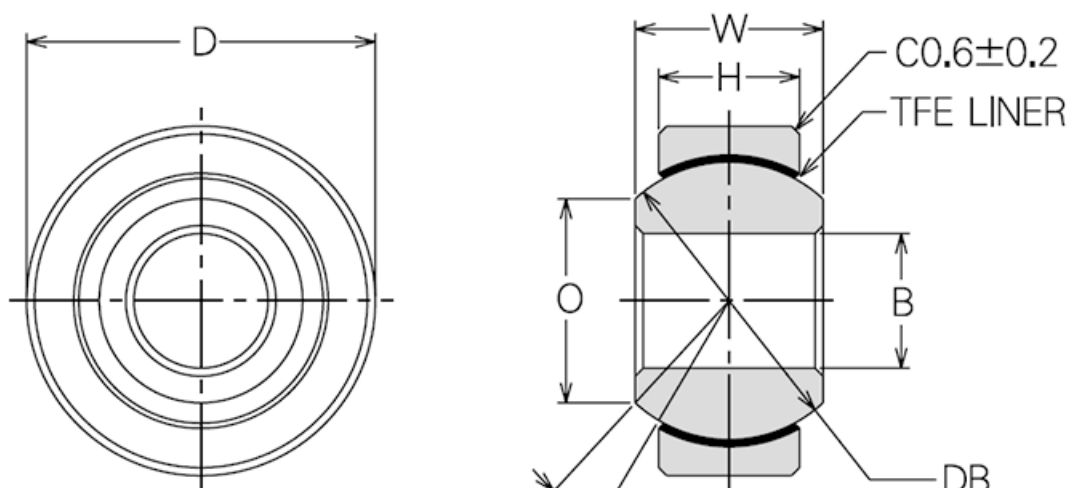
- Self lubricating

The PTFE lining is bonded to the inner diameter of the race. The PTFE Liner acts as a lubricant and therefore no other lubrication is necessary. Thus they are eminently suitable to apply where re-lubrication is impractical or impossible. More over, as they don't require any lubrication, they are effective to lower the maintenance cost. They perform well under slow fluctuation velocity and oscillation load. Therefore PTFE type can induce the difficulties of metal/metal type such as high friction, seizure, fatigue destruction and fretting on the fluctuating surface.

## Material

(P/N)	RACE	BALL	LINER
SBT	410 Stainless Steel	440C Stainless Steel	PTFE / Fabric

## Overall View



ミネベアミツミ株式会社

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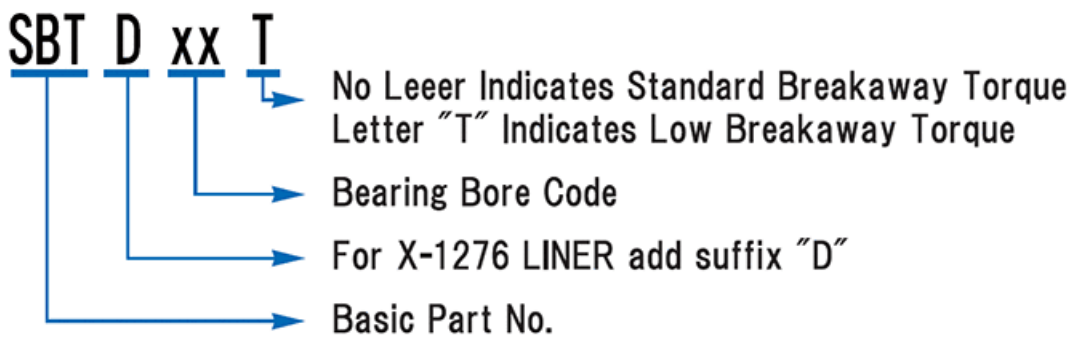
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### Part Number



### Dimension

Dimensions in mm

Part No.	øB H7	øD 0-0.013	W 0-0.13	H ±0.13	α DEG	øO(REF)
SBT3	3	12.0	6.0	4.50	11	6.8
SBT4	4	14.0	7.0	5.25	12	7.6
SBT5	5	16.0	8.0	6.00	11	8.8
SBT6	6	18.0	9.0	6.75	10	11.1
SBT8	8	22.0	12.0	9.00	12	12.7
SBT10	10	26.0	14.0	10.50	12	15.2
SBT12	12	30.0	16.0	12.00	11	17.6
SBT14	14	34.0	19.0	13.50	14	19.2
SBT16	16	38.0	21.0	15.00	13	22.7
SBT18	18	42.0	23.0	16.50	13	24.1
SBT20	20	46.0	25.0	18.00	12	28.8

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SBT20	20	70.0	25.0	18.00	14	20.0
SBT22	22	50.0	28.0	20.00	13	30.3
SBT25	25	56.0	31.0	22.00	14	32.4
SBT30	30	66.0	37.0	25.00	16	38.2

Part No.	SøDB(REF)	No Load Rotational Breakaway Torque - Standerd Type lower limit [N·m]	No Load Rotational Breakaway Torque - Standerd Type upper limit [N·m]	No Load Rotational Breakaway Torque - Standerd Type lower limit [kgf·cm]	No Load Rotational Breakaway Torque - Standerd Type upper limit [kgf·cm]	Static Limit load(Radial) [kN]	Static Limit load(Axial) [kN]
SBT3	9.042	0.06	0.57	0.6	5.8	13.72	1.56
SBT4	10.319	0.06	0.57	0.6	5.8	17.65	2.25
SBT5	11.906	0.12	0.57	1.2	5.8	24.51	2.94
SBT6	14.288	0.12	0.57	1.2	5.8	36.28	3.72
SBT8	17.462	0.12	0.57	1.2	5.8	58.83	6.76
SBT10	20.638	0.12	0.57	1.2	5.8	81.39	9.21
SBT12	23.812	0.12	0.57	1.2	5.8	114.73	18.63
SBT14	26.988	0.12	0.57	1.2	5.8	147.09	23.53
SBT16	30.956	0.12	0.57	1.2	5.8	186.32	29.41
SBT18	33.338	0.23	0.90	2.3	9.2	215.74	35.30
SBT20	38.100	0.23	0.90	2.3	9.2	274.58	42.16
SBT22	41.275	0.23	0.90	2.3	9.2	333.42	51.97
SBT25	44.847	0.33	1.70	3.4	17.3	404.03	65.21
SBT30	53.181	0.33	1.70	3.4	17.3	545.24	84.33

Part No.	Dynamic Load [kN]	Approx. Weight [g]
SBT3	6.27	5
SBT4	8.04	7
SBT5	11.17	10
SBT6	16.57	14
SBT8	26.87	26
SBT10	37.16	42
SBT12	52.46	62
SBT14	67.27	89
SBT16	85.12	125
SBT18	98.65	165
SBT20	125.52	220

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SBT22	152.39	285
SBT25	184.65	380
SBT30	249.28	605

## Notes

1. PTFE liner permanently bonded to race I.D.
  2. MBYT & MBYT-V weights are similar.
  3. Made to order only.
  4. No Load Rotational Breakaway Torque.
- Low Torque All Size: 0.02N · m MAX (Radial Clearance 0.05mm MAX)

\*Please consult MinebeaMitsumi for availability of bearings in this series.