⚠ Cautions for the Use of DC Geared Motors

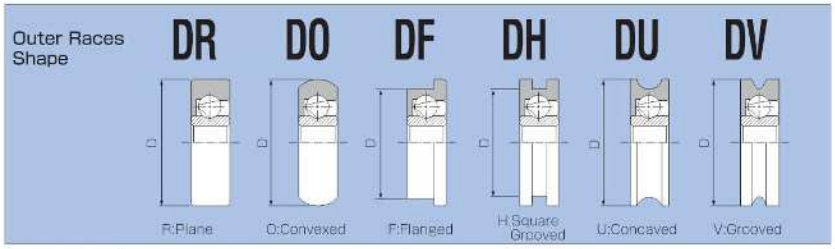
1. Be sure to use our product under ambient conditions in a temperature range from -10 to +50˚C and a relative humidity range from 30 to 90%RH (no condensation).
   The numerical values of all properties given in this catalogue are based on a temperature of 23˚C and a relative humidity of 65%RH. Remember that using it in a high-humidity environment will cause problems such as corrosion of component parts and loss of product characteristics. Use the product with due caution.
2. Store this product at temperatures from -20˚C to +60˚C and relative humidity from 10 to 95%RH (no condensation).
   Remember that in the event that the product is kept in ambient conditions outside the guaranteed this will cause problems such as corrosion of component parts and loss of product characteristics. Use the product with due caution.
3. Use screws of the length range stated in the catalogue when you install the DC geared motor. If you use screws that are longer than the range stated in the catalogue, they will make contact with the interior parts of the gear head, causing problems.
4. Do not install the DC motor output shaft facing upwards. (Gear grease applied to the gear will gradually infiltrate inside the motor interior as time passes. If the infiltrated grease settles on the commutator of the motor it will mix with the friction powder of the motor brush and the mixture will enter the grooves in the commutator, causing a short-circuit between the coils.)
   (If you do use the output shaft facing upwards we can provide means against oil ingress, so be sure to contact us.)
5. If you continue to operate (energize) the motor at overload conditions, this causes problems in that motor performance will deteriorate and the insulation coating of the motor coils (copper wires) will melt and release smoke and burn out (layer short). Examples of how you can prevent are: (1) If you detect a current surge, use a time-lag fuse to interrupt the current. (2) You may use a current protection element with favorable recovery properties (posister or polyswitch). If you have detected an overload or locking condition of the machine or the electric motor you may use the method of switching the motor drive circuit OFF. Be sure to provide protection measures for the motor.
6. Do not lock or apply an impact load to the output side of the gear head during operation. Caution is required, as this would cause serious difficulty due to the gear teeth breaking.
7. Caution is required in case of continuous operation with a gear head structure designed for intermittent operation, as in this case the slide faces of the inner diameter of the gear and the shaft column would develop head due to friction and may result in a burnout.
8. Many DC brush motors use carbon brushes. Beware that when you operate the motor at low speed using, for example, a low voltage or PWM control (the speed you should aim at should be 2,500 rpm or less for the motor alone) the friction powder of the brush will settle in the commutator grooves and cause a short-circuit between the windings. (This will not only lead to the motor developing smoke and burning damage (layer short) but may also lead to a burnout of the motor driver.)
9. When the motor suddenly reverses during DC gear motor operation or while it rotates due to inertia after switching OFF the power supply, electricity is generated (back flow). The start current + the generation of electricity will result in a large current flowing. As this can cause serious problems, including the development of smoke and burning damage of the motor drive circuit and the motor, be sure not to always reverse the motor's sense of rotation until after you have stopped the motor.
10. When you use PWM control, pay attention to the details of item 8 and to the frequency range that is used. As a result of the phase properties of each motor and motor drive circuits and of the noise element (Varister, electrolytic capacitor) that is built into the motor, troubles such as resonance (abnormal noise), heat evolution, and motor stop may occur depending on the frequency range. Be sure therefore to check the optimum frequency range for each motor.
11. Beware that the amount of overrun of each motor unit will vary depending on the ambient conditions and the characteristics of each motor. Beware that restraining (locking) the output shaft forcibly from outside while the motor is in inertial motion after switching the motor OFF or causing the overrun motion to decelerate by instantaneous reversal of direction of rotation will lead to breakdown.
12. Beware that the noise of our DC brush motor can have an adverse effect on the peripheral circuits.
13. In the event that additional work is performed after delivery of our product be sure to remember that such work will be outside the scope of warranty.
14. If you add gears or a pulley to the output shaft of the DC geared motor, be sure to take the following details fully into consideration.
    If you mount by pressure fit do not apply a load in excess of the maximum allowable load in the thrust direction of the output shaft.
    In case of installation using an adhesive, make sure that the adhesive will not adhere to, or accumulate on, the sliding surface of the inner diameter of the output shaft bearing metal and the outer circumference of the output shaft. Furthermore, beware that the use of volatile adhesives will lead to the formation of hazardous gases.
15. Be sure to pay proper attention to overtensioning the belt when you use the drive source (gear, pulley, etc.) you have attached to the output shaft of the DC geared motor. Remember that the application of a thrust or radial load in excess of the maximum allowable load will cause problems.
16. Be sure to pay proper attention to ensure that when you solder leads and ceramic capacitors to the input terminals of the DC geared motor, the tip of the soldering iron does not have an excessively high temperature and the work time during which the soldering iron makes contact is not too long.
17. Be sure to remember that dropping the DC geared motor and applying impact from outside will result in problems including damage of parts and the gears coming out of mesh. Also beware that applying impact to the input terminal will result in problems such as poor electrical contact due to stress acting on the connection between the motor terminal and the interior of the motor.
18. The DC geared motor is operated letting it rotate from the motor side. Be sure not to let it rotate from the output shaft side. Beware that this would damage the gear.

* When using, be sure to pay proper attention to the above details. If you have any uncertainty or query please do not hesitate to contact our sales representative in charge.

TOK BEARING CO.,LTD. BEARINGS

Plastic bearings with a multitude configurations and materials that can suit any customer demand

BEARING PART NUMBER NOMENCLATURE AND DESCRIPTONS



Index number of outer races diameter

In most cases, this number reflects the overall diameter of the bearings. Exceptions are : DH-type of bearing with square groove—index number reflects the "bottom-to-bottom" diameter ; DF—type with flanged shape—index number reflects each diameter of the race threads.

Index of outer race material

D : Polyacetal Resin
N : Polyamide Resin (Nylon)
PE : Polyethylene Resin
P : Other Plastic Resin
A : Steel
S : Stainless Steel
ID : Steel Insert
M : Other Steels
E : Resin Electrication
DT : Bearing Inserts
UT : Polyurethane Resin
C : Ceramic

Index of outer race shape

R : Plane
O : Convexed
F : Flanged
H : Square-Grooved
U : Concaved
V : V-Grooved

Index of Ball Material

No Index : Carbon Steel
S : Stainless Steel
P : Resin
G : Glass
C : Ceramic

Index of inner race shape

A : Studs for riveting
B : Threaded studs
H : Bored races
AH : Riveting studs inserted into the bored races
BH : Threaded studs inserted into the bored races

K D V S — 26 — S H S 8 — x

Index of K-SERIES BEARINGS

When the Part Number has a Prefix of the letter "K", it signifies that this is a K-Series Bearing. If there is no "K" it signifies a standard type bearing.

Index of inner race material

No Index : Carbon Steel
S : Stainless Steel
P : Resin
C : Ceramic

Index of Retainer Type or Full Ball Type

No Index : Retainer Types
S : Full Ball Type

Supplemental Index

A supplemental index is used when further descriptive information is required When a "GN" suffix is used, it denotes no grease.

Index Number for Inner Diameter or Clearance to Installation Surface

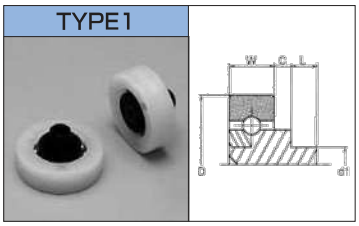
A number signifies the inner diameter of a bored inner race type bearing, which is indicated by a "d" on our drawings. When a riveting stud or a threaded stud type bearing is noted, the index number signifies the clearance between the side wall of the outer race and the installation surface, which is indicated by a "C" on our drawings.

[Bearings]

1. Operation temperature : 0℃～40℃ (Special designing for use −20℃～60℃ is also available)
2. Load capacity indicated in the brochure is based on 1,000,000 revolution test with TOK BEARING durability testing machine.
3. Do not use bearings under axial load.

DR-A

TYPE1



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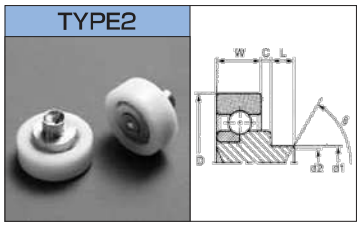

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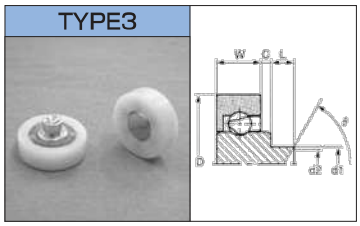

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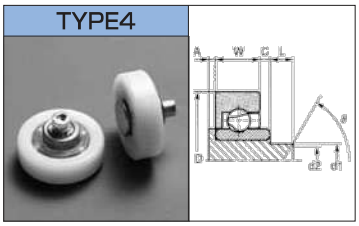

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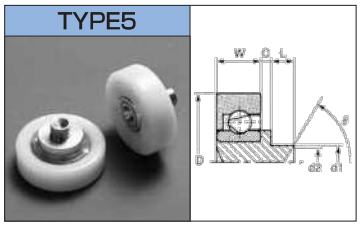

Code	Part No.	D$_{-0.1}^{0}$ [mm]	d1$_{-0.1}^{0}$ [mm]	W$_{-0.2}^{0}$ [mm]	C$^{\pm0.4}$ [mm]	L$^{\pm0.2}$ [mm]	(d2× θ) *1	A$^{\pm0.2}$ [mm]	Load *2 [N] (kgf)	Type	Q'ty [pcs/box]	Gross Weight [kg/box]
000006	DRS-9-A0.5	9$_{-0.05}^{0}$	2$_{-0.05}^{0}$	3$_{-0.1}^{0}$	0.5	1.8	—	—	[9.8] (1)	1	10,000	—
000007	DRS-12-A0.5	12$_{-0.05}^{0}$	3$_{-0.05}^{0}$	4$^{\pm0.1}$	0.5$^{\pm0.3}$	2.3	—	—	[9.8] (1)	1	10,000	—
000001	DRS-16-A1	16$_{-0.3}^{0}$	4	5$^{\pm0.2}$	1	3.5	φ3 ×100°	—	19.6 (2)	2	2,000	9.0
000003	DRS-16-A1.5	16$_{-0.3}^{0}$	5	6.35$^{\pm0.2}$	1.5	3.5	φ4.5× 90°	—	19.6 (2)	2	2,500	14.4
000100	DR-18-A0.5	18	5	6	0.5	3.5	φ4 ×120°	—	19.6 (2)	3	2,000	9.6
000200	DR-19-A0.5	19	5	6	0.5	3.5	φ4 ×120°	—	29.4 (3)	3	2,000	10.7
000207	DR-19-A2	19	5	6	2	3.5	φ4.4×120°	—	29.4 (3)	3	2,000	11.6
000408	DR-22-A-2.1	22	5	7	0	2.1	φ4 × 90°	—	78.4 (8)	3	1,000	7.4
000400	DR-22-A1	22	5	7	1	3.5	φ4.4× 90°	—	78.4 (8)	3	1,000	9.0
000410	DR-22-A2-φ6	22	6	7	2	3.5	φ5.5× 90°	—	78.4 (8)	3	1,000	9.4
000411	DR-22-A2	22	5	7	2	3.5	φ4 × 90°	—	78.4 (8)	3	1,000	8.9
000600	DR-24-A1	24	5	7	1	3.5	φ4.4× 90°	—	78.4 (8)	3	1,000	9.5
000700	DR-26-A1	26	5	7	1	3.5	φ4.4× 90°	—	78.4 (8)	3	1,000	10.2
000800	DR-28-A1	28	5	7	1	3.5	φ4.4× 90°	—	78.4 (8)	3	500	5.8
000900	DR-29-A1	29	5	7	1	3.5	φ4.4× 90°	—	78.4 (8)	3	500	5.7
000427	DR-22-AH (1) 3.5-8019	22	4.5$^{\pm0.1}$	7	0	3.5$^{+0.3}_{0}$	nothing	1	196 (20)	4	1,000	9.1
000419	DR-22-AH2.5-3.65	22	4.5$^{\pm0.1}$	7	2.5	3.65	φ2.5×100°	1	196 (20)	4	1,000	10.2
000705	DR-26-AH	26	4.5$^{\pm0.1}$	7	0	3.5$^{+0.3}_{0}$	nothing	1$^{\pm0.3}$	196 (20)	4	1,000	10.2
000707	DR-26-AH2.5-3.65	26	4.5$^{\pm0.1}$	7	2.5	3.65	φ2.5×100°	1	196 (20)	4	800	8.8
040707	DR-26-AH2.7-2.7	26	3.9$_{-0.2}^{0}$	7	2.7	2.7	φ2.3×110°	1$^{\pm0.3}$	196 (20)	4	800	8.8
040706	DR-26-AH2.7-4	26	3.9$_{-0.2}^{0}$	7	2.7	4$^{\pm0.3}$	φ2.7×120°	1$^{\pm0.3}$	196 (20)	4	800	9.8
000414	DR-22-AH2.5	22	5	7	2.5	3.5	φ4 ×110°	—	196 (20)	5	1,000	10.0
000416	DR-22-AH3.8-2.5	22	4.9	7	3.8	2.5	nothing	—	196 (20)	5	1,000	10.6
000417	DR-22-AH4	22	5	7	4	3.5	φ4 ×110°	—	196 (20)	5	1,000	10.8
000706	DR-26-AH4	26	5	7	4	3.5	φ4 ×110°	—	196 (20)	5	800	9.8

***1 Reference Dimension** ***2 Allowable Load at 300min -1 (300r.p.m.)**

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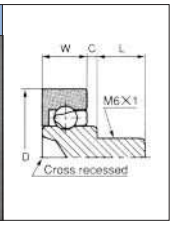
DR-B

TYPE6



Code	Part No.	D$_{-0.1}^{0}$ [mm]	W$_{-0.2}^{0}$ [mm]	C$^{\pm0.4}$ [mm]	L$^{\pm0.5}$ [mm]	Load*1 [N] (kgf)	Type	Q'ty [pcs/box]	Gross Weight [kg/box]
020200	DR-19-B0.5	19	6	0.5	8	49 (5)	6	2,000	12.5
020207	DR-19-B1-14	19	6	1	14	49 (5)	6	1,500	11.1
020208	DR-19-B1.5	19	6	1.5	8	49 (5)	6	2,000	12.9
020212	DR-19-B3.5	19	6	3.5	8	49 (5)	6	1,500	11.0
020404	DR-22-B0.5-4.5	22	7	0.5	4.5	196 (20)	6	1,000	8.4
020400	DR-22-B0.5	22	7	0.5	8	196 (20)	6	1,000	9.8
020408	DR-22-B1-10	22	7	1	10	196 (20)	6	1,000	9.5
020428	DR-22-B3-10.5	22	7	3	10.5	196 (20)	6	1,000	11.5
020427	DR-22-B3.6-12.4	22	7	3.6	12.4	196 (20)	6	1,000	10.9
020415	DR-22-B3.6-14.5	22	7	3.6	14.5	196 (20)	6	1,000	11.9
020600	DR-24-B0.5	24	7	0.5	8	196 (20)	6	1,000	10.4
020608	DR-24-B3-10.5	24	7	3	10.5	196 (20)	6	1,000	11.7
020702	DR-26-B0.5-4.5	26	7	0.5	4.5	196 (20)	6	1,000	9.7
020700	DR-26-B0.5	26	7	0.5	8	196 (20)	6	1,000	10.1
020720	DR-26-B3-10.5	26	7	3	10.5	196 (20)	6	800	10.7
020719	DR-26-B3.6-12.4	26	7	3.6	12.4	196 (20)	6	800	11.3
020714	DR-26-B5-11	26	7	5	11	196 (20)	6	800	8.8
020800	DR-28-B0.5	28	7	0.5	8	196 (20)	6	500	6.7
020803	DR-28-B2-15	28	7	2	15	196 (20)	6	500	6.7
020805	DR-28-B3-10.5	28	7	3	10.5	196 (20)	6	500	6.9
021000	DR-30-B0.5	30	7	0.5	8	196 (20)	6	500	6.8
021005	DR-30-B3-10.5	30	7	3	10.5	196 (20)	6	500	7.6
021004	DR-30-B3.6-12.4	30	7	3.6	12.4	196 (20)	6	500	12.5

***1 Allowable Load at 300min -1 (300r.p.m.)**

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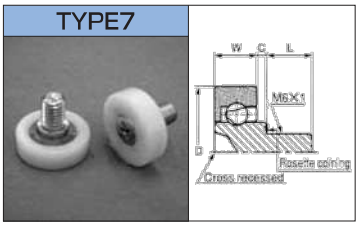
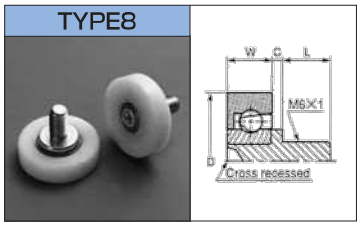
DR-B

TYPE7



TYPE8



Code	Part No.	D$_{-0.1}^{0}$ [mm]	W$_{-0.2}^{0}$ [mm]	C$^{\pm0.4}$ [mm]	L$^{\pm0.5}$ [mm]	Load*1 [N] (kgf)	Type	Q'ty [pcs/box]	Gross Weight [kg/box]
020205	DR-19-B1-5.5	19	6	1	5.5	49 (5)	7	2,000	11.5
020204	DR-19-B1	19	6	1	8	49 (5)	7	2,000	13.5
020210	DR-19-B2-4.5	19	6	2	4.5	49 (5)	7	2,000	12.1
020209	DR-19-B2	19	6	2	8	49 (5)	7	2,000	14.0
020211	DR-19-B2.7	19	6	2.7	8	49 (5)	7	1,500	10.2
020214	DR-19-B3	19	6	3	8	49 (5)	7	1,500	10.7
020406	DR-22-B1	22	7	1	8	196 (20)	7	1,000	9.0
020411	DR-22-B2-5.5	22	7	2	5.5	196 (20)	7	1,000	9.3
020409	DR-22-B2	22	7	2	8	196 (20)	7	1,000	10.3
020413	DR-22-B3	22	7	3	8	196 (20)	7	1,000	11.3
020418	DR-22-B4-4.5	22	7	4	4.5	196 (20)	7	1,000	10.3
020416	DR-22-B4	22	7	4	8	196 (20)	7	1,000	11.7
020420	DR-22-B5	22	7	5	8	196 (20)	7	1,000	12.3
020422	DR-22-B6	22	7	6	8	196 (20)	7	1,000	12.8
020602	DR-24-B2	24	7	2	8	196 (20)	7	1,000	11.4
020604	DR-24-B3	24	7	3	8	196 (20)	7	1,000	11.7
020605	DR-24-B4	24	7	4	8	196 (20)	7	1,000	12.4
020606	DR-24-B5	24	7	5	8	196 (20)	7	1,000	12.5
020607	DR-24-B6	24	7	6	8	196 (20)	7	1,000	13.3
020705	DR-26-B2	26	7	2	8	196 (20)	7	800	9.2
020707	DR-26-B3	26	7	3	8	196 (20)	7	800	9.7
020710	DR-26-B4	26	7	4	8	196 (20)	7	800	10.1
020716	DR-26-B6-6	26	7	6	6	196 (20)	7	800	10.7
020715	DR-26-B6	26	7	6	8	196 (20)	7	800	11.1
020801	DR-28-B2	28	7	2	8	196 (20)	7	500	6.7
021002	DR-30-B3	30	7	3	8	196 (20)	7	500	11.3
020429	DR-22-BH2-11	22	7	2	11	196 (20)	8	1,000	12.3
020430	DR-22-BH3-11	22	7	3	11	196 (20)	8	1,000	11.4
020722	DR-26-BH2-11	26	7	2	11	196 (20)	8	800	10.6
020804	DR-28-BH2-11	28	7	2	11	196 (20)	8	500	6.9

***1 Allowable Load at 300min -1 (300r.p.m.)**

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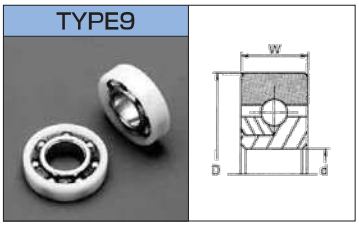
DR-H

TYPE9



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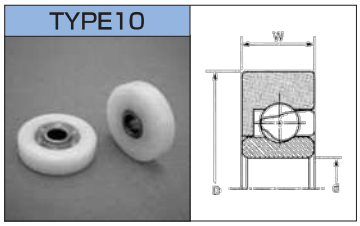

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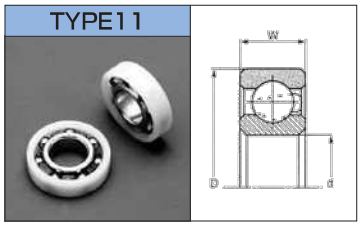

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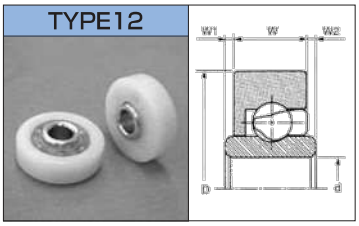
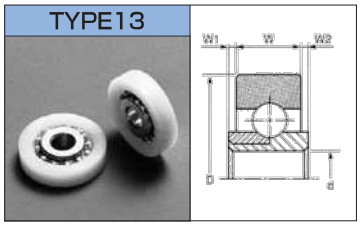


TYPE13



Code	Part No.	D $_{-0.1}^{0}$ [mm]	d $^{+0.1}_{0}$ [mm]	W $_{-0.2}^{0}$ [mm]	W1 *1 [mm]	W2 *1 [mm]	Load *2 [N] (kgf)	Type	Q'ty [pcs/box]	Gross Weight [kg/box]
040012	DRS-9-H2.5	9 $_{-0.05}^{0}$	2.5 $^{+0.05}_{0}$	3 $^{\pm0.1}$	—	—	9.8 (1)	9	10,000	—
040013	DRS-12-H3	12 $_{-0.05}^{0}$	3 $^{+0.05}_{0}$	4 $^{\pm0.1}$	—	—	9.8 (1)	9	10,000	—
040100	DR-18-H6	18	6	6	—	—	49 (5)	10	2,500	7.6
040202	DR-19-H5	19	5	6	—	—	49 (5)	10	2,500	8.9
040205	DR-19-H6	19	6	6	—	—	49 (5)	10	2,500	8.1
040301	DR-20-H8	20	8	6 $^{\pm0.1}$	—	—	29.4 (3)	10	1,500	6.1
040401	DR-22-H6	22	6	7	—	—	196 (20)	10	1,500	9.5
040412	DR-22-H8	22	8	7	—	—	49 (5)	10	1,500	8.2
040600	DR-24-H6	24	6	7	—	—	196 (20)	10	1,000	7.1
040602	DR-24-H10.5	24	10.5	7	—	—	49 (5)	10	1,000	11.5
040701	DR-26-H6	26	6	7	—	—	196 (20)	10	1,000	7.8
041600	DR-26-H10	26	10	8	—	—	196 (20)	10	1,000	7.9
040800	DR-28-H6	28	6	7	—	—	196 (20)	10	500	4.2
041000	DR-30-H6	30	6	7	—	—	196 (20)	10	500	5.6
041610	DR-30-H10-9	30	10	9	—	—	245 (25)	10	500	7.7
041005	DR-30-H10-8	30	10	8 $^{\pm0.1}$	—	—	245 (25)	10	500	6.7
041612	DR-32-H12	32	12	10	—	—	294 (30)	10	500	9.6
041100	DR-35-H6	35	6	7	—	—	196 (20)	10	500	5.7
041614	DR-35-H15	35	15	11 $^{\pm0.2}$	—	—	294 (30)	10	400	10.6
041151	DR-38-H10	38	10	8 $^{\pm0.2}$	—	—	196 (20)	10	500	6.1
041200	DR-40-H6	40 $_{-0.2}^{0}$	6	8	—	—	196 (20)	10	400	5.4
041616	DR-40-H17	40	17	12 $^{\pm0.2}$	—	—	294 (30)	10	250	6.9
041618	DR-47-H20	47	20	14	—	—	343 (35)	10	150	8.7
040102	DR-18-H8	18	8	5	—	—	49 (5)	11	3,000	8.7
040007	DR-16-H4.1W0.25	16	4.1	4	0.25	0.25	19.6 (2)	12	4,000	9.6
040200	DR-19-H4W(1.3)3	19	4	6	1.3	3	49 (5)	12	1,500	8.2
040204	DR-19-H5W(0)2.3	19	5	6	0	2.3	49 (5)	12	2,000	8.6
040400	DR-22-H4W(0.5)3	22	4	7	0.5	3	196 (20)	12	1,000	8.3
040415	DR-22-H6W1	22	6	7	1	1	196 (20)	12	1,000	6.6
040601	DR-24-H6W1	24	6	7	1	1	196 (20)	12	1,000	7.3
040700	DR-26-H4W(0.5)3	26	4	7	0.5	3	196 (20)	12	1,000	9.7
040704	DR-26-H6W1	26	6	7	1	1	196 (20)	12	1,000	8.8
040802	DR-28-H6W1	28	6	7	1	1	196 (20)	12	500	4.5
041003	DR-30-H6W1	30	6	7	1	1	196 (20)	12	500	6.4
041101	DR-35-H6W1	35	6	7	1	1	196 (20)	12	500	6.8
041201	DR-40-H6W0.5	40 $_{-0.2}^{0}$	6	8	0.5	0.5	196 (20)	12	400	5.5
041300	DR-47-H8W(0)9	47	8	14	0	9	196 (20)	12	100	3.5
040005	DRS-16-H4.1W0.25	16	4.1	3.5 $^{\pm0.2}$	0.25	0.25	49 (5)	13	5,000	11.0

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DO

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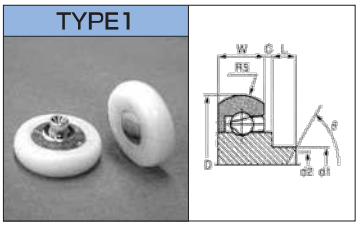

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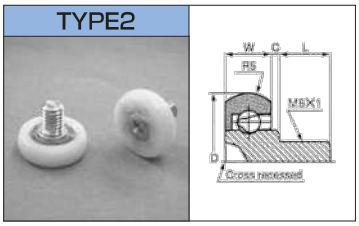

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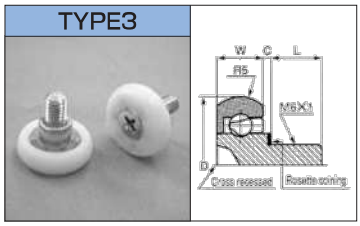

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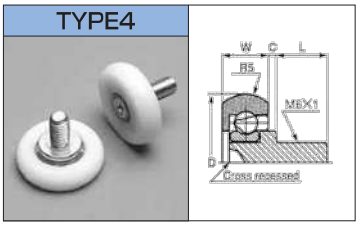

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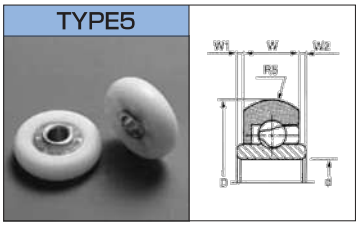

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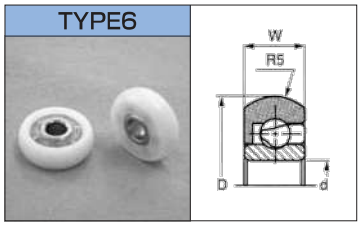

Code	Part No.	$D_{-0.2}^{0}$ [mm]	$d^{+0.1}_{0}$ [mm]	$d1_{-0.1}^{0}$ [mm]	$W_{-0.2}^{0}$ [mm]	$C^{\pm0.4}$ [mm]	$L^{\pm0.2}$ [mm]	(d2× θ) *1	W1*1 [mm]	W2*1 [mm]	Load*2 [N] (kgf)	Type	Q'ty [pcs/box]	Gross Weight [kg/box]
070010	DO-19-A0.5	19	—	5	6	0.5	3.5	φ4 ×120°	—	—	29.4 (3)	1	2,000	10.8
070020	DO-22-A1	22	—	5	7	1	3.5	φ4.4× 90°	—	—	78.4 (8)	1	1,000	8.9
070021	DO-22-A3	22	—	5	7	3	3.5	φ4 × 90°	—	—	78.4 (8)	1	1,000	9.3
070030	DO-24-A1	24	—	5	7	1	3.5	φ4.4× 90°	—	—	78.4 (8)	1	1,000	9.8
070040	DO-26-A1	26	—	5	7	1	3.5	φ4.4× 90°	—	—	78.4 (8)	1	1,000	10.3
071010	DO-19-B0.5	19	—	—	6	0.5	$8^{\pm0.5}$	—	—	—	49 (5)	2	2,000	12.5
071012	DO-19-B0.5-4.5	19	—	—	6	0.5	$4.5^{\pm0.5}$	—	—	—	49 (5)	2	2,000	10.3
071020	DO-22-B0.5	22	—	—	7	0.5	$8^{\pm0.5}$	—	—	—	196 (20)	2	1,000	9.3
071026	DO-22-B3-10.5	22	—	—	7	3	$10.5^{\pm0.5}$	—	—	—	196 (20)	2	1,000	10.4
071030	DO-24-B0.5	24	—	—	7	0.5	$8^{\pm0.5}$	—	—	—	196 (20)	2	1,000	10.3
071040	DO-26-B0.5	26	—	—	7	0.5	$8^{\pm0.5}$	—	—	—	196 (20)	2	1,000	10.7
071050	DO-28-B0.5	28	—	—	7	0.5	$8^{\pm0.5}$	—	—	—	196 (20)	2	500	6.3
071023	DO-22-B5	22	—	—	7	5	$8^{\pm0.5}$	—	—	—	196 (20)	3	1,000	11.2
071031	DO-24-B2	24	—	—	7	2	$8^{\pm0.5}$	—	—	—	196 (20)	3	1,000	10.8
071032	DO-24-B3	24	—	—	7	3	$8^{\pm0.5}$	—	—	—	196 (20)	3	1,000	11.8
071034	DO-24-B4	24	—	—	7	4	$8^{\pm0.5}$	—	—	—	196 (20)	3	1,000	11.6
071060	DO-30-B3	30	—	—	7	3	$8^{\pm0.5}$	—	—	—	196 (20)	3	500	6.4
071035	DO-24-BH0.5	24	—	—	7	0.5	$8^{\pm0.5}$	—	—	—	196 (20)	4	1,000	8.8
071045	DO-26-BH2-11	26	—	—	7	2	$11^{\pm0.5}$	—	—	—	196 (20)	4	800	10.1
072031	DO-24-H6W1	24	6	—	7	—	—	—	1	1	196 (20)	5	1,000	7.8
072043	DO-26-H6W1	26	6	—	7	—	—	—	1	1	196 (20)	5	1,000	8.5
072072	DO-35-H6W1	35	6	—	7	—	—	—	1	1	196 (20)	5	500	5.1
072080	DO-40-H6W0.5	40	6	—	$8_{-0.3}^{0}$	—	—	—	0.5	0.5	196 (20)	5	400	4.5
072000	DO-18-H5	18	5	—	6	—	—	—	—	—	49 (5)	6	2,500	8.1
072010	DO-19-H5	19	5	—	6	—	—	—	—	—	49 (5)	6	2,500	9.8
072020	DO-22-H6	22	6	—	7	—	—	—	—	—	196 (20)	6	1,500	8.9
072030	DO-24-H6	24	6	—	7	—	—	—	—	—	196 (20)	6	1,000	7.3
072040	DO-26-H6	26	6	—	7	—	—	—	—	—	196 (20)	6	1,000	8.0
072050	DO-28-H6	28	6	—	7	—	—	—	—	—	196 (20)	6	800	8.7
072060	DO-29-H6	29	6	—	$7_{-0.1}^{0}$	—	—	—	—	—	196 (20)	6	500	4.0

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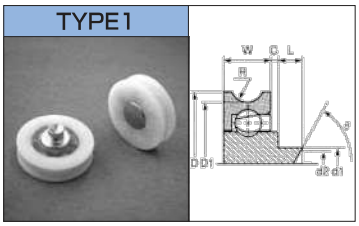
DU

TYPE1



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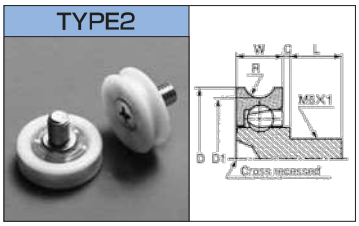

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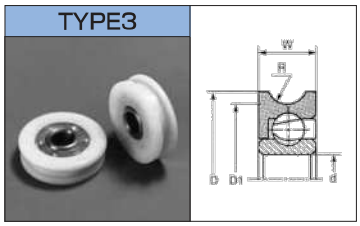

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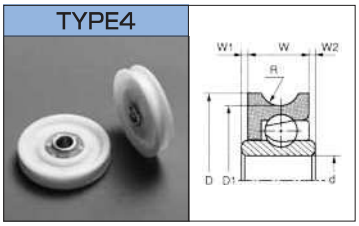

Code	Part No.	D$^{\pm0.2}$ [mm]	D1$^{\pm0.1}$ [mm]	d$^{+0.1}_{0}$ [mm]	d1$_{-0.1}^{0}$ [mm]	W$_{-0.2}^{0}$ [mm]	C$^{\pm0.4}$ [mm]	L$^{\pm0.2}$ [mm]	*1 (d2× θ)	W1*1 [mm]	W2*1 [mm]	R	Load*2 [N] (kgf)	Type	Q'ty [pcs/box]	Gross Weight [kg/box]
080010	DU-19-A0.5	19	17	—	5	6	0.5	3.5	φ4 ×120°	—	—	1.75	29.4 (3)	1	2,000	10.3
080020	DU-22-A1	22	19.2	—	5	7	1	3.5	φ4.4× 90°	—	—	2.5	58.8 (6)	1	1,000	8.5
080030	DU-24-A1	24	21.2	—	5	7	1	3.5	φ4.4× 90°	—	—	2.5	58.8 (6)	1	1,000	9.3
080040	DU-26-A1	26	23.2	—	5	7	1	3.5	φ4.4× 90°	—	—	2.5	58.8 (6)	1	1,000	10.3
081010	DU-19-B0.5	19	17	—	—	6	0.5	8$^{\pm0.5}$	—	—	—	1.75	39.2 (4)	2	2,000	12.4
081013	DU-19-B2	19	17	—	—	6	2	8$^{\pm0.5}$	—	—	—	1.75	39.2 (4)	2	2,000	12.8
081020	DU-22-B0.5	22	19.2	—	—	7	0.5	8$^{\pm0.5}$	—	—	—	2.5	156 (16)	2	1,000	9.8
081021	DU-22-B6	22	19.2	—	—	7	6	8$^{\pm0.5}$	—	—	—	2.5	156 (16)	2	1,000	11.8
081030	DU-24-B0.5	24	21.2	—	—	7	0.5	8$^{\pm0.5}$	—	—	—	2.5	156 (16)	2	1,000	10.5
081040	DU-26-B0.5	26	23.2	—	—	7	0.5	8$^{\pm0.5}$	—	—	—	2.5	156 (16)	2	1,000	11.3
082010	DU-19-H5	19	17	5	—	6	—	—	—	—	—	1.75	39.2 (4)	3	2,500	9.8
082020	DU-22-H6	22	19.2	6	—	7	—	—	—	—	—	2.5	156 (16)	3	1,500	8.8
082060	DU-24-H6	24	21.2	6	—	7	—	—	—	—	—	2.5	156 (16)	3	1,000	6.7
082070	DU-26-H6	26	23.2	6	—	7	—	—	—	—	—	2.5	156 (16)	3	1,000	7.4
082100	DU-30-H6-M	30	25.7	6	—	7$^{\pm0.2}$	—	—	—	—	—	2.5	156 (16)	3	500	3.6
082101	DU-30-H10	30	26	10	—	8$^{\pm0.2}$	—	—	—	—	—	2.5	196 (20)	3	500	6.1
082031	DU-22-H6W0.5	22	19	6	—	7	—	—	—	0.5	0.5	2.5	156 (16)	4	1,500	5.8
082028	DU-22-H6W1	22	19.2	6	—	7	—	—	—	1	1	2.5	156 (16)	4	1,000	6.2
082090	DU-28-H6W1	28	24	6	—	7	—	—	—	1	1	2.5	156 (16)	4	800	8.0
082103	DU-30-H6W1	30	25.7	6	—	7	—	—	—	1	1	2.5	156 (16)	4	500	6.1
082110	DU-35-H6W1	35	31	6	—	7	—	—	—	1	1	2.5	156 (16)	4	500	5.8
082120	DU-40-H6W0.5	40	36	6	—	8$^{\pm0.2}$	—	—	—	0.5	0.5	2.5	156 (16)	4	400	5.4

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DV

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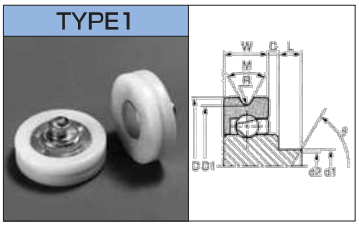

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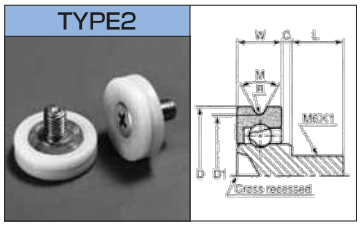

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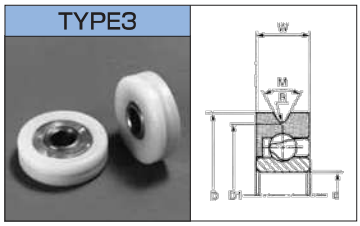

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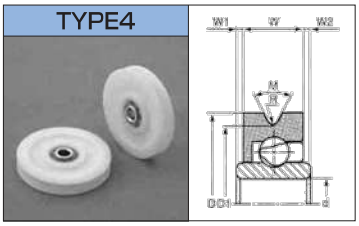

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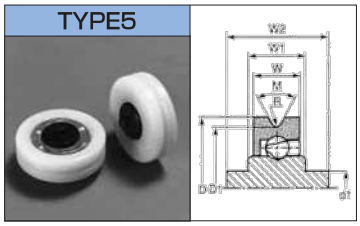

Code	Part No.	D $^{\pm0.2}$ [mm]	D1 $^{\pm0.2}$ [mm]	d $^{+0.1}_{0}$ [mm]	d1 $_{-0.1}^{0}$ [mm]	W $_{-0.2}^{0}$ [mm]	C $^{\pm0.4}$ [mm]	L $^{\pm0.2}$ [mm]	*1 (d2× θ)	W1 *1 [mm]	W2 *1 [mm]	M°	R	Type	Q'ty [pcs/box]	Gross Weight [kg/box]
090000	DV-19-A0.5	19	17	—	5	6	0.5	3.5	φ4 ×120°	—	—	60	0.6	1	2,000	11.0
090100	DV-22-A1	22	19	—	5	7	1	3.5	φ4.4× 90°	—	—	60	0.6	1	1,000	9.2
090200	DV-24-A1	24	21	—	5	7	1	3.5	φ4.4× 90°	—	—	60	0.6	1	1,000	9.8
090300	DV-26-A1	26	23	—	5	7	1	3.5	φ4.4× 90°	—	—	60	0.6	1	1,000	10.6
090400	DV-28-A1	28	24	—	5	7	1	3.5	φ4.4× 90°	—	—	(58)	0.6	1	500	5.3
090500	DV-30-A1	30	27	—	5	7	1	3.5	φ4.4× 90°	—	—	60	0.6	1	500	6.5
090600	DV-38-A0.5	38	35	—	5	8 $^{\pm0.2}$	0.5	3.5	φ4.4× 90°	—	—	60	0.6	1	500	7.5
091000	DV-19-B0.5	19	17	—	—	6	0.5	8 $^{\pm0.5}$	—	—	—	60	0.6	2	2,000	12.6
091100	DV-22-B0.5	22	19	—	—	7	0.5	8 $^{\pm0.5}$	—	—	—	60	0.6	2	1,000	10.0
091200	DV-24-B0.5	24	21	—	—	7	0.5	8 $^{\pm0.5}$	—	—	—	60	0.6	2	1,000	10.6
091201	DV-24-B3	24	21	—	—	7	3	8 $^{\pm0.5}$	—	—	—	60	0.6	2	1,000	10.7
091300	DV-26-B0.5	26	23	—	—	7	0.5	8 $^{\pm0.5}$	—	—	—	60	0.6	2	1,000	11.2
091500	DV-30-B0.5-0.5R	30	28	—	—	7	0.5	8 $^{\pm0.5}$	—	—	—	90	0.5	2	500	8.0
091501	DV-32.5-B1.5-2R	32.5	20.5	—	—	9.5 $^{\pm0.2}$	1.5	8 $^{\pm0.5}$	—	—	—	15	2	2	400	6.6
091600	DV-38-B0.5	38	35	—	—	8 $^{\pm0.2}$	0.5	8 $^{\pm0.5}$	—	—	—	60	0.6	2	250	5.8
092001	DV-19-H5	19	17	5	—	6	—	—	—	—	—	60	0.6	3	2,500	10.0
092100	DV-22-H6-M	22	19	6	—	7	—	—	—	—	—	60	0.6	3	1,500	9.7
092200	DV-24-H6	24	21	6	—	7	—	—	—	—	—	60	0.6	3	1,000	7.4
092201	DV-24-H8	24	20 $^{\pm1}$	8	—	7	—	—	—	—	—	30	0.6	3	1,000	5.6
092300	DV-26-H6	26	23	6	—	7	—	—	—	—	—	60	0.6	3	1,000	8.0
092500	DV-30-H6	30	27	6	—	7	—	—	—	—	—	60	0.6	3	500	6.8
092700	DV-48-H6W0.4-1.6R	48.3	35	6	—	8.2 $^{\pm0.2}$	—	—	—	0.4	0.4	30	1.6	4	250	4.1
090102	DV-22-AW0.5-B	22 $_{-0.1}^{0}$	19 $^{\pm0.1}$	—	3	7	—	—	—	8	12	60	0.65	5	1,000	8.9

***1 Reference Dimension**

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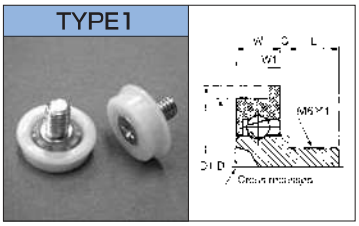
DF

TYPE1



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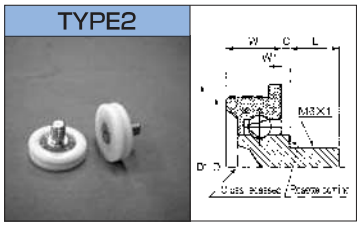

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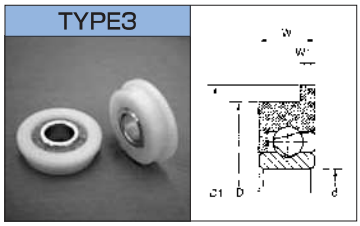

Code	Part No.	D$_{-0.1}^{0}$ [mm]	D1$^{\pm0.2}$ [mm]	d$_{0}^{+0.1}$ [mm]	W$_{-0.2}^{0}$ [mm]	W1$^{\pm0.2}$ [mm]	C$^{\pm0.4}$ [mm]	L$^{\pm0.5}$ [mm]	Load *1 [N] (kgf)	Load *2 [N] (kgf)	Type	Q'ty [pcs/box]	Gross Weight [kg/box]
061001	DF-17-B0.5	17	19	—	6	1	0.5	8	49 (5)	—	1	1,500	10.0
061020	DF-22-B0.5	22	26	—	7	2	0.5	8	196 (20)	—	1	1,000	9.4
061040	DF-26-B1	26$^{\pm0.2}$	32	—	11$^{\pm0.2}$	3	1	8	196 (20)	—	2	400	5.3
061043	DF-26-B2	26$^{\pm0.2}$	32	—	11$^{\pm0.2}$	3	2	8	196 (20)	—	2	400	5.8
062000	DF-17-H6	17	19$^{\pm0.1}$	6	6	1 $^{\pm0.1}$	—	—	49 (5)	14.7 (1.5)	3	3,000	9.5
062005	DF-19-H6	19	22	6	7	1.5	—	—	147 (15)	29.4 (3)	3	1,500	7.7
062020	DF-22-H6	22	26	6	7	2	—	—	196 (20)	39.2 (4)	3	1,500	9.5
062027	DF-23-H10	23	24.75	10	8$^{\pm0.2}$	1.5$^{\pm0.1}$	—	—	98 (10)	39.2 (4)	3	1,000	7.2
062061	DF-30-H10-3	30	34	10	8.5$^{\pm0.2}$	3	—	—	245 (25)	58.8 (6)	3	500	7.0
062062	DF-32-H12	32	36	12	10	3	—	—	245 (25)	58.8 (6)	3	400	7.5

*1 **Allowable Load at 300rpm -1 rotation of outer-race** *2 **Allowable Load at 300rpm -1 rotation of inner-race**

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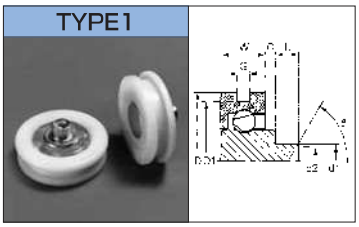
DH

TYPE1



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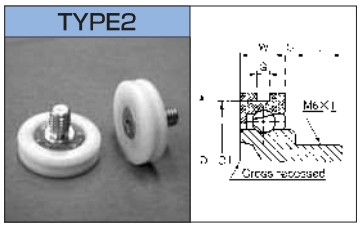

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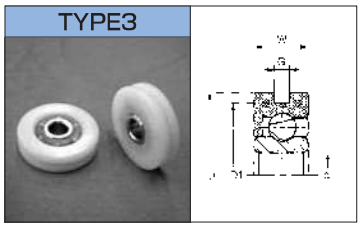

Code	Part No.	D$^{\pm0.2}$ [mm]	D1$^{\pm0.2}$ [mm]	d$_{0}^{+0.1}$ [mm]	d1$_{-0.1}^{0}$ [mm]	W$_{-0.2}^{0}$ [mm]	C$^{\pm0.4}$ [mm]	L$^{\pm0.2}$ [mm]	(d2×θ) *1	G$^{\pm0.2}$ [mm]	Type	Q'ty [pcs/box]	Gross Weight [kg/box]
100000	DH-16-A0.5	19	16	—	5	6	0.5	3.5	ϕ4×120°	2.1	1	2,000	10.9
101012	DH-16-B0.5	19	16	—	—	6	0.5	8$^{\pm0.5}$	—	2.1	2	2,000	12.5
101013	DH-16-B1	19	16	—	—	6	1	8$^{\pm0.5}$	—	2.1	2	2,000	11.8
101020	DH-19-B0.5-2	22	19	—	—	7	0.5	8$^{\pm0.5}$	—	2	2	1,000	9.9
101040	DH-21-B0.5-2	24	21	—	—	7	0.5	8$^{\pm0.5}$	—	2	2	1,000	10.5
102010	DH-16-H5	19	16	5	—	6	—	—	—	2.1	3	2,000	9.9
102021	DH-19-H6-2	22	19	6	—	7	—	—	—	2	3	1,000	9.6
102025	DH-19-H6-2.5	22	19	6	—	7	—	—	—	2.5	3	1,500	8.4
102040	DH-21-H6-2	24	21	6	—	7	—	—	—	2	3	1,000	7.3
102041	DH-21-H6-3	24	21	6	—	7	—	—	—	3	3	1,000	6.5
102042	DH-21-H6-3.2	24	21	6	—	7	—	—	—	3.2	3	1,000	6.2

*1 **Reference Dimension**

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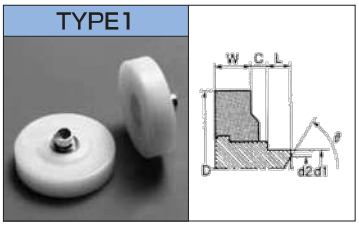
DL

TYPE1



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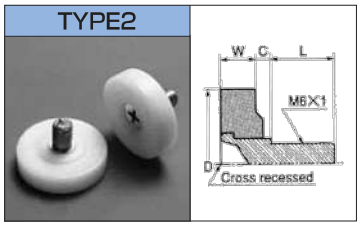

Code	Part No.	D$_{-0.1}^{0}$ [mm]	d1$_{-0.1}^{0}$ [mm]	W$_{-0.2}^{0}$ [mm]	C$^{\pm0.4}$ [mm]	L$^{\pm0.2}$ [mm]	(d2× θ) *1	Type	Q'ty [pcs/box]	Gross Weight [kg/box]
240012	DL-16-A0.5	16	4	5	0.5	3.6	nothing	1	2,500	3.2
240021	DL-19-A1.6	19	5	6.6	1.6	3.5	φ4×100°	1	2,000	10.4
240040	DL-22-A1.6	22	5	6.6	1.6$^{\pm0.5}$	3.5	φ4×100°	1	1,000	6.5
240080	DL-26-A1.6	26	5	6.6	1.6	3.5	φ4×100°	1	1,000	7.5
240120	DL-19-B1.6	19	—	6.6	1.6	8$^{\pm0.5}$	—	2	1,500	9.0
240140	DL-22-B1.6	22	—	6.6	1.6	8$^{\pm0.5}$	—	2	1,000	7.4
240159	DL-22-B2.6-7170	22	—	6.7$^{\pm0.2}$	2.6	8$^{\pm0.5}$	—	2	1,000	8.3
240145	DL-22-B5	22	—	6.7$^{\pm0.2}$	5	8$^{\pm0.5}$	—	2	1,000	9.9
240152	DL-22-B8.7	22$^{\pm0.2}$	—	7$^{\pm0.2}$	8.7	11$^{\pm0.5}$	—	2	1,000	11.7
240180	DL-26-B1.6	26	—	6.6	1.6	8$^{\pm0.5}$	—	2	1,000	9.0

***1 Reference Dimension**

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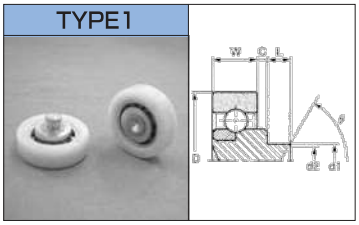
DR-S

The outer races are made of polyacetal resin and the inner races and balls are made of stainless steel.

TYPE1



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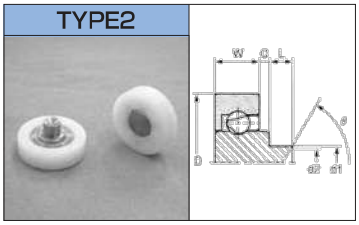

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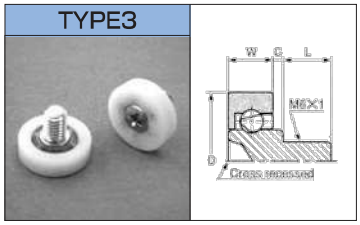

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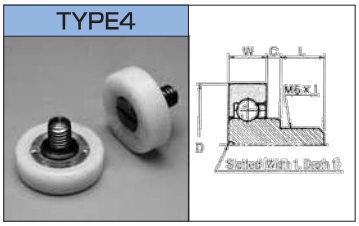

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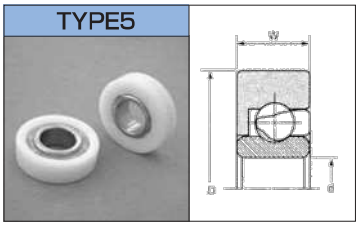
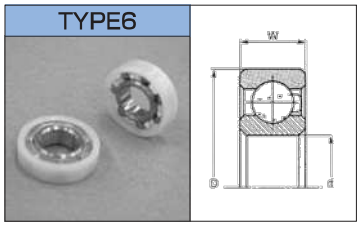


TYPE6



Code	Part No.	D $_{-0.1}$ [mm]	d $^{+0.1}_{0}$ [mm]	d1 $_{-0.1}$ [mm]	W $_{-0.2}$ [mm]	C $^{\pm0.4}$ [mm]	L $^{\pm0.2}$ [mm]	(d2× θ) *1	Load *2 [N] (kgf)	Type	Q'ty [pcs/box]	Gross Weight [kg/box]
000002	DRS-16-SAS1-GN	16 $_{-0.3}$	—	4	5 $^{\pm0.2}$	1	3.5	φ3 ×100°	—	1	2,000	9.0
000202	DR-19-SAS0.5-GN	19	—	5	6	0.5	3.5 $_{-0.2}$	φ4 ×120°	—	2	2,000	10.7
000421	DR-22-SAS1	22	—	5	7	1 $^{\pm0.3}$	3.4 $^{\pm0.1}$	φ4 × 90°	—	2	1,000	9.0
020202	DR-19-SBS0.5	19	—	—	6	0.5	8 $^{\pm0.5}$	—	—	3	2,000	12.5
020442	DR-22-SBS0.5-GN	22	—	—	7	0.5	8 $^{\pm0.5}$	—	—	4	1,000	9.8
020735	DR-26-SBS0.5	26	—	—	7	0.5	8 $^{\pm0.5}$	—	—	4	1,000	10.1
021001	DR-30-SBS0.5	30	—	—	7	0.5 $^{\pm0.3}$	8 $^{\pm0.5}$	—	—	4	500	6.8
021100	DR-35-SBS0.5	35	—	—	7	0.5 $^{\pm0.3}$	8 $^{\pm0.5}$	—	—	4	300	4.0
040101	DR-18-SHS6-GN	18	6	—	6	—	—	—	—	5	2,500	7.8
040207	DR-19-SHS6	19	6	—	6	—	—	—	—	5	2,500	8.1
040404	DR-22-SHS6-GN	22	6	—	7	—	—	—	—	5	1,000	7.0
040414	DR-22-SHS8-GN	22	8	—	7	—	—	—	—	5	1,000	5.3
040801	DR-28-SHS6-GN	28	6	—	7	—	—	—	—	5	500	4.2
041601	DR-26-SHS10-GN	26	10	—	8	—	—	—	98 (10)	5	1,000	7.9
041611	DR-30-SHS10-GN	30	10	—	9	—	—	—	147 (15)	5	500	7.7
041613	DR-32-SHS12-GN	32	12	—	10	—	—	—	176 (18)	5	500	9.6
041615	DR-35-SHS15-GN	35	15	—	11	—	—	—	176 (18)	5	400	10.6
041617	DR-40-SHS17-GN	40	17	—	12	—	—	—	205 (21)	5	250	6.9
041619	DR-47-SHS20-GN	47	20	—	14	—	—	—	235 (24)	5	150	8.7
040103	DR-18-SHS8	18	8	—	5	—	—	—	—	6	3,000	8.7

***1 Reference Dimension** ***2 Allowable Load at 300min -1 (300r.p.m.)**

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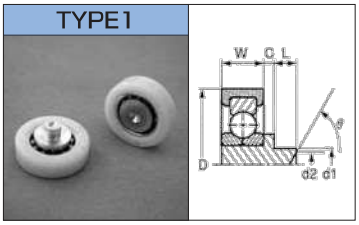
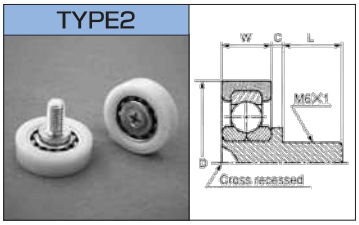
IDS

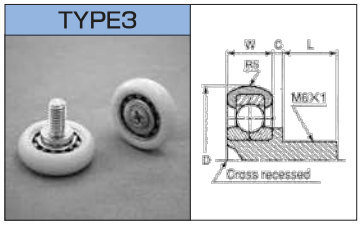
TYPE1



TYPE2



TYPE3



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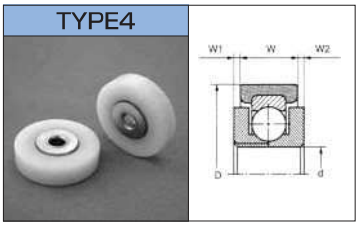

Code	Part No.	D $^{\pm0.1}$ [mm]	d $^{+0.1}_{0}$ [mm]	d1 $^{0}_{-0.1}$ [mm]	W $^{\pm0.2}$ [mm]	C $^{\pm0.4}$ [mm]	L $^{\pm0.2}$ [mm]	*1 (d2× θ)	W1 *1 [mm]	W2 *1 [mm]	Load *2 [N] (kgf)	Type	Q'ty [pcs/box]	Gross Weight [kg/box]
221400	IDS-22-A1	22	—	5	7	1	3.5	ϕ2.5×90°	—	—	392 (40)	1	1,000	12.4
221401	IDS-22-A2.5	22	—	5	7	2.5	3.5	nothing	—	—	392 (40)	1	1,000	14.0
221403	IDS-22-A3.4-4.5	22	—	5.1	7	3.4	4.5	ϕ2.5×90°	—	—	392 (40)	1	1,000	13.4
221405	IDS-22-A9-5	22	—	4.2	7	9	5	nothing	—	—	392 (40)	1	1,000	15.2
221450	IDS-26-A1.5	26	—	6	8	1.5	3.5	ϕ5.5×90°	—	—	588 (60)	1	800	15.5
221504	IDS-22-B1.5-8	22	—	—	7	1.5	8 $^{\pm0.5}$	—	—	—	392 (40)	2	1,000	13.2
221501	IDS-22-B1.5-11	22	—	—	7	1.5	11 $^{\pm0.5}$	—	—	—	392 (40)	2	1,000	15.3
221505	IDS-22-B4-7	22	—	—	7	4	7 $^{\pm0.5}$	—	—	—	392 (40)	2	1,000	14.5
221518	IDS-22-B11	22	—	—	7	11	8 $^{\pm0.5}$	—	—	—	392 (40)	2	1,000	18.6
221600	IDS-26-B2-11	26	—	—	8	2	11 $^{\pm0.5}$	—	—	—	588 (60)	2	500	10.2
221603	IDS-26-B5-9	26	—	—	8	5 $^{\pm0.5}$	9 $^{\pm0.5}$	—	—	—	588 (60)	2	500	11.1
221650	IDS-30-B2-11	30	—	—	9	2	11 $^{\pm0.5}$	—	—	—	588 (60)	2	500	12.1
221700	IDSO-26-B2-11	26 $^{0}_{-0.2}$	—	—	8	2	11 $^{\pm0.5}$	—	—	—	588 (60)	3	500	10.2
221901	IDS-26-H6.35W0.8	26	6.35	—	8	—	—	—	0.8	0.8	294 (30)	4	800	16.3
221954	IDS-35-H6.35W0.26	35 $^{0}_{-0.1}$	6.35	—	9	—	—	—	0.26	0.26	294 (30)	4	500	13.3

***1 Reference Dimension** ***2 Allowable Load at 300min -1 (300r.p.m.)**

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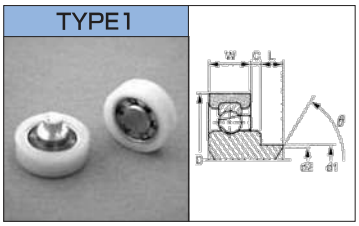
IN

TYPE1



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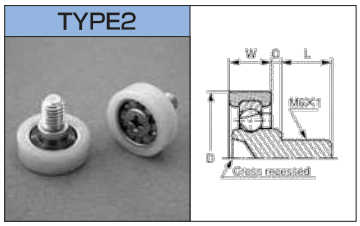
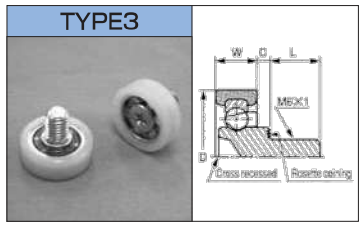


TYPE3



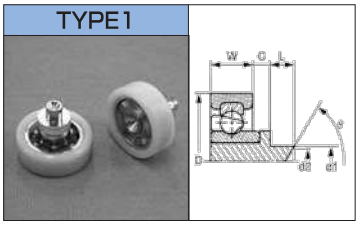
Code	Part No.	D $_{-0.3}^{0}$ [mm]	d1 $_{-0.1}^{0}$ [mm]	W $^{\pm0.2}$ [mm]	C $^{\pm0.4}$ [mm]	L $^{\pm0.2}$ [mm]	(d2× θ) *1	Load *2 [N] (kgf)	Type	Q'ty [pcs/box]	Gross Weight [kg/box]
220000	IN-19-A1.5	19	5	7	1.5	3.5	φ4.4×120°	49 (5)	1	1,500	7.4
220011	IN-19-B1	19	—	7	1	8 $^{\pm0.5}$	—	196 (20)	2	1,500	12.2
220013	IN-19-B2.7	19	—	7	2.7	8 $^{\pm0.5}$	—	196 (20)	2	1,500	13.4
220014	IN-19-B3	19	—	7	3	8 $^{\pm0.5}$	—	196 (20)	2	1,500	13.5
220010	IN-19-B0.5	19	—	7	0.5	8 $^{\pm0.5}$	—	196 (20)	3	1,500	11.9
220012	IN-19-B1.5	19	—	7	1.5	8 $^{\pm0.5}$	—	196 (20)	3	1,500	12.5

***1 Reference Dimension** ***2 Allowable Load at 300min -1 (300r.p.m.)**

Size limits can be modified for practical applications. Please contact our sales/engineering departments for further information and assistance.

ID

TYPE1



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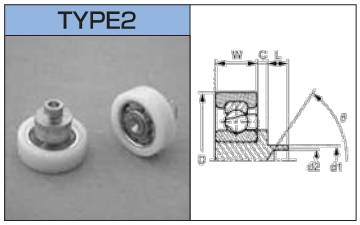

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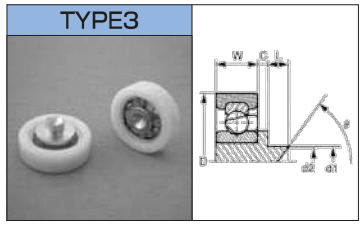

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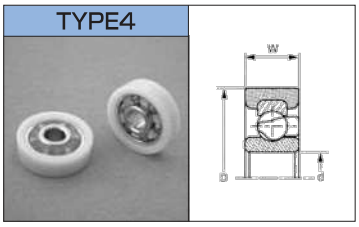

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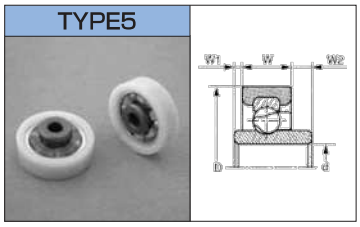

Code	Part No.	D $_{-0.1}^{0}$ [mm]	d $^{+0.1}_{0}$ [mm]	d1 $_{-0.1}^{0}$ [mm]	W $^{\pm0.2}$ [mm]	C $^{\pm0.4}$ [mm]	L $^{\pm0.2}$ [mm]	(d2× θ) *1	W1 *1 [mm]	W2 *1 [mm]	Load *2 [N] (kgf)	Type	Q'ty [pcs/box]	Gross Weight [kg/box]
221101	ID-18.8-AH5	18.8	—	4	7	5	3.5	φ3 × 90°	—	—	333 (35)	1	1,500	13.0
221100	ID-18.8-AH5-5	18.8	—	4	7	5	5	φ3 × 90°	—	—	333 (35)	1	1,500	13.4
221102	ID-19-AH2.5	19 $_{-0.3}^{0}$	—	5	7	2.5	3.5	φ3 ×120°	—	—	333 (35)	2	1,500	12.9
221103	ID-19-AH5.5	19 $_{-0.3}^{0}$	—	5	7	5.5	3.5	φ3 ×120°	—	—	333 (35)	2	1,500	15.9
221110	ID-24-AH1-3.6	24 $^{\pm0.2}$	—	6	8	1	3.6	φ5.5× 90°	—	—	333 (35)	3	1,000	12.3
221301	ID-19-H6	19 $_{-0.3}^{0}$	6	—	7	—	—	—	—	—	333 (35)	4	2,000	10.5
221303	ID-22-H6	22	6	—	7	—	—	—	—	—	333 (35)	4	1,500	22.5
221304	ID-22-H4W (0.5) 3	22	4	—	7	—	—	—	0.5	3	333 (35)	5	1,000	10.2

***1 Reference Dimension** ***2 Allowable Load at 300min -1 (300r.p.m.)**

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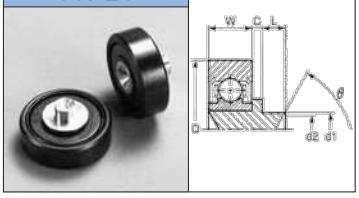
A-SERIES BEARINGS

TYPE1



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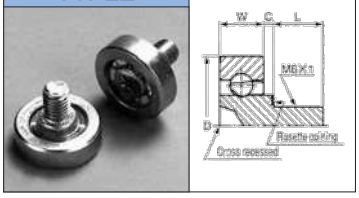

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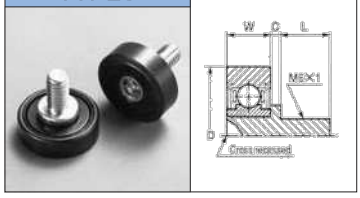

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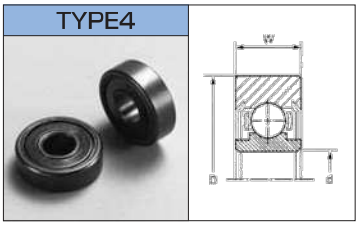

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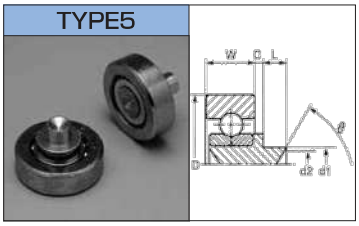

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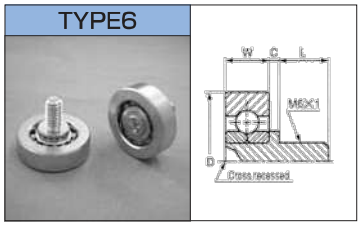
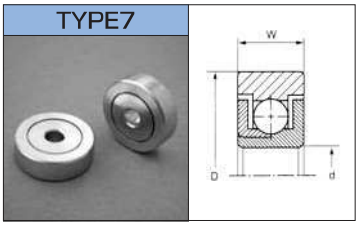


TYPE7



Code	Part No.	$D^{\pm0.1}$ [mm]	$d^{+0.1}_{0}$ [mm]	$d1_{-0.1}$ [mm]	$W^{\pm0.2}$ [mm]	$C^{\pm0.4}$ [mm]	$L^{\pm0.2}$ [mm]	(d2× θ) *1	Load *2 [N] (kgf)	Type	Q'ty [pcs/box]	Gross Weight [kg/box]
230050	A-22-AH1-3.4	22	—	5	7	1	3.4	φ4.5×110°	784 (80)	1	1,000	16.2
230203	A-19-B1	19	—	—	6	1	$8^{\pm0.5}$	—	490 (50)	2	1,000	12.1
230204	A-19-B2	19	—	—	6	2	$8^{\pm0.5}$	—	490 (50)	2	1,000	12.7
230207	A-19-B2.7	19	—	—	6	2.7	$8^{\pm0.5}$	—	490 (50)	2	1,000	12.8
230251	A-22-BH2.8-11	22	—	—	7	2.8	$11^{\pm0.5}$	—	784 (80)	3	1,000	18.0
800000	A-608ZZ-5	22	8	—	7	—	—	—	784 (80)	4	1,000	10.8
231010	AS-19-A0.5-5	$19^{\pm0.05}$	—	5	$6^{\pm0.1}$	$0.5^{\pm0.3}$	5	φ4.5×100~130°	490 (50)	5	1,000	19.0
231050	AS-22-A1.5	22	—	6	8	1.5	3.5	φ5.5× 90°	686 (70)	5	1,000	18.0
231052	AS-22-A1.5-5.5	22	—	6	8	1.5	5.5	φ5 ×110°	686 (70)	5	1,000	20.1
231150	AS-26-A1.5	26	—	6	8	1.5	3.5	φ5.5× 90°	686 (70)	5	800	23.2
231203	AS-22-B0.5-9.5	22	—	—	8	0.5	$9.5^{\pm0.5}$	—	686 (70)	6	1,000	19.9
231204	AS-22-B2-11	22	—	—	8	2	$11^{\pm0.5}$	—	686 (70)	6	1,000	21.5
231250	AS-24-B0.5-9.5	24	—	—	8	0.5	$9.5^{\pm0.5}$	—	686 (70)	6	500	12.3
231300	AS-26-B2-11	26	—	—	8	2	$11^{\pm0.5}$	—	686 (70)	6	500	15.5
231402	AS-608ZZ-2	22	8	—	7	—	—	—	294 (30)	7	500	7.6
231405	AS-26-H6	26	6	—	$8^{\pm0.3}$	—	—	—	294 (30)	7	800	27.8

***1 Reference Dimension** ***2 Allowable Load at 300min -1 (300r.p.m.)**

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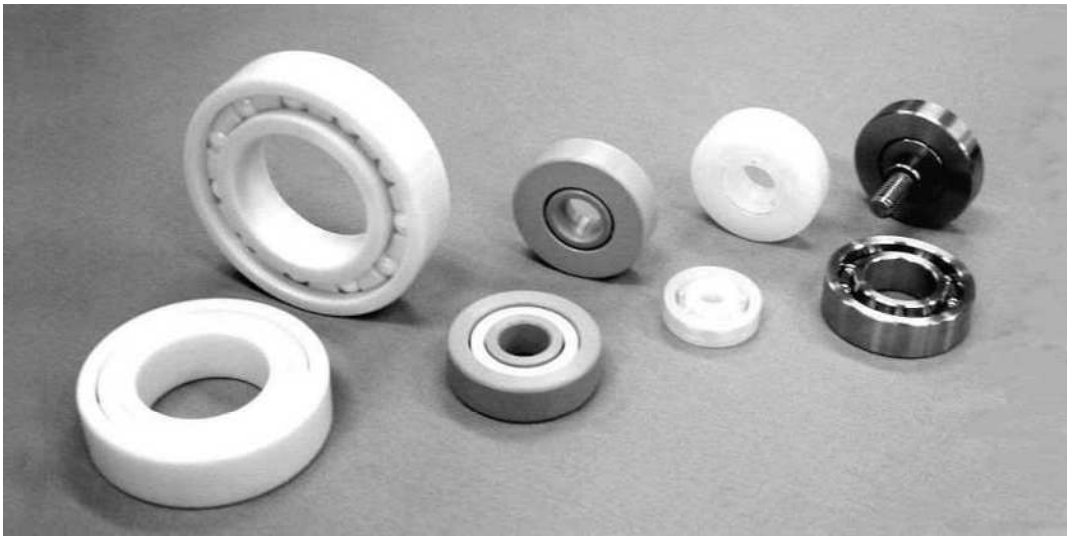
C/PK/PV/PE/S-SERIES BEARINGS



CORROSION AND CHEMICAL RESISTANT BEARINGS

PRIMARY USAGE IN THE MEDICAL AND SEMICONDUTOR INDUSTRIES

Features

1. Excellent Chemical resistance (depending on environment)
2. Excellent Corrosion resistance (depending on environment)
3. Excellent Heat resistance (depending on environment)
4. Waterproof

Applications

Ideal for use in the medical and semiconductor industries where products are subject to harsh Chemicals and environments. Other applications would be in industries using high temperatures such as transportation and cleaning.

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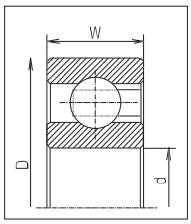
CHARACTERISTICS

Major characteristics of a ceramic bearing are: excellent corrosion and chemical resistance; self lubricating (absence of grease); and non-magnetic. Recommended environments include, but are not limited to: etching, cleaning, coating, medical, and testing equipment.



Code	Part No.	JIS	$D_{-0.02}^{0}$ [mm]	$d_{0}^{+0.02}$ [mm]	$W_{-0.1}^{0}$ [mm]	Balls material	Outer and Inner races material	Retainer material
	C-26-CHC10	6000	26	10	8	ZrO_2	ZrO_2	PTFE
	C-28-CHC12	6001	28	12	8	ZrO_2	ZrO_2	PTFE
	C-30-CHC10	6200	30	10	9	ZrO_2	ZrO_2	PTFE
	C-32-CHC12	6201	32	12	10	ZrO_2	ZrO_2	PTFE
	C-32-CHC15	6002	32	15	9	ZrO_2	ZrO_2	PTFE
	C-35-CHC15	6202	35	15	11	ZrO_2	ZrO_2	PTFE
	C-35-CHC17	6003	35	17	10	ZrO_2	ZrO_2	PTFE
	C-40-CHC17	6203	40	17	12	ZrO_2	ZrO_2	PTFE
	C-42-CHC20	6004	42	20	12	ZrO_2	ZrO_2	PTFE
	C-47-CHC20	6204	47	20	14	ZrO_2	ZrO_2	PTFE
	C-47-CHC25	6005	47	25	12	ZrO_2	ZrO_2	PTFE
	C-52-CHC25	6205	52	25	15	ZrO_2	ZrO_2	PTFE
	C-55-CHC30	6006	55	30	13	ZrO_2	ZrO_2	PTFE
	C-62-CHC30	6206	62	30	16	ZrO_2	ZrO_2	PTFE
	C-62-CHC35	6007	62	35	14	ZrO_2	ZrO_2	PTFE
	C-68-CHC40	6008	68	40	15	ZrO_2	ZrO_2	PTFE
	C-72-CHC35	6207	72	35	17	ZrO_2	ZrO_2	PTFE
	C-80-CHC40	6208	80	40	18	ZrO_2	ZrO_2	PTFE

Inner gap is under C4 (within 0.03mm)
Can be designed and produce in different sizes
Material: Ball and outer/inner races-Zirconia ($ZrO2$); retainer — polytetrafluoroethylene (PTFE)

Guide to Corrosion Resistance

Material / Use liquid	Si_3N_4	ZrO_2	PTFE
Salt-Water	◎	◎	◎
Potassium Hydroxide	△	△	◎
Sodium Hydroxide	△	○	◎
Hydrofluoric acid	△	▲	◎
Phosphoric Acid	○	○	◎
Sulphuric Acid	○	○	◎
Hydrochloric Acid	△	○	◎
Nitric Acid	○	○	◎

※Chemical and corrosion resistance will vary depending on chemical concentrations and temperatures.
(Guide to Corrosion resistance, is only a reference. For more information Please contact our sales and engineering departments for assistance)

◎ : anticorrosive
○ : hardly corrosive
△ : slight corrosive
▲ : possibility of corrosiveness

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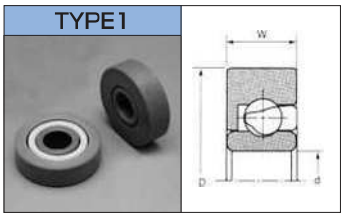
PEEK/PVDF

CHEMICAL AND HEAT RESISTANCE BEARINGS:

PEEK/PVDF bearings have much better chemical and heat resistance than our conventional PE SERIES BEARINGS. These bearings are suitable for use in these environments: automated systems used in chemical processing; transportation systems used in chemical processing; washing and cleaning systems used in the medical and semiconductor industries where chemical solution and high heat are present.

TYPE1



Code	Part No.	D $_{-0.1}^{0}$ [mm]	d $_{0}^{+0.12}$ [mm]	W $_{-0.2}^{0}$ [mm]	Balls material *1	Outer and Inner races *2 material	Retainer material *3
801009	PK-30-GHP10	30	10	9	ガラス	PEEK	PTFE
—	PV-30-GHP10	30	10	9	ガラス	PVDF	PTFE
—	PK-32-GHP12	32	12	10	ガラス	PEEK	PTFE
—	PV-32-GHP12	32	12	10	ガラス	PVDF	PTFE
—	PK-35-GHP15	35	15	11	ガラス	PEEK	PTFE
—	PV-35-GHP15	35	15	11	ガラス	PVDF	PTFE

＊1 Ball Material: G=Glass. Ceramic balls can be used, please contact our sales/engineering department for more details.
＊2 Outer/Inner Race Material: PEEK=Polyetheretherketone; PVDF=Polyvinylidene fluoride.
＊3 Retainer Material: PTFE=Polytetrafluoroethylene.
＊4 Size limits can be modified for practical applications. Please contact our sales/engineering departments for further information and assistance. These bearings are lubricant free and are made to order.

Characteristics \ Materials		Chemical Resistance Resin					Other Resin			
		PTFE	PCTFE	PVDF	PEEK	UHMWPE	PA	POM	PP	PVC
Temperature Resistance [℃]		130	80	80	130	60	70	50	50	35
Mechanical		△	○	○	◎	○	○	◎	○	○
Electrical		◎	○	○	◎	△	△	△	◎	△
Chemical proof	Acid	◎	◎	○	○	○	×	×	○	○
	Alkalis	◎	◎	○	◎	○	×	△	○	○
	Solvents	◎	○	○	◎	△	×	○	△	△

Information provided is for reference only.
Materials only reflect standard characteristics provided by technical books and material supplier's catalogs.

(Explanation of Codes)
◎ : GOOD ·····Acceptable—Visually free of any corrosive affect. Durable for field applications.
○ : FAIR ·····Limited—Slight corrosion influence, but can be used for specific field applications in ambient conditions
△ : AVERAGE ···Unacceptable—Yielding and not applicable
× : IMPROPER···No rating—easily corrodes and not usable

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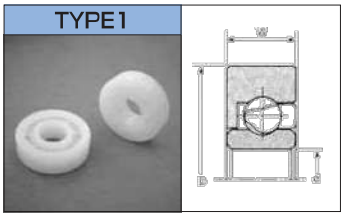
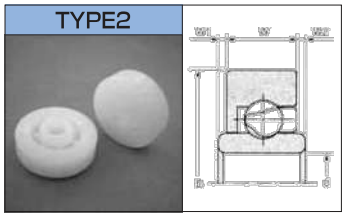
Product specification are subject to change without prior notice.
Before assembly or use of any bearing, please read "Caution for Use"

PE ULTRA-HIGH MOLECULAR WEIGHT POLYETHYLENE (ANTI-ACID/ANTI-ALKALI BEARINGS)

TYPE1



TYPE2



Code	Part No.	$D_{-0.1}^{0}$ [mm]	$d_{0}^{+0.12}$ [mm]	$W_{-0.2}^{0}$ [mm]	W1 *1 [mm]	W2 *1 [mm]	Type	Q'ty [pcs/box]	Gross Weight [kg/box]	BALL *2
250126	PE-35-SHP15	35	$15_{0}^{+0.15}$	11	—	—	1	400	5.3	S
250010	PE-35-SHP8W1.75	35	8	11	1.75	1.75	2	300	3.7	S
250017	PE-35-SHP17W1.75	35	$17_{+0.01}^{+0.2}$	11	1.75	1.75	2	400	4.8	S
250100	PE-26-PHP10	$26_{-0.2}^{0}$	10	8	—	—	1	1,000	2.9	P
250121	PE-30-PHP10	30	10	9	—	—	1	500	2.2	P
250124	PE-32-PHP12	32	$12_{0}^{+0.2}$	10	—	—	1	500	3	P
250127	PE-35-PHP15	35	$15_{0}^{+0.15}$	11	—	—	1	400	2.5	P
250132	PE-47-PHP20	47	20	14	—	—	1	150	4	P
250011	PE-35-PHP8W1.75	35	8	11	1.75	1.75	2	300	3.4	P
250122	PE-30-GHP10	30	10	9	—	—	1	500	6	G
250131	PE-40-GHP17	40	17	12	—	—	1	300	3.7	G
250012	PE-35-GHP8W1.75	35	8	11	1.75	1.75	2	300	3.1	G
250019	PE-35-GHP17W1.75	35	$17_{+0.01}^{+0.2}$	11	1.75	1.75	2	400	3.5	G

＊1 Reference Dimension
＊2 Ball Material: S=Stainless Steel; P=Polyethylene; G=Glass. Outer/Inner Race Material: Ultra-high Molecular Weight Polyethylene.
＊3 Size limits can be modified for practical applications. Please contact our sales/engineering departments for further information and assistance. These bearings are lubricant free and are made to order.

DURABILITY OF PLASTICS IN A CHEMICAL ENVIRONMENT

Table No.1 : durability of plastics in a chemical enviroment

		Polyacetal (POM)	Polyamid (PA)	Polyethylene (PE)	Polypropylene (PP)
Liquid Ammonia			◎	◎	○
Calcium Hydroxide		◎	◎	◎	◎
Potassium Hydroxide		○	○	◎	◎
Sodium Hydroxide	30% 30℃		×	○	○
	30% RT		◎	◎	◎
	10% RT	△	◎	◎	◎
Oxalic Acid		◎	◎	◎	◎
Acetic Acid	50% RT		△	○	○
Hydrochloric Acid	38% RT		×	◎	◎
	10% RT		○	◎	◎
Nitric Acid	RT FumingRT	×	×	×	×
	61% RT	×	×	△	△
	10% RT	△	△	◎	◎
Sulphuric Acid	RT FumingRT	×	×	×	△
	98% RT	×	×	△	△
	10% RT	△	○	◎	◎
Chromic Acid	25% RT	×	×	○	△

Table No.1 denotes the durability of Polyacetal, Polyamide(nylon), Polyethylene, and Polypropylene, against acids and alkali solutions.

Table No.2 : durability of plastics against solvent, oil, gasses and sea water

	Polyacetal (POM)	Polyamid (PA)	Polyethylene (PE)	Polypropylene (PP)
Sea-Water	◎	*	◎	◎
Sulfur Dioxide Gas			○	◎
Carbonic Acid Gas	◎	◎	◎	◎
Ammonia		◎	◎	
Petroleum	○	◎	△	○
Benzine	△	○	△	△
Holmaldehyde		△	○	◎
Ethyl Alcohol	◎	○	○	○
Cresol	○	×	○	○

Bearing used in sea water, must be corrosion resistance to sea water.

＊polyamide resins water absorption ratios are too high to be considered for use as balls or races in a water or sea water environment.

(Explanation of Codes)
◎ : COOD ·····Acceptable—Visually free of any corrosive affect. Durable for field applications.
○ : FAIR ·····Limited—Slight corrosion influence, but can be used for specific field applications in ambient conditions.
△ : AVERAGE ···Unacceptable—Yielding and not applicable
× : IMPROPER···No rating—easily corrodes and not usable
RT : Room Temperature

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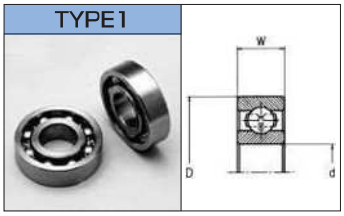
SUS

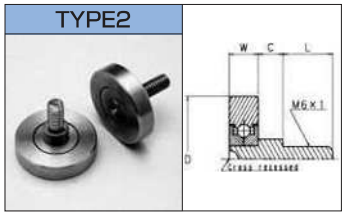
(ALL STAINLESS STEEL BEARINGS)

These bearings are made of stainless steel.

TYPE1



TYPE2



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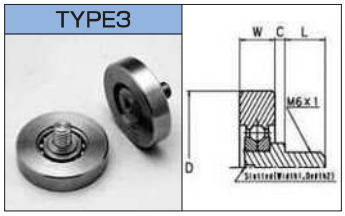

Code	Part No.	$D_{-0.03}^{0}$ [mm]	$d_{0}^{+0.05}$ [mm]	$W_{-0.05}^{0}$ [mm]	$C^{\pm0.4}$ [mm]	$L^{\pm0.5}$ [mm]	Outer races material	Inner races material	Shaft material	Retainer material	Balls material	Type
233002	S-16-SHS8-304-GN	16	8	4	—	—	SUS304	SUS304	—	SUS304	SUS304	1
233003	S-22-SHS8-304-GN	22	8	7	—	—	SUS304	SUS304	—	SUS304	SUS304	1
233007	S-22-SHS10-304-GN	22	10	6	—	—	SUS304	SUS304	—	SUS304	SUS304	1
233008	S-24-SHS12-304-GN	24	12	6	—	—	SUS304	SUS304	—	SUS304	SUS304	1
233009	S-26-SHS9-304-GN	26	9	8	—	—	SUS304	SUS304	—	SUS304	SUS304	1
233000	S-28-SHS12-304-GN	28	12	8	—	—	SUS304	SUS304	—	SUS304	SUS304	1
233001	S-28-SHS15-304-GN	28	15	7	—	—	SUS304	SUS304	—	SUS304	SUS304	1
233005	S-30-SHS10-304-GN	30	10	9	—	—	SUS304	SUS304	—	SUS304	SUS304	1
233004	S-30-SHS17-304-GN	30	17	7	—	—	SUS304	SUS304	—	SUS304	SUS304	1
233006	S-32-SHS12-304-GN	32	12	10	—	—	SUS304	SUS304	—	SUS304	SUS304	1
232050	SS-22-SBS2	$22_{-0.1}^{0}$	—	$7^{\pm0.2}$	2	8	SUS303	SUS303	SUS305	—	SUS304	2
232055	SS-30-SBS6-12	$30^{\pm0.1}$	—	$7_{-0.2}^{0}$	6	12	SUS303	SUS303	SUS305	—	SUS440C	2
232060	SS-30-SBS0.5	$30_{-0.1}^{0}$	—	$7_{-0.2}^{0}$	0.5	8	SUS303	SUS303	SUS303	—	SUS304	3

Size limits can be modified for practical applications. Please contact our sales/engineering departments for further information and assistance. These products are made to order.

CORROSION RESISTANCE OF STAINLESS STTEL

Table No.1—Corrosion resistance of stainless steel

		SUS 304	SUS 316
Sea-Water		A*	A*
20℃ Sulfurous Acid (Saturation) 20℃		C	B
Liquid Ammonia	Boiling	A	A
	20℃	A	A
Ethyl Alcohol	Boiling	A	A
	20℃	A	A
Ammonia	Gas-High Temperature	D	
	Whole Density 20℃	A	A
Sodium Hydroxide		A	A
Oxalic Acid 10% 20℃		A	A
Acetic Acid 50% 20℃		A	A
Hydrochloric Acid Whole Density 20℃		E	E
Nitric Acid	65% Boiling	B	B
	20% 20℃	A	A
Sulphuric Acid	50%20℃	D	C
	5% Boiling	E	C
	5% 20℃	C	B

Stainless Steel has a high resistance to corrosion. However, it is not corrosion free and will corrode in certain environments and over time. Precautions should be taken when using the table and research should be used to determine whether or not Stainless Steel is suitable for your application.

(Explanation of Codes)

code	Weight Reduction by Corrosion	
A	≦0.1	usable
B	0.1~1.0	
C	1.0~3.0	Slightly corroded
D	3.0~10.0	Gets corroded
E	≧10.0	Badly corroded
*	Corrosion spots appear when dehydrated	

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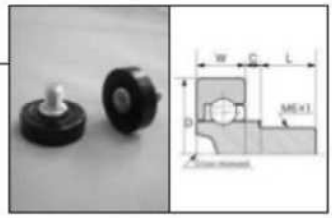
Product specification are subject to change without prior notice.
Before assembly or use of any bearing, please read "Caution for Use"

SPECIAL BEARINGS

We can supply bearings for various applications.

ER NON-ELECTRIFICATION BEARING

Features: Electrification of static electricity is preventive by using conductive resins for the outer races and electric conduction grease.



Code	Part No.	D	W	C	L
720104	ER-19-80.5	19	6	0.5	8
720101	ER-22-82	22	7	2	8
720102	ER-22-86	22	7	6	8
720103	ER-26-80.5	26	7	0.5	8

※Size limits can be modified for practical applications. Please contact our sales/engineering departments for further information and assistance. These products are made to order.

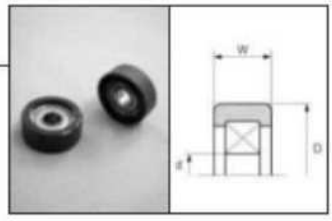
Electric resistance value (reference) unit : kΩ

sample	1	2	3	4	average
electric resistance	174.8	221.8	221.5	131.3	187.4

※An electrical resistance value of the bearing between outer race and inner race is measured after applying radial load, 49N (5kgf), to the bearings for 3minutes.

UT SERIES BEARING

Features: 1. A JIS bearing which is insert-molded using polyurethane resins.
2. Because of the insert-molded polyurethane operational noise levels are very low.
3. Due to the polyurethane molding it is very difficult to damage the bearing.



Code	Part No.	D	d	W	Load (N) ※
110032	UT-20-696ZZ	20	(6)	8	29.4

※Allowable load at 300min^{-1} (300r.p.m)
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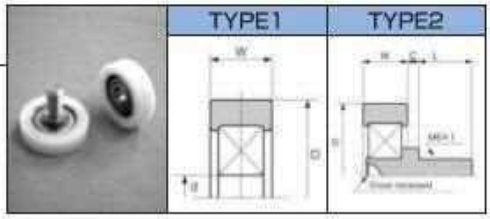
SPECIAL BEARINGS

We can supply bearings for various applications.

DT SERIES BEARING

Features:
1. A steel bearing with an insert-molded polyacetal resin
2. Run-out and clearance of the bearings are small.
3. Because of the insert-molded polyacetal operational noise levels are very low.



Code	Part No.	D	d	W	C	L	TYPE
110070	DT-22-688ZZ	22	(8)	7	–	–	1
110056	DT-26-H6-626ZZ	26	(6)	8	–	–	1
110058	DT-26-BH0.5-626ZZ	26	–	8	0.5	8	2
110057	DT-26-BH2-9.5-626ZZ	26	–	8	2	9.5	2
110060	DT-26-BH4-626ZZ	26	–	8	4	8	2
110059	DT-26-BH6-14-626ZZ	26	–	8	6	14	2

※Size limits can be modified for practical applications. Please contact our sales/engineering departments for further information and assistance. These products are made to order.

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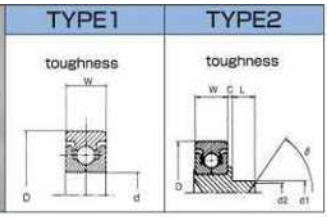
DURABLE AND NON-DESTRUCTIVE
BEARING (TOUGH)

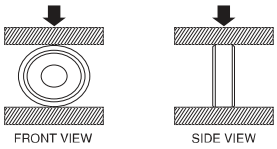
FEATURES: The "TAS" bearings are very durable and tough to destroy. New technology was used to increase its durable and shock resisitance.

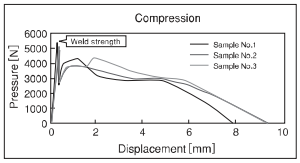


Code	Part No.	D [mm]	d [mm]	d1 [mm]	W [mm]	C	L	(d2×θ)	Load* (N) (kgf)	TYPE
231502	TAS-22-H8	22	8	–	7	–	–	–	392(40)	1
231501	TAS-22-AH1-5	22	–	5	7	1	5	φ3×100°	392(40)	2

※Allowable load at 300rpms
Size limits can be modified for practical applications. Please contact our sales/engineering departments for further information and assistance.

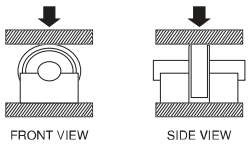
1.Compression examination

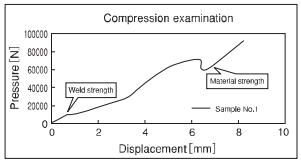




With a fixed outer wheel, the TAS bearing has a compression strength of about 1.5X the JIS bearing 608ZZ

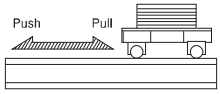
2.Compression examination

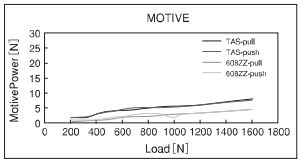




When an inside fix is used, the TAS bearing has a compression strength of approximately 23X the JIS bearing 608ZZ

3.Motive power examination

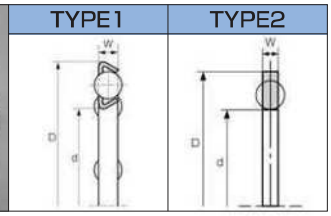




In Motive power, the TAS bearing is equal to the JIS bearing 608ZZ

THRUST RETAINER

FEATURES : 1. This is simple Thrust bearing with a press-fit ball in the retainer.
2. Axial load can be applied in one direction.



Code	Part No.	D	d	W	Retainer material	Balls material	Balls	TYPE
800002	T-22 Thrust Reatainer	21.4	13	2	SUS304	SUJ-2	1/8"×12	1
280300	T-22.7 Nylon Thrust Reatainer	22.7	16	1.4	PA66	SUJ-2	3/32"×12	2

※Size limits can be modified for practical applications. Please contact our sales/engineering departments for further information and assistance.
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UNIVERSAL TYPE-SLIDING DOOR WHEELS

APPLICATIONS: All types of sliding doors

FEATURES:
1. Clamps are not required in the assembly of the doors
2. Simple construction, high durability, and low cost
3. Free from corrosion, 100% plastic material

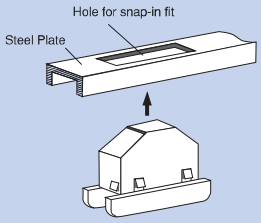
DURABILITY: The door wheels were tested under the following conditions:
- Forward and Reverse Force of 49N(kgf)
- Stroke of 500mm for 100,000 cycles

The result : the door wheels and door should still smoothly.

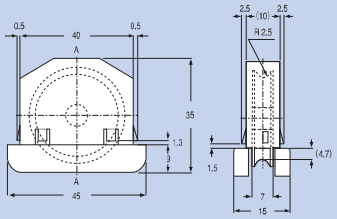
Code	Part NO.	Frame material	Kind of roller
260001	TOK DOOR WHEEL No.3 A	Polyethylene (PE)	Roller (PA : Polyamide)
260005	TOK DOOR WHEEL No.3 B	Polyethylene (PE)	Bearing (DU-30-H6-M)

TOK DOOR WHEEL No.3 A (Roller type)

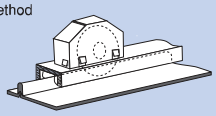
Sizes of Hole for snap-in fit
L×W×t=40.5×11×1.0 (or 0.8) mm



Dimension



Fitting method



TOK DOOR WHEEL No.3 B (Bearing type)

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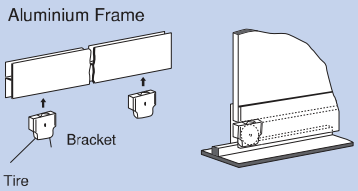
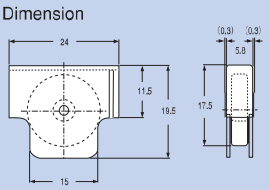
GLASS SLIDING DOOR WHEEL/ ROLLER SET SCREEN V

APPLICATIONS: For glass doors, such as display cases
TYPES: Glass Sliding Door Wheel: Bearing (DRS-16-H4.1WO.25)
Roller set screen V: Roller (POM: Polyacetal)





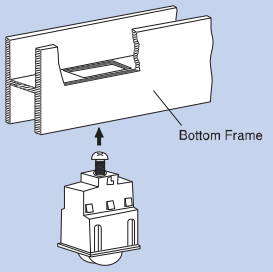
Code	Part NO.	Frame material	Kind of roller
260000	GLASS DOOR WHEEL	Polyethylene (PE)	Bearing (DRS-16-H4.1W0.25)
260068	ROLLER SET SCREEN V	Polyatmide (PA)	Roller (POM : Polyacetal)

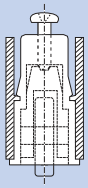
UNIVERSAL TYPE SLIDING DOOR WHEELS WITH ADJUSTABLE HOUSING

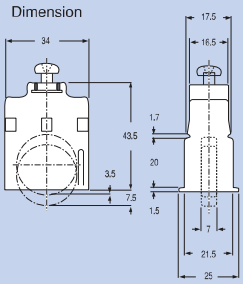
APPLICATIONS: All types of sliding doors
FEATURES: 1. Easy installation without clamps
2. Free from corrosion, 100% plastic material
3. Smooth sliding with D-SERIES BEARINGS
MODELS: 2 types are available:
・ADJUSTABLE DOOR WHEEL F
・ADJUSTABLE DOOR WHEEL No.7

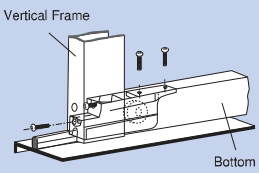

ADJUSTABLE DOOR WHEEL F

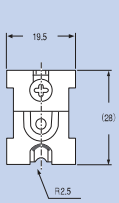

ADJUSTABLE DOOR WHEEL No.7

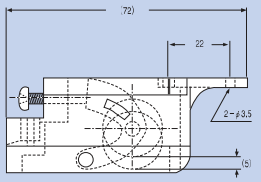












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K-SERIES BEARINGS

THE K-SERIES BEARING

1.The K-Series bearing can be provided with an assortment of materials and colors, depending on the applications Along with acetal resins, other resins can be used based on lubricity, wear resistance, and weight reduction.
2.The K-Series bearing uses a lubricious plastic for its outer race, which enables integral molding of timing gears, pulleys, and etc; it is then press fitted along the periphery of the bearing.
3.The K-Series bearing is a specialty bearing and is designed per customer requirements and specifications.

BASIC SIZES

Bore diameter [mm]	Basic outside diameter *1 [mm]	Basic width [mm]
4	16≦	4≦
5	16≦	4≦
6	16≦	7≦
7	18≦	7≦
8	18.5≦	7≦
9	24≦	7≦
10	24≦	7≦

＊1 Root diameter for gear.

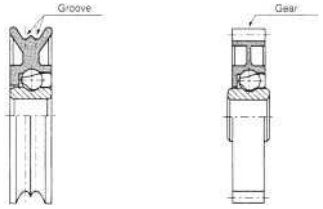
APPLICATIONS

●Wire pulleys ●Tension pulleys ●Sprocket gears
●Timing gears ●Involute gears

DESIGN CONDITIONS TO BE PREARRANGED

●Maximum working load
●Maximum number of revolutions while running
●Applications (objectives, working mechanisms etc.)
●Environment

DESIGN EXAMPLE



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