

# Urethane Molded Bearings

## Inner Wheel Protruded

# Urethane Press-Fit Bearings

■ **Features:** Can be purchased at low price and quick delivery as compared to conventional Molded Bearings.

■ **Urethane Molded Bearings**  
- Inner Wheel Protruded (For Light Load)

**RoHS**

■ **For Light Load**

**UMRW** (Both Sides Protruded)

**UMRV** (One Side Protruded)

**UMRR** (No Protrusion)

		Material		
Tire Section		Thermoplastic Ether Type Urethane (Black, Shore A95)		
Wheel Section		Thermoplastic Lactone Type Urethane (Black)		
Bearing		Outer Ring, Inner Ring, Balls: SUJ2 Shield: Rubber		

Operating Temperature Range: -20°C~40°C

W<sub>1</sub>, W<sub>2</sub> Tolerance D20~60  $\begin{matrix} 0 \\ -0.12 \\ 0 \\ -0.15 \end{matrix}$   
D65~80  $\begin{matrix} 0 \\ -0.12 \\ 0 \\ -0.15 \end{matrix}$

Ⓜ Material: Polyurethane (Black)  
Bearing: Steel  
Ⓜ Hardness: Shore A90

Ⓜ For bearing detailed dimensions, see P989.

■ **Urethane Molded Bearings**  
- Inner Wheel Protruded (For Heavy Load)

**RoHS**

■ **For Heavy Load**

**UMRHW** (Both Sides Protruded)

**UMRHV** (One Side Protruded)

		Material		
Tire Section		Thermosetting Ether Type Urethane (Brown, Shore A95)		
Bearing		Outer Ring, Inner Ring, Balls: SUJ2 Shield: Steel		

Operating Temperature Range: -20°C~40°C

W<sub>1</sub>, W<sub>2</sub> Tolerance D30~60  $\begin{matrix} 0 \\ -0.12 \\ 0 \\ -0.15 \end{matrix}$   
D65, 70  $\begin{matrix} 0 \\ -0.12 \\ 0 \\ -0.15 \end{matrix}$

■ **For Light Load**

Part Number Type	D	d	d Tolerance			d <sub>1</sub>	B	B <sub>1</sub>	W <sub>1</sub>	W <sub>2</sub>	Allowable Load N (Reference Value)	Mass (g)			Unit Price			
			UMRW	UMRV	UMRR							UMRW	UMRV	UMRR	UMRW	UMRV	UMRR	
<b>UMRW</b> (Both Sides Protruded)	20	0	0	-0.02	-0.008	8.6	8	5	11	9.5	55	7	6	5				
	25	6				9.3	9	6	12	10.5	79	12	11	10				
	30	8				12	11	7	15	13	108	21	19	17				
	35	10				14	12	8	16	14	147	24	22	20				
<b>UMRV</b> (One Side Protruded)	40	12	+0.005	-0.012	-0.008	18.3	14	10	18	16	245	60	55	50				
	45	15				21.6	15	11	19	17	274	66	61	56				
	50	15				21.6	15	11	19	17	314	82	76	70				
	55	20				24.6	16	12	20	18	343	90	83	77				
<b>UMRR</b> (No Protrusion)	60	17	-0.012	-0.012	-0.008	24.6	16	12	20	18	392	120	112	104				
	65	17				29.3	16	12	20	18	441	130	121	113				
	70	20				29.3	18	14	22	20	510	188	175	164				
	75	20				29.3	18	14	22	20	510	188	175	164				
	80	20	0	-0.01	0	-0.01	18	14	22	20	589	199	187	176				

Ⓜ ( ) of d<sub>1</sub> dimension is applicable to UMRR.

kgf=Nx0.101972

■ **For Heavy Load**

Part Number Type	D	d	d Tolerance	d <sub>1</sub>	d <sub>2</sub>	B	W <sub>1</sub>	W <sub>2</sub>	Allowable Load N (Reference Value)	Mass (g)		Unit Price	
										UMRHW	UMRHV	UMRHW	UMRHV
<b>UMRHW</b> (Both Sides Protruded)	30	8	0	-0.04	-0.04	12.0	22	11	15	13	303	24	23
	35	12				347	28	27	474	62	59		
	40	15				579	78	75	660	84	82		
	45	20				794	157	151	829	167	162		
<b>UMRHV</b> (One Side Protruded)	50	20	+0.005	-0.012	-0.012	29.3	47	18	22	20	918	199	191
	55	25				1050	210	202					
	60	25											
	65	25											
	70	25											

kgf=Nx0.101972

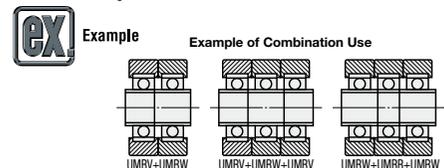
Ordering Example

Part Number

**UMRW40**

**UMRHV55**

- **Features**
- As the bearing inner rings protrude, there is no need to combine stepped shafts or collars for mounting.
  - The urethane section is of a tire and wheel layered construction (Except for D20 ~ D35 are single layer). Economical small diameter shafts can be used even for large diameter rollers.
  - The bearings used have special configuration to prevent the urethane from detaching.
  - Though it excels in oil resistance, applying solvents may cause swelling and reduction in strength.



**C-UMBB**

Material: Polyurethane (Black)  
Bearing: Steel  
Hardness: Shore A90

Ⓜ For bearing detailed dimensions, see P989.

Part Number Type	d	D	B	D <sub>1</sub>	r (min)	Relative Dimension		Bearing Used	Unit Price
						D <sub>s</sub> (min)	R <sub>1</sub> (max)		
<b>C-UMBB</b>	4	13	4	9	0.15	5	0.1	684ZZ	
	5	16	4*	13	0.2	6.6	0.2	695ZZ	
	6	20	5	15	0.2	7.6	0.2	696ZZ	

\*Note that B dimension is different in C-UMBB5-16, and UMBB5-16 that appears on P.1151. In UMBB5-16, B=5. Moreover in C-UMBB5-16, Urethane Molded Bearings Shafts included on P.1155 are also not available.

Item	Magnitude of the force to peel Urethane from bearing			
	Rotation direction		Cross direction	
Measurement Method				
Product Type	Press-fit Bearing	Molded Bearing	Press-fit Bearing	Molded Bearing
Size	4-13	4kgf · m or more	8kgf · m or more	6kgf
	5-16	4kgf · m or more	8kgf · m or more	7kgf
	6-20	4kgf · m or more	8kgf · m or more	10kgf
No peeling at 20kgf				

ex Example

Application direction	Sideways	Top	Bottom	Slanting
	Recommended Product	Press-fit Bearing	Press-fit Bearing	Lightweight: Press-Fit Bearings HeavyWeight: Molded Bearings

Ⓜ Note that even if it is applied from top, side and bottom, if there is unbalanced load due to mounting accuracy or backlash of work, or when used in high rotation, Urethane of the Press-Fit Bearing may come off.

Ordering Example

Part Number - D

**C-UMBB4 - 13**

# Silicon Rubber / Urethane Molded Bearings

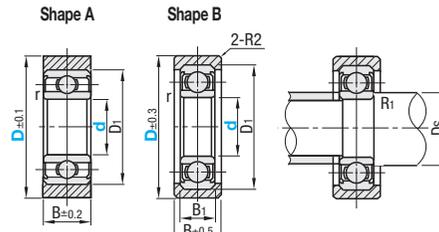
Flat



RoHS

Urethane (white) may turn yellow over time.

Type Bearing		Material	Hardness	Color
Steel	Stainless Steel			
UMBK	UMSBK	Urethane	Shore A95	Black
UMBKW	UMSBKW			White
UMB	UMSB		Black	
UMBW	UMSBW		White	
UMBG	UMSG		Black	
UMBGW	UMSGW		White	
UMBL	-		Black	
UMBLW	-		White	
UMBD	-		Gray	
SUMBB	SUMSB		Silicon Rubber	Shore A70



Shape A Shape B

Bearing Accuracy JIS B 1514, 0 Class

For bearing detailed dimensions, see P989.

## Shape A

Part Number	Type	d	D	Allowable Load N (kgf)					B	D <sub>1</sub>	r (min.)	Relative Dimension			Used Bearing
				Urethane								D <sub>s</sub> (min.)	R <sub>1</sub> (max.)	R <sub>1</sub> (max.)	
				Shore A95	Shore A90	Shore A70	Shore A50	Shore A70							
Urethane UMBK UMSBK UMBKW UMSBKW UMB UMSB UMBW UMSW UMBG UMSG UMBGW UMSGW UMBL UMBLW UMBD	3	10	38(3.8)	28(2.8)	9(0.9)	4(0.4)	7(0.7)	3	7	0.1	3.9	4.1	0.1	W683ZZA	
		12	53(5.4)	34(3.5)	10(1)	6(0.6)	9.8(1)								
	4	13	66(6.7)	44(4.5)	13(1.3)	7(0.7)	13(1.3)	4	9	0.15	5	5.2	0.2	W684X50ZZ	
		16	79(8.1)	59(6)	16(1.6)	6(0.6)	18(1.8)								
	5	16	79(8.1)	59(6)	16(1.6)	6(0.6)	18(1.8)	5	13	0.2	5.6	6.2	0.2	624ZZ	
		20	102(10.4)	78(8)	20(2)	9(0.9)	24(2.4)								
	6	20	114(11.7)	81(8.3)	23(2.3)	15(1.5)	24(2.4)	5	16	0.3	6.6	6.9	0.3	625ZZ	
		28	218(22.2)	157(16)	44(4.5)	39(4)	47(4.8)								
	8	28	208(21.2)	176(18)	42(4.3)	35(3.6)	47(4.8)	6	19	0.3	7.6	7.8	0.2	696ZZ	
		30A	-	176(18)	81(8.3)	65(6.7)	53(5.4)								
Antistatic Urethane UMBD	10	30A	-	176(18)	81(8.3)	65(6.7)	53(5.4)	8	26	0.3	10	12.2	0.3	608ZZ	
		40A	-	274(28)	136(13.9)	93(9.5)	82(8.4)								
Silicon Rubber SUMBB *SUMSB	15	45A	-	343(35)	109(11.1)	102(10.5)	103(10.5)	11	35	0.6	12	13.5	0.6	6000ZZ	
		20	45A	-	490(50)	225(22.9)	176(18.1)	147(15)	9	37	0.3	14	16	0.6	6200ZZ
	25	65A	-	750(70)	333(34)	250(25.8)	226(23)	15	52	1	19	19	0.3	6002ZZ	
		65A	-	750(70)	333(34)	250(25.8)	226(23)	15	52	1	30	32	1	6205ZZ	

Only d4 ~ 8 are available for \* marked types. Allowable load is for reference.  
See price chart for available sizes.

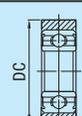
## Shape B

Part Number	Type	d	D	Allowable Load N (kgf)					B	D <sub>1</sub>	B <sub>1</sub>	r (min.)	Relative Dimension			Used Bearing
				Urethane									D <sub>s</sub> (min.)	R <sub>1</sub> (max.)	R <sub>1</sub> (max.)	
				Shore A95	Shore A90	Shore A70	Shore A50	Shore A70								
Urethane UMBK UMSBK UMBKW UMSBKW UMB UMSB UMBW UMSW UMBG UMSG UMBGW UMSGW UMBL UMBLW UMBD	8	30	248(25.3)	176(18)	81(8.3)	65(6.7)	53(5.4)	11	26	8	0.3	10	12.2	0.3	608ZZ	
		30	201(20.5)	176(18)	94(9.6)	51(5.2)	53(5.4)									
10	40	412(42)	274(28)	136(13.9)	93(9.5)	82(8.4)	12	32	9	0.3	14	16	0.6	6200ZZ		
	40	369(37.6)	274(28)	122(12.4)	96(9.9)	82(8.4)										
15	45	534(54.5)	343(35)	109(11.1)	102(10.5)	103(10.5)	15	35	11	0.6	19	20	0.6	6202ZZ		
	45	391(39.9)	343(35)	130(13.3)	98(10.1)	103(10.5)	12	37	9	0.3	22	24	0.3	6904ZZ		
Antistatic Urethane UMBD	20	55	674(68.7)	490(50)	225(22.9)	176(18.1)	147(15)	18	47	14	1	25	28	1	6204ZZ	
		65	999(101.9)	750(70)	333(34)	250(25.8)	226(23)	19	52	15	1	30	32	1	6205ZZ	

See price chart for available sizes. Allowable load is for reference.

Ordering Example: Part Number - D  
UMB10 - 30A

Alterations: Part Number - D - DC  
UMB6 - 20 - DC18

Alteration	Code	Spec.
	DC	O.D. Dimension Changes the D dimension in 1mm increment. D1+2<D<D-1 [Ordering Code] DC18

Properties of Antistatic Urethane

Item	Unit	UMBD
Specific Volume Resistivity	Ω · cm	2.1 × 10 <sup>8</sup>
Surface Resistivity	Ω	4.0 × 10 <sup>8</sup>

Test Conditions (Temperature 30°C / Humidity 60%)  
Listed values are not guaranteed values but an example of measured values.

d	D	Unit Price												
		Steel Bearing					Stainless Steel Bearing							
		Urethane					Silicon							
Shore A95		Shore A90		Shore A70	Shore A50		Shore A95		Shore A90		Shore A70	Shore A50		
UMBK	UMBKW	UMB	UMBGW	UMBL	UMBLW	UMBD	SUMBB	UMSBK	UMSBKW	UMSB	UMSW	UMSG	UMSGW	SUMSB
3	10													
3	12													
4	13													
4	16													
5	16													
5	20													
6	20													
6	28													
8	28													
8	30													
8	30A													
8	30													
10	40													
10	40													
10	30A													
10	40A													
15	45													
15	40A													
15	45A													
20	45													
20	55													
20	45A													
25	65													
25	65A													

# Silicon Rubber / Urethane Molded Bearings

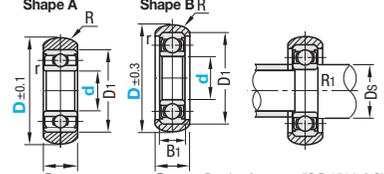
R Type / Hubbed Type



RoHS

Urethane (white) may turn yellow over time.

Type Bearing		Material	Hardness	Color
Steel	Stainless Steel			
UMBRR	UMSRR	Urethane	Shore A90	Black
UMBWR	UMSWR			White
SUMBBR	-			Silicon Rubber



Shape A Shape B R

Bearing Accuracy JIS B 1514, 0 Class

For bearing detailed dimensions, see P989.

## Shape A

Part Number	Type	d	D	Allowable Load N (kgf)				B	D <sub>1</sub>	r (min.)	R	Relative Dimension			Bearing Used
				Urethane								D <sub>s</sub> (min.)	R <sub>1</sub> (max.)	R <sub>1</sub> (max.)	
				Shore A95	Shore A90	Shore A70	Shore A50								
Urethane UMBRR *UMSRR UMBWR *UMSWR Silicon Rubber SUMBBR	3	12	34 (3.5)	9.8 (1)	3	7	0.1	3.9	4.1	0.1	5	5.2	0.1	W683ZZA	
		13	44 (4.5)	13 (1.3)	4	9	0.15	5	5.2	0.2	5.6	6.2	0.2	W684X50ZZ	
	4	16	59 (6)	18 (1.8)	5	13	0.2	6.6	6.9	0.2	6.6	6.9	0.2	624ZZ	
		20	78 (8)	24 (2.4)	6	16	0.3	7.6	7.8	0.2	7.6	7.8	0.2	625ZZ	
	5	20	157 (16)	47 (4.8)	6	19	0.3	8	9.5	0.3	7.6	7.8	0.2	696ZZ	
		28	176 (18)	53 (5.4)	7	22	0.3	10	12.2	0.3	8	9.5	0.3	626ZZ	
	6	28	208 (21.2)	176 (18)	8	26	0.3	12	13.5	0.6	10	12.2	0.3	608ZZ	
		30A	-	176 (18)	81 (8.3)	65 (6.7)	53 (5.4)								
Antistatic Urethane UMBD	10	30A	-	176 (18)	81 (8.3)	65 (6.7)	53 (5.4)	8	26	0.3	12	13.5	0.6	6000ZZ	
		40A	-	274 (28)	136 (13.9)	93 (9.5)	82 (8.4)								
Silicon Rubber SUMBBR *SUMSB	15	45A	-	343 (35)	109 (11.1)	102 (10.5)	103 (10.5)	9	30	0.6	14	16	0.6	6200ZZ	
		20	45A	-	490 (50)	225 (22.9)	176 (18.1)	147 (15)	9	37	0.3	22	24	0.3	6904ZZ
	25	65A	-	750 (70)	333 (34)	250 (25.8)	226 (23)	14	47	25	28	24	0.3	6204ZZ	
		65A	-	750 (70)	333 (34)	250 (25.8)	226 (23)	15	52	30	32	1	30	32	1

Only d4 ~ 8 are available for \* marked types. Allowable load is for reference.

## Shape B

Part Number	Type	d	D	Allowable Load N (kgf)				B	D <sub>1</sub>	B <sub>1</sub>	r (min.)	R	Relative Dimension			Bearing Used
				Urethane									D <sub>s</sub> (min.)	R <sub>1</sub> (max.)	R <sub>1</sub> (max.)	
				Shore A95	Shore A90	Shore A70	Shore A50									
Urethane UMBRR UMSRR UMBWR UMSWR Silicon Rubber SUMBBR	8	30	176(18)	53(5.4)	11	22	7	0.3	10	12.2	0.3	15	14	16	0.6	6000ZZ
		30	201(20.5)	53(5.4)	11	26	8									
	10	40	412(42)	82(8.4)	12	32	9	0.3	14	16	0.6	15	17	19	0.3	6200ZZ
		40	369(37.6)	82(8.4)	12	32	9	0.3	14	16	0.6	15	17	19	0.3	6200ZZ
	15	45	534(54.5)	103(10.5)	15	35	11	0.6	19	20	0.6	20	22	24	0.3	6904ZZ
		45	391(39.9)	103(10.5)	12	37	9	0.3	22	24	0.3	22	24	0.3	6904ZZ	
	20	55	674(68.7)	147(15)	18	47	14	1	25	28	1	20	25	28	1	6204ZZ
		65	999(101.9)	226(23)	19	52	15	1	30	32	1	20	30	32	1	6205ZZ

Allowable load is for reference.

## Hubbed Type



Type	Type	Bearing
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# Threaded Bearings / Urethane Molded Bearings Shafts / Eccentric Bushings

Note that, for some of the types shown here, order might be unable to be received by the MISUMI Indonesia offices.

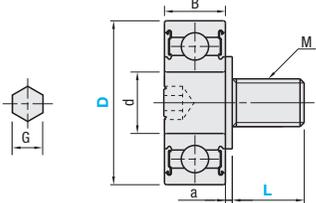
# Cantilever Rollers

■ Features: As a mounting screw is already included, no extra retaining part is required.

■ Threaded Bearings



Type	Material	Surface Treatment
Standard Threaded	Bearing: Steel, Shaft: SUM	Steel
Long Threaded	Bearing: Steel, Shaft: SUS303	Electroless Nickel Plating
NTBG	Steel	
NTSBG	Stainless Steel	



Ⓜ The base of thread contains an incomplete thread portion.

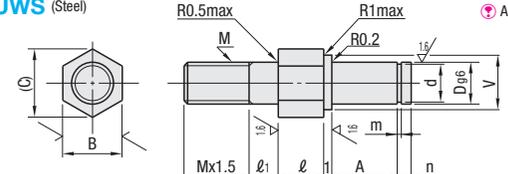
Part Number Type	D	L		B	d	a	G	M (Coarse)	Bearing	Unit Price		
		Standard Threaded	Long Threaded							NTBG	NTSBG	NTBGT
Standard Threaded	6	4	6	2.5	3			M3	673ZZ			
	7	4	6	3	3			M3	W683ZZ			
	8	5	8	2.5	5		1.5	M4	675ZZ			
	9	5	8	4	4			M4	W684A×50ZZ			
	13	5	8	5	4			M4	624ZZ			
	16	5	8	5	5			M4	625ZZ			
Long Threaded	19	8	12	6	6		2.5	M6	626ZZ			
	22	8	12	7	8		4	M6	608ZZ			
	26	8	12	8	10	2.5	5	M6	6000ZZ			
	30	8	12	9	10	2	5	M6	6200ZZ			
	32	12	20	9	15	2.5	5	M10	6002ZZ			
	35	12	20	11	15	3	5	M10	6202ZZ			
	37	12	20	9	20	2.5	8	M10	6904ZZ			
	47	12	20	14	20	3	8	M10	6204ZZ			
	52	12	20	15	25	3	10	M10	6205ZZ			

Ⓜ For bearing detailed dimensions, see P989, 991.

■ Urethane Molded Bearing Shafts



UWS (Steel)



Ⓜ Material: SS400  
 Ⓢ Surface Treatment: Black Oxide  
 Ⓜ Accessory: Nut, Retaining Ring-C Type  
 Ⓜ Retaining Ring-E Type for No. 312-830.

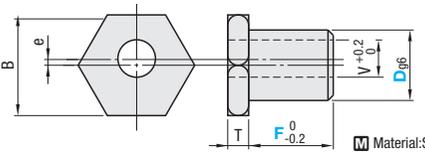
Part Number Type	No.	Dg6	A	ℓ	ℓ1	V	d	Tolerance	M	B	(C)	m	Tolerance	n	Applicable Urethane Molded Bearing	Unit Price	
																	Dimension
UWS	312	3	3			4	2.05	+0.06	3	5	5.8	0.5	+0.05	0	UMBB	3-12	
	413	4	4		1	5	3.05	0	4	7	8.1	0.7	0	2	UMBSW	4-13	
	416	4	4		1	6			4	7	8.1	0.7	0	2	UMBBR	4-16	
	516	5	5	5	2	6.9	4.05	+0.075	5	8	9.2	0.7	0	2	UMBSG	5-16	
	620	5	5		2	7.5		0	5	8	9.2	0.7	0	2	UMBGW	5-20	
	628	6	6		3	8	5.05	0	6	10	11.5	0.9	0	2	UMBL	6-20	
	828	6	6		3	9			6	10	11.5	0.9	0	2	UMBLW	6-28	
	830	8	7	10	4	12	7.1	+0.09	8	14	16.2	0.9	0	3	UMBD	8-28	
	1030	8	8		4	13	9.6	0	10	19	21.9	1.15	+0.14	0	4	SUMBB	8-30
	1040	10	9		5	16		-0.09	10	19	21.9	1.15	0	4	UMSB	10-30	
	1540	15	9		5	18		0	12	21	24	1.35	0	4	UMSW	10-40	
	1545	15	11		5	19	14.3	-0.11	12	21	24	1.35	0	4	UMSG	15-40	
	2045	9	9	15	6	23	19	0	16	27	31.2	1.35	0	4	UMSGW	20-45	
	2055	20	14		6	25	19	-0.21	16	27	31.2	1.35	0	4	SUMSB	20-55	

Ordering Example: Part Number UWS312

■ Eccentric Bushings



ECCB



Ⓜ Material: S45C Equivalent

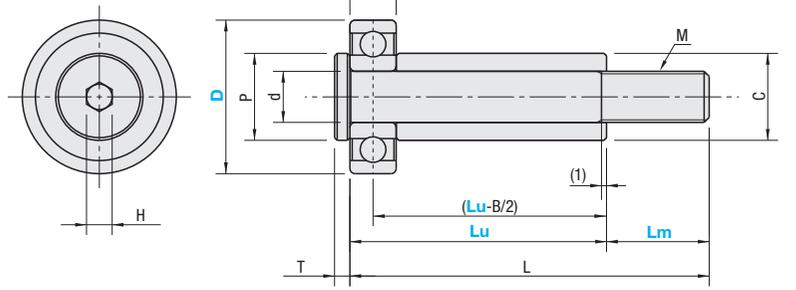
Part Number Type	Dg6	F Selection	Applicable Bearing	V	B	T	e	Unit Price
ECCB	6	5	696ZZ	3	10		0.3	
		6	606ZZ, 626ZZ					
		6	698ZZ					
	8	7	608ZZ	4	12		0.5	
		8	628ZZ					
		8	6900ZZ					
	10	6	6000ZZ	5	14	3	1	
		8	6000ZZ					
		9	6200ZZ					
	12	6	6901ZZ	6	17		1.2	
		8	6001ZZ					
10		6201ZZ						
15	7	6902ZZ	8	19		1.5		
	9	6002ZZ						
	11	6202ZZ						

Ⓜ For bearing detailed dimensions, see P989.

■ Features: Rollers that use bearings. Spacer thickness can be specified from 1mm, and any mounting height can be selected.



Ⓜ Bearing and Spacer can be shipped in an intact state by tightening the gap between O.D. of Pin and I.D. of Spacer. It can prevent falling or missing of parts and reduce time and effort during assembly.

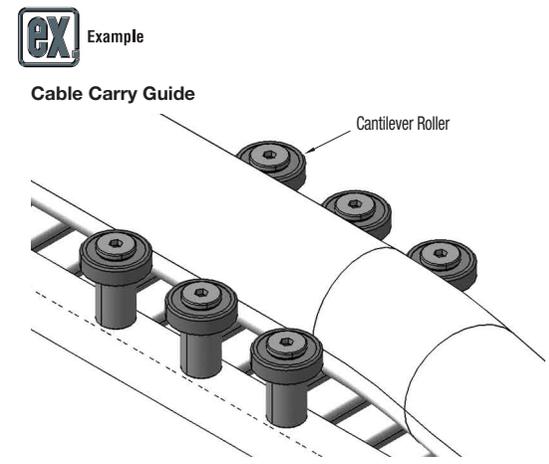


Type	Bearing	Pin	Spacer	Surface Treatment
BWP	SUJ2	S45C	SS400	Black Oxide

Part Number Type	D	1mm Increment		L	B	d	M (Coarse)	H (Hex Socket)	T	C=P	Bearing Part No.	Unit Price
		Lu	Lm									
BWP	11	6~25	5~10	Lu+Lm	5	5	M5	2.5	2	8	685ZZ	
	13	5~25	5~10								695ZZ	
	16	6~40	8~16		5	8	M8	4	3	11	688ZZ	
											698ZZ	
	19	7~40	8~16		6	8	M8	4	11	608ZZ		
	22	8~40	8~16		7	8	M8	4	11	6000ZZ		
	26	9~50	10~20		8	10	M10	5	14	6200ZZ		
	30	10~50	10~20		9	10	M10	5	17	6200ZZ		

Ⓜ Regardless of the specified dimension, (Lm dimension + 1mm) is the threaded section.

Ordering Example: Part Number BWP11 - Lu - Lm



# Engineered Plastic Bearings

**Flat Type**



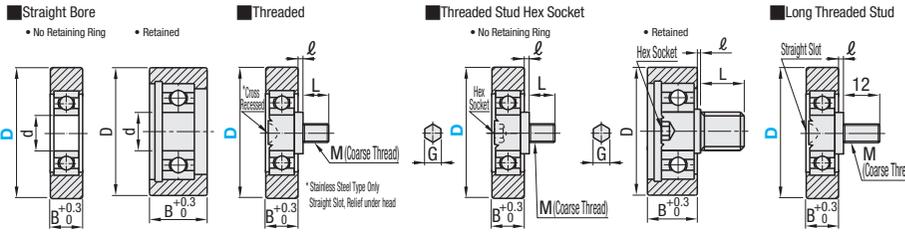
**Retained Type**



Type	Type				Material			Surface Treatment	
	No Retaining Ring				Surface Plastic	Bearing	Shaft	Shaft	
EBSS	EBBS	EBHS	EBBL	-	Polyacetal	SUS440C Equivalent	SUS304 Equivalent	-	
EB	EBB	EBH	-	-	-	SUJ2	SWCH	Trivalent Chromate	
EBD	EBBD	-	-	-	Antistatic Polyacetal	SUS440C Equivalent	SUS304 Equivalent	-	
EBC	-	EBBC	-	-	-	SUS440C Equivalent (Low Dust Generation)	SUS304 Equivalent	-	
EBSZ	-	EBHZ	-	-	MC Nylon	SUJ2	S45C	Trivalent Chromate	
-	-	EBMH	-	-	UHMWPE	-	-	-	
-	-	EBPE	EBPEH	-	-	-	-	-	

\* EBC, EBSZ, EBBC and EBHZ use low dust generation grease and the resin section may be discolored due to reactions with ultraviolet, but the functionality will not be affected.  
 \* Surface resistivity of antistatic polyacetal is  $1.5 \times 10^{11} \Omega$  (Temperature 23°C / Humidity 65%)  
 \* For identification, markings are painted on the side of antistatic polyacetal plastic parts. Wipe off before use.

**Straight Bore**      **Threaded**      **Threaded Stud Hex Socket**      **Long Threaded Stud**  
 • No Retaining Ring      • Retained      • No Retaining Ring      • Retained



Bearing Accuracy JIS B 1514, 0 Class

Part Number	Allowable Load N ( ) indicates SUS304	d	B		L		Hex Socket G	Retaining Ring Size ( ) Type ( ) Only for Retained Type	Bearing Used	Unit Price																	
			Polycetal	MC Nylon Ultra-High-Molecular-Weight Polyethylene	MC Nylon Ultra-High-Molecular-Weight Polyethylene	MC Nylon Ultra-High-Molecular-Weight Polyethylene				Straight Bore			Threaded Stud			Threaded Stud Hex Socket			Long Threaded Stud								
Straight Bore										EBSS	EB	EBD	EBC	EBSZ	EBM	EBPE	EBBS	EBB	EBBD	EBHS	EBH	EBBC	EBHZ	EBMH	EBPEH	EBBL	
EBSS	13		4	-	5	-	1	1.5	L-1040ZZ																		
EB	14	29.4(14.7)	5	8	4	5																					
EBD	16								RTWS13	695ZZ																	
EBC	18																										
EBSZ	19																										
EBM	20	78.4(39.2)	6	9	6	9		2.5	RTWS15	696ZZ																	
EBPE	22																										
EBBS	24																										
EBB	26																										
EBBD	28																										
EBHS	30	176(88)	8	12	8	12		5	RTWS22	608ZZ																	
EBH	35																										
EBBC	40																										
EBHZ	45	245(122)	10	14	8	14		6	RTWS30	6200ZZ																	
EBMH	50																										
EBPEH																											
EBBL																											

\* See price chart for available sizes. \* For bearing detailed dimensions, see P989, 991. kgf=Nx0.101972

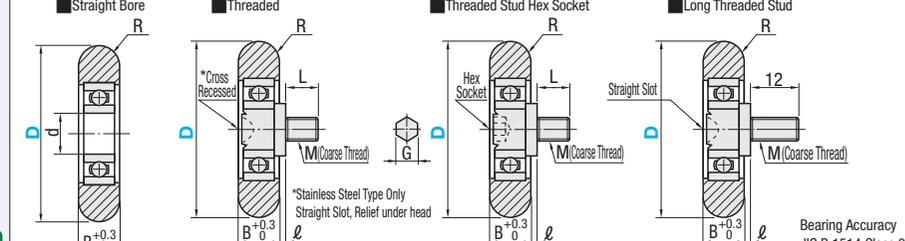
**R Type**



Type	Type				Material			Surface Treatment	
	No Retaining Ring				Surface Plastic	Bearing	Shaft	Shaft	
ERBS	ERBBS	ERBHS	-	-	Polyacetal	SUS440C Equivalent	SUS304 Equivalent	-	
ERB	ERBB	ERBH	ERBBL	-	-	SUJ2	SWCH	Trivalent Chromate	
ERBZ	-	ERBHZ	-	-	Antistatic Polyacetal	SUS440C Equivalent (Low Dust Generation)	SUS304 Equivalent	-	

\* ERBZ and ERBHZ use low dust generation grease and the resin section may be discolored due to reactions with ultraviolet, but the functionality will not be affected.  
 \* Surface resistivity of antistatic polyacetal is  $1.5 \times 10^{11} \Omega$  (Temperature 23°C / Humidity 65%)  
 \* For identification, markings are painted on the side of antistatic polyacetal plastic parts. Wipe off before use.

**Straight Bore**      **Threaded**      **Threaded Stud Hex Socket**      **Long Threaded Stud**

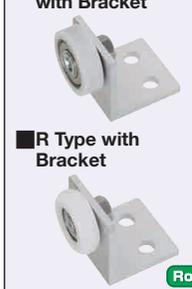


Bearing Accuracy JIS B 1514 Class 0

Part Number	Allowable Load N ( ) indicates SUS304	d	R	B	M (Coarse)	L	ℓ	Hex Socket G	Bearing Used	Unit Price															
										Straight Bore			Threaded Stud			Threaded Stud Hex Socket			Long Threaded Stud						
Straight Bore										ERBS	ERB	ERBZ	ERBBS	ERBB	ERBHS	ERBH	ERBHZ	ERBBL							
ERBS	19																								
ERBBS	20	78.4(39.2)	6		6		1	2.5	696ZZ																
ERB	22				7																				
ERBH	24				6	8																			
ERBZ	26				8		0.5																		
ERBHS	30	176(88)	8		9		1	5	608ZZ																
ERBB	35																								
ERBBL	40																								
marked sizes are only available for ERBS, ERB and ERBH.	45	245	10	6	12	8	12	2	6200ZZ																
	50																								

\* Plating color may vary depending on production lot but no differences in plating properties. kgf=Nx0.101972  
 \* For bearing detailed dimensions, see P989, 991.

**Flat Type with Bracket**



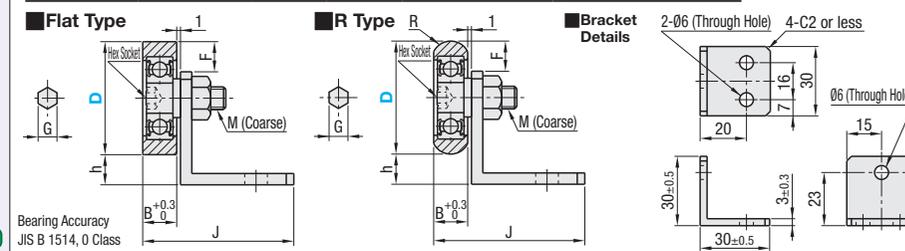
**R Type with Bracket**



Type	Type		Material		Surface Treatment		Accessory	
	Flat	R Type	Surface Plastic	Bearing	Shaft	Shaft	Accessory	
ENHS	-	-	Polyacetal	SUS440C Equivalent	SUS304 Equivalent	Trivalent Chromate	① Bracket (Clear Anodize) ② Nut (M6)	
ENH	ERNH	-	-	SUJ2	SWCH	-	-	

\* Engineered Plastic Bearings and accessories are in separate packages.

**Flat Type**      **R Type**      **Bracket Details**



Bearing Accuracy JIS B 1514, 0 Class

Part Number	Type	D	Allowable Load N ( ) indicates SUS304	F	R	h	B		J		Hex Socket G	Bearing Used	Unit Price				
							Flat	R Type	Flat	R Type			ENHS	ENH	ERNH		
Flat																	
ENHS		24	78.4	5	11	6	7	37	38	2.5	696ZZ						
ENH		26	(39.2)	6	10	8	8	39	39								
		30	176	8	8	9	9	40	40	5	608ZZ						
		35	(88)	10.5	5.5												

\* For bearing detailed dimensions, see P989. kgf=Nx0.101972

**U Groove**

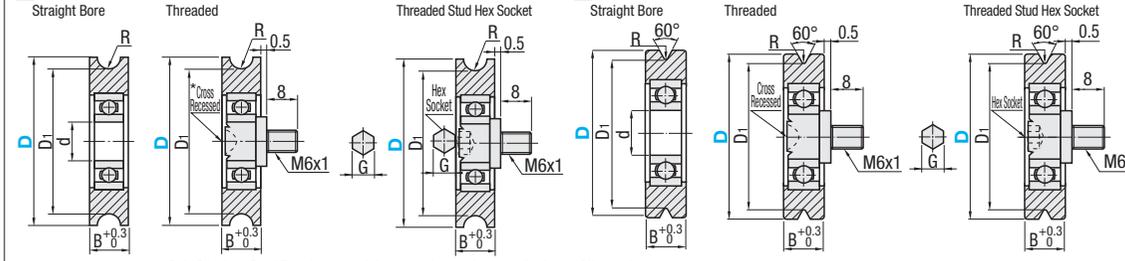


**V Groove**



Shape	Type			Material			Surface Treatment	
	Straight Bore	Threaded Stud	Threaded Stud Hex Socket	Surface Plastic	Bearing	Shaft	Shaft	
U Groove	EUBS	EUBBS	EUBHS	Polyacetal	SUS440C Equivalent	SUS304 Equivalent	-	
V Groove	EVB	EVBBS	EVBH	-	-	-	Trivalent Chromate	

**U Groove**      **V Groove**



\* Only Stainless Steel Type has a straight slot and an undercut at the base of the neck. Bearing Accuracy JIS B 1514, 0 Class

Part Number	Type	D	Allowable Load N ( ) indicates SUS304	d	D1	B	R		Hex Socket G	Bearing Used	Unit Price							
							U Groove	V Groove			Straight Bore		Threaded Stud		Threaded Stud Hex Socket			
Straight Bore											EUBS	EUB	EVB	EUBBS	EUBB	EVBBS	EVBH	EVBH
EUBS		22	78.4	6	19	7	2.5	0.6	2.5	696ZZ								
EUBBS		24	(39.2)	8	21	7												
EUB		30	176	8	27	9			5	608ZZ								
EVB		35	(88)		31													

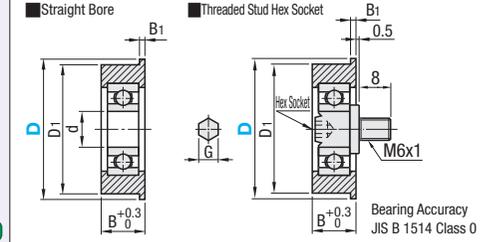
\* With the B=7 size U-Groove Threaded Stud Type, the screw head may protrude above the B dimension. \* For bearing detailed dimensions, see P989. kgf=Nx0.101972

**One Side Flanged**



Type	Type		Material		Surface Treatment	
	Straight Bore	Threaded Stud Hex Socket	Surface Plastic	Bearing	Shaft	Shaft
EKB	EKBH	-	Polyacetal	SUJ2	SWCH	Trivalent Chromate

**Straight Bore**      **Threaded Stud Hex Socket**



Bearing Accuracy JIS B 1514 Class 0

**Part Number**      **Example**      **Part Number**  
 EB24      EB24      EB24      EB24  
 EKB24      EKB24      EKB24      EKB24

**Part Number**      **Allowable Load N**      **d**      **D1**      **B**      **B1**      **Hex Socket G**      **Bearing Used**      **Unit Price**  
**Type**      **D**      **Flat**      **Threaded Stud Hex Socket**      **Flat**      **Threaded Stud Hex Socket**      **Flat**      **Threaded Stud Hex Socket**      **Flat**      **Threaded Stud Hex Socket**

EKB (Straight Bore)	24	78.4	6	20	7	1.5	2.5	696ZZ		
EKBH (Threaded Stud Hex Socket)	35	176	8	30	9	2	5	608ZZ		

\* For bearing detailed dimensions, see P989. kgf=Nx0.101972

