

# Urethane Rollers with Shafts

## Urethane Thickness Configurable Type

**Urethane Rollers with Shafts – Urethane Thickness Configurable Type**

RoHS 10

**Straight**

Type	Material		Hardness
	Shaft	Lining	
USRH	1045 Carbon Steel or Equivalent	Urethane (Natural Color)	Shore A90
USRM	1045 Carbon Steel or Equivalent	Urethane (Natural Color)	Shore A70
USSRH	304 Stainless Steel	Urethane (Natural Color)	Shore A90

**Both Ends Tapped**

Type	Material		Hardness
	Shaft	Lining	
USRWH	1045 Carbon Steel or Equivalent	Urethane (Natural Color)	Shore A90

ⓘ Urethane is baked on the outer circumference of the core material.

Part Number	Type	d	T 1 mm Increment	L 1 mm Increment	E, F 1 mm Increment	Both Ends Tapped			
						M (Coarse), N (Coarse) Selection			
Straight USRH USRM USSRH	Both Ends Tapped USRWH	8	2-5	50-200	5≤E<L/2 5≤F<L/2	3	4	5	
		10				4	5	6	
		12				5	6	8	
		15				5	6	8	10

**Part Number Example**

Part Number: **USRH10-2-195-E10-F10**  
 Straight  
 Part Number: **USRWH10-2-195-E10-F10-M5-N6**  
 Both Ends Tapped

### Straight

d	Available Types														
	USRH				USRM				USSRH						
	L50-100	L101-150	L151-200	L201-250	L251-300	L50-100	L101-150	L151-200	L201-250	L251-300	L50-100	L101-150	L151-200	L201-250	L251-300
8	•	•	•	—	—	•	•	•	—	—	•	•	•	—	—
10	•	•	•	—	—	•	•	•	—	—	•	•	•	—	—
12	•	•	•	—	—	•	•	•	—	—	•	•	•	—	—
15	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

### Both Ends Tapped

d	Available Types				
	USRWH				
	L50-100	L101-150	L151-200	L201-250	L251-300
8	•	•	•	—	—
10	•	•	•	—	—
12	•	•	•	—	—
15	•	•	•	•	•

# Silicon Rubber / Urethane Mold Bearings

## Flat Type

**Silicon Rubber / Urethane Mold Bearings – Flat Type**

RoHS 10

Type		Material	Hardness	Color	
Steel Bearing	Stainless Steel				
UMBBK	UMSBK	Urethane	Shore A95	Black	
UMBBKW	UMSBKW		Shore A90	White	
UMBB	UMSB		Shore A90	Black	
UMBW	UMSW		Shore A90	White	
UMBG	UMSG		Shore A70	Black	
UMBGW	UMSGW		Shore A70	White	
UMBL	—		Shore A50	Black	
UMBLW	—		Shore A50	White	
UMBD	—		Antistatic Urethane	Shore A90	Gray
SUMBB	SUMSB		Silicon Rubber	Shore A70	Light Gray

ⓘ Urethane (white) may turn yellow over time.

Bearing Accuracy JISB1514 Class 0  
 ⓘ For detailed bearing dimensions, please see P.1018-1020, 1026-1029.

### Shape A

Part Number	Type	d	D	Allowable Load N (kgf)				B	D <sub>1</sub>	r (min.)	Relative Dimension			Bearing Used
				Urethane							D <sub>2</sub>	R <sub>1</sub> (max.)		
				Shore A95	Shore A90	Shore A70	Shore A50							
Urethane UMBBK UMBBKW UMBB UMBW UMBG UMBGW UMBL UMBLW	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	W684AX50ZZ
		16	79(8.1)	59(6)	16(1.6)	6(0.6)	18(1.8)							624ZZ
	*5	16	79(8.1)	—	16(1.6)	—	—	5	13	0.2	6.6	6.9	—	WBC5-13ZZ
		20	102(10.4)	—	20(2)	9(0.9)	—							625ZZ
		20	114(11.7)	78(8)	23(2.3)	15(1.5)	24(2.4)							696ZZ
		28	218(22.2)	—	44(4.5)	39(4)	—							626ZZ
	*6	28	208(21.2)	157(16)	42(4.3)	35(3.6)	47(4.8)	6	19	—	8	9.5	—	608ZZ
		30A	—	—	81(8.3)	65(6.7)	—	7	22	0.3	10	12.2	0.3	608ZZ
Antistatic Urethane UMBD	10	30A	—	176(18)	94(9.6)	51(5.2)	53(5.4)	8	26	—	12	13.5	—	6000ZZ
	40A	—	274(28)	136(13.9)	93(9.5)	—	9	30	0.6	14	16	0.6	6200ZZ	
Silicon Rubber SUMBB *SUMSB	15	40A	—	274(28)	122(12.4)	96(9.9)	—	9	32	0.3	17	19	0.3	6002ZZ
	15	45A	—	343(35)	109(11.1)	102(10.5)	103(10.5)	11	35	0.6	19	20	0.6	6202ZZ
	20	45A	—	490(50)	130(13.3)	98(10.1)	—	9	37	0.3	22	24	0.3	6904ZZ
	20	55A	—	490(50)	225(22.9)	176(18.1)	147(15)	14	47	—	25	28	—	6204ZZ
	25	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.

### Shape B

Part Number	Type	d	D	Allowable Load N (kgf)				B	D <sub>1</sub>	B <sub>1</sub>	r (min.)	Relative Dimension			Bearing Used	
				Urethane								D <sub>2</sub>	R <sub>1</sub> (max.)			
				Shore A95	Shore A90	Shore A70	Shore A50									
Urethane UMBBK UMBBKW UMBB UMBW UMBG UMBGW UMBL UMBLW	8	30	248(25.3)	—	81(8.3)	65(6.7)	—	11	22	7	0.3	10	12.2	0.3	608ZZ	
		30	201(20.5)	176(18)	94(9.6)	51(5.2)	53(5.4)								6000ZZ	
	10	40	412(42)	—	136(13.9)	93(9.5)	—								6200ZZ	
		40	369(37.6)	274(18)	122(12.4)	96(9.9)	82(8.4)								6002ZZ	
	15	45	534(54.5)	—	109(11.1)	102(10.5)	—								6202ZZ	
		45	391(39.9)	343(35)	130(13.3)	98(10.1)	103(10.5)								6904ZZ	
	Antistatic Urethane UMBD	20	55	674(68.7)	490(50)	225(22.9)	176(18.1)	147(15)	18	47	14	0.3	22	24	0.3	6204ZZ
		25	65	999(101.9)	750(70)	333(34)	250(25.8)	226(23)	19	52	15	1	25	28	1	6205ZZ

ⓘ Allowable load is for reference.

**Part Number Example**

Part Number: **UMBB10-30A**

**Part Number Alterations**

Part Number: **UMBB6-20-DC18**

ⓘ D: 30A-45A are for UMBB, UMBW and UMSB only, 55A and 65A are for UMBB and UMBW only.

Alteration	Code	Spec.
	DC	O.D. Dimension Changes Dimension in 1 mm increment. ⓘ D <sub>1</sub> +2≤DC≤D-1 Ordering Code: DC18

**Properties of Antistatic Urethane**

Item	Increment	UMBD
Specific Volume Resistivity	Ωcm	2.1 x 10 <sup>9</sup>
Surface Resistivity	Ω	4.0 x 10 <sup>9</sup>

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