


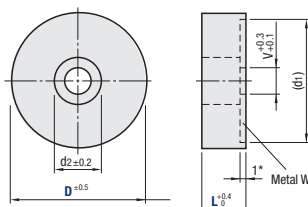
# Bumper with Metal Washer

Urethane / Antistatic Urethane / Rubber

Baked Metal Washer, Urethane and Rubber.



L Standard Type	L Configurable Type	Urethane / Rubber			Washer Material
		Material	Color	Hardness	
AYSK	AYFS	Ether Polyurethane	Black	Shore A95	304 Stainless Steel
AYHK	AYFH		Black	Shore A90	
AYMK	AYFM	Ester Polyurethane	Black	Shore A70	
AYLK	AYFL		Black	Shore A50	
—	AYFY	Antistatic Polyurethane	Black	Shore A30	
—	AYFHE		Gray	Shore A90	
—	AYFME		Gray	Shore A70	
—	AYFLE	Nitrile Rubber (NBR Nitrile Rubber)	Gray	Shore A50	
—	RBFN		Black	Shore A70	
—	RBFU	Low Elasticity Rubber (Hanenaito®)	Black	Shore A57	
—	RBFS	Silicon Rubber (SI)	Light Gray	Shore A70	
—	RBF	Fluoro Rubber (FPM)	Black	Shore A80	



\* The washer thickness of RBF\_ is 2mm.

Ⓜ Hanenaito® is a registered trademark of Naigai Rubber Industry Co., Ltd.

## L Selectable (Urethane)

Part Number Type	D	L Selection	M Applicable Bolts	(d <sub>1</sub> )	d <sub>2</sub>	V	Available Types							
							L10	L15	L20	L25	L30	L40	L50	
AYSK AYHK AYMK AYLK	12	10	M3	11	6	3	•	—	—	—	—	—	—	—
	15	10 15 20	M4	14	8	4	•	•	•	—	—	—	—	—
	20	10 15 20 25	M5	19	9.5	5	•	•	•	•	—	—	—	—
	25	10 15 20 25 30	M6	24	11	6	•	•	•	•	•	—	—	—
	30	15 20 25 30 40	M8	29	14	8	—	•	•	•	•	•	—	—
40	25 30 40 50	M10	39	17	10	—	—	—	•	•	•	•	•	

## L Configurable (Urethane)

Part Number Type	D	L 1 mm Increment	M Applicable Bolts	(d <sub>1</sub> )	d <sub>2</sub>	V

## Characteristic Values of Antistatic Urethane

Specific Volume Resistivity	2.1 x 10 <sup>8</sup> Ω·cm
Surface Resistivity	4.0 x 10 <sup>9</sup> Ω

(Conditions: Temperature 30°C Humidity 60%)  
 Ⓜ All other properties are equal to that of urethane of the same hardness.

## L Dimension Configurable (Rubber)


Part Number Type	D	L 1 mm Increment	M Applicable Bolts	(d <sub>1</sub> )	d <sub>2</sub>	V

Part Number Example: **AYSK12 - 10**  
**AYFY25 - 52**

# Counterbored Urethane Bumpers

L Dimension Standard & Configurable

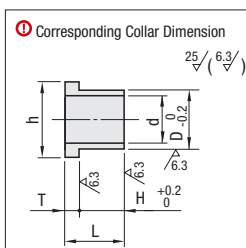
Collar is selectable to match the counterbored hole size.



RoHS 10

Type	Urethane only	With Collar			Material	Hardness	Color
		Black Oxide	Electroless Nickel Plating	304 Stainless Steel			
L Selectable	AZXSK	AZXSC	AZXSM	AZXSS	General Urethane (Ether Polyurethane)	Shore A95	Natural Color
	AZXHK	AZXHC	AZXHM	AZXHS		Shore A90	
	AZXMK	AZXMC	AZXMM	AZXMS	General Urethane (Ester Polyurethane)	Shore A70	
	AZXLK	AZCLC	AZXLM	AZCLS	Shore A50		
	AZEXHK	AZEXHC	—	—	Abrasion Resistant Urethane	Shore A90	
	AZEXMK	AZEXMC	—	—	Shore A70		
L Configurable	AZXS	AZCS	AZCS-M	AZCS-S	General Urethane (Ether Polyurethane)	Shore A95	Natural Color
	AZXH	AZCH	AZCH-M	AZCH-S		Shore A90	
	AZXM	AZCM	AZCM-M	AZCM-S	General Urethane (Ester Polyurethane)	Shore A70	
	AZXL	AZCL	AZCL-M	AZCL-S	Shore A50		

Corresponding Collar Dimension



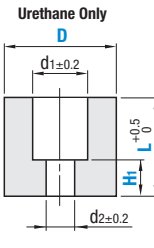
Collars can be ordered separately. P2580

Collar No.	d	D	H	T	L	h
4	4.5	6.5	7	8	8.5	
4A	4.5	6.5	7	8	9	
5	5.5	8	8	9	10	
6	6.6	9	8	9	12	
8	9	11.5	6	8	14.5	
8A	9	11.5	6	8	14.5	
10	11	14	10	3	13	20
12	14	17	10	3	13	20
16	18	22	15	4	19	26

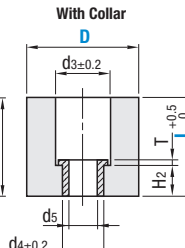
Hole Diameter of Applicable Screws

Screw Size	Urethane Only			With Collar		
	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	d <sub>4</sub>	d <sub>5</sub>	T
M3	6	4	8	5.5	3.5	—
M4	8	5	9.5	6.5	4.5	2
M5	9.5	6	11	8	5.5	2
M6	11	7	13	9	6.6	—
M8	14	9	15.5	11.5	9	—
M10	18	11	19	14	11	3
M12	20	14	22	17	14	—
M16	26	18	28	22	18	4

Urethane Only



With Collar



## L Dimension Standard Type

Part Number Type	D	L Selection	(M) Applicable Screw	Urethane Only H <sub>1</sub>	With Collar				
					H <sub>2</sub>	Applicable Collar No.			
No Collar Urethane Only	12	12	M3	5	5	3			
	15	12 15			4				
	Black Oxide	20	20 25	M4	7	7	4A		
		25	20 25			5			
		30	20 25			6			
	Electroless Nickel Plating	30	20 25 30	M5	8	8	8A		
		40	25 30 40			6			
		50	30 40			8			
	304 Stainless Steel	40	30 40 50	M6	10	8	6		
		50	30 40			8			
		60	30 40			10			
	Standard Shore A95	15-80	25-80	M8	10	10	10		
12						12			
15						15			
Standard Shore A90		25-150	30-150			M10	12	12	12
								15	15
								20	20
Standard Shore A70	25-200	40-200	M12	15	10	10			
					12	12			
					15	15			
Standard Shore A50	25-200	40-200	M16	15	10	10			
					12	12			
					15	15			

## L Dimension Configurable Type

Part Number Type	D	L (1 mm Increment)		M	H <sub>1</sub> 1 mm Increment	H <sub>2</sub> Selectable	Available Types					
		Urethane only	With Collar				AZXS, AZXH, AZXM, AZXL, AZC-, AZC-, -M, AZC-, -S					
		Min. L-40	L41-60				L61-80	L81-100	L101-150	L151-200		
No Collar Urethane Only	15-80	25-80	5-80	M3 M4	5 (M3) 7 (M4)	5	•	•	•	•	•	
						7	•	•	•	•	•	
						8	•	•	•	•	•	
						10	•	•	•	•	•	
						12	•	•	•	•	•	
						15	•	•	•	•	•	
	25-150	30-150	5-150	M4 M5	7 (M4 M5)	7	•	•	•	•	•	
						8	•	•	•	•	•	
						10	•	•	•	•	•	
						12	•	•	•	•	•	
						15	•	•	•	•	•	
						20	•	•	•	•	•	
25-200	40-200	5-200	M6	8 (M6 M8)	8	•	•	•	•	•		
					10	•	•	•	•	•		
					12	•	•	•	•	•		
					15	•	•	•	•	•		
					20	•	•	•	•	•		
					25	•	•	•	•	•		
25-150	30-150	5-150	M8	10 (M10 M12)	10	•	•	•	•	•		
					12	•	•	•	•	•		
					15	•	•	•	•	•		
					20	•	•	•	•	•		
					25	•	•	•	•	•		
					30	•	•	•	•	•		
25-200	40-200	5-200	M10 M12	10 (M12) 15 (M16)	10	•	•	•	•	•		
					12	•	•	•	•	•		
					15	•	•	•	•	•		
					20	•	•	•	•	•		
					25	•	•	•	•	•		
					30	•	•	•	•	•		

Part Number Example: **AZXMC25 - 20 - M6**  
**AZXL50 - 96 - M10 - 20**  
**AZCM40 - 70 - M10**



H <sub>1</sub> / H <sub>2</sub> Tolerance		D Tolerance		D	Tolerance
H <sub>1</sub> / H <sub>2</sub>	Tolerance	D	Tolerance	50	±0.3
30 or Less	±0.2	40 or Less	±0.2	60	±0.3
31-	±0.5			80	±0.4
				100	±0.4