

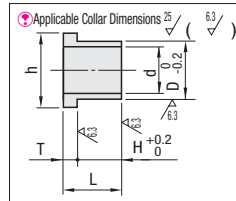
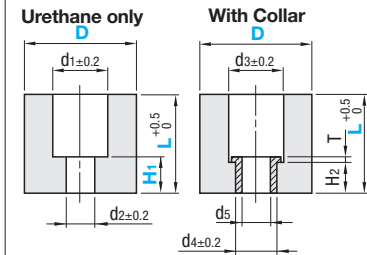
Counterbored Urethane Bumpers

L Selectable, L Configurable



Type	Urethane only	With Collar			Material	Hardness	Color
		Black Oxide	Electroless Nickel Plating	SUS304			
L Selectable	AZXS	AZXS	AZXS	AZXS	Standard Urethane (Ether Polyurethane)	Shore A95	Natural Color
	AZXHK	AZXHC	AZXHM	AZXHS	Standard Urethane (Ether Polyurethane)	Shore A90	
	AZXMK	AZXM	AZXM	AZXS	Standard Urethane (Ester Polyurethane)	Shore A70	
	AZXLK	AZCLC	AZCLM	AZCLS	Standard Urethane (Ester Polyurethane)	Shore A50	Dark Brown
	AZEXHK	AZEXHC	-	-	Abrasion Resistant Urethane	Shore A90	
	AZEXMK	AZEXMC	-	-	Abrasion Resistant Urethane	Shore A70	
	AZXHMK	AZXHMC	-	-	Heat Resistant Urethane	Shore A90	
L Configurable	AZXS	AZCS	AZCS-M	AZCS-S	Standard Urethane (Ether Polyurethane)	Shore A95	Natural Color
	AZXH	AZCH	AZCH-M	AZCH-S	Standard Urethane (Ether Polyurethane)	Shore A90	
	AZXM	AZCM	AZCM-M	AZCM-S	Standard Urethane (Ether Polyurethane)	Shore A70	
	AZXL	AZCL	AZCL-M	AZCL-S	Standard Urethane (Ester Polyurethane)	Shore A50	

H1, H2 Tolerance		D Tolerance	
30 or Less	±0.2	50	±0.3
31~	±0.5	60	±0.4
		80	±0.4
		100	±0.4



Screw Size	Urethane only		With Collar		T
	d1	d2	d3	d4	
M3	6	4	8	5.5	3.5
M4	8	5	9.5	6.5	4.5
M5	9.5	6	11	8	5.5
M6	11	7	13	9	6.6
M8	14	9	15.5	11.5	9
M10	18	11	19	14	11
M12	20	14	22	17	14
M16	26	18	28	22	18

L Selectable

Part Number	Selection		M	Urethane only	With Collar	Unit Price				
	D	L				No Collar	With Collar	Urethane only	Black Oxide	Electroless Nickel Plating
12	12		M3							
15	12 15		M4							
20	20 25		M5							
25	20 25		M6							
30	20 25 30		M8							
40	30 40		M10							
50	30 40 50		M12							
60	30 40		M10							
	40 50		M12							
	30 40		M10							
	40 50		M12							

L Configurable

Part Number	L (1mm Increment)		M Selection	H1 1mm Increment	H2 Selectable
	Urethane only	With Collar			
15			M3 M4		5(M3)7(M4)
20			M4 M5		7(M4 M5)
25	15-80	25-80	M6 M8		8(M6 M8)
30			M10 M12	5≤H1<L	10(M10 M12)
40					
50	25-150	30-150			
60					
80	25-200	40-200	M12 M16		10(M12) 15(M16)
100					

D	Urethane only						With Collar					
	Min. L - 40	L41-60	L61-80	L81-100	L101-150	L151-200	Min. L - 40	L41-60	L61-80	L81-100	L101-150	L151-200
15												
20												
25												
30												
40												
50												
60												
80												
100												

Ordering Example: Part Number - L - M - H1
 AZXMC25 - 20 - M6
 AZXL50 - 96 - M10 - 20
 AZCM40 - 70 - M10

Counterbored Urethane Bumpers, Collars for Counterbored Bumpers

Configurable Type



Type	Material	Hardness	Photo No., Color
AZFS	Standard Urethane	Shore A95	① Natural Color
AZFH	Standard Urethane	Shore A90	② Black
AZFM	Standard Urethane (Ester Urethane)	Shore A70	
AZFL	Standard Urethane (Ester Urethane)	Shore A50	
AZFY	Standard Urethane (Ester Urethane)	Shore A30	
AZFHE	Antistatic Polyurethane	Shore A90	③ Gray
AZFME	Antistatic Polyurethane	Shore A70	
AZFLE	Antistatic Polyurethane	Shore A50	
AZFAN	Low Rebound Urethane	Shore A70	④ Gray
AZFHH	Heat Resistant Urethane	Shore A90	⑤ Brown
ZVULFH	Super Abrasion Resistant Urethane Vulkollan®	Shore A92	
ZVULFM	Super Abrasion Resistant Urethane Vulkollan®	Shore A68	⑥ Beige
AZEFH	Abrasion Resistant Urethane	Shore A90	⑦ Dark Brown
AZEFM	Abrasion Resistant Urethane	Shore A70	

Characteristic Values of Antistatic Urethane

Specific Volume Resistivity	2.1x10 ⁸ Ω·cm
Surface Resistivity	4.0x10 ⁸ Ω

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

Standard Grade

D Tolerance
 Dimension D Tolerance
 50 or Less ±0.2
 51-60 ±0.3
 61-100 ±0.5

V, H, G Tolerances
 Dimension V Tolerance H Tolerance G Tolerance
 30 or Less ±0.2 ±0.2 ±0.2
 31-90 ±0.3 ±0.5 ±0.3
 91~ ±0.5 ±0.5 ±0.5

Precision Grade

L Tolerance
 Dimension L Tolerance
 6-100 ±0.2
 101-200 ±0.3

V, H, G Tolerances
 Dimension V Tolerance H Tolerance G Tolerance
 2-50 ±0.15 ±0.1 ±0.1
 51~ ±0.15 ±0.15 ±0.15

Ⓜ The tolerances are verified at 23°C±2 and 40-80% humidity.

Part Number	D	1mm Increment					Color Selection	Unit Price												
		V	H	G	L	AZFS		AZFH	AZFL	AZFY	AZAH	AZAM	AZFHE	AZFME	AZFLE	ZVULFH	ZVULFM	AZEFH	AZEFM	
Standard Grade, Standard Urethane	8-15	2-10				6-40														
AZFS (Shore A95)	8-15	2-10				41-60														
AZFH (Shore A90)	8-15	2-10				61-80														
AZFM (Shore A70)	8-15	2-10				6-40														
AZFL (Shore A50)	8-15	2-10				41-60														
AZFY (Shore A30)	8-15	2-10				61-80														
AZFAN (Shore A70)	8-15	2-10				10-40														
Standard Grade Antistatic Polyurethane	31-45	5-25				41-60														
AZFHE (Shore A90)	31-45	5-25				81-100														
AZFME (Shore A70)	31-45	5-25				101-150														
AZFLE (Shore A50)	31-45	5-25				25-40														
Standard Grade Heat Resistant Urethane	46-60	6-30				41-60														
AZFHH (Shore A90)	46-60	6-30				61-80														
Standard Grade Vulkollan®	61-80	5-30				101-150														
ZVULFH (Shore A90)	61-80	5-30				25-40														
ZVULFM (Shore A70)	61-80	5-30				41-60														
Standard Grade Abrasion Resistant Urethane	85-100	5-70				81-100														
AZEFH (Shore A90)	85-100	5-70				101-150														
AZEFM (Shore A70)	85-100	5-70				25-40														
Precision Grade, Standard Urethane	85-100	5-70				41-60														
AZAH (Shore A90)	85-100	5-70				61-80														
AZAM (Shore A70)	85-100	5-70				81-100														
						101-150														
						151-200														

Ordering Example: Part Number - D - V - H - G - L - Color Selection
 AZFS - D22 - V5 - H10 - G10 - L38 - N



Type	Material	Surface Treatment
AZC	S45C	Black Oxide
AZM	Equivalent	Electroless Nickel Plating
AZS	SUS304	-

Part Number	Type	No.	d	D	H	T	L	h	Unit Price		
									AZC	AZM	AZS
3			3.5	5.5			7	7.5			
4			4.5	6.5			8	8.5			
4A			4.5	6.5			9	10			
5			5.5	8			10	12			
6			6.6	9			10	12			
8			9	11.5			8	14.5			
8A			9	11.5			6	8			
10			11	14			3	13	17		

Ⓜ No.10 is for AZC only.

Ordering Example: Part Number
 AZC4A