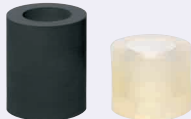


Counterbored Rubber Bumpers

L Selectable

Black Oxide, Electroless Nickel Plating and EN 1.4301 Equiv. Collars are also available.

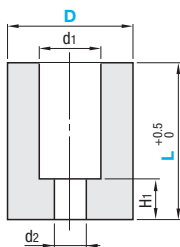
L Selectable



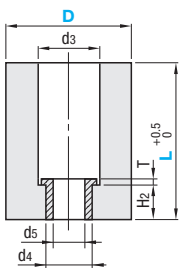
Rubber Only	With Collar			Material	Hardness	Color
	Black Oxide	Electroless Nickel Plating	EN 1.4301 Equiv.			
RBZNK	RBZNK-C	RBZNK-M	RBZNK-S	Nitrile Rubber (NBR)	Shore A70	Black
RBZCK	RBZCK-C	RBZCK-M	RBZCK-S	Chloroprene Rubber (CR)	Shore A65	Black
RBZUK	RBZUK-C	RBZUK-M	RBZUK-S	Low Elasticity Rubber	Shore A32	Black
RBZSK	RBZSK-C	RBZSK-M	RBZSK-S	Silicon Rubber (SI)	Shore A70	Light Gray
RBZAK	RBZAK-C	RBZAK-M	RBZAK-S	Silicon Rubber (SI)	Shore A50	Milky White
RBZFK	RBZFK-C	RBZFK-M	RBZFK-S	Fluororubber (FPM)	Shore A80	Black

The milky white color of silicone rubber shore A 50 is translucent.

Rubber Only



With Collar



Hole Diameter of Applicable Screw

Screw Size	Rubber Only		With Collar			T
	d1	d2	d3	d4	d5	
M3	6	4	8	5.5	3.5	2
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	3
M10	18	11	19	14	11	
M12	20	14	22	17	14	

D Tolerance

D	Tolerance
40 or Less	±0.5
50, 60	±0.7

d2, d4, H1, d1 and d3 Tolerance

Dimension	Tolerance		
	d2, d4	H1	d1, d3
30 or Less	±0.5	±0.5	±0.5

Part Number		L Selection	(M) Applicable Screw	Rubber Only H1	With Collar		Rubber Only		Unit Price		Collar Type		Unit Price	
Type	D				H2	Applicable Collar No.	RBZKNK RBZCK	RBZUK	RBZSK RBZAK	RBZFK	Black Oxide RBZ_K-C	Electroless Nickel Plating RBZ_K-M	EN 1.4301 Equiv. RBZ_K-S	
Rubber Only RBZKNK (Nitrile Rubber, Shore A70) RBZCK (Chloroprene Rubber, Shore A65) RBZUK (Low Elasticity Rubber, Shore A32) RBZSK (Silicon Rubber, Shore A70) RBZAK (Silicon Rubber, Shore A50) RBZFK (Fluororubber, Shore A80)	12	12	M3	5	-						-	-	-	
	15	12 15			5	3								
		15 20				4								
	20	20 25	M4	7	4A									
		20 25			5									
	25	20 25	M6	8	6									
		20 25			8									
	30	20 25 30	M6	10	6									
		25 30 40			8									
	40	30 40	M10	12	10									
		30 40 50			12									
	50	30 40	M10		15	10								
		40 50				12								
60	30 40	M10	10											
	40 50		12											

D12 is not available for Collar Type. L≤30 for Low Elasticity Rubber (RBZUK) and Fluororubber (RBZFK).

For applicable collar dimensions, see Collars for Counterbored Urethane and Rubber Bumpers.



Ordering Example

Part Number - L - M
RBZCK25 - 20 - M6

Counterbored Rubber Bumpers, Collars for Counterbored Bumpers

Configurable Type

Configurable Type



Type	Material	Hardness	Color
RBZN	Nitrile Rubber (NBR)	Shore A70	Black
RBZC	Chloroprene Rubber (CR)	Shore A65	Black
RBZU	Low Elasticity Rubber (Hanarito® GP-35L)	Shore A32	Black
RBZS	Silicon Rubber (SI)	Shore A70	Light Gray
RBZA	Silicon Rubber (SI)	Shore A50	Milky White
RBZF	Fluororubber (FPM)	Shore A80	Black
RBZAM	Amber Color Rubber	Shore A45	Amber Color

The milky white color of silicone rubber shore A 50 is translucent.

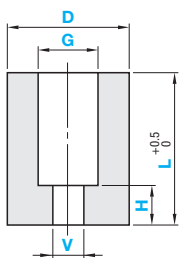
D Tolerance

D	Tolerance
40 or Less	±0.5
41~60	±0.7

V, H, G Tolerances

Dimension	Tolerance		
	V	H	G
30 or Less	±0.5	±0.5	±0.5
31~	-	±0.7	±0.6

When L≤30, V≤G-4.
When L>30, V≤G-6.



Part Number	1mm Increment					Unit Price				
	D	V	H	G	L	RBZN RBZC	RBZU	RBZS RBZA	RBZF	RBZAM
RBZN Nitrile Rubber RBZC Chloroprene Rubber RBZU Low Elasticity Rubber RBZS Silicon Rubber (SI) Shore A70 RBZA Silicon Rubber (SI) Shore A50 RBZF Fluororubber (FPM) RBZAM Amber Color Rubber	11~15	3~10	3≤H<L	7~53 (G≤D-4)	6~30					
					31 ~ 50		-		-	-
	16~30	5~16			6~30					
					31 ~ 50		-		-	-
	31~45	5~25	5≤H<L	7~54 (G≤D-6)	10~30					
					31 ~ 50		-		-	-
	46~60	5~30			25~30					
					31 ~ 50		-		-	-

Amber Color Rubber Type is available up to L20.



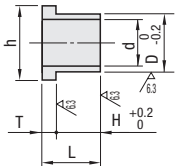
Ordering Example

Part Number - D - V - H - G - L
RBZAM - D22 - V5 - H10 - G12 - L38

Collars for Counterbored Bumpers



Type	Material	Surface Treatment
AZC	EN 1.1191	Black Oxide
AZM	EN 1.1191	Electroless Nickel Plating
AZS	EN 1.4301 Equiv.	-



Ordering Example

Part Number
AZC4A

Part Number		d	D	H	T	L	h	Unit Price		
Type	No.							AZC	AZM	AZS
AZC AZM AZS	3	3.5	5.5	5	2	7	7.5			
	4	4.5	6.5				8.5			
	4A			7		9	10			
	5	5.5	8				12			
	6	6.6	9	8		10	14.5			
	8	9	11.5				8			
	8A			6						
	10	11	14	10	3	13	17		-	-

No.10 is for AZC only.