

# Rollers

## Core Material Press Fit Straight Type

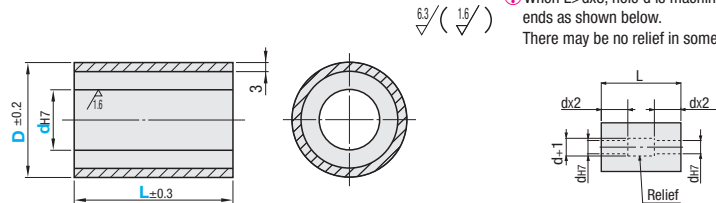
■ **Features:** Core material is press-fit in the surface material and more economical than the Baked Type.

### Core Material Press Fit Straight Type



Type	Material		Hardness
	Core	Urethane, Plastic	
ROUSP	SUS304	Urethane (Natural Color)	Shore A90
ROUAP	Aluminum Alloy	Urethane (Natural Color)	Shore A90
ROMAP	A5052	Foam Urethane (Green)	Shore A65
ROSAP	A5052	Chloroprene Rubber Sponge	Shore A25

⊕ Core material is press fit into Urethane, Foam Urethane and Chloroprene Rubber Sponge.



⊕ When  $L \leq dx3$ , hole d is machined from the same direction.

⊕ When  $L > dx3$ , hole d is machined from both ends as shown below. There may be no relief in some cases.

Part Number Type	D	dh7 Selection					L Selection					
		20	25	30	40	50	15	20	25	30	40	50
Urethane ROUSP ROUAP	20	8					15	20	25	30	40	50
	(25)	8	10	12			15	20	25	30	40	50
	(30)	8	10	12	15		15	20	25	30	40	50
	35	10	12	15	20			20	25	30	40	50
	40	10	12	15	20			20	25	30	40	50
Foam Urethane ROMAP	(50)	12	15	20	25			25	30	40	50	
Chloroprene Rubber Sponge ROSAP												

⊕ Chloroprene rubber sponge is available in sizes in ( ) only.

Ordering Example: Part Number - d - L  
ROUSP20 - 8 - 30

Alterations Example: Part Number - d - L - (MC, UDC)  
ROUSP20 - 8 - 30 - UDC

D	L	Unit Price			
		ROUSP	ROUAP	ROMAP	ROSAP
20	15~25				
	30~50				
25	15~25				
	30~50				
30	15~25				
	30~50				
35	20~25				
	30~50				
40	20~25				
	30~50				
50	25				
	30~50				

Alterations	Code	Spec.
Tapping 	MC	Adds 2 tapped holes at 90°. D M 2, 25, 30 3 35, 40 4 50 5 Ordering Code: MC
Change to Antistatic Urethane (Urethane Color: Gray)	UDC	Change Urethane (Shore A90) to Antistatic Urethane Ordering Code: UDC Specific Volume Resistivity $2.1 \times 10^{10} \Omega \cdot \text{cm}$ Surface Resistivity $4.0 \times 10^9 \Omega$ (Temperature 30°C / Humidity 60%) ⊕ Not applicable to Foam Urethane Type (ROMAP).

### Urethane Load (Reference)

Material	Load Standard N (kgf)	
	Radial	Axial
Urethane	147(15)	242(25)
Foam Urethane	97(10)	97(10)
Chloroprene Rubber Sponge	-	18(2)

\* Data above are for reference only, not guaranteed values.

⊕ A core material is press fit into urethane, foam urethane and chloroprene rubber sponge, and unbalanced load may cause urethane and sponge part to slip or misalign with the core.

⊕ Urethane may discolor over time, but there is no effect on physical properties.

### Foam Urethane

Closed-cell foamed urethane. Each bubble is separated by walls resulting in lower absorption of water, oil and chemicals compared to general sponges with connected cells. Also, it excels in gripping power and shock absorption compared to conventional urethane and other general rubber. Especially suitable for conveying thin materials.

### Chloroprene Rubber Sponge

A chloroprene polymerized synthetic rubber. In comparison to natural rubber, it excels in rebound resilience, weather resistance, aging resistance, ozone resistance, heat resistance, low temp. resistance, and oil resistance. It is an overall well balance rubber but not well suited for use in low (-35°C and below) temperature. Mainly used for general industrial products.

⊕ For the properties, see P.2-389-391.

# Rollers / Aluminum Rollers

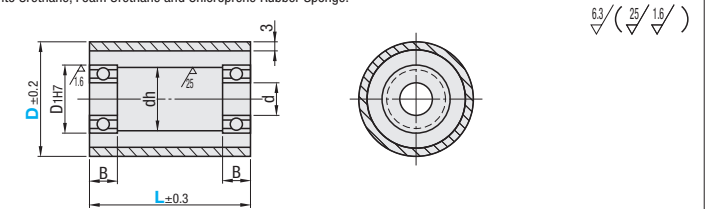
## With Core Material Press Fit Bearings

### With Core Material Press Fit Bearings



Type	Material		Hardness	Bearing
	Core	Urethane, Plastic		
ROUSP	SUS304	Urethane (Natural Color)	Shore A90	Steel
ROUAP	Aluminum Alloy	Urethane (Natural Color)	Shore A90	
RORMSP	SUS304	Foam Urethane (Green)	Shore A65	
RORMAP	A5052	Foam Urethane (Green)	Shore A65	
RORSSP	SUS304	Chloroprene Rubber Sponge	Shore A25	
RORSAP	A5052	Chloroprene Rubber Sponge	Shore A25	

⊕ Core material is press fit into Urethane, Foam Urethane and Chloroprene Rubber Sponge.



Part Number Type	D	L Selection					d	D1(H7)	dh	B	Bearing Used
		20	25	30	40	50					
Urethane ROUSP ROUAP	25	20	25	30	40	50	6	15	10	5	B696ZZx2
	30	20	25	30	40	50	8	19	15	6	B698ZZx2
	35	25	30	40	50		10	22	18	6	B6900ZZx2
	40	25	30	40	50		12	28	24	8	B6001ZZx2
	50	25	30	40	50		15	32	28	9	B6002ZZx2
Foam Urethane RORMSP RORMAP											
Chloroprene Rubber Sponge RORSSP RORSAP											

⊕ For bearing detailed dimensions, see P.989.

Ordering Example: Part Number - L  
ROUSP25 - 30

Alterations Example: Part Number - L - (UDC, SB)  
ROUSP25 - 30 - UDC

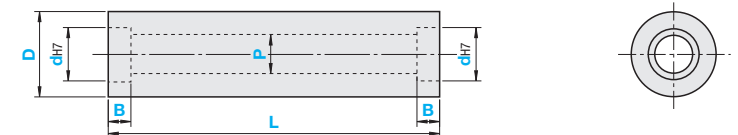
D	L	Unit Price					
		ROUSP	ROUAP	RORMSP	RORMAP	RORSSP	RORSAP
25	20~25						
	30~50						
30	20~25						
	30~50						
35	25						
	30~50						
40	25						
	30~50						
50	25						
	30~50						

Alterations	Code	Spec.
Change to Antistatic Urethane (Urethane Color: Gray)	UDC	Change Urethane (Shore A90) to Antistatic Urethane Ordering Code: UDC Specific Volume Resistivity $2.1 \times 10^{10} \Omega \cdot \text{cm}$ Surface Resistivity $4.0 \times 10^9 \Omega$ (Temperature 30°C / Humidity 60%) ⊕ Not applicable to Foam Urethane Type.
Bearing Material	SB	Bearing material is changed to stainless steel. ⊕ Chloroprene Rubber Sponge not applicable

### Hollow Aluminum Rollers



### ARO



Material Aluminum Alloy Surface Treatment: Clear Anodize

Part Number Type	D	L	d	B	P	Unit Price				
						L50~100	L101~150	L151~200	L201~250	L251~300
ARO	30	50~300	19~55 (d≤D-5)	4~15	15~53 (P≤d-2)					
	40									
	50									
	60									

Ordering Example: Part Number - L - d - B - P  
ARO30 - 100 - 24 - B6 - P22