

# Vertical Guide Rollers / Rollers with Oil Free Bushings

# Urethane Rollers / End Feed Rollers With Side Through Holes

■ Features: Preassembled rollers contribute to labor savings.

**Vertical Guide Rollers**

Type	Material				Surface Treatment			
	Roller	Shaft	Retaining Ring	Bearing	Roller	Shaft	Retaining Ring	
TGRB	S45C Equivalent	S45C Equivalent	Spring Steel	Steel	Electroless Nickel Plating	Electroless Nickel Plating	-	
TGRS	SUS304	SUS304	SUS304		-	-	-	
TGRA	Aluminum Alloy	S45C	Spring Steel		-	Clear Anodize	Electroless Nickel Plating	-
TGRAU	A5052	SUS304	SUS304		-	Urethane Lining (Natural Color)	-	-
TGRSU	SUS304	SUS304	SUS304		-	Urethane Lining (Natural Color)	Shore A90	-

**Core Only**

**Urethane Lined**

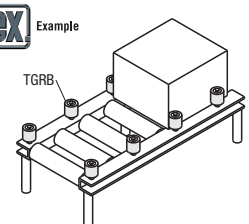
Please use these products for vertical applications.

Part Number Type	D	L Selection	N	d	l	C	B	r	n	m	dh	D1	F	M (Coarse)	W	Used Bearing	Retaining Ring Standards Shape JIS Nominal	Unit Price				
																		TGRB	TGRS	TGRA	TGRAU	TGRSU
Core Only Urethane TGRB (S45C) TGRS (SUS304) TGRA (A5052) TGRSU (SUS304)	20	25	6	9	10	8	5	2	0.7	10	15	5	6	8	696ZZ	E Type	No.5					
		30																40	50			
	25	30	8	12	12	10	7	3	0.9	15	19	6	8	10	698ZZ	E Type	No.7					
		40																50				
	30	40	10	15	15	13	9.6	3	1.15	24	28	8	10	13	6900ZZ	C Type	No.10					
		50																				
	35	40	12	18	18	14	11.5	3	1.15	24	32	10	12	14	6201ZZ	C Type	No.12					
		50																				

Ordering Example: Part Number - L  
TGRS30 - 30  
TGRSU30 - 50

Alterations Example: Part Number - L - (NC)  
TGRB25 - 30 - NC15

Alteration	Code	Spec.
N Dimension Changes	NC	Ordering Code: NC15 NC=1mm Increment 5≤NC≤30 Dimensions other than N dim. will not change.



■ Use of oil free bushings instead of bearings accomplished lower cost and space savings.

**Rollers with Oil Free Bushings**

Type	Roller Material	Surface Treatment	Oil Free Bushings
FRTA	A5052	Clear Anodize	Filler Added PTFE Layer Sintered Bronze Layer Steel-backed Metal Layer (SPCC: Tin Plating)
FRTS	SUS304	-	
FRTAU	A5052	Urethane Lining (Natural Color) Shore A90	
FRTSU	SUS304	Urethane Lining (Natural Color) Shore A90	

**Core Only**

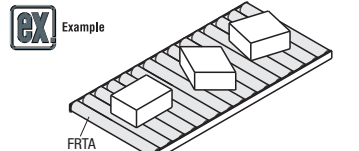
**Urethane Lined**

For L20, oil free bushing F dim. will be 10 or less.

Part Number Type	D	d (I.D.) Selection	L Selection	t	Unit Price			
					FRTA	FRTS	FRTAU	FRTSU
Core Only Urethane FRTA (A5052) FRTS (SUS304) FRTAU (A5052) FRTSU (SUS304)	8	3	20' 25 30 40 50	0.8				
	10	5						
	12	5 6						
	15	6 8						
	18	8 10						
	20	10 12						
	25	10 12 15						
	30	10 12 15						

For Oil Free Bushing details, see P.378. L20 cannot be selected for \*d15.

Ordering Example: Part Number - d - L  
FRTA10 - 5 - 30



■ Features: Can be used as a set with shaft collar shown on P.279, 281.

**Urethane Rollers with Side Through Holes**

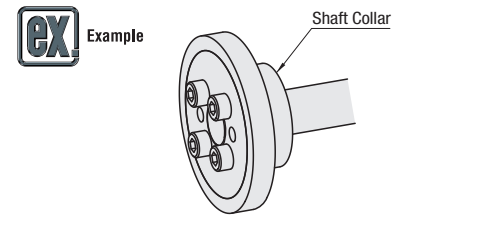
Type	Material		Hardness
	Core	Lining	
ULSH	A5052	Urethane	A90

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

Part Number Type	D	d Selection	L	T	P	P2	S	S2	Unit Price
ULSH	40	10	8	5	18	20	4.5	5.5	
		12			22	22	5.5	5.5	
	50	12	10	5	25	26	6.5	6.5	
		15			32	34	5.5	5.5	
	60	15	10	5	32	34	6.5	6.5	
		20			37	38			
	70	20	10	5	37	38			
		25							

Shaft collar shown on P.281 may not be installable depending on the B size.

Ordering Example: Part Number - D - d  
ULSH - 40 - 10



Alterations Example: Part Number - D - d - (MC)  
ULSH - 40 - 10 - MC

Alteration Code	Tapping
	MC
Spec.	Change S to tapped hole
	S M
	4.5 M4
	5.5 M5
	6.5 M6
	Ordering Code: MC

## End Feed Rollers

Type	Material
MCRPOM	Polyacetal
MCRUPE	UHMWPE

Part Number Type	D	d	P	L 1mm Increment	W	l	D1	M	Unit Price	
									MCRPOM	MCRUPE
MCRPOM MCRUPE	3-10	6	8 10 12	40 45 50 55 60	8	13-(P-D)/√3 (4.34-10.11)	d+20	4		
		8	10 12 15 20	45 50 55 60 65						
		10	12 15 20	50 55 60 65 70						
		12	15 20	55 60 65 70 75						
	3-10	15	20 30	60 65 70 75 80	10	13-(P-D)/√3 (4.34-10.11)	d+20	5		
		20	30	65 70 75 80						
		25		70 75 80						
		30		75 80						

Ordering Example: Part Number - d - P - L  
MCRPOM30 - 8 - 50 - 3

