

## Available materials

- CC	Chrome steel AISI 52100 Balls. Machined AISI 1016 steel housing, toughened & zinc plated
Solve specific application requirements by upgrading materials. Select option by adding suffix i.e. - CS	
- CS	Stainless Steel Balls (AISI 420) but other materials as Standard. Reduce load by 30%.
- SS	All parts in Stainless Steel - out housing AISI 416, Balls AISI 420. Reduce load by 30%.
- CD	Acetal (POM) main ball option - reduce load. See chart overleaf

## Fixing clip selection

Part No.	Ball Size	Minimum Bore $\phi$	Maximum Bore $\phi$
P2730.015	15	24,8	25,0
P2730.022	22	37,0	37,2
P2730.030	30	46,3	46,7

Clip requires a minimum plate thickness of 3mm to grip securely

## How to select the correct unit

Ball Type	Max Load (Kg)	Friction (% of load)	Speed m/sec	Shock Loads		Arduous Conditions	Orientation	Instant Change
				✓✓✓	✓✓			
Medium Duty	20-3500	2%	1,5	✓✓✓	✓✓	✓✓		✓✓✓
Light Duty	7-250	3%	1,0	✓		✓✓		✓✓✓

## Variables to consider:



### Shock Loads:

Standard material ball units have Rockwell 'C' hardness of 60 minimum



### Track Hardness/ Conveyed Item Material:

Standard material ball units have Rockwell 'C' hardness of 60 minimum



### Delicate Surfaces:

Ball Units - Acetal (POM) & Phenolic Resin

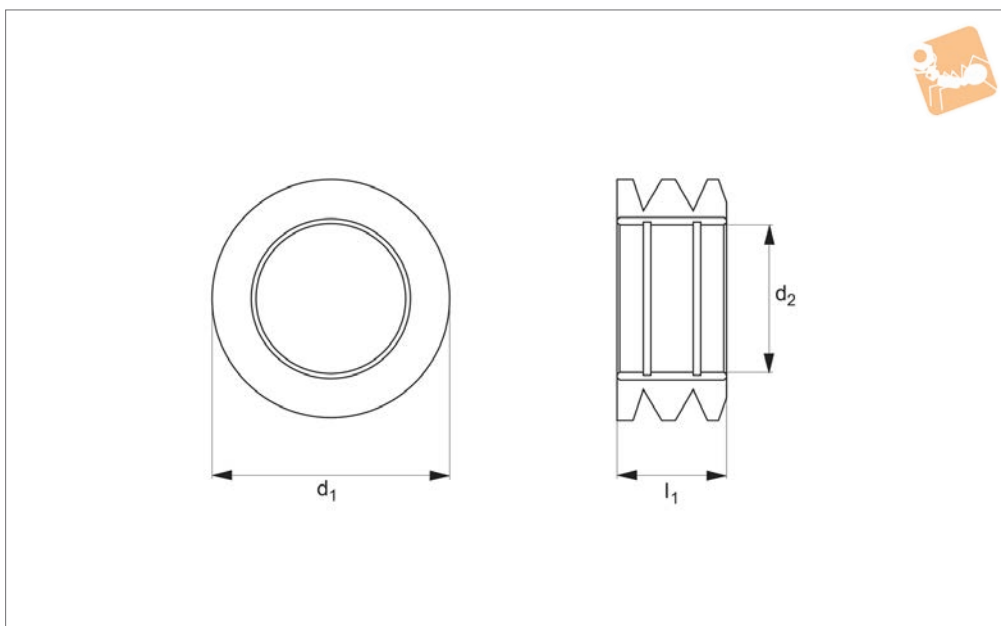


### Operating Environment:

Wet, dirty, outdoor, radioactive



P2770



**Material**

Nitrile, urethane or neoprene bonded to a steel insert. Hardness from 20-60 durometer (Shore A).

**Technical Notes**

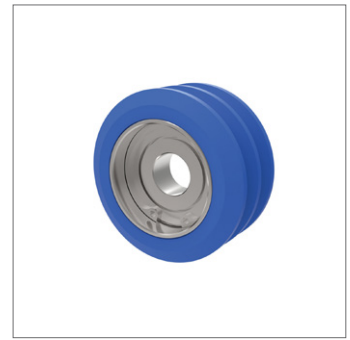
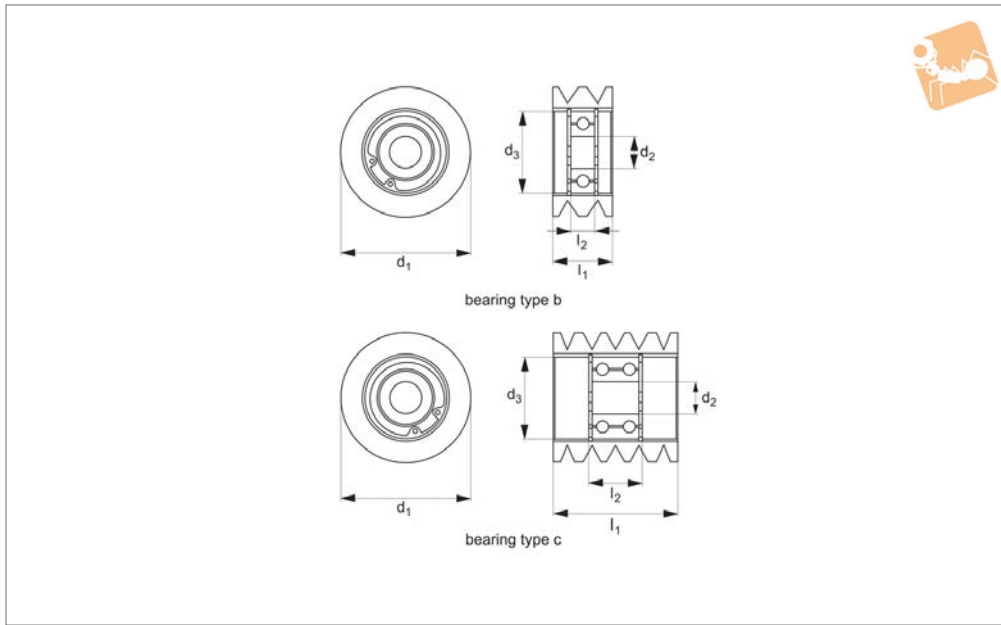
Roller only - allows for custom mounting.

**Tips**

Finned rollers have grooves on the surface, creating less surface contact with the workpiece, and allowing dirt, debris and liquid to pass.



# Finned Roller bearing mount



**P2772**

MATERIAL HANDLING

### Material

Nitrile, urethane or neoprene bonded to a steel insert. Hardness from 20-60 durometer (Shore A).

### Technical Notes

Bearings included (held in place with snap

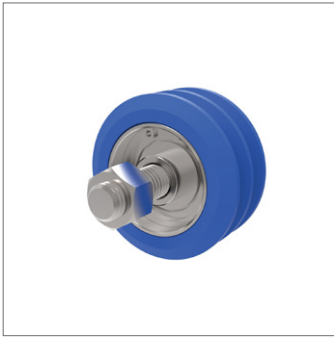
rings). For more details on bearings please see technical pages.

liquid to pass.

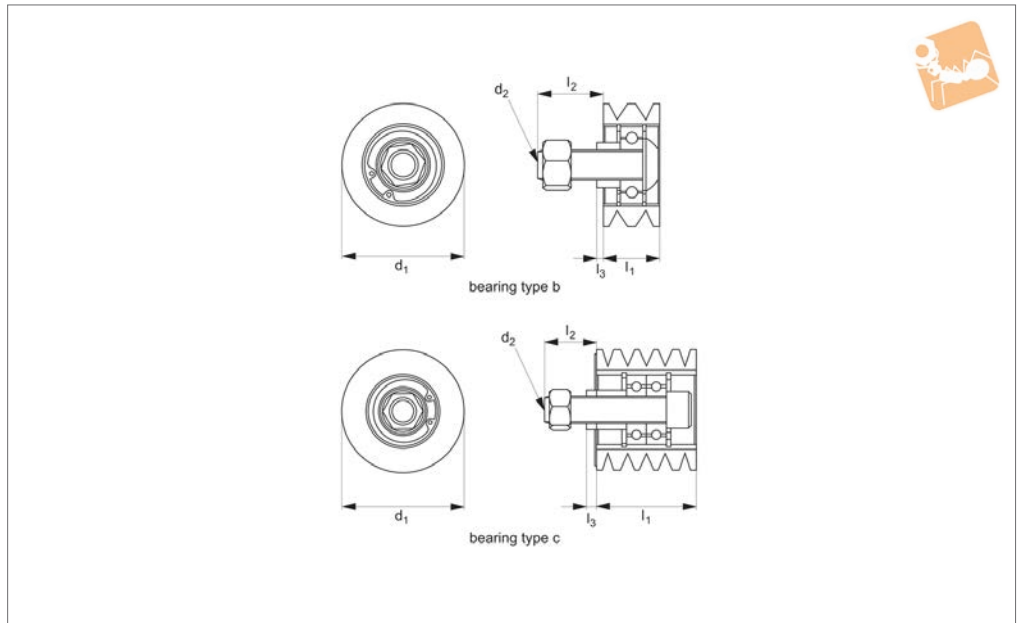
### Tips

Finned rollers have grooves on the surface, creating less surface contact with the workpiece, and allowing dirt, debris and

Order No.	Material	Durometer	Bearing type	d <sub>1</sub>	l <sub>1</sub>	d <sub>2</sub> -0 +0.13	d <sub>3</sub> -0 +0.13	l <sub>2</sub> -0 +0.13	No. of fins
P2772.20A20NI	Nitrile	20	B	50,8 (2")	23.37	12.7	31.62	9.40	3
P2772.20A35NI	Nitrile	35	B	50,8 (2")	23.37	12.7	31.62	9.40	3
P2772.20A60NI	Nitrile	60	B	50,8 (2")	23.37	12.7	31.62	9.40	3
P2772.20B20NI	Nitrile	20	C	50,8 (2")	49.28	12.7	31.62	18.92	6
P2772.20B35NI	Nitrile	35	C	50,8 (2")	49.28	12.7	31.62	18.92	6
P2772.20B60NI	Nitrile	60	C	50,8 (2")	49.28	12.7	31.62	18.92	6
P2772.25A20NI	Nitrile	20	B	63,5 (2,5")	23.37	12.7	31.62	9.40	3
P2772.25A35NI	Nitrile	35	B	63,5 (2,5")	23.37	12.7	31.62	9.40	3
P2772.25A60NI	Nitrile	60	B	63,5 (2,5")	23.37	12.7	31.62	9.40	3
P2772.20A35UR	Urethane	35	B	50,8 (2")	23.37	12.7	31.62	9.40	3
P2772.20A60UR	Urethane	60	B	50,8 (2")	23.37	12.7	31.62	9.40	3
P2772.20B35UR	Urethane	35	C	50,8 (2")	49.28	12.7	31.62	18.92	6
P2772.20B60UR	Urethane	60	C	50,8 (2")	49.28	12.7	31.62	18.92	6
P2772.25A35UR	Urethane	35	B	63,5 (2,5")	23.37	12.7	31.62	9.40	3
P2772.25A60UR	Urethane	60	B	63,5 (2,5")	23.37	12.7	31.62	9.40	3
P2772.20A20NP	Neoprene	20	B	50,8 (2")	23.37	12.7	31.62	9.40	3
P2772.20A35NP	Neoprene	35	B	50,8 (2")	23.37	12.7	31.62	9.40	3
P2772.20A60NP	Neoprene	60	B	50,8 (2")	23.37	12.7	31.62	9.40	3
P2772.20B20NP	Neoprene	20	C	50,8 (2")	49.28	12.7	31.62	18.92	6
P2772.20B35NP	Neoprene	35	C	50,8 (2")	49.28	12.7	31.62	18.92	6
P2772.20B60NP	Neoprene	60	C	50,8 (2")	49.28	12.7	31.62	18.92	6
P2772.25A20NP	Neoprene	20	B	63,5 (2,5")	23.37	12.7	31.62	9.40	3
P2772.25A35NP	Neoprene	35	B	63,5 (2,5")	23.37	12.7	31.62	9.40	3
P2772.25A60NP	Neoprene	60	B	63,5 (2,5")	23.37	12.7	31.62	9.40	3



### P2774



#### Material

Nitrile, urethane or neoprene bonded to a steel insert. Hardness from 20-60 durometer (Shore A).

#### Technical Notes

Bearings included (held in place with snap

rings). For more details on bearings please see technical pages. Assembled with socket head cap screw, spacer and lock nut.

#### Tips

Finned rollers have grooves on the surface, creating less surface contact with the

workpiece, and allowing dirt, debris and liquid to pass.

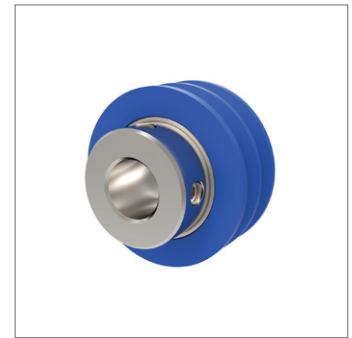
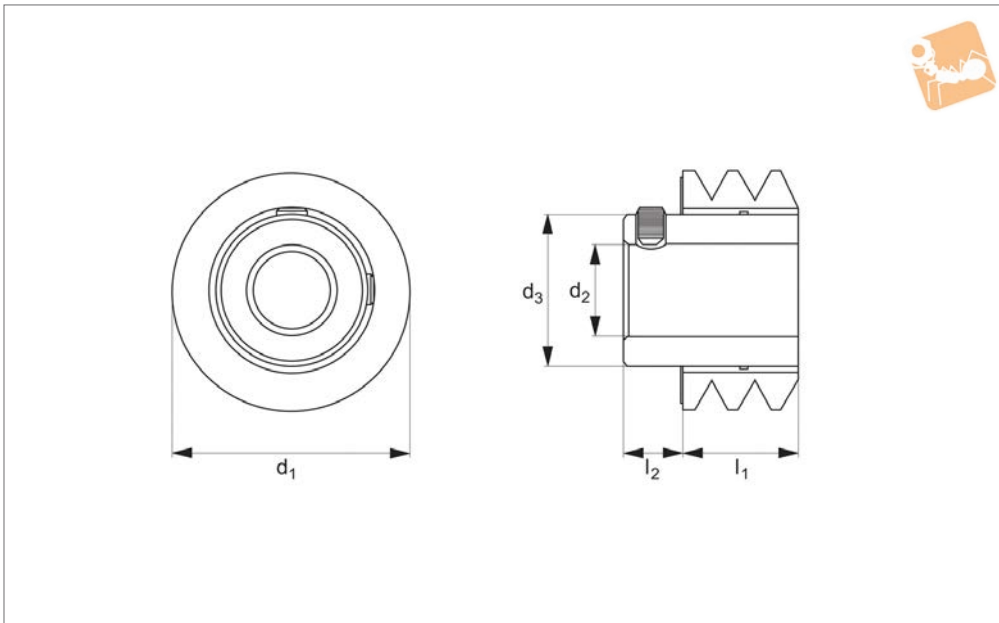
Order No.	Material	Duro.	Bearing type	d <sub>1</sub>	l <sub>1</sub>	d <sub>2</sub>	l <sub>2</sub>	l <sub>3</sub>	No. of bearings	No. of fins
P2774.20A-20NI	Nitrile	20	B	50,8 (2")	23.37	41306	27.94	3.05	1	3
P2774.20A-35NI	Nitrile	35	B	50,8 (2")	23.37	41306	27.94	3.05	1	3
P2774.20A-60NI	Nitrile	60	B	50,8 (2")	23.37	41306	27.94	3.05	1	3
P2774.20B-20NI	Nitrile	20	C	50,8 (2")	49.27	41306	35.81	6.35	1	6
P2774.20B-35NI	Nitrile	35	C	50,8 (2")	49.27	41306	35.81	6.35	1	6
P2774.20B-60NI	Nitrile	60	C	50,8 (2")	49.27	41306	35.81	6.35	1	6
P2774.25A-20NI	Nitrile	20	B	63,5 (2")	49.27	41306	27.94	3.05	1	3
P2774.25A-35NI	Nitrile	35	B	50,8 (2")	49.27	41306	27.94	3.05	1	3
P2774.25A-60NI	Nitrile	60	B	50,8 (2")	49.27	41306	27.94	3.05	1	3
P2774.20A-35UR	Urethane	35	B	50,8 (2")	23.37	41306	27.94	3.05	1	3
P2774.20A-60UR	Urethane	60	B	50,8 (2")	23.37	41306	27.94	3.05	1	3
P2774.20B-35UR	Urethane	35	C	50,8 (2")	49.27	41306	35.81	6.35	1	6
P2774.20B-60UR	Urethane	60	C	50,8 (2")	49.27	41306	35.81	6.35	1	6
P2774.25A-35UR	Urethane	35	B	50,8 (2")	49.27	41306	27.94	3.05	1	3
P2774.25A-60UR	Urethane	60	B	50,8 (2")	49.27	41306	27.94	3.05	1	3
P2774.20A-20NP	Neoprene	20	B	50,8 (2")	23.37	41306	27.94	3.05	1	3
P2774.20A-35NP	Neoprene	35	B	50,8 (2")	23.37	41306	27.94	3.05	1	3
P2774.20A-60NP	Neoprene	60	B	50,8 (2")	23.37	41306	27.94	3.05	1	3
P2774.20B-20NP	Neoprene	20	C	50,8 (2")	49.27	41306	35.81	6.35	1	6
P2774.20B-35NP	Neoprene	35	C	50,8 (2")	49.27	41306	35.81	6.35	1	6
P2774.20B-60NP	Neoprene	60	C	50,8 (2")	49.27	41306	35.81	6.35	1	6
P2774.25A-20NP	Neoprene	20	B	63,5 (2")	49.27	41306	27.94	3.05	1	3
P2774.25A-35NP	Neoprene	35	B	50,8 (2")	49.27	41306	27.94	3.05	1	3
P2774.25A-60NP	Neoprene	60	B	50,8 (2")	49.27	41306	27.94	3.05	1	3



## Finned Roller shaft drive



Material Hand-  
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P2776

MATERIAL HANDLING

### Material

Nitrile, urethane or neoprene bonded to a steel insert. Hardness from 20-60 durometer (Shore A).

### Technical Notes

Designed to be mounted onto a shaft. A

hub extends past the roller and is supplied with two set screws at 90°.

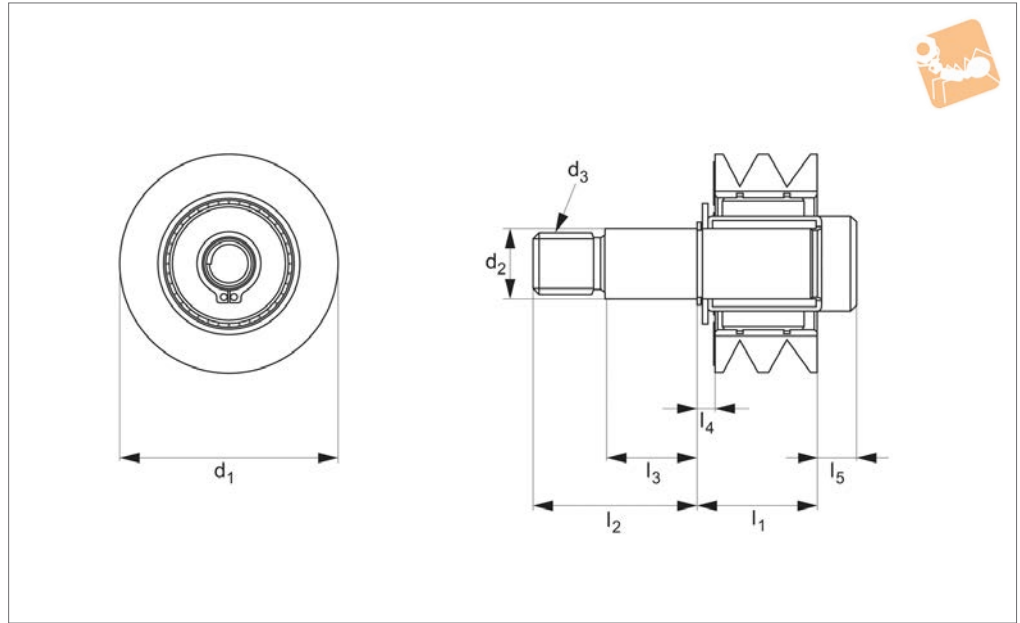
### Tips

Finned rollers have grooves on the surface, creating less surface contact with the workpiece, and allowing dirt, debris and

liquid to pass.



### P2778



#### Material

Nitrile, urethane or neoprene bonded to a steel insert. Hardness from 20-60 durometer (Shore A).

#### Technical Notes

A clutch bearing allows the roller to turn in only one direction. Available in left or right hand rotation (with the stud pointed

upwards, a right hand rotation turns clockwise.

Type R = right hand clutch bearing.

Type L = left hand clutch bearing.

Supplied with type I bearings, please see technical page for more information on bearings.

#### Tips

Finned rollers have grooves on the surface, creating less surface contact with the workpiece, and allowing dirt, debris and liquid to pass.

No. of fins:

$l_2 = 23,37$  3 fins

$l_1 = 49,28$  6 fins

Order No.	Material	Duro.	Type	d <sub>1</sub>	l <sub>1</sub>	d <sub>2</sub> +0.05	d <sub>3</sub>	l <sub>2</sub>	l <sub>3</sub>	l <sub>4</sub>	l <sub>5</sub>
P2778.20A-20NI-R	Nitrile	20	R	50.80	23.37	15.77	1/2-13"	45.47	26.42	3.05	10.41
P2778.20A-35NI-R	Nitrile	35	R	50.80	23.37	15.77	1/2-13"	45.47	26.42	3.05	10.41
P2778.20A-60NI-R	Nitrile	60	R	50.80	23.37	15.77	1/2-13"	45.47	26.42	3.05	10.41
P2778.20A-20NI-L	Nitrile	20	L	50.80	23.37	15.77	1/2-13"	45.47	26.42	3.05	10.41
P2778.20A-35NI-L	Nitrile	35	L	50.80	23.37	15.77	1/2-13"	45.47	26.42	3.05	10.41
P2778.20A-60NI-L	Nitrile	60	L	50.80	23.37	15.77	1/2-13"	45.47	26.42	3.05	10.41
P2778.20B-20NI-R	Nitrile	20	R	50.80	49.28	15.77	1/2-13"	31.75	23.62	10.42	-
P2778.20B-35NI-R	Nitrile	35	R	50.80	49.28	15.77	1/2-13"	31.75	23.62	10.42	-
P2778.20B-60NI-R	Nitrile	60	R	50.80	49.28	15.77	1/2-13"	31.75	23.62	10.42	-
P2778.20B-20NI-L	Nitrile	20	L	50.80	49.28	15.77	1/2-13"	31.75	23.62	10.42	-
P2778.20B-35NI-L	Nitrile	35	L	50.80	49.28	15.77	1/2-13"	31.75	23.62	10.42	-
P2778.20B-60NI-L	Nitrile	60	L	50.80	49.28	15.77	1/2-13"	31.75	23.62	10.42	-
P2778.25A-20NI-R	Nitrile	20	R	63.50	23.37	15.77	1/2-13"	45.47	26.42	3.05	10.42
P2778.25A-35NI-R	Nitrile	35	R	63.50	23.37	15.77	1/2-13"	45.47	26.42	3.05	10.42
P2778.25A-60NI-R	Nitrile	60	R	63.50	23.37	15.77	1/2-13"	45.47	26.42	3.05	10.42
P2778.25A-20NI-L	Nitrile	20	L	63.50	23.37	15.77	1/2-13"	45.47	26.42	3.05	10.42
P2778.25A-35NI-L	Nitrile	35	L	63.50	23.37	15.77	1/2-13"	45.47	26.42	3.05	10.42
P2778.25A-60NI-L	Nitrile	60	L	63,50 (2,5")	23.37	15.77	1/2-13"	45.47	26.42	3.05	10.42
P2778.20A-35UR-R	Urethane	35	R	50.80	23.37	15.77	1/2-13"	45.47	26.42	3.05	10.41
P2778.20A-60NP-R	Urethane	60	R	50.80	23.37	15.77	1/2-13"	45.47	26.42	3.05	10.41
P2778.20A-35UR-L	Urethane	35	L	50.80	23.37	15.77	1/2-13"	45.47	26.42	3.05	10.41
P2778.20A-60NP-L	Urethane	60	L	50.80	23.37	15.77	1/2-13"	45.47	26.42	3.05	10.41
P2778.20B-35UR-R	Urethane	35	R	50.80	49.28	15.77	1/2-13"	31.75	23.62	10.42	-
P2778.20B-60UR-R	Urethane	60	R	50.80	49.28	15.77	1/2-13"	31.75	23.62	10.42	-
P2778.20B-35UR-L	Urethane	35	L	50.80	49.28	15.77	1/2-13"	31.75	23.62	10.42	-
P2778.20B-60UR-L	Urethane	60	L	50.80	49.28	15.77	1/2-13"	31.75	23.62	10.42	-
P2778.25A-35UR-R	Urethane	35	R	63.50	23.37	15.77	1/2-13"	45.47	26.42	3.05	10.42
P2778.25A-60UR-R	Urethane	60	R	63.50	23.37	15.77	1/2-13"	45.47	26.42	3.05	10.42
P2778.25A-35UR-L	Urethane	35	L	63.50	23.37	15.77	1/2-13"	45.47	26.42	3.05	10.42



# Finned Roller clutch bearing



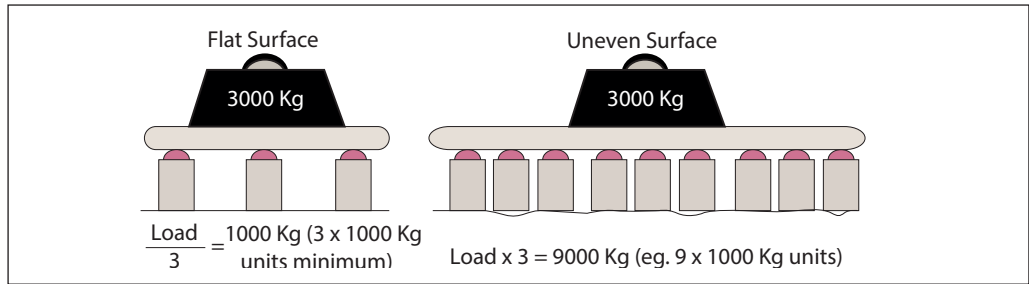
Material Hand-  
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Order No.	Material	Duro.	Type	d <sub>1</sub>	l <sub>1</sub>	d <sub>2</sub> +0.05	d <sub>3</sub>	l <sub>2</sub>	l <sub>3</sub>	l <sub>4</sub>	l <sub>5</sub>
P2778.25A-60UR-L	Urethane	60	L	63,50 (2,5")	23.37	15.77	1/2-13"	45.47	26.42	3.05	10.42
P2778.20A-20NP-R	Neoprene	20	R	50.80	23.37	15.77	1/2-13"	45.47	26.42	3.05	10.41
P2778.20A-35NP-R	Neoprene	35	R	50.80	23.37	15.77	1/2-13"	45.47	26.42	3.05	10.41
P2778.20A-60NP-R	Neoprene	60	R	50.80	23.37	15.77	1/2-13"	45.47	26.42	3.05	10.41
P2778.20A-20NP-L	Neoprene	20	L	50.80	23.37	15.77	1/2-13"	45.47	26.42	3.05	10.41
P2778.20A-35NP-L	Neoprene	35	L	50.80	23.37	15.77	1/2-13"	45.47	26.42	3.05	10.41
P2778.20A-60NP-L	Neoprene	60	L	50.80	23.37	15.77	1/2-13"	45.47	26.42	3.05	10.41
P2778.20B-20NP-R	Neoprene	20	R	50.80	49.28	15.77	1/2-13"	31.75	23.62	10.42	-
P2778.20B-35NP-R	Neoprene	35	R	50.80	49.28	15.77	1/2-13"	31.75	23.62	10.42	-
P2778.20B-60NP-R	Neoprene	60	R	50.80	49.28	15.77	1/2-13"	31.75	23.62	10.42	-
P2778.20B-20NP-L	Neoprene	20	L	50.80	49.28	15.77	1/2-13"	31.75	23.62	10.42	-
P2778.20B-35NP-L	Neoprene	35	L	50.80	49.28	15.77	1/2-13"	31.75	23.62	10.42	-
P2778.20B-60NP-L	Neoprene	60	L	50.80	49.28	15.77	1/2-13"	31.75	23.62	10.42	-
P2778.25A-20NP-R	Neoprene	20	R	63.50	23.37	15.77	1/2-13"	45.47	26.42	3.05	10.42
P2778.25A-35NP-R	Neoprene	35	R	63.50	23.37	15.77	1/2-13"	45.47	26.42	3.05	10.42
P2778.25A-60NP-R	Neoprene	60	R	63.50	23.37	15.77	1/2-13"	45.47	26.42	3.05	10.42
P2778.25A-20NP-L	Neoprene	20	L	63.50	23.37	15.77	1/2-13"	45.47	26.42	3.05	10.42
P2778.25A-35NP-L	Neoprene	35	L	63.50	23.37	15.77	1/2-13"	45.47	26.42	3.05	10.42
P2778.25A-60NP-L	Neoprene	60	L	63.50	23.37	15.77	1/2-13"	45.47	26.42	3.05	10.42

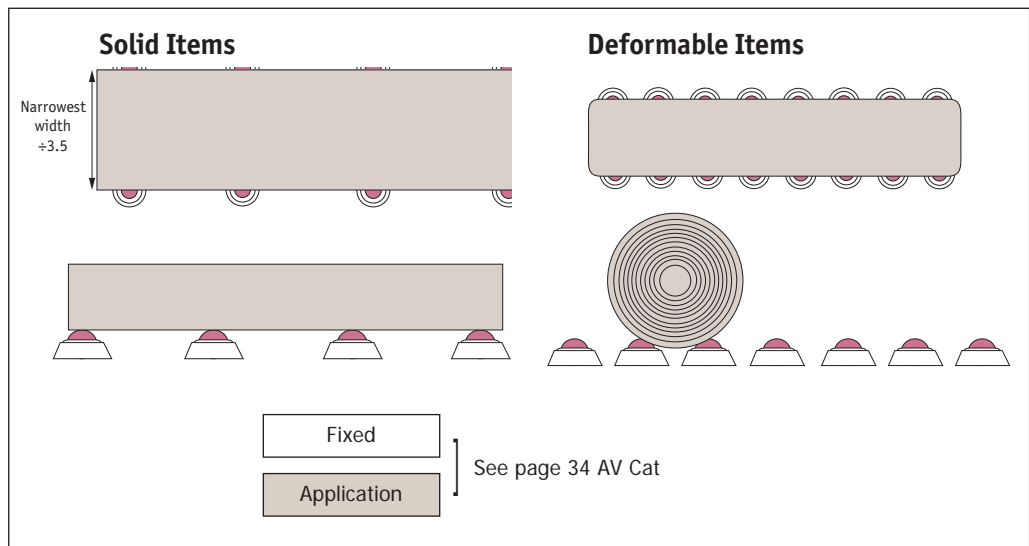
MATERIAL HANDLING



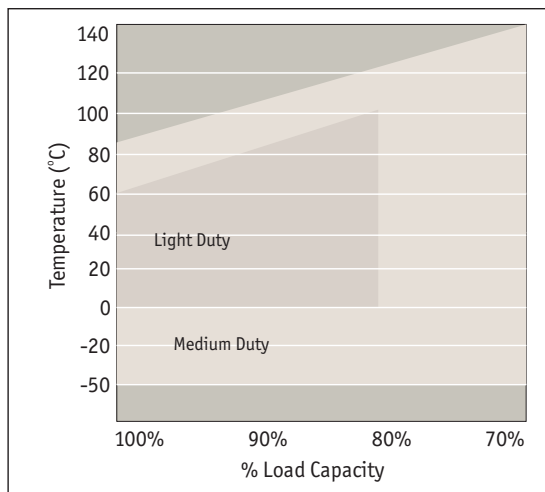
Load & Stability



Pitch & Spacing



Operating Temperature



Ball Transfer Units from Automation Components

MATERIAL HANDLING