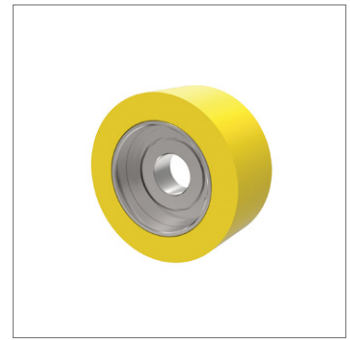
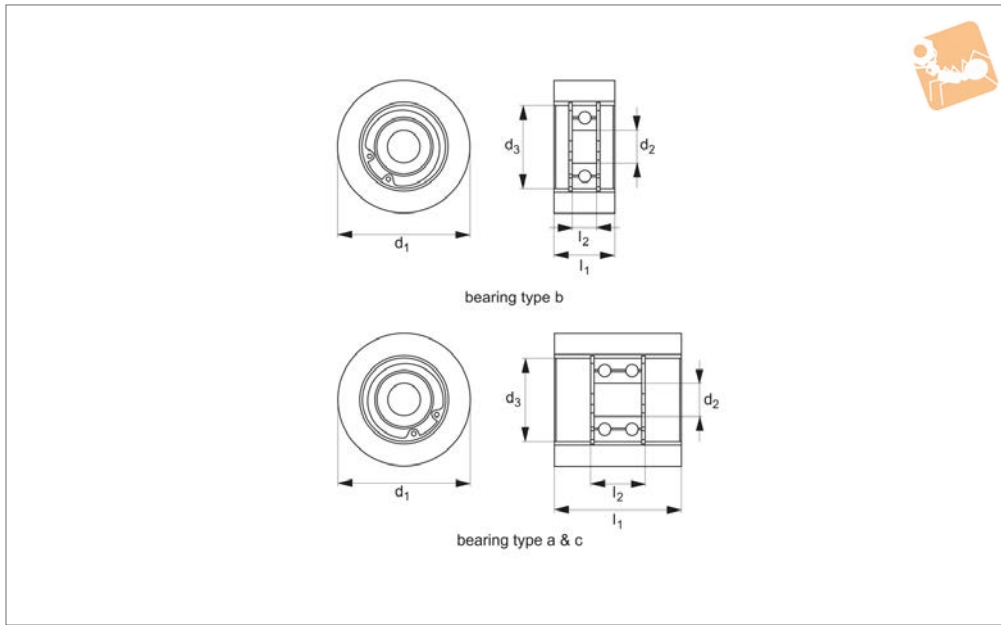




# Solid Roller bearing mount



**P2752**

MATERIAL HANDLING

**Material**

Nitrile, urethane or neoprene bonded to a steel insert.  
Hardness from 20-80 durometer (Shore A).

**Technical Notes**

Bearings included (held in place with snap rings). For more details on bearings please

see technical pages.

Tolerances:  
When  $d_1=38,10$   
 $d_2 \pm 0.05$   
 $d_3 \pm 0.07$   
 $l_2 \pm 0.05$

When  $d_1 > 38,10$   
 $d_2 \pm 0,065$   
 $d_3 \pm 0,065$   
 $l_2 \pm 0,08$

Order No.	Material	Durometer	$d_1$	$l_1$	$d_2$	$d_3$	$l_2$	Bearing type
P2752.15A20NI	Nitrile	20	38,1 (1,5")	31.75	8.0	22.16	12.70	A
P2752.15A60NI	Nitrile	60	38,1 (1,5")	31.75	8.0	22.16	12.70	A
P2752.15A80NI	Nitrile	80	38,1 (1,5")	31.75	8.0	22.16	12.70	A
P2752.20A35NI	Nitrile	20	50,8 (2,0")	23.37	12.77	31.69	9.52	B
P2752.20A35NI	Nitrile	35	50,8 (2,0")	23.37	12.77	31.69	9.52	B
P2752.20B20NI	Nitrile	20	50,8 (2,0")	49.28	12.77	31.69	19.05	C
P2752.20B80NI	Nitrile	80	50,8 (2,0")	49.28	12.77	31.69	19.05	C
P2752.25A20NI	Nitrile	20	63,5 (2,5")	23.37	12.77	31.69	9.52	C
P2752.25A35NI	Nitrile	35	63,5 (2,5")	23.37	12.77	31.69	9.52	C
P2752.25A60NI	Nitrile	60	63,5 (2,5")	23.37	12.77	31.69	9.52	C
P2752.25A80NI	Nitrile	80	63,5 (2,5")	23.37	12.77	31.69	9.52	C
P2752.25B20NI	Nitrile	20	63,5 (2,5")	49.28	12.77	31.69	19.05	C
P2752.25B35NI	Nitrile	35	63,5 (2,5")	49.28	12.77	31.69	19.05	C
P2752.25B60NI	Nitrile	60	63,5 (2,5")	49.28	12.77	31.69	19.05	C
P2752.25B80NI	Nitrile	80	63,5 (2,5")	49.28	12.77	31.69	19.05	C
P2752.40A20NI	Nitrile	20	101,6 (4,0")	23.37	12.77	31.69	9.52	B
P2752.40A35NI	Nitrile	35	101,6 (4,0")	23.37	12.77	31.69	9.52	B
P2752.40A60NI	Nitrile	60	101,6 (4,0")	23.37	12.77	31.69	9.52	B
P2752.40A80NI	Nitrile	80	101,6 (4,0")	23.37	12.77	31.69	9.52	B
P2752.40B20NI	Nitrile	20	101,6 (4,0")	49.28	12.77	31.69	19.05	C
P2752.40B35NI	Nitrile	35	101,6 (4,0")	49.28	12.77	31.69	19.05	C
P2752.40B60NI	Nitrile	60	101,6 (4,0")	49.28	12.77	31.69	19.05	C
P2752.40B80NI	Nitrile	80	101,6 (4,0")	49.28	12.77	31.69	19.05	C
P2752.15A35UR	Urethane	35	38,1 (1,5")	31.75	8.0	22.16	12.70	A
P2752.15A80UR	Urethane	80	38,1 (1,5")	31.75	8.0	22.16	12.70	A
P2752.20A35UR	Urethane	35	50,8 (2,0")	23.37	12.77	31.69	9.52	B
P2752.20A60UR	Urethane	60	50,8 (2,0")	23.37	12.77	31.69	9.52	B
P2752.20A80UR	Urethane	80	50,8 (2,0")	23.37	12.77	31.69	9.52	B
P2752.25A35UR	Urethane	35	63,5 (2,5")	23.37	12.77	31.69	9.52	C
P2752.25A60UR	Urethane	60	63,5 (2,5")	23.37	12.77	31.69	9.52	C
P2752.25A80UR	Urethane	80	63,5 (2,5")	23.37	12.77	31.69	9.52	C



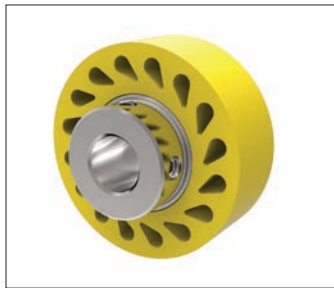
Order No.	Material	Durometer	d <sub>1</sub>	l <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	l <sub>2</sub>	Bearing type
P2752.25B35UR	Urethane	35	63,5 (2,5")	49.28	12.77	31.69	19.05	C
P2752.25B60UR	Urethane	60	63,5 (2,5")	49.28	12.77	31.69	19.05	C
P2752.40A35UR	Urethane	35	101,6 (4,0")	23.37	12.77	31.69	9.52	B
P2752.40A60UR	Urethane	60	101,6 (4,0")	23.37	12.77	31.69	9.52	B
P2752.40A80UR	Urethane	80	101,6 (4,0")	23.37	12.77	31.69	9.52	B
P2752.40B35UR	Urethane	35	101,6 (4,0")	49.28	12.77	31.69	19.05	C
P2752.40B60UR	Urethane	60	101,6 (4,0")	49.28	12.77	31.69	19.05	C
P2752.40B80UR	Urethane	80	101,6 (4,0")	49.28	12.77	31.69	19.05	C
P2752.50A35UR	Urethane	35	127,0 (5,0")	49.28	12.77	31.69	19.05	C
P2752.50A60UR	Urethane	60	127,0 (5,0")	49.28	12.77	31.69	19.05	C
P2752.60A60UR	Urethane	60	152,4 (6,0")	49.28	12.77	31.69	19.05	C
P2752.15A20NP	Neoprene	20	38,1 (1,5")	31.75	8.0	22.16	12.70	A
P2752.15A35NP	Neoprene	35	38,1 (1,5")	31.75	8.0	22.16	12.70	A
P2752.15A60NP	Neoprene	60	38,1 (1,5")	31.75	8.0	22.16	12.70	A
P2752.20B35NP	Neoprene	35	50,8 (2,0")	49.28	12.77	31.69	19.05	C
P2752.20B80NP	Neoprene	80	50,8 (2,0")	49.28	12.77	31.69	19.05	C
P2752.25A20NP	Neoprene	20	63,5 (2,5")	23.37	12.77	31.69	9.52	C
P2752.25A35NP	Neoprene	35	63,5 (2,5")	23.37	12.77	31.69	9.52	C
P2752.25A60NP	Neoprene	60	63,5 (2,5")	23.37	12.77	31.69	9.52	C
P2752.25A80NP	Neoprene	80	63,5 (2,5")	23.37	12.77	31.69	9.52	C
P2752.25B20NP	Neoprene	20	63,5 (2,5")	49.28	12.77	31.69	19.05	C
P2752.25B35NP	Neoprene	35	63,5 (2,5")	49.28	12.77	31.69	19.05	C
P2752.25B60NP	Neoprene	60	63,5 (2,5")	49.28	12.77	31.69	19.05	C
P2752.25B80NP	Neoprene	80	63,5 (2,5")	49.28	12.77	31.69	19.05	C
P2752.40A20NP	Neoprene	20	101,6 (4,0")	23.37	12.77	31.69	9.52	B
P2752.40A35NP	Neoprene	35	101,6 (4,0")	23.37	12.77	31.69	9.52	B
P2752.40A60NP	Neoprene	60	101,6 (4,0")	23.37	12.77	31.69	9.52	B
P2752.40A80NP	Neoprene	80	101,6 (4,0")	23.37	12.77	31.69	9.52	B
P2752.40B20NP	Neoprene	20	101,6 (4,0")	49.28	12.77	31.69	19.05	C



### Product overview



**Solid rollers** - have a smooth surface and a solid body



**Durasoft rollers** - have a smooth contact surface with teardrop holes to allow greater roller compression under load.



**Finned rollers** - are grooved and provide self-cleaning as dirt, debris and liquid pass under the contact surface of the roller.

### Durability levels



20 durometer:  
Stiff foam rubber



35 durometer:  
Pencil rubber top



60 durometer:  
Car tyre

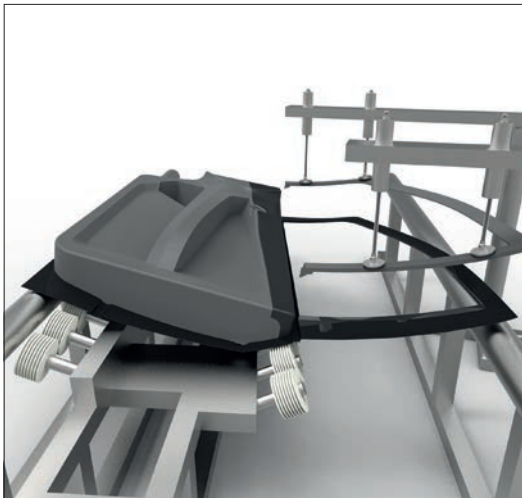


80 durometer:  
Skateboard wheel



90 durometer:  
Hockey puck

### Applications



Rollers are used in car manufacturing to guide and align doors during bonding and curing applications



Bumpers have found their way into commercial exercise equipment to provide protection and stability during use.



## Materials colour guide and properties

### Nitrile and neoprene



Nitrile - one colour



Neoprene - one colour

### Urethane



35 Durometer (Yellow)



60 Durometer (Blue)



80 Durometer (Red)



95 Durometer (Orange)

## Material properties

Base Elastomer	Chemical Name	Advantages	Disadvantages	Max. Temp	Min. Temp
Nitrile	Nitrile Butadiene	Resistant to petroleum, oil, alcohol & abrasion.	Affected by degreaser solvents.	Continuous 79°C Intermittent 107°C	-51°C
Neoprene	Chloroprene	Flame and weather resistant. Resistant to Petroleum, oil, ozone & high temp.	Affected by phosphate hydraulic fluids, aromatic hydrocarbons.	Continuous 93°C Intermittent 121°C	-40°C
Urethane	Di-Isocyanate Polyurethane	Highest abrasion resistance, strength & load bearing. High elongation, hardness. Resistance to Ozone & Oxygen.	Affected by ether, esters, acid, aromatics, alkalis.	Continuous 93°C Intermittent 121°C	-54°C

Property:	Nitrile	Neoprene	Urethane	
Tensile Strength	✓ ✓	✓ ✓ ✓	✓ ✓ ✓ ✓	
Ozone Resistance	✓	✓ ✓	✓ ✓ ✓ ✓	
Cut Resistance	✓ ✓	✓ ✓ ✓	✓ ✓ ✓ ✓	
Abrasion Resistance	✓ ✓	✓ ✓ ✓	✓ ✓ ✓ ✓	
Resistance To:	Nitrile	Neoprene	Urethane	
Compression Set	✓ ✓	✓ ✓ ✓	✓ ✓ ✓	
ASTM #1 Oil	✓ ✓ ✓ ✓	✓ ✓	✓ ✓ ✓ ✓	
ASTM #2 Oil	✓ ✓ ✓ ✓	✓ ✓	✓ ✓ ✓ ✓	
Reference Fuel B	✓ ✓ ✓	✓ ✓	✓ ✓ ✓ ✓	
Ketones: MEK	✓	✓ ✓	✓	
Aromatics: Toluene	✓ ✓ ✓	✓	✓ ✓ ✓ ✓	
Aliphatics: Hexane	✓ ✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓ ✓	
Ethyl Acetate	✓	✓ ✓ ✓	✓	
Cellosolve	✓ ✓	✓ ✓ ✓ ✓	✓	
Methylene Chloride	✓	✓	✓ ✓ ✓ ✓	
Trichloroethylene	✓	✓	✓ ✓ ✓ ✓	
Diethylene Glycol	✓ ✓ ✓ ✓	✓ ✓ ✓ ✓	✓ ✓ ✓	
Isopropyl Alcohol	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	
Caustics: 10% NaOH	✓ ✓ ✓	✓ ✓ ✓	✓	
Acids: H2SO4	✓ ✓	✓ ✓ ✓	✓	
Excellent	✓ ✓ ✓ ✓	Good ✓ ✓ ✓	Fair ✓ ✓	Poor ✓



#### Standard bearings

Bearing Type	Inside diameter (inches)	Outside diameter (inches)	Width (inches)	Load (Kg)	Speed (rpm)
A - Standard Double	.313/.317	.870/.875	.498/.502	55	50
				36	100
				24	250
				20	500
B - Standard Single	.500/.505	1.245/1.250	.370/.380	119	50
				79	100
				51	250
				47	500
C - Standard Double	.500/.505	1.245/1.250	.745/.755	192	50
				128	100
				83	250
				70	500

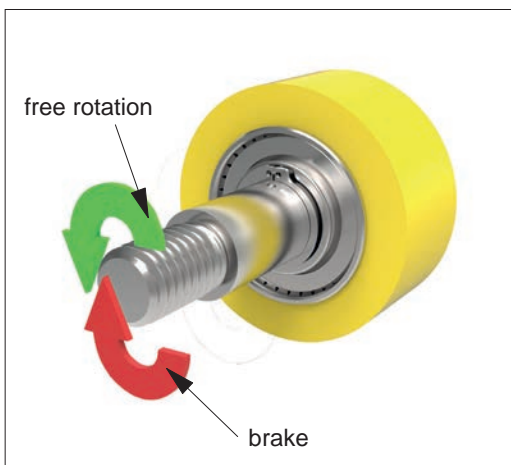
With the calculations above, typical life is approximately 2500 hours.

#### Clutch bearings

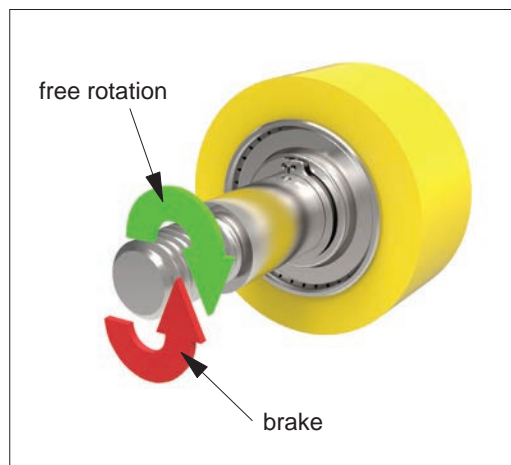
Bearing Type	Inside diameter (inches)	Outside diameter (inches)	Width (inches)	Load (Kg)	Speed (rpm)
H	.3745/.3750	.6245/.6255	.865/.875	167	33
				146	50
				116	100
				85	250
I	.6245/.6250	.8745/.8755	.990/1.000	277	33
				242	50
				192	100
				142	250

With the calculations above, typical life is approximately 1,000,000 revolutions or 500 hours. The bearings are shielded and pre-lubricated for life with grease.

A clutch roller can only be used in one direction, as shown. See data table for clutch direction of particular part.



Left clutch bearing



Right clutch bearing