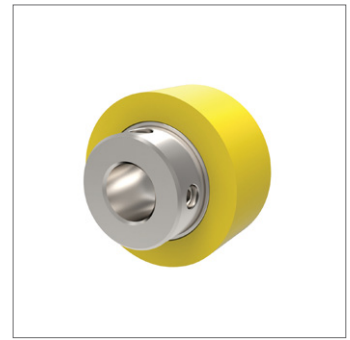
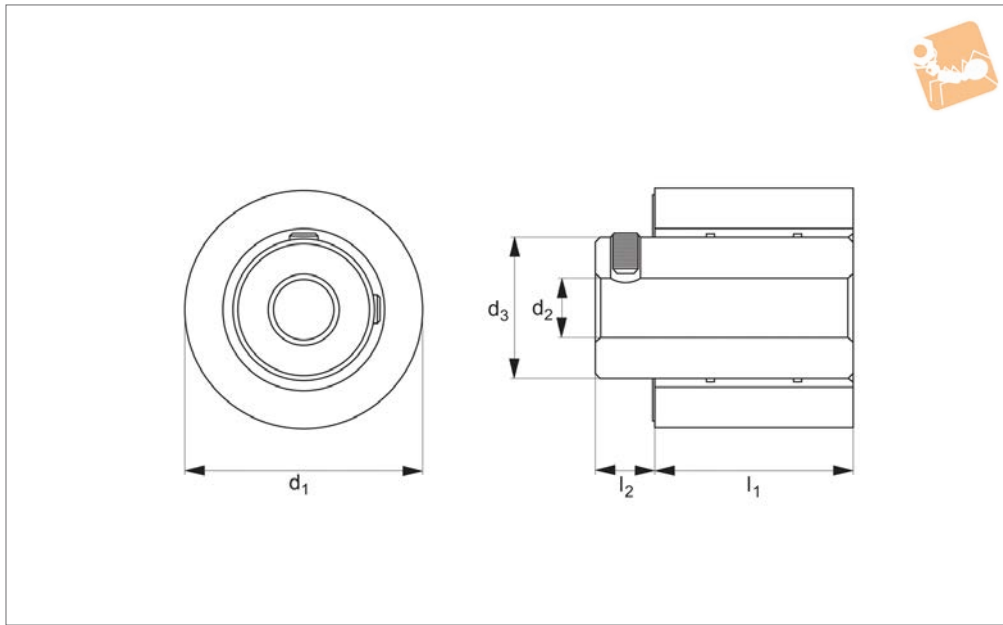




Solid Roller shaft drive



P2756

MATERIAL HANDLING

Material

Nitrile, urethane or neoprene bonded to a steel insert.

Hardness from 20-80 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°.

Order No.	Material	Durometer	d ₁	l ₁	d ₂	d ₃	l ₂
P2756.20A60NI	Nitrile	60	50,80 (2,0")	31,75	23,37	12,72/12,83	12,70
P2756.20C20NI	Nitrile	20	50,80 (2,0")	31,75	49,28	12,73/12,83	12,70
P2756.20C60NI	Nitrile	60	50,80 (2,0")	31,75	49,28	12,73/12,83	12,70
P2756.20D20NI	Nitrile	20	50,80 (2,0")	31,75	49,28	19,08/19,20	12,70
P2756.20D60NI	Nitrile	60	50,80 (2,0")	31,75	49,28	19,08/19,20	12,70
P2756.25A20NI	Nitrile	20	63,50 (2,5")	31,75	23,37	12,73/12,83	12,70
P2756.25A60NI	Nitrile	60	63,50 (2,5")	31,75	23,37	12,73/12,83	12,70
P2756.25B20NI	Nitrile	20	63,50 (2,5")	34,79	23,37	19,08/19,20	12,70
P2756.25B60NI	Nitrile	60	63,50 (2,5")	34,79	23,37	19,08/19,20	12,70
P2756.25C20NI	Nitrile	20	63,50 (2,5")	31,75	49,28	12,73/12,83	12,70
P2756.25C60NI	Nitrile	60	63,50 (2,5")	31,75	49,28	12,73/12,83	12,70
P2756.25D20NI	Nitrile	20	63,50 (2,5")	31,75	49,28	19,08/19,20	12,70
P2756.25D60NI	Nitrile	60	63,50 (2,5")	31,75	49,28	19,08/19,20	12,70
P2756.40A20NI	Nitrile	20	101,6 (4,0")	31,75	23,37	12,73/12,83	12,70
P2756.40A60NI	Nitrile	60	101,6 (4,0")	31,75	23,37	12,73/12,83	12,70
P2756.40B20NI	Nitrile	20	101,6 (4,0")	31,75	23,37	19,08/19,20	12,70
P2756.40B60NI	Nitrile	60	101,6 (4,0")	31,75	23,37	19,08/19,20	12,70
P2756.40C20NI	Nitrile	20	101,6 (4,0")	31,75	49,28	12,73/12,83	12,70
P2756.40C60NI	Nitrile	60	101,6 (4,0")	31,75	49,28	12,73/12,83	12,70
P2756.40D20NI	Nitrile	20	101,6 (4,0")	31,75	49,28	19,08/19,20	12,70
P2756.40D60NI	Nitrile	60	101,6 (4,0")	31,75	49,28	19,08/19,20	12,70
P2756.40E60NI	Nitrile	60	101,6 (4,0")	34,80	49,28	31,78/31,90	12,70
P2756.15A35UR	Urethane	35	38,10 (1,5")	22,36	31,75	12,72/12,83	9,65
P2756.15A60UR	Urethane	60	38,10 (1,5")	22,36	31,75	12,72/12,83	9,65
P2756.15A80UR	Urethane	80	38,10 (1,5")	22,36	31,75	12,72/12,83	9,65
P2756.20A60UR	Urethane	60	50,80 (2,0")	31,75	23,37	12,72/12,83	12,70
P2756.20A80UR	Urethane	80	50,80 (2,0")	31,75	23,37	12,72/12,83	12,70
P2756.20C60UR	Urethane	60	50,80 (2,0")	31,75	49,28	12,73/12,83	12,70
P2756.20D35UR	Urethane	35	50,80 (2,0")	31,75	49,28	19,08/19,20	12,70
P2756.20D80UR	Urethane	80	50,80 (2,0")	31,75	49,28	19,08/19,20	12,70
P2756.25B35UR	Urethane	35	63,50 (2,5")	34,79	23,37	19,08/19,20	12,70
P2756.25B80UR	Urethane	80	63,50 (2,5")	34,79	23,37	19,08/19,20	12,70
P2756.25C60UR	Urethane	60	63,50 (2,5")	31,75	49,28	12,73/12,83	12,70
P2756.25D35UR	Urethane	35	63,50 (2,5")	31,75	49,28	19,08/19,20	12,70
P2756.25D80UR	Urethane	80	63,50 (2,5")	31,75	49,28	19,08/19,20	12,70



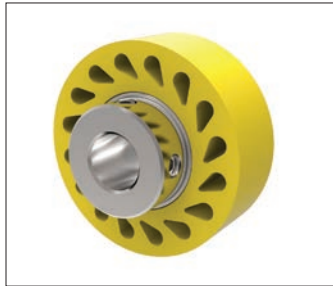
Order No.	Material	Durometer	d ₁	l ₁	d ₂	d ₃	l ₂
P2756.40A35UR	Urethane	35	101,6 (4,0")	31.75	23.37	12,73/12,83	12.70
P2756.40A80UR	Urethane	80	101,6 (4,0")	31.75	23.37	12,73/12,83	12.70
P2756.40B60UR	Urethane	60	101,6 (4,0")	31.75	23.37	19,08/19,20	12.70
P2756.40C35UR	Urethane	35	101,6 (4,0")	31.75	49.28	12,73/12,83	12.70
P2756.40C80UR	Urethane	80	101,6 (4,0")	31.75	49.28	12,73/12,83	12.70
P2756.40E80UR	Urethane	80	101,6 (4,0")	34.80	49.28	31,78/31,90	12.70
P2756.50A35UR	Urethane	35	127,0 (5,0")	31.75	49.28	12,72/12,83	12.70
P2756.50A60UR	Urethane	60	127,0 (5,0")	31.75	49.28	12,72/12,83	12.70
P2756.50B35UR	Urethane	35	127,0 (5,0")	31.75	49.28	19,07/19,20	12.70
P2756.50B80UR	Urethane	80	127,0 (5,0")	31.75	49.28	19,07/19,20	12.70
P2756.60B35UR	Urethane	35	152,4 (6,0")	31.75	49.28	19,08/19,20	12.70
P2756.20A20NP	Neoprene	20	50,80 (2,0")	31.75	23.37	12,72/12,83	12.70
P2756.20A60NP	Neoprene	60	50,80 (2,0")	31.75	23.37	12,72/12,83	12.70
P2756.20C20NP	Neoprene	20	50,80 (2,0")	31.75	49.28	12,73/12,83	12.70
P2756.20C60NP	Neoprene	60	50,80 (2,0")	31.75	49.28	12,73/12,83	12.70
P2756.20D20NP	Neoprene	20	50,80 (2,0")	31.75	49.28	19,08/19,20	12.70
P2756.20D60NP	Neoprene	60	50,80 (2,0")	31.75	49.28	19,08/19,20	12.70
P2756.25A20NP	Neoprene	20	63,50 (2,5")	31.75	23.37	12,73/12,83	12.70
P2756.25A60NP	Neoprene	60	63,50 (2,5")	31.75	23.37	12,73/12,83	12.70
P2756.25B20NP	Neoprene	20	63,50 (2,5")	34.79	23.37	19,08/19,20	12.70
P2756.25B60NP	Neoprene	60	63,50 (2,5")	34.79	23.37	19,08/19,20	12.70
P2756.25C20NP	Neoprene	20	63,50 (2,5")	31.75	49.28	12,73/12,83	12.70
P2756.25C60NP	Neoprene	60	63,50 (2,5")	31.75	49.28	12,73/12,83	12.70
P2756.25D20NP	Neoprene	20	63,50 (2,5")	31.75	49.28	19,08/19,20	12.70
P2756.25D60NP	Neoprene	60	63,50 (2,5")	31.75	49.28	19,08/19,20	12.70
P2756.40A20NP	Neoprene	20	101,6 (4,0")	31.75	23.37	12,73/12,83	12.70
P2756.40A60NP	Neoprene	60	101,6 (4,0")	31.75	23.37	12,73/12,83	12.70
P2756.40B20NP	Neoprene	20	101,6 (4,0")	31.75	23.37	19,08/19,20	12.70
P2756.40B60NP	Neoprene	60	101,6 (4,0")	31.75	23.37	19,08/19,20	12.70
P2756.40C20NP	Neoprene	20	101,6 (4,0")	31.75	49.28	12,73/12,83	12.70
P2756.40C60NP	Neoprene	60	101,6 (4,0")	31.75	49.28	12,73/12,83	12.70
P2756.40D20NP	Neoprene	20	101,6 (4,0")	31.75	49.28	19,08/19,20	12.70
P2756.40D60NP	Neoprene	60	101,6 (4,0")	31.75	49.28	19,08/19,20	12.70
P2756.40E35UR	Neoprene	60	101,6 (4,0")	34.80	49.28	31,78/31,90	12.70
P2756.40E60NP	Neoprene	60	101,6 (4,0")	34.80	49.28	31,78/31,90	12.70



Product overview



Solid rollers - have a smooth surface and a solid body



Durossoft 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

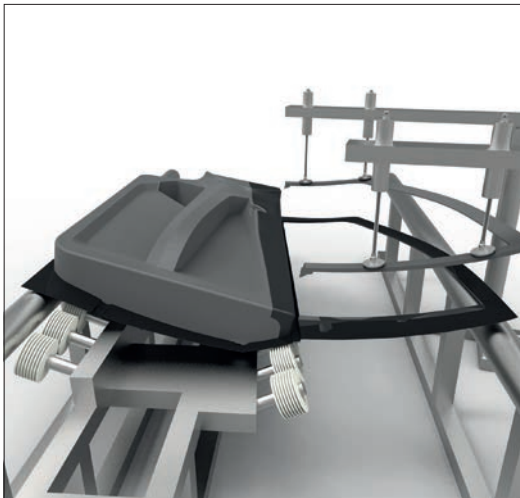


80 durometer:
Skateboard wheel



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 ✓



The tables below show the maximum theoretical radius loads that can be applied to the respective bearings. Refer to individual product tables to identify bearing type supplied with roller.

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

Standard bearings

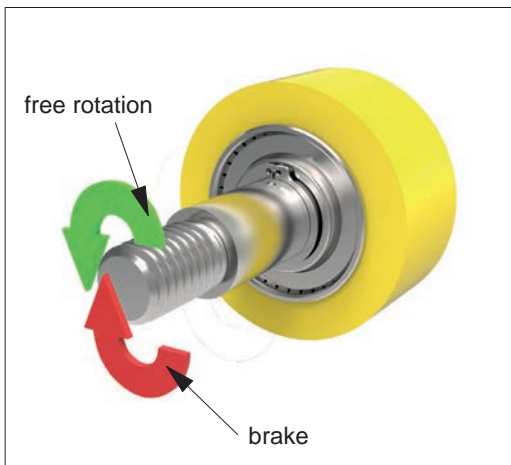
With the calculations above, typical life is approximately 2500 hours.

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

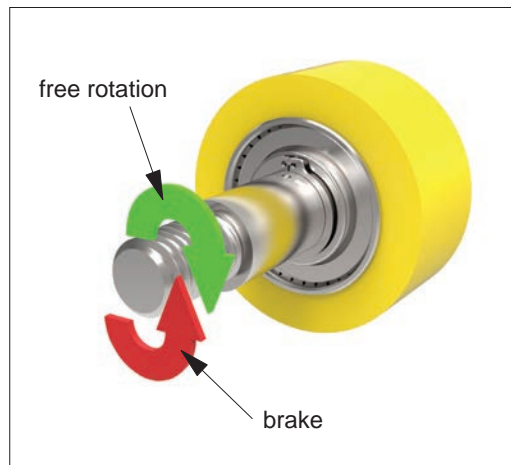
Clutch bearings

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