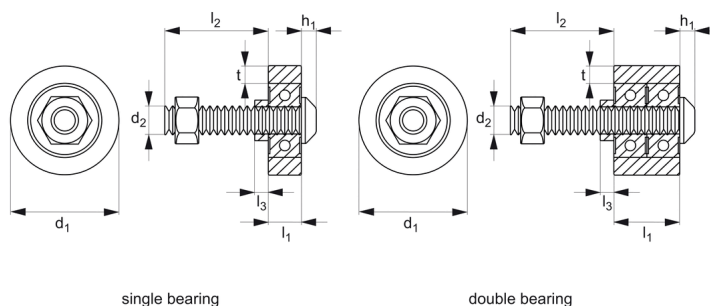




Urethane Covered Bearings stud mounted

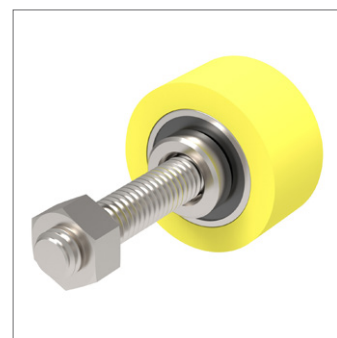


Rollers & Bumpers



single bearing

double bearing



60614

ROLLERS & BUMPERS

Material

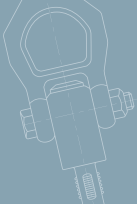
Urethane cast directly to a precision sealed ball bearing. Hardness from 35-95 durometer (Shore A).

Technical Notes

These bearings provide a smooth, quiet and non-marring operation. Urethane provides excellent durability and resi-

stance to abrasion. Assembled with button head cap screw, spacer and lock nut.

Order No.	Bearing type	Durometer	d ₁	l ₁	d ₂	l ₂	d ₃	t	h
60614.W1003	Double	35	20	10	M5x0.8	25	3	3	2.75
60614.W1006	Double	60	20	10	M5x0.8	25	3	3	2.75
60614.W1009	Double	95	20	10	M5x0.8	25	3	3	2.75
60614.W1013	Double	35	25	12	M6x1.0	28	3	3	3.3
60614.W1016	Double	60	25	12	M6x1.0	28	3	3	3.3
60614.W1019	Double	95	25	12	M6x1.0	28	3	3	3.3
60614.W1023	Double	35	30	14	M8x1.25	26	3	4	4.4
60614.W1026	Double	60	30	14	M8x1.25	26	3	4	4.4
60614.W1029	Double	95	30	14	M8x1.25	26	3	4	4.4
60614.W1033	Double	35	35	16	M10x1.5	29	3	4.5	5.5
60614.W1036	Double	60	35	16	M10x1.5	29	3	4.5	5.5
60614.W1039	Double	95	35	16	M10x1.5	29	3	4.5	5.5
60614.W1043	Double	35	40	16	M10x1.5	29	3	7	5.5
60614.W1046	Double	60	40	16	M10x1.5	29	3	7	5.5
60614.W1049	Double	95	40	16	M10x1.5	29	3	7	5.5
60614.W1053	Double	35	40	16	M12x1.75	29	3	6	6.6
60614.W1056	Double	60	40	16	M12x1.75	29	3	6	6.6
60614.W1059	Double	95	40	16	M12x1.75	29	3	6	6.6
60614.W1063	Double	35	50	16	M12x1.75	29	3	11	6.6
60614.W1066	Double	60	50	16	M12x1.75	29	3	11	6.6
60614.W1069	Double	95	50	16	M12x1.75	29	3	11	6.6
60614.W0003	Single	35	20	5	M5x0.8	30	3	3	2.75
60614.W0006	Single	60	20	5	M5x0.8	30	3	3	2.75
60614.W0009	Single	95	20	5	M5x0.8	30	3	3	2.75
60614.W0013	Single	35	25	6	M6x1.0	34	3	3	3.3
60614.W0016	Single	60	25	6	M6x1.0	34	3	3	3.3
60614.W0019	Single	95	25	6	M6x1.0	34	3	3	3.3
60614.W0023	Single	35	30	7	M8x1.25	33	3	4	4.4
60614.W0026	Single	60	30	7	M8x1.25	33	3	4	4.4
60614.W0029	Single	95	30	7	M8x1.25	33	3	4	4.4
60614.W0033	Single	35	35	8	M10x1.5	37	3	4.5	5.5
60614.W0036	Single	60	35	8	M10x1.5	37	3	4.5	5.5
60614.W0039	Single	95	35	8	M10x1.5	37	3	4.5	5.5
60614.W0043	Single	35	40	8	M10x1.5	37	3	7	5.5
60614.W0046	Single	60	40	8	M10x1.5	37	3	7	5.5

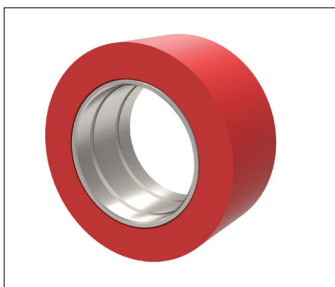


Order No.	Bearing type	Durometer	d ₁	l ₁	d ₂	l ₂	d ₃	t	h
60614.W0049	Single	95	40	8	M10x1.5	37	3	7	5.5
60614.W0053	Single	35	40	8	M12x1.75	37	3	6	6.6
60614.W0056	Single	60	40	8	M12x1.75	37	3	6	6.6
60614.W0059	Single	95	40	8	M12x1.75	37	3	6	6.6
60614.W0063	Single	35	50	8	M12x1.75	37	3	11	6.6
60614.W0066	Single	60	50	8	M12x1.75	37	3	11	6.6
60614.W0069	Single	95	50	8	M12x1.75	37	3	11	6.6

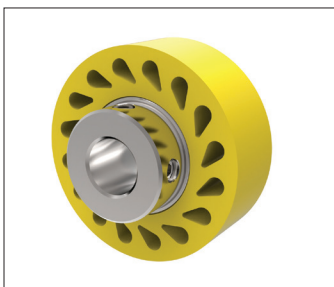


Wixroyd Rollers

Product overview



Solid rollers - have a smooth surface and a solid body

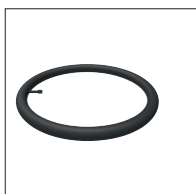


Durasoft rollers - have a smooth contact surface with teardrop holes to allow greater roller compression under load.

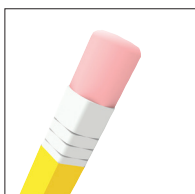


Finned rollers - are grooved and provide self-cleaning as dirt, debris and liquid pass under the contact surface of the roller.

Durability levels



20 durometer:
Stiff foam rubber



35 durometer:
Pencil rubber top



60 durometer:
Car tyre

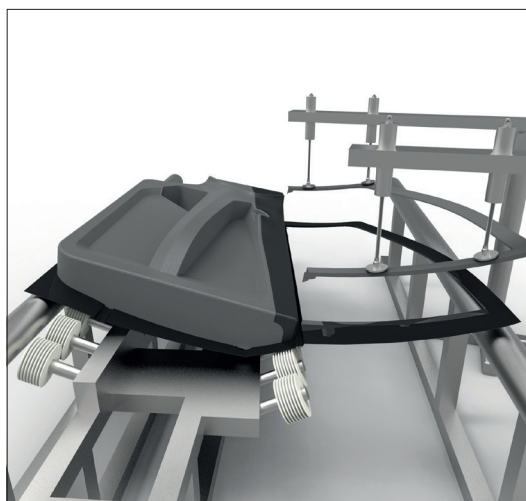


80 durometer:
Skateboard wheel

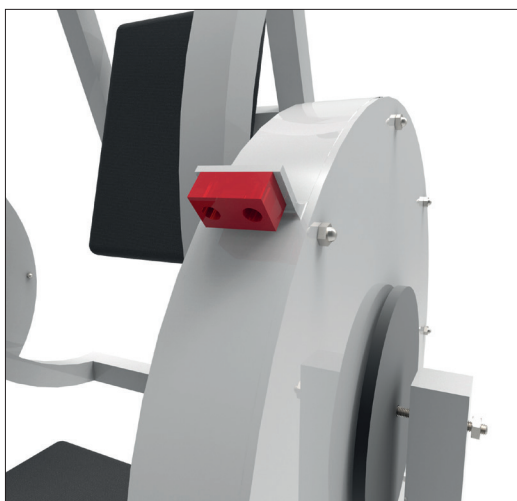


90 durometer:
Hockey puck

Applications



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

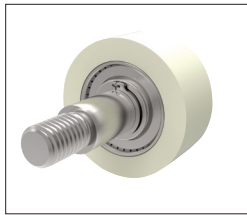


Bumpers have found their way into commercial exercise equipment to provide protection and stability during use.



Materials colour guide and properties

Nitrile and neoprene

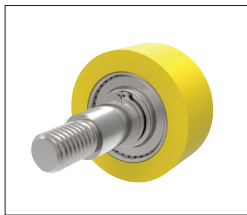


Nitrile - one colour

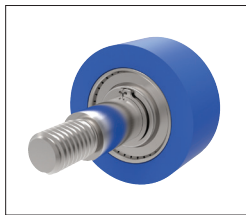


Neoprene - one colour

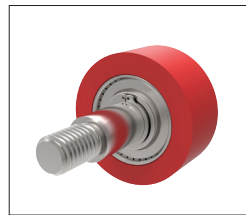
Urethane



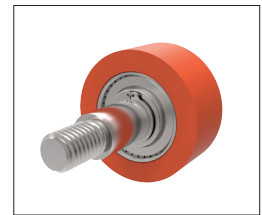
35 Durometer (Yellow)



60 Durometer (Blue)



80 Durometer (Red)

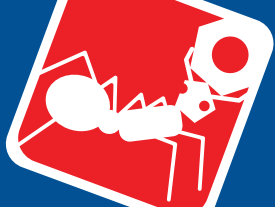


95 Durometer (Orange)

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 ✓



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.

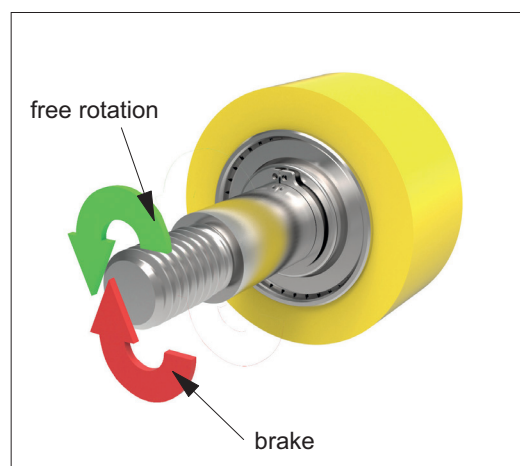
Bearing Type	Inside diameter (inches)	Outside diameter (inches)	Width (inches)	Load (Kg)	Speed (rpm)
A - Standard Double	.313/.317	.870/.875	.498/.502	55	50
				36	100
				24	250
				20	500
B - Standard Single	.500/.505	1.245/1.250	.370/.380	119	50
				79	100
				51	250
				47	500
C - Standard Double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

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

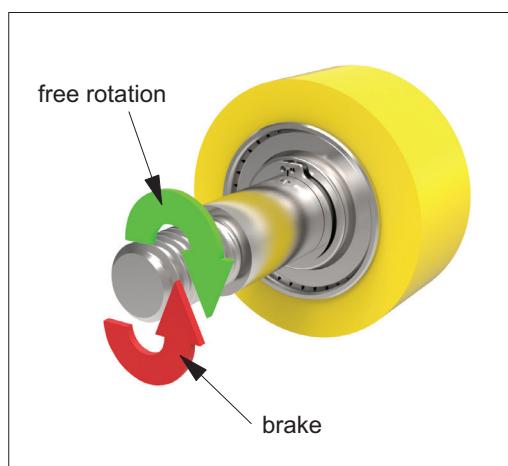
Bearing Type	Inside diameter (inches)	Outside diameter (inches)	Width (inches)	Load (Kg)	Speed (rpm)
H	.3745/.3750	.6245/.6255	.865/.875	167	33
				146	50
				116	100
				85	250
I	.6245/.6250	.8745/.8755	.990/1.000	277	33
				242	50
				192	100
				142	250

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

Standard bearings

Clutch bearings