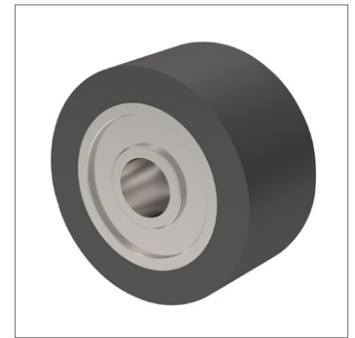
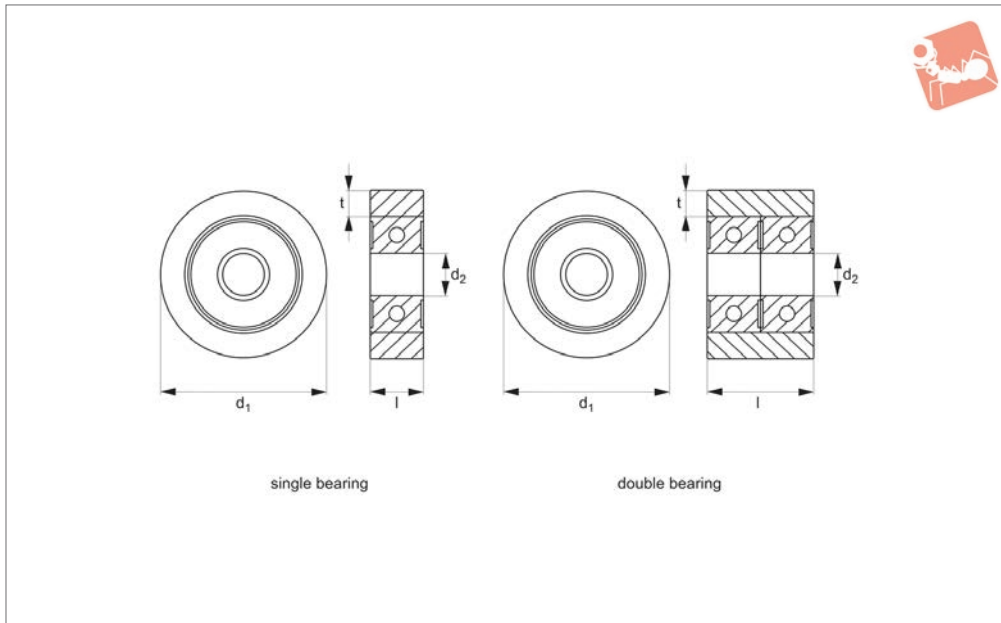




# Urethane Covered Bearings

bearing only

# Rollers & Bumpers



**60610**

ROLLERS & BUMPERS

### Material

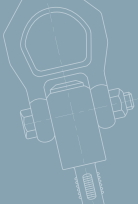
Urethane cast directly to a precision sealed ball bearing. Hardness from 35-95 durometer (Shore A).

### Technical Notes

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

stance to abrasion.

Order No.	Bearing type	Durometer	d <sub>1</sub>	d <sub>2</sub>	l	t
60610.W0003	Single	35	20	5	5	3
60610.W0006	Single	60	20	5	5	3
60610.W0009	Single	95	20	5	5	3
60610.W0013	Single	35	25	6	6	3
60610.W0016	Single	60	25	6	6	3
60610.W0019	Single	95	25	6	6	3
60610.W0023	Single	35	30	8	7	4
60610.W0026	Single	60	30	8	7	4
60610.W0029	Single	95	30	8	7	4
60610.W0033	Single	35	35	9	7	6
60610.W0036	Single	60	35	9	7	6
60610.W0039	Single	95	35	9	7	6
60610.W0043	Single	35	35	10	8	5
60610.W0046	Single	60	35	10	8	5
60610.W0049	Single	95	35	10	8	5
60610.W0053	Single	35	40	10	8	7
60610.W0056	Single	60	40	10	8	7
60610.W0059	Single	95	40	10	8	7
60610.W0063	Single	35	40	12	8	6
60610.W0066	Single	60	40	12	8	6
60610.W0069	Single	95	40	12	8	6
60610.W0073	Single	35	50	12	8	11
60610.W0076	Single	60	50	12	8	11
60610.W0079	Single	95	50	12	8	11
60610.W0089	Single	95	45	15	9	7
60610.W0099	Single	95	50	17	10	8
60610.W0109	Single	95	60	20	12	9
60610.W1003	Double	35	20	5	10	3
60610.W1006	Double	60	20	5	10	3
60610.W1009	Double	95	20	5	10	3
60610.W1013	Double	35	25	6	12	3
60610.W1016	Double	60	25	6	12	3
60610.W1019	Double	95	25	6	12	3
60610.W1023	Double	35	30	8	14	4
60610.W1026	Double	60	30	8	14	4



Order No.	Bearing type	Durometer	d <sub>1</sub>	d <sub>2</sub>	l	t
60610.W1029	Double	95	30	8	14	4
60610.W1033	Double	35	35	9	14	6
60610.W1036	Double	60	35	9	14	6
60610.W1039	Double	95	35	9	14	6
60610.W1043	Double	35	35	10	16	5
60610.W1046	Double	60	35	10	16	5
60610.W1049	Double	95	35	10	16	5
60610.W1053	Double	35	40	10	16	7
60610.W1056	Double	60	40	10	16	7
60610.W1059	Double	95	40	10	16	7
60610.W1063	Double	35	40	12	16	6
60610.W1066	Double	60	40	12	16	6
60610.W1069	Double	95	40	12	16	6
60610.W1073	Double	35	50	12	16	11
60610.W1076	Double	60	50	12	16	11
60610.W1079	Double	95	50	12	16	11
60610.W1089	Double	95	45	15	18	7
60610.W1099	Double	95	50	17	20	8
60610.W1109	Double	95	60	20	24	9
60610.W1119	Double	95	70	25	24	12
60610.W0119	Single	95	70	25	12	12

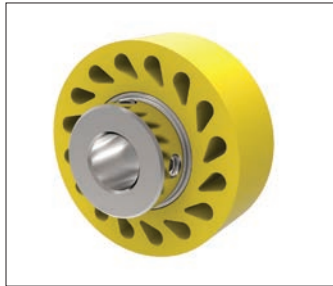


### Wixroyd Rollers

#### 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

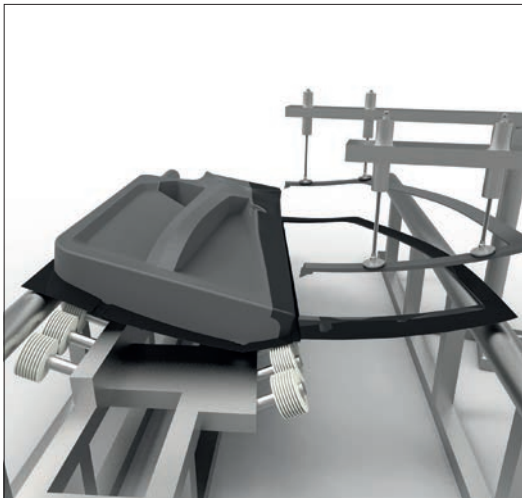


80 durometer:  
Skateboard wheel



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

### Standard bearings

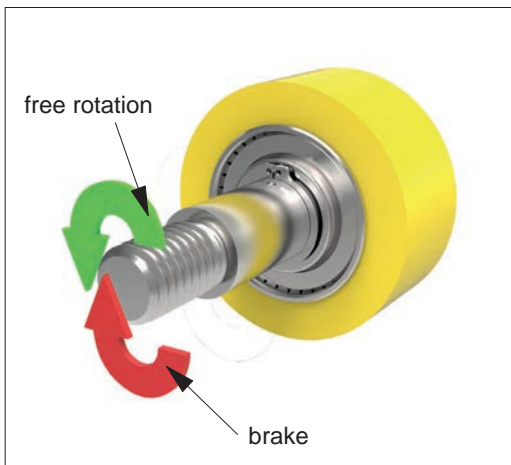
With the calculations above, typical life is approximately 2500 hours.

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

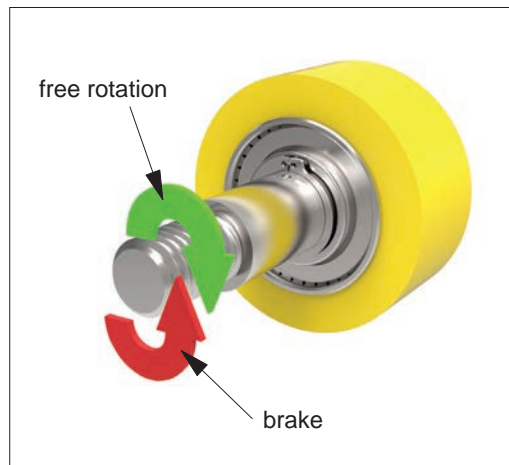
### Clutch bearings

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