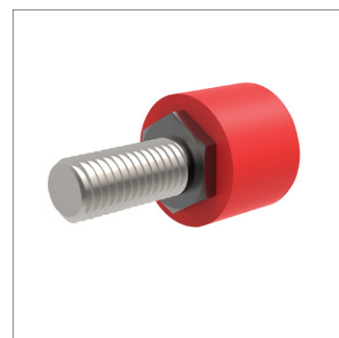
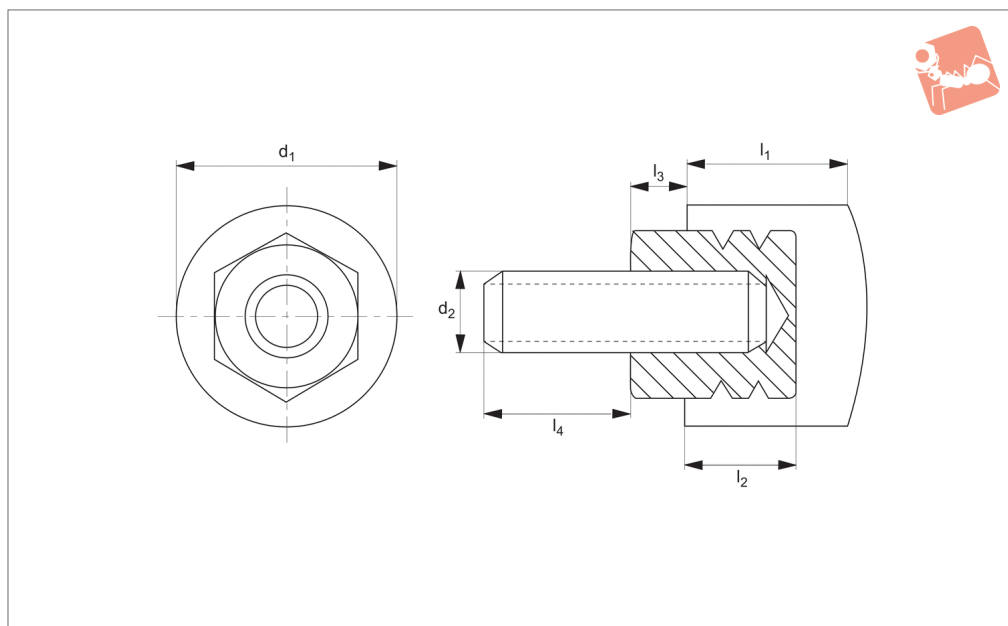




Metric Bumpers with Hex Shoulder - male



Rollers & Bumpers



60890

ROLLERS & BUMPERS

Material

Black Neoprene: flame and weather resistant. Resists: oil, ozone and gasoline. Temperature resistance: -5°C to +93°C (shortly +120°C).

Urethane: highly abrasion resistant, high strength and load bearing. High elonga-

tion and hardness. Resists ozone and oxygen. Temperature resistance: -18°C to +93°C (shortly +120°C).

Technical Notes

Bumpers are moulded to solid steel cores. They are used to guard, stop, align, posi-

tion, or protect parts through stages of manufacturing.

Tips

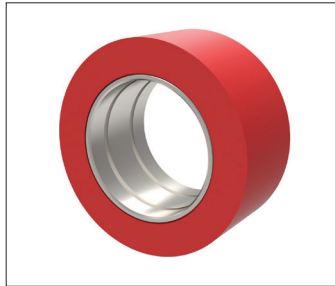
All dimensions metric.

Order No.	Material	l_1	d_1	d_2	l_2	l_3	l_4
60890.W0501	Neoprene	16	19	M 6 x 1,00	9	3.2	15
60890.W0502	Neoprene	16	19	M 6 x 1,00	9	3.2	30
60890.W0503	Neoprene	16	19	M 8 x 1,25	9	4.0	15
60890.W0504	Neoprene	16	19	M 8 x 1,25	9	4.0	30
60890.W0701	Urethane	16	19	M 6 x 1,00	9	3.2	15
60890.W0702	Urethane	16	19	M 6 x 1,00	9	3.2	30
60890.W0703	Urethane	16	19	M 8 x 1,25	9	4.0	15
60890.W0704	Urethane	16	19	M 8 x 1,25	9	4.0	30

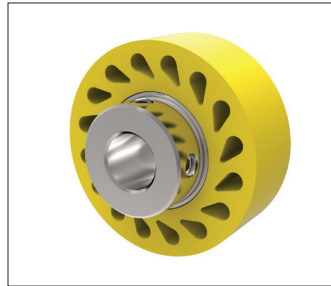


Wixroyd Rollers

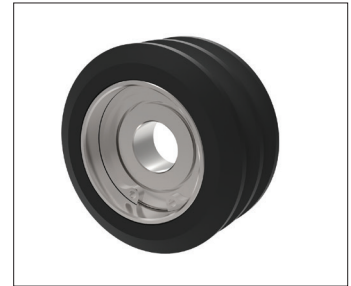
Product overview



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.

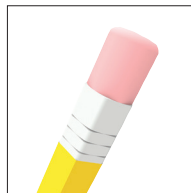


Finned rollers - are grooved and provide self-cleaning as dirt, debris and liquid pass under the contact surface of the roller.

Durability levels



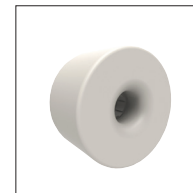
20 durometer:
Stiff foam rubber



35 durometer:
Pencil rubber top



60 durometer:
Car tyre

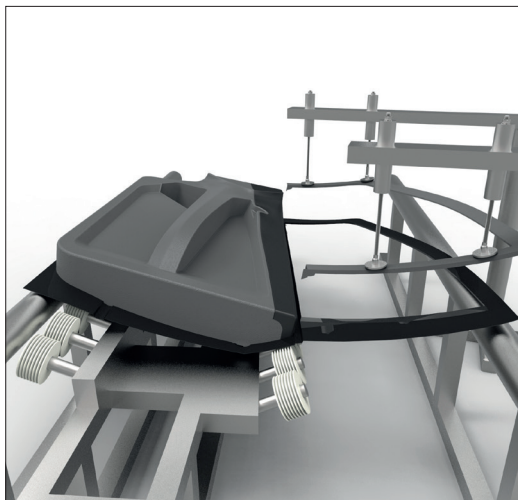


80 durometer:
Skateboard wheel



90 durometer:
Hockey puck

Applications



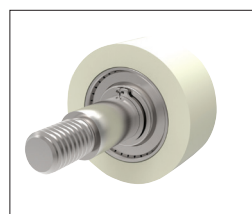
Rollers are used in car manufacturing to guide and align doors during bonding and curing applications



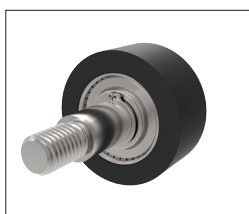
Bumpers have found their way into commercial exercise equipment to provide protection and stability during use.



Materials colour guide and properties

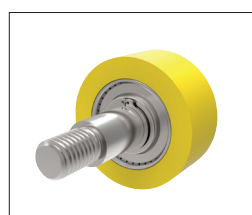


Nitrile - one colour

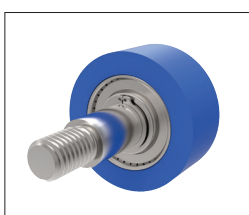


Neoprene - one colour

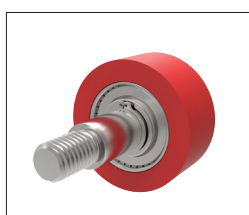
Nitrile and neoprene



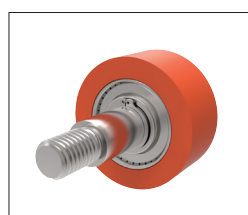
35 Durometer (Yellow)



60 Durometer (Blue)



80 Durometer (Red)



95 Durometer (Orange)

Urethane

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

Material properties

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.

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

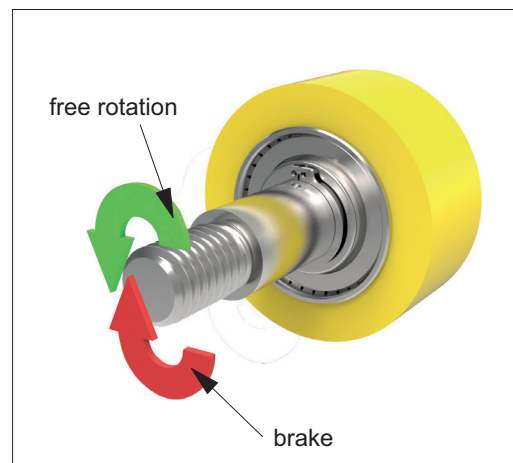
With the calculations above, typical life is approximately 2500 hours.

Clutch bearings

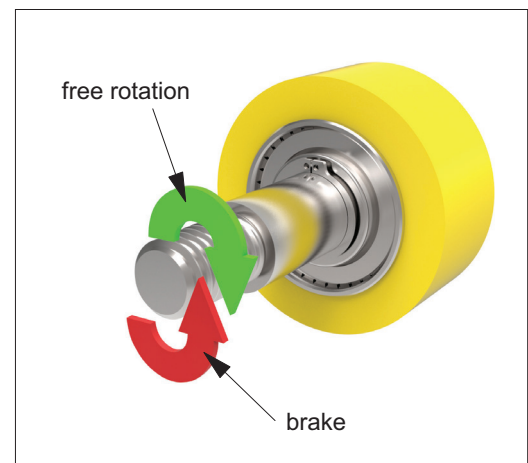
Bearing Type	Inside diameter (inches)	Outside diameter (inches)	Width (inches)	Load (Kg)	Speed (rpm)
H	.3745/.3750	.6245/.6255	.865/.875	167	33
				146	50
				116	100
				85	250
I	.6245/.6250	.8745/.8755	.990/1.000	277	33
				242	50
				192	100
				142	250

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