



ROLcon

2021

**Quality
replacement
conveyor
rollers**

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A warm welcome from Rolcon

The Rolcon business was founded in 1988 by two firm friends who shared a passion for delivering the highest quality engineering solutions. Today, Rolcon continues to thrive as a family business steered by the next generation of its founders, with equal passion and the same solid values of integrity, quality and customer service.



Industry innovators

Did you know it was the Rolcon team that first developed the conveyor roller that's spring-loaded at each end? It's now the industry standard of course. We were also first to market with the patented frame-saving, cartridge-bearing assembly that delivers enhanced productivity.

Our multi-industry experience helps us better understand all operations' needs to solve your issues creatively, no matter how big or small.

Problem solvers

Innovation focussed on providing solutions for maximum productivity is what we do at Rolcon. Our mission is to find what works best for your business. Whether that's a custom-sized roller or an improved lead-time, our specialist team provide a personalized service to reach the right solution for you. We're here to help with all your conveyor roller queries, from pricing to availability and product applications.

Lasting results

Part of the Rolcon experience is receiving lasting results. We will improve your existing system to last longer and perform better. We can help you with solutions that tackle common problems by:

- Improving costs by extending your current system's life.
- Reducing vibrations throughout the system, preventing wear on other necessary machine parts.
- Solving noise problems by improving overall performance, helping with Occupational Safety & Health Administration (OSHA) compliance.
- Offering expedited shipping so you can get your materials quickly.

Custom solutions

We can work with you to achieve the perfect conveyor system for your business. At Rolcon, we understand that every operation is unique. Every business operates under different industry and company guidelines. We design our custom solutions to give you exactly what you need to get the job done.

Rolcon offers many different tube, axle, and bearing combinations for gravity and powered applications. This Catalog focuses on our offering of standard, pre-engineered rollers and can be used for guidance when selecting standard rollers. For custom roller applications, please contact Rolcon customer service at 800-486-2472 or sales@rolconrollers.com. We appreciate your business and hope that you find this catalog useful.

Tube sizes & material options

- Tube diameters range from 3/4" to 3"
- Tube is specified by the Outer Diameter (OD) and tube wall thickness
- Pipe is specified by the Inner Diameter (ID) and a schedule number that represents wall thickness
- Roller tubes are available in the following materials:
 - Mild (low carbon) steel
 - Galvanized steel
 - Stainless steel
 - Aluminum
 - PVC (pipe)
 - Industrial steel pipe

Axle retention & material options

- Axles up to 3/4" (dia or hex) are available with the spring or cotter pin retention
- Axles larger than 3/4" (dia or hex) are not available with the spring retention
- Round axles 3/4" dia and larger are available with D-end retention
- Axles, springs and cotter pins are available in carbon steel and stainless steel
- Other retention styles are available upon request

Construction

Crimped / Swaged – Tube material is formed down over the bearing to hold it in place. Bearings installed in this manner are non-replaceable.

Counter Bored / Press Fit – Tube is counter bored to the correct inside diameter for the bearing to be press fit. Bearings installed in this manner are replaceable.

Bearing features

Seals – Keep contaminants out while helping retain grease within the bearing. Seals are made of Teflon®, felt, rubber, nylon and Mylar® depending on the bearing type.

Shields – Keep contaminants out. Can be used in conjunction with a seal. Generally made of steel.

Ball Retainer – Holds ball bearings evenly spaced. Makes for a quieter bearing and improves bearing life.

Set-Screws – Locks the inner race onto the axle.

Flanged – Flanges are located on the outer race of the bearing. Flanges create a fixed bearing extension from the end of the tube. Flanged bearings cannot be recessed into tubes.

Unflanged – Bearings that have a cylindrical body that can be pressed completely into a tube if needed.

Bearing lubrication

Oiled – Generally used in gravity applications requiring a low coefficient of friction. Temperature range of standard oil is 0° to 200° F.

Grease Packed – Generally used in powered applications. Temperature range of standard grease is -10° to 225° F. Also suitable for humid applications.

Regreaseable – Same features as grease packed bearings, but include a drilled inner race or an extended back closure to accept more grease through a fitting located on the end of the axle without being removed from the roller. The frame thickness of the conveyor is required to determine regrease hole location.

General sprocket information

- Sprockets available on 1.9 and 2-1/2 diameter rollers as standard.
- Standard sprockets are A plate for 40, 50 and 60 series chain.
- Other sizes and styles are available upon request
- Sprockets can be placed anywhere along the length of the tube provided they are clear of the bearing and will not cause chain interference

General groove information

- Grooves available on 1-3/8", 1-5/8", 1.9", 2" and 2-1/2" OD rollers
- Grooves are made for 3/16" diameter or 5mm belt.
- Groove location has a minimum length of 1-1/2" from side of frame and 3/4" between grooves. Grooves can be placed anywhere along the length of the tube provided they are clear of the bearing and are set at least to the minimum centers noted above

Conveyor roller selection for a given load

Consider only 2/3 of the rollers under the product when calculating required roller capacity because conveying surfaces are not typically perfectly flat.

Roller diameter & Axle	Maximum product weight (lbs)
1" OD - 5/16 hex	300
1 3/8" OD - 5/16 hex	600
1.9" OD - 7/16 hex	1500
2-1/2" OD - 11/16 hex	3500
3-1/2" OD - 1-1/16 hex	6000
3-1/2" OD - 1-7/16 dia	10000

Example equation:

300lbs capacity roller x 3 rollers = 900lbs

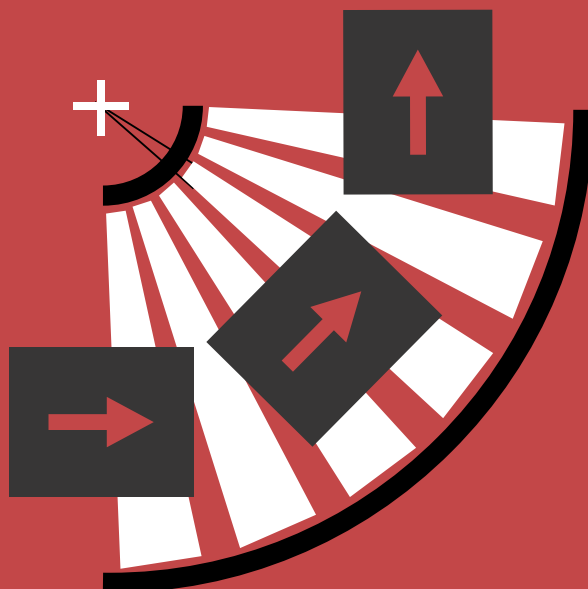
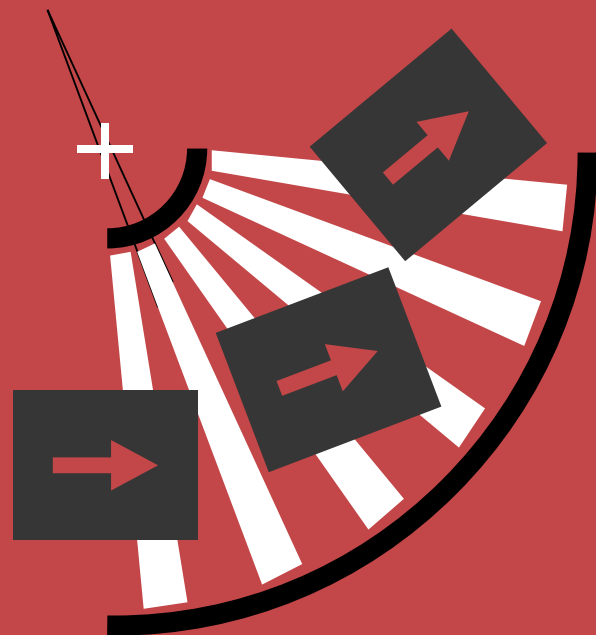
900lbs x 2/3 rule = 600lbs load capacity per 3 rollers.

The above guidelines assume "O" shock load and are not applicable for 3 or more lanes. When calculating load capacity for rollers in fork lift loading areas, Rolcon recommends tripling the required roller capacity due to shock loading.

Taper specific information

Tapered rollers are used in gravity or powered conveyor turns. Tapered rollers are designed to match the inside radius of the curve. This helps to maintain product orientation around a curve. Standard rollers are designed for industry standard inside radius dimensions. Custom tapered rollers can be made to work with custom inside radius dimensions.

The product can become skewed around the curve if the taper rate is not true.

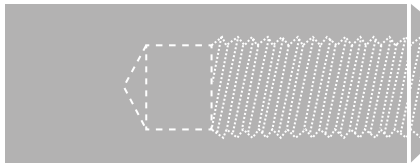


A true taper rate increases the likelihood of maintaining leading edge product orientation through the curve.

Special tube construction

Rolcon can provide special tube construction for many different applications. Below are some of the different tube construction options that are available.

Drill & Tap
(Female Thread)



Concave
Roller



Threaded
(Male Thread)



Sprocketed
Hub



Milled Flat



Bow-Tie
Roller



Milled Slot



V-Groove
Hub



Snap Ring
Groove



Trapezoidal
Crown



Turn Down



Flanges



Bearing selection guide



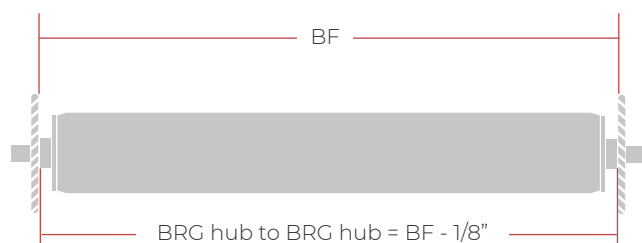
Type of bearing	Capacity	Speed	Conveyor type	Environment	Noise level
Plastic <ul style="list-style-type: none"> • Lowest capacity • No lubrication required • Capable of operating submerged in liquid • Not for use with high speeds or powered conveyor • Ideal for washdown with harsh detergents • Molded plastic bodies and stainless steel balls 	Low	Low	Light Duty Gravity Conveyor	Corrosive Wet	High
Unground Crimped (Non-Precision) <ul style="list-style-type: none"> • Most cost effective • Lowest coefficient of friction, easiest to turn • Zinc plated for mild corrosion resistance • Not for use with high speeds • Stamped metal housing with very loose tolerances • Full complement of balls which are not separated 	Low	Low	Gravity and Lineshaft Conveyor	Mild	High
Unground Press Fit (Non-Precision) <ul style="list-style-type: none"> • More capacity than crimped • Can be replaced for longer roller life • More sealing options available • Zinc plated for mild corrosion resistance • Stamped metal housing with very loose tolerances • Full complement of balls which are not separated 	Medium	Medium	Gravity and Powered Conveyor	Mild	High
Semi-Precision <ul style="list-style-type: none"> • More capacity than unground • Capable of higher speeds than unground • Superior seals over unground • Can be replaced for longer roller life • Machined metal housings with tighter tolerances • Ball retainer keeps the balls separated and evenly spaced 	Medium High	Medium High	Heavy Duty Gravity & Powered Conveyor	Dirty	Medium
Poly Housed ABEC style (Precision) <ul style="list-style-type: none"> • Poly Housed ABEC style (Precision) • Most common ABEC style • Most cost effective ABEC style • Highest possible speeds • Long service life • Better seals than semi-precision 	Medium	Highest	High Speed Powered Conveyor	Mild	Low
All Metal and Insert ABEC style (Precision) <ul style="list-style-type: none"> • All metal parts • Best seals and shields available • Highest capacity possible • Can be replaced for longer roller life • Insert bearings feature set-screws to lock onto axle and prevent side-to-side movement • High quality steel, heat treated to uniform hardness and ground to a micro finish • Tightest tolerances available 	Highest	High	Heavy Duty Powered & Gravity Conveyor	Very Dirty	Low
Framesaver (Precision) <ul style="list-style-type: none"> • Same benefits as Poly Housed ABEC • Uses tapered hex stub axle design • Axle fits tightly in worn frame holes • Prevents additional frame wear • Metal or plastic axles available 	Medium	High	High Speed Powered Conveyor	Mild	Lowest
Bushings <ul style="list-style-type: none"> • No moving parts to wear out • Uncommon sizes available • Long service life • Heavy duty capacity at slow speeds • High temp materials available • Abrasion resistant material available • Food grade materials available 	High	Low	Powered Conveyor	All	Medium

Replacement rollers

The following information is intended to guide you through the proper application and selection of conveyor rollers.

Between frame dimension (BF)

The length of conveyor rollers is normally described in terms of BF, the dimension between the frame or between the rails of the conveyor.



Bearings

- Standard roller construction utilizes “commercial grade” (also known as “non-precision”) bearings.
- Standard bearing lubrication is light oil however, grease packed is also available.
- Generally light oil lubrication is used for gravity applications as it rotates more easily.
- Semi-precision and precision bearings are also available.
- Grease packed is normally used for power conveyor applications or harsh environments.
- Seals on grease packed bearings refer to materials that are used to impede partial (non-liquid) type items from entering the bearings.
- ABEC bearings have significantly lower noise levels, longer life and are usable in conveyor applications up to 600 ft/min.

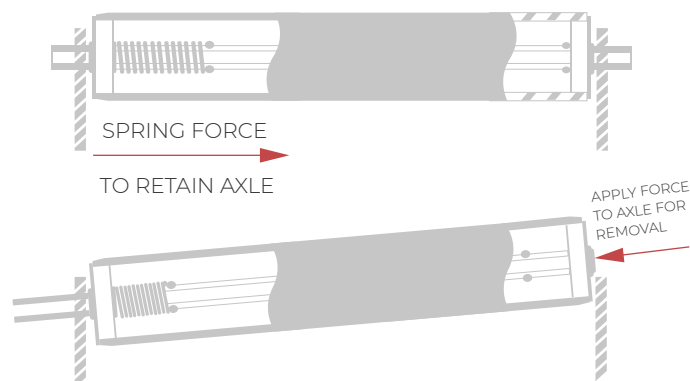
Bearing type & lubrication	Application	Benefit	Speed rating	Load rating
Commercial Light Oil (Standard)	Gravity Conveyor	Free Rolling, Cost Effective	Up to 200 ft/min	Low
Commercial Grease Packed w/ Seals (Optional)	Low Speed Powered Conveyors	Grease adds bearing life, Cost effective	Up to 200 ft/min	Low
Semi-Precision Grease Packed w/ Seals (Optional)	Medium Speed Powered Conveyors	Caged Ball Bearings Higher Speed longer life	Up to 300 ft/min	Medium
Precision (ABEC 1) Sealed (Optional)	High Speed Powered Conveyors	Tighter Tolerances = Higher Speed + Lower Noise	Up to 600 ft/min	High

Roller capacity

Roller capacities are calculated to CEMA standards. The capacity is limited to the bearing capacity, shaft deflection, tube deflection, or tube strength. Refer to specific capacity charts for roller capacities. All capacities based on evenly distributed non-impact loads across entire roller.

Axle construction

Spring retained axle rollers contain a spring that is captured between one of the bearings and a dimple on the shaft. When pushed on one end the shaft will slide through the roller allowing for insertion into the frame. As standard Rolcon spring loads both axles for ease of installation.



Pin retained or Hog Ring Hole rollers contain no spring or dimples to retain the shaft. Instead, the shaft is drilled on each end for a retaining pin or cotter pin.. Once a roller is placed in a frame the retaining pins are inserted. Pin retained rollers must be specified at the time of quoting and ordering.

Grooved rollers

Rolcon grooves rollers with a .185 - .200 deep groove to accommodate a 3/16" or 5mm diameter belt. A minimum of length of 1-1/2" from the side of the frame is required with a 3/4" minimum between grooves.

Rollers available with grooves

Rolcon offers grooved rollers in 1-3/8", 1.9 and 2-1/2" diameter rollers. Different bearings are available and may affect groove location. Multiple grooves are available.

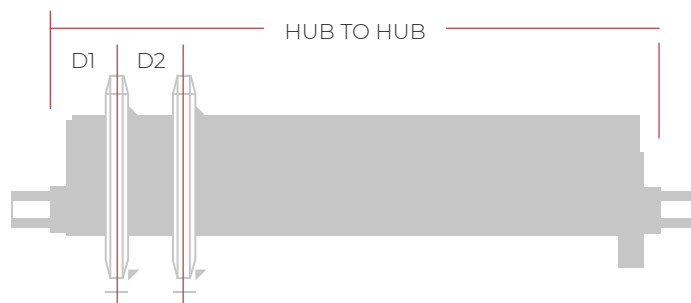
Contact Rolcon Customer Service for more information at sales@rolconrollers.com.



Sprocketed rollers

Sprocketed rollers are used for chain driven live roller conveyors. A typical arrangement is illustrated here. Standard construction includes grease packed and sealed bearings. Can be supplied as spring or pin retained. Length measurement should be from bearing hub to bearing hub. 1.9 and 2-1/2" diameter rollers are available in various configurations. Type A 40, 50 and 60 sprockets are standard.

Contact Rolcon Customer Service for more information at sales@rolconrollers.com.



Polyurethane covered rollers

Factory installed 1/8" thick (83 shore "A") polyurethane covers provide the following advantages:

- Will not mar finish on sensitive products being conveyed.
- Absorbs shock and reduce noise by up to 10 decibels.
- Have extraordinary cut and abrasion resistance for long life.
- Increases traction by up to 15% vs. uncoated rollers.



Diameter & gage



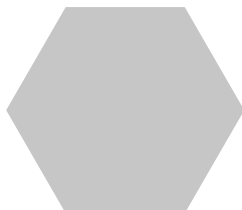
Rolcon offers the following standard tube diameters and gages. Standard axle and tubing materials are also shown.

Tube diameter x gage (Wall)	Tube material	Shaft size
3/4" x 20 ga (.035")	Plain Steel	1/4" Round
.84" x .107"	PVC Plastic	1/4" Round
1-3/8" x 18 ga (.049")	Galvanized Steel	1/4" Round
1-3/8" x 18 ga (.049")	Aluminum	1/4" Round
1-3/8" x 18 ga (.049")	304 Stainless Steel	1/4" Round
1-3/8" x 18 ga (.049")	Galvanized Steel	5/16" Hex
1-3/8" x 18 ga (.049")	Aluminum	5/16" Hex
1-3/8" x 16 ga (.065")	Plain Steel	7/16" Hex
1.9" x 16 ga (.065")	Plain Steel	7/16" Hex
1.9" x 16 ga (.065")	Galvanized Steel	7/16" Hex
1.9" x .112"	PVC Plastic	7/16" Hex
1.9" x 16 ga (.065")	Galvanized Steel	1/4" Round
1.9" x 16 ga (.065")	304 Stainless Steel	7/16" Hex
1.9" x 16 ga (.065")	Aluminum	7/16" Hex
1.9" x 12 ga (.109")	Galvanized Steel	7/16" Hex
1.9" x 9 ga (.148")	Plain Steel	7/16" Hex
2-1/2" x 14 ga (.083")	Plain Steel	7/16" Hex
2-1/2" x 14 ga (.083")	Galvanized Steel	7/16" Hex
2-1/2" x 11 ga (.120")	Plain Steel	11/16" Hex
2-1/2" x 11 ga (.120")	Galvanized Steel	11/16" Hex
2-5/8" x 7 ga (.180")	Plain Steel	11/16" Hex

Shaft sizes

(Full scale when PDF is set at 100%)

11/16 HEX



7/16 HEX



5/16 HEX



1/4 ROUND



Rolcon Urethane products



Urethane elastomers are unique because they combine many of the advantages of rigid plastics, metals and ceramics with the elasticity of rubber.

Some advantages of Urethane:

- Abrasion resistance.
- Reduces effects of shock and impact loading.
- Slip resistance.
- Will not mar most conveyed materials.
- Noise dampening.

Along with urethane sleeves Rolcon also offers urethane shafts and shaft adapters that will eliminate frame wear and extend the life of your conveyor frame.



Rolcon offers several types of urethane products; **Cast Sleeves, Extruded Sleeves, and Shaft Adapters.**

Cast Urethane is a high density polymer material. Standard hardness is between 70 and 90 Shore A durometer.

Extruded Sleeves are available in various lengths and colors. Standard color is orange. Hardness is 85 Shore A durometer.

Urethane Shaft Adapters - 7/16" hex adapter over an interior 5/16" hex steel inner support shaft.

Urethane Limitations and Considerations:

When evaluating an application the following material limitations need to be considered:

Temperature: 200 degrees F. maximum recommended

Hydrolysis: Steam- Not suited for exposure to steam.
Water- Wet environments okay. Note maximum temperature limit.

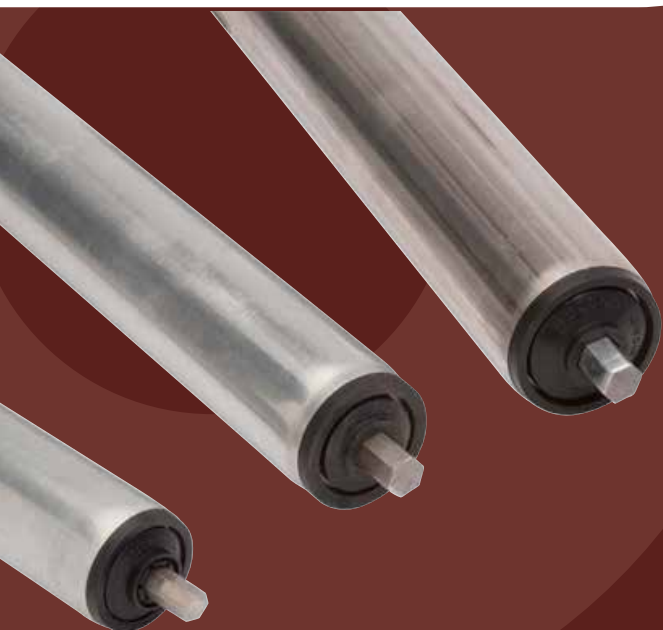
Chemicals: Strong Acids and base chemicals can rapidly degrade material. Inquire before ordering.

Rolcon Urethane Product Advantages

The table below shows some of the advantages of urethane versus metal, plastic, and rubber materials. Contact Rolcon customer service for application questions at sales@rolconrollers.com

	Metal / Urethane	Plastic / Urethane	Rubber / Urethane
Abrasion Resistance	Urethane		
Corrosion Resistance (rust)	Urethane		
Impact Resistance	Urethane		
Noise Abatement	Urethane		
Non-Brittle Upon Impact		Urethane	
Elastomeric Memory		Urethane	
Abrasion Resistance		Urethane	Urethane
Cut/Tear Resistance			Urethane
Load Bearing Capacity			Urethane
Ozone Resistance			Urethane
Harder Durometer Range			Urethane
Mold/Fungi Resistance			Urethane
Non- Marking			Urethane
Color Availability			Urethane

Premium rollers



Our premium conveyor rollers provide extended life, low noise and decreased wear on your conveyor system.

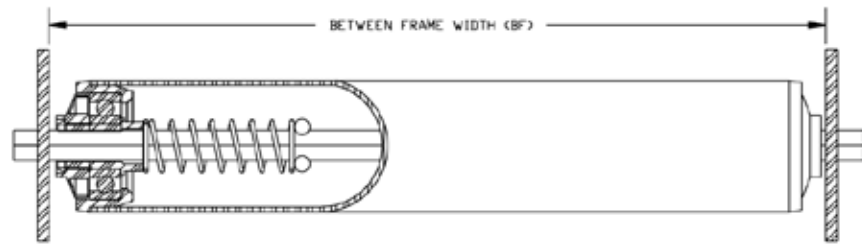
These conveyor rollers are recommended for use in belt driven and powered conveyor lines, as well as belt snubbing and belt tensioning applications. The Premium series conveyor roller is a quiet, smooth running roller that offers long life and decreased wear while substantially reducing noise levels throughout your conveyor system.

These rollers are primarily used for applications that are running at 200 ft/minute or faster, but can be used anytime you are looking for extended bearing life.

Features & benefits

- Substantially reduced noise levels in your conveyor system
- Decreased wear in conveyor system frame
- Extended Life ABEC-1 precision bearings
- Sealed bearings available for wash down applications
- Conductive bushings
- Crimped tube ends
- Various axle configurations available
- Tube options include: stainless, coated and sleeved

1-3/8" OD x 18 Ga – 5/16" hex axle precision bearing

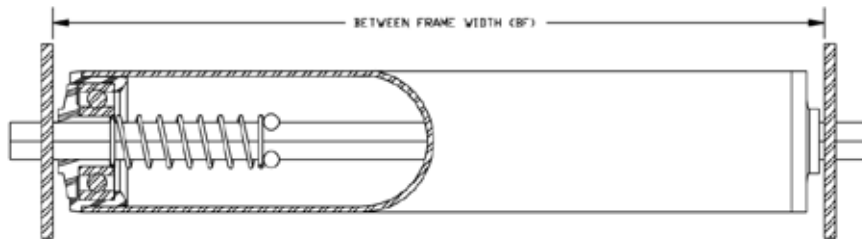


Tube	Axle	Bearing assembly	Bearing	Between frame	Part number
1-3/8" OD x 18 Ga (.049")	5/16" Hex	R143ZZ	ABEC	4-40"	138_RS-1/

Roller capacity chart (LBS.)

BF	4	8	12	16	20	24	28	32	36	40
Bearing R143ZZ	130	130	130	130	130	115	100	90	75	50

1-5/8" OD x 16 Ga – 7/16" hex axle precision bearing

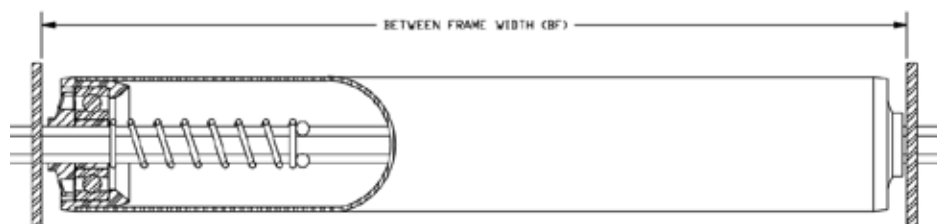


Tube	Axle	Bearing assembly	Bearing	Between frame	Part number
1-5/8" OD x 16 Ga (.065")	7/16" Hex	R158ZZ	ABEC	3-65"	158_RS-1/

Roller capacity chart (LBS.)

BF	3	10	13	16	19	22	25	28	31	34	37	40	43	46	49	52	55	58	61	65
Bearing R158ZZ	300	300	300	300	300	300	300	300	295	270	250	230	210	200	190	180	170	160	155	150

1.9" OD x 16 Ga – 7/16" precision bearing

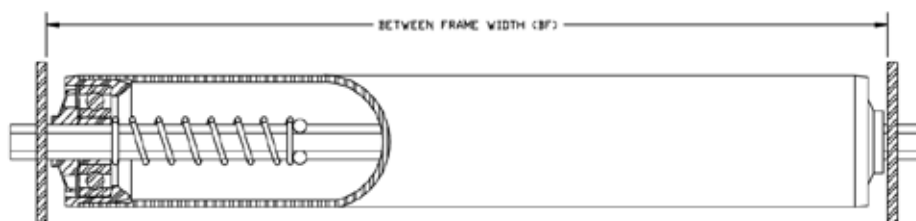


Tube	Axle	Bearing assembly	Bearing	Between frame	Part number
1.9" OD x 16 Ga (0.65")	7/16" Hex	R19ZZ	ABEC	6-50"	19_RS-1/

Roller capacity chart (LBS.)

BF	6	8	12	15	18	21	24	27	30	33	36	39	42	45	48	50
Bearing R19ZZ	390	390	370	290	240	200	175	155	140	125	115	105	100	90	85	80

1.9" OD x 12 Ga – 7/16" hex axle precision bearing

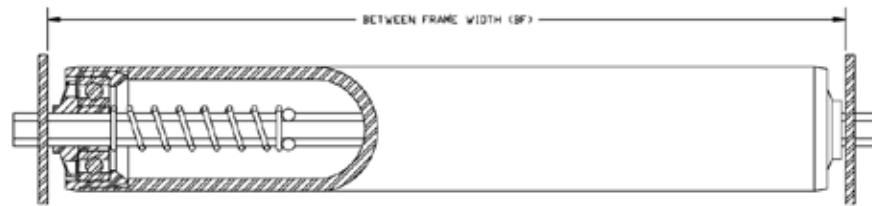
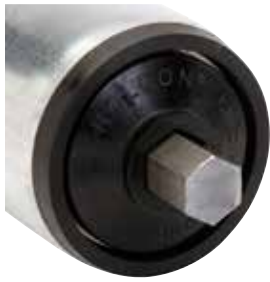


Tube	Axle	Bearing assembly	Bearing	Between frame	Part number
1.9" OD x .109"	7/16" Hex	R19ZZ	ABEC	6-50"	19_RS-1/12GA

Roller capacity chart (LBS.)

BF	6	8	12	15	18	21	24	27	30	33	36	39	42	45	48	50
Bearing R19ZZ	390	390	370	290	240	200	175	155	140	125	115	105	100	90	85	80

1.9" OD x 7 Ga – 7/16" hex axle precision bearing

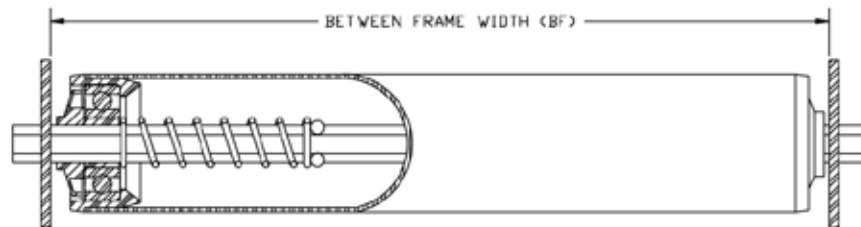


Tube	Axle	Bearing assembly	Bearing	Between frame	Part number
1.9" OD x .180" Wall	7/16" Hex	R19ZZ	ABEC	7-50"	19_RS-1/7GA

Roller capacity chart (LBS.)

BF	7	9	11	13	15	17	19	21	25	27	29	31	33	35	37	39	41	50
Bearing R19ZZ	580	580	525	435	370	325	285	255	213	195	185	170	160	150	140	135	135	125

2" OD x 16 Ga – 7/16" hex axle precision bearing

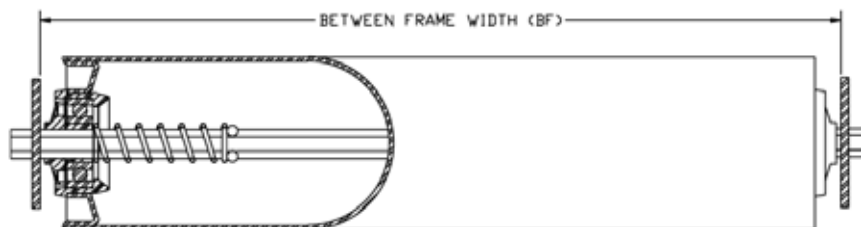


Tube	Axle	Bearing assembly	Bearing	Between frame	Part number
2" OD x 16 Ga (.065")	7/16" Hex	R19ZZ	ABEC	5-63"	2_RS-1/

Roller capacity chart (LBS.)

BF	5	10	13	16	19	22	25	28	31	34	37	40	43	46	49	52	55	58	61	63
Bearing R19ZZ	380	380	380	380	380	370	325	285	255	235	215	200	185	170	160	150	145	135	125	125

2-1/4" OD x 14 Ga – 7/16" hex axle precision bearing

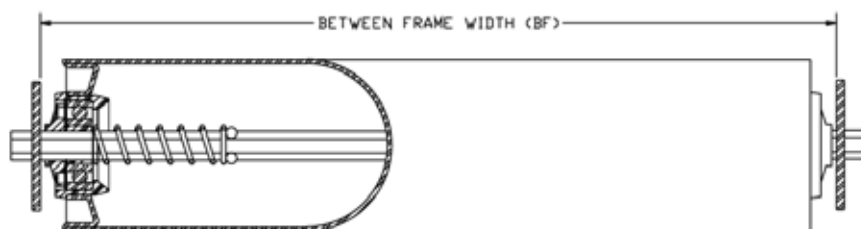


Tube	Axle	Bearing assembly	Bearing	Between frame	Part number
2-1/4" OD x 14 Ga (.083")	7/16" Hex	R158ZZ3134	ABEC	7-65"	225_RS-1/

Roller capacity chart (LBS.)

BF	7	10	13	16	19	22	25	28	31	34	37	40	43	46	49	52	55	58	61	65
Bearing R158ZZ3134	290	290	290	290	290	290	290	290	285	260	240	220	200	185	175	165	160	152	140	135

2-1/2" OD x 14 Ga – 7/16" hex axle precision bearing

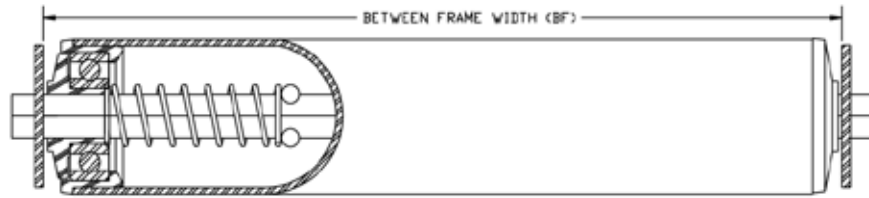


Tube	Axle	Bearing assembly	Bearing	Between frame	Part number
2-1/2" OD x 14 Ga (.083")	7/16" Hex	R158ZZ3135	ABEC	7-65"	25_RS-1/14GA

Roller capacity chart (LBS.)

BF	7	10	13	16	19	22	25	28	31	34	37	40	43	46	49	52	55	58	61	65
Bearing R158ZZ3135	290	290	290	290	290	290	290	290	280	260	240	220	200	185	175	165	160	150	145	135

2-1/2" OD x 11 Ga – 7/16" hex axle precision bearing

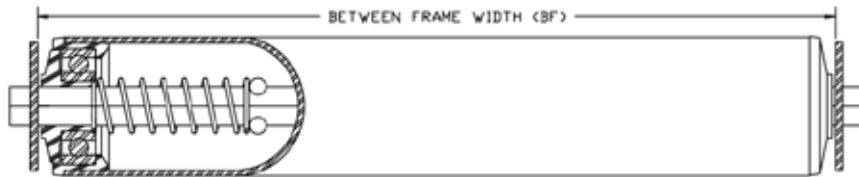


Tube	Axle	Bearing assembly	Bearing	Between frame	Part number
2-1/2" OD x 11 Ga (.120")	7/16" Hex	R25ZZ437	ABEC	7-72"	25_RS-1/437

Roller capacity chart (LBS.)

BF	7	11	15	19	23	27	31	35	39	43	47	51	55	59	63	67	71	72
Bearing R25ZZ437	580	580	580	580	580	580	580	580	580	580	580	580	580	555	520	490	460	460

2-1/2" OD x 11 Ga – 11/16" hex axle precision bearing

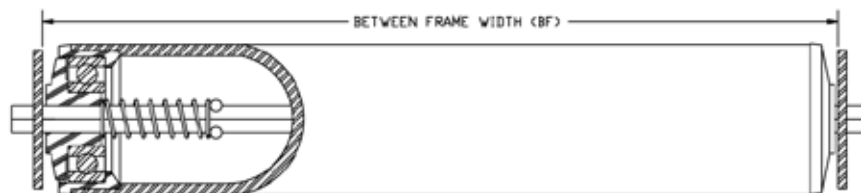


Tube	Axle	Bearing assembly	Bearing	Between frame	Part number
2-1/2" OD x 11 Ga (.120")	11/16" Hex	R25ZZ687	ABEC	7-72"	25_RS-1/

Roller capacity chart (LBS.)

BF	7	11	15	19	23	27	31	35	39	43	47	51	55	59	63	67	71	72
Bearing R25ZZ687	700	700	700	700	700	700	700	700	700	700	700	700	700	700	650	615	580	580

2-1/2" OD x 7 Ga – 7/16" hex axle precision bearing

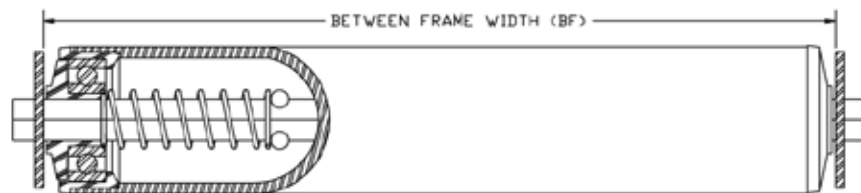


Tube	Axle	Bearing assembly	Bearing	Between frame	Part number
2-1/2" OD x 7 Ga (.180")	7/16" Hex	R25ZZ437	ABEC	7-72"	25_RS-1/7GA/437

Roller capacity chart (LBS.)

BF	7	11	15	19	23	27	31	35	39	43	47	50	54	58	62	66	70	72
Bearing R25ZZ437	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500

2-1/2" OD x 7 Ga – 11/16" hex axle precision bearing

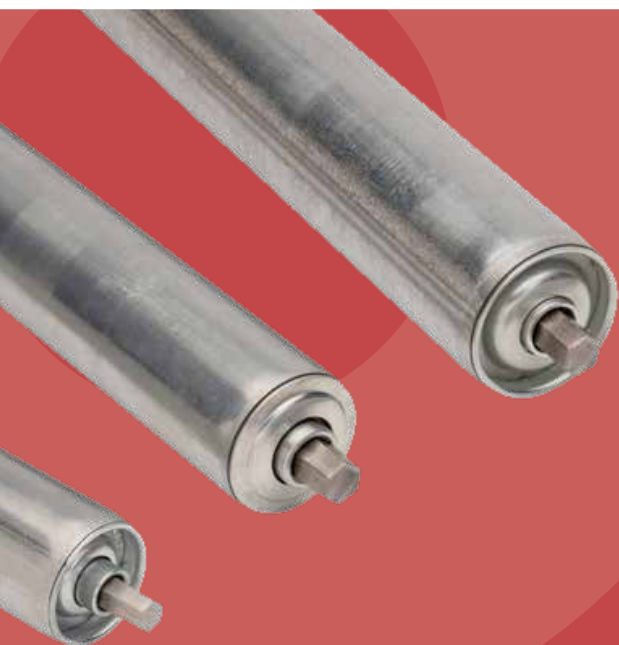


Tube	Axle	Bearing assembly	Bearing	Between frame	Part number
2-1/2" OD x 7 Ga (.180")	11/16" Hex	R25ZZ687	ABEC	7-72"	25_RS-1/7GA

Roller capacity chart (LBS.)

BF	7	11	15	19	23	27	31	35	39	43	47	51	55	59	63	67	71	72
Bearing R25ZZ687	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600

Gravity rollers



Rolcon offers gravity conveyor rollers that cover a wide range of applications from light to heavy duty.

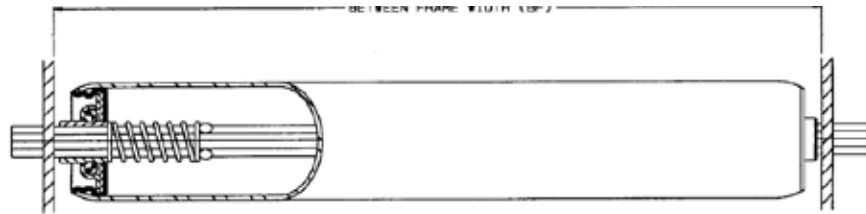
Our gravity conveyor rollers utilize a commercial grade bearing and are generally used in low speed or gravity feed conveyor system applications where noise and speed are not a consideration. Gravity conveyor rollers are an excellent choice for both new and replacement applications fitting most any type of conveyor system.

Rolcon gravity conveyor rollers are available with many options including different tubing material, axle styles, and coatings.

Features & benefits

- Low friction bearings
- Low cost
- Excellent for low-speed applications
- Wide range of tube and axle options
- Sizes available from 1-3/8" diameter to 2-1/2" diameter
- Available with plastic sleeve or rubber coating
- Available with grooves

1-3/8" OD x 18 Ga – 5/16" hex axle non-precision bearing

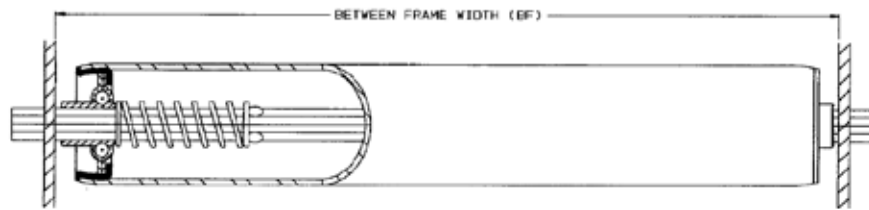


Tube	Axle	Bearing assembly	Bearing	Between frame	Part number
1-3/8" OD x 18 Ga (.049")	5/16" Hex	R1276	Commercial Unground	4-40"	138_RG-1/

Roller capacity chart (LBS.)

BF	4	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29-40
Bearing R1276	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	100	95	90	85	50

1-3/8" OD x 16 Ga – 5/16" hex axle non-precision bearing

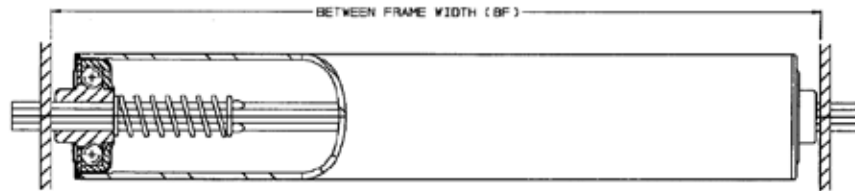


Tube	Axle	Bearing assembly	Bearing	Between frame	Part number
1-3/8" OD x 16 Ga (.065")	5/16" Hex	R1276	Commercial Unground	4-39"	138_RG-1/16GA

Roller capacity chart (LBS.)

BF	4	9	11	13	15	17	19	21	23	25	27	29	31	33	35	37	39
Bearing R1276	120	120	120	120	120	120	120	120	120	110	100	95	85	85	75	75	70

1-5/8" OD x 16 Ga – 5/16" hex axle non-precision bearing

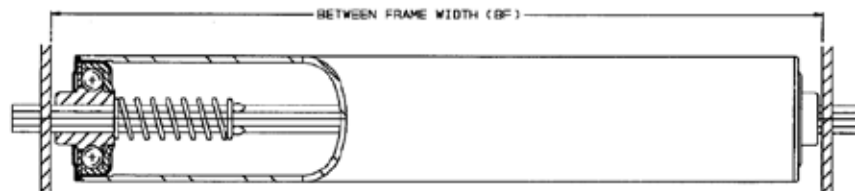


Tube	Axle	Bearing assembly	Bearing	Between frame	Part number
1-5/8" OD x 16 Ga (.065")	5/16" Hex	R1500	Commercial Unground	3–39"	158_RG-1/

Roller capacity chart (LBS.)

BF	3	9	11	13	15	17	19	21	23	25	27	29	31	33	35	37	39
Bearing R1500	290	280	225	185	160	140	125	110	100	95	85	80	75	70	65	60	60

1-5/8" OD x 14 Ga – 7/16" hex axle non-precision bearing

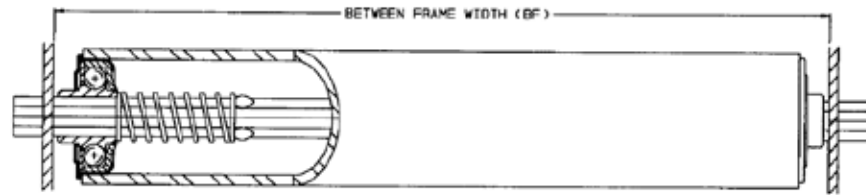


Tube	Axle	Bearing assembly	Bearing	Between frame	Part number
1-5/8" OD x 14 Ga (.083")	R1500	R1500	Commercial Unground	3–65"	158_RG-1/14GA

Roller capacity chart (LBS.)

BF	3	10	13	16	19	22	25	28	31	34	37	40	43	46	49	52	55	58	61	65
Bearing R1500	290	290	290	290	290	290	290	290	285	260	240	220	200	190	180	170	160	150	145	140

1-3/4" OD x 10 Ga – 7/16" hex axle non-precision bearing

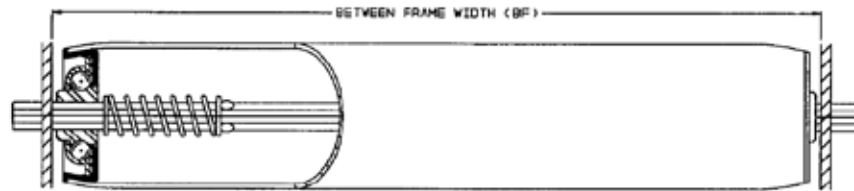


Tube	Axle	Bearing assembly	Bearing	Between frame	Part number
1-3/4" OD x 10 Ga (.134")	7/16" Hex	R1624	Commercial Unground	3-65"	134_RG-1/

Roller capacity chart (LBS.)

BF	3	10	13	16	19	22	25	28	31	34	37	40	43	46	49	52	55	58	61	65
Bearing R1624	290	290	290	290	290	290	290	290	285	260	240	220	200	190	180	170	160	150	140	135

1.9" OD x 16 Ga – 5/16" hex axle non-precision bearing

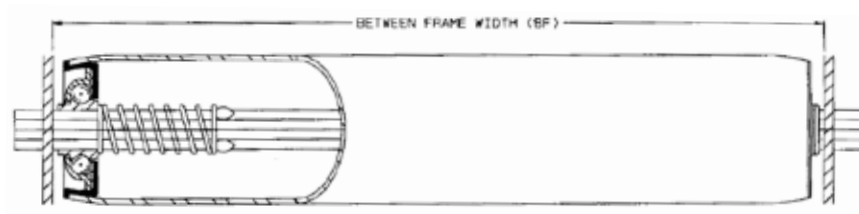


Tube	Axle	Bearing assembly	Bearing	Between frame	Part number
1.9" OD x 16 Ga (.065")	5/16" Hex	R1005	Commercial Unground	6-40"	19_RG-1/312

Roller capacity chart (LBS.)

BF	6	9	11	13	15	17	19	21	23	25	27	29	31	33	35	37	39	40
Bearing R1005	260	260	260	260	230	200	180	160	145	135	125	115	110	100	95	90	85	85

1.9" OD x 16 Ga – 7/16" hex axle non-precision bearing

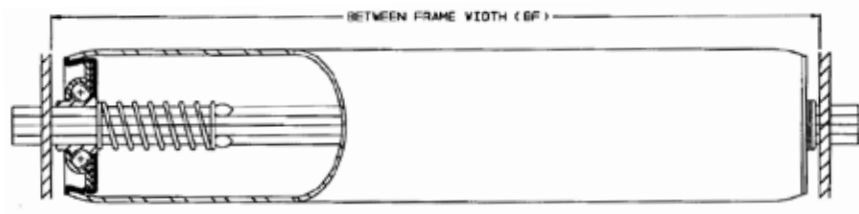


Tube	Axle	Bearing assembly	Bearing	Between frame	Part number
1.9 in. O.D. x 16 Ga. (.065 in.)	7/16 in. Hex	R1005	XXX	6-63"	19_RG-1/

Roller capacity chart (LBS.)

BF	6	10	13	16	19	22	25	28	31	34	37	40	43	46	49	52	55	58	61	63
Bearing R1005	260	260	260	260	260	260	260	260	260	260	260	260	260	260	245	230	220	205	195	190

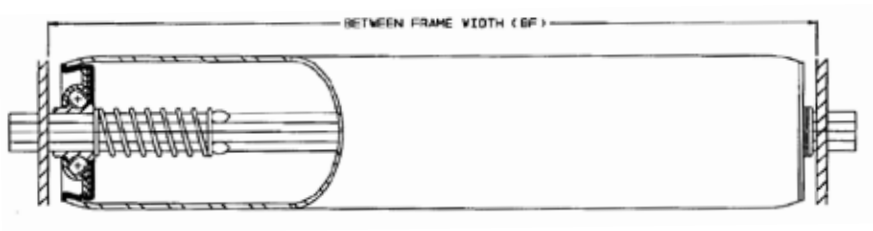
2" OD x 16 Ga – 7/16" hex axle non-precision bearing



Tube	Axle	Bearing assembly	Bearing	Between frame	Part number
2" OD x 16 Ga (.065")	7/16" Hex	R1877	Commercial Unground	4-63"	2_RG-1/

Roller capacity chart (LBS.)

BF	4	10	13	16	19	22	25	28	31	34	37	40	43	46	49	52	55	58	61	63
Bearing R1877	260	260	260	260	260	260	260	260	260	260	260	260	260	260	240	230	215	200	195	185



Tube	Axle	Bearing assembly	Bearing	Between frame	Part number
2-1/2" OD x 11 Ga (.120")	11/16" Hex	MFC-220-11H	Commercial Unground	12-51	25_RG-1/

Roller capacity chart (LBS.)

BF	12	15	18	21	24	27	30	33	36	39	42	45	48	51
Bearing MFC-220-11H	580	580	580	580	580	580	580	580	580	580	580	580	560	530

Grooved rollers



Rolcon grooved conveyor rollers are perfect for line shaft conveyors or for systems that utilize motorized conveyor rollers as the driving device and grooved rollers as the slave roller.

Although single and double grooved rollers are by far the most popular type of grooved conveyor roller, Rolcon can locate grooves any where along the roller and/or put multiple grooves on one roller.

Features

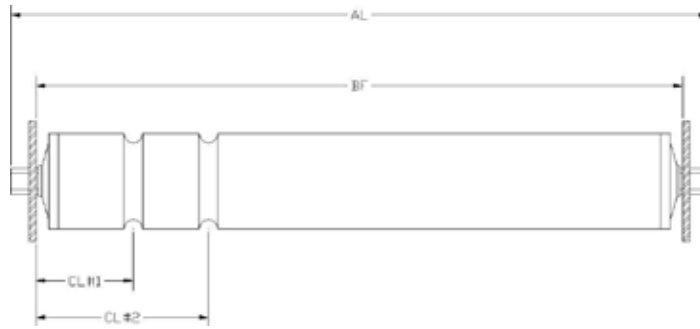
- Locate grooves anywhere along the roller
- Galvanized steel tube standard
- Standard bearings for grooved rollers are Precision ABEC – other bearings are available upon request.
- Spring loaded on both ends
- Crimped tube ends to secure bearings
- Conductive bushing and bearing cap

Technical Specifications

- Groove Depth: .185 – .200 deep to accommodate a 3/16" or 5mm dia. belt.
- Groove Location: Minimum length 1-1/2" from side of frame
- 3/4" minimum between grooves.

Rolcon can produce custom rollers. If you do not see what you are looking for here, please contact us and speak with one of our customer service representatives. We can discuss your application and come up with a custom solution.

1-3/8" OD x 18 Ga – 5/16" hex axle precision bearing

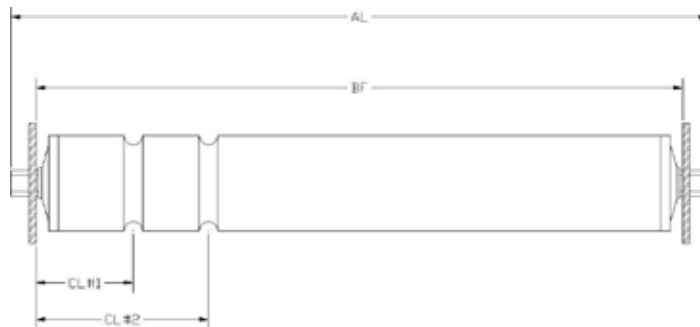


Tube	Axle	Bearing assembly	Bearing	Between frame	Part number
1-3/8" OD x 18 Ga (.049")	5/16" Hex	R143ZZ	ABEC	4-40"	138_RS-1/G

Roller capacity chart (LBS.)

BF	4	8	12	16	20	24	28	32	36	40
Bearing R143ZZ	130	130	130	130	130	115	100	90	75	50

1-5/8" OD x 16 Ga – 7/16" hex axle precision bearing

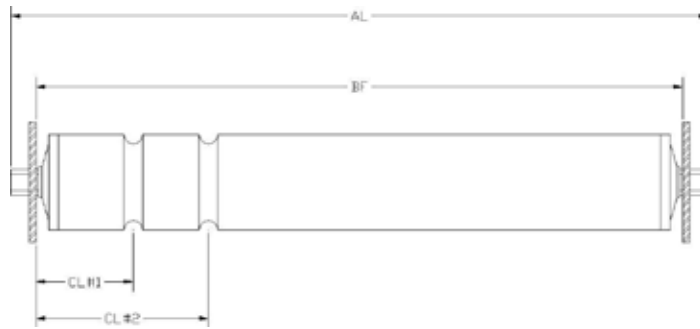


Tube	Axle	Bearing assembly	Bearing	Between frame	Part number
1-5/8" OD x 16 Ga (.065")	7/16" Hex	R158ZZ	ABEC	3-65"	158_RS-1/G

Roller capacity chart (LBS.)

BF	3	10	13	16	19	22	25	28	31	34	37	40	43	46	49	52	55	58	61	65
Bearing R158ZZ	300	300	300	300	300	300	300	300	295	270	250	230	210	200	190	180	170	160	155	150

1.9" OD x 16 Ga – 7/16" precision bearing

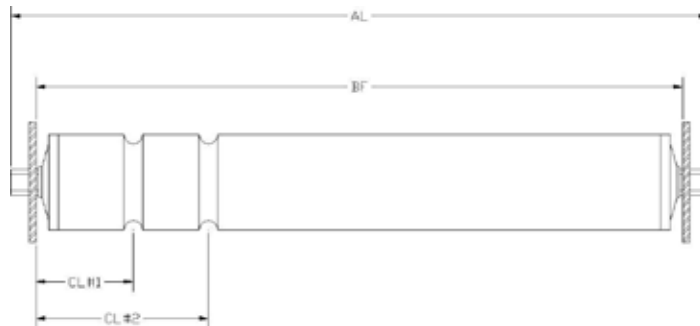


Tube	Axle	Bearing assembly	Bearing	Between frame	Part number
1.9" OD x 16 Ga (0.65")	7/16" Hex	R19ZZ	ABEC	6-50"	19_RS-1/G

Roller capacity chart (LBS.)

BF	6	8	12	15	18	21	24	27	30	33	36	39	42	45	48	50
Bearing R19ZZ	390	390	370	290	240	200	175	155	140	125	115	105	100	90	85	80

1.9" OD x 12 Ga – 7/16" hex axle precision bearing

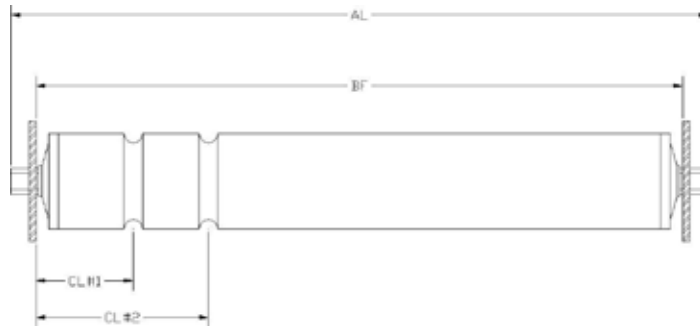


Tube	Axle	Bearing assembly	Bearing	Between frame	Part number
1.9" OD x .109"	7/16" Hex	R19ZZ	ABEC	6-50"	19_RS-1/12GA/G

Roller capacity chart (LBS.)

BF	6	8	12	15	18	21	24	27	30	33	36	39	42	45	48	50
Bearing R19ZZ	390	390	370	290	240	200	175	155	140	125	115	105	100	90	85	80

2" OD x 16 Ga – 7/16" hex axle precision bearing

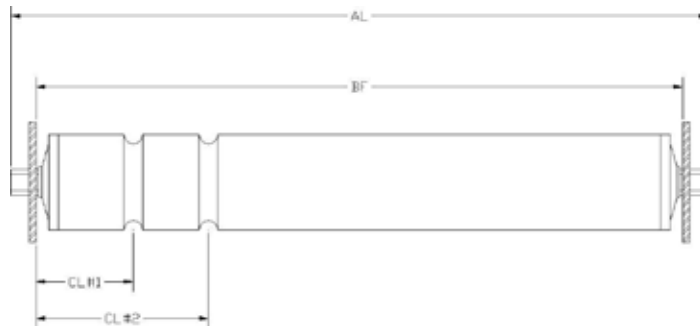


Tube	Axle	Bearing assembly	Bearing	Between frame	Part number
2" OD x 16 Ga (.065")	7/16" Hex	R19ZZ	ABEC	5-63"	2_RS-1/G

Roller capacity chart (LBS.)

BF	5	10	13	16	19	22	25	28	31	34	37	40	43	46	49	52	55	58	61	63
Bearing R19ZZ	380	380	380	380	380	370	325	285	255	235	215	200	185	170	160	150	145	135	125	125

2-1/4" OD x 14 Ga – 7/16" hex axle precision bearing

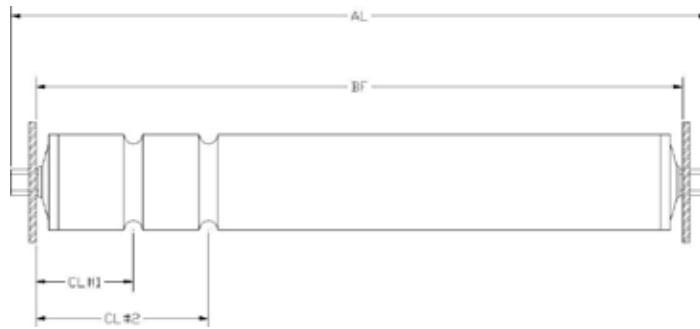


Tube	Axle	Bearing assembly	Bearing	Between frame	Part number
2-1/4" OD x 14 Ga (.083")	7/16" Hex	R158ZZ3134	ABEC	7-65"	225_RS-1/G

Roller capacity chart (LBS.)

BF	7	10	13	16	19	22	25	28	31	34	37	40	43	46	49	52	55	58	61	65
Bearing R158ZZ3134	290	290	290	290	290	290	290	290	285	260	240	220	200	185	175	165	160	152	140	135

2-1/2" OD x 14 Ga – 7/16" hex axle precision bearing

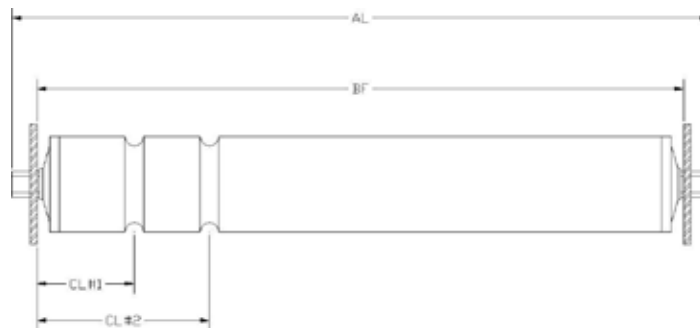


Tube	Axle	Bearing assembly	Bearing	Between frame	Part number
2-1/2" OD x 14 Ga (.083")	7/16" Hex	R158ZZ3135	ABEC	7-65"	25_RS- 1/14GA/437/G

Roller capacity chart (LBS.)

BF	7	10	13	16	19	22	25	28	31	34	37	40	43	46	49	52	55	58	61	65
Bearing R158ZZ3135	290	290	290	290	290	290	290	290	280	260	240	220	200	185	175	165	160	150	145	135

2-1/2" OD x 11 Ga – 7/16" hex axle precision bearing

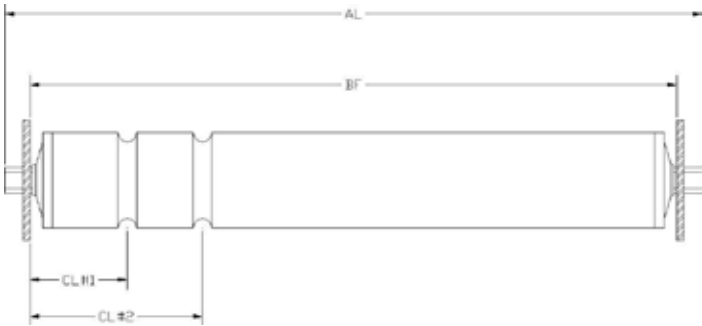


Tube	Axle	Bearing assembly	Bearing	Between frame	Part number
2-1/2" OD x 11 Ga (.120")	7/16" Hex	R25ZZ437	ABEC	7-72"	25_RS-1/437/G

Roller capacity chart (LBS.)

BF	7	11	15	19	23	27	31	35	39	43	47	51	55	59	63	67	71	72
Bearing R25ZZ437	580	580	580	580	580	580	580	580	580	580	580	580	580	555	520	490	460	460

2-1/2" OD x 11 Ga – 11/16" hex axle precision bearing



Tube	Axle	Bearing assembly	Bearing	Between frame	Part number
2-1/2" OD x 11 Ga (.120")	11/16" Hex	R25ZZ687	ABEC	7-72"	25_RS-1/G

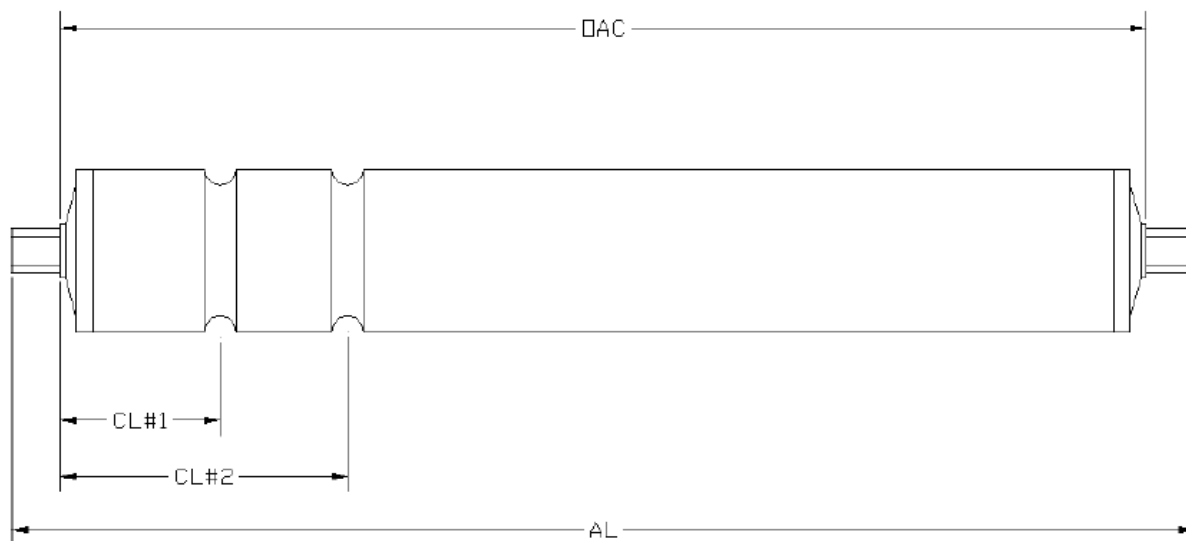
Roller capacity chart (LBS.)

BF	7	11	15	19	23	27	31	35	39	43	47	51	55	59	63	67	71	72
Bearing R25ZZ687	700	700	700	700	700	700	700	700	700	700	700	700	700	700	650	615	580	580

Grooved roller

Order sheet

Double grooved roller not in frame



OAC:

Overall cone dimension

AL:

Axle length

CL1:

Groove centerline

CL2:

Groove centerline

Tube:

diameter / wall thickness material

Axle:

size / type / material

Additional notes:

Company:

Phone:

Contact:

Email:

Sprocketed rollers



Sprocketed rollers provide an economical way to create or add to an existing powered conveyor system. The rollers are available with either single or double sprockets and are welded onto the roller tube.

Double sprocket conveyor rollers are ideal for heavy duty material handling applications, while single sprocket pallet rollers work well for light duty pallet roller conveyor systems.

Features

- Galvanized steel tube
- ABEC 1 precision bearings standard – other bearings available upon request
- Spring loaded on both ends
- Crimped tube ends
- Conductive bushing and bearing cap

Technical Specifications

Standard sprockets:

1.9 Dia Tube:

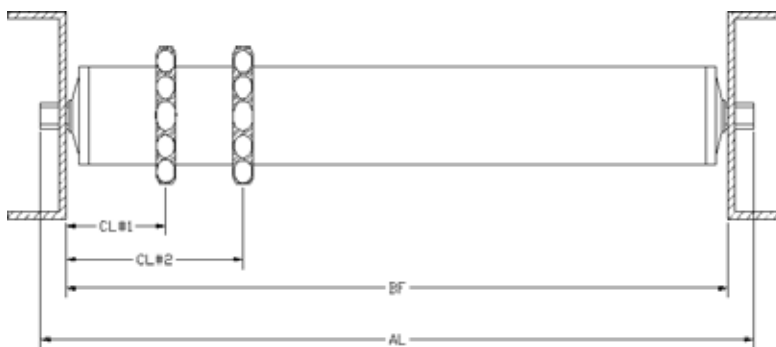
40A18
50A15
60A13

2.5 Dia Tube:

40A20
40A21
40A22
50A17
60A15

Sprocketed rollers are very customizable. Other sprockets are available. Sprockets can be located anywhere along the tube. Contact Rolcon for custom applications.

1.9" OD x 16 Ga – 7/16" hex axle precision bearing

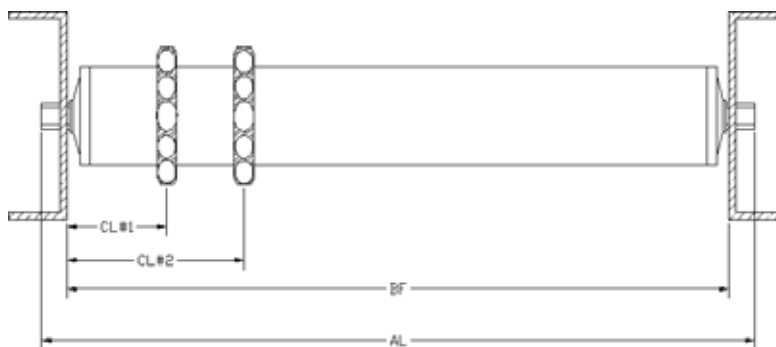


Tube	Axle	Bearing assembly	Bearing	Between frame	Part number
1.9" OD x 16 Ga (.065")	7/16" Hex	R19ZZ	ABEC	6-63"	19_RS-1/SPKT

Roller capacity chart (LBS.)

BF	6	8	12	15	18	21	24	27	30	33	36	39	42	45	48	50
Bearing R19ZZ	390	390	370	290	240	200	175	155	140	125	115	105	100	90	85	80

2-1/2" OD x 11 Ga – 11/16" hex axle precision bearing



Tube	Axle	Bearing assembly	Bearing	Between frame	Part number
2-1/2" OD x 11 Ga (.120")	11/16" Hex	R25ZZ687	ABEC	7-72"	25_RS-1/SPKT

Roller capacity chart (LBS.)

BF	7	11	15	19	23	27	31	35	39	43	47	51	55	59	63	67	71	72
Bearing R25ZZ687	700	700	700	700	700	700	700	700	700	700	700	700	700	700	650	615	580	580

Poly V rollers



Poly V rollers create enhanced driving force compared to typical grooved rollers with O-ring belts.

Poly V rollers offer a much cleaner and quieter operation with reduced maintenance costs unlike your typical CDLR roller. Rollers are offered in 1.9" and 2.5" diameter tubes.

Features & benefits

- Poly V belts don't slip or stretch like O rings and are low maintenance
- Reduced noise levels
- Cleaner than chains, gear boxes and grease
- Better for transfer systems due to insert diameter being smaller than tube O.D
- Reduced maintenance

1.9" OD x 16 Ga – 7/16" hex axle precision bearing



Tube	Axle	Bearing assembly	Bearing	Between frame	Part number
1.9" OD x 16 Ga (.065")	7/16" Hex	R19ZZ	ABEC	12-55"	1.9_RS-1/PolyV

Roller capacity chart (LBS.)

BF	6	8	12	15	18	21	24	27	30	33	36	39	42	45	48	50
Bearing R19ZZ	390	390	370	290	240	200	175	155	140	125	115	105	100	90	85	80

2-1/2" OD x 11 Ga – 11/16" hex axle precision bearing



Tube	Axle	Bearing assembly	Bearing	Between frame	Part number
2-1/2" OD x 11 Ga (.180")	11/16" Hex	R25ZZ687	ABEC	12-55"	25_RS-1/PolyV

Roller capacity chart (LBS.)

BF	7	11	15	19	23	27	31	35	39	43	47	51	55	59	63	67	71	72
Bearing R25ZZ687	700	700	700	700	700	700	700	700	700	700	700	700	700	700	650	615	580	580

Stainless steel rollers



Stainless steel rollers are available for a wide array of applications that require corrosion resistance, wash down and caustic environments.

The rollers may be all stainless or may be manufactured in options such as just the tube, just the bearing or axle or any combination depending on the severity of the application.

304 grade stainless steel is the standard stainless material offered.

Features:

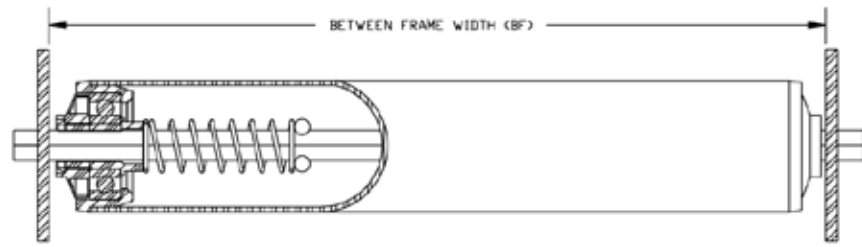
- 304 stainless steel for corrosion resistance
- ABEC-1 bearings with 304 stainless steel balls
- Sealed bearings are available for wash down applications

- Spring loaded on both ends for ease of installation
- Available in all standard tubing diameters

Technical Specifications

- Material: 304 stainless steel
- Bearing: ABEC-1 bearings with 304 ss balls Shielded or Sealed offered as standard

1-3/8" OD x 18 Ga – 5/16" hex axle precision bearing

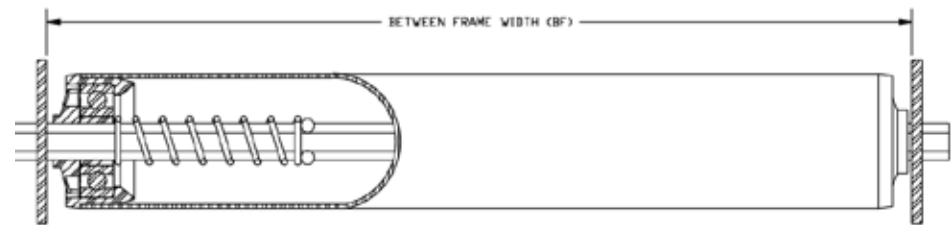


Tube	Axle	Bearing assembly	Bearing	Between frame	Part number
1-3/8" OD x 18 Ga (.049") 304 ss	5/16" Hex 304 ss	R1432RS/SS	ABEC	4-40"	138_RS-1/SS

Roller capacity chart (LBS.)

BF	4	8	12	16	20	24	28	32	36	40
Bearing R1432RS	130	130	130	130	130	115	100	90	75	50

1.9" OD x 16 Ga – 7/16" hex precision bearing



Tube	Axle	Bearing assembly	Bearing	Between frame	Part number
1.9" OD x 16 Ga (.065") 304 ss	7/16" Hex 304 ss	R192RSSS	ABEC	6-50"	19_RS-1/SS

Roller capacity chart (LBS.)

BF	6	8	12	15	18	21	24	27	30	33	36	39	42	45	48	50
Bearing R192RS	390	390	370	290	240	200	175	155	140	125	115	105	100	90	85	80



Tube	Axle	Bearing assembly	Bearing	Between frame	Part number
2-1/2" OD x 11 Ga (.120") 304 ss	11/16" Hex 304 ss	R256872RSSS	ABEC	7-72"	25_RS-1/SS

Roller capacity chart (LBS.)

BF	7	11	15	19	23	27	31	35	39	43	47	51	55	59	63	67	71	72
Bearing R256872RS	700	700	700	700	700	700	700	700	700	700	700	700	700	700	650	615	580	580

Plastic rollers



Rolcon plastic rollers are available in a wide range of tube, axle and bearing combinations.

Plastic rollers are ideal for light duty and gravity applications and are especially effective in humid, corrosive, or wet environments. Typical applications include food processing, chemical or acidic environments, battery handling, and package handling.

Plastic conveyor rollers are an economical way to provide resistance to corrosive environments and materials.

Plastic rollers are primarily used for light loads where the roller may see wet conditions or come in contact with caustic materials.

When made with stainless steel axles and bearings they are a good solution for use in wet or wash down situations. Sealed bearings may be used for added protection.

Features & benefits

- Schedule 40 and 80 PVC outer roller shell
- Hex and round axles available
- Spring loaded on both ends
- Many bearing and bushing styles available
- Very corrosion resistant in harsh conveyor system environments
- Stainless axle and bearings available for corrosion resistance
- .84" – 2.37" diameters available as standard
- Easy to install into your conveyor system line

As with all of Rolcon's roller offerings custom rollers are available. If you don't see the roller for your application in the catalog, contact our customer service team to find the solution for your unique application.

.84" OD x .107" wall PVC – 1/4" round axle non-precision bearing

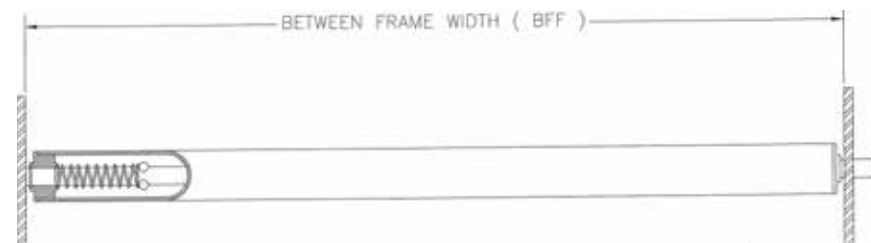


Tube	Axle	Bearing assembly	Bearing	Between frame	Part number
.84" OD x .107" wall PVC Sch40	1/4" round	D08P4004RSS	Non-Precision	12-21"	.84_RG-1/PVC

Roller capacity chart (LBS.)

BF	12	15	18	21
Bearing D08P4004RSS	10	6	4	3

1.05" OD x .123" wall PVC – 1/4" round axle bushing

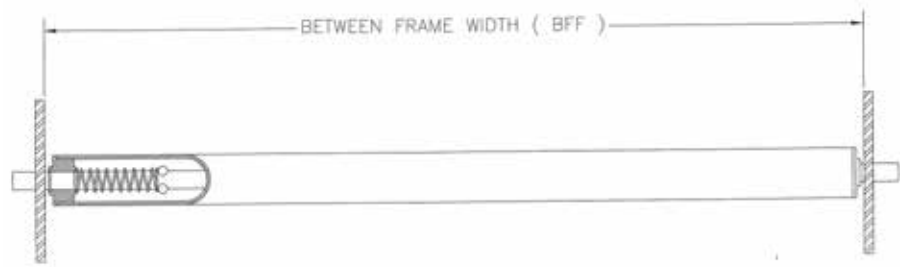


Tube	Axle	Bearing assembly	Bearing	Between frame	Part number
1.05" OD x .107" wall PVC Sch40	1/4" round	D-1618-04	Bushing	12-24"	1.05_RG-1/PVC/B

Roller capacity chart (LBS.)

BF	12	15	18	21	24
Bearing D-1618-04	10	10	9	7	5

1.31" OD x .140" wall PVC – 1/4" round axle bushing

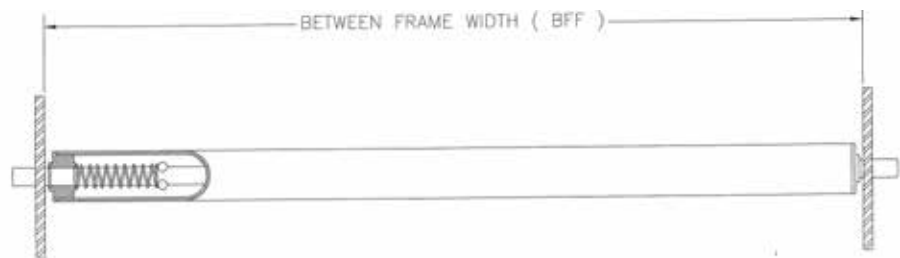


Tube	Axle	Bearing assembly	Bearing	Between frame	Part number
1.31" OD x .140" wall PVC Sch40	1/4" round	STU-16P4004	Bushing	12-27"	1.31_RG-1/PVC/B

Roller capacity chart (LBS.)

BF	12	15	18	21	24	27
Bearing STU-16P4004	37	23	16	11	9	7

1.31" OD x .140" wall PVC – 5/16" round axle bushing

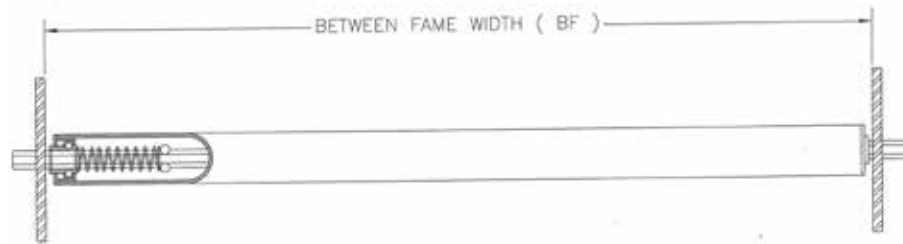


Tube	Axle	Bearing assembly	Bearing	Between frame	Part number
1.31" OD x .140" wall PVC Sch40	5/16" round	STU-16P4005	Bushing	12-27"	1.31_RG-1/PVC/ B/312R

Roller capacity chart (LBS.)

BF	12	15	18	21	24	27
Bearing STU-16P4005	10	10	10	10	9	7

1.31" OD x .140" wall PVC – 5/16" hex axle non-precision bearing

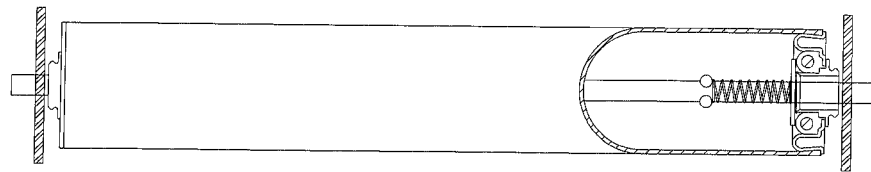


Tube	Axle	Bearing assembly	Bearing	Between frame	Part number
1.31" OD x .140" wall PVC Sch40	5/16" hex	D16P4005SS	Non-precision	12-27"	1.31_RG-1/PVC/312H

Roller capacity chart (LBS.)

BF	12	15	18	21	24	27
Bearing D16P4005SS	37	23	16	11	9	7

1.9" OD x .112" wall PVC – 1/4" round axle non-precision bearing

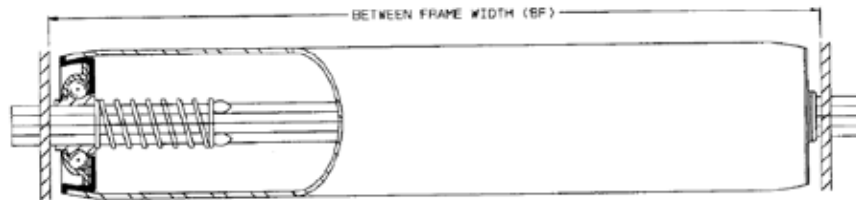


Tube	Axle	Bearing assembly	Bearing	Between frame	Part number
1.9" OD x .112" wall PVC Sch40	1/4" round	D24P4004RSS	Non-precision	12-36"	1.9_RG-1/PVC/25R

Roller capacity chart (LBS.)

BF	12	15	18	21	24	27	30	33	36
Bearing D24P4004RSS	20	20	20	20	20	20	20	20	17

1.9" OD x .112" wall PVC – 7/16" hex non-precision bearing

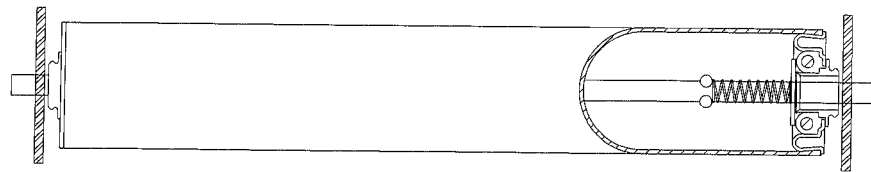
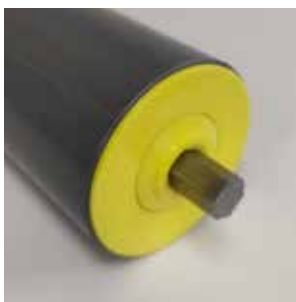


Tube	Axle	Bearing assembly	Bearing	Between frame	Part number
1.9" OD x .112" wall PVC Sch40	7/16" hex	D24P4007SS	Non-precision	12-36"	1.9_RG-1/PVC

Roller capacity chart (LBS.)

BF	12	15	18	21	24	27	30	33	36
Bearing D24P4007SS	20	20	20	20	20	20	20	20	17

1.9" OD x .112" wall PVC – 1/2" round axle non-precision bearing

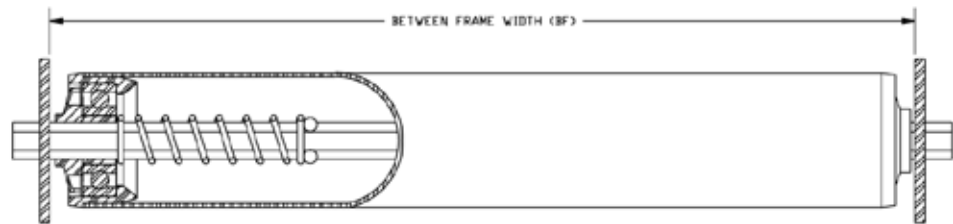


Tube	Axle	Bearing assembly	Bearing	Between frame	Part number
1.9" OD x .112" wall PVC Sch40	1/2" round	D24P4008RSS	Non-precision	12-36"	1.9_RG-1/PVC/5RD

Roller capacity chart (LBS.)

BF	12	15	18	21	24	27	30	33	36
Bearing D24P4008RSS	20	20	20	20	20	20	20	20	17

1.9" OD x .200" wall PVC – 7/16" hex axle precision bearing

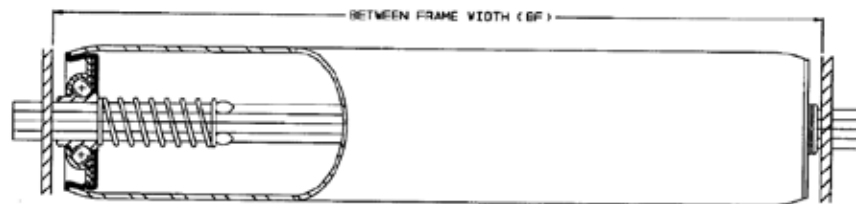
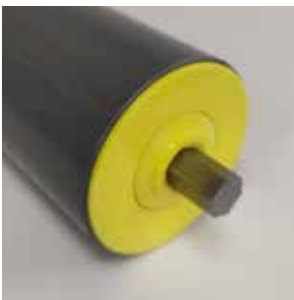


Tube	Axle	Bearing assembly	Bearing	Between frame	Part number
1.9" OD x .200" wall PVC Sch80	7/16" hex	R19ZZ	ABEC	12-36"	1.9_RS-1/PVC80

Roller capacity chart (LBS.)

BF	12	15	18	21	24	27	30	33	36
Bearing R19ZZ	20	20	20	20	20	20	20	20	17

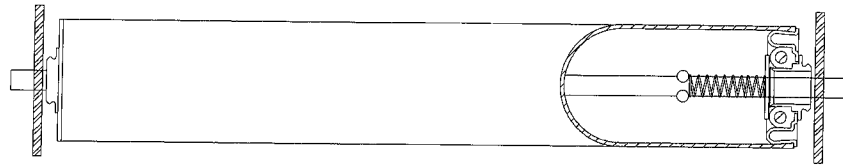
2.37" OD x .218" wall PVC – 7/16" hex axle non-precision bearing



Tube	Axle	Bearing assembly	Bearing	Between frame	Part number
2.37" OD x .218" wall PVC Sch80	7/16" hex	D32P4007RSS	Non-precision	12-51"	2.37_RG-1/PVC

Roller capacity chart (LBS.)

BF	12	15	18	21	24	27	30	33	36	39	42	45	48	51
Bearing D32P4007RSS	174	133	133	85	72	62	55	49	45	41	37	35	32	30



Tube	Axle	Bearing assembly	Bearing	Between frame	Part number
2.37" OD x .218" wall PVC Sch80	1/2" round	D32P4008RSS	Non-precision	12-51"	2.37_RG-1/PVC/.5R

Roller capacity chart (LBS.)

BF	12	15	18	21	24	27	30	33	36	39	42	45	48	51
Bearing D32P4008RSS	174	129	99	80	67	58	51	46	41	38	35	32	30	28

Framesaver rollers



The FS Series conveyor roller was specifically designed to eliminate conveyor system frame wear and drastically reduce noise levels allowing you to substantially reduce conveyor system maintenance costs.

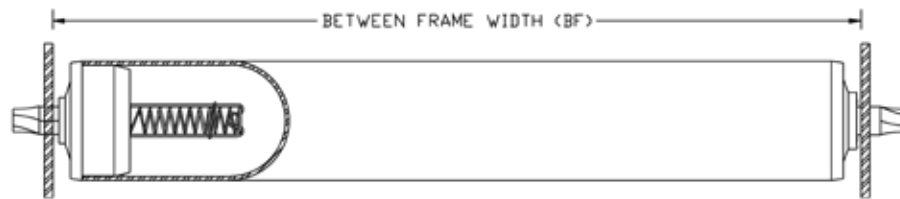
FS series rollers are available in two styles: the FS-1 and the FS-2. FS-1 series rollers utilize the cartridge bearing technology while the FS-2 has a 5/16" hex steel axle that connects the poly axle stubs giving the roller better deflection characteristics.

The FS Series rollers are primarily used as a replacement roller for high-speed applications found in distribution centers where noise and system vibration may be a problem.

Features & benefits

- Substantial reduction in noise levels
- Will not wear out a conveyor frame
- Extended life ABEC-1 precision bearing
- Self aligning axle reduces installation by 50%
- FS-1 Cartridge bearing style 30% lighter than a standard conveyor roller
- Reduction in system damaging vibration

1-5/8" OD x 16 Ga – 7/16" Stub Axle precision bearing

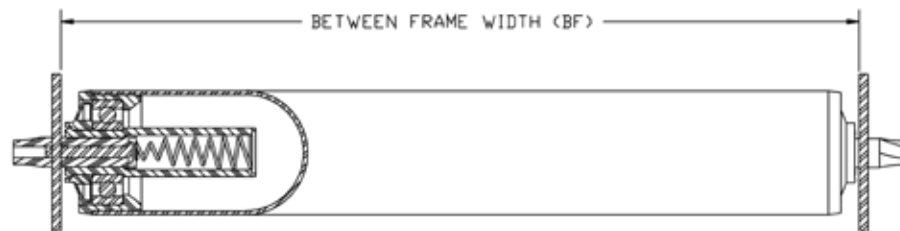


Tube	Axle	Bearing assembly	Bearing	Between frame	Part number
1-5/8" OD x 16 Ga (.065")	7/16" hex axle stub thermo plastic	F158ZZREV1 cartridge	ABEC	12-39"	158_FS-1

Roller capacity chart (LBS.)

BF	12	15	18	21	24	27	30	33	36	39
Bearing F158ZZREV1 cartridge	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx

1.9" OD x 16 Ga – 7/16" Stub Axle precision bearing



Tube	Axle	Bearing assembly	Bearing	Between frame	Part number
1.9" OD x 16 Ga (.065")	7/16" hex axle stub thermo plastic	F19ZZ cartridge	ABEC	12-39"	1.9_FS-1

Roller capacity chart (LBS.)

BF	12	15	18	21	24	27	30	33	36	39
Bearing F19ZZ cartridge	100	100	70	60	50	45	30	25	20	20



Tube	Axle	Bearing assembly	Bearing	Between frame	Part number
1.9" OD x 16 Ga (.065")	7/16" thermo plastic axle stub with 5/16" steel hex thru axle	R19ZZ	ABEC	12-39"	1.9_FS-2

Roller capacity chart (LBS.)

BF	12	15	18	21	24	27	30	33	36	39
Bearing R19ZZ	120	120	100	80	60	50	40	30	25	25

Why should I consider the FS series roller?

The FS series roller was specifically designed to eliminate the two biggest problems conveyor systems have namely frame wear and excessive noise levels.

What causes frame wear?

Every roller is unbalanced due to the tolerance of the tubing. No tube is completely straight or concentric. Because there must be a small clearance between the hex hole and axle, as the roller spins the axle rubs against the frame. The metal-to-metal contact eventually wears the frame and leads to premature wear and excessive noise.

What is the axle stub made of?

The FS series axle stub is made of proprietary polyester type thermoplastic polyurethane. It is specifically designed to display excellent abrasion resistance, cut resistance and durability without wearing your frame.

How long can I expect the FS series to last compared to a standard conveyor roller?

Our testing and field experience indicates that the FS series roller will actually last longer than a conventional roller because you don't get the constant wear of metal to metal contact between the axle and frame.

What is the weight capacity rating for the FS series roller?

The FS series is rated for 75 lbs. However, keep in mind that one roller never sees the complete load. For instance, a 100 lb. Box will usually rest on a minimum of 6 rollers so the effective weight that one roller will see is about 17 lbs.

Is it safe for installers to walk on the FS series roller?

Yes. The axle stub is reinforced with a steel pin made of 1045 cold rolled steel, hardened to 40 R.C. The sheer strength of the pin exceeds 1,394 lbs. A 24" roller can support up to 850 lbs although the operating rating is 75 lbs. At 850 lbs the roller does not come out of the frame, the axle is just distorted to the point that the roller will not spin.

Is the axle stub conductive?

No. The standard axle stub is not conductive. However, the dust cover and bearing housing are conductive. During normal course of operation when the dust cover comes in contact with the frame it displaces any static build up. Rolcon can provide a conductive axle stub if your application warrants it.

What if my frames are already showing wear?

That is the best time to switch to the FS series. By installing FS series rollers you will stop the frames from further wear. You can effectively double the life of your existing conveyor system.

Noise is a problem in our facility. What kind of noise reduction can I expect from the FS series?

Because the FS series uses ABEC-1 precision bearings and there is no metal-to-metal contact you can expect to drop your noise levels on average 3 to 5 decibels. However we have customers report drops of as much as 10 decibels.

Will I pay a premium for a FS series roller?

No. The FS series roller offers you all of the advantages at a cost to you of no more than you would pay for a conventional roller with comparable bearings.

Micro rollers



Our Micro Rollers are small diameter rollers used in conveyors, packaging or other machinery, where small, lightweight products or material have to be handled, usually with rollers at close center distances.

For gravity or powered applications, Our Micro Rollers, are available in a variety of diameters, bearing and bushing types and standard or custom between frame lengths.

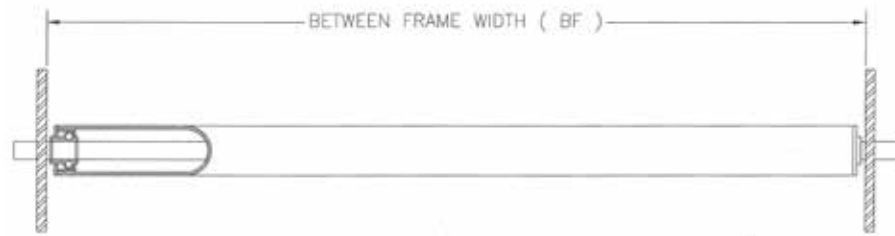
Miniature Rollers can be used in many applications:

- Anywhere close center requirements are required
- To handle small lightweight products, cartons or assemblies in production or packaging lines
- As transition rollers between belt and chain conveyors
- As infeed/outfeed transition conveyors for machinery

Features & benefits

- 3/4" – 1" diameter for close center requirements
- Bushing or Bearing styles available
- Custom between frame dimension available
- Ideal for light packages and cartons
- Spring loaded both ends for ease of installation

3/4" OD x 16 Ga – 1/4" round axle non-precision bearing



Tube	Axle	Bearing assembly	Bearing	Between frame	Part number
3/4" OD x 16 Ga (.035")	1/4" round	034-SR	Non-Precision	12-33"	.75_RG-1/RD

Roller capacity chart (LBS.)

BF	12	15	18	21	24	27	30	33
Bearing 034-SR	60	60	59	51	51	44	39	35

7/8" OD x 16 Ga – 1/4" round axle bushing



Tube	Axle	Bearing assembly	Bearing	Between frame	Part number
7/8" OD x 16 Ga (.035")	1/4" round	D-1420-04	Bushing Type	12-33"	.87_RG-1/B

Roller capacity chart (LBS.)

BF	12	15	18	21	24	27	30	33
Bearing D-1420-04	60	60	59	51	51	44	39	35

1" OD x 16 Ga – 1/4" round axle non-precision bearing



Tube	Axle	Bearing assembly	Bearing	Between frame	Part number
1" OD x 16 Ga (.035")	1/4" round	CB-3825R78	Non-Precision	12-33"	1.0_RG-1/25RD

Roller capacity chart (LBS.)

BF	12	15	18	21	24	27	30	33
Bearing CB-3825R78	60	60	59	59	51	43	37	37

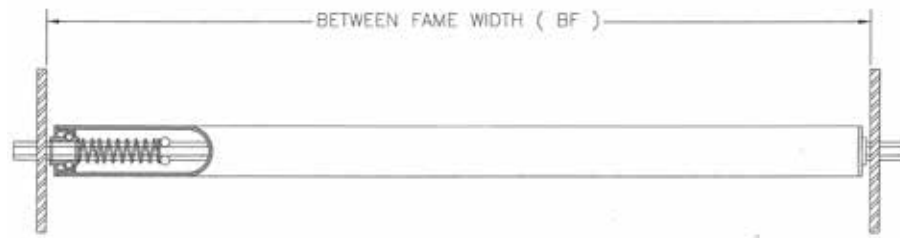
1" OD x 16 Ga – 5/16" round axle non-precision bearing



Tube	Axle	Bearing assembly	Bearing	Between frame	Part number
1" OD x 16 Ga (.035")	5/16" round	CB-385R79	Non-precision	12-33"	1.0_RG-1/312RD

Roller capacity chart (LBS.)

BF	12	15	18	21	24	27	30	33
Bearing CB-385R79	60	60	59	59	59	59	59	59

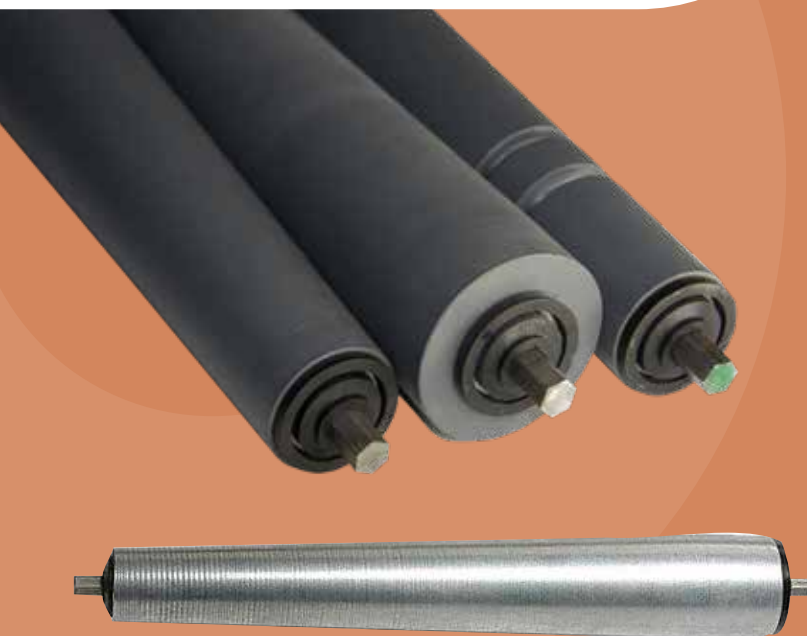


Tube	Axle	Bearing assembly	Bearing	Between frame	Part number
1" OD x 16 Ga (.035")	5/16" hex	CB-195H03	Non-Precision	12-33"	1.0_RC-1

Roller capacity chart (LBS.)

BF	12	15	18	21	24	27	30	33
Bearing CB-195H03	60	60	59	59	59	59	59	59

Tapered rollers



Tapered rollers are commonly used in 45, 90 or 180 degree conveyor curves.

The most common size is 2-1/2 on the large end tapering down to 1-5/8 on the small end. Although that size is most common, tapered rollers can come in just about any custom size you need.

Features

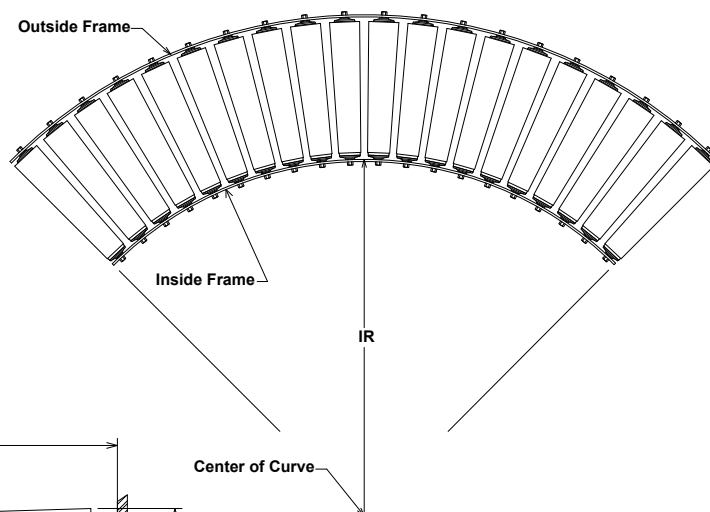
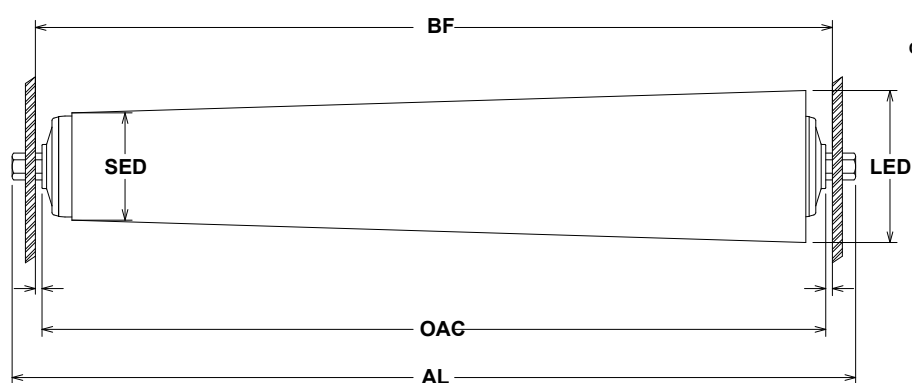
- Custom lengths and designs
- Grooved and non-grooved
- Commercial or ABEC precision bearings available
- Galvanized, Stainless and Coated tubing available
- OD sizes from 1-3/8" to 5"
- PVC tubing available in O.D. sizes from 1-3/8" to 2-1/2"

Due to the special nature of tapered rollers please contact us directly with your application at sales@rolconrollers.com or call 800-486-2472.

Please reference the Tapered roller order sheet for help with the proper dimensions you may need.

Tapered roller

Order sheet



Bearing:

Commercial / ABEC-1 (Precision)

Tube:

Material

Axle:

Size / Configuration / Material

AL:

Axle Length Overall

OAC:

Overall Roller Cone (hub to hub)

BF:

Between Frame Dimension

IR:

Inside Radius of Curve

SED:

Small End Diameter

LED:

Large End Diameter

Company:

Phone:

Contact:

Email:

Capacity charts

Roller capacity

Roller capacities are calculated to CEMA standards. The capacity is limited to the bearing capacity, shaft deflection, tube deflection, or tube strength. All capacities based on evenly distributed non-impact loads across entire roller.

Conveyor roller selection for a given load

As a general rule of thumb consider only 2/3 of the rollers under the product when calculating required roller capacity because conveying surfaces are not typically perfectly flat.

Gravity roller capacity table heavy duty

Bearing type: Commercial unground non-precision

Tube diameter	2.0	2-1/4	2-1/2
Material	Steel	Steel	Steel
Gage	16	14	11
Axle diameter	11/16	11/16, 3/4	11/16, 3/4
BF			
12	380	450	580
15	380	450	580
18	380	450	580
21	380	450	580
24	380	450	580
27	380	450	580
30	380	450	580
33	380	450	580
36	380	450	580
39	380	450	580
42	380	450	580
45	380	450	580
48	350	425	560
51	320	420	530

Gravity roller capacity table light duty

Bearing type: Commercial unground non-precision

Tube diameter	1	1-3/8	1-3/8	1-5/8	1.9	1.9
Material	Steel	Steel	Steel	Steel	Steel	Steel
Gage	20	18	16	16	16	16
Axle diameter	1/4	1/4	5/16	5/16	1/4	5/16
BF						
12	60	90	120	120	40	135
15	60	70	120	120	30	105
18	60	60	120	120	25	95
21	50	50	110	110	20	95
24	45	45	95	95	20	95
27	40	40	85	85	20	95
30	30	34	75	75	15	75
33	32	32	70	70	15	50
36	*	*	63	63	15	50
39	*	*	60	60	10	45
42	*	*	55	55	10	45
45	*	*	50	50	10	40
48	*	*	47	47	10	40
51	*	*	45	45	10	40

Gravity roller capacity table medium duty

Bearing type: Commercial unground non-precision

Tube diameter	1-3/8	1-5/8	1.9	2.0	2-1/4	2-1/2
Material	Steel	Steel	Steel	Steel	Steel	Steel
Gage	18	16	16	16	14	11
Axle diameter	7/16	7/16	7/16	7/16	7/16	7/16
BF						
12	170	240	260	260	290	360
15	170	240	260	260	290	360
18	170	240	260	260	290	360
21	170	240	260	260	290	360
24	170	240	260	260	290	360
27	170	240	260	260	290	360
30	170	240	260	260	290	360
33	170	240	260	260	290	360
36	170	240	260	260	290	360
39	170	240	260	260	290	360
42	150	220	260	260	290	360
45	140	200	260	260	260	360
48	140	190	245	245	260	360
51	120	180	230	230	240	360

Poly V capacity table

Bearing type: Polyhoused ABEC

Tube diameter	1.9	2-1/2
Material	Steel	Steel
Gage	16	11
Axle diameter	7/16	11/16
BF		
12	370	600
15	290	600
18	240	600
21	200	600
24	175	600
27	155	600
30	140	600
33	125	600
36	115	600
39	106	560
42	98	520
45	90	485
48	85	455
51	80	425

Precision bearing capacity table

Bearing type: Polyhoused ABEC

Tube diameter	1-3/8	1-5/8 1.9	1.9	1.9	2	2-1/2
Material	Steel	Steel	Steel	Steel	Steel	Steel
Gage	18	16	12	16	16	11
Axle diameter	5/16	7/16	7/16	7/16	7/16	11/16
BF						
12	100	190	500	370	370	600
15	100	190	485	290	290	600
18	65	190	398	240	240	600
21	55	190	336	200	200	600
24	50	175	289	175	175	600
27	40	155	253	155	155	600
30	40	140	223	140	140	600
33	35	120	198	125	125	600
36	30	115	177	115	115	600
39	30	106	158	106	106	560
42	25	98	142	98	98	520
45	25	90	127	90	90	485
48	20	85	113	85	85	455
51	20	80	89	80	80	425

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