





FS Series Rollers
FS Series Roller Introduction
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FS SERIES ROLLER

Rolcon is proud to introduce the next generation of conveyor roller technology. The FS series conveyor roller.

Rolcon has developed a revolutionary conveyor roller specifically designed to eliminate conveyor frame wear and drastically reduce noise levels allowing you to substantially reduce maintenance costs on your conveyor systems.

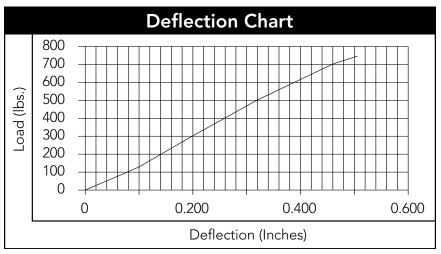
At the heart of this innovative design is Rolcon's patented axle stub. Made of a molded thermoplastic polyurethane reinforced with a steel pin, the axle has a spiral-hex tip that allows for perfect installation every time.

But most important since the axle is made of cut resistant, high abuse polyurethane there is no metal to metal contact between the roller axle and the conveyor frame. This means that the FS series will never wear out your conveyor frames - EVER! Combine that with a precision bearing and you also have the quietest roller on the market.

Take a moment to look over the Seven Unique Benefits you get by switching to the FS series:

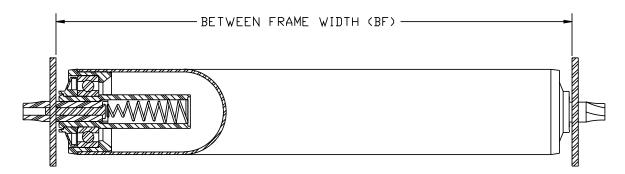
- 1. No Frame Wear -EVER: Due to the thermoplastic polyurethane axle stub Rolcon can guarantee the FS series will never wear out the conveyor frame. MORE IMPORTANT, if your frames are beginning to show wear the FS series will eliminate further wear, saving you the cost of replacing the frames or system.
- 2. Substantial Reduction of Noise Levels: The FS series uses a 6203ZZ precision bearing. This along with no metal-to-metal contact of axle and frame can reduce noise levels by as much as 10 decibels.
- 3. Reduction of System Damaging Vibration: Because all rollers are unbalanced, running your conveyor at high speeds causes vibration that is transferred to the frame and magnified due to metal-to-metal contact. The FS series significantly reduces this vibration transfer saving bearings, motor mounts, switches, electronics and your frames.
- 4. 30% Lighter Than Standard Rollers: Because of the axle construction, the FS series is 30% lighter than a conventional roller. This means less freight charges, no damage to the frame and less employee fatigue during installation.
- **5**. Self Aligning Hex Axle Reduces Installation by 50%: The patented spiral hex on the axle allows the axle to align itself during installation. This is especially handy in overhead applications.
- 6. Axles are Independently Spring Loaded: Since the axles are independently spring loaded it doesn't matter which end you install first.

 Just push and go.
- 7. Greater Bearing Life: There is no side load on the inner race of the bearing from the axle spring. No side load means far greater bearing life.



Valves based on 1924FS-11.9 dia., galvanized steel tube, 24" between frame, 6203ZZ bearing.

FS Series Roller 1 3/8 in. O.D. x 18 Ga. - 5/16 Hex Axle



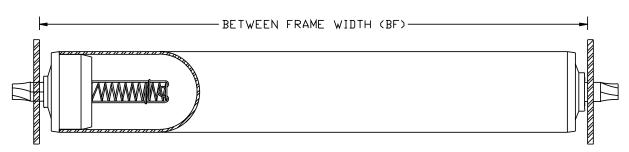
Description

Tube: 1 3/8 in O.D. x 18 Ga. (.049 in) Galvanized Axle: 5/16 hex Thermoplastic Polyurethane

Bearing Assembly: F143ZZ Between Frame: 6-36 Options: See page 35 Part Number: 138_FS-1

Roller Capacity: Maximum Load Rating 20 lbs.

FS Series 1 5/8 in O.D. x 16 Ga. - 7/16 Hex Axle



Description

Tube: 1 5/8 in O.D. x 16 Ga. (.065 in)

Axle: 7/16 in. Hex Thermoplastic Polyurethane

Bearing Asembly: F158ZZREV1

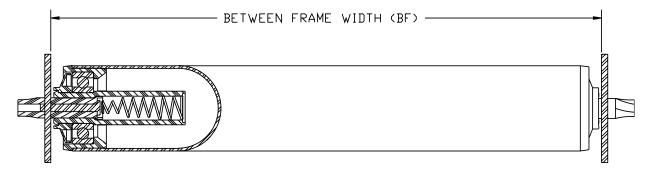
Between Frame: 6-36 Options: See page 35 Part Number: 158_FS-1

Roller Capacity: Maximum Load Rating 30 lbs.



FS Series Rollers (p.3-10)

FS Series 1.9 in. O.D. x 16 Ga. - 7/16 Hex Axle



Description

Tube: 1.9 in. O.D. x 16 Ga. (.065 in)

Axle: 7/16 in. Hex Thermoplastic Polyurethane

Bearing Assembly: F19ZZ Between Frame: 6-50 Options: See page 35 Part Number: 19_FS-1

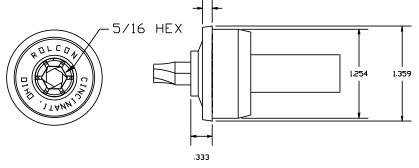
Roller Capacity: Maximum Load Rating 75 lbs.

FS Series Bearing Assemblies

FS Series Bearing Assembly F143ZZ

Description

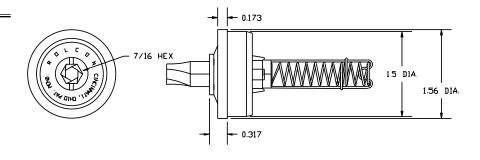
- -Bearing Assembly for 1 3/8" FS Series roller
- -Thermoplastic polyurethane axle stub
- -Conductive resin dust cover and adapter
- -6001ZZ precision bearing
- -Dynamic load 3930 lbs.
- -Static load 2230 lbs.



FS Series Bearing Assembly F158ZZ

Description

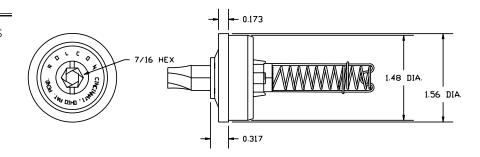
- -Bearing Assembly for FS series Tapered roller
- -Steel re-inforced thermoplastic polyurethane axle stub
- -Conductive resin dust cover and adapter
- -6002ZZ precision bearing
- -For use with 3134 or 3135 adapter
- -Dynamic load 4300 lbs.
- -Static load 2510 lbs.



FS Series Bearing Assembly F158ZZREV1

Description

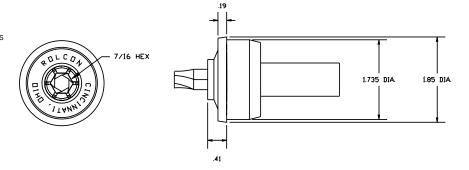
- -Bearing assembly for 1 5/8" dia. FS Series roller
- -7/16" Thermoplastic polyurethane steel re-inforced axle stub
- -Conductive resin dust cover and adapter
- -6002ZZ precision bearing
- -Dynamic load 4300 lbs.
- -Static load 2510 lbs.



FS Series Bearing Assembly F19ZZ

Description

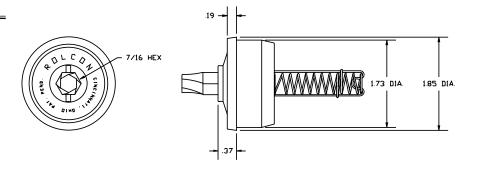
- -Bearing assembly for 1.9 dia. FS series roller
- -Steel re-inforced thermoplastic polyurethane axle stub
- -Conductive resin dust cover and adapter
- -6203ZZ precision bearing
- -Dynamic load 7350 lbs.
- -Static load 4410 lbs.



FS Series Bearing Assembly F19ZZREV1

Description

- -New style bearing assembly for 1.9 dia. FS Series roller
- -7/16" Thermoplastic polyurethane steel re-inforced axle stub
- -Conductive resin dust cover and adapter
- -6203ZZ precision bearing
- -Dynamic load 7350
- -Static load 4410



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FS SERIES TAPERED ROLLER

Rolcon is pleased to announce the newest product in the FS series Roller series. Rolcon's new FS series Tapered Roller.

- * Save up to 50% on the cost of replacement tapered rollers.
- * Reduce noise levels by as much as 10 decibels.
- * Double the life of your curve frames.
- * Standard 1-2 week lead-time.

Traditional Tapered Steel Rollers are Expensive!

Shaping a taper on a steel roller is expensive. The process for shaping metal requires expensive machinery and is very labor intensive. Because there are only a few companies who can do this, you pay a premium on every tapered roller you buy. Not only do you pay more for the process, but also lead times can be as long as 4 to 8 weeks.

You Do Not Need A Full Taper

Rolcon's research has found that you do not need the full taper to get the desired outcome. On a standard curve, most boxes never see the small side of the roller. A standard tapered roller only requires the last third of the roller to be tapered, regardless of box size.

Innovative Polymer Tapered Sleeve

With Rolcon's new patent pending FS series tapered roller we press fit and then double steel pin a polymer sleeve to our standard 1.9 or 1.6 diameter roller. Since we use our standard parts there is no need for expensive shaping machinery or intensive labor. Because we can use our standard FS series roller, you get all of the following benefits:

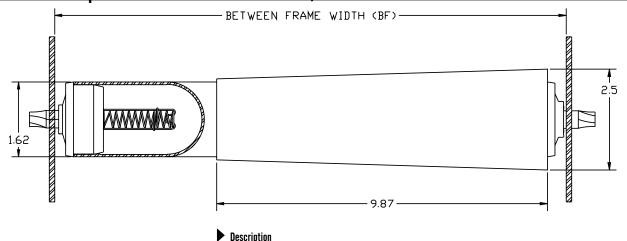
- Up to 50% less in cost
- Fast (1-2 week) lead times.
- FS series quiet-roll technology, reducing noise levels up to 10 decibels.
- 30% lighter than standard steel taper rollers.
- Patented spiral hex, steel reinforced axle stub guarantees no frame wear ever!
- Precision ABEC-1 bearing for long life, heavy loads, and ultra quiet operation.
- Axle stubs independently spring loaded for fast, easy installation.
- **Q**. Double the life of existing curve frames.



<u> TOLL FREE 1-800-486-2472</u>

Gen Info & Ordering Info (p.32–35)

FS Series Tapered Roller 2.5 in. 0.D. to 1.5/8 in. 0.D.



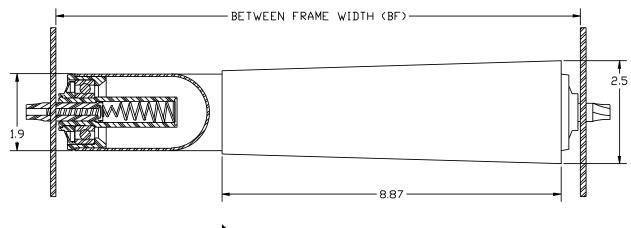
Tube: 1 5/8 in. O.D. x 16 Ga. (.065 in.) Sleeve: 2.5 in. O.D. polypropelyne

Axle: 7/16 in. Hex Thermoplastic Polyurethane

Bearing Assembly: F158ZZ Between Frame: 12-40 Options: See page 35 Part Number: 158_FS-1/RT

Roller Capacity: Maximum load rating 30 LBS.

FS Series Tapered Roller 2.5 in. 0.D. to 1.9 in. 0.D.



Description

Tube: 1.9 in. O.D. x 16 Ga. (.065 in.) Sleeve: 2.5 in. O.D. polypropelyne

Axle: 7/16 in. Hex Thermoplastic Polyurethane

Bearing: FS19ZZ
Between Frame: 12-40
Options: See page 35
Part Number: 19__FS-1/RT

Roller Capacity: Maximum Load Rating 75 LBS.

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FREQUENTLY ASKED QUESTIONS

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.

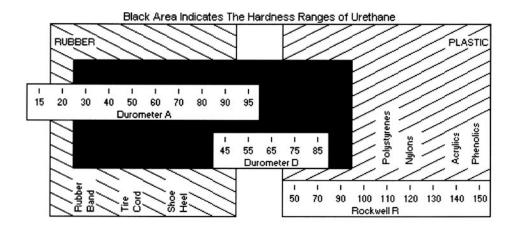
What if my frames are already showing wear? That is the best time to switch to the FS series. By installing FS series rollers you will stop the frames from further wear. You can effectively double the life of your existing conveyor system.

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.

Info & Ordering Info

BENEFITS OF URETHANE



Urethane Properties

*Hardness

*Noise Reduction

*Abrasion Resistance

*Chemical Resistance

*Electrical Properties

*Flex Properties

*Machinability

*Oil & Solvent Resistance

*Tensile Strength

*Tear Strength

Polyurethane prepolymers are designed to provide properties not available in conventional rubbers, metals and plastics. They have higher oil & solvent resistance and better aging properties than most general-purpose rubbers and plastics. They have greater abrasion and tear resistance than neoprene or natural rubber, coupled with greater load-bearing capacity. Their extensibility and impact strength are also greater than those of most plastics.

The various options in the broad polyurethane product line enable us to select the right formulation to achieve the desired combination on engineering properties.

The grade of prepolymer, the curative and special additives can all be selected to maximize the features most critical to each application. Additives include, color, conductive fillers, and UV inhibitors.

Parts fabricated from tough, resilient polyurethane elastomers that have been subjected to abrasive or cutting action have long outlasted similar parts made from metals or plastics.

In addition, polyurethane elastomers can be formulated to cover a wide range of hardness, from soft rubbers at 15 on the A scale to rigid plastics at 85 on the D scale.

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Series Rollers (p.3-10)



ROLCON STANDARD SERIES ROLLERS

Rolcon manufactures a broad line of conveyor rollers offered in two series the RS series roller and the RG series roller.

RS Series Rollers

The RS series rollers are high-speed precision rollers. The RS series gives you extended life by using ABEC-1 precision bearings, conductive bushing and bearing cap and crimped tube ends to prevent assemblies from working out of the tube. The axle is spring loaded on both ends.

Recommended for use in belt and powered conveyor lines, as well as gravity applications. The RS series roller is a quiet, smooth running roller that offers long life and decreased wear while substantially reducing noise levels.

RG Series Rollers

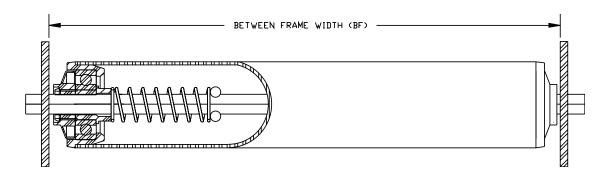
The RG series rollers are generally considered a low cost alternative to the RS series. The RG series rollers utilize a commercial grade bearing and are generally used in low speed or gravity applications where noise is not a consideration.

Both the RS and RG series rollers can be supplied with sprockets, spring loaded or fixed shafts and also available with or without grooves.

Custom Applications

Roughly 50% of Rolcon's business is custom. If you do not see the roller for your application in the catalog, call us. We would be happy to provide a quote for your specific application.

Roller 1 3/8 in. O.D. x 18 Ga. - 5/16 in. Hex Axle Precision Bearing



Description

Roller Capacity Chart(LBS.)

Tube: 1 3/8 in. O.D. x 18 Ga. (.049 in.)

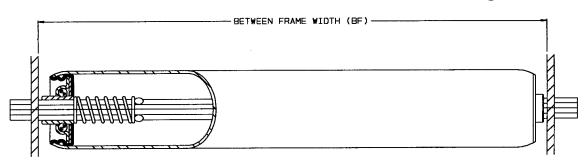
Axle: 5/16 in. Hex

Bearing Assembly: R143ZZ Between Frame: 4-40 in. Options: See page 35

Part Number: 138__RS-1/(options)

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

\blacksquare Roller 1 3/8 in. O.D. x 18 Ga. - 5/16 in. Hex Axle Non-Precision Bearing



Description

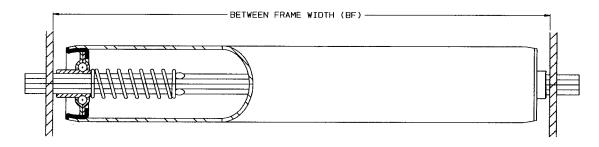
Roller Capacity Chart(LBS.)

Tube: 1 3/8 in. O.D. x 18 Ga. (.049 in.)
Axle: 5/16 in. Hex
Bearing: R1276
Between Frame: 4-40 in.
Options: See page 35
Part Number: 138___RG-1/(options)

BF	Bearing R1276	BF	Bearing R1276
4	120	18	120
8	120	19	120
9	120	20	120
10	120	21	120
11	120	22	115
12	120	23	110
13	120	24	105
14	120	25	100
15	120	26	95
16	120	27	90
17	120	28	85
29-40	50		

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Roller 1 3/8 in. O.D. x 16 Ga. - 5/16 in. Hex Axle Non-Precision Bearing



Roller Capacity Chart(LBS.)

Description

Tube: 1 3/8 in. O.D. x 16 Ga. (.065 in.)

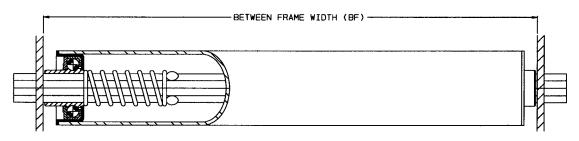
Axle: 5/16 in. Hex Bearing: R1276

Between Frame: 4-39 in. Options: See page 35

Part Number 138___RG-1/16/(options)

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

Roller 1 3/8 in. 0.D. x 16 Ga. - \frac{7}{16} in. Hex Axle Non-Precision Bearing



Roller Capacity Chart(LBS.)

Description

Tube: 1 3/8 in. O.D. x 16 Ga. (.065 in.)

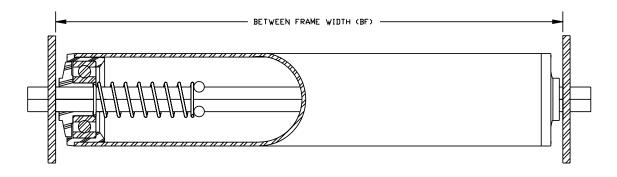
Axle: 7/16 in. Hex Bearing: R1250

Between Frame: 3-39 in. Options: See page 35

Part Number: 138__RG-1/16/716/(options)

BF	Bearing R1250	BF	Bearing R1250
3	170	25	170
9	170	27	170
11	170	29	170
13	170	31	170
15	170	33	170
17	170	35	170
19	170	37	170
21	170	39	170
23	170		

Roller 1 5/8 in. O.D. x 16 Ga. - 7/16 in. Hex Axle Precision Bearing



Description

Roller Capacity Chart(LBS.)

Tube: 1 5/8 in. O.D. x 16 Ga. (.065 in.) Axle: 7/16 in. Hex

Bearing Assembly: R158ZZ

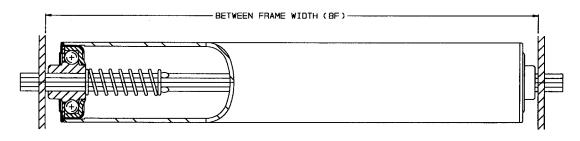
Between Frame: 3-65 in.

Options: See page 35

Part Number: 158_RS-1/(options)

D.E.	D : D45077	L DE	D : D45077
BF	Bearing R158ZZ	BF	Bearing R158ZZ
3	300	37	250
10	300	40	230
13	300	43	210
16	300	46	200
19	300	49	190
22	300	52	180
25	300	55	170
28	300	58	160
31	295	61	155
34	270	65	150

\blacksquare Roller 1 5/8 in. O.D. x 16 Ga. -5/16 in. Hex Axle Non-Precision Bearing



Description

Roller Capacity Chart(LBS.)

Tube: 1 5/8 in. O.D. x 16 Ga. (.065 in.)

Axle: 5/16 in. Hex Bearing: R1500

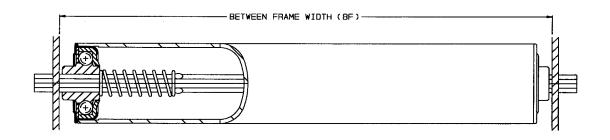
Between Frame: 3-39 in. Options: See page 35

Part Number: 158_RG-1/(options)

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

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Roller 1 5/8 in. O.D. x 14 Ga. - 7/16 in. Hex Axle Non-Precision Bearing



Description

Tube: 1 5/8 in. O.D. x 14 Ga. (.083 in.)

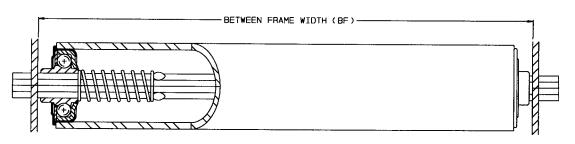
Axle: 7/16 in. Hex Bearing: R1500

Between Frame: 3-65 in. Options: See page 35

Part Number: 158_RG-1/14/(options)

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

Roller 1 3/4 in. 0.D. x 10 Ga. - 7/16 in. Hex Axle Non-Precision Bearing



Description

Roller Capacity Chart(LBS.)

Tube: 1 3/4 in. O.D. x 10 Ga. (.134 in.) Axle: 7/16 in. Hex

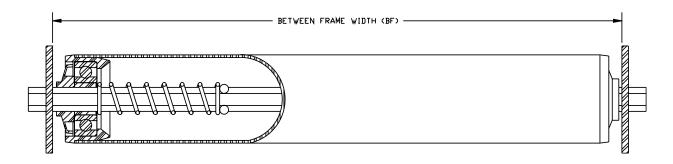
Bearing: R1624

Between Frame: 3-65 in. Options: See page 35

Part Number: 134__RG-1/(options)

BF	Bearing R1624	BF	Bearing R1624
3	290	37	240
10	290	40	220
13	290	43	200
16	290	46	190
19	290	49	180
22	290	52	165
25	290	55	160
28	290	58	150
31	285	61	140
34	260	65	135

Roller 1.9 in. O.D. x 16 Ga. - 7/16 in. Precision Bearing



Description

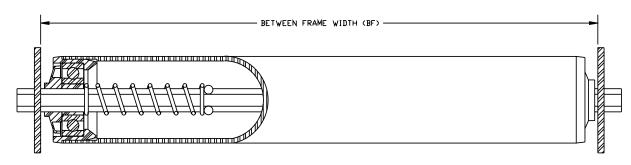
BF

Tube: 1.9 in. O.D. x 16 Ga. (0.65 in.) Axle: 7/16 in. Hex Bearing Assembly: R19ZZ Between Frame: 6-50 in. Options: See page 35

Part Number: 19____RS-1/(Options)

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

■ Roller 1.9 in. O.D. x 16 Ga. - 7/16 in. Hex Axle - Stainless Steel Precision Bearing



Roller Capacity Chart(LBS.

Description

Tube: 1.9 in. O.D. x 16 Ga. (.065 in.) Stainless Steel

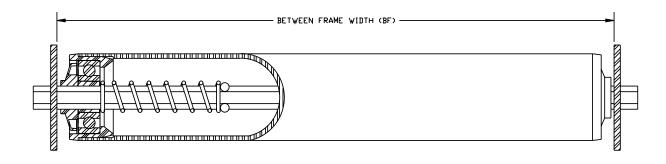
Axle: 7/16 in. Hex Stainless Steel Bearing Assembly: R192RS Between Frame: 6-50 in. Options: See page 35

Part Number: 19__RS-1/SST/SSA

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

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■Roller 1.9 in. O.D. x 12 Ga. - 7/16 in. Hex Axle Precision Bearing



Roller Capacity Chart(LBS.)

Description

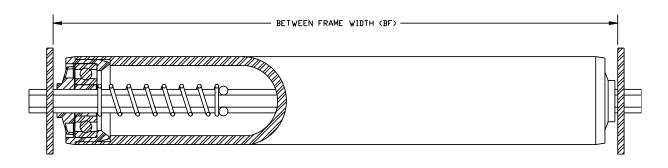
Tube: 1.9 in. O.D. x .109 in. Axle: 7/16 in. Hex

Bearing Assemly: R19ZZ Between Frame: 6-50 in. Options: See page 35

Part Number: 19__RS-1/12/(options)

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

Roller 1.9 in. O.D. x 7 Ga. - \frac{7}{16} in. Hex Axle Precision Bearing



Description

Roller Capacity Chart(LBS.)

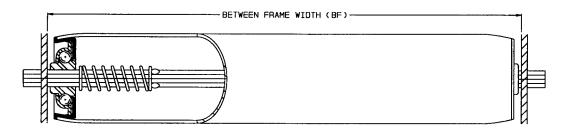
Tube: 1.9 in. O.D. x .180 in. Wall Axle: 7/16 in. Hex Bearing: R19ZZ

Between Frame: 7-50 in. Options: See page 35

Part Number: 19__RS-1/7/(options)

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

\blacksquare Roller 1.9 in. O.D. x 16 Ga. - 5/16 in. Hex Axle Non-Precision Bearing



Description

Roller Capacity Chart(LBS.)

Tube: 1.9 in. O.D. x 16 Ga. (.065 in.) Axle: 5/16 in. Hex

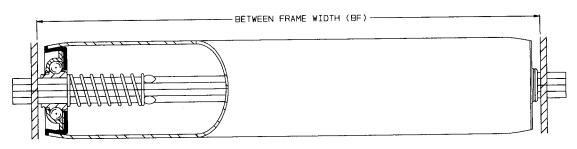
Bearing: R1005 Bushing: R312HB Between Frame: 6-40 in.

Options: See page 35

Part Number: 19__RG-1/516/(options)

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

■ Roller 1.9 in. O.D. x 16 Ga. - 7/16 in. Hex Axle Non-Precision Bearing



Description

Roller Capacity Chart(LBS.)

Tube: 1.9 in. O.D. x 16 Ga. (.065 in.) Axle: 7/16 in. Hex Bearing: R1005

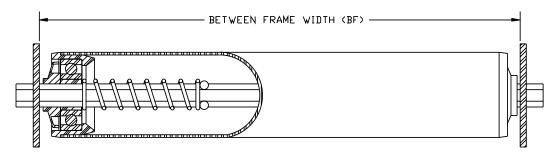
Between Frame: 6-63 in. Options: See Page 35

Part Number: 19___RG-1/(options)

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

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Roller 2 in. O.D. x 16 Ga. - 7/16 in. Hex Axle Precision Bearing



Description

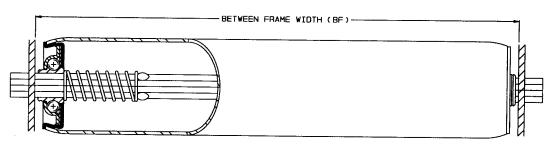
Roller Capacity Chart(LBS.)

Tube: 2 in. O.D. x 16 Ga. (.065 in.)
Axle: 7/16 in. Hex
Bearing Assembly: R19ZZ
Between Frame: 5-63 in.
Options: See page 35

Options. See page 55					
Part Number: 2_	_RS-1/(options)				

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

Roller 2 in. O.D. x 16 Ga. - 7/16 in. Hex Axle Non-Precision Bearing



Description

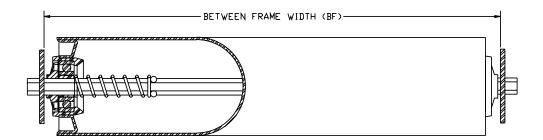
Roller Capacity Chart(LBS.)

Tube: 2 in. O.D. x 16 Ga. (.065 in.)
Axle: 7/16 in. Hex
Bearing: R1877
Between Frame: 4-63 in.
Options: See page 35
Part Number: 2_RG-1/(options)

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

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Roller 2 1/4 in. O.D. x 14 Ga. - 7/16 in. Hex Axle Precision Bearing



Description

Roller Capacity Chart(LBS.)

Tube: 2 1/4 in. O.D. x 14 Ga. (.083 in.)

Axle: 7/16 in. Hex

Bearing Assembly: R158ZZ3134

Adapter: R3134 Between Frame: 7-65 in. Options: See page 35

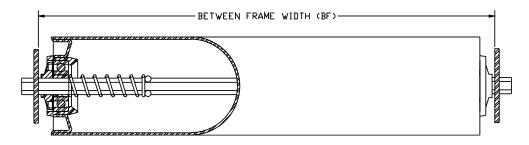
Part Number: 225_RS-1/(options)

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



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\blacksquare Roller 2 1/2 in. O.D. x 14 Ga. - 7/16 in. Hex Axle Precision Bearing



Description

Roller Capacity Chart(LBS.)

Tube: 2 1/2 in. O.D. x 14 Ga. (.083 in.)

Axle: 7/16 in. Hex

Bearing Assembly: R158ZZ3135

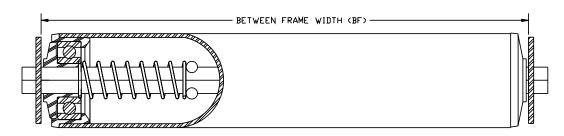
Adapter: 3135

Between Frame: 7-65 in. Options: See page 35

Part Number: 25__RS-1/(options)

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

Roller 2 1/2 in. O.D. x 11 Ga. - \frac{7}{16} in. Hex Axle Precision Bearing



Description

Roller Capacity Chart(LBS.)

Tube: 2 1/2 in. O.D. x 11 Ga. (.120 in.) Axle: 7/16 in. Hex

Bearing Assembly: R25ZZ437

Between Frame: 7-72 in.

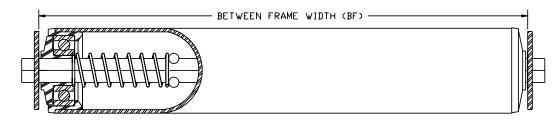
Options: See page 35

Part Number: 25_RS-1/7/16(options)

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

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Roller 2 1/2 in. O.D. x 11 Ga. - 11/16 in. Hex Axle Precision Bearing



Description

Roller Capacity Chart(LBS.)

Tube: 2 1/2 in. O.D. x 11 Ga. (.120 in.)

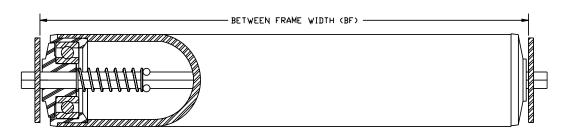
Axle: 11/16 in. Hex

Bearing Assembly: R25ZZ687 Between Frame: 7-72 in. Options: See page 35

Part Number: 25__RS-1/(options)

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

■ Roller 2 1/2 in. O.D. x 7 Ga. - 7/16 in. Hex Axle Precision Bearing



Description

Roller Capacity Chart(LBS.)

Tube: 2 1/2 in. O.D. x 7 Ga. (.180 in)

Axle: 7/16 in. Hex

Bearing Assembly: R25ZZ437 Between Frame: 7-72 in.

Options: See page 35

Part Number: 25__RS-1/7/7-16

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

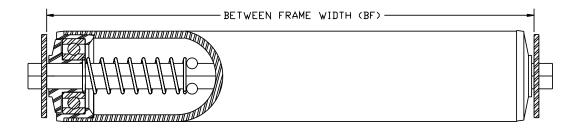
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Series Rollers (p.3-10)

Roller 2 1/2 in. O.D. x 7 Ga. - 11/16 Hex Axle Precision Bearing



Description

Roller Capacity Chart(LBS.)

Tube: 2 1/2 in. O.D. x 7 Ga. (.180 in)

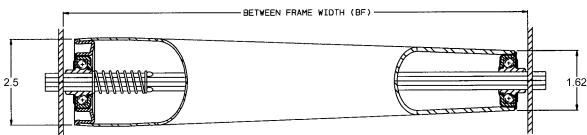
Axle: 11/16 in. Hex

Bearing Assembly: R25ZZ687 Between Frame: 7-72 in. Options: See page 35

Part Number: 25_RS-1/7/options

BF	R25ZZ687	BF	R25ZZ687
7	600	43	600
11	600	47	600
15	600	50	600
19	600	54	600
23	600	58	600
27	600	62	600
31	600	66	600
35	600	70	600
39	600	72	600

■Tapered Roller 2 1/2 in. O.D. to 1 5/8 in. O.D. - 7/16 Hex Axle Precision Bearing



Description

Roller Capacity Chart(LBS.)

Tube: 2 1/2 in. O.D. to 1 5/8 in. O.D.

x 14 Ga.

Axle: 7/16 in. Hex

Bearing Assembly: R1625ZZ, R3135

Between Frame: 12-40 in.

Options: See page 35

Part Number: 2516_RS-1/(options)

BF	Roller Capacity	B⊦	Roller Capacity
12	290	27	290
14	290	28	290
15	290	29	290
16	290	30	290
17	290	31	290
18	290	32	280
19	290	33	270
20	290	34	260
21	290	35	250
22	290	36	245
23	290	37	240
24	290	38	235
25	290	39	225
26	290	40	220

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BEARINGS & BEARING ASSEMBLIES

Rolcon uses a variety of bearings in our rollers and bearing assemblies. Bearings may be purchased separately or as an assembly. The assembly usually consists of an adapter and bushing that allows you to push it into the end of a roller tube.

The most common types of bearings used are:

Commercial Unground Bearing: This is a simply designed bearing that is typically used in low speed applications where noise is not a consideration. Very tolerant of shaft deflection, this bearing is generally considered low cost.

Precision Ball Bearing Meeting ABEC-1 Specifications: This is a standard ABEC-1 Series 6000 and 6200 ball bearing. This bearing offers precise operation, low noise, higher load capacity and a long life span.

ZZ and 2RS Bearings: This version is similar to the previously described bearing. The ZZ has shields on both sides to provide protection from dirt and dust and is the standard bearing used in Rolcon rollers. The 2RS has rubber contact seals on both sides to provide water resistance.

Bearings	

6000 Series Chart R143ZZ 6200 Series Chart R158ZZ

 6200 Series Chart
 R158ZZ

 R1276
 R19ZZ

 R1250
 R158ZZ/3134

R1500 R158ZZ/3135 R1624 R25ZZ437 R1005 R25ZZ687

R1877 R1500/3134 R1500/3135

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Bearing Assemblies

Ball Bearings 6000 Series Chart



OPEN



ONE SHIELD Z



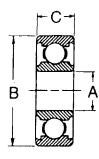
TWO SHIELDS ZZ



ONE SEAL RS



TWO SEALS 2RS



Item No	Bore A		Outer Diameter B		Width C		Basic Load Rating (N) Dynamic Static		Weight	
ZZ/2RS	mm	Inch	mm	Inch	mm	Inch	Cr	Co	lbs.	
R6000	10	0.3937	26	1.0236	8	0.3150	3510	1950	0.046	
R6001	12	0.4724	28	1.1024	8	0.3150	3930	2230	0.048	
R6002	15	0.5906	32	1.2598	9	0.3543	4300	2510	0.057	
R6003	17	0.6693	35	1.3780	10	0.3937	5230	3040	0.079	
R6004	20	0.7874	42	1.6535	12	0.4724	7210	4460	0.152	
R6005	25	0.9843	47	1.8504	12	0.4724	7740	4960	0.165	
R6006	30	1.1811	55	2.1654	13	0.5118	10200	6910	0.198	
R6007	35	1.3780	62	2.4409	14	0.5512	12300	8530	0.353	
R6008	40	1.5748	68	2.6772	15	0.5906	12900	9300	0.463	
R6009	45	1.7717	75	2.9528	16	0.6299	15300	11300	0.529	
R6010	50	1.9685	80	3.1496	16	0.6299	16000	12200	0.573	
R6011	55	2.1654	90	3.5433	18	0.7087	21700	17000	0.838	
R6012	60	2.3622	95	3.7402	18	0.7087	23600	18200	0.904	
R6013	65	2.5591	100	3.9370	18	0.7087	24700	19700	0.948	
R6014	70	2.7559	110	4.3307	20	0.7874	29700	24200	1.322	
R6015	75	2.9528	115	4.5276	20	0.7874	30900	26100	1.389	
R6016	80	3.1496	125	4.9213	22	0.8661	34900	29100	1.895	
R6017	85	3.3465	130	5.1181	22	0.8661	36400	31400	1.984	
R6018	90	3.5433	140	5.5118	24	0.9449	44700	39200	2.557	
R6019	95	3.7402	145	5.7087	24	0.9449	45500	39800	2.601	
R6020	100	3.9370	150	5.9055	24	0.9449	46300	42000	2.755	
R6021	105	4.1339	160	6.2992	26	1.0236	50700	46500	3.570	
R6022	110	4.3307	170	6.6929	28	1.1024	62900	57400	4.628	
R6024	120	4.7244	180	7.0866	28	1.1024	65300	61500	5.290	

[&]quot;Z" Metal shield one side only

Orders for CUSTOM SIZED ROLLERS are always accepted.

[&]quot;N" Snap Ring groove

[&]quot;2RS" Rubber seal two sides

[&]quot;RS" Rubber seal one side only

[&]quot;ZZ" Metal shield two sides

[&]quot;NR" Snap ring installed

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Series Rollers (p.3-10)

Ball Bearings 6200 Series Chart



OPEN



ONE SHIELD Z



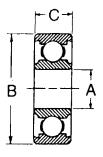
TWO SHIELDS ZZ



ONE SEAL RS



TWO SEALS 2RS



		Bore	Oute	r Diameter	١	Vidth	Basic Loa (N	J	
Item No		A		В		C	Dynamic	Static	Weight
ZZ/2RS	mm	Inch	mm	Inch	mm	Inch	Cr	Co	lbs.
R6200	10	0.3937	30	1.1811	9	0.3543	4600	2650	0.071
R6201	12	0.4724	32	1.2598	10	0.3937	4700	2650	0.082
R6202	15	0.5906	35	1.3780	11	0.4331	5880	3480	0.099
R6203	17	0.6693	40	1.5748	12	0.4724	7350	4410	0.145
R6204	20	0.7874	47	1.8504	14	0.5512	9800	6180	0.240
R6205	25	0.9843	52	2.0472	15	0.5906	10800	6960	0.295
R6206	30	1.1811	62	2.4409	16	0.6299	15000	10000	0.439
R6207	35	1.3780	72	2.8346	17	0.6693	19700	13600	0.635
R6208	40	1.5748	80	3.1496	18	0.7087	25100	17900	0.807
R6209	45	1.7717	85	3.3465	19	0.7480	25800	18500	0.897
R6210	50	1.9685	90	3.5433	20	0.7874	27000	19800	1.020
R6211	55	2.1654	100	3.9370	21	0.8268	33300	25000	1.340
R6212	60	2.3622	110	4.3307	22	0.9661	40200	30900	1.730
R6213	65	2.5591	120	4.7244	23	0.9055	43900	34000	2.180
R6214	70	2.7559	125	4.9213	24	0.9449	47700	37300	2.360
R6215	75	2.9528	130	5.1181	25	0.9843	50900	41100	2.550
R6216	80	3.1496	140	5.5118	26	1.0236	55800	44500	3.080
R6217	85	3.3465	150	5.9055	28	1.1024	64000	53000	4.200
R6218	90	3.5433	160	6.2992	30	1.1811	73800	60500	4.680
R6219	95	3.7402	170	6.6929	32	1.2598	83500	70600	5.750
R6220	100	3.9370	180	7.0866	34	1.3386	93900	79000	6.980

"Z" Metal shield one side only

"N" Snap Ring groove

"2RS" Rubber seal two sides

"RS" Rubber seal one side only

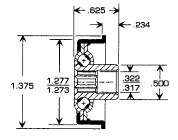
"ZZ" Metal shield two sides

"NR" Snap ring installed

R1276

Description

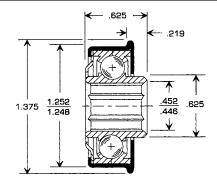
- *Swage fit conveyor bearing
- *47 lb. Load rating
- *Eleven 5/32" balls
- *5/16" hex bore



R1250

Description

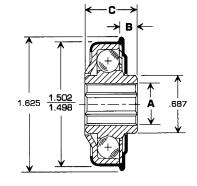
- *Press fit conveyor bearing
- *105 lb. Load rating
- *Ten 1/4" balls
- *7/16" hex bore



R1500

Description

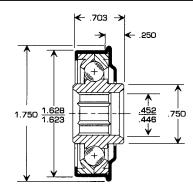
- *Press fit conveyor bearing
- *145 lb. Load rating
- *Eleven 9/32" balls
- *7/16 hex bore
- A=.452 / .446H
- B = 5/16
- C = 3/4



R1624

Description

- *Press fit conveyor bearing
- *125 lb. Load rating
- *Thirteen 1/4" balls
- *7/16" hex bore



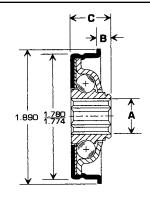
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R1005

Description

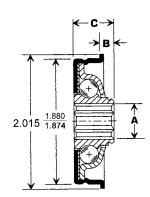
- *Swage fit conveyor bearing
- *130 lb. Load rating
- *Eleven 1/4" balls
- *7/16" hex bore
- A = .452/.446H
- B = 11/64
- C = .536/.526



R1877

Description

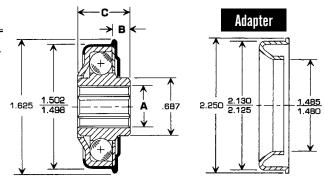
- *Swage fit conveyor bearing
- *100 lb. Load rating
- *Eleven 1/4" balls
- *7/16" hex bore
- A = 7/16 Hex
- B = .200
- C = .625



R1500/3134

Description

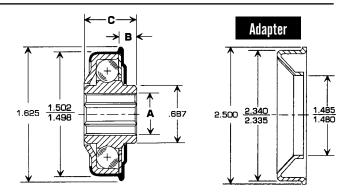
- *Swage fit conveyor bearing and adapter
- *145 lb. Load rating
- *Eleven 9/32" balls
- *Carbon steel adapter
- A = .452 / .446H
- B = 5/16
- C = 3/4



R1500/3135

Description

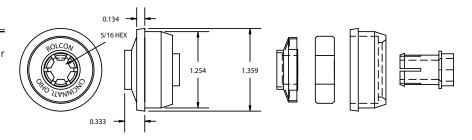
- *Swage fit conveyor bearing and adapter
- *145 lb. Load rating
- *Eleven 9/32" balls
- *Carbon steel adapter
- *7/16" bore for axle
- A = .452 / .446H
- B = 5/16
- C = 3/4



R143ZZ

Description

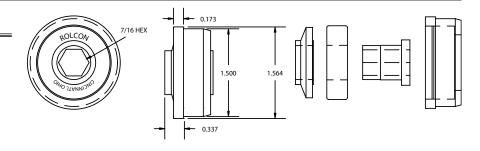
- *Bearing assembly for 1 3/8" roller
- *6001ZZ or 2RS precision bearing
- *Dynamic load 3930 lbs.
- *Static load 2230 lbs.



R158ZZ

Description

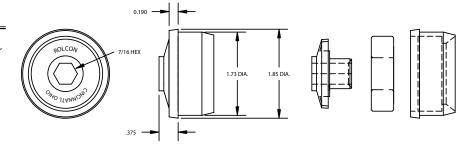
- *Bearing assembly for 1 5/8" dia. roller
- *6002ZZ or 2RS precision bearing
- *Dynamic load 4300 lbs.
- *Static load 2510 lbs.



R19ZZ

Description

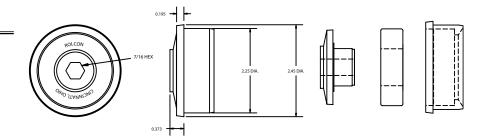
- *Bearing assembly for 1.9" dia. roller
- *6203ZZ or 2RS precision bearing
- *Dynamic load 7350
- *Static load 4410



R25ZZ437

Description

- *6205ZZ or 2RS precision bearing
- *7/16" hex bore
- *Dynamic load 10800
- *Static load 6960

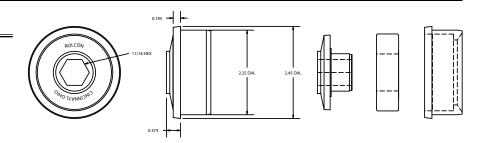


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R25ZZ687

Description

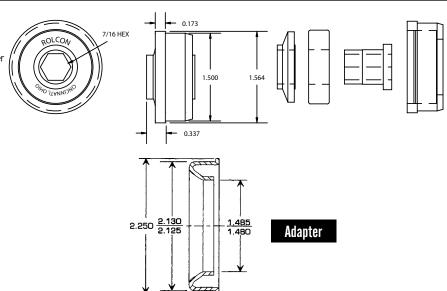
- *6205ZZ or 2RS precision bearing
- *11/16" hex bore
- *Dynamic load 10800
- *Static load 6960



R158ZZ/3134

Description

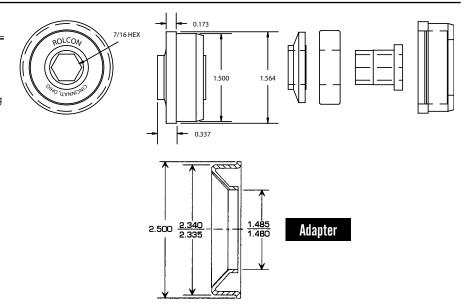
- *Swage fit conveyor bearing and adapter
- *6002ZZ or 2RS precision bearing
- *Carbon steel adapter
- *7/16" hex bore
- *Dynamic Load 4300 lbs.
- *Static Load 2510 lbs.



R158ZZ/3135

Description

- *Swage fit conveyor bearing and adapter
- *6002ZZ or 2RS precision bearing
- *Carbon steel adapter
- *7/16" hex bore
- *Dynamic Load 4300 lbs.
- *Static Load 2510 lbs.



BEARINGS

Rolcon uses a variety of different bearings depending on the application. Generally 4 different styles are offered.

Precision Bearings

Precision bearings are standard in Rolcon rollers. These bearings are suitable for any speed, but are typically used when speeds exceed 400 rpm or when conveying heavy loads. These bearings have hardened and ground balls, raceways and retainers. They are available shielded or sealed. These are ABEC-1 bearings and come either grease packed or oiled.

Semi-Precision Bearings

Semi-Precision bearings are typically used for higher speed applications up to about 400 rpm. These bearings have hardened raceways and hardened steel balls with a retainer to separate the balls. Generally give longer life and are quieter than non-precision.

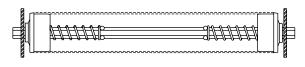
Non-Precision Bearings

Non-precision bearings are typically used for slow to moderate speed applications. These bearings have stamped outer races, carbon steel balls and ground raceways. As a rule of thumb, they do not last as long and are noisier than precision and semi-precision bearings.

Commercial Grade Stainless Steel

These bearings are used for roller that are going into corrosive environments. Machined raceways and series 300 stainless steel balls are good for light to moderate loads and can be used for high speeds.

AXLE CONSTRUCTION



Spring Retained Axle

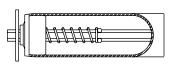
All Rolcon rollers are double spring retained. This is achieved by making two nicks on the axle and installing a spring between the nick and the bearing. This allows for ease of installation since both sides of the axle are free to move.



Pin or Ring Retained Axle

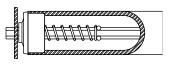
This axle has a hole drilled in each end of the axle to accept cotter pins or hog rings. Pin retained axles are offered on all sizes of Rolcon rollers.

ROLLER CONSTRUCTION



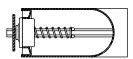
Crimped

This is the standard way in which a Rolcon roller is assembled. The tube is crimped down over the bearing to hold it in place. The bearings are not replaceable when made in this manner.



Bored

On some of the heavier gauged tubing the tube needs to be bored to accept the bearing. The bearing is then held in place by a press fit.



Adapter

This roller utilizes a bearing that is pressed into an adapter. The adapter is then press fit into the tube. In some cases the adapter will be crimped.



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Series Rollers

[p.3-10]

ROLLERS WITH SPROCKETS



Rolcon utilizes as standard type A sprockets. Other sprockets are available upon request. The sprockets are welded to the roller for use in chain driven live roller conveyors. Single and multiple sprockets are available. Location of sprockets, chain size and number of teeth must be specified. Sprockets may also be purchased individually.

ROLLERS WITH GROOVES



Rollers can be grooved to accommodate drive belts and rollers used on line shaft conveyors. The location of the groove must be specified. Standard roller diameters are 1 3/8, 1 5/8 and 1.9.

TAPERED ROLLERS

Rolcon offers tapered rollers in a variety of sizes. Please call for price and availability.

ROLLERS WITH SPECIAL COVERINGS

Rollers are available with a variety of coverings. 1/8" thick Kastalon sleeving is the standard sleeving used. Different material, thickness and durometer are available upon request.

ROLLERS WITH LAGGING

Rollers are available with various types of lagging. Call for options.

ROLLER SELECTION AND LOAD CAPACITIES

The roller capacity refers to the maximum load a single roller can support. Load capacities listed are based on the between frame length of the roller, actual load ratings for the bearing, tube deflection and shaft deflection. Load capacities for precision bearings allow for 3/4 of a degree of shaft deflection at the bearing. For commercial unground bearings it is 1 degree. When selecting a roller for a specific application a good rule of thumb is to allow 25% more capacity than the heaviest product being conveyed. To ensure smooth conveyance of product, Rolcon recommends that a minimum of 3 rollers be in contact with the conveyed product at all times.

LIMITED WARRANTY, DISCLAIMER AND LIMITATION OF REMEDIES

Rolcon guarantees each product against defects in material and workmanship for 1 year. If products fail to perform as warranted, Rolcon will repair or replace, at our option. We will not assume any liability for damages, labor, delays, or any other charges. We make no other warranty, expressed or implied.

Rolcon reserves the right to make design changes and improvements to our products at any time without notice or assuming any obligations to incorporate changes and improvements in products previously sold nor to replace previously sold products with these changes and improvements.

Rolcon reserves the right to discontinue any product without notice.



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<u> TOLL FREE 1-800-486-2472</u>

ORDERING INFORMATION



IMPORTANT - To ensure proper fit, the between frame dimension as measured from inside frame to inside frame is required.

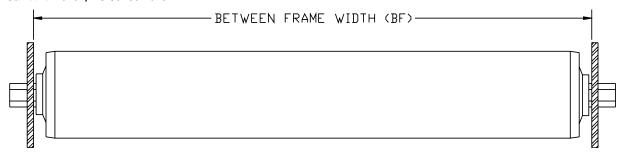
As standard Rolcon uses precision bearings and double spring loads the axle. Please specify any deviation from standard.

NOTE: Roughly 50% of our business is custom. If you cannot find what you want in the catalog, just fill out the order form and we will be happy to quote your own custom roller.

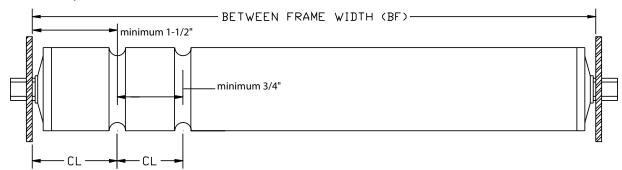
Between Frame Width	
Wall Thickness (Gauge)	
Axle Length	
Groove Center Line	(if applicable)
Single Spring Retained	

Rolle	er Diameter Axle Size	-
Туре	of Bearing	-
Sp	rocket Size	(if applicable
Pi	n Retained	_

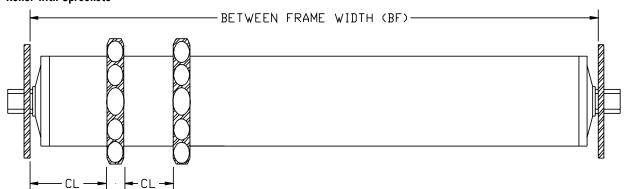
Standard Roller / FS Series Roller



Grooved Roller / FS Series Grooved Roller



Roller with Sprockets



www.rolconvenix.com

ORDERING OPTIONS

Rolcon's standard roller utilizes galvanized tubing, precision bearings and CRS axles. Many options are available. The following table lists the standard options Rolcon provides. Please call if an option you need is not listed.

Part Number Breakdown

1.9	24	FS-1	/G@
Tube	Between	Roller	Options
Diameter	Frame	Series	

Roller Diameter

	Suffix	1 3/8	1 5/8	1 3/4	1.9	2	2 1/4	2.5
-ZPT	Zinc Plated Tube	•	•	•	•	•	•	•
-Raw	Raw Tube	•	•	•	•	•	•	•
-PVC	PVC Tube				•			
-SST	Stainless Steel Tube	•	•	•	•	•	•	•
-SSA	Stainless Steel Axle	•	•	•	•	•	•	•
-ZPA	Zinc Plated Axle	•	•	•	•	•	•	•
-G@	Grooves	•	•	•	•	•		
-SPKT	Sprockets	•	•	•	•	•	•	•
-ALT	Aluminum Tube	•	•	•	•	•	•	•
-UR	Urethane Sleeve	•	•	•	•	•		•
-2RS	2RS Bearing	•	•	•	•	•	•	•
-SSB	Stainless Steel Bearing	•	•	•	•	•	•	•
-Oil	Oil Bearing	•	•	•	•	•	•	•
-HR	Hog Ring Hole	•	•	•	•	•	•	•
-NA	No Axle	•	•	•	•	•	•	•
-RT	Rolcon Tapered Roller		•		•			
-DP	Delrin Plugs	•	•	•	•	•	•	•
-DTA	Drilled and Tapped Axle	•	•	•	•	•	•	•
-SNUB	Snub Roller							•

Custom roller applications are welcome. Call for your application specific quote.



<u>TOLL FREE 1-800-486-2472</u>



Conveyor Rollers and Accessories

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