

Ralphs-Pugh Plastic Rollers

Ralphs-Pugh plastic rollers are available in a wide range of bearings, tube, and shaft combinations. Plastic rollers are ideal for Light Duty Gravity Applications, Humid, Corrosive or Wet Environments. Typical applications include; food processing, chemical or acidic environments, battery handling, and package handling. The following information is provided to help match the operating environment with the proper product.

Roller Selection Criteria:

To select the right roller for the operating environment the following items must be considered:

- Conveyed Items or Materials.
Size / Shape / Weight
- Surface Characteristics of Materials
- Operating Environment
Heat / Humidity
Exposure to Chemicals

Materials:

Tubes:

- Standard White or Gray PVC
- Hi-Impact White PVC with UV Stabilizers
- Polypropylene
- Steel Reinforced PVC

Drive Options:

- Grooves
- V-Guides

Shaft Configuration & Materials:

- Hex, Round - Dual spring loading is standard - Option: Fixed or Loose
- Carbon Steel, Stainless Steel, Aluminum
- Zinc and Nickel Plating Available

Shaft Extensions:

- 9/16" is standard for 3/16" round to 1/2" round or 7/16" hex
- 3/4" is standard for 5/8" - 11/16" round or hex and larger
- Measurements are from the hub of the bearing to the end of the shaft on each side.

Shaft End Options:

- Drilled and Tapped, Threaded, Drilled Holes, Milled Flats
- Plastic Flat Caps, Urethane & Plastic Adapters over an internal metal support shaft



Bearings / Bushings:

Commercial Grade / Non Precision:

Ball bearings in a plastic raceway: Economical light duty stainless steel balls in engineered plastic raceways. These bearings are ideal for wet environments where corrosion is a concern. They are free spinning and maintenance free. All plastic raceways are designed, engineered, and molded in our facility. Standard ball materials are 302 or 316 series stainless steel. Applications include food processing, clean rooms, packaging machinery, and general material handling. These bearings are identified by a 1 in the prefix of the part number. These bearings are not recommended for powered applications. Example - 1A5

Plated Steel / Plastic Housings

Designed for light to moderate loads, these commercial grade ball bearings have hardened steel balls and machined inner and outer raceways. They are available with light oil or grease lubricant for driven systems. Plastic housings are available in conductive or non-conductive material with or without labyrinth seals. The labyrinth seal(s) provide protection to the bearing from dust, dirt, and airborne contaminants. These bearings are identified by a 2 in the prefix of the part number. Example - 2A4

Stainless Steel / Plastic Housings

Designed for light to moderate loads, commercial grade stainless steel balls and raceways provide an excellent solution for corrosive operating environments. For maximum protection against contamination, some housings are available with labyrinth seal systems. Example - 2A5

Precision Grade / ABEC-1

Designed for higher speeds and heavier loads, ABEC-1 precision bearings are available in chromium steel and optional 440, 304 or 316 stainless steel. ABEC-1 ball bearings and raceways are hardened, precision ground, and incorporate a ball retainer to eliminate bearing to bearing contact. Bearings are factory lubricated. Several seal/shield configurations are offered. Standard configuration is the Non-Contact Rubber Seal (LLB). Options include; the Contact Seal (2RS) and Non-Contact Metal Shields (ZZ). Bearing housings are available in metal or plastic. Plastic housings are made with conductive or non-conductive materials and available with or without labyrinth seals. Labyrinth seals provide additional bearing protection against dirt, dust, and other airborne contaminants. ABEC-1 bearings provide the highest load and speed capabilities, the lowest noise levels, and the longest life span of any available bearing unit. These bearings are identified by a 3 in the prefix of the part number. Example - 3A4

Bushings: Non ball bearing style units are designed for low speed, light to medium load applications. Bushing surface materials include; Ultra (Acetal plastic with Teflon Additives), CS2 Acetal, UHMW, and ABS plastic. Bushing insert materials include nylon, stainless steel, carbon steel and Ultra.

Bushing style rollers are ideal for sanitary, rust and corrosion resistance applications in push and gravity conveyors. These bearings are identified by a 5 in the prefix of the part number. Example - 5A8

Load Capacities: Load capacities listed are based upon length of the roller (IF), actual load ratings for the bearing, tube deflection and shaft deflection for the materials listed. Calculations for load capacities of precision bearings allow for $\frac{3}{4}$ of 1 degree of shaft deflection while commercial bearings allow for 1 degree of shaft deflection. ***Shaft deflection will increase as a roller becomes longer and roller loads will decrease substantially as the length of the roller increases. Please note that load capacities listed are for steel shafts. Load ratings for rollers with aluminum shafts must be reduced to 33% of the value listed.***

Roller Length: I.F. = Inside Frame distance. This measurement allows $\frac{1}{16}$ " of freeplay per side for a total of $\frac{1}{8}$ " per roller. O.A. = Overall roller length. This is the measurement from bearing hub to bearing hub of the roller. For calculation purposes I.F. $-\frac{1}{8}$ " = O.A.

Ordering Information:

Ralphs-Pugh roller numbering system lists the bearing part number first, the tube part number second and the shaft part number last followed by the roller length.

Example 1: Standard Roller

Bearing: ABEC -1 precision bearing in a plastic housing – Double labyrinth seals
Tube: 1.90" outside diameter x .112" wall thickness Hi-Impact PVC tube
Shaft: 7/16" hexagonal carbon steel spring-loaded shaft with 9/16" shaft extensions
Length: Must fit a frame measuring 18" inside frame distance (I.F.)
Max. Load: Roller must be capable of handling a load of 50 lbs. per roller

Solution:

Find the plastic roller page designating 1.90" x .112" – 7/16" Hex - See page 37

Bearing part #: 3A4
Tube part #: H41
Shaft part #: C68
Load per roller: Load capacity chart indicates roller is good up to 83 lbs per roller

Roller Part # - 3A4.H41.C68 x 18" I.F.

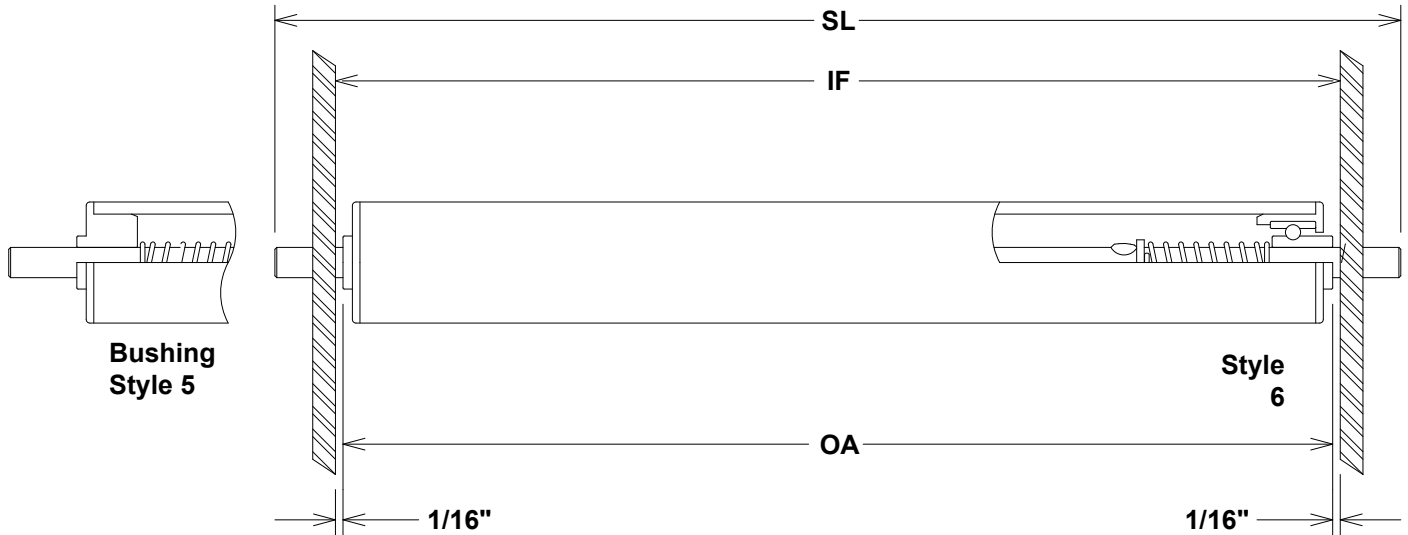
Example 2: Rollers with Options – (Grooves, Special Shaft Lengths or Extensions, etc.)

Solution:

Check Engineering Data section for specific data, information, or drawings. Inquire with Customer Service.

Plastic Rollers

.84" Dia. x .107" Wall Thickness - 1/4" Round Shaft



Bearings:	Type:	Part #	Style / Description:
	Steel Commercial	2G1	6 / Plastic Housing - No Seals
	Stainless Steel	2G2	6 / Plastic Housing - No Seals
	Bushing Style, UHMW	Inquire	5 / UHMW Plastic
	Bushing Style, Acetal	Inquire	5 / Acetal Plastic
	Bushing Style, Ultra	5H1	5 / "Ultra" Acetal Plastic
Tube:	Materials:	Part #	Description:
	PVC	W00	.84" x .107" Wall White PVC
Shaft:	Materials:	Part #	Description:
	Carbon Steel	C10	1/4" Round Carbon Steel Shaft
	Stainless Steel	S10	1/4" Round 304 Stainless Steel Shaft
	Aluminum	A10	1/4" Round Aluminum Shaft
	Standard Extensions:	9/16"	
	Standard Springs:	Dual spring loaded with shaft depressing to bearing hub	
	Options:	Fixed shaft, through shaft, D-shaft, threaded	

Note: Bushing style rollers are for intermittent use only.
Not recommended for powered systems.

Load Capacity (LBS.)

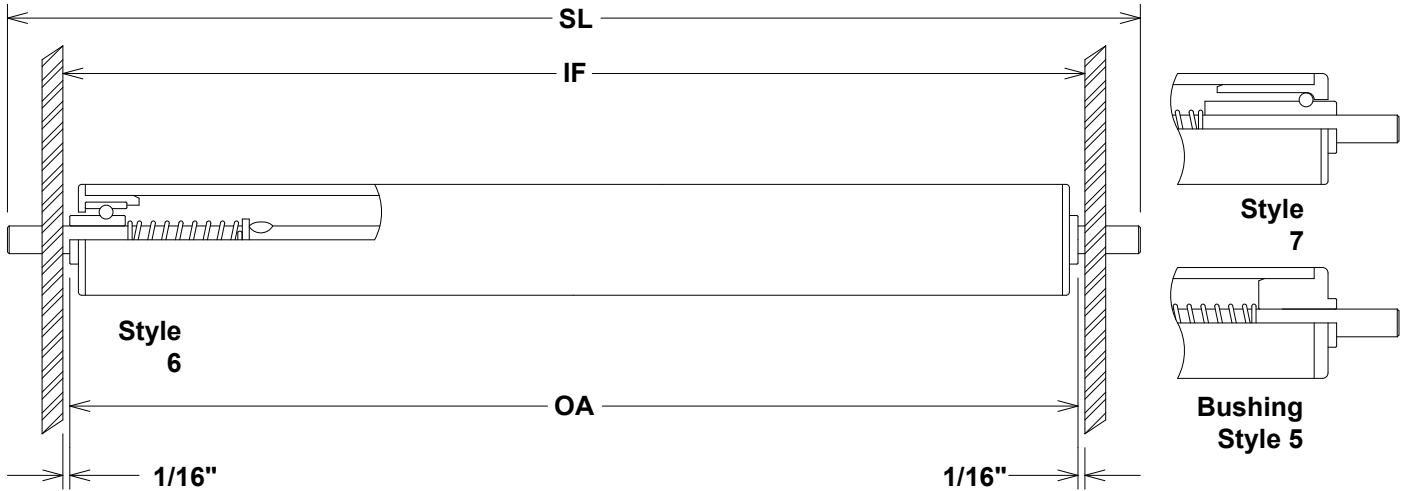
Frame I.F.	Bearing #			Frame I.F.	Bearing #		
	2G1	2G2	BUSHING		2G1	2G2	BUSHING
12	10	10	11	33	***	***	***
15	6	6	7	36	***	***	***
18	4	4	4	39	***	***	***
21	3	3	3	42	***	***	***
24	***	***	***	45	***	***	***
27	***	***	***	48	***	***	***
30	***	***	***	51	***	***	***

* Load capacity with aluminum shaft is 33% of steel capacity.

** Longer lengths are not recommended exceeding a load capacity of 5 pounds.

Plastic Rollers

1.05" Dia. x .113" Wall Thickness - 1/4" Round Shaft



Bearings:	Type:	Part #	Style / Description:
	Stainless Steel	1K2	7 / Stainless steel balls in a plastic housing and raceway
	Carbon Steel	2K2	6 / Plastic Housing - No Seals
	Stainless Steel	2K8	6 / Plastic Housing - No Seals
	Bushing Style, UHMW	Inquire	5 / UHMW Plastic
	Bushing Style, Acetal	5H7	5 / Acetal Plastic
	Bushing Style, Ultra	Inquire	5 / "Ultra" Acetal Plastic

Tube:	Materials:	Part #	Description:
	PVC	W10	1.05" x .113" Wall White PVC

Shaft:	Materials:	Part #	Description:
	Carbon Steel	C10	1/4" Round Carbon Steel Shaft
	Stainless Steel	S10	1/4" Round 304 Stainless Steel Shaft
	Aluminum	A10	1/4" Round Aluminum Shaft

Standard Extensions: 9/16"
 Standard Springs: Dual spring loaded with shaft depressing to bearing hub
 Options: Fixed shaft, through shaft, D-shaft, threaded

Note: 1K2 and bushing style bearings are for intermittent use only.
 Not recommended for powered systems.

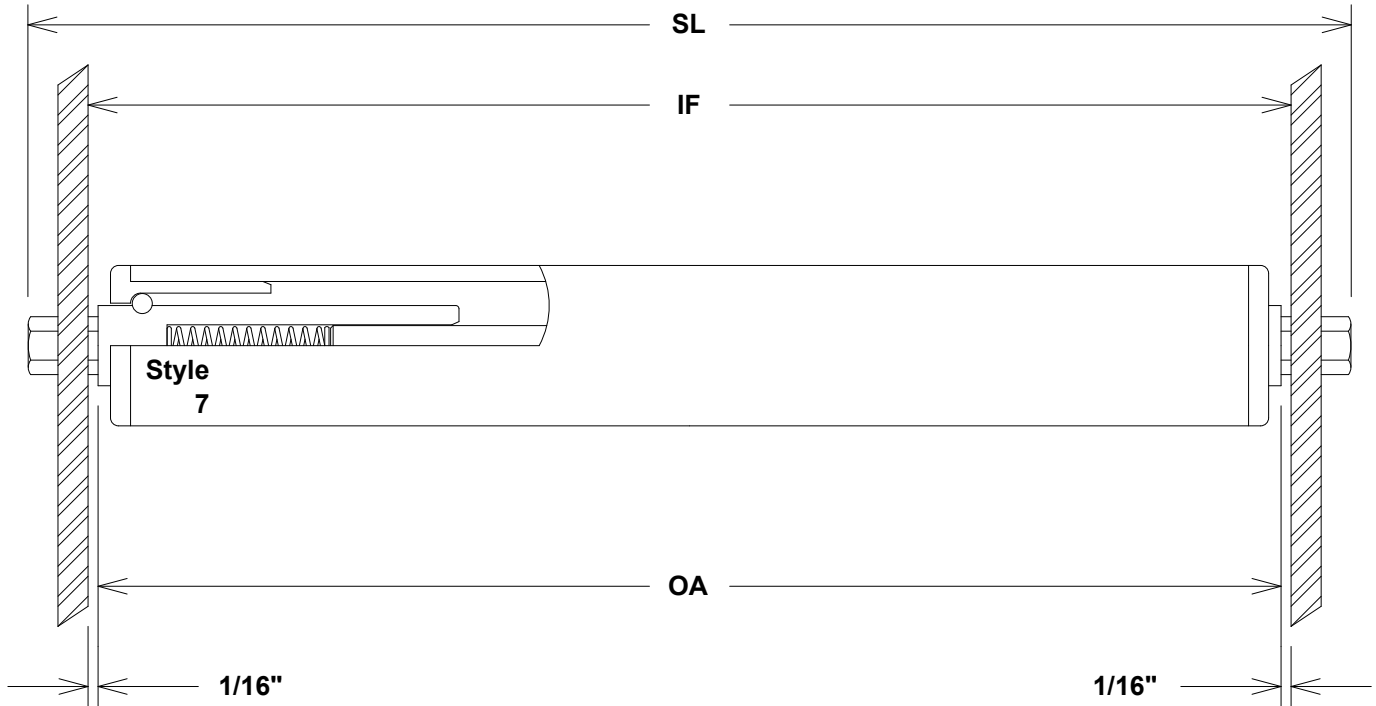
Load Capacity (LBS.)

Frame I.F.	Bearing #				Frame I.F.	Bearing #			
	1K2	2K2	2K8	BUSHING		1K2	2K2	2K8	BUSHING
12	10	20	20	22	33	***	***	***	***
15	10	14	14	14	36	***	***	***	***
18	9	9	9	9	39	***	***	***	***
21	7	7	7	7	42	***	***	***	***
24	5	5	5	5	45	***	***	***	***
27	***	***	***	***	48	***	***	***	***
30	***	***	***	***	51	***	***	***	***

* Load capacity with aluminum shaft is 33% of steel capacity.

** Longer lengths are not recommended exceeding a load capacity of 5 pounds.

1.05" Dia. x .113" Wall Thickness - 5/16" Hex Shaft Adapter



Bearings:	Type: Stainless Steel	Part # 1K1	Style / Description: 7 / Stainless steel balls in a plastic housing and raceway
Tube:	Materials: PVC	Part # W10	Description: 1.05" x .113" Wall White PVC
Shaft:	Materials: Acetal Adapters	Part # C12	Description: 5/16" Hex External Adapter with 1/4" Round Internal Carbon Steel Shaft
	Acetal Adapters	S12	5/16" Hex External Adapter with 1/4" Round Internal 304 Stainless Steel Shaft
	Standard Extensions:	7/16"	
	Standard Springs:	Dual spring loaded with shaft depressing to bearing hub	

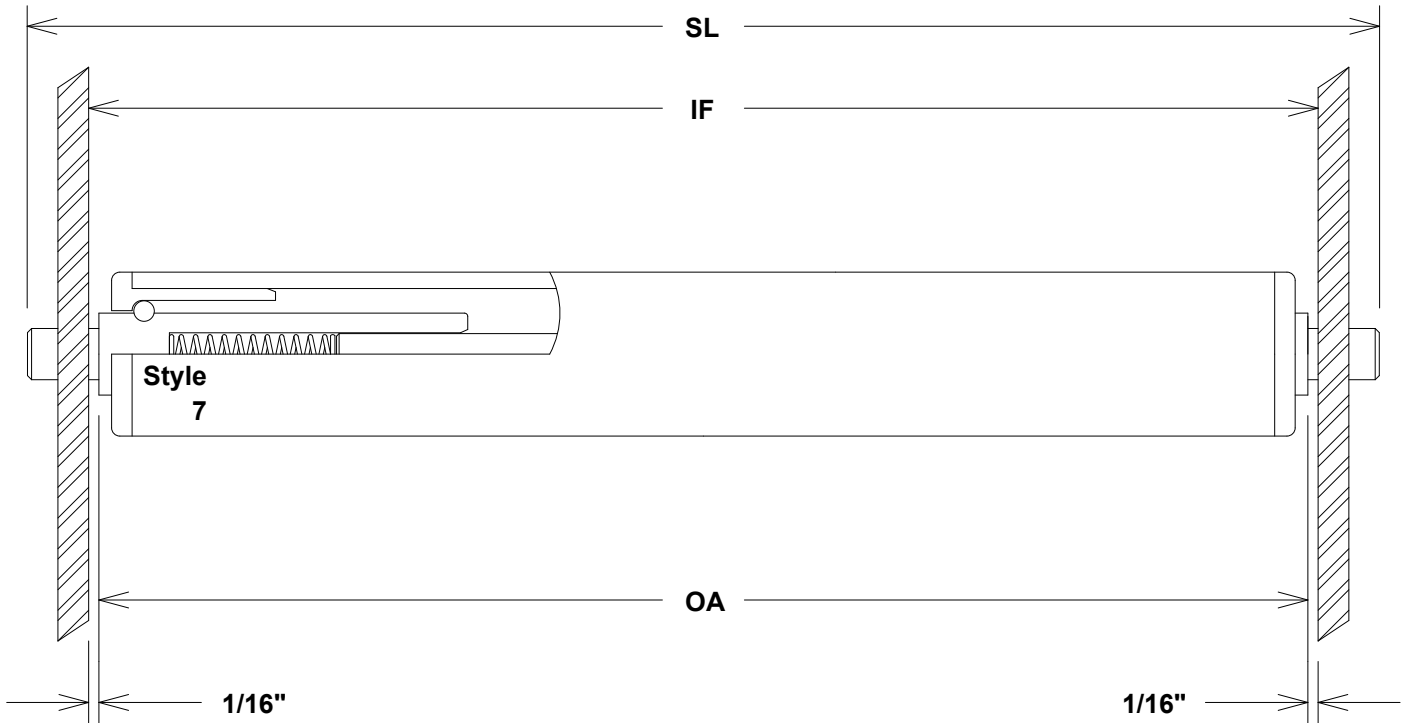
Note: 1K1 style bearings are for intermittent use only.
Not recommended for powered systems.

Load Capacity (LBS.)

Frame I.F.	Bearing # 1K1	Frame I.F.	Bearing # 1K1
12	10	33	***
15	10	36	***
18	9	39	***
21	7	42	***
24	5	45	***
27	***	48	***
30	***	51	***

* Longer lengths are not recommended exceeding a load capacity of 5 pounds.

1.05" Dia. x .113" Wall Thickness - 5/16" Round Shaft Adapter



Bearings:	Type: Stainless Steel	Part # 1K3	Style / Description: 7 / Stainless steel balls in a plastic housing and raceway
Tube:	Materials: PVC	Part # W10	Description: 1.05" x .113" Wall White PVC
Shaft:	Materials: Acetal Adapters	Part # Inquire	Description: 5/16" Round External Adapter with 1/4" Round Internal Carbon Steel Shaft
	Acetal Adapters	Inquire	5/16" Round External Adapter with 1/4" Round Internal 304 Stainless Steel Shaft
	Standard Extensions:	7/16"	
	Standard Springs:	Dual spring loaded with shaft depressing to bearing hub	

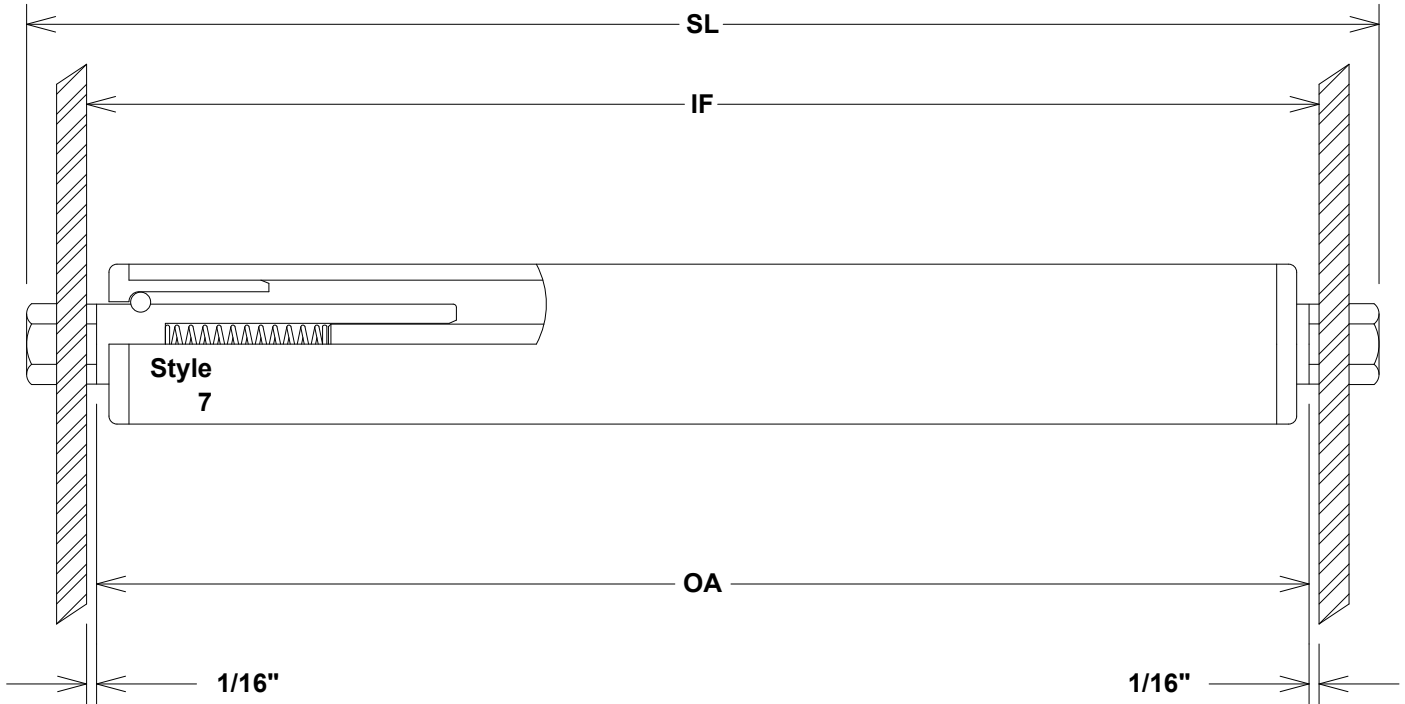
Note: 1K3 style bearings are for intermittent use only.
Not recommended for powered systems.

Load Capacity (LBS.)

Frame I.F.	Bearing # 1K3	Frame I.F.	Bearing # 1K3
12	10	33	***
15	10	36	***
18	9	39	***
21	7	42	***
24	5	45	***
27	***	48	***
30	***	51	***

* Longer lengths are not recommended exceeding a load capacity of 5 pounds.

1.05" Dia. x .113" Wall Thickness - 7/16" Hex Shaft Adapter



Bearings:	Type: Stainless Steel	Part # 1K4	Style / Description: 7 / Stainless steel balls in a plastic housing and raceway
Tube:	Materials: PVC	Part # W10	Description: 1.05" x .113" Wall White PVC
Shaft:	Materials: Acetal Adapters	Part # C07	Description: 7/16" Hex External Adapter with 1/4 Round Internal Carbon Steel Shaft
	Acetal Adapters	S07	7/16" Hex External Adapter with 1/4" Round Internal 304 Stainless Steel Shaft
	Standard Extensions:	7/16"	
	Standard Springs:	Dual spring loaded with shaft depressing to bearing hub	

Note: 1K4 style bearings are for intermittent use only.
Not recommended for powered systems.

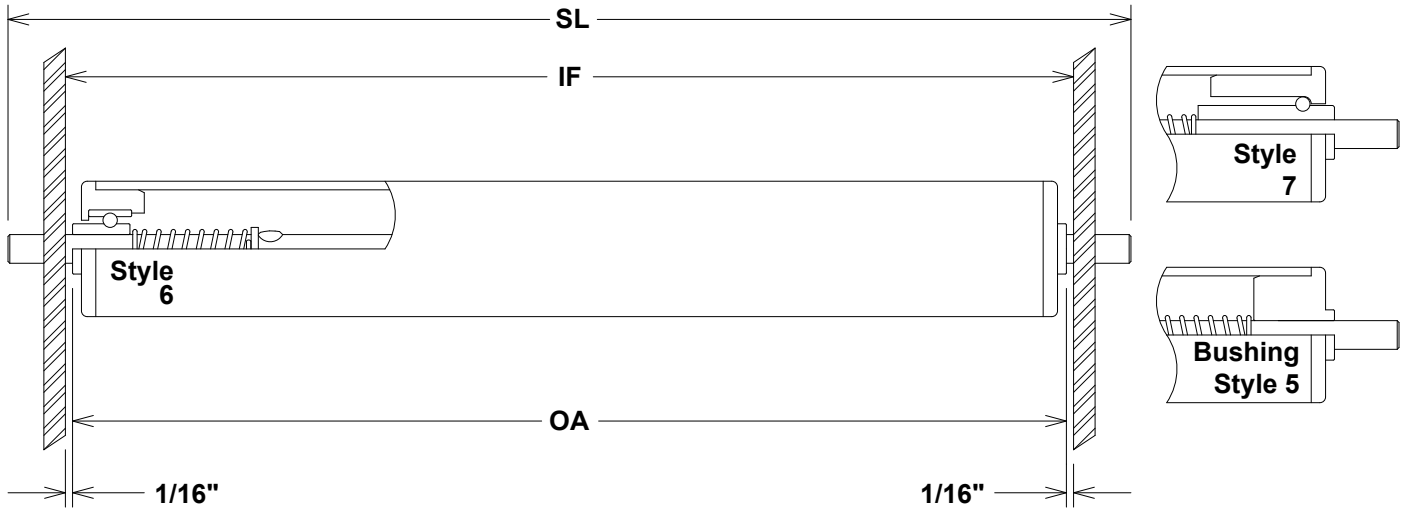
Load Capacity (LBS.)

Frame I.F.	Bearing # 1K4	Frame I.F.	Bearing # 1K4
12	10	33	***
15	10	36	***
18	9	39	***
21	7	42	***
24	5	45	***
27	***	48	***
30	***	51	***

* Longer lengths are not recommended exceeding a load capacity of 5 pounds.

Plastic Rollers

1.18" Dia. x .075" Wall Thickness - 1/4" Round Shaft



Bearings:	Type:	Part #	Style / Description:
	Stainless Steel	1L7	7 / Stainless steel balls in a plastic housing and raceway
	Steel, Commercial	2I1	6 / Plastic Housing - No Seals
	Stainless Steel	2I0	6 / Plastic Housing - No Seals
	Bushing Style, UHMW	Inquire	5 / UHMW Plastic
	Bushing Style, Acetal	5L1	5 / Acetal Plastic
	Bushing Style, Ultra	Inquire	5 / "Ultra" Acetal Plastic

Tube:	Materials:	Part #	Description:
	PVC	D17	1.18" x .075" Wall Gray PVC

Shaft:	Materials:	Part #	Description:
	Carbon Steel	C10	1/4" Round Carbon Steel Shaft
	Stainless Steel	S10	1/4" Round 304 Stainless Steel Shaft
	Aluminum	A10	1/4" Round Aluminum Shaft

Standard Extensions: 9/16"
 Standard Springs: Dual spring loaded with shaft depressing to bearing hub
 Options: Fixed shaft, through shaft, D-shaft, threaded

Note: 1L7 and bushing style rollers are for intermittent use only.
 Not recommended for powered systems.

Load Capacity (LBS.)

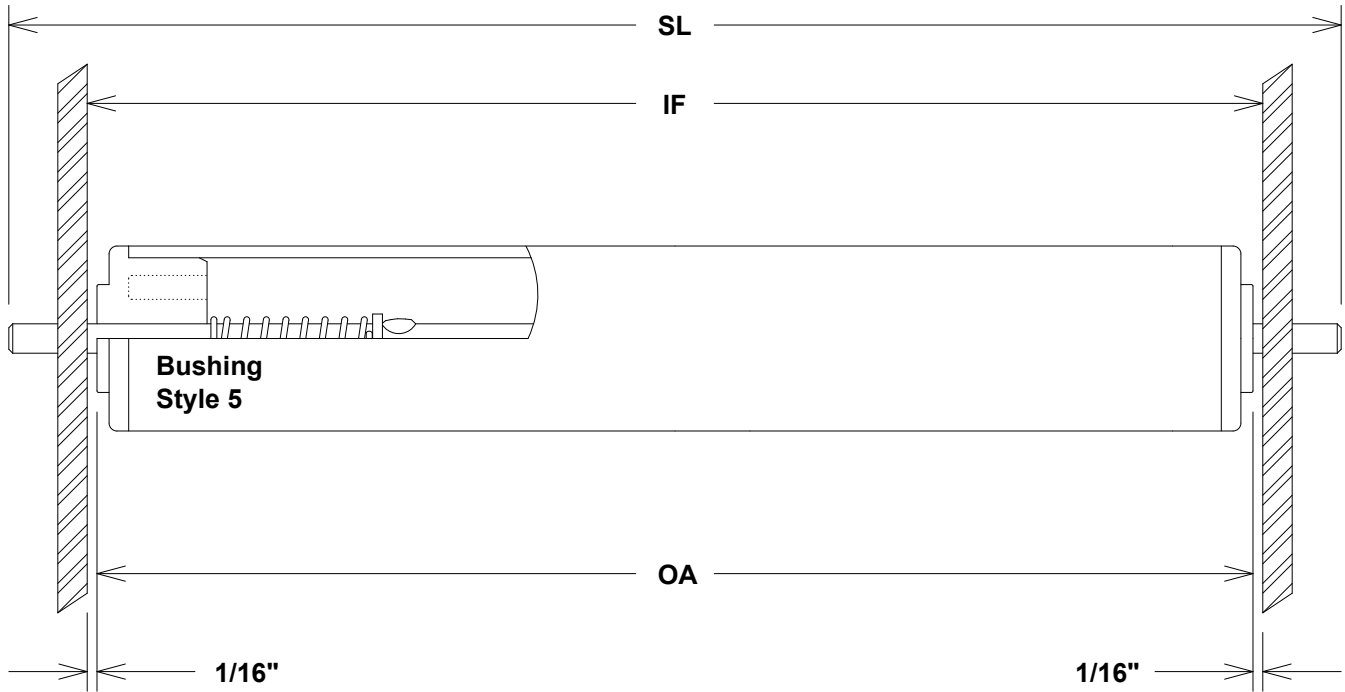
Frame I.F.	Bearing #				Frame I.F.	Bearing #			
	1L7	2I1	2I0	BUSHING		1L7	2I1	2I0	BUSHING
12	10	24	24	24	33	***	***	***	***
15	10	15	15	15	36	***	***	***	***
18	10	10	10	10	39	***	***	***	***
21	7	7	7	7	42	***	***	***	***
24	6	6	6	6	45	***	***	***	***
27	***	***	***	***	48	***	***	***	***
30	***	***	***	***	51	***	***	***	***

* Load capacity with aluminum shaft is 33% of steel capacity.

** Longer lengths are not recommended exceeding a load capacity of 5 pounds.

Plastic Rollers

1.18" Dia. x .075" Wall Thickness - 3/16" Round Shaft



Bearings:	Type: Bushing Style, UHMW Bushing Style, Acetal Bushing Style, Ultra	Part # Inquire 5H2 Inquire	Style / Description: 5 / UHMW Plastic 5 / Acetal Plastic 5 / "Ultra" Acetal Plastic
Tube:	Materials: PVC	Part # D17	Description: 1.18" x .075" Wall Gray PVC
Shaft:	Materials: Carbon Steel	Part # C08	Description: 3/16" Round Carbon Steel Shaft
	Standard Extensions:	9/16"	
	Standard Springs:	Dual spring loaded with shaft depressing to bearing hub	
	Options:	Fixed shaft, through shaft, D-shaft	

Note: Bushing style rollers are for intermittent use only.
Not recommended for powered systems.

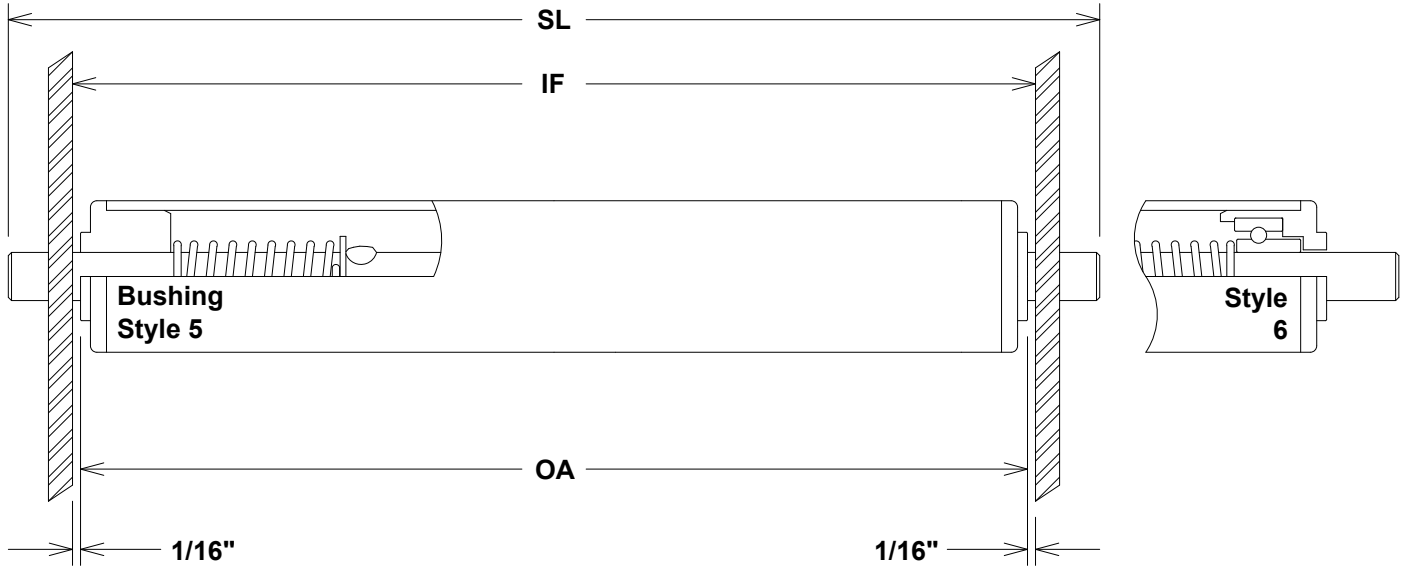
Load Capacity (LBS.)

Frame I.F.	BUSHING	Frame I.F.	BUSHING
12	24	33	***
15	15	36	***
18	10	39	***
21	7	42	***
24	6	45	***
27	***	48	***
30	***	51	***

* Longer lengths are not recommended exceeding a load capacity of 5 pounds.

Plastic Rollers

1.18" Dia. x .075" Wall Thickness - 3/8" Round Shaft



Bearings:	Type: Steel, Commercial Stainless Steel Bushing Style, UHMW Bushing Style, Acetal Bushing Style, Ultra	Part # 2K6 Inquire Inquire Inquire 5L9	Style / Description: 6 / Plastic Housing - No Seals 6 / Plastic Housing - No Seals 5 / UHMW Plastic 5 / Acetal Plastic 5 / "Ultra" Acetal Plastic
Tube:	Materials: PVC	Part # D17	Description: 1.18" x .075" Wall Gray PVC
Shaft:	Materials: Carbon Steel Stainless Steel	Part # C20 S25	Description: 3/8" Round Carbon Steel Shaft 3/8" Round 304 Stainless Steel Shaft
	Standard Extensions:	9/16"	
	Standard Springs:	Dual spring loaded with shaft depressing to bearing hub	
	Options:	Fixed shaft, through shaft, D-shaft, threaded	

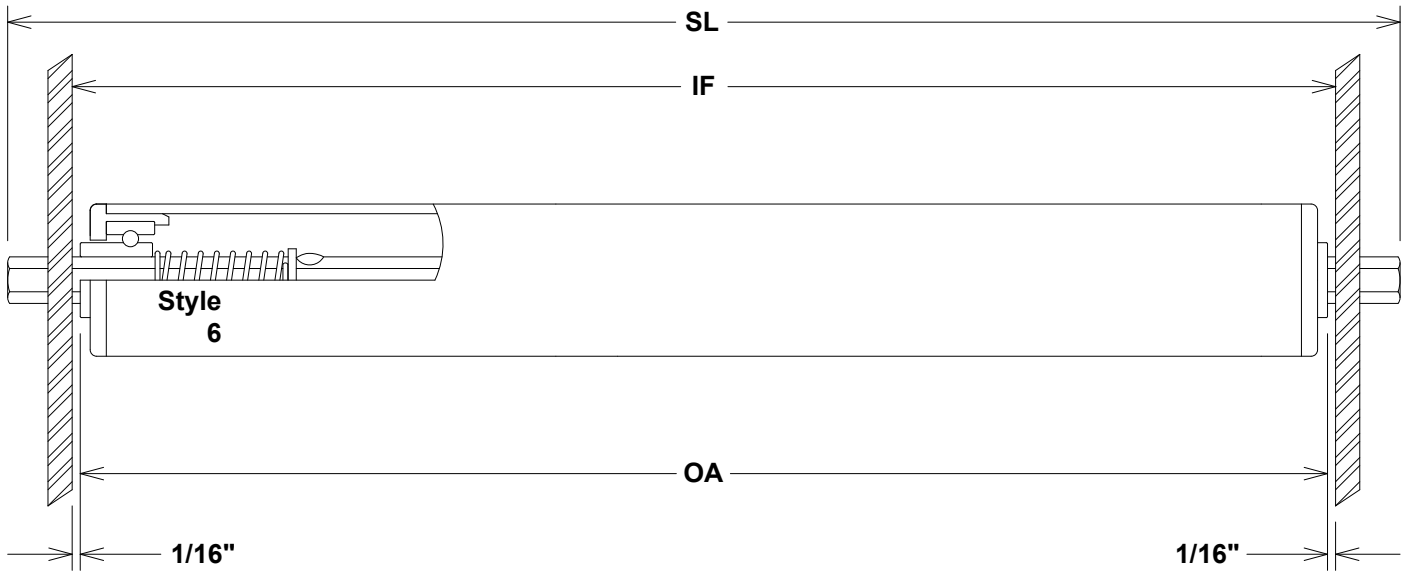
Note: Bushing style bearings are for intermittent use only.
Not recommended for powered systems.

Load Capacity (LBS.)

Frame I.F.	Bearing #		Frame I.F.	Bearing #	
	2K6	BUSHING		2K6	BUSHING
12	24	24	33	***	***
15	15	15	36	***	***
18	10	10	39	***	***
21	7	7	42	***	***
24	6	6	45	***	***
27	***	***	48	***	***
30	***	***	51	***	***

* Longer lengths are not recommended exceeding a load capacity of 5 pounds.

1.18" Dia. x .075" Wall Thickness - 5/16" Hex Shaft



Bearings:	Type: Steel, Commercial Stainless Steel	Part # 217 Inquire	Style / Description: 6 / Plastic Housing - No Seals 6 / Plastic Housing - No Seals
Tube:	Materials: PVC	Part # D17	Description: 1.18" x .075" Wall Gray PVC
Shaft:	Materials: Carbon Steel Stainless Steel	Part # C14 S14	Description: 5/16" Hex Carbon Steel Shaft 5/16" Hex 304 Stainless Steel Shaft
	Standard Extensions:	9/16"	
	Standard Springs:	Dual spring loaded with shaft depressing to bearing hub	
	Options:	Fixed shaft, through shaft, holes, pins or rings	

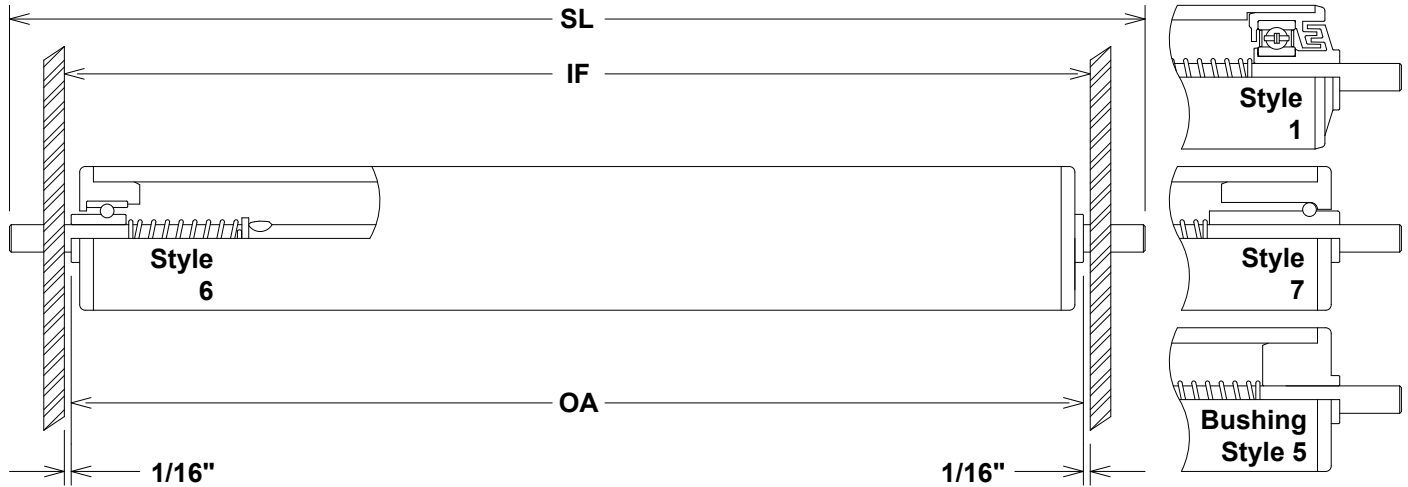
Load Capacity (LBS.)

Frame I.F.	Bearing # 217	Frame I.F.	Bearing # 217
12	24	33	***
15	15	36	***
18	10	39	***
21	7	42	***
24	6	45	***
27	***	48	***
30	***	51	***

* Longer lengths are not recommended exceeding a load capacity of 5 pounds.

Plastic Rollers

1.31" Dia. x .133" Wall Thickness - 1/4" Round Shaft



Bearings:	Type:	Part #	Style / Description:
	Stainless Steel	1L2	7 / Stainless steel balls in a plastic housing and raceway
	Steel, Commercial	2L2	6 / Plastic Housing - No Seals
	Stainless Steel	2P1	6 / Plastic Housing - No Seals
	Bushing Style, Acetal	Inquire	5 / Acetal Plastic
	Bushing Style, Ultra	5G4	5 / "Ultra" Acetal Plastic
	ABEC-1 Precision	3N8	6 / Plastic Housing - No Seals

Tube:	Materials:	Part #	Description:
	PVC	W20	1.31" x .133" Wall White PVC

Shaft:	Materials:	Part #	Description:
	Carbon Steel	C10	1/4" Round Carbon Steel Shaft
	Stainless Steel	S10	1/4" Round 304 Stainless Steel Shaft
	Aluminum	A10	1/4" Round Aluminum Shaft
	Standard Extensions:	9/16"	
	Standard Springs:	Dual spring loaded with shaft depressing to bearing hub	
	Options:	Fixed shaft, through shaft, D-shaft, threaded	

Note: 1L2 and bushing style bearings are for intermittent use only.
Not recommended for powered systems.

Load Capacity (LBS.)

Frame I.F.	Bearing #				
	1L2	2L2	2P1	BUSHING	3N8
12	10	37	37	37	40
15	10	23	23	23	24
18	10	16	16	16	16
21	10	11	11	11	12
24	9	9	9	9	9
27	7	7	7	7	7
30	***	***	***	***	***
33	***	***	***	***	***
36	***	***	***	***	***

* Load capacity with aluminum shaft is 33% of steel capacity.

** Longer lengths are not recommended exceeding a load capacity of 5 pounds.

1.31" Dia. x .133" Wall Thickness - 5/16" Hex Shaft



Bearings:	Type:	Part #	Style / Description:
	ABEC-1 Precision	3M6	1 / Conductive plastic - Double labyrinth seal construction
	Stainless Steel	1L4	7 / Stainless steel balls in a plastic housing and raceway
	Steel, Commercial	2L4	6 / Plastic housing - No seals
	Stainless Steel	2L0	6 / Plastic housing - No seals

Tube:	Materials:	Part #	Description:
	PVC	W20	1.31" x .133" Wall White PVC

Shaft:	Materials:	Part #	Description:
	Carbon Steel	C14	5/16" Hex Carbon Steel Shaft
	Stainless Steel	S14	5/16" Hex 304 Stainless Steel Shaft
	Acetal Adapters	C12	5/16" Hex External Adapter with 1/4" Round Internal Carbon Steel Shaft
	Acetal Adapters	S12	5/16" Hex External Adapter with 1/4" Round Internal 304 Stainless Steel Shaft
	Standard Extensions:	7/16" with C12 and S12, 9/16" with C14 and S14	
	Standard Springs:	Dual spring loaded with shaft depressing to bearing hub	
	Options:	Fixed shaft, through shaft, holes, pins or rings	

Note: 1L4 style bearings are for intermittent use only.
Not recommended for powered systems.

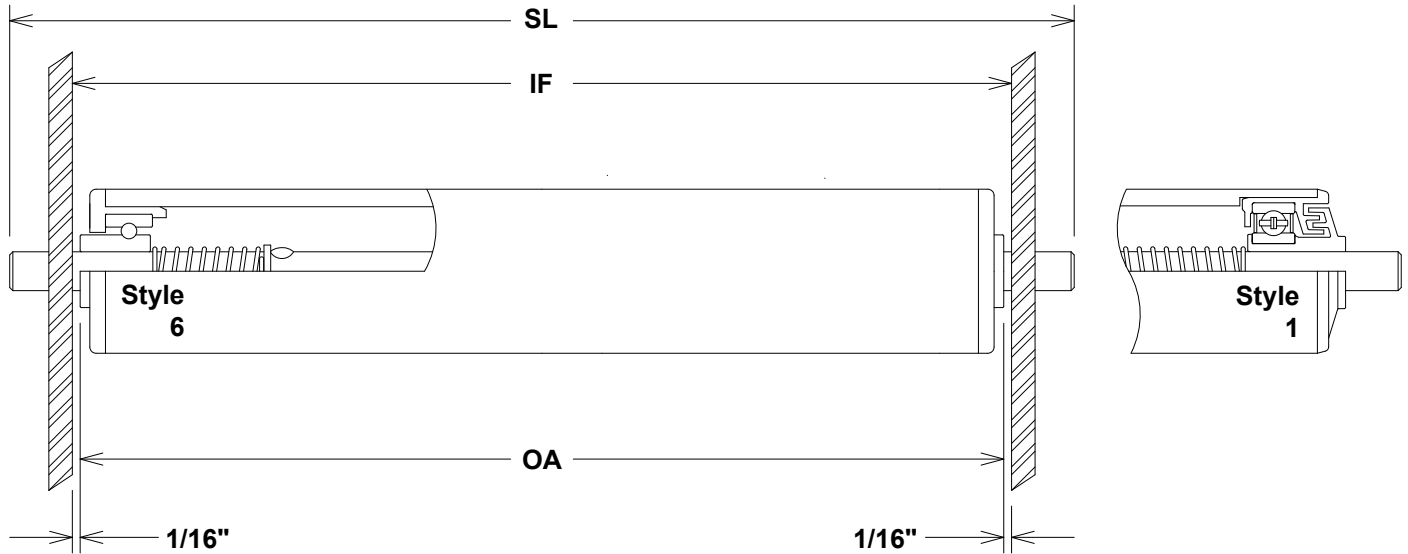
Load Capacity (LBS.)

Frame	Bearing #				Frame	Bearing #				
	I.F.	3M6	2L4	1L4		2L0	I.F.	3M6	2L4	1L4
12	40	37	10	37	33	***	***	***	***	***
15	24	23	10	23	36	***	***	***	***	***
18	16	16	10	16	39	***	***	***	***	***
21	12	11	10	11	42	***	***	***	***	***
24	9	9	9	9	45	***	***	***	***	***
27	7	7	7	7	48	***	***	***	***	***
30	***	***	***	***	51	***	***	***	***	***

* Longer lengths are not recommended exceeding a load capacity of 5 pounds.

Plastic Rollers

1.31" Dia. x .133" Wall Thickness - 5/16" Round Shaft



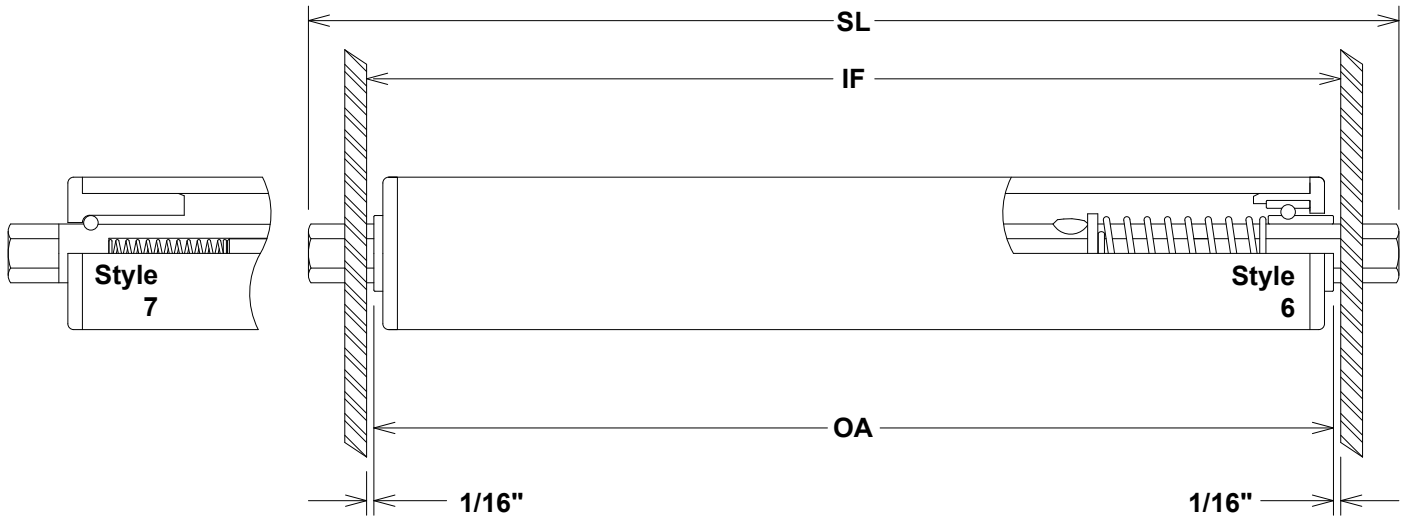
Bearings:	Type: Steel, Commercial Stainless Steel ABEC-1 Precision	Part # 2L3 2L9 3M6	Style / Description: 6 / Plastic Housing - No Seals 6 / Plastic Housing - No Seals 1 / Conductive Plastic - Double Labyrinth Seal Construction
Tube:	Materials: PVC	Part # W20	Description: 1.31" x .133" Wall White PVC
Shaft:	Materials: Carbon Steel Stainless Steel	Part # C16 S16	Description: 5/16" Round Carbon Steel Shaft 5/16" Round 304 Stainless Steel Shaft
	Standard Extensions:	9/16"	
	Standard Springs:	Dual spring loaded with shaft depressing to bearing hub	
	Options:	Fixed shaft, through shaft, D-shaft, threaded	

Load Capacity (LBS.)

Frame I.F.	Bearing #			Frame I.F.	Bearing #		
	2L3	2L9	3M6		2L3	2L9	3M6
12	37	37	40	33	***	***	***
15	23	23	24	36	***	***	***
18	16	16	16	39	***	***	***
21	11	11	12	42	***	***	***
24	9	9	9	45	***	***	***
27	7	7	7	48	***	***	***
30	***	***	***	51	***	***	***

* Longer lengths are not recommended exceeding a load capacity of 5 pounds.

1.31" Dia. x .133" Wall Thickness - 7/16" Hex Shaft



Bearings:	Type:	Part #	Style / Description:
	Stainless steel	1L6	7 / Stainless steel balls in a plastic housing and raceway
	Steel, commercial	2L5	6 / Plastic housing - No seals
	Stainless steel	2J6	6 / Plastic housing - No seals
Tube:	Materials:	Part #	Description:
	PVC	W20	1.31" x .133 Wall White PVC
Shaft:	Materials:	Part #	Description:
	Carbon steel	C68	7/16" Hex Carbon Steel Shaft
	Stainless steel	S70	7/16" Hex 304 Stainless Steel Shaft
	Aluminum	A66	7/16" Hex Aluminum Shaft
	Acetal adapters	C07	7/16" Hex External Adapter with 1/4" Round Internal Carbon Steel Shaft
	Acetal adapters	S07	7/16" Hex External Adapter with 1/4" Round Internal 304 Stainless Steel Shaft
	Standard Extensions:	7/16" with C07 and S07, 9/16" with all others	
	Standard Springs:	Dual spring loaded with shaft depressing to bearing hub	
	Options:	Fixed shaft, through shaft, holes, rings or pins, drilled and tapped, threaded	

Note: 1L6 style bearings are for intermittent use only.
Not recommended for powered systems.

Load Capacity (LBS.)

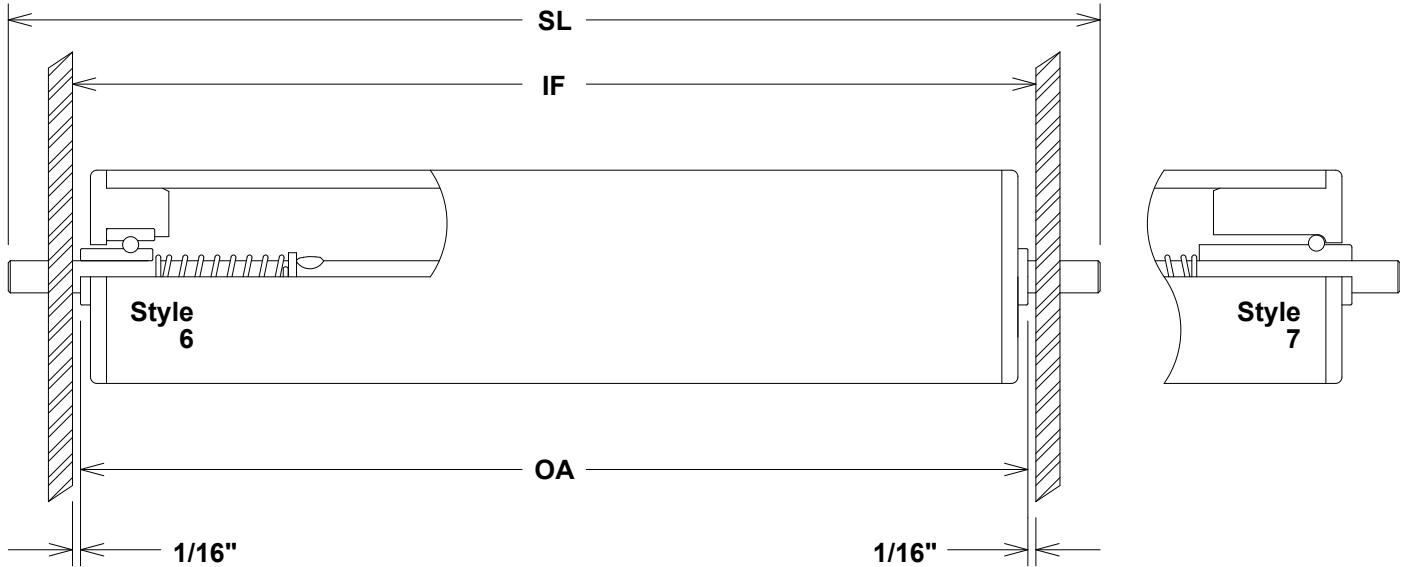
Frame I.F.	Bearing #			Frame I.F.	Bearing #		
	1L6	2L5	2J6		1L6	2L5	2J6
12	10	37	37	33	***	***	***
15	10	23	23	36	***	***	***
18	10	16	16	39	***	***	***
21	10	11	11	42	***	***	***
24	9	9	9	45	***	***	***
27	7	7	7	48	***	***	***
30	***	***	***	51	***	***	***

* Load capacity with aluminum shaft is 33% of steel capacity.

** Longer lengths are not recommended exceeding a load capacity of 5 pounds.

Plastic Rollers

1.66" Dia. x .140" Wall Thickness - 1/4" Round Shaft



Bearings:	Type: Stainless Steel Steel, Commercial Stainless Steel	Part # 1N2 2N2 2N0	Style / Description: 7 / Stainless steel balls in a plastic housing and raceway 6 / Plastic housing - No Seals 6 / Plastic housing - No Seals
Tube:	Materials: PVC	Part # W30	Description: 1.66" x .140" Wall White PVC
Shaft:	Materials: Carbon Steel Stainless Steel Aluminum	Part # C10 S10 A10	Description: 1/4" Round Carbon Steel Shaft 1/4" Round 304 Stainless Steel Shaft 1/4" Round Aluminum Shaft
	Standard Extensions:	9/16"	
	Standard Springs:	Dual spring loaded with shaft depressing to bearing hub	
	Options:	Fixed shaft, through shaft, D-shaft, threaded	
Note:	1N2 style bearings are for intermittent use only. Not recommended for powered systems.		

Load Capacity (LBS.)

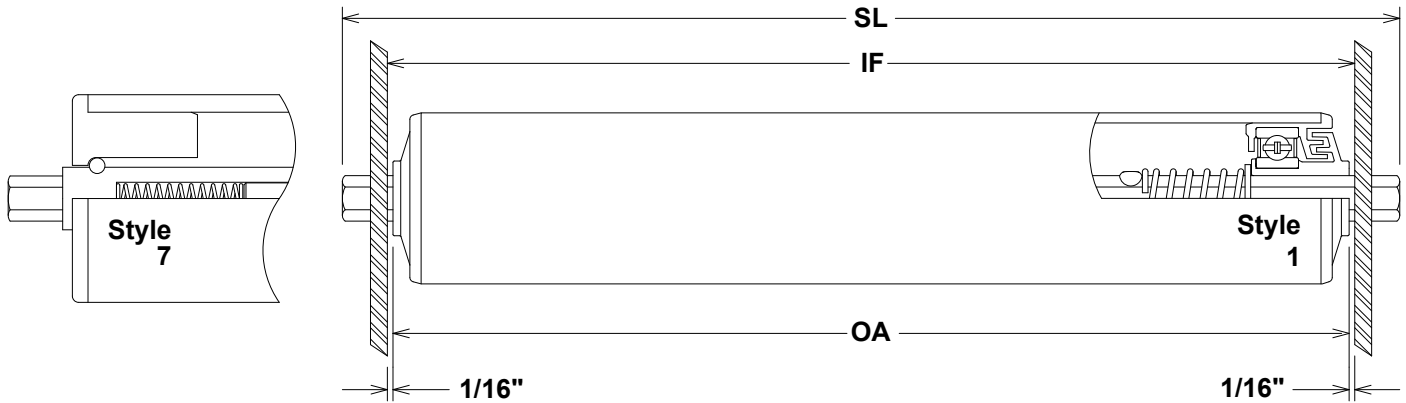
Frame I.F.	Bearing #			Frame I.F.	Bearing #		
	1N2	2N2	2N0		1N2	2N2	2N0
12	10	60	60	33	10	10	10
15	10	52	52	36	***	***	***
18	10	35	35	39	***	***	***
21	10	25	25	42	***	***	***
24	10	19	19	45	***	***	***
27	10	15	15	48	***	***	***
30	10	12	12	51	***	***	***

* Load capacity with aluminum shaft is 33% of steel capacity.

** Longer lengths are available upon request.

Plastic Rollers

1.66" Dia. x .140" Wall Thickness - 5/16" Hex Shaft



Bearings:	Type: Stainless Steel Steel, Commercial Stainless Steel	Part # 1N4 2N4 2N5	Style / Description 7 / Stainless steel balls in a plastic housing and raceway 1 / Conductive plastic - Double labyrinth seal construction 1 / Conductive plastic - Double labyrinth seal construction
Tube:	Materials: PVC	Part # W30	Description: 1.66" x .140" Wall White PVC
Shaft:	Materials: Carbon Steel Stainless Steel Acetal Adapters Acetal Adapters Standard Extensions: Standard Springs: Options:	Part # C14 S14 C12 S12	Description: 5/16" Hex Carbon Steel Shaft 5/16" Hex 304 Stainless Steel Shaft 5/16" Hex External Adapter with 1/4" Round Internal Carbon Steel Shaft 5/16" Hex External Adapter with 1/4" Round Internal 304 Stainless Steel Shaft 7/16" with C12 and S12, 9/16" with C14 and S14 Dual spring loaded with shaft depressing to bearing hub Fixed shaft, through shaft, holes, pins or rings

Note: 1N4 style bearings are for intermittent use only.
Not recommended for powered systems.

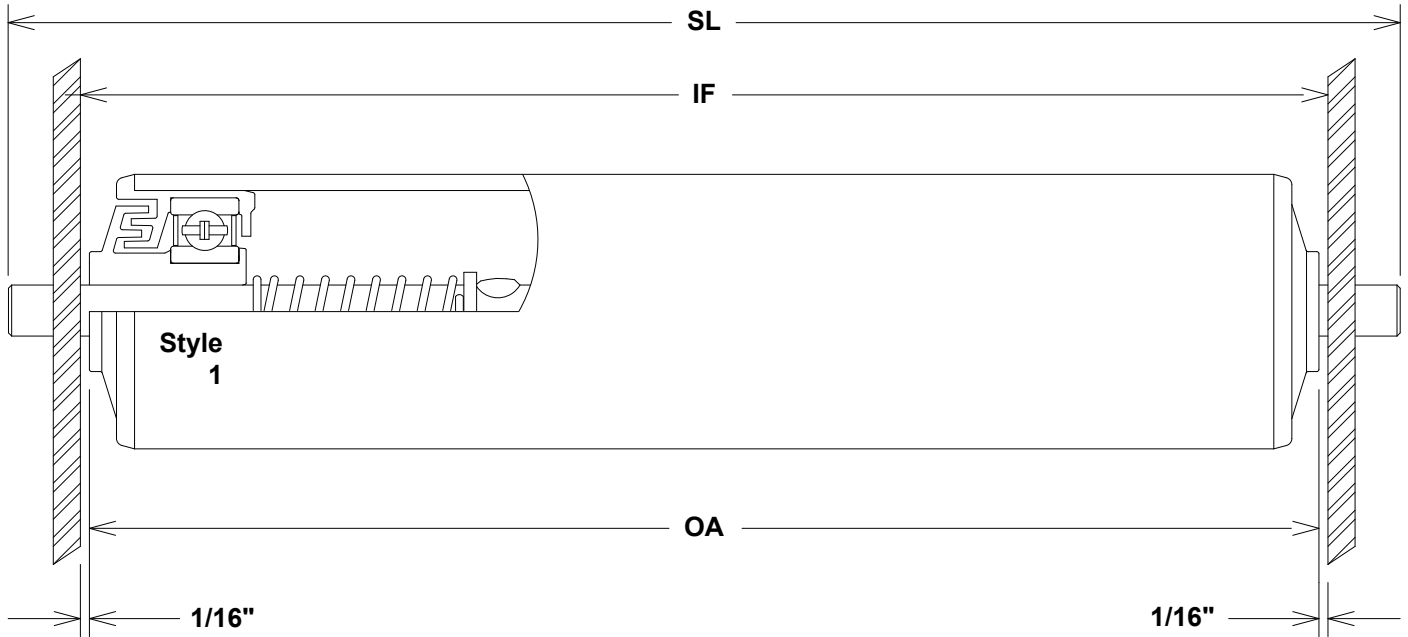
Load Capacity (LBS.)

Frame I.F.	Bearing #		Frame I.F.	Bearing #	
	1N4	2N4-2N5		1N4	2N4-2N5
12	10	60	33	10	10
15	10	52	36	***	***
18	10	35	39	***	***
21	10	25	42	***	***
24	10	19	45	***	***
27	10	15	48	***	***
30	10	12	51	***	***

* Longer lengths are available upon request.

Plastic Rollers

1.66" Dia. x .140" Wall Thickness - 5/16" Round Shaft



Bearings:	Type: Steel, Commercial Stainless Steel	Part # 2N3 2S5	Style / Description: 1 / Plastic Housing with double labyrinth seal construction 1 / Plastic Housing with double labyrinth seal construction
Tube:	Materials: PVC	Part # W30	Description: 1.66" x .140" Wall White PVC
Shaft:	Materials: Carbon Steel Stainless Steel	Part # C16 S16	Description: 5/16" Round Carbon Steel Shaft 5/16" Round 304 Stainless Steel Shaft
	Standard Extensions:	9/16"	
	Standard Springs:	Dual spring loaded with shaft depressing to bearing hub	
	Options:	Fixed shaft, through shaft, D-shaft, threaded	

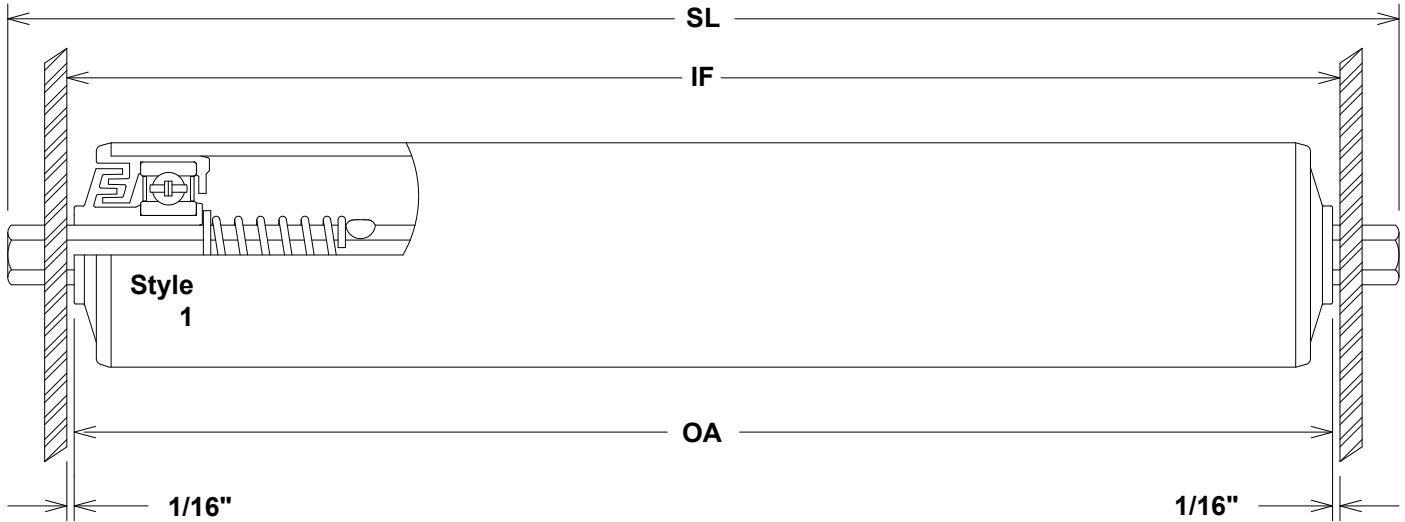
Load Capacity (LBS.)

Frame I.F.	Bearing # 2N3-2S5	Frame I.F.	Bearing # 2N3-2S5
12	60	33	10
15	52	36	***
18	35	39	***
21	25	42	***
24	19	45	***
27	15	48	***
30	12	51	***

* Longer lengths are available upon request.

Plastic Rollers

1.66" Dia. x .140" Wall Thickness - 7/16" Hex Shaft



Bearings:	Type: Steel, Commercial Stainless Steel	Part # 2N6 SS - Inquire	Style / Description: 1 / Conductive plastic - Double labyrinth seal construction 1 / Conductive plastic - Double labyrinth seal construction
Tube:	Materials: PVC	Part # W30	Description: 1.66" x .140" Wall White PVC
Shaft:	Materials: Carbon Steel Stainless Steel Options: ** Plastic Adapters Urethane Adapters ** Plastic Adapters Urethane Adapters	Part # C68 S70 C62 UC62 S62 US62	Description: 7/16" Hex Carbon Steel Shaft 7/16" Hex 304 Stainless Steel Shaft 7/16" Hex External Adapter with 5/16" Hex Internal Carbon Steel Shaft 7/16" Hex External Adapter with 5/16" Hex Internal Carbon Steel Shaft 7/16" Hex External Adapter with 5/16" Hex Internal 304 Stainless Steel Shaft 7/16" Hex External Adapter with 5/16" Hex Internal 304 Stainless Steel Shaft

** Max Load 50 Lbs Per Roller

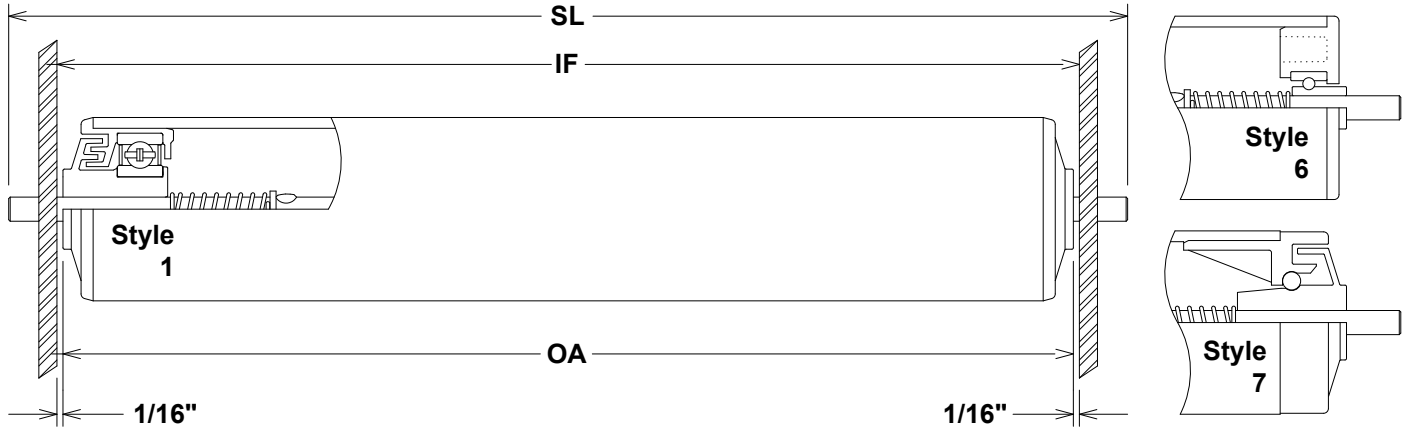
Load Capacity (LBS.)

Frame I.F.	Bearing #		Frame I.F.	Bearing #	
	2N6	(SS)		2N6	(SS)
12	60	60	33	10	10
15	52	52	36	***	***
18	35	35	39	***	***
21	25	25	42	***	***
24	19	19	45	***	***
27	15	15	48	***	***
30	12	12	51	***	***

** Longer lengths are available upon request.

Plastic Rollers

1.90" Dia. x .112" Wall Thickness - 1/4" Round Shaft



Bearings:	Type:	Part #	Style / Description:
	Stainless Steel	1A9	7 / 302 Stainless steel balls in a plastic housing and raceway
	Steel, Commercial	2Q4	6 / Plastic Housing - No Seals
	Steel, Commercial	2A1	1 / Plastic housing with double labyrinth seal construction
	Stainless Steel	2A9	1 / Plastic housing with double labyrinth seal construction

Tube:	Materials:	Part #	Description:
	PVC	H41	1.90" x .112" Wall White "Hi-Impact" PVC
	Drive options	Grooves	

Shaft:	Materials:	Part #	Description:
	Carbon Steel	C10	1/4" Round Carbon Steel Shaft
	Stainless Steel	S10	1/4" Round 304 Stainless Steel Shaft
	Aluminum	A10	1/4" Round Aluminum Shaft

Standard Extensions: 9/16"

Standard Springs: Dual spring loaded with shaft depressing to bearing hub

Options: Fixed shaft, through shaft, threaded (1/4 x 20), D-shaft

Note: 1A1 and 1A9 style bearings are for intermittent use only.
Not recommended for powered systems.

Load Capacity (LBS.)

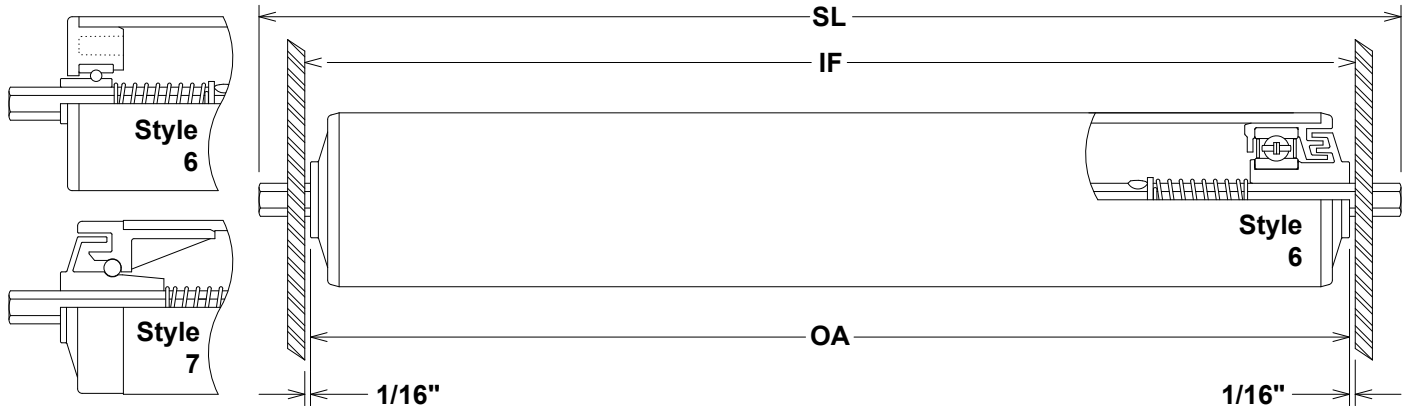
Frame I.F.	Bearing #			
	1A9	2Q4	2A1	2A9
12	20	60	88	88
15	20	60	70	70
18	20	55	58	58
21	20	47	49	49
24	20	40	40	40
27	20	32	31	31
30	20	25	25	25
33	20	21	21	21
36	17	17	17	17
39	15	15	***	***

* Load capacity with aluminum shaft is 33% of steel capacity.

** Longer lengths are available upon request.

Plastic Rollers

1.90" Dia. x .112" Wall Thickness - 5/16" Hex Shaft



Bearings:	Type:	Part #	Style / Description:
	Stainless Steel	1B2	7 / 302 Stainless steel balls in a plastic housing and raceway
	Stainless Steel	1B3	7 / 316 Stainless steel balls in a plastic housing and raceway
	Steel, Commercial	2J4	6 / Plastic Housing - No Seals
	Stainless Steel	2G5	6 / Plastic Housing - No Seals
	Steel, Commercial	2A2	1 / Conductive plastic - Double labyrinth seal construction
	Stainless Steel	2A5*	1 / Conductive plastic - Double labyrinth seal construction
	ABEC-1 Precision	3J6	1 / Conductive plastic - Double labyrinth seal construction

Tube:	Materials:	Part #	Description:
	PVC	H41	1.90" x .112" Wall White "Hi-Impact" PVC
	Drive options:	Grooves	

Shaft:	Materials:	Part #	Description:
	Carbon steel	C14	5/16" Hex Carbon Steel Shaft
	Stainless steel	S14	5/16" Hex 304 Stainless Steel Shaft
	Standard Extensions:	9/16"	
	Standard Springs:	Dual spring loaded with shaft depressing to bearing hub	
	Options:	Fixed shaft, through shaft, holes, pins or rings, drilled and tapped	

Note: 1B2 and 1B3 style bearings are for intermittent use only.
Not recommended for powered systems.

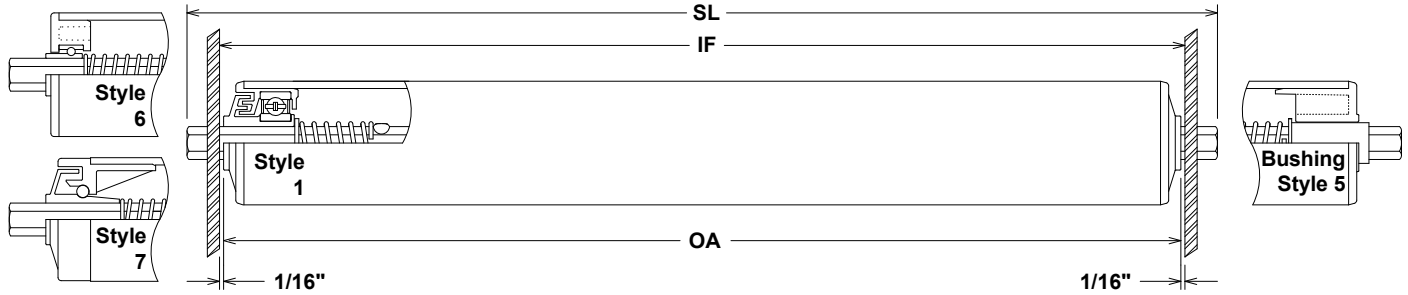
Load Capacity (LBS.)

Frame I.F.	Bearing #						
	1B2	1B3	2J4	2G5	2A2	2A5	3J6
12	20	20	60	102	110	110	93
15	20	20	60	102	97	97	73
18	20	20	60	73	79	79	60
21	20	20	53	53	59	59	51
24	20	20	40	40	44	44	44
27	20	20	32	32	34	34	34
30	20	20	25	25	27	27	27
33	20	20	21	21	22	22	22
36	17	17	17	17	19	19	19
39	15	15	15	15	16	16	16

** Longer lengths are available upon request.

Plastic Rollers

1.90" Dia. x .112" Wall Thickness - 7/16" Hex Shaft



Bearings:	Type:	Part #	Style / Description:
	Stainless Steel	1A5	7 / Series 302 stainless steel balls in a plastic housing and raceway
	Stainless Steel	1A8	7 / Series 316 stainless steel balls in a plastic housing and raceway
	Steel, Commercial	2W4	6 / Ball bearing in a plastic housing - No seals
	Stainless Steel	2P8	6 / Ball bearing in a plastic housing - No seals
	Steel, Commercial	2A4	1 / Plastic housing with double labyrinth seal construction
	Stainless Steel	2A5	1 / Plastic housing with double labyrinth seal construction
	ABEC 1 - Precision	3A4	1 / Plastic housing with double labyrinth seal construction
	Bushing Style, Stainless	5B7	5 / "Ultra" plastic housing, stainless steel bushing
	Bushing Style, Nylon	5A8	5 / "Ultra" plastic housing, nylon bushing
	Bushing Style, Stainless	5B4	5 / "Ultra" plastic housing, SS bushing, plastic shaft adapter
	Bushing Style, Nylon	5A1	5 / "Ultra" plastic housing, nylon bushing, plastic shaft adapter
Tube:	Materials:	Part #	Description:
	PVC	H41	1.90" x .112" Wall White "Hi-Impact" PVC
	Drive Options:	Grooves	
Shaft:	Materials:	Part #	Description:
	Carbon Steel	C68	7/16" Hex Carbon Steel Shaft
	Stainless Steel	S70	7/16" Hex 304 Stainless Steel Shaft
	Aluminum	A66	7/16" Hex Aluminum Shaft
	** Plastic Adapters	C62	7/16" Hex External Adapter with 5/16" Hex Internal Carbon Steel Shaft
	Urethane Adapters	UC62	7/16" Hex External Adapter with 5/16" Hex Internal Carbon Steel Shaft
	** Plastic Adapters	S62	7/16" Hex External Adapter with 5/16" Hex Internal 304 Stainless Steel Shaft
	Urethane Adapters	US62	7/16" Hex External Adapter with 5/16" Hex Internal 304 Stainless Steel Shaft
	** Max 50 Lbs Per Roller		
	Standard Extensions:	9/16"	
	Standard Springs:	Dual spring loaded with shaft depressing to bearing hub	
	Options:	Fixed shaft, through shaft, holes, pins or rings, drilled and tapped, zinc plated	

Note: 1A5, 1A8 and bushing style bearings are for intermittent use only. Not recommended for powered systems.

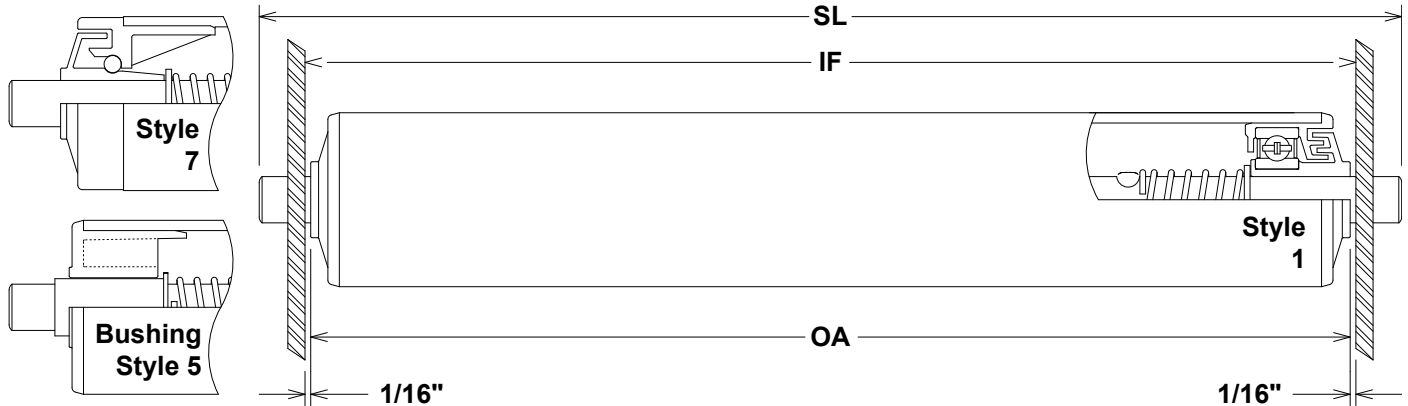
Load Capacity (LBS.)

Frame I.F.	Bearing #						
	1A5 / 1A8	2W4	2P8	2A4	2A5	3A4	BUSHING
12	20	60	60	110	110	110	100
15	20	60	60	110	110	110	100
18	20	60	60	83	83	83	85
21	20	53	53	59	59	59	60
24	20	40	40	44	44	44	45
27	20	32	32	34	34	34	35
30	20	25	25	27	27	27	28
33	20	21	21	22	22	22	23
36	17	17	17	19	19	19	19
39	***	***	***	16	16	16	16

* Load capacity with aluminum shaft is 33% of steel capacity.
 ** Longer lengths are available upon request but are not recommended.

Plastic Rollers

1.90" Dia. x .112" Wall Thickness - 1/2" Round Shaft



Bearings:	Type:	Part #	Style / Description:
	Stainless Steel	1B9	7 / 302 Stainless steel balls in a plastic housing and raceway
	Steel, Commercial	2A3	1 / Plastic housing with double labyrinth seal construction
	Stainless Steel	2B9	1 / Plastic housing with double labyrinth seal construction
	ABEC-1 Precision	3A3	1 / Plastic housing with double labyrinth seal construction
	Bushing Style, Nylon	5C0	5 / "Ultra" plastic housing, nylon bushing

Tube:	Materials:	Part #	Description:
	PVC	H41	1.90" x .112" Wall White "Hi-Impact" PVC
	Drive Options	Grooves	

Shaft:	Materials:	Part #	Description:
	Carbon Steel	C30	1/2" Round Carbon Steel Shaft
	Stainless Steel	S35	1/2" Round 304 Stainless Steel Shaft
	Options:	Zinc plated	1/2" Round Aluminum Shaft

Standard Extensions: 9/16"
 Standard Springs: Dual spring loaded with shaft depressing to bearing hub
 Options: Fixed shaft, through shaft, threaded, drilled and tapped, D-shaft, flats, hole

Note: 1B9 and bushing style bearings are for intermittent use only.
 Not recommended for powered systems.

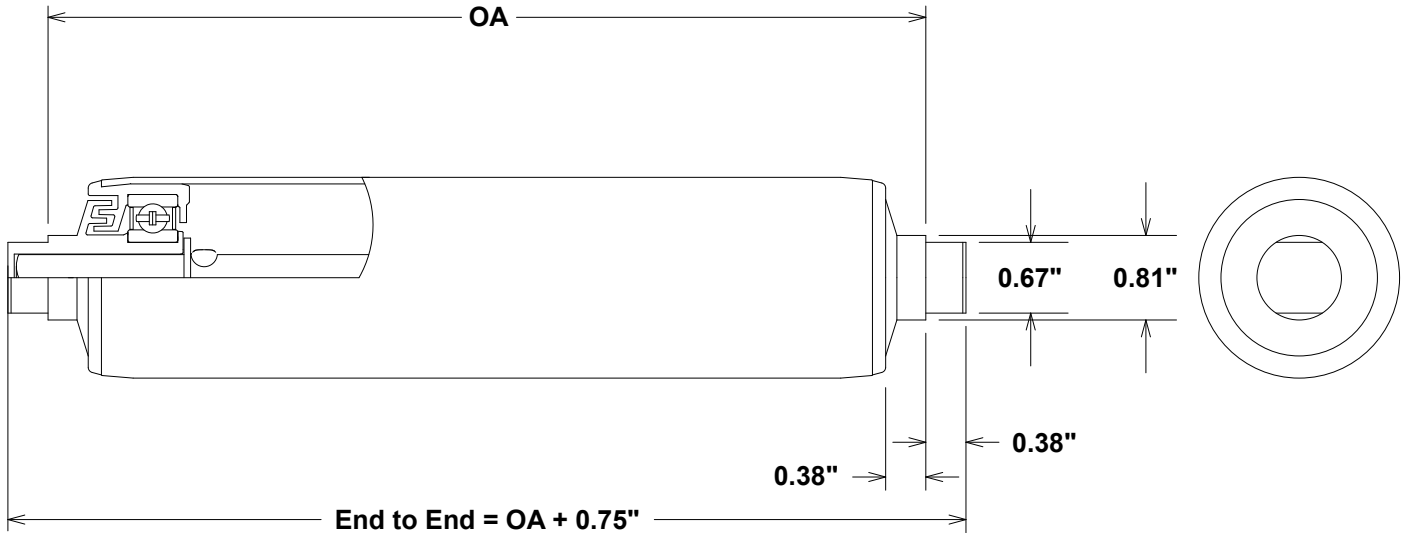
Load Capacity (LBS.)

Frame I.F.	Bearing #				
	1B9	2A3	2B9	3A3	BUSHING
12	20	110	110	110	100
15	20	110	110	110	100
18	20	90	90	83	85
21	20	63	63	59	60
24	20	47	47	44	45
27	20	36	36	34	35
30	20	29	29	27	28
33	20	23	23	22	23
36	17	19	19	19	19
39	***	16	16	16	16
42	***	***	***	***	***

** Longer lengths are available upon request.

Plastic Rollers

1.90" Dia. x .112" Wall Thickness - .67" Plastic Flat Caps



Bearings:	Type:	Part #	Style / Description:
	Steel, Commercial	2E4	1 / Plastic housing with double labyrinth seal construction
	Stainless Steel	2E5	1 / Plastic housing with double labyrinth seal construction
	ABEC-1 Precision	3A5	1 / Plastic housing with double labyrinth seal construction

Tube:	Materials	Part #	Description:
	PVC	H41	1.90" x .112" Wall White "Hi-Impact" PVC

Shaft:	Materials:	Part #	Description:
	** Acetal Flat Caps	C64	Uses a 7/16" hex carbon steel internal shaft
	** Acetal Flat Caps	S64	Uses a 7/16" hex stainless steel internal shaft

** Max 50 Lbs. per roller

Standard Extensions: 3/8"
Standard Springs: No springs

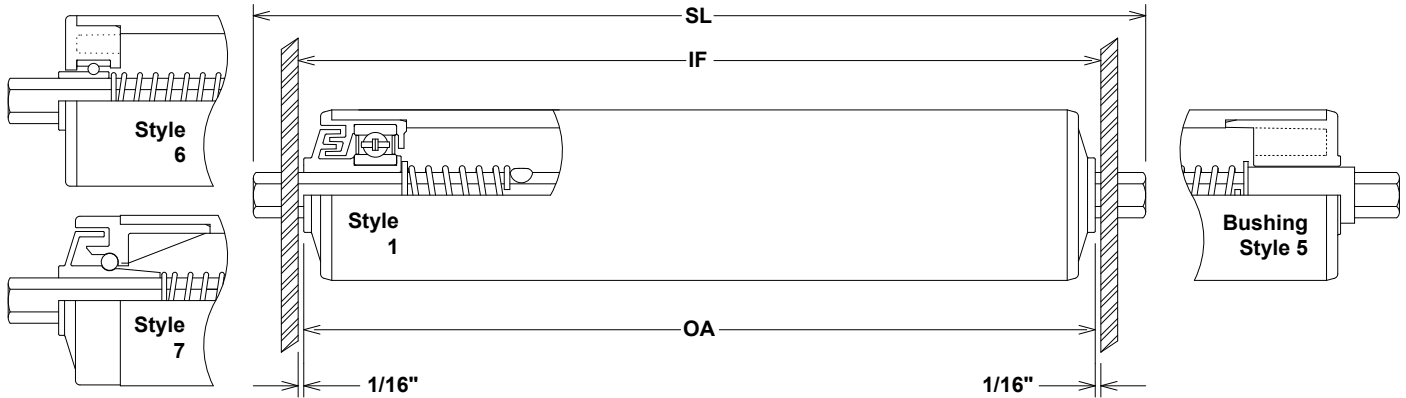
Load Capacity (LBS.)

Frame I.F.	Bearing #			Frame I.F.	Bearing #		
	2E4	2E5	3A5		2E4	2E5	3A5
12	50	50	50	33	22	22	22
15	50	50	50	36	19	19	19
18	50	50	50	39	16	16	16
21	50	50	50	42	***	***	***
24	44	44	44	45	***	***	***
27	34	34	34	48	***	***	***
30	27	27	27	51	***	***	***

* Longer lengths are available upon request but not recommended.

Plastic Rollers

1.90" Dia. x .200" Wall Thickness - 7/16" Hex Shaft



Bearings:	Type:	Part #	Style / Description:
	Stainless Steel	1C3	7 / Series 302 stainless steel balls in a plastic housing and raceway
	Stainless Steel	1C6	7 / Series 316 stainless steel balls in a plastic housing and raceway
	Steel, Commercial	2W5	6 / Plastic housing - No seals
	Stainless Steel	2P8	6 / Plastic housing - No seals
	Steel, Commercial	2B1	1 / Plastic housing with double labyrinth seal construction
	Stainless Steel	2B2	1 / Plastic housing with double labyrinth seal construction
	ABEC-1 Precision	3B1	1 / Plastic housing with double labyrinth seal construction
	Bushing style, Stainless	5C2	5 / "Ultra" plastic housing, stainless steel bushing
	Bushing style, Nylon	5A3	5 / "Ultra" plastic housing, nylon bushing
Tube:	Materials:	Part #	Description:
	PVC	H45	1.90" x .200" Wall White "Hi-Impact" PVC
	PVC	D45	1.90" x .200" Wall Dark Gray PVC
Shaft:	Materials:	Part #	Description:
	Carbon Steel	C68	7/16" Hex Carbon Steel Shaft
	Stainless Steel	S70	7/16" Hex 304 Stainless Steel Shaft
	Aluminum	A66	7/16" Hex Aluminum Shaft
	Options:	Zinc Plated	
	** Plastic Adapters	C62	7/16" Hex External Adapter with 5/16" Hex Internal Carbon Steel Shaft
	Urethane Adapters	UC62	7/16" Hex External Adapter with 5/16" Hex Internal Carbon Steel Shaft
	** Plastic Adapters	S62	7/16" Hex External Adapter with 5/16" Hex Internal 304 Stainless Steel Shaft
	Urethane Adapters	US62	7/16" Hex External Adapter with 5/16" Hex Internal 304 Stainless Steel Shaft
	** Max 50 Lbs. Per Roller		
	Standard Extensions:	9/16"	
	Standard Springs:		Dual spring loaded with shaft depressing to bearing hub
	Options:		Fixed shaft, through shaft, holes, pins or rings, drilled and tapped

Note: 1C9, 1C3, 1C6 and bushing style bearings are for intermittent use only. Not recommended for powered systems.

Load Capacity (LBS.)

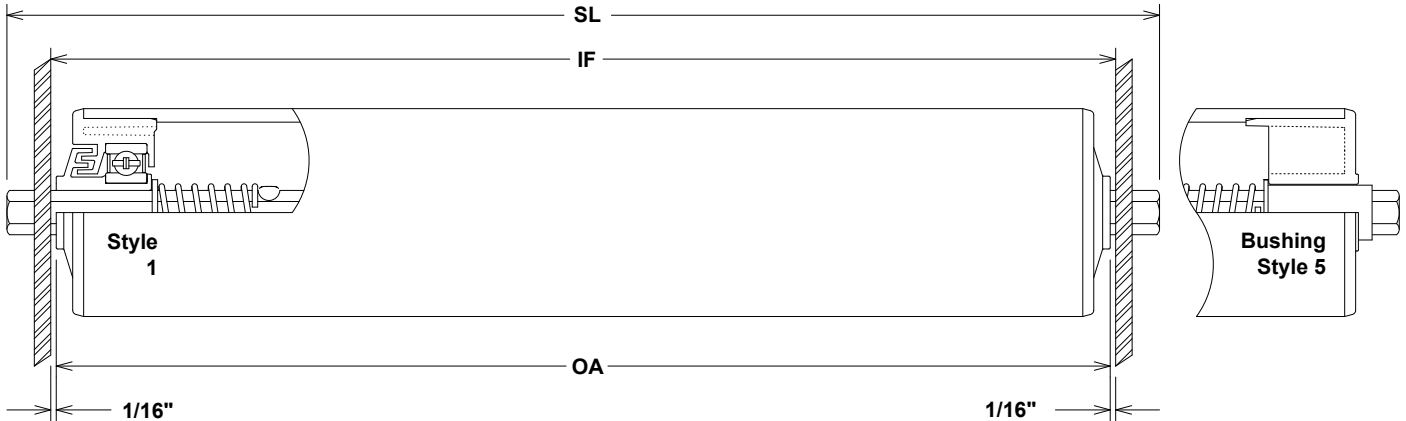
Frame	Bearing #					Frame	Bearing #					
	I.F.	2W5	2P8	2B1	2B2		3B1	I.F.	2W5	2P8	2B1	2B2
12		60	60	110	110	110	33	32	32	34	34	34
15		60	60	110	110	110	36	27	27	29	29	29
18		60	60	110	110	110	39	23	23	24	24	24
21		60	82	91	91	91	42	20	20	21	21	21
24		60	62	68	68	68	45	17	17	18	18	18
27		49	49	53	53	53	48	15	15	16	16	16
30		39	39	42	42	42	51	***	***	***	***	***

* Load capacity with aluminum shaft is 33% of steel capacity.

** Longer lengths are available upon request but are not recommended.

Plastic Rollers

2.37" Dia. x .125" Wall Thickness - 7/16" Hex Shaft



Bearings:	Type:	Part #	Style / Description:
	Steel, Commercial	2B5	1 / Plastic housing with double labyrinth seal construction
	Stainless Steel	2B6	1 / Plastic housing with double labyrinth seal construction
	ABEC-1 Precision	3B5	1 / Plastic housing with double labyrinth seal construction
	Bushing Style, Stainless	5K8	5 / "Ultra" plastic housing, stainless steel bushing
	Bushing Style, Nylon	5A0	5 / "Ultra" plastic housing, nylon bushing
	Bushing Style, Stainless	5A5	5 / "Ultra" plastic housing, SS bushing, plastic shaft adapter
	Bushing Style, Nylon	Inquire	5 / "Ultra" plastic housing, nylon bushing, plastic shaft adapter

Tube:	Materials:	Part #	Description:
	PVC	H51	2.37" x .125" Wall White "Hi-Impact" PVC

Shaft:	Materials:	Part #	Description:
	Carbon Steel	C68	7/16" Hex Carbon Steel Shaft
	Stainless Steel	S70	7/16" Hex 304 Stainless Steel Shaft
	Aluminum	A66	7/16" Hex Aluminum Shaft
	Options:	Zinc Plated	
	** Plastic Adapters	C62	7/16" Hex External Adapter with 5/16" Hex Internal Carbon Steel Shaft
	Urethane Adapters	UC62	7/16" Hex External Adapter with 5/16" Hex Internal Carbon Steel Shaft
	** Plastic Adapters	S62	7/16" Hex External Adapter with 5/16" Hex Internal 304 Stainless Steel Shaft
	Urethane Adapters	US62	7/16" Hex External Adapter with 5/16" Hex Internal 304 Stainless Steel Shaft
	** Max 50 Lbs. Per Roller		
	Standard Extensions:	9/16"	
	Standard Springs:	Dual spring loaded with shaft depressing to bearing hub	
	Options:	Fixed shaft, through shaft, holes, pins or rings, drilled and tapped	

Note: Bushing style rollers are for intermittent use only
Not recommended for powered systems

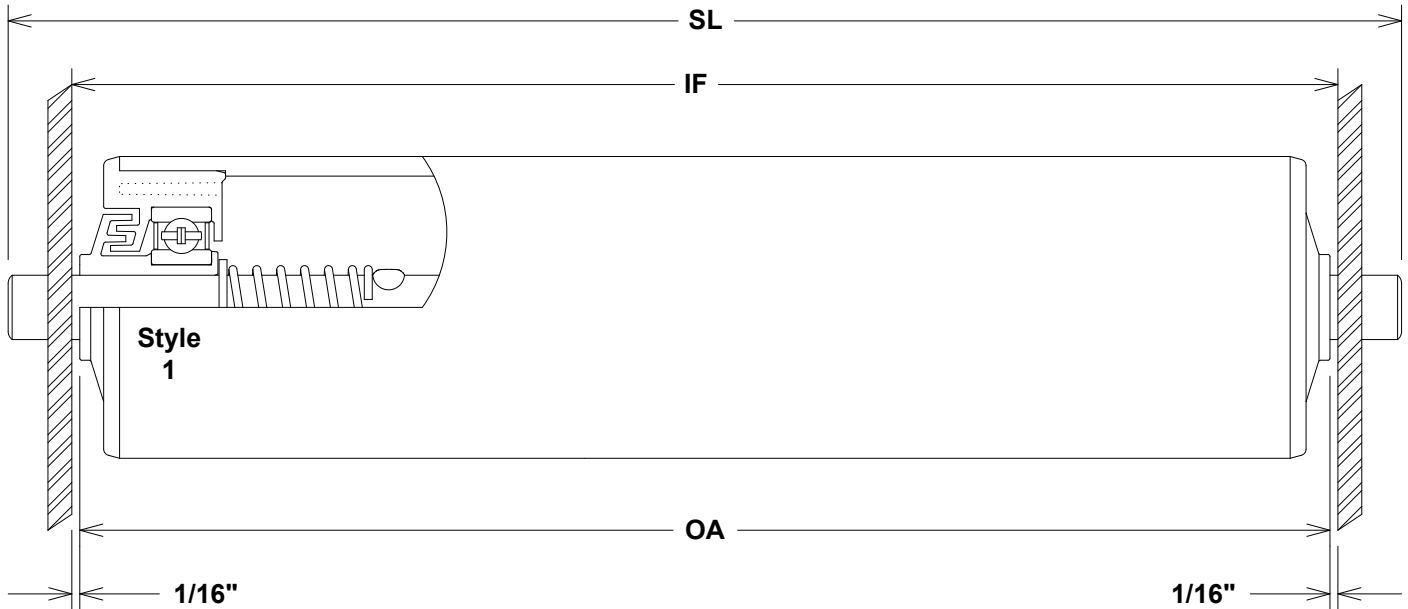
Load Capacity (LBS.)

Frame I.F.	Bearing #				Frame I.F.	Bearing #			
	2B5	2B6	3B5	BUSHING		2B5	2B6	3B5	BUSHING
12	174	174	174	100	33	49	49	46	46
15	133	133	126	100	36	45	45	41	41
18	103	103	98	98	39	41	41	38	38
21	85	85	80	80	42	37	37	35	35
24	72	72	67	67	45	35	35	32	32
27	62	62	58	58	48	32	32	30	30
30	55	55	51	51	51	30	30	28	28

* Load capacity with aluminum shaft is 33% of steel capacity.

** Longer lengths are available upon request but are not recommended.

2.37" Dia. x .125" Wall Thickness - 1/2" Round Shaft



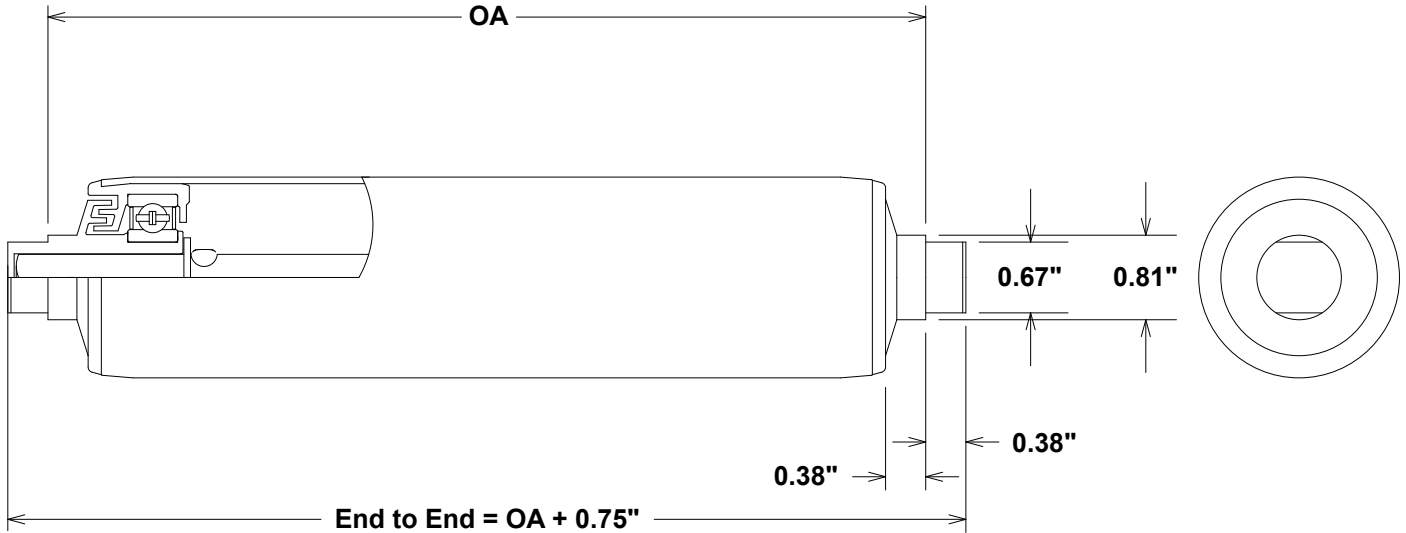
- | | | | |
|------------------|---|---|--|
| Bearings: | Type:
Steel, Commercial
Stainless Steel
ABEC-1 Precision | Part #
2B3
2E6
3B2 | Style / Description:
1 / Plastic housing with double labyrinth seal construction
1 / Plastic housing with double labyrinth seal construction
1 / Plastic housing with double labyrinth seal construction |
| Tube: | Materials:
PVC | Part #
H51 | Description:
2.37" x .125" Wall White "Hi-Impact" PVC |
| Shaft: | Materials:
Carbon Steel
Stainless Steel
Options:
Standard Extensions:
Standard Springs:
Options: | Part #
C30
S35
Zinc Plated
9/16"
Dual spring loaded with shaft depressing to bearing hub
Fixed shaft, through shaft, threaded, drilled and tapped, D-shaft, flats, holes | Description:
1/2" Round Carbon Steel Shaft
1/2" Round 304 Stainless Steel Shaft |

Load Capacity (LBS.)

Frame I.F.	Bearing #			Frame I.F.	Bearing #		
	2B3	2B6	3B2		2B3	2B6	3B2
12	173	173	174	33	58	58	46
15	135	135	129	36	48	48	41
18	111	111	99	39	41	41	38
21	94	94	80	42	35	35	35
24	82	82	67	45	30	30	32
27	72	72	58	48	27	27	30
30	65	65	51	51	23	23	28

** Longer lengths are available upon request but not recommended.

2.37" Dia. x .125" Wall Thickness - .67" Plastic Flat Caps



Bearings:	Type:	Part #	Style / Description:
	Steel, Commercial	2C1	1 / Plastic housing with double labyrinth seal construction
	Stainless Steel	2A0	1 / Plastic housing with double labyrinth seal construction
	ABEC-1 Precision	3B7	1 / Plastic housing with double labyrinth seal construction

Tube:	Materials:	Part #	Description:
	PVC	H51	2.37" x .125" Wall White "Hi-Impact" PVC

Shaft:	Materials:	Part #	Description:
	** Plastic Flat Caps	C64	Uses a 7/16" hex carbon steel internal shaft
	** Plastic Flat Caps	S64	Uses a 7/16" hex stainless steel internal shaft

** Max 50 Lbs. Per Roller

Standard Extensions 3/8"
Standard Springs: No Springs

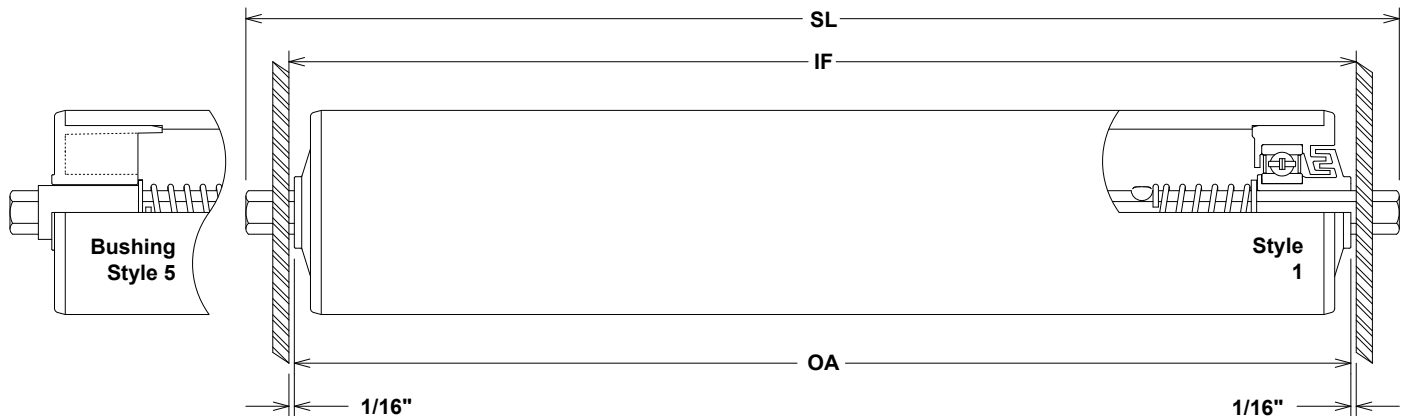
Load Capacity (LBS.)

Frame I.F.	Bearing #			Frame I.F.	Bearing #		
	2A0	2C1	3B7		2A0	2C1	3B7
12	50	50	50	33	49	49	49
15	50	50	50	36	41	41	41
18	50	50	50	39	35	35	35
21	50	50	50	42	30	30	30
24	50	50	50	45	26	26	26
27	50	50	50	48	22	22	22
30	50	50	50	51	20	20	20

** Longer lengths are available upon request but are not recommended.

Plastic Rollers

2.37" Dia. x .218" Wall Thickness - 7/16" Hex Shaft



Bearings:	Type:	Part #	Style / Description:
	Steel, Commercial	2R7	1 / Plastic housing with double labyrinth seal construction
	Stainless Steel	2D8	1 / Plastic housing with double labyrinth seal construction
	ABEC-1 Precision	3F8	1 / Plastic housing with double labyrinth seal construction
	Bushing Style, Stainless	Inquire	5 / "Ultra" plastic housing, stainless steel bushing
	Bushing Style, Nylon	5D8	5 / "Ultra" plastic housing, nylon bushing

Tube:	Materials:	Part #	Description:
	PVC	W55	2.37" x .218" Wall White PVC
	Options:		Plastic tube may be steel reinforced

Shaft:	Materials:	Part #	Description:
	Carbon Steel	C68	7/16" Hex Carbon Steel Shaft
	Stainless Steel	S70	7/16" Hex 304 Stainless Steel Shaft
	Aluminum	A66	7/16" Hex Aluminum Shaft
	Options:	Zinc Plated	
	** Plastic Adapters	C62	7/16" Hex External Adapter with 5/16" Hex Internal Carbon Steel Shaft
	*** Urethane Adapters	UC62	7/16" Hex External Adapter with 5/16" Hex Internal Carbon Steel Shaft
	** Plastic Adapters	S62	7/16" Hex External Adapter with 5/16" Hex Internal 304 Stainless Steel Steel Shaft
	*** Urethane Adapters	US62	7/16" Hex External Adapter with 5/16" Hex Internal 304 Stainless Steel Steel Shaft
	** Max 50 Lbs. Per Roller	*** Max 100 Lbs. Per Roller	
	Standard Extensions:	9/16"	
	Standard Springs:	Dual spring loaded with shaft depressing to bearing hub	
	Options:	Fixed shaft, through shaft, holes, pins or rings, drilled and tapped, threaded	

Note: Bushing style bearings are for intermittent use only.
Not recommended for powered systems.

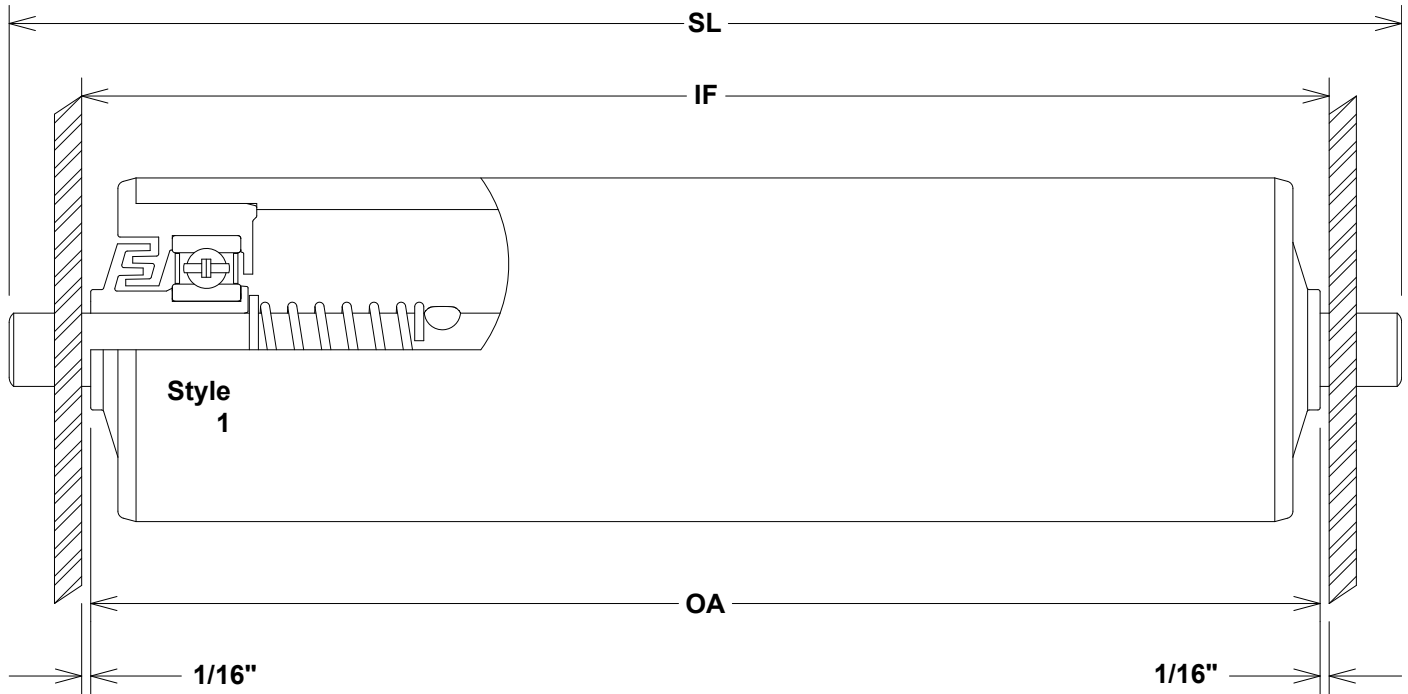
Load Capacity (LBS.)

Frame I.F.	Bearing #				Frame I.F.	Bearing #			
	2R7	2D8	3F8	BUSHING		2R7	2D8	3F8	BUSHING
12	174	174	174	100	33	49	49	46	46
15	133	133	126	100	36	45	45	41	41
18	103	103	98	98	39	41	41	38	38
21	85	85	80	80	42	37	37	35	35
24	72	72	67	67	45	35	35	32	32
27	62	62	58	58	48	32	32	30	30
30	55	55	51	51	51	30	30	28	28

* Load capacity with aluminum shaft is 33% of steel capacity.

** Longer lengths are available upon request but are not recommended.

2.37" Dia. x .218" Wall Thickness - 1/2" Round Shaft



Bearings:	Type: Steel, Commercial Stainless Steel ABEC-1 Precision	Part # Inquire Inquire Inquire	Style / Description: 1 / Plastic housing with double labyrinth seal construction 1 / Plastic housing with double labyrinth seal construction 1 / Plastic housing with double labyrinth seal construction
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Tube:	Materials: PVC	Part # W55	Description: 2.37" x .218" Wall White PVC
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Options: Plastic tube may be steel reinforced

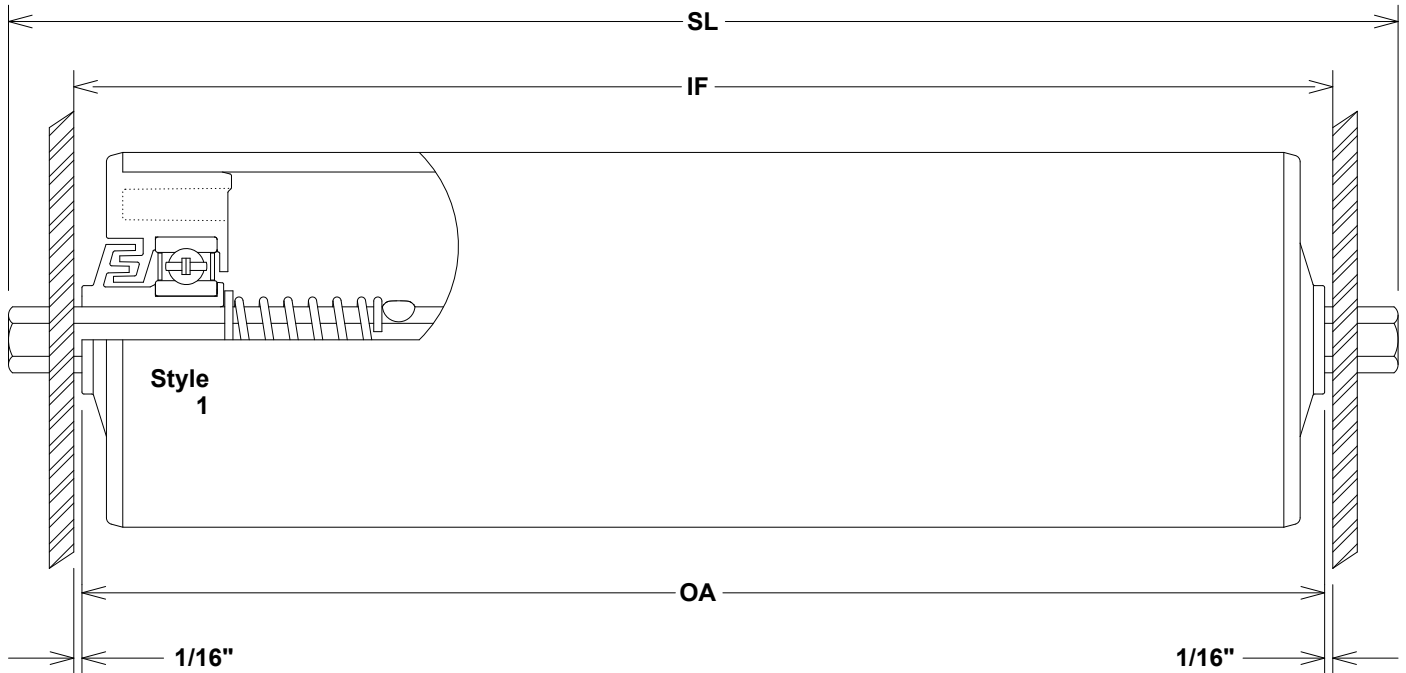
Shaft:	Materials: Carbon Steel Stainless Steel Options: Standard Extensions: Standard Springs: Options:	Part # C30 S35 Zinc Plated 9/16" Dual spring loaded with shaft depressing to bearing hub Fixed shaft, through shaft, threaded, drilled and tapped, D-shaft, flats, holes	Description: 1/2" Round Carbon Steel Shaft 1/2" Round 304 Stainless Steel Shaft
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Load Capacity (LBS.)

Frame I.F.	Bearing #		Frame I.F.	Bearing #	
	ABEC - 1	OTHER		ABEC - 1	OTHER
12	174	173	33	46	58
15	129	135	36	41	53
18	99	111	39	38	49
21	80	94	42	35	46
24	67	82	45	32	40
27	58	72	48	30	35
30	51	65	51	28	30

* Longer lengths are available but not recommended.

2.87" Dia. x .150" Wall Thickness - 7/16" Hex Shaft



Bearings:	Type:	Part #	Style / Description:
	Steel, Commercial	2F9	1 / Plastic housing with double labyrinth seal construction
	Stainless Steel	Inquire	1 / Plastic housing with double labyrinth seal construction
	ABEC-1 Precision	Inquire	1 / Plastic housing with double labyrinth seal construction

Tube:	Materials:	Part #	Description:
	PVC	H61	2.87" x .150" Wall White "Hi-Impact" PVC

Shaft:	Materials:	Part #	Description:
	Carbon Steel	C68	7/16" Hex Carbon Steel Shaft
	Stainless Steel	S70	7/16" Hex 304 Stainless Steel Shaft
	Aluminum	A66	7/16" Hex Aluminum Shaft
	Options:	Zinc Plated	

Standard Extensions: 9/16"
 Standard Springs: Dual spring loaded with shaft depressing to bearing hub
 Options: Fixed shaft, through shaft, holes, pins or rings, drilled and tapped, flat caps

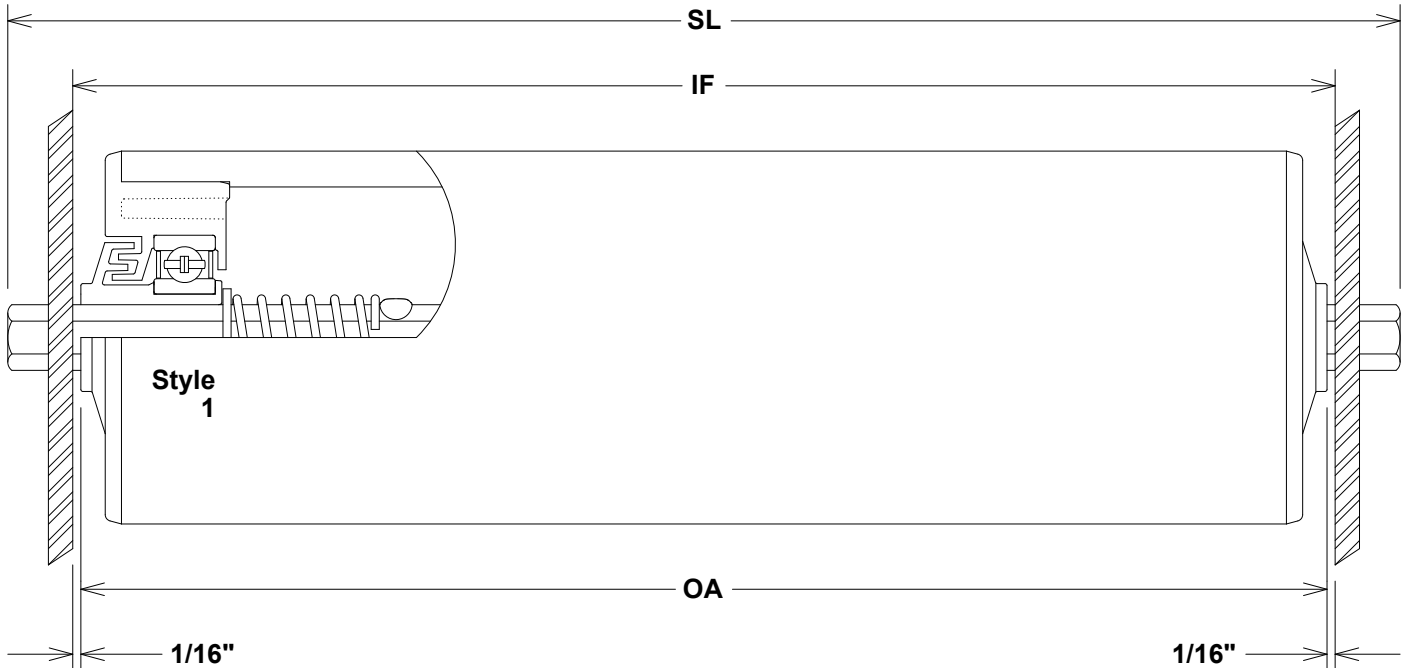
Load Capacity (LBS.)

Frame I.F.	Bearing #		Frame I.F.	Bearing #	
	2F9	ABEC-1		2F9	ABEC-1
12	174	210	33	85	103
15	174	210	36	78	88
18	167	196	39	71	75
21	140	166	42	66	64
24	121	144	45	59	55
27	106	127	48	51	48
30	94	114	51	45	42

* Load capacity with aluminum shaft is 33% of steel capacity.

** Longer lengths are available upon request but are not recommended.

2.87" Dia. x .276" Wall Thickness - 7/16" Hex Shaft



Bearings:	Type:	Part #	Style / Description:
	Steel, Commercial	2E8	1 / Plastic housing with double labyrinth seal construction
	Stainless Steel	2E9	1 / Plastic housing with double labyrinth seal construction
	ABEC-1 Precision	3D2	1 / Plastic housing with double labyrinth seal construction

Tube:	Materials:	Part #	Description:
	PVC	W65	2.87" x .276" Wall White PVC

Shaft:	Materials:	Part #	Description:
	Carbon Steel	C68	7/16" Hex Carbon Steel Shaft
	Stainless steel	S70	7/16" Hex 304 Stainless Steel Shaft
	Aluminum	A66	7/16" Hex Aluminum Shaft
	Options:	Zinc Plated	

Standard Extensions: 9/16"

Standard Springs: Dual spring loaded with shaft depressing to bearing hub

Options: Fixed shaft, through shaft, holes, pins or rings, drilled and tapped, flat caps

Load Capacity (LBS.)

Frame I.F.	Bearing #			Frame I.F.	Bearing #		
	2E8	2E9	3D2		2E8	2E9	3D2
12	174	174	210	33	85	85	103
15	174	174	210	36	78	78	94
18	167	167	196	39	71	71	86
21	140	140	166	42	66	66	80
24	121	121	144	45	61	61	74
27	106	106	127	48	57	57	65
30	94	94	114	51	54	54	57

* Load capacity with aluminum shaft is 33% of steel capacity.

** Longer lengths are available upon request but are not recommended.