

Ralphs-Pugh Troughing and Return Carrier Units

Ralphs-Pugh troughing units are available in both 2 roll (V-trough) and 3 roll configurations. Return carriers are 1 roll configuration. They are designed for the continuous bulk conveying of food products, feed, grain, fertilizer, chemicals, corrosive substances, and other materials. Ideal for replacement of fluming, hinge wall belting, and conveyors with side boards. Engineered frames provide durability and strength while the high quality rollers result in low maintenance. These units are rated for light to moderate loads with speeds up to 300 FPM. All units are easy to install, easy to clean and require very little maintenance. Replacement kits are available, please inquire with customer service. ***We can also custom manufacture to your specifications.***

Bearings:

- **ABEC-1 Chrome alloy precision ball bearings** in an engineered plastic housing with double labyrinth seals for the highest in load, speed and contamination protection.
- **Commercial grade stainless steel ball bearings** in an engineered plastic housing with double labyrinth seals offering the best solution to wet and corrosive applications.
- **Bushing style bearings** are ideal for food grade applications and protection against corrosion. These bearings are made of Ultra (Acetal plastic with Teflon additives). They are self-lubricating, long lasting, and quiet.

Tube:

- Ralphs-Pugh Hi-Impact white PVC tubing is available in 1.90", 2.375" and 2.875" diameters. This tubing is engineered and produced to our specifications and offers the ultimate in strength, impact, and resistance to ultra violet light.
- Stainless steel tubing is available in 1.90" and 2.50" diameters.
- Galvanized steel tubing is available in 1.90" and 2.50" diameters.
- Other diameters available upon request with Customer Service.
- Outer ends of rollers are capped to prevent water or contaminants from entering the bearing resulting in a more sanitary longer lasting unit.



Frames and Mounting Bases:

- Stainless steel
- Painted carbon steel
- Wide variety of mounting bases available with 2 roll design
- Wing rolls canted forward 2 degrees for belt tracking
- Belt direction indicated on each unit
- Easy to assemble

Drawings, dimensions and ordering information is available in the following sections.

Replacement Kits Available - Inquire

Ralphs-Pugh Troughing Units - 3 Roll

General Information on part numbering system:

Example: See following page for details

S3RS-P28S-20-12

Base Material

S - Stainless Steel

C - Painted Carbon Steel

Both bases are made from 10 gauge material with (2) 7/16" x 3/4" slotted holes.

Foot depth is 2 1/4".

Number of rolls per unit

3R - 3 Roll troughing unit

Wing Length

S - Short (3 3/4")

L - Long (7")

Roller Tube Material

P - Plastic

S - Stainless Steel

G - Galvanized Steel

Roller Tube Diameters

19 - 1.900" PVC and Steel

23 - 2.375" - (2 3/8") PVC only

25 - 2.500" - (2 1/2") Steel only

28 - 2.875" - (2 7/8") PVC only

Other Sizes are Available

Bearing Type

P - ABEC-1 Chrome Alloy Precision Ball Bearing in Plastic Housings

S - Commercial Grade Stainless Steel Ball Bearing in Plastic Housings

B - Bushing Style (Acetal plastic with Teflon additives) - PVC Tubes only

Wing Roller Angles

Standards are - 20 and 35 degrees

Belt Width

Short Wing Standards are - 12", 16", 18", 24", 30", 36", 42" and 48"

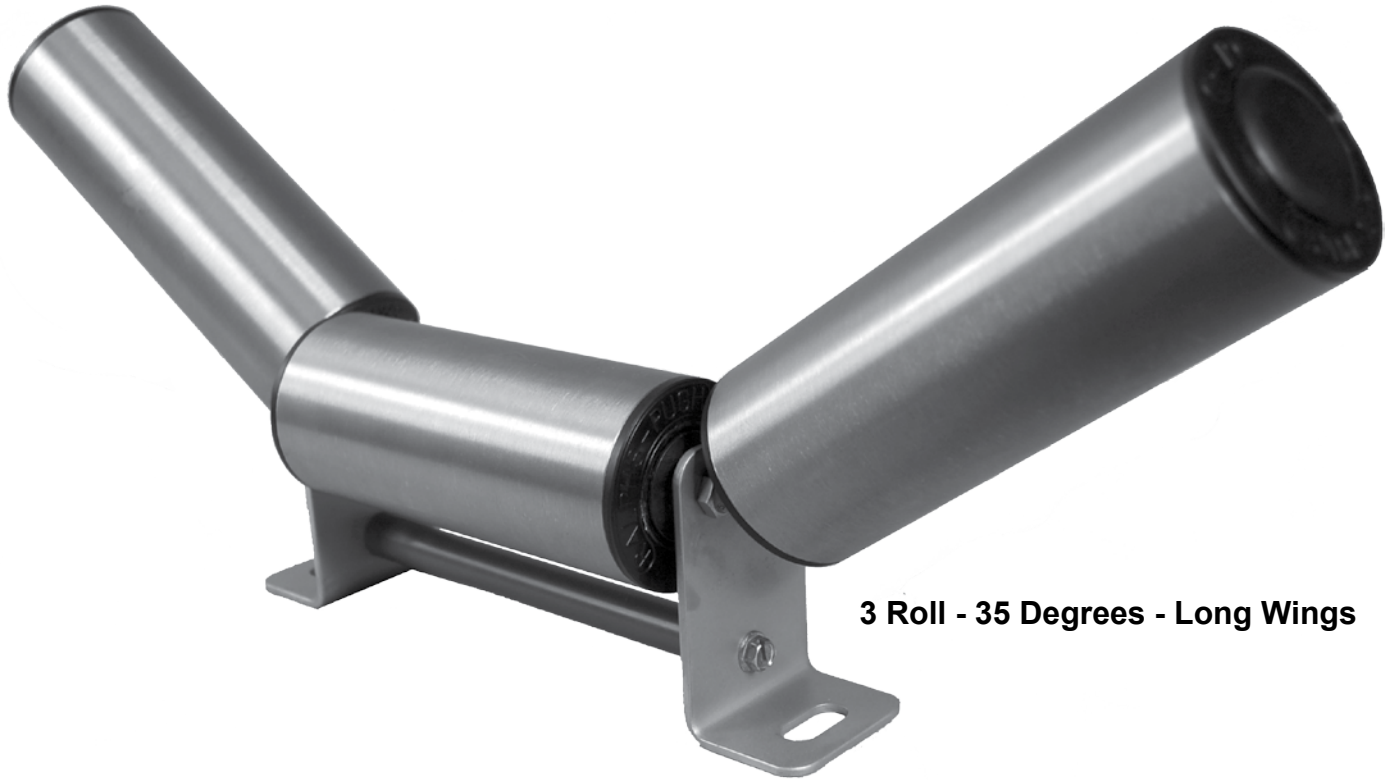
Long Wing Standards are - 18", 24", 30", 36", 42" and 48"

Options available – Inquire with Customer Service

Wing Roller tilt

Standard - Canted forward 2 degrees to help track belt for single direction conveying

Troughers - 3 Roll



3 Roll - 35 Degrees - Long Wings

3 Roll - 20 Degrees - Short Wings



Troughers

Troughers - 3 Roll - 20 Degrees - Long Wings

3 Roll – 20 Degree Roller Angle – Long Wings - 1.90” Diameter Metal and Plastic Rollers

Belt Size	A Dim	B Dim	C Dim	D Dim	E Dim	F Dim	G Dim	H Dim	I Dim	J Dim	Approx Wt. Lbs
18	21.59	6.38	6.63	8.75	9.88	7.00	6.30	4.52	20.29	3.89	4.50
20	23.59	8.63	8.63	10.75	11.88	7.00	6.30	4.55	22.29	3.89	4.75
22	25.59	10.38	10.63	12.75	13.88	7.00	6.30	4.52	24.29	3.89	5.25
24	27.59	12.38	12.63	14.75	15.88	7.00	6.30	4.52	26.29	3.89	5.50
26	29.59	14.38	14.63	16.75	17.88	7.00	6.30	4.52	28.29	3.89	6.00
30	33.59	18.38	18.63	20.75	21.88	7.00	6.30	4.52	32.29	3.89	6.50
36	39.59	24.38	24.63	26.75	27.88	7.00	6.30	4.52	38.29	3.89	7.38
42	45.59	30.38	30.63	32.75	33.88	7.00	6.30	4.52	44.29	3.89	8.38
48	51.59	36.38	36.63	38.75	39.88	7.00	6.30	4.52	50.29	3.89	9.38

3 Roll – 20 Degree Roller Angle – Long Wings - 2.38” Diameter Plastic Rollers

Belt Size	A Dim	B Dim	C Dim	D Dim	E Dim	F Dim	G Dim	H Dim	I Dim	J Dim	Approx Wt. Lbs
18	21.75	6.38	6.63	8.75	9.88	7.00	6.53	4.29	20.13	4.13	4.50
20	23.75	8.63	8.63	10.75	11.88	7.00	6.53	4.29	22.13	4.13	4.75
22	25.75	10.38	10.63	12.75	13.88	7.00	6.53	4.29	24.13	4.13	5.25
24	27.75	12.38	12.63	14.75	15.88	7.00	6.53	4.29	26.13	4.13	5.50
26	29.75	14.38	14.63	16.75	17.88	7.00	6.53	4.29	28.13	4.13	6.00
30	33.75	18.38	18.63	20.75	21.88	7.00	6.53	4.29	32.13	4.13	6.50
36	39.75	24.38	24.63	26.75	27.88	7.00	6.53	4.29	38.13	4.13	7.38
42	45.75	30.38	30.63	32.75	33.88	7.00	6.53	4.29	44.13	4.13	8.38
48	51.75	36.38	36.63	38.75	39.88	7.00	6.53	4.29	50.29	4.13	9.38

3 Roll – 20 Degree Roller Angle – Long Wings - 2.50” Diameter Metal Rollers

Belt Size	A Dim	B Dim	C Dim	D Dim	E Dim	F Dim	G Dim	H Dim	I Dim	J Dim	Approx Wt. Lbs
18	21.79	6.38	6.63	8.75	9.88	7.00	6.59	4.24	20.08	4.19	4.50
20	23.79	8.38	8.63	10.75	11.88	7.00	6.59	4.24	22.08	4.19	4.75
22	25.79	10.38	10.63	12.75	13.88	7.00	6.59	4.24	24.08	4.19	5.25
24	27.79	12.38	12.63	14.75	15.88	7.00	6.59	4.24	26.08	4.19	5.50
26	29.79	14.38	14.63	16.75	17.88	7.00	6.59	4.24	28.08	4.19	6.00
30	33.79	18.38	18.63	20.75	21.88	7.00	6.59	4.24	32.08	4.19	6.50
36	39.79	24.38	24.63	26.75	27.88	7.00	6.59	4.24	38.08	4.19	7.38
42	45.79	30.38	30.63	32.75	33.88	7.00	6.59	4.24	44.08	4.19	8.38
48	51.79	36.38	36.63	38.75	39.88	7.00	6.59	4.24	50.08	4.19	9.38

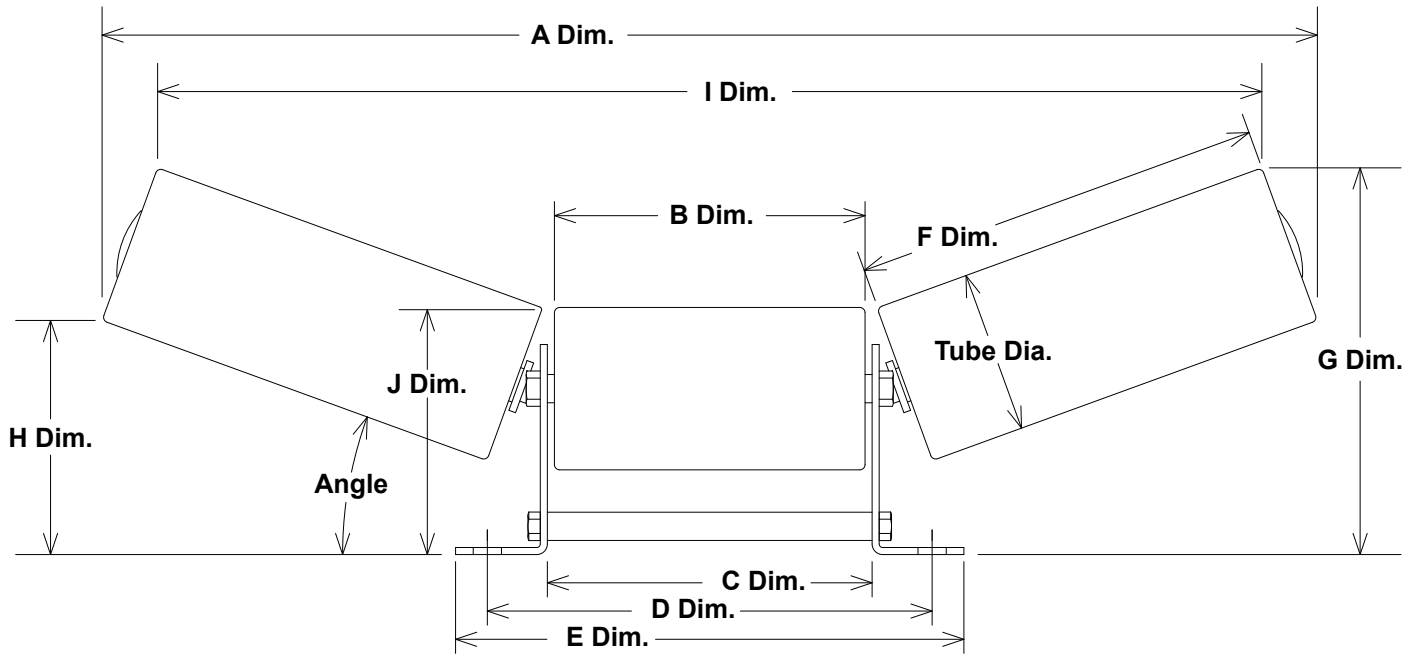
3 Roll – 20 Degree Roller Angle – Long wings - 2.875” Diameter Plastic Rollers

Belt Size	A Dim	B Dim	C Dim	D Dim	E Dim	F Dim	G Dim	H Dim	I Dim	J Dim	Approx Wt. Lbs
18	21.92	6.38	6.63	8.75	9.88	7.00	6.76	4.06	19.96	4.38	4.50
20	23.92	8.38	8.63	10.75	11.88	7.00	6.76	4.06	21.96	4.38	4.75
22	25.92	10.38	10.63	12.75	13.88	7.00	6.76	4.06	23.96	4.38	5.25
24	27.92	12.38	12.63	14.75	15.88	7.00	6.76	4.06	25.96	4.38	5.50
26	29.92	14.38	14.63	16.75	17.88	7.00	6.76	4.06	27.96	4.38	6.00
30	33.92	18.38	18.63	20.75	21.88	7.00	6.76	4.06	31.96	4.38	6.50
36	39.92	24.38	24.63	26.75	27.88	7.00	6.76	4.06	37.96	4.38	7.38
42	45.92	30.38	30.63	32.75	33.88	7.00	6.76	4.06	43.96	4.38	8.38
48	51.92	36.38	36.63	38.75	39.88	7.00	6.76	4.06	49.96	4.38	9.38

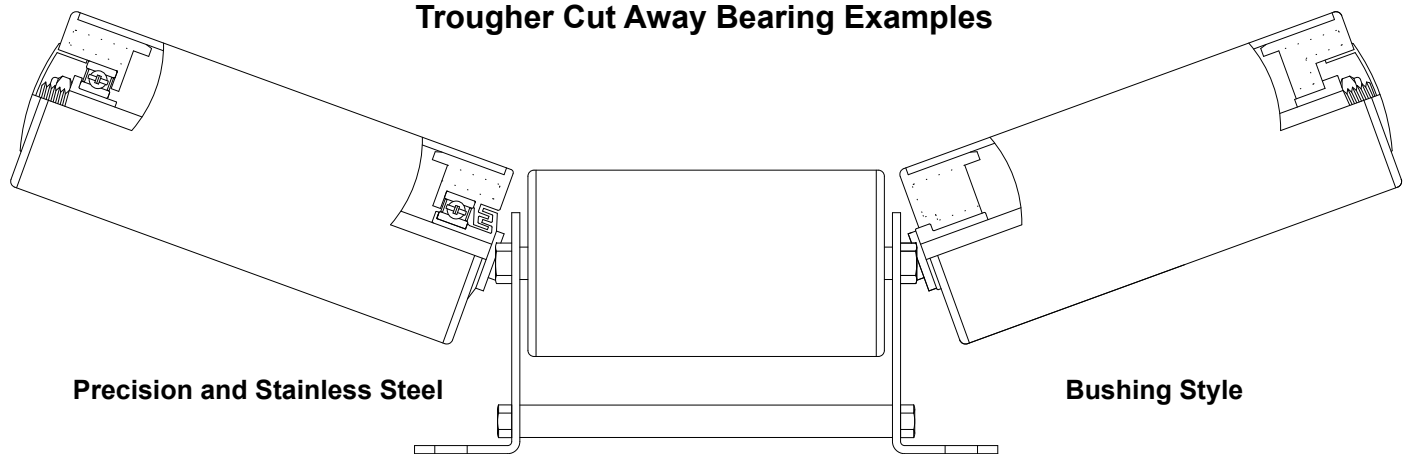
Troughers

Troughers - 3 Roll - 20 Degrees - Long Wings

Trougher Dimensions



Trougher Cut Away Bearing Examples



Troughers

Troughers - 3 Roll - 20 Degrees - Short Wings

3 Roll – 20 Degree Roller Angle – Short Wings - 1.90” Diameter Metal and Plastic Rollers

Belt Size	A Dim	B Dim	C Dim	D Dim	E Dim	F Dim	G Dim	H Dim	I Dim	J Dim	Approx Wt Lbs
12	14.61	5.50	5.75	7.88	9.00	3.75	5.19	3.41	13.31	3.89	3.63
14	16.61	7.50	7.75	9.88	11.00	3.75	5.19	3.41	15.31	3.89	4.00
16	18.61	9.50	9.75	11.88	13.00	3.75	5.19	3.41	17.31	3.89	4.25
18	20.61	11.50	11.75	13.88	15.00	3.75	5.19	3.41	19.31	3.89	4.50
20	22.61	13.50	13.75	15.88	17.00	3.75	5.19	3.41	21.31	3.89	4.75
22	24.61	15.50	15.75	17.88	19.00	3.75	5.19	3.41	23.31	3.89	5.25
24	26.61	17.50	17.75	19.88	21.00	3.75	5.19	3.41	25.31	3.89	5.50
26	28.61	19.50	19.75	21.88	23.00	3.75	5.19	3.41	27.31	3.89	6.00
30	32.61	23.50	23.75	25.88	27.00	3.75	5.19	3.41	31.31	3.89	6.50
36	38.61	29.50	29.75	31.88	33.00	3.75	5.19	3.41	37.31	3.89	7.38
42	44.61	35.50	35.75	37.88	39.00	3.75	5.19	3.41	43.31	3.89	8.38
48	50.61	41.50	41.75	43.88	45.00	3.75	5.19	3.41	49.31	3.89	9.38

3 Roll – 20 Degree Roller Angle – Short Wings - 2.38” Diameter Plastic Rollers

Belt Size	A Dim	B Dim	C Dim	D Dim	E Dim	F Dim	G Dim	H Dim	I Dim	J Dim	Approx Wt Lbs
12	14.77	5.50	5.75	7.88	9.00	3.75	5.42	3.18	13.14	4.13	3.63
14	16.77	7.50	7.75	9.88	11.00	3.75	5.42	3.18	15.14	4.13	4.00
16	18.77	9.50	9.75	11.88	13.00	3.75	5.42	3.18	17.14	4.13	4.25
18	20.77	11.50	11.75	13.88	15.00	3.75	5.42	3.18	19.14	4.13	4.50
20	22.77	13.50	13.75	15.88	17.00	3.75	5.42	3.18	21.14	4.13	4.75
22	24.77	15.50	15.75	17.88	19.00	3.75	5.42	3.18	23.14	4.13	5.25
24	26.77	17.50	17.75	19.88	21.00	3.75	5.42	3.18	25.14	4.13	5.50
26	28.77	19.50	19.75	21.88	23.00	3.75	5.42	3.18	27.14	4.13	6.00
30	32.77	23.50	23.75	25.88	27.00	3.75	5.42	3.18	31.14	4.13	6.50
36	38.77	29.50	29.75	31.88	33.00	3.75	5.42	3.18	37.14	4.13	7.38
42	44.77	35.50	35.75	37.88	39.00	3.75	5.42	3.18	43.14	4.13	8.38
48	50.77	41.50	41.75	43.88	45.00	3.75	5.42	3.18	49.14	4.13	9.38

3 Roll – 20 Degree Roller Angle – Short Wings - 2.50” Diameter Metal Rollers

Belt Size	A Dim	B Dim	C Dim	D Dim	E Dim	F Dim	G Dim	H Dim	I Dim	J Dim	Approx Wt Lbs
12	14.81	5.50	5.75	7.88	9.00	3.75	5.47	3.12	13.10	4.19	3.63
14	16.81	7.50	7.75	9.88	11.00	3.75	5.47	3.12	15.10	4.19	4.00
16	18.81	9.50	9.75	11.88	13.00	3.75	5.47	3.12	17.10	4.19	4.25
18	20.81	11.50	11.75	13.88	15.00	3.75	5.47	3.12	19.10	4.19	4.50
20	22.81	13.50	13.75	15.88	17.00	3.75	5.47	3.12	21.10	4.19	4.75
22	24.81	15.50	15.75	17.88	19.00	3.75	5.47	3.12	23.10	4.19	5.25
24	26.81	17.50	17.75	19.88	21.00	3.75	5.47	3.12	25.10	4.19	5.50
26	28.81	19.50	19.75	21.88	23.00	3.75	5.47	3.12	27.10	4.19	6.00
30	32.81	23.50	23.75	25.88	27.00	3.75	5.47	3.12	31.10	4.19	6.50
36	38.81	29.50	29.75	31.88	33.00	3.75	5.47	3.12	37.10	4.19	7.38
42	44.81	35.50	35.75	37.88	39.00	3.75	5.47	3.12	43.10	4.19	8.38
48	50.81	41.50	41.75	43.88	45.00	3.75	5.47	3.12	49.10	4.19	9.38

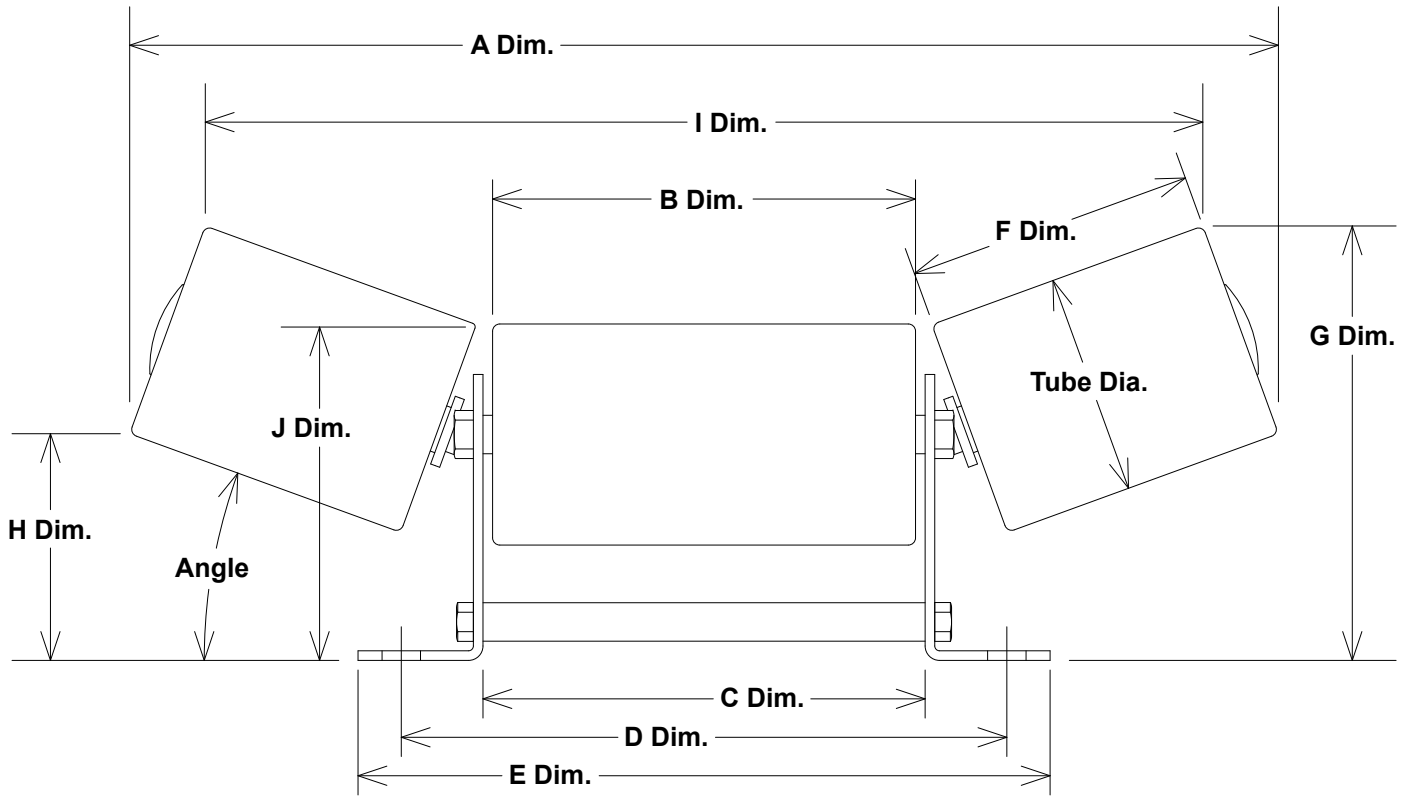
3 Roll – 20 Degree Roller Angle – Short Wings - 2.875” Diameter Plastic Rollers

Belt Size	A Dim	B Dim	C Dim	D Dim	E Dim	F Dim	G Dim	H Dim	I Dim	J Dim	Approx Wt Lbs
12	14.94	5.50	5.75	7.88	9.00	3.75	5.65	2.95	12.97	4.38	3.63
14	16.94	7.50	7.75	9.88	11.00	3.75	5.65	2.95	14.97	4.38	4.00
16	18.94	9.50	9.75	11.88	13.00	3.75	5.65	2.95	16.97	4.38	4.25
18	20.94	11.50	11.75	13.88	15.00	3.75	5.65	2.95	18.97	4.38	4.50
20	22.94	13.50	13.75	15.88	17.00	3.75	5.65	2.95	20.97	4.38	4.75
22	24.94	15.50	15.75	17.88	19.00	3.75	5.65	2.95	22.97	4.38	5.25
24	26.94	17.50	17.75	19.88	21.00	3.75	5.65	2.95	24.97	4.38	5.50
26	28.94	19.50	19.75	21.88	23.00	3.75	5.65	2.95	26.97	4.38	6.00
30	32.94	23.50	23.75	25.88	27.00	3.75	5.65	2.95	30.97	4.38	6.50
36	38.94	29.50	29.75	31.88	33.00	3.75	5.65	2.95	36.97	4.38	7.38
42	44.94	35.50	35.75	37.88	39.00	3.75	5.65	2.95	42.97	4.38	8.38
48	50.94	41.50	41.75	43.88	45.00	3.75	5.65	2.95	48.97	4.38	9.38

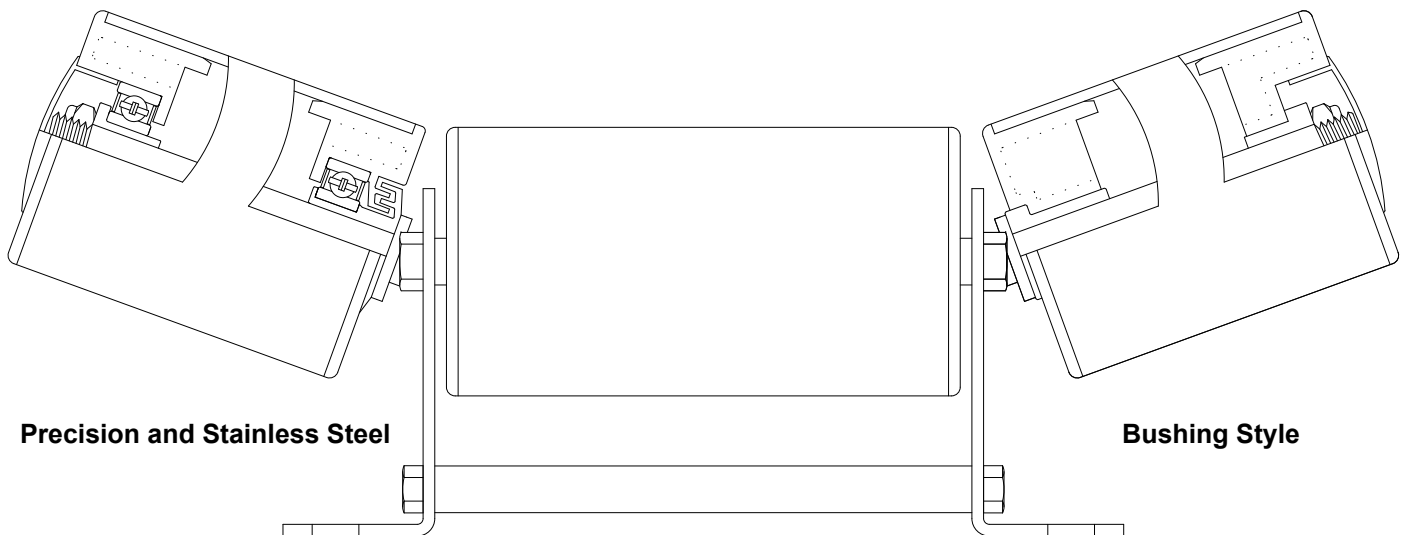
Troughers

Troughers - 3 Roll - 20 Degrees - Short Wings

Trougher Dimensions



Trougher Cut Away Bearing Examples



Troughers

Troughers - 3 Roll - 35 Degrees - Long Wings

3 Roll – 35 Degree Roller Angle – Long Wings - 1.90” Diameter Metal and Plastic Rollers

Belt Size	A Dim	B Dim	C Dim	D Dim	E Dim	F Dim	G Dim	H Dim	I Dim	J Dim	Approx Wt Lbs
18	20.93	6.38	6.63	8.75	9.88	7.00	8.13	6.57	18.75	3.89	4.50
20	22.93	8.38	8.63	10.75	11.88	7.00	8.13	6.57	20.75	3.89	4.75
22	24.93	10.38	10.63	12.75	13.88	7.00	8.13	6.57	22.75	3.89	5.25
24	26.93	12.38	12.63	14.75	15.88	7.00	8.13	6.57	24.75	3.89	5.50
26	28.93	14.38	14.63	16.75	17.88	7.00	8.13	6.57	26.75	3.89	6.00
30	32.93	18.38	18.63	20.75	21.88	7.00	8.13	6.57	30.75	3.89	6.50
36	38.93	24.38	24.63	26.75	27.88	7.00	8.13	6.57	36.75	3.89	7.38
42	44.93	30.38	30.63	32.75	33.88	7.00	8.13	6.57	42.75	3.89	8.38
48	50.93	36.38	36.63	38.75	39.88	7.00	8.13	6.57	48.75	3.89	9.38

3 Roll – 35 Degree Roller Angle – Long Wings - 2.38” Diameter Plastic Rollers

Belt Size	A Dim	B Dim	C Dim	D Dim	E Dim	F Dim	G Dim	H Dim	I Dim	J Dim	Approx Wt Lbs
18	21.20	6.38	6.63	8.75	9.88	7.00	8.32	6.38	18.48	4.13	4.50
20	23.20	8.38	8.63	10.75	11.88	7.00	8.32	6.38	20.48	4.13	4.75
22	25.20	10.38	10.63	12.75	13.88	7.00	8.32	6.38	22.48	4.13	5.25
24	27.20	12.38	12.63	14.75	15.88	7.00	8.32	6.38	24.48	4.13	5.50
26	29.20	14.38	14.63	16.75	17.88	7.00	8.32	6.38	26.48	4.13	6.00
30	33.20	18.38	18.63	20.75	21.88	7.00	8.32	6.38	30.48	4.13	6.50
36	39.20	24.38	24.63	26.75	27.88	7.00	8.32	6.38	36.48	4.13	7.38
42	45.20	30.38	30.63	32.75	33.88	7.00	8.32	6.38	42.48	4.13	8.38
48	51.20	36.38	36.63	38.75	39.88	7.00	8.32	6.38	48.48	4.13	9.38

3 Roll – 35 Degree Roller Angle – Long Wings - 2.50” Diameter Metal Rollers

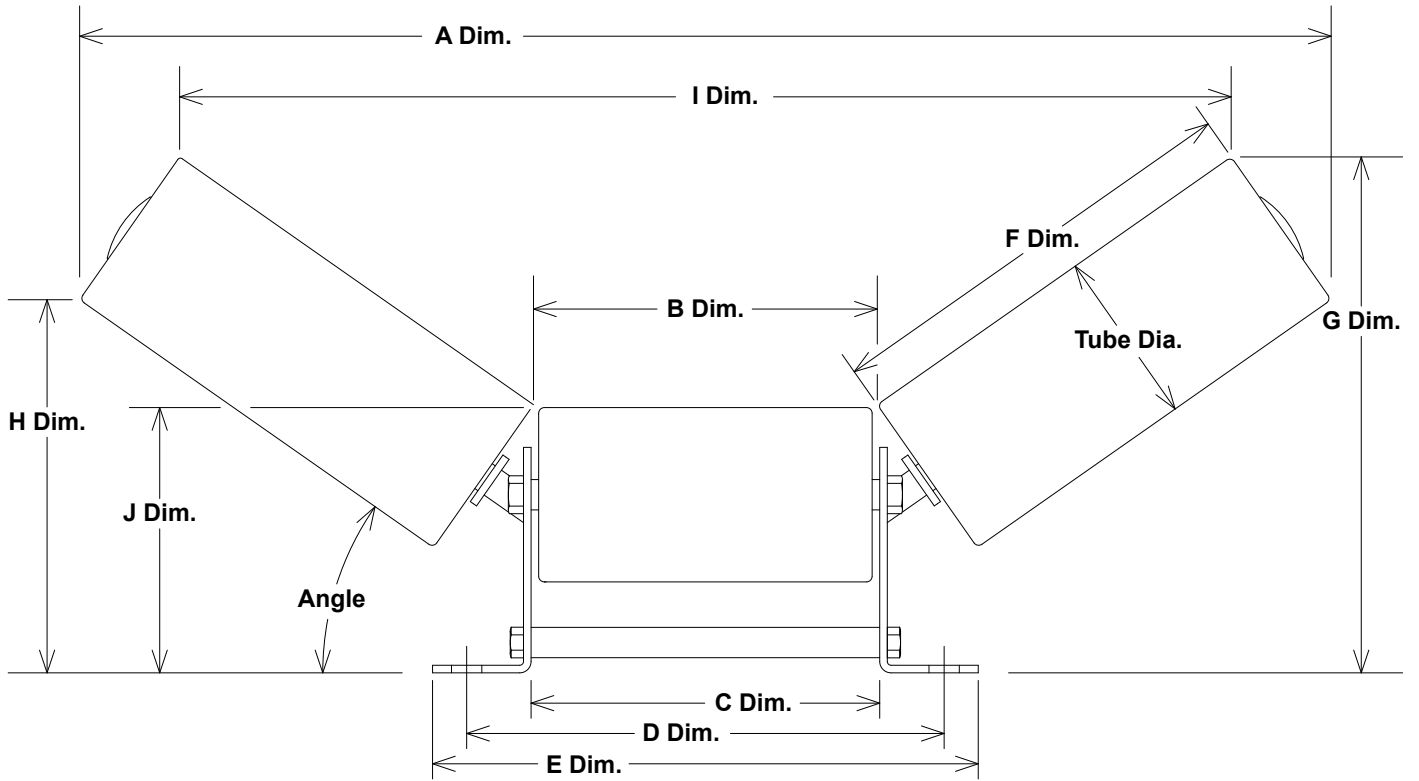
Belt Size	A Dim	B Dim	C Dim	D Dim	E Dim	F Dim	G Dim	H Dim	I Dim	J Dim	Approx Wt Lbs
18	21.27	6.38	6.63	8.75	9.88	7.00	8.38	6.33	18.41	4.19	4.50
20	23.27	8.38	8.63	10.75	11.88	7.00	8.38	6.33	20.41	4.19	4.75
22	25.27	10.38	10.63	12.75	13.88	7.00	8.38	6.33	22.41	4.19	5.25
24	27.27	12.38	12.63	14.75	15.88	7.00	8.38	6.33	24.41	4.19	5.50
26	29.27	14.38	14.63	16.75	17.88	7.00	8.38	6.33	26.41	4.19	6.00
30	33.27	18.38	18.63	20.75	21.88	7.00	8.38	6.33	30.41	4.19	6.50
36	39.27	24.38	24.63	26.75	27.88	7.00	8.38	6.33	36.41	4.19	7.38
42	45.27	30.38	30.63	32.75	33.88	7.00	8.38	6.33	42.41	4.19	8.38
48	51.27	36.38	36.63	38.75	39.88	7.00	8.38	6.33	48.41	4.19	9.38

3 Roll – 35 Degree Roller Angle – Long Wings - 2.875” Diameter Plastic Rollers

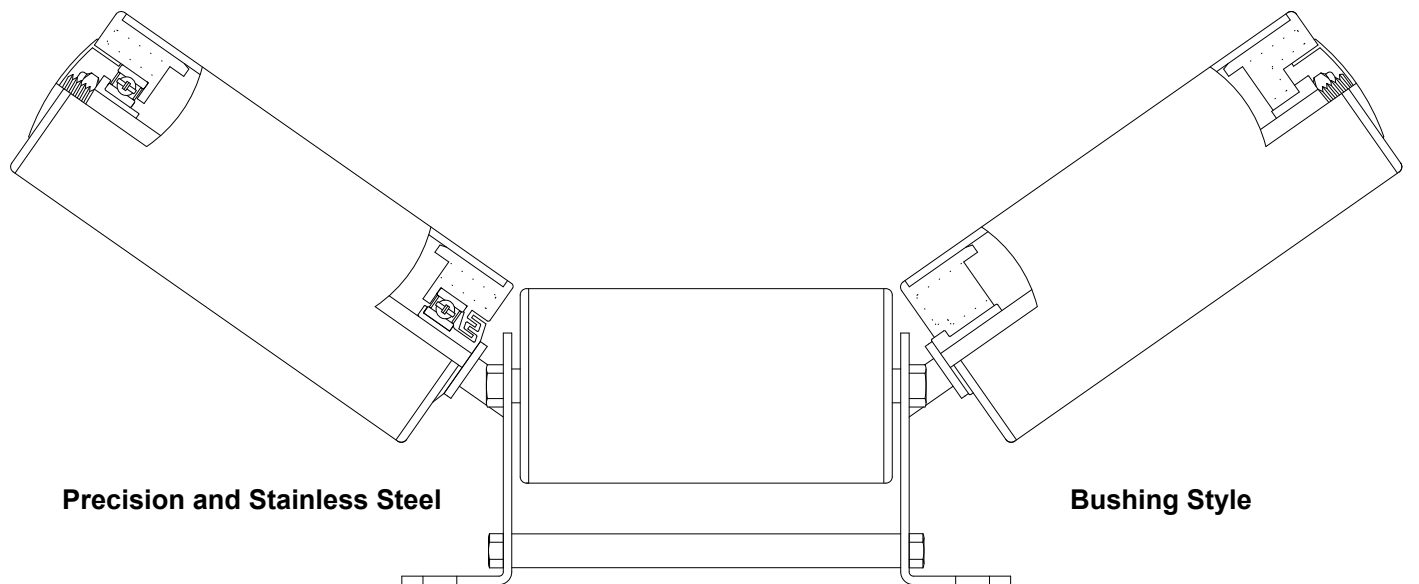
Belt Size	A Dim	B Dim	C Dim	D Dim	E Dim	F Dim	G Dim	H Dim	I Dim	J Dim	Approx Wt Lbs
18	21.50	6.38	6.63	8.75	9.88	7.00	8.53	6.17	18.20	4.38	4.50
20	23.50	8.38	8.63	10.75	11.88	7.00	8.53	6.17	20.20	4.38	4.75
22	25.50	10.38	10.63	12.75	13.88	7.00	8.53	6.17	22.20	4.38	5.25
24	27.50	12.38	12.63	14.75	15.88	7.00	8.53	6.17	24.20	4.38	5.50
26	29.50	14.38	14.63	16.75	17.88	7.00	8.53	6.17	26.20	4.38	6.00
30	33.50	18.38	18.63	20.75	21.88	7.00	8.53	6.17	30.20	4.38	6.50
36	39.50	24.38	24.63	26.75	27.88	7.00	8.53	6.17	36.20	4.38	7.38
42	45.50	30.38	30.63	32.75	33.88	7.00	8.53	6.17	42.20	4.38	8.38
48	51.50	36.38	36.63	38.75	39.88	7.00	8.53	6.17	48.20	4.38	9.38

Troughers - 3 Roll - 35 Degrees - Long Wings

Trougher Dimensions



Trougher Cut Away Bearing Examples



Troughers

Troughers - 3 Roll - 35 Degrees - Short Wings

3 Roll – 35 Degree Roller Angle – Short Wings - 1.90” Diameter Metal and Plastic Rollers

Belt Size	A Dim	B Dim	C Dim	D Dim	E Dim	F Dim	G Dim	H Dim	I Dim	J Dim	Approx Wt Lbs
12	14.47	5.50	5.75	7.88	9.00	3.75	6.17	4.61	12.29	3.89	3.63
14	16.47	7.50	7.75	9.88	11.00	3.75	6.17	4.61	14.29	3.89	4.00
16	18.47	9.50	9.75	11.88	13.00	3.75	6.17	4.61	16.29	3.89	4.25
18	20.47	11.50	11.75	13.88	15.00	3.75	6.17	4.61	18.29	3.89	4.50
20	22.47	13.50	13.75	15.88	17.00	3.75	6.17	4.61	20.29	3.89	4.75
22	24.47	15.50	15.75	17.88	19.00	3.75	6.17	4.61	22.29	3.89	5.25
24	26.47	17.50	17.75	19.88	21.00	3.75	6.17	4.61	24.29	3.89	5.50
26	28.47	19.50	19.75	21.88	23.00	3.75	6.17	4.61	26.29	3.89	6.00
30	32.47	23.50	23.75	25.88	27.00	3.75	6.17	4.61	30.29	3.89	6.50
36	38.47	29.50	29.75	31.88	33.00	3.75	6.17	4.61	36.29	3.89	7.38
42	44.47	35.50	35.75	37.88	39.00	3.75	6.17	4.61	42.29	3.89	8.38
48	50.47	41.50	41.75	43.88	45.00	3.75	6.17	4.61	48.29	3.89	9.38

3 Roll – 35 Degree Roller Angle – Short Wings - 2.38” Diameter Plastic Rollers

Belt Size	A Dim	B Dim	C Dim	D Dim	E Dim	F Dim	G Dim	H Dim	I Dim	J Dim	Approx Wt Lbs
12	14.74	5.50	5.75	7.88	9.00	3.75	6.37	4.42	12.01	4.13	3.63
14	16.74	7.50	7.75	9.88	11.00	3.75	6.37	4.42	14.01	4.13	4.00
16	18.74	9.50	9.75	11.88	13.00	3.75	6.37	4.42	16.01	4.13	4.25
18	20.74	11.50	11.75	13.88	15.00	3.75	6.37	4.42	18.01	4.13	4.50
20	22.74	13.50	13.75	15.88	17.00	3.75	6.37	4.42	20.01	4.13	4.75
22	24.74	15.50	15.75	17.88	19.00	3.75	6.37	4.42	22.01	4.13	5.25
24	26.74	17.50	17.75	19.88	21.00	3.75	6.37	4.42	24.01	4.13	5.50
26	28.74	19.50	19.75	21.88	23.00	3.75	6.37	4.42	26.01	4.13	6.00
30	32.74	23.50	23.75	25.88	27.00	3.75	6.37	4.42	30.01	4.13	6.50
36	38.74	29.50	29.75	31.88	33.00	3.75	6.37	4.42	36.01	4.13	7.38
42	44.74	35.50	35.75	37.88	39.00	3.75	6.37	4.42	42.01	4.13	8.38
48	50.74	41.50	41.75	43.88	45.00	3.75	6.37	4.42	48.01	4.13	9.38

3 Roll – 35 Degree Roller Angle – Short Wings - 2.50” Diameter Metal Rollers

Belt Size	A Dim	B Dim	C Dim	D Dim	E Dim	F Dim	G Dim	H Dim	I Dim	J Dim	Approx Wt Lbs
12	14.81	5.50	5.75	7.88	9.00	3.75	6.42	4.37	11.94	4.19	3.63
14	16.81	7.50	7.75	9.88	11.00	3.75	6.42	4.37	13.94	4.19	4.00
16	18.81	9.50	9.75	11.88	13.00	3.75	6.42	4.37	15.94	4.19	4.25
18	20.81	11.50	11.75	13.88	15.00	3.75	6.42	4.37	17.94	4.19	4.50
20	22.81	13.50	13.75	15.88	17.00	3.75	6.42	4.37	19.94	4.19	4.75
22	24.81	15.50	15.75	17.88	19.00	3.75	6.42	4.37	21.94	4.19	5.25
24	26.81	17.50	17.75	19.88	21.00	3.75	6.42	4.37	23.94	4.19	5.50
26	28.81	19.50	19.75	21.88	23.00	3.75	6.42	4.37	25.94	4.19	6.00
30	32.81	23.50	23.75	25.88	27.00	3.75	6.42	4.37	29.94	4.19	6.50
36	38.81	29.50	29.75	31.88	33.00	3.75	6.42	4.37	35.94	4.19	7.38
42	44.81	35.50	35.75	37.88	39.00	3.75	6.42	4.37	41.94	4.19	8.38
48	50.81	41.50	41.75	43.88	45.00	3.75	6.42	4.37	47.94	4.19	9.38

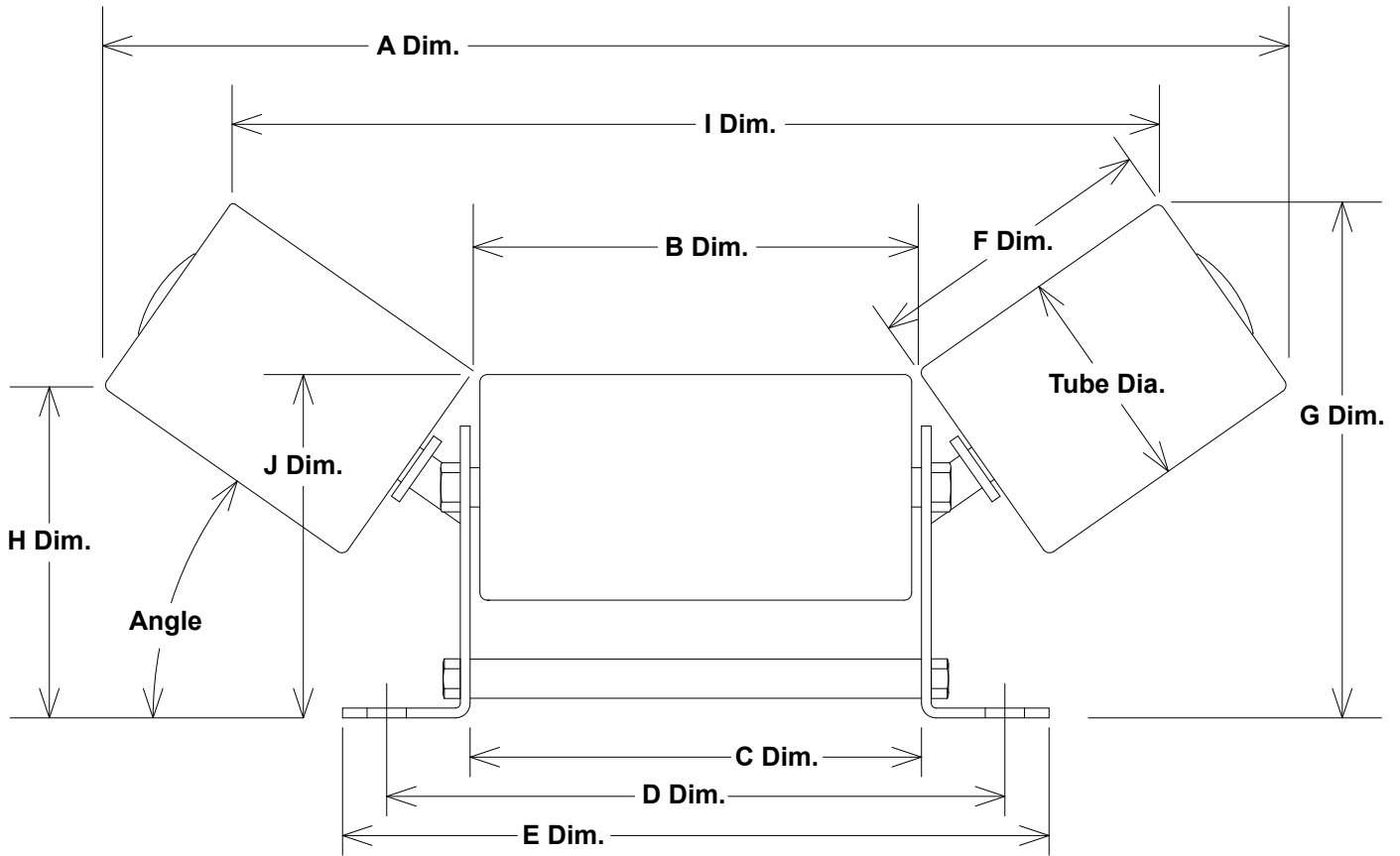
3 Roll – 35 Degree Roller Angle – Short Wings - 2.875” Diameter Plastic Rollers

Belt Size	A Dim	B Dim	C Dim	D Dim	E Dim	F Dim	G Dim	H Dim	I Dim	J Dim	Approx Wt Lbs
12	15.03	5.50	5.75	7.88	9.00	3.75	6.57	4.22	11.73	4.38	3.63
14	17.03	7.50	7.75	9.88	11.00	3.75	6.57	4.22	13.73	4.38	4.00
16	19.03	9.50	9.75	11.88	13.00	3.75	6.57	4.22	15.73	4.38	4.25
18	21.03	11.50	11.75	13.88	15.00	3.75	6.57	4.22	17.73	4.38	4.50
20	23.03	13.50	13.75	15.88	17.00	3.75	6.57	4.22	19.73	4.38	4.75
22	25.03	15.50	15.75	17.88	19.00	3.75	6.57	4.22	21.73	4.38	5.25
24	27.03	17.50	17.75	19.88	21.00	3.75	6.57	4.22	23.73	4.38	5.50
26	29.03	19.50	19.75	21.88	23.00	3.75	6.57	4.22	25.73	4.38	6.00
30	33.03	23.50	23.75	25.88	27.00	3.75	6.57	4.22	29.73	4.38	6.50
36	39.03	29.50	29.75	31.88	33.00	3.75	6.57	4.22	35.73	4.38	7.38
42	45.03	35.50	35.75	37.88	39.00	3.75	6.57	4.22	41.73	4.38	8.38
48	51.03	41.50	41.75	43.88	45.00	3.75	6.57	4.22	47.73	4.38	9.38

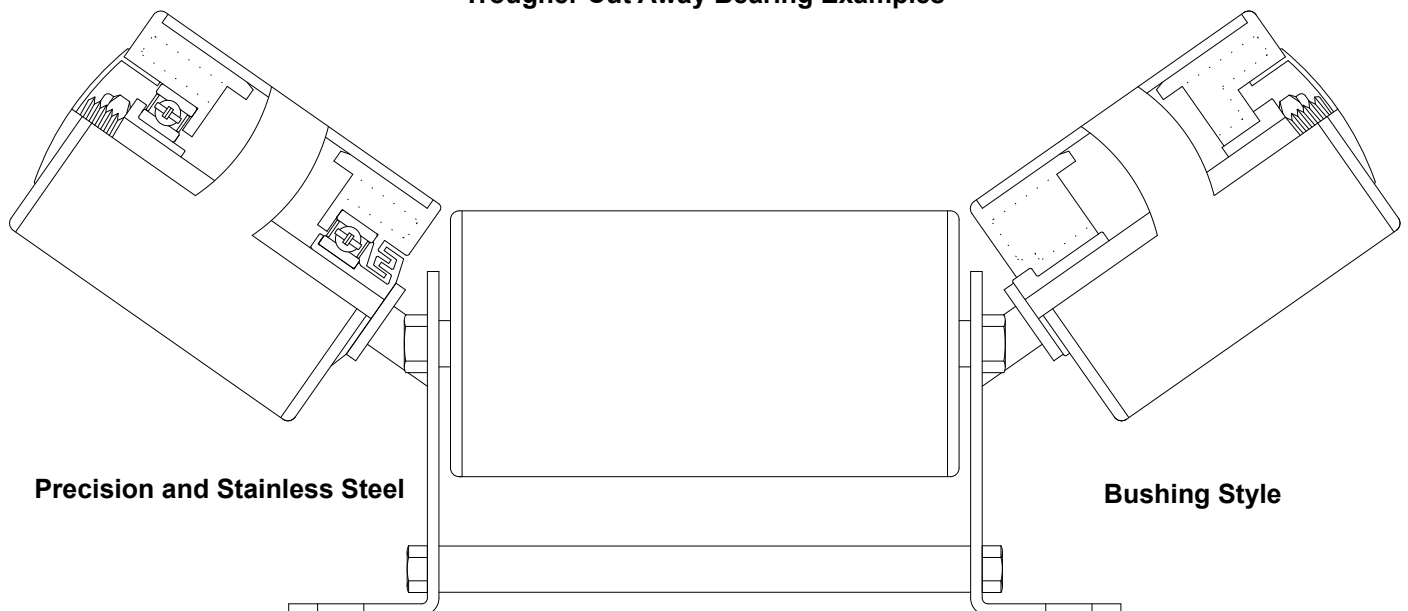
Troughers

Troughers - 3 Roll - 35 Degrees - Short Wings

Trougher Dimensions



Trougher Cut Away Bearing Examples



Ralphs-Pugh V-Trough Units - 2 Roll

General Information on part numbering system:

Example: See following page for details

S2RA-P28S-30-14

Base Material _____

- S - Stainless Steel
- C - Painted Carbon Steel

Number of rolls per unit _____

- 2R - 2 Roll V-Trough unit

Base design _____

- A - Flat base 3 3/8" x 3 3/8" square with 6 holes 1/2" x 3/8" parallel to belt travel
- B - Flat base 2" x 3 1/2" long base; side parallel to belt travel
- C - Flat base 2" x 3 1/2" long base; turned 90 degrees to belt travel
- D - Angle base 1" x 1" x 3 1/2"; ridge parallel to belt travel
- E - Angle base 1" x 1" x 3 1/2"; ridge turned 90 degrees to belt travel
- F - Flat base 2" x 5" with 2 slotted holes 7/16" x 3/4" on 3 1/2" centers
- G - Flat base 2" x 5" with 2 slotted holes 7/16" x 3/4" on 3 1/2" centers turned 90 degrees from belt travel
- * All bases are 0.120" thick (11 gauge)

Roller Tube Material _____

- P - Plastic
- S - Stainless Steel
- G - Galvanized Steel

Roller Tube Diameters _____

- | | |
|---------------------------|---------------|
| 19 - 1.900" | PVC and Steel |
| 23 - 2.375" - (2 3/8") | PVC only |
| 25 - 2.500" - (2 1/2") | Steel only |
| 28 - 2.875" - (2 7/8") | PVC only |
| Other Sizes are Available | |

Bearing Type _____

- P - ABEC-1 Chrome Alloy Precision Ball Bearing in Plastic Housings
- S - Commercial Grade Stainless Steel Ball Bearing in Plastic Housings
- B - Bushing Style Ultra (Acetal plastic with Teflon additives) - PVC Tubes only

Roller Angles _____

- Standards are - 15, 20, 25, and 30 degrees
- Options available – Inquire with Customer Service

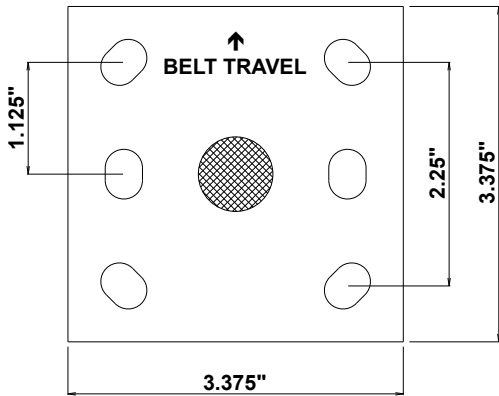
Belt Width _____

- Standards are - 8", 12", 14", 16", 18", 20", 24", 30"
- Options available – Inquire with Customer Service

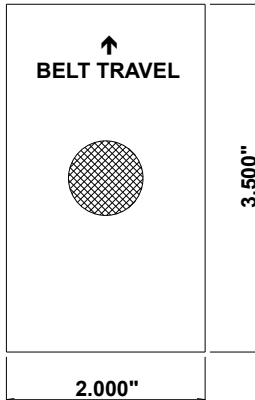
Wing Roller tilt

- Standard - Canted forward 2 degrees to help track belt for single direction conveying

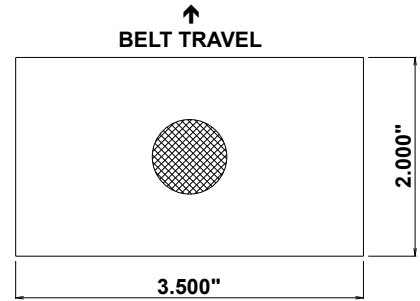
Troughers - 2 Roll Base Designs



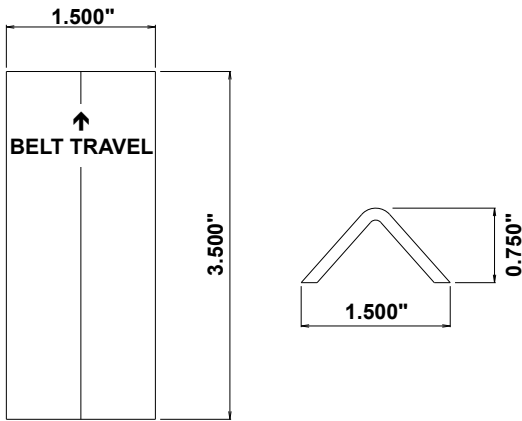
A - Flat Base



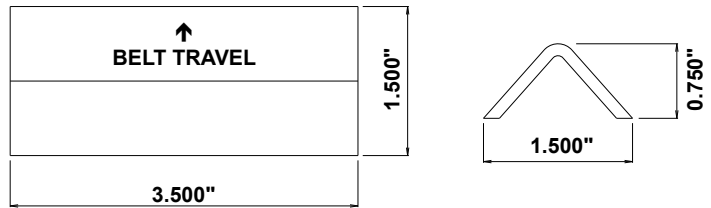
B - Flat Base



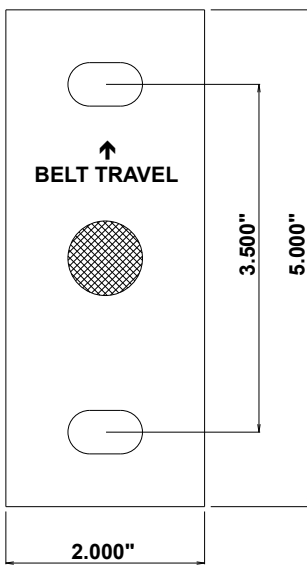
C - Flat Base



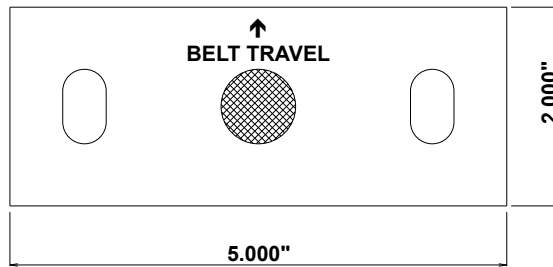
D - Angle Base



E - Angle Base



F - Flat Base



G - Flat Base

Troughers

Troughers - 2 Roll - 15 Degrees

2 Roll – 15 Degree Roller Angle – 1.90” Diameter Metal and Plastic Rollers

Belt Width	A DIM	B DIM	C DIM	D DIM	E DIM	F DIM	G DIM	Approx Wt Lbs
8	10.64	4.81	4.25	2.41	9.55	3.00	0.25	2.25
10	12.82	5.94	4.54	2.70	11.72	3.00	0.25	2.63
12	14.99	7.06	4.83	2.99	13.90	3.00	0.25	3.00
14	16.92	8.06	5.09	3.25	15.83	3.00	0.25	3.38
16	19.09	9.19	5.38	3.54	18.00	3.00	0.25	3.75
18	21.27	10.31	5.67	3.8.3	20.17	3.00	0.25	4.00
20	23.44	11.44	5.96	4.13	22.35	3.00	0.25	4.38
24	27.55	13.56	6.51	4.68	26.45	3.00	0.25	5.00
30	33.70	16.75	7.34	5.50	32.61	3.00	0.25	6.00

2 Roll – 15 Degree Roller Angle – 2.38” Diameter Plastic Rollers

Belt Width	A DIM	B DIM	C DIM	D DIM	E DIM	F DIM	G DIM	Approx Wt Lbs
8	10.78	4.81	4.47	2.18	9.55	3.25	0.25	2.25
10	12.95	5.94	4.77	2.47	11.72	3.25	0.25	2.63
12	15.12	7.06	5.06	2.76	13.90	3.25	0.25	3.00
14	17.05	8.06	5.32	3.02	15.83	3.25	0.25	3.38
16	19.23	9.19	5.61	3.31	18.00	3.25	0.25	3.75
18	21.40	10.31	5.90	3.61	20.17	3.25	0.25	4.00
20	23.57	11.44	6.19	3.90	22.35	3.25	0.25	4.38
24	27.68	13.56	6.74	4.45	26.45	3.25	0.25	5.00
30	33.84	16.75	7.57	5.27	32.61	3.25	0.25	6.00

2 Roll – 15 Degree Roller Angle – 2.50” Diameter Metal Rollers

Belt Width	A DIM	B DIM	C DIM	D DIM	E DIM	F DIM	G DIM	Approx Wt Lbs
8	10.84	4.81	4.54	2.12	9.55	3.29	0.25	2.25
10	13.01	5.94	4.83	2.41	11.72	3.29	0.25	2.63
12	15.19	7.06	5.12	2.70	13.90	3.29	0.25	3.00
14	17.12	8.06	5.38	2.96	15.83	3.29	0.25	3.38
16	19.29	9.19	5.67	3.25	18.00	3.29	0.25	3.75
18	21.47	10.31	5.96	3.54	20.17	3.29	0.25	4.00
20	23.64	11.44	6.25	3.84	22.35	3.29	0.25	4.38
24	27.75	13.56	6.80	4.39	26.45	3.29	0.25	5.00
30	33.90	16.75	7.63	5.21	32.61	3.29	0.25	6.00

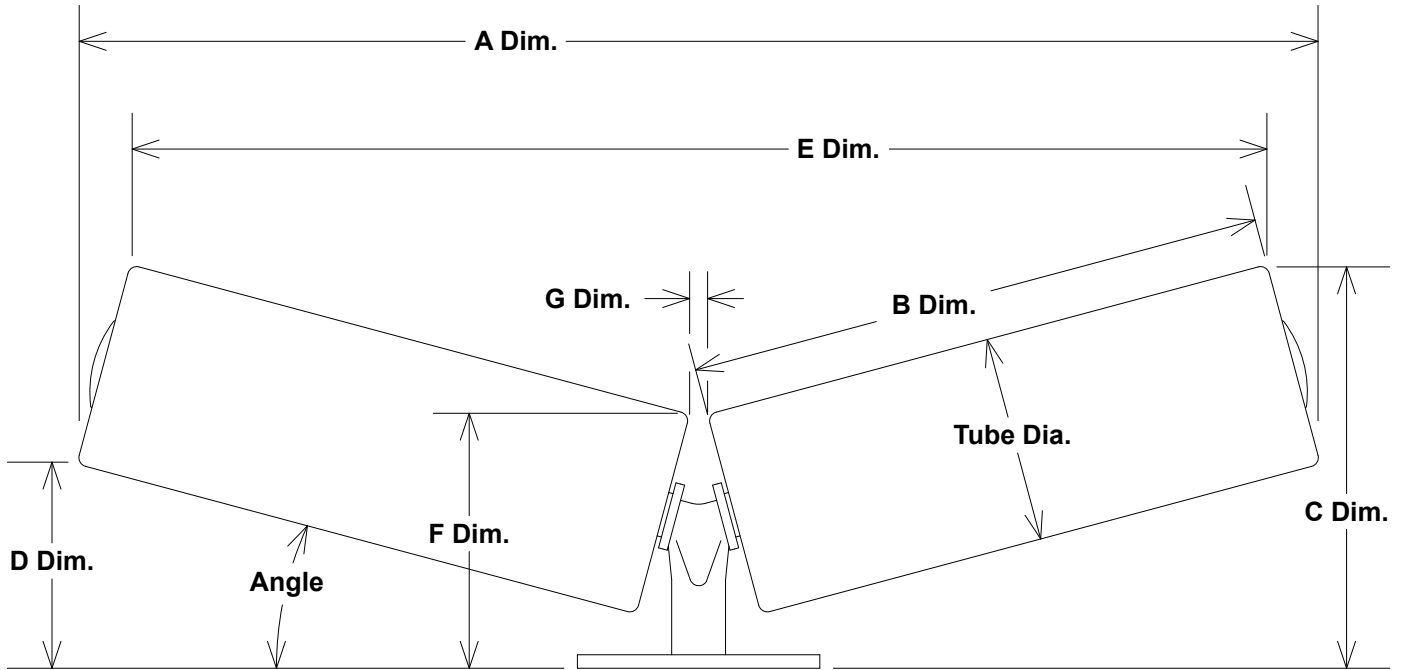
2 Roll – 15 Degree Roller Angle – 2.875” Diameter Plastic Rollers

Belt Width	A DIM	B DIM	C DIM	D DIM	E DIM	F DIM	G DIM	Approx Wt Lbs
8	11.03	4.81	4.74	1.96	9.55	3.49	0.25	2.25
10	13.21	5.94	5.03	2.25	11.72	3.49	0.25	2.63
12	15.38	7.06	5.32	2.54	13.90	3.49	0.25	3.00
14	17.31	8.06	5.58	2.80	15.83	3.49	0.25	3.38
16	19.49	9.19	5.87	3.09	18.00	3.49	0.25	3.75
18	21.65	10.31	6.16	3.38	20.17	3.49	0.25	4.00
20	23.83	11.43	6.45	3.67	22.35	3.49	0.25	4.38
24	27.94	13.56	7.00	4.22	26.45	3.49	0.25	5.00
30	34.10	16.75	7.83	5.05	32.61	3.49	0.25	6.00

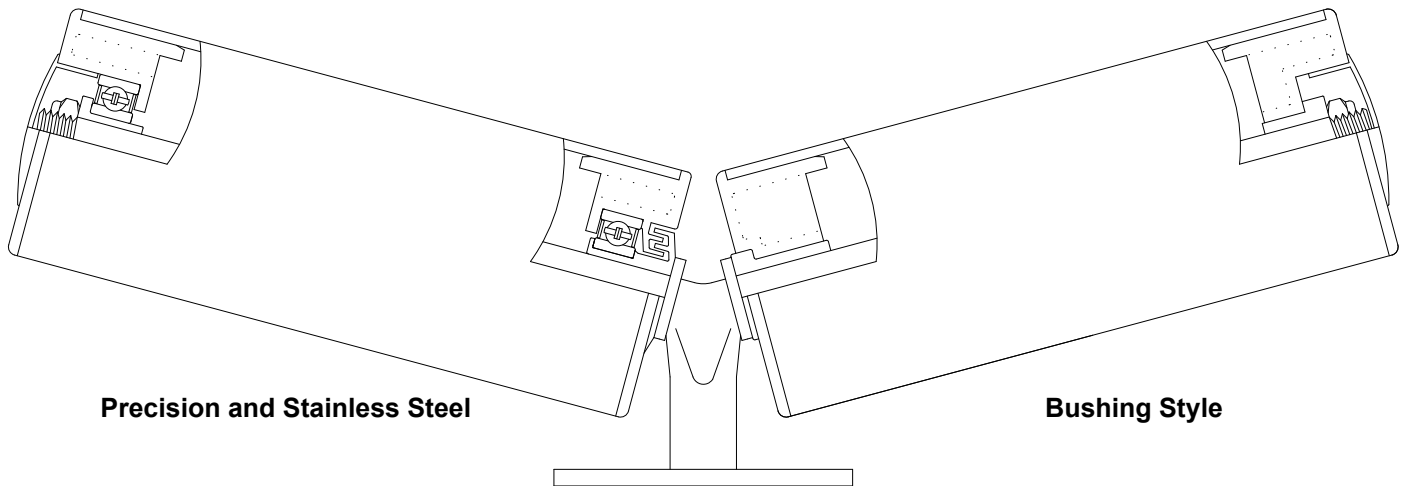
Troughers

Troughers - 2 Roll - 15 Degrees

Trougher Dimensions



Trougher Cut Away Bearing Examples



Troughers

Troughers - 2 Roll - 20 Degrees

2 Roll – 20 Degree Roller Angle – 1.90” Diameter Metal and Plastic Rollers

Belt Width	A DIM	B DIM	C DIM	D DIM	E DIM	F DIM	G DIM	Approx Wt Lbs
8	10.59	4.81	4.65	2.87	9.29	3.01	0.25	2.25
10	12.71	5.94	5.04	3.25	11.41	3.01	0.25	2.63
12	14.82	7.06	5.42	3.64	13.52	3.01	0.25	3.00
14	16.70	8.06	5.76	3.98	15.40	3.01	0.25	3.38
16	18.82	9.19	6.15	4.36	17.52	3.01	0.25	3.75
18	20.93	10.31	6.53	4.75	19.63	3.01	0.25	4.00
20	23.04	11.44	6.92	5.13	21.75	3.01	0.25	4.38
24	27.04	13.56	7.65	5.86	25.74	3.01	0.25	5.00
30	33.03	16.75	8.74	6.95	31.73	3.01	0.25	6.00

2 Roll – 20 Degree Roller Angle – 2.38” Diameter Plastic Rollers

Belt Width	A DIM	B DIM	C DIM	D DIM	E DIM	F DIM	G DIM	Approx Wt Lbs
8	10.92	4.81	4.91	2.67	9.29	3.26	0.25	2.25
10	13.03	5.94	5.29	3.06	11.41	3.26	0.25	2.63
12	15.15	7.06	5.68	3.44	13.52	3.26	0.25	3.00
14	17.03	8.06	6.02	3.79	15.40	3.26	0.25	3.38
16	19.14	9.19	6.40	4.17	17.52	3.26	0.25	3.75
18	21.56	10.31	6.79	4.55	19.63	3.26	0.25	4.00
20	23.37	11.44	7.17	4.93	21.75	3.26	0.25	4.38
24	27.37	13.56	7.90	5.67	25.74	3.26	0.25	5.00
30	33.35	16.75	8.99	6.76	31.73	3.26	0.25	6.00

2 Roll – 20 Degree Roller Angle – 2.50” Diameter Metal Rollers

Belt Width	A DIM	B DIM	C DIM	D DIM	E DIM	F DIM	G DIM	Approx Wt Lbs
8	11.00	4.81	4.97	2.62	9.29	3.33	0.25	2.25
10	13.12	5.94	5.36	3.01	11.41	3.33	0.25	2.63
12	15.23	7.06	5.74	3.39	13.52	3.33	0.25	3.00
14	17.11	8.06	6.08	3.73	15.40	3.33	0.25	3.38
16	19.23	9.19	6.47	4.12	17.52	3.33	0.25	3.75
18	21.34	10.31	6.85	4.50	19.63	3.33	0.25	4.00
20	23.46	11.44	7.24	4.89	21.75	3.33	0.25	4.38
24	27.45	13.56	7.96	5.62	25.74	3.33	0.25	5.00
30	33.44	16.75	9.05	6.70	31.73	3.33	0.25	6.00

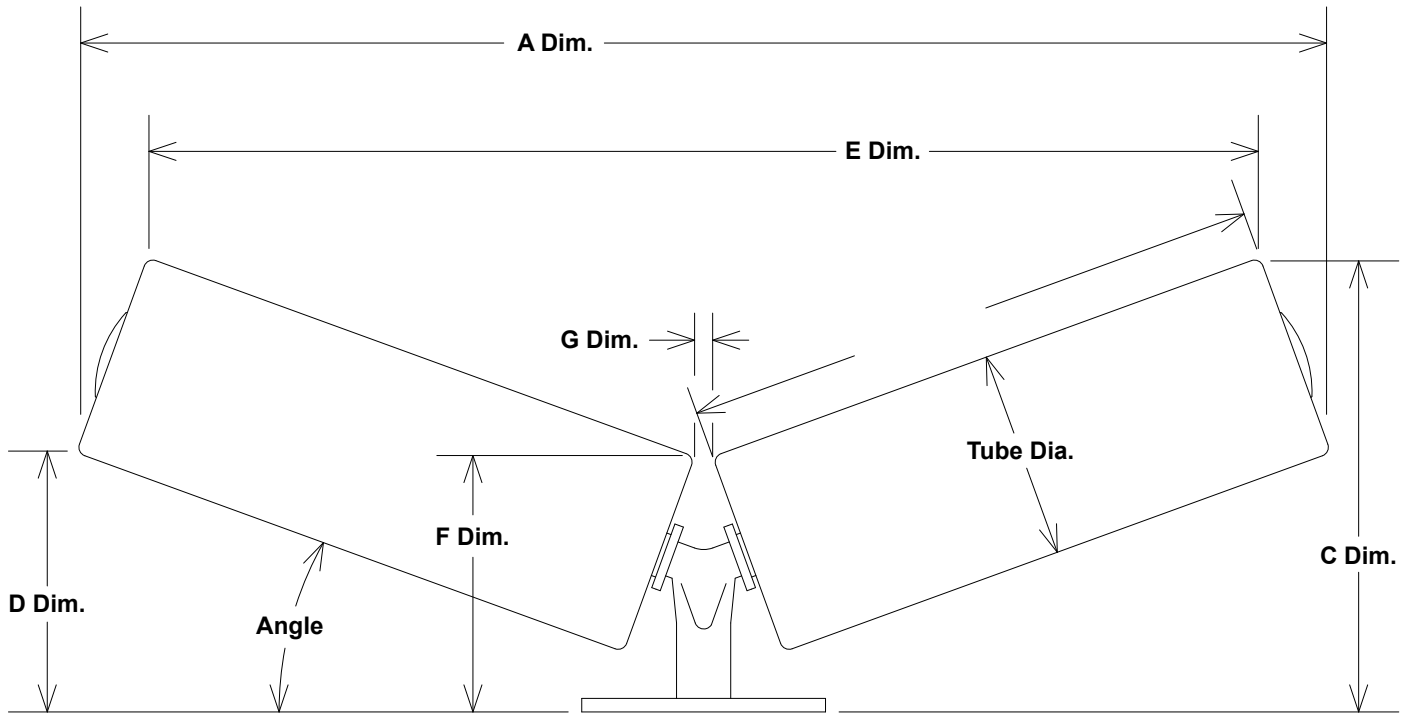
2 Roll – 20 Degree Roller Angle – 2.875” Diameter Plastic Rollers

Belt Width	A DIM	B DIM	C DIM	D DIM	E DIM	F DIM	G DIM	Approx Wt Lbs
8	11.26	4.81	5.17	2.47	9.29	3.53	0.25	2.25
10	13.37	5.94	5.56	2.85	11.41	3.53	0.25	2.63
12	15.49	7.06	5.94	3.24	13.52	3.53	0.25	3.00
14	17.37	8.06	6.29	3.58	15.40	3.53	0.25	3.38
16	19.48	9.19	6.67	3.97	17.52	3.53	0.25	3.75
18	21.60	10.31	7.05	4.35	19.63	3.53	0.25	4.00
20	23.71	11.43	7.43	4.74	21.75	3.53	0.25	4.38
24	27.08	13.56	8.16	5.46	25.74	3.53	0.25	5.00
30	33.70	16.75	9.25	6.55	31.73	3.53	0.25	6.00

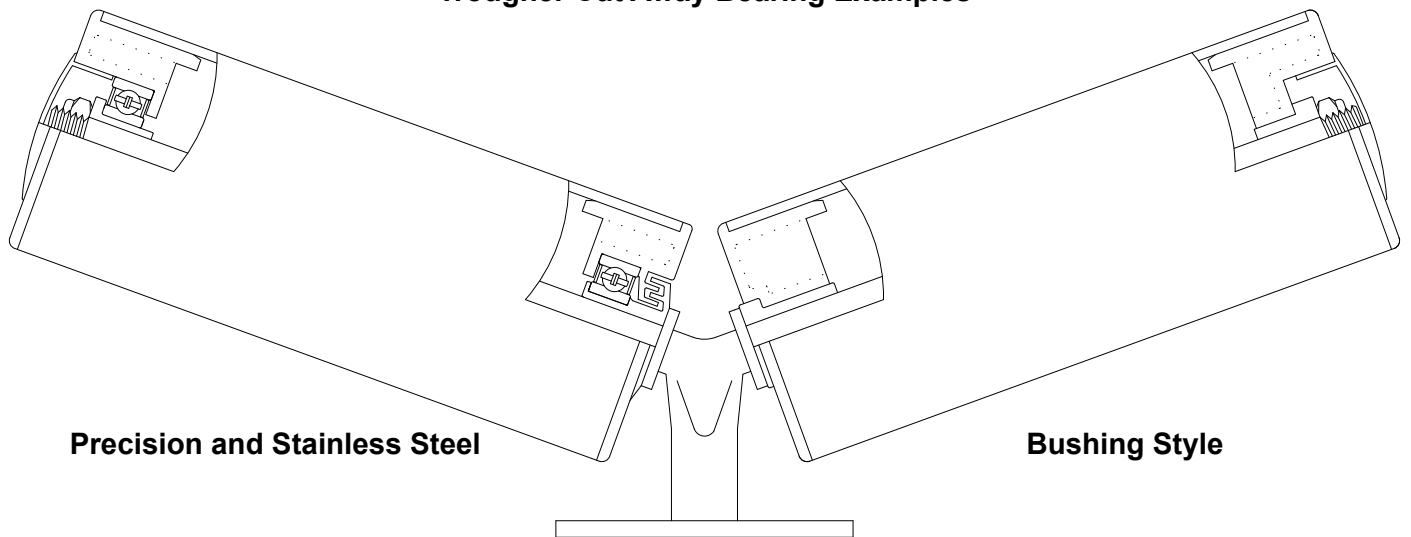
Troughers

Troughers - 2 Roll - 20 Degrees

Trougher Dimensions



Trougher Cut Away Bearing Examples



Troughers

Troughers - 2 Roll - 25 Degrees

2 Roll – 25 Degree Roller Angle – 1.90” Diameter Metal and Plastic Rollers

Belt Width	A DIM	B DIM	C DIM	D DIM	E DIM	F DIM	G DIM	Approx Wt Lbs
8	10.58	4.81	5.07	3.34	8.97	3.03	0.25	2.25
10	12.62	5.94	5.54	3.82	11.01	3.03	0.25	2.63
12	14.66	7.06	6.01	4.30	13.05	3.03	0.25	3.00
14	16.47	8.06	6.44	4.72	14.86	3.03	0.25	3.38
16	18.51	9.19	6.92	5.19	16.90	3.03	0.25	3.75
18	20.55	10.31	7.39	5.67	18.94	3.03	0.25	4.00
20	22.59	11.44	7.87	6.14	20.98	3.03	0.25	4.38
24	26.44	13.56	8.76	7.04	24.84	3.03	0.25	5.00
30	32.22	16.75	10.11	8.39	30.61	3.03	0.25	6.00

2 Roll – 25 Degree Roller Angle – 2.38” Diameter Plastic Rollers

Belt Width	A DIM	B DIM	C DIM	D DIM	E DIM	F DIM	G DIM	Approx Wt Lbs
8	10.98	4.81	5.32	3.18	8.97	3.29	0.25	2.25
10	13.02	5.94	5.80	3.65	11.01	3.29	0.25	2.63
12	15.06	7.06	6.28	4.13	13.05	3.29	0.25	3.00
14	16.87	8.06	6.70	4.55	14.86	3.29	0.25	3.38
16	18.91	9.19	7.18	5.02	16.90	3.29	0.25	3.75
18	20.95	10.31	7.65	5.50	18.94	3.29	0.25	4.00
20	22.99	11.44	8.13	5.98	20.98	3.29	0.25	4.38
24	26.84	13.56	9.03	6.87	24.84	3.29	0.25	5.00
30	32.62	16.75	10.37	8.22	30.61	3.29	0.25	6.00

2 Roll – 25 Degree Roller Angle – 2.50” Diameter Metal Rollers

Belt Width	A DIM	B DIM	C DIM	D DIM	E DIM	F DIM	G DIM	Approx Wt Lbs
8	11.09	4.81	5.40	3.13	8.97	3.36	0.25	2.25
10	13.13	5.94	5.87	3.61	11.01	3.36	0.25	2.63
12	15.17	7.06	6.35	4.08	13.05	3.36	0.25	3.00
14	16.98	8.06	6.77	4.50	14.86	3.36	0.25	3.38
16	19.02	9.19	7.25	4.98	16.90	3.36	0.25	3.75
18	21.06	10.31	7.72	5.46	18.94	3.36	0.25	4.00
20	23.09	11.44	8.20	5.93	20.98	3.36	0.25	4.38
24	26.95	13.56	9.10	6.83	24.84	3.36	0.25	5.00
30	32.72	16.75	10.44	8.18	30.61	3.36	0.25	6.00

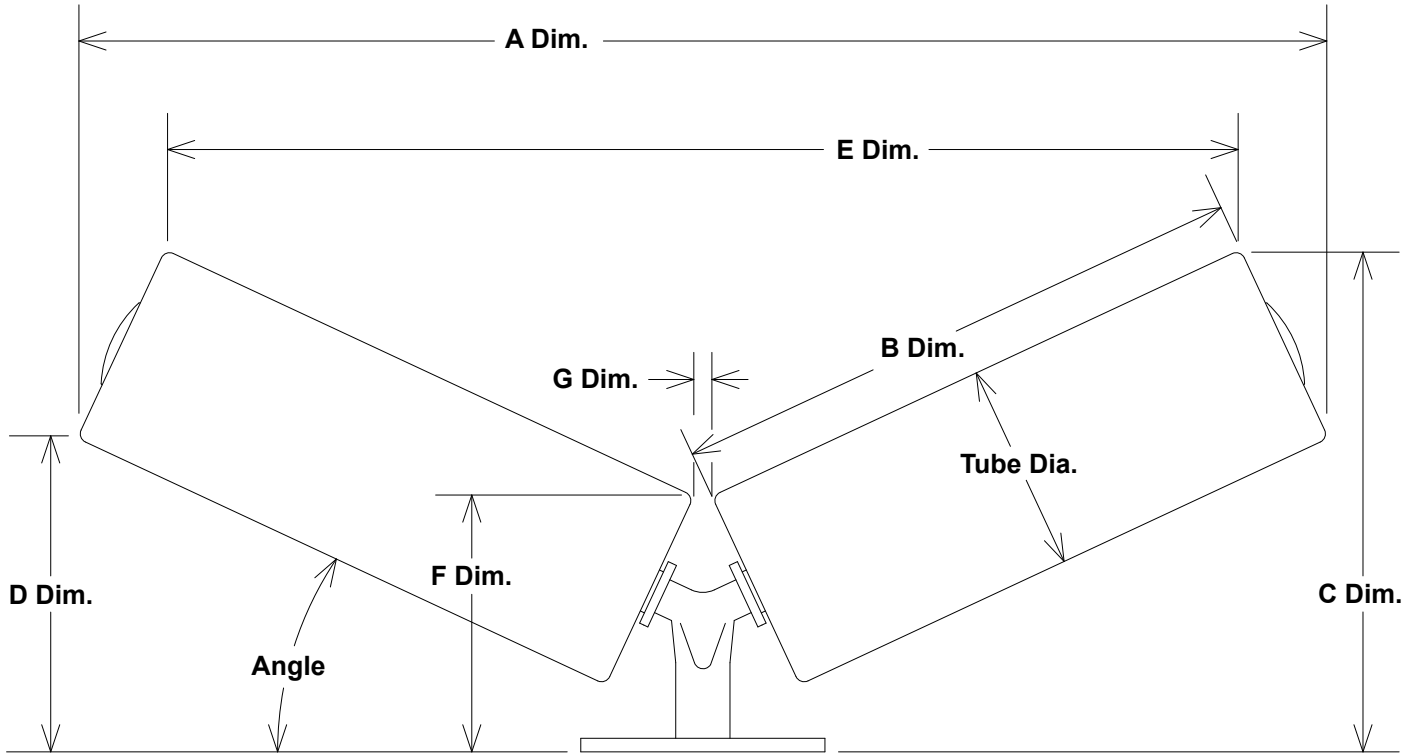
2 Roll – 25 Degree Roller Angle – 2.875” Diameter Plastic Rollers

Belt Width	A DIM	B DIM	C DIM	D DIM	E DIM	F DIM	G DIM	Approx Wt Lbs
8	11.04	4.81	5.60	3.00	8.97	3.57	0.25	2.25
10	13.44	5.94	6.08	3.47	11.01	3.57	0.25	2.63
12	15.48	7.06	6.55	3.95	13.05	3.57	0.25	3.00
14	17.29	8.06	6.98	4.37	14.86	3.57	0.25	3.38
16	19.33	9.19	7.45	4.85	16.90	3.57	0.25	3.75
18	21.37	10.31	7.93	5.32	18.94	3.57	0.25	4.00
20	23.41	11.43	8.40	5.79	20.98	3.57	0.25	4.38
24	27.27	13.56	9.30	6.70	24.84	3.57	0.25	5.00
30	33.04	16.75	10.65	8.04	30.61	3.57	0.25	6.00

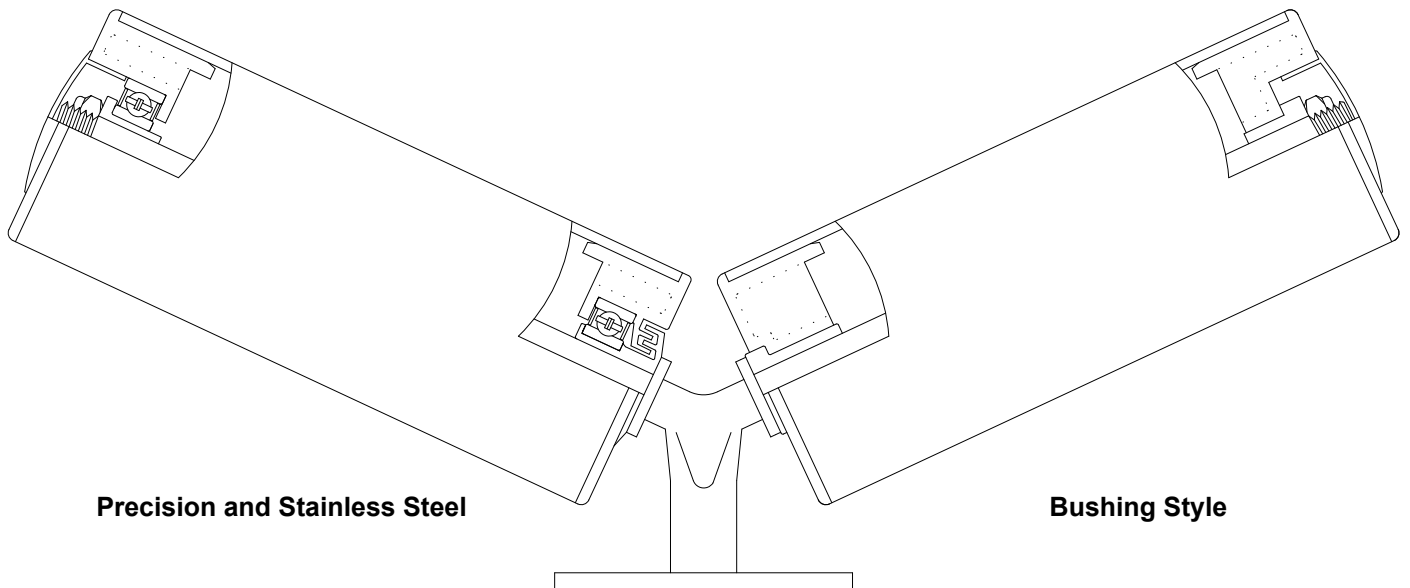
Troughers

Troughers - 2 Roll - 25 Degrees

Trougher Dimensions



Trougher Cut Away Bearing Examples



Troughers

Troughers - 2 Roll - 30 Degrees

2 Roll – 30 Degree Roller Angle – 1.90” Diameter Metal and Plastic Rollers

Belt Width	A DIM	B DIM	C DIM	D DIM	E DIM	F DIM	G DIM	Approx Wt Lbs
8	10.48	4.81	5.46	3.82	8.59	3.06	0.25	2.25
10	12.44	5.94	6.02	4.38	10.54	3.06	0.25	2.63
12	14.38	7.06	6.59	4.95	12.48	3.06	0.25	3.00
14	16.11	8.06	7.09	5.45	14.21	3.06	0.25	3.38
16	18.06	9.19	7.65	6.01	16.16	3.06	0.25	3.75
18	20.01	10.31	8.22	6.57	18.11	3.06	0.25	4.00
20	21.95	11.44	8.78	7.13	20.06	3.06	0.25	4.38
24	25.64	13.56	9.84	8.20	23.74	3.06	0.25	5.00
30	31.16	16.75	11.44	9.79	29.26	3.06	0.25	6.00

2 Roll – 30 Degree Roller Angle – 2.38” Diameter Plastic Rollers

Belt Width	A DIM	B DIM	C DIM	D DIM	E DIM	F DIM	G DIM	Approx Wt Lbs
8	10.96	4.81	5.74	3.69	8.59	3.34	0.25	2.25
10	12.91	5.94	6.31	4.25	10.54	3.34	0.25	2.63
12	14.86	7.06	6.89	4.81	12.48	3.34	0.25	3.00
14	16.59	8.06	7.37	5.31	14.21	3.34	0.25	3.38
16	18.54	9.19	7.93	5.87	16.16	3.34	0.25	3.75
18	20.49	10.31	8.49	6.44	18.11	3.34	0.25	4.00
20	22.43	11.44	9.06	7.00	20.06	3.34	0.25	4.38
24	26.12	13.56	10.12	8.06	23.74	3.34	0.25	5.00
30	31.64	16.75	11.71	9.65	29.26	3.34	0.25	6.00

2 Roll – 30 Degree Roller Angle – 2.50” Diameter Metal Rollers

Belt Width	A DIM	B DIM	C DIM	D DIM	E DIM	F DIM	G DIM	Approx Wt Lbs
8	11.08	4.81	5.81	3.65	8.59	3.41	0.25	2.25
10	13.04	5.94	6.38	4.21	10.54	3.41	0.25	2.63
12	14.98	7.06	6.94	4.77	12.48	3.41	0.25	3.00
14	16.71	8.06	7.44	5.27	14.21	3.41	0.25	3.38
16	18.66	9.19	8.00	5.84	16.16	3.41	0.25	3.75
18	20.61	10.31	8.56	6.40	18.11	3.41	0.25	4.00
20	22.56	11.44	9.13	6.96	20.06	3.41	0.25	4.38
24	26.24	13.56	10.19	8.02	23.74	3.41	0.25	5.00
30	31.76	16.75	11.78	9.62	29.26	3.41	0.25	6.00

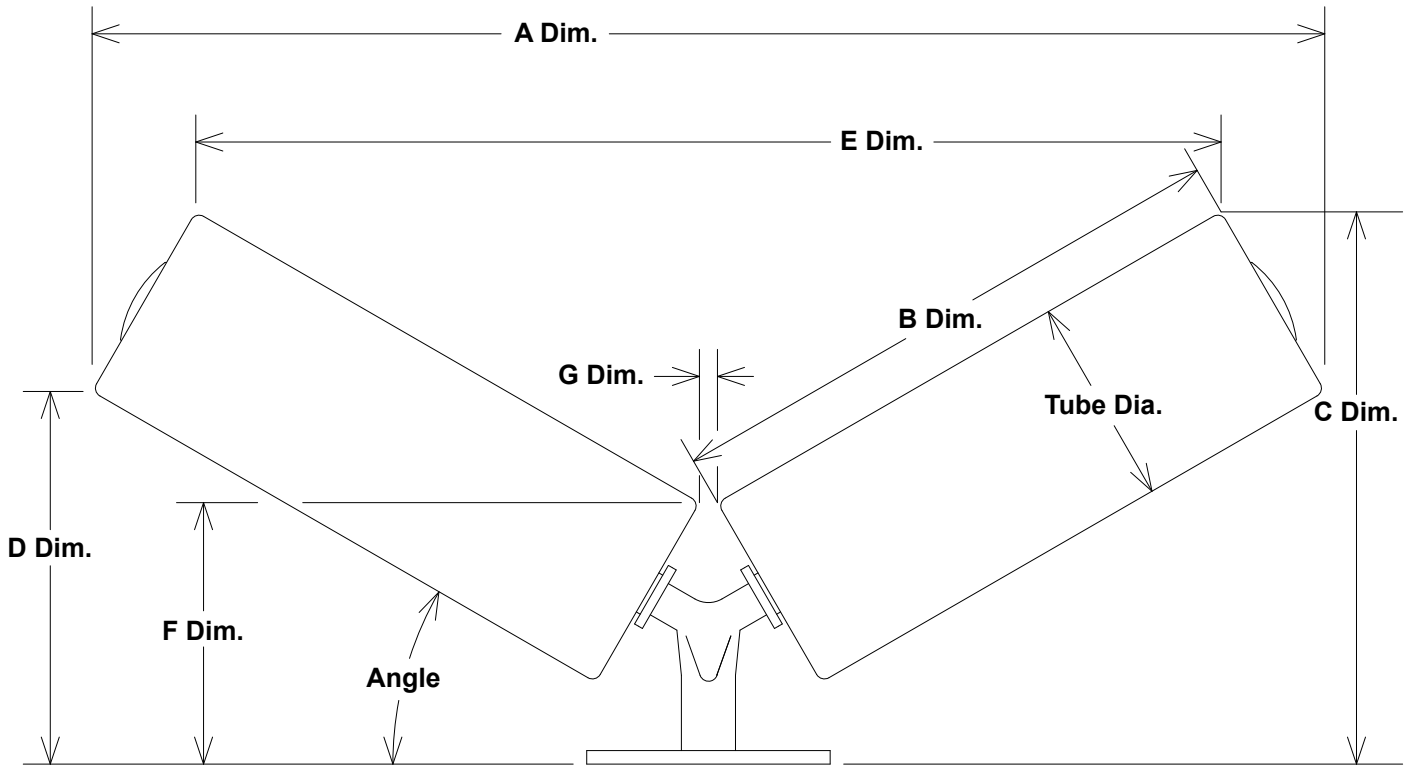
2 Roll – 30 Degree Roller Angle – 2.875” Diameter Plastic Rollers

Belt Width	A DIM	B DIM	C DIM	D DIM	E DIM	F DIM	G DIM	Approx Wt Lbs
8	11.46	4.81	6.03	3.54	8.59	3.63	0.25	2.25
10	13.41	5.94	6.59	4.10	10.54	3.63	0.25	2.63
12	15.36	7.06	7.16	4.67	12.48	3.63	0.25	3.00
14	17.09	8.06	7.66	5.17	14.21	3.63	0.25	3.38
16	19.04	9.19	8.22	5.73	16.16	3.63	0.25	3.75
18	20.99	10.31	8.78	6.29	18.11	3.63	0.25	4.00
20	22.93	11.43	9.34	6.85	20.06	3.63	0.25	4.38
24	26.62	13.56	10.41	7.92	23.74	3.63	0.25	5.00
30	32.14	16.75	12.00	9.51	29.26	3.63	0.25	6.00

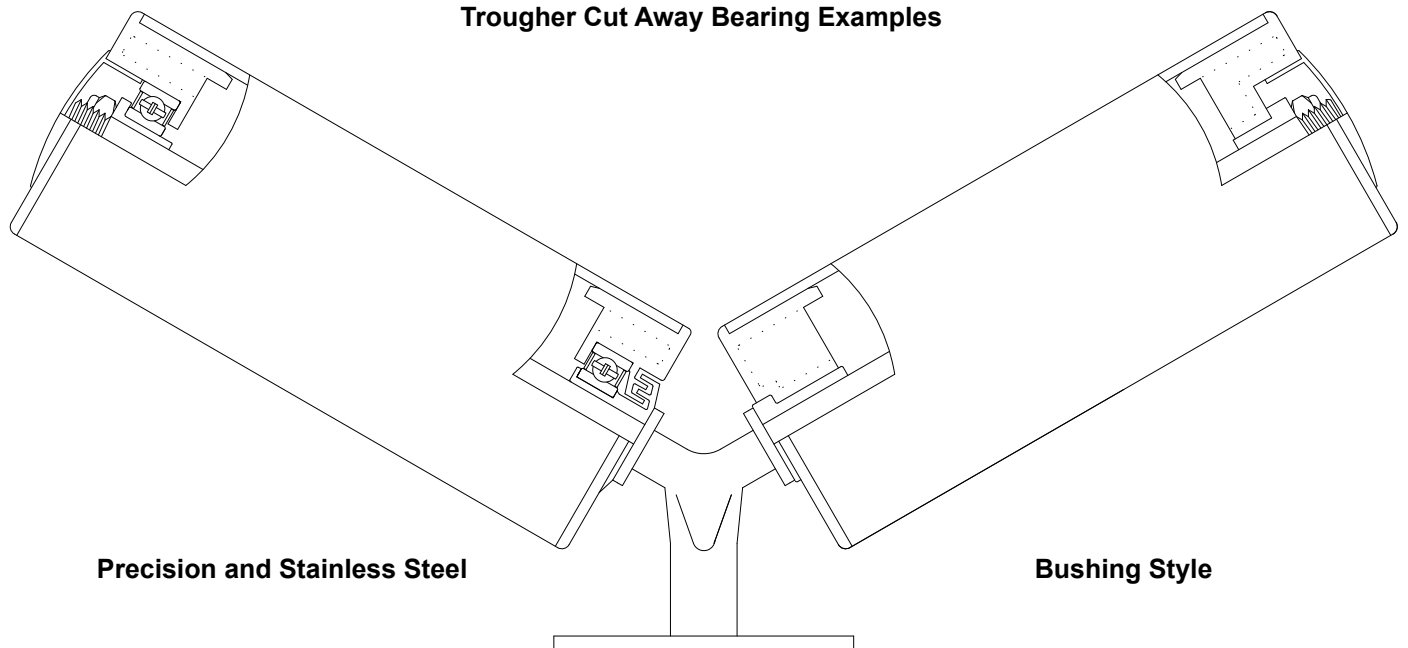
Troughers

Troughers - 2 Roll - 30 Degrees

Trougher Dimensions



Trougher Cut Away Bearing Examples



Ralps-Pugh Troughing Units - 1 Roll

General Information on part numbering system:

Example:

S1RL-P28S-18

Frame Material _____

S - Stainless Steel

C - Painted Carbon Steel

Number of rolls per unit _____

1R - 1 Roll Belt Return Carrier Unit

Base design _____

Use "S" or "L" for 3 roll units

S - Short wings on 3 roll troughing units

L - Long wings on 3 roll troughing units

Match to Base Design for 2 Roll units

A - Flat base 3 3/8" x 3 3/8" square with 6 holes 1/2" x 3/8" parallel to belt travel

B - Flat base 2" x 3 1/2" long base; side parallel to belt travel

C - Flat base 2" x 3 1/2" long base; turned 90 degrees to belt travel

D - Angle base 1" x 1" x 3 1/2"; ridge parallel to belt travel

E - Angle base 1" x 1" x 3 1/2"; ridge turned 90 degrees to belt travel

F - Flat base 2" x 5" with 2 slotted holes 7/16" x 3/4" on 3 1/2" centers

G - Flat base 2" x 5" with 2 slotted holes 7/16" x 3/4" on 3 1/2" centers turned 90 degrees from belt travel

* All bases are 0.120" thick (11 gauge)

Roller Tube Material _____

P - Plastic

S - Stainless Steel

G - Galvanized Steel

Roller Tube Diameters – Standard _____

19 - 1.900" PVC and Steel

23 - 2.375" - (2 3/8") PVC only

25 - 2.500" - (2 1/2") Steel only

28 - 2.875" - (2 7/8") PVC only

Other Sizes are Available

Bearing Type _____

P - ABEC-1 Chrome Alloy Precision Ball Bearing in Plastic Housings

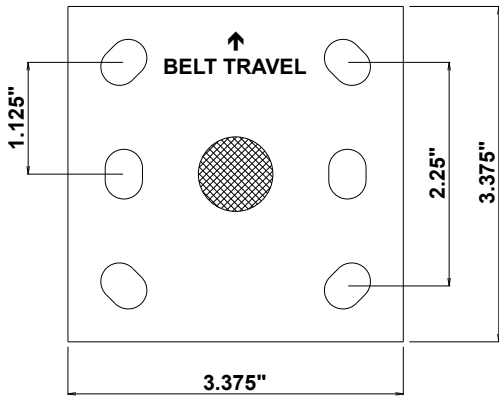
S - Commercial Grade Stainless Steel Ball Bearing in Plastic Housings

B - Bushing Style (Acetal plastic with Teflon additives) - PVC Tubes only

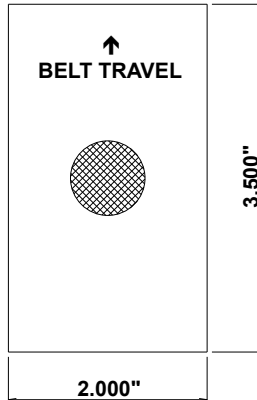
Belt Width _____

8" – 48"

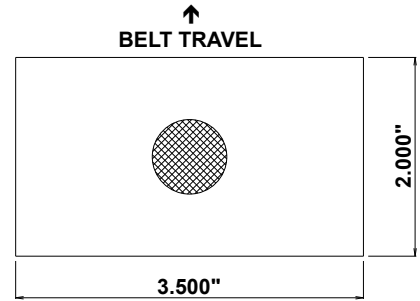
Troughers - Return Carrier - 1 Roll Base Designs



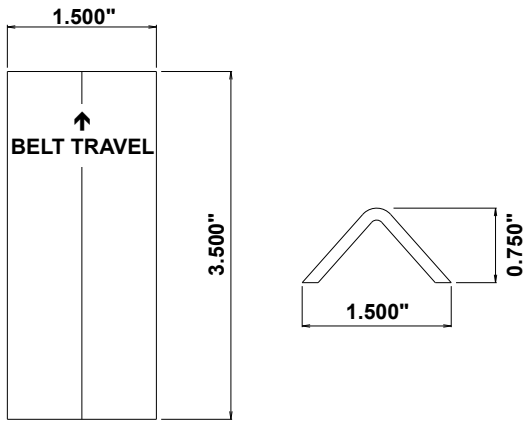
A - Flat Base



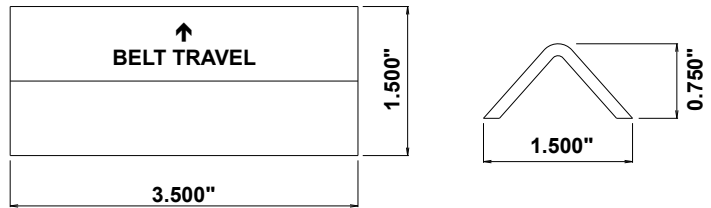
B - Flat Base



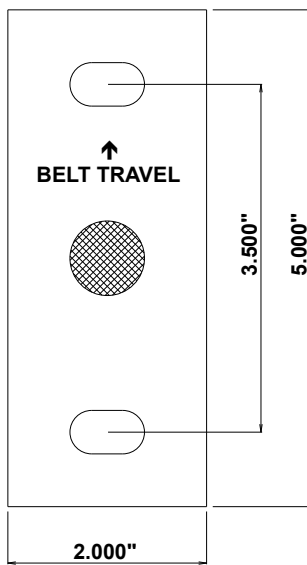
C - Flat Base



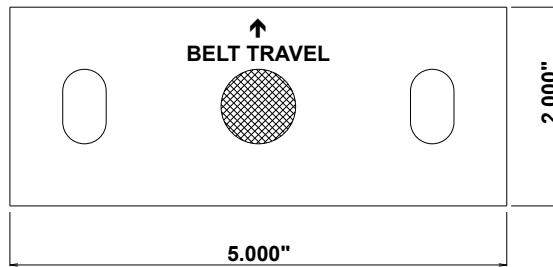
D - Angle Base



E - Angle Base



F - Flat Base



G - Flat Base

Troughers

Troughers - Return Carrier - 1 Roll

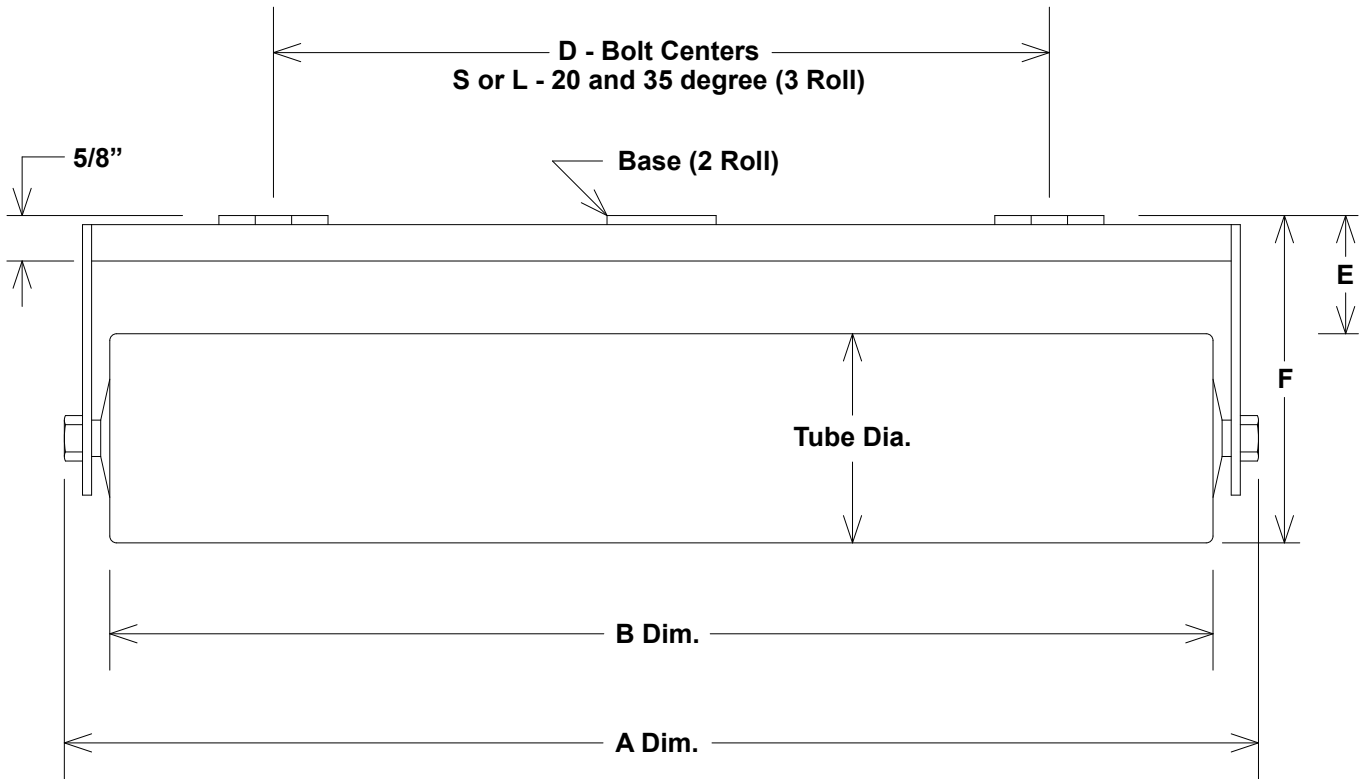
Belt Width	A	B	D – 20 Degree 3R		D – 35 Degree 3R		Weight of 1 Roll Unit for	
			S	L	S	L	3 Roll Return	2 Roll Return
12	14.13	13.06	7.88	--	7.88	--	3.25	3.75
14	16.13	15.06	9.88	--	9.88	--	3.63	4.13
16	18.13	17.06	11.88	--	11.88	--	3.88	4.50
18	20.13	19.06	13.88	8.75	13.88	8.75	4.25	5.00
20	22.13	21.06	15.88	10.75	15.88	10.75	4.50	5.25
22	24.13	23.06	17.88	12.75	17.88	12.75	5.00	5.75
24	26.13	25.06	19.88	14.75	19.88	14.75	5.13	6.00
26	28.13	27.06	21.88	16.75	21.88	16.75	5.62	6.50
30	32.13	31.06	25.88	20.75	25.88	20.75	6.13	7.25
36	38.13	37.06	31.88	26.75	31.88	26.75	7.00	--
42	44.13	43.06	37.88	32.75	37.88	32.75	8.00	--
48	50.13	49.06	43.88	38.75	43.88	38.75	9.00	--

Tube Diameter	2.87" (28)	2.50" (25)	2.25" (23)	1.90 (19)
E Dim	1.50	1.69	1.81	1.99
F Dim	4.38	4.19	4.06	3.89

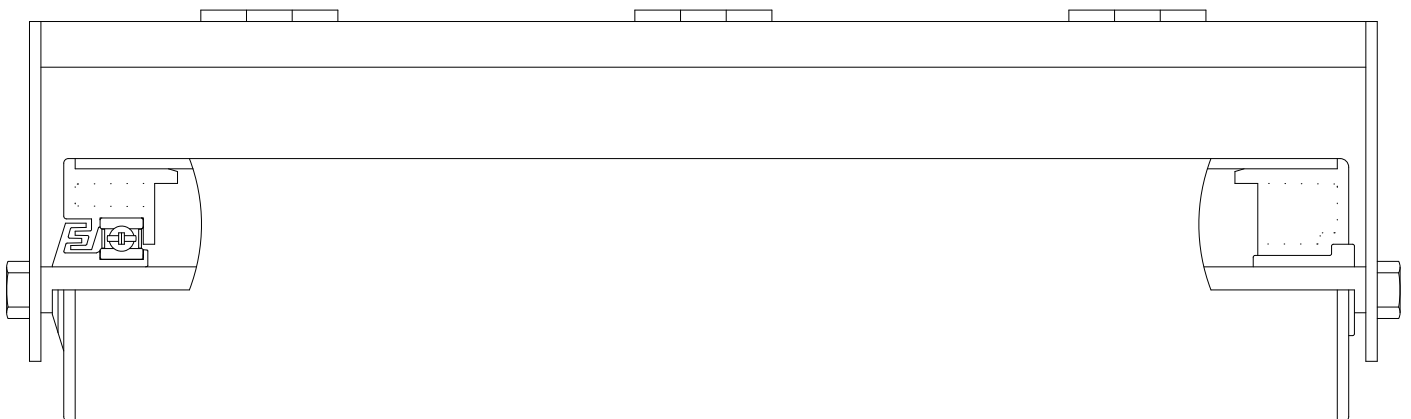


Troughers - Return Carrier - 1 Roll

Return Carrier Dimensions



Return Carrier Cut Away Bearing Examples



Precision and Stainless Steel

Bushing Style

Trougher Engineering Guidelines

Many variables affect actual conveyor delivery - your application will require specific engineering that Ralphs-Pugh does not provide. The following information is for comparative purposes only and is only provided for 50 pounds per cubic foot material density. Find the cross sectional area (Sq. Ft.) for 0 and 10 degree surcharge of various standard Troughers on charts on left. See the theoretical conveyor delivery (Tons per hour) and frame spacing (Max. center distance inches) on charts on right for various cross sectional areas (sq. ft.) and Belt speeds (FPM) at 50 pounds per cubic foot density. See illustration and examples below to better understand the data provided.

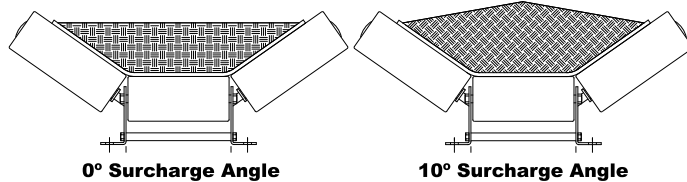
Belt Size	Cross Section Area (sq. ft.)			
	2R-15		*2R*-20	
	0 Sur	10 Sur	0 Sur	10 Sur
8	0.021	0.036	0.027	0.042
10	0.035	0.059	0.045	0.069
12	0.053	0.088	0.068	0.103
14	0.073	0.124	0.094	0.144
16	0.098	0.164	0.126	0.192
18	0.125	0.211	0.161	0.247
20	0.157	0.264	0.201	0.309
24	0.230	0.387	0.295	0.452
30	0.365	0.615	0.469	0.719

Belt Size	Cross Section Area (sq. ft.)			
	2R-25		*2R*-30	
	0 Sur	10 Sur	0 Sur	10 Sur
8	0.033	0.047	0.037	0.051
10	0.054	0.078	0.061	0.085
12	0.080	0.116	0.091	0.127
14	0.112	0.163	0.127	0.177
16	0.150	0.216	0.169	0.236
18	0.192	0.278	0.217	0.303
20	0.240	0.347	0.271	0.379
24	0.352	0.509	0.398	0.555
30	0.559	0.809	0.632	0.882

Belt Size	Cross Section Area (sq. ft.)			
	*3RS-20		*3RS-35	
	0 Sur	10 Sur	0 Sur	10 Sur
12	0.053	0.088	0.085	0.116
14	0.066	0.115	0.107	0.151
16	0.079	0.145	0.129	0.189
18	0.092	0.177	0.151	0.229
20	0.105	0.212	0.173	0.272
22	0.118	0.249	0.194	0.317
24	0.131	0.288	0.216	0.365
26	0.144	0.331	0.238	0.415
30	0.170	0.422	0.282	0.522
36	0.210	0.577	0.348	0.702
42	0.249	0.755	0.414	0.903
48	0.288	0.955	0.479	1.127

Belt Size	Cross Section Area (sq. ft.)			
	*3RL-20		*3RL-35	
	0 Sur	10 Sur	0 Sur	10 Sur
12	NA	NA	NA	NA
14	NA	NA	NA	NA
16	NA	NA	NA	NA
18	0.143	0.225	0.227	0.297
20	0.169	0.272	0.269	0.359
22	0.194	0.321	0.312	0.423
24	0.219	0.372	0.354	0.490
26	0.244	0.426	0.396	0.559
30	0.295	0.541	0.481	0.705
36	0.370	0.732	0.608	0.943
42	0.446	0.945	0.735	1.202
48	0.522	1.180	0.861	1.484

Cross Section Area	b) Delivery = Tons per hour at 50 lbs. / cu. ft.						a) Max Spacing (in.) at 50 lbs. / cu. ft.	
	Belt Speed (ft. per min. FPM)						*2R*	*3R*
	50	100	150	200	250	300		
0.02	1.5	3.0	4.5	6.0	7.5	9.0	***	***
0.03	2.3	4.5	6.8	9.0	11.3	13.5	***	***
0.04	3.0	6.0	9.0	12.0	15.0	18.0	***	***
0.05	3.8	7.5	11.3	15.0	18.8	22.5	***	***
0.06	4.5	9.0	13.5	18.0	22.5	27.0	***	***
0.07	5.3	10.5	15.8	21.0	26.3	31.5	***	***
0.08	6.0	12.0	18.0	24.0	30.0	36.0	***	***
0.09	6.8	13.5	20.3	27.0	33.8	40.5	***	***
0.10	7.5	15.0	22.5	30.0	37.5	45.0	***	***
0.12	9.0	18.0	27.0	36.0	45.0	54.0	***	***
0.14	10.5	21.0	31.5	42.0	52.5	63.0	***	***
0.16	12.0	24.0	36.0	48.0	60.0	72.0	***	***
0.18	13.5	27.0	40.5	54.0	67.5	81.0	***	***
0.20	15.0	30.0	45.0	60.0	75.0	90.0	***	***
0.23	17.3	34.5	51.8	69.0	86.3	103.5	***	***
0.26	19.5	39.0	58.5	78.0	97.5	117.0	***	***
0.29	21.8	43.5	65.3	87.0	108.8	130.5	***	***
0.32	24.0	48.0	72.0	96.0	120.0	144.0	75	***
0.35	26.3	52.5	78.8	105.0	131.3	157.5	69	***
0.38	28.5	57.0	85.5	114.0	142.5	171.0	63	***
0.41	30.8	61.5	92.3	123.0	153.8	184.5	59	***
0.44	33.0	66.0	99.0	132.0	165.0	198.0	55	***
0.47	35.3	70.5	105.8	141.0	176.3	211.5	51	***
0.50	37.5	75.0	112.5	150.0	187.5	225.0	48	72
0.55	41.3	82.5	123.8	165.0	206.3	247.5	44	65
0.60	45.0	90.0	135.0	180.0	225.0	270.0	40	60
0.65	48.8	97.5	146.3	195.0	243.8	292.5	37	55
0.70	52.5	105.0	157.5	210.0	262.5	315.0	34	51
0.75	56.3	112.5	168.8	225.0	281.3	337.5	32	48
0.80	60.0	120.0	180.0	240.0	300.0	360.0	30	45
0.85	63.8	127.5	191.3	255.0	318.8	382.5	28	42
0.90	67.5	135.0	202.5	270.0	337.5	405.0	27	40
0.95	71.3	142.5	213.8	285.0	356.3	427.5	25	38
1.00	75.0	150.0	225.0	300.0	375.0	450.0	24	36
1.10	82.5	165.0	247.5	330.0	412.5	495.0	22	33
1.20	90.0	180.0	270.0	360.0	450.0	540.0	20	30
1.30	97.5	195.0	292.5	390.0	487.5	585.0	18	28
1.40	105.0	210.0	315.0	420.0	525.0	630.0	17	26
1.50	112.5	225.0	337.5	450.0	562.5	675.0	16	24



Installation Notes:

a) Spacing of units will be dictated by troughability of belt as well as by load capacity of troughing unit. Where *** is indicated, spacing should be limited to maintain troughability of belt. Inches shown indicate the maximum center distance (at 50 lbs./Cu. Ft. materials) so as not to exceed 100 pounds per 2 roll units and 150 pounds for 3 roll units. In general, spacing should not exceed 36 to 48 inches for troughability or inches indicated for unit load capacity. Consult your engineering for specifics.

b) Roller diameter as well as belt speed and load per unit affect bearing life. For ball bearings, limit 1.9dia. roll units to 150 FPM, 2.88dia. roll units to 300FPM. For bushing style bearings, limit 1.9dia. roll units to 50 FPM, 2.88dia. roll units to 100 FPM.

c) Pulley top elevation to bottom of belt trough affects belt stress and bearing loads in rollers. Typically; For *2R*-30, Locate the top of the pulley above the trough V by 1/2" for a 12" belt to 1 1/2" for a 30" belt width. For *3RS-20, Locate the top of the pulley level with the top of the center roll. For *3RL-35, Locate the top of the pulley 1/2" above the top of the center roll.

d) Spacing for first unit from pulley affects belt stress and bearing loads in rollers. Typically; For *2R*, use *2R*-15 as transition unit - offset the distance from the pulley by one belt width. For *3RS, offset the distance from the pulley by one belt width. For *3RL, offset the distance from the pulley by 1.5 x belt width.

Examples: On the left, *2R*-30 @ 0 sur x 24" belt = .398 Sq. Ft.

On the right under "cross section area", Between 0.38 and 0.41 Sq. Ft. @ 150 FPM = approx. 90 TPH and Maximum spacing of approximately 60 inches, but should be reduced for troughability.

On the left, 3RL-35 @ 10 sur x36" belt = 0.943 Sq. Ft.

On the right under "cross section area", Close to 0.95 Sq. Ft. @ 200 FPM = approx. 285 TPH and Max. spacing of 38 inches, based on unit load limit.