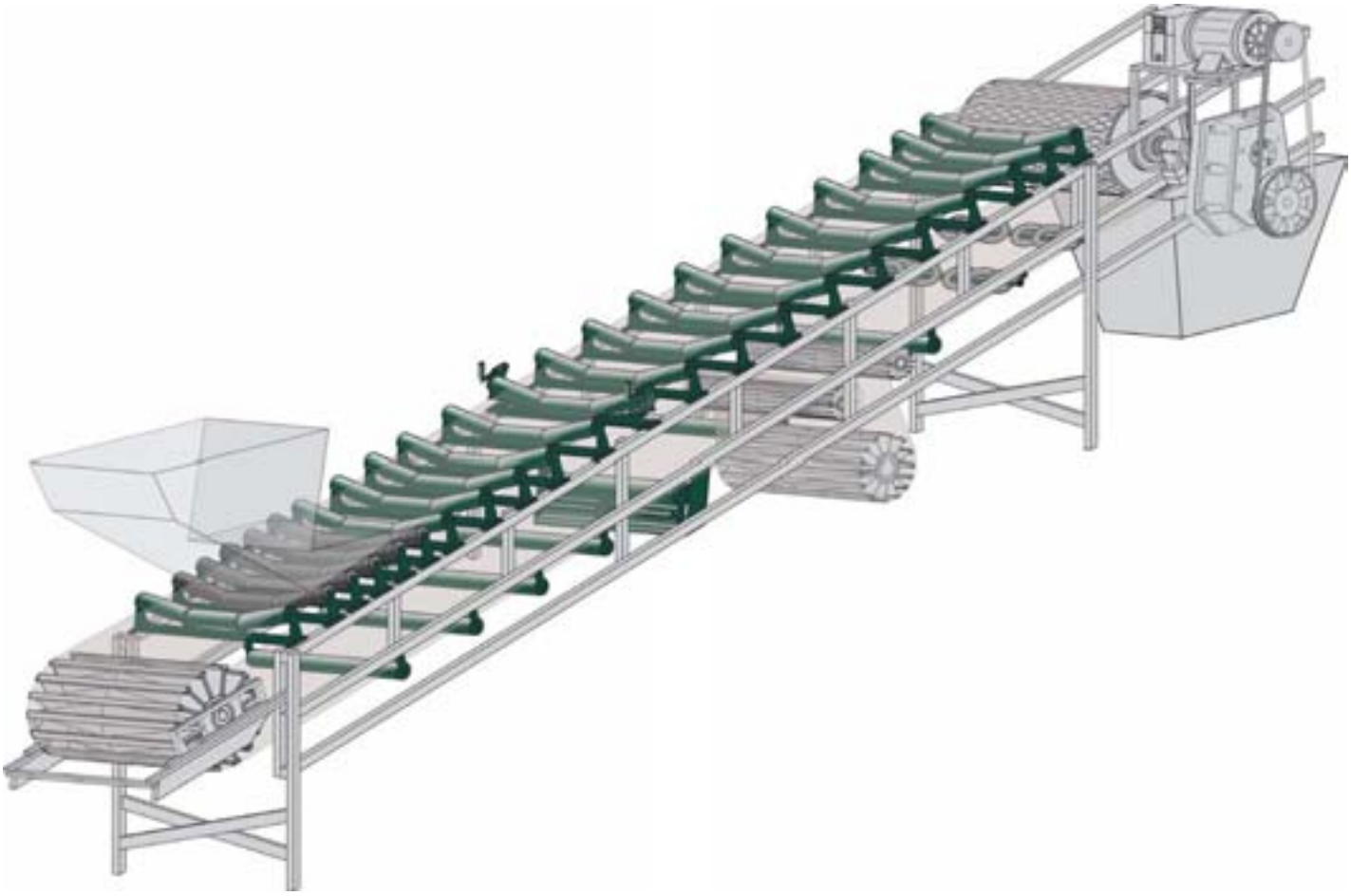
Performance, Value and Reliability



The Cost Effective Choice For Light To Heavy Duty Applications

Rexnord

Rexnord Belt Conveyor Components Operation

This catalog represents over five decades of Rex® Belt conveyor idler experience. Our organization is here to put that knowledge to work for you. Make use of our belt conveyor engineering, component selection and maintenance training, as many have, to improve your bottom line.

We have salespeople located in all key areas worldwide. Their mission is to provide you with the best technical and product support possible… whenever you need it.

Our CEMA B+, C & D idler has one of the best seals in the world. We make it ourselves, which promotes excellent idler and belt life. The CEMA B has a unique press-fit end disc and bearing assembly to provide reliable performance for light duty applications at an economical price.

During normal business hours, call your local Rexnord Authorized Distributor or a Rexnord Service Center nearest you, see the inside back cover for the service center phone numbers.

Our 24 hour emergency service number is 414-643-2800.

Rex®

Belt Conveyor Components, Whisperol® Conveyor Rollers and Spray Nozzles

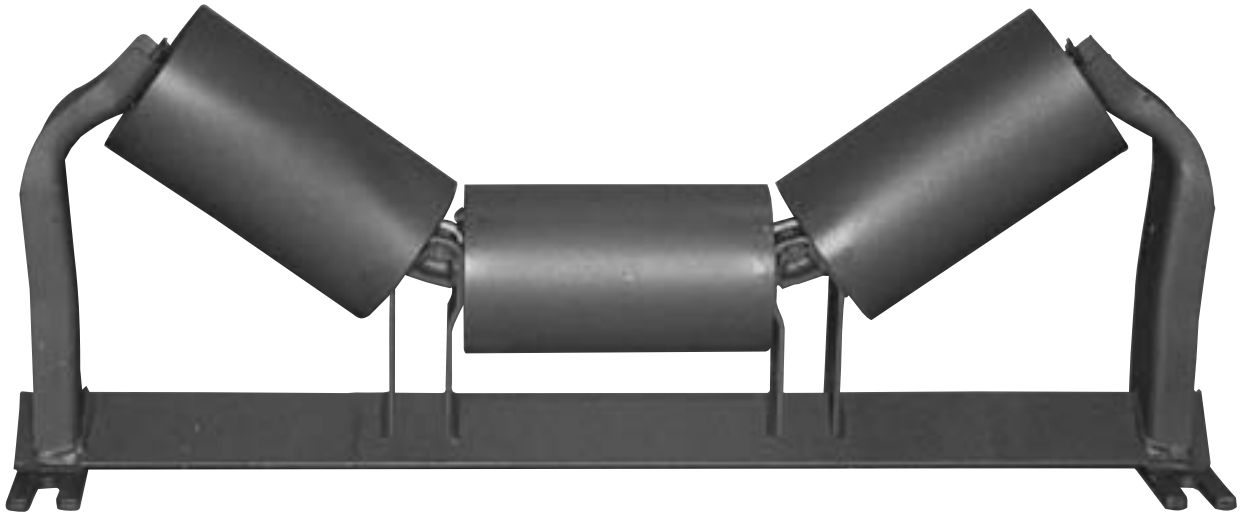


TABLE OF CONTENTS

INDEX

REX IDLERS

CEMA AND REX IDLER CLASSIFICATION

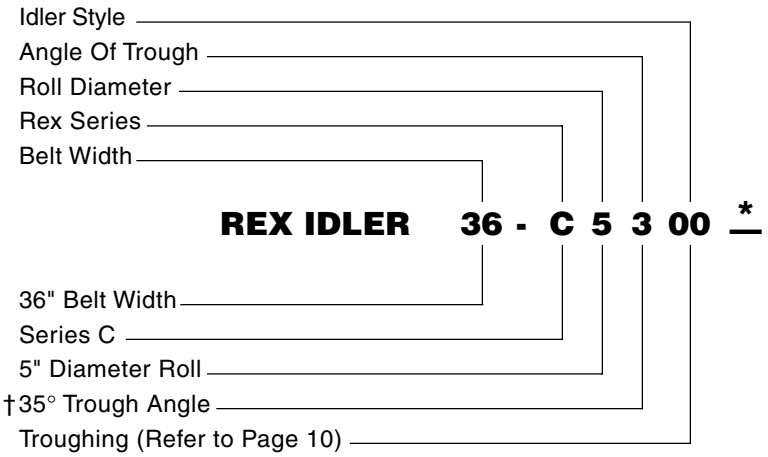
Service Class	CEMA Class	Rex Series	Roll Diam. Inches	Rex Bearing Type	Belt Widths Inches
Light Duty	B	B	4 5	Ball	18-48
		B+	4 5	Roller	18-48
Medium Duty	C	C	5 6	Roller	18-60
	D	D	5 6	Roller	18-72
Heavy Duty	E	E	6 7	Roller	36-72

For idler selection procedure and idler load ratings, see pages 71 – 81. For product specifications see pages 82 – 83.

IDENTIFICATION GUIDE AND ORDERING INFORMATION

The following is an example of the Rex Idler Numbering System.

Rex Idler Model: 36-C5300FS
This number describes the idler as follows:



† (0 = Flat, 2 = 20°, 3 = 35°, 4 = 45°)

*** Suffix**

C — Chevron Ribbed
C/C — Ceramic Coated
C/D — Ceramic Disc
FS — Factory Sealed
RG — Regreasable
S — Straight Ribbed
U/C — Urethane Coated
U/D — Urethane Disc
W/B — Wide Base

Note: Specify factory sealed or regreasable sealing option.

IDLER INTERCHANGE

Interchangeability is one of the most important features of the Rex Idler line, specifically in the dimensional areas of:

a. Backing Distance — from the bottom of the base pad to the top of the center roll of troughing idlers.

b. Bolt Hole Spacing — across the width of the conveyor frame for troughing and return idlers. (Belt width plus 9")

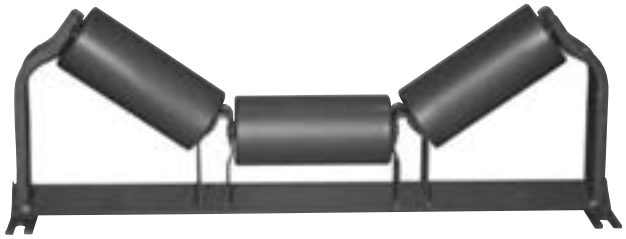
Rex Idlers conform to the CEMA dimensional standards and are interchangeable with competitive idlers listed below.

Manufacturer	CEMA B	CEMA C	CEMA D	CEMA E
Rexnord	Series B	Series C	Series D	Series E
Continental Conveyor	B Plus	H	H Plus	SDX
Goodman Conveyor	B	C	D	E
Hewitt-Robins	B	2000	3000	4000
FMC-Link Belt	B2000	C3000	D3000	E4000
Precismeca	PB	PC	PD	PE
Precision Idler	B	C	—	—
Stephens-Adamson	2174-2175	4205-4206	5195-5196	6326-6327
Superior Machinery	60/61/71	80/81	—	—

REX IDLERS

THE REX LINE

There is a Rex Idler to meet your service requirements ranging from intermittent conveying of light materials to continuous conveying of very heavy materials.

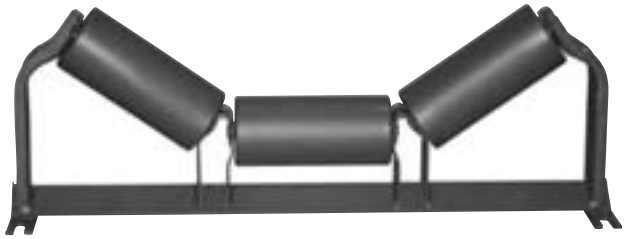


Series B

The Light Duty line exceeds CEMA B specifications using heavy duty ball bearings, available with 4" and 5" diameter rolls. Furnished in a wide selection of styles in 18" to 48" belt widths.

Available factory sealed only.

Refer Pages: 12 – 21.



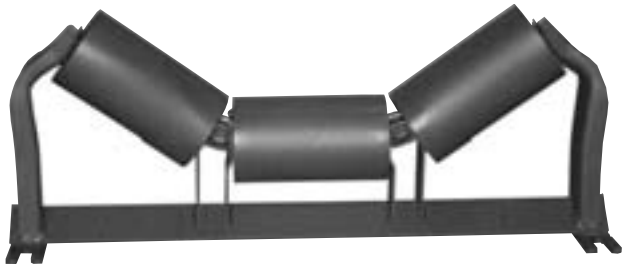
Series B+

Series B+ combines a CEMA B frame with the Rex patented “G” Seal to give longer life. Available in 4" and 5" diameter rolls. Furnished in 18"-48" belt widths.

Available in regreasable or factory sealed.

Same envelope dimensions as Series B, Pages: 12 – 21.

(Available with polyethylene rolls – B+ only.)



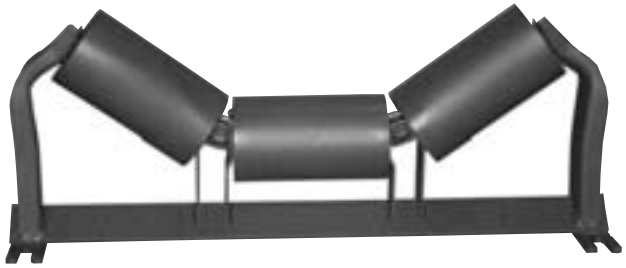
Series C

The Medium Duty line exceeds CEMA C specifications using precision tapered roller bearings, available with 5" and 6" diameter rolls. Furnished in a wide selection of styles in 18" to 60" belt widths.

Available in regreasable or factory sealed.

Refer Pages: 22 – 42

(Available with polyethylene rolls, pages 44 – 46.)



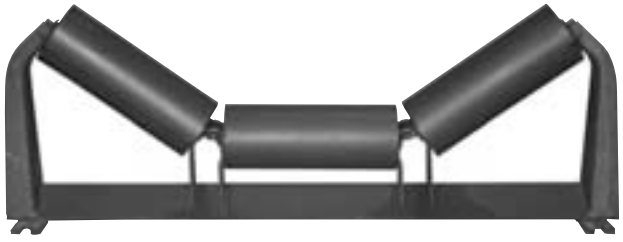
Series D

The Medium Duty line exceeds CEMA D specifications utilizing the Series C idler construction with heavier shafts to provide higher load capacity. Furnished in a wide selection of styles in 24" to 60" belt widths.

Available in regreasable or factory sealed.

Refer Pages: 22 – 42

(Available with polyethylene rolls, pages 44 – 46.)



Series E

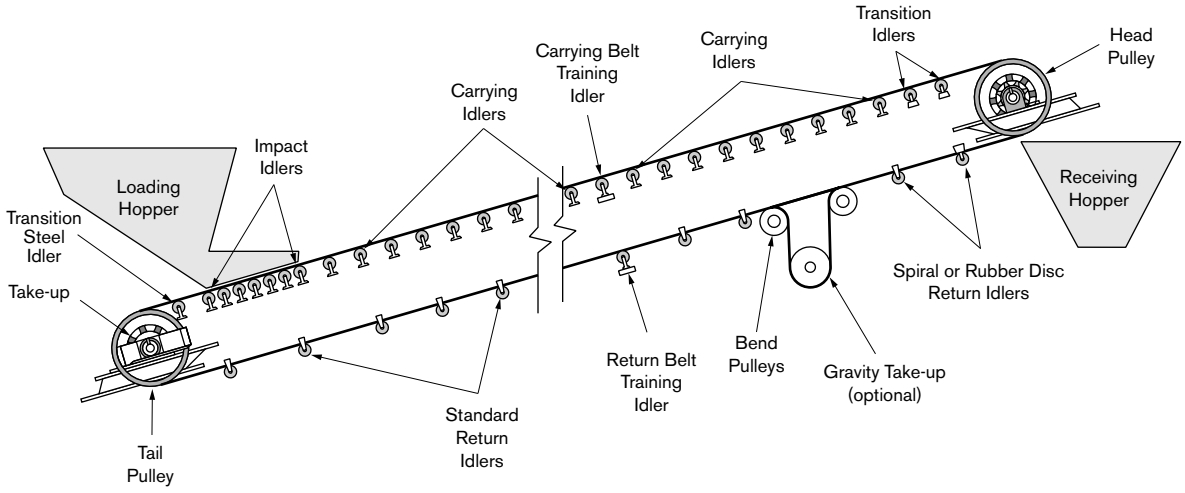
The Heavy Duty line exceeds CEMA E specifications using heavy duty precision tapered roller bearings, available with 6" and 7" diameter rolls. Furnished in a wide selection of styles in 36" to 96" belt widths.

Refer Pages: 48 – 60

REX IDLERS

THE BELT CONVEYOR

The following is a simplified conveyor, used to illustrate basic belt conveyor components. Unlimited variations of elevation, loading, discharge, idlers and idler spacing, pulleys, and accessories are possible.



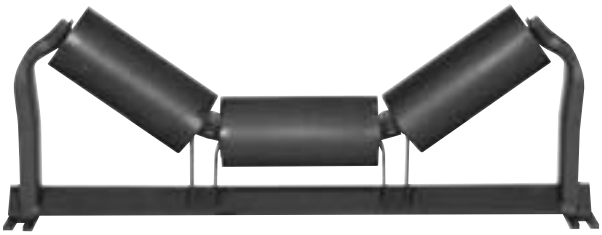
TYPES OF IDLERS

Carrying Idlers (Troughing or Flat)

Support the belt in the section of the conveyor that transports the material. These idlers may be flat or troughed to shape the belt to prevent spillage and are available in 20°, 35° and 45° trough angles with equal or unequal roll lengths. Normal spacing is 3 to 5 feet.

Refer Pages:

14, 16, 18, 24, 26, 28, 30, 32, 34, 36, 50, 52, 54, 55, 57, 61



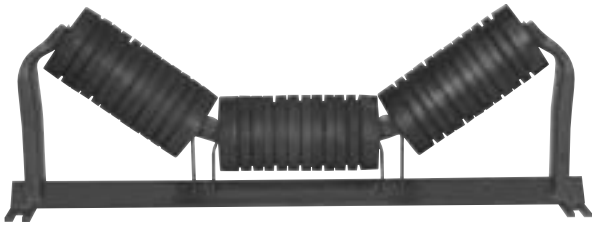
Impact Idlers (Troughing or Flat)

Prevent damage to the belt at the loading point. These idlers may be troughing or flat types with grooved, molded rubber rolls. It is standard practice to use impact idlers at all loading and transfer points when the impact force exceeds 40 foot pounds.

To insure maximum **belt protection** for optimum life and to reduce skirtboard leakage the **impact idlers** should be at least **six inch diameter** and spaced at **one foot intervals.**

Refer Pages:

14, 16, 24, 26, 28, 30, 32, 34, 36, 50, 52, 54, 55, 57, 61



REX IDLERS

TYPES OF IDLERS

Return Idlers

Support the empty belt between the discharge point and the tail pulley. Normal spacing is 10 feet.

a. **Steel** — Used where materials are not sticky, corrosive, or abrasive.

Available with urethane covering. Six inch diameter also available in ¼" wall thickness.

Refer Pages: 18, 36, 41, 56, 61

b. **Spiral** — Used where sticky materials adhere to the belt, where a corrosive environment is present or abrasive wear is a problem. Unique construction minimizes belt fleet and damage to the return belt due to material build-up on the idler rolls. Spiral roll idlers can be used for belt travel in one direction only.

Refer Pages: 21, 39

c. **Disc** — Used under the same conditions as the spiral idler. These idlers can be used for belt travel in either direction. Massed end discs are standard.

Ceramic, urethane and rubber disc rolls available.

Refer Pages: 21, 40, 56

Carrying Belt Training Idlers (Troughing or Flat)

Assist in keeping the belt centered on the conveyor. Actuating shoe type is used on belt traveling in either direction. Positive type is used on belt traveling in one direction only and is illustrated. Normal spacing is 100 feet and not within 50 feet of the head or tail pulley.

(Urethane rolls enhance trainer effectiveness.)

Refer Pages: 15, 17, 20, 25, 27, 29, 31, 33, 35, 37, 38, 51, 53, 60

Return Belt Training Idlers

Used for the same purposes as are Carrying Training Idlers. They are of the actuating shoe type, belt travel — either direction, and the positive and inclined pivot types, belt travel — one direction only. The positive type is illustrated. Normal spacing is 100 feet and not within 50 feet of the head or tail pulley.

(Urethane rolls enhance trainer effectiveness.)

Can also be furnished with spiral or disc rolls.

Refer Pages: 19, 20, 37, 38, 39, 40, 42, 58, 59

NOTE: Ceramic and urethane covered rolls available — see page 62. Polyethylene rolls available — see pages 44 – 46.

IDLER INDEX

Idler Number	Description	Roll Diam. In.	Roll Material	Page
O3144	Return, Catenary	3	Rubber	69
O3204	Trough, Catenary	3	Rubber	69
O4044	Return, Catenary - Solid Shaft	3-1/2	Rubber	69
B4020	Flat	4	Steel	18
B+4020	Flat	4	Steel	18
F4021	Flat, Live Shaft	4	Steel	61
B+4030	Flat Training, Actuating Shoe	4	Steel	20
B+4031	Flat Training, Positive Arm	4	Steel	20
B4040	Return	4	Steel	18
B+4040	Return	4	Steel	18
F4041	Return, Live Shaft	4	Steel	61
B+4050	Return Training, Inclined Pivot	4	Steel	20
B+4051	Return Training, Actuating Shoe	4	Steel	19
B+4052	Return Training, Positive Arm	4	Steel	19
B4200	Trough, 20°	4	Steel	14
B+4200	Trough, 20°	4	Steel	14
B+4210	Trough Training, 20°, Actuating Shoe	4	Steel	15
B+4212	Trough Training, 20°, Positive Arm	4	Steel	15
B4300	Trough, 35°	4	Steel	16
B+4300	Trough, 35°	4	Steel	16
B+4310	Trough Training, 35°, Actuating Shoe	4	Steel	17
B+4312	Trough Training, 35°, Positive Arm	4	Steel	17
B5020	Flat	5	Steel	18
B+5020	Flat	5	Steel	18
C5020	Flat	5	Steel	36
D5020	Flat	5	Steel	36
C5021	Flat, Live Shaft	6	Steel	61
F5022	Flat, Impact Live Shaft	5	Rubber	61
C5025	Flat, Impact	5	Rubber	36
D5025	Flat, Impact	5	Rubber	36
C5027	Flat	5	Poly.	46
B+5030	Flat Training, Actuating Shoe	5	Steel	20
C5030	Flat Training, Actuating Shoe	5	Steel	38
D5030	Flat Training, Actuating Shoe	5	Steel	38
B+5031	Flat Training, Positive Arm	5	Steel	20
C5031	Flat Training, Positive Arm	5	Steel	37
D5031	Flat Training, Positive Arm	5	Steel	37
C5035	Flat Training, Actuating Shoe	5	Poly.	46
C5036	Flat Training, Positive Arm	5	Poly.	46
B5040	Return	5	Steel	18
B+5040	Return	5	Steel	18
C5040	Return	5	Steel	36
F5041	Return, Live Shaft	5	Steel	61
B5043	Return, Disc	5	Rubber	21
B+5043	Return, Disc	5	Rubber	21
C5043	Return, Disc	5	Rubber	40
D5043	Return, Disc	5	Rubber	40
C5045	Return	5	Rubber	36
D5045	Return	5	Rubber	36
C5046	Return, Ribbed Covered	6-1/2	Rubber	41
D5046	Return, Ribbed Covered	6-1/2	Rubber	41
C5047	Return	5	Poly.	46
B+5050	Return Training, Inclined Pivot	5	Steel	20
C5050	Return Training, Inclined Pivot	5	Steel	38
D5050	Return Training, Inclined Pivot	5	Steel	38
B+5051	Return Training, Actuating Shoe	5	Steel	19
C5051	Return Training, Actuating Shoe	5	Steel	38
D5051	Return Training, Actuating Shoe	5	Steel	38
B+5052	Return Training, Positive Arm	5	Steel	19
C5052	Return Training, Positive Arm	5	Steel	37
D5052	Return Training, Positive Arm	5	Steel	37
C5054	Return Training, Disc, Inclined Pivot	5	Rubber	40
D5054	Return Training, Disc, Inclined Pivot	5	Rubber	40
C5056	Return Training, Disc, Positive Arm	5	Rubber	40
D5056	Return Training, Disc, Positive Arm	5	Rubber	40
C5059	Return Training, Positive Arm	5	Poly.	46
C5070	Return Training, Actuating Shoe	5	Poly.	46
B5200	Trough, 20°	5	Steel	14
B+5200	Trough, 20°	5	Steel	14
C5200	Trough,20°	5	Steel	24
D5200	Trough,20°	5	Steel	24
C5201	Trough, 20°, Unequal Roll Length	5	Steel	26
D5201	Trough, 20°, Unequal Roll Length	5	Steel	26
B+5202	Trough Impact, 20°	5	Rubber	14
C5202	Trough Impact, 20°	5	Rubber	24
D5202	Trough Impact, 20°	5	Rubber	24
C5203	Trough Impact, 20°, Unequal Roll Lg.	5	Rubber	26
D5203	Trough Impact, 20°, Unequal Roll Lg.	5	Rubber	26
C5206	Trough, 20°	5	Poly.	46
B+5210	Trough Training, 20°, Actuating Shoe	5	Steel	15
C5210	Trough Training, 20°, Actuating Shoe	5	Steel	25
D5210	Trough Training, 20°, Actuating Shoe	5	Steel	25
C5211	Trough Training, 20°, Unequal Roll Lg.	5	Steel	27
D5211	Trough Training, 20°, Unequal Roll Lg.	5	Steel	27
B+5212	Trough Training, 20°, Positive Arm	5	Steel	15
C5212	Trough Training, 20°, Positive Arm	5	Steel	25
D5212	Trough Training, 20°, Positive Arm	5	Steel	25
C5213	Trough Training, 20°, Positive Arm, Unequal Roll Length	5	Steel	27
D5213	Trough Training, 20°, Positive Arm, Unequal Roll Length	5	Steel	27
C5218	Trough Training, 20°, Actuating Shoe	5	Poly.	46
C5264	Trough Training, 20°, Positive Arm	5	Poly.	46
B5300	Trough, 35°	5	Steel	16
B+5300	Trough, 35°	5	Steel	16
C5300	Trough, 35°	5	Steel	28
D5300	Trough, 35°	5	Steel	28
C5301	Trough, 35°, Unequal Roll Length	5	Steel	30
D5301	Trough, 35°, Unequal Roll Length	5	Steel	30
B+5302	Trough Impact, 35°	5	Rubber	16
C5302	Trough Impact, 35°	5	Rubber	28
D5302	Trough Impact, 35°	5	Rubber	28
C5303	Trough Impact, 35°, Unequal Roll Lg.	5	Rubber	30
D5303	Trough Impact, 35°, Unequal Roll Lg.	5	Rubber	30
C5306	Trough, 35°	5	Poly.	46
B+5310	Trough Training, 35°, Actuating Shoe	5	Steel	17
C5310	Trough Training, 35°, Actuating Shoe	5	Steel	29
D5310	Trough Training, 35°, Actuating Shoe	5	Steel	29
C5311	Trough Training, 35°, Actuating Shoe, Unequal Roll Length	5	Steel	31
D5311	Trough Training, 35°, Actuating Shoe, Unequal Roll Length	5	Steel	31
B+5312	Trough Training, 35°, Positive Arm	5	Steel	17
C5312	Trough Training, 35°, Positive Arm	5	Steel	29
D5312	Trough Training, 35°, Positive Arm	5	Steel	29
C5313	Trough Training, 35°, Positive Arm, Unequal Roll Length	5	Steel	31
D5313	Trough Training, 35°, Positive Arm, Unequal Roll Length	5	Steel	31
C5318	Trough Training, 35°, Actuating Shoe	5	Poly.	46
C5364	Trough Training, 35°, Positive Arm	5	Poly.	46
C5400	Trough, 45°	5	Steel	32
D5400	Trough, 45°	5	Steel	32
C5401	Trough, 45°, Unequal Roll Length	5	Steel	34
D5401	Trough, 45°, Unequal Roll Length	5	Steel	34
C5402	Trough Impact, 45°	5	Rubber	32
D5402	Trough Impact, 45°	5	Rubber	32
C5403	Trough Impact, 45°, Unequal Roll Lg.	5	Rubber	34
D5403	Trough Impact, 45°,Unequal Roll Lg.	5	Rubber	34
C5406	Trough, 45°	5	Poly.	46
C5410	Trough Training, 45°, Actuating Shoe	5	Steel	33
D5410	Trough Training, 45°, Actuating Shoe	5	Steel	33
C5411	Trough Training, 45°, Actuating Shoe, Unequal Roll Length	5	Steel	35
D5411	Trough Training, 45°, Actuating Shoe, Unequal Roll Length	5	Steel	35
C5412	Trough Training, 45°, Positive Arm	5	Steel	33
D5412	Trough Training, 45°, Positive Arm	5	Steel	33
C5413	Trough Training, 45°, Positive Arm, Unequal Roll Length	5	Steel	35
D5413	Trough Training, 45°, Positive Arm, Unequal Roll Length	5	Steel	35
C5418	Trough Training, 45°, Actuating Shoe	5	Poly.	46
C5464	Trough Training, 45°, Positive Arm	5	Poly.	46
C6020	Flat	6	Steel	36

IDLER INDEX

IDLER INDEX

IDLER STYLES AND PAGE LOCATION

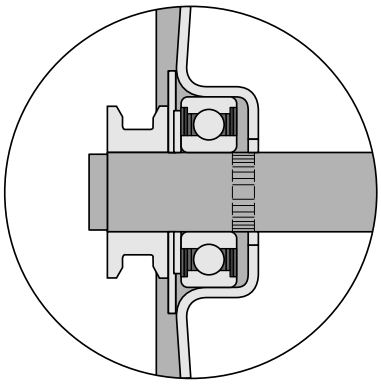
Style No. (Last 2 Digits)	Idler Description			PAGE NUMBER										
				Series										
				B and B+			C & D				E			
	Type	Roll		Angle of Trough										
		Material	Length	0°	20°	35°	0°	20°	35°	45°	0°	20°	35°	45°
00	Troughing	Steel	Equal	…	14	16	…	24	28	32	…	50	52	…
01	Troughing	Steel	Unequal	…	…	…	…	27	31	35	…	…	…	…
02	Troughing Impact	Rubber	Equal	…	14	16	…	24	28	32	…	50	52	…
03	Troughing Impact	Rubber	Unequal	…	…	…	…	26	30	34	…	…	…	…
04	Troughing, Catenary - 25°	Rubber	…	…	…	…	…	…	…	…	…	…	…	…
06	Troughing	Poly-ethylene	Equal	…	…	…	…	46	46	46	…	…	…	…
10	Troughing Training, Actuating Shoe	Steel	Equal	…	15	17	…	25	29	33	…	51	53	…
11	Troughing Training, Actuating Shoe	Steel	Unequal	…	…	…	…	27	31	35	…	…	…	…
12	Troughing Training, Positive Arm	Steel	Equal	…	15	17	…	25	29	33	…	51	53	…
13	Troughing Training, Positive Arm	Steel	Unequal	…	…	…	…	27	31	35	…	…	…	…
18	Troughing Training, Actuating Shoe	Poly-ethylene	Equal	…	…	…	…	46	46	46	…	…	…	…
20	Flat	Steel	…	18	…	…	36	…	…	…	57	…	…	…
21	Flat, Live Shaft (order as 41)	Steel	…	…	…	…	61	…	…	…	…	…	…	…
22	Flat, Impact Live Shaft	Rubber	…	…	…	…	61	…	…	…	61	…	…	…
25	Flat, Impact	Rubber	…	…	…	…	36	…	…	…	57	…	…	…
27	Flat	Poly-ethylene	…	…	…	…	46	…	…	…	…	…	…	…
30	Flat, Training, Actuating Shoe	Steel	…	20	…	…	38	…	…	…	…	…	…	…
31	Flat, Training, Positive Arm	Steel	…	20	…	…	37	…	…	…	60	…	…	…
35	Flat, Training, Actuating Shoe	Poly-ethylene	…	…	…	…	46	…	…	…	…	…	…	…
36	Flat, Training, Positive Arm	Poly-ethylene	…	…	…	…	46	…	…	…	…	…	…	…
40	Return	Steel	…	18	…	…	36	…	…	…	57	…	…	…
41	Return, Live Shaft	Steel	…	…	…	…	61	…	…	…	…	…	…	…
42	Return, Spiral	Rubber	…	…	…	…	39	…	…	…	…	…	…	…
43	Return, Disc	Rubber	…	21	…	…	40	…	…	…	56	…	…	…
44	Return, Catenary	Rubber	…	…	…	…	…	…	…	…	…	…	…	…
45	Return	Rubber	…	…	…	…	36	…	…	…	…	…	…	…
46	Return, Ribbed (C or S)	Rubber	…	…	…	…	41	…	…	…	…	…	…	…
46	Return, Beater, Rod	Steel (E)	…	…	…	…	…	…	…	…	60	…	…	…
47	Return	Poly-ethylene	…	…	…	…	46	…	…	…	…	…	…	…
49	Return, Impact	Rubber	…	…	…	…	36	…	…	…	…	…	…	…
50	Return Training, Inclined Pivot	Steel	…	20	…	…	38	…	…	…	…	…	…	…
51	Return Training, Actuating Shoe	Steel	…	19	…	…	38	…	…	…	59	…	…	…
52	Return Training, Positive Arm	Steel	…	19	…	…	37	…	…	…	58	…	…	…
53	Return Training, Spiral, Inclined Pivot	Rubber	…	…	…	…	39	…	…	…	…	…	…	…
54	Return Training, Disc, Inclined Pivot	Rubber	…	…	…	…	40	…	…	…	…	…	…	…
55	Return Training, Disc, Actuating Shoe	Rubber	…	…	…	…	…	…	…	…	59	…	…	…
56	Return Training, Disc, Positive Arm	Rubber	…	…	…	…	40	…	…	…	58	…	…	…
57	Return Training Spiral, Positive Arm	Rubber	…	…	…	…	39	…	…	…	…	…	…	…
58	Return Training, Ribbed	Rubber	…	…	…	…	42	…	…	…	…	…	…	…
59	Return Training, Positive Arm	Poly-ethylene	…	…	…	…	46	…	…	…	…	…	…	…
64	Troughing Training, Positive Arm	Poly-ethylene	Equal	…	…	…	46	…	…	…	…	…	…	…
70	Return Training, Actuating Shoe	Poly-ethylene	…	…	…	…	46	…	…	…	…	…	…	…

REX IDLER SEALS

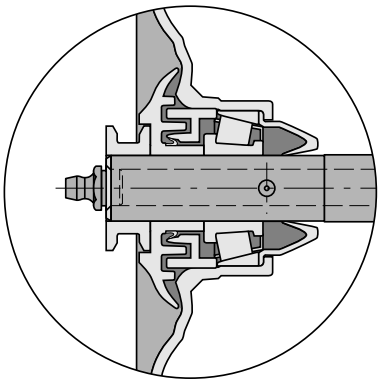
SEAL FEATURES OF B, B+, C AND D

FACTORY SEALED: B SERIES has a 17mm “Sealed For Life” ball bearing protected by metal and polymeric covers.

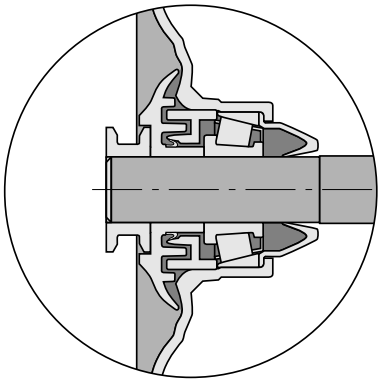
A SPECIAL COMBINATION LABYRINTH AND OUTER SHIELD: B+, C AND D SERIES
REGREASABLE and **FACTORY SEALED** — The seal has a (5) passage labyrinth with a wiping component — filled with grease to block contaminants from reaching the bearing. The inner and outer seals are close tolerance, injection molded non-metallic components to retard corrosion. The labyrinth and rear seal retain the lubrication within the bearing cavity. The protective outer shield provides an additional barrier to further delay the penetration of contaminants.



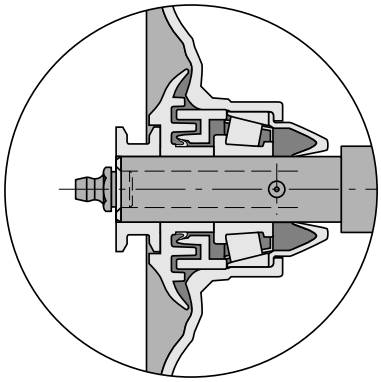
SERIES B
BALL BEARING
FACTORY SEALED



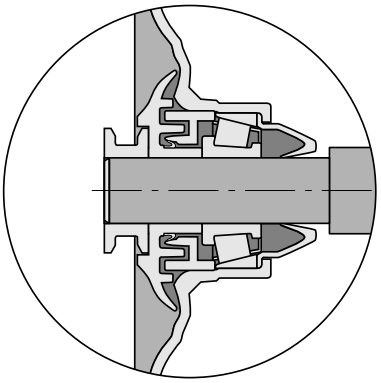
SERIES B+, C
ROLLER BEARING
REGREASABLE



SERIES B+, C
ROLLER BEARING
FACTORY SEALED



SERIES D
ROLLER BEARING
REGREASABLE



SERIES D
ROLLER BEARING
FACTORY SEALED

REGREASABLE

Regreasable idlers with the unique labyrinth/shield design are excellent for long overland conveyors. For installations where water is present or where frequent washdowns are required, regreasing is recommended.

Periodic regreasing will flush the bearings and seals of contaminants to provide extended roll life.

FACTORY SEALED

Factory sealed idlers with the same seal design and a solid shaft are a viable economic alternative for those installations where periodic regreasing will not be provided.

REX IDLERS

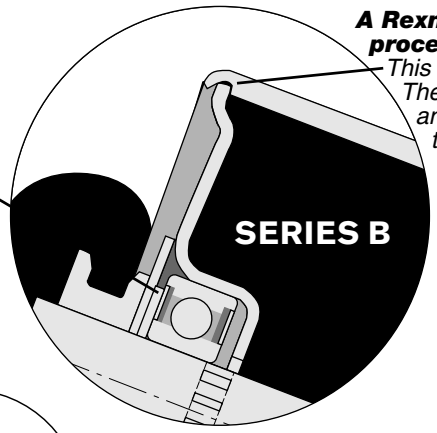
ECONO-B Series – CEMA B Factory Sealed
20° and 35° Trough – 4" and 5" Roll Diameter – 17 mm Solid Shaft

Longer Belt and Idler Life

The ECONO-B is the economical choice for light to moderate duty. A factory sealed ball bearing designed for optimum idler life means no lubrication is necessary.

Factory Sealed Idlers
Sealed-for-life by the "H" seal. Metal and polymeric covers protect the sealed bearing for longer life… ***B Series.***

A Rexnord exclusive manufacturing process *produces a unique rounded roll end. This EASY Roll protects the belt for longer life. The EASY Roll design also keeps the roll shell and end disc junction completely away from the wear area for more idler life. Meets or exceeds CEMA load rating requirements.*

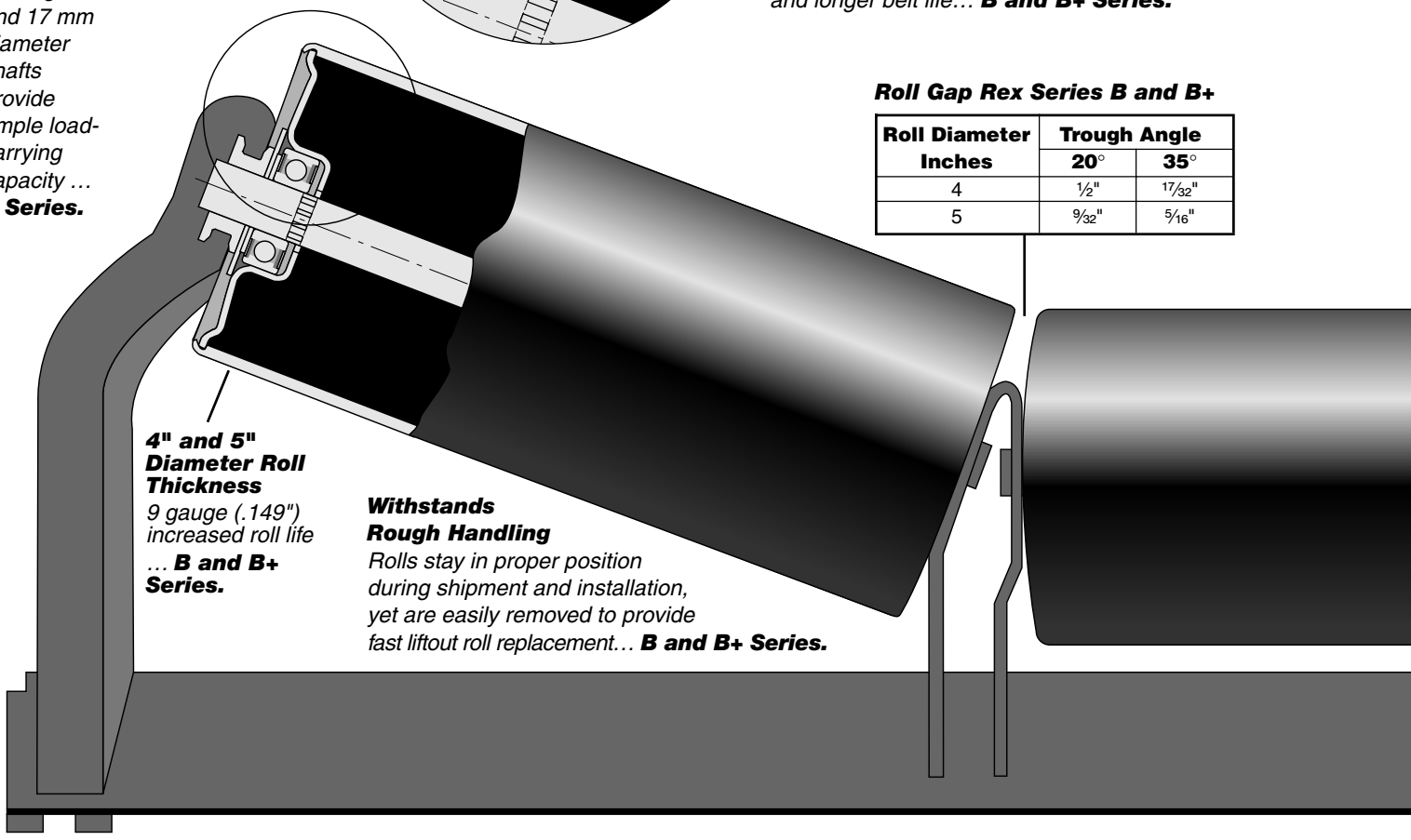


Longer Belt Life
Rex designed "Mini-Gap" provides smallest possible space between rollers for maximum "no pinch" belt protection… better belt support and longer belt life… ***B and B+ Series.***

Longer Idler Life
Rugged ball bearings and 17 mm diameter shafts provide ample load-carrying capacity … ***B Series.***

Roll Gap Rex Series B and B+

Roll Diameter Inches	Trough Angle	
	20°	35°
4	1/2"	17/32"
5	9/32"	5/16"



4" and 5" Diameter Roll Thickness
9 gauge (.149") increased roll life … ***B and B+ Series.***

Withstands Rough Handling
Rolls stay in proper position during shipment and installation, yet are easily removed to provide fast liftout roll replacement… ***B and B+ Series.***

Interchangeability
…built to fit existing conveyor frame without cutting or fitting. Conforms to CEMA B dimensions… ***B and B+ Series.***

Self-Cleaning Base
Inverted angle base prevents build-up of spillage… eliminates possible jamming of idler rolls… ***B and B+ Series.***

REX IDLERS

Series B+ – FACTORY SEALED or REGREASABLE
20° and 35° Trough – 4" and 5" Roll Diameter – 3/4" Shaft

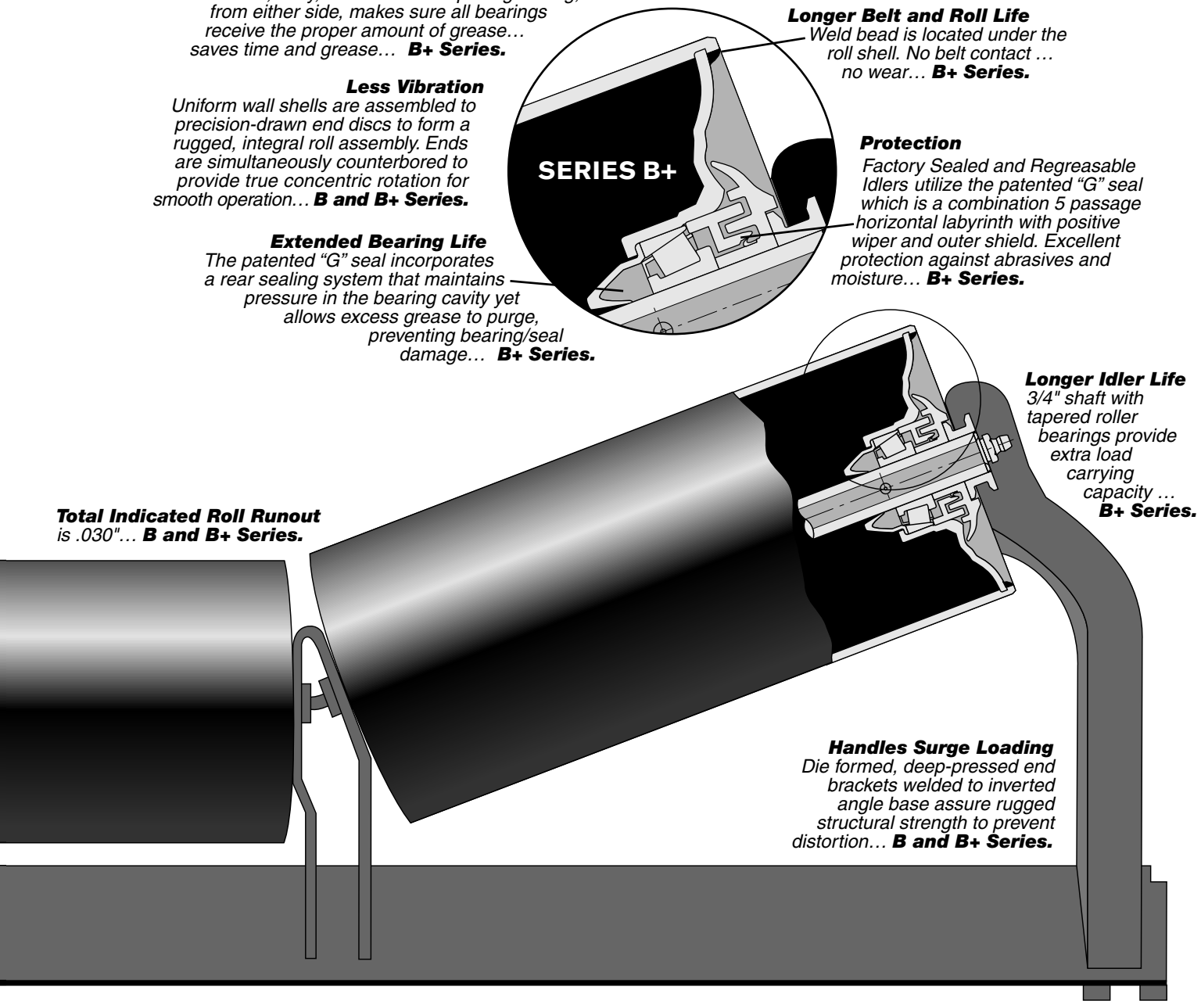
More Capacity with an Option of Relubrication

The Rex B+ offers a tapered roller bearing and the patented "G" seal in the same envelope dimensions as the Series B. Available as factory sealed with solid shaft or regreasable. Exceeds CEMA load rating requirements.

Reduced Maintainance Costs
Positive, easy, convenient one point greasing, from either side, makes sure all bearings receive the proper amount of grease… saves time and grease… ***B+ Series.***

Less Vibration
Uniform wall shells are assembled to precision-drawn end discs to form a rugged, integral roll assembly. Ends are simultaneously counterbored to provide true concentric rotation for smooth operation… ***B and B+ Series.***

Extended Bearing Life
The patented "G" seal incorporates a rear sealing system that maintains pressure in the bearing cavity yet allows excess grease to purge, preventing bearing/seal damage… ***B+ Series.***



Longer Belt and Roll Life
Weld bead is located under the roll shell. No belt contact … no wear… ***B+ Series.***

Protection
Factory Sealed and Regreasable Idlers utilize the patented "G" seal which is a combination 5 passage horizontal labyrinth with positive wiper and outer shield. Excellent protection against abrasives and moisture… ***B+ Series.***

Longer Idler Life
3/4" shaft with tapered roller bearings provide extra load carrying capacity … ***B+ Series.***

Total Indicated Roll Runout
is .030"… ***B and B+ Series.***

Handles Surge Loading
Die formed, deep-pressed end brackets welded to inverted angle base assure rugged structural strength to prevent distortion… ***B and B+ Series.***

*	Roll Diameter
Polyethylene**	5"
Ceramic Coated	4, 5"
Urethane Coated	4, 5"
Rubber Coated	4, 5"

* Options available in B+ only.
** See pages 44-46.

Note:
Grease transfer tube on regreasable idler only … ***B+ Series.***

Simple Belt Training Adjustment *of idlers is fast and easy using slotted mounting holes. Precision jig welded frame assures positive, accurate alignment…* ***B and B+ Series.***

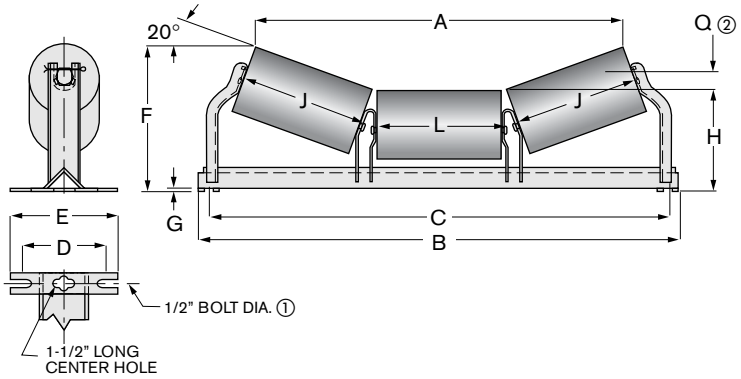
Series B+ Idlers – 3/4" Shaft – Factory Sealed or Regreasable

REX IDLERS

SERIES B and B+

20° TROUGHING IDLER — EQUAL LENGTH ROLLS

REGREASABLE	FACTORY SEALED
B+4200 RG	B4200 FS B+4200 FS
4-Inch Steel Rolls	
B+5200 RG	B5200 FS B+5200 FS
5-Inch Steel Rolls	



Dimensions in Inches — Average Weight in Pounds

Belt Width	A		B	C	D		E	F		G	H		J	L	Q	Idler Wgt.	
	4" Roll	5" Roll			Recom.	Minimum		4" Roll	5" Roll		4" Roll	5" Roll				4" Roll	5" Roll
18	21 1/16	20 3/4	28 1/2	27	6	5 3/8	7 3/4	9 5/16	9 3/4	1/4	6 13/16	7 5/16	7	7	15/16	28	31
20	23 1/16	22 3/4	30 1/2	29	6	5 3/8	7 3/4	9 5/16	9 3/4	1/4	6 13/16	7 5/16	7	9	15/16	29	33
24	26 13/16	26 1/2	34 1/2	33	6	5 3/8	7 3/4	10	10 1/2	1/4	6 13/16	7 5/16	9	9	1 1/4	33	37
30	32 5/8	32 1/4	40 1/2	39	6	5 3/8	7 3/4	10 11/16	11 1/8	1/4	6 13/16	7 5/16	11	11	1 9/16	38	43
36	38 3/8	38	47	45	7 1/2	5 3/4	9 1/4	11 3/4	12 1/4	5/16	7 1/4	7 3/4	13	13	1 15/16	47	53
42	44 1/8	43 3/4	53	51	7 1/2	5 3/4	9 1/4	12 1/2	12 15/16	5/16	7 1/4	7 3/4	15	15	2 1/4	52	59
48	49 7/8	49 1/2	59	57	7 1/2	5 3/4	9 1/4	13 1/8	13 5/8	5/16	7 1/4	7 3/4	17	17	2 5/8	58	66

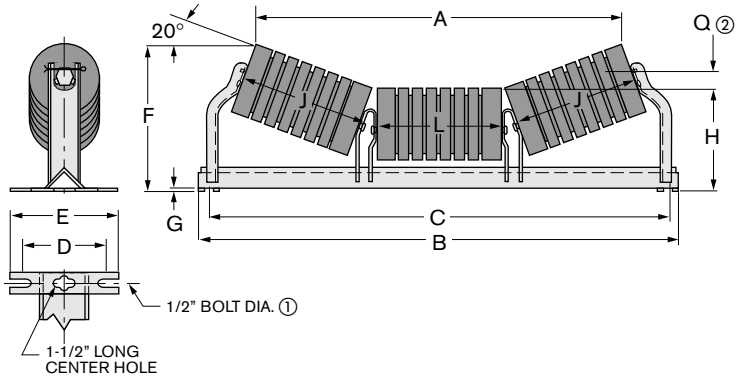
① Use washers with ½" bolts.

② Location of head pulley in relation to idler center roll.

□ Shaded sizes are most commonly used and are more readily available.

20° TROUGHING IMPACT IDLER — EQUAL LENGTH ROLLS

REGREASABLE	FACTORY SEALED
B+5202 RG	B+5202 FS
5-Inch Rubber Rolls	



Dimensions in Inches — Average Weight in Pounds

Belt Width	A	B	C	D		E	F	G	H	J	L	Q	Idler Wgt.
				Recom.	Minimum								
18	20 5/8	28 1/8	27	6	5 3/8	7 3/4	9 3/4	1/4	7 5/16	7	7	15/16	37
20	22 5/8	30 1/2	29	6	5 3/8	7 3/4	9 3/4	1/4	7 5/16	7	9	15/16	39
24	26 1/2	34 1/2	33	6	5 3/8	7 3/4	10 1/2	1/4	7 5/16	9	9	1 1/4	41
30	32 3/16	40 1/2	39	6	5 3/8	7 3/4	11 1/8	1/4	7 5/16	11	11	1 9/16	57
36	37 15/16	47	45	7 1/2	5 3/4	9 1/4	12 1/4	5/16	7 3/4	13	13	1 15/16	65
42	43 11/16	53	51	7 1/2	5 3/4	9 1/4	12 15/16	5/16	7 3/4	15	15	2 1/4	74
48	49 7/16	59	57	7 1/2	5 3/4	9 1/4	13 5/8	5/16	7 3/4	17	17	2 5/8	87

① Use washers with ½" bolts.

② Location of head pulley in relation to idler center roll.

□ Shaded sizes are most commonly used and are more readily available.

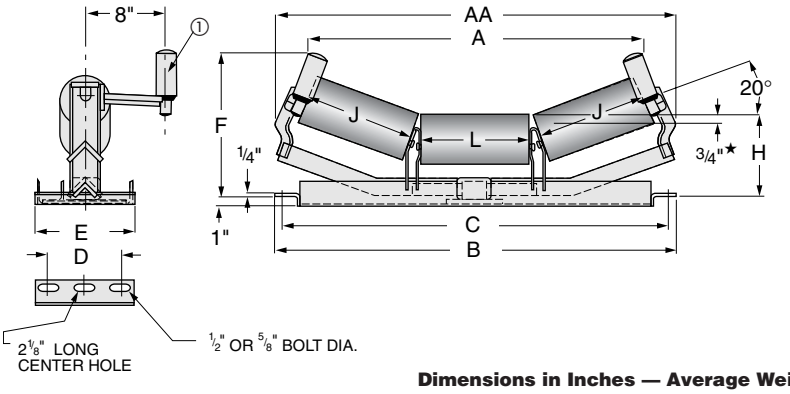
Note: Dimensions subject to change. Certified drawings are supplied with orders upon request.

SERIES B+

20° TROUGHING TRAINING IDLER — EQUAL LENGTH ROLLS

Positive Arm① Type — Belt Travel One Direction Only

BELT TRAVEL



REGREASABLE	FACTORY SEALED
B+4212 RG	B+4212 FS
4-Inch Steel Rolls	
B+5212 RG	B+5212 FS
5-Inch Steel Rolls	

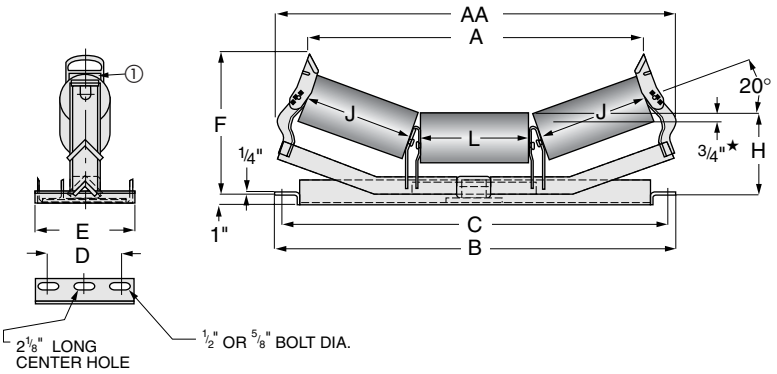
Dimensions in Inches — Average Weight in Pounds

Belt Width	A	AA	B	C	D			E	F	H		J	L	Idler Wgt.	
					Recom.	Minimum	Maximum			4" Roll	5" Roll			4" Roll	5" Roll
18	23 3/16	28 9/16	28 1/2	27	7 1/2	5 3/4	8 5/8	10	13 3/8	7 5/8	8 1/8	7	7	75	80
20	25 3/16	30 9/16	30 1/2	29	7 1/2	5 3/4	8 5/8	10	13 3/8	7 5/8	8 1/8	7	9	78	84
24	28 15/16	34 5/16	34 1/2	33	7 1/2	5 3/4	8 5/8	10	14	7 5/8	8 1/8	9	9	81	87
30	34 1 1/16	40 1/16	40 1/2	39	7 1/2	5 3/4	8 5/8	10	14 1 1/16	7 5/8	8 1/8	11	11	102	110
36	40 1/2	45 7/8	46 1/2	45	7 1/2	5 3/4	8 5/8	10	15 7/16	7 5/8	8 1/8	13	13	111	120
42	46 1/4	51 13/16	52 1/2	51	7 1/2	5 3/4	10 3/4	14 1/2	16 7/16	8	8 1/2	15	15	121	132
48	52	57 9/16	58 1/2	57	7 1/2	5 3/4	10 3/4	14 1/2	17 1/8	8	8 1/2	17	17	132	144

★Approximate distance to the top of the center roll of other idlers. ▫ Shaded sizes are most commonly used and are more readily available.

20° TROUGHING TRAINING IDLER — EQUAL LENGTH ROLLS

Actuating Shoe① Type — Belt Travel Either Direction



REGREASABLE	FACTORY SEALED
B+4210 RG	B+4210 FS
4-Inch Steel Rolls	
B+5210 RG	B+5210 FS
5-Inch Steel Rolls	

Dimensions in Inches — Average Weight in Pounds

Belt Width	A	AA	B	C	D			E	F	H		J	L	Idler Wgt.	
					Recom.	Minimum	Maximum			4" Roll	5" Roll			4" Roll	5" Roll
18	23 3/4	28 9/16	28 1/2	27	7 1/2	5 3/4	8 5/8	10	12 1/16	7 5/8	8 1/8	7	7	75	80
20	25 3/4	30 9/16	30 1/2	29	7 1/2	5 3/4	8 5/8	10	12 1/16	7 5/8	8 1/8	7	9	78	84
24	29 3/4	34 5/16	34 1/2	33	7 1/2	5 3/4	8 5/8	10	12 3/4	7 5/8	8 1/8	9	9	81	87
30	35 1/4	40 1/16	40 1/2	39	7 1/2	5 3/4	8 5/8	10	13 7/8	7 5/8	8 1/8	11	11	102	110
36	41	45 7/8	46 1/2	45	7 1/2	5 3/4	8 5/8	10	14 1/16	7 5/8	8 1/8	13	13	111	120
42	46 3/4	51 13/16	52 1/2	51	7 1/2	5 3/4	10 3/4	14 1/2	15 5/16	8	8 1/2	15	15	121	132
48	52 1/2	57 9/16	58 1/2	57	7 1/2	5 3/4	10 3/4	14 1/2	15 7/8	8	8 1/2	17	17	132	144

★Approximate distance to the top of the center roll of other idlers. ▫ Shaded sizes are most commonly used and are more readily available.

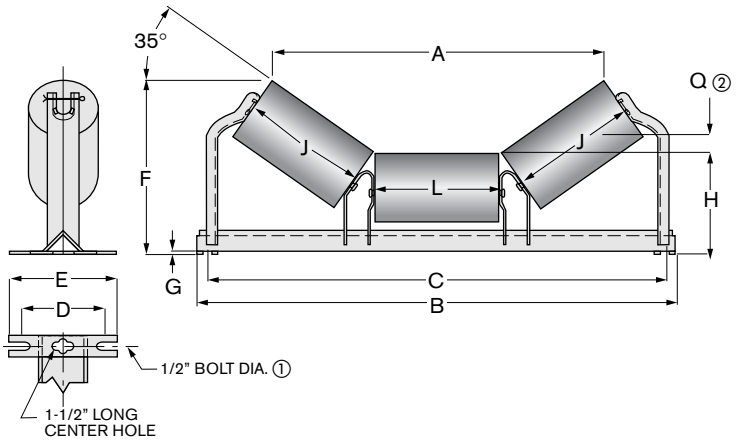
Note: Dimensions subject to change. Certified drawings are supplied with orders upon request.

REX IDLERS

SERIES B and B+

35° TROUGHING IDLER — EQUAL LENGTH ROLLS

REGREASABLE	FACTORY SEALED
B+4300 RG	B4300 FS B+4300 FS
4-Inch Steel Rolls	
B+5300 RG	B5300 FS B+5300 FS
5-Inch Steel Rolls	



Dimensions in Inches — Average Weight in Pounds

Belt Width	A		B	C	D		E	F		G	H		J	L	Q	Idler Wgt.	
	4" Roll	5" Roll			Recom.	Minimum		4" Roll	5" Roll		4" Roll	5" Roll				4" Roll	5" Roll
18	19½	18⅞	28½	27	6	5⅜	7¾	11	11 7/16	¼	6 13/16	7 5/16	7	7	1½	28	32
20	21½	20⅞	30½	29	6	5⅜	7¾	11	11 7/16	¼	6 13/16	7 5/16	7	9	1½	30	34
24	24¾	24 3/16	34½	33	6	5⅜	7¾	12⅛	12 9/16	¼	6 13/16	7 5/16	9	9	2⅛	34	38
30	30	29½	40½	39	6	5⅜	7¾	13¼	13¾	¼	6 13/16	7 5/16	11	11	2 11/16	39	44
36	35¼	34¾	47	45	7½	5¾	9¼	14⅞	15¼	5/16	7¼	7¾	13	13	3¼	48	54
42	40 9/16	40	53	51	7½	5¾	9¼	16	16 7/16	5/16	7¼	7¾	15	15	3 13/16	54	61
48	45⅞	45¼	59	57	7½	5¾	9¼	17⅛	17 9/16	5/16	7¼	7¾	17	17	4 7/16	59	67

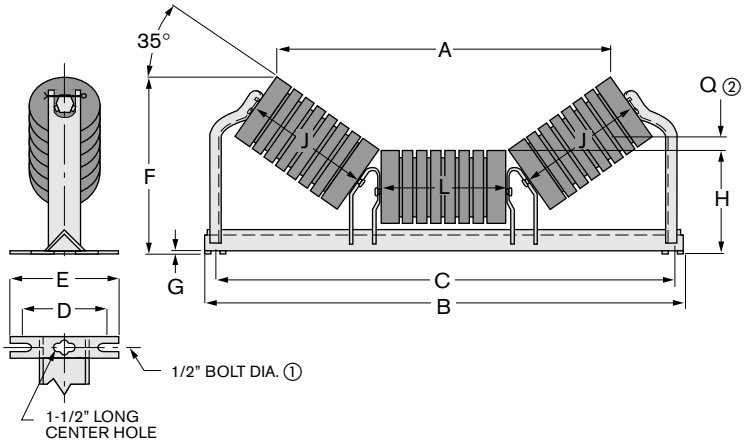
① Use washers with ½" bolts.

▫ Shaded sizes are most commonly used and are more readily available.

② Location of head pulley in relation to idler center roll.

35° TROUGHING IMPACT IDLER — EQUAL LENGTH ROLLS

REGREASABLE	FACTORY SEALED
B+5302 RG	B+5302 FS
5-Inch Rubber Rolls	



Dimensions in Inches — Average Weight in Pounds

Belt Width	A	B	C	D		E	F	G	H	J	L	Q	Idler Wgt.
				Recom.	Minimum								
18	18⅞	28½	27	6	5⅜	7¾	11 7/16	¼	7 5/16	7	7	1½	37
20	20⅞	30½	29	6	5⅜	7¾	11 7/16	¼	7 5/16	7	9	1½	40
24	24 3/16	34½	33	6	5⅜	7¾	12 9/16	¼	7 5/16	9	9	2⅛	45
30	29½	40½	39	6	5⅜	7¾	13¾	¼	7 5/16	11	11	2 11/16	58
36	34¾	47	45	7½	5¾	9¼	15¼	5/16	7¾	13	13	3¼	66
42	40	53	51	7½	5¾	9¼	16 7/16	5/16	7¾	15	15	3 13/16	75
48	45¼	59	57	7½	5¾	9¼	17 9/16	5/16	7¾	17	17	4 7/16	88

① Use washers with ½" bolts.

▫ Shaded sizes are most commonly used and are more readily available.

② Location of head pulley in relation to idler center roll.

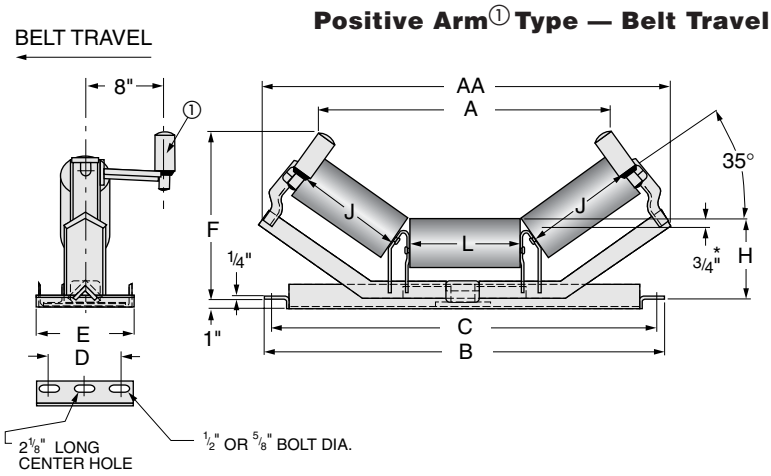
Note: Dimensions subject to change. Certified drawings are supplied with orders upon request.

REX IDLERS

SERIES B+

35° TROUGHING TRAINING IDLER — EQUAL LENGTH ROLLS

Positive Arm① Type — Belt Travel One Direction Only



REGREASABLE	FACTORY SEALED
B+4312 RG	B+4312 FS
4-Inch Steel Rolls	
B+5312 RG	B+5312 FS
5-Inch Steel Rolls	

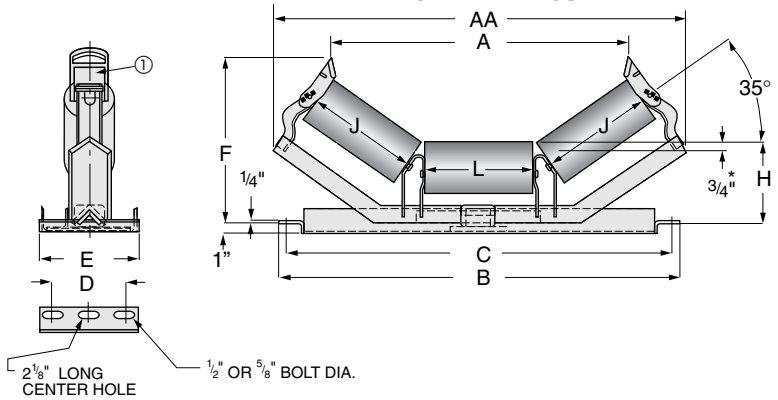
Dimensions in Inches — Average Weight in Pounds

Belt Width	A	AA	B	C	D			E	F	H		J	L	Idler Wgt.	
					Recom.	Minimum	Maximum			4" Roll	5" Roll			4" Roll	5" Roll
18	20	30 13/16	28 1/2	27	7 1/2	5 3/4	8 5/8	10	14 15/16	7 5/8	8 1/8	7	7	78	86
20	22	32 13/16	30 1/2	29	7 1/2	5 3/4	8 5/8	10	14 15/16	7 5/8	8 1/8	7	9	80	88
24	23 13/16	36 1/8	34 1/2	33	7 1/2	5 3/4	8 5/8	10	17 1/8	7 5/8	8 1/8	9	9	83	93
30	29 1/16	41 3/8	40 1/2	39	7 1/2	5 3/4	8 5/8	10	18 3/16	7 5/8	8 1/8	11	11	105	115
36	35 3/4	46 1/16	46 1/2	45	7 1/2	5 3/4	8 5/8	10	19 5/16	7 5/8	8 1/8	13	13	113	124
42	41 1/16	52 3/8	52 1/2	51	7 1/2	5 3/4	10 3/4	14 1/2	19 15/16	8	8 1/2	15	15	128	140
48	46 5/16	57 11/16	58 1/2	57	7 1/2	5 3/4	10 3/4	14 1/2	21 1/16	8	8 1/2	17	17	140	156

★Approximate distance to the top of the center roll of other idlers. ▫ Shaded sizes are most commonly used and are more readily available.

35° TROUGHING TRAINING IDLER — EQUAL LENGTH ROLLS

Actuating Shoe① Type — Belt Travel Either Direction



REGREASABLE	FACTORY SEALED
B+4310 RG	B+4310 FS
4-Inch Steel Rolls	
B+5310 RG	B+5310 FS
5-Inch Steel Rolls	

Dimensions in Inches — Average Weight in Pounds

Belt Width	A	AA	B	C	D			E	F	H		J	L	Idler Wgt.	
					Recom.	Minimum	Maximum			4" Roll	5" Roll			4" Roll	5" Roll
18	20 3/8	29 7/16	28 1/2	27	7 1/2	5 3/4	8 5/8	10	13 15/16	7 5/8	8 1/8	7	7	78	86
20	22 3/8	31 7/16	30 1/2	29	7 1/2	5 3/4	8 5/8	10	13 15/16	7 5/8	8 1/8	7	9	80	88
24	25 5/8	34 3/16	34 1/2	33	7 1/2	5 3/4	8 5/8	10	15 1/8	7 5/8	8 1/8	9	9	83	93
30	30 15/16	40 1/16	40 1/2	39	7 1/2	5 3/4	8 5/8	10	16 1/4	7 5/8	8 1/8	11	11	105	115
36	36 3/16	45 7/16	46 1/2	45	7 1/2	5 3/4	8 5/8	10	17 3/8	7 5/8	8 1/8	13	13	113	124
42	41 1/2	51 1/16	52 1/2	51	7 1/2	5 3/4	10 3/4	14 1/2	18 15/16	8	8 1/2	15	15	128	140
48	46 3/4	56 5/16	58 1/2	57	7 1/2	5 3/4	10 3/4	14 1/2	20 1/16	8	8 1/2	17	17	140	156

★Approximate distance to the top of the center roll of other idlers. ▫ Shaded sizes are most commonly used and are more readily available.

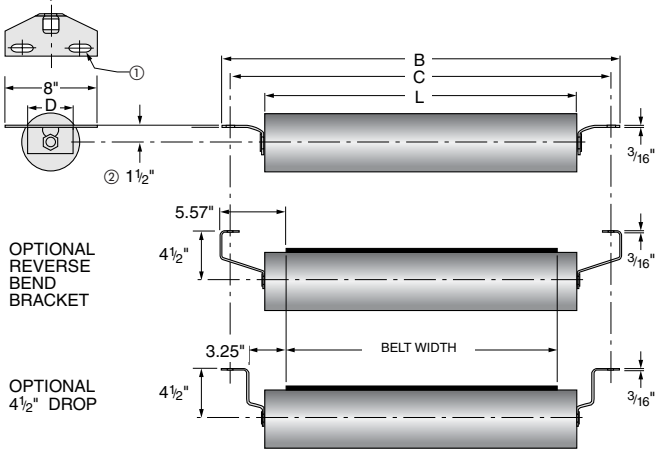
Note: Dimensions subject to change. Certified drawings are supplied with orders upon request.

REX IDLERS

SERIES B and B+
RETURN IDLER

B+ Rolls can be furnished in polyethylene, ceramic coated or urethane coated.

REGREASABLE	FACTORY SEALED
B+4040 RG	B4040 FS B+4040 FS
4-Inch Steel Roll	
B+5040 RG	B5040 FS B+5040 FS
5-Inch Steel Roll	



Dimensions in Inches — Average Weight in Pounds

Belt Width	B	C	D			L	Idler Wgt.	
			Recom.	Minimum	Maximum		4" Roll	5" Roll
18	28½	27	5	3¾	6¼	21	17	20
20	30½	29	5	3¾	6¼	23	18	21
24	34½	33	5	3¾	6¼	27	20	24
30	40½	39	5	3¾	6¼	33	24	29
36	46½	45	5	3¾	6¼	39	29	33
★42	52½	51	5	3¾	6¼	45	33	38
★48	58½	57	5	3¾	6¼	51	39	44

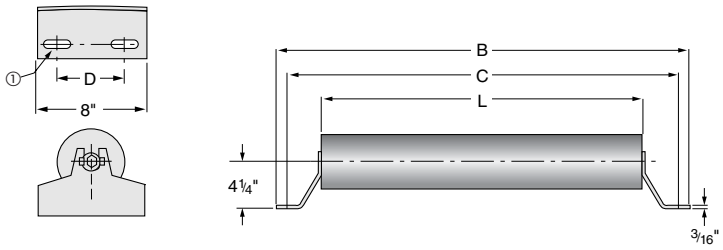
① ½" or ⅝" bolt dia.
② Also available with 11¾" and 16½" drop.

★ These idlers are Series B+.
▫ Shaded sizes are most commonly used and are more readily available.

FLAT IDLER

B+ Rolls can be furnished in polyethylene, ceramic coated or urethane coated.

REGREASABLE	FACTORY SEALED
B+4020 RG	B4020 FS B+4020 FS
4-Inch Steel Roll	
B+5020	B5020 FS B+5020 FS
5-Inch Steel Roll	



Dimensions in Inches — Average Weight in Pounds

Belt Width	B	C	D			L	Idler Wgt.	
			Recom.	Minimum	Maximum		4" Roll	5" Roll
18	29	27	5	3¾	6¼	21	18	22
20	31	29	5	3¾	6¼	23	20	23
24	35	33	5	3¾	6¼	27	22	26
30	41	39	5	3¾	6¼	33	26	30
36	47	45	5	3¾	6¼	39	31	35
★42	53	51	5	3¾	6¼	45	35	40
★48	59	57	5	3¾	6¼	51	41	46

① ½" or ⅜" bolt.

★ These idlers are Series B+.
▫ Shaded sizes are most commonly used and are more readily available.

Note: Dimensions subject to change. Certified drawings are supplied with orders upon request.

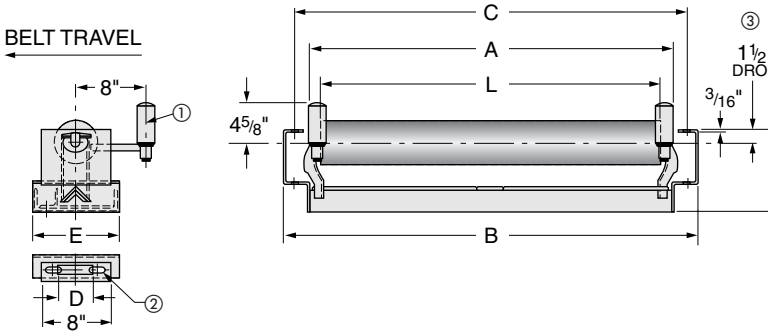
REX IDLERS

SERIES B+

RETURN TRAINING IDLER

Positive Arm① Type — Belt Travel One Direction Only

This trainer can be furnished with a rubber disc, ceramic disc, urethane disc or spiral roll.



REGREASABLE	FACTORY SEALED
B+4052 RG	B+4052 FS
4-Inch Steel Roll	
B+5052 RG	B+5052 FS
5-Inch Steel Roll	

Dimensions in Inches — Average Weight in Pounds

Belt Width	A	B	C	D			E	F	L	Idler Wgt.	
				Recom.	Minimum	Maximum				4" Roll	5" Roll
18	23⅝	29½	27	5	3¾	6¼	10	9½	21	83	90
20	25⅝	31½	29	5	3¾	6¼	10	9½	23	94	102
24	29⅝	35½	33	5	3¾	6¼	10	9½	27	100	110
30	35⅝	41½	39	5	3¾	6¼	10	9½	33	117	126
36	41⅝	47½	45	5	3¾	6¼	10	9½	39	137	148
42	47⅝	53½	51	5	3¾	6¼	14½	10	45	142	157
48	53⅝	59½	57	5	3¾	6¼	14½	10	51	153	167

① Positive Arm.

② ½" or ⅝" bolt dia.

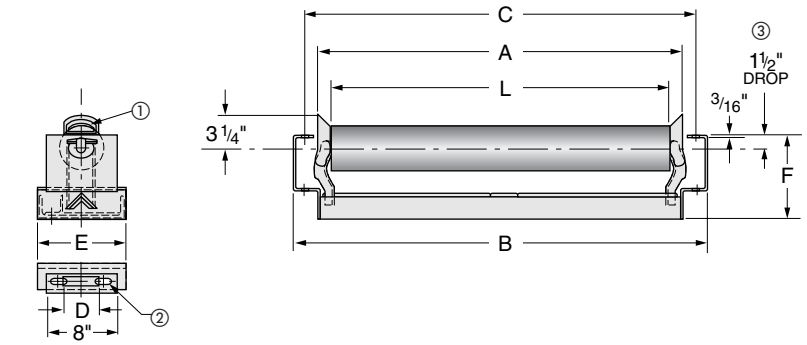
③ Also available with 4½" and 11¾" drop.

□ Shaded sizes are most commonly used and are more readily available.

RETURN TRAINING IDLER

Actuating Shoe① Type — Belt Travel Either Direction

This trainer can be furnished with a rubber disc, ceramic disc, urethane disc or spiral roll.



REGREASABLE	FACTORY SEALED
B+4051 RG	B+4051 FS
4-Inch Steel Roll	
B+5051 RG	B+5051 FS
5-Inch Steel Roll	

Dimensions in Inches — Average Weight in Pounds

Belt Width	A	B	C	D			E	F	L	Idler Wgt.	
				Recom.	Minimum	Maximum				4" Roll	5" Roll
18	24⅛	29½	27	5	3¾	6¼	10	9½	21	81	88
20	26⅛	31½	29	5	3¾	6¼	10	9½	23	93	100
24	30⅛	35½	33	5	3¾	6¼	10	9½	27	96	112
30	36⅛	41½	39	5	3¾	6¼	10	9½	33	115	125
36	42⅛	47½	45	5	3¾	6¼	10	9½	39	135	146
42	48⅛	53½	51	5	3¾	6¼	14½	10	45	140	152
48	54⅛	59½	57	5	3¾	6¼	14½	10	51	151	165

① Actuating Shoe.

② ½" or ⅝" bolt dia.

③ Also available with 4½" and 11¾" drop.

□ Shaded sizes are most commonly used and are more readily available.

Note: Dimensions subject to change. Certified drawings are supplied with orders upon request.

REX IDLERS

SERIES B+

FLAT TRAINING IDLER

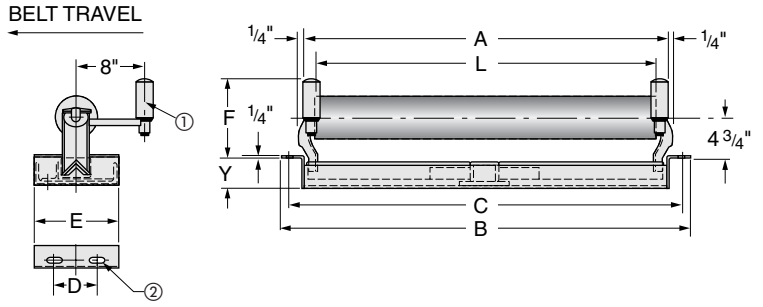
Positive Arm① Type — Belt Travel One Direction Only

This trainer can be furnished with a rubber disc, ceramic disc, urethane disc or spiral roll.

REGREASABLE **FACTORY SEALED**

B+4031 RG **B+4031 FS**
4-Inch Steel Roll

B+5031 RG **B+5031 FS**
5-Inch Steel Roll



Dimensions in Inches — Average Weight in Pounds

Belt Width	A	B	C	D			E	F	L	Y	Idler Wgt.	
				Recom.	Min.	Max.					4" Roll	5" Roll
18	23⅝	28¾	27	5	3¾	6¼	10	9⅜	21	3⅛	78	85
20	25⅝	30¾	29	5	3¾	6¼	10	9⅜	23	3⅛	89	97
24	29⅝	34¾	33	5	3¾	6¼	10	9⅜	27	3⅛	95	105
30	35⅝	40¾	39	5	3¾	6¼	10	9⅜	33	3⅛	112	121
36	41⅝	46¾	45	5	3¾	6¼	10	9⅜	39	3 3/16	132	143
42	47⅝	52¾	51	5	3¾	6¼	14½	9⅜	45	3 11/16	137	152
48	53⅝	58¾	57	5	3¾	6¼	14½	9⅜	51	3 11/16	148	162

① For belt travel in both directions replace positive arms with actuating shoes. ▫ Shaded sizes are most commonly used and are more readily available.
② ½" or ⅝" bolt dia.

RETURN TRAINING IDLER

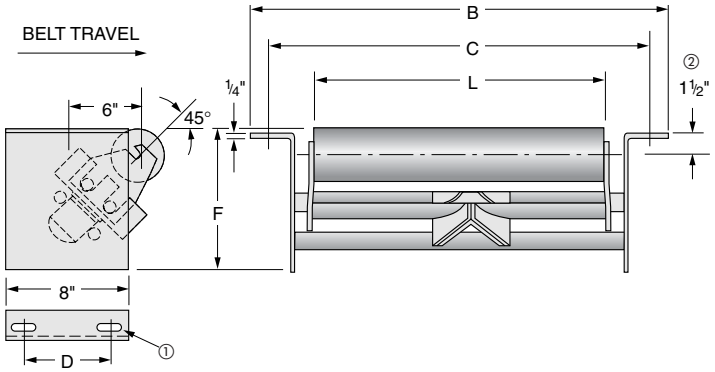
Inclined Pivot Type — Belt Travel One Direction Only

This trainer can be furnished with a rubber disc, ceramic disc, urethane disc or spiral roll.

REGREASABLE **FACTORY SEALED**

B+4050 RG **B+4050 FS**
4-Inch Steel Roll

B+5050 RG **B+5050 FS**
5-Inch Steel Roll



Dimensions in Inches — Average Weight in Pounds

Belt Width	B	C	D			F		L	Idler Wgt.	
			Recom.	Minimum	Maximum	4" Roll	5" Roll		4" Roll	5" Roll
18	29	27	5	3¾	6¼	11 11/16	12 3/16	21	74	81
20	31	29	5	3¾	6¼	11 11/16	12 3/16	23	77	85
24	35	33	5	3¾	6¼	11 11/16	12 3/16	27	85	94
30	41	39	5	3¾	6¼	11 11/16	12 3/16	33	98	108
36	47	45	5	3¾	6¼	11 11/16	12 3/16	39	108	119
42	53	51	5	3¾	6¼	11 11/16	12 3/16	45	120	133
48	59	57	5	3¾	6¼	11 11/16	12 3/16	51	132	146

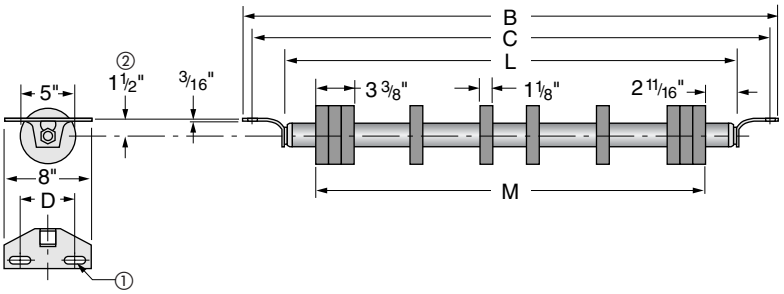
① ½" or ⅝" bolt dia. ▫ Shaded sizes are most commonly used and are more readily available.
② Also available with a 4½" or 11¾" drop.

Note: Dimensions subject to change. Certified drawings are supplied with orders upon request.

REX IDLERS

SERIES B+
DISC RETURN IDLER

Rex Disc Return Idlers minimize belt misalignment which can cause damage to the belt, resulting from material build-up on the return idler rolls. Available with rubber, ceramic or urethane discs.



REGREASABLE	FACTORY SEALED
B+5043 RG	B+5043 FS

5-Inch Disc Roll

Dimensions in Inches — Average Weight in Pounds

Belt Width	B	C	D			L	M	No. of Discs	Idler Wgt.
			Recom.	Minimum	Maximum				
18	28½	27	5	3¾	6¼	21	15¾	7	17
20	30½	29	5	3¾	6¼	23	17¾	7	19
24	34½	33	5	3¾	6¼	27	21¾	8	21
30	40½	39	5	3¾	6¼	33	27¾	9	24
36	46½	45	5	3¾	6¼	39	33¾	10	27
42	52½	51	5	3¾	6¼	45	39¾	11	31
48	58½	57	5	3¾	6¼	51	45¾	12	36

① ½" or ⅝" bolt dia.

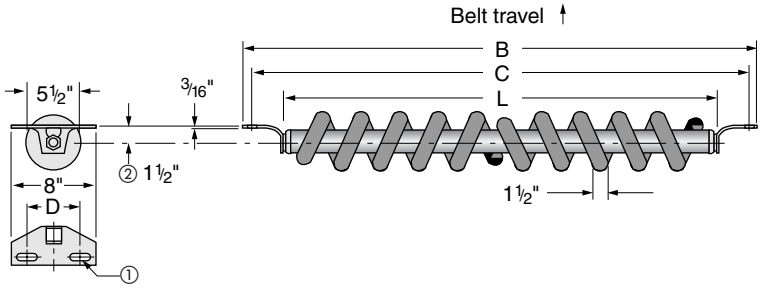
② Also available with a 4½", 11¾", 16½" drop.
For reverse bend brackets, see page 18.

□ Shaded sizes are most commonly used and are more readily available.

SERIES C
SPIRAL RETURN IDLER

Belt Travel One Direction

Rex Spiral Return Idlers **minimize belt fleet and damage on the return belt which would otherwise result from material build-up**. The correct direction of rotation is important and is clearly marked on each idler. The "V" formed by right-hand and left-hand **spirals should point in the direction of rotation**.



REGREASABLE	FACTORY SEALED
C6042 RG	C6042 FS

5½-Inch Rubber Spiral Roll

Dimensions in Inches — Average Weight in Pounds

Belt Width	B	C	D			L	Idler Wgt.
			Recom.	Minimum	Maximum		
18	28½	27	5	3¾	6¼	21	19
20	30½	29	5	3¾	6¼	23	22
24	34½	33	5	3¾	6¼	27	24
30	40½	39	5	3¾	6¼	33	28
36	46½	45	5	3¾	6¼	39	33
42	52½	51	5	3¾	6¼	45	39
48	58½	57	5	3¾	6¼	51	44

① ½" or ⅝" bolt dia.

② Also available with a 4½", 11¾", 16½" drop.
For reverse bend brackets, see page 18.

□ Shaded sizes are most commonly used and are more readily available.

Note: Dimensions subject to change. Certified drawings are supplied with orders upon request.

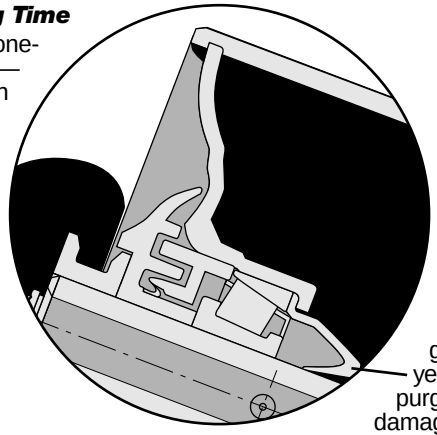
Series C and D — CEMA C and D
20°, 35° and 45° Trough — 5" and 6" Roll Diameter
4" Roll Diameter also available — Made to Order

Regreasable or Factory Sealed Bearings

The complete line of Rex CEMA Series C and D Idlers, with off-the-shelf availability . . .

Reduced Regreasing Time

Easy, convenient, patented one-point greasing — from either side — provides positive through lubrication of all six bearings… saves time, cuts maintenance costs.

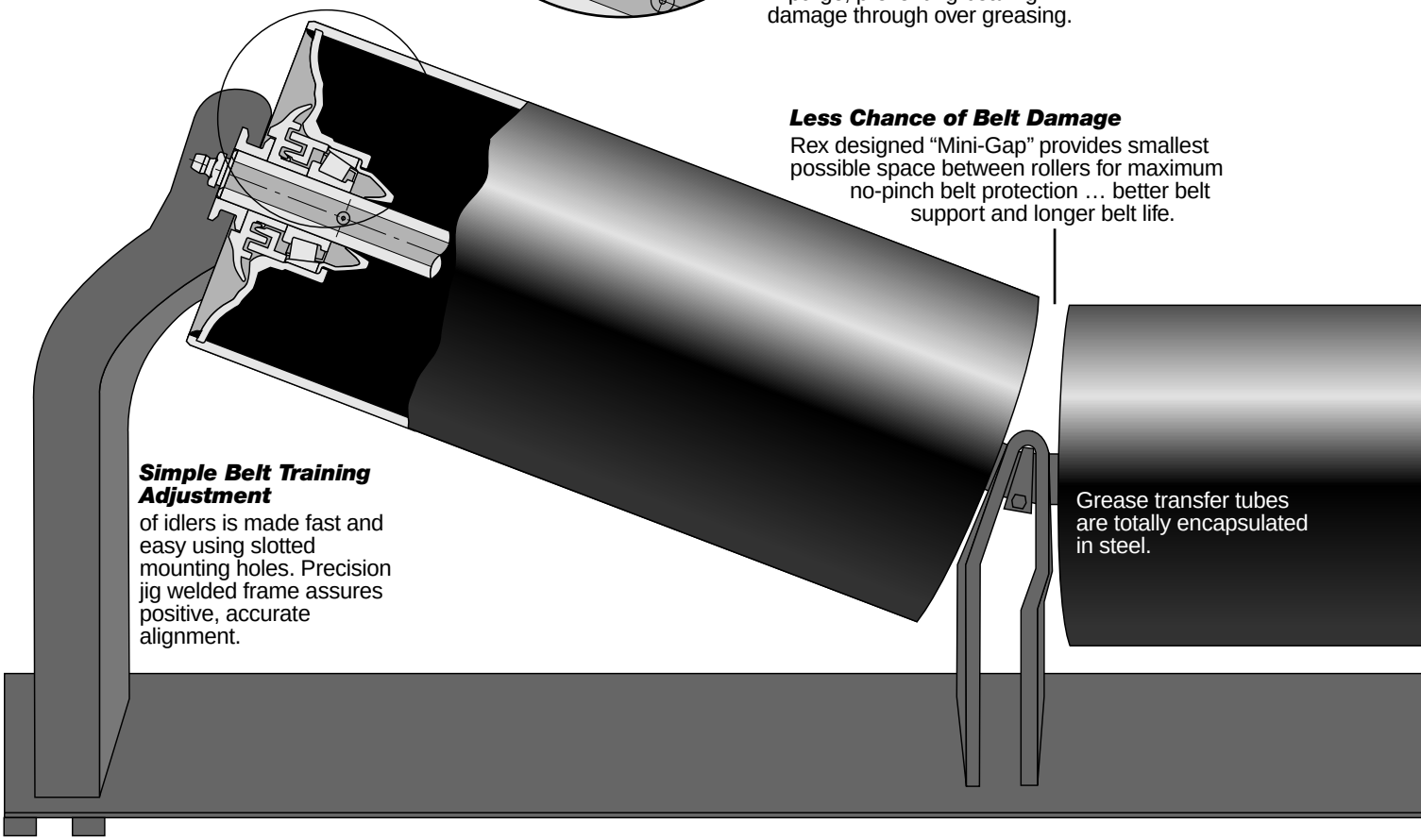


Controlled Greasing Extends Bearing Life

Rear grease seal keeps grease in bearing cavity only, yet allows excess grease to purge, preventing bearing damage through over greasing.

Less Chance of Belt Damage

Rex designed “Mini-Gap” provides smallest possible space between rollers for maximum no-pinch belt protection … better belt support and longer belt life.



Simple Belt Training Adjustment

of idlers is made fast and easy using slotted mounting holes. Precision jig welded frame assures positive, accurate alignment.

Grease transfer tubes are totally encapsulated in steel.

Regreasable Idlers

Interchangeability

… built to fit existing conveyor frame without cutting or fitting. Conforms to CEMA standards.

Better Protection Against Abrasives and Moisture

Rex offers a special combination labyrinth with wiping seal and protective outer shield for your operating environment. This seal has *five hard-to-get-through* passages filled with grease to block contaminants from the roller bearings. The outer and inner seals are close tolerance injection molded nonmetallic. The labyrinth/shield seal is particularly excellent for long overland horizontal conveyors, because of its low friction torque or for applications where water is present or when frequent washdowns are required.

Series C and D — CEMA C and D
20°, 35° and 45° Trough — 5" and 6" Roll Diameter
4" Roll Diameter also available — Made to Order

Regreasable or Factory Sealed

offer low initial and maintenance costs, extra dependability for moderate to heavy duty applications.

Less Vibration
Uniform thick shells are welded to precision-drawn end discs to form a rugged, integral roll assembly. Ends are simultaneously counter-bored to provide true concentricity, accurate rotation for smooth operation.

Protected Weld
Weld bead is located under roll shell to protect it from belt contact and premature wear.

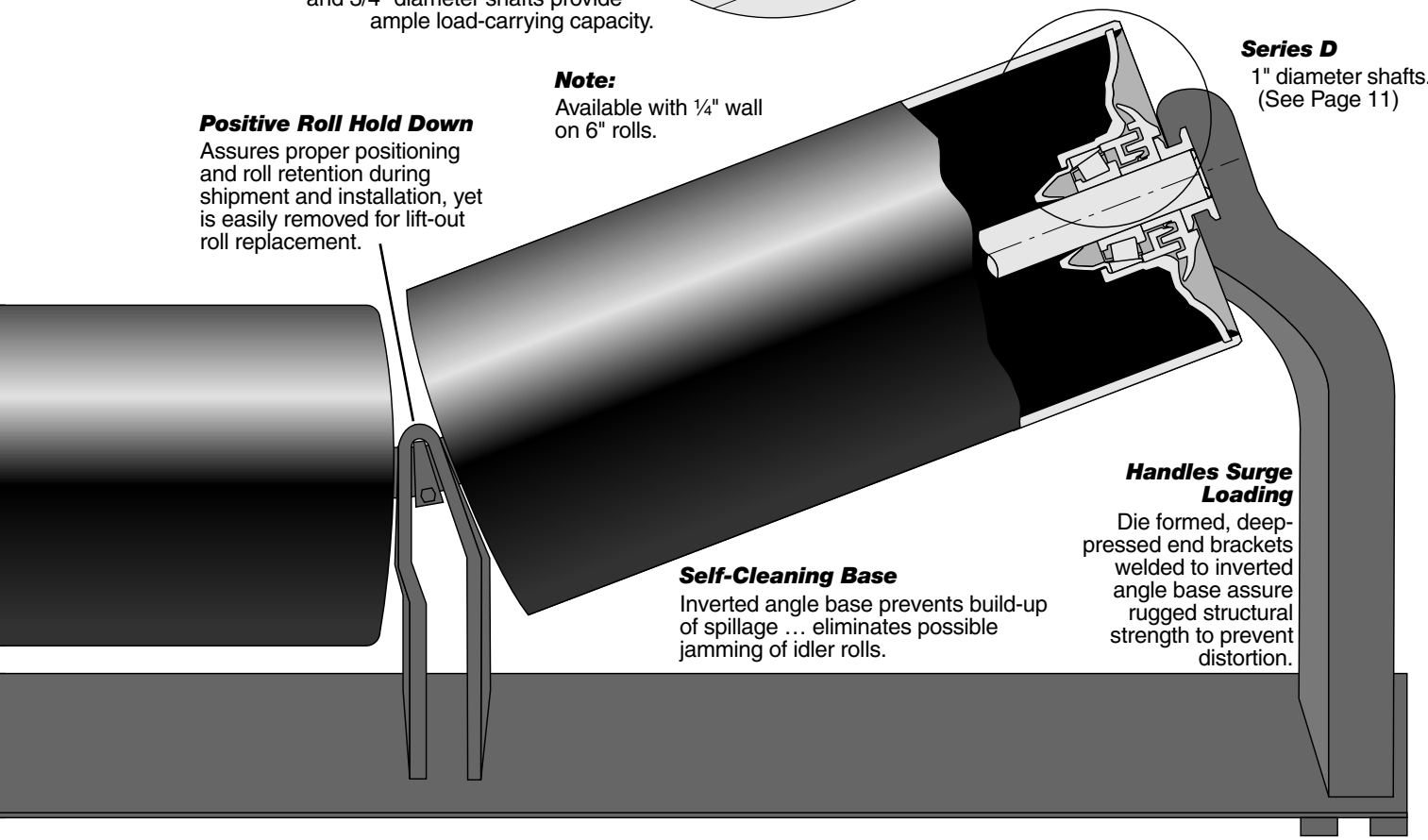
Factory-Sealed Idlers
eliminate the need for relubrication … solid shafts for more load carrying capacity.

Longer Idler Life — Series C
Rugged 3/4" tapered roller bearings and 3/4" diameter shafts provide ample load-carrying capacity.

Series D
1" diameter shafts. (See Page 11)

Note:
Available with ¼" wall on 6" rolls.

Positive Roll Hold Down
Assures proper positioning and roll retention during shipment and installation, yet is easily removed for lift-out roll replacement.



Handles Surge Loading
Die formed, deep-pressed end brackets welded to inverted angle base assure rugged structural strength to prevent distortion.

Self-Cleaning Base
Inverted angle base prevents build-up of spillage … eliminates possible jamming of idler rolls.

	Roll Diameter
Polyethylene*	5, 6"
Ceramic Coated	4, 5, 6"
Urethane Coated	4, 5, 6"
Rubber Coated	4, 5, 6"

*See pages 44-46.

Factory-Sealed Idlers

Better Protection Against Abrasives

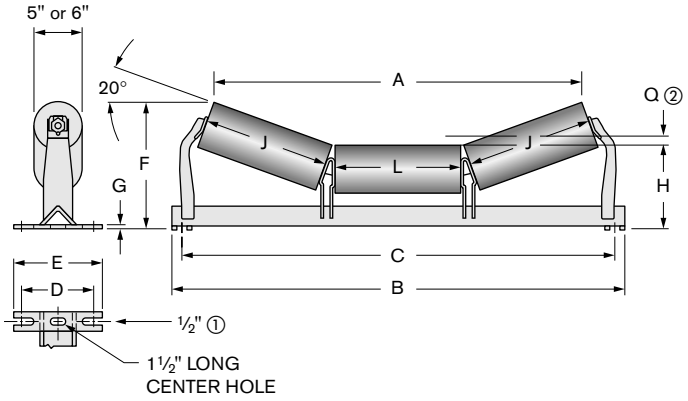
Rex offers a special combination labyrinth with wiping seal and protective outer shield for your operating environment. This seal has five hard-to-get-through passages filled with grease to block contaminants from the roller bearings. The outer and inner seals are close tolerance injection molded nonmetallic. This product will provide excellent service in most environments and where minimum maintenance can be provided. Solid shafts are standard.

REX IDLERS

SERIES C and D

20° TROUGHING IDLER — EQUAL LENGTH ROLLS

REGREASABLE	FACTORY SEALED
C5200 RG	C5200 FS
D5200 RG	D5200 FS
5-Inch Steel Rolls	
C6200 RG	C6200 FS
D6200 RG	D6200 FS
6-Inch Steel Rolls ③	



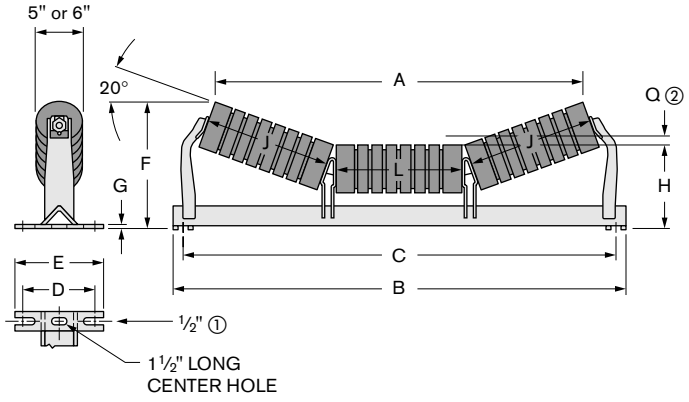
Dimensions in Inches — Average Weight in Pounds

Belt Width	A		B	C	D		E	F		G	H		J	L	Q	Idler Wgt. (Series C)	
	5" Roll	6" Roll			Recom.	Min.		5" Roll	6" Roll		5" Roll	6" Roll				5"	6"
18	20 13/16	20 1/2	29	27	7 1/2	5 3/4	9 1/4	11	11 1/2	5/16	8 9/16	9 1/16	7	7	1 5/16	41	48
20	22 13/16	22 1/2	31	29	7 1/2	5 3/4	9 1/4	11	11 1/2	5/16	8 9/16	9 1/16	7	9	1 5/16	45	53
24	26 1/2	26 3/16	35	33	7 1/2	5 3/4	9 1/4	11 11/16	12 3/16	5/16	8 9/16	9 1/16	9	9	1 1/4	49	58
30	32 5/16	31 15/16	41	39	7 1/2	5 3/4	9 1/4	12 3/8	12 7/8	5/16	8 9/16	9 1/16	11	11	1 9/16	57	64
36	38 1/16	37 11/16	47	45	7 1/2	5 3/4	9 1/4	13 1/8	13 5/8	5/16	8 1/16	9 3/16	13	13	1 15/16	65	73
42	43 13/16	43 7/16	53	51	7 1/2	5 3/4	9 1/4	14 1/8	14 9/16	5/16	9	9 1/2	15	15	2 1/4	72	82
48	49 9/16	49 9/16	59	57	7 1/2	5 3/4	9 1/4	14 13/16	15 1/4	5/16	9	9 1/2	17	17	2 5/8	83	92
54	55 5/16	55	65 1/2	63	9	6 3/8	11 1/2	15 7/8	16 5/16	3/8	9 1/4	9 3/4	19	19	3	94	105
60	61 1/16	60 1/4	71 1/2	69	9	6 3/8	11 1/2	16 9/16	17	3/8	9 1/4	9 3/4	21	21	3 1/4	104	116
72	72 5/8	72 5/8	83 1/2	81	9	7 3/4	11 1/2	18 5/16	18 3/4	3/8	9 11/16	10 3/16	25	25	3 7/8	127	141

① Use washers on ½-inch bolts.
■ Shaded sizes are most commonly used and are more readily available.
② Location of head pulley in relation to idler center roll.
③ Available in ¼" roll wall thickness.

20° TROUGHING IMPACT IDLER — EQUAL LENGTH ROLLS

REGREASABLE	FACTORY SEALED
C5202 RG	C5202 FS
D5202 RG	D5202 FS
5-Inch Rolls	
C6202 RG	C6202 FS
D6202 RG	D6202 FS
6-Inch Rolls	



Dimensions in Inches — Average Weight in Pounds

Belt Width	A		B	C	D		E	F		G	H		J	L	Q	Idler Wgt. (Series C)	
	5" Roll	6" Roll			Recom.	Min.		5" Roll	6" Roll		5" Roll	6" Roll				5"	6"
18	20 13/16	20 1/2	29	27	7 1/2	5 3/4	9 1/4	11	11 1/2	5/16	8 9/16	9 1/16	7	7	1 5/16	43	50
20	22 13/16	22 1/2	31	29	7 1/2	5 3/4	9 1/4	11	11 1/2	5/16	8 9/16	9 1/16	7	9	1 5/16	46	54
24	26 1/2	26 3/16	35	33	7 1/2	5 3/4	9 1/4	11 11/16	12 3/16	5/16	8 9/16	9 1/16	9	9	1 1/4	50	60
30	32 5/16	31 15/16	41	39	7 1/2	5 3/4	9 1/4	12 3/8	12 7/8	5/16	8 9/16	9 1/16	11	11	1 9/16	60	68
36	38 1/16	37 11/16	47	45	7 1/2	5 3/4	9 1/4	13 1/8	13 5/8	5/16	8 11/16	9 3/16	13	13	1 15/16	69	76
42	43 13/16	43 7/16	53	51	7 1/2	5 3/4	9 1/4	14 1/8	14 9/16	5/16	9	9 1/2	15	15	2 1/4	76	85
48	49 9/16	49 5/16	59	57	7 1/2	5 3/4	9 1/4	14 13/16	15 1/4	5/16	9	9 1/2	17	17	2 5/8	86	97
54	55 5/16	55	65 1/2	63	9	6 3/8	11 1/2	15 7/8	16 5/16	3/8	9 1/4	9 3/4	19	19	3	98	109
60	61 1/16	60 1/4	71 1/2	69	9	6 3/8	11 1/2	16 9/16	17	3/8	9 1/4	9 3/4	21	21	3 1/4	109	121
72	72 5/8	72 5/16	83 1/2	81	9	7 3/4	11 1/2	18 5/16	18 3/4	3/8	9 11/16	10 3/16	25	25	3 7/8	133	145

① Use washers on ½-inch bolts.
■ Shaded sizes are most commonly used and are more readily available.
② Location of head pulley in relation to idler center roll.

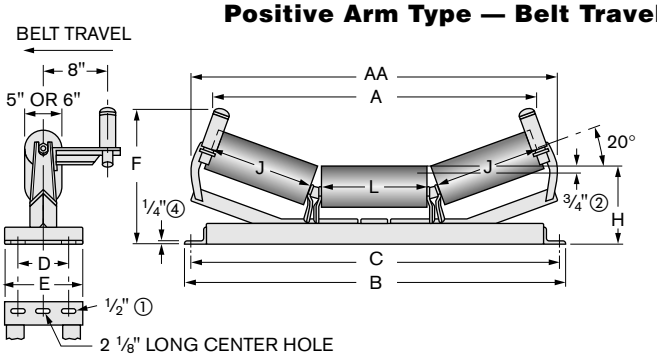
Note: Dimensions subject to change. Certified dimensions of ordered material furnished on request.

REX IDLERS

SERIES C and D

20° TROUGHING IDLER — EQUAL LENGTH ROLLS

Positive Arm Type — Belt Travel One Direction Only



REGREASABLE	FACTORY SEALED
C5212 RG	C5212 FS
D5212 RG	D5212 FS
5-Inch Steel Rolls	
C6212 RG	C6212 FS
D6212 RG	D6212 FS
6-Inch Steel Rolls ③	

Dimensions in Inches — Average Weight in Pounds

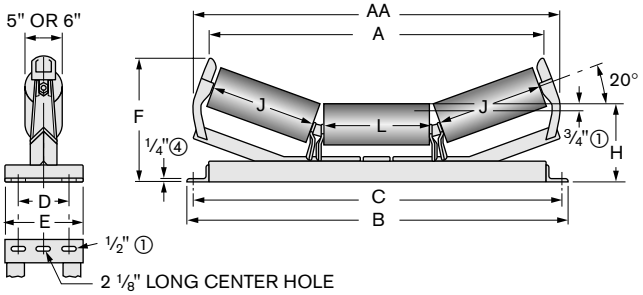
Belt Width	A	AA	B	C	D			E	F	H		J	L	Idler Wgt. (Series C)	
					Recom.	Min.	Max			5" Roll	6" Roll			5"	6"
18	23 3/16	28 9/16	29	27	7½	5¾	8⅝	10	14 3/16	9¼	9¾	7	7	102	114
20	25 3/16	30 9/16	31	29	7½	5¾	8⅝	10	14 3/16	9¼	9¾	7	9	107	119
24	28 15/16	34 5/16	35	33	7½	5¾	8⅝	10	14 7/16	9¼	9¾	9	9	118	130
30	34 1/16	40 1/16	41	39	7½	5¾	8⅝	10	15 9/16	9¼	9¾	11	11	132	145
36	40½	45 7/16	47	45	7½	5¾	8⅝	10	16 5/16	9 5/16	9 13/16	13	13	146	159
42	46 1/16	51 13/16	53	51	7½	5¾	10¾	14½	17½	9 13/16	10 5/16	15	15	163	175
48	52	57 9/16	59	57	7½	5¾	10¾	14½	18 3/16	9 13/16	10 5/16	17	17	178	191
54	57¼	63 9/16	65	63	9	5¾	10¾	14½	19¼	10 3/16	10 11/16	19	19	192	206
60	63½	69 5/16	71	69	9	5¾	10¾	14½	19 15/16	10 3/16	10 11/16	21	21	208	221
72	75	80¼	83	81	9	5¾	10¾	16½	21 5/16	10 3/16	10 11/16	25	25	236	253

① Use washers on ½-inch bolts.
② Approximate distance to the top of the center roll of other idlers.
③ Available in ¼" roll wall thickness.
④ .31"–.72" belt width

■ Shaded sizes are most commonly used and are more readily available.

20° TROUGHING IMPACT IDLER — EQUAL LENGTH ROLLS

Actuating Shoe Type — Belt Travel Either Direction



REGREASABLE	FACTORY SEALED
C5210 RG	C5210 FS
D5210 RG	D5210 FS
5-Inch Steel Rolls	
C6210 RG	C6210 FS
D6210 RG	D6210 FS
6-Inch Steel Rolls ③	

Dimensions in Inches — Average Weight in Pounds

Belt Width	A		AA	B	C	D			E	F		H		J	L	Idler Wgt. (Series C)	
	5" Dia.	6" Dia.				Recom.	Min.	Max.		5" Dia.	6" Dia.	5" Dia.	6" Dia.			5"	6"
18	23¾	23⅛	28 9/16	29	27	7½	5¾	8⅝	10	13 3/16	14¼	9¼	9¾	7	7	100	112
20	25¾	25⅛	30 9/16	31	29	7½	5¾	8⅝	10	13 3/16	14¼	9¼	9¾	7	9	105	117
24	29½	28⅞	34 5/16	35	33	7½	5¾	8⅝	10	13⅞	14 15/16	9¼	9¾	9	9	116	128
30	35¼	34 11/16	40 1/16	41	39	7½	5¾	8⅝	10	14 9/16	15⅛	9¼	9¾	11	11	130	143
36	41	41 7/16	45⅞	47	45	7½	5¾	8⅝	10	15¼	16⅜	9 5/16	9 13/16	13	13	144	156
42	46¾	46 3/16	51 13/16	53	51	7½	5¾	10¾	14½	16½	17 9/16	9 13/16	10 5/16	15	15	160	172
48	52¼	51 15/16	57 9/16	59	57	7½	5¾	10¾	14½	17 3/16	17¾	9 13/16	10 5/16	17	17	175	188
54	58¼	57 11/16	63 9/16	65	63	9	5¾	10¾	14½	18 3/16	19 5/16	10 3/16	10 11/16	19	19	190	203
60	64	63 7/16	69 5/16	71	69	9	5¾	10¾	14½	18⅞	20	10 3/16	10 11/16	21	21	206	218
72	75 5/16	75	80¼	83	81	9	5¾	10¾	16½	20¼	21 5/16	10 3/16	10 11/16	25	25	234	250

① Use washers on ½-inch bolts.
② Approximate distance to the top of the center roll of other idlers.
③ Available in ¼" roll wall thickness.
④ .31"–.72" belt width

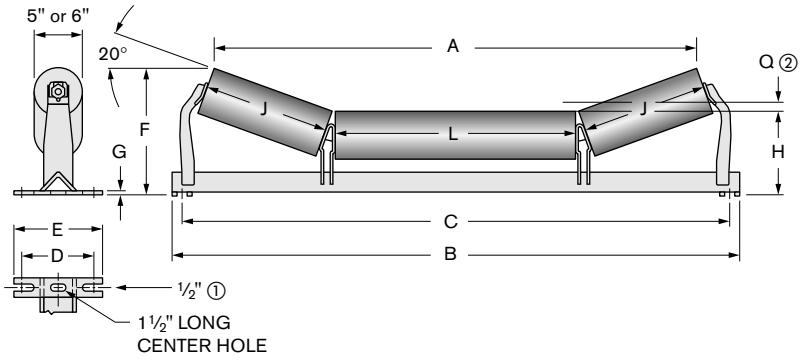
■ Shaded sizes are most commonly used and are more readily available.

Note: Dimensions subject to change. Certified dimensions of ordered material furnished on request.

REX IDLERS

SERIES C and D
MADE TO ORDER ONLY
20° TROUGHING IDLER — UNEQUAL LENGTH ROLLS

REGREASABLE	FACTORY SEALED
C5201 RG	C5201 FS
D5201 RG	D5201 FS
5-Inch Steel Rolls	
C6201 RG	C6201 FS
D6201 RG	D6201 FS
6-Inch Steel Rolls ③	



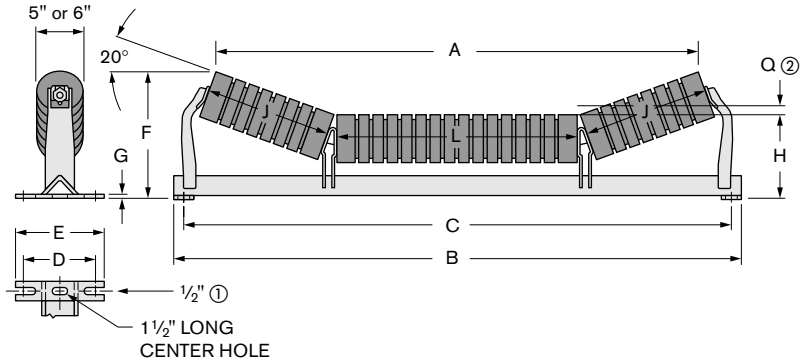
Dimensions in Inches — Average Weight in Pounds

Belt Width	A		B	C	D		E	F		G	H		J	L	Q	Idler Wgt. (Series C)	
	6" Roll	6" Roll			Recom.	Min.		5" Roll	6" Roll		5" Roll	6" Roll				5"	6"
24	28 15/16	28½	35½	33	7½	5¾	9¼	11	11½	5/16	8 9/16	9 1/16	7	15	13/16	49	58
30	34 15/16	34½	41½	39	7½	5¾	9¼	11	11½	5/16	8 9/16	9 1/16	7	21	13/16	57	64
36	40 15/16	40½	47½	45	7½	5¾	9¼	11 1/16	11 9/16	5/16	8 11/16	9 3/16	7	27	13/16	65	73
42	46 15/16	46½	53½	51	7½	5¾	9¼	11 3/8	11 7/8	5/16	9	9½	7	33	13/16	72	82
48	52 15/16	52½	59½	57	7½	5¾	9¼	11 3/8	11 7/8	5/16	9	9½	7	39	13/16	83	92
54	58 15/16	58½	65½	63	9	6⅜	11½	11¾	12⅛	⅜	9¼	9¾	7	45	13/16	94	105
60	64 15/16	64½	71½	69	9	6⅜	11½	11¾	12⅛	⅜	9¼	9¾	7	51	13/16	104	116
72	76 15/16	76½	83½	81	9	7¾	11½	11¾	12⅛	⅜	9¼	9¾	9	57	13/16	123	138

① Use washers on ½-inch bolts. Contact Rexnord for load rating.
② Location of head pulley in relation to idler center roll.
③ Available in ¼" roll wall thickness.

20° TROUGHING IMPACT IDLER — UNEQUAL LENGTH ROLLS
MADE TO ORDER ONLY

REGREASABLE	FACTORY SEALED
C5203 RG	C5203 FS
D5203 RG	D5203 FS
5-Inch Rubber Rolls	
C6203 RG	C6203 FS
D6203 RG	D6203 FS
6-Inch Rubber Rolls	



Dimensions in Inches — Average Weight in Pounds

Belt Width	A		B	C	D		E	F		G	H		J	L	Q	Idler Wgt. (Series C)	
	5" Roll	6" Roll			Recom.	Min.		5" Roll	6" Roll		5" Roll	6" Roll				5"	6"
24	28 15/16	28½	35½	33	7½	5¾	9¼	11	11½	5/16	8 9/16	9 1/16	7	15	13/16	50	60
30	34 15/16	34½	41½	39	7½	5¾	9¼	11	11½	5/16	8 9/16	9 1/16	7	21	13/16	60	68
36	40 15/16	40½	47½	45	7½	5¾	9¼	11 1/16	11 9/16	5/16	8 11/16	9 3/16	7	27	13/16	69	76
42	46 15/16	46½	53½	51	7½	5¾	9¼	11 3/8	11 7/8	5/16	9	9½	7	33	13/16	76	85
48	52 15/16	52½	59½	57	7½	5¾	9¼	11 3/8	11 7/8	5/16	9	9½	7	39	13/16	86	97
54	58 15/16	58½	65½	63	9	6⅜	11½	11¾	12⅛	⅜	9¼	9¾	7	45	13/16	98	109
60	64 15/16	64½	71½	69	9	6⅜	11½	11¾	12⅛	⅜	9¼	9¾	7	51	13/16	109	121
72	76 15/16	76½	83½	81	9	7¾	11½	11¾	12⅛	⅜	9¼	9¾	9	57	13/16	130	142

① Use washers on ½-inch bolts. Contact Rexnord for load rating.
② Location of head pulley in relation to idler center roll.

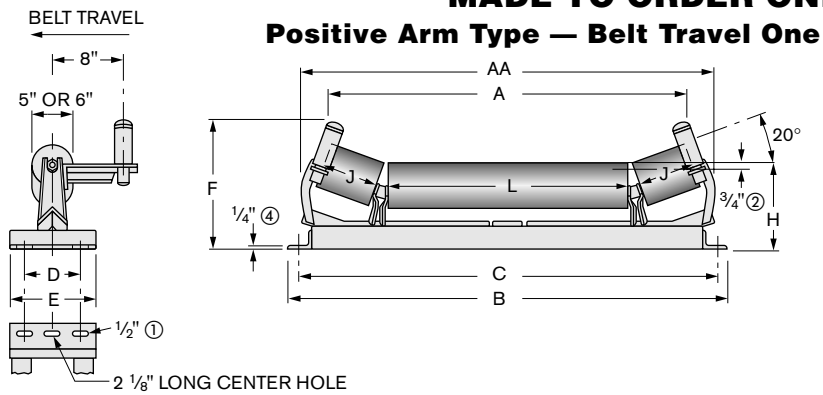
Note: Dimensions subject to change. Certified dimensions of ordered material furnished on request.

REX IDLERS

SERIES C and D

20° TROUGHING IDLER — UNEQUAL LENGTH ROLLS
MADE TO ORDER ONLY

Positive Arm Type — Belt Travel One Direction Only



REGREASABLE	FACTORY SEALED
C5213 RG	C5213 FS
D5213 RG	D5213 FS
5-Inch Steel Rolls	
C6213 RG	C6213 FS
D6213 RG	D6213 FS
6-Inch Steel Rolls ③	

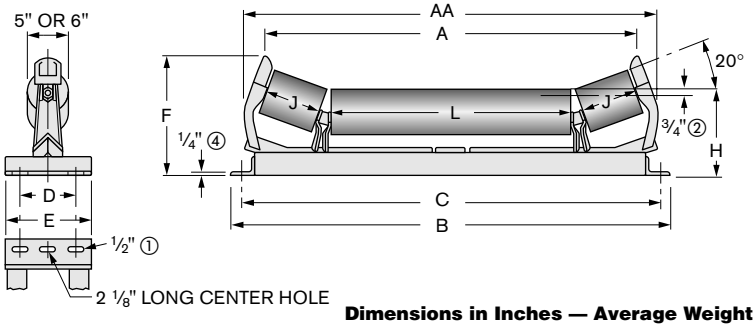
Dimensions in Inches — Average Weight in Pounds

Belt Width	A	AA	B	C	D			E	F	H		J	L	Idler Wgt. (Series C)	
					Recom.	Min.	Max			5" Dia.	6" Dia.			5"	6"
24	29 3/16	34 9/16	35	33	7½	5¾	8⅝	10	14 3/16	9¼	9¾	7	15	118	132
30	35 3/16	40 9/16	41	39	7½	5¾	8⅝	10	14 3/16	9¼	9¾	7	21	132	145
36	41 3/16	46 9/16	47	45	7½	5¾	8⅝	10	14¼	9 5/16	9 13/16	7	27	146	159
42	47 3/16	52 9/16	53	51	7½	5¾	10¾	14½	14¾	9 13/16	10 5/16	7	33	163	175
48	53 3/16	58 9/16	59	57	7½	5¾	10¾	14½	14¾	9 13/16	10 5/16	7	39	178	192
54	59 3/16	64 9/16	65	63	9	5¾	10¾	14½	15⅛	10 3/16	10 11/16	7	45	192	206
60	65 3/16	70 9/16	71	69	9	5¾	10¾	14½	15⅛	10 3/16	10 11/16	7	51	208	221
72	76 13/16	82⅜	84	81	9½	5¾	10¾	16½	16⅜	10 9/16	11 1/16	9	57	227	239

① Use washers on ½-inch bolts. Contact Rexnord for load rating.
② Approximate distance to the top of the center roll of other idlers.
③ Available in ¼" roll wall thickness.
④ .31"–.72" belt width

20° TROUGHING TRAINING IDLER — UNEQUAL LENGTH ROLLS
MADE TO ORDER ONLY

Actuating Shoe Type — Belt Travel Either Direction



REGREASABLE	FACTORY SEALED
C5211 RG	C5211 FS
D5211 RG	D5211 FS
5-Inch Steel Rolls	
C6211 RG	C6211 FS
D6211 RG	D6211 FS
6-Inch Steel Rolls ③	

Dimensions in Inches — Average Weight in Pounds

Belt Width	A		AA	B	C	D			E	F		H		J	L	Idler Wgt. (Series C)	
	5" Dia.	6" Dia.				Recom.	Min.	Max.		5" Dia.	6" Dia.	5" Dia.	6" Dia.			5"	6"
24	29¾	29⅛	34 9/16	35	33	7½	5¾	8⅝	10	13 3/16	14¼	9¼	9¾	7	15	116	128
30	35¾	35⅛	40 9/16	41	39	7½	5¾	8⅝	10	13 3/16	14¼	9¼	9¾	7	21	130	143
36	41¾	41⅛	46 9/16	47	45	7½	5¾	8⅝	10	13¼	14 5/16	9 5/16	9 13/16	7	27	144	156
42	47¾	47⅛	52 9/16	53	51	7½	5¾	10¾	14½	13¾	14 13/16	9 13/16	10 5/16	7	33	160	172
48	53¾	53⅛	58 9/16	59	57	7½	5¾	10¾	14½	13¾	14 13/16	9 13/16	10 5/16	7	39	175	190
54	59¾	59⅛	64 9/16	65	63	9	5¾	10¾	14½	14⅛	15 3/16	10 3/16	10 11/16	7	45	190	203
60	65¾	65⅛	70 9/16	71	69	9	5¾	10¾	14½	14⅛	15 3/16	10 3/16	10 11/16	7	51	206	218
72	78¾	78⅛	81 9/16	84	81	9½	5¾	10¾	16½	14⅛	15 3/16	10 9/16	11 1/16	9	57	225	237

① Use washers on ½-inch bolts. Contact Rexnord for load rating.
② Approximate distance to the top of the center roll of other idlers.
③ Available in ¼" roll wall thickness.
④ .31"–.72" belt width

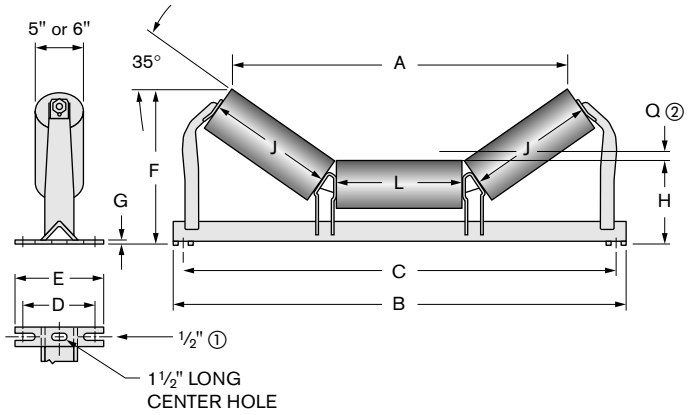
Note: Dimensions subject to change. Certified dimensions of ordered material furnished on request.

REX IDLERS

SERIES C and D

35° TROUGHING IDLER — EQUAL LENGTH ROLLS

REGREASABLE	FACTORY SEALED
C5300 RG	C5300 FS
D5300 RG	D5300 FS
5-Inch Steel Rolls	
C6300 RG	C6300 FS
D6300 RG	D6300 FS
6-Inch Steel Rolls ③	



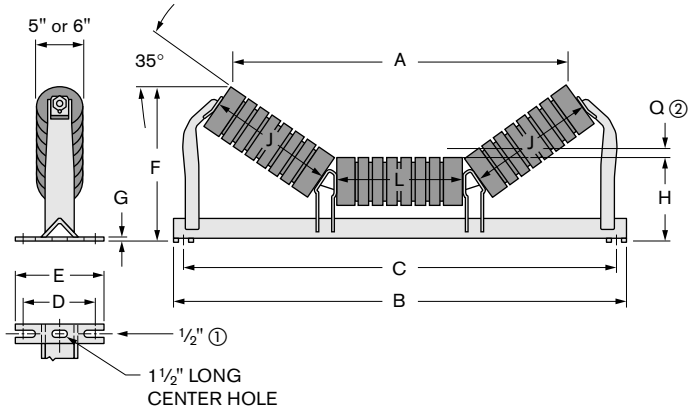
Dimensions in Inches — Average Weight in Pounds

Belt Width	A		B	C	D		E	F		G	H		J	L	Q	Idler Wgt. (Series C)	
	6" Roll	6" Roll			Recom.	Min.		5" Roll	6" Roll		5" Roll	6" Roll				5"	6"
18	18 15/16	18 3/8	29	27	7½	5¾	9¼	12 1/16	13 1/16	5/16	8 9/16	9 1/16	7	7	1½	42	49
20	20 15/16	20 3/8	31	29	7½	5¾	9¼	12 1/16	13 1/16	5/16	8 9/16	9 1/16	7	9	1½	46	54
24	24 3/16	23 3/8	35	33	7½	5¾	9¼	13 3/16	14 3/16	5/16	8 9/16	9 1/16	9	9	2 1/8	50	59
30	29 7/16	28 7/8	41	39	7½	5¾	9¼	14 3/16	15 5/16	5/16	8 9/16	9 1/16	11	11	2 11/16	58	69
36	34¾	34 3/16	47	45	7½	5¾	9¼	16 1/8	16 9/16	5/16	8 11/16	9 3/16	13	13	3¼	69	78
42	40	39 7/16	53	51	7½	5¾	9¼	17 5/8	18	5/16	9	9½	15	15	3 13/16	77	88
48	45 5/16	44¾	59	57	7½	5¾	9¼	18¾	19 3/16	5/16	9	9½	17	17	4 7/16	90	101
54	50 9/16	50	65½	63	9	6⅜	11½	20¼	20 11/16	⅜	9¼	9¾	19	19	5	102	115
60	55⅞	55¼	71½	69	9	6⅜	11½	21 7/16	21 13/16	⅜	9¼	9¾	21	21	5 9/16	114	130
72	66¼	65⅞	83½	81	9	6¼	11½	24	24½	⅜	9 11/16	10 3/16	25	25	6 1/16	148	157

① Use washers on ½-inch bolts.
■ Shaded sizes are most commonly used and are more readily available.
② Location of head pulley in relation to idler center roll.
③ Available in ¼" roll wall thickness.

35° TROUGHING IMPACT IDLER — EQUAL LENGTH ROLLS

REGREASABLE	FACTORY SEALED
C5302 RG	C5302 FS
D5302 RG	D5302 FS
5-Inch Rubber Rolls	
C6302 RG	C6302 FS
D6302 RG	D6302 FS
6-Inch Rubber Rolls	



Dimensions in Inches — Average Weight in Pounds

Belt Width	A		B	C	D		E	F		G	H		J	L	Q	Idler Wgt. (Series C)	
	5" Roll	6" Roll			Recom.	Min.		5" Roll	6" Roll		5" Roll	6" Roll				5"	6"
18	18 15/16	18 3/8	29	27	7½	5¾	9¼	12 1/16	13 1/16	5/16	8 9/16	9 1/16	7	7	1½	44	52
20	20 15/16	20 3/8	31	29	7½	5¾	9¼	12 1/16	13 1/16	5/16	8 9/16	9 1/16	7	9	1½	48	57
24	24 3/16	23 3/8	35	33	7½	5¾	9¼	13 3/16	14 3/16	5/16	8 9/16	9 1/16	9	9	2 1/8	52	61
30	29 7/16	28 7/8	41	39	7½	5¾	9¼	14 15/16	15 5/16	5/16	8 9/16	9 1/16	11	11	2 11/16	61	72
36	34¾	34 3/16	47	45	7½	5¾	9¼	16 1/8	16 9/16	3/16	8 11/16	9 3/16	13	13	3¼	73	82
42	40	39 7/16	53	51	7½	5¾	9¼	17 5/8	18	5/16	9	9½	15	15	3 13/16	81	92
48	45 5/16	44¾	59	57	7½	5¾	9¼	18¾	19 3/16	5/16	9	9½	17	17	4 7/16	94	105
54	50 9/16	50	65½	63	9	6⅜	11½	20¼	20 11/16	⅜	9¼	9¾	19	19	5	105	120
60	55⅞	55¼	71½	69	9	6⅜	11½	21 7/16	21 13/16	⅜	9¼	9¾	21	21	5 9/16	119	135
72	66¼	65⅞	83½	81	9	6¼	11½	24	24½	⅜	9 11/16	10 3/16	25	25	6 1/16	145	161

① Use washers on ½-inch bolts.
■ Shaded sizes are most commonly used and are more readily available.
② Location of head pulley in relation to idler center roll.

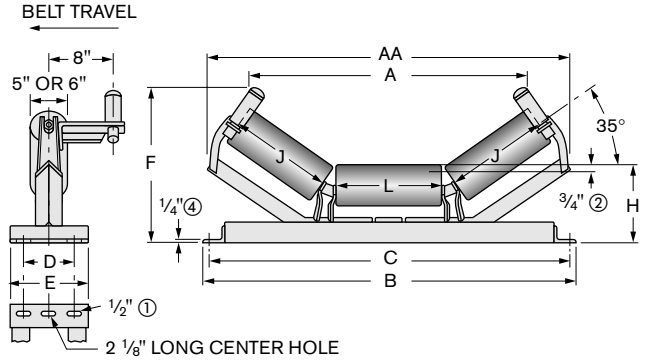
Note: Dimensions subject to change. Certified dimensions of ordered material furnished on request.

REX IDLERS

SERIES C and D

35° TROUGHING TRAINING IDLER — EQUAL LENGTH ROLLS

Positive Arm Type — Belt Travel One Direction Only



REGREASABLE	FACTORY SEALED
C5312 RG	C5312 FS
D5312 RG	D5312 FS
5-Inch Steel Rolls	
C6312 RG	C6312 FS
D6312 RG	D6312 FS
6-Inch Steel Rolls ③	

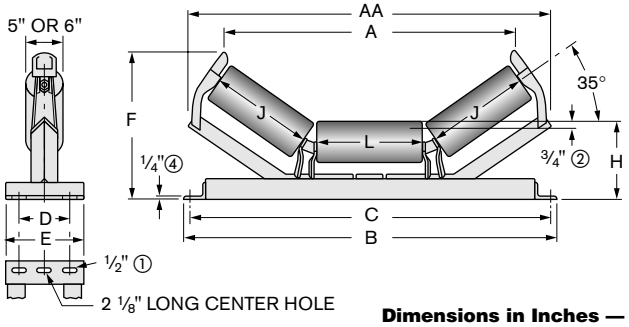
Dimensions in Inches — Average Weight in Pounds

Belt Width	A	AA	B	C	D			E	F	H		J	L	Idler Wgt. (Series C)	
					Recom.	Min.	Max			5" Dia.	6" Dia.			5"	6"
18	20	30 13/16	29	27	7½	5¾	8⅝	10	16 1/16	9¼	9¾	7	7	104	116
20	22	32 13/16	31	29	7½	5¾	8⅝	10	16 1/16	9¼	9¾	7	9	109	121
24	23 13/16	36⅛	35	33	7½	5¾	8⅝	10	17	9¼	9¾	9	9	120	132
30	29 1/16	41⅜	41	39	7½	5¾	8⅝	10	18⅛	9¼	9¾	11	11	135	147
36	35¾	46 11/16	47	45	7½	5¾	8⅝	10	19 5/16	9 5/16	9 13/16	13	13	149	162
42	41 1/16	52⅜	53	51	7½	5¾	10¾	14¼	21¼	9 13/16	10 5/16	15	15	166	178
48	46 5/16	57 1/16	59	57	7½	5¾	10¾	14½	22⅜	9 13/16	10 5/16	17	17	181	194
54	51⅝	65¾	65	63	9	5¾	10¾	14½	23⅞	10 3/16	10 11/16	19	19	196	209
60	56⅞	68 5/16	71	69	9	5¾	10¾	14½	25	10 3/16	10 11/16	21	21	212	225
72	67 7/16	79 9/16	83	81	9½	5¾	10¾	16½	27⅝	10 3/16	10 11/16	25	25	231	244

① Use washers on ½-inch bolts.
■ Shaded sizes are most commonly used and are more readily available.
② Approximate distance to the top of the center roll of other idlers.
③ Available in ¼" roll wall thickness.
④ .31"–.72" belt width

35° TROUGHING TRAINING IDLER — EQUAL LENGTH ROLLS

Actuating Shoe Type — Belt Travel Either Direction



REGREASABLE	FACTORY SEALED
C5310 RG	C5310 FS
D5310 RG	D5310 FS
5-Inch Steel Rolls	
C6310 RG	C6310 FS
D6310 RG	D6310 FS
6-Inch Steel Rolls ③	

Dimensions in Inches — Average Weight in Pounds

Belt Width	A		AA	B	C	D			E	F		H		J	L	Idler Wgt. (Series C)	
	5" Roll	6" Roll				Recom.	Min.	Max.		5" Dia.	6" Dia.	5" Dia.	6" Dia.			5"	6"
18	20⅜	19 1/16	30 13/16	29	27	7½	5¾	8⅝	10	15 1/16	16	9¼	9¾	7	7	102	114
20	22⅜	21 1/16	32 13/16	31	29	7½	5¾	8⅝	10	15 1/16	16	9¼	9¾	7	9	107	119
24	25⅝	24 5/16	36⅛	35	33	7½	5¾	8⅝	10	16¼	17⅛	9¼	9¾	9	9	118	130
30	30 15/16	29⅝	41⅜	41	39	7½	5¾	8⅝	10	17⅜	18¼	9¼	9¾	11	11	133	145
36	36 3/16	34⅞	46 11/16	47	45	7½	5¾	8⅝	10	18⅛	19	9 5/16	9 13/16	13	13	147	160
42	41½	40 3/16	52⅜	53	51	7½	5¾	10¾	14½	20¼	21⅛	9 13/16	10 5/16	15	15	163	176
48	46¾	45 7/16	57 1/16	59	57	7½	5¾	10¾	14½	21⅜	22 5/16	9 13/16	10 5/16	17	17	178	191
54	52	50¾	65¾	65	63	9	5¾	10¾	14½	22 15/16	23 13/16	10 3/16	10 11/16	19	19	193	206
60	57 5/16	56	68 9/16	71	69	9	5¾	10¾	14½	24 1/16	24 15/16	10 3/16	10 11/16	21	21	209	222
72	67⅞	67¾	79⅝	83	81	9½	5¾	10¾	16¾	26¾	27¼	10 3/16	10 11/16	25	25	227	240

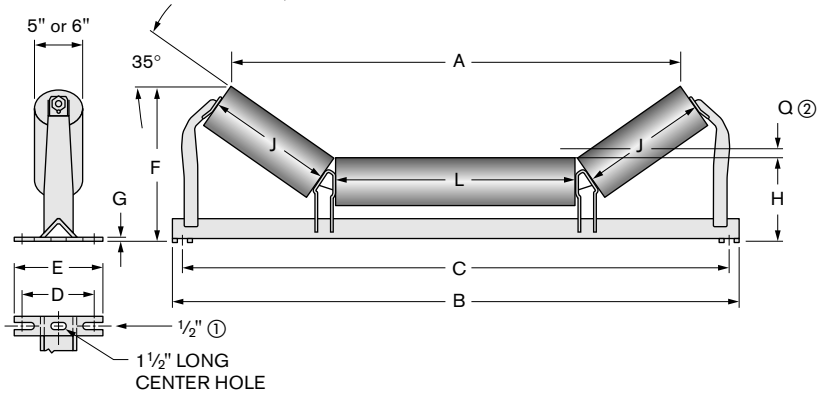
① Use washers on ½-inch bolts.
■ Shaded sizes are most commonly used and are more readily available.
② Approximate distance to the top of the center roll of other idlers.
③ Available in ¼" roll wall thickness.
④ .31"–.72" belt width

Note: Dimensions subject to change. Certified dimensions of ordered material furnished on request.

REX IDLERS

SERIES C and D
MADE TO ORDER ONLY
35° TROUGHING IDLER — UNEQUAL LENGTH ROLLS

REGREASABLE	FACTORY SEALED
C5301 RG	C5301 FS
D5301 RG	D5301 FS
5-Inch Steel Rolls	
C6301 RG	C6301 FS
D6301 RG	D6301 FS
6-Inch Steel Rolls ③	



Dimensions in Inches — Average Weight in Pounds

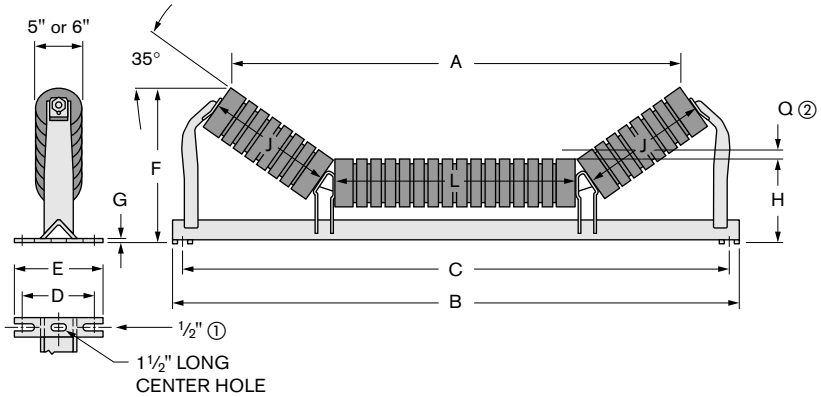
Belt Width	A		B	C	D		E	F		G	H		J	L	Q	Idler Wgt. (Series C)	
	5" Roll	6" Roll			Recom.	Min.		5" Roll	6" Roll		5" Roll	6" Roll				5"	6"
30	30 3/16	29 5/8 7	41	39	7½	5¾	9¼	13 13/16	14 3/16	5/16	8 9/16	9 1/16	9	15	2⅛	58	69
36	36 3/16	35⅝	47	45	7½	5¾	9¼	13⅞	14¼	5/16	8 11/16	9 3/16	9	21	2⅛	69	78
42	42⅜	41⅝	53	51	7½	5¾	9⅕	14 3/16	14 9/16	5/16	9	9½	9	27	2⅛	77	88
48	48 3/16	47⅝	59	57	7½	5¾	9¼	14 3/16	14 9/16	5/16	9	9½	9	33	2⅛	90	101
54	54 3/16	53⅝	65½	63	9	6⅜	11½	14 9/16	14 15/16	⅜	9¼	9¾	9	39	2⅛	102	115
60	60 3/16	59⅝	71½	69	9	6⅜	11½	14 9/16	14 15/16	⅜	9¼	9¾	9	45	2⅛	114	130
72	72 3/16	71⅝	83½	8 1	9	7¾	11½	14⅞	15¼	⅜	9 11/16	10 3/16	9	57	2⅛	129	145

① Use washers on ½-inch bolts.
② Location of head pulley in relation to idler center roll.
③ Available in ¼" roll wall thickness.

Contact Rexnord for load rating.

35° TROUGHING IMPACT IDLER — UNEQUAL LENGTH ROLLS
MADE TO ORDER ONLY

REGREASABLE	FACTORY SEALED
C5303 RG	C5303 FS
D5303 RG	D5303 FS
5-Inch Rubber Rolls	
C6303 RG	C6303 FS
D6303 RG	D6303 FS
6-Inch Rubber Rolls	



Dimensions in Inches — Average Weight in Pounds

Belt Width	A		B	C	D		E	F		G	H		J	L	Q	Idler Wgt. (Series C)	
	5" Roll	6" Roll			Recom.	Min.		5" Roll	6" Roll		5" Roll	6" Roll				5"	6"
30	30 3/16	29⅝	41	39	7½	5¾	9¼	13 13/16	14 3/16	5/16	8 9/16	9 1/16	9	15	2⅛	59	70
36	36 3/16	35⅝	47	45	7½	5¾	9¼	13⅞	14¼	5/16	8 11/16	9 3/16	9	21	2⅛	70	79
42	42⅜	41⅝	53	51	7½	5¾	9¼	14 3/16	14 9/16	5/16	9	9½	9	27	2⅛	79	90
48	48 3/16	47⅝	59	57	7½	5¾	9¼	14 3/16	14 9/16	5/16	9	9½	9	33	2⅛	92	103
54	54 3/16	53⅝	65½	63	9	6⅜	11½	14 9/16	14 15/16	⅜	9¼	9¾	9	39	2⅛	105	118
60	60 3/16	59⅝	71½	69	9	6⅜	11½	14 9/16	14 15/16	⅜	9¼	9¾	9	45	2⅛	117	133
72	72 3/16	71⅝	83½	81	9	7¾	11½	14⅞	15¼	⅜	9 11/16	10 3/16	9	57	2⅛	132	147

① Use washers on ½-inch bolts.
② Location of head pulley in relation to idler center roll.

Contact Rexnord for load rating.

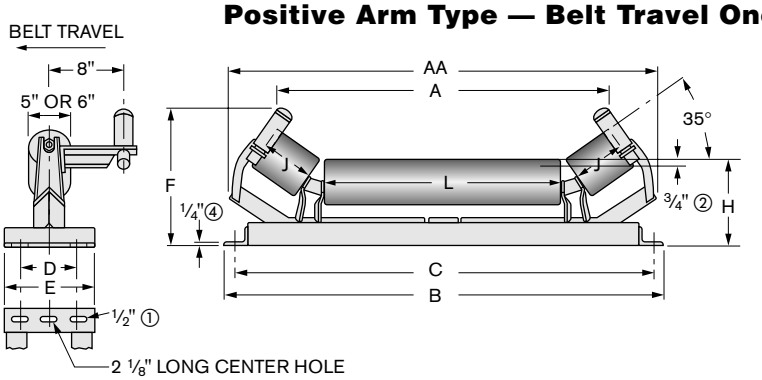
Note: Dimensions subject to change. Certified dimensions of ordered material furnished on request.

REX IDLERS

SERIES C and D

35° TROUGHING TRAINING IDLER — UNEQUAL LENGTH ROLLS
MADE TO ORDER ONLY

Positive Arm Type — Belt Travel One Direction Only



REGREASABLE	FACTORY SEALED
C5313 RG	C5313 FS
D5313 RG	D5313 FS
5-Inch Steel Rolls	
C6313 RG	C6313 FS
D6313 RG	D6313 FS
6-Inch Steel Rolls ③	

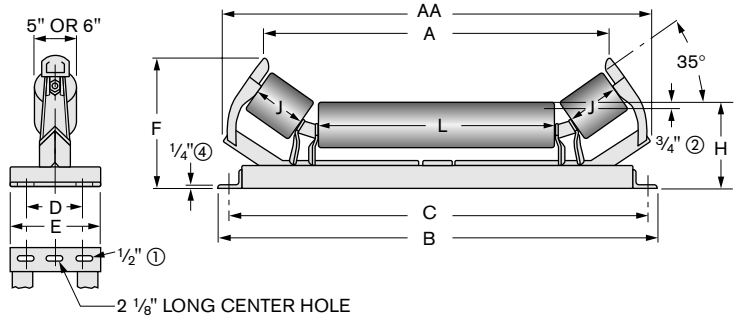
Dimensions in Inches — Average Weight in Pounds

Belt Width	A	AA	B	C	D			E	F	H		J	L	Idler Wgt. (Series C)	
					Recom.	Min.	Max			5" Roll	6" Roll			5"	6"
30	31¼	42⅛	41	39	7½	5¾	8⅝	10	17 5/16	9¼	9¾	9	15	135	147
36	37¼	48⅛	47	45	7½	5¾	8⅝	10	17⅜	9 5/16	9 13/16	9	21	149	162
42	43¼	54 9/16	53	51	7½	5¾	10¾	14½	17⅞	9 13/16	10 5/16	9	27	166	178
48	49¼	60 9/16	59	57	7½	5¾	10¾	14½	17⅞	9 13/16	10 5/16	9	33	181	194
54	55¼	66⅞	65	63	9	5¾	10¾	14½	18¼	10 3/16	10 11/16	9	39	196	209
60	61¼	72⅞	71	69	9	5¾	10¾	14½	18¼	10 3/16	10 11/16	9	45	212	225
72	72¼	85¼	83	81	9½	5¾	10¾	16½	18¼	10 3/16	10 11/16	9	57	231	243

① Use washers on ½-inch bolts.
Contact Rexnord for load rating.
② Approximate distance to the top of the center roll of other idlers.
③ Available in ¼" roll wall thickness.
④ .31"–.72" belt width

35° TROUGHING TRAINING IDLER — UNEQUAL LENGTH ROLLS
MADE TO ORDER ONLY

Actuating Shoe Type — Belt Travel Either Direction



REGREASABLE	FACTORY SEALED
C5311 RG	C5311 FS
D5311 RG	D5311 FS
5-Inch Steel Rolls	
C6311 RG	C6311 FS
D6311 RG	D6311 FS
6-Inch Steel Rolls ③	

Dimensions in Inches — Average Weight in Pounds

Belt Width	A		AA	B	C	D			E	F		H		J	L	Idler Wgt. (Series C)	
	5" Roll	6" Roll				Recom.	Min.	Max.		5" Roll	6" Roll	5" Roll	6" Roll			5"	6"
30	31⅝	30 5/16	42⅛	41	39	7½	5¾	8⅝	10	16 5/16	17⅛	9¼	9¾	9	15	132	145
36	37⅝	36 5/16	48⅛	47	45	7½	5¾	8⅝	10	16⅜	17 3/16	9 5/16	9 3/16	9	21	147	160
42	43⅝	46 5/16	54⅛	53	51	7½	5¾	10¾	14½	16⅞	17 11/16	9 13/16	10 5/16	9	27	163	176
48	49⅝	48 5/16	60 9/16	59	57	7½	5¾	10¾	14½	16⅞	17 11/16	9 13/16	10 5/16	9	33	178	191
54	55⅝	54 5/16	66⅞	65	63	9	5¾	10¾	14½	17¼	18 1/16	10 3/16	10 11/16	9	39	193	206
60	61⅝	60 5/16	72⅞	71	69	9	5¾	10¾	14½	17¼	18 1/16	10 3/16	10 11/16	9	45	209	222
72	73⅜	72½	85¼	83	81	9½	5¾	10¾	16½	17½	18⅜	10 3/16	10 11/16	9	57	229	240

① Use washers on ½-inch bolts.
Contact Rexnord for load rating.
② Approximate distance to the top of the center roll of other idlers.
③ Available in ¼" roll wall thickness.
④ .31"–.72" belt width

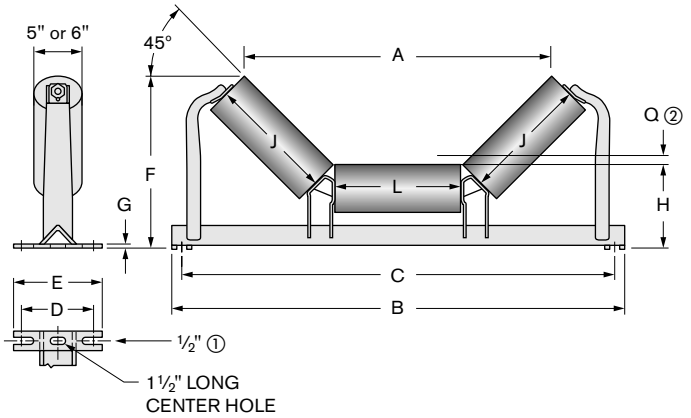
Note: Dimensions subject to change. Certified dimensions of ordered material furnished on request.

REX IDLERS

SERIES C and D

45° TROUGHING IDLER — EQUAL LENGTH ROLLS

REGREASABLE	FACTORY SEALED
C5400 RG	C5400 FS
D5400 RG	D5400 FS
5-Inch Steel Rolls	
C6400 RG	C6400 FS
D6400 RG	D6400 FS
6-Inch Steel Rolls ③	



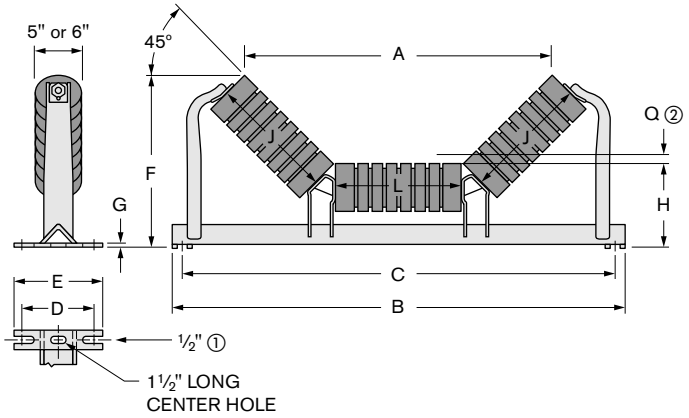
Dimensions in Inches — Average Weight in Pounds

Belt Width	A		B	C	D		E	F		G	H		J	L	Q	Idler Wgt. (Series C)	
	5" Roll	6" Roll			Recom.	Min.		5" Roll	6" Roll		5" Roll	6" Roll				5"	6"
18	17 11/16	17	29	27	7½	5¾	9¼	13⅝	14	5/16	8 9/16	9 1/16	7	7	1 15/16	45	51
20	19 11/16	19	31	29	7½	5¾	9¼	13⅝	14	5/16	8 9/16	9 1/16	7	9	1 15/16	49	57
24	22¼	21 9/16	35	33	7½	5¾	9¼	15 1/16	15⅜	5/16	8 9/16	9 1/16	9	9	2½	53	62
30	27 1/16	26⅜	41	39	7½	5¾	9¼	16 7/16	16 13/16	5/16	8 9/16	9 1/16	11	11	3⅞	61	72
36	31 15/16	31 3/16	47	45	7½	5¾	9¼	17 15/16	18 5/16	5/16	8 11/16	9 3/16	13	13	3⅞	72	81
42	36¾	36 1/16	53	51	7½	5¾	9¼	19⅝	20	5/16	9	9½	15	15	4 9/16	80	92
48	41 9/16	40⅞	59	57	7½	5¾	9¼	21 1/16	21 7/16	5/16	9	9½	17	17	5¼	94	105
54	46⅜	45 11/16	65½	63	9	6⅜	11½	22⅞	23 3/16	⅜	9¼	9¾	19	19	5 15/16	106	119
60	51¼	50½	71½	69	9	6⅜	11½	24¼	24⅝	⅜	9¼	9¾	21	21	6⅝	117	134
72	60 15/16	60¼	83½	81	9	7¾	11½	27½	27 13/16	⅜	9 11/16	10 3/16	25	25	7⅛	146	163

① Use washers on ½-inch bolts.
■ Shaded sizes are most commonly used and are more readily available.
② Location of head pulley in relation to idler center roll.
③ Available in ¼" roll wall thickness.

45° TROUGHING IMPACT IDLER — EQUAL LENGTH ROLLS

REGREASABLE	FACTORY SEALED
C5402 RG	C5402 FS
D5402 RG	D5402 FS
5-Inch Rubber Rolls	
C6402 RG	C6402 FS
D6402 RG	D6402 FS
6-Inch Rubber Rolls	



Dimensions in Inches — Average Weight in Pounds

Belt Width	A		B	C	D		E	F		G	H		J	L	Q	Idler Wgt. (Series C)	
	5" Roll	6" Roll			Recom.	Min.		5" Roll	6" Roll		5" Roll	6" Roll				5"	6"
18	17 11/16	17	29	27	7½	5¾	9¼	13⅝	14	5/16	8 9/16	9 1/16	7	7	1 15/16	47	54
20	19 11/16	19	31	29	7½	5¾	9¼	13⅝	14	5/16	8 9/16	9 1/16	7	9	1 15/16	51	60
24	22¼	21 9/16	35	33	7½	5¾	9¼	15 1/16	15⅜	5/16	8 9/16	9 1/16	9	9	2½	55	65
30	27 1/16	26⅜	41	39	7½	5¾	9¼	16 7/16	16 13/16	5/16	8 9/16	9 1/16	11	11	3 3/16	64	75
36	31 15/16	31 3/16	47	45	7½	5¾	9¼	17 15/16	18⅝	5/16	8 11/16	9 3/16	13	13	3⅞	75	84
42	36¾	36 1/16	53	51	7½	5¾	9¼	19⅝	20	5/16	9	9½	15	15	4 9/16	84	96
48	41 9/16	40⅞	59	57	7½	5¾	9¼	21 1/16	21 7/16	5/16	9	9½	17	17	5¼	98	109
54	46⅜	45 11/16	65½	63	9	6⅜	11½	22⅞	23 3/16	⅜	9¼	9¾	19	19	5 15/16	110	123
60	51¼	50½	71½	69	9	6⅜	11½	24¼	24⅝	⅜	9¼	9¾	21	21	6⅝	121	139
72	60 15/16	60¼	83½	81	9	7¾	11½	27½	27 13/16	⅜	9 11/16	10 3/16	25	25	7⅛	148	167

① Use washers on ½-inch bolts.
■ Shaded sizes are most commonly used and are more readily available.
② Location of head pulley in relation to idler center roll.

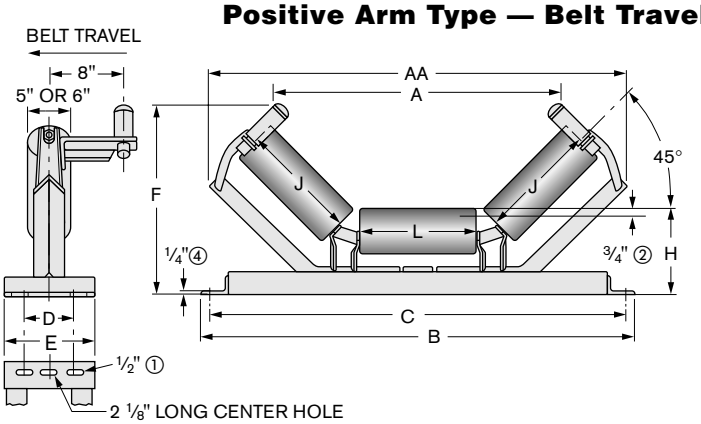
Note: Dimensions subject to change. Certified dimensions of ordered material furnished on request.

REX IDLERS

SERIES C and D

45° TROUGHING TRAINING IDLER — EQUAL LENGTH ROLLS

Positive Arm Type — Belt Travel One Direction Only



REGREASABLE	FACTORY SEALED
C5412 RG	C5412 FS
D5412 RG	D5412 FS
5-Inch Steel Rolls	
C6412 RG	C6412 FS
D6412 RG	D6412 FS
6-Inch Steel Rolls ③	

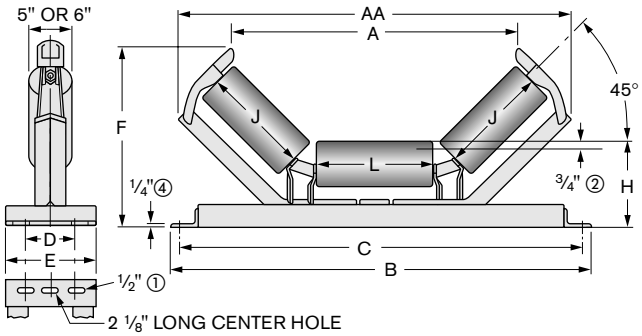
Dimensions in Inches — Average Weight in Pounds

Belt Width	A	AA	B	C	D			E	F	H		J	L	Idler Wgt. (Series C)	
					Recom.	Min.	Max			5" Roll	6" Roll			5"	6"
18	17¾	31⅞	29	27	7½	5¾	8⅝	10	17 1/16	9¼	9¾	7	7	106	118
20	19¾	33⅞	31	29	7½	5¾	8⅝	10	17 1/16	9¼	9¾	7	9	111	123
24	22 9/16	36 9/16	35	33	7½	5¾	8⅝	10	18½	9¼	9¾	9	9	122	134
30	27⅜	41⅜	41	39	7½	5¾	8⅝	10	20	9¼	9¾	11	11	137	149
36	32 3/16	46¼	47	45	7½	5¾	8⅝	10	21⅜	9 5/16	9 13/16	13	13	149	164
42	37	51 9/16	53	51	7½	5¾	10¾	14½	22 3/16	9 13/16	10 5/16	15	15	169	181
48	41⅞	56⅜	59	57	7½	5¾	10¾	14½	24¾	9 13/16	10 5/16	17	17	183	196
54	46 1/16	61⅝	65	63	9	5¾	10¾	14½	26½	10 3/16	10 11/16	19	19	198	212
60	51½	66 7/16	71	69	9	5¾	10¾	14½	27 15/16	10 3/16	10 11/16	21	21	215	227
72	60¼	76⅝	83	81	9½	5¾	10¾	16½	30½	10 3/16	10 11/16	25	25	254	263

① Use washers on ½-inch bolts.
■ Shaded sizes are most commonly used and are more readily available.
② Approximate distance to the top of the center roll of other idlers.
③ Available in ¼" roll wall thickness.
④ .31"–.72" belt width

45° TROUGHING TRAINING IDLER — EQUAL LENGTH ROLLS

Actuating Shoe Type — Belt Travel Either Direction



REGREASABLE	FACTORY SEALED
C5410 RG	C5410 FS
D6410 RG	C5410 FS
5-Inch Steel Rolls	
C6410 RG	C6410 FS
D6410 RG	D5410 FS
6-Inch Steel Rolls ③	

Dimensions in Inches — Average Weight in Pounds

Belt Width	A		AA	B	C	D			E	F		H		J	L	Idler Wgt. (Series C)	
	5" Roll	6" Roll				Recom.	Min.	Max.		5" Roll	6" Roll	5" Roll	6" Roll			5"	6"
18	18¼	16⅝	31⅞	29	27	7½	5¾	8⅝	10	16 3/16	16 15/16	9¼	9¾	7	7	104	116
20	20¼	18⅝	33⅞	31	29	7½	5¾	8⅝	10	16 3/16	16 15/16	9¼	9¾	7	9	109	121
24	22 9/16	21½	35 9/16	35	33	7½	5¾	8⅝	10	17 9/16	18 5/16	9¼	9¾	9	9	120	132
30	27 15/16	26 5/16	41⅜	41	39	7½	5¾	8⅝	10	19 1/16	19¾	9¼	9¾	11	11	135	147
36	32¾	31⅛	46¼	47	45	7½	5¾	8⅝	10	20 7/16	21¼	9 5/16	9 13/16	13	13	147	162
42	37 9/16	35 15/16	51 9/16	53	51	7½	5¾	10¾	14½	22⅜	23⅛	9 13/16	10 5/16	15	15	165	178
48	42⅜	40 13/16	56⅜	59	57	7½	5¾	10¾	14½	23¾	24 9/16	9 13/16	10 5/16	17	17	180	193
54	47¼	45⅝	61⅝	65	63	9	5¾	10¾	14½	25 9/16	26 5/16	10 3/16	10 11/16	19	19	195	208
60	52 1/16	50 7/16	66 7/16	71	69	9	5¾	10¾	14½	27	27¾	10 3/16	10 11/16	21	21	211	224
72	62 3/16	60¾	76⅝	83	81	9½	5¾	10¾	16½	29 13/16	30 9/16	10 3/16	10 11/16	25	25	249	260

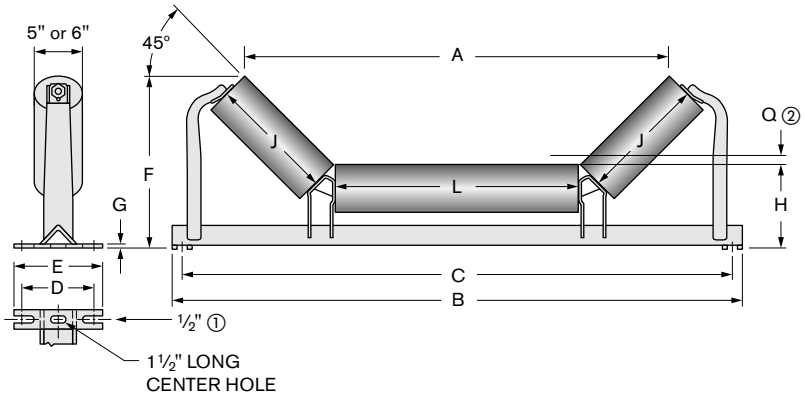
① Use washers on ½-inch bolts.
■ Shaded sizes are most commonly used and are more readily available.
② Approximate distance to the top of the center roll of other idlers.
③ Available in ¼" roll wall thickness.
④ .31"–.72" belt width

Note: Dimensions subject to change. Certified dimensions of ordered material furnished on request.

REX IDLERS

SERIES C and D
MADE TO ORDER ONLY
45° TROUGHING IDLER — UNEQUAL LENGTH ROLLS

REGREASABLE	FACTORY SEALED
C5401 RG	C5401 FS
D5401 RG	D5401 FS
5-Inch Steel Rolls	
C6401 RG	C6401 FS
D6401 RG	D6401 FS
6-Inch Steel Rolls ③	



Dimensions in Inches — Average Weight in Pounds

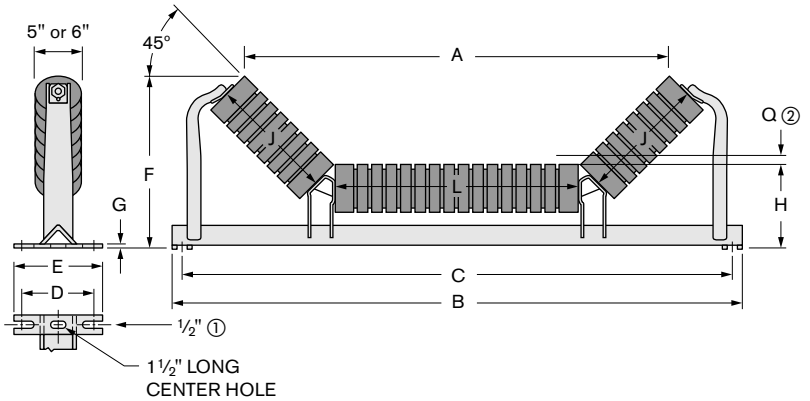
Belt Width	A		B	C	D		E	F		G	H		J	L	Q	Idler Wgt. (Series C)	
	5" Roll	6" Roll			Recom.	Min.		5" Roll	6" Roll		5" Roll	6" Roll				5"	6"
30	28¼	27⁹⁄₁₆	41	39	7½	5¾	9¼	15¹⁄₁₆	15⅜	5⁄16	8⁹⁄₁₆	9¹⁄₁₆	9	15	2½	59	70
36	34¼	33⁹⁄₁₆	47	45	7½	5¾	9¼	15⅛	15⁷⁄₁₆	5⁄16	8¹¹⁄₁₆	9³⁄₁₆	9	21	2½	75	79
42	40¼	39⁹⁄₁₆	53	51	7½	5¾	9¼	15⁷⁄₁₆	15¾	5⁄16	9	9½	9	27	2½	82	91
48	46¼	45⁹⁄₁₆	59	57	7½	5¾	9¼	15⁷⁄₁₆	15¾	5⁄16	9	9½	9	33	2½	91	101
54	52¼	51⁹⁄₁₆	65½	63	9	6⅜	11½	15¹³⁄₁₆	16⅛	⅜	9¼	9¾	9	39	2½	102	115
60	58¼	57⁹⁄₁₆	71½	69	9	6⅜	11½	15¹³⁄₁₆	16⅛	⅜	9¼	9¾	9	45	2½	114	130
72	70¼	69⁹⁄₁₆	83½	81	9	7¾	11½	15¹³⁄₁₆	16⅛	⅜	9¹¹⁄₁₆	10³⁄₁₆	9	57	2½	141	157

① Use washers on ½-inch bolts.
② Location of head pulley in relation to idler center roll.
③ Available in ¼" roll wall thickness.

Contact Rexnord for load rating.

45° TROUGHING IMPACT IDLER — UNEQUAL LENGTH ROLLS
MADE TO ORDER ONLY

REGREASABLE	FACTORY SEALED
C5403 RG	C5403 FS
D5403 RG	D5403 FS
5-Inch Rubber Rolls	
C6403 RG	C6403 FS
D6403 RG	D6403 FS
6-Inch Rubber Rolls	



Dimensions in Inches — Average Weight in Pounds

Belt Width	A		B	C	D		E	F		G	H		J	L	Q	Idler Wgt. (Series C)	
	5" Roll	6" Roll			Recom.	Min.		5" Roll	6" Roll		5" Roll	6" Roll				5"	6"
30	28¼	27⁹⁄₁₆	41	39	7½	5¾	9¼	15¹⁄₁₆	15⅜	5⁄16	8⁹⁄₁₆	9¹⁄₁₆	9	15	2½	62	73
36	34¼	33⁹⁄₁₆	47	45	7½	5¾	9¼	15⅛	15⁷⁄₁₆	5⁄16	8¹¹⁄₁₆	9³⁄₁₆	9	21	2½	73	82
42	40¼	39⁹⁄₁₆	53	51	7½	5¾	9¼	15⁷⁄₁₆	15¾	5⁄16	9	9½	9	27	2½	81	93
48	46¼	45⁹⁄₁₆	53	57	7½	5¾	9¼	15⁷⁄₁₆	15¾	5⁄16	9	9½	9	33	2½	95	106
54	52¼	51⁹⁄₁₆	65½	63	9	6¾	11½	15¹³⁄₁₆	16⅛	⅜	9¼	9¾	9	39	2½	106	119
60	58¼	57⁹⁄₁₆	71½	69	9	6⅜	11½	15¹³⁄₁₆	16⅛	⅜	9¼	9¾	9	45	2½	117	135
72	70¼	69⁹⁄₁₆	83½	81	9	7¾	11½	15¹³⁄₁₆	16⅛	⅜	9¹¹⁄₁₆	10³⁄₁₆	9	57	2½	143	161

① Use washers on ½-inch bolts.
② Location of head pulley in relation to idler center roll.

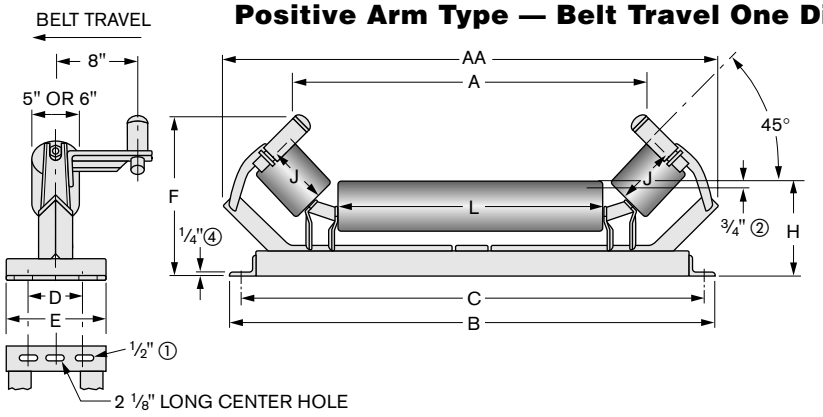
Contact Rexnord for load rating.

Note: Dimensions subject to change. Certified dimensions of ordered material furnished on request.

SERIES C and D

45° TROUGHING TRAINING IDLER — UNEQUAL LENGTH ROLLS
MADE TO ORDER ONLY

Positive Arm Type — Belt Travel One Direction Only



REGREASABLE	FACTORY SEALED
C5413 RG	C5413 FS
D5413 RG	D5413 FS
5-Inch Steel Rolls	
C6413 RG	C6413 FS
D6413 RG	D6413 FS
6-Inch Steel Rolls ③	

Dimensions in Inches — Average Weight in Pounds

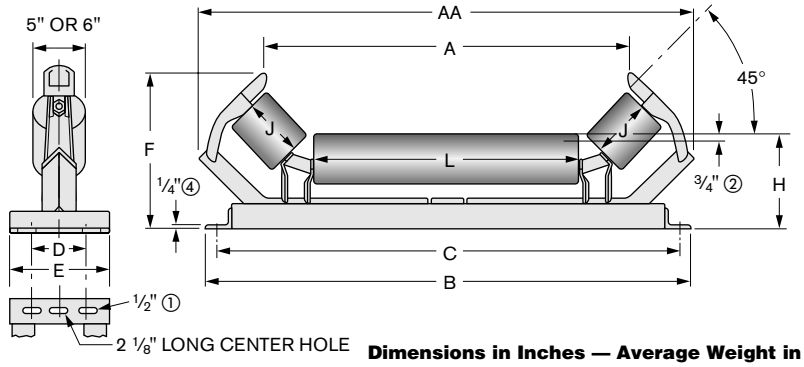
Belt Width	A	AA	B	C	D			E	F	H		J	L	Idler Wgt. (Series C)	
					Recom.	Min.	Max			5" Roll	6" Roll			5"	6"
30	28 9/16	42 9/16	41	39	7½	5¾	8⅝	10	18½	9¼	9¾	9	15	135	147
36	34 9/16	48⅝	47	45	7½	5¾	8⅝	10	18 9/16	9 5/16	9 13/16	9	21	147	162
42	40 9/16	55 1/16	53	51	7½	5¾	10¾	14½	19 1/16	9 13/16	10 5/16	9	27	166	180
48	46 9/16	61 1/16	59	57	7½	5¾	10¾	14½	19 1/16	9 13/16	10 5/16	9	33	180	193
54	52 9/16	67½	65	63	9	5¾	10¾	14½	19 7/16	10 3/16	10 11/16	9	39	194	208
60	58 9/16	73½	71	69	9	5¾	10¾	14½	19 7/16	10 3/16	10 11/16	9	45	211	223
72	69⅝	86	83	81	9½	5¾	10¾	16½	19 7/16	10 3/16	10 11/16	9	57	248	259

① Use washers on ½-inch bolts.
② Approximate distance to the top of the center roll of other idlers.
③ Available in ¼" roll wall thickness.
④ .31"–.72" belt width

Contact Rexnord for load rating.

45° TROUGHING TRAINING IDLER — UNEQUAL LENGTH ROLLS
MADE TO ORDER ONLY

Actuating Shoe Type — Belt Travel Either Direction



REGREASABLE	FACTORY SEALED
C5411 RG	C5411 FS
D5411 RG	D5411 FS
5-Inch Steel Rolls	
C6411 RG	C6411 FS
D6411 RG	D6411 FS
6-Inch Steel Rolls ③	

Dimensions in Inches — Average Weight in Pounds

Belt Width	A		AA	B	C	D			E	F		H		J	L	Idler Wgt. (Series C)	
	5" Roll	6" Roll				Recom.	Min.	Max.		5" Roll	6" Roll	5" Roll	6" Roll			5"	6"
30	29 1/16	27½	42 9/16	41	39	7½	5¾	8⅝	10	17 9/16	18 5/16	9¼	9¾	9	15	133	145
36	35 1/16	33½	48⅝	47	45	7½	5¾	8⅝	10	17⅝	18⅜	9 5/16	9 13/16	9	21	145	160
42	41 1/16	39½	55 1/16	53	51	7½	5¾	10¾	14½	18¼	18⅞	9 13/16	10 5/16	9	27	162	177
48	47 1/16	45½	61 1/16	59	57	7½	5¾	10¾	14½	18¼	18⅞	9 13/16	10 5/16	9	33	177	190
54	53 1/16	51½	67½	65	63	9	5¾	10¾	14½	18⅝	19¼	10 3/16	10 11/16	9	39	191	204
60	59 1/16	57½	73½	71	69	9	5¾	10¾	14½	18⅝	19¼	10 3/16	10 11/16	9	45	207	220
72	71 1/16	69½	80 5/16	83	81	9½	5¾	10¾	16½	18⅝	19¼	10 3/16	10 11/16	9	57	241	255

① Use washers on ½-inch bolts.
② Approximate distance to the top of the center roll of other idlers.
③ Available in ¼" roll wall thickness.
④ .31"–.72" belt width

Contact Rexnord for load rating.

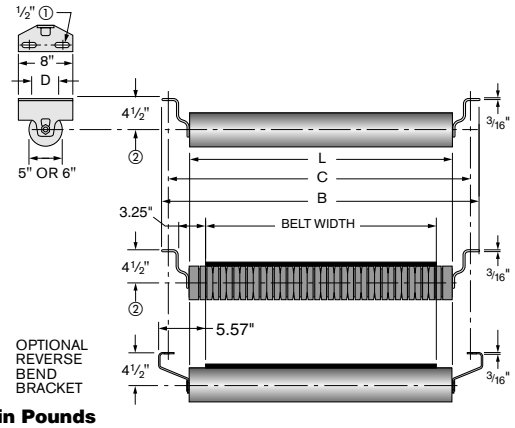
Note: Dimensions subject to change. Certified dimensions of ordered material furnished on request.

REX IDLERS

SERIES C and D

RETURN STEEL OR RUBBER IDLER

REGREASABLE	FACTORY SEALED	REGREASABLE	FACTORY SEALED
C5040 RG	**C5040 FS**	**C5049 RG**	**C5049 FS**
D5040 RG	**D5040 FS**	**D5049 RG**	**D5049 FS**
5-Inch Steel Roll		*5-Inch Rubber Roll*	
C6040 RG	**C6040 FS**	**C6049 RG**	**C6049 FS**
D6040 RG	**D6040 FS**	**D6049 RG**	**D6049 FS**
6-Inch Steel Roll ③		*6-Inch Rubber Roll*	



Dimensions in Inches — Average Weight in Pounds

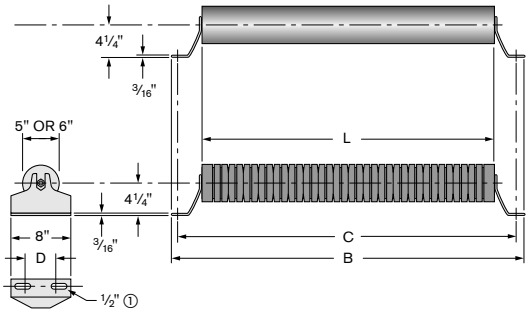
Belt Width	B	C	D			L	Idler Wgt. and Thickness (Series C)				
			Recom.	Min.	Max.		5"		6"		
							Steel	Rubber	Steel	Steel	Rubber
							.149"	1.47"	.165"	.250"	1.97"
18	29	27	5	3¾	6¼	21	22	32	33	41	39
20	31	29	5	3¾	6¼	23	24	32	35	44	39
24	35	33	5	3¾	6¼	27	26	38	38	49	47
30	41	39	5	3¾	6¼	33	32	49	44	58	57
36	47	45	5	3¾	6½	39	37	57	50	56	66
42	53	51	5	3¾	6¼	45	42	64	56	75	75
48	59	57	5	3¾	6¼	51	47	73	62	83	84
★54	65	63	5	3¾	6¼	57	58	85	70	95	92
★60	71	69	5	3¾	6¼	63	63	90	79	107	100
★72	83	81	5	3¾	6¼	75	74	106	93	126	116

① Use washers on ½-inch bolts.
② Available with 1½, 11¾ or 16½ inch drop.
③ Available in ¼" roll wall thickness.

■ Shaded sizes are most commonly used and are more readily available.
★ These idlers are Series D only.

FLAT STEEL OR RUBBER IDLER

REGREASABLE	FACTORY SEALED	REGREASABLE	FACTORY SEALED
C5020 RG	**C5020 FS**	**C5025 RG**	**C5025 FS**
D5020 RG	**D5020 FS**	**D5025 RG**	**D5025 FS**
5-Inch Steel Roll		*5-Inch Rubber Roll*	
C6020 RG	**C6020 FS**	**C6025 RG**	**C6025 FS**
D6020 RG	**D6020 FS**	**D6025 RG**	**D6025 FS**
6-Inch Steel Roll ③		*6-Inch Rubber Roll*	



Dimensions in Inches — Average Weight in Pounds

Belt Width	B	C	D			L	Idler Wgt. and Thickness (Series C)				
			Recom.	Min.	Max.		5"		6"		
							Steel	Rubber	Steel	Steel	Rubber
							.149"	1.47"	.165"	.250"	1.97"
18	29	27	5	3¾	6¼	21	22	32	33	41	39
20	31	29	5	3¾	6¼	23	24	32	35	44	39
24	35	33	5	3¾	6¼	27	26	38	38	49	47
30	41	39	5	3¾	6¼	33	32	49	44	58	57
36	47	45	5	3¾	6½	39	37	57	50	56	66
42	53	51	5	3¾	6¼	45	42	64	56	75	75
48	59	57	5	3¾	6¼	51	47	73	62	83	84
★54	65	63	5	3¾	6¼	57	58	85	70	95	92
★60	71	69	5	3¾	6¼	63	63	90	79	107	100
★72	83	81	5	3¾	6¼	75	74	106	93	126	116

① Use washers on ½-inch bolts.

■ Shaded sizes are most commonly used and are more readily available.
★ These idlers are Series D only.

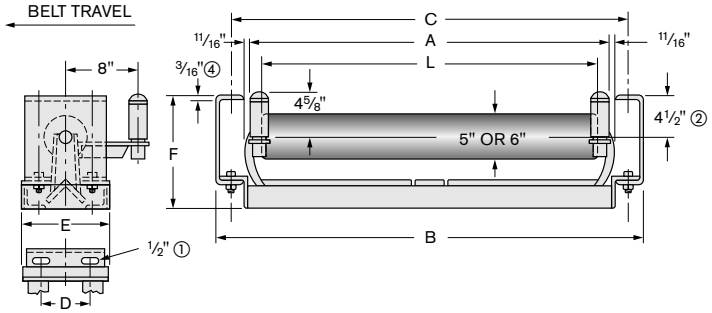
Note: Dimensions subject to change. Certified dimensions of ordered material furnished on request.

REX IDLERS

SERIES C and D

RETURN TRAINING IDLER

Positive Arm Type — Belt Travel One Direction Only



REGREASABLE	FACTORY SEALED
C5052 RG	C5052 FS
D5052 RG	D5052 FS
5-Inch Steel Roll	
C6052 RG	C6052 FS
D6052 RG	D6052 RG
6-Inch Steel Roll ③	

Dimensions in Inches — Average Weight in Pounds

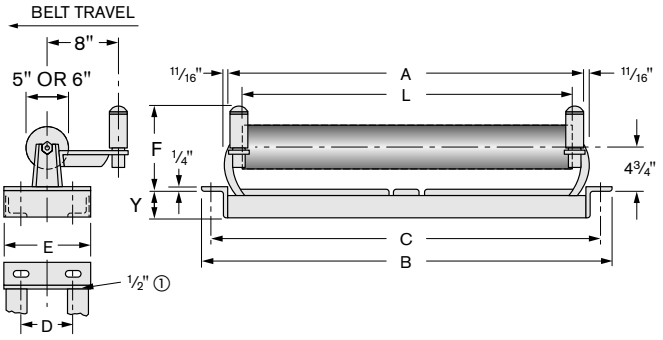
Belt Width	A	B	C	D			E	F	L	Idler Wgt. and Thickness (Series C)		
				Recom.	Min.	Max.				5"	6"	6"
										.149"	.165"	.250"
18	23⅝	29½	27	5	3¾	6¼	10	12½	21	90	105	114
20	25⅝	31½	29	5	3¾	6¼	10	12½	23	102	117	127
24	29⅝	35½	33	5	3¾	6¼	10	12½	27	110	129	140
30	35⅝	41½	39	5	3¾	6¼	10	12½	33	126	141	155
36	41⅝	47½	45	5	3¾	6¼	10	12½	39	148	153	169
42	47⅝	53½	51	5	3¾	6¼	14½	13	45	157	165	184
48	53⅝	59½	57	5	3¾	6¼	14½	13	51	167	182	204
★54	59⅝	65½	63	5	3¾	6¼	14½	13	57	178	192	216
★60	65⅝	71½	69	5	3¾	6¼	14½	13	63	188	200	227
★72	77⅝	83½	81	5	3¾	6¼	16½	13 15/16	75	208	214	238

① Use washers on ½-inch bolts.
② Available with 1½ or 11¾ inch drop.
③ Available in ¼" roll wall thickness.
④ ¼"–.72" belt width

■ Shaded sizes are most commonly used and are more readily available.
★ These idlers are Series D only.

FLAT TRAINING IDLER

Positive Arm Type — Belt Travel One Direction Only



REGREASABLE	FACTORY SEALED
C5031 RG	C5031 FS
D5031 RG	D5031 FS
5-Inch Steel Roll	
C6031 RG	C6031 FS
D6031 RG	D6031 FS
6-Inch Steel Roll ②	

Dimensions in Inches — Average Weight in Pounds

Belt Width	A	B	C	D			E	F	L	Y	Idler Wgt. and Thickness (Series C)		
				Recom.	Min.	Max.					5"	6"	6"
											.149"	.165"	.250"
18	23⅝	28¾	27	5	3¾	6¼	10	9⅜	21	3⅛	85	100	109
20	25⅝	30¾	29	5	3¾	6¼	10	9⅜	23	3⅛	97	112	122
24	29⅝	34¾	33	5	3¾	6¼	10	9⅜	27	3⅛	105	124	135
30	35⅝	40¾	39	5	3¾	6¼	10	9⅜	33	3⅛	121	136	150
36	41⅝	46¾	45	5	3¾	6¼	10	9⅜	39	3 3/16	143	148	165
42	47⅝	52¾	51	5	3¾	6¼	14½	9⅜	45	3 11/16	152	160	179
48	53⅝	58¾	57	5	3¾	6¼	14½	9⅜	51	3 11/16	162	177	199
★54	59⅝	64¾	63	5	3¾	6¼	14½	9⅜	57	3 3/16	173	187	211
★60	65⅝	70¾	69	5	3¾	6¼	14½	9⅜	63	3 3/16	183	198	225
★72	77⅝	82¾	81	5	3¾	6¼	16½	9¾	75	3 3/16	202	208	234

① Use washers on ½-inch bolts.
② Available in ¼" roll wall thickness.

■ Shaded sizes are most commonly used and are more readily available.
★ These idlers are Series D only.

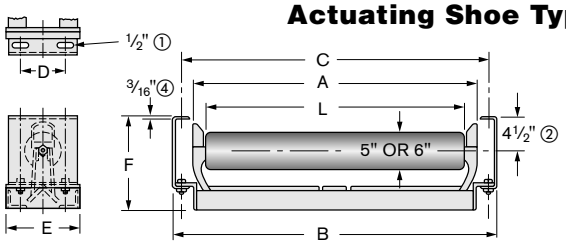
Note: Dimensions subject to change. Certified dimensions of ordered material furnished on request.

REX IDLERS

SERIES C and D

RETURN TRAINING IDLER

Actuating Shoe Type — Belt Travel Either Direction



REGREASABLE **FACTORY SEALED**

C5051 RG **C5051 FS**
D5051 RG **D5051 FS**
5-Inch Steel Roll

C6051 RG **C6051 FS**
D6051 RG **D6051 FS**
6-Inch Steel Roll ③

Dimensions in Inches — Average Weight in Pounds

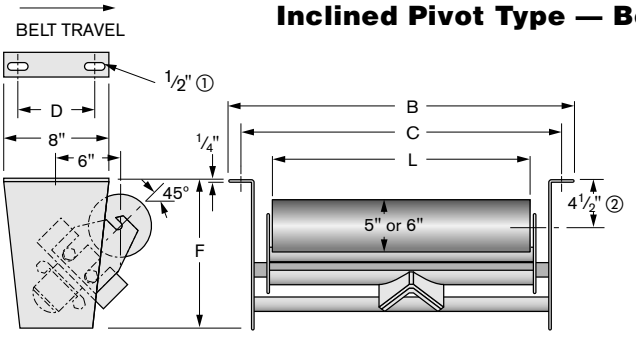
Belt Width	A	B	C	Recom.	Min.	Max.	E	F	L	Idler Wgt. & Thick. (Series C) 5" .149"	6" .165"	6" .250"
18	24⅛	29½	27	5	3¾	6¼	10	12½	21	88	102	111
20	26⅛	31½	29	5	3¾	6¼	10	12½	23	100	115	125
24	30⅛	35½	33	5	3¾	6¼	10	12½	27	112	127	139
30	36⅛	41½	39	5	3¾	6¼	10	12½	33	125	139	153
36	42⅛	47½	45	5	3¾	6¼	10	12½	39	146	151	167
42	48⅛	53½	51	5	3¾	6¼	14½	13	45	152	163	182
48	54⅛	59½	57	5	3¾	6¼	14½	13	51	165	180	201
★54	60⅛	65½	63	5	3¾	6¼	14½	13	57	176	190	214
★60	66⅛	71½	69	5	3¾	6¼	14½	13	63	186	201	227
★72	78⅛	83½	81	5	3¾	6¼	16½	13 15/16	75	205	219	251

① Use washers on ½-inch bolts.
② Available with 1½ or 11¾ inch drop.
③ Available in ¼" roll wall thickness.
④ ¼"–.72" belt width

★ These idlers are Series D only.
■ Shaded sizes are most commonly used and are more readily available.

RETURN TRAINING IDLER

Inclined Pivot Type — Belt Travel One Direction Only



REGREASABLE **FACTORY SEALED**

C5050 RG **C5050 FS**
D5050 RG **D5050 FS**
5-Inch Steel Roll

C6050 RG **C6050 FS**
D6050 RG **D6050 FS**
6-Inch Steel Roll ③

Dimensions in Inches — Average Weight in Pounds

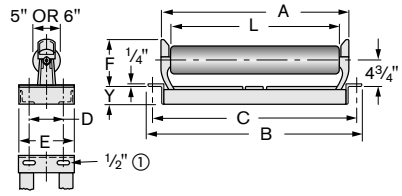
Belt Width	B	C	D Recom.	D Min.	D Max.	F	L	Idler Wgt. & Thick. (Series C) 5" .149"	6" .165"	6" .250"
18	29	27	5	3¾	6¼	14 3/16	21	81	74	83
20	31	29	5	3¾	6¼	14 3/16	23	85	90	100
24	35	33	5	3¾	6¼	14 3/16	27	94	106	118
30	41	39	5	3¾	6¼	14 3/16	33	108	122	136
36	47	45	5	3¾	6¼	14 3/16	39	119	136	152
42	53	51	5	3¾	6¼	14 3/16	45	133	152	171
48	59	57	5	3¾	6¼	14 3/16	51	146	167	188
★54	65	63	5	3¾	6¼	14 3/16	57	185	199	223
★60	71	69	5	3¾	6¼	14 3/16	63	200	215	281
★72	83	81	5	3¾	6¼	14 3/16	75	231	247	279

① Use washers on ½-inch bolts.
② Available with 1½ or 11¾ inch drop.
③ Available in ¼" roll wall thickness.

★ These idlers are Series D only.
■ Shaded sizes are most commonly used and are more readily available.

FLAT TRAINING IDLER

Actuating Shoe Type — Belt Travel Either Direction



REGREASABLE **FACTORY SEALED**

C5030 RG **C5030 FS**
D5030 RG **D5030 FS**
5-Inch Steel Roll

C6030 RG **C6030 FS**
D6030 RG **D6030 FS**
6-Inch Steel Roll ②

Dimensions in Inches — Average Weight in Pounds

Belt Width	A	B	C	D Recom.	D Min.	D Max.	E	F 5" Dia.	F 6" Dia.	L	Y	Idler Wgt. and Thick. (Series C) 5" .149"	6" .165"	6" .250"
18	24⅛	28¾	27	5	3¾	6¼	10	8	9⅛	21	3⅛	83	98	107
20	26⅛	30¾	29	5	3¾	6¼	10	8	9⅛	23	3⅛	95	110	120
24	30⅛	34¾	33	5	3¾	6¼	10	8	9⅛	27	3⅛	107	122	134
30	36⅛	40¾	39	5	3¾	6¼	10	8	9⅛	33	3⅛	120	134	148
36	42⅛	46¾	45	5	3¾	6¼	10	8	9⅛	39	3 3/16	141	146	162
42	48⅛	52¾	51	5	3¾	6¼	14½	8	9⅛	45	3 11/16	147	158	177
48	54⅛	58¾	57	5	3¾	6¼	14½	8	9⅛	51	3 11/16	160	175	196
★54	60⅛	64¾	63	5	3¾	6¼	14½	8	9⅛	57	3 9/16	171	185	209
★60	66⅛	70¾	69	5	3¾	6¼	14½	8	9⅛	63	3 9/16	181	196	222
★72	78⅛	82¾	81	5	3¾	6¼	16½	8	9⅛	75	3 9/16	200	215	247

① Use washers on ½-inch bolts.
② Available in ¼" roll wall thickness.

★ These idlers are Series D only.
■ Shaded sizes are most commonly used and are more readily available.

Note: Dimensions subject to change. Certified dimensions of ordered material furnished on request.

REX IDLERS

SERIES C and D

SPIRAL RETURN IDLER

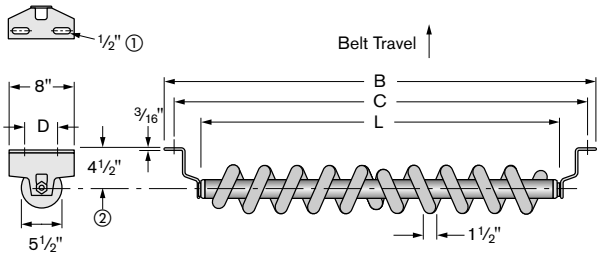
Belt Travel One Direction Only

Rex Spiral Return Idlers **minimize belt fleet and damage on the return belt which would otherwise result from material build-up**. The correct direction of rotation is important and is clearly marked on each idler. The "V" formed by right-hand and left-hand **spirals should point in the direction of rotation**.

Dimensions in Inches — Average Weight in Pounds

Belt Width	B	C	D			L	Idler Wgt. (Series C)
			Recom.	Min.	Max.		
18	29	27	5	3¾	6¼	21	20
20	31	29	5	3¾	6¼	23	23
24	35	33	5	3¾	6¼	27	25
30	41	39	5	3¾	6¼	33	29
36	47	45	5	3¾	6¼	39	34
42	53	51	5	3¾	6¼	45	40
48	59	57	5	3¾	6¼	51	45
★54	65	63	5	3¾	6¼	57	58
★60	71	69	5	3¾	6¼	63	67
★72	83	81	5	3¾	6¼	75	85

① Use washers on ½-inch bolts.
② Available with 1½, 11¾ or 16½ inch drop.
★ These idlers are Series D only.
■ Shaded sizes are most commonly used and are more readily available.



REGREASABLE	FACTORY SEALED
C6042 RG	C6042 FS
D6042 RG	D6042 FS

5½-Inch Rubber Spiral Roll

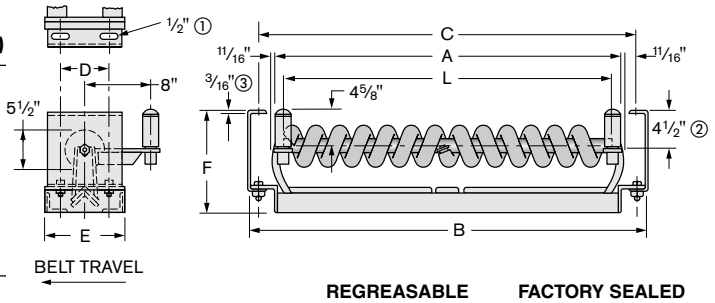
SPIRAL RETURN TRAINING IDLER

Positive Arm Type — Belt Travel One Direction Only

Dimensions in Inches — Average Weight in Pounds

Belt Width	A	B	C	D			E	F	L	Idler Wgt. (Series C)
				Recom.	Min.	Max.				
18	23⅝	29½	27	5	3¾	6¼	10	12½	21	88
20	25⅝	31½	29	5	3¾	6¼	10	12½	23	98
24	29⅝	35½	33	5	3¾	6¼	10	12½	27	110
30	35⅝	41½	39	5	3¾	6¼	10	12½	33	123
36	41⅝	47½	45	5	3¾	6¼	10	12½	39	135
42	47⅝	53½	51	5	3¾	6¼	14½	13	45	143
48	53⅝	59½	57	5	3¾	6¼	14½	13	51	159
★54	59⅝	65½	63	5	3¾	6¼	14½	13	57	169
★60	65⅝	71½	69	5	3¾	6¼	14½	13	63	179
★72	77⅝	83½	81	5	3¾	6¼	16½	13 15/16	75	197

① Use washers on ½-inch bolts.
② Available with 1½ or 11¾ inch drop.
③ ¼"–.72" belt width
★ These idlers are Series D only.
■ Shaded sizes are most commonly used and are more readily available.



REGREASABLE	FACTORY SEALED
C6057 RG	C6057 FS
D6057 RG	D6057 FS

5½-Inch Rubber Spiral Roll

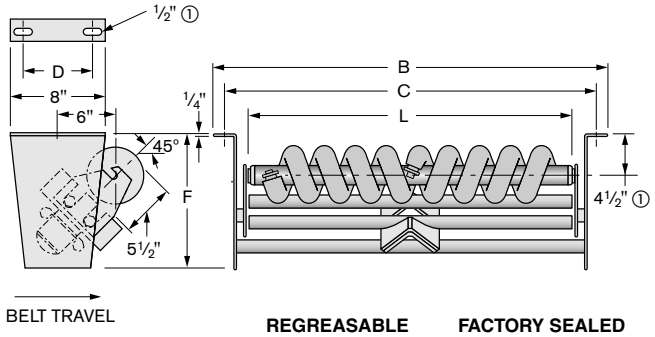
SPIRAL RETURN TRAINING IDLER

Inclined Pivot Type — Belt Travel One Direction Only

Dimensions in Inches — Average Weight in Pounds

Belt Width	B	C	D			F	L	Idler Wgt. (Series C)
			Recom.	Min.	Max.			
18	29	27	5	3¾	6¼	14 3/16	21	76
20	31	29	5	3¾	6¼	14 3/16	23	81
24	35	33	5	3¾	6¼	14 3/16	27	90
30	41	39	5	3¾	6¼	13 3/16	33	104
36	47	45	5	3¾	6¼	14 3/16	39	115
42	53	51	5	3¾	6¼	14 3/16	45	130
48	59	57	5	3¾	6¼	14 3/16	51	144
★54	65	63	5	3¾	6¼	14 3/16	57	173
★60	71	69	5	3¾	6¼	14 3/16	63	188
★72	83	81	5	3¾	6¼	14 3/16	75	215

① Use washers on ½-inch bolts.
② Available with 1½ or 11¾ inch drop.
★ These idlers are Series D only.



REGREASABLE	FACTORY SEALED
C6053 RG	C6053 FS
D6053 RG	D6053 FS

5½-Inch Rubber Spiral Roll

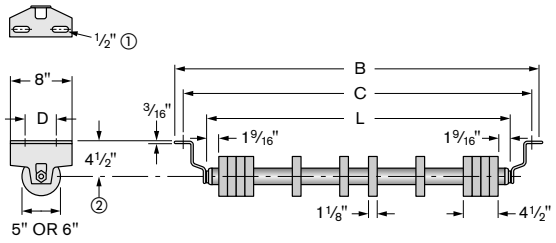
Note: Dimensions subject to change. Certified dimensions of ordered material furnished on request.

REX IDLERS

SERIES C and D

DISC RETURN IDLER

Rex Disc Return Idlers minimize belt misalignment which can cause damage to the belt, resulting from material build-up on the return idler rolls. Available with rubber, ceramic or urethane discs.



Four discs on each end is standard.

REGREASABLE **FACTORY SEALED**

C5043 RG **C5043 FS**
D6043 RG **D5043 FS**
5-Inch Disc Roll

C6043 RG **C6043 FS**
D6043 RG **D6043 FS**
6-Inch Disc Roll

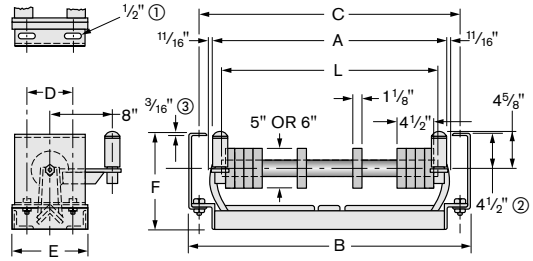
Dimensions in Inches — Average Weight in Pounds

Belt Width	B	C	D			L	No. of Discs	Idler Wgt. (Series C)	
			Recom.	Min.	Max.			5"	6"
18	29	27	5	3¾	6¼	21	9	20	26
20	31	29	5	3¾	6¼	23	9	22	28
24	35	33	5	3¾	6¼	27	10	24	30
30	41	39	5	3¾	6¼	33	11	27	34
36	47	45	5	3¾	6¼	39	12	31	37
42	53	51	5	3¾	6¼	45	13	35	42
48	59	57	5	3¾	6¼	51	14	41	48
★54	65	63	5	3¾	6¼	57	15	49	56
★60	71	69	5	3¾	6¼	63	16	54	62
★72	83	81	5	3¾	6¼	75	18	65	73

① Use washers on ½-inch bolts.
② Available with 1½, 11¾ or 16½ inch drop.
★ These idlers are Series D only.
■ Shaded sizes are most commonly used and are more readily available.

DISC RETURN TRAINING IDLER

Positive Arm Type — Belt Travel One Direction Only



Four discs on each end is standard.

REGREASABLE **FACTORY SEALED**

C5056 RG **C5056 FS**
D5056 RG **D5056 FS**
5-Inch Disc Roll

C6056 RG **C6056 FS**
D6056 RG **D6056 FS**
6-Inch Disc Roll

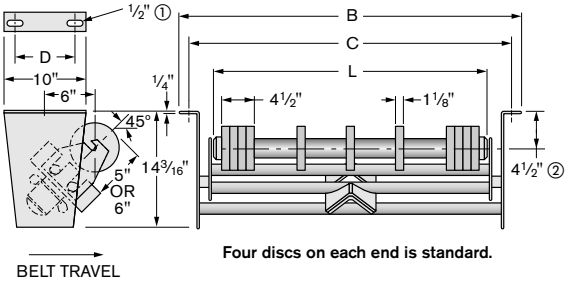
Dimensions in Inches — Average Weight in Pounds

Belt Width	A	B	C	D			E	F	No. of Discs	L	Idler Wgt. (Series C)	
				Recom.	Min.	Max.					5"	6"
18	23⅝	29½	27	5	3¾	6¼	10	12½	9	21	94	97
20	25⅝	31½	29	5	3¾	6¼	10	12½	9	23	106	109
24	29⅝	35½	33	5	3¾	6¼	10	12½	10	27	118	121
30	35⅝	41½	39	5	3¾	6¼	10	12½	11	33	131	134
36	41⅝	47½	45	5	3¾	6¼	10	12½	12	39	143	146
42	47⅝	53½	51	5	3¾	6¼	14½	13	13	45	156	159
48	53⅝	59½	57	5	3¾	6¼	14½	13	14	51	167	171
★54	59⅝	65½	63	5	3¾	6¼	14½	13	15	57	183	187
★60	65⅝	71½	69	5	3¾	6¼	14½	13	16	63	195	199
★72	77⅝	83½	81	5	3¾	6¼	16½	13 15/16	18	75	216	221

① Use washers on ½-inch bolts.
② Available with 1½ or 11¾ inch drop.
③ ¼"–.72" belt width
★ These idlers are Series D only.
■ Shaded sizes are most commonly used and are more readily available.

DISC RETURN TRAINING IDLER

Inclined Pivot Type — Belt Travel One Direction Only



Four discs on each end is standard.

REGREASABLE **FACTORY SEALED**

C5054 RG **C5054 FS**
D5054 RG **D5054 FS**
5-Inch Disc Roll

C6054 RG **C6054 FS**
D6054 RG **D6054 FS**
6-Inch Disc Roll

Dimensions in Inches — Average Weight in Pounds

Belt Width	B	C	D			L	No. of Discs	Idler Wgt. (Series C)	
			Recom.	Min.	Max.			5"	6"
18	29	27	5	3¾	6¼	21	9	67	69
20	31	29	5	3¾	6¼	23	9	69	71
24	35	33	5	3¾	6¼	27	10	73	76
30	41	39	5	3¾	6¼	33	11	80	83
36	47	45	5	3¾	6¼	39	12	106	109
42	53	51	5	3¾	6¼	45	13	116	120
48	59	57	5	3¾	6¼	51	14	127	131
★54	65	63	5	3¾	6¼	57	15	161	165
★60	71	69	5	3¾	6¼	63	16	174	178
★72	83	81	5	3¾	6¼	75	18	197	202

① Use washers on ½-inch bolts.
② Available with 1½ or 11¾ inch drop.
★ These idlers are Series D only.
■ Shaded sizes are most commonly used and are more readily available.

Note: Dimensions subject to change. Certified dimensions of ordered material furnished on request.

REX IDLERS

SERIES C and D

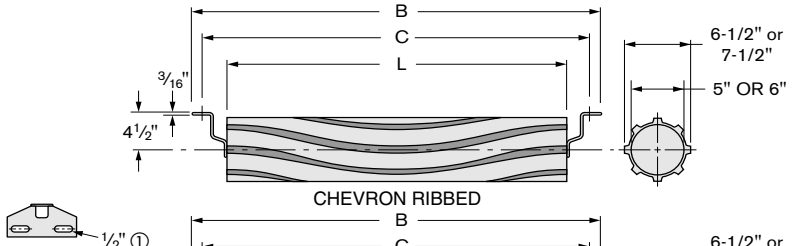
RIBBED COVERED RETURN IDLER

The REX RIBBED COVERED RETURN IDLERS are standard Rex return idlers covered with a tough extruded, one piece, ribbed rubber sleeve. The sleeve is offered in either a **straight-ribbed** or **chevron** pattern. The **straight-ribbed** idler acts as an effective belt beater removing carry-back from the underside of the belt. It comes complete with special hangers for longer life. The **chevron ribbed** cover also removes material but runs smoothly without idler build-up making an effective return idler for severe operating conditions. Both styles offer "rubber on rubber" belt protection, prevent idler build-up, remove carry back and operate with dual direction bolts.

STRAIGHT RIBBED (S)

CHEVRON RIBBED (C)

Only available with 4½" drop bracket shown here with positive roll hold down clamp.



REGREASABLE	FACTORY SEALED
C5046 RG	**C5046 FS**
D5046 RG	**D5046 FS**
6½ Inch Rubber Roll	
C6046 RG	**C6046 FS**
D6046 RG	**D6046 FS**
7½-Inch Rubber Roll	

Dimensions in Inches — Average Weight in Pounds

Belt Width	B	C	D			L	Idler Wgt. (Series C)	
			Recom.	Min.	Max.		6½" Roll	7½" Roll
18	29	27	5	3¾	6¼	21	33	39
20	31	29	5	3¾	6¼	23	35	42
24	35	33	5	3¾	6¼	27	39	47
30	41	39	5	3¾	6¼	33	48	56
36	47	45	5	3¾	6¼	39	56	65
42	53	51	5	3¾	6¼	45	63	74
48	59	57	5	3¾	6¼	51	70	83
★54	65	63	5	3¾	6¼	57	84	92
★60	71	69	5	3¾	6¼	63	92	100
★72	83	81	5	3¾	6¼	75	98	108

① Use washers on ½-inch bolts.
Add suffix "C" for chevron and "S" for straight, i.e. 48-C6046RG-S.

■ Shaded sizes are most commonly used and are more readily available.
★ These idlers are Series D.

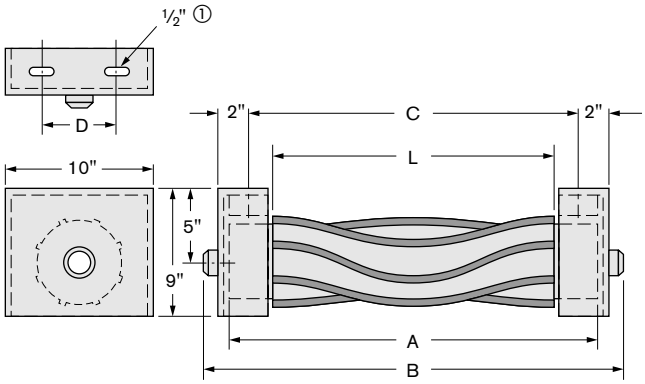
REX IDLERS

SERIES D

REX RIBBED® TRAINING IDLER

The REX RIBBED TRAINING IDLER functions by sensing misalignment and immediately reacting to it. A Rex cartridge self-aligning roller bearing centered inside the rubber covered steel roll provides a rugged pivot. The cartridge bearing is well protected with “M” seals and by its location inside the roll. The tough ribbed rubber cover helps eliminate material build-up. The REX RIBBED TRAINING IDLER is especially effective on reversing conveyors.

Model D6058
7 1/2-Inch Rubber Roll



The REX RIBBED TRAINING IDLER utilizes a steel six inch diameter hollow tube. This tube is placed into a fluted rubber sleeve which is 7½" diameter. The rubber sleeve has a chevron pattern for superior training.

Dimensions in Inches — Average Weight in Pounds

Belt Width	A	B	C	D			L	Idler Wgt.
				Recom.	Min.	Max.		
24	36	38½	33	4	3 5/16	8 11/16	29½	93
30	42	44½	39	4	3 5/16	8 11/16	35½	103
36	48	50½	45	4	3 5/16	8 11/16	41½	115
42	54	56½	51	4	3 5/16	8 11/16	47½	127
48	60	62½	57	4	3 5/16	8 11/16	53½	138
54	66	68½	63	4	3 5/16	8 11/16	59½	154
60	72	74½	69	4	3 5/16	8 11/16	65½	165
72	84	86½	81	4	3 5/16	8 11/16	77½	183

① Use washers on ½" bolts.

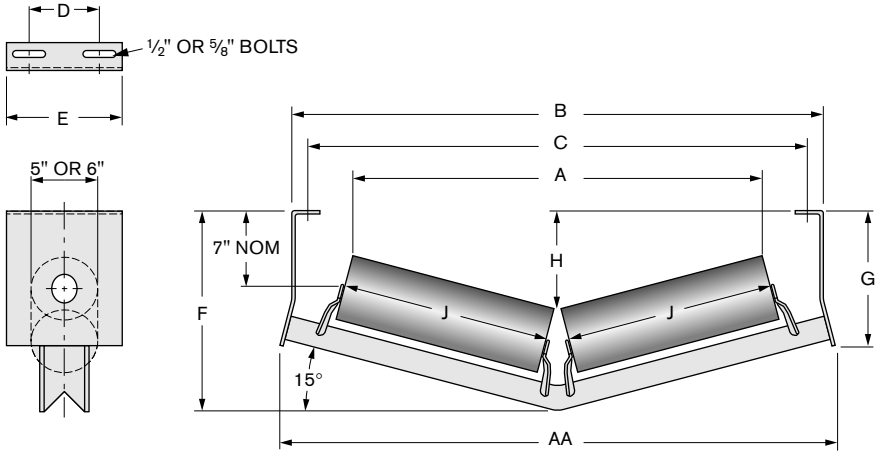
■ Shaded sizes are most commonly used and are more readily available.

REX IDLERS

SERIES C and D

V – RETURN IDLER – 15°

Factory Sealed



C5140V15 FS **D5140V15 FS**
5-Inch Disc Roll

C6140V15 FS **D6140V15 FS**
6-Inch Disc Roll

Dimensions in Inches — Average Weight in Pounds

Belt Width	A		AA	B	C	A			E	F	G	H		J	Idler Wgt. (Series C)	
	5" Roll	6" Roll				Recom.	Min.	Max				5" Roll	6" Roll		5"	6"
18	21½	21¼	32¼	30	27	6¼	3¾	8½	10	16¼	12½	7½	7	11	59	62
20	21½	21¼	34¼	32	29	6¼	3¾	8½	10	16¼	12½	7½	7	11	60	63
24	25⅜	25⅛	38¼	36	33	6¼	3¾	8½	10	16¾	12½	8	7½	13	66	70
30	33⅛	32⅞	44¼	42	39	6¼	3¾	8½	10	17¾	12½	9	8½	17	76	81
36	37	36¾	50¼	48	45	6¼	3¾	8½	10	18½	12½	9⅝	9⅛	19	83	88
42	44¾	44½	56¼	54	51	6¼	3¾	8½	10	19¼	12½	10½	10	23	93	100
48	48½	48¼	62¼	60	57	6¼	3¾	8½	10	20	12½	11¼	10¾	25	99	107
54	56¼	56	68¼	66	63	6¼	3¾	8½	10	21	12½	12⅛	11⅝	29	110	119
60	64	63¾	74¼	72	69	6¼	3¾	8½	10	21¾	12½	12⅞	12⅜	33	120	130
72	75⅝	75⅜	86¼	84	81	6¼	3¾	8½	10	22½	12½	13¾	13¼	39	137	149

Available in: Rubber Disk, Rubber Roll, Steel ¼" wall in 6" diameter, Rex Ribbed Covered Roll, Polyethylene Roll and Urethane, Ceramic or Rubber Coated Roll.
Part number example: 36 C6140V15 FS

REX IDLERS

Series B+, C and D
(5" Roll diameter only for B+)

POLYETHYLENE ROLL IDLERS
Regreasable or Factory Sealed

A durable roll shell that resists corrosion and material build-up.

Longer Belt Life

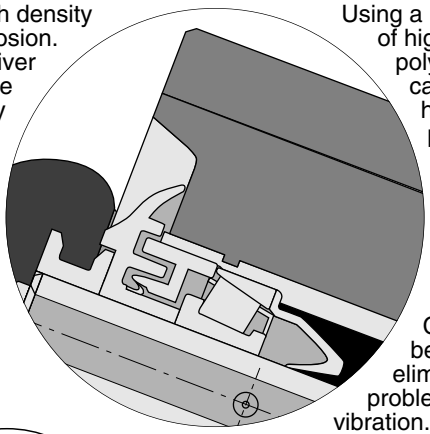
Unlike steel, high density polyethylene rolls resist corrosion. Consequently they deliver exceptional life in corrosive applications that quickly destroy conventional steel rolls. In the unlikely event of a stall, polyethylene rolls won't cut or damage conveyor belts.

Resists Corrosion

Using a proprietary formulation of high molecular weight polyethylene, Teflon® and carbon black, Rexnord's high density polyethylene rolls are manufactured using a patented extrusion process. The result is a roll that not only resists corrosion, but one that also resists material build-up. Clean rolls help extend belt life, and help eliminate training problems and conveyor vibration.

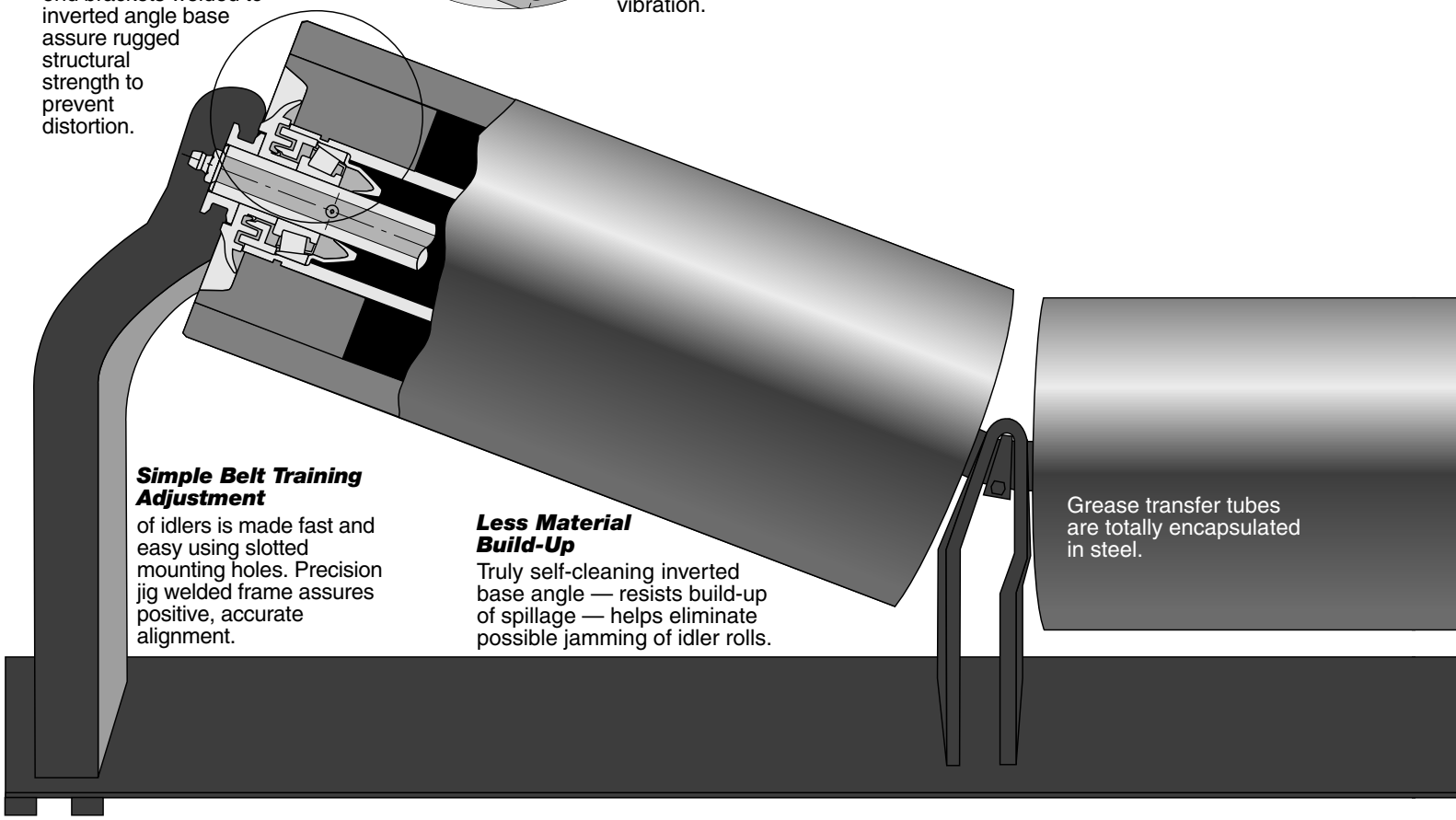
Less Chance of Belt Damage

Longer belt life is assured because polyethylene roll shell resists material build-up, and Rex designed "Mini-Gap" provides smallest possible space between rollers for better belt support and no-pinch belt protection.



Handles Surge Loading

Die formed, deep-pressed end brackets welded to inverted angle base assure rugged structural strength to prevent distortion.



Simple Belt Training Adjustment

of idlers is made fast and easy using slotted mounting holes. Precision jig welded frame assures positive, accurate alignment.

Less Material Build-Up

Truly self-cleaning inverted base angle — resists build-up of spillage — helps eliminate possible jamming of idler rolls.

Grease transfer tubes are totally encapsulated in steel.

Regreasable Idlers

Better Protection Against Abrasives and Moisture

Rex offers a special combination labyrinth with wiping seal and protective outer shield for your operating environment. This seal has five hard-to-get-through passages filled with grease to block contaminants from the roller bearings. The outer and inner seals are close tolerance injection molded nonmetallic. The labyrinth/shield seal is particularly excellent for long overland horizontal conveyors, because of its low friction torque or for applications where water is present or when frequent washdowns are required.

REX IDLERS

Series B+, C and D
(5" Roll diameter only for B+)

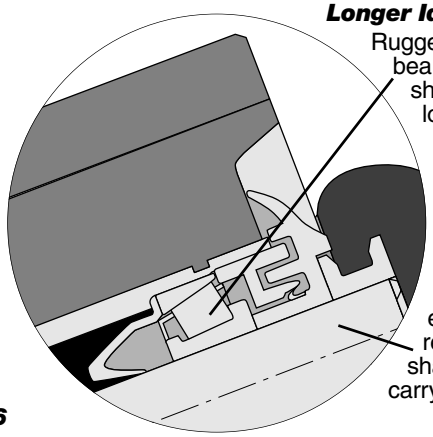
POLYETHYLENE ROLL IDLERS
Regreasable or Factory Sealed

Other Features Include:

- A wide variety of available sizes — in 5 and 6-inch diameters and 18- to 72-inch widths.
- Galvanized frames with plated hardware for additional corrosion protection (optional).
- Polyethylene rolls are interchangeable with Rex steel rolls.

Typical Applications:

- Chemicals
- Acid
- Oil
- Pulp & paper
- Chemical compounds
- Coke
- Tar sands
- Wood Chips
- Salt
- Coal
- Phosphates
- Asphalt



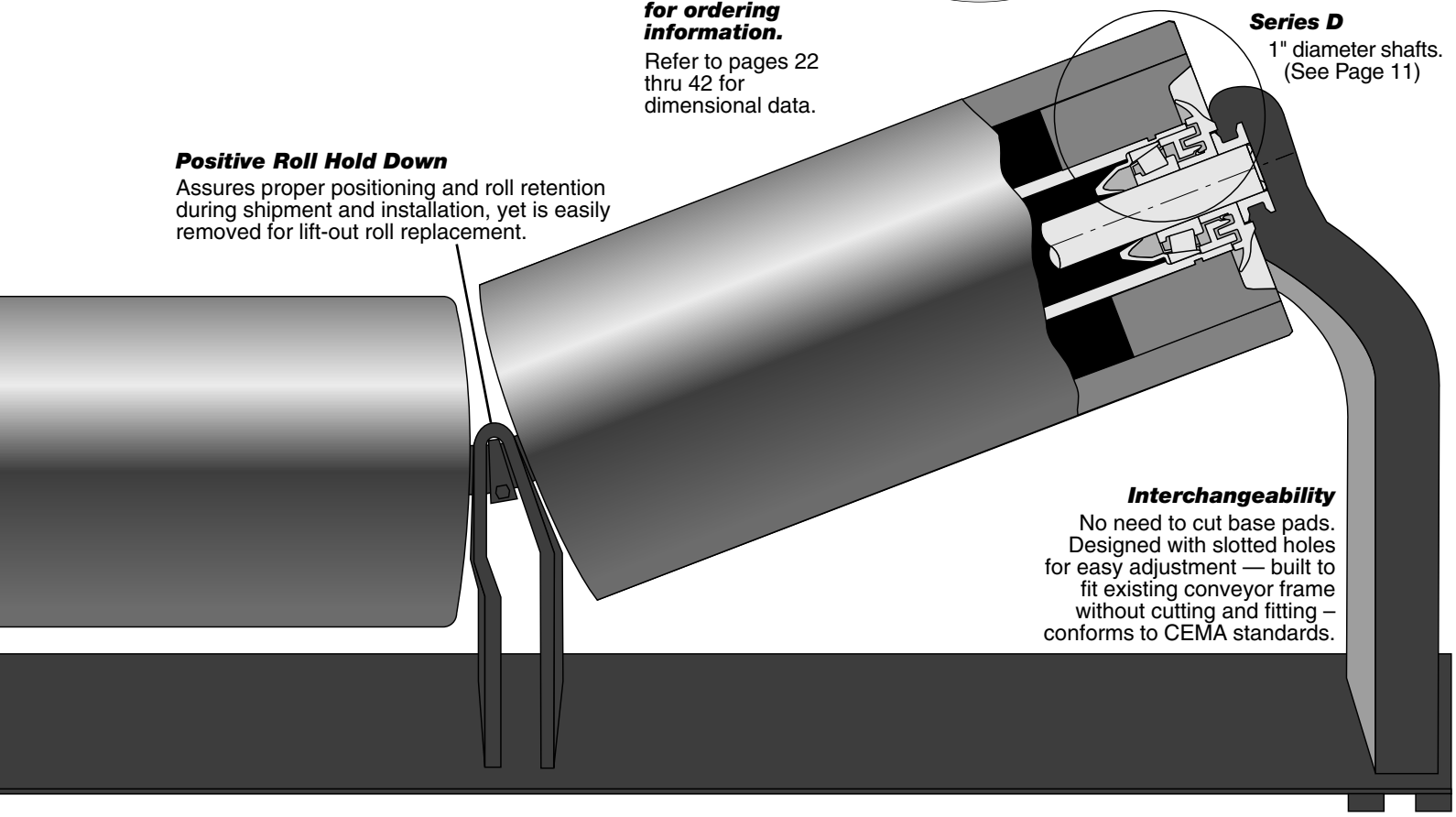
Longer Idler Life — Series C
Rugged 3/4" tapered roller bearings and 3/4" diameter shafts provide ample load-carrying capacity.

Factory-Sealed Idlers
eliminate the need for relubrication … solid shafts for more load carrying capacity.

See Page 46 for ordering information.
Refer to pages 22 thru 42 for dimensional data.

Series D
1" diameter shafts. (See Page 11)

Positive Roll Hold Down
Assures proper positioning and roll retention during shipment and installation, yet is easily removed for lift-out roll replacement.



Interchangeability
No need to cut base pads. Designed with slotted holes for easy adjustment — built to fit existing conveyor frame without cutting and fitting – conforms to CEMA standards.

Factory-Sealed Idlers

Better Protection Against Abrasives

Rex offers a special combination labyrinth with wiping seal and protective outer shield for your operating environment. This seal has five hard-to-get-through passages filled with grease to block contaminants from the roller bearings. The outer and inner seals are close tolerance injection molded nonmetallic. This product will provide excellent service in most environments and where minimum maintenance can be provided. Solid shafts are standard.

POLYETHYLENE ROLL IDLERS

ORDERING INFORMATION — ORDER BY MODEL NUMBER

DESCRIPTION	MODEL NUMBER ◆	
	5" Roll (B+, C and D)	6" Roll (C and D)
Flat	X5027 FS	X6027 FS
Flat -Training - Actuating Shoe	X5035 FS	X6035 FS
Flat - Training- Positive Arm	X5036 FS	X6036 FS
Return	X5047 FS	X6047 FS
Return - Training - Positive Arm	X5059 FS	X6059 FS
Return - Training - Actuating Shoe	X5070 FS	X6070 FS
20° Troughing	X5206 FS	X6206 FS
20° Troughing - Training - Actuating Shoe	X5218 FS	X6218 FS
20° Troughing - Training - Positive Arm	X5264 FS	X6264 FS
35° Troughing	X5306 FS	X6306 FS
35° Troughing -Training - Actuating Shoe	X5318 FS	X6318 FS
35° Troughing- Training - Positive Arm	X5364 FS	X6364 FS
45° Troughing- Training - Positive Arm	X5406 FS	X6406 FS
45° Troughing- Training - Actuating Shoe	X5418 FS	X6418 FS
45°Troughing - Training - Positive Arm	X5464 FS	X6464 FS

If galvanized frame required; specify “galvanized frame”

Insert CEMA Classification for “X”.

◆ FS is factory sealed; specify RG for regreasable.

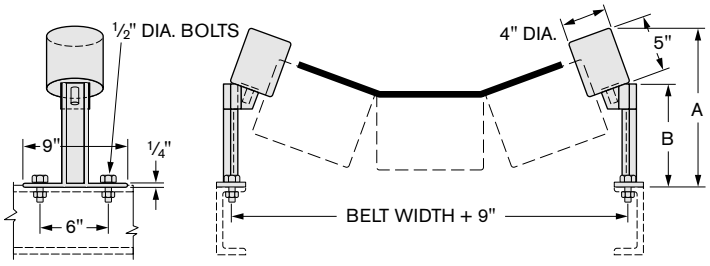
SIDE GUIDE IDLERS

The use of side guide idlers is not normally recommended. There are some applications where conditions may require their use. On a new installation, side guide idlers are sometimes installed during the belt training period and then removed before the conveyor is placed in actual operation.

Side guide idlers tend to cause belt-edge wear. Training idlers are much preferred to assure proper belt alignment since they do not damage the belt.

Factory sealed ball bearings insure free roll rotation to keep belt edge wear to a minimum.

FOR TROUGHED BELTS



Dimensions in Inches — Average Weight in Pounds

Side Guide Part No.	20° Idlers			A	B	Idler Wgt. Lbs.	Side Guide Part No.	35° Idlers		A	B	Idler Wgt.
	Idler Series							Idler Series				
	B, B+	C, D						B, B+	C, D			
		5	6									
	Belt Widths							Belt Widths				
611-20444	18-20	—	—	13⅛	7 25/32	9.2	**611-20445**	18-20	—	15½	10 7/16	10.3
601-3327	24-36	18-20	18-20	14 11/32	9 9/32	9.4	**611-20446**	24-30	18-20	17 3/32	12 3/32	10.6
601-3328	42	24-36	24-30	15¾	10 11/16	10.0	**601-3333**	36	24-30	18¼	13 7/16	10.9
601-3329	48	42-48	36-48	17 15/16	12⅞	10.4	**601-3334**	42	36	20 5/32	15 11/32	11.2
601-3330	—	54-60	54-60	19 11/16	14⅝	10.8	**601-3335**	48	42-48	22 3/16	17⅜	11.9
							601-3336	—	54-60	24¾	19 15/16	13.1

45° Side Guide Idlers also available upon request.

SIDE GUIDE IDLERS

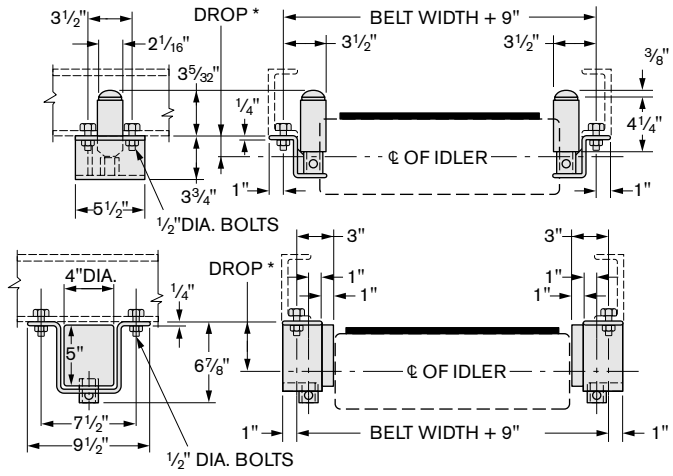
FOR RETURN BELTS

Side Guide Part No.	Idler Series All Belt Sizes	Idler Wgt.
601-3518	B, B+ C, D	6.0

* For use with conveyors that have 1½" drop brackets on their return idlers

Side Guide Part No.	Idler Series All Belt Sizes	Idler Wgt.
601-3519	C, D	10.0

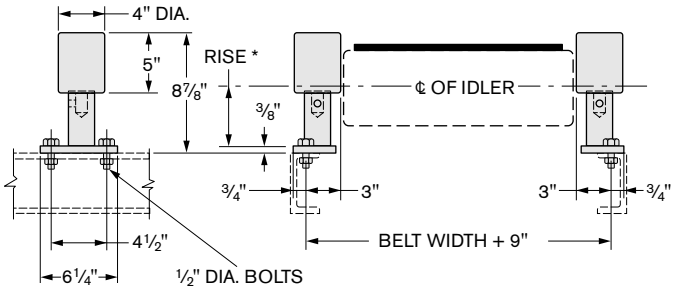
* For use with conveyors that have 4½" drop brackets on their return idlers



FOR FLAT BELTS

Side Guide Part No.	Idler Series All Belt Sizes	Idler Wgt.
601-3520	B C, D	17.0

* For use with conveyors that have 4¼" rise brackets

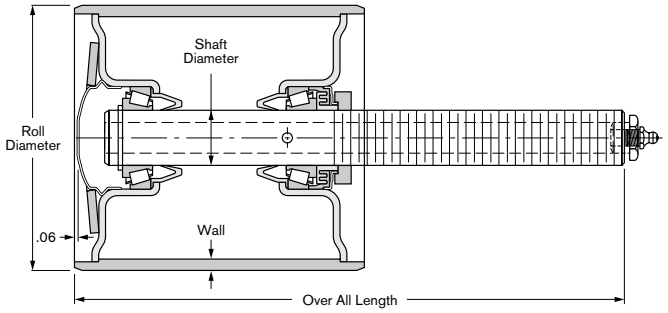


FOR FLEX WALL RETURN BELTS

Regreasable or factory sealed.

Side Guide Part No.	Diameter ①		Length	Over All Length	Wall Thickness	Weight
	Shaft	Roll				
611-21651	0.75	5	5.25	10	0.149	8
611-21963	0.75	4	5	10	0.149	6.7
611-22131	0.75	6	5.75	10	0.165	10
611-22132	0.75	6	5.75	10	0.25	11.1

① Thread is 16 UNF.



All items are normally available from stock

Note: Dimensions subject to change. Certified dimensions of ordered material furnished on request.

REX IDLERS

Series E — CEMA E
20°, 35° and 45° Trough — 6" and 7" Roll Diameter
Regreasable or Factory Sealed

Increased Idler Capacity with Tapered Roller Bearings
Precision tapered roller bearings and 1¼" diameter shafts assure freer-turning rolls and less belt wear.

Maintainance Cost Reduced
Single point grease through lubrication with relief fitting and center tube minimizes maintenance cost.

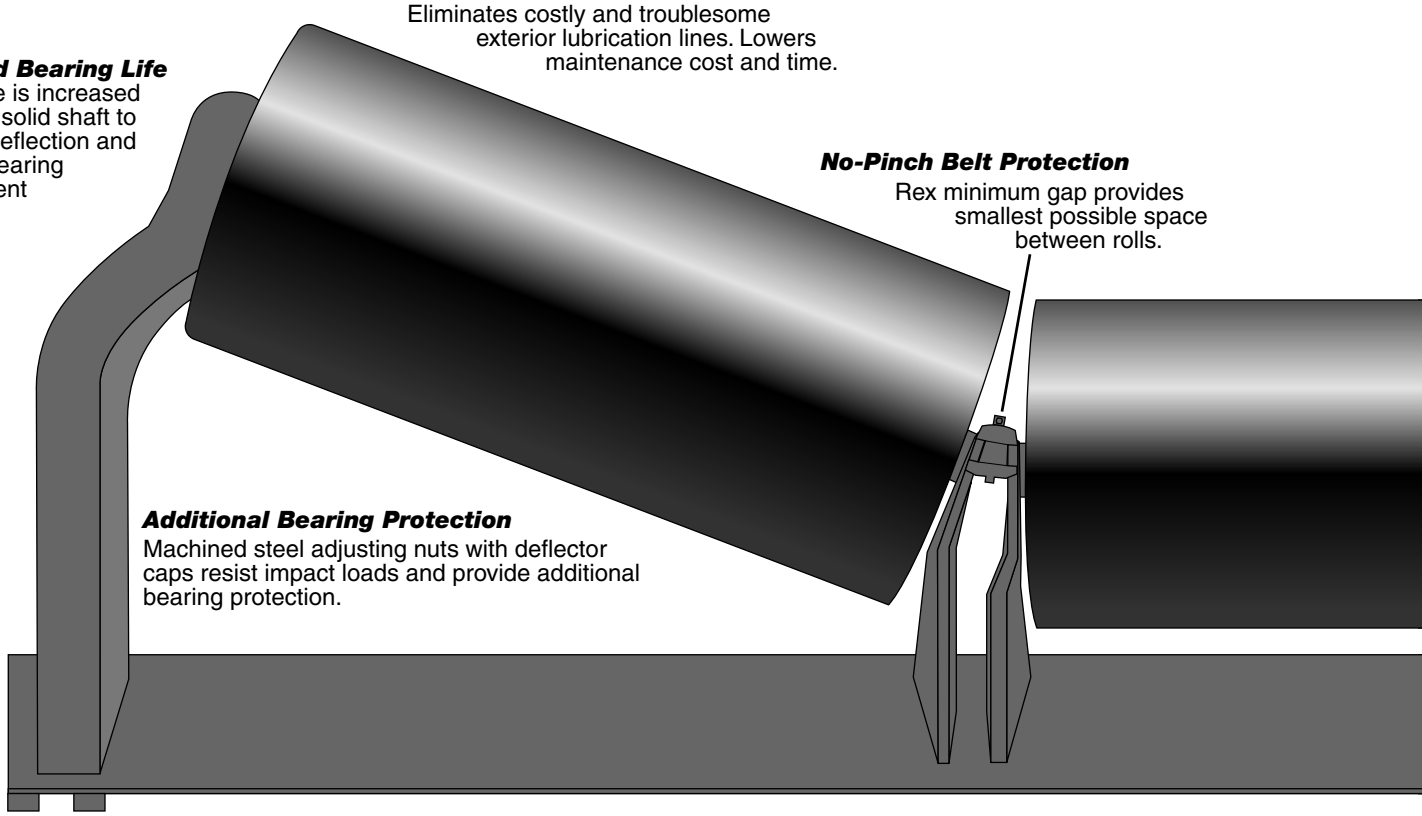
Better Protection Against Abrasives and Moisture
Triple-labyrinth cartridge type grease seal protects bearings.

Roll Shaft Locks
Heavy end retainer provides locking of roll shaft.

Positive Through Greasing to all Bearing Cavities and Seals
Eliminates costly and troublesome exterior lubrication lines. Lowers maintenance cost and time.

Increased Bearing Life
Bearing life is increased by using a solid shaft to minimize deflection and resulting bearing misalignment

No-Pinch Belt Protection
Rex minimum gap provides smallest possible space between rolls.



Additional Bearing Protection
Machined steel adjusting nuts with deflector caps resist impact loads and provide additional bearing protection.

No Need to Cut or Fit Base Pads
Pads are designed to fit existing conveyor frames without recutting and fitting. Meet all CEMA standards.

Handles Surge Loading
Die-pressed, deep formed end brackets of rugged cross section give solid support and idler roll alignment.

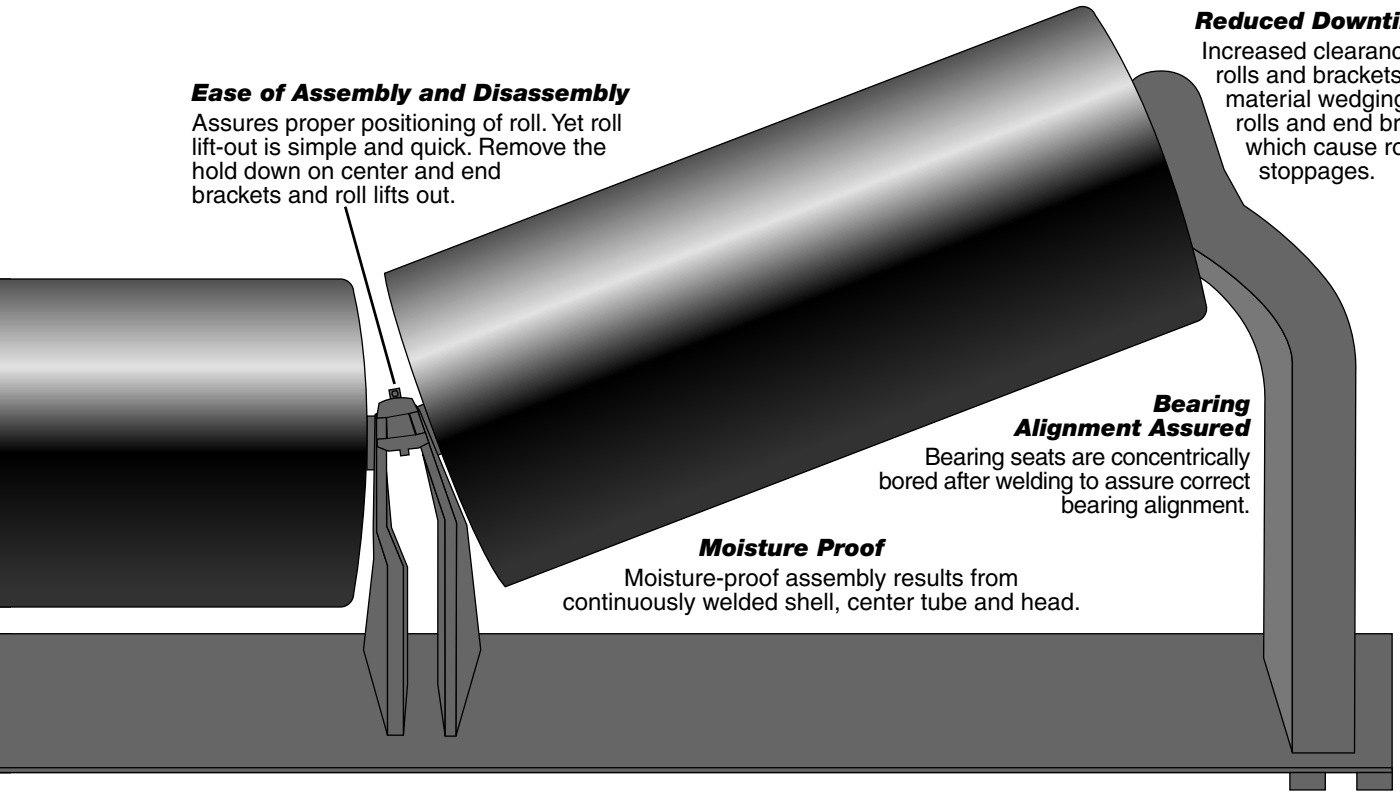
REX IDLERS

Series E — CEMA E
20°, 35° and 45° Trough — 6" and 7" Roll Diameter
Regreasable or Factory Sealed

Longer Roll Life
Superior sealing protection and true concentricity of rolls assure longer roll life under severest operating conditions.

Moisture Proof Assembly
Rigid construction and moisture-proof assembly result from continuously welded center tube joint.

No Lubrication Required
Factory lubricated and sealed idlers can be furnished as an optional feature, replacing the standard fittings with pipe plugs.



Reduced Downtime
Increased clearance between rolls and brackets minimizes material wedging between rolls and end brackets which cause roll stoppages.

Ease of Assembly and Disassembly
Assures proper positioning of roll. Yet roll lift-out is simple and quick. Remove the hold down on center and end brackets and roll lifts out.

Bearing Alignment Assured
Bearing seats are concentrically bored after welding to assure correct bearing alignment.

Moisture Proof
Moisture-proof assembly results from continuously welded shell, center tube and head.

Reduces Roll Damage
Inverted angle base prevents build-up of spillage … eliminates possible jamming of idler rolls.

Ease of Maintainance
Jig welded frame assures positive, accurate roll alignment. Slotted mounting holes in base pad simplify adjustments.

REX IDLERS

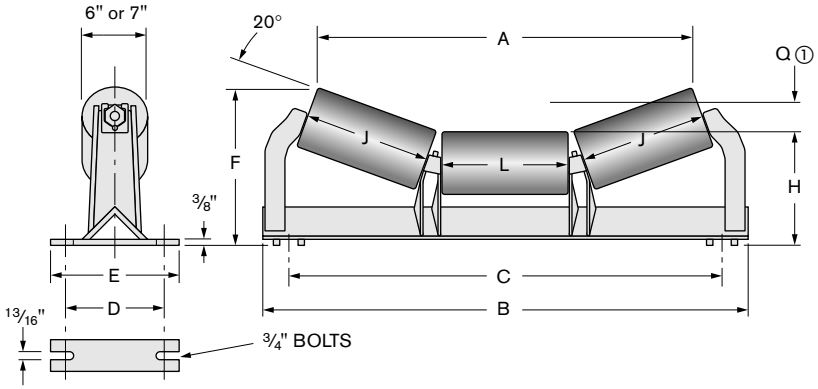
SERIES E

20° TROUGHING IDLER — EQUAL LENGTH ROLLS

REGREASABLE **FACTORY SEALED**

E6200 RG **E6200 FS**
6-Inch Steel Rolls

E7200 RG **E7200 FS**
7-Inch Steel Rolls



Dimensions in Inches — Average Weight in Pounds

Belt Width	A		B	C	D	E	F		H		J	L	Q①	Idler Wgt.	
	6" Roll	7" Roll			Min.		6" Roll	7" Roll	6" Roll	7" Roll				6" Roll	7" Roll
36	41	40⅝	50½	45	9	12	15⅜	15¾	10½	11	13 9/16	13 9/16	1⅞	140	168
42	46¾	46⅜	56	51	9	12	16	16½	10½	11	15 9/16	15 9/16	2¼	154	187
48	52½	52⅛	62	57	9	12	16¾	17⅛	10½	11	17 9/16	17 9/16	2½	167	203
54	58⅜	58	68	63	9	12	17⅜	17⅞	10½	11	19⅝	19⅝	3	180	220
60	63½	63⅛	74	69	9	12	18	18½	10½	11	21⅜	21⅜	3¼	192	236
72	74⅝	74¼	86	81	9	12	20⅛	20½	11¼	11¾	25¼	25¼	3½	233	285
84	86⅛	85¾	98	93	11½	14½	22¼	22⅝	12	12½	29¼	29¼	4⅝	304	363
96	97⅝	97¼	110	105	11½	14½	23⅝	24	12	12½	33¼	33¼	5¼	337	406

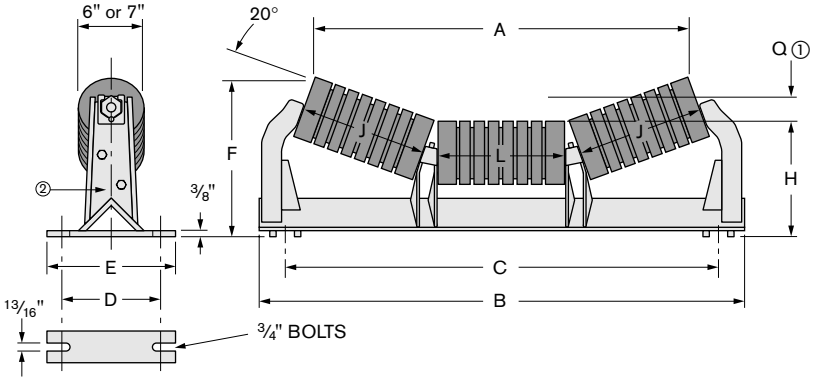
① Location of head pulley in relation to idler center roll.

20° TROUGHING IMPACT IDLER — EQUAL LENGTH ROLLS

REGREASABLE **FACTORY SEALED**

E6202 RG **E6202 FS**
6-Inch Rubber Rolls

E7202 RG **E7202 FS**
7-Inch Rubber Rolls



Dimensions in Inches — Average Weight in Pounds

Belt Width	A		B	C	D	E	F		H		J	L	Q①	Idler Wgt.	
	6" Roll	7" Roll			Min.		6" Roll	7" Roll	6" Roll	7" Roll				6" Roll	7" Roll
36	40 1/16	40⅜	50½	45	9	12	15¼	15 1/16	10 7/16	10 15/16	13 1/16	13 1/16	1⅞	145	161
42	46 7/16	46⅛	56	51	9	12	15 15/16	16⅜	10 7/16	10 15/16	15 1/16	15 1/16	2¼	165	183
48	52¼	51⅞	62	57	9	12	16⅝	17 1/16	10 7/16	10 15/16	17 1/16	17 1/16	2½	182	202
54	58⅛	57 13/16	68	63	9	12	17 5/16	17¾	10 7/16	10 15/16	19⅛	19⅛	3	199	222
60	63 3/16	62⅞	74	69	9	12	17⅞	18⅜	10 7/16	10 15/16	20⅞	20⅞	3¼	214	239
72	74⅜	74	86	81	9	12	19 15/16	20 7/16	11 3/16	11 11/16	24¾	24¾	3½	265	294
84	85⅞	85 9/16	98	93	11½	14½	22 1/16	22½	11 15/16	12 7/16	28¾	28¾	4⅝	364	397
96	97⅜	97 1/16	110	105	11½	14½	23 7/16	23⅞	11 15/16	12 7/16	32¾	32¾	5¼	407	444

① Location of head pulley in relation to idler center roll.
② Demountable end brackets.

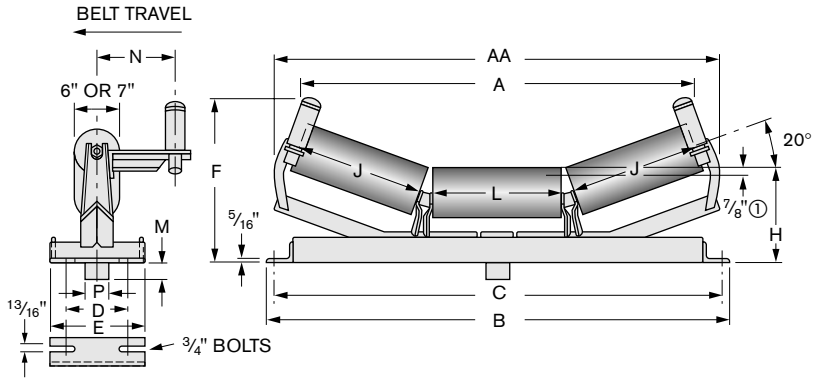
Note: Dimensions subject to change. Certified dimensions of ordered material furnished on request.

REX IDLERS

SERIES E

20° TROUGHING TRAINING IDLER — EQUAL LENGTH ROLLS

Positive Arm Type — Belt Travel One Direction Only



REGREASABLE **FACTORY SEALED**

E6212 RG **E6212 FS**
6-Inch Steel Rolls

E7212 RG **E7212 FS**
7-Inch Steel Rolls

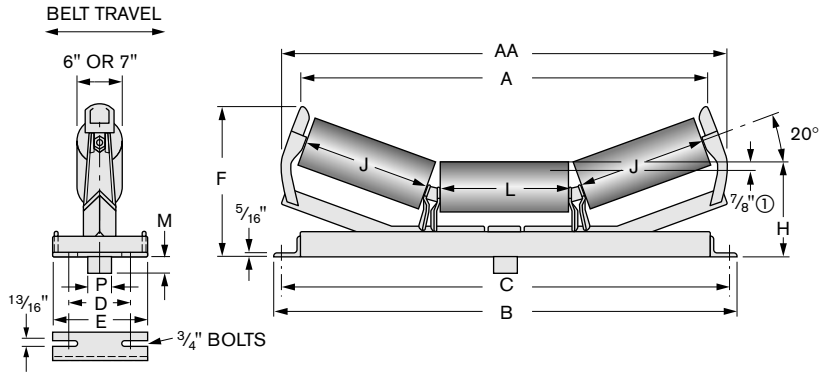
Dimensions in Inches — Average Weight in Pounds

Belt Width	A	AA	B	C	D Min.	E	F	H 6" Dia.	H 7" Dia.	J	L	M	N	P	Idler Wgt. 6" Dia.	Idler Wgt. 7" Dia.
36	42¾	51⅜	47	45	9	12	18¾	11⅜	11⅞	13⁹⁄₁₆	13⁹⁄₁₆	3¹¹⁄₁₆	10	3½	237	265
42	48½	57⅛	53	51	9	12	19⅜	11⅜	11⅞	15⁹⁄₁₆	15⁹⁄₁₆	3¹¹⁄₁₆	10	3½	258	290
48	54¼	62⅞	59	57	9	12	20⅛	11⅜	11⅞	17⁹⁄₁₆	17⁹⁄₁₆	3¹¹⁄₁₆	10	3½	278	315
54	60⅛	68⅞	65	63	9	12	20¾	11⅜	11⅞	19⅝	19⅝	3¹¹⁄₁₆	15	3½	300	339
60	65¼	74	71	69	9	12	21⅜	11⅜	11⅞	21⅜	21⅜	3¹¹⁄₁₆	15	3½	318	362
72	76⅜	85⅝	83	81	9	12	23½	12⅛	12⅝	25¼	25¼	4¾	15	5¼	434	485

① Approximate distance to the top of the center roll of other idlers.

20° TROUGHING TRAINING IDLER — EQUAL LENGTH ROLLS

Actuating Shoe Type — Belt Travel Either Direction



REGREASABLE **FACTORY SEALED**

E6210 RG **E6210 FS**
6-Inch Steel Rolls

E7210 RG **E7210 FS**
7-Inch Steel Rolls

Dimensions in Inches — Average Weight in Pounds

Belt Width	A	AA	B	C	D Min.	E	F	H 6" Dia.	H 7" Dia.	J	L	M	N	P	Idler Wgt. 6" Dia.	Idler Wgt. 7" Dia.
36	44⅜	44	51⅜	47	45	9	12	17¾	11⅜	11⅞	13⁹⁄₁₆	3¹¹⁄₁₆	13⁹⁄₁₆	3½	224	252
42	50⅛	49¾	57⅛	53	51	9	12	18⅜	11⅜	11⅞	15⁹⁄₁₆	3¹¹⁄₁₆	15⁹⁄₁₆	3½	245	277
48	55⅞	55½	62⅞	59	57	9	12	19⅛	11⅜	11⅞	17⁹⁄₁₆	3¹¹⁄₁₆	17⁹⁄₁₆	3½	265	301
54	61¾	61⅜	68⅞	65	63	9	12	19¾	11⅜	11⅞	19⅝	3¹¹⁄₁₆	19⅝	3½	286	326
60	66⅞	66½	74	71	69	9	12	20⅜	11⅜	11⅞	21⅜	3¹¹⁄₁₆	21⅜	3½	305	348
72	78	77⅝	85⅝	83	81	9	12	22½	12⅛	12⅝	25¼	4¾	25¼	5¼	421	472

① Approximate distance to the top of the center roll of other idlers.

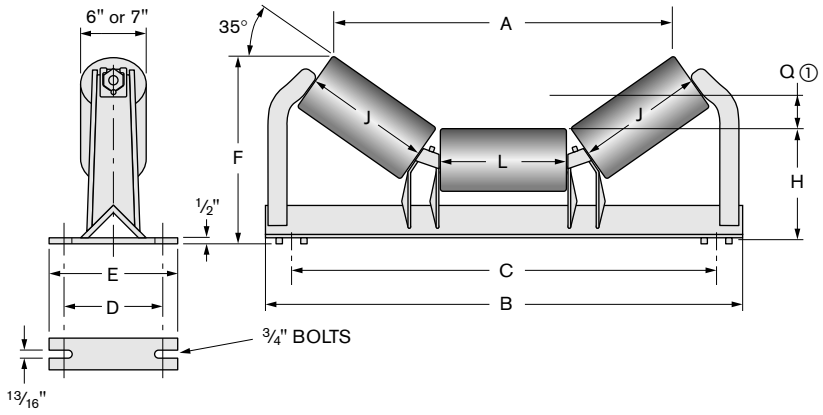
Note: Dimensions subject to change. Certified dimensions of ordered material furnished on request.

REX IDLERS

SERIES E

35° TROUGHING IDLER — EQUAL LENGTH ROLLS

REGREASABLE	FACTORY SEALED
E6300 RG	**E6300 FS**
6-Inch Steel Rolls	
E7300 RG	**E7300 FS**
7-Inch Sreel Rolls	



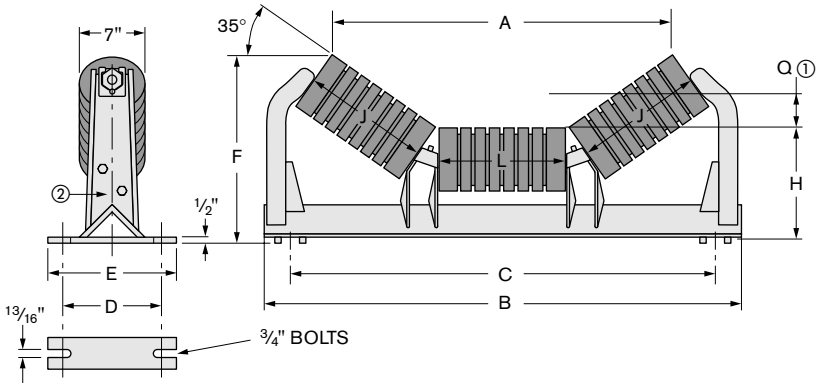
Dimensions in Inches — Average Weight in Pounds

Belt Width	A		B	C	D	E	F		H		J	L	Q①	Idler Wgt.	
	6" Roll	7" Roll			Min.		6" Roll	7" Roll	6" Roll	7" Roll				6" Roll	7" Roll
36	37 1/16	36 7/8	50 1/2	45	9	12	18 7/16	19	10 7/16	11	13 3/16	13 3/16	3 1/8	149	175
42	42 3/8	42 1/8	56	51	9	12	19 9/16	20 1/8	10 7/16	11	15 9/16	15 9/16	3 3/4	168	193
48	47 5/8	47 3/8	61 1/4	57	9	12	20 3/4	21 1/4	10 7/16	11	17 9/16	17 9/16	4 1/4	181	212
54	53 1/16	52 7/8	67	63	9	12	21 15/16	22 1/2	10 7/16	11	19 5/8	19 5/8	4 7/8	199	230
60	57 3/4	57 1/2	71 3/4	69	9	12	22 15/16	23 1/2	10 7/16	11	21 3/8	21 3/8	5 1/2	213	246
72	67 15/16	67 3/4	83 1/2	81	9	12	25 13/16	26 3/8	11 1/8	11 3/4	25 1/4	25 1/4	6 5/8	260	296
84	78 7/16	78 1/4	95 1/2	93	11 1/2	14 1/2	28 7/8	29 1/2	11 7/8	12 1/2	29 1/4	29 1/4	7 1/4	337	377
96	89	89 3/4	107 1/2	105	11 1/2	14 1/2	31 3/16	31 3/4	11 7/8	12 1/2	33 1/4	33 1/4	8 7/8	378	423

① Location of head pulley in relation to idler center roll.

35° TROUGHING IMPACT IDLER — EQUAL LENGTH ROLLS

REGREASABLE	FACTORY SEALED
E6302 RG	**E6302 FS**
6-Inch Rubber Rolls	
E7302 RG	**E7302 FS**
7-Inch Rubber Rolls	



Dimensions in Inches — Average Weight in Pounds

Belt Width	A		B	C	D	E	F		H		J	L	Q①	Idler Wgt.	
	6" Roll	7" Roll			Min.		6" Roll	7" Roll	6" Roll	7" Roll				6" Roll	7" Roll
36	37	36 7/16	50 1/2	45	9	12	18 7/16	18 13/16	10 7/16	10 15/16	13 1/16	13 1/16	3 1/8	160	176
42	42 5/16	41 11/16	56	51	9	12	19 9/16	20	10 7/16	10 15/16	15 1/16	15 1/16	3 3/4	181	199
48	47 9/16	47	61 1/4	57	9	12	20 3/4	21 1/8	10 7/16	10 15/16	17 1/16	17 1/16	4 1/4	199	219
54	53	52 7/16	67	63	9	12	21 7/8	22 5/16	10 7/16	10 15/16	19 1/8	19 1/8	4 7/8	217	240
60	57 5/8	57 1/16	71 3/4	69	9	12	22 7/8	23 5/16	10 7/16	10 15/16	20 7/8	20 7/8	5 1/2	233	258
72	67 7/8	67 5/16	83 1/2	81	9	12	25 13/16	26 1/4	11 3/16	11 11/16	24 3/4	24 3/4	6 5/8	285	314
84	78 7/16	77 13/16	95 1/2	93	11 1/2	14 1/2	28 7/8	29 5/16	11 15/16	12 7/16	28 3/4	28 3/4	7 1/4	376	409
96	88 15/16	88 3/8	107 1/2	105	11 1/2	14 1/2	31 3/16	31 9/16	11 15/16	12 7/16	32 3/4	32 3/4	8 7/8	421	458

① Location of head pulley in relation to idler center roll.
② Demountable end brackets.

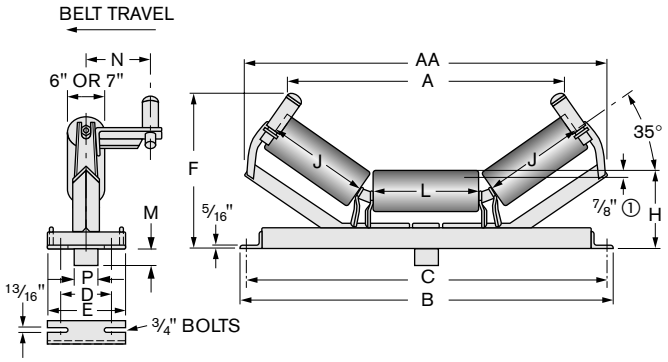
Note: Dimensions subject to change. Certified dimensions of ordered material furnished on request.

REX IDLERS

SERIES E

35° TROUGHING TRAINING IDLER — EQUAL LENGTH ROLLS

Positive Arm Type — Belt Travel One Direction Only



REGREASABLE	FACTORY SEALED
E6312 RG	E6312 FS
6-Inch Steel Rolls	
E7312 RG	E7312 FS
7-Inch Steel Rolls	

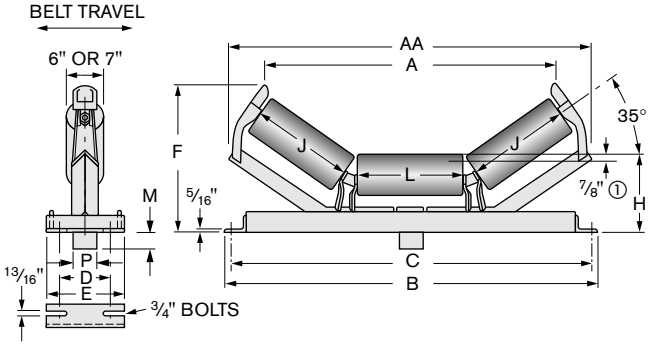
Dimensions in Inches — Average Weight in Pounds

Belt Width	A	AA	B	C	D Min.	E	F	H 6" Dia.	H 7" Dia.	J	L	M	N	P	Idler Wgt. 6" Dia.	Idler Wgt. 7" Dia.
36	38 1/8	53 3/8	47	45	9	12	22 3/8	11 3/8	11 7/8	13 9/16	13 9/16	3 11/16	10	3 1/2	242	270
42	43 1/2	58 5/8	53	51	9	12	23 1/2	11 3/8	11 7/8	15 9/16	15 9/16	3 11/16	10	3 1/2	263	295
48	48 3/4	63 7/8	59	57	9	12	24 5/8	11 3/8	11 7/8	17 9/16	17 9/16	3 11/16	10	3 1/2	283	320
54	54 1/8	69 1/4	65	63	9	12	25 3/4	11 3/8	11 7/8	19 5/8	19 5/8	3 11/16	15	3 1/2	304	344
60	58 3/4	73 7/8	71	69	9	12	26 3/4	11 3/8	11 7/8	21 3/8	21 3/8	3 11/16	15	3 1/2	319	362
72	69	85 7/8	83	81	9	12	29 3/4	12 1/8	12 5/8	25 1/4	25 1/4	4 3/4	15	5 1/4	434	486

① Location of head pulley in relation to idler center roll.

35° TROUGHING TRAINING IDLER — EQUAL LENGTH ROLLS

Actuating Shoe Type — Belt Travel Either Direction



REGREASABLE	FACTORY SEALED
E6310 RG	E6310 FS
6-Inch Steel Rolls	
E7310 RG	E7310 FS
7-Inch Steel Rolls	

Dimensions in Inches — Average Weight in Pounds

Belt Width	A 6" Dia.	A 7" Dia.	AA	B	C	D Min.	E	F 6" Dia.	F 7" Dia.	H① 6" Dia.	H① 7" Dia.	J	L	M	P	Idler Wgt. 6" Dia.	Idler Wgt. 7" Dia.
36	39 7/8	39 3/8	53 3/8	47	45	9	12	21 5/16	21 11/16	11 3/8	11 7/8	13 9/16	13 9/16	3 11/16	3 1/2	229	257
42	45 1/4	44 5/8	58 5/8	53	51	9	12	22 5/16	22 13/16	11 3/8	11 7/8	15 9/16	15 9/16	3 11/16	3 1/2	250	282
48	50 1/2	49 7/8	63 7/8	59	57	9	12	23 9/16	23 15/16	11 3/8	11 7/8	17 9/16	17 9/16	3 11/16	3 1/2	270	306
54	55 7/8	55 3/8	69 1/4	65	63	9	12	24 11/16	25 3/16	11 3/8	11 7/8	19 5/8	19 5/8	3 11/16	3 1/2	291	331
60	60 1/2	60	73 7/8	71	69	9	12	25 11/16	26 3/16	11 3/8	11 7/8	21 3/8	21 3/8	3 11/16	3 1/2	306	349
72	70 3/4	70 1/4	85 7/8	83	81	9	12	28 11/16	29 1/16	12 1/8	12 5/8	25 1/4	25 1/4	4 3/4	5 1/4	421	473

① Location of head pulley in relation to idler center roll.

Note: Dimensions subject to change. Certified dimensions of ordered material furnished on request.

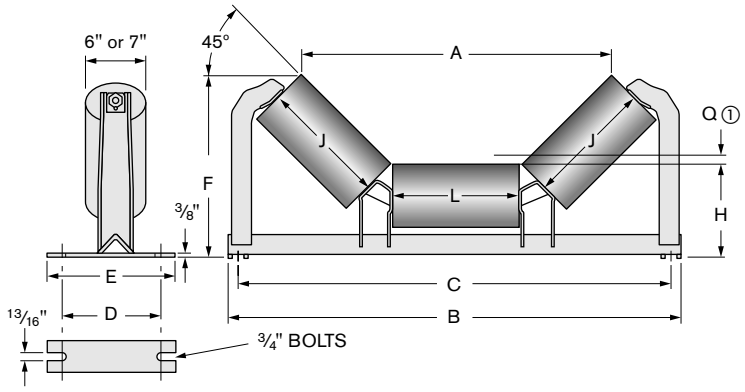
REX IDLERS

SERIES E
45° TROUGHING IDLER — EQUAL LENGTH ROLLS

REGREASABLE **FACTORY SEALED**

E6400 RG **E6400 FS**
6-Inch Steel Rolls

E7400 RG **E7400 FS**
7-Inch Steel Rolls



Dimensions in Inches — Average Weight in Pounds

Belt Width	A		B	C	D	E	F		H		J	L	Q①	Idler Wgt.	
	6" Roll	7" Roll			Min.		6" Roll	7" Roll	6" Roll	7" Roll				6" Roll	7" Roll
36	33 7/8	33 1/4	54	45	9	12	20 3/8	20 3/4	10 1/2	11	13 9/16	13 9/16	4	151	179
42	38 3/4	38	59 1/2	51	9	12	21 13/16	22 3/16	10 1/2	11	15 9/16	15 9/16	4 5/8	167	198
48	43 5/8	42 7/8	65 1/2	57	9	12	23 9/16	23 9/16	10 1/2	11	17 9/16	17 9/16	5 3/8	180	217
54	48 1/2	47 7/8	71 1/2	63	9	12	24 11/16	25	10 1/2	11	19 5/8	19 5/8	6 1/8	196	236
60	52 3/4	52 1/8	74	69	9	12	25 7/8	26 1/4	10 1/2	11	21 3/8	21 3/8	6 3/4	209	253
72	62 1/8	61 1/2	87	81	9	12	29 3/8	29 3/4	11 1/4	11 3/4	25 1/4	25 1/4	7 7/8	253	304

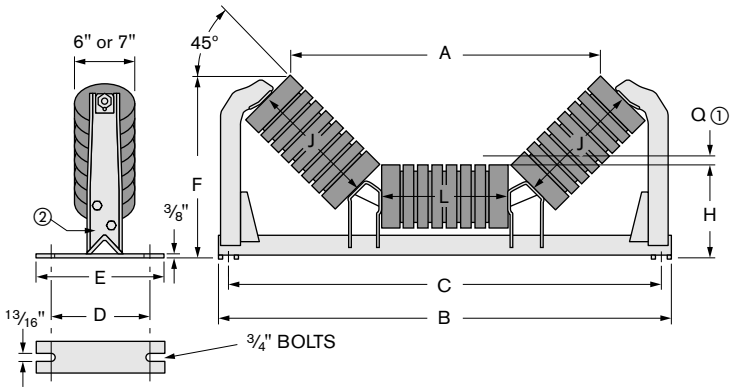
① Location of head pulley in relation to idler center roll.

45° TROUGHING IMPACT IDLER — EQUAL LENGTH ROLLS

REGREASABLE **FACTORY SEALED**

E6402 RG **E6402 FS**
6-Inch Rubber Rolls

E7402 RG **E7402 FS**
7-Inch Rubber Rolls



Dimensions in Inches — Average Weight in Pounds

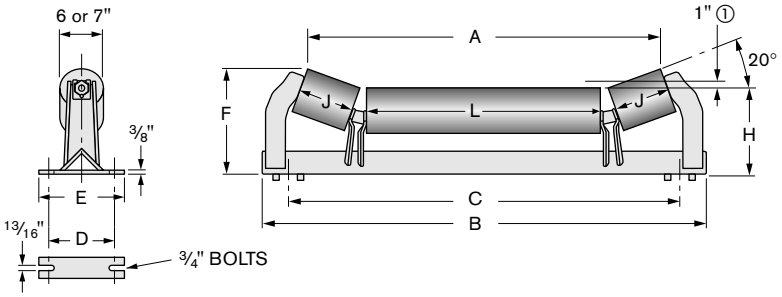
Belt Width	A		B	C	D	E	F		H		J	L	Q①	Idler Wgt.	
	6" Roll	7" Roll			Min.		6" Roll	7" Roll	6" Roll	7" Roll				6" Roll	7" Roll
36	33 7/8	33 1/8	54	45	9	12	20 1/4	20 5/8	10 7/16	10 15/16	13 1/16	13 1/16	4	164	180
42	38 11/16	37 15/16	59 1/2	51	9	12	21 11/16	22 1/16	10 7/16	10 15/16	15 1/16	15 1/16	4 5/8	185	204
48	43 1/2	42 13/16	65 1/2	57	9	12	23 1/8	23 7/16	10 7/16	10 15/16	17 1/16	17 1/16	5 3/8	204	224
54	48 1/2	47 3/4	71 1/2	63	9	12	24 9/16	24 7/8	10 7/16	10 15/16	19 1/8	19 1/8	6 1/8	223	246
60	52 11/16	52	74	69	9	12	25 13/16	26 1/8	10 7/16	10 15/16	21 1/8	21 1/8	6 3/4	240	265
72	62 1/16	61 3/8	87	81	9	12	29 1/4	29 9/16	11 3/16	11 11/16	24 3/4	24 3/4	7 7/8	293	322

① Location of head pulley in relation to idler center roll.
② Demountable end brackets.

Note: Dimensions subject to change. Certified dimensions of ordered material furnished on request.

REX IDLERS

SERIES E
20° TROUGHING TRAINING IDLER — UNEQUAL LENGTH ROLLS



REGREASABLE **FACTORY SEALED**

E6201 RG **E6201 FS**
6-Inch Steel Rolls

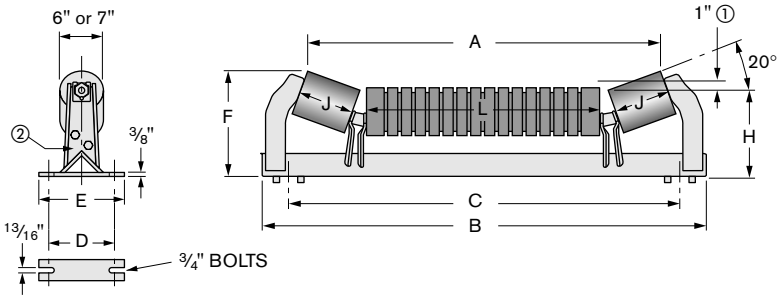
E7201 RG **E7201 FS**
7-Inch Steel Rolls

Dimensions in Inches — Average Weight in Pounds

Belt Width	A		B	C	D	E	F		H		J	L	Idler Wgt.	
	6" Dia.	7" Dia.			Min.		6" Dia.	7" Dia.	6" Dia.	7" Dia.			6" Dia.	7" Dia.
36	41	40¾	50½	45	9	12	13⅛	13⁹⁄₁₆	10⁷⁄₁₆	10¹⁵⁄₁₆	7⅜	25¼	138	167
42	46⅞	46⅝	56	51	9	12	13⅛	13⁹⁄₁₆	10⁷⁄₁₆	10¹⁵⁄₁₆	7⅜	31⅛	146	179
48	52⅞	52⅝	62	57	9	12	13⅛	13⁹⁄₁₆	10⁷⁄₁₆	10¹⁵⁄₁₆	7⅜	37⅛	158	195
54	58⅞	58⅝	68	63	9	12	13⅛	13⁹⁄₁₆	10⁷⁄₁₆	10¹⁵⁄₁₆	7⅜	43⅛	177	218
60	64⅞	64⅝	74	69	9	12	13⅛	13⁹⁄₁₆	10⁷⁄₁₆	10¹⁵⁄₁₆	7⅜	49⅛	190	233
72	76⅞	76⅝	86	81	9	12	13⅞	14⅜	11⅛	11⅝	7⅜	61⅛	229	280

① Location of head pulley in relation to idler center roll.

20° TROUGHING TRAINING IDLER — UNEQUAL LENGTH ROLLS



REGREASABLE **FACTORY SEALED**

E6203 RG **E6203 FS**
6-Inch Steel & Rubber Rolls

E7203 RG **E7203 FS**
7-Inch Steel & Rubber Rolls

Dimensions in Inches — Average Weight in Pounds

Belt Width	A		B	C	D	E	F		H		J	L	Idler Wgt.	
	6" Dia.	7" Dia.			Min.		6" Dia.	7" Dia.	6" Dia.	7" Dia.			6" Dia.	7" Dia.
36	40¹³⁄₁₆	40½	50½	45	9	12	13⅛	13⁹⁄₁₆	10⁷⁄₁₆	10¹⁵⁄₁₆	7⅜	24¾	137	158
42	46¹¹⁄₁₆	46⅜	56	51	9	12	13⅛	13⁹⁄₁₆	10⁷⁄₁₆	10¹⁵⁄₁₆	7⅜	30⅝	153	176
48	52¹¹⁄₁₆	52⅜	62	57	9	12	13⅛	13⁹⁄₁₆	10⁷⁄₁₆	10¹⁵⁄₁₆	7⅜	36⅝	169	194
54	58¹¹⁄₁₆	58⅜	68	63	9	12	13⅛	13⁹⁄₁₆	10⁷⁄₁₆	10¹⁵⁄₁₆	7⅜	42⅝	185	213
60	64¹¹⁄₁₆	64⅜	74	69	9	12	13⅛	13⁹⁄₁₆	10⁷⁄₁₆	10¹⁵⁄₁₆	7⅜	48⅝	201	231
72	76¹¹⁄₁₆	76⅜	86	81	9	12	13¹³⁄₁₆	14⅜	11⅛	11⅝	7⅜	60⅝	250	285

① Location of head pulley in relation to idler center roll.
② Demountable end bracket.

Note: Dimensions subject to change. Certified dimensions of ordered material furnished on request.

REX IDLERS

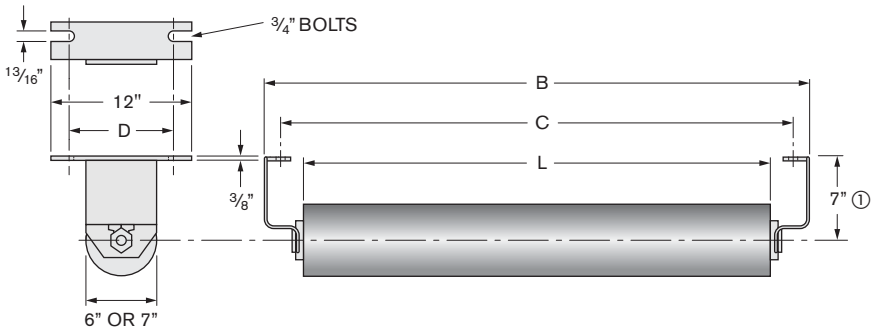
SERIES E

RETURN IDLER

REGREASABLE **FACTORY SEALED**

E6040 RG **E6040 FS**
6-Inch Steel Roll

E7040 RG **E7040 FS**
7-Inch Steel Roll



Dimensions in Inches — Average Weight in Pounds

Belt Width	B	C	D Minimum	L	Idler Weight	
					6" Roll	7" Roll
36	48¼	45	9	39⅞	82	109
42	54¼	51	9	45⅞	90	121
48	60¼	57	9	51⅞	99	133
54	66¼	63	9	57⅞	107	145
60	72¼	69	9	63⅞	115	156
72	84¼	81	9	75⅞	131	181

① Also available with 4½" drop.

DISC RETURN IDLER

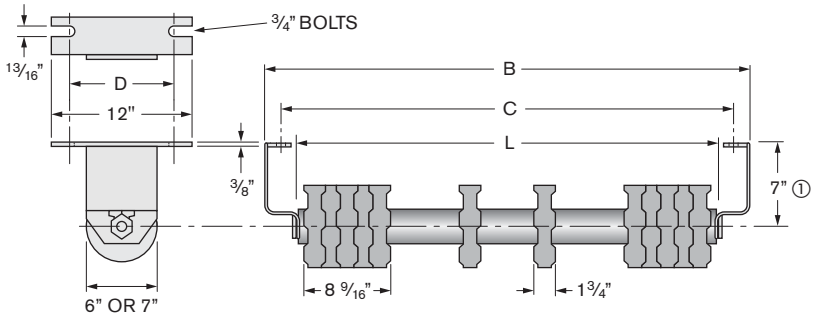
Belt Travel Either Direction

Available with rubber or urethane discs.

REGREASABLE **FACTORY SEALED**

E6043 RG **E6043 FS**
6-Inch Rubber Disc Roll

E7043 RG **E7043 FS**
7-Inch Rubber Disc Roll



Five discs on each end is standard.

Dimensions in Inches — Average Weight in Pounds

Belt Width	B	C	D Minimum	L	Idler Weight		Number of Discs
					6" Roll	7" Roll	
36	48¼	45	9	39 11/16	88	92	13
42	54¼	51	9	45 11/16	96	100	14
48	60¼	57	9	51 11/16	104	108	15
54	66¼	63	9	57 11/16	112	118	16
60	72¼	69	9	63 11/16	121	127	17
72	84¼	81	9	75 11/16	137	143	19

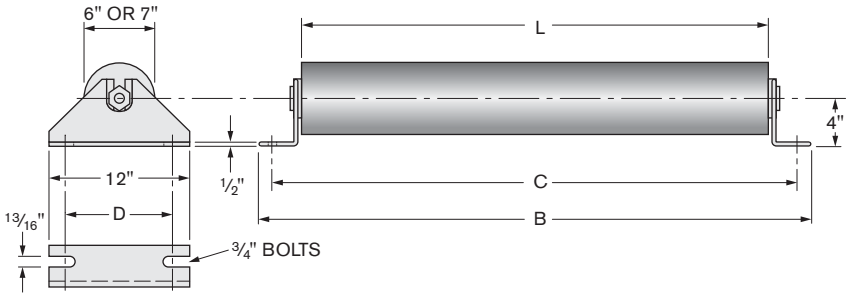
① Also available with 4½" drop.

Note: Dimensions subject to change. Certified dimensions of ordered material furnished on request.

REX IDLERS

SERIES E

FLAT STEEL IDLER

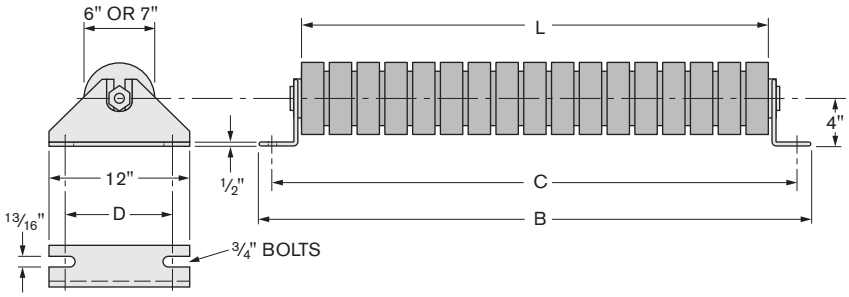


REGREASABLE	FACTORY SEALED
E6020 RG	E6020 FS
6-Inch Steel Roll	
E7020 RG	E7020 FS
7-Inch Steel Roll	

Dimensions in Inches — Average Weight in Pounds

Belt Width	B	C	D Minimum	L	Idler Weight	
					6" Roll	7" Roll
36	47 7/16	45	9	39 7/8	81	108
42	53 7/16	51	9	45 7/8	89	120
48	59 7/16	57	9	51 7/8	98	132
54	65 7/16	63	9	57 7/8	106	144
60	71 7/16	69	9	63 7/8	114	155
72	83 7/16	81	9	75 7/8	130	180

FLAT RUBBER IDLER



REGREASABLE	FACTORY SEALED
E6025 RG	E6025 FS
6-Inch Rubber Roll	
E7025 RG	E7025 FS
7-Inch Rubber Roll	

Dimensions in Inches — Average Weight in Pounds

Belt Width	B	C	D Minimum	L	Idler Weight	
					6" Roll	7" Roll
36	47 7/16	45	9	38	126	139
42	53 7/16	51	9	44 7/8	140	156
48	59 7/16	57	9	50 7/8	155	173
54	65 7/16	63	9	56 7/8	170	190
60	71 7/16	69	9	62 7/8	185	207
72	83 7/16	81	9	74 7/8	214	241

Note: Dimensions subject to change. Certified dimensions of ordered material furnished on request.

REX IDLERS

SERIES E

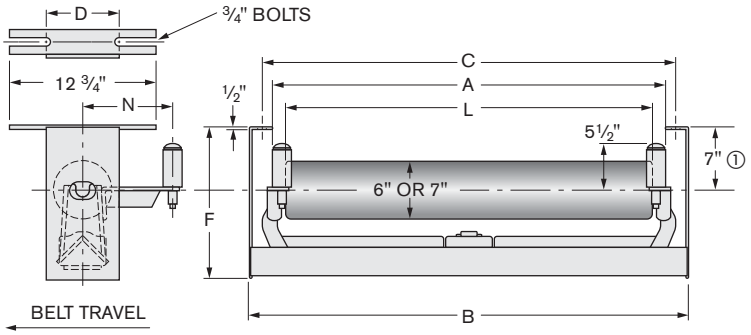
RETURN TRAINING IDLER

Positive Arm Type – Belt Travel One Direction Only

REGREASABLE **FACTORY SEALED**

E6052 RG **E6052 FS**
6-Inch Steel Roll

E7052 RG **E7052 FS**
7-Inch Steel Roll



Dimensions in Inches — Average Weight in Pounds

Belt Width	A	B	C	D Minimum	F	L	N	Idler Weight	
								6" Roll	7" Roll
36	44⅜	48½	45	9	18⁹⁄₁₆	39⅞	10	254	281
42	50⅜	54½	51	9	18⁹⁄₁₆	45⅞	10	310	341
48	56⅜	60½	57	9	18⁹⁄₁₆	51⅞	10	331	366
54	62⅜	66½	63	9	18⁹⁄₁₆	57⅞	15	348	386
60	68⅜	72½	69	9	18⁹⁄₁₆	63⅞	15	374	414
72	80⅜	84½	81	9	19¹¹⁄₁₆	75⅞	15	520	570

① 1 ¾" or 4 ¼" can be furnished for wide base idlers.

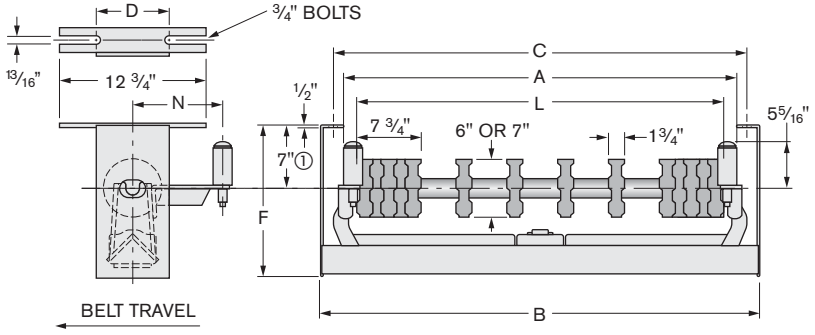
DISC RETURN TRAINING IDLER

Positive Arm Type — Belt Travel One Direction Only

REGREASABLE **FACTORY SEALED**

E6056 RG **E6056 FS**
6-Inch Rubber Disc Roll

E7056 RG **E7056 FS**
7-Inch Rubber Disc Roll



Five discs on each end is standard.

Dimensions in Inches — Average Weight in Pounds

Belt Width	A	B	C	D Minimum	F	L	N	Number of Discs	Idler Weight	
									6" Roll	7" Roll
36	44⅜	48½	45	9	18⁹⁄₁₆	39¹¹⁄₁₆	10	13	260	264
42	50⅜	54½	51	9	18⁹⁄₁₆	45¹¹⁄₁₆	10	14	316	320
48	56⅜	60½	57	9	18⁹⁄₁₆	51¹¹⁄₁₆	10	15	337	341
54	62⅜	66½	63	9	18⁹⁄₁₆	57¹¹⁄₁₆	15	16	353	359
60	68⅜	72½	69	9	18⁹⁄₁₆	63¹¹⁄₁₆	15	17	379	385
72	80⅜	84½	81	9	19¹¹⁄₁₆	75¹¹⁄₁₆	15	19	525	531

① 1 ¾" or 4 ¼" can be furnished for wide base idlers.

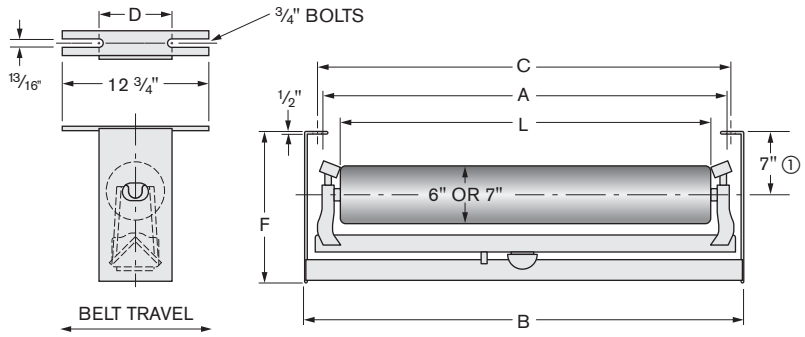
Note: Dimensions subject to change. Certified dimensions of ordered material furnished on request.

REX IDLERS

SERIES E

RETURN TRAINING IDLER

Actuating Shoe Type – Belt Travel Either Direction



REGREASABLE	FACTORY SEALED
E6051 RG	E6051 FS
6-Inch Steel Roll	
E7051 RG	E7051 FS
7-Inch Steel Roll	

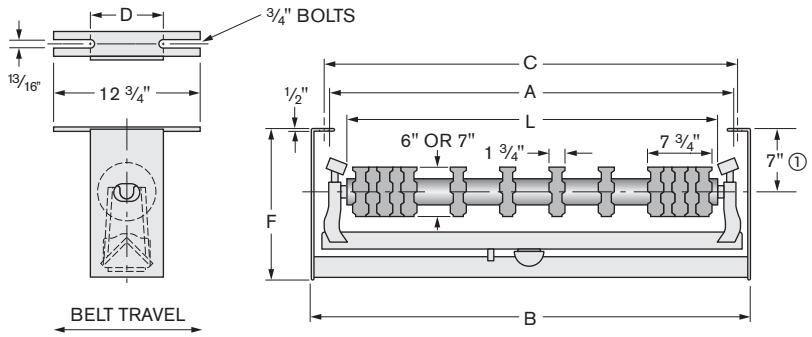
Dimensions in Inches — Average Weight in Pounds

Belt Width	A	B	C	D Minimum	F	L	Idler Weight	
							6" Roll	7" Roll
36	44¾	48½	45	9	18 9/16	39⅞	241	268
42	50¾	54½	51	9	18 9/16	45⅞	297	328
48	56¾	60½	57	9	18 9/16	51⅞	318	353
54	62¾	66½	63	9	18 9/16	57⅞	335	373
60	68¾	72½	69	9	18 9/16	63⅞	361	401
72	80¾	84½	81	9	19 1/16	75⅞	499	549

① 1 ¾" or 4 ¼" can be furnished for wide base idlers.

DISC RETURN TRAINING IDLER

Actuating Shoe Type — Belt Travel Either Direction



REGREASABLE	FACTORY SEALED
E6055 RG	E6055 FS
6-Inch Rubber Disc Roll	
E7055 RG	E7055 FS
7-Inch Rubber Disc Roll	

Dimensions in Inches — Average Weight in Pounds

Belt Width	A	B	C	D Minimum	F	L	Number of Discs	Idler Weight	
								6" Roll	7" Roll
36	44¾	48½	45	9	18 9/16	39 1 1/16	13	247	251
42	50¾	54½	51	9	18 9/16	45 1 1/16	14	303	307
48	56¾	60½	57	9	18 9/16	51 1 1/16	15	324	328
54	62¾	66½	63	9	18 9/16	57 1 1/16	16	340	346
60	68¾	72½	69	9	18 9/16	63 1 1/16	17	366	372
72	80¾	84½	81	9	19 1/16	75 1 1/16	19	512	518

① 1 ¾" or 4 ¼" can be furnished for wide base idlers.

Note: Dimensions subject to change. Certified dimensions of ordered material furnished on request.

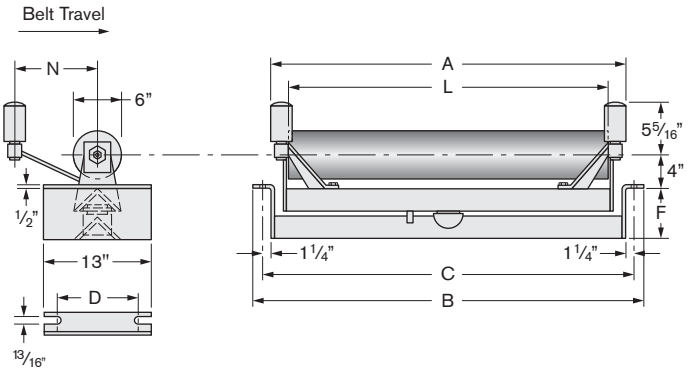
REX IDLERS

SERIES E
FLAT TRAINING IDLER
Positive Arm Type – Belt Travel One Direction Only

REGREASABLE **FACTORY SEALED**

E6031 RG **E6031 FS**
6-Inch Steel Roll

E7031 RG **E7031 FS**
7-Inch Steel Roll



Dimensions in Inches — Average Weight in Pounds

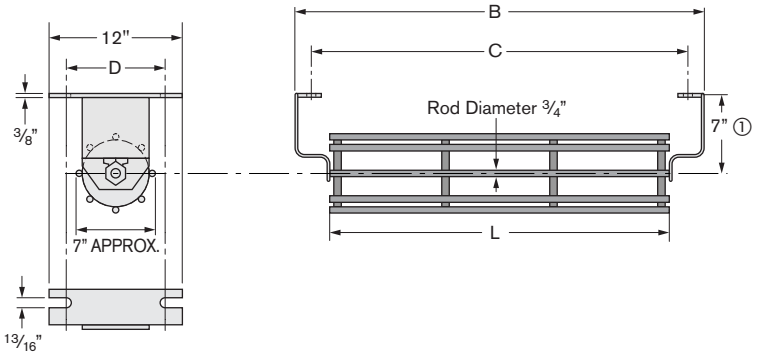
Belt Width	A	B	C	D Minimum	F	L	N	Idler Weight 6" Roll	Idler Weight 7" Roll
36	42⅜	47½	45	9	7 7/16	37⅞	10	201	228
42	48⅜	53½	51	9	7 7/16	43⅞	10	227	258
48	54⅜	59½	57	9	7 7/16	49⅞	10	253	287
54	60⅜	65½	63	9	7 7/16	55⅞	15	283	310
60	66⅜	71½	69	9	7 7/16	61⅞	15	292	332
72	78⅜	83½	81	9	9⅜	73⅜	15	404	454

① 1 ¾" or 4 ¼" can be furnished for wide base idlers.

RETURN BEATER IDLER

REGREASABLE **FACTORY SEALED**

E7046 RG **E7046 FS**
7-Inch Steel Rod Roll



Dimensions in Inches — Average Weight in Pounds

Belt Width	B	C	D Minimum	L	Idler Weight 7" Roll
36	48¼	45	9	39⅞	109
42	54¼	51	9	45⅞	121
48	60¼	57	9	51⅞	133
54	66¼	63	9	57⅞	146
60	72¼	69	9	63⅞	158
72	84¼	81	9	75⅞	183

① 1 ¾" or 4 ¼" can be furnished for wide base idlers.

Note: Dimensions subject to change. Certified dimensions of ordered material furnished on request.

LIVE SHAFT IDLERS

SERIES F

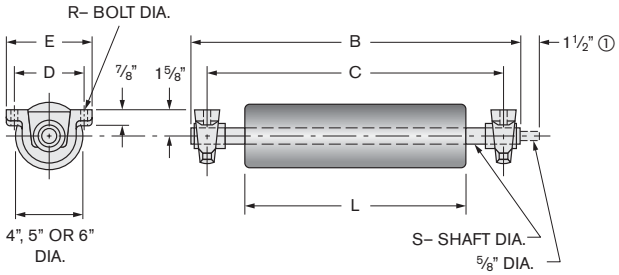
LIVE SHAFT RETURN OR FLAT IDLER

Dimensions in Inches — Average Weight in Pounds

Belt Width	B	C	D			E	L	R	S	Idler Wgt.		
			Recom.	Min.	Max.					4" Roll	5" Roll	6" Roll
18	29	27	4⅝	4¼	5	6	21	½	1³⁄₁₆	24	27	32
20	31	29	4⅝	4¼	5	6	23	½	1³⁄₁₆	27	31	38
24	35	33	4⅝	4¼	5	6	27	½	1³⁄₁₆	31	37	44
30	41	39	4⅝	4¼	5	6	33	½	1³⁄₁₆	36	42	51
36	47	45	4⅝	4¼	5	6	39	½	1³⁄₁₆	41	48	57
42	53	51	4⅝	4¼	5	6	45	½	1³⁄₁₆	47	54	65
48	59	57	4⅝	4¼	5	6	51	½	1³⁄₁₆	53	60	72
54	65	63	4⅝	4¼	5	6	57	½	1³⁄₁₆	. . .	. . .	79
60	71	69	4⅝	4¼	5	6	63	½	1³⁄₁₆	. . .	. . .	85

① Idlers with stub shaft extension are available on request.
② Also available in ¼" roll wall thickness.

Note: Return Idler shown.
Rotate pillow blocks 180° for Flat Idler.



F4041
4-Inch Steel Roll

F5041
5-Inch Steel Roll

F6041
6-Inch Steel Roll ②

SERIES F – HEAVY DUTY

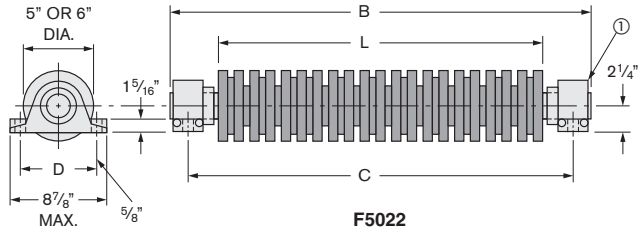
(Photograph on Page 6)

LIVE SHAFT FLAT IMPACT IDLER

Dimensions in Inches — Average Weight in Pounds

Belt Width	B	C	D			L	Idler Wgt.	
			Recom.	Min.	Max.		5" Roll	6" Roll
18	29⅞	27	6¼	6	7¼	21	45	51
20	31⅞	29	6¼	6	7¼	23	55	61
24	35⅞	33	6¼	6	7¼	27	63	71
30	41⅞	39	6¼	6	7¼	33	72	81
36	47⅛	45	6¼	6	7¼	39	80	91
42	53⅞	51	6¼	6	7¼	45	89	101
48	59⅞	57	6¼	6	7¼	51	97	111
54	65⅞	63	6¼	6	7¼	57	106	122
60	71⅞	69	6¼	6	7¼	63	115	132

① Shaft is 2¹⁄₁₆" and has 1¹⁵⁄₁₆" roller bearing pillow blocks.
□ Shaded sizes are most commonly used and are more readily available.



F5022
5-Inch Rubber Roll

F6022
6-Inch Rubber Roll

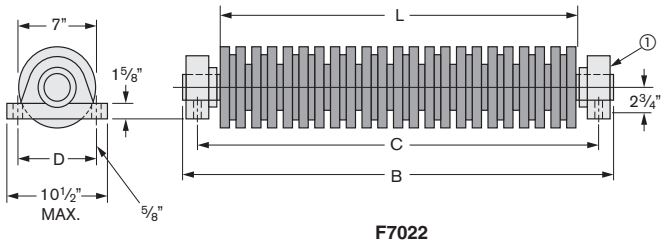
SERIES F – SUPER DUTY

LIVE SHAFT FLAT IMPACT IDLER

Dimensions in Inches — Average Weight in Pounds

Belt Width	B	C	D			L	Rise ②	Idler Wgt.
			Recom.	Min.	Max.			
30	43¾	39	7⅛	6⅞	8¾	34	2¹³⁄₁₆	130
36	49¾	45	7⅛	6⅞	8¾	40	2¹⁵⁄₁₆	150
42	55¾	51	7⅛	6⅞	8¾	46	3¼	170
48	61¾	57	7⅛	6⅞	8¾	52	3¼	190
54	67¾	63	7⅛	6⅞	8¾	58	3½	210
60	73¾	69	7⅛	6⅞	8¾	64	3½	230
72	85¾	81	7⅛	6⅞	8¾	76	3¹⁵⁄₁₆	270
84	97¾	93	7⅛	6⅞	8¾	88	—	310
96	109¾	105	7⅛	6⅞	8¾	100	—	350

① Has 2²¹⁄₃₂" shaft and 2⁷⁄₁₆" roller bearing pillow blocks.
② Required rise when interspersed with Series C - 6" impact idlers.
□ Shaded sizes are most commonly used and are more readily available.



F7022
7-Inch Rubber Roll

Note: Dimensions subject to change. Certified dimensions of ordered material furnished on request.

REX IDLER PROBLEM SOLVERS

Disc Idlers

RUBBER disc idlers are designed to allow material to fall off the belt, keeping the belt clean. Used in abrasive applications where temperatures do not exceed 200°F.

URETHANE disc idlers provide longer life due to higher wear resistance. Temperatures not to exceed 200°F.

CERAMIC disc idlers are recommended for extremely abrasive applications. Temperatures not to exceed 200°F.

NOTE: Ceramic is brittle and must be handled with care.

Spiral Idlers

The unique **SPIRAL** return idler has an ever changing point of contact, providing a scrubbing action to resist material build-up. In most applications, four or five spiral idlers after the head pulley will adequately clean the belt. Temperatures not to exceed 200°F.

NOTE: Should not be used on reversing conveyors.

Coated Rolls

Steel rolls can be coated to provide extended roll life:

RUBBER for corrosion and material build-up. Temperature not to exceed 200°F.

URETHANE for corrosion and abrasion. ¼" and ⅛" coating is available (⅛" available up to 40" only.) Temperature not to exceed 200°F.

CERAMIC for corrosion and extreme abrasion. Standard thickness is .010". Temperatures not to exceed 200°F.

Scale Quality Idlers

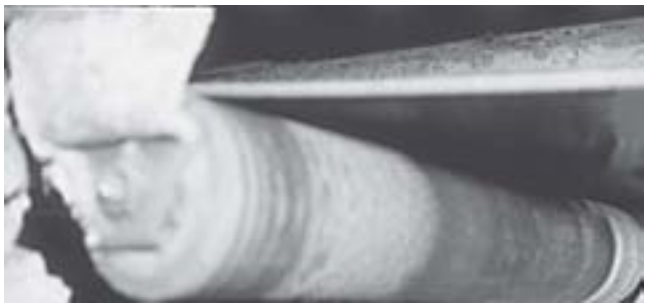
Available for in-motion weighing systems.

Rolls are turned on the OD to .015" TIR.

Rolls are balanced to minimize vibration.

Polyethylene Roll Idlers

Polyethylene roll idlers resist corrosion and material build-up. Temperatures not to exceed 160°F. Refer to pages 44 -46.



Return Idler

Six inch steel return idlers are available in ¼" wall at a nominal premium for abrasive and corrosive applications. Available in B+, C, D and E.

REX IDLERS

TO ORDER COMPLETE ROLL ASSEMBLIES, SPECIFY:

Steel Roll Assembly
Idler Model Number
Regreasable or Factory Sealed

(If Model Number is not known, specify idler series, belt width, roll diameter and length)

Steel Roll

Impact Roll Assembly
Idler Model Number
Regreasable or Factory Sealed

(If Model Number is not known, specify idler series, belt width, roll diameter and length)

Impact Roll

Spiral Roll Assembly
Idler Model Number
Regreasable or Factory Sealed

(If Model Number is not known, specify idler series, belt width and roll diameter)

Spiral Clincher Strip Only
Idler Series
(Available in 50-foot coils only)

Spiral Return Roll

Disc Roll Assembly
Idler Model Number
Regreasable or Factory Sealed

(If Model Number is not known, specify idler series, belt width and roll diameter)

Discs Only
Idler Series and Roll Diameter
Rubber, Urethane or Ceramic

Disc Roll

Urethane Covered Roll Assembly
Idler Model Number
Regreasable or Factory Sealed

(If Model Number is not known, specify idler series, belt width, roll diameter and length)

Urethane Covered Roll

Ceramic Coated Roll Assembly
Idler Model Number
Regreasable or Factory Sealed

(If Model Number is not known, specify idler series, belt width, roll diameter and length)

Ceramic Coated Roll

Polyethylene Roll Assembly
Idler Model Number
Regreasable or Factory Sealed

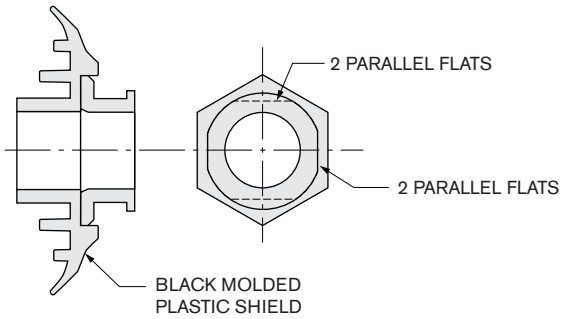
(If Model Number is not known, specify idler series, belt width, roll diameter and length)

Polyethylene Roll

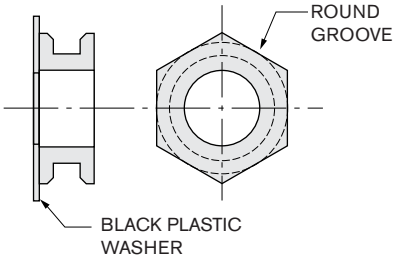
REX IDLERS

SERIES B (Old Pre 97)
IDLER IDENTIFICATION BRACKETS

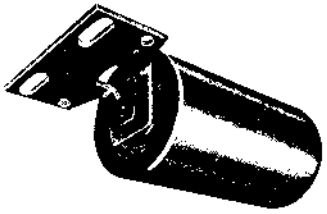
PRE 97 (OLD) CEMA B NUT



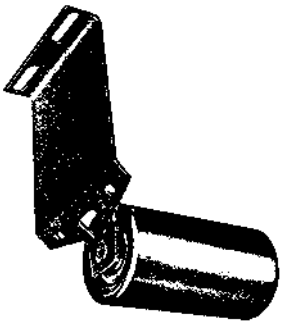
NEW CEMA B NUT



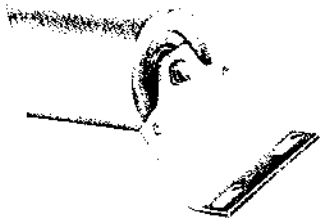
(OLD STYLE) DROP BRACKETS SERIES B



Standard 1½" Drop (shown)
Part No. 111-20130-01
Optional 3" Drop
Part No. 111-20083-01



Optional 1¾" Drop (shown)
Part No. 111-20132-01
Optional 4¼" Drop
Part No. 111-20131-01

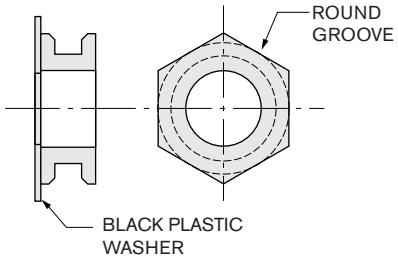


Standard 4¼" Rise/Drop Combination
Part No. 111-20084-01
Optional 1½" Rise #111-20082-01
Optional 3" Rise #111-20083-01

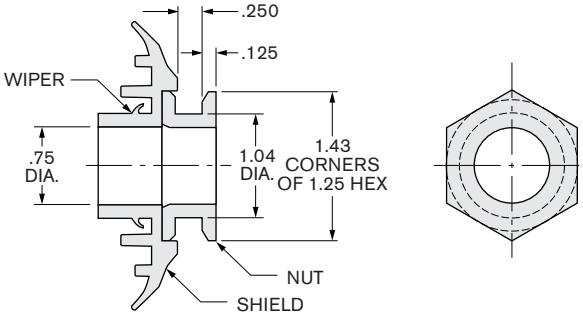
REX IDLERS

SERIES B, B+, C and D
IDLER IDENTIFICATION, BRACKETS AND SEAL KITS

CEMA B NUT

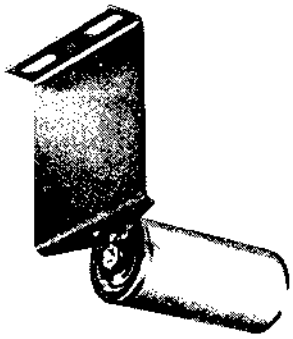


CEMA B+, C and D NUT



DROP BRACKETS SERIES B, B+, C & D

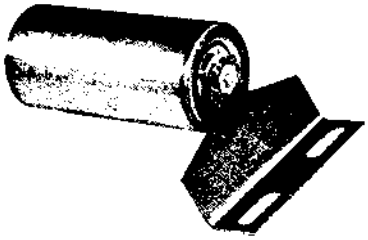
Standard C & D 4½" Drop (shown)
Part No. 101-60672-1
Standard B & B+ 1½" Drop
Part No. 101-60671-1



Optional 11¾" Drop (shown)
Part No. 101-60672-2

Optional 16½" Drop
Part No. 101-60672-9

RISE BRACKETS SERIES B, B+, C & D



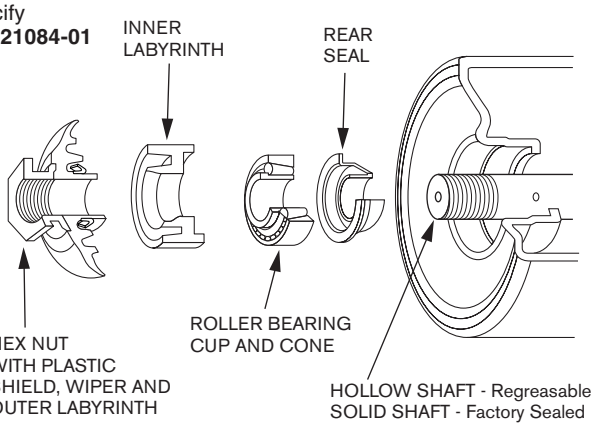
Standard 4¼" Rise
Part No. 101-60676-1

REVERSE DROP BRACKET SERIES B, B+, C & D

4½" Drop Only
These brackets are used to allow more belt fleet.
Part No. 101-60673-5

Series B+, C and D
.750" Bearing Bore

To order, specify
Part #**611-21084-01**

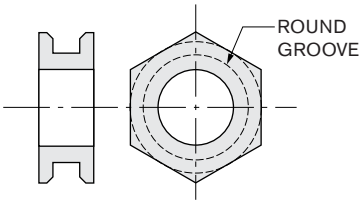


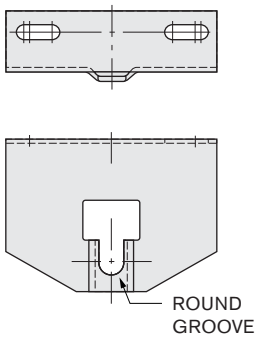
For spiral and disc rolls – order kit 611-21084-02

REX IDLERS

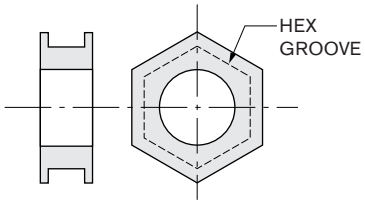
SERIES E
IDLER IDENTIFICATION, BRACKETS AND SEAL KITS

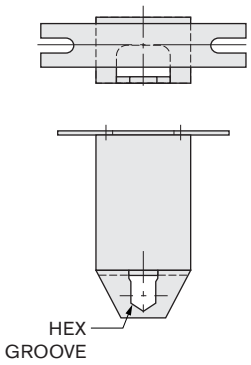
BEFORE 1998



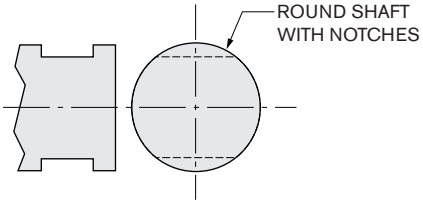


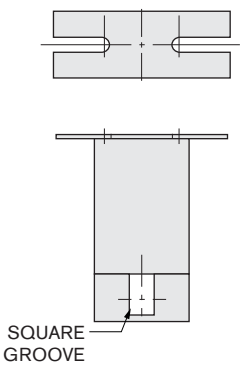
EARLY 1998-MID 2001





MID 2001-PRESENT



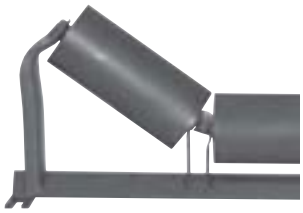


CONSULT FACTORY FOR BRACKET AVAILABILITY

CONSULT FACTORY FOR SEAL KIT AVAILABILITY

REX BELT IDLERS INTERCHANGEABILITY

To convert any standard CEMA B, B+, C and D troughing idler to belt width plus 14" or 15"

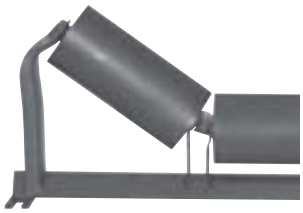


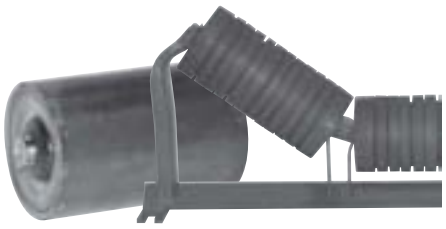
Order proper idler clip.

Belt Width Plus	Clip No.
14"	101-60685-1
15"	101-60685-2

These clips can be welded on standard idlers as shown.

To Convert Troughing Idlers to Impact Idlers





Remove the steel rolls and replace with impact rolls.
NOTE: Both 5" and 6" diameter rolls are interchangeable.

TRAINING IDLERS

To Convert Return Training Idlers to Flat Training Idlers Remove the Hanger Brackets

Convert positive type return trainer to flat training idler by removing the hanger brackets.

Convert actuating type return trainer to flat training idler by removing the hanger brackets.

Conversion of Positive Type to Actuating Shoe Type Training Idler

Convert any “positive” type training idler to “actuating shoe” type training idler by removing the positive arms and adding actuating shoes to the end brackets.

Actuating shoes vary with roll diameter

Roll Dia.	Part No.
4"-5"	411-20009-01
6"	411-20010-01

NOTE: Bolt holes are provided on all positive trainers for conversion to actuating shoe.

Use 5/16 x 1 Hex Hd. Cap Screw and Nut

REX CATENARY IDLERS

The Rex Catenary Idler is designed to handle wet, sticky or hot materials in such applications as glass plants, fertilizer plants, quarries and food processing operations. Rubber rolls and steel cable in the roll element resist material buildup through continuous flexing action. Overall flexibility of the roll assembly provides smooth handling of lumpy materials. End bearings are double-sealed and factory lubricated for minimum maintenance. The roll is suspended from a mounting hook and swivel assembly which offers additional flexibility and exceptional ease in installation.

ROLL BENEFITS

Bearings and Seals

Assure longer life due to double contact seal.

Last longer due to downward position which ejects troublesome dirt.

Run cooler away from the hot belt.

Improves belt life by preventing belt contamination by leaking grease.

Reduce maintenance — only two bearings per idler.

Rolls

Resist buildup because of flexing action.

More versatile — can rotate either direction.

Reduce belt damage — rubber roll surface cannot cut belt covers.

Give longer life since they are corrosion resistant.

Provide smooth flowing ride when handling lumpy material.

BASE BENEFITS

Mounting Hook and Swivel

Permits roll to adapt to varying load conditions by allowing greater roll articulation.

Assures easy roll installation.

Base Pipe

Rectangular pipe provides structural strength.

End Stands

Absorb maximum loads since the rectangular shape gives added strength in the direction of maximum loads.

INSTALLATION

It is essential that the brackets be installed in a straight line and square with the center line of the conveyor. Upon installation, if the idler does not contact the troughed belt completely across its width, it will be necessary to increase the spacing between the idlers to drop the belt or shim up the brackets; in some cases, both of the procedures may be necessary.

When installing an idler next to a conventional steel idler roll, the backing dimension (height at the center of the idler) should be ½- to 1-inch higher than the center of the steel idler, as measured from the deck on the top of the roller.

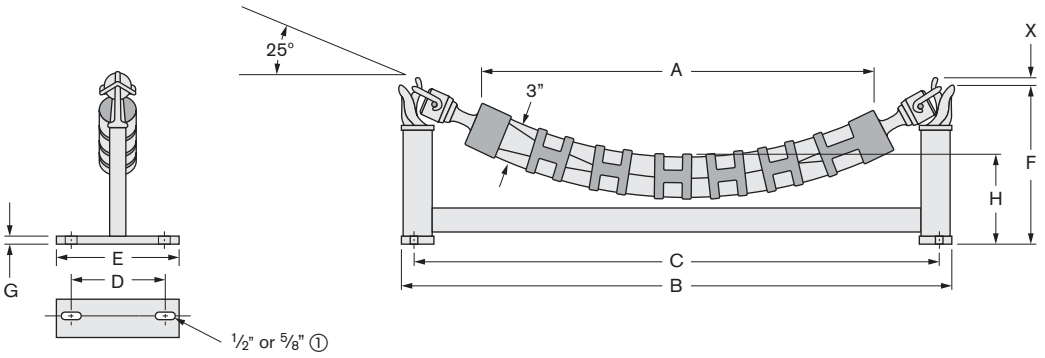
Height of the drive and tail pulleys also is important in relation to the top of the center of the idler. The top of the center should be ½- to 1-inch higher than the top of the pulley.

Rex Catenary Idlers should be applied using the 20-degree troughing idler capacity charts on page 74. Use the chart below to determine proper idler spacing.

Material Weight in Lbs./Cu. Ft.	Maximum Lump Size — Inches	Troughing Idler Spacing — Feet	Return Idler Spacing — Feet
20-50	5	6	10
55-70	4	6	10
75-125	3	5	10

REX CATENARY IDLERS

CATENARY TROUGHING IDLER



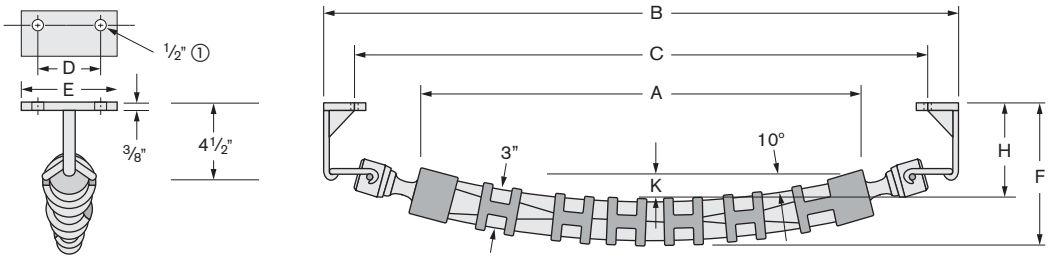
O3204
3-Inch Rubber Roll

Dimensions in Inches — Average Weight in Pounds

Belt Width	A	B	C	D			E	F	G	H	X	Weight
				Recom.	Min.	Max.						
18	19½	29¾	27	4½	4	5	6⅞	10¾	⅜	8¼	1⅝	30
20	21½	31¾	29	4½	4	5	6⅞	10⅞	⅜	8¼	1⅝	31
24	25½	35¾	33	4½	4	5	6⅞	11⅛	⅜	8¼	1⅝	34
30	31¼	41	39	7½	7	8	9⅞	12⅝	⅜	9	1⅝	43
36	37¼	47	45	7½	7	8	9⅞	13	⅜	9	1⅝	46

① Use washers on ½ -inch bolts.

CATENARY RETURN IDLER



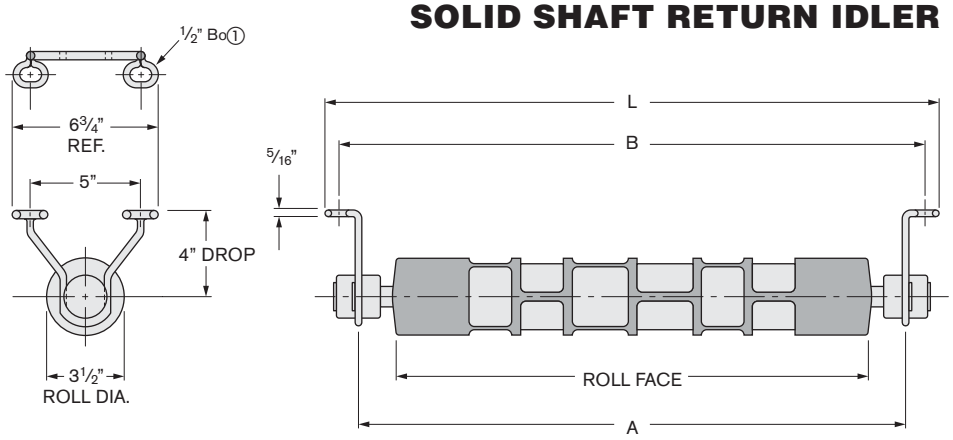
O3144
3-Inch Rubber Roll

Dimensions in Inches — Average Weight in Pounds

Belt Width	A	B	C	D	E	F	H	K	Weight
18	20⅛	31	27	5	6	6⅞	3⅞	⅞	15
20	22 1/16	33	29	5	6	7 1/16	4 1/16	1 1/16	15
24	26 1/16	37	33	5	6	7 3/16	4 3/16	1 3/16	16
30	31⅞	42¼	39	5	6	7 3/16	4 3/16	1⅜	18
36	38	48¼	45	5	6	7 3/16	4 5/16	1½	20

① Use washers on ½ -inch bolts.

SOLID SHAFT RETURN IDLER



O4044
3½-Inch Rubber Roll

Belt Width	Roll Face	Dimensions In Inches		
		A	B	L
18	21¾	24 15/16	27	28 7/16
20	23¾	26 15/16	29	30 7/16
24	27¾	30 15/16	33	34 7/16
30	33¾	36 15/16	39	40 7/16
36	39¾	42 15/16	45	46 7/16

① Use washers on ½ -inch bolts.

Note: Dimensions subject to change. Certified dimensions of ordered material furnished on request.

REX IDLERS

WEIGHT OF ROTATING PARTS FOR STEEL ROLLS

The weights of rotating parts of the idler rolls are used in determining the additional forces required to overcome roller friction. For convenience, the following tabulation of average weights of rotating parts may be used in these calculations. The weights listed include only the rotating parts of the carrying and return rolls.

Series No.	Roll Diameter	Belt Width Inches	Troughing Idlers Lbs.	Flat or Return Idlers Lbs.
B	4 inch	18	13.42	11.58
		20	14.43	12.59
		24	16.46	14.62
		30	19.50	17.66
		36	22.55	20.71
		42	25.59	23.75
		48	28.64	26.80
B	5 Inch	18	16.18	14.70
		20	17.46	15.98
		24	20.02	18.54
		30	23.85	22.37
		36	27.69	26.21
		42	31.52	30.04
		48	35.36	33.88
B+, C and D	5 Inch	18	18.61	15.21
		20	19.90	16.50
		24	22.47	19.07
		30	26.33	22.93
		36	30.19	26.79
		42	34.05	30.65
		48	37.91	34.51
		54	41.77	38.37
		60	45.63	42.23
C and D	6 Inch	18	23.10	20.26
		20	24.81	21.97
		24	28.24	25.40
		30	33.38	30.54
		36	38.52	35.68
		42	43.66	40.82
		48	48.81	45.97
		54	53.95	51.11
		60	59.09	56.25
E	6 Inch	36	62.6	54.8
		42	70.3	62.5
		48	78.0	70.1
		54	85.7	77.8
		60	93.4	85.5
		72	108.7	100.8
		84	124.0	116.2
		96	139.4	131.5
E	7 Inch	36	60.8	60.1
		42	69.8	69.1
		48	78.9	78.1
		54	87.9	87.1
		60	96.9	96.1
		72	114.9	114.2
		84	132.9	132.2
		96	150.9	150.2

SELECTION OF BELT CONVEYOR IDLERS

Determination of Belt Width and Speed

Belt width and belt speed can be determined by using the material characteristics and required conveyor capacity.

Basis for Selection

Required Conveyor Capacity — Amount of material to be handled, (tons per hour). This figure should reflect peak or surge volume rather than average volume.

Material Characteristics — A precise description of the material to be handled. The description should include the following:

A. Material Weight — In pounds per cubic foot. (Table 1, pages 72-73)

B. Maximum Lump Size — (largest measurement) and percentage of lumps and fines.

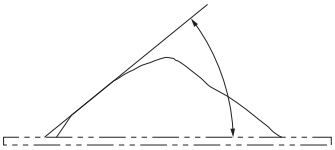
C. Flowability of the Material — Free-flowing, average or sluggish.

D. Abrasiveness of Material — Non-abrasive, mildly abrasive or very abrasive. (Table 1, pages 72-73).

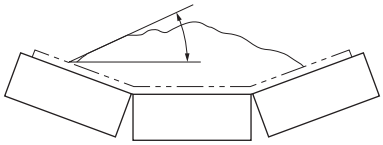
E. Corrosiveness of Material — Non-corrosive, mildly corrosive or very corrosive. (Table 1, pages 72-73).

F. Surcharge Angle — This is the angle from the horizontal assumed by the conveyed material as it is carried on a belt passing over idlers. The surcharge angle is normally 5° to 15° less than the angle of repose.

G. Angle of Repose — This is the angle from the horizontal assumed by the material in a freely formed pile on a horizontal surface.



ANGLE OF REPOSE



SURCHARGE ANGLE

Selection Procedure

1. From Tables 2, 3, or 4 (pages 74-76) — Determine the **minimum belt width** based on lump size, surcharge angle and percentage of lumps and fines. (The minimum belt width is the same for any troughing angle.) Read down the appropriate right hand column until the required lump size is reached — then read across to the left hand column for minimum belt width.

2. From Tables 2, 3 or, 4 (pages 74-76) — Refer to the footnotes and select the symbol which most closely represents the material to be conveyed based on flowability and abrasiveness.

   Next, determine the design capacity. The capacities shown in the tables are based on material weight of 100 pounds per cubic foot. For other materials, use the following formula to convert required capacity to design capacity:

   $$\frac{100 \times \text{Required Capacity (TPH)}}{\text{Actual Material Wgt. (Lbs/Cu.Ft.)}} = \text{Design Capacity (TPH)}$$

   To find **maximum belt speed**, enter the table at the belt width from paragraph 1 and read to the right until the selected symbol is reached. Then read down - following the selected symbol across columns if necessary - to the required design capacity at the proper surcharge angle. Normal belt speed is usually 100-200 fpm less than the maximum.

3. To determine **optimum** belt width and speed - deduct at least 100 fpm and increase belt width as required.

NOTES: Do not select any belt width narrower than minimum belt width determined in Step 1.

Do not select any belt speed faster than maximum belt speed determined in Step 2.

A minimum belt speed of 300 fpm is recommended for proper discharge from 35° and 45° troughed belts.

Weights and Conveying Characteristics of Materials

Table (1A) lists CEMA material class descriptions and corresponding codes referred to in Table (1). Table (1) lists typical values. Some materials, particularly ores, vary widely. Weight and angle of repose depend largely on the size distribution in a given material. Degree of aeration may be important factor in density of very fine material. Angle of repose may increase with the percentage of fines as well as the angularity of the particles. Fines carry most of the moisture content, which is often the controlling factor. For these reasons, the values given can only be approximate.

TABLE 1A – CEMA MATERIAL CLASS DESCRIPTION

	Material Characteristics	Code
SIZE	Very fine – 100 mesh and under	A
	Fine – 1/8 inch and under	B
	Granular – under 1/2 inch	C
	Lumpy – containing over 1/2 inch	D
	Irregular – stringy, interlocking, mats together	E
FLOWABILITY ANGLE OF REPOSE	Very free flowing – angle of repose than 20°	1
	Free flowing – angle of repose 20° to 30°	2
	Average flowing – angle of repose 30° to 45°	3
	Sluggish – angle of repose 45° and over	4
ABRASIVENESS	Non-abrasive	5
	Abrasive	6
	Very abrasive	7
	Very sharp – cuts or gouges belt covers	8
MISCELLANEOUS CHARACTERISTICS (Sometimes more than one of these characteristics may apply.)	Very dusty	L
	Aerates and develops fluid characteristics	M
	Contains explosive dust	N
	Contaminable, affecting use of saleability	P
	Degradable, affecting use of saleability	Q
	Gives off harmful fumes or dust	R
	Highly corrosive	S
	Mildly corrosive	T
	Hygroscopic	U
	Interlocks of mats	V
	Oils or chemicals present – may affect rubber products	W
	Packs under pressure	X
	Very light and fluffy – may be wind swept	Y
	Elevated temperature	Z

Table 1
Conveying Properties of Materials
(For Additional Information See CEMA Handbook)

Material	Lbs. per Cu. Ft.	Angle of Repose	Recom'd Max. Inclin.	Code
Alfalfa meal	17	45°	…	B46Y
Alum, fine	45-50	30-44°	…	B35
Alum, lumpy	50-60	30-44°	…	D35
Alumina	50-65	22°	10-12°	B27M
*Aluminum chips	7-15	45°	…	E46Y
Aluminum hydrate	18	34°	20-24°	C35
Aluminum oxide	70-120	29°	…	A27M
Aluminum silicate	49	30-44°	…	B35S
Aluminum sulphate	54	32°	17°	D35
Ammonium chloride, crystalline	45-52	30-44°	…	B36S
Ammonium nitrate	45	30-44°	…	*C36NUS
Ammonium sulphate, granular	45-58	44°	…	*C35TU
Asbestos, ore or rock	81	30-44°	…	D37R
Asbestos, shred	20-25	45°	…	E46XY
Ashes, coal, dry, 3" and under	35-40	45°	…	D46T
Ashes, coal, wet, 3" and under	45-50	45°	…	D46T
Ashes, fly	40-45	42°	20-25°	A37
Ashes, gas-producer, wet	78	…	…	D47T
Asphalt, binder for paving	80-85	…	…	C45
Asphalt, crushed, ½" and under	45	30-44°	…	C35
Bagasse	7-10	45°	…	E45Y
Bakelite and similar plastics, powdered	35-45	45°	…	B45
Barite	180	30-44°	…	B36
Barium carbonate	72	45°	…	A45
Barium oxide	150-200	…	…	A46
*Bark, wood, refuse	10-20	45°	27°	E45VY
Basalt	80-103	20-28°	…	B26
Bauxite, ground, dry	68	20-29°	20°	B26
Bauxite, mine run	80-90	31°	17°	E37
Bauxite, crushed, 3" and under	75-85	30-44°	20°	D37
*Bentonite, crude	35-40	42-44°	…	D36X
Bentonite, 100 mesh and under	50-60	42°	20°	A36XY
Boneblack, 100 mesh and under	20-25	20-29°	…	A25Y
Bonechar	27-40	30-44°	…	B36
Bonemeal	50-60	30-44°	…	B36
Borate of lime	60	30-44°	…	A35
Borax, ½" screenings	55-60	30-44°	…	C36
Borax, 3" and under	60-70	30-44°	…	D35
Boric acid, fine	55	20-29°	…	B26T
Brewer's grain, spent, dry	25-30	45°	…	C45
Brewer's grain, spent, wet	55-60	45°	…	C45T
Calcium carbide, crushed	70-80	30-44°	…	D36N
Carbon, activated, dry, fine	8-20	20-29°	…	B26Y
Carbon black, pelletized	20-25	25°	…	B25Q
Carbon black, powder	4-7	30-44°	…	*A35Y
Carborundum, 3" and under	100	20-29°	…	D27
Casein	36	30-44°	…	B35
Cast iron chips	90-120	45°	…	C46
Cement, Portland	72-99	30-44°	20-23°	A36M
Cement, Portland, aerated	60-75	…	…	A16M
Cement, rock (see limestone)	100-110	…	…	D36
Cement clinker	75-95	30-40°	18-20°	D37
Chalk, lumpy	75-85	45°	…	D46
*Charcoal	18-25	35°	20-25°	D36Q
Chrome ore (chromite)	125-140	30-44°	…	D37
Cinders, blast furnace	57	35°	18-20°	*D37T
Cinders, coal	40	35°	20°	*D37T
Clay, calcined	80-100	…	…	B37
Clay, dry, fines	100-120	35°	20-22°	C37
Clay, dry, lumpy	60-75	35°	18-20°	D36
Coal, anthracite, sized	55-60	27°	16°	C26
Coal, bituminous, mined 50 mesh and less	50-54	45°	24°	B45T
Coal, bituminous, mined and sized	45-55	35°	16°	D35T
Coal, bituminous, mined, run of mine	45-55	38°	18°	D35T
Coal, bituminous, stripping, not cleaned	50-60	…	…	D36T
Coal, lignite	40-45	38°	22°	D36T
Coke, loose	23-35	30-44°	18°	B37QVT
Coke, petroleum calcined	35-45	30-44°	20°	D36Y
Coke breeze, ¼" and under	25-35	30-44°	20-22°	C37Y
Compost	30-50	…	…	E45ST
Concrete, cinder	90-100	…	12-30°	D46
Copper ore	120-150	30-44°	20°	*D37
Copper sulfate	75-85	31°	17°	D36
Cork, granulated	12-15	…	…	C45
Corn, shelled	45	21°	10°	C25NW
Cottonseed cake, crushed	40-45	30-44°	…	B35
Cottonseed cake, lumpy	40-45	30-44°	…	D35W
Cottonseed meal	35-40	35°	22°	B35W
Cottonseed meats	40	30-44°	…	B35W
Cryolite, dust	75-90	30-44°	…	A36
Cryolite, lumpy	90-100	30-44°	…	D36
Cullet	80-120	30-44°	20°	D37Z
Diatomaceous earth	11-14	30-44°	…	A36MY
Dicalcium phosphate	40-50	45°	…	A45
Disodium phosphate	25-31	30-44°	…	B36QT
Dolomite, lumpy	80-100	30-44°	22°	D36
Earth, as excavated — dry	70-80	35°	20°	B36
Earth, wet, containing clay	100-110	45°	23°	B46
Ebonite, crushed ½" and under	65-70	30-44°	…	C35
Emery	230	20-29°	…	A27
Epson salts	40-50	30-44°	…	B35

* May vary considerbly – consult a CEMA member

Table 1 — Cont'd.
Conveying Properties of Materials
(For Additional Information See CEMA Handbook)

Material	Lbs. per Cu. Ft.	Angle of Repose	Recom'd Max. Inclin.	Code
Feldspar, ½" screenings	70-85	38°	18°	B36
Feldspar, 1½" to 3" lumps	90-110	34°	17°	D36
Ferrous sulfate	50-75	…	…	C36
Filter press mud, sugar factory	70	…	…	A15
Flue dust, boiler house, dry	35-40	20°	…	A17MTY
Fluorspar, ½" screenings	85-105	45°	…	C46
Fluorspar, 1½" to 3" lumps	110-120	45°	…	D46
Foundry refuse, old sand cores, etc.	70-100	30-44°	…	D37Z
Fuller's earth, dry	30-35	23°	…	B26
Fuller's earth, oily	60-65	20-29°	…	B26
Fuller's earth, oil filter, burned	40	20-29	…	B26
Fuller's earth, oil filter, raw	35-40	35°	20°	*B26
Glass batch, wool and container	80-100	30-44°	20-22°	D38Z
Glue, pearl	40	25°	11°	C25
Grain, distillery, spent, dry	30	30-44°	…	E35WY
Grain, distillery, spent, wet	40-60	45°	…	C45V
Granite, ½" screenings	80-90	20-29°	…	C27
Granite, 1½" to 2" lumps	85-90	20-29°	…	D27
Granite, broken	95-100	30-44°	…	D37
Graphite, flake	40	30-44°	…	C35
Gravel, bank run	90-100	38°	20°	
Gypsum, ½" screenings	70-80	40°	21°	C36
Gypsum, 1½" to 3" lumps	70-80	30°	15°	D36
Guano, dry	70	20-29°	…	B26
Hops, spent, wet	50-55	45°	…	E45T
Ice, crushed	35-45	19°	…	D16
Ilmenite ore	140-160	30-44°	…	B37
Iron ore	100-200	35°	18-20°	*D36
Iron ore pellets	116-130	30-44°	13-15°	D37Q
Iron sulfide	120-135	30-44°	…	D36
Kaolin clay, 3" and under	63	35°	19°	D36
Lactose	32	30-44°	…	A35PX
Lead arsenate	72	45°	…	B45R
Lead ores	200-270	30°	15°	*B36RT
Lead oxides	60-150	45°	…	B45
Lead oxides, pulverized	200-250	30-44°	…	A36
Lead sulfide	240-260	30-44°	…	A36
Lignite, air-dried	45-55	30-44°	…	*D35
Lime, ground, ⅛" and under	60-65	43°	23°	B35X
*Lime, hydrated, ⅛" and under	40	40°	21°	B35MX
Lime, hydrated, pulverized	32-40	42°	22°	A35MXY
Lime, pebble	53-56	30°	17°	D35
Limestone, agricultural, ⅛" and less	68	30-44°	20°	B36
Limestone, crushed	85-90	38°	18°	C36X
Magnesium chloride	33	40°	…	C45
Magnesium sulfate	40-50	30-44°	…	
Malt, dry, whole	27-30	20-29°	…	C25N
Malt, wet or green	60-65	45°	…	C45
Manganese dioxide	80	…	…	*
Manganese ore	125-140	39°	20°	*D37
Manganese sulfate	70	30-44°	…	C37
Marble, crushed ½" and under	80-95	30-44°	…	D37
Marl	80	30-44°	…	C37
Mica, flakes	17-22	19°	…	B16MY
Mica, ground	13-15	34°	23°	*B36
Milk, malted	30-35	45°	…	A45PX
*Molybdenite, powdered	107	40°	25°	B35
Molybdenum ore	107	40°	…	B36
Nickel–cobalt, sulfate ore	80-150	30-44°	…	*D37T
Oil cake	48-50	45°	…	D45W
Oxalic acid crystals	60	30-44°	…	B35SU
Oyster shells, ground, under ½"	50-60	30-44°	…	C36T
Oyster shells, whole	80	30-44°	…	D36TV
Paper pulp stock	40-60	19°	…	*E15MV
Peanuts, in shells	15-24	30-44°	…	D35Q
Peanuts, shelled	35-45	30-44°	…	C35Q
Phosphate, acid, fertilizer	60	26°	13°	B25T
Phosphate, triple super, ground fertilizer	50-55	45°	30°	B45T
Phosphate rock, broken, dry	75-85	25-29°	12-15°	D26
Phosphate rock, pulverized	60	40°	25°	B36
Polystyrene pellets	35	23°	…	B25PQ
Potash salts, sylvite, etc.	80	20-29°	…	B25T
Potassium carbonate	51	20-29°	…	B26
Potassium chloride, pellets	120-130	30-44°	…	C36T
Potassium nitrate	76-80	20-29°	…	C26T
Potassium sulfate	42-48	45°	…	B36X
Pumice, ⅛" and under	40-45	45°	…	B47
Pyrites, iron, 2" to 3" lumps	135-145	20-29°	…	D26T
Pyrites, pellets	120-130	30-44°	…	C36T
Quartz, ½" screenings	80-90	20-29°	…	C27Z
Quartz, 1½" to 3" lumps	85-95	20-29°	…	D27Z
Rock, crushed	125-145	20-29°	…	D26
Rock, soft, excavated with shovel	100-110	30-44°	22°	D36
Rubber, pelletized	50-55	35°	22°	D35
Rubber, reclaim	25-30	32°	18°	D35
Salicylic acid	29	…	…	B25U
Salt, common dry, coarse	40-55	…	18-22°	C36TU
Salt, common dry, fine	70-80	25°	11°	D26TUW
Salt cake, dry, coarse	85	36°	21°	B36TW
Salt cake, dry, pulverized	60-85	20-29°	…	B26NT
Sand, bank, damp	105-130	45°	20-22°	B47
Sand, bank, dry	90-110	35°	16-18°	B37
Sand, core	65	41°	26°	B35X
Sand, foundry, prepared	80-90	30-44°	24°	B37
Sand, foundry, shakeout	90-100	39°	22°	D37
Sand, silica, dry	90-100	20-29°	10-15°	B27
Sandstone, broken	85-90	30-44°	…	D37
Sawdust	10-13	36°	22°	*B35
Sewage sludge, moist	55	30-44°	…	B36
Shale, broken	90-100	20-29°	…	D26QZ
Shale, crushed	85-90	39°	22°	C36
Shellac	80	45°	…	C45
Shellac, powdered or granulated	31	…	…	B35PY
Sinter	100-135	35°	…	*D37
Slag, blast furnace, crushed	80-90	25°	10°	A27
Slag, furnace, granular, dry	60-65	25°	13-16°	C27
Slag, furnace, granular, wet	90-100	45°	20-22°	B47
Slate, crushed, ½" and under	80-90	28°	15°	C36
Slate, 1½" to 3" lumps	85-95	…	…	D26
Soap beads or granules	15-25	30-44°	…	C35Q
Soda ash, briquettes	50	22°	7°	C26
Soda ash, heavy	55-65	32°	19°	B36
Soda ash, light	20-35	37°	22°	A36Y
Sodium aluminate, ground	72	30-44°	…	B36
Sodium aluminum sulfate	75	30-44°	…	A36
Sodium antimonate, crushed	49	31°	…	C36
Sodium nitrate	70-80	24°	11°	*D25
Sodium phosphate	50-65	37°	…	B36
Soybeans, whole	45-50	21-28°	12-16°	C27NW
Starch	25-50	24°	12°	*B25
Steel chips, crushed	100-150	30-44°	…	D37WZ
Steel trimmings	75-150	35°	18°	E37V
Sugar, raw, cane	55-65	45°	…	B46TX
Sugar, refined, granulated, dry	50-55	30-44°	…	B35PU
Sugar, refined, granulated, wet	55-65	30-44°	…	C35X
Sugar, beet pulp, dry	12-15	20-29°	…	C26
Sugar, beet pulp, wet	25-45	20-29°	…	C26X
Sugar cane, knifed	15-18	45°	…	E45V
Sulfate, crushed, ½" and under	50-60	30-44°	20°	C35NS
Sulfate, 3" and under	80-85	30-44°	18°	D35NS
Taconite, pellets	116-130	30-44°	13-15°	D37Q
Talc, ½" screenings	80-90	20-29°	…	C25
Talc, 1½" to 3" lumps	85-95	20-29°	…	D25
Titanium dioxide	140	30-44°	…	B36
Titanium sponge	60-70	45°	…	E47
Tobacco scraps	15-25	45°	…	D45Y
Tobacco stems	15	45°	…	E45Y
Traprock, ½" screenings	90-100	30-44°	…	C37
Traprock, 2" to 3" lumps	100-110	30-44°	…	D37
Trisodium phosphate, granular	60	30-44°	11°	B35
Trisodium phosphate, pulverized	50	40°	25°	B35
Vermiculite, expanded	16	45°	…	C45Y
Vermiculite ore	70-80	…	20°	D36Y
Walnut shells, crushed	35-45	30-44°	…	B37
Wood chips	10-30	45°	27°	E45WY
Wood chips, hogged, fuel	15-25	45°	…	D45
Zinc concentrates	75-80	…	…	B26
Zinc ore, crushed	160	38°	22°	*
Zinc ore, roasted	110	38°	…	C36
Zinc oxide, heavy	30-35	45-55°	…	A45X
Zinc oxide, light	10-15	45°	…	A45XY

* May vary considerbly – consult a CEMA member

REX IDLERS

Table 2 — Belt Capacity — 20° Troughing Idlers — Equal Length Rolls

Belt Width Inches	Surcharge Angle Degrees	Cross Sectional Area Square Feet	Design Capacity — Short Tons (2000 Lbs.) Per Hour — 100 Pounds Per Cubic Foot Material												Max. Lump Size Largest Dimension — Inches			
			Belt Speed — Feet Per Minute (Suggested Speeds — See Footnotes)												10% Lumps 90% Fines		All Lumps No Fines	
			50	100	150	200	250	300	350	400	500	600	700	800	Surcharge		Surcharge	
															20°	30°	20°	30°
18	0	.090	14	27	41	54	68	81	95■	108◆	135●	162	189	216	6	3	4	2
	5	.109	16	33	49	65	82	98	114■	131◆	164●	196	229	262				
	10	.128	19	38	58	77	96	115	134■	154◆	192●	230	269	307				
	20	.168	25	50	76	101	126	151	176■	202◆	252●	302	353	403				
	25	.188	28	56	85	113	141	169	197■	226◆	282●	338	395	451				
	30	.209	31	63	94	125	157	188	219■	251◆	314●	376	439	502				
20	0	.115	17	35	52	69	86	104	121■	138◆	173●	207	242	276	6	3½	4	2
	5	.139	21	42	63	83	104	125	146■	167◆	209●	250	292	334				
	10	.163	24	49	73	98	122	147	171■	196◆	245●	293	342	391				
	20	.213	32	64	96	128	160	192	224■	256◆	320●	383	447	511				
	25	.239	36	72	108	143	179	215	251■	287◆	359●	430	502	574				
	30	.266	40	80	120	160	200	239	279■	319◆	399●	479	559	638				
24	0	.174	26	52	78	104	131	157	183	209	261■	313◆	365●	418	8	4	5	2½
	5	.209	31	63	94	125	157	188	219	251	314■	376◆	439●	502				
	10	.246	37	74	111	148	185	221	258	295	369■	443◆	517●	590				
	20	.321	48	96	144	193	241	289	337	385	482■	578◆	674●	770				
	25	.360	54	108	162	216	270	324	378	432	540■	648◆	756●	864				
	30	.399	60	120	180	240	299	359	419	479	599■	718◆	838●	958				
30	0	.285	43	86	128	171	214	257	299	342	428■	513◆	599●	684	10	5	6	3
	5	.342	51	103	154	205	257	308	359	410	513■	616◆	718●	821				
	10	.402	60	121	181	241	302	361	422	482	603■	724◆	844●	965				
	20	.523	78	157	235	314	392	471	549	628	785■	941◆	1098●	1125				
	25	.586	88	176	264	352	440	527	615	703	879■	1055◆	1231●	1406				
	30	.649	97	195	292	389	487	584	681	779	974■	1168◆	1363●	1558				
36	0	.423	63	127	190	254	317	381	444	508	635■	761◆	888●	1015	12	6	7	3½
	5	.508	76	152	229	305	381	457	533	610	762■	914◆	1067●	1219				
	10	.596	89	179	268	358	447	536	626	715	894■	1073◆	1252●	1430				
	20	.774	116	232	348	464	581	697	813	929	1161■	1393◆	1625●	1858				
	25	.867	130	260	390	520	650	780	910	1040	1301■	1561◆	1821●	2081				
	30	.961	144	288	432	577	721	865	1009	1153	1442■	1730◆	2018●	2306				
42	0	.589	88	177	265	353	442	530	618	707	884	1060■	1237◆	1414●	14	7	8	4
	5	.708	106	212	318	425	531	638	744	850	1062	1275■	1487◆	1700●				
	10	.829	124	249	373	497	622	746	870	995	1244	1492■	1741◆	1990●				
	20	1.074	161	322	483	644	806	967	1128	1289	1611	1933■	2255◆	2578●				
	25	1.201	180	361	540	721	901	1082	1262	1442	1802	2163■	2523◆	2884●				
	30	1.333	200	400	600	800	1000	1200	1400	1600	2000	2399■	2799◆	3199●				
48	0	.782	117	235	352	469	587	704	821	938	1173	1408■	1642◆	1877●	16	8	10	5
	5	.939	140	282	422	564	705	845	987	1128	1409	1681■	1973◆	2255●				
	10	1.099	165	330	495	659	824	989	1154	1319	1649	1978■	2308◆	2638●				
	20	1.424	214	427	641	854	1068	1282	1495	1709	2136	2563■	2990◆	3418●				
	25	1.592	238	476	714	952	1190	1428	1666	1904	2380	2857■	3332◆	3808●				
	30	1.765	265	530	794	1059	1324	1589	1853	2118	2648	3177■	3707◆	4236●				
54	0	1.002	150	301	451	601	752	902	1052	1202	1503	1804■	2104◆	2405●	18	9	11	5½
	5	1.204	180	360	542	722	903	1084	1264	1445	1806	2167■	2529◆	2890●				
	10	1.407	211	422	633	844	1055	1266	1477	1688	2111	2533■	2955◆	3377●				
	20	1.823	273	547	820	1094	1367	1641	1914	2188	2735	3281■	3828◆	4375●				
	25	2.037	306	612	916	1222	1528	1833	2139	2444	3056	3667■	4278◆	4889●				
	30	2.259	339	678	1017	1355	1694	2033	2372	2711	3389	4066■	4744◆	5422●				
60	0	1.250	188	375	563	750	938	1125	1313	1500	1875	2250■	2625◆	3000●	20	10	12	6
	5	1.151	225	450	675	900	1125	1350	1576	1801	2251	2702■	3152◆	3602●				
	10	1.753	263	526	789	1052	1315	1578	1841	2104	2630	3155■	3681◆	4207●				
	20	2.270	341	681	1022	1362	1703	2043	2384	2724	3405	4086■	4767◆	5448●				
	25	2.537	380	761	1142	1522	1903	2283	2664	3045	3806	4567■	5328◆	6090●				
	30	2.813	422	844	1266	1688	2110	2532	2954	3376	4220	5063■	5907◆	6751●				
72	0	1.826	274	548	822	1096	1370	1643	1917	2191	2739	3287■	3835◆	4382●	24	12	14	7
	5	2.192	328	658	986	1315	1644	1973	2302	2631	3289	3941■	4604◆	5262●				
	10	2.560	384	768	1152	1536	1920	2304	2688	3072	3840	4608■	5376◆	6144●				
	20	3.313	497	994	1491	1988	2485	2982	3479	3976	4970	5963■	6957◆	7951●				
	25	3.702	555	1110	1665	2221	2776	3332	3887	4442	5552	6663■	7773◆	8884●				
	30	4.103	615	1231	1846	2462	3077	3693	4308	4924	6155	7385■	8616◆	9847●				
84	0	2.513	377	754	1131	1508	1885	2262	2639	3016	3770	4523■	5277◆	6031●	26	13	15	7½
	5	3.014	452	904	1356	1808	2260	2713	3165	3617	4521	5425■	6329◆	7234●				
	10	3.519	528	1056	1584	2111	2639	3167	3695	4223	5278	6334■	7390◆	8446●				
	20	4.551	683	1365	2048	2731	3413	4096	4779	5461	6827	8192■	9557◆	10922●				
	25	5.085	763	1525	2288	3051	3814	4576	5339	6102	7627	9153■	10678◆	12204●				
	30	5.685	845	1690	2536	3381	4226	5071	5917	6762	8452	10143■	11833◆	13524●				
96	0	3.308	496	992	1489	1985	2481	2977	3473	3970	4962	5954■	6947◆	7939●	28	14	16	8
	5	3.967	595	1190	1785	2380	2975	3570	4165	4760	5950	7141■	8331◆	9521●				
	10	4.631	695	1389	2084	2779	3473	4168	4863	5557	6946	8336■	9725◆	11114●				
	20	5.986	898	1796	2694	3692	4490	5387	6285	7183	8979	10775■	12571◆	14366●				
	25	6.687	1003	2006	3009	4012	5015	6018	7021	8024	10030	12037■	14043◆	16049●				
	30	7.411	1112	2223	3335	4447	5558	6670	7782	8893	11117	13340■	15563◆	17786●				

Material Flowability and Abrasiveness.
- ● Grain or other Free Flowing, Non Abrasive Materials.
- ◆ Coal, Damp Clay, Soft Ores, Overburden and Earth, Fine Crushed Stone.
- ■ Heavy, Hard, Sharp Edged Ore, Coarse Crushed Stone.

Note: A Minimum Speed of 300 FPM is recommended for proper discharge.

Suggested Belt Speeds for Other Conditions:
Fine, Dry, Dusty or Fluffy Material 100-200 FPM Maximum.
Fragile Materials where degradation is harmful 150-250 FPM Maximum.
Wet Materials or materials which tend to cling to belt 300FPM Min.

REX IDLERS

Table 3 — Belt Capacity — 35° Troughing Idlers — Equal Length Rolls

Belt Width Inches	Surcharge Angle Degrees	Cross Sectional Area Square Feet	Design Capacity — Short Tons (2000 Lbs.) Per Hour — 100 Pounds Per Cubic Foot Material												Max. Lump Size Largest Dimension — Inches			
			Belt Speed — Feet Per Minute (Suggested Speeds — See Footnotes)												10% Lumps 90% Fines		All Lumps No Fines	
															Surcharge		Surcharge	
			50	100	150	200	250	300	350	400	500	600	700	800	20°	30°	20°	30°
18	0	.144	22	43	65	86	108	130	151■	173◆	216●	259	302	346	6	3	4	2
	5	.161	24	48	72	97	121	145	169■	193◆	242●	290	338	386				
	10	.178	27	53	80	107	134	160	187■	214◆	267●	320	374	427				
	20	.212	32	64	95	127	159	191	223■	254◆	318●	382	445	509				
	25	.231	35	69	104	139	173	208	243■	277◆	347●	416	485	554				
	30	.249	37	75	112	149	187	224	261■	299◆	374●	448	523	598				
20	0	.184	28	55	83	110	138	166	193■	221◆	276●	331	386	442	6	3½	4	2
	5	.205	31	62	92	123	154	185	215■	246◆	308●	369	431	492				
	10	.226	34	68	102	136	170	203	237■	271◆	339●	407	475	542				
	20	.270	41	81	122	162	203	242	284■	324◆	405●	486	567	648				
	25	.293	44	88	132	176	220	264	308■	352◆	440●	527	615	703				
	30	.316	47	95	142	190	237	284	332■	379◆	474●	569	664	758				
24	0	.278	42	83	125	167	209	250	292	334	417■	500◆	584●	667	8	4	5	2½
	5	.309	46	93	139	185	232	278	324	371	464■	556◆	649●	742				
	10	.341	51	102	153	205	256	307	358	409	512■	614◆	716●	818				
	20	.406	61	122	183	244	305	365	426	487	609■	731◆	853●	974				
	25	.441	66	132	198	265	331	397	463	529	662■	794◆	926●	1058				
	30	.475	71	143	214	285	356	428	499	570	713■	855◆	998●	1140				
30	0	.456	68	137	205	274	342	410	479	547	684■	821◆	958●	1094	10	5	6	3
	5	.506	76	152	228	304	380	455	531	607	759■	911◆	1063●	1214				
	10	.558	84	167	251	335	419	502	586	670	837■	1004◆	1172●	1339				
	20	.663	99	199	298	398	497	597	696	796	995■	1193◆	1392●	1591				
	25	.718	108	215	323	431	539	646	754	862	1077■	1291◆	1508●	1723				
	30	.773	116	232	348	464	580	696	812	928	1160■	1391◆	1623●	1855				
36	0	.676	101	203	304	406	507	608	710	811	1014■	1217◆	1420●	1622	12	6	7	3½
	5	.750	113	225	338	450	563	675	788	900	1125■	1350◆	1575●	1800				
	10	.827	124	248	372	496	620	744	868	992	1241■	1489◆	1737●	1985				
	20	.981	147	294	441	589	736	883	1030	1177	1472■	1766◆	2060●	2354				
	25	1.062	159	319	478	637	797	956	1115	1274	1593■	1912◆	2230●	2549				
	30	1.143	171	343	514	686	857	1029	1200	1372	1715■	2057◆	2400●	2743				
42	0	.940	141	282	423	564	705	846	987	1128	1410	1692■	1974◆	2256●	14	7	8	4
	5	1.043	156	313	469	626	782	939	1095	1252	1565	1877■	2190◆	2503●				
	10	1.148	172	344	517	689	861	1033	1205	1378	1722	2066■	2411◆	2755●				
	20	1.361	204	408	612	817	1021	1225	1429	1633	2042	2450■	2858◆	3266●				
	25	1.473	221	442	663	884	1105	1325	1547	1768	2210	2651■	3093◆	3535●				
	30	1.585	238	476	713	951	1189	1427	1664	1902	2378	2853■	3329◆	3804●				
48	0	1.249	187	375	562	749	937	1124	1311	1499	1874	2248■	2623◆	2998●	16	8	10	5
	5	1.383	207	415	622	830	1037	1245	1452	1660	2075	2489■	2904◆	3319●				
	10	1.523	228	457	685	914	1142	1371	1599	1828	2285	2741■	3198◆	3655●				
	20	1.804	271	541	812	1082	1353	1624	1894	2165	2706	3247■	3788◆	4330●				
	25	1.949	292	585	877	1170	1462	1755	2047	2340	2925	3509■	4094◆	4680●				
	30	2.100	315	630	945	1260	1575	1890	2205	2520	3150	3780■	4410◆	5040●				
54	0	1.600	240	480	720	960	1200	1440	1680	1920	2400	2880■	3360◆	3840●	18	9	11	5½
	5	1.774	266	532	798	1065	1330	1597	1863	2129	2661	3194■	3726◆	4258●				
	10	1.950	293	585	878	1170	1463	1755	2048	2340	2925	3510■	4095◆	4680●				
	20	2.309	346	693	1039	1385	1732	2078	2424	2771	3464	4165■	4849◆	5542●				
	25	2.494	375	748	1122	1497	1871	2245	2620	2994	3742	4490■	5239◆	5988●				
	30	2.686	403	806	1209	1612	2015	2417	2820	3223	4029	4835■	5641◆	6446●				
60	0	1.992	299	598	896	1195	1494	1793	2092	2390	2988	3586■	4183◆	4781●	20	10	12	6
	5	2.211	331	662	995	1327	1658	1990	2322	2654	3317	3980■	4644◆	5308●				
	10	2.430	365	729	1094	1458	1823	2187	2552	2916	3645	4374■	5103◆	5832●				
	20	2.876	431	863	1294	1726	2157	2588	3020	3451	4314	5177■	6040◆	6902●				
	25	3.107	466	932	1498	1864	2330	2896	3262	3728	4660	5592■	6525◆	7456●				
	30	3.345	502	1004	1505	2007	2509	3011	3512	4014	5018	6021■	7025◆	8028●				
72	0	2.913	437	874	1311	1748	2185	2622	3060	3496	4380	5245■	6119◆	6993●	24	12	14	7
	5	3.220	484	968	1453	1937	2422	2907	3391	3875	4845	5813■	6782◆	7751●				
	10	3.547	532	1064	1596	2128	2660	3192	3724	4256	5321	6385■	7449◆	8513●				
	20	4.197	630	1259	1889	2518	3148	3777	4407	5036	6296	7555■	8814◆	10073●				
	25	4.532	680	1360	2040	2720	3400	4080	4758	5439	6800	8158■	9518◆	10878●				
	30	4.879	732	1464	2196	2927	3659	4391	5123	5855	7319	8782■	10246◆	11710●				
84	0	4.007	601	1202	1803	2404	3005	3606	4207	4808	6010	7213■	8415◆	9617●	26	13	15	7½
	5	4.440	666	1332	1998	2664	3330	3996	4662	5328	6660	7992■	9324◆	10656●				
	10	4.876	731	1463	2194	2926	3657	4388	5120	5851	7314	8777■	10240◆	11702●				
	20	5.776	865	1730	2595	3460	4325	5189	6054	6919	8649	10379■	12109◆	13838●				
	25	6.226	934	1868	2802	3736	4670	5603	6537	7471	9339	11207■	13075◆	14942●				
	30	6.701	1005	2010	3015	4020	5026	6031	7036	8041	10052	12062■	14072◆	16082●				
96	0	5.274	791	1582	2373	3164	3955	4747	5538	6329	7911	9493■	11075◆	12658●	28	14	16	8
	5	5.842	876	1753	2629	3505	4382	5258	6134	7010	8763	10515■	12268◆	14020●				
	10	6.415	962	1925	2887	3849	4811	5774	6736	7698	9622	11547■	13471◆	15396●				
	20	7.584	1138	2275	3413	4550	5688	6825	7963	9100	11376	13651■	15926◆	18202●				
	25	8.189	1228	2457	3685	4913	6142	7370	8598	9827	12283	14740■	17197◆	19654●				
	30	8.812	1322	2644	3965	5287	6609	7930	9253	10574	13218	15862■	18505◆	21149●				

Material Flowability and Abrasiveness.
- ● Grain or other Free Flowing, Non Abrasive Materials.
- ◆ Coal, Damp Clay, Soft Ores, Overburden and Earth, Fine Crushed Stone.
- ■ Heavy, Hard, Sharp Edged Ore, Coarse Crushed Stone.

Note: A Minimum Speed of 300 FPM is recommended for proper discharge.

Suggested Belt Speeds for Other Conditions:
Fine, Dry, Dusty or Fluffy Material 100-200 FPM Maximum.
Fragile Materials where degradation is harmful 150-250 FPM Maximum.
Wet Materials or materials which tend to cling to belt 300FPM Min.

REX IDLERS

Table 4 — Belt Capacity — 45° Troughing Idlers — Equal Length Rolls

Belt Width Inches	Surcharge Angle Degrees	Cross Sectional Area Square Feet	Design Capacity — Short Tons (2000 Lbs.) Per Hour — 100 Pounds Per Cubic Foot Material												Max. Lump Size Largest Dimension — Inches			
			Belt Speed — Feet Per Minute (Suggested Speeds — See Footnotes)												10% Lumps 90% Fines		All Lumps No Fines	
															Surcharge		Surcharge	
			50	100	150	200	250	300	350	400	500	600	700	800	20°	30°	20°	30°
18	0	.170	26	51	77	102	128	153	179■	204◆	255●	306	357	408	6	3	4	2
	5	.185	28	56	83	111	139	167	194■	222◆	278●	333	389	444				
	10	.200	30	60	90	120	150	180	210■	240◆	300●	360	420	480				
	20	.230	35	69	104	138	173	207	242■	276◆	345●	414	483	552				
	25	.246	37	74	111	148	185	221	258■	295◆	369●	443	517	590				
	30	.262	39	79	118	157	197	236	275■	314◆	393●	472	550	629				
20	0	.217	33	65	98	130	163	195	228■	260◆	326●	391	456	521	6	3½	4	2
	5	.236	35	71	106	142	177	212	246■	283◆	354●	425	496	566				
	10	.254	38	76	114	152	191	229	267■	305◆	381●	457	533	610				
	20	.293	44	88	132	176	220	264	308■	352◆	440●	527	615	703				
	25	.313	47	94	141	188	235	282	329■	376◆	470●	563	657	751				
	30	.333	50	100	150	200	250	300	350■	400◆	500●	599	699	799				
24	0	.327	49	98	147	196	245	294	343	392	491■	589◆	687●	785	8	4	5	2½
	5	.355	53	107	160	213	266	320	373	426	533■	639◆	746●	852				
	10	.383	57	115	172	230	287	345	402	460	575■	689◆	804●	919				
	20	.440	66	132	198	264	330	396	462	528	660■	792◆	924●	1056				
	25	.470	71	141	212	282	353	423	494	564	705■	846◆	987●	1128				
	30	.499	75	150	225	299	374	449	524	599	749■	898◆	1048●	1198				
30	0	.536	80	161	241	322	402	482	563	643	804■	965◆	1126●	1286	10	5	6	3
	5	.580	87	174	261	348	435	522	609	696	870■	1044◆	1218●	1392				
	10	.625	94	188	281	375	469	563	656	750	938■	1125◆	1313●	1500				
	20	.716	107	215	322	430	537	644	752	859	1074■	1289◆	1504●	1718				
	25	.764	115	229	344	458	573	688	802	917	1146■	1375◆	1604●	1834				
	30	.812	122	244	365	487	609	731	853	974	1218■	1462◆	1705●	1949				
36	0	.795	119	239	358	477	596	716	835	954	1193■	1431◆	1670●	1908	12	6	7	3½
	5	.860	129	258	387	516	645	774	903	1032	1290■	1548◆	1806●	2064				
	10	.926	139	278	417	556	695	833	972	1111	1389■	1667◆	1945●	2222				
	20	1.060	159	318	477	636	795	954	1113	1272	1590■	1908◆	2226●	2544				
	25	1.131	170	339	509	679	848	1018	1188	1357	1697■	2036◆	2375●	2714				
	30	1.201	180	360	540	721	901	1081	1261	1441	1802■	2162◆	2522●	2882				
42	0	1.106	166	332	498	664	830	995	1161	1327	1659	1991■	2323◆	2654●	14	7	8	4
	5	1.194	179	358	537	716	896	1075	1254	1433	1791	2149■	2507◆	2866●				
	10	1.286	193	386	579	772	965	1157	1350	1543	1929	2315■	2701◆	3086●				
	20	1.471	221	441	662	883	1103	1324	1545	1765	2207	2648■	3089◆	3530●				
	25	1.568	235	470	706	941	1176	1411	1646	1882	2352	2822■	3293◆	3763●				
	30	1.665	250	500	749	999	1249	1499	1748	1998	2498	2997■	3497◆	3996●				
48	0	1.467	220	440	660	880	1100	1320	1540	1760	2201	2641■	3081◆	3521●	16	8	10	5
	5	1.584	238	475	713	950	1188	1426	1663	1901	2376	2851■	3326◆	3802●				
	10	1.705	256	512	767	1023	1279	1535	1790	2046	2558	3069■	3581◆	4092●				
	20	1.948	292	585	877	1169	1461	1753	2045	2338	2922	3507■	4091◆	4676●				
	25	2.076	311	623	934	1246	1557	1868	2180	2491	3114	3737■	4360◆	4982●				
	30	2.204	331	661	992	1322	1653	1984	2314	2465	3306	3967■	4628◆	5290●				
54	0	1.879	282	563	845	1128	1410	1691	1973	2255	2819	3383■	3947◆	4510●	18	9	11	5½
	5	2.030	304	609	914	1218	1523	1827	2132	2436	3046	3655■	4264◆	4873●				
	10	2.182	327	655	982	1309	1637	1964	2291	2618	3273	3928■	4582◆	5237●				
	20	2.493	374	748	1122	1496	1870	2244	2618	2992	3740	4487■	5235◆	5983●				
	25	2.656	398	796	1194	1592	1990	2388	2786	3184	3980	4776■	5572◆	6368●				
	30	2.819	423	846	1269	1691	2114	2537	2960	3383	4229	5074■	5920◆	6766●				
60	0	2.342	351	702	1054	1405	1757	2108	2459	2810	3513	4215■	4919◆	5621●	20	10	12	6
	5	2.529	379	758	1138	1518	1897	2277	2656	3036	3796	4554■	5313◆	6072●				
	10	2.718	408	815	1223	1631	2039	2446	2854	3262	4077	4892■	5708◆	6523●				
	20	3.104	466	931	1397	1862	2328	2794	3259	3725	4656	5587■	6518◆	7450●				
	25	3.303	496	991	1487	1982	2478	2973	3469	3965	4956	5947■	6938◆	7929●				
	30	3.510	527	1053	1580	2106	2633	3159	3686	4212	5265	6318■	7371◆	8424●				
72	0	3.420	513	1026	1539	2052	2565	3078	3591	4104	5130	6156■	7182◆	8208●	24	12	14	7
	5	3.693	554	1108	1662	2216	2770	3324	3878	4432	5540	6648■	7756◆	8864●				
	10	3.967	595	1190	1785	2380	2975	3570	4165	4760	5951	7141■	8331◆	9521●				
	20	4.528	679	1358	2038	2717	3396	4075	4754	5434	6792	8150■	9509◆	10867●				
	25	4.818	722	1445	2168	2891	3614	4336	5059	5782	7228	8673■	10118◆	11564●				
	30	5.118	768	1535	2303	3071	3839	4606	5374	6142	7677	9212■	10748◆	12283●				
84	0	4.702	705	1411	2116	2821	3527	4232	4937	5642	7053	8464■	9874◆	11285●	26	13	15	7½
	5	5.076	761	1523	2284	3045	3807	4568	5330	6091	7614	9137■	10660◆	12182●				
	10	5.452	818	1635	2453	3271	4089	4907	5275	6542	8178	9813■	11449◆	13085●				
	20	6.220	933	1866	2799	3732	4665	5598	6531	7464	9330	11196■	13062◆	14928●				
	25	6.617	992	1985	2978	3970	4963	5955	6948	7940	9925	11910■	13896◆	15880●				
	30	7.027	1054	2108	3162	4216	5270	6324	7378	8432	10540	12649■	14757◆	16865●				
96	0	6.188	928	1856	2785	3713	4641	5569	6497	7425	9282	11138■	12995◆	14851●	28	14	16	8
	5	6.678	1002	2003	3005	4007	5008	6010	7012	8014	10017	12020■	14024◆	16027●				
	10	7.172	1076	2152	3227	4303	5379	6455	7530	8606	10758	12910■	15061◆	17213●				
	20	8.180	1227	2454	3681	4908	6135	7362	8589	9816	12270	14724■	17178◆	19632●				
	25	8.701	1305	2610	3915	5220	6525	7831	9136	10441	13051	15662■	18272◆	20882●				
	30	9.239	1386	2772	4158	5543	6929	8315	9701	11087	13858	16630■	19402◆	22174●				

Material Flowability and Abrasiveness.
- ● Grain or other Free Flowing, Non Abrasive Materials.
- ◆ Coal, Damp Clay, Soft Ores, Overburden and Earth, Fine Crushed Stone.
- ■ Heavy, Hard, Sharp Edged Ore, Coarse Crushed Stone.

Note: A Minimum Speed of 300 FPM is recommended for proper discharge.

Suggested Belt Speeds for Other Conditions:
Fine, Dry, Dusty or Fluffy Material 100-200 FPM Maximum.
Fragile Materials where degradation is harmful 150-250 FPM Maximum.
Wet Materials or materials which tend to cling to belt 300 FPM Min.

SELECTION PROCEDURE — from CEMA Standard 502-1998

Rexnord is a member of CEMA — Conveyor Equipment Manufacturers Association. The following procedure is part of the CEMA standard for belt conveyor idlers. For more information, contact Rexnord.

Selection of the Rex idler series is based on the following factors: belt speed, belt weight, belt width, idler capacity, idler spacing, material lump size, type of service, and environmental conditions.

Initial Selection: Steps 1 and 2

Select idler class by comparing calculated idler load (CIL and CILr) with idler load ratings from table 14 (page 80). Refer to page 10 for idler styles and catalog page numbers.

NOTE: When material to be conveyed is of an unusually abrasive, corrosive, or sticky nature, refer to table 15 (page 81) for idler roll recommendations.

Bearing L_{10} Life Correction: Steps 3, 4, and 5

Factors K2 (figure 8) and K3A (figure 9) are multiplying factors used to adjust basic L_{10} life rating of idler class selected. Factor K2 is based on percent of idler load and K3A is a factor for actual roll speed (rpm). Step 5, factor K3B, is an optional step showing the advantage of using larger diameter rolls. It can be used as a multiplier to save repeating step 4 if a larger diameter roll is used.

Determine Potential Idler Life: Step 6

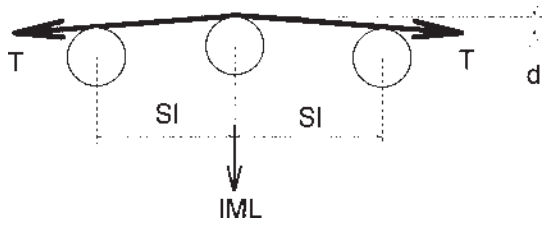
Factors K4A (figure 11), K4B (figure 12), and K4C (figure 13) show conditions which will affect idler life, but are independent of bearing L_{10} life, idler load, and idler class. Use these figures to evaluate the potential expected idler life. Contact Rexnord for recommendations.

Step 1. Troughing Idler Series Selection

CIL = ((Wb + (Wm x K1)) x SI) + IML

Where:

CIL	=	calculated idler load, in pounds
Wb	=	belt weight, in pounds per foot (table 5)
Wm	=	weight of material, in pounds per foot
	=	TPH x 33.3 ÷ FPM
K1	=	lump adjustment factor (see table 6, page 78)
SI	=	idler spacing, in feet (see table 7, page 78)
TPH	=	capacity, in short tons per hour
FPM	=	belt speed, in feet per minute (selected from paragraph 3, page 71)
IML	=	idler misalignment load, in pounds — caused by deviation in idler height and belt tension (see the following diagram and formula)



IML = (d x T) ÷ (6 x SI)

d = idler misalignment, in inches

T = belt tension, in pounds

SI = idler spacing, in feet

When an idler is higher than adjacent idlers, a component of belt tension will add load to that idler. The amount of height deviation can vary with the installation and type of idler. CEMA publications on conveyor installation standards list recommendations on structure misalignment.

Use CIL and select proper series of idlers from table 14. CIL value should be equal to or less than the idler load rating.

This troughing idler selection procedure for calculated idler load does not include the following:

1. Impact force on idler at conveyor loading points.
2. Effect of belt transitions (head and tail pulley) on idler load.

Table 5
Wb — Estimated Average Belt Weights (Lb/Ft)
Multiple Ply & Reduced Ply Belts

Width Inches	Material Carried Lb/Cu. Ft.		
	30-74	75-129	130-200
18	3.5	4	4.5
20	4	4.5	5
24	4.5	5.5	6
30	6	7	8
36	9	10	12
42	11	12	14
48	14	15	17
54	16	17	19
60	18	20	22
72	21	24	26
84	25	30	33
96	30	35	38

Note: 1. Steel Cable Belts — Increase above values by 50%.
2. Actual belt weights vary widely with different constructions, manufacturers, cover gauges, etc. Use the above values for estimating only and obtain actual values from the belt manufacturer whenever possible.

SELECTION PROCEDURE from CEMA Standard 502-1998

Table 6
K1 — Lump Adjustment Factor †

Maximum Lump Size (Inches)	Material Weight In Pounds Per Cubic Foot						
	50	75	100	125	150	175	200
4	1.00	1.00	1.00	1.00	1.10	1.10	1.10
6	1.00	1.00	1.00	1.10	1.10	1.10	1.10
8	1.00	1.00	1.10	1.10	1.10	1.20	1.20
10	1.00	1.10	1.10	1.10	1.20	1.20	1.20
12	1.00	1.10	1.10	1.20	1.20	1.20	1.30
14	1.10	1.10	1.10	1.20	1.20	1.30	1.30
16	1.10	1.10	1.20	1.20	1.30	1.30	1.40
18	1.10	1.10	1.20	1.20	1.30	1.30	1.40

† These factors are for average conditions. If lump percent, speed, and/or sag are high consult Rexnord.

Table 7
SI — Recommended Average Spacing of Idlers (in feet)

Belt Width	Carrying Idlers: Weight of Material Conveyed Pounds Per Cubic Feet						Return Idlers
	30	50	75	100	150	200	
18	5½	5	5	5	4½	4½	10
20	5½	5	4½	4½	4	4	10
24	5	4½	4½	4	4	4	10
30	5	4½	4½	4	4	4	10
36	5	4½	4	4	3½	3½	10
42	4½	4½	4	3½	3	3	10
48	4½	4	4	3½	3	3	10
54	4½	4	3½	3½	3	3	10
60	4	4	3½	3	3	3	10
72	4	3½	3½	3	2½	2½	8
84	3½	3½	3	2½	2½	2	8
96	3½	3½	3	2½	2	2	8

Note: 1. **Loading Point (Impact Idlers)** — Normally, one half the carrying idler spacing is recommended. To insure maximum belt protection for optimum life and to reduce skirtboard leakage the impact idlers should be at least **six inch diameter** and spaced at **one foot intervals.**

2. **Convex Vertical Curves** — One-half of normal spacing unless radius is small, then space closer.

Step 2. Return Idler Series Selection

CILr = (SI x Wb) + IML

Where:

CILr = calculated idler load for the return idlers, in pounds

SI = idler spacing, in feet (see table 7)

Wb = belt weight, in pounds per foot (table 5, page 77)

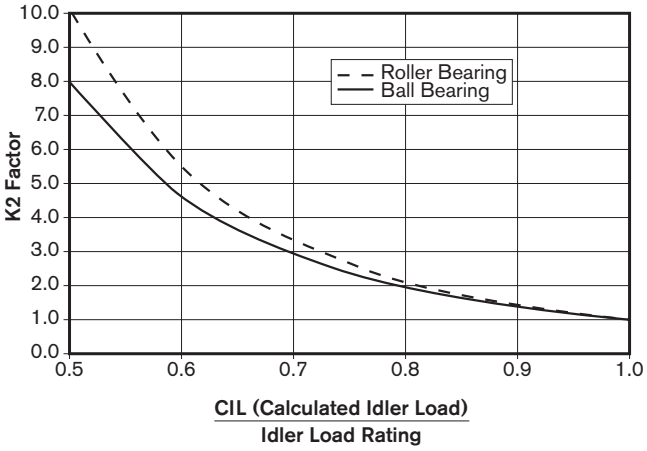
IML = idler misalignment load, in pounds — caused by deviation in idler height and belt tension. (calculate using the IML formula in step 1)

Use CILr and select the proper series from table 14. CILr should be equal to or less than the return idler load rating.

Step 3. K2 = Effect of load on predicted bearing life

When calculated idler load (CIL) is less than the load rating of the idler selected, the bearing L_{10} life will increase.

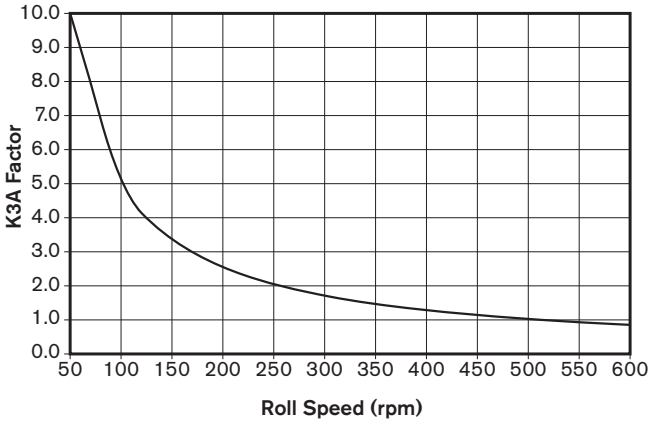
Figure 8
K2 = Effect of Load on Predicted Bearing L_{10} Life



Step 4. 3A = Effect of belt speed on predicted bearing life

CEMA L_{10} life ratings are based on 500 rpm. Slower speeds increase life and faster speeds decrease life. Figure 9 shows this relationship.

Figure 9
K3A = Effect of Belt Speed on Predicted Bearing L_{10} Life



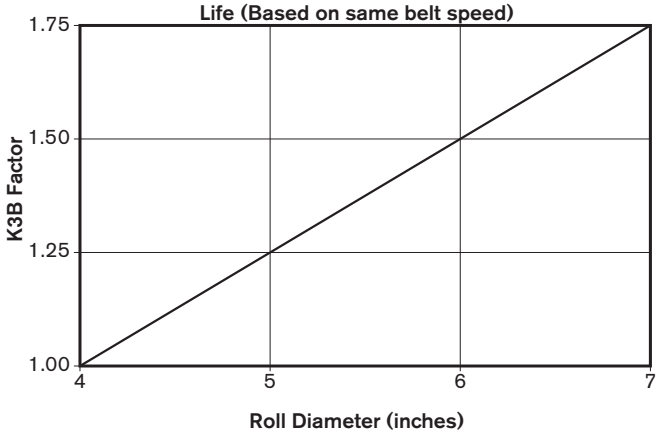
$$RPM = \frac{\text{Belt Speed (fpm) x 12}}{\text{Roll Dia. (in.) x } \pi}$$

Step 5. K3B = Effect of roll diameter on predicted bearing life

For a given belt speed, using larger diameter rolls will increase idler L_{10} life. Figure 10 depicts L_{10} life adjustment for various roll diameters using a 4" diameter as a value of 1.0. Percent life increase can be calculated for each roll diameter increase.

Example: $\frac{\text{1.5 for 6" dia.}}{\text{1.25 for 5" dia.}}$ = 1.20 for 20% increase in L_{10} life.

Figure 10
K3B = Effect of Roll Diameter on Predicted Bearing L_{10} Life (Based on same belt speed)



Step 6. K4 = Environmental, maintenance, and other conditions

Figure 11	K4A -	Effect of maintenance on potential idler life
Figure 12	K4B -	Effect of environment on potential idler life
Figure 13	K4C -	Effect of operating temperature on potential idler life

Based on collective application experience by CEMA idler manufacturers, these conditions are very important in determining potential idler life. However, exact mathematical basis is very subjective, so contact Rexnord for assistance, or for any unusual conditions not listed.

Figure 11
K4A = Effect of Maintenance on Potential Idler Life

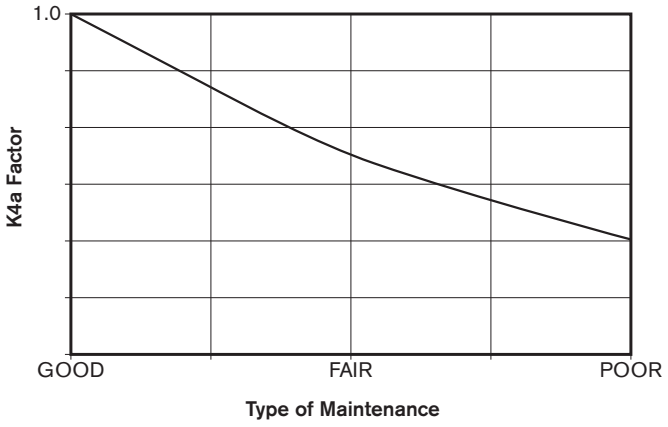


Figure 12
K4B = Effect of Environmental Conditions on Potential Idler Life

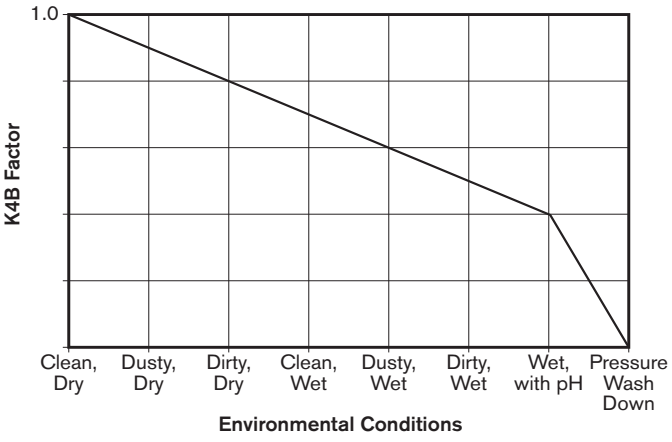
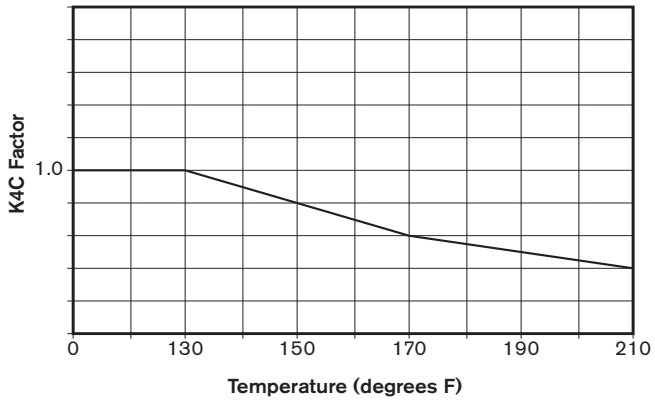


Figure 13
K4C = Effect of Operating Temperature on Potential Idler Life



SELECTION PROCEDURE —from CEMA Standard 502-1998

Table 14
Idler Load Ratings (in pounds)

Belt Width	Trough Angle			Return	2 Roll V-Return
	20°	35°	45°		
Series B & B+ ①					
18	410	410	410	220	N/A
20	410	410	410	210	N/A
24	410	410	410	190	N/A
30	410	410	410	165	N/A
36	410	410	396	155	N/A
42	390	363	351	150 ②	N/A
48	380	353	342	125 ②	N/A
Series C					
18	900	900	900	475	500
20	900	900	900	400	500
24	900	900	900	325	500
30	900	900	900	250	500
36	900	837	810	200	500
42	850	791	765	150	500
48	800	744	720	125	500
54	750	698	675	375 ③	500
60	700	650	630	280 ③	500
Series D					
24	1200	1200	1200	600	850
30	1200	1200	1200	600	850
36	1200	1200	1200	600	850
42	1200	1200	1200	500	850
48	1200	1200	1200	425	850
54	1200	1116	1080	375	850
60	1150	1070	1035	280	850
72	1050	977	945	155	850
Series E					
36	1800	1800	1800	1000	N/A
42	1800	1800	1800	1000	N/A
48	1800	1800	1800	1000	N/A
54	1800	1800	1800	920	N/A
60	1800	1800	1800	850	N/A
72	1800	1800	1800	700	N/A
84	1800	1674	1620	550	N/A
96	1750	1628	1575	400	N/A

NOTES: Troughing idler load ratings are based on equal length roll idlers, and are based on 70% of the load on the center roll.

CEMA Standard 502 specifies that the load ratings for B and C Series idlers shall be based on a minimum L_{10} life of 30,000 hours; and the load ratings for D and E Series idlers shall be based on a minimum L_{10} life of 60,000 hours. For all idlers, the L_{10} life calculations are to be done at 500 rpm. B+ is a Rexnord exclusive, not a CEMA standard.

① Recommended maximum belt speed:
4" diam. roll — 500 fpm
5" diam. roll — 600 fpm
② These return idlers are series C.
③ These return idlers are series D.

REX IDLERS

SELECTION PROCEDURE —Cont'd

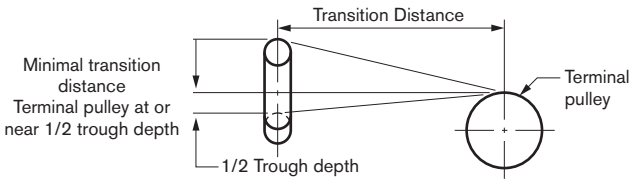
Table 15
Idler Roll Recommendations

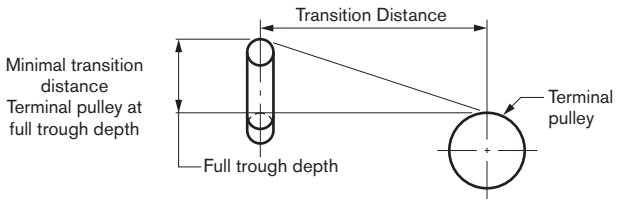
Material Characteristics	Idler Roll Recommendations	
	Troughing or Flat	Return
NA —Non Abrasive MA — Mildly Abrasive NC — Non Corrosive MC —Mildly Corrosive	Standard — Steel	Standard — Steel
VA — Very Abrasive	Larger roll diameter Thicker roll shell — steel Coated roll (Ceramic) Rubber cover or Urethane cover	Rubber, Urethane, Ceramic Disc or Rubber Spiral Thicker roll shell — steel Larger roll diameter Coated roll (Ceramic) Rubber cover or Urethane cover
VC — Very Corrosive	Thicker roll shell — steel Coated roll (Ceramic) Rubber cover or Urethane cover Polyethylene	Thicker roll shell — steel Coated roll (Ceramic) Rubber cover or Urethane cover Rubber, Urethane, Ceramic Disc or Rubber Spiral Polyethylene
Materials which adhere to belt and idlers.	Rubber Disc or Urethane disc Catenary Rubber cover or Urethene cover Polyethylene	Rubber or Urethane Disc or Rubber Spiral Catenary Polyethylene

Table 16
Terminals — Distance between nearest standard carrying idler and pulley.

Carrying Idler Spacing at Terminals		
Troughing Angle	Distance in Inches Pulley to closest standard idler	Transition Idlers — If distance to the closest standard idler is greater than the recommended spacing in table 17 below, the use of the following transition idlers are recommended.
20°	1.0 x belt width	. . .
35°	1.5 x belt width	20° idler
45°	2.0 x belt width	20° idler and 35° idler

Table 17
Recommended Minimum Transition Distance





Idler Angle	% Rated Tension	Fabric Belts	Steel Cable Belts
20°	Over 90 60 to 90 Less than 60	.9*b* .8*b* .6*b*	2.0*b* 1.6*b* 1.0*b*
35°	Over 90 60 to 90 Less than 60	1.6*b* 1.3*b* 1.0*b*	3.4*b* 2.6*b* 1.8*b*
45°	Over 90 60 to 90 Less than 60	2.0*b* 1.6*b* 1.3*b*	4.0*b* 3.2*b* 2.3*b*

Idler Angle	% Rated Tension	Fabric Belts	Steel Cable Belts
20°	Over 90 60 to 90 Less than 60	1.8*b* 1.6*b* 1.2*b*	4.0*b* 3.2*b* 2.8*b*
35°	Over 90 60 to 90 Less than 60	3.2*b* 2.4*b* 1.8*b*	6.8*b* 5.2*b* 3.6*b*
45°	Over 90 60 to 90 Less than 60	4.0*b* 3.2*b* 2.4*b*	8.0*b* 6.4*b* 4.4*b*

b = Belt width

REX IDLER SPECIFICATIONS

REGREASABLE IDLERS

Regreasable idlers are designed to provide positive thru-lubrication to all bearings from a single fitting and are recommended for those installations where a regular re-lubrication program is scheduled.

Series B+

Idlers are Rexnord Light Duty type conforming to the dimension requirements for CEMA B. The idlers exceed CEMA B Load Ratings by utilizing a CEMA C roll.

4" and 5" diameter rolls are manufactured from #9 gauge (.149") welded steel tubing, counterbored for deep drawn steel end discs which are welded in place assuring concentricity and balance. Total indicated runout to be .030" or less. Rolls shall have ¾" hollow shafts to permit thru greasing and ¾" tapered roller bearings designed to operate at 100% of the CEMA C rated idler load. Seals shall be of the five passage horizontal labyrinth with wiper type. The combination outer seal and shield and inner seal are close tolerance injection molded non-metallic components.

The idler frame shall consist of an inverted angle, formed end and center brackets with slotted mounting pads. Frame strength shall be equal or greater than the CEMA B idler load ratings.

Gap between the center and end roll shall not exceed the following:

Roll Diameter Inches	Trough Angle	
	20°	35°
4	½"	17/32"
5	9/32"	5/16"

Positive roll retention locks are provided for end and center rolls. Roll locks are easily removeable for roll replacement. Both ends of the idler are equipped with a ball check type grease fitting to allow lubrication from either side of the idler.

Series C & D Troughing Idler

Idlers are Rexnord Medium Duty type conforming to the requirements for CEMA C in dimension. Rex Idlers meet or exceed CEMA load rating requirements. Available with 5" and 6" diameter rolls with single point thru-greasing.

Rolls shall be manufactured from welded steel tubing. The 5 inch diameter roll shall have a wall thickness of #9 gauge (.149") and the 6 inch diameter roll shall have a wall thickness of #8 gauge (.165"). The roll shell shall be counterbored for deep drawn steel end discs which will be welded in place assuring concentricity and balance. T.I.R. to be .030" or less. Rolls shall have ¾" diameter hollow shafts (1" diameter for Series D); to permit thru-greasing and ¾" tapered roller bearings designed to operate at 100% of the rated idler load. Seals shall be of the five passage horizontal labyrinth with wiper type. The combination outer seal and shield and inner seal are close tolerance injection molded non-metallic components.

The idler frame shall consist of an inverted steel angle, end and center brackets and slotted mounting pads. Frame strength shall be equal to or greater than the CEMA D idler load ratings.

Gap between the center and end roll shall not exceed the following:

Roll Diameter Inches	Trough Angle		
	20°	35°	45°
5	5/16"	9/32"	5/16"
6	3/8"	7/32"	3/16"

Positive retention heavy duty roll locks are to be provided for end and center rolls and are to be easily removable for roll replacement. Center roll locks are to provide support and protection for the thru-grease connector tube.

Both ends of the idler are equipped with a ball check type grease fitting to allow lubrication from either side of the idler.

Series E Troughing Idler

Idlers are Heavy Duty type conforming to the requirements for CEMA E in dimensions and load rating and are available with 6" and 7" diameter rolls with single point thru-greasing.

Rolls are manufactured from ¼" welded steel tubing, counterbored for deep drawn steel end discs which will be welded in place assuring concentricity and balance. T.I.R. to be .040". Rolls shall have 1¼"diameter shafts and 1¼" tapered roller bearings designed to operate at 100% of the rated idler loads. Seals shall be of the triple labyrinth cartridge type with deflector caps.

The idler frame shall consist of an inverted steel angle, end and center brackets and slotted mounting pads. Frame strength shall be equal to or greater than the idler load ratings.

Positive retention heavy duty roll locks are to be provided for end and center rolls and are to be easily removable for roll replacement.

Each idler shall have a standard grease fitting on one end and a pressure relief fitting on the opposite end.

REX IDLER SPECIFICATIONS

FACTORY SEALED IDLERS

Factory sealed idlers are designed to provide longer roll life for those installations where a regular re-lubrication program will not be maintained.

Series B Troughing Idler

Idlers are Rexnord Light Duty type conforming to the dimensional requirements for CEMA B. These idlers exceed CEMA B load ratings. Available in 4" and 5" diameter rolls.

Rolls are manufactured from #9 gauge (.149") welded steel tubing, counterbored for steel end discs. The end discs are pressed into the roll shell at which time the roll ends are formed to lock the disc securely assuring concentricity and balance. The 17mm solid shaft with ball bearings has dual shields and seals. An outer shield protects the bearing from larger contaminants.

The idler frame shall consist of an inverted steel angle, formed end and center brackets and slotted mounting pads. Frame strength shall be equal to or greater than the idler load ratings.

Gap between the center and end roll shall not exceed the following:

Roll Diameter Inches	Trough Angle	
	20°	35°
4	1/2"	17/32"
5	9/32"	5/16"

Positive roll retention is to be provided for end and center rolls, to be easily removable for roll replacement.

Series C & D Troughing Idler

Idlers are Rexnord Medium Duty type conforming to the requirements for CEMA Series C in dimension. Available with 5" and 6" diameter rolls. Rex idlers meet or exceed CEMA load rating requirements.

Rolls shall be manufactured from welded steel tubing. The 5 inch diameter roll shall have a wall thickness of #9 Gauge (.149") and the 6 inch diameter roll shall have a wall thickness of #8 Gauge (.165"). The roll shell shall be counterbored for deep drawn steel end discs which will be welded in place assuring concentricity and balance. T.I.R. to be .030" or less. Rolls shall have 3/4" diameter solid shafts (1" diameter for Series D); and 3/4" tapered roller bearings designed to operate at 100% of the rated idler load. Seals shall be of the five passage horizontal labyrinth with wiper type. The combination outer seal and shield and inner seal are close tolerance injection molded non-metallic components.

The idler frame shall consist of an inverted steel angle, end and center brackets and slotted mounting pads. Frame strength shall be equal to or greater than the CEMA D idler load ratings.

Gap between the center and end roll shall not exceed the following:

Roll Diameter Inches	Trough Angle		
	20°	35°	45°
5	5/16"	9/32"	5/16"
6	3/8"	7/32"	3/16"

Positive retention heavy duty roll locks are to be provided for end and center rolls and are to be easily removable for roll replacement.

SPECIFIC FUNCTION IDLERS

Return and Flat Idlers — Return and Flat idlers are to have the same specifications for roll construction as the troughing idlers. Hanger or support brackets shall have a strength equal to or greater than the idler load rating.

Impact Idlers — Troughing — To be used where the impact force exceeds 40 foot pounds. Impact idler rolls shall be of molded rubber specifically selected for shock absorbing characteristics, with alternate deep and shallow grooving for impact absorption, and press fit onto a steel inner tube.

Impact Idlers — Flat — Flat impact idler rolls are to have the same specifications as the troughing impact rolls, except they are to be mounted on a solid steel shaft with outboard roller bearing pillow blocks.

Spiral Return Idlers — Spiral return idlers shall consist of an extruded rubber, formed to fit over a heavy steel spiral which is welded to a steel inner tube. These idlers are to be used on unidirectional conveyors only.

Rubber Disc Return Idlers — Rubber disc return idlers shall have square corner, abrasion resistant rubber discs with an encapsulated steel ring to maintain a compression fit between the disc and inner tube.

Urethane Disc Return/Idlers — Urethane disc return idlers shall have square corner, abrasion resistant urethane discs with an encapsulated steel ring to maintain a compression fit between the disc and inner tube.

Ceramic Disc Return/Idlers — Ceramic disc return idlers shall have extremely abrasion resistant ceramic discs with a urethane bushing to maintain a compression fit between the disc and inner tube.

Training Idlers (Positive Type) — Training idlers shall be provided with ball bearing activating rollers mounted on both ends of the idler frame. The idler frame shall be free to swivel within controlled limits about a pivot housing on tapered roller bearings.Belt travel one direction only.

Training Idlers (Actuating Shoe) — Training idlers shall be provided with actuating shoes mounted on both ends of the idler frame. The idler shall be free to swivel within controlled limits about a pivot housing on tapered roller bearings. Belt travel either direction.

Training Idlers (Inclined Pivot) — Training idlers shall be constructed to allow the weight of the belt to direct the roll to a belt centering position. Belt travel one direction only.

Ceramic Covered Rolls — Rolls shall be standard steel idler rolls with a ceramic covering for increased roll shell wear life. Ceramic material is not to chip off roll face until backup metal is deformed. Rolls are to be interchangeable with standard roll assemblies of the same series.

Urethane Covered Rolls — Rolls shall be standard steel idler rolls with a 1/8" or 1/4" thick bonded urethane covering for increased roll shell wear life. Rolls are interchangeable with standard roll assemblies of the same series.

Polyethylene Roll Idlers — Polyethylene rolls are made of a proprietary formulation of high molecular weight polyethylene, Teflon® and carbon black to provide a roll that resists corrosion and material build-up.

REX IDLERS

INSTALLATION, CARE AND MAINTENANCE

A belt conveyor is one of the most economical means of transporting bulk material. It can operate in almost any weather condition, and it can traverse terrain which would severely limit other means of transport. A belt conveyor system represents a substantial capital investment . . . and it must be kept running to obtain full value.

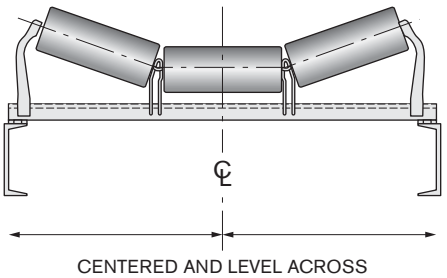
In a system, the belt can easily represent half the total conveyor cost. . . and is the most fragile part of the conveyor. The structure and various mechanical components of a system serve primarily to drive, guide, and protect the belt.

IMPORTANT — Safety Instructions

Compliance with safety standards, including OSHA and other Federal, State, local codes or regulations is the responsibility of the user of the conveyor installation. Placement of guards and other safety equipment in accordance with safety standards is dependent upon the area and use to which the system is put. A safety study should be made of the conveyor application and guards should be installed wherever appropriate. "Safety Standards For Conveyors And Related Equipment" ANSI B20.1is a guide for safe construction, installation, operation and maintenance of conveyors and related equipment.

GENERAL RECOMMENDATIONS

1. Alignment of the structure is critical if the belt is to train properly on the idlers. Idler and pulley supports must be equidistant from the conveyor centerline and level across the conveyor width.



2. Pulley shaft assemblies must be square to centerline of conveyor, level and in line.
3. Belt must be properly spliced so it runs straight and true.

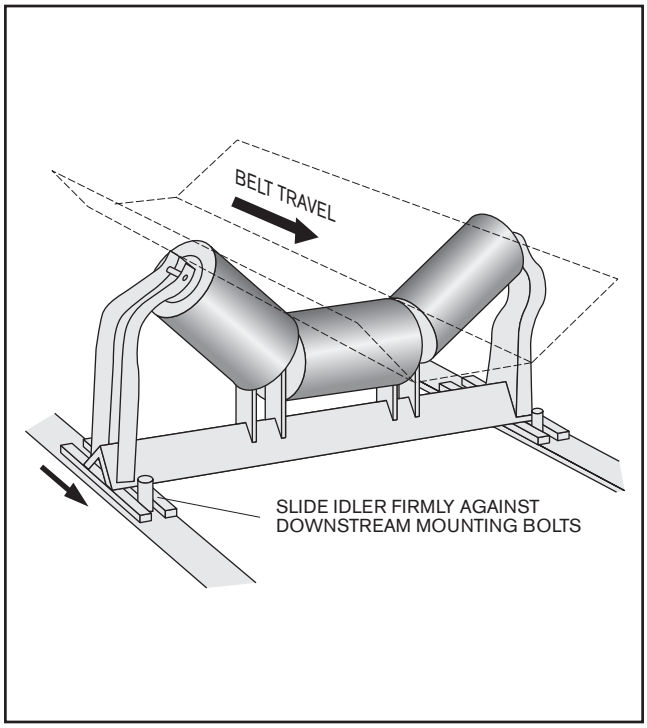
STORAGE AND PREPARATION

Belt conveyor idlers are usually shipped to the job site mounted on skids and shrink wrapped. As idlers often arrive well in advance of their installation, they should be stored under cover to protect them from exposure to the weather and other adverse conditions.

Prior to installation, check all idlers for evidence of damage to the rolls or frame due to mishandling. Check all rolls to make sure that they turn freely.

INSTALLATION

Place idlers in position by sliding them downstream, firmly against the mounting bolts and lightly tighten. Final alignment requires that the centerline of all idlers is in a straight line, perpendicular to the line of belt travel, properly spaced and level. When alignment is complete, bolt idlers securely in place.



IDLER ALIGNMENT

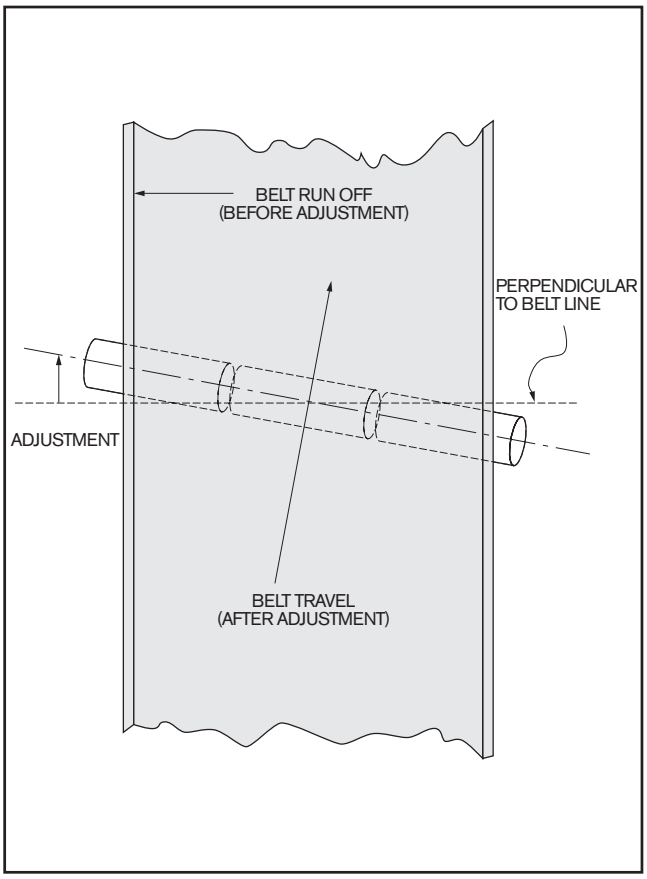
When the idlers and belt have been installed, the system should be started while empty and checked for alignment. A properly aligned conveyor has the belt running evenly in the center of the idlers and, therefore, prevents damage to the belt edges from contact with supporting structures or other objects. If a misalignment problem exists, it is not advisable to attempt to correct it by readjusting the head or tail pulley, as this will cause undue strains on the pulley bearings, belt, belt splice or joint, and on the conveyor frames. Pulleys should be carefully aligned when installed and should not be moved for purposes of belt training. *(Continued)*

INSTALLATION, CARE AND MAINTENANCE

IDLER ALIGNMENT — Cont'd

If one section of a belt runs true and another section runs out of line, either the belt is bowed from improper storage or handling or the belt is not properly spliced. If the belt runs out of line consistently at one point in the conveyor, the condition can be attributed to misaligned idlers. Usually the idlers that require adjustment will be located upstream of the point at which the belt runs out of line.

Proper alignment is achieved by loosening the mounting bolts on several idlers on the upstream side and skewing them slightly. When one side of an idler is shifted ahead of the other, the belt shifts to the side which is behind. Retighten the mounting bolts before restarting the conveyor.



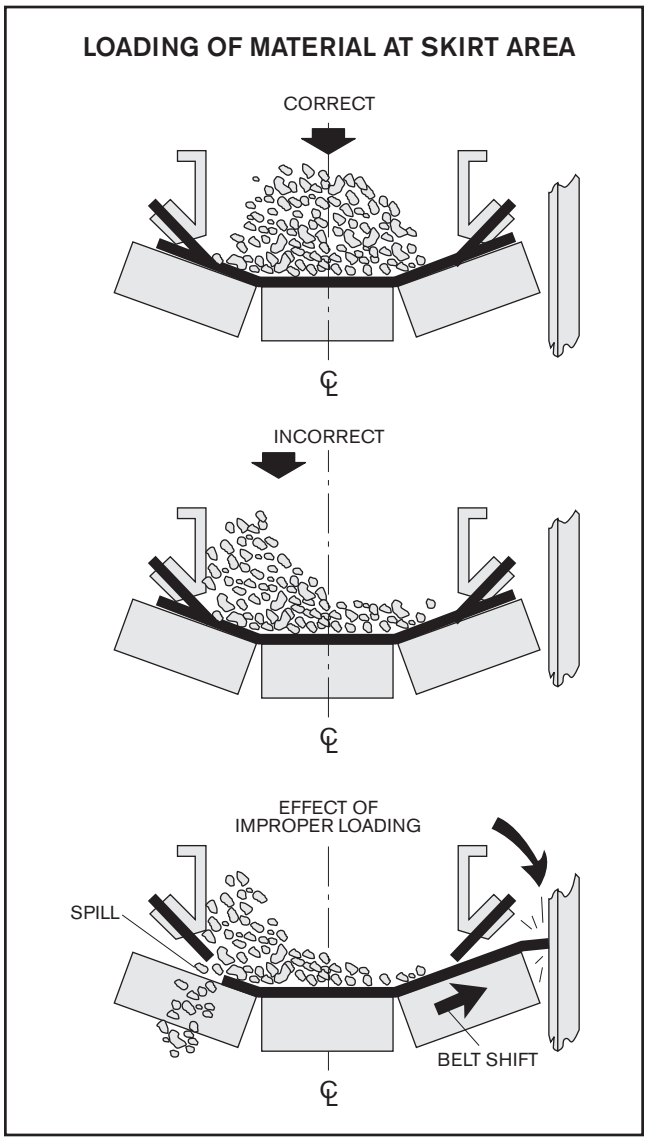
Do not shift idlers on a reversing belt as this will detrain the belt when it travels in the opposite direction.

Once constant central alignment has been achieved on the return and carrying run with an empty belt, the conveyor should be checked while carrying a full load.

LOADING

Start with a light load and gradually work up to the load that the conveyor was designed to handle. Check chutes to see that the material is being directed onto the center of the belt. Off-center loading is harmful to belt, idlers, and shafting. An off-center load will affect belt alignment in that the belt will run off center. An on-center load will maintain belt alignment.

To insure maximum **belt protection** for optimum life and to reduce skirtboard leakage the **impact idlers** should be at least **six inch diameter** and spaced at **one foot intervals**.



The loading area of a belt conveyor is the critical point. Here the conveyor receives its major abrasion and practically all of its impact. The ideal condition is to have the material pass from chute to belt at the same speed and direction of travel as the belt, with a minimum amount of impact, and to load the belt on center.

The skirts must be adjusted to prevent side spillage of material and to keep the load central on the belt. The maximum distance between skirtboards customarily is two thirds the width of a troughed belt. It is desirable, when possible, to reduce this spacing to one half the width of the troughed belt especially for free flowing materials.

The skirt lengths are designed to stop side spillage. The material should also be at rest on the belt before it reaches the end of the skirt. If the material is still tumbling as it passes the skirt end, the skirts should be lengthened.

TRAINING IDLERS

A properly aligned and centrally loaded belt will track in the center of the idlers without using training idlers. Training idlers are used to compensate for occasional irregular loading, the effects of wind, and other varying conditions.

INSTALLATION, CARE AND MAINTENANCE

TROUGHING TRAINING IDLERS

Troughing training idlers are installed along the conveyor length, as required, but not closer than fifty feet from a pulley. Positive arm types are used on belts traveling in one direction only. Actuating shoe types are used on reversing belts and on belts with traveling trippers or stackers.

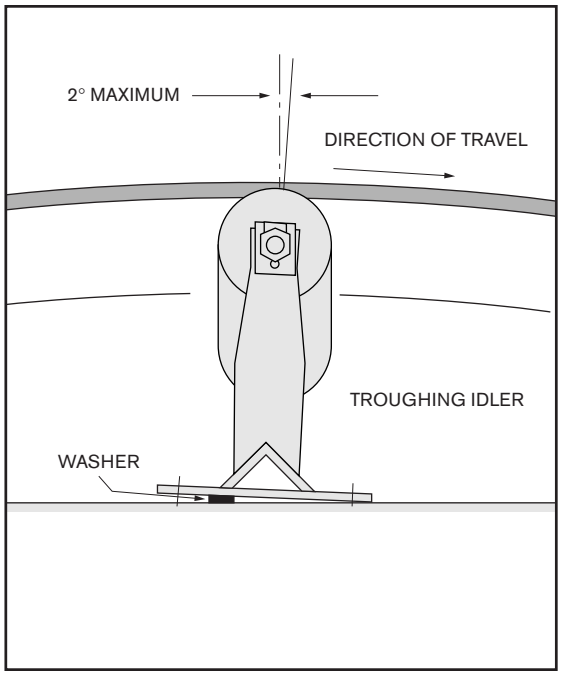
RETURN TRAINING IDLERS

Return training idlers are installed along the conveyor length, as required, but not closer than fifty feet from a pulley. Positive arm and inclined pivot types are used on belts traveling in one direction only; actuating shoe types are used on reversing belts.

TILTING IDLERS

Tilting the troughing idlers forward (not over 2 degrees) in the direction of belt travel produces an aligning effect. This may be accomplished by placing a tilting block or steel washer under the rear of the idler stand. If the angle of tilt exceeds 2 degrees, excessive wear may occur on the belt and on the idler rolls, since the rolls are rotating on an axis which is not at right angles to the path of belt travel. This method has the advantage over shifting idlers in that it will correct movement on the belt before and after the idler, hence, it is useful for training erratic belts.

Both shifting and tilting idlers are unidirectional adjustments. They are obviously not effective for a reversing belt.

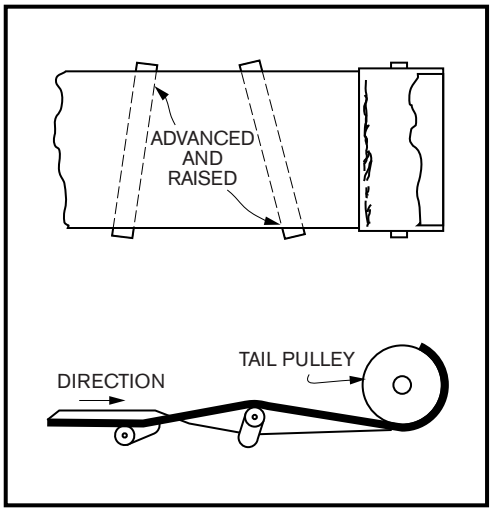


Return idlers cannot be tilted, however, by shifting their axis, they can be used to provide a corrective effect.

This can be done by slightly advancing and raising the alternate ends of the return rolls nearest the tail pulley. This can be done for expediency on a *temporary basis*. If this area is a training problem, a self-aligning return idler should be installed about the 2nd or 3rd idler from the tail pulley.

NOTE

Shifting or tilting of idlers for belt training can only be used for belts traveling in **one direction only**. This remedy cannot be used for **reversing belt** conveyors.



SIDE GUIDE IDLERS

Side guide idlers do not train a belt. They are sometimes used to prevent a belt from running off the pulleys and to prevent the belt from damage caused by contacting the conveyor structure and other objects.

They should be installed so that they do not touch the belt edge when it is running normally. If the belt runs against a side guide idler continually, even though the rolls are free to rotate, belt edge wear can occur.

REX IDLERS

INSTALLATION, CARE AND MAINTENANCE

LUBRICATION

All Rex idlers are prelubricated at the factory and are ready for operation. All external lubrication lines (if added by the customer) should be filled with grease when installed to insure that the idlers will get grease when the lubrication cycle is started.

Under normal conditions, relubrication should be every 4000 to 6000 hours until a clean bead of grease appears around the final opening of each seal.

The lubrication cycle can be lengthened in applications where operating conditions are clean, dry, of moderate temperature and slow speed. The cycle should be shortened in applications where severe dirt, high humidity, elevated temperatures, high speeds, free water, prolonged shutdown, or other extreme conditions are encountered. Periodic inspection during the first few years of operation will provide the best determination of required relubrication frequency.

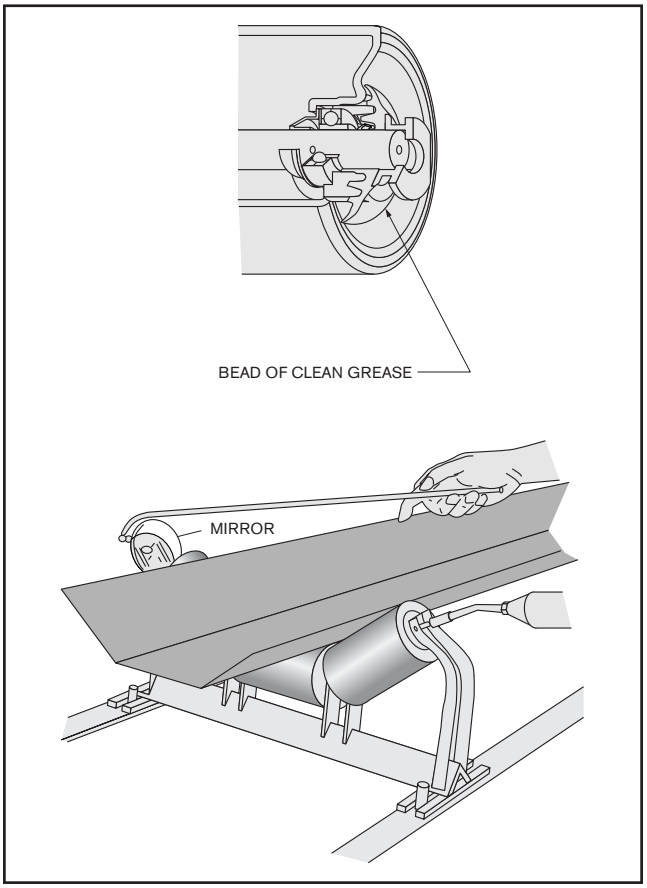
Rex idlers are greased at the factory with Lithium EP grease with a NLGI #2 consistency having the following characteristics:

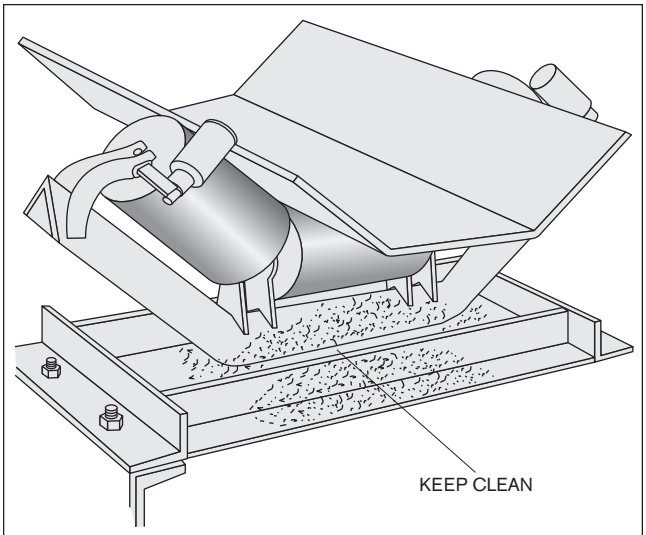
1. Lithium soap base
2. Mineral oil
3. Worked penetration 265-295" 77°F
4. Operating range of +225°F to-10°F
5. Bleed rate 3% maximum

It is recommended that an equivalent grease be used. When using any other type of grease, it is imperative that it be compatible with the original grease.

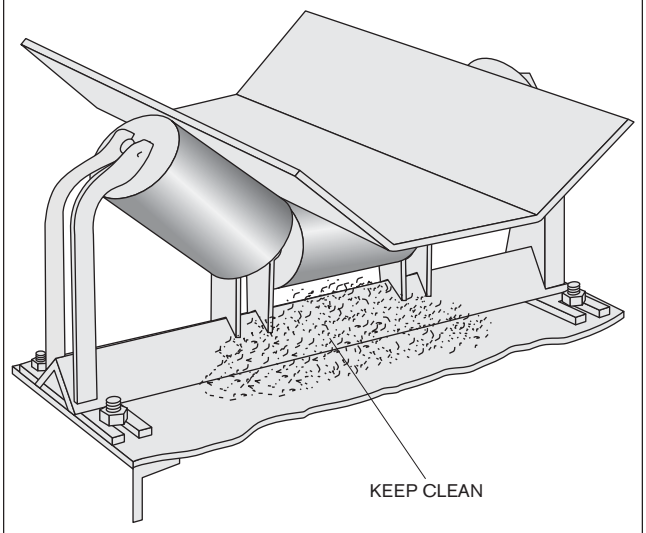
When lubricating idlers, the use of high pressure equipment is not only unnecessary but is actually undesirable unless used with great care. High pressure may cause damage to bearings and seals. It is recommended that a VOLUME TYPE GREASE GUN BE USED: one that delivers an ounce of grease per seven to ten strokes of the lever.

All fittings should be wiped clean before lubricating so as not to introduce dirt into the system.





TROUGHING TRAINING IDLER



TROUGHING IDLER

INSPECTION AND MAINTENANCE

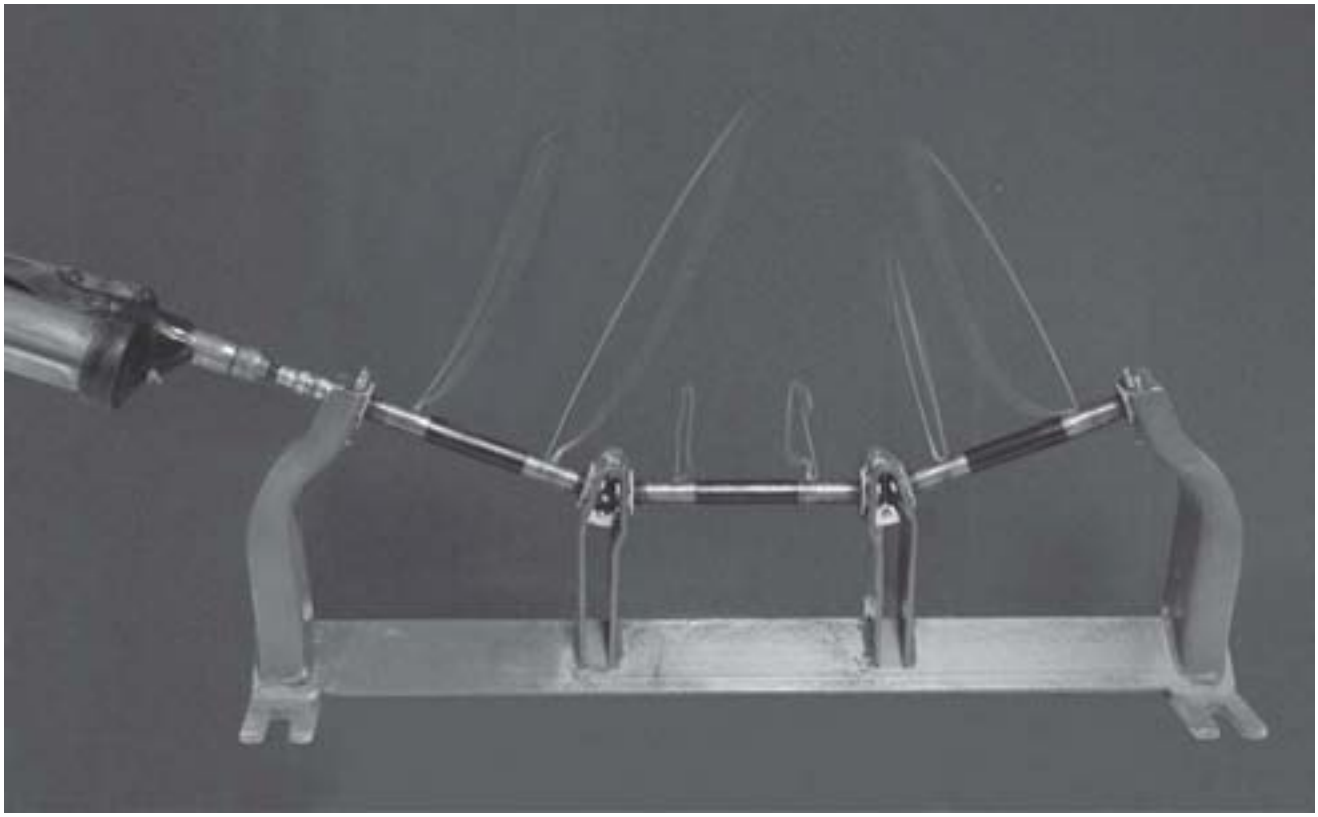
A scheduled maintenance program, followed faithfully by trained people, can usually help avoid costly interruptions in production and repairs to equipment. Many operators make a cursory check at least once a day to find obvious problems. A more comprehensive inspection is made at periodic intervals.

Inspection should entail the following:

1. Inspect belt for breaks and cuts or for indications that the belt edge is rubbing.
2. The belt should be centered on the idlers.
3. Check loading areas - material should be loaded evenly, and on the center of the belt.
4. Rubber skirts on chutes and skirt plates are adjusted to prevent spillage.
5. Belt cleaners are properly adjusted and working.
6. Rex Idlers are designed to be self cleaning. Accumulation of material must not be allowed to prevent idler rolls from rotating or training idlers from pivoting.
7. All idler rolls should be rotating. A stalled roll will cause excessive roll shell and belt wear and should be replaced.

INSTALLATION, CARE AND MAINTENANCE

Effective Through-Greasing System

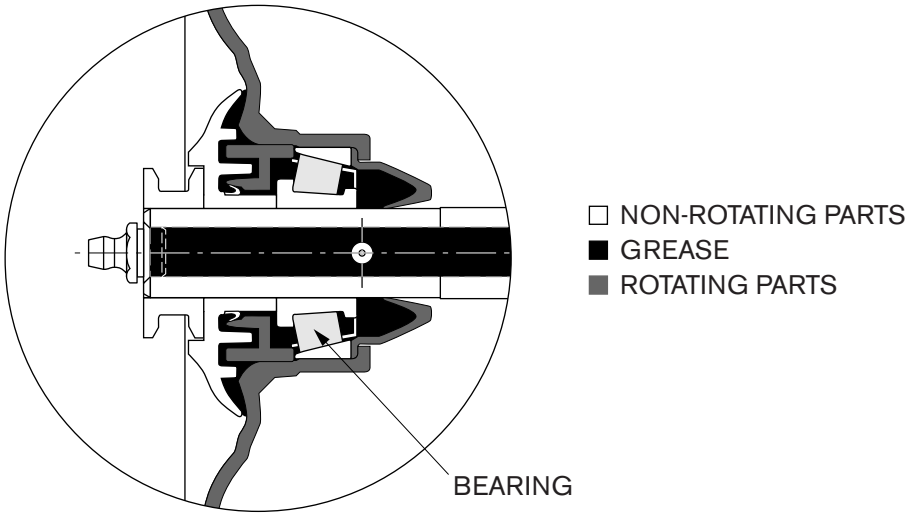


EFFECTIVE THROUGH-GREASING SYSTEM

Rex® patented metered greasing system make use of an engineered grease restrictor in the shafts at each bearing. This develops equalized pressures throughout all roll shafts to provide grease to each bearing cavity without depending on the seals to pressurize the system.

This pressurized system within the shafts allows grease to flow to all bearings without high pressure buildup in the bearing cavities.

This system allows the grease to flow outward through the bearings and seals, purging them of detrimental contaminants that could stop bearing rotation.



REX IDLERS

BELT CONVEYOR TROUBLE-SHOOTING

Any belt conveyor installation can be subject to a wide variety of problems which may become costly in terms of replacement and plant downtime unless quickly diagnosed and corrected. This guide is intended to point out the majority of belt conveyor problems and to set forth their probable causes and solutions.

Locate the specific problem in the "problem" column below and note the numbers to the right. They represent the most likely causes for the problem, in order of probable occurrence, and how to correct them. The list at the bottom of the page details the causes and solutions by number.

COMMON BELT CONVEYOR PROBLEMS

PROBLEM	CAUSE AND SOLUTION In Order of Probable Ocurrence					
Belt runs off at tail pulley.	7	15	14	17	21	—
Entire belt runs off at all points of the conveyor.	26	17	15	21	4	16
One belt section runs off at all points of the conveyor.	2	11	1	—	—	—
Belt runs off at head pulley.	15	22	21	16	—	—
Belt runs to one side throughout entire length at specified idlers.	15	16	21	—	—	—
Belt slip.	19	7	21	14	22	—
Belt slip on start-up.	19	7	22	10	—	—
Excessive belt stretch.	13	10	21	6	9	8
Belt breaks at or behind fasteners; fasteners tear loose.	2	23	13	22	20	10
Vulcanized splice separation.	13	23	10	20	2	9

PROBLEM	CAUSE AND SOLUTION In Order of Probable Ocurrence					
Excessive wear, including rips, gouges, ruptures and tears.	12	25	17	21	8	5
Excessive bottom cover wear.	21	14	5	19	20	22
Excessive edge wear, broken edges.	26	4	17	8	1	21
Cover swells in spots or streaks.	8	—	—	—	—	—
Belt hardens or cracks.	8	23	22	18	—	—
Covers become checked or brittle.	8	18	—	—	—	—
Longitudinal grooving or cracking of top cover.	27	14	21	12	—	—
Longitudinal grooving or cracking of bottom cover.	14	21	22	—	—	—
Fabric decay, carcass cracks, ruptures, gouges (soft spots inbelt).	12	20	5	10	8	24
Ply separation.	13	23	11	8	3	—

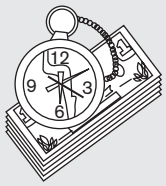
PROBABLE CAUSES AND SOLUTIONS

1. **Belt bowed** — Avoid telescoping belt rolls or storing them in damp locations. A new belt should straighten out when "broken in" or it must be replaced.
2. **Belt improperly spliced or wrong fasteners** — Use correct fasteners. Retighten after running for a short while. If improperly spliced, remove belt splice and make new splice. Set up regular inspection schedule.
3. **Belt speed too fast** — Reduce belt speed.
4. **Belt strained on one side** — Allow time for new belt to "break in." If belt does not break in properly or is not new, remove strained section and splice in a new piece.
5. **Breaker strip missing or inadequate** — When service is lost, install belt with proper breaker strip.
6. **Counterweight too heavy** — Recalculate weight and adjust counterweight accordingly. (If using screw takeups, reduce takeup tension to point of slip, then tighten slightly.)
7. **Counterweight too light** — Recalculate weight required and adjust counterweight accordingly. (If using screw takeups, increase tension.)
8. **Damage by abrasives, acid, chemicals, heat, mildew, oil** — Use belt designed for specific condition. For abrasive materials working into cuts and between plies, make spot repairs with cold patch or with Permanent Repair Patch. Seal metal fasteners or replace with vulcanized step splice. Enclose conveyor for protection against rain, snow and sun. Don't over-lubricate idlers.
9. **Differential speed wrong on dual pulleys** — Make necessary adjustment.
10. **Drive underbelted** — Recalculate maximum belt tensions and select correct belt. If conveyor is over-extended, consider using two-flight system with transfer point. If carcass is not rigid enough for load, install belt with proper flexibility when service is lost.
11. **Edge worn or broken** — Repair belt edge. Remove badly worn or out-of-square section and splice in a new piece.
12. **Excessive impact of material on belt or fasteners** — Use correctly designed chutes and baffles. Make vulcanized splices. Install impact idlers. Where possible, load fines first. Where material is trapped under skirts, adjust skirtboards to minimum clearance.
13. **Excessive tension** — Recalculate and adjust tension. Use vulcanized splice within recommended limits.
14. **Idler rolls not turning** — Correct or replace stalled rolls. Lubricate. Improve maintenance. (Don't over-lubricate.)
15. **Idlers or pulleys out-of-square with center line of conveyor** — Realign. Install limit switches for greater safety.
16. **Idlers improperly placed** — Relocate idlers or insert additional idlers spaced to support belt.
17. **Improper loading, spillage** — Feed should be in direction of belt travel and at belt speed, centered on the belt. Control flow with feeders, chutes and skirtboards.
18. **Improper storage or handling** — Refer to your belt supplier for storage and handling tips.
19. **Insufficient traction between belt and pulley** — Increase wrap with snub pulleys. Lag drive pulley. In wet conditions, use grooved lagging. Install correct cleaning devices on belt. Install centrifugal switch for safety.
20. **Material between belt and pulley** — Use skirtboards properly. Remove accumulation. Improve maintenance.
21. **Material build-up** — Remove accumulation. Install cleaning devices, scrapers, and inverted "V" decking. Improve housekeeping.
22. **Pulley lagging worn** — Replace worn pulley lagging. Use grooved lagging for wet conditions.
23. **Pulleys too small** — Use larger-diameter pulleys.
24. **Radius of convex vertical curve too small** — Increase radius by vertical realignment of idlers to prevent excessive edge tension.
25. **Relative loading velocity too high or too low** — Adjust chutes or correct belt speed. Consider use of impact idlers.
26. **Side loading** — Load in direction of belt travel, in center of conveyor.
27. **Skirts improperly placed** — Install skirtboards so that they do not rub against belt.

Rex Whisperol® Idlers
Take a closer look.

Quiet. Whisperol® polymeric rollers are quiet! They run considerably quieter than steel rollers with ball bearings because they're made completely of engineering grade polymeric materials. Only the hex shaft is metal.

Resists Corrosion. Whisperol's polymeric construction eliminates rust and corrosion. Only the shaft is metal, and that is available in corrosion resistant stainless steel. Or, it can be nickel plated.



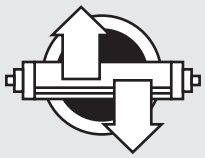
Saves Time and Money. Spring loaded hex shafting makes quick work of Whisperol installation and removal. Whisperol roller lengths come in increments of 1/4" ensuring that any current roller length you have can be matched with a replacement Whisperol.

Unique in the roller industry, Whisperol spherical bearings allow for a large amount of misalignment without affecting rolling friction. Low friction, engineering grade polymeric materials give exceptional wear life and create very little sound. This patented bearing makes Whisperol polymeric rollers the most feature filled product for the price.

Note: The 250 Series Whisperol rollers use a unique sleeve bearing to provide greater support in heavy duty applications. The same engineering grade polymeric materials are used.

Options.

- Nickel plated shafting – corrosion resistance for frequent washdown applications.
- Stainless steel shafting – excellent corrosion resistance against acid and chemical washdowns used in the food and beverage industry.
- Dual drive grooves for a line shaft conveying applications. Not available on the 250 Series with a 7/16" shaft. (250 Series with 11/16" shaft available with single groove one end or both ends.)
- Steel internal sleeves can be inserted inside the polymeric roll shell for greater impact resistance and rigidity. Allows wider "BF" dimensions.



Self-Aligning Bearings. Patented spherical bearing handles misalignment up to 5° and still operates at peak efficiency.

Long Lasting. Durable engineered polymeric materials give excellent performance and a long uninterrupted life. Self-lubricated and self-aligning, Whisperol operates for years without an ounce of attention. You'll forget they're there!

FDA Approved. Whisperol polymeric rollers are made of FDA approved materials. They may be used for packaged product handling in inspected food plants.

Protects Your Products. Whisperol's polymeric roll shell resists build-up of glues, starches and other common packaging contaminants. The smooth, slippery surfaces of the polymeric roll shell don't give contaminants a place to hang on. Plus, they're antistatic, further reducing the chances for build-up to collect on the roll shell.

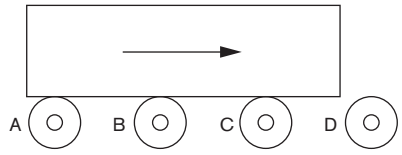
Lower Maintenance Costs. No lubrication or maintenance is required. What this means to you is Whisperol quietly goes about its business with no attention from your maintenance staff.

Whisperol® rollers will quietly handle any type of packaged product: beverage cases, packaged foods and general unit handling. The polymeric roll shell resists static charges, thereby reducing the attraction of dirt and debris.

Whisperol® rollers can handle a variety of product configurations and loading ranges. As this photo demonstrates, even heavily loaded wooden pallets may be conveyed. If you need to roll it, Whisperol polymeric rollers can do the job quietly and cleanly.

How to determine load per roller.

Typical roller design will assure that 3 rollers will come in contact with the package at all times. In the figure below, the package leaves roller "A" at the same time it comes in contact with roller "D".

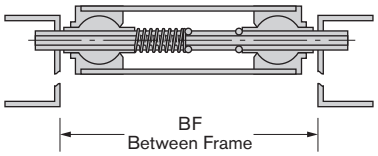


How to calculate roller loading.

1. Verify that the existing roller spacing actually maintains 3 rollers under the package at all times.
2. Divide the package length by 4 to get the proper roller spacing that will assure roller contact at all times.
3. Now divide the package weight by 3 to get the actual load per roller spacing and load per roller.

In many instances, more than 3 rollers are supporting the package. In these cases, use that quantity of rollers divided into the package weight to determine the load per roller quantity found in Step 3.

REX WHISPEROL® IDLERS



Normal-duty roller conveyors.
(1.9" dia. 7/16" hex shaft)

The 190 Series was designed to deliver superior service, quiet running and low maintenance for a variety of conveyor applications. With a full ranger of options available, the 190 Series can be adapted to virtually any application.

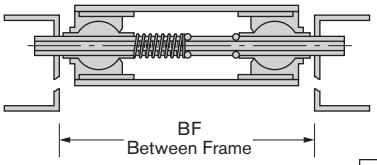
190 SERIES

Size Ranges • Available in increments of 1/4" from 6" BF to 33" BF
Load Capacity • 40 lbs.
Requires internal steel sleeve for BF>38"

Whisperol® conveyor roller application data–1.9" dia. roller on 7/16" hex shaft

Belt Speed FPM	Roller Speed RPM	Dynamic Friction for Power Calculations-% Load/Roller - in Pounds At 75°F ambient temperature*					Operating Conditions
		10#	15#	20#	30#	40#	
100	200	4.0%	4.0%	4.0%	4.0%	3.5%	**Continuous Service** Power or Gravity Conveyor
150	300	4.0%	4.0%	4.0%	4.0%	4.0%	
200	400	4.0%	4.0%	4.0%	4.0%	4.0%	**Intermittent Service** at stated. Load and Speed up to 60% of the time. Powered Conveyor.
225	450	4.0%	4.0%	4.0%	4.0%	4.0%	
250	500	4.0%	4.0%	4.0%	4.0%	4.0%	
275	550	4.5%	4.0%	4.0%	4.0%	4.0%	
300	600	4.5%	4.0%	4.0%	4.0%	4.0%	

*At 90°F to 100°F Ambient Temperatures, operate these rollers at only 50% of continous service at a maximum speed of 125 RPM.
Note: Spring loaded shafts available as standard.



For wider conveyor applications.
(2.25" dia. 7/16" hex shaft)

With its thicker shell, the 225 Series delivers wider load carrying capabilities - up to 54". The spring-loaded shaft simplifies installation.

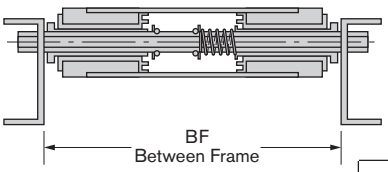
225 SERIES

Size Ranges • Available in increments of 1/4" from 6" BF to 54" BF
Load Capacity • 40 lbs.
Requires internal steel sleeve for BF>40"

Whisperol® conveyor roller application data–2.25" dia. roller on 7/16" hex shaft

Belt Speed FPM	Roller Speed RPM	Dynamic Friction for Power Calculations-% Load/Roller - in Pounds At 75°F ambient temperature*					Operating Conditions
		10#	15#	20#	30#	40#	
120	200	4.0%	4.0%	4.0%	4.0%	3.5%	**Continuous Service** Power or Gravity Conveyor
175	300	4.0%	4.0%	4.0%	4.0%	4.0%	
235	400	4.0%	4.0%	4.0%	4.0%	4.0%	**Intermittent Service** at stated. Load and Speed up to 60% of the time. Powered Conveyor.
265	450	4.0%	4.0%	4.0%	4.0%	4.0%	
295	500	4.0%	4.0%	4.0%	4.0%	4.0%	
325	550	4.5%	4.0%	4.0%	4.0%	4.0%	
355	600	4.5%	4.0%	4.0%	4.0%	4.0%	

*At 90°F to 100°F Ambient Temperatures, operate these rollers at only 50% of continous service at a maximum speed of 125 RPM.
Note: Spring loaded shafts available as standard.



For heavy-duty handling conveyors.
(2.50" dia. 7/16" or 11/16" hex shaft)

With 11/16" hex shaft and cylindrical bearings, the heavy-duty 250 Series is built to handle loads smoothly and quietly.

250 SERIES

Size Ranges • Available in increments of 1/4" from 10" BF to 63" BF (54" BF with 7/16" hex shaft).
Load Capacity • 250 lbs. with 11/16" hex shaft (optional spring-loaded shaft).
• 40 lbs. with 7/16" hex shaft (spring-loaded shaft standard).

Whisperol® conveyor roller application data–2.50" dia. roller on 11/16" hex shaft

Belt Speed FPM	Roller Speed RPM	Dynamic Friction for Power Calculations-% Load/Roller - in Pounds At 75°F ambient temperature*				Operating Conditions
		100#	150#	200#	250#	
50	77	4.0%	4.0%	4.0%	4.0%	**Continuous Service** Power or Gravity Conveyor
75	115	4.0%	4.0%	4.0%	4.0%	
100	155	4.0%	4.0%	4.0%	4.0%	**Intermittent Service** at stated. Load and Speed up to 60% of the time. Powered Conveyor.
150	230	4.0%	4.0%	4.0%	4.0%	
205	310	4.0%	4.0%	3.5%	3.5%	

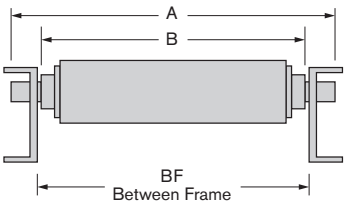
*At 90°F to 100°F Ambient Temperatures, operate these rollers at only 50% of continous service at a maximum speed of 125 RPM.
Note: Standard roller shafts are spring loaded shafts consturction. Cottered shafts available as option.
Center support barings are furnished as standard on rollers above 31" BF.

How to order Whisperol®

1. Measure between frame (BF) dimension (in inches).
2. Select roll diameter: 1.9", 2.25" or 2.5"
3. Specify options:
   - special shaft materials
   - drive grooves
   - internal steel sleeve.
4. Determine quantity (10 pc. Minimum) of rollers needed.

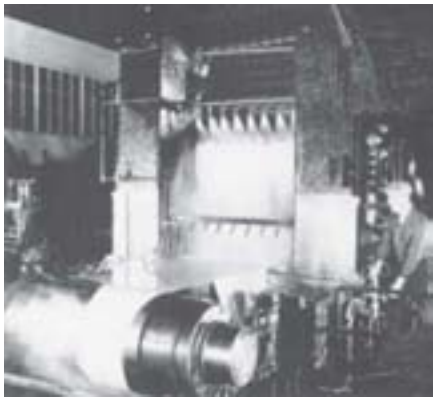
Important dimensions

Dimension	Models: 190, 225 and 250 (7/16" shaft)	Models: 250 (11/16" shaft)
A-Shaft Length	BF + 1 1/2"	BF + 2"
B-Bearing to Bearing Length	BF - 1/4"	BF - 1/4"



Note: Dimensions subject to change. Certified dimensions of ordered material furnished on request.

REX FLAT SPRAY NOZZLES



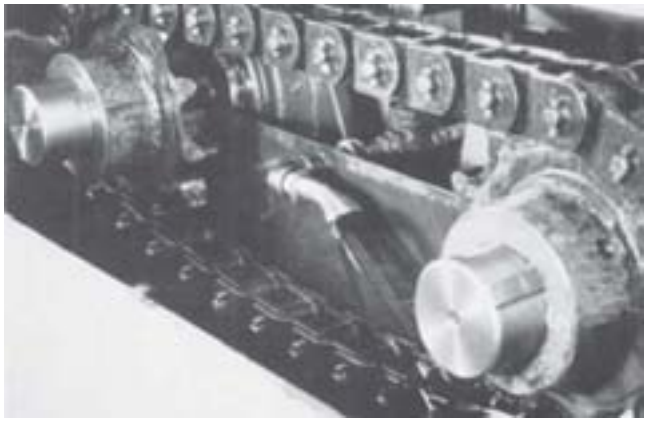
STEEL: Steel sheets are cooled with blades of water from Rex Flat Spray Nozzles.

FOR PRECISION:

- COOLING
- WASHING
- CLEANING
- DESCALING

Rock: Efficient use of Rex Flat Spray Nozzles cleans rock with a minimum of water and power.

LUMBER: Rex Flat Spray Nozzles remove all saw-destroying grit and dirt from logs.



LUBRICATION: High Speed chain is lubricated and cooled with a Rex Flat Spray Nozzle.

Precise Spray Pattern

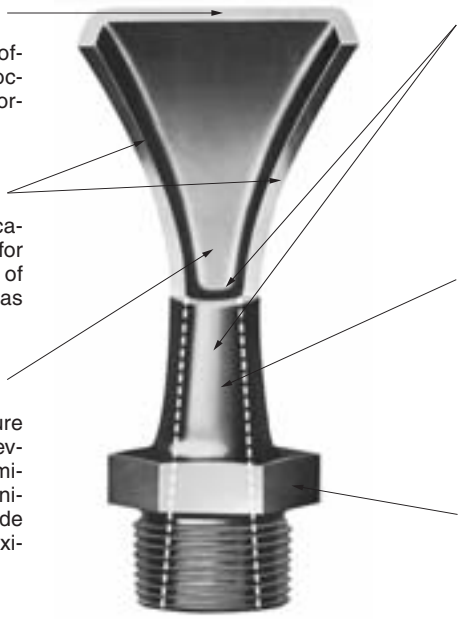
The wide range of deflectors and venturis offers a choice of liquid patterns from high velocity micro-thin to delicate low velocity at the correct pressure, quantity and angle of impact.

Precision-Controlled Pattern

Guide vanes, designed for a specific application, produce a sharp-edged blade of liquid for uniform cutting or cooling. There is no loss of liquid in side splatter. Can cut liquid usage as much as 80%.

Precision-Controlled Impact

The perfectly flat, polished deflector makes sure that every drop of liquid works hard — that every drop is kept in line to form an efficient micro-thin water blade. The venturi throat is uniformly tapered to eliminate turbulence and guide every drop of liquid onto the deflector with maximum force.



Performance Inspected — Each Rex Flat Spray Nozzle is hand-finished. They are not released for delivery until final inspection — under actual operating conditions — shows the blade pattern to be perfect. This is your guarantee of performance.

Dependable Performance

The circular orifice and tapered throat keep the Rex Flat Spray Nozzles working under conditions that would quickly plug ordinary slotted openings. The Rexnord design provides a maximum-size opening to allow particles used for cleaning to pass through easily, to assure long clog-free operation.

Long Operating Life

Rex Flat Spray Nozzles are designed for various applications and pressures. Suitable blade construction materials and proper proportioning of the shank and deflector give rugged durability under the working pressures for which each was designed. There is a Rex Flat Spray Nozzle for any working pressure from 20 to 1500 p.s.i.

Simple, Quick, Permanent Installation

One-piece construction, with standard pipe threads and standard hex for wrenches, means simple, easy installation. No adjustments are required at any time during or after installation.

REX FLAT SPRAY NOZZLES

SELECTION PROCEDURE

THE AVAILABLE WATER PRESSURE (PSI) MUST BE KNOWN.

1. From the typical application tables (pages 95 — 96), select an application similar to the one under consideration.
2. Estimate the distance from the Spray Nozzle to the line of impingement and enter selected application table.
3. Select orifice size based on available pressure. Use smallest orifice for minimum water usage. Use largest orifice for highest impact force and greatest water discharge.
4. After determining the orifice size, read down to the bottom of the chart and find the patterns available and the pipe thread size.
5. Using Table 1, select the proper Material Code that is compatible with the washing solution being used.
6. Check Table 2 to determine which of the patterns from Step 4 are available in the material selection from Step 5.
7. Having determined the pattern, turn to Table 13, page 97, to determine spray width.
8. To determine quantity required, divide the total coverage needed by the spray width.
9. To order, list quantity, pattern number, material code, and orifice size.

NOTE: To determine discharge rate in gallons per minute (GPM) for any orifice size and pressure, see page 98.

Example

Cooling Steel in Mill
(see page 95, Table 8)

16"

300 PSI
16.4 GPM
12 Orifice

70488A or 70488B or 70873A.
⅜" Pipe Thread

Clear Water
Code BH.

Aluminum Bronze is available for patterns
70488A & 70488B. Use70488B (See footnote ★)

12"

$\frac{148"}{12} = 13$

13 pcs. 70488B — BH-12

NOTE: Use smallest orifice size as impact force not required for this application.

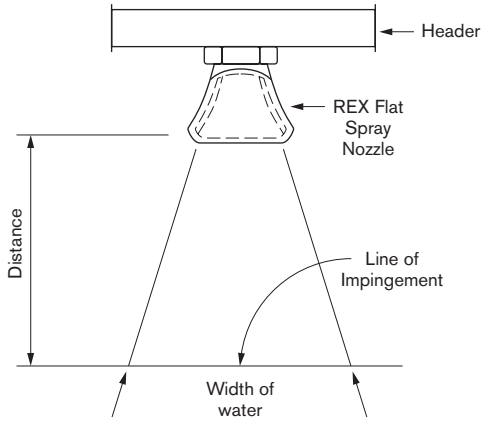


Table 1
Nozzle Material Selection Code

Read step 5 here →

Liquid Solution	Pressure Range in Pounds per Square Inch (p.s.i.)						
	0-50	51-100	101-200	201-300	301-600	601-1000	1001-1500
1. Clear Water	B or MB	B or MB	BH	BH	AH	AH	AAH
2. Water with some Silt	B or MB	BH	AH	AH	AAH	AAH	AAH
3. Water with some Sand	BH	AH	AH	AH	AAH	AAH	
4. Water with Detergent	S or Z	S or Z	SH or ZH	AAH	AAH		
5. Mildly Acid Solution	B or MB	B or MB	AAH	AAH			
6. Harsh Acid Solution	SS	SS	AAH				

Table 2
Pattern Selection

Read step 6 here →

Mat'l. Code ▲	Material Description	Pipe Thread Size			
		3/8"	3/4"		1"
		Orifice Number Range			
		6-16	16-20	22-28	32-36
		Pattern Number ★			
A A	416 Stainless Steel	70488B		70608A 74493A	70494A
AH	416 Stainless Steel - Heat Treated	70488B		70608A 74493A	70494A
AAH	440C Stainless Steel - Heat Treated	70488A	70608B		
B	Aluminum Bronze	70488A 70488B	70608B	70608A 70229A 73889A	
BH	Aluminum Bronze - Heat Treated	70488A 70488B	70608B	70608A 73889A 70229A	
MB	Manganese Bronze	70873A	70608B	70608A	70494A
MBP	Mn. Br. - Polished	70873A	70608B	70608A	
S	8620 Steel	70488B			
SH	8620 St. - Heat Treated	70488B			
SS	303 Stainless Steel	70488A 70488B			
SSP	303 S. S. - Polished	70488B			
Z	Cast Iron		70608B	70608A 74493A	70494A
ZH	Cast Iron - Heat Treated		70608B	70608A 74493A	70494A

▲ Suffix letter "P"indicates material with polished finish only.
Suffix letter "H"indicates hardened material with polished finish.

★ If more than one pattern is shown, consider the following: The pattern with the lesser angle of discharge will give the greater impact. The pattern with the wider deflector blade will produce a wider spray pattern but less impact. **(See page 97)**.

Note: Dimensions subject to change. Certified dimensions of ordered material furnished on request.

REX FLAT SPRAY NOZZLES

TYPICAL APPLICATION TABLES

Table 3
Log Washing
Gallons Per Minute

Distance Inches	PSI	Orifice		
		28	32	36
16	40		42.5	53.9
	50	36.4	47.6	60.2
	60	39.9	52.1	66.0
	70	44.0	56.1	71.1
	80	46.1	60.2	76.2
	100	51.5	67.7	85.1
	125	57.6	75.2	
	150	63.1		
24	70			71.1
	80			76.2
	90			80.7
	100			85.1
	125			95.2
	150			104.3
Pattern	70229A 70608A&B 73889A 74493A		70494A	
PipeThread	¾"		1"	

Table 4
Washing Hard Vegetables
Gallons Per Minute

Distance Inches	PSI	Orifice						
		6	7	8	9	10	11	12
16	40	1.5						
24	30	1.3	1.8					
	40	1.5	2.0					
	50	1.7						
36	20		1.9	2.4	2.9			
	30			2.3	2.9	3.6		
	40			2.7	3.4	4.2		
	50			3.0				
48	20					2.9	3.6	4.2
	30					3.6	4.4	5.2
	40					4.2	5.0	6.0
	50					4.6	5.6	6.7
	60					5.1		
Pattern	70488A— 70488B — 70873A							
Pipe Thread	⅜"							

Table 5
Can and Bottle Washing
Gallons Per Minute

Distance Inches	PSI	Orifice			
		6	7	8	9
12	60	1.8			
	70	1.9			
	80	2.1			
	90	2.3			
16	40				3.4
	50			3.0	3.8
	60			3.3	4.1
	70			3.5	4.4
	80			3.8	
Pattern	70488A— 70488B — 70873A				
Pipe Thread	⅜"				

Table 6
Descaling Steel
Gallons Per Minute

Distance Inches	PSI	Orifice			
		6	7	8	9
12	400				10.6
	450				11.3
	500			9.4	11.9
	600		7.9	10.3	13.0
	700		8.5	11.1	14.1
	800	6.7	9.1	11.9	15.1
	900	7.1	9.7	12.6	
	1000	7.5	10.2		
	1200	8.2			
Pattern	70488A — 70488B —70873A				
Pipe Thread	⅜ "				

Table 7
Washing Felts and Paper —GPM

Distance Inches	PSI	Orifice									
		6	7	8	9	10	11	12	14	16	18
8	40	1.5									
	50	1.7									
12	30				2.9						
	40			2.7	3.4						
	50		2.3	3.0							
	60	1.8	2.5								
	70	2.0									
	80	2.1									
16	30						4.4				
	40				3.4	4.2	5.0				
	50			3.0	3.8	4.6					
	60		2.5	3.3							
	70		2.7								
24	30								7.1		
	40						5.0	6.0	8.1		
	50				3.8	4.6	5.6	6.7			
	60				4.1	5.1					
	70				4.5						
36	30									9.2	11.7
	40								8.1	10.6	
	50							6.7	9.1		
	60							7.3			
Pattern	70488A— 70488B — 70873A							70229A —70608A&B 73889A — 74493A			
PipeThread	⅜ "							¾ "			

Read step 1 here

Table 8
Cooling Steel in Mill — GPM

Distance Inches	PSI	Orifice						
		9	10	11	12	14	16	18
12	150				11.6			
	175			10.5	12.5			
	200	7.5	9.3	11.2	13.4			
	250	8.4	10.4	12.6	15.0			
	300	9.2	11.4	13.8	16.4			
	350	10.0	12.3	14.9	17.7			
	400	10.6	13.1	15.9	18.9			
	450	11.3	13.9					
	500	11.9						
16	175							28.2
	200					18.2	23.8	30.1
	250					20.4	26.6	33.7
	300				16.4	22.3	29.1	36.9
	350				17.7	24.1	31.5	
	400				18.9	25.8		
	450				20.1			
	500				21.2			
Pattern	70488A —70488B —70673A							70229A 70608A&B 73889A 74493A
PipeThread	⅜"							¾"

Read step 3 here

Read step 2 here

Read step 4 here

Note: Dimensions subject to change. Certified dimensions of ordered material furnished on request.

REX FLAT SPRAY NOZZLES

TYPICAL APPLICATION TABLES

Table 9
Washing Soft Vegetables — GPM

Distance Inches	PSI	Orifice						
		6	7	8	9	10	11	12
16	40 50	1.5 1.7						
24	30 40 50	 1.5 1.7	1.8 2.0					
36	20 30 40 50			1.9 2.3 2.7 3.0	2.4 2.9 3.4 3.8	2.9 3.6 4.2 4.6		
48	20 30 40 50 60						3.6 4.4 5.0 5.6 6.2	4.2 5.2 6.0 6.7
Pattern	70488A— 70488B — 70873A							
Pipe Thread	⅜"							

Table 10
Washing Ore & Gravel — GPM

Distance Inches	PSI	Orifice								
		14	16	18	20	22	24	28	32	36
12	30 40 50 60 70 80 90 100	 9.1 10.0 10.7 11.5 12.2 12.9	 10.6 11.9 13.0 14.0 15.0 15.9	11.7 13.5 15.5 16.5 18.2 19.0	14.4 16.6 18.6 20.4 21.9					
16	30 40 50 60 70 80 90			 13.5 15.1 16.5 18.2 19.0 20.4	 16.6 18.6 20.4 21.9 23.5	17.4 20.1 22.5 24.6 27.5	20.7 23.9 26.8 29.3 31.6			
24	30 40 50 60 70 80					 22.5 24.6 27.5 28.4	 23.9 26.8 29.3 31.6	28.2 32.6 36.4 39.9	36.8 42.5 47.6	
36	30 40 50 60 70 80								 42.5 47.6 52.1 56.1 60.2	46.0 53.9 60.2 66.0 71.1
Pattern	70488A&B 73889A			70229A — 70608A&B 73889A — 74493A					70494A	
Pipe Thread	⅜"			¾"					1"	

Table 11
Meat Cleaning — GPM

Distance Inches	PSI	Orifice							
		6	7	8	9	10	11	12	14
12	110 125 150 175	 2.9 3.1	3.3 3.6						
16	100 125 150			4.2 4.7 5.1	5.3 5.9				
24	100 125					6.6 7.3	7.9		
36	80 100								11.5 12.9
Pattern	70488A — 70873A								
Pipe Thread	⅜"								

Table 12
Washing Vehicles & Scum Removal — GPM

Distance Inches	PSI	Orifice												
		6	7	8	9	10	11	12	14	16	18	20	22	24	28
8	40 50 60 70 80 90		 2.7 2.9 3.1	 3.3 3.5 3.8	 3.8 4.1 4.5	4.2 4.6 5.1									
12	50 60 70 80 90 100				 4.5 4.8 5.1 5.3	 5.1 5.5 5.9 6.3	5.6 6.2 6.7 7.1	6.7 7.3 7.9							
16	40 50 60 70 80 90							 7.9 8.5 9.0	10.0 10.7	11.9 13.0	13.5 15.1				
24	40 50 60 70 80								10.0 10.7 11.5	11.9 13.0 14.0	13.5 15.1 16.5	16.6 18.6			
36	30 40 50 60 70 80										 16.5 17.8 19.0	 18.6 20.4 21.9	 22.5 24.6	23.9 26.8	28.2 32.6
Pattern	70488A — 70488B — 70873A										73889A — 74493A 73889A — 74493A				
Pipe Thread	⅜"										¾"				

Note: Dimensions subject to change. Certified dimensions of ordered material furnished on request.

REX FLAT SPRAY NOZZLES

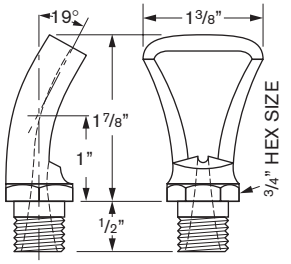
SPRAY PATTERN WIDTHS (Table 13)

Width of Water Spray (Inches) at Line of Impingement at 60 P.S.I.★

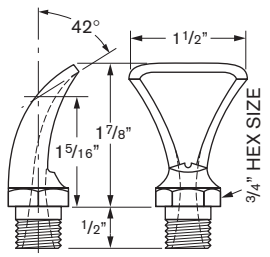
Read step 7 here

3/8" Pipe Thread

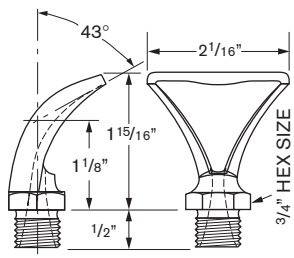
Pattern No. 70488A
Approx. Shipping Wt.: 3 oz.



Pattern No. 70488B
Approx. Shipping Wt.: 4 oz.



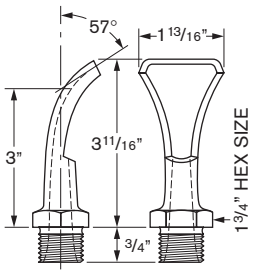
Pattern No. 70873A
Approx. Shipping Wt.: 4 oz.



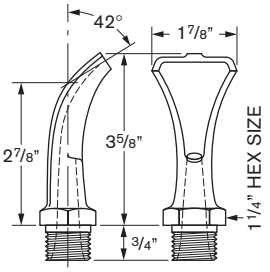
Distance from Point of Discharge to Point of Impingement	Orifice Sizes in 64th Inches									Orifice Sizes in 64th Inches									Orifice Sizes in 64th Inches					
	6	7	8	9	10	11	12	14	16	6	7	8	9	10	11	12	14	16	9	10	11	12	14	16
4	3	3	3	3	3	3	4	4	4	3	3	3	3	4	4	4	4	4	5	5	6	6	6	7
8	4	4	4	4	5	5	6	7	7	5	5	5	6	6	6	6	7	7	8	9	10	10	11	12
12	6	6	7	8	8	9	9	10	11	6	7	7	8	8	8	9	10	11	12	13	14	15	16	18
→16	8	8	9	10	10	11	11	13	14	8	9	9	10	10	11	12	13	14	16	17	18	19	21	23
20	9	10	11	12	13	14	14	16	17	10	10	11	12	12	13	14	15	17	20	21	22	23	26	28
24	11	12	13	14	15	16	16	18	20	11	12	13	14	15	16	17	18	20	24	25	27	28	31	34
32	14	16	17	19	20	21	21	24	26	14	16	16	18	19	20	22	24	26	30	32	35	36	40	45
40	18	19	21	24	24	26	26	30	32	18	19	20	22	22	26	27	29	32	38	40	44	45	50	56
48	21	23	25	28	29	31	32	36	39	21	23	24	27	28	30	32	35	38	45	48	52	54	60	65

3/4" Pipe Thread

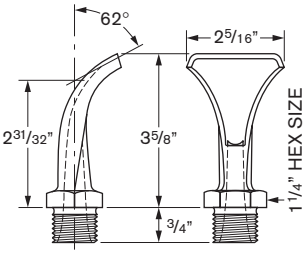
Pattern No. 70229A
Approx. Shipping Wt.: 7 oz.



Pattern No. 70608A & 70608B
Approx. Shipping Wt.: 8.5 oz.

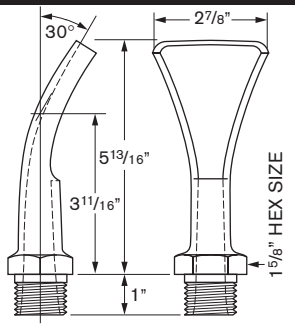


Pattern No. 73889A & 74493A
Approx. Shipping Wt.: 8.5 oz.



Distance from Point of Discharge to Point of Impingement	Orifice Sizes in 64th Inches	Orifice Sizes in 64th Inches					Orifice Sizes in 64th Inches
		70608B		70608A			
	22	16	20	22	24	28	22
4	5	4	4	5	5	6	7
8	8	6	8	9	9	10	11
12	12	8	11	13	13	14	15
16	15	10	14	16	17	18	19
20	18	12	17	20	21	22	24
24	22	15	21	24	25	26	28
32	28	19	27	31	32	34	36
40	35	24	33	38	40	43	44
48	42	29	39	44	46	51	53

1" Pipe Thread



Pattern No. 70494A Approx. Shipping Wt.: 24 oz.

Distance from Point of Discharge to Point of Impingement	Orifice Size in 64th Inches
	36
4	8
8	13
12	18
16	23
20	28
24	33
32	43
40	52
48	62

★ Spray width will vary slightly at other pressures. However, use widths listed for all pressures. For other liquids, consult Rexnord.

Note: Dimensions subject to change. Certified dimensions of ordered material furnished on request.

REX FLAT SPRAY NOZZLES

HOW TO ORDER

1. Number of units. 2. List Pattern No. — Material Code — Orifice Size

Pattern Numbers and Orifice Sizes

Pipe Thread	Pattern Number †	Orifice Size No.													Pipe Thread	Pattern Number †	Orifice Size No.			
		6	7	8	9	10	11	12	13	14	15	16	18	20			22	24	28	36
		Orifice Diam. In.															Orifice Diam. In.			
		3/32	7/64	1/8	9/64	5/32	11/64	3/16	13/64	7/32	15/64	1/4	9/32	5/16			11/32	3/8	7/16	9/16
3/8	70488A-AAH	□	□	□	□	□	□	□		□		□			3/4	70229A-B	■			
3/8	70488A-B	■	■	■	■	■	□	■	■	■	□	■								
3/8	70488A-BH	■	■	□	□	□	□	□		□		□			3/4	70608A-A	□	□	□	
3/8	70488A-SS	□	□	□	□										3/4	70608A-AH	□	□	□	
															3/4	70608A-B	□	□	□	
3/8	70488B-A	■	□	■	□	□	□	■		□		■			3/4	70608A-BH	□	□	□	
3/8	70488B-AH	□	□	□	□	□	□	□		□		□			3/4	70608A-MB	■	□	□	
3/8	70488B-B	■	■	■	■	□	□	■		□		■			3/4	70608A-MBP	□	□	□	
3/8	70488B-BH	□	□	■	□	□	□	□		□		□			3/4	70608A-Z	■	□	□	
3/8	70488B-S	■	□	■	■	□	□	■		□		■			3/4	70608A-ZH	□	□	□	
3/8	70488B-SH	□	□	□	□	□	□	□		□		□								
3/8	70488B-SS	■	■	■	□	□	□	■		□		■			3/4	73889A-B	■			
3/8	70488B-SSP	□	□	□	□	□	□	□		□		□			3/4	73889A-BH	□			
3/8	70873A-MB				■	□	□	■		□		■			3/4	74493A-A	□			
3/8	70873A-MBP				□	□	□	□		□		□			3/4	74493A-AH	□			
															3/4	74493A-Z	■			
															3/4	74493A-ZH	□			
3/4	70608B-AAH											□								
3/4	70608B-B											□	□	□	1	70494A-AH				□
3/4	70608B-BH											□	□	□	1	70494A-MB				□
3/4	70608B-MB							□				■	□	□	1	70494A-Z				■
3/4	70608B-MBP							□				□	□	□	1	70494A-ZH				□
3/4	70608B-Z											□	□							
3/4	70608B-ZH											□	□							

† See Table 2 for Material Code (Page 94).
■ Stock Size.
□ Order Size — Ten Piece Minimum Quantity.

Discharge Rates in GPM (By Orifice Number)

PSI	6	7	8	9	10	11	12	14	16	18	20	22	24	28	32	36
15	.9	1.2	1.6	2.1	2.5	3.1	3.7	5.0	6.5	8.2	10.2	12.3	14.7	19.9	26.1	33.0
20	1.1	1.4	1.9	2.4	2.9	3.6	4.2	5.8	7.5	9.5	11.8	14.2	16.9	23.0	30.1	38.1
30	1.3	1.8	2.3	2.9	3.6	4.4	5.2	7.1	9.2	11.7	14.4	17.4	20.7	28.2	36.8	46.6
40	1.5	2.0	2.7	3.4	4.2	5.0	6.0	8.1	10.6	13.5	16.6	20.1	23.9	32.6	42.5	53.9
50	1.7	2.3	3.0	3.8	4.6	5.6	6.7	9.1	11.9	15.1	18.6	22.5	26.8	36.4	47.6	60.2
60	1.8	2.5	3.3	4.1	5.1	6.2	7.3	10.0	13.0	16.5	20.4	24.6	29.3	39.9	52.1	66.0
80	2.1	2.9	3.8	4.8	5.9	7.1	8.5	11.5	15.0	19.0	23.5	28.4	33.8	46.1	60.2	76.2
100	2.4	3.2	4.2	5.3	6.6	7.9	9.5	12.9	16.8	21.3	26.3	31.8	37.8	51.5	67.3	85.1
125	2.6	3.6	4.7	5.9	7.3	8.9	10.6	14.4	18.8	23.8	29.4	35.6	42.3	57.6	75.2	95.2
150	2.9	3.9	5.1	6.5	8.0	9.7	11.6	15.8	20.6	26.1	32.2	38.9	46.3	63.1	82.4	104.3
175	3.1	4.3	5.6	7.0	8.7	10.5	12.5	17.0	22.2	28.2	34.8	42.1	50.1	68.1	89.0	112.6
200	3.3	4.6	5.9	7.5	9.3	11.2	13.4	18.2	23.8	30.1	37.2	45.0	53.5	72.8	95.1	120.4
250	3.7	5.1	6.6	8.4	10.4	12.6	15.0	20.4	26.6	33.7	41.6	50.3	59.8	81.4	106.4	134.6
300	4.1	5.6	7.3	9.2	11.4	13.8	16.4	22.3	29.1	36.9	45.5	55.1	65.5	89.2	116.5	147.5
350	4.4	6.0	7.9	10.0	12.3	14.9	17.7	24.1	31.5	39.8	49.2	59.5	70.8	96.4	125.9	159.3
400	4.7	6.4	8.4	10.6	13.1	15.9	18.9	25.8	33.6	42.6	52.6	63.6	75.7	103.0	134.6	170.3
450	5.0	6.8	8.9	11.3	13.9	16.9	20.1	27.3	35.7	45.2	55.7	67.5	80.3	109.3	142.7	180.6
500	5.3	7.2	9.4	11.9	14.7	17.8	21.2	28.8	37.6	47.6	58.8	71.1	84.6	115.2	150.4	190.4
550	5.5	7.5	9.9	12.5	15.4	18.6	22.2	30.2	39.4	49.9	61.6					
600	5.8	7.9	10.3	13.0	16.1	19.5	23.2	31.5	41.2	52.1	64.4					
650	6.0	8.2	10.7	13.6	16.7	20.3	24.1	32.8	42.9	54.3	67.0					
700	6.3	8.5	11.1	14.1	17.4	21.0	25.0	34.1	44.5	56.3	69.6					
750	6.5	8.8	11.5	14.6	18.0	21.8	25.9	35.3	46.1	58.3	72.0					
800	6.7	9.1	11.9	15.1	18.6	22.5	26.8	36.4	47.6	60.2	74.3					
850	6.9	9.4	12.3	15.5	19.2	23.2	27.6	37.5	49.0	62.1	76.6					
900	7.1	9.7	12.6	16.0	19.7	23.8	28.4	38.6	50.5	63.9	78.8					
950	7.3	9.9	13.0	16.4	20.2	24.5	29.2	39.7	51.8	65.6	81.0					
1000	7.5	10.2	13.3	16.8	20.8	25.1	29.9	40.7	53.2	67.3	83.1					
1100	7.8	10.7	13.9	17.6	21.8	26.4	31.4									
1200	8.2	11.2	14.6	18.4	22.8	27.5	32.8									
1300	8.5	11.6	15.2	19.2	23.7	28.7	34.1									
1400	8.8	12.0	15.7	19.9	24.6	29.7	35.4									
1500	9.2	12.5	16.3	20.6	25.4	30.8	36.6									

Note: Dimensions subject to change. Certified dimensions of ordered material furnished on request.

INDEX

NOTES

WORLDWIDE SERVICE LOCATIONS

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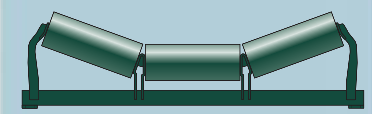
Rexnord Corporation, Fresno
1080 W Sierra Ave (Suite #102)
Fresno, CA 93711
T: 559-435-1111
F: 559-439-6887

Idler Styles



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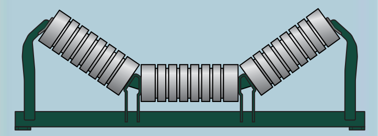

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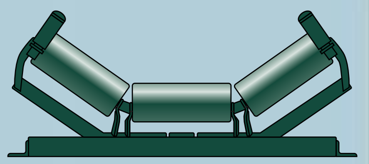

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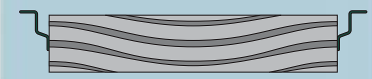

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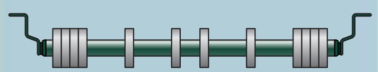

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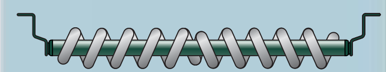

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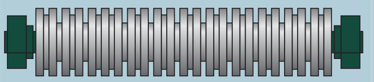

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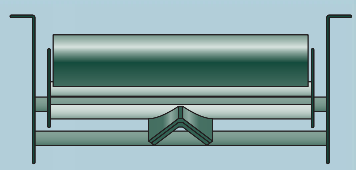

Inclined Return Training

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CONVEYOR EQUIPMENT MANUFACTURERS ASSOCIATION

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