

transtex conveyor belting

PVC 350 & PVC 450 Elevator Belting – Now Available



- ▶ Resists stretching & shrinking
- ▶ Excellent bolt holding strength
- ▶ Interwoven polyester carcass for added strength and fastener holding
- ▶ Resistant to mildew and moisture
- ▶ Meets OSHA Specifications for surface electrical resistance of 300 megohms or less
- ▶ Meets MSHA Standards for flame resistance
- ▶ PVC 450 ORG (Oil Resistant Grain)
- ▶ PVC 350 also available in ORG

For more information contact your Account Manager or Territory Sales Manager

Transtex – lightweight rubber & pvc

Forbo Movement Systems
Transtex Belting
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Charlotte, NC 28273-6509
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Fax: 704-334-7126
www.forbo-transtex.com

Made in the USA



forbo
MOVEMENT SYSTEMS

DATE _____

COMPANY _____

ADDRESS _____

DATA SUBMITTED BY _____ Title _____

Total Belt Length _____ (ft.) Belt Width _____ (in.) C to C Pulleys _____ (ft.)
Rated Elevator Capacity _____ (BPH) Material Handled _____ Wt. Per Cu. In. ¹ _____ (lbs.)
(TPH)

BUCKETS:

Style and Manufacturer _____ Size _____ Projection _____ (in.)

Spacing on Belt _____ (in.) No. of Rows _____ Staggered _____ Number (C to C) Ascending Side _____

Empty Weight _____ (lbs.) 100 % Cup Capacity _____ @ _____ % = _____ (cu. in.) Total Weight of Material in Bucket _____ (lbs.)

Head Pulley Diameter _____ (in.) Type Lagging _____ Boot Pulley Diameter _____ (in.)

Boot Pulley Face Width _____ (in.) Type Take Up: Screw _____ Floating _____ Approximate Weight² _____ (lbs.)

Weight per Foot For Type _____ Belt _____ = _____ (lbs.)
(Weight P.I.W. x Belt Width)

PICK UP IN BOOT: (to compensate for digging action)

For UP Loaded Leg - Use **10 %** of Total Bucket Load
For DOWN Loaded Leg - Use **20 %** of Total Bucket Load
For UP and DOWN Loaded Leg - Use **30 %** of Total Bucket Load

SUSPENDED WEIGHT: (Ascending Side)

Empty Buckets: _____ x _____ lbs. - _____ lbs.
(No.) (Wt.)

Load in Buckets: _____ x _____ lbs. - _____ lbs.
(No.) (Wt.)

Belt C to C _____ x _____ lbs. - _____ lbs.
(Ft.) (Wt.)

Pickup in Boot _____ lbs. - _____ lbs.
(% Bucket Load)

Floating Takeup Weight ^{2**} - _____ lbs.

Maximum Tension - _____ lbs.

THEREFORE:

The workload (t) is calculated as follows:

$\frac{\text{maximum tension}}{\text{belt width}} = \text{_____ lbs. per inch of belt width}$

The proper Belt per the above information is: Forbo Transtex _____

TOTAL BELT LENGTH CALCULATIONS: *

1. Center to Center Pulleys _____
2. Center to Center Pulleys _____
3. $\frac{1}{2}$ Head Pulley Circum. ² _____
4. $\frac{1}{2}$ Boot Pulley Circum. ² _____
5. Belt Splice ³ _____
Sub-Total _____
6. Plus Contingency Factor _____
(1% of Sub-Total)
TOTAL _____

* Round off Fractions to nearest whole Number

¹ See Table 1 Other Side
² See Table 2 Other Side

**TABLE #1
BULK MATERIAL WEIGHT**

	Lbs. Cu. In.	Lbs. Cu. Ft.
Alfalfa Meal	.013	22
Alfalfa Pellets	.025	43
Alumina	.038	65
Baking Soda	.032	55
Barley, Whole	.028	48
Bauxite	.052	90
Beans, Castor	.021	37
Borax	.041	70
Buckwheat	.024	42
Calcium Carbonate	.058	100
Cashew Nuts	.021	37
Caustic Soda	.051	88
Cement, Portland	.054	94
Clay, Brick	.069	120
Clover Seed	.028	48
Coal, Bituminous	.032	55
Cocoa Beans	.023	40
Cocoonut, Shredded	.013	22
Coffee, Roasted Bean	.015	26
Copper Ore	.087	150
Corn, Shelled	.026	45
Cottonseed Cake	.026	45
Cottonseed Meal	.023	40
Cullet, Glass	.069	120
Distiller's Grain, Wet	.035	60
Earth, Wet	.064	110
Flaxseed	.026	45
Flour, Wheat	.023	40
Garbage, Household	.029	50
Gravel	.058	100
Gypsum	.046	80
Hominy, Dry	.021	37
Hops, Dry	.020	35
Iron Ore	.116	200
Limestone, Crushed	.052	90
Magnesium Chloride	.019	33
Malt, Dry	.017	30
Mica, Pulverized	.009	15
Milo	.026	45
Oats	.015	26
Oyster Shells, Whole	.046	80
Peanuts, Shelled	.026	45
Peas, Dried	.029	50
Phosphate Acid Fertilizer	.035	60
Rice, Hulled	.028	49
Rye	.028	48
Safflower, Meal	.029	50
Salt, Dry	.046	80
Sand, Dry	.075	130
Sand, Dry Silica	.058	100
Sludge, Sewage	.029	50
Soda Ash, Heavy	.038	65
Soy Bean Meal	.023	40
Soy Beans, Whole	.029	50
Sugar, Raw	.038	65
Sulphur, Lumpy	.050	85
Taconite, Pellets	.075	130
Vermiculite, Ore	.046	80
Wheat	.028	48
Zinc Ore, Crushed	.093	160



**TABLE #2
PULLEY SPECIFICATIONS**

Diameter (Inches)	Circumference (Feet)	1/2* Circumference (Feet)	Floating** Take-Up Factor (lbs. per inch of Pulley Face Width)
8	2.07	2	5
9	2.35	2	5
10	2.64	2	7
11	2.89	2	7
12	3.14	2	7
13	3.39	2	8
14	3.64	2	8
15	3.92	2	9
16	4.18	3	9
18	4.71	3	9
20	5.21	3	10
21	5.50	3	10
22	5.75	3	12
24	6.28	4	12
28	7.32	4	15
30	7.85	4	18
32	8.35	5	20
36	9.42	5	24
40	10.46	6	29
42	10.99	6	31
48	12.57	7	40
54	14.14	8	47
60	15.71	8	53
66	17.28	9	—
72	18.85	10	—
84	21.99	11	—
96	25.13	13	—

* Rounded off to nearest whole number.

** Floating Take-Up Factor Includes Pulley Weight, Structural Assembly and Steel Weights.
TO CALCULATE: Multiply Take-Up Factor Listed for given Boot Pulley diameter x total inches of Boot Pulley Face width.

**TABLE #3
BELT - BUCKET JOINT SPECIFICATIONS***

	BUTT-RIDER	LAP
		
Pulley Centers	Minimum Buckets Per Row on Each End of Main Belt	Minimum Buckets Per Row in Splice Area
0 - 99'	3	3
100' - 149'	4	4
150' - 199'	5	5
200' - 249'	6	6
250' & over	7	7

* For Handling Grain or Similar Lightweight Materials

Note: For Pulley Centers above 300' or Special Applications contact Forbo Transtex Representative or Charlotte Offices.

TRANSTEX PRODUCT SPECIFICATIONS

Product Specification:	PVC 450 ORG CxC Black
Transtex Product Code:	908310
Product Construction:	Solid woven polyester carcass with black PVC top and bottom covers.
Color:	Black
Compound Formulation:	Fire resistant, and oil and fat resistant PVC covers and impregnated carcass
Nominal Overall Gauge, inches:	0.370 +/- 0.010
mm:	9.4 +/- 0.25
Nominal Weight, in lbs/ft²:	2.4 +/- 10 %
in kg/m²:	11.7 +/- 10 %
Rated Working Tension:	450 lbs/in. / 79 N/mm. @ 1.5 %
Top Cover Surface:	Smooth
Bottom Cover Surface:	Smooth
Minimum Pulley Diameter:	10 inches / 254 mm.
Temperature Range:	0° to 180° F. / -18° to 82°C.
Transverse Rigidity:	N/A
Special Standards:	Fire resistant to MSHA 2G/ASTM D378. Static conductive to OSHA 29 CFR.
Cover Coefficient of Friction, Steel:	0.83 Nominal
Bottom Coefficient of Friction, Steel:	0.83 Nominal
Production Width(s):	72 inches / 1829 mm.
Typical Applications:	Bucket elevators, recycling, grain, feed & seed fertilizer, applications requiring good tear resistance and resistance to oils and fats.
Specification Date:	May 14, 2009

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TRANSTEX PRODUCT SPECIFICATIONS

Product Specification:	PVC 350 O/M CxC Black
Transtex Product Code:	908732
Product Construction:	Solid woven polyester carcass with black PVC top and bottom covers.
Color:	Black
Compound Formulation:	Fire resistant PVC Covers and PVC Impregnated
Nominal Overall Gauge, inches:	0.305 +/- 0.01
mm:	7.7 +/- 0.25
Nominal Weight, in lbs/ft²:	2.0 +/- 10 %
in kg/m²:	9.8 +/- 10 %
Rated Working Tension:	350 lbs/in. / 61 N/mm. @ 1.5%
Top Cover Surface:	Smooth
Bottom Cover Surface:	Smooth
Minimum Pulley Diameter:	7 inches / 178 mm.
Temperature Range:	0° to 180° F. / -18° to 82°C.
Transverse Rigidity:	N/A
Special Standards:	Fire resistant to MSHA 2G/ASTM D378. Static conductive to OSHA 29 CFR.
Cover Coefficient of Friction, Steel:	0.83 Nominal
Bottom Coefficient of Friction, Steel:	0.83 Nominal
Production Width(s):	72 inches / 1829 mm.
Typical Applications:	Bucket elevators, recycling, grain, feed & seed fertilizer, applications requiring good tear resistance.
Specification Date:	May 14, 2009

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TRANSTEX PRODUCT SPECIFICATIONS

Product Specification:	PVC 350 ORG CxC Black
Transtex Product Code:	908736
Product Construction:	Solid woven polyester carcass with black PVC top and bottom covers.
Color:	Black
Compound Formulation:	Fire resistant, and oil and fat resistant PVC covers and impregnated carcass
Nominal Overall Gauge, inches:	0.305 +/- 0.01
mm:	7.7 +/- 0.25
Nominal Weight, in lbs/ft²:	2.0 +/- 10 %
in kg/m²:	9.8 +/- 10 %
Rated Working Tension:	350 lbs/in. / 61 N/mm. @ 1.5 %
Top Cover Surface:	Smooth
Bottom Cover Surface:	Smooth
Minimum Pulley Diameter:	7 inches / 178 mm.
Temperature Range:	0° to 180° F. / -18° to 82°C.
Transverse Rigidity:	N/A
Special Standards:	Fire resistant to MSHA 2G/ASTM D378. Static conductive to OSHA 29 CFR.
Cover Coefficient of Friction, Steel:	0.83 Nominal
Bottom Coefficient of Friction, Steel:	0.83 Nominal
Production Width(s):	72 inches / 1829 mm.
Typical Applications:	Bucket elevators, recycling, grain, feed & seed fertilizer, applications requiring good tear resistance and resistance to oils and fats.
Specification Date:	May 14, 2009

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