



# **Eye-Flex® Conveyor Belts**

Heavy-duty modular conveyor belt





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# Heavy-duty modular conveyor belt

Eye-Flex's greater strength, carrying capacity, and open flat surface profile is the answer to all your heavy-duty conveying needs, whether you have a new or a replacement application. Eye-Flex® has almost limitless options and its configurations are custom designed to meet your requirements. For product orientation, Eye-Flex® offers flights and side guards to meet all product handling needs. Additionally, Eye-Flex® is available with multiple drive options including cage rollers, positive drive sprockets, and an optional chain edge drive for enhanced tracking and reliability.



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## Advantages of Eye-Flex® include:

- Flat carrying surface
- · Easy to clean due to open construction
- Positive drive
- · High load capacity
- Modular design
- Almost unlimited application possibilities

Eye-Flex's high strength, robustness and open, flat carrying surface provide the answer to your heavy duty conveyor belt requirements.

Whatever your needs, Wire Belt Company's Technical Sales Engineers will work with you to determine the best Eye-Flex® belt configuration to accommodate your product, process, application and maintenance requirements. If you require a unique belt or conveyor to deliver the best conveyor performance, we will not hesitate to design and deliver a totally customised solution for your application. Our aim is your complete satisfaction with the performance of our products. We are confident we can provide the right belt, sprockets and other components you need.







Eve-Flex® with underwelded wire spacing

## **Typical Eye-Flex® Applications**

Eye-Flex® has many and varied uses, below is a list of typical applications. If you have an application that is not listed below, contact our Technical Sales Engineers to see if Eye-Flex® belts are right for your needs.

- Transport
- Cooking
- Heating
- Drying
- Cooling
- Drainage
- Freezing
- Frying
- Baking
- Washing

- Weed Clearing
- Curing
- Sorting
- Dredging
- Elevating
- De-Elevating
- Loading
- Degreasing
- Grading



Degreasing



Baking



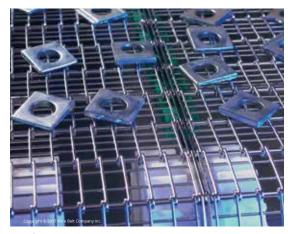
Packaging



Draining



Heat Treatment



Cooling



Freezing



Many elements of Eye-Flex® belt can be customised to suit each individual application, such as gap width and fixing method:

- Normal gap
- Ring
- Spring
- Distance sleeves
- · Underwelded wire

#### Eye-Flex® belt without spacers

Eye-Flex® has a standard construction based on a straight modular form. It is designed and built without spacers or perpendicularly welded under wires. This allows excellent flow-through in applications where no cross support is required. Eye-Flex® is often used in food processing for its flat conveying surface, open mesh configuration, and ease of cleaning. Eye-Flex® without spacers is also easily repaired with minimal cost.



Eye-Flex® belt without spacers									
Belt Pitch	Wire Dia.	Cross Rod Dia.		Belt Pitch Wire Dia. Cr		Cross Rod Dia.			
mm	mm	mm		mm	mm	mm			
15.875	1.80	3.20		50.00	3.00	5.00			
25.00	2.00	5.00		50.80	1.60	8.00			
25.40	2.00	5.00		50.80	1.60	6.00			
30.00	1.60	4.00		50.80	2.00	8.00			
30.00	2.00	4.00		50.80	2.50	8.00			
30.00	2.00	5.00		50.80	2.50	5.00			
30.00	2.00	7.00		50.80	3.00	5.00			
30.00	2.00	8.00		50.80	4.00	7.00			
31.75	2.00	5.00		60.00	2.00	5.00			
50.00	1.40	5.00		60.00	2.50	5.00			
50.00	1.60	5.00		70.00	4.00	7.00			
50.00	2.00	5.00		75.00	2.50	5.00			
50.00	2.50	6.00		75.00	2.50	8.00			
50.00	2.50	8.00		100.00	3.00	8.00			

### Eye-Flex® belt with underwelded wire spacing

Eye-Flex® belting with underside welded wires provide the largest range of available gap widths, up to 50mm. One, two or three wires can be welded to the underside of the links, depending on the belt pitch and application requirements. Underwelded wire spacing should be considered on applications where hygiene and sanitation are critical. The underwelded wire eliminates the potential bacteria traps under the spacers, springs, rings and sleeves. This configuration makes cleaning and sanitation easy and more efficient.



	Eye-Flex® belt with underwelded wire spacing									
Belt Pitch	Wire Diameter	Cross Rod Diameter	Minimum Gap Spacing	Gap in Steps of	Maximum No. of Welded Wires					
mm	mm	mm	mm	mm	mm					
15.875	1.80	3.20	2.00	0.10	1					
25.000	2.00	5.00	2.30	0.10	2					
25.400	2.00	5.00	2.30	0.10	2					
30.000	2.00	4.00	2.30	0.10	2					
30.000	2.00	5.00	2.30	0.10	2					
50.000	2.00	5.00	2.30	0.10	3					
50.000	2.50	5.00	2.80	0.10	3					
50.000	2.50	6.00	2.80	0.10	3					
50.800	2.50	8.00	2.80	0.10	3					
50.800	3.00	8.00	3.30	0.10	3					
75.000	2.50	5.00	2.80	0.10	3					
75.000	2.50	8.00	2.80	0.10	3					



### Eye-Flex® belt with rings as spacers

This versatile variation of Eye-Flex® uses rings between the wires to increase the belt gap. By increasing the belt gap, more air will circulate around the bottom of the product. Increasing the product exposure to this additional air flow improves the efficiency of your process. The gap is set by one or more rings placed between adjacent links on the cross rod. The gap width is determined by the number and thickness of rings used.



Eye-Flex® belt with rings as spacers									
Belt Pitch	Wire Diameter	Cross Rod Diameter	Minimum Gap Spacing	Gap Spacing can be Increased by					
mm	mm	mm	mm	mm					
25.000	2.00	5.00	4.00	2.00					
25.400	2.00	5.00	4.00	2.00					
30.000	2.00	4.00	4.00	2.00					
30.000	2.00	5.00	4.00	2.00					
31.750	2.00	5.00	4.00	2.00					
50.000	2.00	5.00	4.00	2.00					
50.000	2.50	5.00	5.00	2.50					
50.000	2.50	6.00	5.00	2.50					
50.800	2.50	6.00	5.00	2.50					
50.800	2.50	8.00	5.00	2.50					
50.800	4.00	8.00	8.00	4.00					
60.000	2.00	5.00	4.00	2.00					
60.000	2.50	5.00	5.00	2.50					
75.000	2.50	5.00	5.00	2.50					
75.000	2.50	8.00	5.00	2.50					

#### Eye-Flex® belt with springs as spacers

Springs help create a more dimensionally stable belt in heating or freezing applications. These belts are more dimensionally stable because the wires are able to move on the cross rod. Springs also expose a large proportion of the connecting rod for improved cleaning and sanitising. The gap width is secured by springs placed on the cross rod between adjacent links. Permanent fixing of the wire links does not occur with this method. They are held in relative position by compression of the springs.



Eye-Flex® belt with springs as spacers										
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Belt Pitch	Wire Diameter	Cross Rod Diameter	Minimum Gap Spacing		Gap Spacing also Available in these Widths					
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	
25.000	2.00	5.00	7.00	8.00	10.00	12.00	15.00	17.50	20.00	
25.400	2.00	5.00	7.00	8.00	10.00	12.00	15.00	17.50	20.00	
30.000	2.00	4.00	7.00	8.00	10.00	12.00	-	-	20.00	
30.000	2.00	5.00	7.00	8.00	10.00	12.00	15.00	17.50	20.00	
31.750	2.00	5.00	7.00	8.00	10.00	12.00	15.00	17.50	20.00	
50.000	2.00	5.00	7.00	8.00	10.00	12.00	15.00	17.50	20.00	
50.000	2.50	5.00	7.50	8.00	10.00	12.00	15.00	17.50	20.00	
50.000	2.50	6.00	7.50	-	-	-	-	-	20.00	
50.000	3.00	8.00	10.50	-	-	-	15.50	-	20.00	
50.800	2.00	6.00	7.00	-	-	-	-	-	-	
50.800	2.00	8.00	8.00	-	-	-	-	-	-	
50.800	2.50	6.00	7.50	-	-	-	-	-	20.00	
50.800	2.50	8.00	10.00	-	-	-	15.00	-	20.00	
50.800	3.00	8.00	10.50	-	-	-	15.50	-	20.00	
50.800	4.00	8.00	12.00	-	-	-	-	-	-	
60.000	2.50	5.00	7.00	8.00	10.00	12.00	15.00	17.50	20.00	
60.000	2.50	5.00	7.50	8.50	10.00	12.00	15.00	17.50	20.00	
70.000	4.00	7.00	12.00	-	-	-	-	-	-	
75.000	2.50	5.00	7.50	8.50	10.00	12.00	15.00	17.50	20.00	
75.000	2.50	8.00	10.00	-	10.00	-	15.00	-	20.00	
100.000	3.00	8.00	10.50	-	10.50	-	15.50	-	20.00	



#### **Optional Features**

#### **Chain Edge**

Chain edges are available on Eye-Flex® belts as an alternative method for driving the belt for enhanced tracking and reliability.



#### **Reinforcing Plates**

Reinforcing plates are the typical edge style. These are solid metal plates added before the connecting rod is welded. Additional reinforcing plates can be added at the edge of the belt, or at specified increments across the belt width to further enhance the strength of this belt.



#### **Cross Flights**

Flights are available on Eye-Flex® belts to aid in product alignment, separation, or loading. Flights can also form a barrier across the belt width, that can aid transport of product up inclines. Other styles of flights can hold product in fixed positions. Flights can be bolted, welded in place, or formed directly into the wire. Height, shape and style of flight can be customised for your application. Contact our Technical Sales Engineers for more information.



#### **Side Guards**

Eye-Flex® belts can be equipped with side guards to prevent product from falling off the side of the belt. Height and shape of the side guards can be customised for your product or application. These side guards can also be inserted at various points across the belt width providing a positive separation between rows of product.



#### **Drive Components**

#### **Sprockets**

With their positive engagement, sprockets eliminate the possibility of slippage on the drive shaft that can occur on a friction drive system. All sprockets are available in stainless steel or polyacetal plastic. The table below shows the available pitch diameters and number of teeth for each belt pitch.



Sprocket pitch diameter table											
Number		Belt Pitch mm									
of Teeth	15.875	25.00	25.40	30.00	31.75	50.00	50.80	60.00	70.00	75.00	100.00
7	36.60	57.60	58.50	69.10	73.20	115.20	117.10	138.30	161.30	172.90	230.50
10	51.40	80.90	82.20	97.10	102.80	161.80	164.40	194.20	226.50	242.70	323.60
12	61.30	96.6	98.10	115.90	122.70	193.20	196.30	231.80	270.50	289.80	386.40
14	71.30	112.4	114.20	134.80	142.70	224.70	228.30	269.60	314.60	337.10	449.40
15	76.40	120.2	122.20	144.30	152.40	240.50	244.30	288.60	336.70	360.70	481.00
16	81.40	128.2	130.20	153.80	162.70	256.30	260.40	307.60	358.80	384.40	512.60
18	91.40	144.0	146.30	172.80	182.80	287.90	292.60	345.50	403.10	431.90	575.90
20	101.50	159.8	162.40	191.80	203.00	319.60	324.70	383.60	447.50	479.40	

#### **Sprocket Material**

- PA6G (Polyamide Cast Nylon 6) FDA approved.
- POM (PolyOxyMethylene / Acetal) FDA approved.
- 1.4305 Stainless Steel standard
- 1.4404 Stainless Steel for corrosive environments
- Mild Steel
- Other materials on special request.

#### **Cage Rollers**

This positive drive system is often used for chain edge belts. In addition to driving the chain edge, this drive system also engages the belt across the entire belt width. Cage rollers are an excellent choice for applications that require a sanitary and hygienic drive system.





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