Unigrid & Spiragrid belts

Unigrid and Spiragrid belts can change direction and travel on different planes, hence one Unigrid or Spiragrid belt can be used to replace several separate conventional units, and their individual drive and transfer systems; offering savings at both installation and annual running costs.

Please find below detailed technical data regarding our range of Unigrid and Spiragrid belts. For further details and advice regarding your application; talk to your Locker Group sales consultant.

Unigrid and Spiragrid belts are extremely versatile, the ability to move in different directions as mentioned above brings ongoing efficiency, plus the large open areas makes them suitable for freezing, heating, drying, cooking or transporting applications. This large open area also allows for easy cleaning and ample airflow for product cooling. The Spiral overlay option offers additional support when necessary, updating Unigrid belts to become Spiragrid.

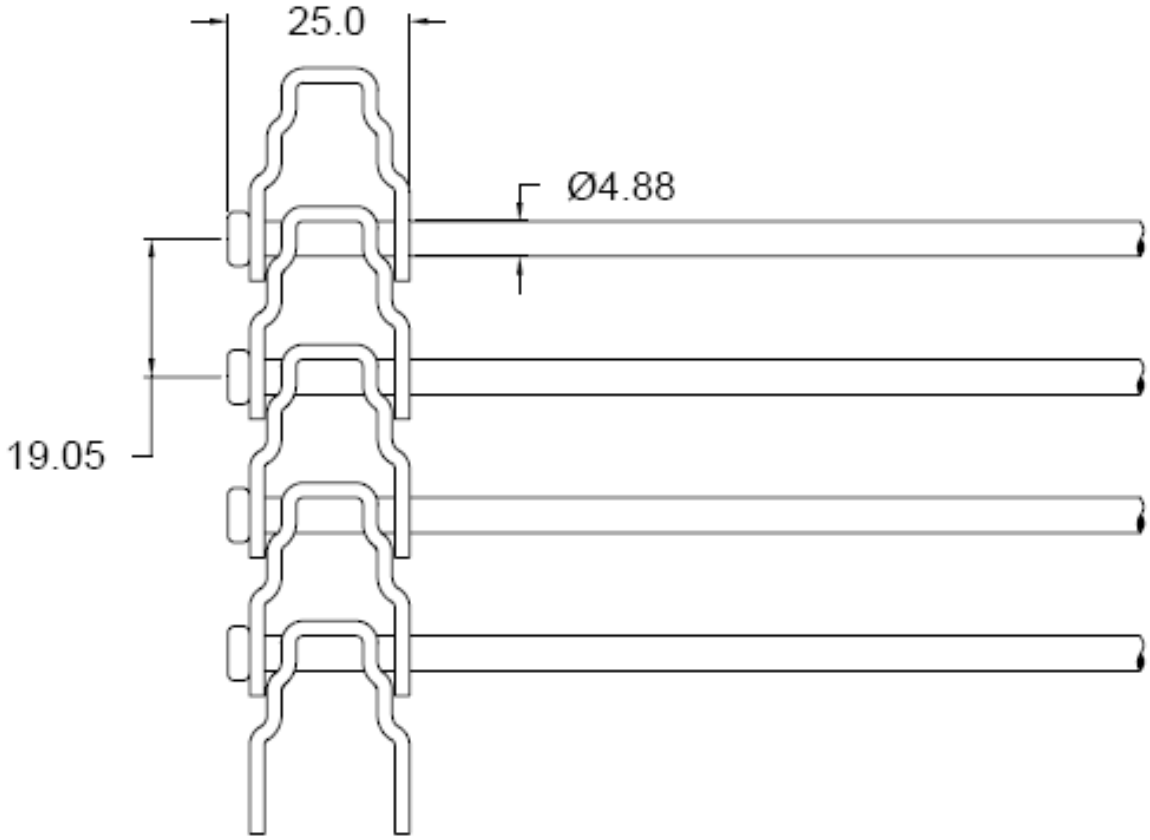
Unigrid / Spiragrid belts are sprocket driven; the sprockets engage the belt within the chain links, resulting in accurate consistent tracking.

These belts are fast & easy to assemble using the threaded joining rod provided with the belt sections. Belt sections can also be tack welded to retain if necessary.

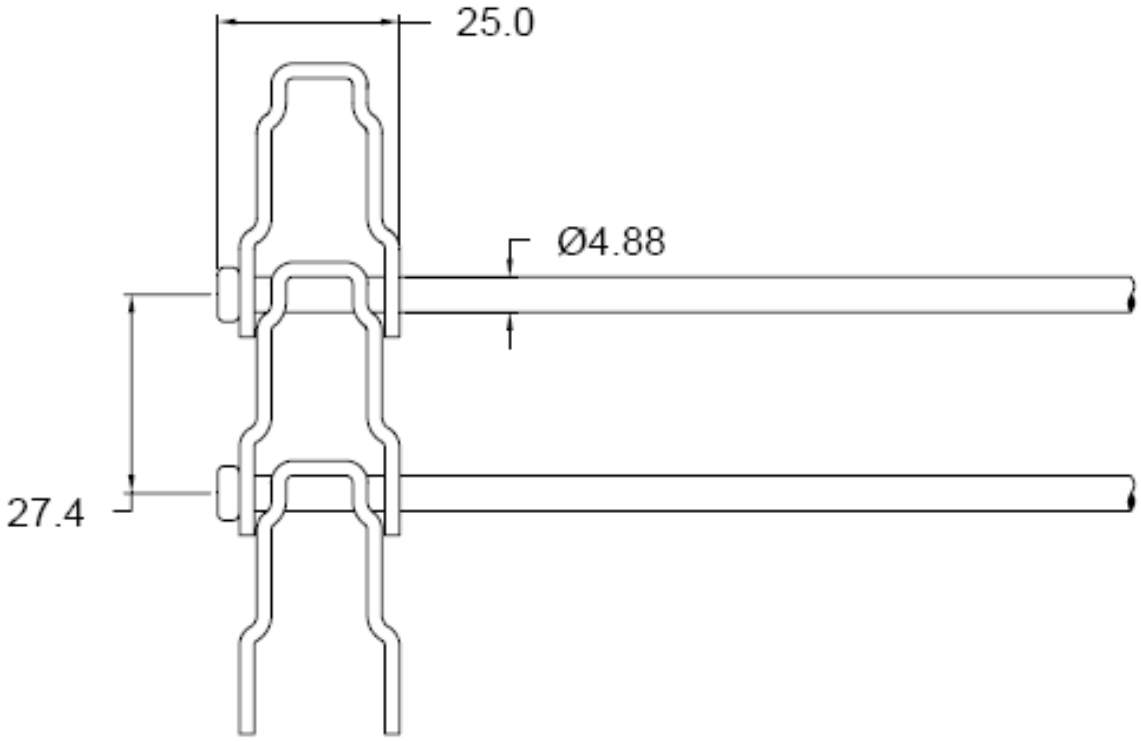
Operating Characteristics:

Overall Width:	100mm (min) 1830mm (max) Note – widths over 1065mm require centre row of links and can **only** be used for straight applications.	
Carry width:	Overall, minus 50mm	
Min Int'd radius:	2.2 x W	
Min sprocket diam.:	75mm	
Max. belt speed:	0.75m/s	
Method of drive:	Sprocket or drum	
Working tension:	90 kgs (max) straight running	45kgs (max) turn curve application
Distance between pins:	U195 – 14mm (nominal)	U275 – 22.5mm (nominal)
Weight/m^2:	U195 – 11kg	U275 – 9kg
Link section:	11mm x 2mm	
Rod diameter:	∅ 4.88mm	
Rod pitch:	U195 -19.05mm (nominal)	U275 – 27.4mm (nominal)
Rod strength:	11-1200 MPa	
Edge finish:	Hot upset button welded off to links	
Joining Rods:	∅ 4.88mm diameter threaded 3/16" whit. (supplied) or collar welded edges. Nuts to outside on one direction curves – or cut threaded length back to nut, weld off and finish to smooth contour.	
Operating Temp's:	-40ºC to +800ºC	
Material Types:	Links - T304 S/S Rods - HD Brt m/steel, T304 S/S and T316 S/S Mesh Overlay – m/steel, T304 & T316	

U195 Unigrid



U275 Unigrid



A range of apertures and wire diameters are available.

U195 Spiragrid			U275 Spiragrid		
Overlay Specification	Weight/m^2		Overlay Specification	Weight/m^2	
	∅1.25	∅1.6		∅1.25	∅1.6
19.05 x 19.05	10.5	11.5	19.05 x 27.4	7.9	9
16.9 x 19.05	10.7	12	16.9 x 27.4	8.1	9.3
12.7 x 19.05	11.2	13	12.7 x 27.4	8.6	10.2
10.2 x 19.05	11.7	13.9	10.2 x 27.4	9.1	11.1
8.5 x 19.05	12.3	14.9	8.5 x 27.4	9.6	11.9
6.4 x 19.05	13.4	16.9	6.4 x 27.4	10.6	13.6
5.1 x 19.05	14.5	18.8	5.1 x 27.4	11.6	15.4
4.2 x 19.05	17.5	21.9	4.2 x 27.4	13.1	17.6

Spiragrid

The addition of a spiral overlay increases the versatility of Unigrid offering the advantage of small product retention and better product support, while maintaining belt performance.

Installation

To ensure satisfactory belt performance it is imperative the following instructions are strictly adhered to:

I. Keyways and sprocket teeth are in line
II. Terminal shafts are at right angles to the direction of belt travel.
III. Continuous plane bearing surface in internal arc.
IV. Smooth transition from internal bearing faces to straight sections.
V. Sprocket teeth to drive against round wires.
VI. Sprocket teeth to be positioned centrally in edge links.
VII. Align belt on unit before applying any tension.

Nominal Sprocket Dimensions – U195				
Teeth	P.C.D.	O.D.	L.T.B.	Wt/kg
12	73.6	84	25	0.45
17	104	112	40	2.00
25	152	160	40	3.90

Nominal Sprocket Dimensions – U275				
Teeth	P.C.D.	O.D.	L.T.B.	Wt/kg
12	106	118	25	0.45
17	149	160	40	2.00
25	218.45	228	40	3.90