WHITEHOUSE
FLEXIBLE TUBING LTD

STAINLESS STEEL POLYLOCK



STAINLESS STEEL POLYLOCK FLEXIBLE METAL HOSE

Stainless Steel Polylock is a flexible stripwound metal hose manufactured from a single stainless steel strip, precision-formed to create a fully interlocked section.

Built-in flats within the hose wall provide excellent anti-torsion properties, helping to prevent the hose from twisting or unwinding during processing.

Key Features

- Great flexibility
- High mechanical strength
- Long service life
- Anti-torsion hose design
- Maximum operating temperature of +650°C
- Suitable for exhaust, ducting, extraction and materials handling applications

Alternative lengths can be manufactured on request.

Maximum Operating Temperature

Polylock is engineered to withstand temperatures up to +650°C, making it suitable for extreme heat applications.

Please note: All listed diameters refer to internal diameter (ID). Please confirm sizing before ordering. We can manufacture alternative lengths, as required - please contact us for non-standard lengths.

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PRODUCT DETAILS

Stainless Steel Polylock Hose – Product Details

Stainless Steel Polylock is manufactured from a single stainless steel metal strip, precision-formed around a mandrel to create a fully interlocked section.

A series of flats are built into the hose wall to provide anti-torsion properties. This helps prevent the hose from unwinding when cut, removing the need for tack welding and making the hose easier to process on site.

Key Features

- Single stainless steel strip construction
- Fully interlocked section
- Great flexibility
- High mechanical strength
- Long service life
- Built-in anti-torsion properties
- Maximum operating temperature of +650°C
- No need for tack welding when cut
- Available in a range of internal diameters
- Alternative lengths available on request

The Polylock section provides a particularly smooth surface in one direction. For optimum flow characteristics, the media should flow through the tubing in the recommended flow direction.

Following the correct flow direction can help protect both the media and the tubing and can help prevent damage when handling abrasive materials such as plastic pellets.

All listed hose diameters refer to the internal diameter (ID).

TECHNICAL DATA

I/D INCHES	I/D MM	O/D MM	INSIDE BEND RADIUS	WEIGHTS (KG) PER 100M
1.1/4″	32	36	165	59
1.3/8″	35	39	170	65
1.1/2″	38	42	174	70
1.5/8″	41	45	177	76

1.3/4″	44	48	184	83
1.7/8″	48	52	189	90
2″	50	54	193	100
2.1/8″	54	58	200	108
2.1/4″	57	61	215	113
2.3/8″	60	64	227	118
2.1/2″	63	67	250	123
2.5/8″	67	71	267	132
2.3/4″	70	74	277	140
3″	76	80	300	150

APPLICATIONS

Stainless Steel Polylock Hose Applications

Stainless Steel Polylock is suitable for a range of industrial applications where flexible metal hose is required for the movement, extraction or handling of materials.

Typical applications include:

- **Conveyance** – suitable for conveying materials through flexible metal tubing systems
- **Ducting & Extraction** – suitable for flexible ducting and extraction applications
- **Materials Handling** – suitable for handling and transferring materials

Polylock is also suitable for vehicle and industrial exhaust systems, fume extraction and abrasion-resistant material transfer applications.

SPECIAL FEATURES

Polylock Hose Special Features

Stainless Steel Polylock has a series of flats built into the hose wall to provide anti-torsion properties. This helps prevent the hose from unwinding when it is cut.

As a result, there is no need for tack welding after cutting, making Polylock easier to process on site.

Recommended Flow Direction

The design of the Polylock section provides a particularly smooth surface in one direction.

For this reason, Whitehouse recommends that the media travelling through the tubing follows the specified flow direction of the

hose.

Following the recommended flow direction provides a number of benefits, including:

- Helping to protect the media passing through the hose
- Helping to protect the tubing itself
- Providing optimum flow characteristics
- Helping to prevent damage to the media or tubing when handling abrasive materials

This is particularly important when the hose is used with abrasive materials such as plastic pellets.

ASSEMBLIES

Made-to-Order Stainless Steel Polylock Hose Assemblies

Whitehouse offers a wide range of made-to-order Stainless Steel Polylock hose assemblies, allowing the hose to be supplied with end fittings to suit the required application.

Standard end fitting options include:

- Flange
- Threaded end adapter
- Unicone end
- Plain spigot end
- Other non-standard end fittings

For non-standard end fittings, select the 'Other' option when completing the Assemblies RFQ and provide details of the required fitting.

Drawings can also be submitted for bespoke or non-standard assembly requirements.

Assembly RFQ form

FAQS

Frequently Asked Questions About Stainless Steel Polylock Hose

What is Stainless Steel Polylock?

Stainless Steel Polylock is a flexible stripwound metal hose manufactured from a single stainless steel strip, precision-formed around a mandrel to create a fully interlocked section.

What is Stainless Steel Polylock used for?

Typical applications include vehicle and industrial exhaust systems, ducting and fume extraction, conveyance and materials handling, including abrasion-resistant transfer applications.

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What is the maximum operating temperature of Polylock?

Stainless Steel Polylock has a maximum operating temperature of +650°C, making it suitable for high-temperature applications.

Does Polylock have anti-torsion properties?

Yes. A series of flats are built into the hose wall to provide anti-torsion properties, helping to prevent the hose from twisting or unwinding when cut.

Does Polylock need to be tack welded when cut?

No. The anti-torsion design prevents the hose from unwinding when cut, removing the need for tack welding and making it easier to process on site.

Does Stainless Steel Polylock have a recommended flow direction?

Yes. The Polylock section provides a particularly smooth surface in one direction. Whitehouse recommends that media flows through the tubing in the indicated flow direction to help provide optimum flow characteristics and protect both the media and the tubing.

Is Polylock suitable for handling abrasive materials?

Yes. Following the recommended flow direction can help prevent damage to the media or tubing when Polylock is used with abrasive materials such as plastic pellets.

What sizes of Stainless Steel Polylock are available?

The standard technical data covers internal diameters from 32mm to 76mm. All listed diameters refer to the internal diameter (ID).

Can alternative Polylock lengths be manufactured?

Yes. Alternative lengths can be manufactured as required. Contact Whitehouse for non-standard lengths.

Can Polylock be supplied as a made-to-order assembly?

Yes. Whitehouse offers made-to-order Polylock assemblies with standard end fitting options including flanges, threaded end adaptors, Unicone ends and plain spigot ends. Other non-standard end fittings can also be specified.