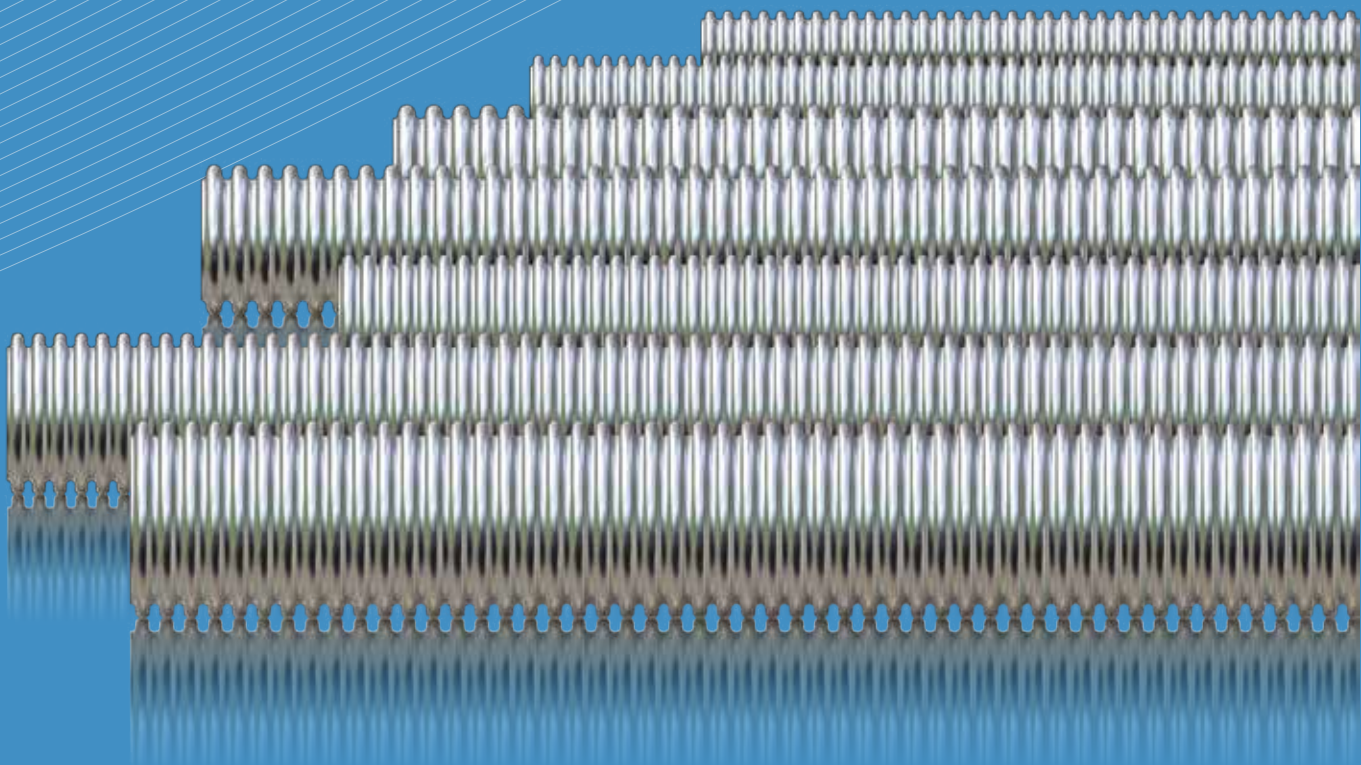


# »»»<sup>®</sup> ARSEN

FLEXIBLE METAL HOSES  
WITHOUT BRADING



# CONTENTS

<b>CONTENTS</b>	2
<b>GENERAL EXPLANATIONS</b>	3
<b>STANDARD PITCH METAL HOSES</b>	4
<i>Dimensions and Operating Conditions</i>	
<b>WIDE PITCH METAL HOSES</b>	4
<i>Dimensions and Operating Conditions</i>	
<b>QUICK CONNECTION TECHNIQUES</b>	5
<i>Material Specifications</i>	
<i>Dimensions and Operating Conditions</i>	
<i>Installation</i>	

# GENERAL EXPLANATIONS



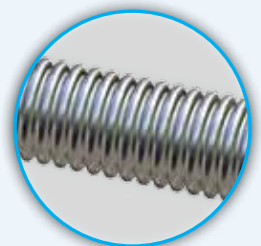
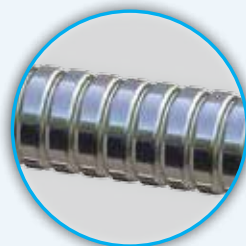
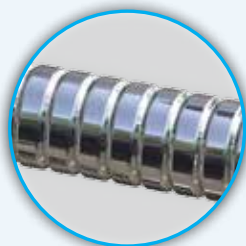
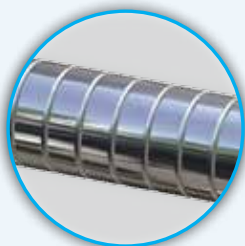
*Flexible metal hoses are produced by welding a 0.15 – 0.40 mm thick stainless steel strip longitudinally under protective gas from inside and outside and then forming either mechanically or hydraulically. Mechanical forming is a four step process as can be seen below. Process called forming is necessary to shape thin sheet without being harmed. It also makes it possible to produce metal hoses in any profile without extra costs for molds.*

*The biggest advantage of metal hoses against stripwound hoses which have lack of 100% leaktightness but more flexibility and less production costs is that corrugated metal hoses have 100% leaktightness.*

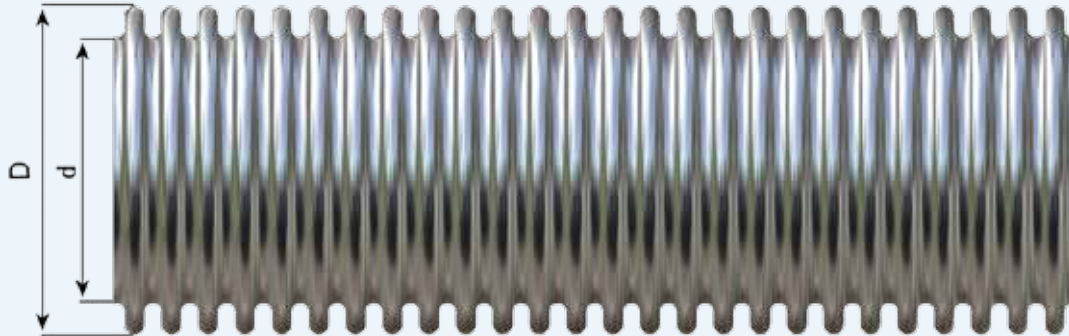
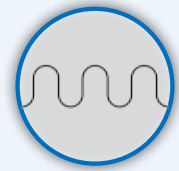
*Stainless steel sheet with its resistance against high temperature (-270 °C +600 °C) and corrosion together with flexible metal hoses' high flexibility and flexing free of constrictions are turned into reliable and serviceable hoses used widely many areas of applications.*

*Under protection of braiding in variety of thicknesses and profiles in order to increase their resistance against pressure and external influences and with additional protective measures for moving systems, metal hoses are now an essential requirement for any type installations in industry. One of the reasons of widely usage of metal hoses is that they remove difficulties of inflexible, fixed connections.*

*All types of flexible metal hoses are produced and tested according to TS EN ISO 10380, and all hoses are subject to 100 % leakage test after first production and also after welding their fittings before shipping.*



# STANDARD PITCH METAL HOSES



## Dimensions and Operating Conditions

DN		Inner Diameter	Outer Diameter	d D	Working Pressure	Bend Radius		Weight (±) %10
(mm)	(inch)	d (mm)	D (mm)	tol. (±)	20 °C (bar)	Static	Dynamic	(kg/m)
010	3/8"	10.1	14.3	0.20	10	18	130	0.10
012	1/2"	12.2	16.8	0.20	9.0	20	135	0.11
016	5/8"	16.2	21.8	0.20	7.0	30	145	0.17
020	3/4"	20.3	26.6	0.20	4.0	35	160	0.22
025	1"	25.4	32.2	0.30	3.0	40	185	0.33

# WIDE PITCH METAL HOSES



## Dimensions and Operating Conditions

DN		Inner Diameter	Outer Diameter	d D	Working Pressure	Bend Radius		Weight (±) %10
(mm)	(inch)	d (mm)	D (mm)	tol. (±)	20 °C (bar)	Static	Dynamic	(kg/m)
010	3/8"	10.1	14.2	0.20	16	17		0.08
012	1/2"	12.4	16.7	0.20	16	19		0.09
016	5/8"	16.6	22.0	0.20	10	25		0.14
020	3/4"	20.4	26.0	0.20	10	30		0.16
025	1"	25.6	31.8	0.30	8.0	35		0.24

# QUICK CONNECTION TECHNIQUES



*It is quite important to use an easy and quick connection technique for hose installations in solar energy systems.*

*This provides cost savings by reducing workmanship costs besides providing products at a good cost.*

*Because no handiness is required for mounting hoses and connection parts we produce, it is quite easy for anyone without experience.*

## Material Specifications

**Hose:** AISI 316L/ 304L Stainless Steel  
**Ring:** AISI 304 Stainless Steel

**Fittings:** MS58 Brass (Nickel Coated)  
**Seal:** Klingerite without Asbestos

Dimensions and Operating Conditions							
Hose Diameter	Fitting Diameter	Inner Diameter	Outside Diameter	Tol. (±)	Kit Hose Length	Kit Part Qty.	Temp. Rating
DN10 / 3/8"	3/8"	Please see the tables in the previous page			25 m	10 pcs of Nut Ring Seal	150 °C
DN12 / 1/2"	1/2"				25 m		150 °C
DN16 / 5/8"	3/4"				20 m		150 °C
DN20 / 3/4"	1"				15 m		150 °C
DN25 / 1"	1 1/4"				10 m		150 °C

## Installation



*Hose is cut in needed length.*



*Swatting equipment is adjusted into the last convolution and closed.*



*The convolution is flattened by pulling and releasing the equipment as shown in the figure.*



*The ring is tightened and fixed behind the flattened convolution.*



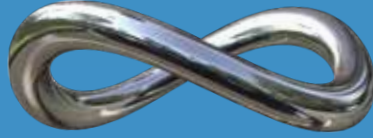
*The seal is placed inside the nut to finish the installation.*



*The hoses are now ready to install with seals and preferably with double sided nipples.*

**Arsen Industrial Installation  
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