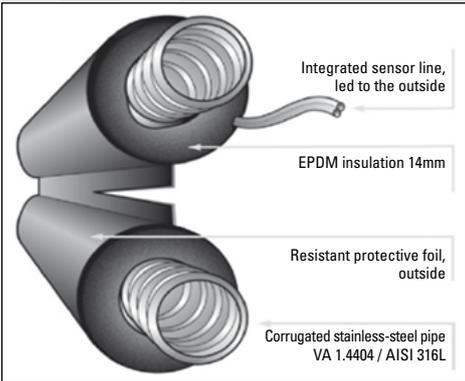


# PIPING

## DOUBLE CORRUGATED PIPE



### Product description

The double corrugated pipe simplifies collector connection up to the roof insertion or the complete piping on to the solar station. The double corrugated pipe system is characterised by its unique connection system, its temperature resistance and the high flexibility of the pre-insulated pipes.

The highly pressure-resistant metal hose with wide corrugation is semi-elastic and allows the shape to be easily changed by manual bending. The corrugated hose can therefore be easily adjusted to individual needs and requirements. The insulation of the protective sleeve is UV resistant, provides protection from mechanical strain, is free of PVC and CFC, and can easily be separated without loss of insulation. The stud link, which connects both pre-insulated corrugated pipes, can easily be separated with a knife - without damaging the insulation. Due to the pre-insulated pipe with integrated two-wire sensor cable, as well as to the unique connection system of the forward and return flow, time and costs are saved during installation.

All TiSUN double corrugated pipes are delivered with 4 protective caps and 4 shrink sleeves for weatherproof installation without penetration or any foreign bodies.

### Specifications

<b>Type</b>	<b>DWR16 / DWR20</b>
<b>Material</b>	Stainless steel 1.4404 (AISI 316L), longitudinal weld, no braiding
<b>Corrugation</b>	Wide corrugation
<b>Temperature range:</b>	-270 °C to +600 °C
<b>Oxygen diffusion proof</b>	Yes

	<b>DN16</b>	<b>DN20</b>
Internal diameter [mm]	16.3/-0.4	20.4/-0.4
Outer diameter [mm]	21.4/-0.4	26.7/-0.4
Static bending radius [mm]	25	30
Double corrugated pipe width [mm]	100	110
Double corrugated pipe height [mm]	50	55
Operating pressure at 20°C /SF3 [bar]	16	10
Bursting pressure [bar]	> 4x BD	> 4x BD
Weight [g/m]	0.14	0.19
Wall thickness [mm]	0.18	0.18
Content [l/m]	0.27	0.43

### Available lengths

Lengths [m]	1.0	3.0	5.0	10.0	15.0	20.0	25.0	50.0	Special length
	<b>DN16</b>								
<b>Type</b>	DWR16-1	DWR16-3	DWR16-5	DWR16-10	DWR16-15	DWR16-20	DWR16-25	DWR16-50	DWR16-SL
<b>Item no.</b>	1530015	1530016	1530017	1530018	1530019	1530020	1530021	1510695	1530022
	<b>DN20</b>								
<b>Type</b>	DWR20-1	DWR20-3	DWR20-5	DWR20-10	DWR20-15	DWR20-20	DWR20-25	DWR20-50	DWR20-SL
<b>Item no.</b>	1530023	1530024	1530025	1530026	1530027	1530028	1530029	1510696	1530030
<b>Packaging unit</b>	PE film	PE film	PE film	Box	Box	Box	Box	Box	Specific
<b>Length / Width / Height [cm]</b>	100 x 11 x 5.5	55 x 55 x 15	55 x 55 x 30	75 x 75 x 25	75 x 75 x 30	75 x 75 x 35	75 x 75 x 40	120 x 80 x 53	-

## DOUBLE CORRUGATED PIPE

### Insulation

Material	Foam made using synthetic rubber with tear-resistant covering film, separable; incl. sensor cable.
Wall thickness [mm]	14 mm
CFC free	yes
UV resistant	yes
Min. temperature [°C]	-50
Max. temperature [°C]	+150
Thermal conductivity at 0°C [W/mK]	$\lambda = 0.038$
Thermal conductivity at 40 °C [W/mK]	$\lambda = 0.040$
Vapour diffusion resistance	$\mu \geq 4,500$
Flammable material class	Euroclass E
Flame dispersal on the surface	Normal flammability (DIN 4102-B2)
Practical fire behaviour	Self-extinguishing, non-drip, does not spread fire further

### Pressure loss diagram for corrugated stainless steel pipe

Pressure loss in [mbar] per pipe length [m], pressed out by the volume flow [m<sup>3</sup>/h] of a glycol-water mixture 40:60 through flexible corrugated stainless steel pipe. Operating temperature: 40°C - density: 1027 kg/m<sup>3</sup> - kinematic viscosity 2.6\*10<sup>-6</sup> m<sup>2</sup>/s

