

Piping provides optimum energy transport

The TiSUN® philosophy that the whole system is only as good as the weakest link in the chain also holds true for our piping products. Our piping ensures efficient energy transfer from the collector to the corresponding solar components.



Double spiral piping connection and piping set for large collectors

The connection piping sets connect the collector and solar station and replace the HAS-11 to HAS-44 hydraulic connection sets. Stainless steel double spiral piping, insulated with PE film (removable), incl. sensor cable and threaded connection parts. Temperature range: max. +175 °C, fire resistance class B2, UV-stable.



For large collector

Set consists of: double spiral piping, sensor cable, threaded connection for large collector and solar station, immersion tube, dummy plug, attachment clamps.

| Type | Spiral piping | Length | Collector connection | for solar station | Item No. |
|-------------------|---------------|--------|----------------------|---------------------------------|----------------|
| AVS 15/22S | DN15 | 15 m | Lge. coll.- 22 mm | SF 25/50, SSR 25/50, SSRH 25/50 | 1530008 |
| AVS 20/22S | DN20 | 20 m | Lge. coll.- 22 mm | SF 25/50, SSR 25/50, SSRH 25/50 | 1530006 |
| AVS 25/22S | DN25 | 20 m | Lge. coll.- 22 mm | SF 25/50, SSR 25/50, SSRH 25/50 | 1530007 |

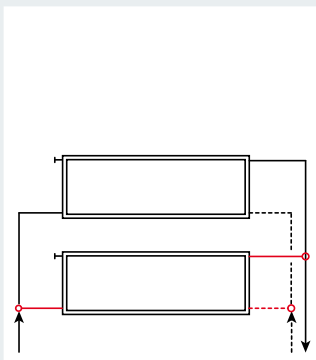


Note: Installation, connection, roof insertion and laying of connection piping set takes place on site!

For installation of FI collectors by TiSUN® installers: the connection piping set installation to be done on site must be performed before installing the metal covering! For installation of FA collectors by TiSUN® installers: the connection piping set installation to be done on site must be performed before installing the piping duct!

Expansion piping set for additional row of collectors, installed one above the other

The expansion piping sets (EVS) connect two collector arrays installed one above the other and must only be used with spiral piping (spiral piping set SVS or connection piping set AVS). Temperature range: max. +175 °C, fire resistance class B2, UV-stable.



For FM-S and FM-W module collector

Set consists of: 2x T-20, 2x KL20/18, 18 mm dummy plug, DN20 2.5 m stainless steel double spiral piping incl. separable insulation.

| Type | Spiral piping | Length | Collector connection | Item No. |
|---------------|---------------|--------|----------------------|----------------|
| EVS-FM | DN20 | 2.5 m | FM- 18 mm | 1510159 |

For FA, FI, FF large collector

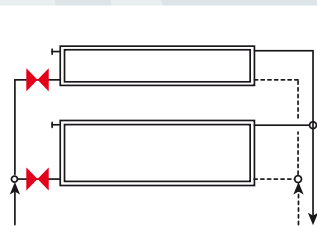
Set consists of: 2x T-25, 2x KL25/22, 22 mm dummy plug, DN25 2.5 m stainless steel double spiral piping incl. separable insulation.

| | | | | |
|----------------|------|-------|-------------------|----------------|
| EVS-GFK | DN25 | 2.5 m | Lge. coll.- 22 mm | 1510160 |
|----------------|------|-------|-------------------|----------------|

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Line regulator valve with threaded connection for spiral pipe

High-temperature bypass Taco setter with threaded connection for regulating and shutting off collector arrays of different sizes. Operation with bypass viewing window to 130 °C/8 bar; with plugs (in scope of delivery) to 185 °C/10 bar. Fast regulation through direct reading of volume flow in l/min. Can be installed anywhere and needs no maintenance.



For FM module collector and FA, FI, FF large collector

Set consists of: 2 line regulator valves and 4 adapters to spiral pipe.

| Type | Spiral pipe | Valve | Item No. |
|----------------------|-------------|----------------|----------------|
| REG 20 2-12I | DN20 | TCS 2-12 l/min | 1520016 |
| REG 25 10-40I | DN25 | TCS10-40 l/min | 1520018 |



Note: Install regulation set as far away as possible from the collector and with UV and weather protection.

Double spiral piping set for module collector

Consisting of: stainless steel double spiral piping, insulated with PE film (removable), with sensor cable, incl. threaded connection parts for collector connection and solar station with attachment clamps, max. +175 °C, fire resistance class B2, UV-stable.

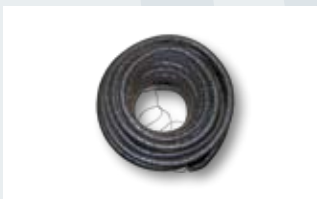


For FM module collector

| Type | Designation | Pipe | Length | For solar station | Item No. |
|-------------------|-------------|-------|--------|---------------------------------|----------------|
| SVS 15/18S | DN 15 | Cu 18 | 15 m | SF 25/50, SSR 25/50, SSRH 25/50 | 1510339 |
| SVS 20/18S | DN 20 | Cu 18 | 20 m | SF 25/50, SSR 25/50, SSRH 25/50 | 1510340 |

50 m double spiral piping incl. insulation

Consisting of: stainless steel double spiral piping, insulated with PE film (removable), incl. sensor cable, max. +175 °C, fire resistance class B2, UV-stable.



| Type | Length | Designation | Item No. |
|-------------|--------|-------------|----------------|
| W 15 | 50 m | DN 15 | 1510143 |
| W 20 | 50 m | DN 20 | 1510144 |
| W 25 | 50 m | DN 25 | 1510145 |

Double pipe clamp

Oval clamp for attachment of double spiral piping (incl. screws and wall plugs).



| Type | Designation | Item No. |
|-------------|-----------------|----------------|
| S 15 | DN 15 | 1510156 |
| S 20 | DN 20 and DN 25 | 1510157 |

Female-thread adapter

Female-thread adapter on spiral pipe (incl. graphite seal to +450 °C).



| Type | Designation | Item No. |
|-----------------|--------------------------|----------------|
| UI 15/34 | DN 15-3/4" female thread | 1510121 |
| UI 20/34 | DN 20-3/4" female thread | 1510122 |
| UI 25/34 | DN 25-3/4" female thread | 1510124 |
| UI 25/1 | DN 25-1" female thread | 1510123 |

Male-thread adapter

Male-thread adapter on spiral pipe (incl. graphite seal to +450 °C).



| Type | Designation | Item No. |
|-----------------|------------------------|----------|
| UA 15/34 | DN 15-3/4" male thread | 1510125 |
| UA 20/34 | DN 20-3/4" male thread | 1510126 |
| UA 25/34 | DN 25-3/4" male thread | 1510128 |
| UA 25/1 | DN 25-1" male thread | 1510127 |

T-piece

T-piece for spiral pipe (incl. graphite seal to +450 °C).



| Type | Designation | Item No. |
|-------------|-------------|----------|
| T 15 | DN 15 | 1510129 |
| T 20 | DN 20 | 1510130 |
| T 25 | DN 25 | 1510131 |

Coupling

Coupling for spiral pipe (incl. graphite seal to +450 °C).



| Type | Designation | Item No. |
|-------------|-------------|----------|
| K 15 | DN 15 | 1510132 |
| K 20 | DN 20 | 1510133 |
| K 25 | DN 25 | 1510134 |

Adapter to cutting ring

For cutting ring threaded connection incl. seal.



| Type | Designation | Item No. |
|-----------------|-------------|----------|
| KL 15/18 | DN 15/18 mm | 1510135 |
| KL 15/22 | DN 15/22 mm | 1510139 |
| KL 20/18 | DN 20/18 mm | 1510138 |
| KL 20/22 | DN 20/22 mm | 1510136 |
| KL 25/28 | DN 25/28 mm | 1510137 |

Adapter to solar station

For cutting ring threaded connection incl. seal.



| Type | Designation | Item No. |
|-----------------|-------------|----------|
| US 20/22 | DN 20/22 mm | 1510161 |
| US 25/28 | DN 25/28 mm | 1510305 |

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Transition angle from spiral pipe to cutting ring threaded connection for FA, FI, FF large collectors

Consisting of: 90° transition angle from spiral pipe to collector (cutting ring threaded connection) and graphite seal.



| Type | Spiral pipe | Collector connection | Item No. |
|-----------|-------------|----------------------|----------|
| KLW 15/22 | DN15 | Lge. coll. - 22 mm | 1510168 |
| KLW 20/22 | DN20 | Lge. coll. - 22 mm | 1510169 |
| KLW 25/22 | DN25 | Lge. coll. - 22 mm | 1510170 |

Replacement conical seal

Graphite seal to +450 °C.



| Type | Spiral pipe | Item No. |
|------|-------------|----------|
| E 15 | DN 15 | 1510140 |
| E 20 | DN 20 | 1510141 |
| E 25 | DN 25 | 1510142 |

Reduction for 25/50 m² solar stations with 22 mm connections

Connection set consisting of 4 pieces of 22 to 28 mm reduction cutting ring threaded connection with support sleeves for 28 mm copper pipe.



| Type | Connection | Designation | Item No. |
|------------|-----------------|--|----------|
| US 22S/28S | 22 mm, 28 mm | Reduction threaded connection 22/28 | 1510342 |