



Armaflex® DUOSOLAR VA

The unique join-split solution for solar professionals

- ▶ The Pre-Insulated Pipe for Solar Hot Water Systems, Saving Time and Money
- ▶ Pre-Insulated Feed and Return Pipes Can Be Easily Separated and Joined with a Tool
- ▶ External Copolymer Foil Protects Against UV Radiation and Mechanical Strain



ARMAFLEX DUOSOLAR: The unique join-split solution for solar professionals

Armaflex DuoSolar is a system solution with pre-insulated feed and return pipes for solar hot water applications. Armaflex DuoSolar is used to connect the solar panel with the thermal storage water heater in an easy and professional way. It optimises thermal efficiency of the entire system and increases the life expectancy of the installation. Thanks to the pre-applied insulation, the patented join split connection system of the feed and return pipe and the integrated sensor cable, Armaflex DuoSolar saves time and lowers assembly costs. Armaflex DuoSolar, presented in continuous coils to reduce waste material, comes with a complete range of accessories to ensure a smooth & secure installation.

- ▶ Meets the demands of modern heating systems
- ▶ Full product range to fit all standard thermal solar systems
- ▶ External copolymer foil protects against UV radiation and mechanical strain
- ▶ Pre-insulated feed and return pipes can be easily separated and joined with a tool



Technical Product Data		
	Values	Remarks
Description	Two corrugated stainless steel pipes are pre-insulated with highly flexible, temperature- and UV-resistant HT/Armaflex tubes, covered with a polyolefin copolymer foil.	
Max. Surface Temperature	+150° C	For temperatures below -50° C, please consult our Technical Department. Tel. +44 (0)161 287 7038 · Fax +44 (0)161 633 2685
Min. Surface Temperature	-50° C	
Thermal Conductivity at 0° C	0.038 W/(m · K)	Test according to EN ISO 8497
Thermal Conductivity at +40° C	0.042 W/(m · K)	
Water Vapour Permeability	Moisture Resistance Factor $\mu > 4,000$	Test according to DIN 52 615
Fire Performance	Class 1 (Insulation)	Test according to BS 476 Part 7: 1997
Noise Reduction	Sound Absorption Coefficient ISO 354:2003 up to 0.8	Also suitable for use in the prevention of sound passage
Resistance to	Building Materials Good Ozone Good UV Good Chemicals Consult Product Test List	
Environmental Aspects	ODP zero, GWP zero	
Health Aspects	Dust & Fibre Free	

Corrugated stainless steel pipe					
Description:	austenitic stainless steel - Material according to EN 10088-2: X2CrNiMo17122 - according to DIN 17441: 1.4404				
Size	Inner-Ø mm	Outer-Ø mm	Min. Bending radius mm	Max. Operating pressure bar	Volume l/m
DN 16	16.3	21.4	25	16	0.273
DN 20	20.5	26.7	30	10	0.430
DN 25	25.4	31.8	35	10	0.633

For **Outdoor applications** NO additional coating or painting is necessary - **Armaflex DuoSolar is UV-resistant.**

ARMAFLEX DUOSOLAR VA

Pre-insulated corrugated stainless steel pipes.



Nom ID mm	Insulation thickness mm	Description	Reference			
			10 m coil length	15 m coil length	20 m coil length	25 m coil length
16	14	Armaflex DuoSolar VA DN 16	SO-DV-14X16/E10	SO-DV-14X16/E15	SO-DV-14X16/E20	SO-DV-14X16/E25
20	14	Armaflex DuoSolar VA DN 20	SO-DV-14X20/E10	SO-DV-14X20/E15	SO-DV-14X20/E20	SO-DV-14X20/E25
25	14	Armaflex DuoSolar VA DN 25		SO-DV-14X25/E15		SO-DV-14X25/E25
16	20	Armaflex DuoSolar VA DN 16		SO-DV-20X16/E15		SO-DV-20X16/E25
20	20	Armaflex DuoSolar VA DN 20		SO-DV-20X20/E15		SO-DV-20X20/E25

- Each package consists of a pair of coiled pre-insulated pipes (length as indicated) and installation instructions

ARMAFLEX DUOSOLAR VA Pipe Hangers

Oval pipe hanger with hex head screws M 8x80 and raw plugs S 10



Description	for pre-insulated pipe with 14 mm insulation thickness		for pre-insulated pipe with 20mm insulation thickness	
	Reference	Pieces/ carton	Reference	Pieces/ carton
Pipe hanger for VA DN 16	SCH-DN16-FEF14	4	SCH-DN16-FEF20	4
Pipe hanger for VA DN 20	SCH-DN20-FEF14	4	SCH-DN20-FEF20	4
Pipe hanger for VA DN 25	SCH-DN25-FEF14	4		

ARMAFLEX DUOSOLAR VA Standard Fitting Set



Description	for pre-insulated pipe DN 16		for pre-insulated pipe DN 20		for pre-insulated pipe DN 25	
	Reference	sets/ carton	Reference	sets/ carton	Reference	sets/ carton
Fittings set with 4 of each split rings, union nuts and washers	SO-VA-FIT-16/4	1	SO-VA-FIT-20/4	1	SO-VA-FIT-25/4	1
Set of 2 double nipple	SO-VA-DNI-16	1	SO-VA-DNI-20	1	SO-VA-DNI-25	1

ARMAFLEX DUOSOLAR VA Flange Tools

Reference	Description
SO-VA-FLA	Flange tool base element, without clamping jaw for DN 12 - DN 25
SO-VA-BACK-16	Clamping jaw for flange tool DN 16
SO-VA-BACK-20	Clamping jaw for flange tool DN 20
SO-VA-BACK-25	Clamping jaw for flange tool DN 25

- For all Armaflex DuoSolar products: Delivery 10 working days



Coupling system for secure installations with Armaflex DuoSolar VA

Designed to make the installation of Armaflex DuoSolar VA easier than ever before, the newly developed coupling system from Armacell is a quick, professional and secure solution for solar hot water applications.

- ▶ Ease of assembly allows joints to be fitted in seconds by simply tightening a nut, eliminating the time consuming “flanging” practices associated with standard fittings.
- ▶ Sophisticated design of the quick fitting couplings delivers cost savings to builders of thermal solar equipment.
- ▶ The breakthrough family of quick fitting couplings provides a permanent and leak proof seal for corrugated stainless steel hoses.
- ▶ The connection remains leak proof even after repeated assembly and disassembly.
- ▶ The quick fitting coupling does not cause any pressure drop.



Application of Armaflex DuoSolar Coupling System

<p>Cut cleanly at right angles in the valley of the corrugation with a pipe cutter designed for stainless steel corrugated pipe.</p>	<p>Check whether the sealing surface is clean and burr-free. Insert the corrugated pipe into the fitting all the way to the stop.</p>	<p>Screw the nut with an open end wrench all the way to the mechanical stop.</p>	<p>The connection is tight when the thread is no longer visible.</p>

ARMAFLEX DUOSOLAR VA Quick Fitting Couplings



Brass coupling systems for Armaflex DuoSolar, sets are consisting of 2 couplings

Nom ID mm	Coupling with male tapered thread for metal-to-metal sealing screw joints			Coupling with male straight thread for flat-sealing screw joints		
	Male tapered thread	Reference	piece / carton	Reference	Male tapered thread	piece / carton
DN 16	1/2"	SO-SDN16-E1/2	10			
DN 16	3/4"	SO-SDN16-E3/4	10	SO-SDN16-F3/4	3/4"	10
DN 16	1"	SO-SDN16-E1	10	SO-SDN16-F1	1"	10
DN 20	3/4"	SO-SDN20-E3/4	10	SO-SDN20-F3/4	3/4"	10
DN 20	1"	SO-SDN20-E1	10	SO-SDN20-F1	1"	10
DN25	1"	SO-SDN25-E1	10			
DN 25	1 1/4"	SO-SDN25-E11/4	10			

Nom ID mm	Coupling with female straight internal thread for metal-to-metal or flat sealing screw joints			Coupling with clamping ring for plain pipes		
	Female straight internal thread	Reference	piece / carton	Clamping ring for plain pipes	Reference	piece / carton
DN 16	1/2"	SO-SDN16-I1/2	10	Ø 15 mm	SO-SDN16-CU15	10
DN 16	3/4"	SO-SDN16-I3/4	10	Ø 18 mm	SO-SDN16-CU18	10
DN 16	1"	SO-SDN16-I1	10	Ø 22 mm	SO-SDN16-CU22	10
DN 20				Ø 15 mm	SO-SDN20-CU15	10
DN 20	3/4"	SO-SDN20-I3/4	10	Ø 18 mm	SO-SDN20-CU18	10
DN 20	1"	SO-SDN20-I1	10	Ø 22mm	SO-SDN20-CU22	10
DN25	1"	SO-SDN25-I1	10	Ø 18 mm	SO-SDN25-CU18	10
DN 25	1 1/4"	SO-SDN25-I11/4	10	Ø 22 mm	SO-SDN25-CU22	10

Coupling for corrugated stainless steel hoses						
Nom ID mm	Reference	piece / carton				
DN 16	SO-SDN16-DN16	10				
DN 20	SO-SDN20-DN20	10				
DN 25	SO-SDN25-DN25	10				

- **Note:** All sets of Armaflex DuoSolar Couplings consisting of 2 couplings
- For all Armaflex DuoSolar products: Delivery 10 working days