

Flexible stainless steel insulated piping SolarFlex

NA3500

**CALEFFI
SOLAR**



Function

SolarFlex is a system solution with pre-insulated flow and return pipes for solar hot water heating systems used to connect the solar collector with the storage tank in an easy, quick and professional way. It optimizes thermal efficiency of the entire system. The pre-insulation solution of two flexible stainless steel pipes inside two EPDM closed cell insulation and the integrated sensor cable, saves time and reduces cost of installation. SolarFlex is packaged in a 50-foot continuous coil with a complete range of accessories to ensure a smooth and secure installation.

General

- Easy to install, enabling pipes to be run without using a torch in confined spaces or on the roof.
- Ensures a leak-free installation.
- Easy to separate, without damaging the tubes.
- External copolymer foil protects against UV radiation and mechanical strain.
- Identification mark for flow and return.
- Meets highest requirements for modern solar heating systems.
- Pre-insulated feed and return pipes can be joined easily without special tools.

Product range

NA3520-15	1/2" SolarFlex pipe 50' coil including (2) double nipples, (4) union nuts, 4 segment rings and 4 washers
NA3540-15	3/4" SolarFlex pipe 50' coil including (2) double nipples, (4) union nuts, 4 segment rings and 4 washers
NA3540-B	3/4" SolarFlex pipe bulk cut to length up to 164 foot. Without connection fittings.
NA3560-15	1" SolarFlex pipe 50' coil including (2) double nipples, (4) union nuts, 4 segment rings and 4 washers

Technical specifications

Materials:

- pipe: two corrugated stainless steel 316L
- insulation: two closed cell elastomer UV resistance EPDM
- outer cover: UV resistant polyolefin copolymer foil

Insulation thickness: 5/8 inch (16mm)

Thermal conductivity: 0.215 BTU-in/hr-ft²-°F (0.031 W/mK)

Thermal resistance: R-4.2

Max. working pressure: 150 psi (10 bar)

Max. fluid temperature: 350°F (175°C)

Min. surface temperature: -60°F (-50°C)

Length per coil: 50 feet (15m)

Fluid capacity per foot: 1/2" - 0.0219 gallons (0.08 liters)

3/4" - 0.0346 gallons (0.13 liters)

1" - 0.0509 gallons (0.19 liters)

Min. bending radius: 5 inch (130mm)

Pressure loss: Approx. 25% more than in a comparable smooth pipe

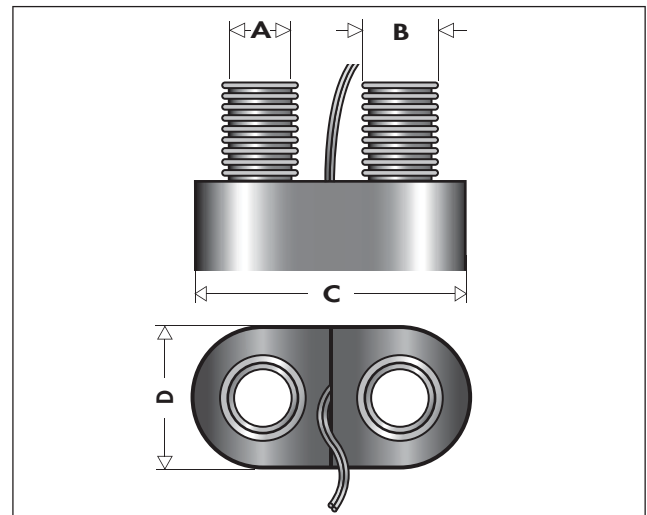
Flammability: Class VO

Flame spread/smoke density: 25/50

Agency approvals: ASTM D 635

ASTM C 177

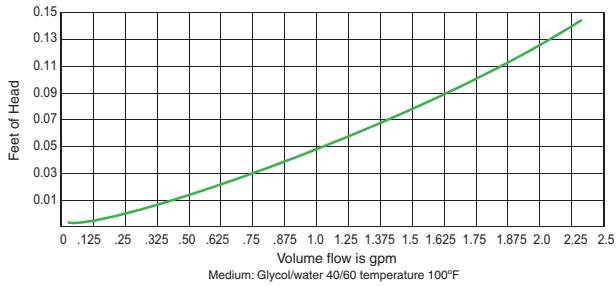
Dimensions



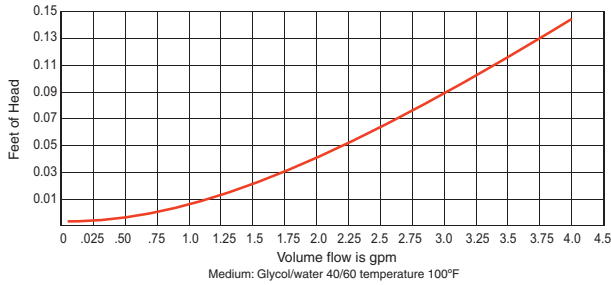
Code	A	B	C	D	Weight (lb/ft)
NA3520-15	1/2"	11/16"	4"	2"	0.4
NA3540-15	3/4"	15/16"	4 - 3/8"	2 - 1/8"	0.5
NA3560-15	1"	1 - 1/4"	4 - 7/16"	2 - 1/2"	0.7

Hydraulic characteristics

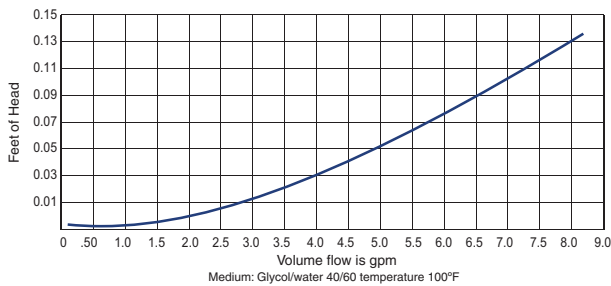
Feet of head curve for 1 foot of 1/2" SolarFlex



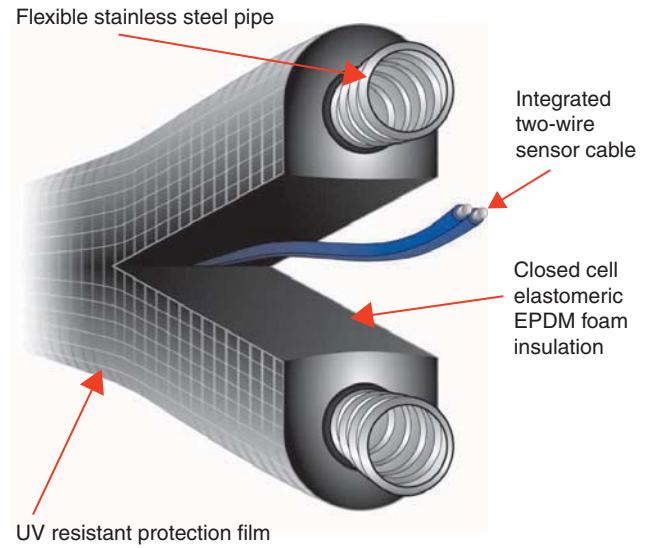
Feet of head curve for 1 foot of 3/4" SolarFlex



Feet of head curve for 1 foot of 1" SolarFlex



Construction details



Flow and return pipes are easy to separate without damaging the insulation or sensor cable.

Item	Code	Description
SolarFlex pipe hangers		
	NA12132	Pipe hangers 1/2" pack of 4 hanger for 1/2" SolarFlex
	NA12133	Pipe hangers 3/4" pack of 4 hangers for 3/4" SolarFlex
	NA12134	Pipe hangers 1" pack of 4 hangers for 1" SolarFlex
SolarFlex extra connection kits		
	NA12102	Connection Kit for 1/2" SolarFlex with 4 nuts, 4 segment rings and 4 flat sealing washers
	NA12103	Connection Kit for 3/4" SolarFlex with 4 nuts, 4 segment rings and 4 flat sealing washers
	NA12104	Connection Kit for 1" SolarFlex with 4 nuts, 4 segment rings and 4 flat sealing washers
SolarFlex insulating tape		
	NA35001	Insulating EPDM foam tape (UV resistant) to wrap exposed piping, 50 ft roll x 2" wide x 1/8" thick
	NA35002	Black film tape (UV resistant) to wrap foam tape, 50 ft roll x 2" wide
	NA35007	Black braid sleeve (UV & Vermin resistant), to protect exposed split piping outside, (2) 4' braid with (1) 30 ft roll x 2" wide black film tape