Connection Fittings Installation Guide

VITOSOL

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Vitosol 200-FM Flat Plate Collectors





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Fitting Sets and Kits

Item	Description	Part Number
General Connection Set	 One set required for each Vitosol 200-FM collector array. Array size can be 1 to 12 collectors. Contains all the required fittings for pipe connection to collector. Contents: 2 x brass connecting pipe (one long, one short) 2 x brass plugs 4 x stainless steel profile clamp 2 x 22 mm 90° compression elbow 1 x package of O-ring silicone assembly grease 2 x copper tube support inserts 	7248240
Installation Fittings Set	 One set required for each system. Contains the metric conversion fittings required to connect to the collector array and the conversion adaptor for the expansion tank fitting. Contents: 4 x copper pipe adaptors - 22 mm diameter to ¾" diameter x 4" long 1 x copper pipe stub - 22 mm diameter x 2.4" long 1 x ¾" BSPT Female x ¾" NPT male adaptor 1 x gasket 1 x package of technical literature 	ZK02868 (CA) ZK02870 (USA)

Collector Loop Fittings

Item	Description	Part Number
Interconnection Pipe Set	 Used to connect Vitosol 200-FM collectors together. Brass fittings with double O-ring seal, connected by flexible stainless steel pipe. Contents: 2 x interconnection pipes 1 x package of O-ring silicone assembly grease 	7248239
Sensor Well Set	Collector sensor well set for Vitosol 200-FM. One required per system. Installed in top collector outlet piping. Contents: 1 x 22 mm compression tee 1 x immersion sensor well 1 x sensor wire strain relief 1 x insulation cover 1 x copper tube support insert	7174993

Item	Description	Part Number
Automatic Fast Air Vent	Air vent for high point of each collector array. Built in shut-off valve for 100% isolation after system is totally vented 22 mm brass compression couplings. Note: If ordered individually, requires 2 x PN 9543380 - copper adaptors – 22 mm x ¾" x 4".	7298127
Manual Air Vent	Air vent for high point of each collector array. Can be used as an alternate to the Fast Air Vent. Manual key vent, 22 mm brass compression couplings. Note: If ordered individually, requires 2 x PN 9543380 - copper adaptors – 22 mm x ³ / ₄ " x 4".	7316263
Brass Elbow With Sensor Well	Solar tank sensor well for Vitocell tanks. Installs on solar glycol return line to collectors. Note: Must be ordered separately for all other tanks.	
	1" probe, for Vitocell 300-V tanks, 42 USG: – For tanks with NPT threads	7606041
- C-	1" probe, for Vitocell 300-B, 300-V tanks, 53 to 79 USG: – For tanks with NPT threads	7606041
	1 ¼ " probe, for Vitocell 300-B, 300-V tanks, 119 USG: – For tanks with NPT threads	7606042
Expansion Tank Flex Pipe	 Flexible ¾ "G x 19" (500 mm) long Stainless steel flexible connection pipe. Used to connect expansion tank to Solar-Divicon DN20B / DN25B. Compression fitting with gasket. Note: Only for use with the following tank models: 18L, 25L, 40L 	7497468

Spare Parts / Individual Fittings

Item	Description	Part Number
Copper Adaptor	Included with the Installation Fittings Set (see page 3), but can be ordered individually. Used to connect standard NPT copper to all Vitosol fitting with compression couplings (e.g. Supply/Return piping to 90° compression elbow.	9543380
	Copper adaptor pipe stub – 22 mm diameter x $\frac{34}{4}$ Copper x 4'' long.	
Copper Connector	Included with the Installation Fittings Set (see page 3), but can be ordered individually. Used to connect two items together that both have 22 mm compression couplings (e.g. Air vent and sensor well). Copper pipe stub – 22 mm diameter x 2.4" long.	5276590
Vitosol Profile Clamp	Included with the General Connection Set (see page 3), but can be ordered individually. Used for Vitosol 200-FM to attach brass connection pipes and plugs to the collector header pipe.	7317074
Brass Collector Connection Pipe – Short	Included with the General Connection Set (see page 3), but can be ordered individually. Used for Vitosol 200-FM to connect piping to the collector header pipe.	7827514
Brass Collector Connection Pipe – Long	Included with the General Connection Set (see page 3), but can be ordered individually. Used for Vitosol 200-FM. To connect piping to the collector header pipe.	7827515
Brass Collector Plug	Included with the General Connection Set (see page 3), but can be ordered individually. Used for Vitosol 200-FM to plug the collector header pipe.	7827516
Compression Connector – Union	Brass union fitting with 22 mm compression fittings (sold in a set of 2). Used for a straight connection between two 22 mm pipes: - To bring S/R piping straight out of collector instead of using 90° compression elbow. To extend pipe between two collectors that have to span an obstruction.	7819612

Item	Description	Part Number
Compression Connector, 90° Elbow	Brass elbow fitting with 22 mm compression fittings. Included with the General Connection Set, but can be ordered individually.	7819611
Collector Fitting O-rings	Package of 4. Spare parts, used for all collector fittings.	7819604
Silicone Assembly Grease	6 gram package.Included with the General Connection Set (see page 3) and with the Interconnection Pipe Set (see page 4). This can be ordered individually.Used for lubricating O-rings on all collector fittings.	7819602
Solar Divicon Expansion Tank Adaptor Fitting	Coupling, ¾" BSPT x ¾" NPT Brass. Included with the Solar Divicon fittings, but can be ordered individually. Used to connect NPT piping to the expansion tank connection on all Solar Divicon.	7134829
Expansion Tank Service Valve Adaptor Fitting	Adaptor, ¾" G female - ¾" NPT male. Included with the Installation Fittings Set (see page 4), but can be ordered individually. Used to connect NPT piping to the service valve on the expansion tank.	18 to 50 L Expansion Tanks 9635592
Flat Gasket	Flat Gasket, 17 x 24 x 1.5mm Used with solar divicon expansion tank adaptor, expansion tank service valve adaptor, solar expansion tank service valve & flexible tank adaptor. This can be ordered individually.	6039797

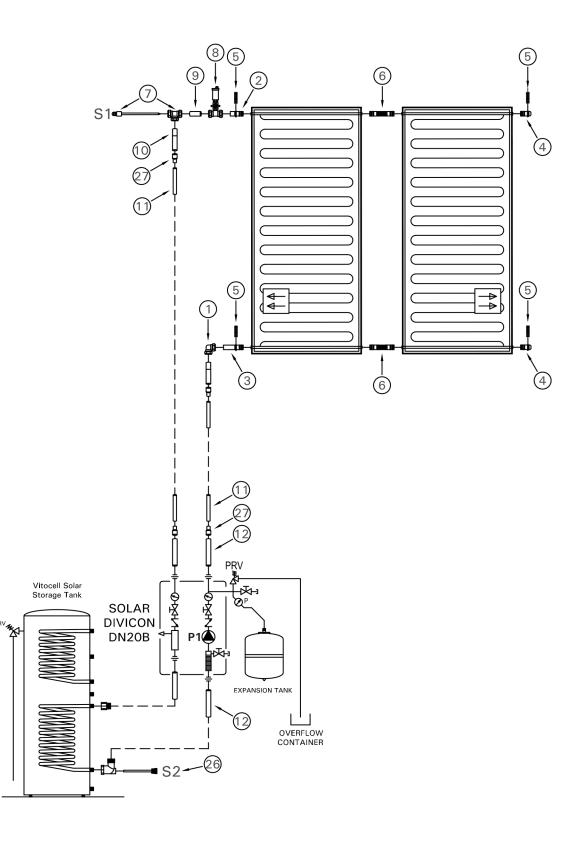
Connection Fittings Parts Index

1	₽ ₽	Ø22mm Compression 90 deg Elbow
2		Connection Pipe - Short - 200-FM
3		Connection Pipe - Long - 200-FM
4	UL ID	Connection Plug - 200-FM
 3 4 5 6 	Ω	Vitosol Profile Clamp - 200-FM & 1/2" Insulated Flexible S.S. Piping
6	(transacty	Interconnection Pipe Set - 200-FM
$\overline{\mathcal{I}}$	S1ªœ───→ I∐I	Sensor Well Set - 200-FM
8	Ŭ a≣a	Fast Air Vent c/w Shut-off
9		Copper Pipe Stub Ø22 mm x 2 1/2" Long
		Copper Adaptor Pipe Stub - Ø22mm x ؾ" x 4" Long
(11)		Ø1/2" Rigid Copper Pipe (Field Supplied)
12		Ø3/4" Rigid Copper Pipe (Field Supplied)
		Ø1" Rigid Copper Pipe (Field Supplied)
14		1/2" Insulated Flexible S.S. Piping
15	o –	Vitosol O-rings (Solar Rated)
15 16 17 13 19	o –	Vitosol Plastic Spacer (White)
17	8 🗘 📼	Ø22mm Compression Nut - 1/2" SS Piping
18	0 0	Ø22mm Compression Sleave - 1/2" SS Piping
19	Ē	Ø22mm Compression Adaptor - 1/2" SS Piping
20		3/4" BSPT x 3/4" NPT Brass Coupling
21	o –	Flat Fiber Gasket
22	Ð	3/4" G Female x 3/4" NPT Male Adaptor
23		Flexible S.S. Expansion Tank Adaptor
24		3/4" Expansion Tank Service Valve
25		1" Expansion Tank Service Valve
26	₽ • S2	Brass Elbow c/w Sensor Well
27	-0	Ø1/2" x Ø3/4" Copper Reducing Coupling (Field Supplied)
28	C D	Ø3/4" x Ø1" Copper Reducing Coupling (Field Supplied)
29	Ē	3/4" Female NPT x Ø3/4" Copper Sweat Adaptor (Field Supplied)
23 29 30 31 32	□ Ĵ ■	3/4" Male NPT x $Ø3/4$ " Copper Sweat Adaptor (Field Supplied)
31	□ Ĵ ■	1" Male NPT x Ø1" Copper Sweat Adaptor (Field Supplied)
32	() ()	Ø22mm Straight Compression

Layout Drawings Connection Fittings with Solar-Divicon DN20B

Note: 1/2 "copper piping

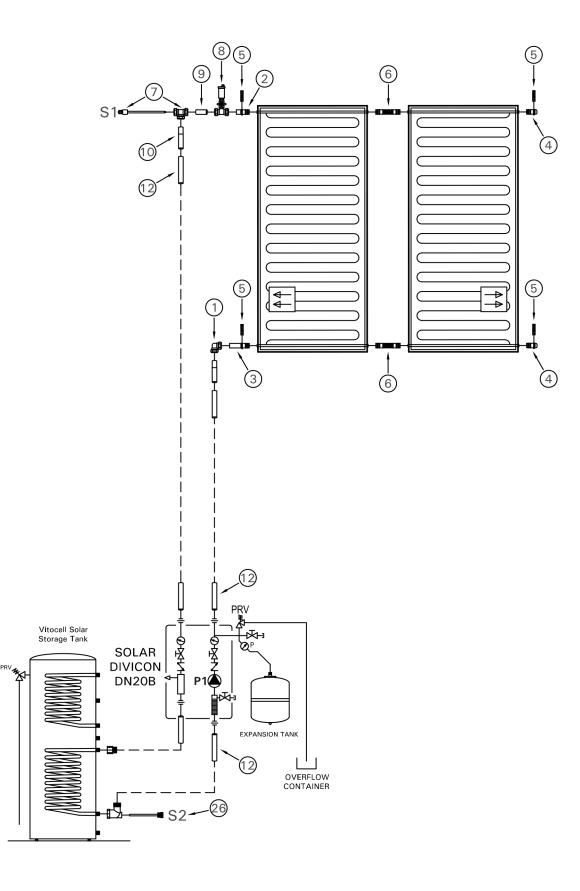
Note: See numbered parts index on page 7.



Connection Fittings with Solar-Divicon DN20B

Note: 3/4 "copper piping

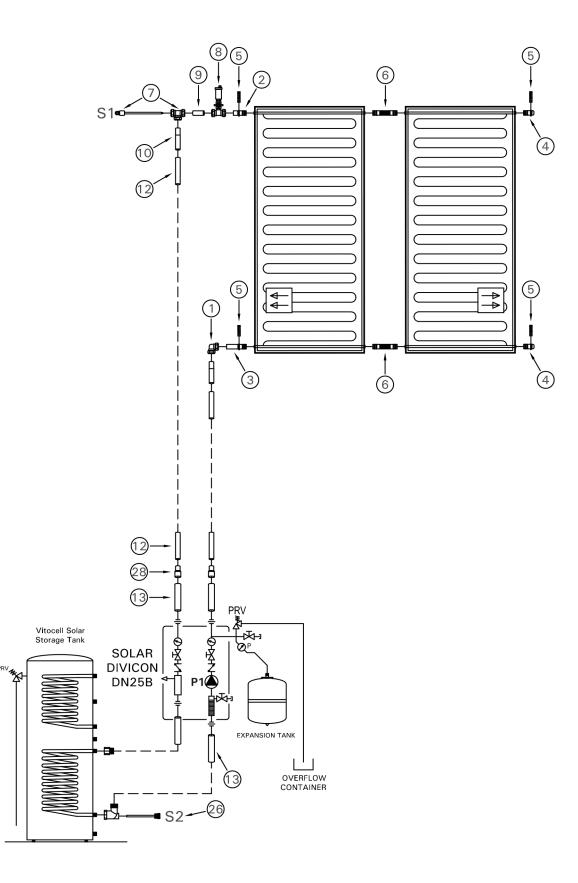
Note: See numbered parts index on page 7.



Layout Drawings Connection Fittings with Solar-Divicon DN25B

Note: 3/4 "copper piping

Note: See numbered parts index on page 7.



Vitosol Connection Fitting Installation Guide

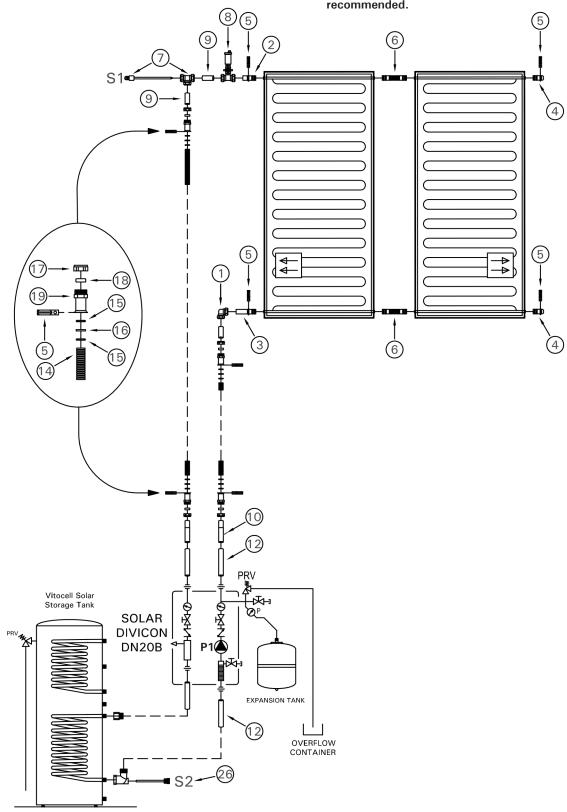
Connection Fittings with Solar-Divicon DN20B

Note: ¹/₂ "stainless steel line set.

Note: See numbered parts index on page 7.

IMPORTANT

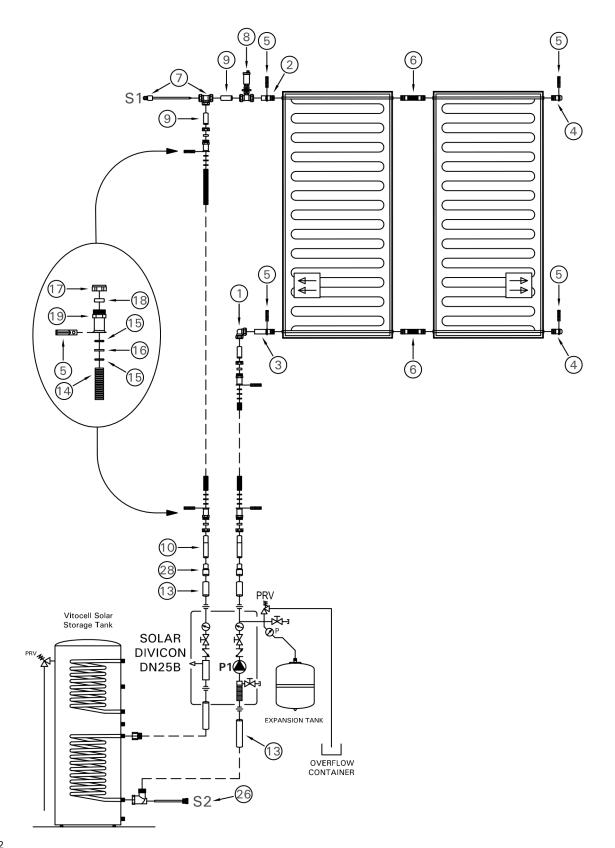
The $\frac{1}{2}$ " stainless steel line set has a minimum bend radius of 2". If possible a bend radius larger than 2" is recommended.



Layout Drawings Connection Fittings with Solar-Divicon DN25B

Note: 1/2 "stainless steel line set.

Note: See numbered parts index on page 7.

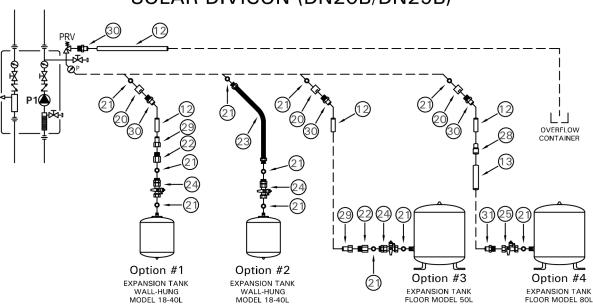


Expansion Tank Piping Connections

Note: See numbered parts index on page 7.

IMPORTANT

The $1\!\!/_2$ " stainless steel line set (option #2) has a minimum bend radius of 2". If possible a bend radius larger than 2" is recommended.



SOLAR DIVICON (DN20B/DN25B)

*Special Note:

-The 1/2" stainless steel lineset has a minimum bend radius of 2". If possible a larger bend radius would be recommended.

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