

Instruction

Right and wrong

Hose assembly routing tips



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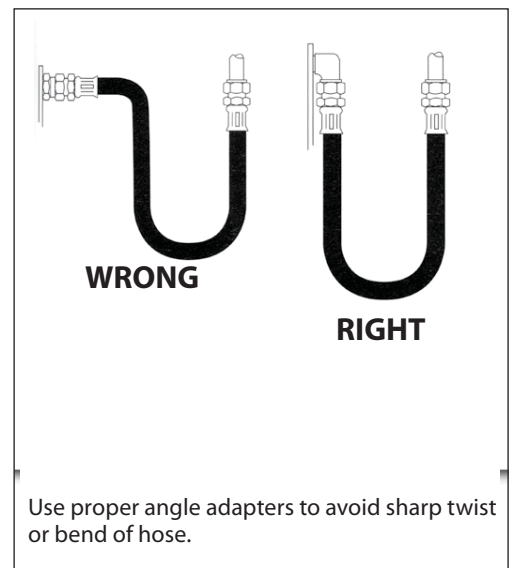
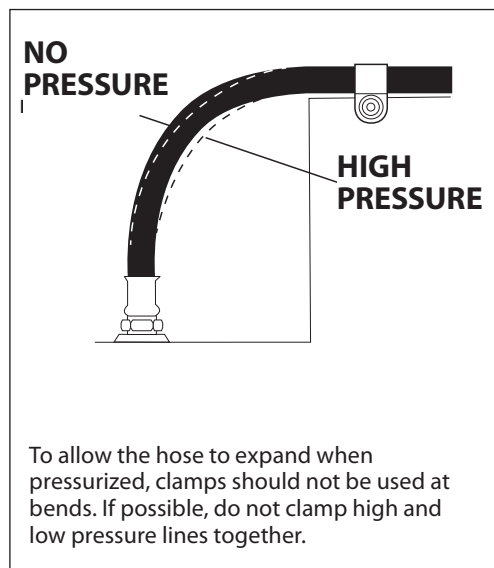
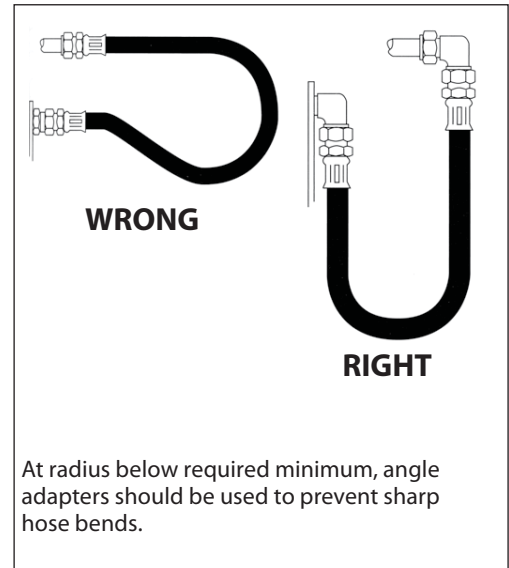
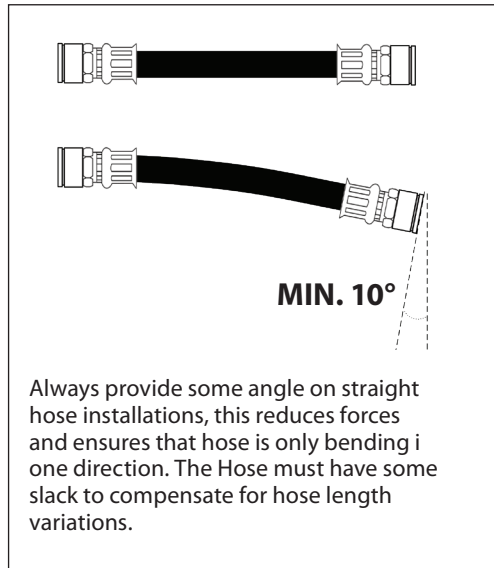
Correct hose installation is essential for safe and satisfactory performance. The size of the hoses impacts the installation recommendations. This manual has therefore been split in recommendation for hoses up to 2" and recommendation larger than 2".

Hose routing tips:
Danfoss recommends installing hose whip restraints whenever your pressurized hose assemblies are in proximity to personnel or crucial equipment.
Check with these examples when installing your hoses.

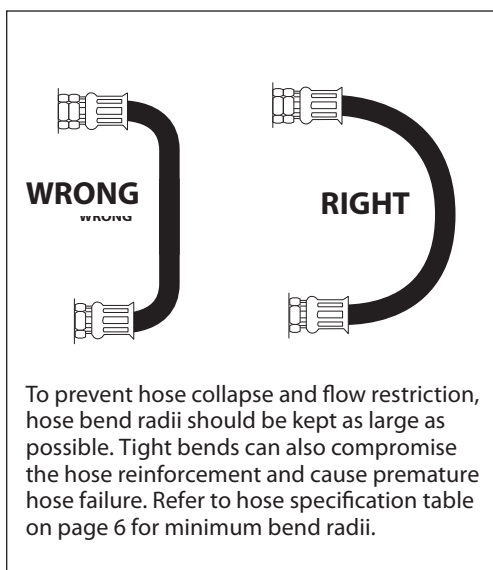
1. Hoses up to 2"

When installing hoses, avoid twisting the hose as the hose will try to straighten under pressure.

This can cause hose failure via hose blowout from the fitting and/or hose burst at the point of strain.



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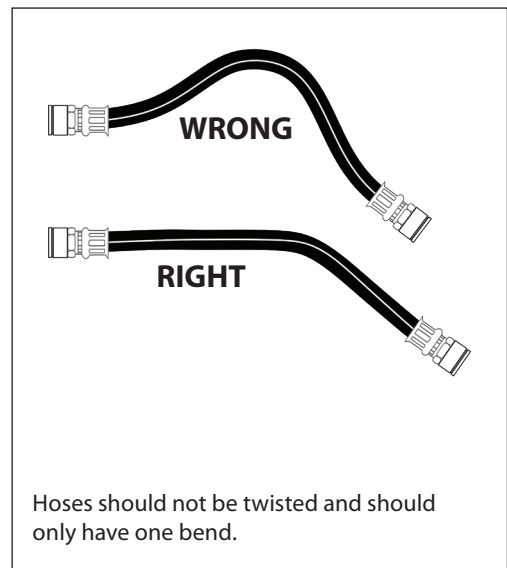
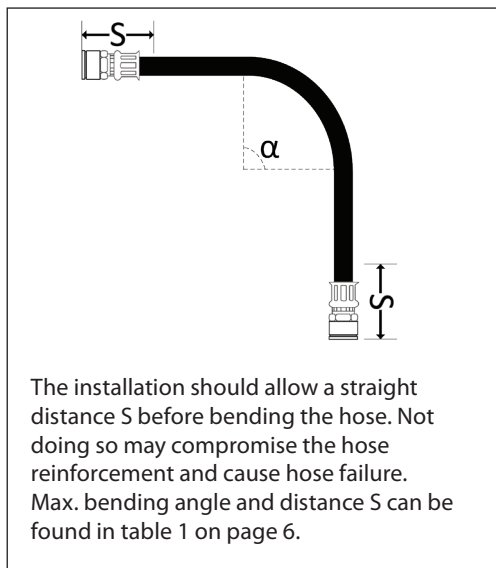
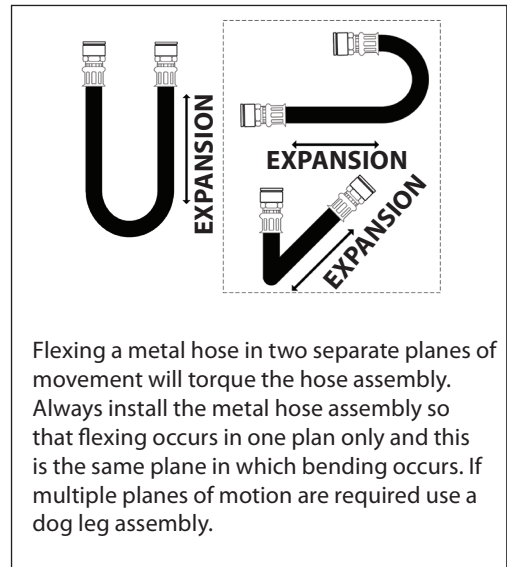
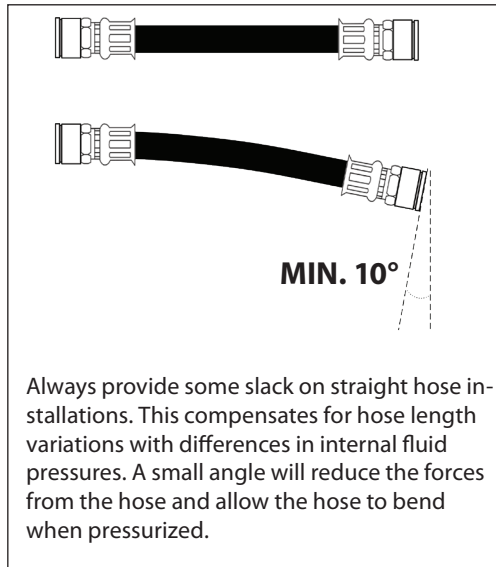


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2. Hoses larger than 2"

Whenever possible, high pressure hoses should always be connected directly to Danfoss provided adapters and check valves. Elbows and distance pipes should be avoided to prevent excessive side loads.

Danfoss 3" HP hoses are nylon reinforced; when using hoses that are not steel reinforced the connected items must be grounded to avoid electrical stray currents.



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The use of pipe or fittings between pump and iSave connectors and hoses should be avoided. Such configurations can apply excessive loads on the connectors and can cause connector and/or connector bolt failure. If this cannot be avoided, the piping system must be protected by either hose whip restraints mounted directly to the frame or the hard piping must be fixed relative to any pump/iSave movements.

If hose is bent, ensure max. bending angle and distance S from each connector (see table 1 on page 6).

To prevent hose collapse and flow restriction, hose bend radii should be kept as large as possible. Tight bends can also compromise the hose reinforcement and cause premature hose failure. Refer to hose specification table on page 6 for minimum bend radii.

The hose must have a distance S before bending starts.

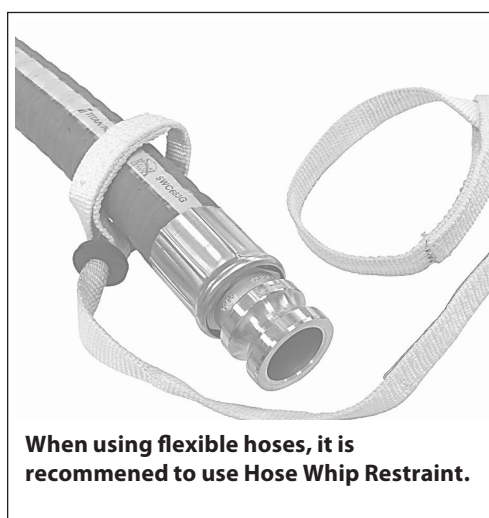
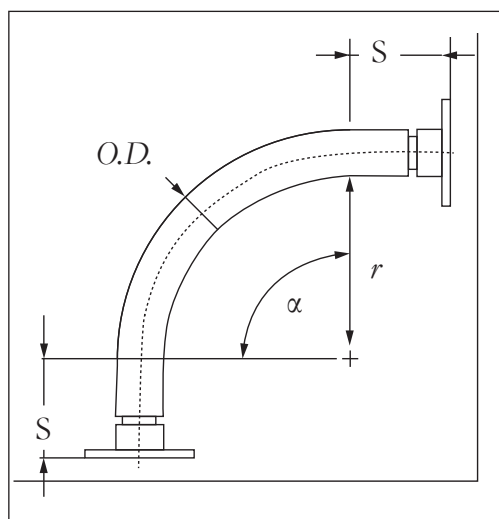
To allow the hose to expand when pressurized, clamps should not be used at bends. If possible, do not clamp high and low pressure lines together.

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3. Hose specification table

High pressure hoses						
Code number	Pipe connection ¹⁾ [A]	Pipe connection material	Hose size Inner diameter	Hose length ISO 1436 [B]	Bending radius	S
180Z0228	1.5" Vic. OGS	Super duplex EN 1.4410	25.4 mm (1.0")	0.66 m (26")	152 mm (6.08"), max. 90°	79 mm (3.11")
180Z0229	1.5" Vic. OGS	Super duplex EN 1.4410	25.4 mm (1.0")	1.16 m (45.7")	152 mm (6.08"), max. 180°	79 mm (3.11")
180Z0167	1.5" Vic. OGS	Super duplex EN 1.4410	38.0 mm (1.5")	1.16 m (45.7")	250 mm (9.84"), max. 180°	85 mm (3.35")
180Z0140	2.0" Vic. OGS	Super duplex EN 1.4410	50 mm (2.0")	1.25 m (49")	630 mm (24.8"), max. 90°	115 mm (4.53")
180Z0263	2.5" Vic. OGS ¹⁾	Super duplex EN 1.4410	50 mm (2.0")	1.78 m (70")	630 mm (24.8"), max. 180°	115 mm (4.53")
180Z0280	2.5" Vic. OGS	Super duplex EN 1.4410	50 mm (2.0")	1.00 m (39.4")	630 mm (24.8"), max. 90°	115 mm (4.53")
180Z0619	2.5" Vic. OGS	Super duplex EN 1.4410	65 mm (2.5")	1.78 m (70")	200 mm (7.87"), max. 270°	150 mm (5.90")
180Z0618	2.5" Vic. OGS	Super duplex EN 1.4410	65 mm (2.5")	1.00 m (9.4")	200 mm (7.87"), max. 90°	150 mm (5.90")
180Z0612	3.0" Vic. OGS	Super duplex EN 1.4410	76 mm (3.0")	1.79 m (70.5")	250 mm (9.84"), max. 270°	150 mm (5.90")
180Z0611	3.0" Vic. OGS	Super duplex EN 1.4410	76 mm (3.0")	1.00 m (39.4")	250 mm (9.84"), max. 90°	150 mm (5.90")
180Z1000	3.0" Vic. OGS	Super duplex EN 1.4410	76 mm (3.0")	1,25 m (49")	250 mm (9.84"), max. 180°	150 mm (5.90")
180Z1001	3.0" Vic. OGS	Super duplex EN 1.4410	76 mm (3.0")	1,6 m (63")	250 mm (9.84"), max. 180°	150 mm (5.90")
Low pressure hoses						
180Z0298	2.0" Vic. OGS	Super duplex EN 1.4410		2.0 m (79")		
180Z0144	3.0" Vic. OGS	Super duplex EN 1.4410		2.0 m (79")		

¹⁾ The installation instruction for Style 77DX is located in the Victaulic document I-100 Field Installation Handbook (<http://static.victaulic.com>)



When using flexible hoses, it is recommended to use Hose Whip Restraint.

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Danfoss A/S

High Pressure Pumps • danfoss.com • +45 7488 2222 • E-mail: highpressurepumps@danfoss.com

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