

Electronic Coolant Hose (ECH)

Provides Easy Coolant System Design and Installation



Parflex Electronic Coolant Hose (ECH) is a thermoplastic hose designed for the pressure and temperature requirements of the battery mobility market. This market values light weight, durability, push to connect installation and formed hose capability for compact routings. A thermoplastic polyamide liner provides excellent chemical compatibility and moisture permeation resistance, resulting in a hose with unparalleled weight savings and unmatched cleanliness.

Parflex ECH hoses are available in 14mm, 18mm or 22mm sizes in a bulk pack or thermally formed design.

Parflex offers a VDA style connector that is quickly becoming the standard in E-mobility. VDA fittings provide full flow with no restriction for minimized pressure drop and foolproof push to connect installation. They are manufactured from a high performance glass filled polyamide and contain EPDM O-ring seals for water based coolants.



Fittings and hose are both colored black for maximum UV resistance.

Contact Information:

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Product Features:

- Unparalleled weight savings
- Unmatched cleanliness and chemical resistance
- Features push-to-connect fittings for quicker assemblies
- Formed hoses speed up installation, especially in confined spaces
- Temperature Range: -40°F (-40°C) to 212°F (100°C)



ENGINEERING YOUR SUCCESS.

Electronic Coolant Hose with Push-To-Connect Fittings



Features

- Light weight and small outer diameters
- Cut and abrasion resistant elastomer cover
- UV resistant thermoplastics with clean, chemical resistant inner core tube
- Thermal formable for compact routings
- Unrestricted fitting flow
- High performance glass filled fitting material
- Make your own assemblies



Series ECH

Part Number	Nominal I.D.		Maximum O.D.		Max. Working Pressure 73°F/ 23°C		Minimum Bend Radius		Weight	
	mm	inch	mm	inch	MPa	psi	mm	inch	kg/mtr	lbs/ft
ECH-14	14	.55	20	.78	.86	125	90	3.5	0.16	0.11
ECH-18	18	.71	24	.94	.86	125	120	4.7	0.22	0.15
ECH-22	22	.86	29	1.14	.86	125	200	7.9	0.28	0.19

Construction

- Tube: Polyamide
- Cover: Cut and abrasion resistant elastomer

Operating Parameters

- Temperature Range: -40°F (-40°C) to 212°F (100°C)
- Vacuum Rating: 28 inch Hg
- Change in length at Max. Working Pressure: +/- 2%
- Min. Burst Pressure is 4x Max. Working Pressure at 73°F (23°C)

Color

- ● Black

Notes



- Connector - N66 GF30% with EPDM O-rings
- Push to connect assembly
- Black for UV resistance
- Aluminum adapters and manifolds - Contact Parker's Tube Fitting Division

Fittings

- ECH Series (VDA coolant connector)
 - MUST BE ASSEMBLED ON ECH ASSEMBLY EQUIPMENT
 - 12mm - straight, 90° elbow
 - 16mm - straight, 45° elbow, 90° elbow
 - 20mm - straight, 45° elbow, 90° elbow
- Adapters
 - T and Y Fittings (molded)
 - Aluminum/SS threaded port adapters
 - Custom configurations available



Assembly

Option 1	P/N ECH-MACHINE & ECH-TOOLING-KIT
Pneumatic powered table top production machine	
Option 2	P/N TH1E-5 & ECH-TOOLING-KIT-M
Manual machine TH1E-5	

Female ECH Fittings

Part Number	Shape	Socket Size		ECH Hose Size
		mm	inch	
FVDA121400	Straight	12	0.472	ECH-14
FVDA161800	Straight	16	0.630	ECH-18
FVDA202200	Straight	20	0.787	ECH-22
FVDA121445	45 Degree	12	0.472	ECH-14
FVDA161845	45 Degree	16	0.630	ECH-18
FVDA202245	45 Degree	20	0.787	ECH-22
FVDA121490	90 Degree	12	0.472	ECH-14
FVDA161890	90 Degree	16	0.630	ECH-18
FVDA202290	90 Degree	20	0.787	ECH-22



FVDA121400
FVDA161800
FVDA202200



FVDA121445
FVDA161845
FVDA202245



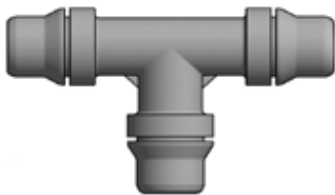
FVDA121490
FVDA161890
FVDA202290

Male ECH Fittings

Part Number	Shape	Spigot Size 1		Spigot Size 2		Spigot Size 3		ECH Hose Size
		mm	inch	mm	inch	mm	inch	
MVDA121400	Straight	12	0.472	-	-	-	-	ECH-14
MVDA161800	Straight	16	0.630	-	-	-	-	ECH-18
MVDA202200	Straight	20	0.787	-	-	-	-	ECH-22
MVDA16T	Tee	16	0.630	16	0.630	16	0.630	ECH-18
MVDA20T	Tee	20	0.787	20	0.787	20	0.787	ECH-22



MVDA121400
MVDA161800
MVDA202200



MVDA16T
MVDA20T

