

VDA Style Adapters

Durable, Leak-Free Push-to-Connect
Coolant System Connections



In the landscape of alternative vehicle platforms, battery electric vehicles are making a huge push for change and requiring new, innovative solutions from all suppliers within the value chain.

One of the more critical sub-systems within the battery mobility market are the coolant systems to keep the batteries operating longer and more efficiently. Through extensive VOC (Voice of Customer), we have heard the following concerns when developing thermal management systems: weight savings, corrosion resistance, durability, and push-to-connect solutions to maximize life, simplify assembly, and limit envelope space requirements.

With this feedback, Parker has created customizable VDA adapters and has the support expertise for implementing this fitting style into your design.



Contact Information:

Parker Hannifin Corporation
Tube Fittings Division
3885 Gateway Blvd
Columbus, OH 43228

phone 614 279 7070

www.parker.com/tfd
tfd.quotes@support.parker.com

Product Features:

- Made-to-order to meet your unique system's needs
 - o Full size range
 - o Any configuration
- Leak-free push-to-connect design
- Created for durability
- Full coolant system compatibility
- Parker's expertise with coolant systems



ENGINEERING YOUR SUCCESS.



VDA Style Adapters

VDA style adapters are quickly becoming the standard in the e-mobility market. Parker's Tube Fittings Division offers made-to-order metal VDA adapters to meet your unique system's configuration needs. Due to the strength of metal, these adapters provide longer life when connected into metal manifolds, pumps, valves, battery pack, etc. in your system. Additionally, Parker's engineers can help spec the appropriate adapters for your unique system to ensure it operates the most effectively and efficiently.

Parker's VDA Adapter Advantages:

- Metal material for maximum durability and leak-free performance
 - Aluminum – also great for weight savings
 - Stainless steel
 - Steel
- Any end configuration needed for your system, such as:
 - Male VDA spigot ends
 - ECH hose ends
 - SAE J2044 ends
 - Bulkhead options
 - O-Ring Face Seal, JIC, etc
 - Port ends – ISO 9974, ISO 1179, SAE J1926, ISO 6149, etc
 - Diagnostic/test ports
- Full size range available to meet your system's needs
- Parker coolant system expertise to help spec the appropriate adapters for the most effective and efficient system.



Contact the Tube Fittings Division at **614-279-7070** or tfd.quotes@support.parker.com to discuss your VDA adapter needs, or to request a system consultation.



Leak-free, durable solutions for your whole coolant system

Along with metal VDA adapters, Parker provides hose and fittings to complete your coolant system connections. For hoses, the Parflex Division offers an Electric Cooling Hose (ECH), a thermoplastic hose with forming capabilities for tight routings, and push-to-connect fitting design. They also have hose fittings that are available in many configurations, including a VDA style connector. All come with Parker's engineering expertise to help spec your systems for optimal efficiency and life.



ENGINEERING YOUR SUCCESS.

Standard VDA-Style Adapter Configurations

F50HVDA

Conversion Adapter, SAE-ORB / VDA Spigot

Part Number	End Size 1	End Size 2	Drill Size 1	Drill Size 2	Hex	A	B
	SAE-ORB	VDA	SAE-ORB	VDA			
8M12 F50HVDA	3/4-16	NW12	13 mm	12 mm	0.875	1.73	0.67
10M12 F50HVDA	7/8-14	NW12	16 mm	12 mm	0.100	1.73	0.62
10M16 F50HVDA	7/8-14	NW16	16 mm	16 mm	1.125	1.90	0.71
12M16 F50HVDA	1 1/16-12	NW16	19 mm	16 mm	1.250	2.07	0.81
14M20 F50HVDA	1 3/16-12	NW20	20 mm	20 mm	1.375	2.05	0.77
16M20 F50HVDA	1 5/16-12	NW20	21.5 mm	20 mm	1.500	2.20	0.92

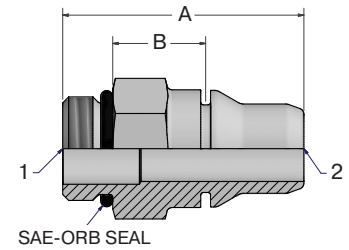
Materials:

For Aluminum add -D
For Stainless Steel add -SS
For Carbon Steel add -S

O-Ring Material:

NBR - 90 Duro Nitrile
FKM - 90 Duro FKM
E0893 - 80 Duro EPDM

Example: 10M16 F50HVDA-D E0893



FHVDA

Conversion Adapter, NPTF / VDA Spigot

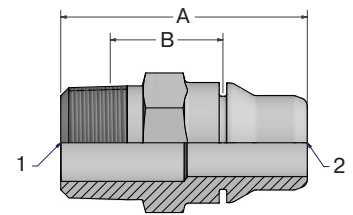
Part Number	End Size 1	End Size 2	Drill Size 1	Drill Size 2	Hex	A	B
	NPTF	VDA	NPTF	VDA			
1/2-M12 FHVDA	1/2-14	NW12	13.4 mm	12 mm	0.875	2.05	0.89
3/4-M16 FHVDA	3/4-14	NW16	18.2 mm	16 mm	1.125	2.29	1.05
1-M20 FHVDA	1-11 1/2	NW20	23.8 mm	16 mm	1.375	2.48	1.09

Materials:

For Aluminum add -D
For Stainless Steel add -SS
For Carbon Steel add -S

Example:

1/2-M12 FHVDA-D



F82EDHVDA

Conversion Adapter, Metric-ED / VDA Spigot
(for ISO 9974 / DIN 3852-1 Port)

Part Number	End Size 1	End Size 2	Drill Size 1	Drill Size 2	Hex	A	B
	Metric	VDA	Metric	VDA			
M22-M12 F82EDHVDA	M22X1.5	NW12	14 mm	12 mm	1.0625	2.05	0.79
M26-M16 F82EDHVDA	M26X1.5	NW16	18 mm	16 mm	1.3750	2.28	0.87
M33-M20 F82EDHVDA	M33X2	NW20	23 mm	16 mm	1.6250	2.42	0.91

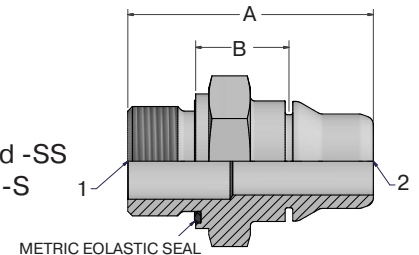
Materials:

For Aluminum add -D
For Stainless Steel add -SS
For Carbon Steel add -S

O-Ring Material:

NBR - 90 Duro Nitrile
FKM - 90 Duro FKM

Example: M22-M12 F82EDHVDA-D FKM



F42EDHVDA

Conversion Adapter, BSPP-ED / VDA Spigot
(for ISO 1179-1 Port)

Part Number	End Size 1	End Size 2	Drill Size 1	Drill Size 2	Hex	A	B
	BSPP	VDA	BSPP	VDA			
1/2-M12 F42EDHVDA	1/2-14	NW12	14 mm	12 mm	1.0625	2.05	0.79
3/4-M16 F42EDHVDA	3/4-14	NW16	18 mm	16 mm	1.3750	2.28	0.87
1-M20 F42EDHVDA	1-11	NW20	23 mm	16 mm	1.6250	2.42	0.91

Materials:

For Aluminum add -D
For Stainless Steel add -SS
For Carbon Steel add -S

O-Ring Material:

NBR - 90 Duro Nitrile
FKM - 90 Duro FKM

Example: 1/2-M12 F42EDHVDA-D,
1/2-M12 F42EDHVDA-D FKM

