

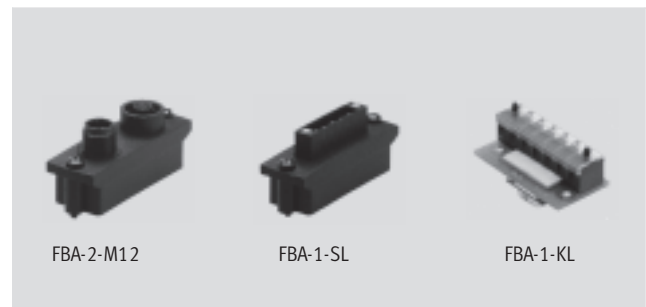
# Electrical adapters NEFV, for valves

FESTO

Technical data

## Bus connection FBA

- Sub-D 9-pin adapter
- Can be assembled with any cable length
- Protection class IP20 to IP65



General technical data				
Type	FBA-2-M12-5POL	FBA-2-M12-5POL-RK	FBA-1-SL	FBA-1-KL
Electrical connection	Sub-D straight socket, 9-pin; M12 plug/socket, 5-pin	Sub-D straight plug, 9-pin; M12 plug/socket, 5-pin	Sub-D straight socket, 9-pin; plug, 5-pin	M8x1 plug, 4-pin, straight, screw terminal
Operating voltage range [V DC]	24			
Acceptable current load [A]	4	4	4	7.5
Connection cross section [mm <sup>2</sup> ]	–	–	–	0.5
Type of mounting	2x M3x20 screws			
Mounting position	Any			
Protection class	IP65	IP65	IP40	IP20

Materials	
Pin contact	Gold-plated bronze
Housing	Polyamide
Note on materials	RoHS-compliant

Operating and environmental conditions		
Ambient temperature [°C]	–5 ... +50	
Storage temperature [°C]	–20 ... +70	

# Electrical adapters NEFV, for valves

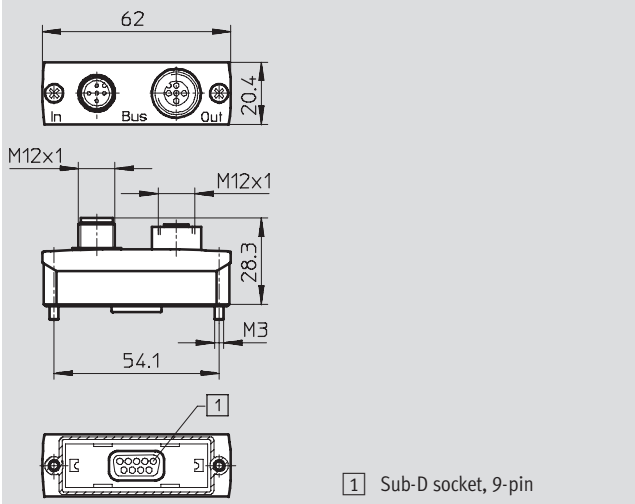
Technical data

**FESTO**

## Dimensions

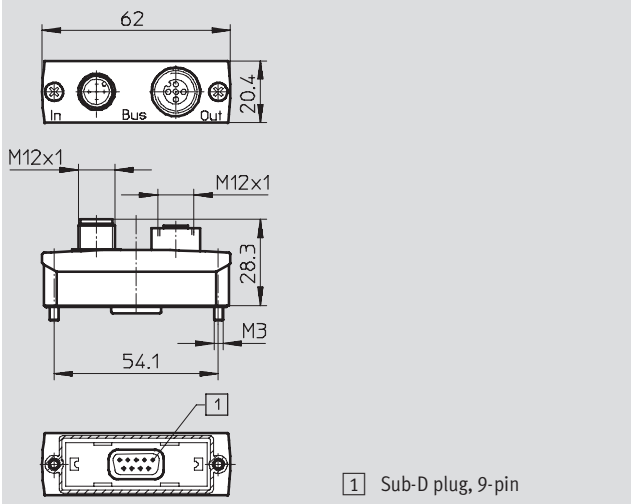
Download CAD data → [www.festo.com](http://www.festo.com)

### FBA-2-M12-5POL



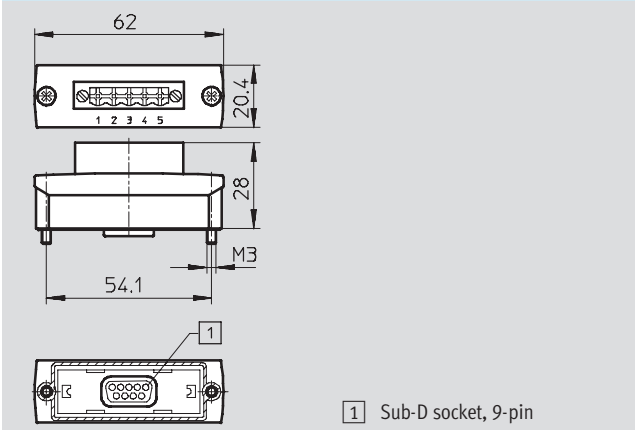
1 Sub-D socket, 9-pin

### FBA-2-M12-5POL-RK



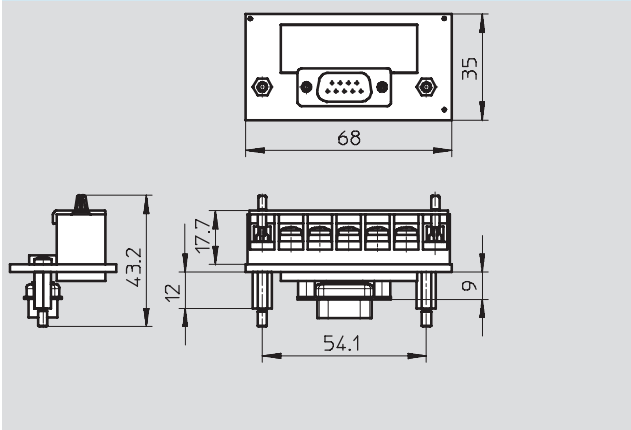
1 Sub-D plug, 9-pin

### FBA-1-SL-...



1 Sub-D socket, 9-pin

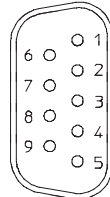
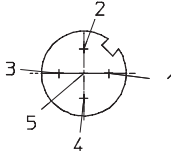
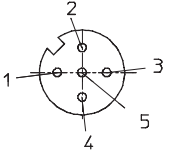
### FBA-1-KL-...

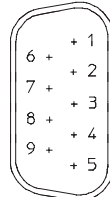
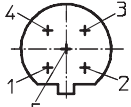
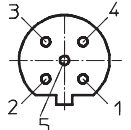


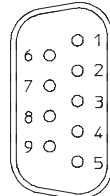
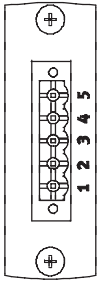
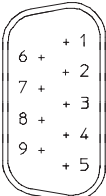
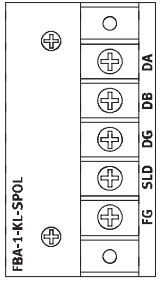
# Electrical adapters NEFV, for valves

Technical data

**FESTO**

Pin allocation – Sub-D/opposite side							
FBA-2-M12-5POL							
Sub-D connection	Pin	Pin	Plug	Sub-D connection	Pin	Pin	Socket
	1	–			1	–	
	2	5			2	5	
	3	3			3	3	
	4	–			4	–	
	5	1			5	1	
	6	–			6	–	
	7	4			7	4	
	8	–			8	–	
	9	2			9	2	
	Housing	1			Housing	1	

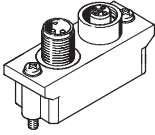
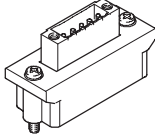
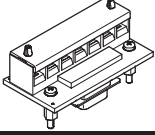
FBA-2-M12-5POL-RK							
Sub-D connection	Pin	Pin	Plug	Sub-D connection	Pin	Pin	Socket
	1	5			1	5	
	2	–			2	–	
	3	4			3	4	
	4	–			4	–	
	5	–			5	3	
	6	–			6	1	
	7	–			7	–	
	8	2			8	2	
	9	–			9	–	
	Housing	Housing			Housing	Housing	

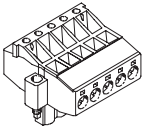
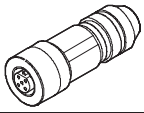
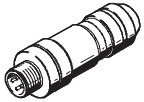
FBA-1-SL-5POL				FBA-1-KL-5POL				
Sub-D connection	Pin	Pin	Plug	Sub-D connection	Pin	Pin	Terminal strip	
	1	–			1	–		
	2	2			2	DA		
	3	1			3	DG		
	4	–			4	–		
	5	3			5	FG		
	6	–			6	–		
	7	4			7	DB		
	8	–			8	–		
	9	5			9	–		
	Housing	3			Housing	SLD		

## Electrical adapters NEFV, for valves

Technical data

**FESTO**

Ordering data					
	Electrical connection	Weight [g]	Part No.	Type	
	Sub-D straight socket, 9-pin; M12 plug/socket, 5-pin	28	<b>525632</b>	<b>FBA-2-M12-5POL</b>	
	Sub-D straight plug, 9-pin; M12 plug/socket, 5-pin	37	<b>533118</b>	<b>FBA-2-M12-5POL-RK</b>	
	Sub-D straight socket, 9-pin; plug, 5-pin	26	<b>525634</b>	<b>FBA-1-SL-5POL</b>	
	Sub-D straight plug, 9-pin; screw terminal, 5-pin	47	<b>197962</b>	<b>FBA-1-KL-5POL</b>	

Ordering data – Accessories					
	Description	Electrical connection	Weight [g]	Part No.	Type
	Adapter for FBA-1-SL-5POL, protection class IP20	Angled socket, 5-pin; screw terminal, 5-pin	20	<b>525635</b>	<b>FBSD-KL-2x5POL</b>
	Socket for self-assembly of a connecting cable for FBA-2-M12-5POL-RK	Socket M12x1, 5-pin, straight	48	<b>1067905</b>	<b>NECU-M-B12G5-C2-PB</b>
	Plug for self-assembly of a connecting cable for FBA-2-M12-5POL-RK	Plug M12x1, 5-pin, straight	46	<b>1066354</b>	<b>NECU-M-S-B12G5-C2-PB</b>

## Product Range and Company Overview

### A Complete Suite of Automation Services

Our experienced engineers provide complete support at every stage of your development process, including: conceptualization, analysis, engineering, design, assembly, documentation, validation, and production.



**Custom Automation Components**  
Complete custom engineered solutions



**Custom Control Cabinets**  
Comprehensive engineering support and on-site services



**Complete Systems**  
Shipment, stocking and storage services

### The Broadest Range of Automation Components

With a comprehensive line of more than 30,000 automation components, Festo is capable of solving the most complex automation requirements.



**Electromechanical**  
Electromechanical actuators, motors, controllers & drives



**Pneumatics**  
Pneumatic linear and rotary actuators, valves, and air supply



**PLCs and I/O Devices**  
PLC's, operator interfaces, sensors and I/O devices

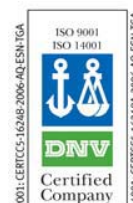
### Supporting Advanced Automation... As No One Else Can!

Festo is a leading global manufacturer of pneumatic and electromechanical systems, components and controls for industrial automation, with more than 12,000 employees in 56 national headquarters serving more than 180 countries. For more than 80 years, Festo has continuously elevated the state of manufacturing with innovations and optimized motion control solutions that deliver higher performing, more profitable automated manufacturing and processing equipment. Our dedication to the advancement of automation extends beyond technology to the education and development of current and future automation and robotics designers with simulation tools, teaching programs, and on-site services.

### Quality Assurance, ISO 9001 and ISO 14001 Certifications

Festo Corporation is committed to supply all Festo products and services that will meet or exceed our customers' requirements in product quality, delivery, customer service and satisfaction.

To meet this commitment, we strive to ensure a consistent, integrated, and systematic approach to management that will meet or exceed the requirements of the ISO 9001 standard for Quality Management and the ISO 14001 standard for Environmental Management.



© Copyright 2008, Festo Corporation. While every effort is made to ensure that all dimensions and specifications are correct, Festo cannot guarantee that publications are completely free of any error, in particular typing or printing errors. Accordingly, Festo cannot be held responsible for the same. For Liability and Warranty conditions, refer to our "Terms and Conditions of Sale", available from your local Festo office. All rights reserved. No part of this publication may be reproduced, distributed, or transmitted in any form or by any means, electronic, mechanical, photocopying or otherwise, without the prior written permission of Festo. All technical data subject to change according to technical update.



Printed on recycled paper at New Horizon Graphic, Inc., FSC certified as an environmentally friendly printing plant.

# Festo North America

## Festo Regional Contact Center

5300 Explorer Drive  
Mississauga, Ontario L4W 5G4  
Canada

### USA Customers:

For ordering assistance,

**Call:** 1.800.99.FESTO (1.800.993.3786)

**Fax:** 1.800.96.FESTO (1.800.963.3786)

**Email:** [customer.service@us.festo.com](mailto:customer.service@us.festo.com)

For technical support,

**Call:** 1.866.GO.FESTO (1.866.463.3786)

**Fax:** 1.800.96.FESTO (1.800.963.3786)

**Email:** [product.support@us.festo.com](mailto:product.support@us.festo.com)

### Canadian Customers:

**Call:** 1.877.GO.FESTO (1.877.463.3786)

**Fax:** 1.877.FX.FESTO (1.877.393.3786)

**Email:** [festo.canada@ca.festo.com](mailto:festo.canada@ca.festo.com)

## USA Headquarters

Festo Corporation  
395 Moreland Road  
P.O. Box 18023  
Hauppauge, NY 11788, USA  
[www.festo.com/us](http://www.festo.com/us)

## USA Sales Offices

### Appleton

North 922 Tower View Drive, Suite N  
Greenville, WI 54942, USA

### Boston

120 Presidential Way, Suite 330  
Woburn, MA 01801, USA

### Chicago

1441 East Business Center Drive  
Mt. Prospect, IL 60056, USA

### Dallas

1825 Lakeway Drive, Suite 600  
Lewisville, TX 75057, USA

### Detroit – Automotive Engineering Center

2601 Cambridge Court, Suite 320  
Auburn Hills, MI 48326, USA

### New York

395 Moreland Road  
Hauppauge, NY 11788, USA

### Silicon Valley

4935 Southfront Road, Suite F  
Livermore, CA 94550, USA

## United States



**USA Headquarters, East:** Festo Corp., 395 Moreland Road, Hauppauge, NY 11788

Phone: 1.631.435.0800; Fax: 1.631.435.8026;

Email: [info@festo-usa.com](mailto:info@festo-usa.com)

[www.festo.com/us](http://www.festo.com/us)

## Canada



**Headquarters:** Festo Inc., 5300 Explorer Drive, Mississauga, Ontario L4W 5G4

Phone: 1.905.624.9000; Fax: 1.905.624.9001;

Email: [festo.canada@ca.festo.com](mailto:festo.canada@ca.festo.com)

[www.festo.ca](http://www.festo.ca)

## Mexico



**Headquarters:** Festo Pneumatic, S.A., Av. Ceylán 3, Col. Tequesquahuac,  
54020 Tlalneapantla, Edo. de México

Phone: 011 52 [55] 53 21 66 00; Fax: 011 52 [55] 53 21 66 65;

Email: [festo.mexico@mx.festo.com](mailto:festo.mexico@mx.festo.com)

[www.festo.com/mx](http://www.festo.com/mx)

## Central USA

Festo Corporation  
1441 East Business  
Center Drive  
Mt. Prospect, IL 60056, USA  
Phone: 1.847.759.2600  
Fax: 1.847.768.9480



## Western USA

Festo Corporation  
4935 Southfront Road,  
Suite F  
Livermore, CA 94550, USA  
Phone: 1.925.371.1099  
Fax: 1.925.245.1286



## Festo Worldwide

Argentina Australia Austria Belarus Belgium Brazil Bulgaria Canada Chile China Colombia Croatia Czech Republic Denmark  
Estonia Finland France Germany Great Britain Greece Hong Kong Hungary India Indonesia Iran Ireland Israel Italy Japan Latvia  
Lithuania Malaysia Mexico Netherlands New Zealand Norway Peru Philippines Poland Romania Russia Serbia Singapore  
Slovakia Slovenia South Africa South Korea Spain Sweden Switzerland Taiwan Thailand Turkey Ukraine United States Venezuela

[www.festo.com](http://www.festo.com)