

Universal plug connectors, for self-assembly













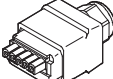



FESTO



Universal plug connectors, for self-assembly

Product range overview

FESTO

Version	Type	Connection cross section [mm²]	Connector type	Electrical connection	Protection class	Bus protocol/ activation	➔ Page/ Internet
Harax® quick connection							
	NECU-S-...-HX	0.14 ... 0.34	Plug	M8x1, 3-pin	IP65, IP67	–	3
				M8x1, 4-pin			
				M12x1, 3-pin, A-coded			
		M12x1, 4-pin, A-coded					
		M12x1, 3-pin, A-coded					
		M12x1, 4-pin, A-coded					
		0.34 ... 0.75					
Screw terminal							
	NECU-S-M8G4 	0.14 ... 0.5	Plug	M8x1, 4-pin	IP67	–	5
	NECU-...-D12...-C2	0.14 ... 0.75	Plug	M12x1, 4-pin, D-coded	IP65, IP67	Ethernet	6
	NECU-...-S-B12G5 	0.14 ... 0.75	Plug	M12x1, 5-pin, B-coded	IP65, IP67	–	7
	NECU-...-B12G5 	0.14 ... 0.75	Socket	M12x1, 5-pin, B-coded	IP65, IP67	–	8
	NECU-G78...-C2	0.25 ... 2	Socket	G7/8", 4-pin	IP65, IP67, IP68	–	9
				G7/8", 5-pin			
Cable connector							
	NECU-M8G4	0.14 ... 0.5	Socket	M8x1, 4-pin	IP67	–	10
	SIE-GD	0.25 ... 0.75	Socket	M12x1, 4-pin	IP67	–	11
	SIE-WD-TR	0.25 ... 0.75	Socket	M12x1, 4-pin	IP67	–	12
Spring-loaded terminal							
	NECU-...-PPG5 	0.75 ... 2.5	Socket	AIDA push-pull, 5-pin	IP65, IP67	–	13
Insulation displacement connector							
	NECU-S-ECG4 	0.14	Plug	Insulation displacement connector, square design, 4-pin	IP40	–	14

Harax® is a registered trademark of its respective trademark holder in certain countries.

Universal plug connectors NECU, for self-assembly

Technical data

Plug NECU-S-...-HX

Reconnectable M8 and M12 round plug connectors with Harax® quick connection technology for low-voltage applications.



General technical data							
NECU-S-		M8G3-HX	M8G4-HX	M12G3-HX	M12G4-HX	M12G3-HX-Q7	M12G4-HX-Q7
Electrical connection		Straight plug / insulation displacement connector					
		M8x1		M12x1		M12x1	
				A-coded		A-coded	
		3-pin	4-pin	3-pin	4-pin	3-pin	4-pin
Operating voltage range	[V DC]	0 ... 32		0 ... 32		0 ... 48	
	[V AC]	0 ... 32		0 ... 32		0 ... 48	
Surge capacity	[kV]	0.8					
Acceptable current load at 40 °C	[A]	4		4		6	
Based on standard		EN 61076-2-104		EN 61076-2-101			
		EN 61984					
Cable diameter	[mm]	2.5 ... 5.1		2.9 ... 5.1		4.7 ... 6.0	
Individual wire diameter	[mm]	≥0.1					
Connection cross section	[mm²]	0.14 ... 0.34		0.14 ... 0.34		0.34 ... 0.75	
Wire diameter	[mm]	0.9 ... 1.6		0.9 ... 1.6		1.6 ... 2.0	
Wire insulation		PP		PP		–	
		PVC					
		TPE-E		TPE-E		–	
Connection frequency		3					
Max. tightening torque of locking clip	[Nm]	0.3		0.5		0.5	
Protection class		IP65					
		IP67					

Materials	
Housing	PA
	Nickel-plated die-cast zinc
Seals	FPM
	PUR
Pin contact	Gold-plated
Note on materials	Free of copper and PTFE
	RoHS-compliant

Operating and environmental conditions	
Ambient temperature	[°C] –25 ... +85
Corrosion resistance class CRC ¹⁾	1
Degree of contamination	3
Certification	cULus recognized (OL)




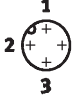
1) Corrosion resistance class 1 according to Festo standard 940 070
Components subject to low corrosion stress. Transport and storage protection. Parts that do not have primarily decorative surface requirements, e.g. in internal areas that are not visible or behind covers.

Harax® is a registered trademark of its respective trademark holder in certain countries.

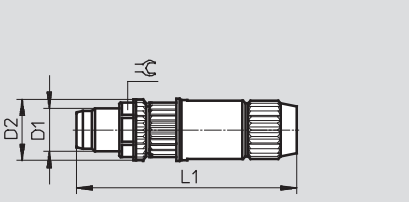
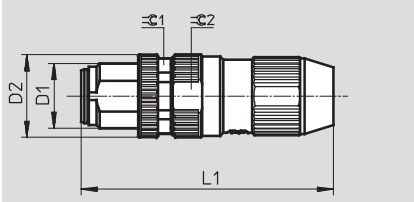
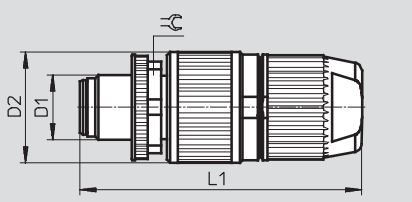
Universal plug connectors NECU, for self-assembly

FESTO

Technical data

Plug symbols					
M8x1			M12x1		
3-pin	Pin	Wire colour	4-pin	Pin	Wire colour
	1	Brown		1	Brown
	3	Blue		2	White
	4	Black		3	Blue
				4	Black
	1	Brown		1	Brown
	3	Blue		2	White
	4	Black		3	Blue
				4	Black

Compatibility matrix						
NECU-S-	M8G3-HX	M8G4-HX	M12G3-HX	M12G4-HX	M12G3-HX-Q7	M12G4-HX-Q7
Sensors						
NEBU/SIM	■	■	■	■	–	–
SM...-8/M	■	■	■	■	–	–
SM...-10/M	–	–	–	–	–	–
SM...-10	–	–	–	–	–	–
Valves						
KME-1	–	–	–	–	■	■
KMEB-3	–	–	–	–	■	■
KMEB-1	–	–	–	–	■	■
KMC-1	–	–	–	–	■	■
KMF-1	–	–	–	–	■	■
KMV-1	–	–	–	–	■	■
KMYZ-2/3/7/9	■	■	■	■	–	–
NEBV-M8W4L	■	■	■	■	–	–
NEBV-M8G4L	■	■	■	■	–	–
NEBV-H1G2	■	■	■	■	■	■
KMEB-2	–	–	–	–	■	■

Dimensions		Download CAD Data → www.festo.com/us/cad	
NECU-S-M8G...-HX	NECU-S-M12G...-HX	NECU-S-M12G...-HX-Q7	
			

Type	D1	D2	L1	≈C	≈C1	≈C2
NECU-S-M8G...-HX	M8x1	11.5	40.8	9	–	–
NECU-S-M12G...-HX	M12x1	15.3	46.75	–	13	14
NECU-S-M12G...-HX-Q7	M12x1	20.5	52.2	17	–	–

Ordering data					
Connection cross section [mm ²]	Electrical connection	Weight [g]	Part No.	Type	
0,14 ... 0,34	Plug M8x1, 3-pin, straight, insulation displacement connector	7.8	562024	NECU-S-M8G3-HX	
	Plug M8x1, 4-pin, straight, insulation displacement connector	7.8	562025	NECU-S-M8G4-HX	
	Plug M12x1, A-coded, 3-pin, straight, insulation displacement connector	17.5	562027	NECU-S-M12G3-HX	
	Plug M12x1, A-coded, 4-pin, straight, insulation displacement connector	17.5	562028	NECU-S-M12G4-HX	
0,34 ... 0,75	Plug M12x1, A-coded, 3-pin, straight, insulation displacement connector	32.8	564946	NECU-S-M12G3-HX-Q7	
	Plug M12x1, A-coded, 4-pin, straight, insulation displacement connector	33.3	564947	NECU-S-M12G4-HX-Q7	

Universal plug connectors NECU, for self-assembly

Technical data

Plug NECU-S-M8G4

- Plug
- 4-pin
- Can be assembled with any cable length

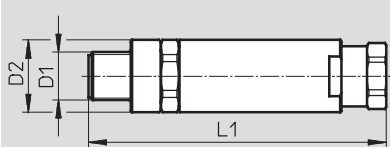
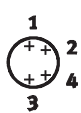


General technical data		
Electrical connection	Plug M8x1, 4-pin, straight, screw terminal	
Plug coding	Coded via contact arrangement	
Operating voltage range	[V DC]	0 ... 30
	[V AC]	0 ... 30
Surge capacity	[kV]	0.8
Acceptable current load	[A]	4
Based on standard	EN 61076-2-101	
	EN 61984	
Transmission characteristics	DIN EN 50173 / CAT 5	
Permissible cable Ø	[mm]	3.5 ... 5.0
Connection cross section	[mm ²]	0.14 ... 0.5
Type of mounting	Via knurled nut	
Protection class	IP67	

Materials	
Pin contact	Gold-plated brass
Union nut	Nickel-plated brass
Note on materials	RoHS-compliant

Operating and environmental conditions	
Ambient temperature	[°C] -25 ... +85
Degree of contamination	3

Dimensions Download CAD Data → www.festo.com/us/cad

NECU-S-M8G4-C2	Pin allocation
	

Type	D1	D2	L1
NECU-S-M8G4-C2	M8	12	49.6

Ordering data		
Electrical connection	Part No.	Type
Plug M8x1, 4-pin, straight	1068198	NECU-S-M8G4-C2

Universal plug connectors NECU, for self-assembly

FESTO

Technical data

Plug NECU-...-D12...-C2

- Plug for power supply
- 4-pin
- Can be assembled with any cable lengths
- With screw terminal



General technical data		
Electrical connection	Plug M12x1, round plug connector, 4-pin, straight, suitable for self-assembly, screw terminal, can be screened	
Plug coding	D, for Ethernet	
Operating voltage range	[V DC]	0 ... 250
	[V AC]	0 ... 250
Surge capacity	[kV]	2.5
Acceptable current load	[A]	4
Based on standard	EN 61076-2-101	
	EN 61984	
Transmission characteristics	DIN EN 50173 / CAT 5	
Permissible cable Ø	[mm]	6.0 ... 8.0
Connection cross section	[mm ²]	0.14 ... 0.75
Protection class	IP65/IP67	

Materials	
Housing	Nickel-plated die-cast zinc
Pin contact	Gold-plated brass
Note on materials	Free of copper and PTFE
	RoHS-compliant

Operating and environmental conditions	
Ambient temperature	[°C] -40 ... +85
Corrosion resistance class CRC ¹⁾	1
Degree of contamination	3
CE mark (see declaration of conformity)	To EU Low Voltage Directive

1) Corrosion resistance class 1 according to Festo standard 940 070

Components subject to low corrosion stress. Transport and storage protection. Parts that do not have primarily decorative surface requirements, e.g. in internal areas that are not visible or behind covers.

Dimensions		Download CAD Data → www.festo.com/us/cad

Ordering data			
Electrical connection	Weight [g]	Part No.	Type
Plug M12x1, round plug connector, 4-pin, straight, suitable for self-assembly, screw terminal, can be screened	47	543109	NECU-M-S-D12G4-C2-ET

Universal plug connectors NECU, for self-assembly

Technical data

Plug NECU-S-B12G5

- Plug
- 5-pin
- Can be assembled with any cable length

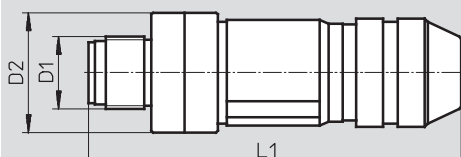
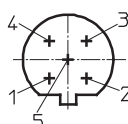


General technical data		
Electrical connection	Plug M12x1, 5-pin, straight, screw terminal	
Plug coding	B, for Profibus	
Operating voltage range	[V DC]	0 ... 60
	[V AC]	0 ... 60
Surge capacity	[kV]	1.5
Acceptable current load	[A]	4
Based on standard	EN 61076-2-101	
	EN 61984	
Transmission characteristics	DIN EN 50173 / CAT 5	
Permissible cable Ø	[mm]	6 ... 8
Connection cross section	[mm ²]	0.14 ... 0.75
Protection class	IP65/IP67	

Materials	
Housing	Nickel-plated die-cast zinc
Pin contact	Gold-plated brass
Note on materials	RoHS-compliant

Operating and environmental conditions	
Ambient temperature	[°C] -25 ... +85
Degree of contamination	3
CE mark (see declaration of conformity)	To EU Low Voltage Directive

Dimensions Download CAD Data → www.festo.com/us/cad

NECU-M-S-B12G5		Pin allocation	
			

Type	D1	D2	L1
NECU-M-S-B12G5	M12	20	62.5

Ordering data		
Electrical connection	Part No.	Type
Plug M12x1, 5-pin, straight	1066354	NECU-M-S-B12G5-C2-PB

Universal plug connectors NECU, for self-assembly

Technical data

FESTO

Socket NECU-B12G5

- Socket
- 5-pin
- Can be assembled with any cable length



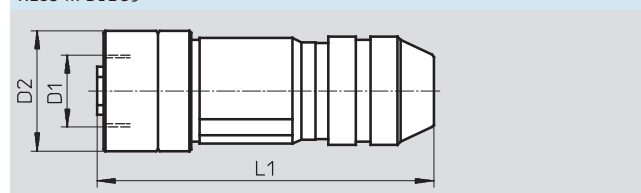
General technical data		
Electrical connection	Socket M12x1, 5-pin, straight, screw terminal	
Plug coding	B, for Profibus	
Operating voltage range	[V DC]	0 ... 60
	[V AC]	0 ... 60
Surge capacity	[kV]	1.5
Acceptable current load	[A]	4
Based on standard	EN 61076-2-101	
	EN 61984	
Transmission characteristics	DIN EN 50173 / CAT 5	
Permissible cable Ø	[mm]	6 ... 8
Connection cross section	[mm ²]	0.14 ... 0.75
Protection class	IP65/IP67	

Materials	
Housing	Nickel-plated die-cast zinc
Pin contact	Gold-plated brass
Note on materials	RoHS-compliant

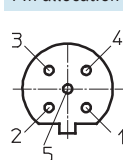
Operating and environmental conditions	
Ambient temperature	[°C] -25 ... +85
Degree of contamination	3
CE mark (see declaration of conformity)	To EU Low Voltage Directive

Dimensions Download CAD Data → www.festo.com/us/cad

NECU-M-B12G5



Pin allocation



Type	D1	D2	L1
NECU-M-B12G5	M12	20	56

Ordering data		
Electrical connection	Part No.	Type
Socket M12x1, 5-pin, straight	1067905	NECU-M-B12G5-C2-PB

Universal plug connectors NECU, for self-assembly

FESTO

Technical data

Power supply socket NECU-G78...-C2

- Power supply socket for fieldbus connection
- 4-pin and 5-pin
- Can be assembled with any cable lengths
- With screw terminal
- Wire cross section of up to 2 mm²



General technical data		
Type	NECU-G78G4-C2	NECU-G78G5-C2
Electrical connection	Socket 7/8", round plug connector, 4-pin, straight, suitable for self-assembly, screw terminal	Socket 7/8", round plug connector, 5-pin, straight, suitable for self-assembly, screw terminal
Plug coding	ODVA AutoSIG	NFPA/T3.5.29 R1-2003
Operating voltage range	[V DC]	0 ... 250
	[V AC]	0 ... 250
Surge capacity	[kV]	2.5
Acceptable current load	[A]	8
Based on standard	EN 61984	
Permissible cable Ø	[mm]	5.0 ... 12.0
Connection cross section	[mm ²]	0.25 ... 2.0
Protection class	IP65/IP67/IP68	

Materials	
Housing	PA (colour: black)
Seals	NBR
Pin contact	Gold-plated copper base alloy
Union nut	Nickel-plated brass
Note on materials	Free of copper and PTFE
	RoHS-compliant

Operating and environmental conditions	
Ambient temperature	[°C] -40 ... +80
Corrosion resistance class CRC ¹⁾	1
Degree of contamination	3
CE mark (see declaration of conformity)	To EU Low Voltage Directive
Certification	CSA C/US (OL)

1) Corrosion resistance class 1 according to Festo standard 940 070
Components subject to low corrosion stress. Transport and storage protection. Parts that do not have primarily decorative surface requirements, e.g. in internal areas that are not visible or behind covers.

Dimensions		Download CAD Data → www.festo.com/us/cad
		x Cable diameter 5.0 ... 12.0 mm

Ordering data			
Electrical connection	Weight [g]	Part No.	Type
Socket 7/8", round plug connector, 4-pin, straight, suitable for self-assembly, screw terminal	49	543108	NECU-G78G4-C2
Socket 7/8", round plug connector, 5-pin, straight, suitable for self-assembly, screw terminal	51	543107	NECU-G78G5-C2

Universal plug connectors NECU, for self-assembly

FESTO

Technical data

Cable socket NECU-M8G4

- Socket for power supply
- 4-pin
- Can be assembled with any cable lengths
- With cable connector PG7



General technical data		
Electrical connection	Socket M8x1, 4-pin, straight	
Operating voltage range	[V DC]	0 ... 30
	[V AC]	0 ... 30
Surge capacity	[kV]	0.8
Acceptable current load	[A]	3
Based on standard	EN 61984	
Permissible cable Ø	[mm]	3.5 ... 5.0
Connection cross section	[mm ²]	0.14 ... 0.5
Connection frequency	500	
Type of mounting	Via knurled nut	
Mounting position	Any	
Max. tightening torque of plug	[Nm]	0.3
Protection class	IP67	

Materials	
Housing	PBT (colour: black)
	Nickel-plated die-cast zinc
Pin contact	Gold-plated brass
Union nut	Nickel-plated brass
Note on materials	RoHS-compliant

Operating and environmental conditions	
Ambient temperature	[°C] -40 ... +80
Storage temperature	[°C] -40 ... +80
Corrosion resistance class CRC ¹⁾	2
Degree of contamination	3

1) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

Dimensions		Download CAD Data → www.festo.com/us/cad

Ordering data			
Electrical connection	Weight [g]	Part No.	Type
Socket M8x1, 4-pin, straight	9.5	544392	NECU-M8G4

Universal plug connectors SIE, for self-assembly

Technical data

FESTO

Sensor socket SIE-GD

- Reconnectable for low-voltage applications
- 4-pin
- Can be assembled with any cable lengths
- With cable connector PG7



General technical data		
Electrical connection		Straight socket M12x1, 4-pin
Operating voltage range	[V DC]	0 ... 250
	[V AC]	0 ... 250
Surge capacity	[kV]	2.5
Acceptable current load at 40 °C	[A]	4
Conforms to		EN 61076-2-101
		EN 61984
Permissible cable Ø	[mm]	4 ... 6
Connection cross section	[mm ²]	0.25 ... 0.75
Connection frequency		50
Type of mounting		Via knurled nut
Max. tightening torque	[Nm]	0.5
Protection class		IP67

Materials	
Housing	PA
Union nut	PA
Note on materials	RoHS-compliant

Operating and environmental conditions	
Ambient temperature	[°C] -25 ... +85
Corrosion resistance class CRC ¹⁾	4
Degree of contamination	3
CE mark (see declaration of conformity)	To EU Low Voltage Directive

1) Corrosion resistance class 4 according to Festo standard 940 070
Components subject to particularly high corrosion stress. Parts used with aggressive media, e.g. in the food or chemical industry. These applications should be supported with special tests with the media if required.

Dimensions	Download CAD Data → www.festo.com/us/cad

Ordering data		
Electrical connection	Part No.	Type
Straight socket M12x1, 4-pin	18494	SIE-GD

Universal plug connectors SIE, for self-assembly

Technical data

FESTO

Angled socket SIE-WD-TR

- Reconnectable for low-voltage applications
- 4-pin
- Can be assembled with any cable lengths



General technical data		
Electrical connection	Angled socket M12x1, 4-pin	
Operating voltage range	[V DC]	0 ... 250
	[V AC]	0 ... 250
Surge capacity	[kV]	2.5
Acceptable current load at 40 °C	[A]	4
Conforms to	EN 61076-2-101	
	EN 61984	
Permissible cable Ø	[mm]	4 ... 6
Connection cross section	[mm ²]	0.25 ... 0.75
Connection frequency	50	
Type of mounting	Via knurled nut	
Max. tightening torque	[Nm]	0.5
Protection class	IP67	

Materials	
Housing	PA
Union nut	PA
Note on materials	RoHS-compliant

Operating and environmental conditions	
Ambient temperature	[°C] -25 ... +85
Corrosion resistance class CRC ¹⁾	4
Degree of contamination	3
CE mark (see declaration of conformity)	To EU Low Voltage Directive

1) Corrosion resistance class 4 according to Festo standard 940 070
Components subject to particularly high corrosion stress. Parts used with aggressive media, e.g. in the food or chemical industry. These applications should be supported with special tests with the media if required.

Dimensions

Download CAD Data → www.festo.com/us/cad

1 Contact set can be repositioned by 4x90°

2 Cable Ø

Ordering data			
	Electrical connection	Part No.	Type
Angled socket	Angled socket M12x1, 4-pin	12956	SIE-WD-TR

Universal plug connectors NECU, for self-assembly

Technical data

Socket NECU-PPG5

- Power supply socket
- 5-pin
- Can be assembled with any cable length



General technical data	
Electrical connection	Socket AIDA push-pull, 5-pin, straight, spring-loaded terminal
Plug coding	Black insulator
Operating voltage range [V DC]	0 ... 24
Surge capacity [kV]	2.5
Acceptable current load [A]	16
Based on standard	EN 61984
Permissible cable Ø [mm]	9 ... 13
Connection cross section [mm ²]	0.75 ... 2.5
Protection class	IP65/IP67

Materials	
Housing	Nickel-plated die-cast zinc
Housing colour	Silver
Seals	NBR, TPE
Pin contact	Nickel-plated and gold-plated copper based alloy
Note on materials	RoHS-compliant

Operating and environmental conditions	
Ambient temperature [°C]	−40 ... +100
Degree of contamination	3
Fire protection classification to UL 94	V-0

Ordering data		
Electrical connection	Part No.	Type
Socket AIDA push-pull, 5-pin, straight	563059	NECU-M-PPG5-C1

Universal plug connectors NECU, for self-assembly

Technical data

FESTO

Plug NECU-S-ECG4

- Plug
- Insulation displacement connector
- 4-pin
- Can be assembled with any cable lengths

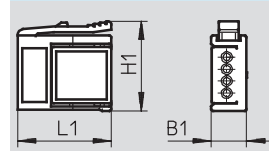


General technical data		
Electrical connection	Straight plug/insulation displacement connector, 4-pin, square design	
Operating voltage range	[V DC]	0 ... 30
Surge capacity	[kV]	0.8
Acceptable current load at 40 °C	[A]	3
Individual wire diameter	[mm]	≥ 0.07
Connection cross section	[mm ²]	0.14
Wire diameter	[mm]	0.8 ... 1
Wire insulation	PP, PVC, TPE-E	
Connection frequency	1	
Type of mounting	Engaging	
Protection class	IP40	

Materials	
Housing	PC, PBT
Pin contacts	Bronze
Note on materials	RoHS-compliant

Operating and environmental conditions	
Ambient temperature	[°C] -20 ... +60
Corrosion resistance class CRC ¹⁾	1
Degree of contamination	2
Certification	cULus recognized (OL)

- 1) Corrosion resistance class 1 according to Festo standard 940 070
Components subject to low corrosion stress. Transport and storage protection. Parts that do not have primarily decorative surface requirements, e.g. in internal areas that are not visible or behind covers.

Dimensions		Download CAD Data → www.festo.com/us/cad	
NECU-S-ECG4			
			

Type	B1	H1	L1
NECU-S-ECG4	5.9	14.9	15.6

Ordering data		
Electrical connection	Part No.	Type
Straight plug/insulation displacement connector, 4-pin, square design	570922	NECU-S-ECG4-HX-Q3

Universal plug connectors SIE, for self-assembly

Accessories



Operational status indicator

SIE-LP-LED-GR

Indicates the ready status of
a proximity sensor SIE connected
via the angled socket SIE-WD-TR
by illuminating a green LED



Ordering data			
Operating voltage range [V DC]	Ambient temperature [°C]	Part No.	Type
10 ... 30	-25 ... +70	12957	SIE-LP-LED-GR

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

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

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

USA Headquarters

Festo Corporation
395 Moreland Road
P.O. Box 18023
Hauppauge, NY 11788, USA
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

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

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

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