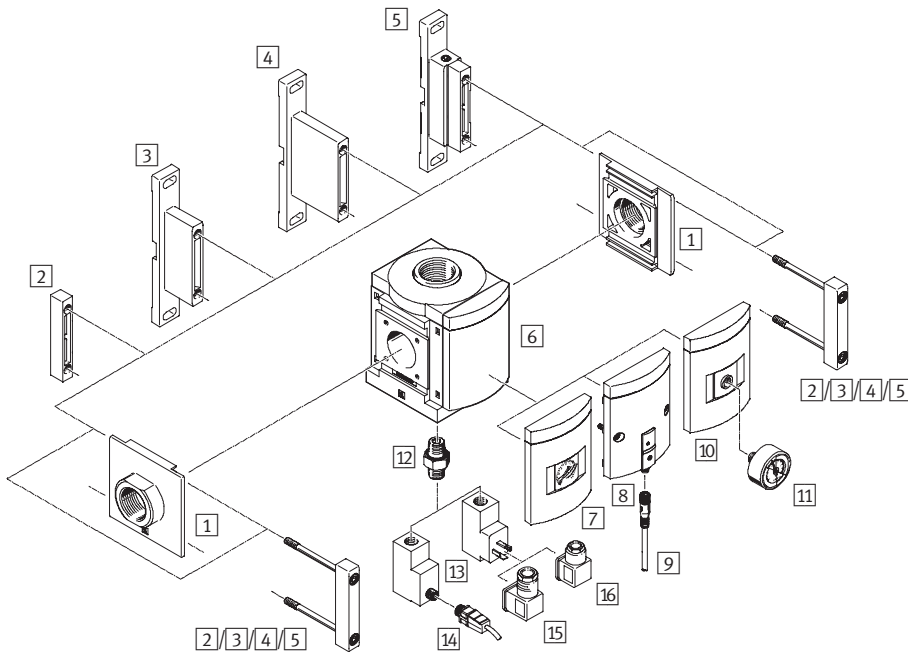


Branching modules MS-FRM, MS series, NPT



## Branching modules MS9-FRM, MS series, NPT

Peripherals overview



**Note**

Additional accessories:

- Module connector for combination with size MS6, MS9 or MS12

→ Internet: rmv, armv

Mounting attachments and accessories					
		Individual component		Combination	→ Page/Internet
		Without connecting thread	With connecting thread NPT3/4-14 or NPT1-11 1/2		
1	Connecting plate MS9-AQ...	■	-	■	ms9-aq
2	Module connector MS9-MV	■	-	■	ms9-mv
3	Mounting bracket MS9-WP	■	■	■	ms9-wp
4	Mounting bracket MS9-WPB	■	■	■	ms9-wp
5	Mounting bracket MS9-WPM	■	-	■	ms9-wp
6	Cover plate VS	■	■	■	8
7	MS pressure gauge AG	■	■	■	8
8	Pressure sensor without display AD7 ... AD10	■	■	■	8
9	Connecting cable NEBU-M8...-LE3	■	■	■	10
10	Adapter plate for EN pressure gauge 1/4 A4	■	■	■	8
11	Pressure gauge MA	■	■	■	10
12	Double nipple (included in the scope of delivery) ESK	■	■	■	-
13	Pressure switch PEV X/Y/M12	■	■	■	8
14	Connecting cable NEBU-M12...-LE4	■	■	■	10
15	Angled socket PEV-1/4-WD-LED-...	■	■	■	11
16	Plug socket MSSD-C-4P	■	■	■	11

## Branching modules MS9-FRM, MS series, NPT

Type codes

		MS	9	-	FRM	-	NG	-	VS	-	Y
<b>Series</b>											
MS	Standard service unit										
<b>Size</b>											
9	Grid dimension 90 mm										
<b>Service function</b>											
FRM	Branching module										
<b>Connection size</b>											
NG	Module without connecting thread, without connecting plate										
<b>Pressure gauge alternatives</b>											
VS	Cover plate										
<b>Pressure switch</b>											
	Without pressure switch										
Y	With pressure switch										

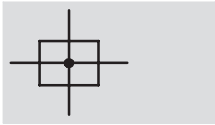
Additional variants can be ordered using the modular system → 8

- Connecting plates
- Pressure gauge/pressure gauge alternatives
- Alternative pressure gauge scale
- Pressure switch
- Type of mounting
- Alternative flow direction

# Branching modules MS9-FRM, MS series, NPT


Technical data

Function



Flow rate  
10,000 ... 50,000 l/min

Temperature range  
-10 ... +60 °C

 Operating pressure  
0 ... 20 bar



- Pneumatic manifold with 4 connections
- Attachment facility for auxiliary modules
- Outlet at top and bottom
- Can be used as an intermediate distributor for varying air qualities
- Optional pressure sensor

General technical data				
Pneumatic connection 1, 2	NPT $\frac{3}{4}$ -14	NPT1-11 $\frac{1}{2}$	NPT $\frac{1}{2}$ -14 ... NPT1 $\frac{1}{2}$ -11 $\frac{1}{2}$ (with connecting plate AQ...)	- (without connecting thread NG)
Pneumatic connection 3, 4	NPT1-11 $\frac{1}{2}$			
Design	Branching module			
Type of mounting	Via accessories In-line installation			
Mounting position	Any <sup>1)</sup>			
Pressure display	Via pressure sensor for displaying output pressure via operational status indicator and electrical output Via pressure gauge for displaying output pressure Via pressure gauge with red/green scale for displaying output pressure G $\frac{1}{4}$ prepared			

1) The branching module must be mounted vertically when combined with a pressure sensor as condensate must not collect in the pressure sensor.

Standard nominal flow rate $q_n$ [l/min]					
Pneumatic connection	Connecting plate AQR	Thread NPT $\frac{3}{4}$ -14 or connecting plate AQS	Thread NPT1-11 $\frac{1}{2}$ or connecting plate AQT	Connecting plate AQU	Connecting plate AQV
In main flow direction 1 $\rightarrow$ 2	10,000	25,000	45,000	47,000	50,000
Outlet at top	13,000				
Outlet at bottom	13,000				

1) Measured at  $p_1 = 6$  bar and  $p_2 = 5$  bar,  $\Delta p = 1$  bar

# Branching modules MS9-FRM, MS series, NPT

Technical data

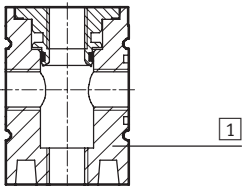
Operating and environmental conditions			
Variant	Standard	Pressure switch X/Y/M12	Pressure sensor AD...
Operating pressure [bar]	0 ... 20	0 ... 12	0 ... 10
Operating medium	Air quality class 5:7:- to DIN ISO 8573-1		Filtered compressed air, lubricated or unlubricated, grade of filtration 40 µm
Ambient temperature [°C]	-10 ... +60	-10 ... +60	0 ... +50
Temperature of medium [°C]	-10 ... +60	-10 ... +60	0 ... +50
Storage temperature [°C]	-10 ... +60	-10 ... +60	-10 ... +60
Corrosion resistance class CRC <sup>1)</sup>	2		

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.

Weight [g]	
Branching module	1,000
Branching module with pressure switch X/Y/M12	1,100

## Materials

Sectional view



Branching module		
1	Housing	Die-cast aluminium
-	Cover	PA reinforced
-	Connecting plate, module connector, mounting bracket	Die-cast aluminium
Note on materials		RoHS-compliant
		Free of copper and PTFE (not with variant AG)

## Dimensions – Basic version

Without connecting thread NG Download CAD Data → [www.festo.com/us/cad](http://www.festo.com/us/cad)



Type	B1	B2	B3	L1	L2
MS9-FRM-NG	90	45	109	122	64

# Branching modules MS9-FRM, MS series, NPT

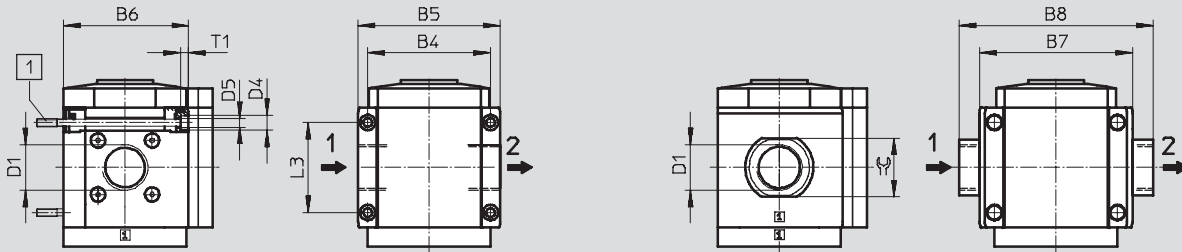
Technical data

## Dimensions – Connecting thread/connecting plate

Download CAD Data → [www.festo.com/us/cad](http://www.festo.com/us/cad)

With connecting thread N $\frac{3}{4}$  or N1

With connecting plate AQ...



1 Mounting screw M6x $\min$ .90 to DIN 912 (not included in the scope of delivery) for wall mounting without mounting bracket

→ Flow direction

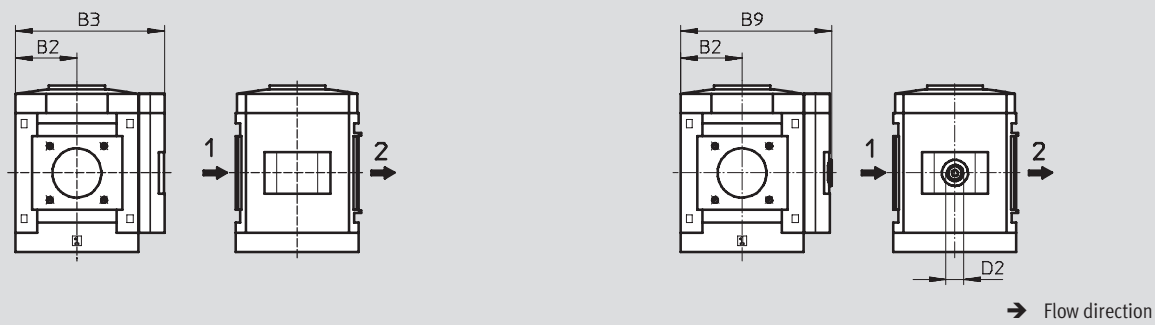
Type	B4	B5	B6	B7	B8	D1	D4	D5	L3	T1	$\approx$
MS9-FRM-N $\frac{3}{4}$	90	104	91.5	-	-	NPT $\frac{3}{4}$ -14	11	6.5	66	6	-
MS9-FRM-N1						NPT1-11 $\frac{1}{2}$					
MS9-FRM-AQR	-	-	-	112	132	NPT $\frac{1}{2}$ -14	-	-	-	-	30
MS9-FRM-AQS					132	NPT $\frac{3}{4}$ -14					36
MS9-FRM-AQT					142	NPT1-11 $\frac{1}{2}$					41
MS9-FRM-AQU					162	NPT1 $\frac{1}{4}$ -11 $\frac{1}{2}$					50
MS9-FRM-AQV					176	NPT1 $\frac{1}{2}$ -11 $\frac{1}{2}$					55

## Dimensions – Pressure gauge alternatives

Download CAD Data → [www.festo.com/us/cad](http://www.festo.com/us/cad)

Integrated MS pressure gauge with standard scale AG or red/green scale RG, display unit [bar]

Adapter plate A4 for EN pressure gauge  $\frac{1}{4}$ , without pressure gauge



Type	B2	B3	B9	D2
MS9-FRM-...-AG/RG	45	109	-	-
MS9-FRM-...-A4		-	110	G $\frac{1}{4}$

# Branching modules MS9-FRM, MS series, NPT

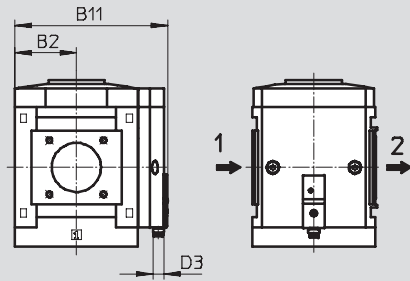
Technical data

## Dimensions – Pressure gauge alternatives

Download CAD Data → [www.festo.com/us/cad](http://www.festo.com/us/cad)

Pressure sensor without LCD display (operational status indicator only) AD7 ... AD10

Technical data → Internet: [sde5](http://sde5)



→ Flow direction

Variant AD7:  
SDE5-D10-O-...-P-M8 with 3-pin plug M8x1, threshold value comparator, 1 switching output PNP, N/O contact

Variant AD9:  
SDE5-D10-O3-...-P-M8 with 3-pin plug M8x1, window comparator, 1 switching output PNP, N/O contact

Variant AD8:  
SDE5-D10-C-...-P-M8 with 3-pin plug M8x1, threshold value comparator, 1 switching output PNP, N/C contact

Variant AD10:  
SDE5-D10-C3-...-P-M8 with 3-pin plug M8x1, window comparator, 1 switching output PNP, N/C contact

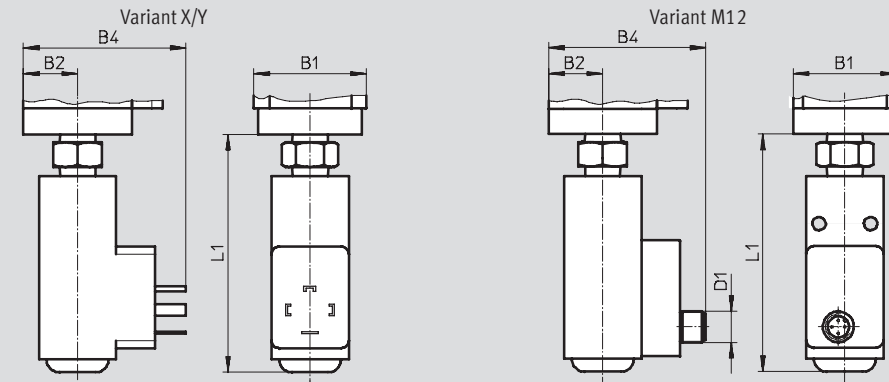
Type	B2	B11	D3
MS9-FRM-...-AD7/AD8/AD9/AD10	45	112	M8

## Dimensions – Pressure switch

Download CAD Data → [www.festo.com/us/cad](http://www.festo.com/us/cad)

Pressure switch with adjustable pressure switching point X/Y/M12

Technical data → Internet: [pev-1/4](http://pev-1/4)



Variant X:  
PEV-1/4-SC-OD with display, plug, square design to DIN EN 175 301, type A

Variant Y:  
PEV-1/4-B-OD, plug, square design to DIN EN 175 301, type A

Variant M12:  
PEV-1/4-B-M12 with 4-pin plug M12x1

Type	B1	B2	B4	D1	L1
MS9-FRM-...-X/Y	90	45	87	–	105
MS9-FRM-...-M12	90	45	85	M12x1	105

## Ordering data

Size	Connection	Standard		With pressure switch PEV-1/4-B-OD (variant Y)	
		Part No.	Type	Part No.	Type
MS9	–	564148	MS9-FRM-NG-VS <sup>1)</sup>	564150	MS9-FRM-NG-VS-Y <sup>1)</sup>

1) Free of copper and PTFE

## Branching modules MS9-FRM, MS series, NPT

Ordering data – Modular products

**M** **Mandatory data** →

Module No.	Series	Size	Function	Connection size
562534	MS	9	FRM	N $\frac{3}{4}$ , N1, AQR, AQS, AQT, AQU, AQV, NG
<b>Ordering example</b>				
<b>562534</b>	<b>MS</b>	<b>9</b>	<b>- FRM</b>	<b>- AQS</b>

Ordering table		Grid dimension	[mm]	90	Condition s	Code	Enter code
<b>M</b>	Module No.	<b>562534</b>					
	Series	Standard				<b>MS</b>	MS
	Size	9				<b>9</b>	9
	Function	Branching module				<b>-FRM</b>	-FRM
	Connection size	Thread N $\frac{3}{4}$				<b>-N<math>\frac{3}{4}</math></b>	
		Thread N1				<b>-N1</b>	
		Connecting plate N $\frac{1}{2}$				<b>-AQR</b>	
		Connecting plate N $\frac{3}{4}$				<b>-AQS</b>	
		Connecting plate N1				<b>-AQT</b>	
		Connecting plate N1 $\frac{1}{4}$				<b>-AQU</b>	
		Connecting plate N1 $\frac{1}{2}$				<b>-AQV</b>	
		Module without connecting thread, without connecting plate				<b>-NG</b>	

**Transfer order code**

562534	MS	9	-	FRM	-	
--------	----	---	---	-----	---	--



# Branching modules MS9-FRM, MS series, NPT

Ordering data – Modular products

Mandatory data		Options		
Pressure gauge/pressure gauge alternatives	Alternative pressure gauge scale	Pressure switch	Type of mounting	Alternative flow direction
AG, VS, A4, RG, AD7 ... AD10	PSI, MPA, BAR	X, Y, M12	WP, WPM, WPB	Z
- VS				

Ordering table						
Grid dimension	[mm]		Condition s	Code	Enter code	
M	Pressure gauge/pressure gauge alternatives	MS pressure gauge		-AG		
		Cover plate		-VS		
		Adapter plate for EN pressure gauge 1/4, without pressure gauge		-A4		
		Integrated pressure gauge, red/green scale	1	-RG		
		Pressure sensor without display, plug M8, threshold value comparator, PNP, N/O contact	2	-AD7		
		Pressure sensor without display, plug M8, threshold value comparator, PNP, N/C contact	2	-AD8		
		Pressure sensor without display, plug M8, window comparator, PNP, N/O contact	2	-AD9		
		Pressure sensor without display, plug M8, window comparator, PNP, N/C contact	2	-AD10		
		Alternative pressure gauge scale	PSI	3		-PSI
			MPa	3		-MPA
Bar	3		-BAR			
O	Pressure switch	Pressure switch PEV with display, plug socket, EN175301, type A, cube	4	-X		
		Pressure switch PEV without display, plug socket, EN 175301, type A, cube	4	-Y		
		Pressure switch PEV without display, plug socket, round, M12, 4-pin	4	-M12		
Type of mounting	Mounting bracket	5	-WP			
	Mounting bracket	5	-WPM			
	Mounting bracket for large wall gap	5	-WPB			
Alternative flow direction	Flow direction from right to left			-Z		

- |                        |  |                       |   |
|------------------------|--|-----------------------|---|
| 1 <b>RG</b>            | Not with alternative pressure gauge scale PSI, PSI scale serves only as an auxiliary scale | 4 <b>X, Y, M12</b>    | Max. permissible operating pressure P1 = 12 bar |
| 2 <b>AD7 ... AD10</b>  | Measuring range max. 10 bar  | 5 <b>WP, WPM, WPB</b> | Not with module NG                              |
| 3 <b>PSI, MPA, BAR</b> | Not with pressure gauge alternatives VS, A4, AD7, AD8, AD9, AD10                           |                       |   |


Transfer order code

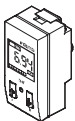
-  -  -  -  -


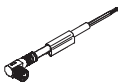
# Branching modules MS-FRM, MS series, NPT


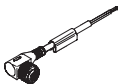
Accessories

FESTO

Ordering data – Pressure gauge MA					
	Nominal size	Pneumatic connection	Display range		Part No. Type
			[bar]	[psi]	
	Pressure gauge MA, DIN EN 837-1 <span style="float: right;">Technical data → Internet: ma</span>				
	40	G1/4	0 ... 16	0 ... 232	<b>183901</b> MA-40-16-G1/4-EN
	Pressure gauge MA, DIN EN 837-1, with red-green range <span style="float: right;">Technical data → Internet: ma</span>				
	40	R1/8	0 ... 16	–	<b>525726</b> MA-40-16-R1/8-E-RG
	50	R1/4	0 ... 16	–	<b>525729</b> MA-50-16-R1/4-E-RG

Ordering data – Pressure sensor SDE1						
	Pneumatic connection	Electrical output	Electrical connection	Display	Part No. Type	
					Technical data → Internet: sde1	
Pressure sensor SDE1 for direct mounting on the service unit with pressure gauge connection (adapter plate for pneumatic connection included in scope of delivery), pressure measurement range 0 ... 10 bar, relative pressure measurement						
	Male thread R1/8	1 switching output PNP	M8x1, 3-pin	LCD	<b>192026</b>	SDE1-D10-G2-R18-C-P1-M8
			M8x1, 3-pin	Illuminated LCD	<b>529970</b>	SDE1-D10-G2-R18-L-P1-M8
			M12x1, 3-pin	Illuminated LCD	<b>534064</b>	SDE1-D10-G2-R18-L-P1-M12
		2 switching outputs PNP	M8x1, 4-pin	LCD	<b>192027</b>	SDE1-D10-G2-R18-C-P2-M8
			M8x1, 4-pin	Illuminated LCD	<b>529971</b>	SDE1-D10-G2-R18-L-P2-M8
			1 switching output PNP and 0 ... 10 V analogue	M8x1, 4-pin	LCD	<b>529958</b>
	M8x1, 4-pin	Illuminated LCD		<b>529972</b>	SDE1-D10-G2-R18-L-PU-M8	
	Male thread R1/4	1 switching output PNP	M8x1, 3-pin	LCD	<b>192028</b>	SDE1-D10-G2-R14-C-P1-M8
			M8x1, 3-pin	Illuminated LCD	<b>529967</b>	SDE1-D10-G2-R14-L-P1-M8
			M12x1, 3-pin	Illuminated LCD	<b>534157</b>	SDE1-D10-G2-R14-L-P1-M12
		2 switching outputs PNP	M8x1, 4-pin	LCD	<b>192029</b>	SDE1-D10-G2-R14-C-P2-M8
			M8x1, 4-pin	Illuminated LCD	<b>529968</b>	SDE1-D10-G2-R14-L-P2-M8
		1 switching output PNP and 0 ... 10 V analogue	M8x1, 4-pin	LCD	<b>529957</b>	SDE1-D10-G2-R14-C-PU-M8
			M8x1, 4-pin	Illuminated LCD	<b>529969</b>	SDE1-D10-G2-R14-L-PU-M8


Ordering data – Connecting cable NEBU-M8					
	Electrical connection	Number of wires	Cable length [m]	Part No. Type	
				Technical data → Internet: nebu	
	M8x1, straight socket	3	2.5	<b>541333</b>	NEBU-M8G3-K-2.5-LE3
			5	<b>541334</b>	NEBU-M8G3-K-5-LE3
		4	2.5	<b>541342</b>	NEBU-M8G4-K-2.5-LE4
			5	<b>541343</b>	NEBU-M8G4-K-5-LE4
	M8x1, angled socket	3	2.5	<b>541338</b>	NEBU-M8W3-K-2.5-LE3
			5	<b>541341</b>	NEBU-M8W3-K-5-LE3
		4	2.5	<b>541344</b>	NEBU-M8W4-K-2.5-LE4
			5	<b>541345</b>	NEBU-M8W4-K-5-LE4


Ordering data – Connecting cable NEBU-M12					
	Electrical connection	Number of wires	Cable length [m]	Part No. Type	
				Technical data → Internet: nebu	
	M12x1, straight socket	3	2.5	<b>541363</b>	NEBU-M12G5-K-2.5-LE3
			5	<b>541364</b>	NEBU-M12G5-K-5-LE3
		4	2.5	<b>550326</b>	NEBU-M12G5-K-2.5-LE4
			5	<b>541328</b>	NEBU-M12G5-K-5-LE4
	M12x1, angled socket	3	2.5	<b>541367</b>	NEBU-M12W5-K-2.5-LE3
			5	<b>541370</b>	NEBU-M12W5-K-5-LE3
		4	2.5	<b>550325</b>	NEBU-M12W5-K-2.5-LE4
			5	<b>541329</b>	NEBU-M12W5-K-5-LE4


## Branching modules MS-FRM, MS series, NPT

FESTO

Accessories

Ordering data – Angled socket PEV					Technical data → Internet: pev-1/4	
	Description	Operating voltage range	Electrical connection	Switching status display	Part No.	Type
	For PEV-1/4-...-OD	15 ... 30 V DC	4-pin	Yellow LED	<b>164274</b>	<b>PEV-1/4-WD-LED-24</b>
		≤ 230 V AC ≤ 180 V DC	4-pin	Yellow LED	<b>164275</b>	<b>PEV-1/4-WD-LED-230</b>

Ordering data – Plug socket MSSD					Technical data → Internet: mssd-c-4p	
	Description	Operating voltage range	Electrical connection	Type of mounting: cable connection	Part No.	Type
	For PEV-1/4-...-OD	≤ 250 V AC/DC	3-pin	Clamping screws	<b>171157</b>	<b>MSSD-C-4P</b>

Ordering data – Double nipple ESK					
	Description	Pneumatic connection		Part No.	Type
	Adjustable for angular compensation • For retrofitting pressure switch PEV to branching module MS-FRM	R1/4	R1/4	<b>151521</b>	<b>ESK-1/4-1/4</b>
			R1/2	<b>534153</b>	<b>ESK-1/4-1/2</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 Tlalneantla, 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)