

### Solenoid Coil (C-Coil)

With Standard Socket

DC:

Type MSG-...

AC:

Type MSW-...

These solenoids can be mounted on the following solenoid-actuated valves:

Type MC, MOC, JMC, MLC

Type CM-...-C and CH  
CJM-...-C and CH

Solenoid Coils comply with VDE Specification 0580, insulation Class F.

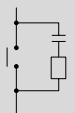
These solenoids may be changed without disturbing the pneumatic circuit.

Test certification: VDE

UR approval only when used with certain valves.

Note:

The following should be used as an RC element for DC (12-220V) for contact arc suppression.

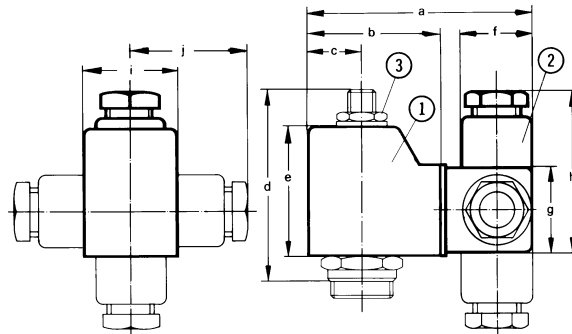


Capacitor 0.1µF, 630 W

Resistance: 1 ohm, 1 W

To be used with aluminum valves only with  $\geq 20 \times 1.25 \times 1.0$  in /  $50 \times 32 \times 25$  mm body dimensions.

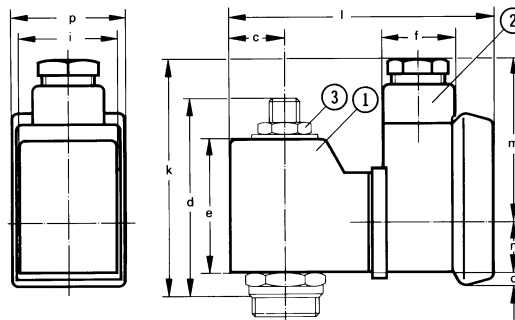
- ① Solenoid coil can be rotated on an armature tube
- ② Plug connection can be turned 90°
- ③ Maximum torque for mounting nuts: 35.4 lb-in / 400 N.cm



### Dimensions

a	2.76 in / 70 mm
b	1.65 in / 42 mm
c	0.67 in / 17 mm
d	2.32 in / 59 mm
e	1.58 in / 40 mm
f	0.87 in / 22 mm
g	1.10 in / 28 mm
h	1.97 in / 50 mm
i	1.16 in / 29.5 mm
j	1.46 in / 37 mm
k	2.80 in / 71 mm
l	3.15 in / 80 mm
m	1.93 in / 49 mm
n	0.59 in / 15 mm
o	0.16 in / 4 mm
p	1.36 in / 34.5 mm

For 250-380 V



Order Number					
DC			AC 50 Hz to 60 Hz		
Part No.	Type	Voltage	Part No.	Type	Voltage
3598	MSG-	12V	3589	MSW-	24V
3599	MSG-	24V	3594	MSW-	42V
			3591	MSW-	110V
			3592	MSW-	220/230V
			7704	MSW-	24/60V
			7705	MSW-	42/60V
			4125	MSW-	110/60V
			4126	MSW-	220/60V

Order Number (See Table)	Type MSG + Voltage	Type MSW + Voltage + Frequency
Design	DC solenoid	AC solenoid
Voltage	Standard	12, 24V
	Available	6 to 240V
Permissible Voltage Variation	± 10%	± 10% at nominal frequency
Permissible Frequency Variation	—	± 5% at nominal voltage
Power Consumption	12 W	Inrush: 30 VA Holding: 22 VA
Response Time	100%	
Protection Type (DIN 40050)	IP 65	
Ambient Temperatures	23 to 104°F / -5 to +40°C	
Minimum Energizing Time	20 ms	
Power Factor cos ø	—	0.5
Weight	0.375 lb / 0.170 kg	0.375 lb / 0.170 kg

14 to 140°F / -10 to +60°C temperature range of medium

# Solenoid Actuated Valves

## Solenoid Coils without Sockets, for C-Coils



### Solenoid Coil (C coil)

Without Sockets

With Pin Connections for Plug to DIN 43650

DC:

Type MSG-...-OD

AC:

Type MSW-...-OD

These solenoids can be mounted on the following solenoid-actuated valves:

Types MC, MOC, JMC, MLC,  
Types CM-...-C and CH  
CJM-...-C and CH.

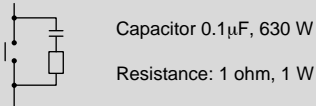
Solenoid coils comply with VDE Specification 0580, insulation class F.

These solenoids may be changed without disturbing the pneumatic circuit.

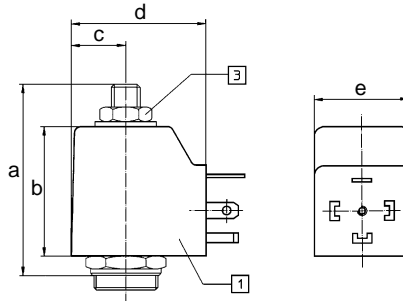
Test Certificate: VDE

#### Note:

The following should be used as an RC element for DC (12-220V) for contact arc suppression.



To be used with aluminum valves only with ≥ 20 x 1.25 x 1.0 in. / 50 x 32 x 25 mm body dimensions.



- ① Solenoid coil can be rotated on the solenoid stem
- ② Torque for mounting nuts:  
min. 17 lb in / 200 Ncm  
max. 34 lb in / 400 Ncm

#### Dimensions

- a 2.32 in / 59 mm
- b 1.57 in / 40 mm
- c 0.66 in / 17 mm
- d 1.65 in / 42 mm
- e 1.16 in / 29.5 mm

#### Accessories:

Standard Sockets

Order Number  
34583 MSSD-C

Sockets with cable,  
Type KMC-...,  
see page 460.

LED gaskets, see pages  
462-463.

Order Number						
DC			AC			
Part No.	Type	Voltage	Part No.	Type	Voltage	
34400	MSG	-12 -OD	50 Hz			
34401	MSG	-24 -OD	34402	MSW	-24	-OD
			34403	MSW	-42	-OD
			34404	MSW	-48	-OD
			34405	MSW	-110	-OD
			34407	MSW	-220/230	-OD
			34409	MSW	-240	-OD
			60 Hz			
			34406	MSW	-110	-60-OD
			34408	MSW	-230	-60-OD

Order Number (See Table)	Type MSG + Voltage + OD	Type MSW + Voltage + Frequency + OD
Design	DC solenoid	AC solenoid
Standard Voltage	12, 24 V	24, 42, 48, 110, 220, 240V / 50 to 60 Hz
Permissible Voltage Variation	± 10%	± 10%
Permissible Frequency Variation	–	± 5%
Power Consumption	12 W	Inrush: 30 VA, Holding: 22 VA
Response Time	100%	
Protection Type (DIN 40050)	IP 65	
Ambient Temperature	23 to 104°F / -5 to +40°C	
Medium Temperature	14 to 140°F / -10 to +60°C	
Minimum Energization Time	20 ms	
Power Factor cos Ø	–	0.5
Weight	0.330 lb / 0.150 kg	0.330 lb / 0.150 kg

# 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

## United States

**Customer Resource Center**  
502 Earth City Expy., Suite 125  
Earth City, MO 63045

For ordering assistance, or to find  
your nearest Festo Distributor,

**Call:** 1.800.99.FESTO  
**Fax:** 1.800.96.FESTO  
**Email:** customer.service@us.festo.com

For technical support,

**Call:** 1.866.GO.FESTO  
**Fax:** 1.800.96.FESTO  
**Email:** product.support@us.festo.com

### Headquarters

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

---

### Sales Offices

#### Appleton

N. 922 Tower View Drive, Suite N  
Greenville, WI 54942

#### Boston

120 Presidential Way, Suite 330  
Woburn, MA 01801

#### Chicago

1441 East Business Center Drive  
Mt. Prospect, IL 60056

#### Dallas

1825 Lakeway Drive, Suite 600  
Lewisville, TX 75057

**Detroit - Automotive Engineering Center**  
2601 Cambridge Court, Suite 320  
Auburn Hills, MI 48326

#### New York

395 Moreland Road  
Hauppauge, NY 11788

#### Silicon Valley

4935 Southfront Road, Suite F  
Livermore, CA 94550

## Design and Manufacturing Operations



**East:** 395 Moreland Road, Hauppauge, NY 11788



**Central:** 1441 East Business Center Drive, Mt. Prospect, IL 60056



**West:** 4935 Southfront Road, Suite F, Livermore, CA 94550

---

## Mexico

### Headquarters

Festo Pneumatic, S.A.  
Av. Ceylán 3, Col. Tequesquahuac  
54020 Tlalnepantla, Edo. de México  
**Call:** 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](http://www.festo.com/mx)



---

## Canada

### Headquarters

Festo Inc.  
5300 Explorer Drive  
Mississauga, Ontario L4W 5G4  
**Call:** 1.905.624.9000  
**Fax:** 1.905.624.9001  
**Email:** info.ca@ca.festo.com  
[www.festo.com/ca](http://www.festo.com/ca)



---

## 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)