



## **Quickstepper and Commander FSS/FSSC**



# Quickstepper and Commander FSS/FSSC

Key features

FESTO



## Quickstepper

- Pneumatic/mechanical sequencer with 12 steps and start logic circuits
- Ready to install
- Acknowledgement-controlled motion sequences

## Commander

- Command module for use with Quickstepper, including the most important functions for pneumatic sequencers

The Quickstepper is a miniature controller with 12 switching steps. It is particularly suitable for use with the Commander. Each input  $X_n$  is assigned an output  $A_n$ . Only one output at a time is fed with compressed air, in an order corresponding to the sequence of the

switching steps. The other outputs are exhausted at this time. The Quickstepper offers a safe mode of operation: each given switching step cannot begin until the preceding step has been executed and acknowledged. If the pulses fed to the input L are too short, the output A is disabled.

# Quickstepper and Commander FSS/FSSC

Key features

FESTO

## Quickstepper FSS-12-C



### Functions

- Step counter for steps 1 to 12 with upward counting function
- White pressure indicator for activated output Pn
- Blue pressure indicator for acknowledgement signal from last step to be executed (INPUT)
- Slide switch OUTPUT:  
When the switch is at 0, the outputs are disabled. The control steps can be worked through manually. Only the selected step is activated. When the switch is set to 1, pressure is fed to the activated output.
- Pushbutton MAN.STEP (inching operation):  
Advance to next step or selection of a switching step.
- Port MAN/P:  
Port for pilot air P for operation without a Commander. This signal can also be obtained from an external preselect MAN.
- Safety:  
When the port L (reset) is activated, the step indicator always advances to the last step (12). This is important when the control is at a standstill. The Quickstepper has the additional safety feature that it will switch only when a continuous signal is present at the AUTO port. When an AUTO signal is present, inching operation (step-by-step manual switching) is not possible. The OUTPUT preselect is then disabled. This ensures that no manual intervention can be made while the Quickstepper is running in the AUTOMATIC mode. Only one output at a time is fed with compressed air. All other outputs are exhausted.

## Commander FSSC-12



### Functions

- O position:  
Visual indicator for direct reporting of initial position from system signal generator.
- Reset  
Reset is active in the MAN mode. The Quickstepper is reset to step 12 in its initial position.
- START button
- Preselect AUTO/MAN  
In the MAN mode, setup or inching operation is activated.
- STOP button  
For a stop within the cycle. The next step is then disabled.
- Preselect for continuous/single cycle If, while the controller is in operation, this selector switch is moved from continuous cycle to single cycle, or from continuous cycle to single cycle and back to continuous cycle, operation will stop (stop at end of cycle).



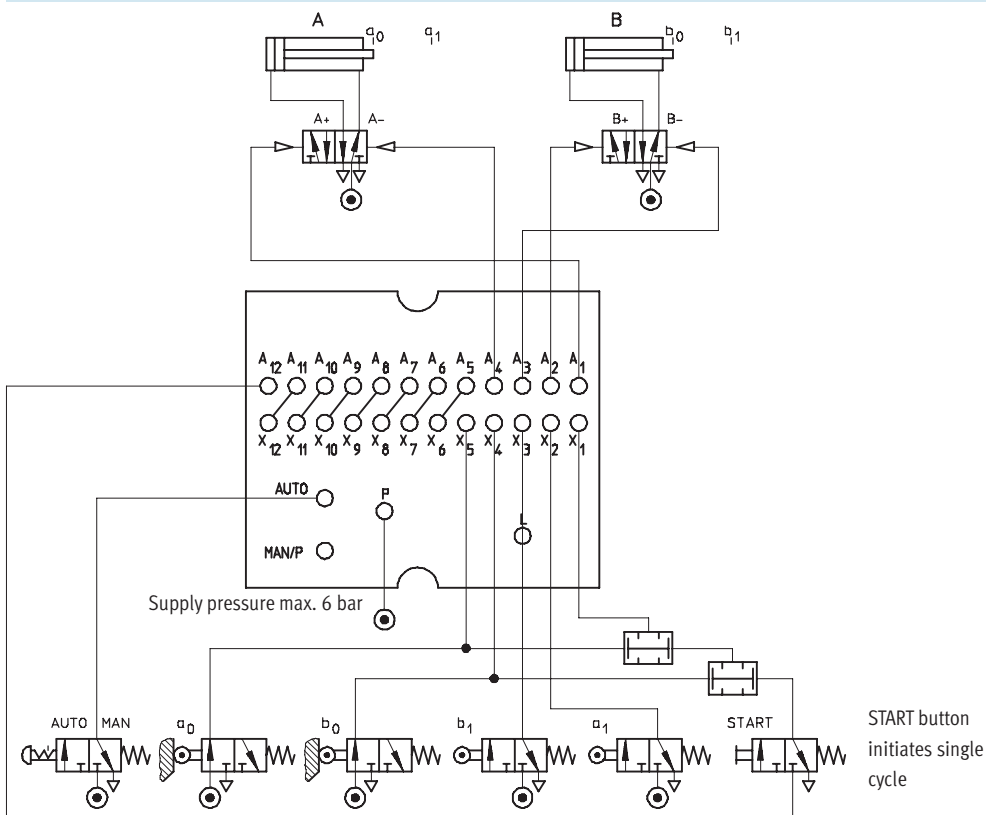
# Quickstepper and Commander FSS/FSSC

Technical data

Technical data		Quickstepper FSS-12-C	Commander FSSC-12
Operating medium		5 µm filtered, unlubricated compressed air	
Constructional design		Sequencer with 12 switching steps (additive)	
Nominal size		2.5	
Inputs and outputs	[mm]	2.5	
Standard nominal flow rate	[l/min]	60	
P > An			
Operating pressure range	[bar]	2 ... 6	
Acknowledgement response pressure	[bar]	≥ 1.5	
Acknowledgement drop-off pressure	[bar]	≤ 0.5	
Acknowledgement pulse length	[ms]	min. 50	
Step frequency max.	[Hz]	12	
Temperature range	[°C]	-15 ... +60	
Pneumatic connection		Barbed fitting for plastic tubing with 3 mm standard ID P, P <sub>IN</sub> , A <sub>p</sub> : Barbed fitting for plastic tubing PU or PP with 4 mm standard ID	
Type of mounting		On mounting frame 2n or panel mounting	
Materials		Housing, sub-base: plastic; barbed fitting: brass; seals: perbunan, vulkollan	
Weight	[g]	450	450

## Example of control application

Shown in initial position



Circuit diagram

P = Compressed air supply

L = Reset signal

X<sub>1</sub>-X<sub>12</sub> = Inputs

A<sub>1</sub>-A<sub>12</sub> = Outputs

AUTO = Start signal

MAN/P = Pilot air supply for operation without Commander

START button initiates single cycle

# Quickstepper and Commander FSS/FSSC

Technical data

## Circuit diagram

Rear side of Quickstepper-C

- MAN/P  
Port for pilot air P for operation without a Commander. This signal can also be obtained from an external preselect MAN.

Rear side of Commander

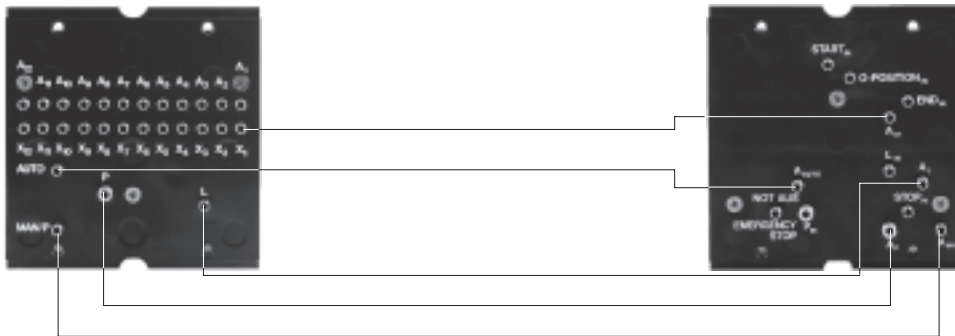
- Start<sub>IN</sub>  
For alternative external START signal.

 Note

If an external start is used, the START button on the front panel must be locked out (to disable the internal START function). This is important, since safety regulations specify that it must be possible to initiate a start from one place only.

- L<sub>IN</sub>  
For an external reset signal. Note: The RESET button on the front panel can be locked out to disable the internal RESET function.
- EMERGENCY STOP  
If no signal is present or the pilot air supply fails, the outputs A1 ... A12 are disabled. They remain disabled even if an emergency stop pushbutton which has been pressed is released.
- P<sub>IN</sub>  
Pilot pressure
- Stop<sub>IN</sub>  
External signal for stop within cycle
- O position<sub>IN</sub>  
Direct common initial position
- END<sub>IN</sub>  
External signal for stop at end of cycle

## Standard connections



The Quickstepper and Commander can be replaced quickly. Tubing can be left in place.

## Plug set FSS-KM-8-12

Used to bridge unused Quickstepper inputs and outputs. The blanking strip is cut to length according to the number of unused steps and pushed onto the barbed fittings. The P connection is made via a tubing connector to the lowest step which is to be bypassed. The threaded plug is always inserted at step 12.



# Quickstepper and Commander FSS/FSSC

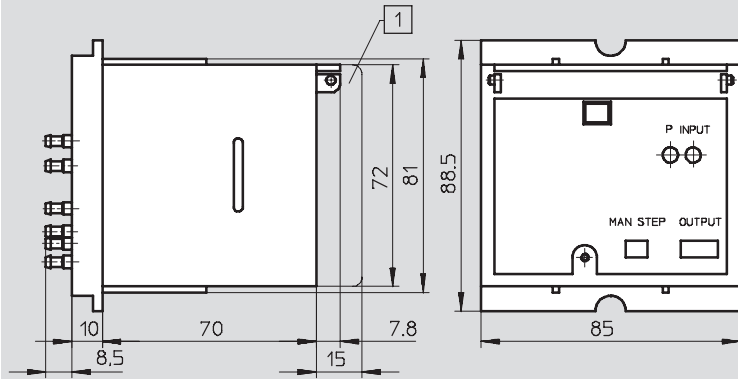
Technical data

FESTO

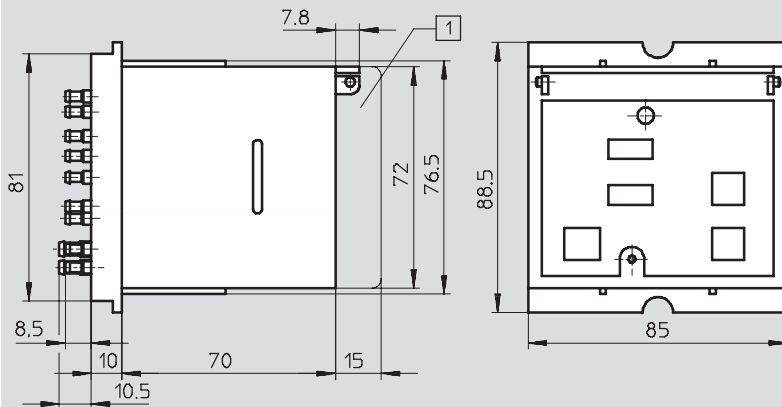
## Dimensions

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

### Quickstepper FSS-12-C

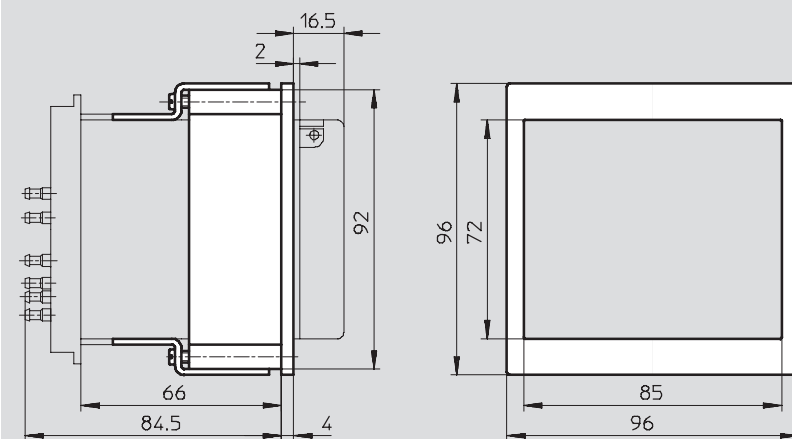


### Commander FSSC-12



1 Protective cover

### Frame for panel mounting FSS-F-12



## Ordering data

	Part No.	Type
Quickstepper	15 609	FSS-12-C
Commander	13 985	FSSC-12

# Quickstepper and Commander FSS/FSSC

Accessories



Cover cap FSS-K-12-C



Panel frame FSS-F-12



Required front panel aperture  
 □ 92 mm  
 Panel thickness max. 13 mm

Plug set FSS-KM-8-12



**Ordering data**

	Weight [g]	Part No.	Type
Cover cap, lockable	40	15 701	FSS-K-12-C
Frame for panel mounting	110	11 570	FSS-F-12
Plug kit	-	13 830	FSS-KM-8-12



# 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](mailto:customer.service@us.festo.com)

For technical support,

**Call:** 1.866.GO.FESTO

**Fax:** 1.800.96.FESTO

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