# Quickstepper FSS

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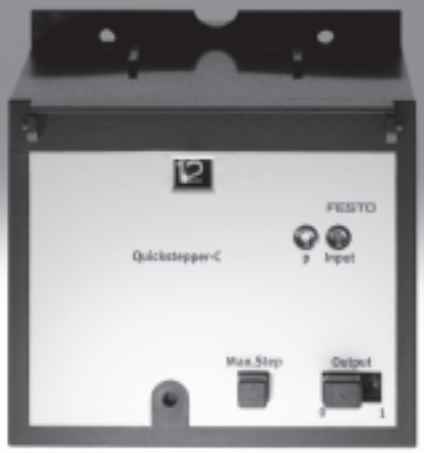


# Quickstepper FSS

Key features

## Description

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

The Quickstepper is a mini control system with 12 switching steps. Each input Xn is assigned an output An. 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 features a highly safe mode of operation as 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.

## 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 select a switching step.
- Port MAN/P:
  Port for pilot air P. This signal can also be obtained from an external MAN preselect.
- Safety:
  When the port L (reset) is activated, the step indicator always advances to the last step (12). This is important when the controller 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 AUTOMATIC mode.
  Only one output at a time is fed with compressed air. All other outputs are exhausted.

# Quickstepper FSS

Technical data

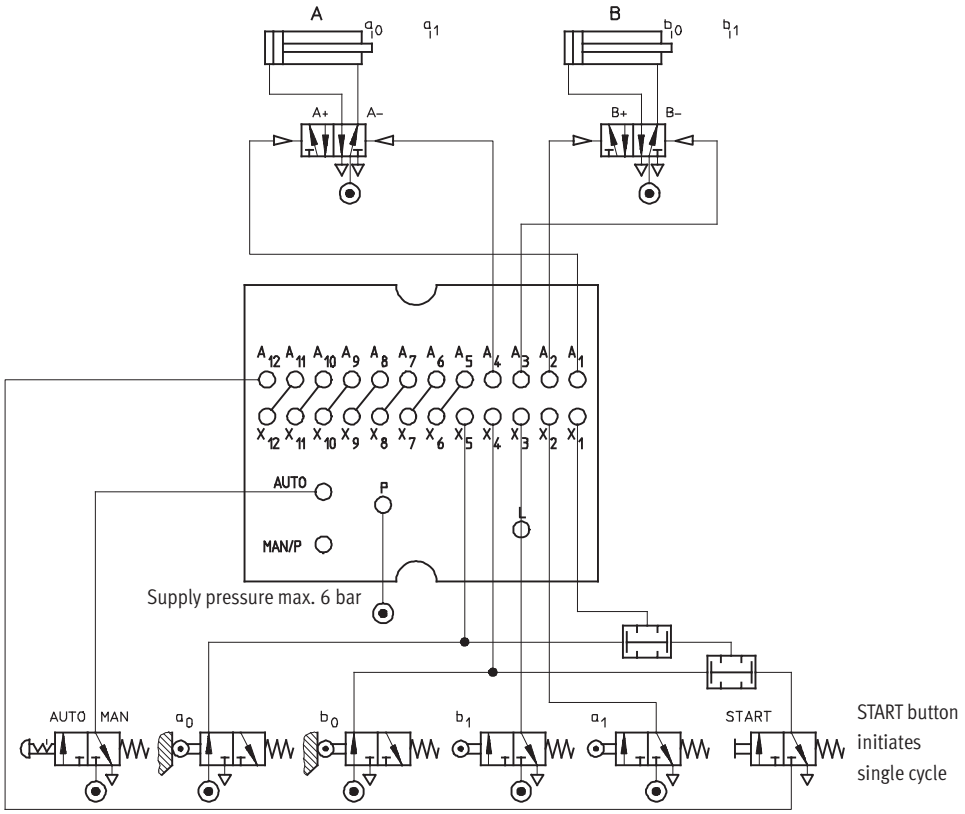
Quicksteppers can be replaced quickly. The tubing is left in place.

| General technical data | | |
|---|---|---|
| Operating medium | | Filtered, unlubricated compressed air, grade of filtration 5 µm |
| Design | | Sequencer with 12 switching steps (additive) |
| Nominal size of inputs and outputs | [mm] | 2.5 |
| Standard nominal flow rate | [l/min] | 60 |
| Acknowledgement response pressure | [bar] | ≥ 1.5 |
| Acknowledgement drop-off pressure | [bar] | ≤ 0.5 |
| Min. acknowledgement pulse length | [ms] | 50 |
| Max. step frequency | [Hz] | 12 |
| Ambient temperature | [°C] | |
| Pneumatic connection | P | Barbed fitting for plastic tubing with 4 mm standard ID |
| | L | Barbed fitting for plastic tubing with 3 mm standard ID |
| | Inputs | |
| | AUTO | |
| | MAN/P | |
| Type of mounting | | On mounting frame 2n |
| | | Front panel mounting |
| Weight | [g] | 450 |
| | | |
| Materials | | |
| Housing | | ABS |
| Seals | | NBR |

| Operating and environmental conditions | | |
|---|---|---|
| Operating pressure | [bar] | 2 ... 6 |
| Ambient temperature | [°C] | 5 ... 40 |
| Storage temperature | [°C] | –40 ... +60 |

## Example of control application

Shown in initial position




Circuit diagram

| | |
|---|---|
| P | = Compressed air supply line |
| L | = Reset signal |
| $X_1$–$X_{12}$ | = Inputs |
| $A_1$–$A_{12}$ | = Outputs |
| AUTO | = Start signal |
| MAN/P | = Pilot air supply line |

## Circuit diagram

Rear side of Quickstepper-C

- MAN/P
  Pilot air port. This signal can also be obtained from an external MAN preselect.

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.

- $L_{IN}$
  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 blocked. They remain disabled even if an emergency stop pushbutton which has been pressed is released.
- $P_{IN}$
  Pilot pressure.
- $Stop_{IN}$
  External signal for stop within cycle.
- O $position_{IN}$
  Direct common initial position.
- $END_{IN}$
  External signal for stop at end of cycle.

# Quickstepper FSS

Technical data

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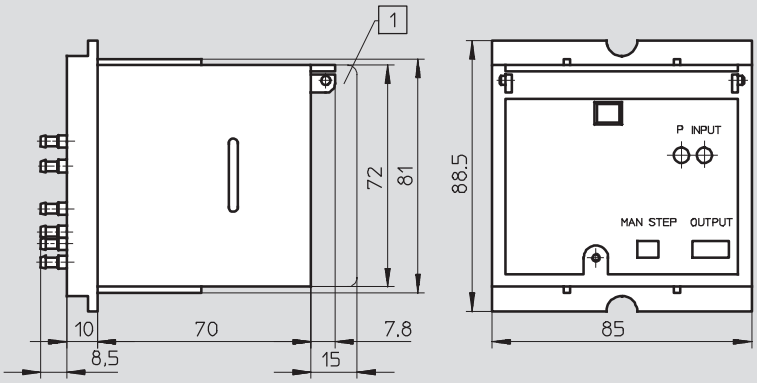
**Dimensions** Download CAD data ➔ **www.festo.com**



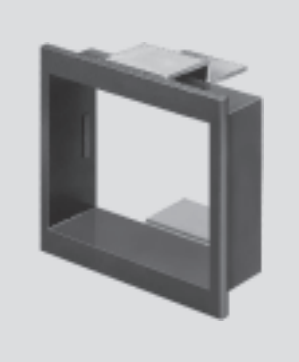

1 Protective cap

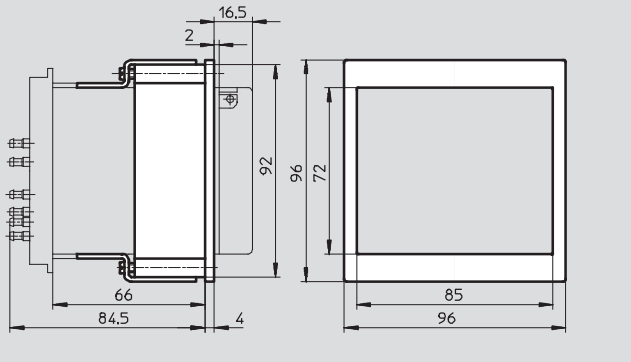
**Ordering data**

| | Part No. | Type |
|---|---|---|
| Quickstepper | **15609** | **FSS-12-C** |

**Panel frame FSS-F-12**
For front panel mounting

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






| Ordering data | | | |
|---|---|---|---|
| | Weight [g] | Part No. | Type |
| Panel frame | 110 | **11570** | **FSS-F-12** |

**Adapter FSS-KM-8-12**
For bridging 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 plug is always inserted at step 12.

| Ordering data | | |
|---|---|---|
| | Part No. | Type |
| Adapter | **13830** | **FSS-KM-8-12** |

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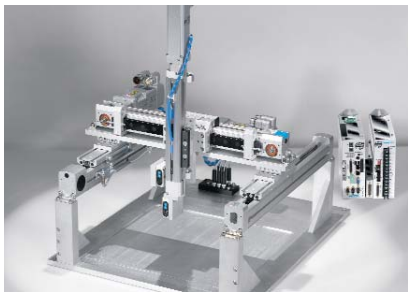

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