Quickstepper FSS

FESTO



Key features

Description

- Pneumatic/mechanical sequencer with 12 steps and linked to start
- Ready-to-install sequence controller
- Feedback-controlled motion sequences

The Quickstepper is a mini control system with 12 sequence steps. Each input Xn is assigned an output An.
Only one output is supplied with pressure at any time, according to the order of the sequence steps.

The other outputs are then exhausted. The Quickstepper has a safe mode of operation: the next step can only begin when the previous one has been executed and acknowledged.

If the pulses at input L are too short, output A is blocked.

Functions

- Step counter 1 to 12 with additive counting direction
- White pressure indicator for activated output Pn
- Blue pressure indicator for the feedback signal for the last executed step (INPUT)
- Slide switch OUTPUT:
- If 0, the outputs are blocked. Control can now be enabled manually. Only the selected step is activated. If 1, the activated output is pressurised.
- Pressure switch MAN.STEP (jog mode):
- Advancing or selecting a step.
- Connection MAN/P:
 Pilot air port P. This signal can also
 come from an external MAN preselection.

Safety:

If the L port (reset or align) is actuated (important for shutdown of a control unit), the step indicator always goes to the final step (12). The Quickstepper is also provided with safeguards so that it only switches when a constant signal is present at the AUTO port.

If the AUTO signal is present, jog operation is not possible, i. e. stepwise manual sequencing is not possible.

The OUTPUT preselection is blocked. This ensures that, during AUTOMATIC operation, manual interventions directly at the Quickstepper are not possible.

Only one output is supplied with pressure at any time. All other outputs are exhausted

Datasheet

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



General technical data		
Pneumatic connection	Р	Barbed connector for plastic tubing with 4 mm standard ID
	L	Barbed connector for plastic tubing with 3 mm standard ID
	Inputs	
	AUTO	
	MAN/P	
Nominal size of inputs and outputs	[mm]	2.5
Design		Sequencer with 12 steps (additive)
Type of mounting		On 2n mounting frame
		Front panel mounting
Standard nominal flow rate	[l/min]	60
Acknowledgement response pressure	[bar]	≥ 1.5
Acknowledgement drop-off	[bar]	≤ 0.5
pressure		
Min. acknowledgement pulse	[ms]	50
length		
Max. step frequency	[Hz]	12
Weight	[g]	450

Operating and environmental conditions				
Operating pressure	[bar]	2.5 6		
Operating medium		Compressed air to ISO 8573-1:2010 [6:4:4]		
Note on the operating/pilot medium		Lubricated operation not possible		
Ambient temperature	[°C]	+5 +40		
Storage temperature	[°C]	-40 +60		

ATEX		
ATEX category for gas	II 2G	
Type of (ignition) protection for gas	Ex h IIC T4 Gb	
ATEX category for dust	II 3D	
Type of (ignition) protection for dust	Ex h IIIC T125°C Dc	
Explosion ambient temperature	+5°C ≤ Ta ≤ +40°C	
CE marking (see declaration of conformity) ¹⁾	To EU Explosion Protection Directive (ATEX)	
UKCA marking (see declaration of conformity) ¹⁾	UK explosion regulations	
Explosion protection certification outside the	EPL Dc (GB)	
EU	EPL Gb (GB)	

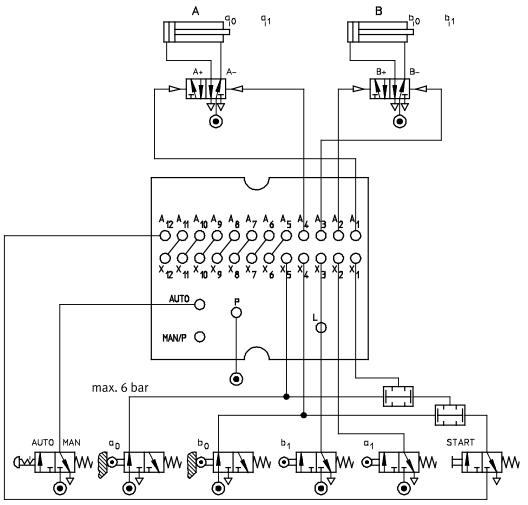
 $^{1) \}quad \text{Additional information: www.festo.com/catalogue/fss} \rightarrow \text{Support/Downloads}.$

Materials	
Housing	ABS
Seals	NBR

Datasheet

Example of control application

Shown in initial position



Connection 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 START = Start button initiates

individual cycles

Connection diagram

On the back of the Quickstepper-C

MAN/P
 Pilot air port. This signal can also
 come from an external MAN preselection.

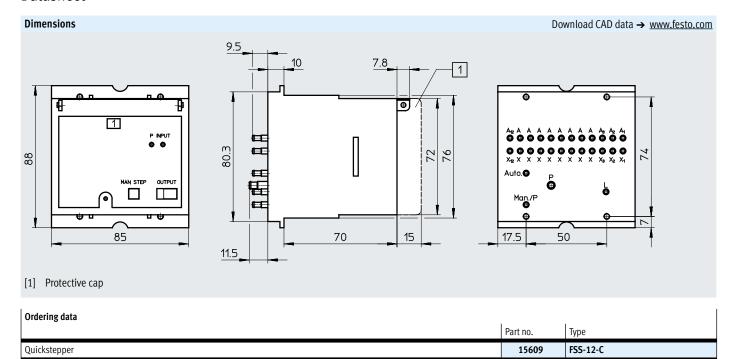
- L_{IN}
 For external reset signal. Note:
 RESET button on the front panel can be actuated, in which case the
 RESET function is blocked internally.
- EMERGENCY OFF
 If no signal is present or if the pilot air fails, outputs A1 ... A12 are blocked. This also applies in the event that an EMERGENCY OFF mushroom actuator is unlocked.
- P_{IN}
 Pilot pressure
- Stop_{IN}
 External signal for STOP during the cycle
- O position_{IN}
 Direct common initial position
- END_{IN}
 External signal for stop at cycle end



Note

If started externally, the START button on the front panel must be actuated (START function is blocked internally). This is important since, according to the safety rules, it is only possible to start from one place.

Datasheet



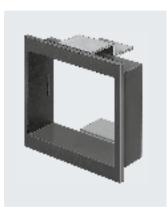
Quickstepper FSS

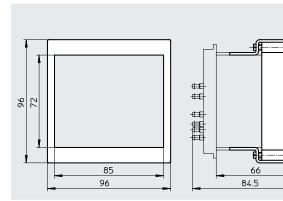
Accessories

Panel frame FSS-F-12

For front panel mounting

Front panel cut-out 92 x 92 mm Panel thickness max. 13 mm





92

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	Weight [g]	Part no.	Туре				
Panel frame	110	11570	FSS-F-12				

Adapter FSS-KM-8-12

For bridging the outputs and inputs of the Quickstepper that are not required. The contact strip is shortened to the number of steps of the Quickstepper that are needed and is plugged onto the nipple. The P connection is via a barbed tubing connector on the lowest step that is to be bridged. The plug is always inserted at step 12.



Ordering data				
	Part no.	Туре		
Adapter	13830	FSS-KM-8-12		