

Control block for two-hand start ZSB

FESTO



Control block for two-hand start ZSB

Key features

FESTO

Function

This pneumatic control block for two-hand start ZSB is used where a manually started operation, such as the triggering of compressed air cylinders, would otherwise involve danger for a machine operator, or with other devices where machine operators have to have both hands clear of a danger zone when starting a machine.

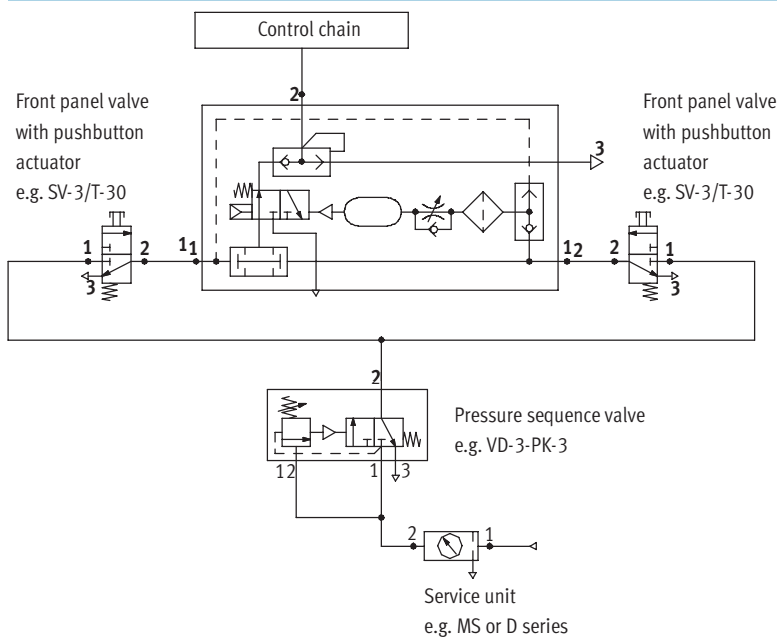
The ZSB will only switch if pressure is applied simultaneously via 3/2-way pushbutton valves to the two inlet ports 1₁ and 1₂ of the ZSB, i.e. within max. 0.5 seconds, and if there is an output signal at port 2. If both pushbutton valves are activated, outlet port 2 is pressurised.

Releasing one or both pushbutton valves interrupts the flow immediately and the outlet port 2 becomes unpressurised. The system vents from 2 to 3.

The pneumatic control block for two-hand start is a safety component in accordance with the EU Machinery Directive.

It falls within Category 1 as defined by EN 954 (only in conjunction with a pressure sequence valve such as VD-3-PK-3) and conforms to Type III A as defined by EN 574.

Sample circuit



Note

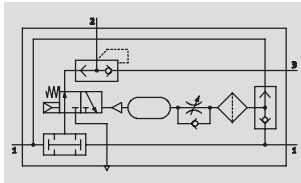
When installing the two pushbutton valves which actuate the control block for two-hand start, make sure that the protective function cannot easily be bypassed, for example by pressing the pushbutton valves with the hand and elbow of the same arm. If necessary, the pushbutton valves should be fitted with an additional guard plate.

Control block for two-hand start ZSB

Technical data

FESTO

Function



Flow rate

up to 50 l/min

Temperature range

-10 ... +60°C



Operating pressure
3 ... 8 bar



General technical data	
Pneumatic connection	G $\frac{1}{8}$
Nominal size [mm]	4
Actuation type	Pneumatic
Design	Poppet valve with spring return
Type of mounting	Via through-hole Via female thread
Mounting position	Any
Standard nominal flow rate [l/min]	50
Product weight [g]	490

Operating and environmental conditions	
Operating pressure [bar]	3 ... 8
Operating medium	Filtered compressed air, grade of filtration 50 µm
Ambient temperature [°C]	-10 ... +60
CE mark (see declaration of conformity)	To EU Machinery Directive

Materials	
Housing	Anodised wrought aluminium alloy
End cap	Die-cast aluminium
Seals	NBR

Dimensions

Download CAD Data → www.festo.com/us/cad

The image shows two views of a rectangular control block. The front view (left) shows a block with width B1 and height H4. It has four ports: two inlet ports (1, 2) on the left, one outlet port (2) on the right, and one vent port (3) on the top right. The side view (right) shows the block with width B2 and height H1. It shows the internal components, including a filter (1) and a vent (3). Dimensions L1, L2, and L3 are shown for the side view. Dimensions B3 and B4 are shown for the front view. Dimensions D1, D2, and D3 are shown for the front view. Dimensions H5, H6, and H2 are shown for the front view. Dimensions H3 and H2 are shown for the side view.

1 Filter

1, 1₂ = Inlet ports

2 = Outlet port

3 = Vent

Ordering data		
	Part No.	Type
Control block for two-hand start	3527	ZSB- $\frac{1}{8}$

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

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

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

USA Headquarters

Festo Corporation
395 Moreland Road
P.O. Box 18023
Hauppauge, NY 11788, USA
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

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

www.festo.ca

Mexico



Headquarters: Festo Pneumatic, S.A., Av. Ceylán 3, Col. Tequesquahuac,
54020 Tlalneapantla, 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

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