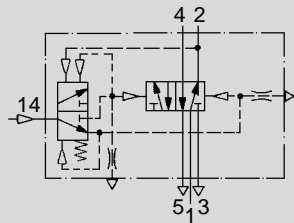


### Binary Reduction Valve

With Sub-base  
Type VLL-5-PK-3

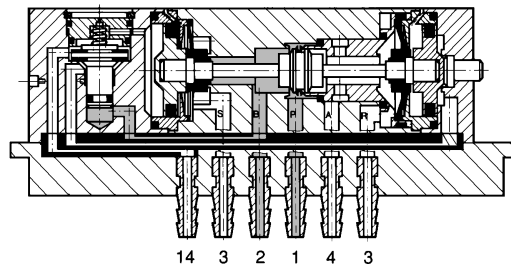


The valve consists of a 5 ported, 4 way, 2 position directional control valve and a pulse actuated shuttle valve. Pilot pressure applied at connection 14 shifts and holds the shuttle valve spool. When the pilot pressure is removed, pilot pressure from outlet 2 shifts the shuttle valve spool so the next pilot signal switches the valve back. Until this happens, the valve maintains its shifted position.

Each time pilot pressure is applied at 14, output signals 4 and 2 change.

Note: If the supply pressure at 1 is shut off and one or more control signals are received at 14, connection 1 will continue to open to 2 when the operating pressure at 1 is restored.

If no pilot pressure is received by 14, the previous position is maintained even if the operating pressure at 1 is restored.



- 1 (P) = Supply Port
- 4, 2 (A, B) = Working or Outlet Port
- 5, 3 (R, S) = Exhaust Port
- 14 (Z) = Pilot Port

Order Number	Part No./Type	4606 VLL-5-PK-3
Medium		Compressed air (filtered, lubricated or unlubricated)
Mounting		Two holes through sub-base or manifold mounting
Connection	Working Ports	Barbed fitting for 3 mm tubing
	Pilot Port	Barbed fitting for 3 mm tubing
Orifice Size		0.10 in / 2.5 mm
$C_V$ Factor (P → A)		0.105 $C_V$ / 105 l/min
Supply Pressure Range		45 to 120 psi / 3 to 8 bar
Pilot Pressure Range		See graph (next page)
Response Time at 90 psi / 6 bar		20 ms
Minimum Signal Period		10 ms
Design		Seat valve
Temperature Range		32 to 140°F / 0 to +60°C
Materials		Housing: Al, plastic. Sub-base: Plastic, brass. Seals: Buna N
Weight		0.287 lb / 0.130 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](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)