# Air reservoirs

# **FESTO**



Air reservoirs CRVZS FESTO

Technical data

Function CRVZS-0.1/0.4/0.75/2



CRVZS-5/10/20 with condensate drain



Temperature range

−10 ... +100 °C

Pressure

-0.95 ... 16 bar



- The reservoirs can be used to compensate pressure fluctuations, and act as accumulators in the event of sudden air consumption
- They can also be used to provide large quantities of compressed air for supplying fast pulsing drives
- Time delays for pressure build-up can be achieved in combination with flow control valves

Technical data								
Туре	CRVZS-0.1	CRVZS-0.4	CRVZS-0.75	CRVZS-2	CRVZS-5	CRVZS-10	CRVZS-20	
Pneumatic connection	G1/8	G½ G1/4			G1			
Condensate drain connection	-	-			G <sup>3</sup> / <sub>8</sub>			
Type of mounting	Retaining clips	Retaining clips			holes			
Installation position	Any				Condensate drain downwards			
Volume [l]	0.1	0.4	0.75	2	5	10	20	
Weight [g]	226	543	736	1,681	3,581	6,459	10,208	

Operating and environmental of	Operating and environmental conditions							
Туре		CRVZS-0.1	CRVZS-0.4	CRVZS-0.75	CRVZS-2	CRVZS-5	CRVZS-10	CRVZS-20
Operating pressure	[bar]	-0.95 +16						
Operating medium		Compressed air						
		Nitrogen						
Ambient temperature	[°C]	-10 +100 (obs	–10 +100 (observe operating range of tubing and pipe)					
Temperature of medium	[°C]	-10 +100 (obs	–10 +100 (observe operating range of tubing and pipe)					
Corrosion resistance class	CRC <sup>1)</sup>	3	3					
Conforms to		AD 2000	AD 2000					
CE symbol		- In accordance with EU Pressure Equipment						uipment
(see declaration of conformity)		Directive						
Food industry approval		DIN EN ISO 14159						
Approval		German Technical Control Board (TÜV)						

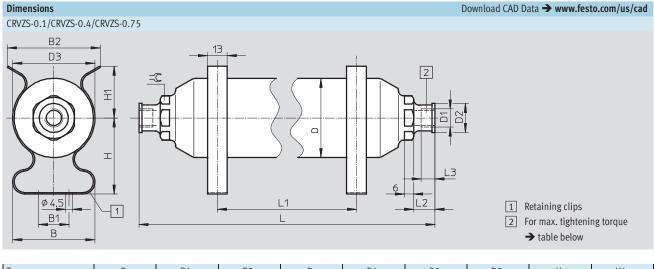
<sup>1)</sup> Corrosion resistance class 3 according to Festo standard 940 070 Components requiring higher corrosion resistance. External visible parts in direct contact with industrial atmospheres or media such as solvents and cleaning agents, with a predominantly functional requirement for the surface

Materials								
Туре	CRVZS-0.1	CRVZS-0.4	CRVZS-0.75	CRVZS-2	CRVZS-5	CRVZS-10	CRVZS-20	
Air reservoir	High-alloy stai	High-alloy stainless steel						
Retaining clips	High-alloy stai	nless steel		-				
Note on materials	Free of copper	Free of copper and PTFE						
	Conforms to Ro	Conforms to RoHS						

Air reservoirs CRVZS

Technical data

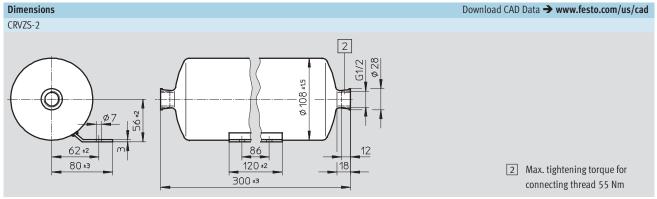




Туре	В	B1	B2	D	D1	D2	D3	Н	H1
	±2		±2	Ø		Ø	Ø	±1	±1
CRVZS-0.1	51	14	-	40	G1/8	15	42	43	28
CRVZS-0.4	54	14	-	52	G1/4	19	54	50	34
CRVZS-0.75	60	20	79	70	G1/4	19	72	61	34

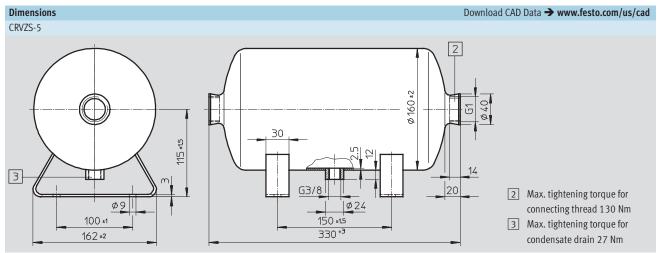
Туре	L	L1		L2	L3	=©	Max. tightening torque
	±1	min.	max.				for connecting thread [Nm]
CRVZS-0.1	132	13	50	10	6	19	15
CRVZS-0.4	240	13	150	14	9	27	23
CRVZS-0.75	248	13	140	14	9	27	23

Note: This product conforms to ISO 1179-1 and ISO 228-1

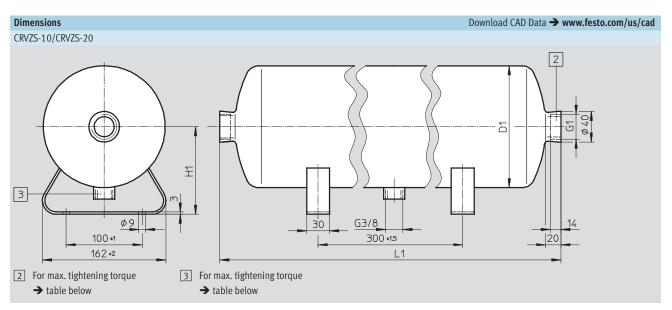


Air reservoirs CRVZS FESTO

Technical data



Note: This product conforms to ISO 1179-1 and ISO 228-1



Туре	D1	H1	L1	Max. tightening torque	
	±2	±1.5	±3	Connecting thread [Nm]	Condensate drain [Nm]
CRVZS-10	160	115	558	130	27
CRVZS-20	194	136	740	130	27

Ordering data							
Volume [l]	Part No. Type		Volume [l]	Part No. Type			
0.1	160233 CRVZS-0.1		5	192159 CRVZS-5			
0.4	160234 CRVZS-0.4		10	160237 CRVZS-10			
0.75	160235 CRVZS-0.75		20	534845 CRVZS-20			
2	160236 CRVZS-2						

Air reservoirs VZS FESTO

Technical data

Function with condensate drain



Temperature range −10 ... +100 °C

Pressure

-0.95 ... 16 bar



- The reservoirs can be used to compensate pressure fluctuations, and act as accumulators in the event of sudden air consumption
- They can also be used to provide large quantities of compressed air for supplying fast pulsing drives
- Time delays for pressure build-up can be achieved in combination with flow control valves

Technical data	
Туре	VZS-20-B
Pneumatic connection	G1
Condensate drain connection	G3/8
Type of mounting	Via through-holes
Installation position	Condensate drain downwards
Volume [l]	20
Weight [g]	8,600

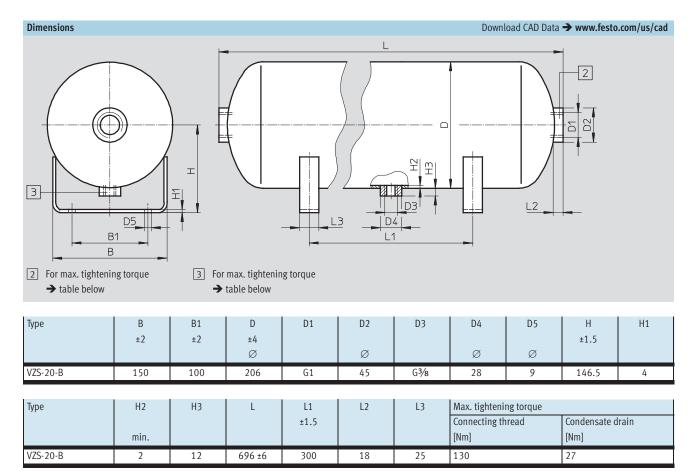
Operating and environment	Operating and environmental conditions					
Туре		VZS-20-B				
Operating pressure	[bar]	-0.95 +16				
Operating medium		Compressed air				
		Nitrogen				
Ambient temperature	[°C]	−10 +100 (observe operating range of tubing and pipe)				
Temperature of medium	[°C]	−10 +100 (observe operating range of tubing and pipe)				
Corrosion resistance class	CRC <sup>1)</sup>	4				
Conforms to		EN 286-1				
CE symbol		In accordance with EU Simple Pressure Vessel Directive				
(see declaration of conformit	y)					
Approval		German Technical Control Board (TÜV)				

<sup>1)</sup> Corrosion resistance class 4 according to Festo standard 940 070 Components requiring higher corrosion resistance. Parts used with aggressive media, e.g. food or chemical industry. These applications should be supported with special tests with the media if required

Materials				
Air reservoir	Painted steel			
Note on materials	Free of copper and PTFE			

Air reservoirs VZS FESTO

Technical data



Ordering data		
Volume [l]	Part No.	Туре
20	192161	VZS-20-B

# **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.



# **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) 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

#### Mexico



Headquarters: Festo Pneumatic, S.A., Av. Ceylán 3, Col. Tequesquinahuac, 54020 Tlalnepantla, 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, 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