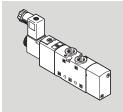
## **VTUS-VUVS**

## Valve Terminal Combination



**FESTO** 

Festo SE & Co. KG Ruiter Straße 82 73734 Esslingen Germany +49 711 347-0

www.festo.com

Operating conditions | EX

8094403 2018-07a [8094405]





Translation of the original instructions

## 1 Identification EX

Identification			
<b>€</b> x	II 3G Ex ec IIC T4 Gc		
⟨£x⟩	II 3D Ex tc IIIC T115°C X Dc		

Tab. 1

#### 2 Further applicable documents

## **NOTICE!**

Technical data for the product can have different values in other documents. For operation in an explosive atmosphere, the technical data in this document always have priority.

 $\Box$ 

All available documents for the product → www.festo.com/pk.

## 3 Safety

#### 3.1 Safety instructions

- The device can be used under the stated operating conditions in zone 2, explosive gas atmospheres, and in zone 22, explosive dust atmospheres.
- The following work should only be performed outside potentially explosive areas: commissioning, maintenance, mounting.

#### 3.2 Intended use

The valve terminal VTUS is intended for control of pneumatic components.

## 3.3 Identification X: Special conditions

- Do not disconnect when powered.
- Use an additional strain relief upstream of the plug connector.
- Use only approved accessories.
- Protect the device from all mechanical impact.
- Protect device from UV radiation.
- Ambient temperature for individual mounting : −10 °C  $\leq$  T<sub>a</sub>  $\leq$  +60 °C
- Ambient temperature for block mounting: -10 °C ≤  $T_a$  ≤ +50 °C
- Only use in a clean environment.
- Individual valves with external pilot air: the maximum capacity at ports 12 and 14 amounts to 8 pF. The limit value for the group of devices IIB is observed.

## 4 Commissioning

# **▲ WARNING!**

The discharge of electrostatically charged parts can lead to ignitable sparks.

- Include the device in the system's potential equalisation.
- Include the valve and coil separately in the equipotential bonding of the system.

#### NOTICE!

Escaping exhaust air can swirl up dust and create an explosive dust atmosphere.

## NOTICE!

Particulate matter in the compressed air can cause electrostatic charges.

#### NOTICE!

Strong charge-generating processes can charge non-conductive layers and coatings on metal surfaces.

## 5 Operation

- Draw in operating medium outside potentially explosive areas.

#### 6 Service and care

Perform maintenance only outside potentially explosive areas.

#### 7 Technical data

Operating conditions		VTUS	vuvs		
Operating medium		Compressed air to ISO 8573-1:2010: [7:4:4]			
Pilot air [bar]		1.5 10			
Operating pressure					
With internal pilot air [bar]		1.5 10			
With external pilot air [bar]		-0.9 10			
Ambient temperature	[°C]	$-10 \le T_a \le +50$	$-10 \le T_a \le +60$		
Temperature of medium	[°C]	$-10 \le T_a \le +50$	-10 ≤ T <sub>a</sub> ≤ +60		
Storage temperature [°C]		-20 ≤ T <sub>a</sub> ≤ +60			
Nominal operating voltage [V DC]		24 ± 10 %			
Degree of protection		IP65 in accordance with EN60529			
Degree of contamination		2			
Mounting position		-	Any		
Duty cycle	[%]	-	100 (continuous operation)		
Materials					
Seals		NBR			
Housing		-	Painted die-cast aluminium		
Piston slide		-	Aluminium alloy High-alloy stainless steel		
CE marking		To EU Explosion Protection Directive (ATEX)			

Tab. 2

Additional conditions for VUWS valves						
Max. operating frequency	[Hz]	2				
Max. ambient temperature	[°C]	50				

Tab. 3

## 8 Approved combinations

Use only the following combinations:

Valve terminal	Valve	Coil	Plug socket
VTUS-20EX2	VUVS-L20EX2 VUVS-LT20EX2	VACS-C-C1-1-EX2	MSSD-EB-M12-24VDC-SD-EX
VTUS-25EX2	VUVS-L25EX2 VUVS-LT25EX2	VACF-B-B2-1-EX2	MSSD-F
		VACF-B-C1-1-EX2	MSSD-EB-M12-24VDC-SD-EX
VTUS-30EX2	VUVS-L30EX2 VUVS-LT30EX2	VACF-A-A1-1-EX2	MSSD-C-24V-EX
		VACF-B-B2-1-EX2	MSSD-F
		VACF-B-C1-1-EX2	MSSD-EB-M12-24VDC-SD-EX

Tab. 4