

Type **TV17GOS**

WEH[®] Shut-off valve for filling, mixing, evacuating and discharging
pipe systems or vessels of all types filled with oxygen at a pressure of up to 420 bar



General

DESCRIPTION

Features

- Compact design
- High flow rate
- Light weight, approx. 4.2 kg resp. approx. 8.3 kg incl. pneumatic actuator
- Bidirectional sealing possible
- Easy installation
- Low investment costs
- Low flow noise
- Reduction of the number of valves needed in plant construction
- High-quality materials

The WEH® TV17GOS Shut-off valve for oxygen is used to shut off the flow in oxygen systems. Due to its compact design, it is ideal for installation in technical gas plants. It can also be installed in existing systems without any problems. Thanks to its streamlined design, the shut-off valve impresses with high flow values and its extremely low-noise operation. The WEH® TV17GOS is available with manual or pneumatic actuation (initial position NC or NO).

Application

Shut-off valve for filling, mixing, evacuating and discharging pipe systems or vessels of all types filled with oxygen at a pressure of up to 420 bar.

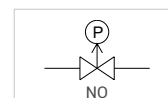
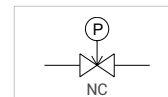
The shut-off valve is not designed for media of fluid group 1 as defined in the Pressure Equipment Directive 2014/64/EU or use in in ATEX-relevant zones. Corresponding requirements can be evaluated by us on request.

TECHNICAL DATA

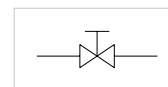
Characteristics	Basic version
Generation	2
Functions	
Automatic venting	No
Check valve	No
Vacuum operation	Yes
Flow direction	B1 → B2
Actuation	Pneumatic (NC resp. NO) for automatic control (e.g. via SPS) or manual with actuation lever
Specifications of valve	
Nominal bore (DN)	12 mm
Max. allowable operating pressure PS	420 bar
Temperature range	0 °C up to +60 °C
Leak rate	≤ 5 x 10 ⁻³ mbar x l/s
Specifications of pneumatic actuator	
Pilot pressure port P1	G1/4" female thread
Pilot pressure	6 - 8 bar
Measuring port MA2	M28x1.5 male thread
Number of cycles	Maximum 1 cycle per minute
Materials	
Materials (in flow channel)	Brass and Monel® 400
Spring material	Steel 1.4310
Inlet valve seal	Modified polyimide
Sealing material	EPDM
Conformity / Tests / Approvals	Type approval for suitability against adiabatic compression available

Symbols

pneumatic:



manual:

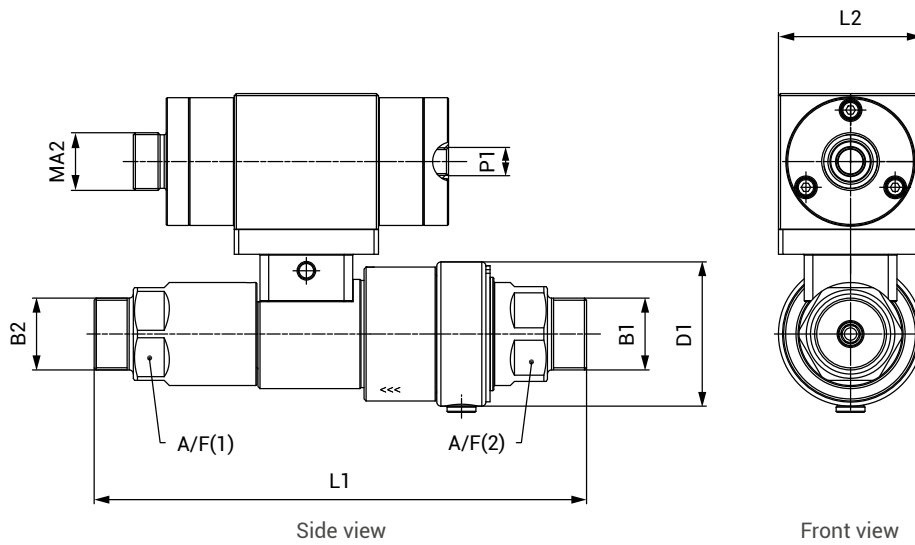


Ordering

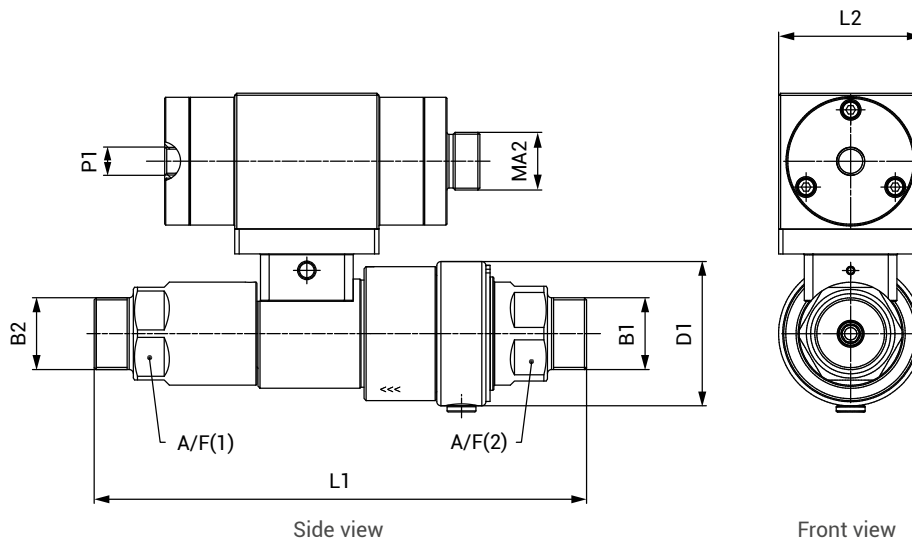
ORDERING | WEH® TV17GOS Shut-off valve with pneumatic actuation

approx. dimensions (mm)

TV17GOS NC



TV17GOS NO

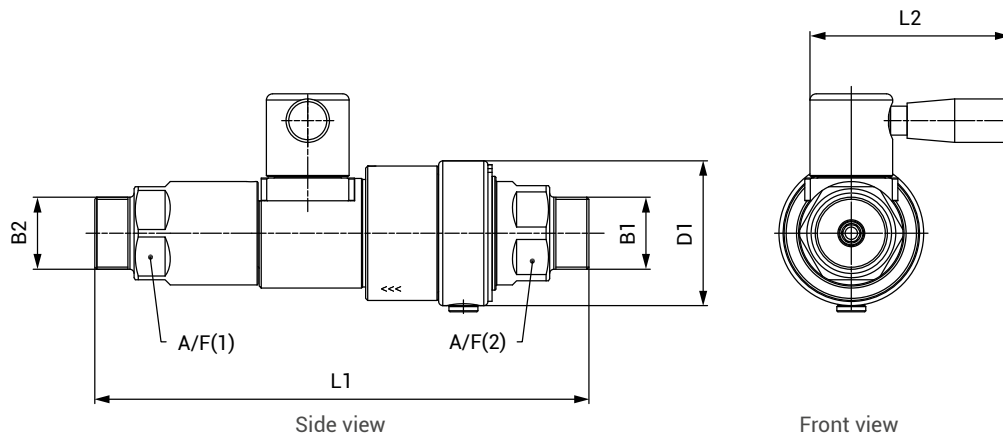


Part no.	Description	DN	B1 / B2 (male thread)	P1 (female thread)	MA2 (male thread)	L1	L2	D1	A/F(1)	A/F(2)
C1-159223	TV17GOS NC	12	UNF 1 3/8"-12	G1/4"	M28x1.5	239	70	70	45	46
C1-171636	TV17GOS NO	12	UNF 1 3/8"-12	G1/4"	M28x1.5	239	70	70	45	46

Ordering

ORDERING | WEH® TV17GOS Shut-off valve with manual actuation

approx. dimensions (mm)



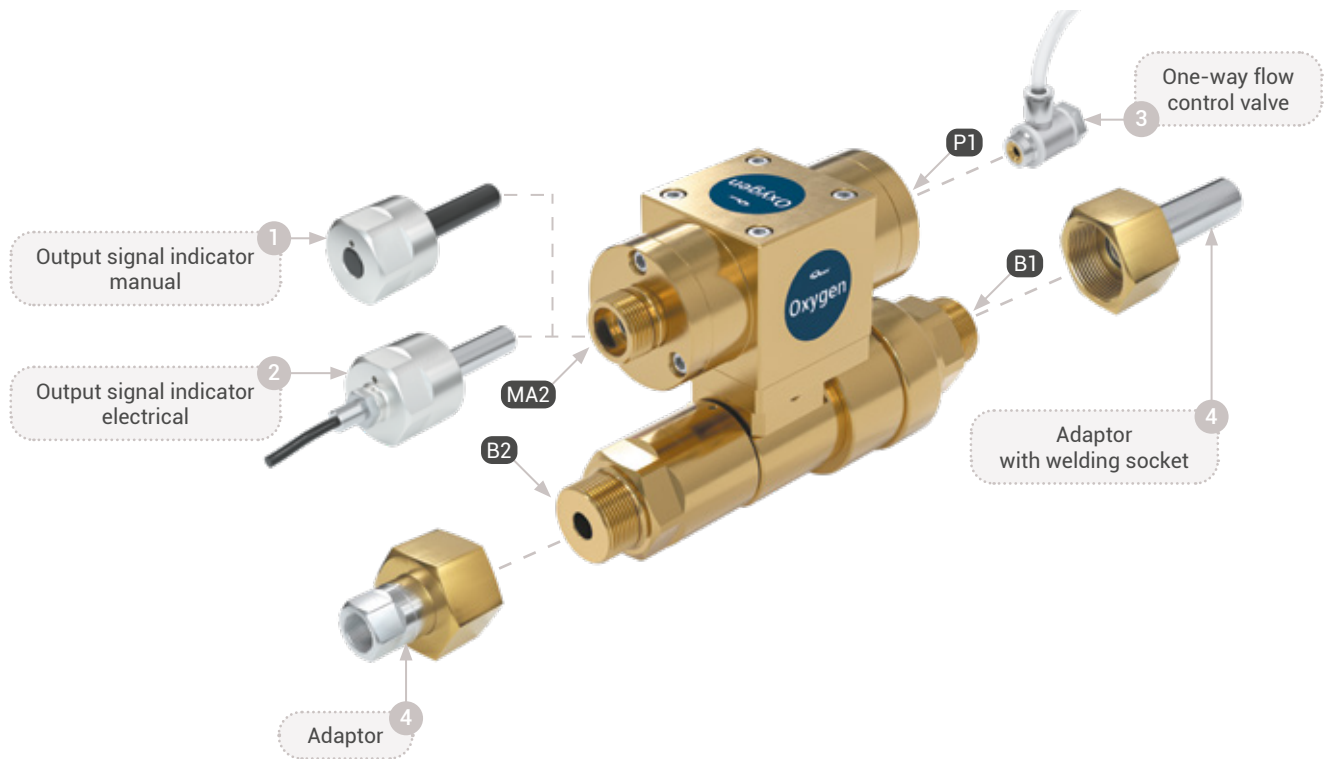
Part no.	Description	DN	B1 / B2 (male thread)	L1	L2	D1	A/F(1)	A/F(2)
C1-163167	TV17GOS	12	UNF 1 3/8"-12	239	97	70	45	46

Required information for ordering see page 7, catalog no. 80.

System overview

SYSTEM OVERVIEW

The following schematic diagram gives you an overview of the various accessories available for the WEH® TV17GOS Shut-off valve.



Definition of ports

- B1** Media inlet

- B2** Media outlet

- P1** Pilot pressure port, compressed air 6 - 8 bar

- MA2** Measuring port for output signal indicators

Accessories

ACCESSORIES

The following accessories are available for the WEH® TV17GOS Shut-off valve:

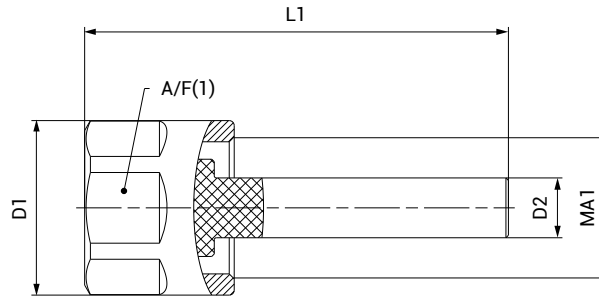
1 Manual output signal indicator for pneumatic actuator

Application: Manual indication of valve position for the pneumatic actuator (port MA2)

Function: A pin (visible/non-visible) indicates whether the valve is closed or open

Materials: Aluminum and POM

approx. dimensions (mm)



Part no.	Description	MA1 (female thread)	L1	D1	D2	A/F(1)
C1-76590	Manual output signal indicator	M28x1.5	85	35	12	32

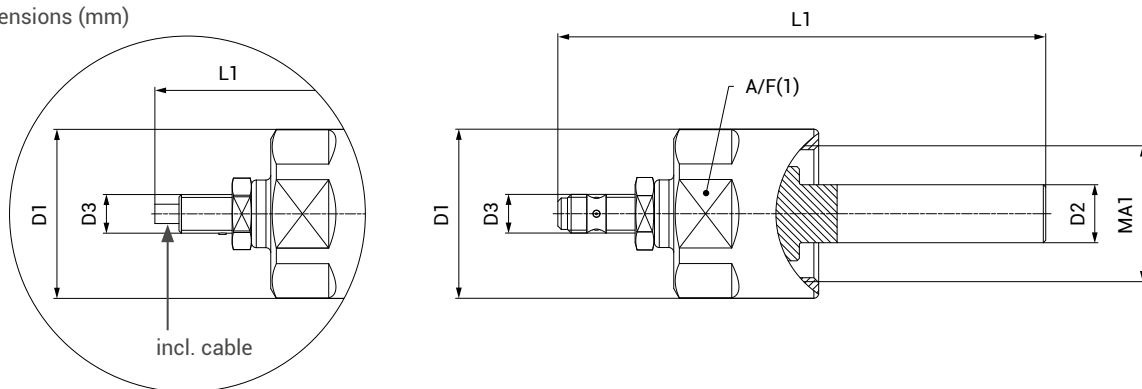
2 Electrical output signal indicator for pneumatic actuator

Application: Electrically transmittable indication of valve position for the pneumatic actuator (port MA2)

Function: The valve position can be transmitted electrically to a control system via the 'Namur' proximity switch. This is useful if feedback of the valve position is required for automatic switching operations.

Materials: Stainless steel 1.4305 and aluminum (C1-76878) resp. stainless steel 1.4435 and brass (C1-101585)

approx. dimensions (mm)



Part no.	Description	MA1 (female thread)	L1	D1	D2	D3	A/F(1)
C1-76878	Electrical output signal indicator (EX) incl. cable	M28x1.5	85	35	12	M8x1	32
C1-101585	Electrical output signal indicator	M28x1.5	85	35	12	M8x1	32

Accessories

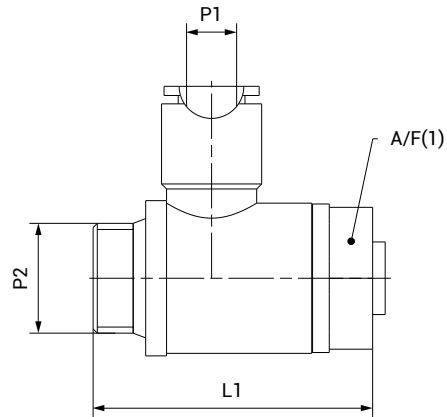
3 One-way flow control valve for pneumatic actuator

Application: For regulation of the switching parameters of the valve (port P1)

Function: Soft opening of the valve

Materials: Nickel-plated brass

approx. dimensions (mm)



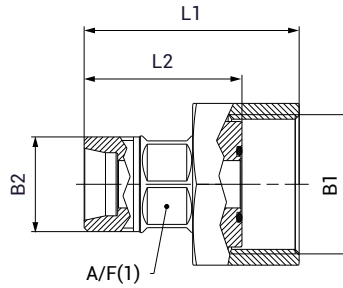
Part no.	Description	P1	P2 (male thread)	L1	A/F(1)
C1-78813	One-way flow control valve	6	G1/4"	33.5	17

Accessories

4 Adaptors incl. sleeve nut

Application: For easy installation of valves (ports B1/B2) in pipelines or complete plants
 Materials: Adaptor of stainless steel 1.4305, sleeve nut of brass (plane sealing)

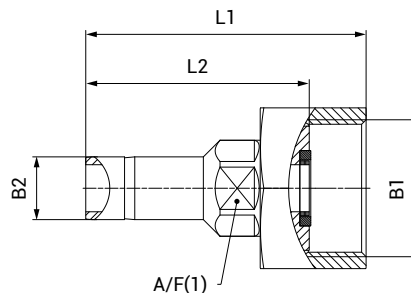
approx. dimensions (mm)



Adaptor with 24° cone connection acc. to ISO 8434-1 (S16xM24)

Part no.	DN	B1 (female thread)	B2 (male thread)	L1	L2	A/F(1)
C1-164158	12	UNF 1 3/8"-12	M24x1.5	55	40	22

approx. dimensions (mm)

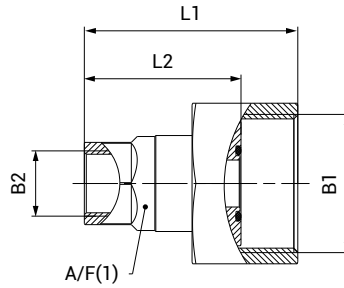


Adaptor for tube connection via pipe socket (for ferrule fitting)

Part no.	DN	B1 (female thread)	B2	L1	L2	A/F(1)
C1-166893	12	UNF 1 3/8"-12	Tube Ø 16	71.5	57	22

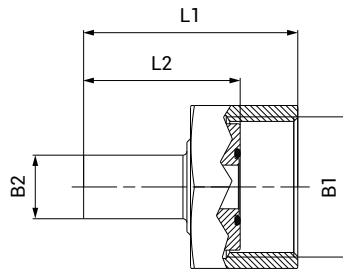
Accessories

approx. dimensions (mm)



Adaptor for connection to G-thread						
Part no.	DN	B1 (female thread)	B2 (female thread)	L1	L2	A/F(1)
C1-164157	12	UNF 1 3/8"-12	G3/8"	55	40	21

approx. dimensions (mm)



Adaptor with welding socket					
Part no.	DN	B1 (female thread)	B2	L1	L2
C1-100953	12	UNF 1 3/8"-12	Tube Ø 16x2	54	39
C1-164156	12	UNF 1 3/8"-12	Tube Ø 20x3	84	69

Other adaptors on request.

Accessories

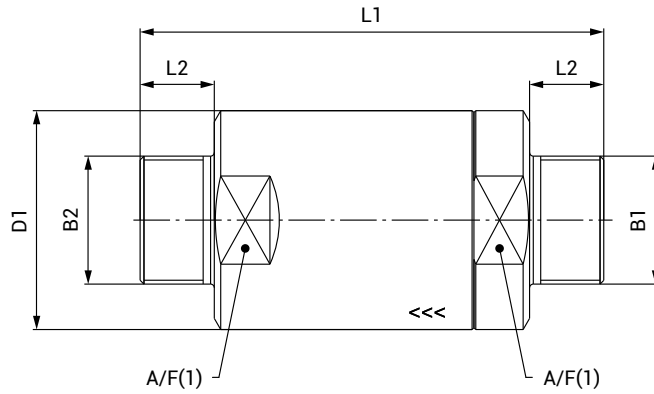
WEH® TSF4 Filter

Application: For installation in gas mixing plants

Function: Filtering of contaminants in the gas flow

Materials: brass, EPDM seals, Monel® wire filter insert

approx. dimensions (mm)



Part no.	Filter (µm)	B1 (male thread)	B2 (male thread)	L1	L2	D1	A/F(1)
C1-92654-X01	40	UNF 1 3/8"-12	UNF 1 3/8"-12	125	20	59	54

Accessories

ACCESSORIES FOR VALVE ASSEMBLIES

The following accessories enable the construction of complex valve systems by valve assemblies (see following sample images of technical gas plants). In this way, technical gas plants for filling, mixing, evacuating and discharging can be realized particularly economically. Monitoring and maintenance of these plants are thus considerably facilitated and investment costs are reduced.

Part no.	Description	Connection
C1-101070	Adaptor incl. sleeve nut	M24x2 male thread - UNF 1 3/8"-12 female thread
C1-100942	Screw adaptor	M24x2 male thread - UNF 1 3/8"-12 male thread
C1-100958	Plug	M24x2 male thread
C1-167238	Screw adaptor	M24x2 male thread - pipe socket Ø 6 mm
C1-110327	Connection bar for up to 4 components	M24x2 female thread
C1-100360	Connection bar for up to 6 components	M24x2 female thread
C1-75787	Connection tee with 3 connections	M24x2 female thread

Example of a technical gas plant with TV17 valve assemblies:



Technical explanations

TECHNICAL EXPLANATIONS

Abbreviations/Definitions

For explanation of abbreviations and definitions of terms see applicable Technical Appendix of the corresponding catalog or www.weh.com

Illustrations

The illustrations and/or images used in these data sheet are particularly provided for illustrative purposes only and may differ in some details from the actual product. For binding information, please refer to your individual orders.

Safe product selection

Our WEH® Products are designed to be operated by qualified professional users (insofar as WEH® Products are also designed to be operated by other users in individual cases, this is explicitly stated in the corresponding operating instructions). Please note that WEH does not know your system and therefore - also due to the large number of different potential applications of WEH® Products - cannot perform tests on all potential types of application. You alone are responsible for the selection, configuration and suitability of WEH® Products, especially according to the requirements of your system. Before purchasing WEH® Products, please particularly ensure that our products are compatible with your intended use, your performance data, your material and fluids, your system concept and your system limits according to our product specifications. Please also consider your technical and legal requirements for operation, handling and maintenance. The quality and safety of WEH® Products is our highest priority. For this reason, WEH® Products may not be used outside the specifications in the relevant data sheets and product descriptions. If you are not sure whether the WEH® Product is suitable for your system and intended use, please contact us in advance. We also strongly recommend that you refrain from using third-party spare parts or a combination of WEH® Products with unsuitable third-party products. You alone are responsible for reviewing the suitability of third-party products. WEH® Products and WEH® Spare parts comply with our quality and safety standards.

Service life

WEH® Products are generally products which may be subject to wear and fatigue during operation and depending on your individual application/use. For details - in particular regarding the corresponding minimum inspection and maintenance intervals - please refer to the respective operating instructions for the WEH® Product.

Explanation on the Pressure Equipment Directive

These WEH® Products are generally classified as pressure accessories in accordance with Article 2 (5) of the Pressure Equipment Directive 2014/68/EU and are considered to be similar to piping. These WEH® Products may not be used as safety accessories. Furthermore, it is pointed out, that these WEH® Products are designed and placed on the market in accordance with the requirements of Article 4 (3) of the Pressure Equipment Directive 2014/68/EU. The assessment with regard to a different classification can, however, be made on request.

External change management

WEH reserves the right to update, optimise and adjust its products continuously. This may result in corresponding changes of the product. Customers will be informed proactively or unsolicited by WEH only in individual cases about product updates, product optimisations and/or product adaptations that have been carried out. You are free to contact WEH at any time to request information about any product updates, product optimisations and/or product adjustments.

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More questions? – Great! Don't hesitate to contact our experts.

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