

# TAV 50



## Automatic and Manual Valves for High Vacuum Installations, Ø 50 mm

### Application

The TAV 50 valves maximize the efficiency of your high vacuum system. Since the valves are opened and closed automatically according to need, the vacuum is always concentrated to the suction points that are currently in use. This maximizes the extraction power, lowers operating costs, noise level and minimizes the size of the vacuum unit required.

Savings potential is substantial, considering the fact that a grinding tool is used effectively, approx. 15-20% of the actual time through out the working day. In a welding application, the torch is actively used approx. 30-50% of the actual time through out the working day. Therefore installing automatic valves at every suction point offers considerable savings.

### Benefits

- Lower operational costs and smaller vacuum unit.
- Lower noise levels
- Conductive plastic

### Description of ATEX models

Depending on model and application, several of the TAV 50 valves are marked according to the ATEX directive with the EX marking and have a category marking. All TAV 50 marked with the EX marking are category 3D equipment according to directive 94/9/EC. This means that these models may be placed in areas classified as zone 22 according to directive 1999/92/EC.

Manually operated equipment does not fall under the scope of the directive 94/9/EC (ATEX). Even though the TAV50 MA is not marked with the EX marking, it is highly suitable for use in areas classified as zone 22 and share the same high level of protection as the TAV50 with EX marking.

Valves that do not have the EX marking (-W, -G and AC/DC valves) are not suitable for ATEX and may not be installed in classified areas. See table below with part numbers, where "EX" is included in the description, for an overview of which valves are suitable for classified areas.

### Technical data

- The compressed air supply must be dry and clean (according to standard ISO 8573-1).
- Recommended pressure: 0,6-0,7 MPa (6-7 bar)
- Max. pressure: 1,0 MPa (10 bar)
- Min. pressure (for safe operation): 0,5 MPa (5 bar)
- Max. air flow (flow valve): 1800 NI/min.
- Min. air flow (flow valve): 100 NI/min.
- Working temperature: 0° +40°C
- Connection: inner diameter 51 mm, outer diameter 63 mm.



#### TAV 50 FV EX

To be used with pneumatic tools. The valve opens automatically as soon as the tool is activated.

#### TAV 50 MV-G

To be used with electrical tools. The valve opens automatically as soon as the tool is activated.

#### TAV 50 MV-W

To be used with welding torches or guns. The ring sensor detects the current and the valve opens automatically as soon as the gun is activated.

#### TAV 50 PC

This valve is designed for direct control with compressed air, e.g. with a 3-port valve (option).

#### TAV 50 MA

This valve is operated with a manual handle and is used where there is no need for automatic control.

#### TAV 50 FV/MV-G

Is a combined valve and can be used with electrical and / or pneumatic tools. The valve opens automatically as soon as the tool is activated.

#### TAV 50 FV/MV-W

Is a combined valve and can be used with welding torches and pneumatic tools. The valve opens automatically as soon as the gun / tool is activated.

**NOTE! All valves require micro switches, the AS-set (option) for automatic start/stop of the vacuum unit.**



## Accessories



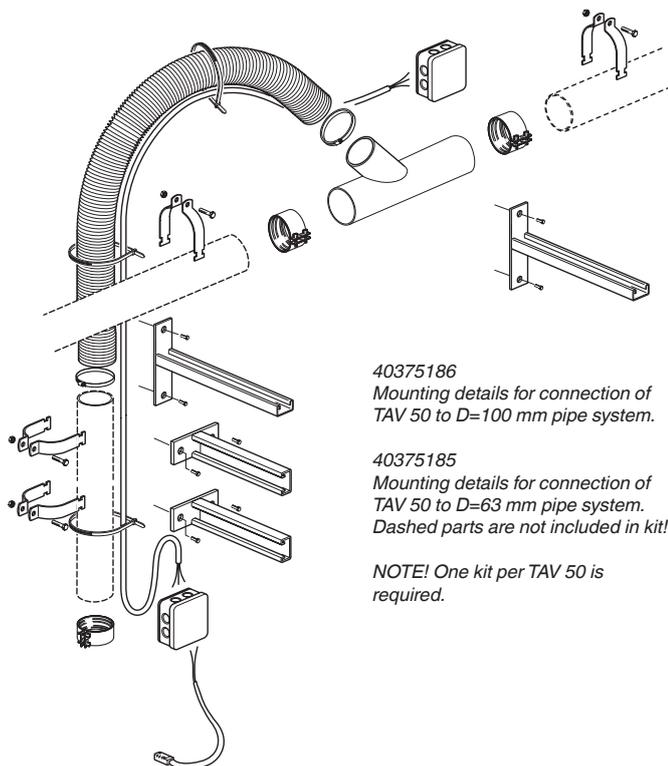
Denomination	Description	Part number
AS-set	AS-set with micro switch for automatic start /stop of the vacuum unit.	40141550
Current Sensing Device	Connection box with current sensing relay for hand-held electric tools, 110-240V AC. Max 16 A. Included as standard with TAV 50 MV-G and TAV 50 FV/MV-G.	40780260
Transformer	Transformer 230/24 V AC, 60VA for the ring sensor for the welding torches. One transformer can feed up to 12 TAV valves à 5 VA. Suitable for TAV 50 MV-W and TAV 50 FV/MV-W.	40750100
Toggle valve 3/2	3/2 port pneumatic valve for pneumatic control of single acting cylinders. Suitable for TAV 50 PC. The kit includes fittings and hose (6/4 mm, 25 m)	40680280
Restrictor G 1/8"	Restrictor for delayed closing of TAV 50 FV and TAV 50 FV/MV. Max delay: 10 sec, G 1/8" thread.	40617910
Restrictor M5	Restrictor for delayed closing of TAV 50 MV valves. Max delay: 3 sec, M5 thread.	40617520
Activator	Pneumatic activator for TAV 50 FV and TAV 50 FV/MV valves. Activates the flow sensing valve and allows use for other than extraction from pneumatic tools, e.g. floor cleaning using through a swing arm, etc.  <i>NOTE! Male quick coupler is not included.</i>	40190010

## Part number TAV 50 Valves

Part number	Description
40060100	TAV 50 FV EX
40060120	TAV 50 MV-G *)
40060130	TAV 50 FV/MV-G *)
40060110	TAV 50 MV-W **)
40060140	TAV 50 FV/MV-W **)
40147040	TAV 50 FV/MV 24V DC EX
40147090	TAV 50 FV/MV 24V AC/DC
40147120	TAV 50 FV/MV 115V AC EX
40147100	TAV 50 FV/MV 230V AC EX
40147071	TAV 50 MV 24V DC EX
40147050	TAV 50 MV 24V AC/DC
40147110	TAV 50 MV 115V AC EX
40147060	TAV 50 MV 230V AC EX
40147020	TAV 50 MA
40147030	TAV 50 PC EX

\*) Connection box with current sensing relay is included as standard. This valve requires 230 V AC.

\*\*\*) Requires 24 V AC from transformer (option). The transformer can be shared by several valves.



40375186  
Mounting details for connection of TAV 50 to D=100 mm pipe system.

40375185  
Mounting details for connection of TAV 50 to D=63 mm pipe system. Dashed parts are not included in kit!

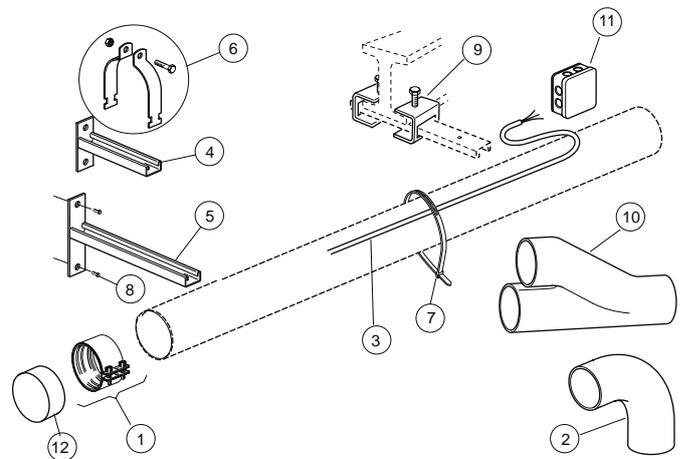
NOTE! One kit per TAV 50 is required.

40060660 Mounting details for suspension of D=100 mm pipe.

40060730 Mounting details for suspension of D=63 mm pipe.

Dashed parts are not included in kit!

NOTE! One kit is for one meter of pipe, e.g. 5m = order 5 pcs of mounting kits.



# KOMSA