

## Installation positions of control valves in pipelines and attachment options of the actuators on the valves

Actuator Types AT (SC/SO), BR31a, R, MD, MN and MZ

Translation

### 1 Valve Types 72, 73, 82 with actuators Type AT (SC/SO) and BR31a

#### 1.1 Installation positions of the valve in the pipeline

##### NOTICE

**Malfunction or damage to the control valve due to incorrect installation in the pipeline.**

- Install the control valve in the plant so that the condensate can drain off.
- The plug should not swing downwards. Deposits of the medium can cause the plug to jam!
- The permissible installation position of the accessories must be observed! See the associated installation and operating instructions.

**Type-approved valves according to Gas Appliances Regulation (EU) 2016/426, DVGW, DIN EN 161, CERTCO** may only be installed in the pipeline with the actuator facing upwards. See Fig. 1.1.

- SAMSON VETEC recommends the standard installation position: horizontal pipeline, AT actuator orientated vertically upwards. See Fig. 1.1.
- For correct **sizing of the actuator** and **alignment of the accessories**, the installation position in the pipeline deviating from the standard must be specified when ordering the valve.

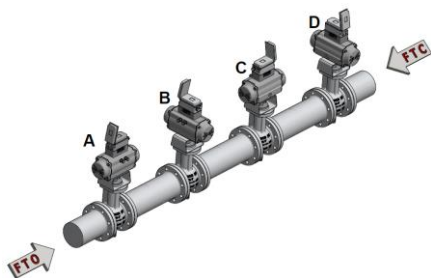


Fig. 1.1: Standard installation positions - horizontal pipeline

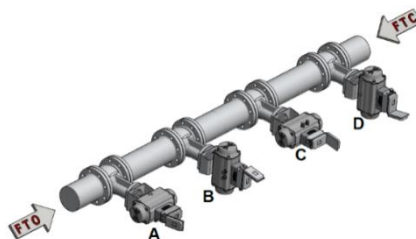


Fig. 1.2: Optional installation position - horizontal pipeline (after consulting SAMSON VETEC)



Fig. 2: Alternative installation positions: vertical pipeline (after consulting SAMSON VETEC)

FTO=Flow to open • FTC=Flow to close

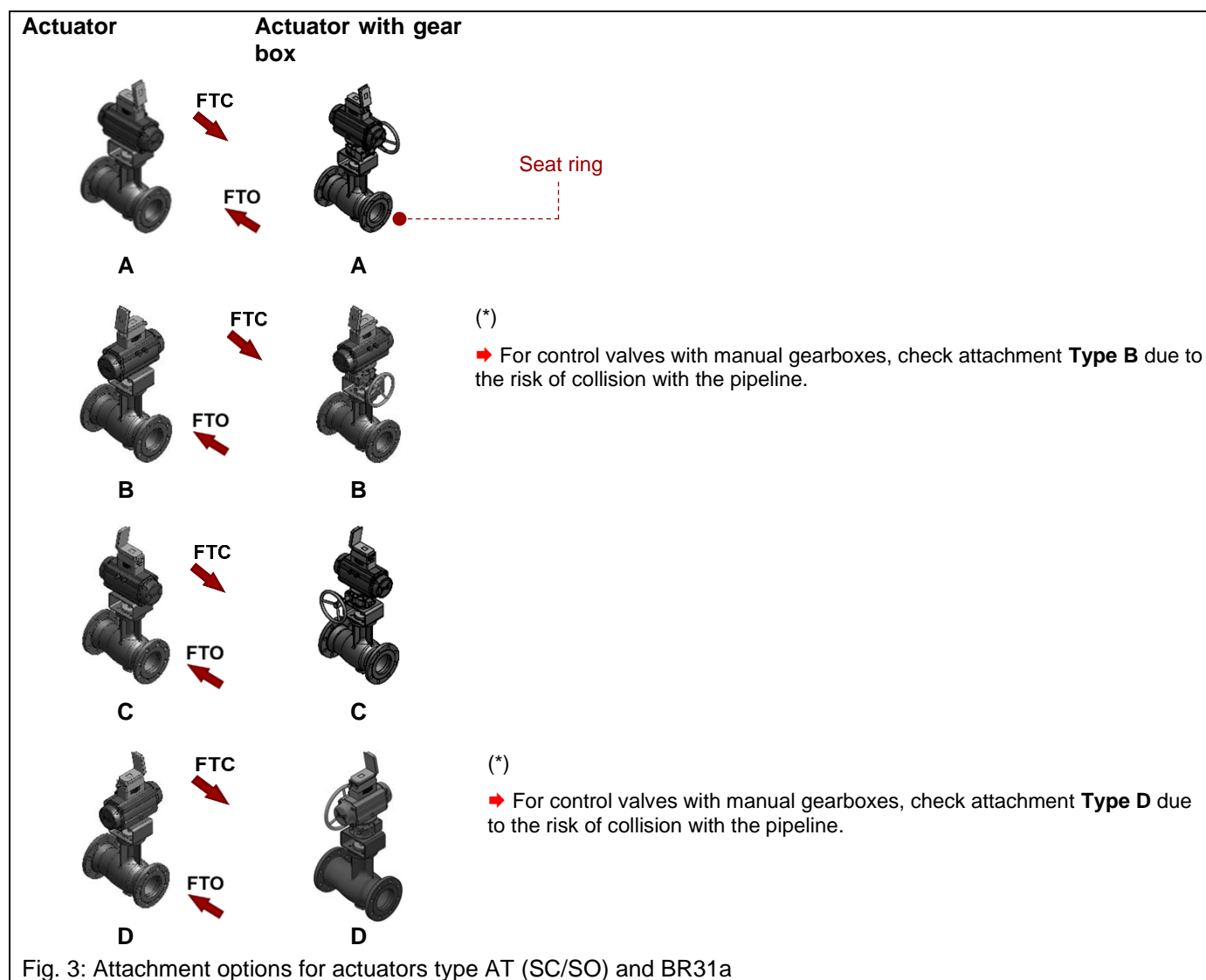
Other installation positions on request!

(To be filled in by the customer)

## 1.2 Attachment options for actuators AT / BR31a to the valve Types 72, 73, 82

Attachment types A, B\*, C, D\* are possible for mounting the actuators to the valves.

Attachment **Type A** is selected as the **standard mounting position** if no other information is available.



FTO=Flow to open • FTC=Flow to close

## 2 Valves Type 62 with actuators type AT (SC/SO) and BR31a

### 2.1 Installation positions of the valve in the pipeline

#### ! NOTICE

**Malfunction or damage to the control valve due to incorrect installation in the pipeline.**

- Install the control valve in the plant so that the condensate can drain off.
  - The plug should not swing downwards. Deposits of the medium can cause the plug to jam!
  - The permissible installation position of the accessories must be observed! See the associated installation and operating instructions.
- SAMSON VETEC recommends the standard installation position: horizontal pipeline, AT actuator orientated vertically upwards. See Fig. 4.1.
- For correct **sizing of the actuator** and **alignment of the accessories**, the installation position in the pipeline deviating from the standard must be specified when ordering the valve.

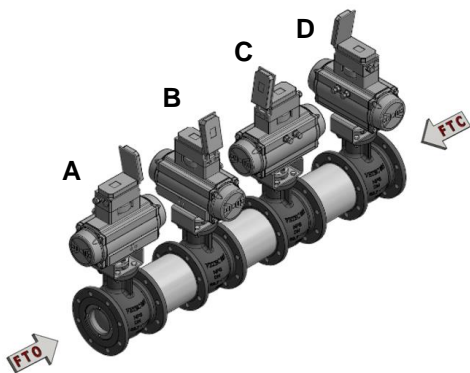


Fig. 4.1: Standard installation positions - horizontal pipeline

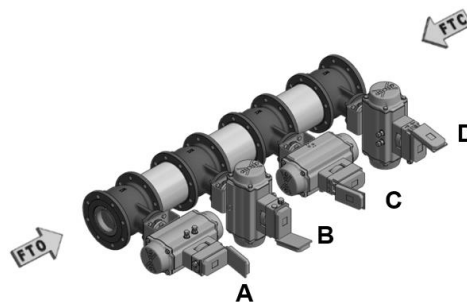


Fig. 4.2: Optional installation position - horizontal pipeline (after consulting SAMSON VETEC)



Fig. 5: Alternative installation positions: vertical pipeline (after consulting SAMSON VETEC)

FTO=Flow to open • FTC=Flow to close

Other installation positions on request!

*(To be filled in by the customer)*

2.2 Attachment options for actuators AT / BR31a to the valve Type 62

Attachment types A, B\*, C, D\* are possible for mounting the actuators to the valves.

Attachment **Type A** is selected as the **standard mounting position** if no other information is available.

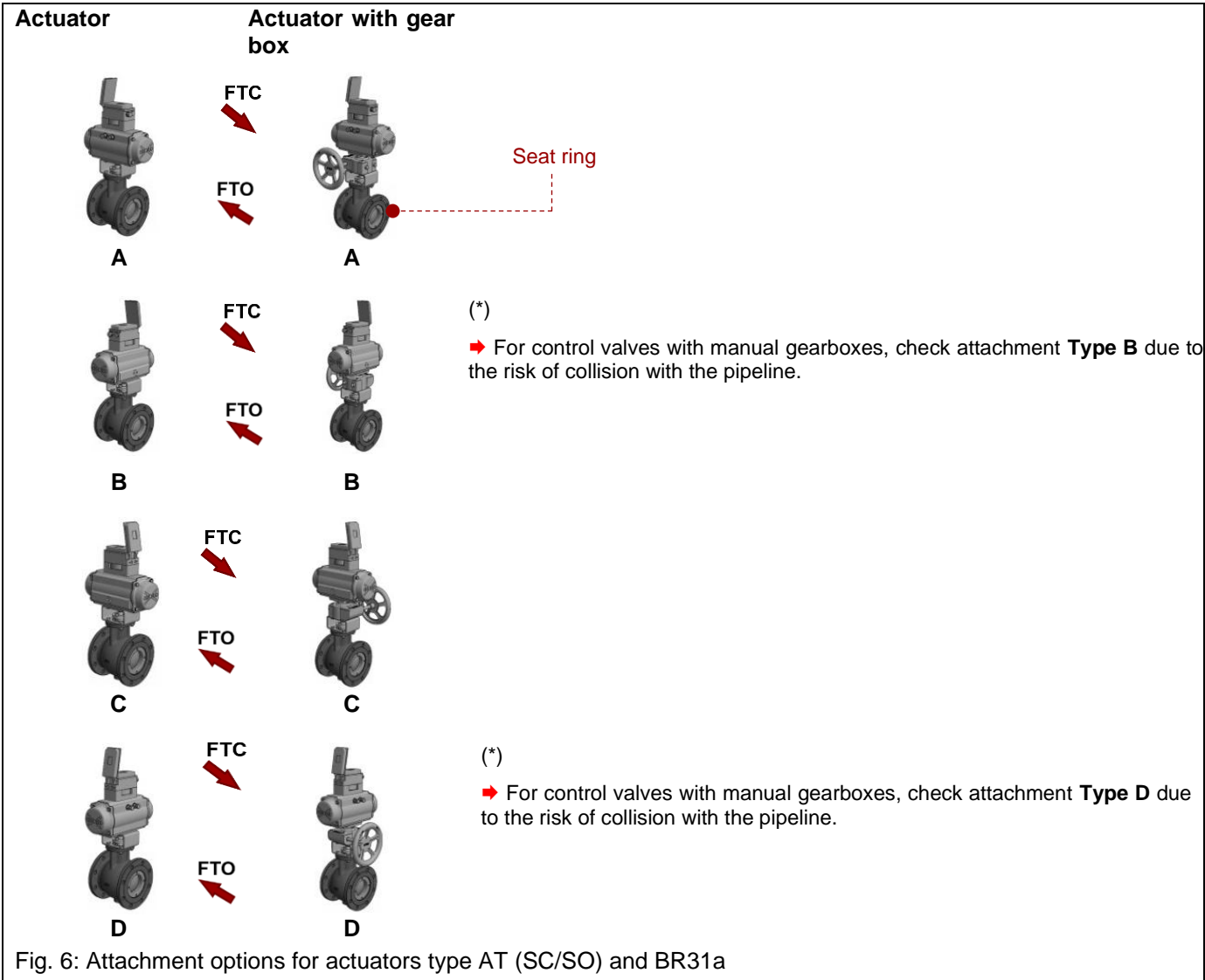


Fig. 6: Attachment options for actuators type AT (SC/SO) and BR31a

FTO=Flow to open • FTC=Flow to close

### 3 Valves type 72, 73, 82 with actuator type R

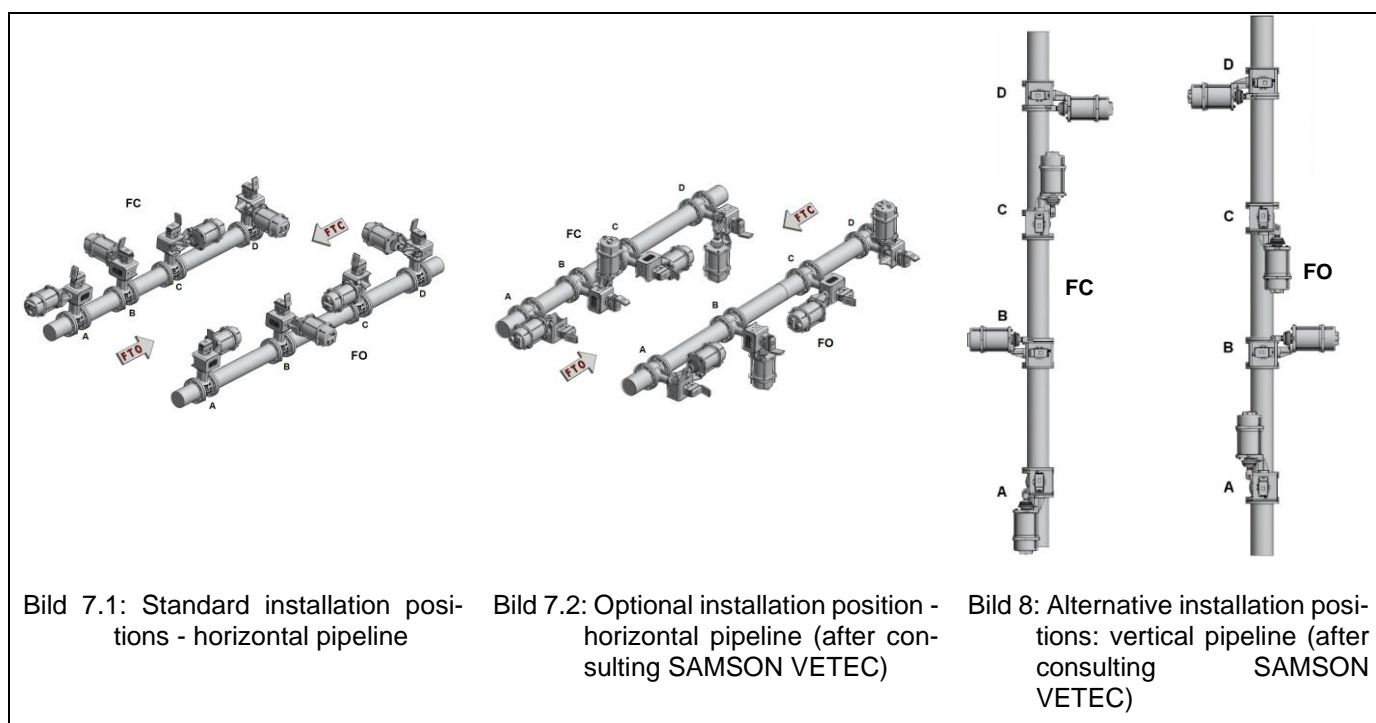
#### 3.1 Installation positions of the valve in the pipeline

##### ! NOTICE

**Malfunction or damage to the control valve due to incorrect installation in the pipeline.**

- Install the control valve in the plant so that the condensate can drain off.
- The plug should not swing downwards. Deposits of the medium can cause the plug to jam!
- The permissible installation position of the accessories must be observed! See the associated installation and operating instructions.

- SAMSON VETEC recommends the standard installation position: horizontal pipeline, R actuator with horizontal piston rod (parallel to the pipeline). See Figure 7.1.
- For correct **sizing of the actuator** and **alignment of the accessories**, the installation position in the pipeline deviating from the standard must be specified when ordering the valve.



FC=Fail-to-close • FO=Fail-to-open • FTO=Flow to open • FTC=Flow to close

##### **Other installation positions on request!**

(To be filled in by the customer)

### 3.2 Attachment options for R-actuator to the valve

Attachment Types A, B, C, D are possible for mounting the actuators to the valves.

Attachment **Type A** is selected as the **standard mounting position** if no other information is available.

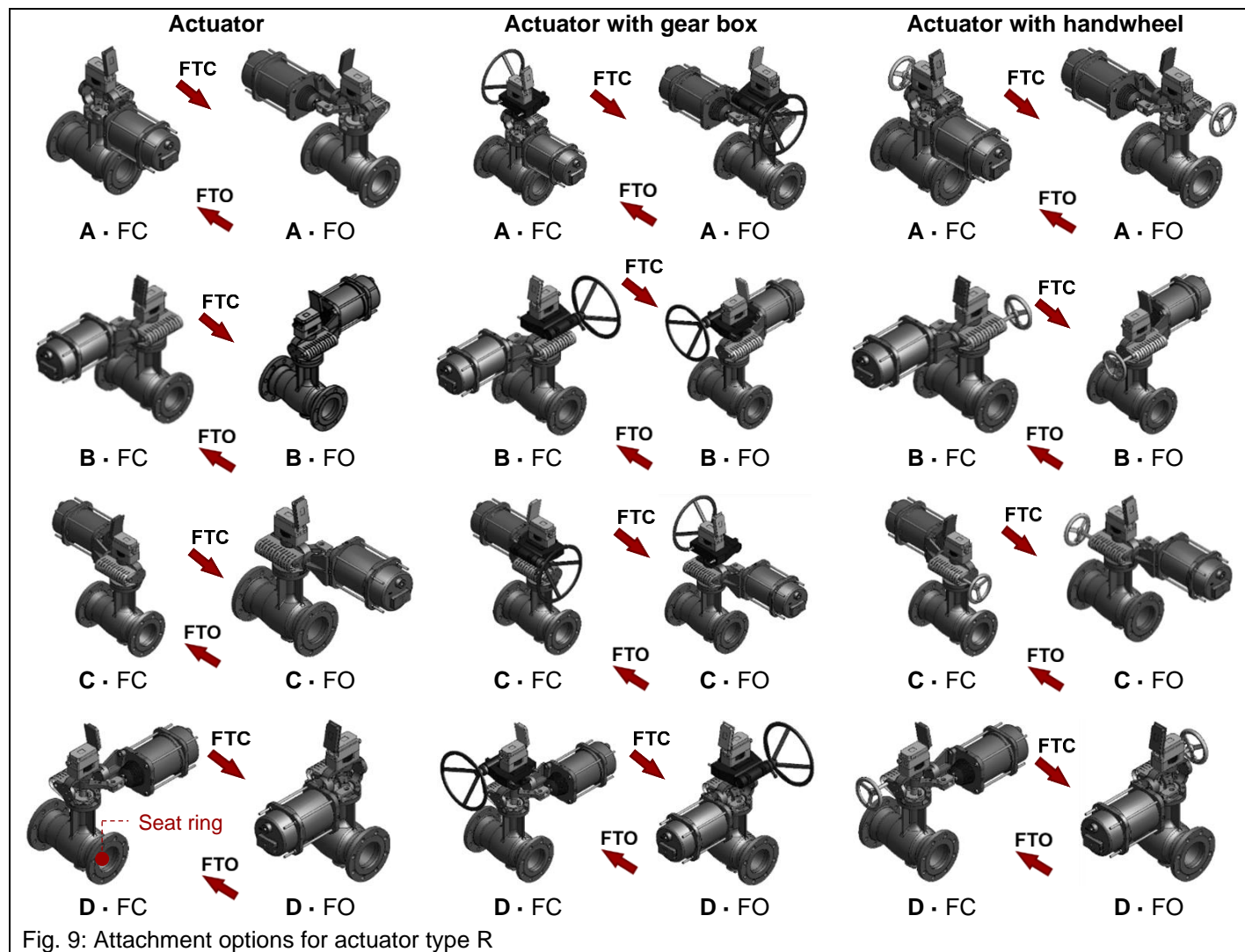


Fig. 9: Attachment options for actuator type R

FC=Fail-to-close • FO=Fail-to-open • FTO=Flow to open • FTC=Flow to close

## 4 Valves type 72, 73, 82 with actuators type MD and MZ

### 4.1 Installation positions of the valve in the pipeline

#### ! NOTICE

**Malfunction or damage to the control valve due to incorrect installation in the pipeline.**

- Install the control valve in the plant so that the condensate can drain off.
  - The plug should not swing downwards. Deposits of the medium can cause the plug to jam!
  - The permissible installation position of the accessories must be observed! See the associated installation and operating instructions.
- 
- SAMSON VETEC recommends the standard installation position: horizontal pipeline, MD, MZ actuator with vertical piston rod (vertical to the pipeline). See Figure 10.
  - For correct **sizing of the actuator** and **alignment of the accessories**, the installation position in the pipeline deviating from the standard must be specified when ordering the valve.

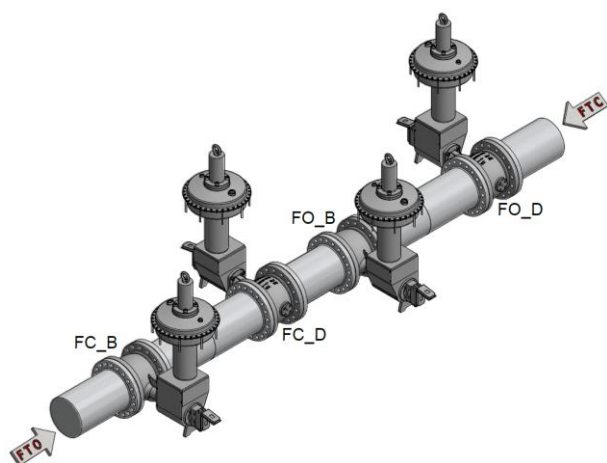


Bild 10: Standard installation positions - horizontal pipe-line

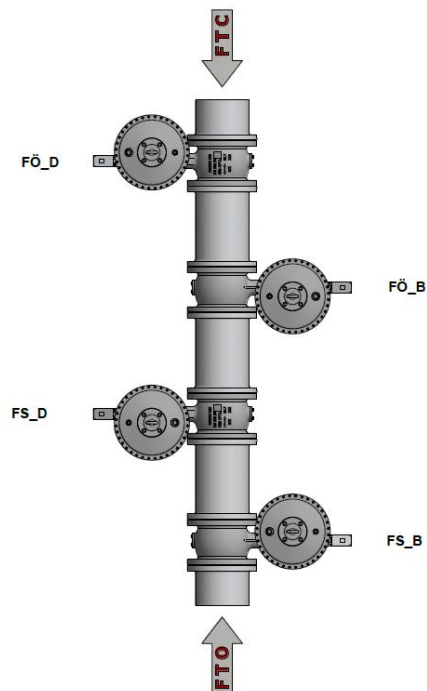


Bild 11: Alternative installation positions: vertical pipeline (after consulting SAMSON VETEC)

#### **Other installation positions on request!**

(To be filled in by the customer)

## 4.2 Attachment options for M-actuators (MD/MZ) to the valve

For mounting the actuator to the valve, we recommend attachment Types B and D.

Attachment Types A and C must be checked due to the risk of collision with the pipeline. Details on request!

Attachment **Type B** is selected as the **standard mounting position** if no other information is available.

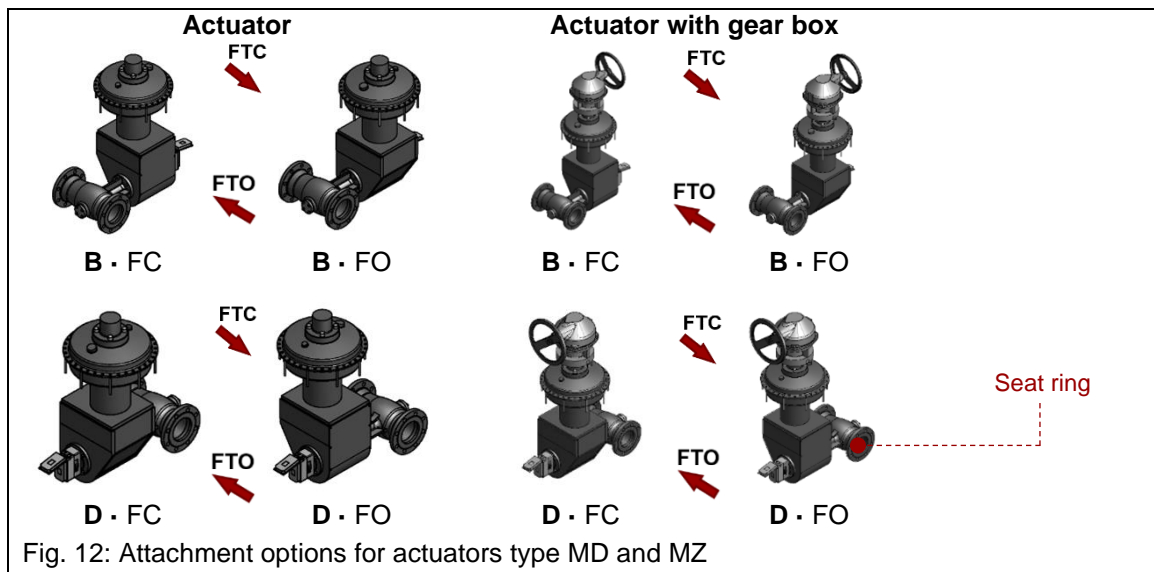


Fig. 12: Attachment options for actuators type MD and MZ

FC=Fail-to-close • FO=Fail-to-open • FTO=Flow to open • FTC=Flow to close



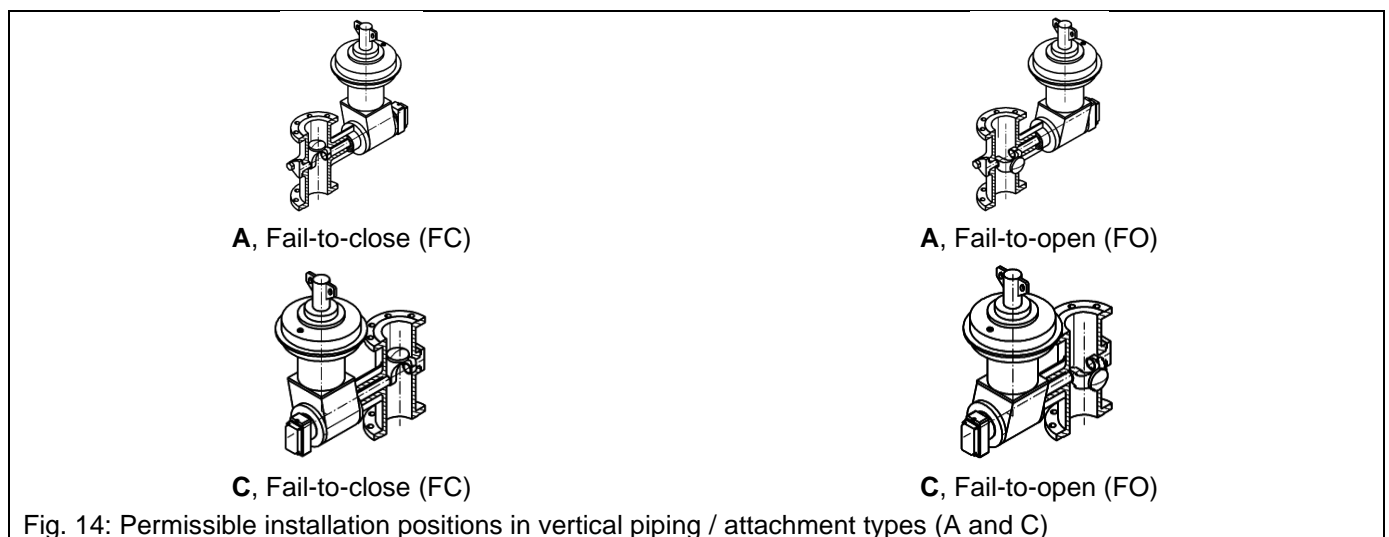
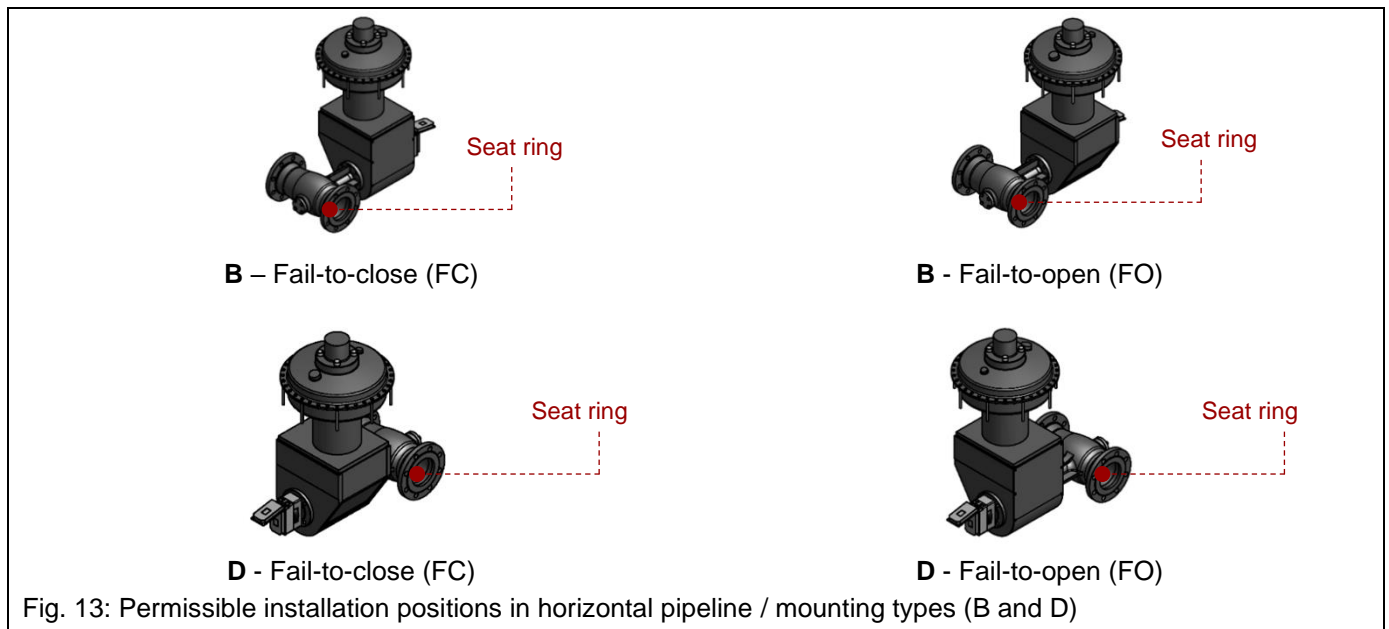
## 5 Valves type 72, 73, 82 with actuator type MN

### 5.1 Installation positions of the valve in the pipeline

#### ! NOTICE

**Malfunction or damage to the control valve due to incorrect installation in the pipeline.**

- Store, transport and install the control valve with Type MN actuator only with horizontal shaft (actuator facing upwards, with vertical piston rod). See Fig. 13, 14.
  - Install the control valve in the plant so that the condensate can drain off.
  - The plug should not swing downwards. Deposits of the medium can cause the plug to jam!
  - The permissible installation position of the accessories must be observed! See the associated installation and operating instructions.
- Permissible installation position: vertical pipeline, MN actuators with vertical piston rod parallel to the pipeline and orientated upwards. See Fig. 14.
- For correct **sizing of the actuator** and **alignment of the accessories**, the installation position in the pipeline deviating from the standard must be specified when ordering the valve.



## 5.2 Attachment options for MN-actuator to the valve

For mounting the actuator to the valve, we recommend attachment types **B** and **D** (See Fig. 13).

Attachment type B is selected as the standard mounting position if no other information is available.

Attachment types A and C ( See Fig. 14) are possible under the following conditions: vertical pipeline, without insulation, maximum permissible medium temperature 60 °C and only from nominal width DN 80. Details on request!



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