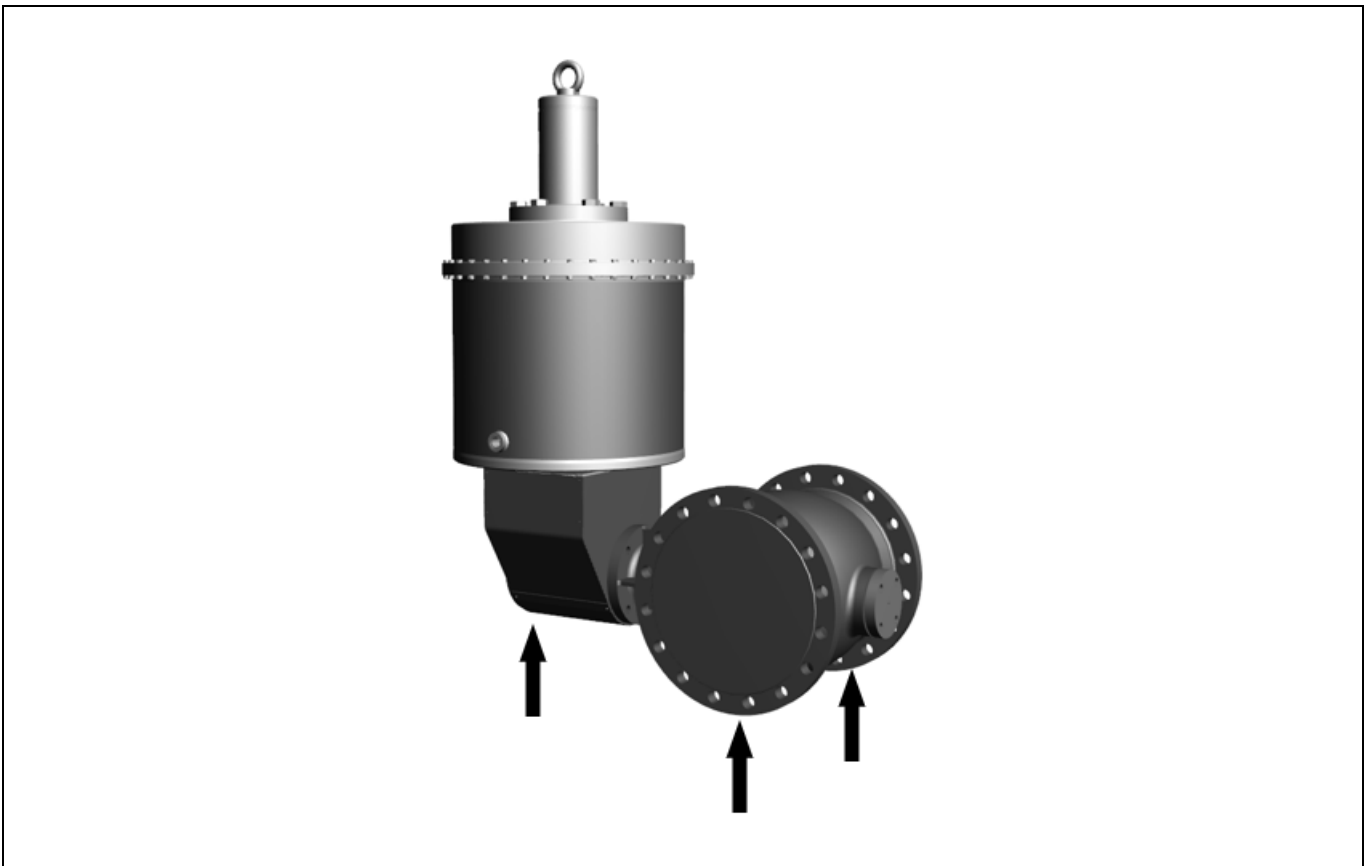


Support/suspension of the actuator & control valve on site

EB005.032 EN

Chap. 5 (03-01)

Translation of the original



Valve Series 72, 73, 82 in combination with actuator Type MD

Note on these mounting and operating instructions

This document is an excerpt (chap.5) from the mounting and operating instructions of the device. The division of the complete document corresponds to the categories of the guideline VDI 2770. The instructions in this document cover only a small part of the manufacturer's information for this device. This document contains instructions and information on how to support or suspend control valves (devices).

For the safe and proper use of the device, all persons handling the product must have read and understood also the following sections of the mounting and operating instructions before starting any work: The chapters de-scribing the activity to be carried out.

The images shown in these instructions are for illustration purposes only. The actual product may vary.

- For the safe and proper use of these instructions, read them carefully and keep them for later reference.
- We accept no responsibility for damage and operational faults caused by failure to comply with these instructions.
- If you have any questions about these instructions, contact SAMSON VETEC After-sales Service: sales-vetec-de@samsongroup.com

Definition of signal words

DANGER

- *Hazardous situations which, if not avoided, will result in death or serious injury*

NOTICE

- *Property damage message or malfunction*

WARNING

- *Hazardous situations which, if not avoided, could result in death or serious injury*

Note

- *Additional information*

Tip

- *Recommended action*

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Referenced documentation:

The following documents apply in addition to these instructions: Installation and operating instructions for the SAMSON VETEC devices purchased, e.g. valve, actuator and accessories, additional installations (e.g. silencers).

1. Safety instructions and measures

DANGER

Danger due to suspended loads falling!

- Stay clear of suspended or moving loads.
 - Close off and secure the transport paths.
-

WARNING

Risk of injury due to incorrect lifting without the use of lifting equipment!

Lifting the valve without the use of lifting equipment may lead to injuries (back injury in particular) depending on the weight of the valve.

- Observe the occupational health and safety regulations valid in the country of use.
-

WARNING

Risk due to objects (components) falling down or out!

- When mounting and dismantling, secure the components against falling down.
 - Secure the area.
-

WARNING

Risk of personal injury due to the valve tipping over!

- Observe the valve's centre of gravity.
 - Secure the valve against tipping over or turning.
-

WARNING

Risk of lifting equipment tipping over and risk of damage to lifting accessories due to exceeding the rated lifting capacity!

- Only use approved lifting equipment and accessories whose minimum lifting capacity is higher than the weight of the valve including actuator and packaging, if applicable.
-

NOTICE

Malfunction or risk of valve damage due to insufficient or incorrect support/suspension!

- Observe the support points intended for this purpose.
 - Support the valve/actuator without stress or vibration.
 - If the pipeline is not self-supporting, the control valve and/or the pipeline must be supported or suspended.
 - Use sufficient and suitable supports or suspensions.
-

2. Dimensions and weights

The Type 72, 73, 82 Rotary Plug Valves are combined with the SAMSON VETEC Type MD Pneumatic Actuators. The installation dimensions and supporting weights of the supplied valve can be found in the documents, e.g. dimensional drawings, delivery notes, etc. The valve and actuator nameplates provide information on the design of the control valve (device).

■ Dimensions · Actuators Type MD

Actuator	K	L	N	Ø P	HK
MD 450/75	1105	65	150	557	290
MD 700/75	1540	85	155	756	360

Dimension in mm

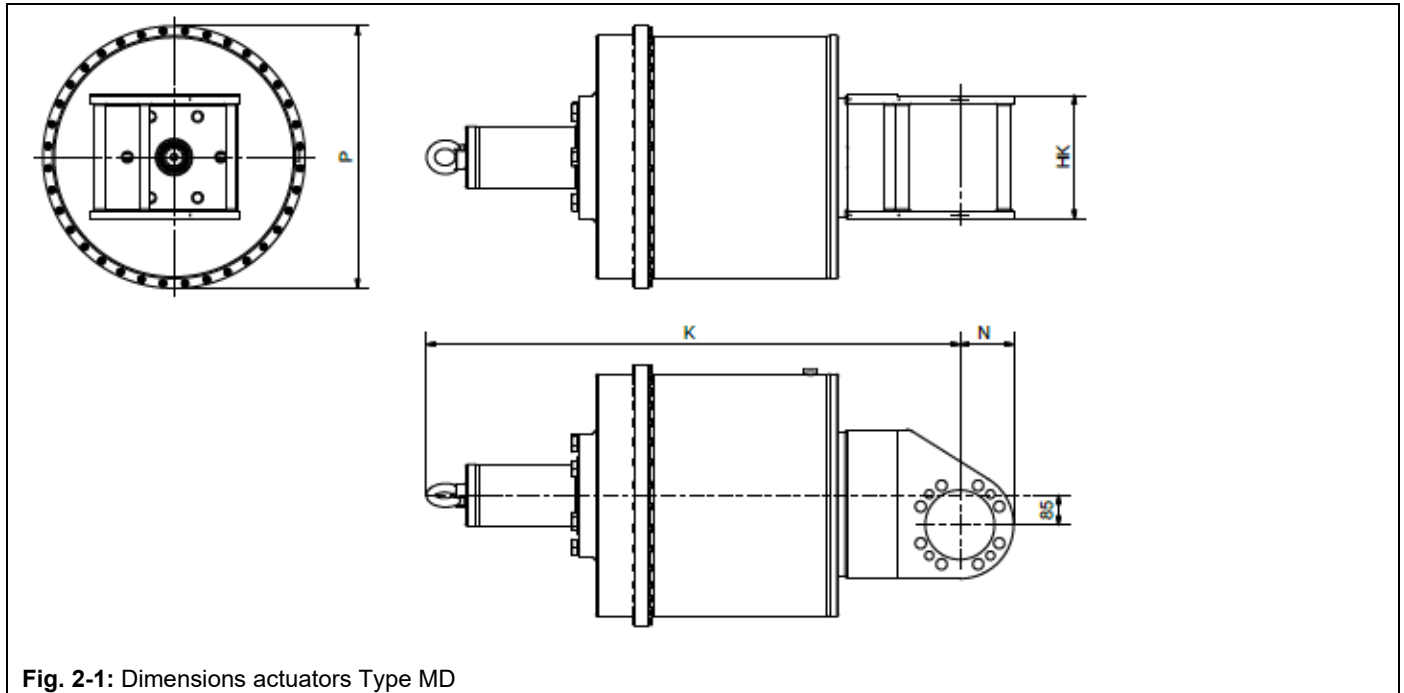


Fig. 2-1: Dimensions actuators Type MD

■ Weight · Actuators Type MD

Actuator	Weight* in kg
MD450 / 0,65-1,1	350
MD450 / 1,15-2,01	355
MD450 / 1,56-2,72	360
MD450 / 1,71-3,13	370
MD700 / 0,55-0,9	640
MD700 / 0,7-1,3	645
MD700 / 1,51-2,8	655
MD700 / 1,74-3,1	670
MD700 / 2,1-3,75	680
MD700 / 2,16-3,5	680
MD700 / 2,51-4,07	690
MD700 / 2,88-4,66	700

* Actuator with bracket and without accessories. Information may vary.

■ Weight · Valves (Standard design)

Valve	82.7	72.3	73.7	73.3
DN	Weight* in kg			
25	8	8	15	15
40	13	15	20	24
50	16	20	28	40
80	35	40	45	60
100	43	50	60	75
150	85	100	180	220
200	140	160	250	290
250	190	220	390	470
300	260	250	510	
400		450	965	
500		850	On request	

* Valve without bracket. Information may vary.

■ Weight · Accessories

Accessories	Weight* in kg
Positioner incl. tubing	2
Supply pressure regulator	0,5
Solenoid valve	1
Booster	1

* Information is for reference and may vary.

3. Support and suspension conditions

The control valve with MD actuator and, if necessary, the pipeline must be fitted with a suitable support or suspension.

To ensure that the control valve functions properly, make sure that the following conditions are met:

- When supporting or suspending the actuator and/or the control valve in the pipeline, observe the specified support/suspension points.
- Support/suspension should be **vibration-free and without mechanical stresses**.
- First support the pipeline, then support the valve and actuator at the specified points.

4. Support and suspension points · Control valve with actuator Type MD

i Note

Selection and implementation of a suitable support or suspension of the installed control valve/actuator as well as the pipeline are the responsibility of the plant operator.

! NOTICE

Risk of damage to the control valve due to incorrect attachment of the support/suspension!

The eyelets/eyebolts on actuator are only intended for supporting or suspending the actuator. They are not intended for supporting the entire control valve.

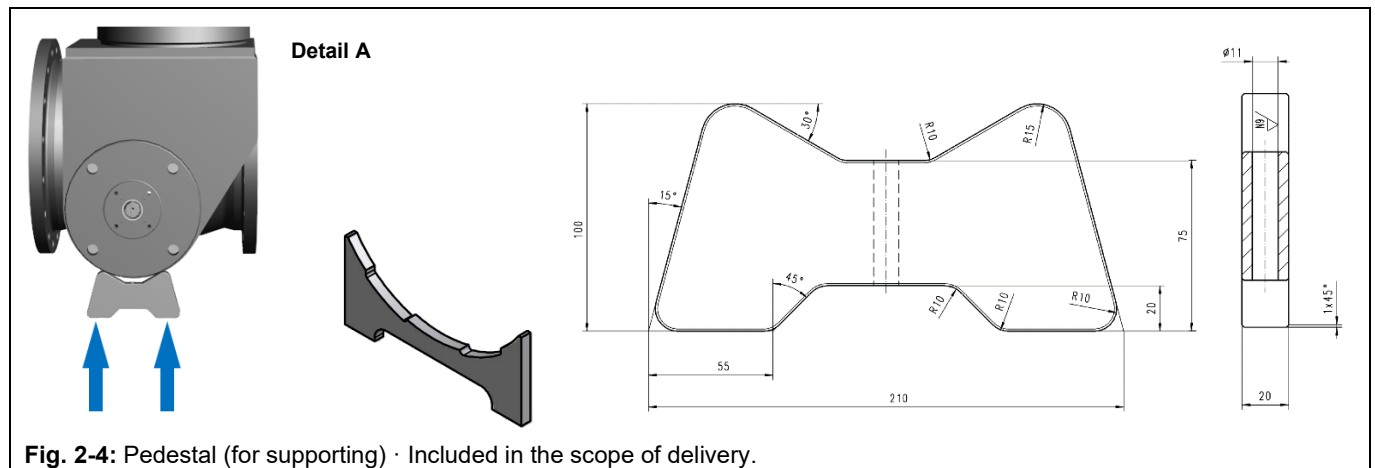
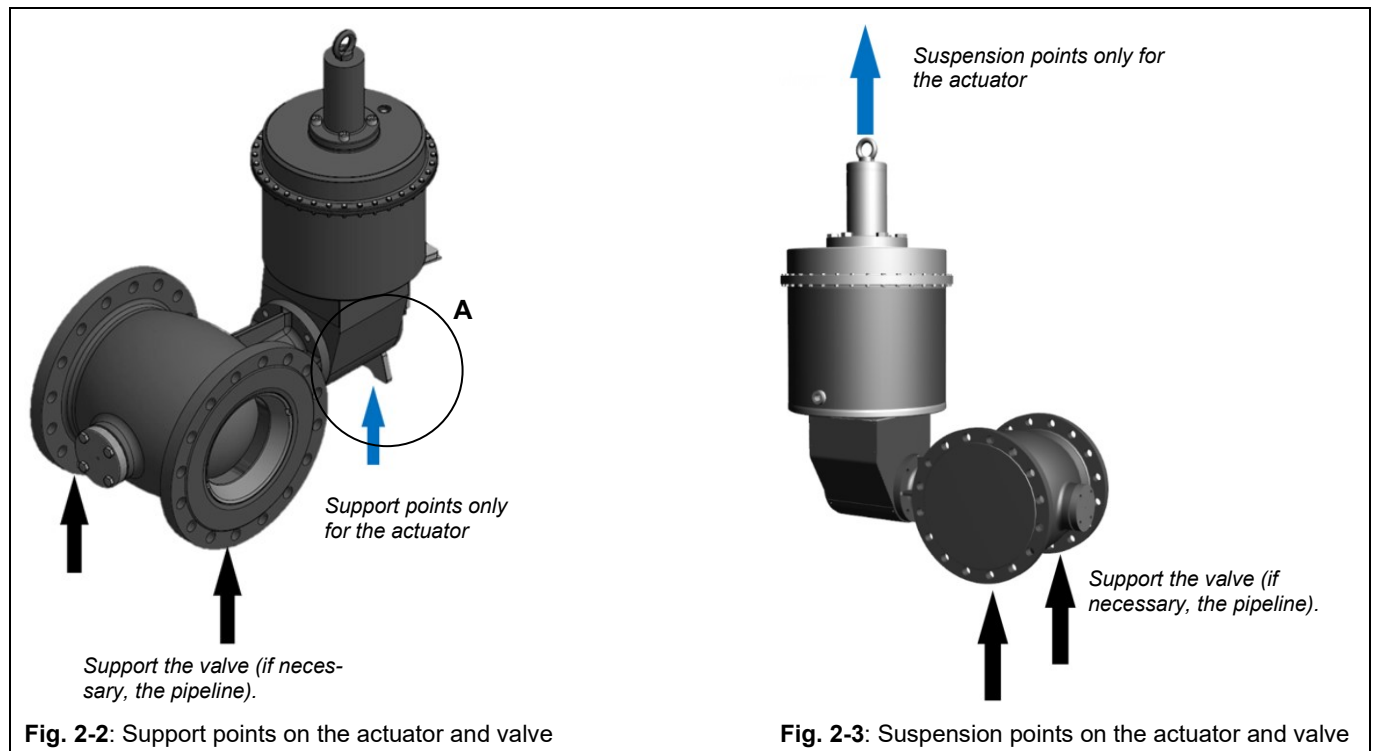
- When supporting/suspending the control valve, make sure that the support/suspension attached to the valve body or to the bracket bear the entire load.
- Do not attach the support/suspension for the entire control valve to the actuator, handwheel, accessories or other components.

4.1. Control valve with vertically upwards oriented actuator

SAMSON VETEC recommends installing the control valves so that the actuator is pointing vertically upwards. For the standard installation position of the control valve, see Fig. 2-2 and 2-3.

Support/suspension points on the actuator and valve

Example: Valve Type 72.3 with Actuator Type MD · **Standard installation position**



4.2. Control valve with horizontally oriented actuator

i Note

Selection and implementation of a suitable support or suspension of the installed control valve/actuator as well as the pipeline are the responsibility of the plant operator.

! NOTICE

Risk of damage to the control valve due to incorrect attachment of the support/suspension!

The eyelets/eyebolts on actuator are only intended for supporting or suspending the actuator. They are not intended for supporting the entire control valve.

- When supporting/suspending the control valve, make sure that the support/suspension attached to the valve body or to the bracket bear the entire load.
- Do not attach the support/suspension for the entire control valve to the actuator, handwheel, accessories or other components.

Support/suspension points on the actuator and valve

Example: Valve Type 72.3 with Actuator Type MD

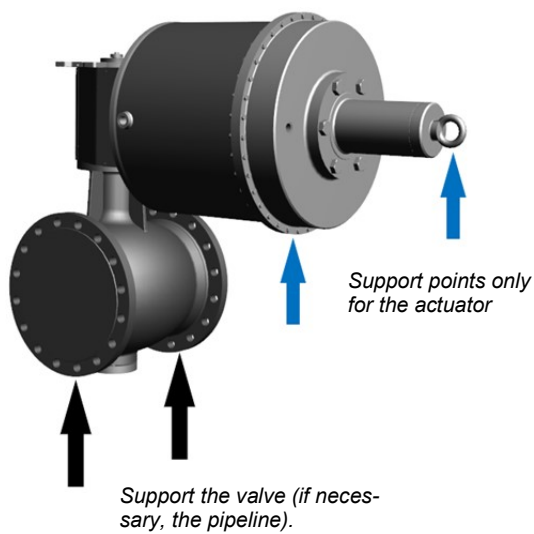


Fig. 2-5: Support points on the actuator and valve

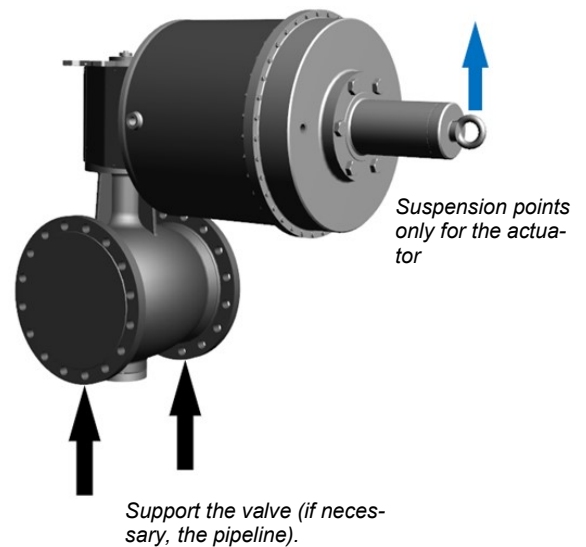


Fig. 2-6: Suspension points on the actuator and valve

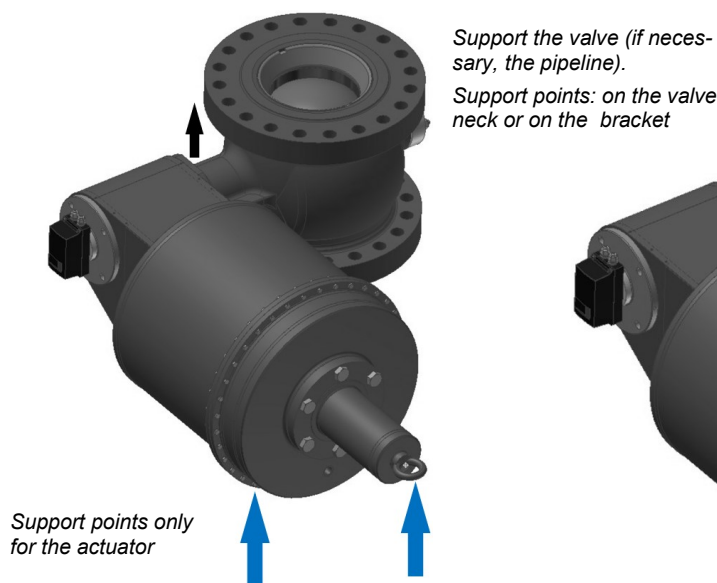


Fig. 2-7: Support points on the actuator and valve

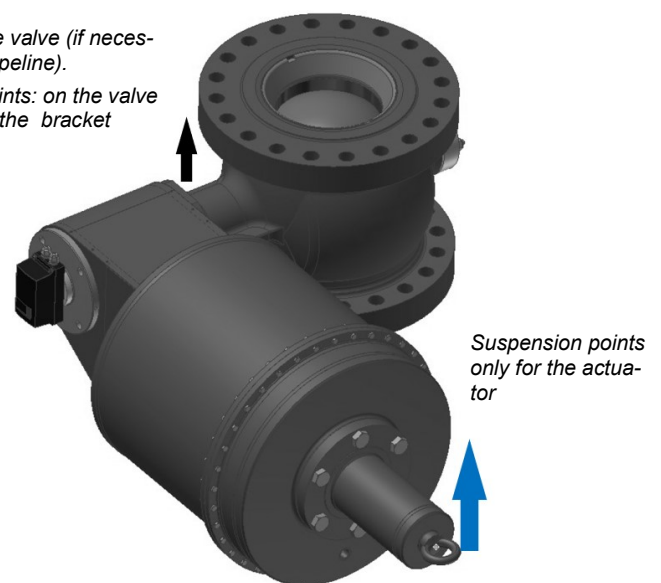


Fig. 2-8: Suspension points on the actuator and valve



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