

USE

DS series double seat valves are used to control fluids belonging to group 2 according to the article 9 of 97/23/CE (PED) directive in air-conditioning, thermoventilation and heating plants and in industrial process thermal machines; therefore, they cannot be used as safety valves.

Group 2 regards water, overheated water, steam.

For different fluids belonging to group 2, please contact our Sales Support.

**MANUFACTURING CHARACTERISTICS**

They consist in a two-way double seat valve body to be assembled on bidirectional electrical actuator, driving mechanical connection with elastic pin and position indicator.

TECHNICAL CHARACTERISTICS

Model	DSGA	DSAA
Construction	PN16	PN25
Body	Cast iron	Steel
Seat	Stainless steel	Stainless steel
Plug	Stainless steel	Stainless steel
Stem (Ø 9 mm)	Stainless steel	Stainless steel
Control characteristic	Equal percentage	Equal percentage
Stem packing	Teflon V-ring	Teflon V-ring
Max fluid temperature °C	200	230
Min fluid temperature °C	-10 ⁽¹⁾	-10 ⁽¹⁾
Connections	Flanges PN16	Flanges PN25
Leakage max % of Kvs	0,12	0,12

(¹) For applications with possible ice formations on stem and gasket, see accessory 245.

MAX DIFFERENTIAL AND CLOSE-OFF PRESSURE (bar) *

Nominal diameter DN mm	Kvs	DSGA			DSAA			
		MVL	MVF58	MVF515	MVL	MVLA/C **	MVF58	MVF515
150	300	-	-	-	12 (14)	7	2,9	17,5
200	500	8 (9)	1,8	11,6	-	-	-	-

Kvs is the flow rate expressed in m³/h of water at a temperature between 5 °C and 40°C passing through a valve open at nominal stroke under a 100 kPa (1 bar) differential pressure.

* The values in brackets represent the max differential pressure the actuator can bear in order to maintain the valve in closed position. When only one value is indicated, this corresponds to the max differential and close-off pressure.

** MVLA in emergency opens the valve; MVLC in emergency closes the valve.

Note The max operating pressures at different temperatures for various PN classes must correspond to the UNI 1284 table.

ACTUATORS TECHNICAL CHARACTERISTICS, WIRING DIAGRAMS AND INSTALLATION

See SH - MVL actuators data sheets and mounting instructions.

MOTORIZED VALVES OPTIONS

MODEL DESCRIPTION

A150-2 flanges with ANSI 150 bolt holes (for DSAA valves)

A300-2 flanges with ANSI 300 bolt holes (for DSAA valves)

INSTALLATION

HYDRAULIC CONNECTIONS

Respect the fluid directions indicated by the arrow on the valve body.

VALVE MOUNTING

Before mounting the valve, make sure pipes are clean, free from welding slags. The pipes must be perfectly aligned with the valve body and not subjected to vibrations.

For installations on plants with high temperature fluids (steam, overheated water, diathermic oil) use expansion joints to avoid the dilatation of pipes to overload the valve body.

Install the valves with the actuator in vertical position for fluid temperature up to 120°C, with higher temperatures they must be mounted horizontally.

The valves can also be mounted in any other position, provided that the actuator main shaft is always horizontal.

NOTE: Following the hydraulic installation it is necessary to check the tight of the stem packing placed on the bonnet, both in cases of low and high temperatures. The valves require periodic maintenance.

ACCESSORIES

MODEL DESCRIPTION

245 stem heater for applications with -10 °C low temperature fluid with SH - MVL actuators.

AG51 Adapter for MVF actuators

Leave sufficient room over the actuator, at least 10 cm., to allow the actuator disassembling from the valve body for eventual maintenance. The actuator must not be installed in explosive atmosphere, at a room temperature higher than 50 °C and lower than -5 °C; they must not be subjected to steam or water jets or dripping.

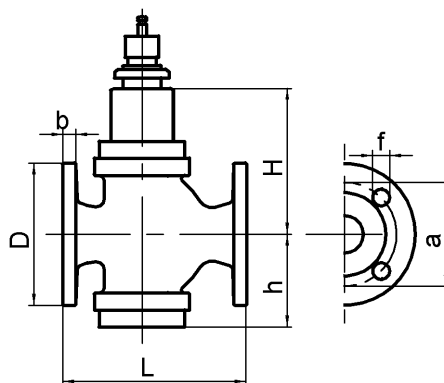
Avoid the valve installation in plants which are considered aggressive and/or corrosive for valve materials.

Please contact our Sales Support in order to determine which potentially aggressive or polluting substances can be used.

We disclaim all responsibility in case of valve failure due to external fortuitous events (fire, earthquakes etc.).

NOTE: The actuator can be rotated with respect to the valve body by the blocking ring nut; after such operation re-tighten the ring nut.

OVERALL DIMENSIONS (mm)



N4122

Model	DN	L	H	h	D	b	2a	f	Hole nr.	Weight Kg.	Stroke mm
DSAA PN40	150	480	265	224	300	28	250	25	8	83	45
DSGA PN16	200	600	320	275	340	30	295	22	12	160	45

The performances stated on this sheet can be modified without any prior notice due to design improvement.

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CONTROLLI

Automatic control systems for:
air-conditioning/heating/industrial thermal process.

ISO 9000