

→ Series 651mSK VA

651mSK VA

Diaphragm safety valves
made of stainless steel,
angle-type with
threaded connections

■ SUITABLE FOR

Solar heating systems



■ EXAMPLES OF USE

For the protection of:

- closed-circuit, intrinsically safe solar heating systems with water or water mixtures as a heat transfer medium, with permissible supply temperatures of up to 120°C.

As these valves are completely made of metal, they can also be installed at high environmental or radiation temperatures. All materials suitable for max. temperatures up to 160°C.

- intrinsically safe, thermal solar plants

For non intrinsically safe plants and temperatures >120°C please use the safety valves 451/851bG series or 452/852bGL series.

Safety valves are set and sealed at the factory.

■ APPROVALS

TÜV Type test approval 2013

SOL

EC type examination

SOL

Requirements

TRD 721
DIN 4757 Teil 1
DIN EN 12976

DIN EN ISO 4126-1
DGR 97/23/EG

Classification society

American Bureau of Shipping

ABS

CE 0035

■ MATERIAL



■ SPECIFICATION



1/2"



- 10°C to + 120°C



2,0 – 10 bar

■ MATERIALS

Component	Material	DIN EN	ASME
Inlet body	Stainless steel	1.4408	CF8M
Outlet body	Stainless steel	1.4408	CF8M
Spring housing	Nickel plated brass	CW617N	CW617N
Internal wetted parts	Stainless steel	1.4404	316 L
Internal not wetted parts	Brass	CW617N	CW617N
Spring	Stainless steel	1.1200	ASTM A 228

■ VALVE VERSION

m	Standard with diaphragm	The diaphragm prevents the medium entering into the spring housing and protects moving parts from being affected by the medium.
---	-------------------------	---

■ MEDIUM

S	Solar hot-water or solar hot-water mixtures	Flow temperature $\leq 120^{\circ}\text{C}$ in intrinsically safe solar systems
---	---	---

■ TYPE OF LIFTING MECHANISM

K	Standard with twist-type lifting mechanism
---	--

■ VARIATION

VA	wetted parts made of stainless steel
----	--------------------------------------

■ AVAILABLE NOMINAL DIAMETERS AND CONNECTION SIZES

Nominal diameter DN		15
Inlet		1/2" (15)
Outlet	1/2" (15)	
	3/4" (20)	■

■ TYPE OF CONNECTION INLET / OUTLET THREADED CONNECTIONS

f / f	Standard	Female thread BSP-P / Female thread BSP-P	DIN EN 10226, ISO 7-1 / DIN EN 10226, ISO 7-1
-------	----------	---	---

■ SEALS

EPDM	Ethylene propylene diene	Elastomere flat seal and diaphragm (up to 100% glycol resistant)	-10°C to $+120^{\circ}\text{C}$
------	--------------------------	--	---

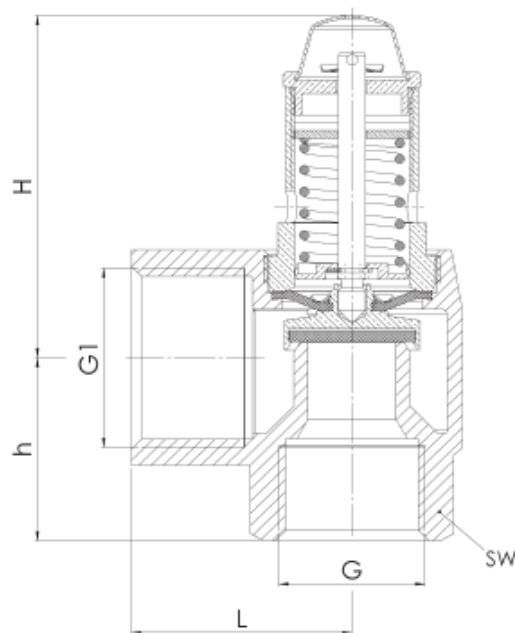
■ NOMINAL DIAMETERS, CONNECTIONS, INSTALLATION DIMENSIONS

Series 651mSK VA: Connection, installation dimensions, ranges of adjustment

Nominal diameter	DN	15
Connection DIN EN 10226-1	G	1/2" (15)
Outlet DIN EN 10226-1	G1	3/4" (20)
Installation dimensions in mm	L	34
	H	70
	h	28
	SW	27
Weight	kg	0,30
Set pressure ¹	bar	3, 4, 6, 8, 10

¹Other pressures between 2 bar and 10 bar against surcharge

■ MAIN DIMENSIONS, INSTALLATION DIMENSIONS



■ INDIVIDUAL SELECTION / VALVE CONFIGURATION

Series	Valve version	Medium	Lifting device	Variation	Nominal diameter DN	Connection type		Connection size		Seal	Set pressure	Quantity
						Inlet	Outlet	Inlet	Outlet			
651	m	S	K	VA	15	f	f	15	20	EPDM	3,0	10
651	m	S	K	VA	15	f	f	15	20	EPDM		
651	m	S	K	VA	15	f	f	15	20	EPDM		
651	m	S	K	VA	15	f	f	15	20	EPDM		

■ **CAPACITY TABLE**

Series 651mSK VA: Blowing-off rates at 0,5 bar or 10% above set pressure				
Solar plants	Nominal diameter	DN	15	
	Capacity		kW	Kcal/h
			50	45.000
	DIN 4757			
	Surface of the collector inlet	m ²	50	