

→ Series 651mHIK

651mHIK

Safety valves made of
gunmetal, angle-type with
threaded connections



■ SUITABLE FOR

Hot water



■ EXAMPLES OF USE

For the protection of:

- thermostatically protected closed-circuit water heating systems with flow temperatures of up to 120°C.

Not permitted in Germany.

Should the thermostatic limiting and control unit fail, the safety valve has to blow-off the total heating output of the boiler as hot water and steam.

As these valves are completely made of metal they can also be installed at high environmental or radiation temperatures.

- heating systems for building technology- and industrial-applications
- co-generation plants (CHP)

Safety valves are set and sealed at the factory.

■ APPROVALS

EU type examination

TSG ZF001-2006

TR ZU 032/2013 - TR ZU 010/2011

Requirements

PED 2014/68/EU

Classification society

DNV
Lloyd's Register EMEA
American Bureau of Shipping
Russian Maritime Register of Shipping

DNV
LR EMEA
ABS
RS



■ MATERIAL



■ SPECIFICATION



1/2" – 1 1/2" – 10°C to + 120°C 2,5 bar, 3,0 bar
and 3,5 bar

■ MATERIALS

Component	Material	DIN EN	ASME
Inlet body	Gunmetal	CC499K	CC499K
Outlet body	Gunmetal	CC499K	CC499K
Internal parts	Brass	CW617N	CW617N
Spring	Spring steel with anti-rust protection	1.1200	ASTM A228

Series 651mHIK ■ 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.
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■ MEDIUM

HI	Hot water (international)	Flow temperature ≤ 120°C in water heating systems
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■ TYPE OF LIFTING MECHANISM

K	Standard with twist-type lifting mechanism
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■ AVAILABLE NOMINAL DIAMETERS AND CONNECTION SIZES

Nominal diameter DN		15	20	25	32	40
Inlet		1/2" (15)	3/4" (20)	1" (25)	1 1/4" (32)	1 1/2" (40)
Outlet	1/2" (15)	■				
	3/4" (20)		■			
	1" (25)			■		
	1 1/4" (32)				■	
	1 1/2" (40)					■

■ 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
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■ SEALS

EPDM	Ethylene propylene diene	Elastomere flat seal and diaphragm (up to 100% glycol resistant)	−10°C to +120°C
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■ OPTIONS

MA	Gauge connection	in size 1/2" also with gauge connection G 1/4" available
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Against surcharge

Pressure gauge type 32	Chapter Accessories
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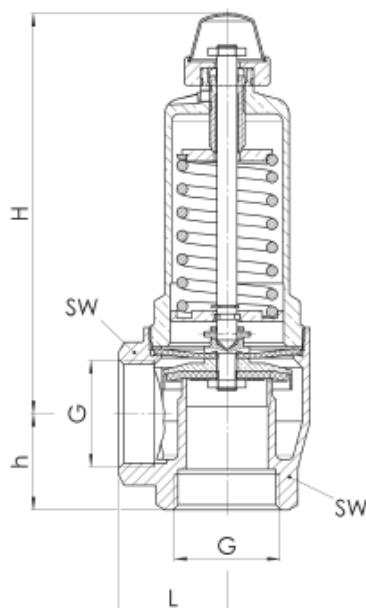
NOMINAL DIAMETERS, CONNECTIONS, INSTALLATION DIMENSIONS

Series 651mHIK: Connection, installation dimensions, ranges of adjustment

Nominal diameter	DN	15	20	25	32	40
Connection DIN EN ISO 228	G	1/2" (15)	3/4" (20)	1" (25)	1 1/4" (32)	1 1/2" (40)
Outlet DIN EN ISO 228	G	1/2" (15)	3/4" (20)	1" (25)	1 1/4" (32)	1 1/2" (40)
Installation dimensions in mm	L	26	30	38	42	53
	H	65	72	86	160	183
	h	24	28	30	40	40
	SW	26	32	39	49	56
Weight	kg	0,25	0,4	0,7	1,6	2,5
Set pressure ¹	bar	2,5	2,5	2,5	2,5	2,5
		3	3	3	3	3
		3,5	3,5	3,5	3,5	3,5

¹Other set pressures available on request against surcharge

MAIN DIMENSIONS, INSTALLATION DIMENSIONS



INDIVIDUAL SELECTION / VALVE CONFIGURATION

Series	Valve version	Medium	Lifting device	Nominal diameter DN	Connection type		Connection size		Seal	Options	Set pressure	Quantity
					Inlet	Outlet	Inlet	Outlet				
651	m	HI	K	15	f	f	15	15	EPDM	MA	2,5	30
651	m	HI	K	25	f	f	25	25	EPDM		3,5	5
651	m	HI	K		f	f			EPDM			
651	m	HI	K		f	f			EPDM			

■ CAPACITY TABLE ACC. TO ISO 4126-1 / AD2000 A2

Series 651mHIK: Blowing-off rates at 0,5 bar above set pressure

Nominal diameter DN		15		20		25		32		40	
	Set pressure bar	kW	Kcal/h	kW	Kcal/h	kW	Kcal/h	kW	Kcal/h	kW	Kcal/h
Heating	2,50	148	127.000	235	202.000	442	380.000	576	495.000	712	612.000
	3,00	170	146.000	270	232.000	504	433.000	657	565.000	814	700.000
	3,50	191	164.000	304	261.000	568	488.000	739	635.000	913	785.000