

Temperature Regulator DN 15-50

Fig. 771

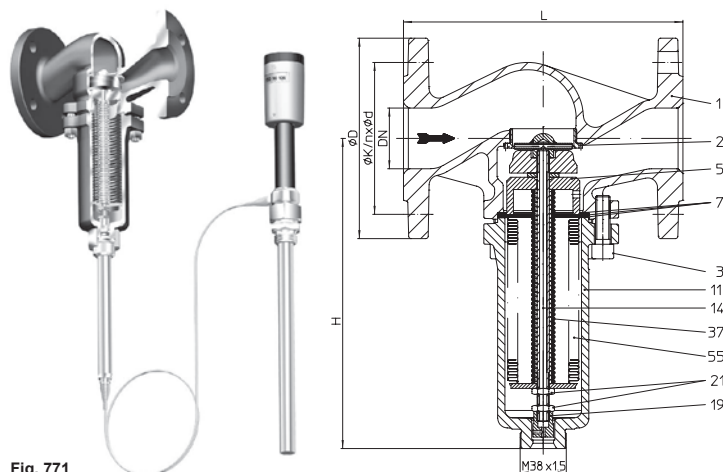


Fig. 771

Dimensions								
DN			15	20	25	32	40	50
Fig. 771	L	(mm)	130	150	160	180	200	230
	H	(mm)	160	160	195	195	215	255
	Weight	(kg)	3.3	4.3	6	7.1	9.8	12.2
Fig. 772	H	(mm)	305	305	340	340	360	400
	Weight	(kg)	4.3	5.3	7	8.1	10.8	13.2

Kvs-value								
DN			15	20	25	32	40	50
Standard Kvs-values		(m³/h)	4.0	6.3	10.0	16.0	22.0	32.0
Travel		(mm)	7.5	7.5	8	9.5	9.5	11.5
Reduced Kvs-values		(m³/h)	0.4	1.0	--	--	--	--
Travel		(mm)	5	5	--	--	--	--
Leakage rate			IV acc. to DIN EN 1349 (≤ 0,01% from the nominal flow)					

Pressure Temperature Rating								
acc. to DIN EN 1092-2								
Material			-60°C to <-10°C*	-10°C to 120°C	150°C	200°C	250°C	300°C
EN-JL1040	16	(bar)	--	16	14.4	12.8	11.2	9.6
EN-JS1049	16	(bar)	on request	16	15.5	14.7	13.9	12.8
EN-JS1049	25	(bar)	on request	25	24.3	23	21.8	20
acc. to manufacturers standard								
Material			-60°C to <-10°C*	-10°C bis 120°C	150°C	200°C	250°C	300°C
1.0619+N	40	(bar)	30	40	38.1	35	32	28
SA105	40	(bar)	30	40	38.1	35	32	28
DN100 max. 26 bar								
acc. to DIN EN 1092-1								
Material			-60°C to <-10°C*	-10°C to 100°C	150°C	200°C	250°C	300°C
1.4408	40	(bar)	40	40	36.3	33.7	31.8	29.7
DN100 max. 26 bar								

Proportional Range (Combination Controller with Valve in Kelvin) ¹⁾											
DN	15			20	25	32	40	50	65	80	100
Controller size I	10	10	15	15	17	20	20	24	37	39	39
Controller size II	7.5	7.5	10	10	12	13	13	16	27	29	29
Controller size III	5	5	6.5	6.5	7.5	8.5	8.5	10	20	21	21

□ = recommended combinations

¹⁾ The proportional range determines at what change in sensor temperature the valve will move from totally open to totally closed.

*last updated 10/16

Features

- Self-operating (no auxiliary power required)
- Reliable, low maintenance operation
- Over-temperature safety device
- Valves pressure balanced with stainless steel bellows
- 3 thermal controller sizes for optimal selection of proportional range
- Thermal sensors with different time constants
- Exact and easy adjustment
- Setting range is adjustable
- Sensor pocket
- Manual control device

Figure	Nom. pressure	Material	Nom. diameter
12.771 / 12.772	PN16	EN-JL1040	DN15-100
22.771 / 22.772	PN16	EN-JS1049	DN15-100
23.771 / 23.772	PN25	EN-JS1049	DN15-100
35.771 / 35.772	PN40	1.0619+N	DN15-100
55.771 / 55.772	PN40	1.4408	DN15-100

Selection of possible applications

Industrial heating and ventilation systems, residential applications, marked-warehouses, ship building, cooling systems, etc.. (other applications on request)

Selection of possible flow media

Fluids, air and steam (other flow media on request)

Max. differential pressure drop Δp								
DN			15	20	25	32	40	50
Fig. 771	Straight through	(bar)	16	16	16	16	12	9
Fig. 772								

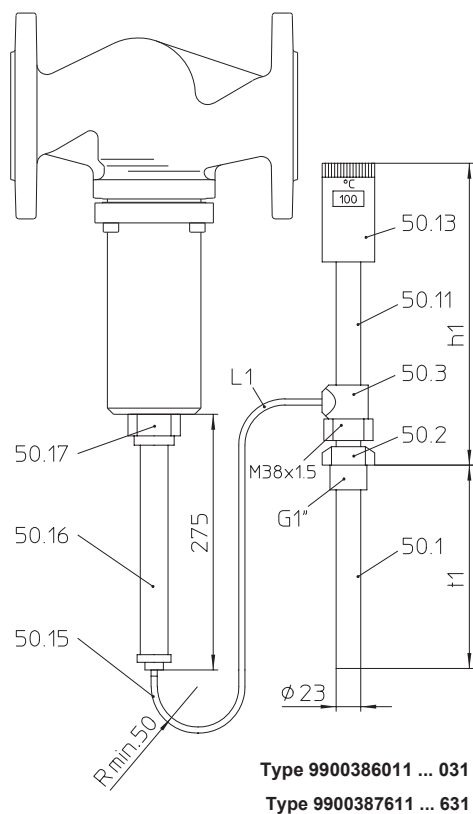


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Fig. 771

Material					
Pos.	Description	Fig. 12.771 Fig. 12.772	Fig. 22./23.771 Fig. 22./23.772	Fig. 35.771 Fig. 35.772	Fig. 55.771 Fig. 55.772
1	Body	EN-JL1040, EN-GJL-250	EN-JS1049, EN-GJS-400-18U-LT	GP240GH+N, 1.0619+N	GX5CrNiMo19-11-2, 1.4408
2	Seat	X6CrNiTi18-10, 1.4541			
3	Cylinder screw	A2-70			
5	Guide bushing	X6CrNiTi18-10, 1.4541			
7	Gasket *	Graphite			
11	Hood	EN-JS1049, EN-GJS-400-18U-LT			X6CrNiMoTi17-12-2, 1.4571
14	Spindle unit *	X6CrNiTi18-10, 1.4541			
19	Pressure piece	X6CrNiTi18-10, 1.4541			
21	Hexagon nut	A2-70			
28	Cooling spacer	EN-JS1049, EN-GJS-400-18U-LT			X6CrNiTi18-10, 1.4541
37	Spring *	X12CrNi17-7, 1.4310			
55	Balanced bellow *	X6CrNiTi18-10, 1.4541			
50.1	See types on below table	Constructions refer to page16			
50.2	Screw joint	CuZn39Pb3, CW614N (nickel plated)			
50.3	Sleeve nut	St Fe/Zn 12C			
50.11	Pipe	Al (painted)			
50.13	Indicator unit	ABS (Plastic)			
50.15	Capillary tube	Cu (tin plated)			
50.16	Actuator	CuZn37, CW508L (nickel plated)			
50.17	Sleeve nut	CuZn39Pb3, CW614N (nickel plated)			

* Spare part (cpl. unit)



Type 9900386011 ... 031

Type 9900387611 ... 631

Dimensions and weights

Type		h1	t1	L1	Weight
Thermal controller	Thermal detector	(mm)	(mm)	(m)	(kg)
9900386011	9900387611	269	339	2,4,8,16	1,8
9900386021	9900387621	347	557		3
9900386031	9900387631	347	857		3,3

Controller/Detector - Types

	Type		Size	Pressure range (°C)	Time constant without sensor pocket	Temperature sensor version
	Thermal controller	Thermal detector				
	9900386011	9900387611	I	-20 ... +50	75 s ²⁾ measured with water (flow rate 0,2 - 0,3 m/s)	Temperature sensor and setpoint adjusting knob in one unit. Stainless steel 1.4541 (optional sensor pocket)
	9900386021	9900387621	II	0 ... +70		
	9900386031	9900387631	III	+30 ... +100		

¹⁾ V1 = Volume of controlled volume sensor
V2 = Volume of outside temperature sensor

²⁾ with brass sensor pocket : 100s
with stainless steel sensor pocket : 115s

*last updated 10/16

