

THERMAL WORKING ELEMENTS

CONTROL RANGES AND CONSTRUCTIONAL DESIGNS LIST

The temperature ranges shown in the table apply to our standard products. Control ranges may be modified slightly depending on the type of element and load.

A large number of combinations of the constructional design and control range can be supplied as a standard product.

If the combination you require is not available as a standard product, this can be developed short-term.

The control ranges are normally 12-15 °C, customized control ranges upon request. The respective material of the wax element can be matched to the surrounding medium, e.g. brass, aluminium and stainless steel.

We shall be pleased to advise you on the optimum element and regarding the specification of the technical data. You will no doubt understand that we cannot provide any guarantee with regard to the mechanical, chemical and electrical influences to which the wax element is exposed during use.

Start of stroke °C	Control range °C	Start of stroke °C	Control range °C
6	6 ... 30	75	75 ... 90
15	15 ... 30	79	79 ... 94
20	20 ... 35	83	83 ... 95
25	25 ... 40	87	87 ... 102
40	40 ... 55	92	92 ... 108
45	45 ... 60	96	96 ... 110
50	50 ... 65	100	100 ... 115
55	55 ... 70	105	105 ... 120
60	60 ... 80	110	110 ... 125
65	65 ... 80	115	115 ... 130
71	71 ... 85	-20 ... 110	-20 ... 120

Type	Length L mm	External diameter D ₁ mm	Shaft diameter D ₂ mm	Piston diameter d mm	Stroke in the control range H _R mm	Max. permissible stroke mm	Max. permissible load N	Min. load N
X4.369.*).299	18,0	12,0	8,5	2,5	3	7	100	30
X4.307.*).299	20,0	15,5	12,0	3,5	4	7	200	40
X4.514.*).299	24,0	15,2	11,5	3,5	4	10	200	40
X4.319.*).299	30,0	21,0	14,5	4,0	8	15	200	45
X4.308.*).299	32,0	17,5	12,0	3,0	7	18	200	30
X1.248.*).299	33,5	20,7	15,0	4,0	8	18	200	45
X2.326.*).299	37,0	23,0	17,5	4,8	10	15	300	70
X4.050.*).299	37,0	27,0	20,5	6,0	10	17	500	100
X3.213.*).299	42,0	29,6	24,0	7,0	10	15	700	150
X2.301.*).299	48,0	22,0	18,0	4,8	16	23	300	70
X4.051.*).299	51,0	27,0	20,5	6,0	15	30	500	100
X4.001.*).299	79,0	36,0	26,0	9,0	16	25	1000	200
X4.370.*).299	87,0	36,0	27,5	11,0	15	25	1500	300

* Replace *) by other start-to-open-temperature on request (°C). For example wax element X4.319.75.299 opens at 75 °C. Technical modifications reserved.