

Ceramics for pyrometers, furnace construction & laboratory ware

Advantages

- **High dimensional tolerance**
- **Chemical corrosion resistance**
- **High heat resistance**
- **Very good thermal shock resistance**
- **High degree of reliability and economy in service**

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Standard tubes

Standard tubes

The standard products are listed in the catalogue by order numbers. As orders are confirmed according to these numbers, please indicate the same in your order.

Upon request, we will send you further catalogues enabling your works department to place orders according to these order numbers.

We use the following symbols in our order files:

The lengths desired for tubes which are not standardized according to DIN are indicated in mm behind symbol "L".

Special flange diameters are indicated in brackets as follows:

Flange diameter x height in mm, e. g.: (F 40 x 5)

Insulating tubes:

The letters behind the order numbers are equivalent to the following lengths:

A = 5, B = 10, C = 25, D = 50, E = 75 and F = 100 mm.

Insulating rods with slots:

Please add an "S" behind the length, i. e.
for 2 bores 1 slot
for 4 bores 2 slots.



TUBES O = open both ends



TUBES OF = open both ends, with flange



TUBES G = closed one end



TUBES GF = closed one end, with flange



TUBES OFF = open both ends, with two flanges

Technical data

Quality	Dim.	AluSIK-60 ZA 10A	AluSIK-80 GA AluSIK-80 ZA H	AluSIK-60 ZB HE	AluSIK-99 GB AluSIK-99 ZA TEH	CarSIK-70 ZA	CarSIK-90 ZA
Chem./phys. Composition		Mullite	Corundum	Sillimanite	Sintered alumina	Mullite-bonded SiC	Mullite-bonded SiC
Type acc. to DIN VDE 0335		C 610	C 530	-	C 799	-	-
Chem. composition							
AL₂O₃	%	60	80	60	99.7	70 SiC*	90 SiC*
Type of body		impervious	porous	porous	impervious	porous	porous
Bulk density	g/cm ³	2.7	2.4	2.3	3.8	2.1	2.2
Open porosity	%	0	27	22	0	25	25
Limit of application	°C	1600	1500	1400	1750	1400	1450
Thermal expansion 20 – 1000 °C	10 ⁻⁶ K ⁻¹	5.5	5.8	6.5	8	5	5
Thermal conductivity 20 – 100 °C	W/mK	5	2	1.5	25	7	25
Thermal shock resistance		good	very good	good	medium-good	very good	very good
Spec. electric resistance at RT	Ω cm	10 ¹³	-	-	10 ¹⁴	-	-
600 °C		10 ⁶	10 ⁶	10 ⁶	10 ⁸	-	-
Max. production length for tubes	mm	3000	3000	3000	3000	2200	1900

*Addition of SiC to mix

		AluSIK-90 TA	MagSIK-96 TC	ZirSIK-95 TA
Chemical analysis		AL ₂ O ₃ 90%	MgO 96%	ZrO ₂ 95% CaO 4%
Bulk density	g/cm ³	2.5	2.8	4.3
Open porosity	%	27	25	25
Limit of application	°C			
▪ oxidizing		1750	2400	2400
▪ reducing		1600	1700	2100
▪ vacuum		-	1600	2200
Thermal conductivity 20 – 100 °C	W/mK	3	13	2
Thermal expansion 20 – 1000 °C	10 ⁻⁶ K ⁻¹	7.5	-	9.6

Above values were established on test pieces and identify the characteristic data of our products.

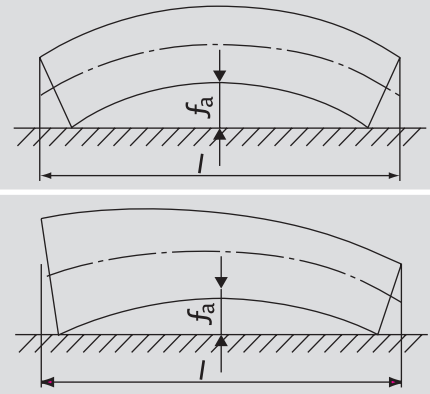
Transfer of these values into practice depends on individual geometry and application of each part.

Diameter tolerances – deflectional tolerances

without grinding to DIN 40 680, issue 1983

Nominal dimensional range for diameter or length in mm			Degree of accuracy			Nominal dimensional range for length in mm			Degree of accuracy		
			coarse Permissible deviation in mm						medium Permissible deviation in mm		
up to 4		± 0.4	± 0.15	up to 30		± 1.7	± 0.15	up to 30		± 1.7	± 0.15
above 4 up to 6		± 0.6	± 0.20	above 30 up to 40		± 1.8	± 0.20	above 30 up to 40		± 1.8	± 0.20
above 6 up to 8		± 0.7	± 0.25	above 40 up to 50		± 1.9	± 0.25	above 40 up to 50		± 1.9	± 0.25
above 8 up to 10		± 0.8	± 0.30	above 50 up to 60		± 2.0	± 0.30	above 50 up to 60		± 2.0	± 0.30
above 10 up to 13		± 1.0	± 0.35	above 60 up to 70		± 2.1	± 0.35	above 60 up to 70		± 2.1	± 0.35
above 13 up to 16		± 1.2	± 0.40	above 70 up to 80		± 2.1	± 0.40	above 70 up to 80		± 2.1	± 0.40
above 16 up to 20		± 1,2	± 0.45	above 80 up to 90		± 2.2	± 0.45	above 80 up to 90		± 2.2	± 0.45
above 20 up to 25		± 1.5	± 0.50	above 90 up to 100		± 2.3	± 0.50	above 90 up to 100		± 2.3	± 0.50
above 25 up to 30		± 1.5	± 0.55	above 100 up to 110		± 2.4	± 0.55	above 100 up to 110		± 2.4	± 0.55
above 30 up to 35		± 2.0	± 0.60	above 110 up to 125		± 2.5	± 0.65	above 110 up to 125		± 2.5	± 0.65
above 35 up to 40		± 2.0	± 0.65	above 125 up to 140		± 2.6	± 0.70	above 125 up to 140		± 2.6	± 0.70
above 40 up to 45		± 2.0	± 0.70	above 140 up to 155		± 2.7	± 0.80	above 140 up to 155		± 2.7	± 0.80
above 45 up to 50		± 2.5	± 0.80	above 155 up to 170		± 2.9	± 0.85	above 155 up to 170		± 2.9	± 0.85
above 50 up to 55		± 2.5	± 0.90	above 170 up to 185		± 3.0	± 0.90	above 170 up to 185		± 3.0	± 0.90
above 55 up to 60		± 2.5	± 1.00	above 185 up to 200		± 3.1	± 1.00	above 185 up to 200		± 3.1	± 1.00
above 60 up to 70		± 3.0	± 1.20	above 200 up to 250		± 3.5	± 1.25	above 200 up to 250		± 3.5	± 1.25
above 70 up to 80		± 3.5	± 1.40	above 250 up to 300		± 3.9	± 1.50	above 250 up to 300		± 3.9	± 1.50
above 80 up to 90		± 4.0	± 1.60	above 300 up to 350		± 4.3	± 1.75	above 300 up to 350		± 4.3	± 1.75
above 90 up to 100		± 4.5	± 1.80	above 350 up to 400		± 4.7	± 2.00	above 350 up to 400		± 4.7	± 2.00
above 100 up to 110		± 5.0	± 2.00	above 400 up to 450		± 5.1	± 2.25	above 400 up to 450		± 5.1	± 2.25
above 110 up to 125		± 5.5	± 2.20	above 450 up to 500		± 5.5	± 2.50	above 450 up to 500		± 5.5	± 2.50
above 125 up to 140		± 6.0	± 2.50	above 500 up to 600		± 6.3	± 3.00	above 500 up to 600		± 6.3	± 3.00
above 140 up to 155		± 6.5	± 2.80	above 600 up to 700		± 7.1	± 3.50	above 600 up to 700		± 7.1	± 3.50
above 155 up to 170		± 7.0	± 3.00	above 700 up to 800		± 7.9	± 4.00	above 700 up to 800		± 7.9	± 4.00
above 170 up to 185		± 7.5	± 3.40	above 800 up to 900		± 8.7	± 4.50	above 800 up to 900		± 8.7	± 4.50
above 185 up to 200		± 8.0	± 3.80	above 900 up to 1000		± 9.5	± 5.00	above 900 up to 1000		± 9.5	± 5.00
above 200 up to 250		± 9.0	± 4.20	above 1000		± 1.5+0.8% x L	± 0.5% x L	above 1000		± 1.5+0.8% x L	± 0.5% x L
above 250 up to 300		± 10.0	± 4.60								
above 300 up to 350		± 11.0	± 5.00								
above 350 up to 400		± 12.0	± 5.50								
above 400 up to 450		± 13.0	± 6.10								
above 450 up to 500		± 14.0	± 6.80								
above 500 up to 600		± 15.0	± 7.60								
above 600 up to 700		± 16.0	± 8.30								
above 700 up to 800		± 17.5	± 9.00								
above 800 up to 900		± 19.0	± 9.50								
above 900 up to 1000		± 20.0	± 10.00								
above 1000		± 0.02 x D	± 0.01 x D								
Accuracy											
DIN VDE 0335, Type											
Manufacturing method											
cast, extruded Ø 30 mm and above	530	610	799	530	610	799					
extruded up to Ø 30 mm											

Manufacturing method	Degree of accuracy	
	coarse	medium
Cast and extruded for parts Ø 30 mm and above	application customary	
extruded for parts up to Ø 30 mm		application customary



Owing to a modern process control system we are able to achieve values on diameter, length and bending which are considerably better than standardized. Should you require smaller tolerances, please send us your inquiry. Those data stipulated for the "coarse" degree of accuracy do not apply for the first production, for which instead we have to come to a special agreement.

● Manufacturing method customary

Mullite tubes, AluSIK-60 ZA type C 610 "10 A"

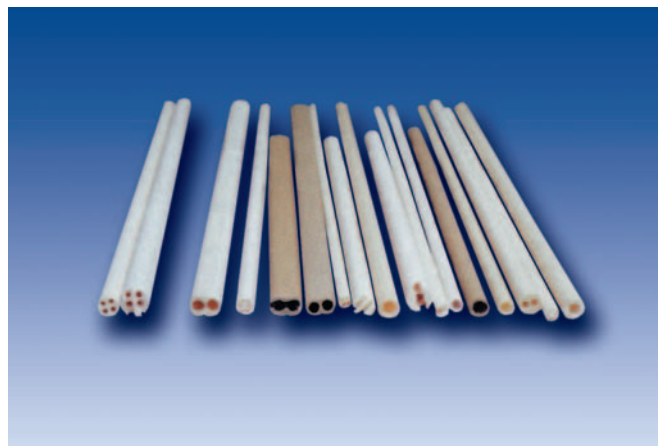
Order No.	Diameter mm
R 001	1.5 x 0.8
R 002	2 x 1
R 003	3 x 1.5
R 004	3 x 2
R 005	4 x 2
R 006	5 x 3
R 007	6 x 4
R 008	7 x 4
R 009	8 x 5
R 010	9 x 6
R 011	10 x 7
R 012	11 x 7
R 013	12 x 8
R 014	14 x 10
R 015	15 x 11
R 016	16 x 12
R 017	17 x 13
R 018	18 x 14
R 019	19 x 13
R 020	19 x 15
R 021	20 x 15
R 022	22 x 18
R 023	22 x 15
R 024	24 x 19
R 025	26 x 20
R 026	28 x 20
R 027	28 x 23
R 028	30 x 23
R 029	30 x 25
R 030	32 x 26
R 031	33 x 28
R 032	36 x 30
R 033	38 x 30
R 034	40 x 32
R 035	43 x 37
R 036	46 x 40
R 037	48 x 40
R 038	50 x 40
R 039	50 x 42
R 040	54 x 46
R 041	60 x 50
R 042	66 x 56
R 043	70 x 60
R 044	75 x 65
R 045	80 x 70
R 046	90 x 76
R 047	95 x 80
R 048	105 x 90
R 049	115 x 100



Larger resp. other dimensions upon inquiry.

Two-bore and four-bore insulating tubes AluSIK-60 ZA, type C 610 "10 A"

Order No.	Bores	Outer diameter mm	Inner diameter mm
R 050	2	2.2	0.5
R 051	2	3	0.8
R 052	2	3 x 2 oval	0.8
R 053*	2	4	1
R 054*	2	6	1.8
R 055*	2	7.5 x 4.5 oval	2.3
R 056*	2	8	2
R 057*	2	8.5	2.5
R 058*	2	10	2.7
R 059*	2	12	3
R 060*	2	15.5	4.5
R 061*	4	5.5	1.2
R 062*	4	8.5	1.5
R 063*	4	9	2.5
R 064*	4	11	2.5
R 065*	2	12 x 8 oval	4



**Also available with one or two slots.*



Larger resp. other dimensions upon inquiry.

Insulating tubes for thermocouples AluSIK-60 ZA, type C 610 “10 A”

in lengths: A = 5 mm, B = 10 mm, C = 25 mm, D = 50 mm, E = 75 mm, F = 100 mm
with **one** bore

Order No.	Outer diameter mm	Inner diameter mm
R 070*	1	0.5
R 071*	1.5	0.8
R 072*	2	1
R 073	2.7	1.7
R 074	3	1.2
R 075	3.5	2.5
R 076	4	2
R 077	5	3
R 078	6	4
R 079	7	4.5

*Available only in lengths 25 and 50 mm.



with **two and four** bores

Order No.	Bores	Outer diameter mm	Inner diameter mm
R 080*	2	2.2	0.5
R 081*	2	3	0.8
R 082	2	4	1
R 083	4	4.5	1
R 084	4	5.5	1.2
R 085	2	6	1.8
R 086*	2	8	2
R 087*	2	8.5	2.5
R 088*	4	8.5	1.5
R 089*	2	10	2.7
R 090*	2	12 x 8 oval	4
R 091*	2	3 x 2 oval	0.8
R 092*	2	5 x 3 oval	1.6
R 093*	2	7.5 x 4.5 oval	2.3
R 094*	4	9	2.5

*Available only in lengths 25 and 50 mm.



Larger resp. other dimensions upon inquiry.

Sintered alumina tubes, AluSIK-99 ZA type C 799 “TEH”

Order No.	Diameter mm
R 200	1 x 0.5
R 201	1.5 x 0.8
R 202	2 x 1
R 203	3 x 1.5
R 204	4 x 2
R 205	5 x 3
R 206	6 x 3
R 207	7 x 4
R 208	8 x 5
R 209	10 x 6
R 210	11 x 7
R 211	12 x 8
R 212	15 x 10
R 213	17 x 12
R 214	20 x 15
R 215	24 x 18
R 216	27 x 20
R 217	30 x 23
R 218	32 x 25
R 219	35 x 27
R 220	38 x 30
R 221	42 x 34
R 222	46 x 38
R 223	50 x 40
R 224	58 x 48
R 225	65 x 55
R 226	70 x 60
R 227	75 x 65



Two-bore and four-bore insulating tubes AluSIK-99 ZA, type C 799 “TEH”

Order No.	Bores	Outer diameter mm	Inner diameter mm
R 250	2	2.2	0.5
R 251	2	3	0.8
R 252	2	3 x 2 oval	0.8
R 253*	2	4	1
R 254*	2	6	1.8
R 255*	2	8	2
R 256*	2	8.5	2.5
R 257*	2	10	2.7
R 258*	2	12	3
R 259*	2	15.5	4.5
R 260*	4	5.5	1.2
R 261*	4	8.5	1.5
R 262*	4	11	2.5
R 263*	2	12 x 8 oval	4

**Also available with one or two slots.*



Insulating tubes for thermocouples AluSIK-99 ZA, type C 799 “TEH”

in lengths: A = 5 mm, B = 10 mm, C = 25 mm, D = 50 mm, E = 75 mm, F = 100 mm
with **one** bore

Order No.	Outer diameter mm	Inner diameter mm
R 270*	1	0.5
R 271*	1.5	0.8
R 272*	2	1
R 273	2.7	1.7
R 274	3	1.2
R 275	4	2
R 276	5	3
R 277	6	4
R 278	7	4.5

*Available only in lengths 25 and 50 mm.



with **two and four** bores

Order No.	Bores	Outer diameter mm	Inner diameter mm
R 280*	2	3 x 2 oval	0.8
R 281*	2	3	0.8
R 282	2	4	1
R 283	4	4.5	1
R 284	4	5.5	1.2
R 285	2	6	1.8
R 286*	2	8	2
R 287*	2	8.5	2.5
R 288*	4	8.5	1.5
R 289*	2	12 x 8 oval	4

*Available only in lengths 25 and 50 mm.



Larger resp. other dimensions upon inquiry.

Corundum tubes

AluSIK-80 ZA, type C 530 "H"

Order No.	Diameter mm
R 300	16 x 10
R 301	20 x 12
R 302	22 x 15
R 303	23 x 17
R 304	26 x 18
R 305	30 x 20
R 306	30 x 22
R 307	35 x 26
R 308	35 x 28
R 309	40 x 30
R 310	40 x 32
R 311	50 x 40
R 312	60 x 50
R 313	65 x 55
R 314	70 x 60
R 315	75 x 65
R 316	80 x 70
R 317	85 x 75
R 318	95 x 80
R 319	100 x 85
R 320	110 x 90
R 321	120 x 100
R 322	130 x 110
R 323*	140 x 120
R 324*	150 x 130
R 325*	160 x 140
R 326*	170 x 150
R 327*	180 x 160
R 801*	190 x 170
R 802*	200 x 180
R 803*	210 x 190
R 804*	220 x 200
R 805*	230 x 210
R 806*	240 x 220
R 807*	250 x 230
R 808*	260 x 240
R 809**	275 x 250
R 810**	280 x 260
R 811**	300 x 280
R 812**	310 x 290
R 813**	320 x 300
R 814**	380 x 350
R 815**	425 x 400
R 816**	480 x 450
R 817**	530 x 500

Corundum threaded tubes

AluSIK-80 GA, type C 530 "H"

Order No.	Outer diameter mm	Thread pitch
R 330	15	2.0 mm
R 331	20	2.0 mm
R 332	25	2.0 mm
R 333	30	2.0 mm
R 334	35	2.5 mm
R 335	40	2.5 mm
R 336	45	2.5 mm
R 337	50	2.5 mm
R 338	60	3.0 mm
R 339	75	3.0 mm
R 340	80	3.5 mm
R 341	90	3.5 mm



Max. manufacturing length 1000 mm,
wall thickness 5 - 15 mm.

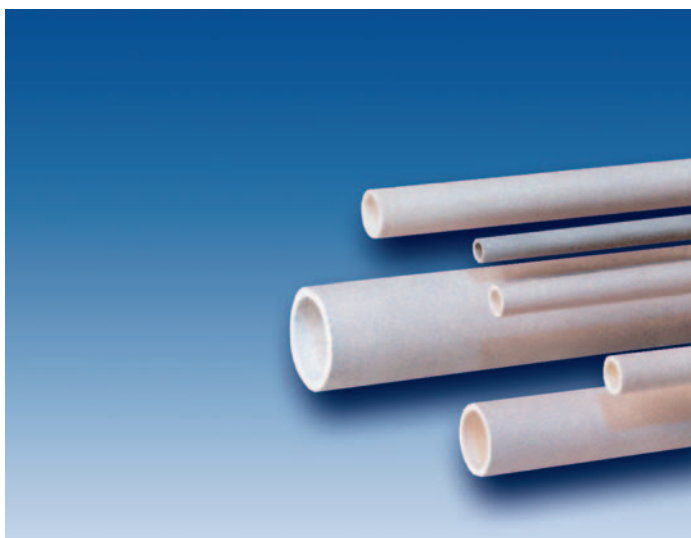
* Max. manufacturing length 1000 mm.

** Max. manufacturing length 600 mm.

Larger resp. other dimensions upon inquiry.

Sillimanite supporting tubes AluSIK-60 ZB “HE”

Order No.	Diameter mm
R 350	15 x 7
R 351	18 x 12
R 352	20 x 12
R 353	22 x 16
R 354	23 x 13
R 355	25 x 12
R 356	25 x 15
R 357	25 x 18
R 358	30 x 20
R 359	35 x 25
R 360	40 x 30
R 361	45 x 35
R 362	50 x 40
R 363	55 x 45
R 364	60 x 48

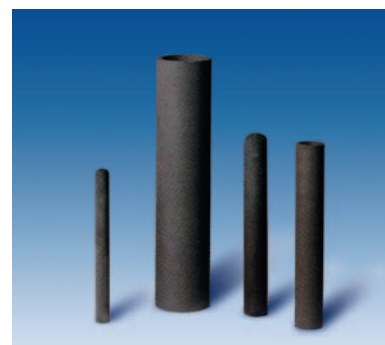


Silicon-carbide-tubes CarSIK-70 ZA

Order No.	Diameter mm
R 400	16 x 10
R 401	20 x 12
R 402	23 x 17
R 403	26 x 18
R 404	30 x 22
R 405	35 x 28
R 406	40 x 32
R 407	45 x 35
R 408	50 x 40
R 409	60 x 50
R 410	65 x 55
R 411	70 x 60
R 412	80 x 70
R 413	95 x 80
R 414	120 x 100

Silicon-carbide-tubes CarSIK-90 ZA

Order No.	Diameter mm
R 420	15 x 9
R 421	23 x 15
R 422	26 x 18
R 423	30 x 22
R 424	35 x 26
R 425	40 x 30
R 426	45 x 35
R 427	50 x 40
R 428	55 x 45
R 429	60 x 48
R 430	70 x 56
R 431	75 x 60
R 432	80 x 66
R 433	95 x 80

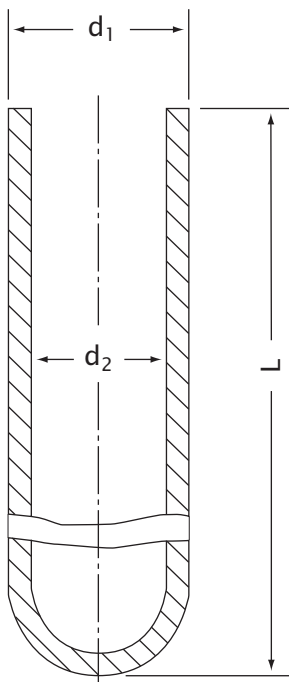


Max. length 1900 mm.

Tolerances for protection tubes according to DIN 43724, issue 1979

VDE 0335 type	Outer-Ø d_1	Inner-Ø d_2	Length $L \pm 2$
C 610	10	7	270, 375, 530, 740, 1030, 1430, 2030
	15	11	
	24	19	
C 799	10	6	
	15	10	
C 530	24	18	
	26	18	

All dimensions in mm.



Tolerance on the wall thickness according to DIN 40680 part 1, accuracy coarse.
 Tolerance on the deflection according to DIN 40680 part 2, accuracy fine with following definition: A straight rod with a diameter of $0.8(d_1 - 2s)$ must fit into the protection sheath down to the bottom. The bottom is round with uniform changeover to the cylindrical part of the protection sheath.

Mullite tubes, AluSIK-60 ZA type C 610 “10 A”

Order No.	Length mm	Diameter mm
R 500	270	10 x 7
R 501	375	10 x 7
R 502	530	10 x 7
R 503	740	10 x 7
R 504	1030	10 x 7
R 505	1430	10 x 7
R 506	2030	10 x 7
R 510	270	15 x 11
R 511	375	15 x 11
R 512	530	15 x 11
R 513	740	15 x 11
R 514	1030	15 x 11
R 515	1430	15 x 11
R 516	2030	15 x 11
R 520	270	24 x 19
R 521	375	24 x 19
R 522	530	24 x 19
R 523	740	24 x 19
R 524	1030	24 x 19
R 525	1430	24 x 19
R 526	2030	24 x 19

Sintered alumina tubes AluSIK-99 ZA, type C 799 “TEH”

Order No.	Length mm	Diameter mm
R 560	270	10 x 6
R 561	375	10 x 6
R 562	530	10 x 6
R 563	740	10 x 6
R 564	1030	10 x 6
R 565	1430	10 x 6
R 566	2030	10 x 6
R 570	270	15 x 10
R 571	375	15 x 10
R 572	530	15 x 10
R 573	740	15 x 10
R 574	1030	15 x 10
R 575	1430	15 x 10
R 576	2030	15 x 10
R 580	270	24 x 18
R 581	375	24 x 18
R 582	530	24 x 18
R 583	740	24 x 18
R 584	1030	24 x 18
R 585	1430	24 x 18
R 586	2030	24 x 18

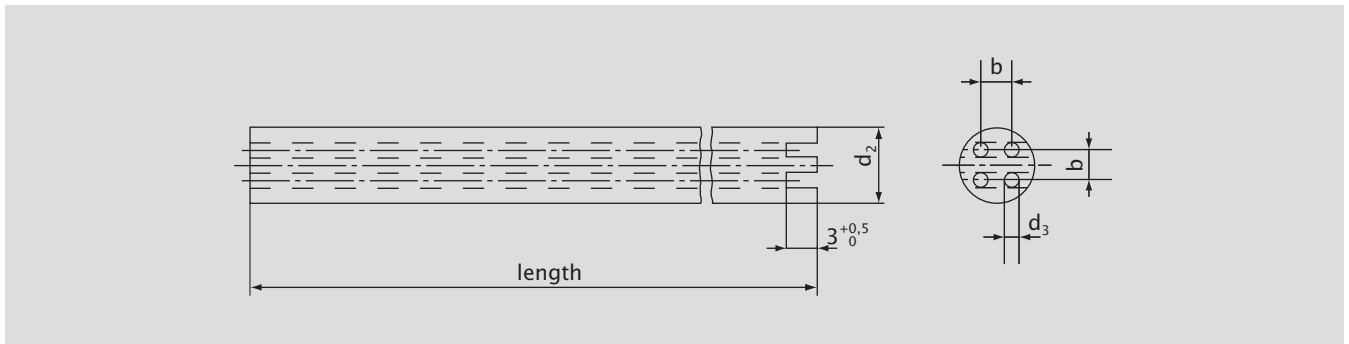
Corundum outer protection tubes AluSIK-80 ZA, type C 530 “H”

Order No.	Length mm	Diameter mm
600	270	26 x 18
601	375	26 x 18
602	530	26 x 18
603	740	26 x 18
604	1030	26 x 18
605	1430	26 x 18
606	2030	26 x 18

DIN-tubes are closed one end and without flange.

DIN

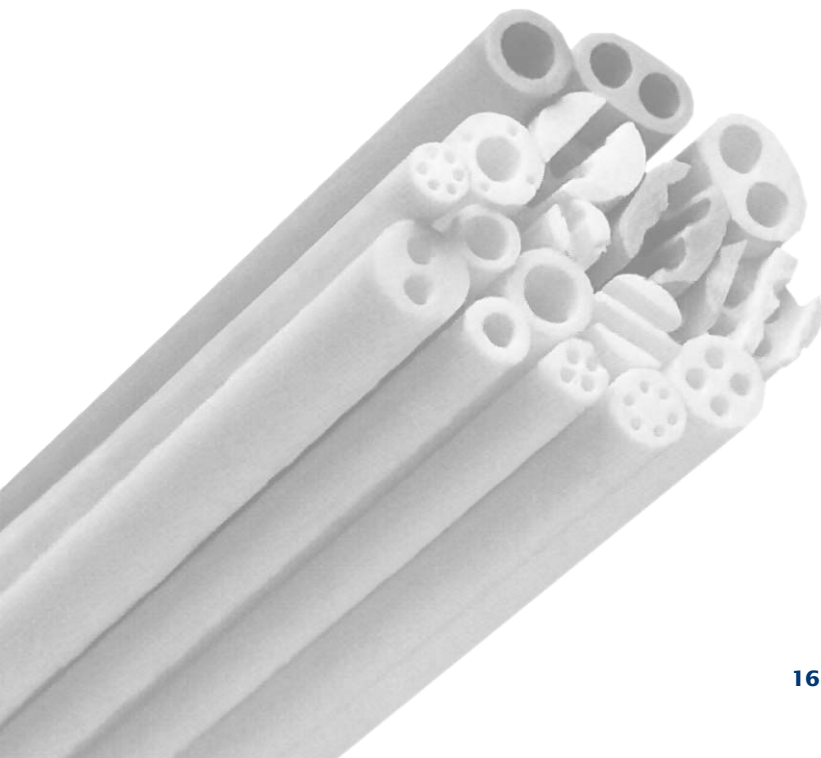
Tolerances for insulators with four bores according to DIN 43725, issue 1990



VDE 0335 Type	outer-Ø d ₂ (mm) ± 0,3	distance b (mm) ± 0,1	bore-Ø d ₃ (mm) ± 0,1	length mm ± 2	for wire-Ø (mm)
C 610, C 799	5.5 ¹⁾	2	1.2	275, 380, 560, 770, 1060, 1460, 2060	≤ 0.8
	8.5 ¹⁾	3	1.5		

¹⁾ A 4-bore insulating tube, d₂=5.5 mm must fit into a protection tube, inner dia. 6 mm and a 4-bore insulating tube, d₂=8.5 mm, must fit into a protection tube, inner dia. 10 mm.

A 1 mm wire has to be passed through the bores.



Mullite insulating tubes, AluSIK-60 ZA type C 610 “10 A”

Order No.	Length mm	Bores	Outer diameter mm	Inner diameter mm
R 640	275	4	5.5	1.2
R 641	380	4	5.5	1.2
R 642	560	4	5.5	1.2
R 643	770	4	5.5	1.2
R 644	1060	4	5.5	1.2
R 645	1460	4	5.5	1.2
R 646	2060	4	5.5	1.2
R 650	275	4	8.5	1.5
R 651	380	4	8.5	1.5
R 652	560	4	8.5	1.5
R 653	770	4	8.5	1.5
R 654	1060	4	8.5	1.5
R 655	1460	4	8.5	1.5
R 656	2060	4	8.5	1.5

Also available with one or two slots.

Sintered alumina insulating tubes AluSIK-99 ZA, type C 799 “TEH”

Order No.	Length mm	Bores	Outer diameter mm	Inner diameter mm
R 720	275	4	5.5	1.2
R 721	380	4	5.5	1.2
R 722	560	4	5.5	1.2
R 723	770	4	5.5	1.2
R 724	1060	4	5.5	1.2
R 725	1460	4	5.5	1.2
R 726	2060	4	5.5	1.2
R 730	275	4	8.5	1.5
R 731	380	4	8.5	1.5
R 732	560	4	8.5	1.5
R 733	770	4	8.5	1.5
R 734	1060	4	8.5	1.5
R 735	1460	4	8.5	1.5
R 736	2060	4	8.5	1.5

Also available with one or two slots.

Crucibles, conical shape AluSIK-99 GB, type C 799

Order No.	Height mm	Top outer diameter mm
T 001	approx. 39	approx. 44
T 002	approx. 59	approx. 60
T 003	approx. 78	approx. 72
T 004	approx. 89	approx. 83
T 005	approx. 100	approx. 83
T 006	approx. 166	approx. 100
T 007	approx. 221	approx. 133



Crucibles, low form, conical shape AluSIK-99 GB, type C 799

Order No.	Height mm	Top outer diameter mm	Capacity ccm
T 110	17	20	3
T 111	23	30	9
T 112	30	40	24
T 113	40	50	45
T 114	50	60	80
T 115	56	70	120
T 116	65	80	180



Crucibles, tall form, conical shape AluSIK-99 GB, type C 799

Order No.	Height mm	Top outer diameter mm	Capacity ccm
T 130	25	20	4
T 131	34	25	6
T 132	53	35	25
T 133	80	45	60
T 134	90	55	90
T 135	120	65	180
T 136	140	75	300
T 137	160	85	540



Crucibles, medium form, conical shape, AluSIK-99 GB, type C 799

Order No.	Height mm	Top outer diameter mm	Capacity ccm
T 120	35	35	20
T 121	45	45	30
T 122	60	55	60



Corundum crucibles, cylindrical shape AluSIK-80 GA, type C 530

Order No.	Length mm	Diameter mm
T 050	200	16 x 12
T 051	200	24 x 20
T 052	200	34 x 28
T 053	300	34 x 28
T 054	300	44 x 38
T 055	300	55 x 47
T 056	300	68 x 58
T 057	390	93 x 79
T 058	390	111 x 95
T 059	530	142 x 120



Tammann crucibles, cylindrical shape AluSIK-99 GB, type C 799

Order No.	Length mm	Diameter mm
T 010	100	18 x 14
T 011	100	22 x 17
T 012	100	28 x 23
T 013	100	33 x 28
T 014	100	38 x 32
T 015	100	42 x 36
T 016	100	49 x 43
T 017	100	53 x 45
T 018	100	61 x 51
T 019	100	66 x 56
T 020	200	38 x 32
T 021	200	42 x 36
T 022	200	49 x 43
T 023	200	53 x 45
T 024	200	61 x 51
T 025	200	66 x 56



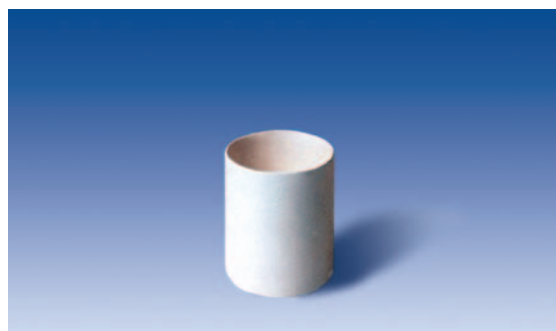
Crucibles, cylindrical shape with spherical bottom, AluSIK-99 GB, type C 799

Order No.	Height mm	Outer diameter mm	Capacity ccm
T 140	6	6	0.5
T 141	13	10	1
T 142	63	18	9
T 143	46	23	12
T 144	113	33	50



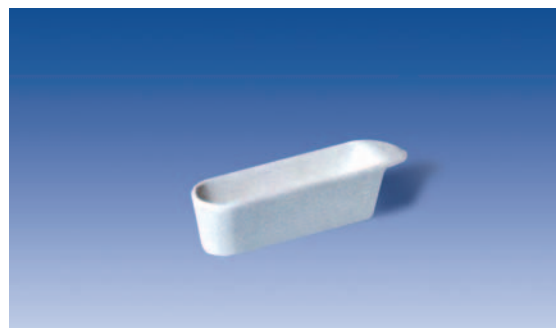
Crucibles, cylindrical shape with flat bottom AluSIK-99 GB, type C 799

Order No.	Height mm	Outer diameter mm	Capacity ccm
T 100	10	8	0.5
T 101	30	20	9
T 102	40	30	20
T 103	60	40	60
T 104	75	50	90
T 105	100	65	150
T 106	100	90	460
T 107	110	100	750
T 108	130	100	1000



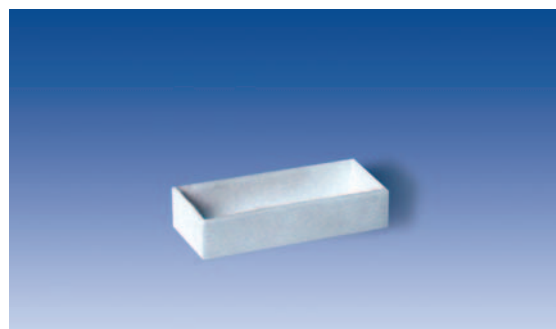
Boats, with or without eye AluSIK-99 GB, type C 799

Order No.	Length mm	Width mm	Height mm
S 030	55	13	9
S 031	93	13	9
S 032	110	18	12
S 033	110	22	15
S 034	110	28	22
S 035	110	33	28
S 036	110	39	33



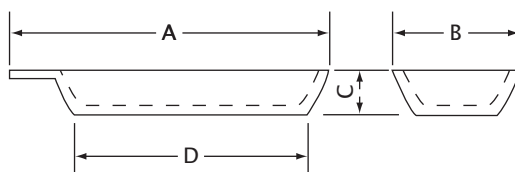
Ignition dishes, rectangular, conical AluSIK-99 GB, type C 799

Order No.	Length mm	Width mm	Height mm
S 040	88	30	18
S 041	112	29	18
S 042	88	47	25
S 043	113	46	22
S 044	140	45	23
S 045	84	28	38
S 046	114	59	30
S 047	140	56	28



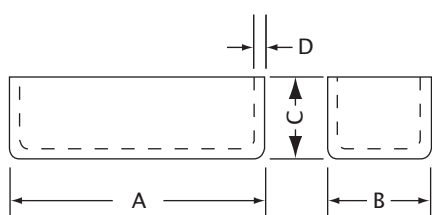
Boats, AluSIK-99 GB type C 799

Order No.	Dimensions mm			
	A	B	C	D
S 100	53	8	8	37
S 101	80	15	10	60
S 102	90	15	10	70
S 103	100	20	17	70
S 104	110	13	10	80
S 105	160	20	15	135
S 106	200	20	14	175



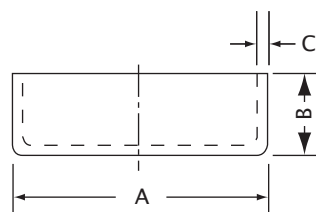
Dishes, rectangular AluSIK-99 GB, type C 799

Order No.	Dimensions mm			
	A	B	C	D
S 120	22	12	11	1.5
S 121	43	28	11	2
S 122	53	48	15	2.5
S 123	85	44	16	3



Ignition basins, round AluSIK-99 GB, type C 799

Order No.	Dimensions mm		
	A	B	C
S 110	12	8	1.5
S 111	26	11	2
S 112	41	16	2.5
S 113	66	16	3



Lids, AluSIK-99 GB type C 799

Order No.	Diameter mm
T 150	8
T 151	20
T 152	25
T 153	30
T 154	35
T 155	40
T 156	45
T 157	50
T 158	55
T 159	60
T 160	65
T 161	70
T 162	75
T 163	80
T 164	85
T 165	90
T 166	100



Metallurgy

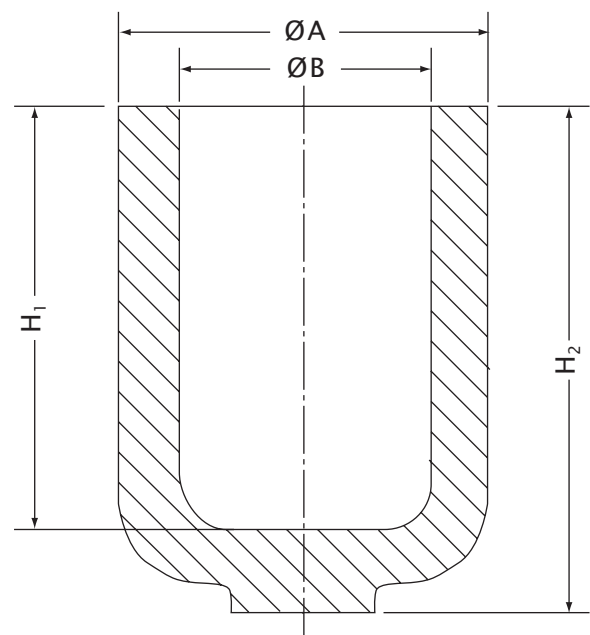
Our Zircon-oxide, aluminium-oxide and magnesium-oxide melting crucibles are suited for the metals mentioned in the table below.

ZrO₂-Crucible ZirSIK-95 TA		Al₂O₃-Crucible AluSIK-90 TA		MgO-Crucible MagSIK-96 TC	
Chrome	Cr	Antimony	Sb	Chrome	Cr
Cobalt	Co	Bismuth	Bi	Cobalt	Co
Iridium	Ir	Cadmium	Cd	Copper	Cu
Nickel	Ni	Gallium	Ga	Lead	Pb
Palladium	Pd	Iron	Fe	Magnesium	Mg
Rhodium	Rh	Magnesium	Mg	Nickel	Ni
Vanadium	V	Zinc	Zn	Plutonium	Pu
Steel		Molybdenum	Mo	Scandium	Sc
Platinum	Pt	Nickel	Ni	Uranium	U
				Zircon	Zr
				Steel	
				Rare earths	

Isostatically pressed crucibles

Order No.	Dimensions mm			
	Ø A	Ø B	H ₁	H ₂
ISO 1	93	79	185	197
ISO 2	86	75	209	218
ISO 3	116	98	195	210
ISO 4	60	50	120	128
ISO 5	65	53	190	200
ISO 6	147	124	237	250
ISO 7	131	111	252	266
ISO 8	42	32	115	120
ISO 9	88	68	130	150
ISO 10	85	45	130	150

Larger resp. other dimensions upon inquiry.

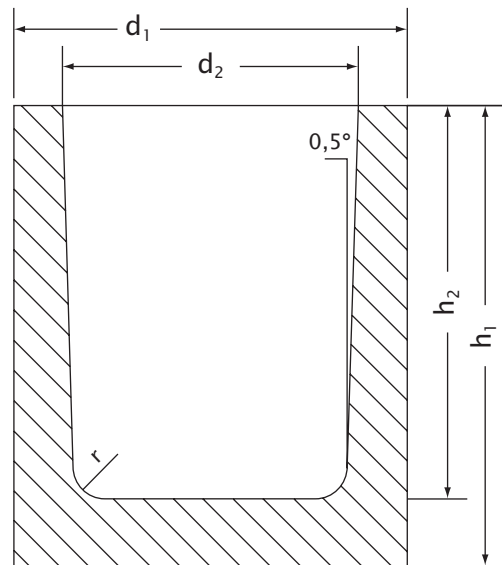


Cylindrical crucibles rammed

Order No.	Dimensions mm				
	d_1	d_2	h_1	h_2	r
ZT 1	12	8	25	19	1
ZT 2	20	12	25	20	1
ZT 3	13	8	47	42	1
ZT 4	24	18	28	18	1
ZT 5	35	24	97	92	2
ZT 6	43	36	54	48	2
ZT 7	50	39	69	65	2
ZT 8	53	42	80	75	2
ZT 9	57	46	99	89	2
ZT 10	65	54	99	93	3
ZT 11	119	75	170	150	3
ZT 12	127	106	139	127	4
ZT 13*	120	100	200	180	10
ZT 14	215	175	295	255	4
ZT 15	150	127	155	135	5
ZT 16	170	140	185	165	5

* conical

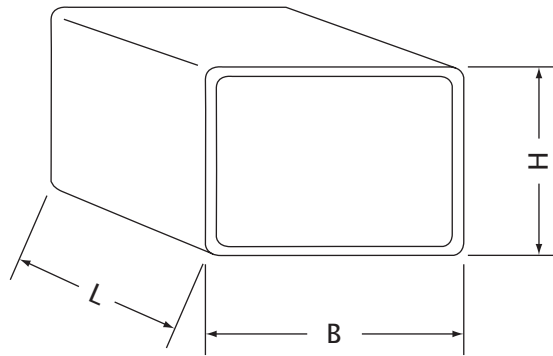
Larger resp. other dimensions upon inquiry.



Muffles, monolithically produced from corundum AluSIK-80 GA, type C 530

Rectangular muffles

Order No.	B	H
M 1010	85	85
M 1003	95	65
M 1011	95	95
M 1007	110	80
M 1002	110	110
M 1028	120	65
M 1008	120	100
M 1018	130	60
M 1020	130	115
M 1012	140	108
M 1022	150	80
M 1017	155	65
M 1029	155	92
M 1025	170	100
M 1001	170	140
M 1019	170	170
M 1021	180	160
M 1031	190	115
M 1026	200	180
M 1030	205	130
M 1009	210	140
M 1015	270	120
M 1027	285	182
M 1014	300	240

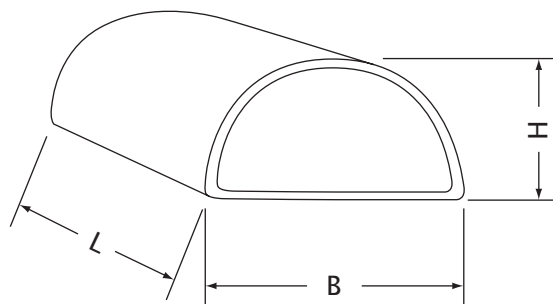


All muffles are available with or without back wall.
The maximal length that can be produced is 1000 mm.
Wall thickness 6–10 mm depending on the muffles cross-section.

Muffles, monolithically produced from corundum AluSIK-80 GA, type C 530

Semi-circular muffles

Order No.	B	H
M 3006	170	80
M 3004	180	80
M 3005	180	70
M 3007	180	90
M 3001	200	90
M 3002	235	117

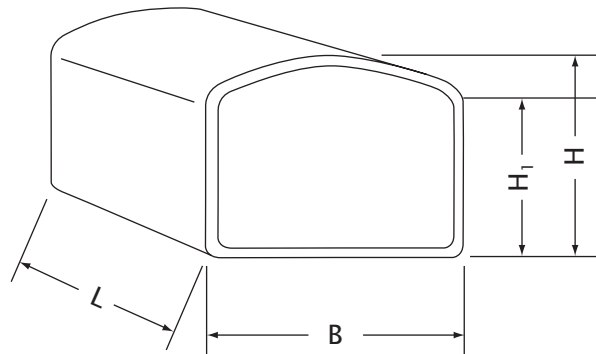


All muffles are available with or without back wall.
The maximal length that can be produced is 1000 mm.
Wall thickness 6–10 mm depending on the muffles cross-section.

Muffles, monolithically produced from corundum AluSIK-80 GA, type C 530

Muffles with convex roof

Order No.	B	H	H ₁
M 2023	100	90	40
M 2012	135	100	50
M 2024	140	70	45
M 2013	140	115	95
M 2002	150	120	90
M 2016	160	93	65
M 2020	160	140	90
M 2022	170	120	105
M 2025	175	90	70
M 2015	185	110	90
M 2008	205	140	105
M 2010	205	165	140
M 2019	210	140	105
M 2001	220	170	140
M 2006	220	170	155
M 2021	220	225	180
M 2009	265	160	120
M 2005	285	225	185



All muffles are available with or without back wall.
The maximal length that can be produced is 1000 mm.
Wall thickness 6-10 mm depending on the muffles cross-section.

Adhesives and mastics

Grade	Type	Limit of application
AluSIK-60 FA	Sillimanite	1600 °C mastic ready for use with a waterglass base
AluSIK-80 FB	Corundum	1800 °C mastic ready for use with a waterglass base
SioSIK-40 NC	Corundum	1600 °C dry mastic with a phosphate base
		(cold bonding)
		to be mixed with 22 % water

Mastics must be stored frost-free.

Ready-for-use mastics to be used immediately on opening; dry mastic to be processed within max. 30 minutes after mixing.

Ready-for-use mastics may be stored for 3 months max., if required, clear water may be added.

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