

STANDARD PRODUCT RANGE

Oxide ceramics

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CONTACT

order-ma@kyocera-fineceramics.de

MATERIALS

Material	KYOCERA-Brand	Characterisation
Al_2O_3 Aluminium Oxide	**DEGUSSIT AL23**	Pure Al_2O_3, dense, excellent thermal and electrical resistance properties, corrosion resistant, permeable to microwaves
Al_2O_3 Aluminium Oxide	**DEGUSSIT AL24**	Pure Al_2O_3, slightly porous, good resistance to thermal shock, extremely good creep strength
Al_2O_3 Aluminium Oxide	**DEGUSSIT AL25**	Pure Al_2O_3, very porous, good thermal insulation, highest resistance to thermal shock of all the Al_2O_3 materials
Al_2O_3 Aluminium Oxide	**DEGUSSIT DD57**	Dense, without any binder, red colour, wear resistant and tough, also called ‘sintered ruby’
Al_2O_3 Aluminium Oxide	**F99.7**	Pure Al_2O_3, dense, extremely resistant to wear and corrosion, very high electrical insulating properties
Al_2O_3 (+ ZrO_2) Aluminium Oxide, fine grain stabilized	**FZT**	AL_2O_3 toughened with ZrO_2, dense, high strength, good resistance to thermal shock, extremely resistant to wear and corrosion, fine grain size
ZrO_2 Zirkonium Oxide	**FZM**	ZrO_2 partially stabilized with MgO, dense, high strength and highly wear resistant, extremely resistant to corrosion and thermal shock
ZrO_2 Zirkonium Oxide	**DEGUSSIT FZY**	Partially stabilized with Y_2O_3, dense, high purity ZrO_2, high temperature and corrosion resistance, ion conducting for measuring oxygen

TOLERANCES IN HIGH-TEMPERATURE TECHNOLOGY

The dimensional accuracy of the size of the sintered parts essentially depends on the material and the foming method.

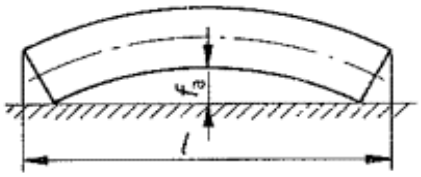
Tolerances for length and diameter for extruded parts according to DIN 40680
Tolerance according to the principle of independence ISO 8015, ISO 14405-1

Nominal size ø / Length in mm		Allowed tolerances in mm	
>	≤	coarse	medium
	4	± 0.4	± 0.15
4	6	± 0.6	± 0.20
6	8	± 0.7	± 0.25
8	10	± 0.8	± 0.30
10	13	± 1.0	± 0.35
13	16	± 1.2	± 0.40
16	20	± 1.2	± 0.45
20	25	± 1.5	± 0.50
25	30	± 1.5	± 0.55
30	35	± 2.0	± 0.60
35	40	± 2.0	± 0.65
40	45	± 2.0	± 0.70
45	50	± 2.5	± 0.80
50	55	± 2.5	± 0.90
55	60	± 2.5	± 1.00
60	70	± 3.0	± 1.20
70	80	± 3.5	± 1.40
80	90	± 4.0	± 1.60
90	100	± 4.5	± 1.80
100	110	± 5.0	± 2.00
110	125	± 5.5	± 2.20
125	140	± 6.0	± 2.50
140	155	± 6.5	± 2.80
155	170	± 7.0	± 3.00
170	185	± 7.5	± 3.40
185	200	± 8.0	± 3.80
200	250	± 9.0	± 4.20
250	300	±10.0	± 4.60
300	350	± 11.0	± 5.00
350	400	± 12.0	± 5.50
400	450	± 13.0	± 6.10
450	500	± 14.0	± 6.80
500	600	± 15.0	± 7.60
600	700	±16.0	± 8.30
700	800	± 17.5	± 9.00
800	900	± 19.0	± 9.50
900	1000	± 20.0	± 10.00
1000		± 0.02 * d	± 0.01 * d

Cover size	Accuracy level
≤ 30 mm	medium
> 30 mm	coarse

Definition of KYOCERA Fineceramics Europe Mannheim

Straightness: max. 0.5% of the length



The deviation from straightness is determined in accordance with DIN 40680-2 by measuring the greatest vertical distance of the lateral surface from the straight line connecting the furthest points of the outer chord of the workpiece and related to the length.

Ovality: 3% of the nominal size

Twist: Maximum twist cannot be guaranteed.

Chipping: The edges are cut and not bevelled. Small edge chipping is possible

Concentricity: A deviation up to 0.5 mm from the centre point is allowed.

Hole Circle: The DIN 40680 medium column applies to the bolt circle of a capillary, based on the outside diameter.

Tighter tolerances on request

October 2024

Crucibles, boats, combustion trays:
Tolerances ± 3% (but not less ± 0.1 mm)

Plates:
Tolerances ± 3% (but not less ± 0.1 mm); Deflection: maximum 0.5% of the diagonal

Insulating beads and grinding bodies:
Tolerances ± 3% (but not less than ± 0.1 mm)

Available are also parts with different dimensions, in different ceramic and metal materials as well as coated parts.





ELECTRICAL ENGINEERING

Feedthroughs, Tube-To-Tube Insulator, Standoffs

SINGLE TERMINAL FEEDTHROUGHS



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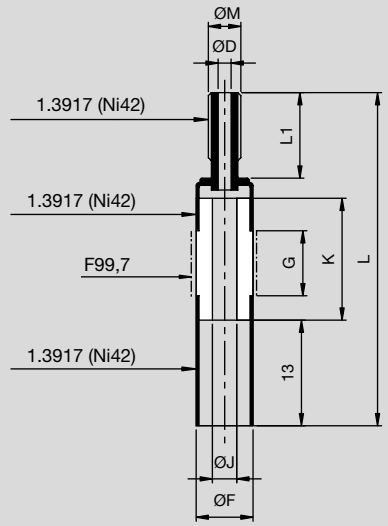

Voltage (DC)	Ø M	Ø D	Ø F	Ø J	G	K	L	L1	Product No.
4 kV	M4	1.6	7	3	8	15	41	10	551-1001
6 kV	M6	2.5	9	4	13	20	47	10	551-1002
6 kV	M6	2.5	10.8	5	13	20	47	10	551-1003
6 kV	M8	3.8	13.5	6.5	13	20	54	17	551-1004

Feedthroughs are also available in other dimensions
Also available with welded-on flanges (CF, KF, etc.)

SINGLE TERMINAL FEEDTHROUGHS



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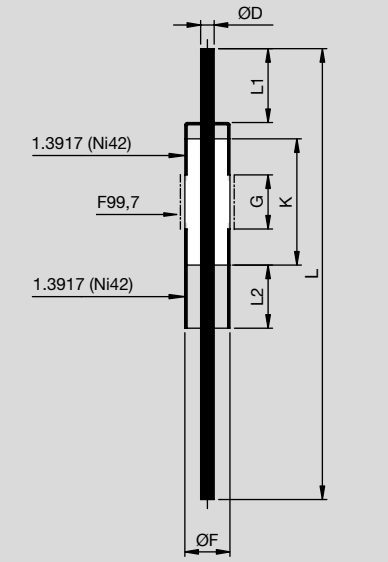

Voltage (DC)	Conductor	Current	Ø D	Ø F	G	K	L	L1	L2	Product No.
2 kV	NiFeCo	4 A	1.5x0.25	5	4	10.5	60	10	7	551-1063
2 kV	NiFeCo	5 A	1.5	5	4	10.5	60	10	7	551-1064
3 kV	NiFeCo	5 A	1.5	5	6	12.5	60	10	7	551-1066
3 kV	Cu	15 A	1.5	5	6	12.5	60	10	7	551-1066-2
4 kV	Ni42	5 A	1.5	7	8	15	57	10	13	551-0412
4 kV	Cu	15 A	1.5	7	8	15	57	10	13	551-0412-1
4 kV	Ni42	8 A	2	7	8	15	52	10	13	551-1006
4 kV	Cu	25 A	2	7	8	15	52	10	13	551-1006-1
5 kV	NiFeCo	5 A	1.5	5	10	16.5	60	10	7	551-1068
5 kV	Cu	15 A	1.5	5	10	16.5	60	10	7	551-1068-2
6 kV	Ni42	12 A	3	9	13	20	58	10	13	551-1007
6 kV	Cu	40 A	3	9	13	20	58	10	13	551-1007-1
6 kV	Ni42	20 A	4	10.8	13	20	58	10	13	551-1008
6 kV	Cu	60 A	4	10.8	13	20	58	10	13	551-1008-1
6 kV	Ni42	25 A	5	13.5	13	20	65	10	13	551-1009
6 kV	Cu	80 A	5	13.5	13	20	65	10	13	551-1009-1
8 kV	Cu	120 A	8	19.8	16	23	68	10	13	551-1010-1

Feedthroughs are also available in other dimensions
Also available with welded-on flanges (CF, KF, etc.)

SINGLE TERMINAL FEEDTHROUGHS

Voltage (DC)	Conductor	Current	Ø D	Ø F	G	L	Ø K	L1	L2	Product No.
1 kV	Ni42	4 A	1.5x0,25	4	2.8	35	4.5	6	10	551-1491
1 kV	Ni42	5 A	1.5	4	2.8	35	4.5	6	10	551-1425
1 kV	Cu	5 A	1.5	4	2.8	35	4.5	6	10	551-1425-1
4 kV	Ni42	30 A	7.5x0.75	12	8	53	13	10	14	551-1633
4 kV	Cu	90 A	7.5x0.75	12	8	53	13	10	14	551-1633-1

Feedthroughs are also available in other dimensions
Also available with welded-on flanges (CF, KF, etc.)

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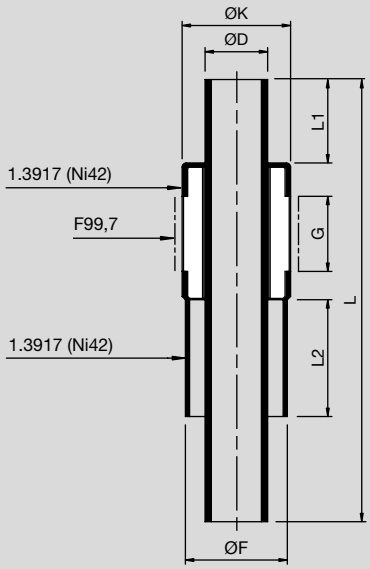

SINGLE TERMINAL FEEDTHROUGHS

Voltage (DC)	No. of Ribs	Creepage distance	Ø M	Ø D	Ø F	Ø A	Ø A1	G	K	K1	L2	Product No.
25 kV	3	54	M6	2.5	45	40	22	45	66	12	67	551-1012

This feedthrough could be adjusted with different conductors for special electrical standards
Also available with welded-on flanges (CF, KF, etc.)

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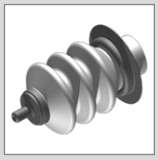

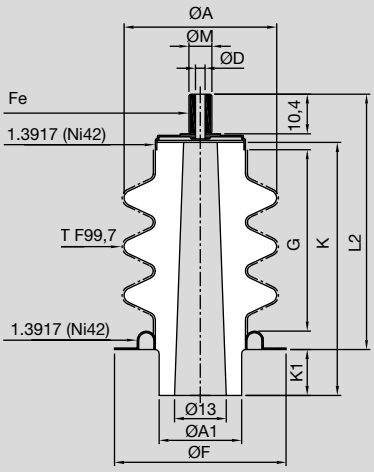

SINGLE TERMINAL FEEDTHROUGHS

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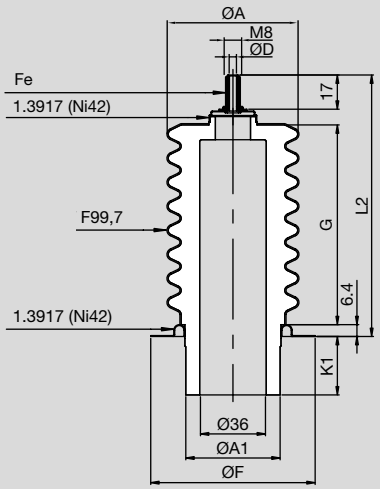

Voltage (DC)	No. of Ribs	Creepage distance	Ø M	Ø D	Ø F	Ø A	Ø A1	G	K1	L2	Product No.
50 kV	8	150	M8	3.8	88.9	70	52	108	31.6	141.4	551-0970
Order-related manufacture											

This feedthrough could be adjusted with different conductors for special electrical standards
Also available with welded-on flanges (CF, KF, etc.)

MULTITERMINAL FEEDTHROUGHS

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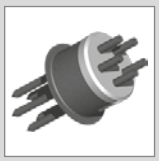

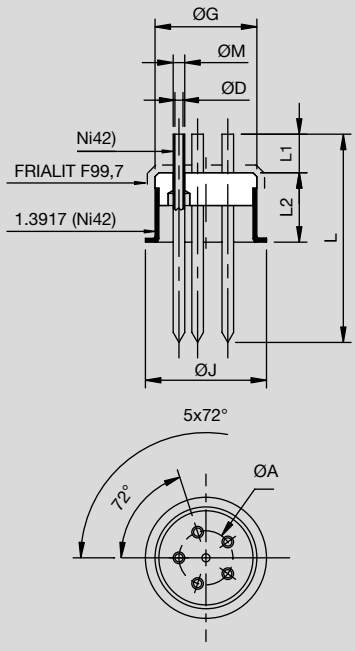

Voltage (DC)	Current	Ø D	Ø A	Ø G	Ø J	L	L1	L2	No. of Feedthroughs	Product No.
500 V Pin-Pin 1 kV Pin-Flange	4 A	1.5x0.25	7	13.2	15.7	27	5	9	5	552-2548
Order-related manufacture										

Feedthroughs are also available in other dimensions
Also available with welded-on flanges (CF, KF, etc.)

MULTITERMINAL FEEDTHROUGHS

Voltage (DC)	Current	Ø D	Ø F	Ø J	G	L	L1	L2	No. of Feedthroughs	Product No.
500 V Pin-Pin 1 kV Pin-Flange	4 A	1.5x0.25	5	10.8	5	32	10	17	2	552-0861
500 V Pin-Pin 1 kV Pin-Flange	4 A	1.5x0.25	5	10.8	5	32	10	17	4	552-0838

Feedthroughs are also available in other dimensions
Also available with welded-on flanges (CF, KF, etc.)

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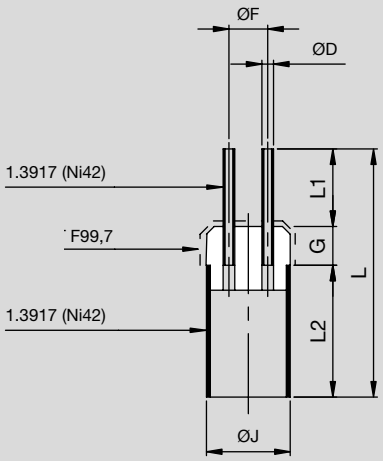

TUBE-TO-TUBE INSUL ATORS

Voltage (DC)	Ø F	Ø A	Ø J	G	L	Product No.
5 kV	8x6	13.5	10	12	39	559-1464

Tube-To-Tube Insulator is also available in other dimensions
Also available with welded-on flanges (CF, KF, etc.)

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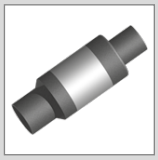

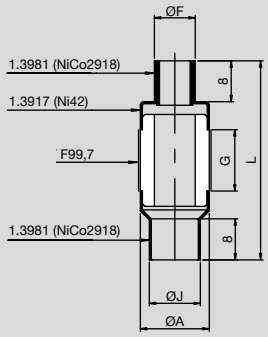

TUBE-TO-TUBE INSULATORS

Voltage (DC)	Ø F	Ø A	Ø J	G	L	Product No.
15 kV	18	23	18	30	74	559-3664-2

Tube-To-Tube Insulator is also available in other dimensions
Also available with welded-on flanges (CF, KF, etc.)

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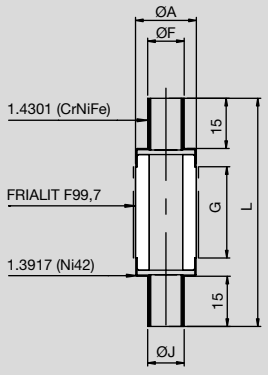
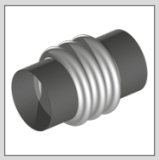


TUBE-TO-TUBE INSULATORS



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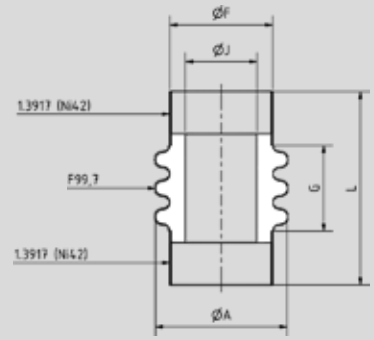
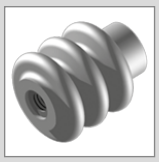


Voltage (DC)	No. of Ribs	Creepage distance	Ø F	Ø A	Ø J	G	L	Product No.
15 kV	3	44	36	46	25	30	67.6	559-0654

Tube-To-Tube Insulator is also available in other dimensions
Also available with welded-on flanges (CF, KF, etc.)

STANDOFFS



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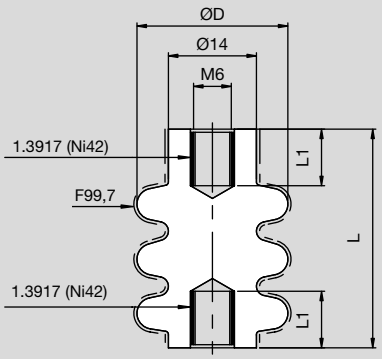

Voltage (DC)	Creepage distance	Ø D	L	L1	Product No.
15 kV	40	24	30	9	558-1162

Standoff is also available in other dimensions

STANDOFFS

Voltage (DC)	Creepage distance	Ø D	L	L1	Product No.
40 kV	130	24	80	9	558-2105

Customized parts with different lengths, different diameters or different number of flutes are also available

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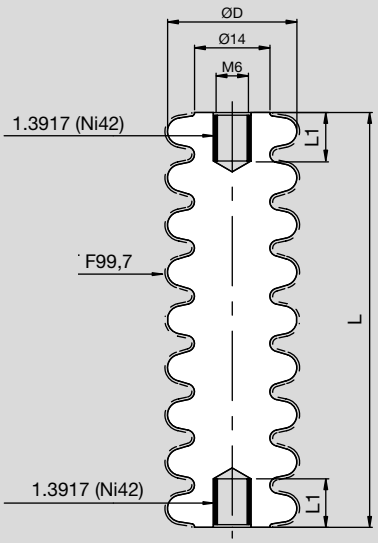

STANDOFFS

Voltage (DC)	Creepage distance	Ø D	L	L1	Product No.
10 kV	25	7.5	25	8	558-1511
15 kV	38	9.5	38.1	6	558-1984

Standoffs are also available in other dimensions

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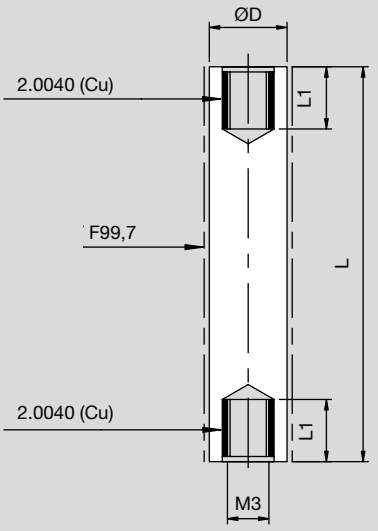


Available are also parts with different dimensions and in different ceramic materials.





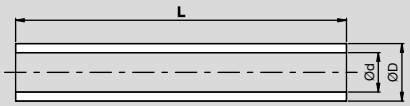
HIGH TEMPERATURE TECHNOLOGY

Tubes, Rods, Multi-Bore Tubes, Bands, Crucibles,
Discs, Plates, Boats, Combustion Trays,
Grinding Pieces, Insulating powders, Cement

TUBES



DEGUSSIT AL23
DEGUSSIT AL24



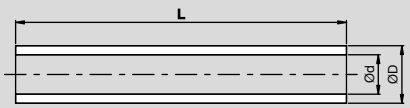
Ø D	Ø d	L max.	Product No. **DEGUSSIT AL23**
3	1,6	1000	122-11003-0
4	2	1000	122-11004-0
5	3	1000	122-11005-0
6	3	2100	122-11006-0
6	4	1500	122-11006-2
7	4	2100	122-11007-0
7	5	2100	122-11007-1
8	5	2100	122-11008-0
10	6	2100	122-11010-0
10	7	2100	122-11010-3
11	7	2100	122-11011-0
12	8	2100	122-11012-0
15	10	2100	122-11015-0
16	12	2100	122-11016-0
20	15	2100	122-11020-0
24	18	2100	122-11024-0
25	20	2100	122-11025-0
30	25	2100	122-11030-0
35	29	2100	122-11035-0
40	34	2100	122-11040-0
45	38	2100	122-11045-0
48	40	2100	122-11048-0
50	42	2100	122-11050-0
55	47	2100	122-11055-0
60	50	2100	122-11060-0
65	55	2100	122-11065-0
70	60	2100	122-11070-0
80	70	2100	122-11080-0

Ø D	Ø d	L max.	Product No. **DEGUSSIT AL24**
10	6	2100	122-21010-0
12	8	2100	122-21012-0
15	10	2100	122-21015-0
20	15	2100	122-21020-0
24	18	2100	122-21024-0
30	24	1500	122-21030-0
40	32	1500	122-21040-0
50	40	1500	122-21050-0
60	50	1500	122-21060-0
70	54	1500	122-21070-0

LARGE-DIAMETER TUBES

DEGUSSIT AL23





Ø D	Ø d	L max.	Product No.
90	80	1600	122-11090-0
95	85	1500	122-11095-1
100	85	1500	122-11100-0
105	90	1500	122-11105-0
115	100	1600	122-11115-1
117	105	1700	122-11117-0
120	105	1700	122-11120-0
130	110	1800	122-11130-0
140	120	1800	122-11140-0
150	130	1100	122-11150-1
170	150	1500	122-11170-0
Order-related manufacture			

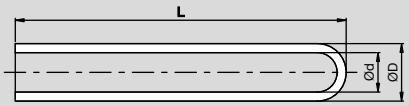
TUBES - ONE END CLOSED

Ø D	Ø d	L max.	Product No. **DEGUSSIT AL23**
3	1,6	1000	101-11003-0
4	2	1000	101-11004-0
5	3	1000	101-11005-0
6	3	2100	101-11006-0
6	4	2100	101-11006-1
7	4	2100	101-11007-0
7	5	2100	101-11007-1
8	5	2100	101-11008-0 *
10	6	2100	101-11010-0 *
10	7	2100	101-11010-1
11	7	2100	101-11011-0
12	8	2100	101-11012-0 *
15	10	2100	101-11015-0 *
16	12	2100	101-11016-0
20	15	2100	101-11020-0 *
24	18	2100	101-11024-0 *
25	20	2100	101-11025-0
30	25	800	101-11030-0
35	29	800	101-11035-0
40	34	800	101-11040-0
45	38	800	101-11045-0
50	42	800	101-11050-0
55	47	800	101-11055-0
60	50	800	101-11060-0
65	55	800	101-11065-0
70	60	800	101-11070-0
80	70	800	101-11080-0

Ø D	Ø d	L max.	Product No. **DEGUSSIT AL24**
10	6	2100	101-21010-0
12	8	2100	101-21012-0
15	10	2100	101-21015-0
20	15	2100	101-21020-0
24	18	2100	101-21024-0

DEGUSSIT AL23
DEGUSSIT AL24



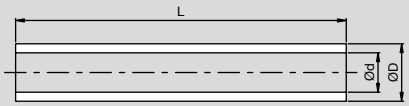


*standard size for thermocouple
(see chapter: protective tubes for standard length one end closed)
Available with flange (Surcharge: +10% of Price per Metre)

THIN INSULATING TUBES



DEGUSSIT AL23

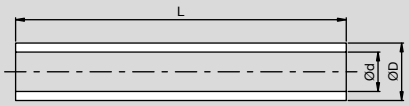


Ø D	Ø d	L max.	Product No.
0.5	0.2	400	121-11050-0
0.6	0,3	400	121-11060-0
0.8	0.4	400	121-11080-0
1	0.5	400	121-11100-0
1	0.6	400	121-11100-1
1.1	0.6	400	121-11110-0
1.2	0.8	400	121-11120-0
1.5	0,5	400	121-11150-1
1.5	1	400	121-11150-0
1.6	0.8	400	121-11160-0
1.7	1.1	400	121-11170-0
2	0.7	400	121-11200-5
2	1	400	121-11200-0
2	1.2	400	121-11200-1
2	1.5	400	121-11200-2
2.5	1.3	400	121-11250-0
2.7	1.7	400	121-11270-0
2.8	2.2	400	121-11280-1

TUBES - THIN WALLED



DEGUSSIT AL23

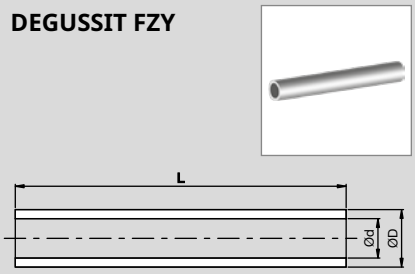


Ø D	Ø d	L max.	Product No.
3	2	400	123-11003-0
4	3	400	123-11004-0
5	4	400	123-11005-0
6	5	400	123-11006-0
7	6	400	123-11007-0
8	7	400	123-11008-0
10	9	400	123-11010-0
12	11	400	123-11012-0
16	15	400	123-11016-0
20	19	400	123-11020-0

TUBES FOR OXYGEN SENSORS

Ø D	Ø d	L max.	Product No.
6	3	1000	122-56006-0
6	4	1000	122-56006-1
8	5	1000	122-56008-0
10	6	1000	122-56010-0
10	7	1000	122-56010-1
13	9	1000	122-56013-0
15	10	1000	122-56015-0
Order-Related Product			

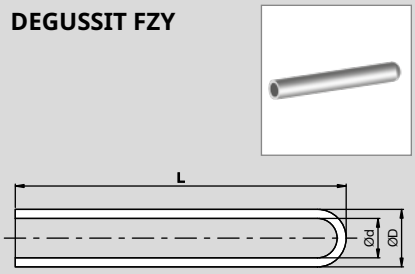
DEGUSSIT FZY



TUBES FOR OXYGEN SENSORS - ONE END CLOSED

Ø D	Ø d	L max.	Product No.
6	3	1000	101-56006-0
6	4	1000	101-56006-1
8	5	1000	101-56008-0
10	6	1000	101-56010-0
10	7	1000	101-56010-1
13	9	1000	101-56013-0
15	10	1000	101-56015-0
Order-Related Product			

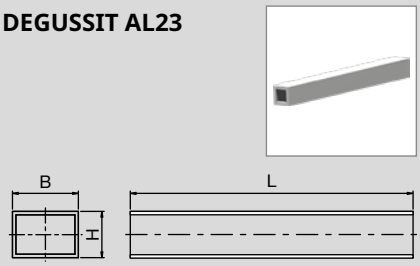
DEGUSSIT FZY



RECTANGULAR TUBES

B	H	Wall Thickness	L max.	Product No.
15	15	2.5	2150	191-11015-0
16	12	2.5	2150	191-11016-0
20	20	3	2150	191-11020-0
Order-Related Product				

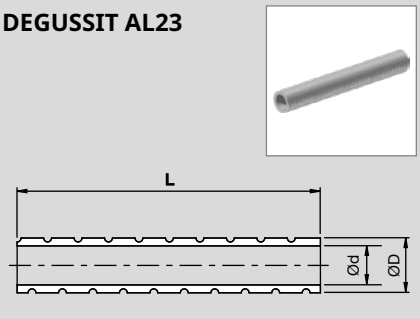
DEGUSSIT AL23



RIBBED TUBES

Ø D	Ø d	L max.	Thread breadth	Thread depth	Thread pitch	Product No.
21	15	500	1	1	1.5	281-11021-0
27	20	500	1	1	1.5	281-11027-0
33	25	500	1	1	1.5	281-11033-0
38	29	500	1.5	1.2	2	281-11038-0
44	34	500	2	1.6	2.5	281-11044-0
50	38	500	2	2	2.5	281-11050-0
60	47	500	2.5	2	5	281-11060-0

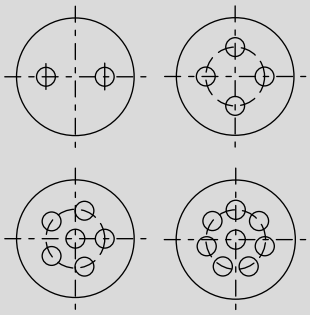
DEGUSSIT AL23



MULTI-BORE TUBES - ROUND



DEGUSSIT AL23
auf Wunsch mit Schlitz



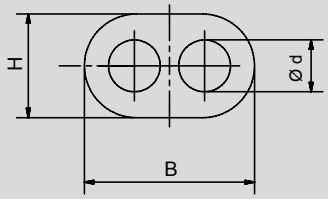
Ø D	Ø d	Number of bores	L max.	Product No.
0.9	0.2	2	400	141-11090-0
1.2	0.3	2	400	141-11120-0
1.2	0.2	4	400	142-11120-0
1.55	0.4	2	400	141-11155-0
2	0.5	2	400	141-11200-0
2	0.4	6	400	142-11200-0
2.35	0.5	4	400	142-11235-0
2.5	0.7	2	1200	141-11250-0
2.8	0.7	4	800	142-11280-0
3	0.8	2	2100	143-11030-0
4	0.8	2	2100	143-11040-0 *
4	0.8	4	2100	144-11040-0 *
4	1.2	2	2100	143-11040-1
5	1.2	2	2100	143-11050-0
5	1	4	2100	144-11050-0
5.5	1.2	4	2100	144-11055-0 *
6	1.5	2	2100	143-11060-0 *
8	0.8	6	2100	144-11080-0
8	0.8	8	2100	144-11080-1
8	1.6	2	2100	143-11080-0 *
8.5	1.5	4	2100	144-11085-0 *

* standard size for thermocouple
(see chapter: multi-bore tubes for standard-length thermocouples)

MULTI-BORE TUBES - OVAL



DEGUSSIT AL23
auf Wunsch mit Schlitz



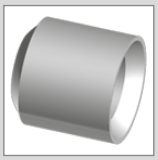
B	H	Ø d	Number of bores	L max.	Product No.
1.55	0.9	0.25	2	400	145-11155-0
2.3	1.4	0.7	2	400	145-11230-0
3	1.5	0.8	2	400	145-11030-0
4.2	2.2	1.2	2	400	145-11042-0

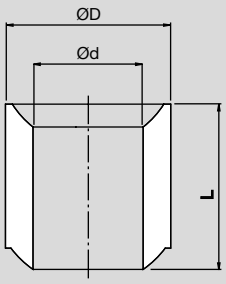
INSULATING BEADS

Ø D	Ø d	L	Product No.
3,5	1	3	160-11035-00003
4	1.5	4.7	160-11040-00004
5	2.5	5	160-11050-00005
7	3.8	7	160-11070-00007
8,5	5	10	160-11085-00010

Packing unit: 100 pcs.

DEGUSSIT AL23





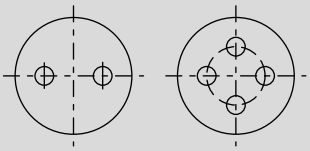
INSULATING BEADS

Ø D	Ø d	L	Number of bores	Product No.
4	0.8	4	2	161-11040-00004
4	0.8	10	2	161-11040-00010
4	0.8	4	4	162-11040-00004
4	0.8	10	4	162-11040-00010

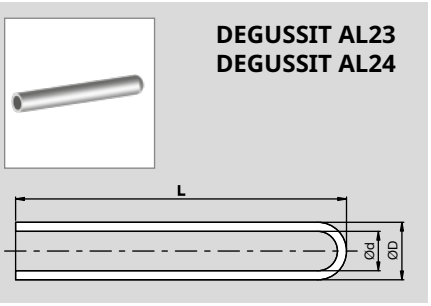
Packing unit: 100 pcs.

DEGUSSIT AL23





PROTECTIVE TUBES FOR STANDARD-LENGTH THERMOCOUPLES ONE END CLOSED



DEGUSSIT AL23
DEGUSSIT AL24

Ø D	Ø d	L max.	Product No. **DEGUSSIT AL23**
8	5	2100	100-11008-0
10	6	2100	100-11010-0
12	8	2100	100-11012-0
15	10	2100	100-11015-0
20	15	2100	100-11020-0
24	18	2100	100-11024-0

Ø D	Ø d	L max.	Product No. **DEGUSSIT AL24**
15	10	2100	100-21015-0
20	15	2100	100-21020-0
24	18	2100	100-21024-0

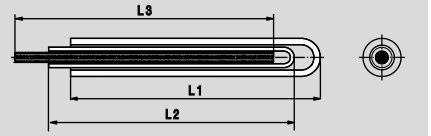
MULTI-BORE TUBES FOR STANDARD-LENGTH THERMOCOUPLES



DEGUSSIT AL23

Ø D	Ø d	Number of bores	L max.	Product No.
4	0.8	2	2100	140-11040-0
6	1.5	2	2100	140-11060-0
8	1.6	2	2100	140-11080-0
4	0.8	4	2100	140-11040-1
5.5	1.2	4	2100	140-11055-0
8.5	1.5	4	2100	140-11085-0

THERMOCOUPLES



DEGUSSIT AL23
DEGUSSIT AL24
Schutzrohre und Kapillarrohr

Length outer protective tube L1	Length inner protective tube L2	Length bore tube L3
180	200	205
250	270	275
355	375	380
500	530	560
710	740	770
1000	1030	1060
1400	1430	1460
2000	2030	2060

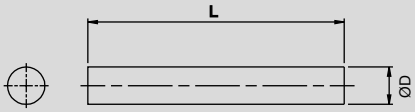
For a standard thermocouple with an outer protective tube 180 you need an inner protective tube 200 and bore tube 205.

RODS

Ø D	L max.	Product No.
0.5	400	181-11050-0
0.6	400	181-11060-0
0.8	400	181-11080-0
1	400	181-11100-0
1.2	400	181-11120-0
1.5	400	181-11150-0
1.7	400	181-11170-0
2	400	181-11200-0
2.5	400	181-11250-0
3	1000	182-11003-0
4	1000	182-11004-0
5	1000	182-11005-0
6	1000	182-11006-0
7	1000	181-11007-0
8	1000	182-11008-0
10	1000	182-11010-0
12	1000	182-11012-0

DEGUSSIT AL23

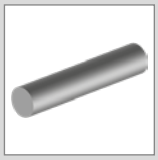


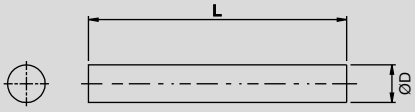


BARS

Ø D	L max.	Product No.
15	400	625-13015-0
16	400	625-13016-1
20	400	625-13020-1
25	400	625-13025-1
30	400	625-13030-0
35	400	625-13035-0
40	400	625-13040-0
45	400	625-13045-0
50	400	625-13050-0
55	400	625-13055-0
60	400	625-13060-0
65	400	625-13065-0
70	400	625-13070-0
75	400	625-13075-0
80	400	625-13080-0
90	400	625-13090-0
Order-Related Product		

F99,7





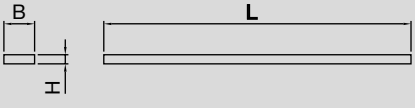
Tolerances
Diameter: +1 / +4 mm
Length: +/- 5 mm
Deflection: max. 0,5 % of the total lenght

BANDS

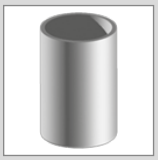
B	H	L max.	Product No.
1	1	400	183-11010-0
6	3	400	183-11060-1
7	2	400	183-11070-2
8	4	400	183-11080-2
10	1	400	183-11100-1
10	2	400	183-11100-6
10	3	400	183-11100-0
11	3	400	183-11110-0
15	3	400	183-11150-0
16	8	400	183-11160-3
Order-Related Product			

DEGUSSIT AL23

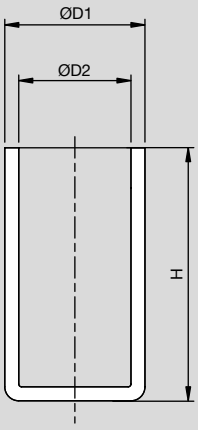




CRUCIBLES - CYLINDRICAL, FLAT BASE



DEGUSSIT AL23
DEGUSSIT AL24
DEGUSSIT AL25
DEGUSSIT FZY



Ø D1	Ø D2	H	Approx. Vol. ml	Product No. **DEGUSSIT AL23**
10	8	15	0.7	201-11010-0150
20	16	30	6	201-11020-0300
30	26	40	20	201-11030-0400
35	30	50	40	201-11035-0500
40	36	60	60	201-11040-0600
50	44	75	110	201-11050-0750
65	55	100	225	201-11065-1000
85	73	150	600	201-11085-1500
110	100	150	1,100	201-11110-1500

Ø D1	Ø D2	H	Approx. Vol. ml	Product No. **DEGUSSIT AL24**
20	16	30	6	201-21020-0300
30	26	40	20	201-21030-0400
35	30	50	40	201-21035-0500
40	36	60	60	201-21040-0600
50	44	75	110	201-21050-0750
65	55	100	225	201-21065-1000
85	73	150	600	201-21085-1500

Ø D1	Ø D2	H	Approx. Vol. ml	Product No. **DEGUSSIT AL25**
145	125	160	1,760	201-22145-1600
120	100	200	1,500	201-22120-2000

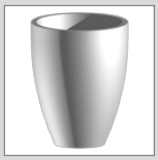
Ø D1	Ø D2	H	Approx. Vol. ml	Product No. **DEGUSSIT FZY**
10	8	15	0.7	201-56010-0150
20	16	30	6	201-56020-0300
30	26	40	20	201-56030-0400
35	30	50	40	201-56035-0500
40	36	60	60	201-56040-0600
50	44	75	110	201-56050-0750
65	55	100	225	201-56065-1000
85	73	150	600	201-56085-1500
Order-Related Product				

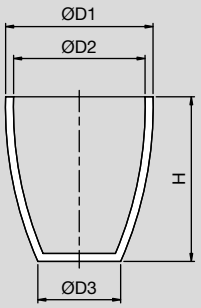
CRUCIBLES CONICAL HIGH FORM

Ø D1	Ø D2	Ø D3	H	Approx. Vol. ml	Product No. **DEGUSSIT AL23**
20	17	11	25	3	202-11020-0250
25	21	13	30	6	202-11025-0300
30	26	15	38	12	202-11030-0380
35	31	18	45	19	202-11035-0450
45	40	22	55	37	202-11045-0550
60	53	30	65	76	202-11060-0650
73	67	35	90	190	202-11073-0900

Ø D1	Ø D2	Ø D3	H	Approx. Vol. ml	Product No. **DEGUSSIT FZY**
20	17	11	25	4	202-56020-0250
60	53	30	65	76	202-56060-0650
65	55	32	100	150	202-56065-1000
73	67	35	90	190	202-56073-0900
85	78	35	100	400	202-56085-1001
100	91	50	120	500	202-56100-1200
Order-Related Product					

DEGUSSIT AL23
DEGUSSIT FZY

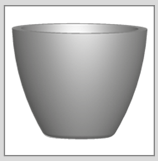


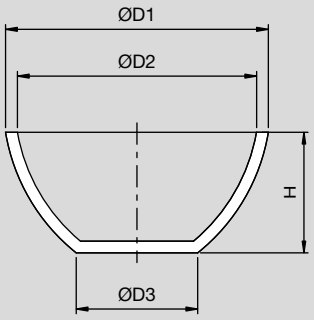


CRUCIBLES CONICAL WIDE FORM

Ø D1	Ø D2	Ø D3	H	Approx. Vol. ml	Product No.
25	22	13	20	4	203-11025-0200
30	26	15	24	6.5	203-11030-0240
40	36	20	32	16	203-11040-0320
43	38	22	37	22	203-11043-0370
50	45	25	40	34	203-11050-0400
65	59	33	55	88	203-11065-0550
88	80	44	60	170	203-11088-0600

DEGUSSIT AL23



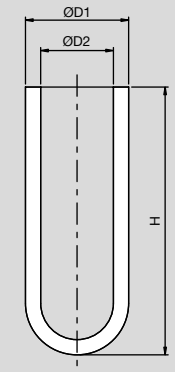


CRUCIBLES - CYLINDRICAL, ROUND BASE

Ø D1	Ø D2	H	Approx. Vol. ml	Tammann No.	Product No.
6	3	30	0.2	-	204-11006-0300
8	5	50	1	-	204-11008-0500
10	6	80	2.3	-	204-11010-0800
12	8	100	5	-	204-11012-1000
15	10	100	8	-	204-11015-1000
20	15	100	17	-	204-11020-1000
25	20	100	30	-	204-11025-1000
16	12	190	22	I a	204-11016-1900
24	20	190	60	I b	204-11024-1900
34	28	190	123	I c	204-11034-1900
24	20	280	90	II a	204-11024-2800
34	28	280	180	II b	204-11034-2800
44	38	280	300	II c III a	204-11044-2800
55	47	280	490	III b	204-11055-2800
68	58	280	790	III c	204-11068-2800
68	58	390	1,070	IV a	204-11068-3900

DEGUSSIT AL23
Tammann

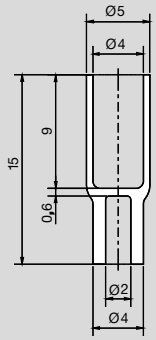




SLIP-ON CRUCIBLES

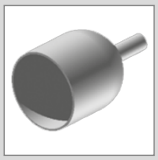


DEGUSSIT AL23

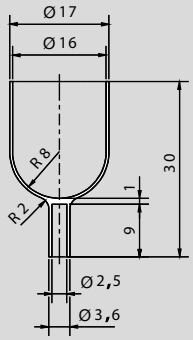


Approx. Vol. ml	Product No.
0.11	209-11000-0063
Order-Related Product	

SLIP-ON CRUCIBLES



DEGUSSIT AL23

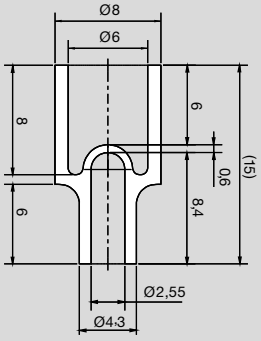


Approx. Vol. ml	Product No.
3.5	209-11000-0064
Order-Related Product	

SLIP-ON CRUCIBLES



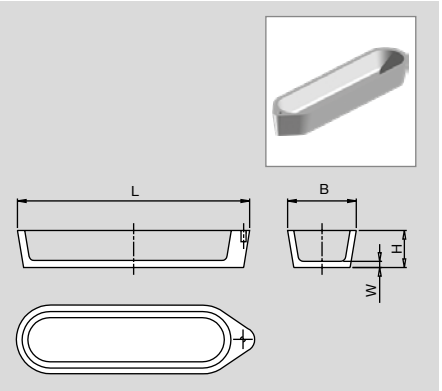
DEGUSSIT AL23



Approx. Vol. ml	Product No.
0.2	209-11000-0068
Order-Related Product	

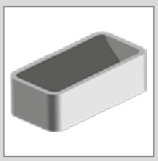
BOATS

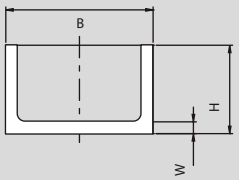
L	B	H	W	Approx. Vol. ml	Product No.
32	9	6	2	0.2	221-11032-0090
48	9	6	2	0.4	221-11048-0090
69	9	6	2	0.7	221-11069-0090
50	15	8	2.5	1.7	221-11050-0150
87	15	8	2.5	2.8	221-11087-0150
112	15	8	2.5	4.7	221-11112-0150
92	18	10	3	5.5	221-11092-0180
118	18	10	3	7	221-11118-0180
58	23	13	3	5.2	221-11058-0230
92	23	13	3	9.5	221-11092-0230
124	23	13	3	13.5	221-11124-0230
102	31	17	3	20	221-11102-0310
130	31	17	3	27	221-11130-0310

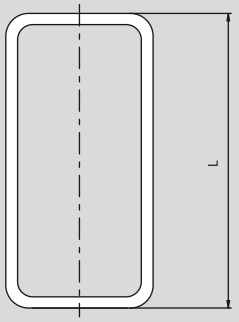


COMBUSTION TRAYS

DEGUSSIT AL23
DEGUSSIT AL24
DEGUSSIT AL25
DEGUSSIT FZY







L	B	H	W	Approx. Vol. ml	Product No. **DEGUSSIT AL23**
50	25	20	3	12	222-11050-0250
50	50	20	3	26	222-11050-0500
75	50	20	4	35	222-11075-0500
100	50	30	4	95	222-11100-0500

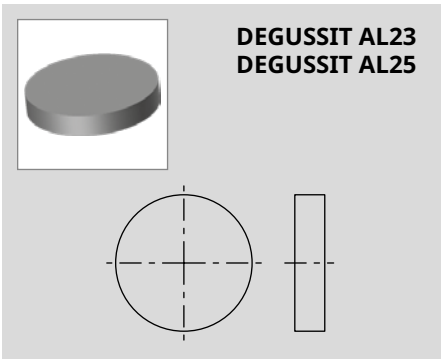
L	B	H	W	Approx. Vol. ml	Product No. **DEGUSSIT AL24**
145	85	30	5	212	222-21145-0850

L	B	H	W	Approx. Vol. ml	Product No. **DEGUSSIT AL25**
205	125	50	10-15	660	222-22205-1250 *

L	B	H	W	Approx. Vol. ml	Product No. **DEGUSSIT FZY**
50	25	20	3	12	222-56050-0250
50	50	20	3	26	222-56050-0500
75	50	20	4	35	222-56075-0500
100	50	30	4	95	222-56100-0500
Order-Related Product					

*W 10-15 conical

PLATES - ROUND



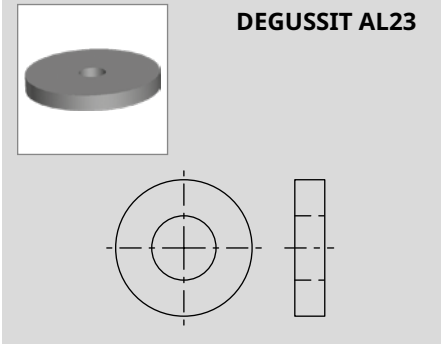
DEGUSSIT AL23
DEGUSSIT AL25

Ø D	H	Product No. **DEGUSSIT AL23**
10	3	211-11010-0300
15	3	211-11015-0300
20	3	211-11020-0300
25	4	211-11025-0400
30	5	211-11030-0500
35	5	211-11035-0500
40	6	211-11040-0600
45	6	211-11045-0600
50	6	211-11050-0600
52	6	211-11052-0600
55	6	211-11055-0600
60	7	211-11060-0700
70	7	211-11070-0700
80	8	211-11080-0800

Ø D	H	Product No. **DEGUSSIT AL25**
130	15	211-22130-1500
150	20	211-22150-2000
200	25	211-22200-2500

Plates sizes of plates up to approx. Ø 350 x 20 upon request

PLATES - ROUND WITH HOLE



DEGUSSIT AL23

Ø D1	Ø D2	H	Product No.
20	6	3	212-11020-0300
25	6	4	212-11025-0400
30	6	5	212-11030-0500
35	6	5	212-11035-0500
40	8	6	212-11040-0600
45	8	6	212-11045-0600
50	10	6	212-11050-0600
52	10	6	212-11052-0600
55	10	6	212-11055-0600
60	10	7	212-11060-0700
70	10	7	212-11070-0700
80	10	8	212-11080-0800

Plates sizes of plates up to approx. Ø 350 x 20 upon request

PLATES - RECTANGULAR

L	B	H	Product No. **DEGUSSIT AL23**
50	25	4	215-11050-0400
50	50	4	215-11050-0401
75	50	4	215-11075-0400
100	50	4	215-11100-0400

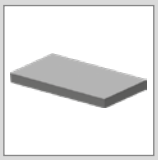
L	B	H	Product No. **DEGUSSIT AL25**
105	50	10	215-22105-1000
115	115	15	215-22115-1500
145	70	15	215-22145-1500
145	85	15	215-22145-1501

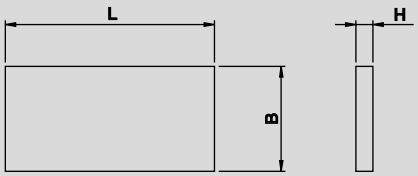
L	B	H	Product No. **F99,7**
90	90	9	690-13090-6
102	17	9,3	690-13102-2
103	66.5	9,3	690-13103-0
103	37.5	9,3	690-13103-2

L	B	H	Product No. **FZM**
90	90	9	790-55090-9
99.8	17.4	9,1	790-55099-0

Plates sizes of plates up to approx. 700 x 350 x 20 upon request

DEGUSSIT AL23
DEGUSSIT AL25
F99,7
FZM

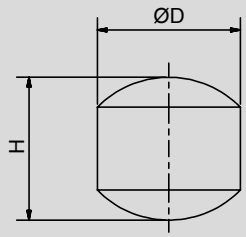




GRINDING BODIES



DEGUSSIT AL23



Ø D	H	pcs./l	pcs./kg	kg/l	Product No.
5	5	8325	3540	2,35	230-11000-0505
10	10	1020	440	2,3	230-11000-0510
15	15	350	157	2,25	230-11000-0515
20	20	120	53	2,25	230-11000-0520
30	30	34	15	2,2	230-11000-0530

INSULATING POWDER - CALCINED

Aluminium oxide
Al_2O_3 >99,5 %

Type	Crystal size	Product No.
VM	99% < 10 µm	251-11000-1025

Primarily for **electrical insulation** of cathode heaters and as fillers of casting resins.

INSULATING POWDER - FUSED

Aluminium oxide
Al_2O_3 >99,7%

Type	Crystal size	Product No.
E No. 100	~ 150 µm	251-11000-1100
E No. 250	~ 40 µm	251-11000-1250

Primarily in dry filling for **thermal insulation** of electrical furnaces.

CEMENT

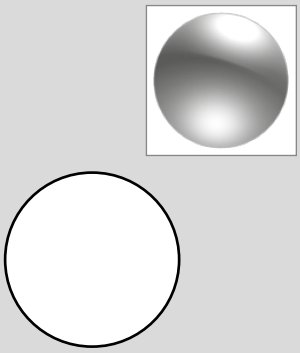
Aluminium oxide
AL_2O_3 >95%

Type	Crystal size	Product No.
AL2O3	~ 150 µm	251-15000-1010

For sealing thermocouples in furnace linings, embedding heating coils or platinum crucibles, etc. The cement is diluted with water to the required consistency. Since it is not cold-hardening, it contains 0.5% organic binder in order to increase its dry strength. This binder is burned off completely during the heating process. Above 1200 °C progressive hardening of the cement begins, as a result of sintering.

Ø D	Product No.
1.0000	610-13100-0
1.5000	610-13150-0
2.0000	610-13200-0
2.3810	610-13238-1
2.5000	610-13250-0
3.0000	610-13300-0
3.1750	610-13317-5
3.5000	610-13350-0
4.0000	610-13400-0
4.7625	610-13476-3
5.0000	610-13500-0
6.0000	610-13600-0
6.3500	610-13635-0
7.0000	610-13700-0
8.0000	610-13800-0
8.7320	610-13873-2
9.0000	610-13900-0
9.5250	610-13952-5
10.0000	611-13010-0
12.0000	611-13012-0
12.7000	611-13012-7
13.0000	611-13013-0
14.0000	611-13014-0
16.0000	611-13016-0
17.0000	611-13017-0
18.0000	611-13018-0
19.0000	611-13019-0
20.0000	611-13020-0
22.0000	611-13022-0
26.0000	611-13026-0
29.0000	611-13029-0
30.0000	611-13030-0
32.0000	611-13032-0
35.0000	611-13035-0
40.0000	611-13040-0
45.0000	611-13045-0
50.0000	611-13050-0
54.0000	611-13054-0
60.0000	611-13060-0
65.0000	611-13065-0
70.0000	611-13070-0
90.0000	611-13090-0
100.0000	611-13100-0

F99,7



Quality: Grade 25, polished surface
Sphericity: 0.6 µm
Diameter Tolerance: 2.5 µm

Available are also parts with different dimensions and in different ceramic materials.





SURFACE FINISHING

Fine Grinding Tools, Burnishing Wheels

FINE-GRINDING TOOL - BENCHSTONE

DEGUSSIT DD57
DEGUSSIT AL24

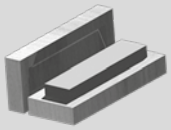


Dimensions	Colour	Type	Product No. **DEGUSSIT DD57**
100 x 25 x 10	ruby red	fine	901-41100-0
100 x 25 x 10	ruby red	medium	902-41100-0
150 x 25 x 15	ruby red	fine	901-41101-0
150 x 25 x 15	ruby red	medium	902-41101-0
200 x 50 x 12	ruby red	fine	901-41102-0
200 x 50 x 12	ruby red	medium	902-41102-0

Dimensions	Colour	Type	Product No. **DEGUSSIT AL24**
100 x 25 x 10	white	coarse	903-21100-0
150 x 25 x 15	white	coarse	903-21101-0

FINE-GRINDING TOOL - BENCHSTONE IN WOODEN CASE, REMOVABLE

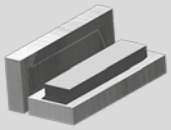
DEGUSSIT DD57



Dimensions	Colour	Type	Product No.
120 x 50 x 10	ruby red	fine / medium	904-41111-0

FINE-GRINDING TOOL - BENCHSTONE IN WOODEN CASE, GLUED IN

DEGUSSIT DD57
DEGUSSIT AL24



Dimensions	Colour	Type	Product No. **DEGUSSIT DD57**
100 x 25 x 10	ruby red	fine	901-41110-0
100 x 25 x 10	ruby red	medium	902-41110-0
120 x 50 x 10	ruby red	fine	901-41111-0
120 x 50 x 10	ruby red	medium	902-41111-0
200 x 50 x 12	ruby red	fine	901-41112-0
200 x 50 x 12	ruby red	medium	902-41112-0

Dimensions	Colour	Type	Product No. **DEGUSSIT AL24**
100 x 25 x 10	white	coarse	903-21110-0

FINE-GRINDING TOOL - TRIANGULAR

DEGUSSIT DD57



Dimensions	Colour	Type	Product No.
100 x 4	ruby red	fine	901-41200-0
100 x 4	ruby red	medium	902-41200-0
100 x 6	ruby red	fine	901-41201-0
100 x 6	ruby red	medium	902-41201-0
100 x 6	ruby red	coarse	903-44201-0
100 x 8	ruby red	fine	901-41202-0
100 x 8	ruby red	medium	902-41202-0
100 x 8	ruby red	coarse	903-44202-0
100 x 10	ruby red	fine	901-41203-0
100 x 10	ruby red	medium	902-41203-0
100 x 10	ruby red	coarse	903-44203-0
120 x 13	ruby red	fine	901-41205-0
120 x 13	ruby red	medium	902-41205-0

FINE-GRINDING TOOL - RECTANGULAR

Dimensions	Colour	Type	Product No.
100 x 6 x 3	ruby red	fine	901-41220-0
100 x 6 x 3	ruby red	medium	902-41220-0
100 x 8 x 6	ruby red	fine	901-41221-0
100 x 8 x 6	ruby red	medium	902-41221-0
100 x 8 x 6	ruby red	coarse	903-44221-0

DEGUSSIT DD57



FINE-GRINDING TOOL - SQUARE

Dimensions	Colour	Type	Product No.
100 x 4	ruby red	fine	901-41210-0
100 x 4	ruby red	medium	902-41210-0
100 x 6	ruby red	fine	901-41211-0
100 x 6	ruby red	medium	902-41211-0
100 x 6	ruby red	coarse	903-44211-0
100 x 8	ruby red	fine	901-41212-0
100 x 8	ruby red	medium	902-41212-0
100 x 8	ruby red	coarse	903-44212-0
100 x 10	ruby red	fine	901-41213-0
100 x 10	ruby red	medium	902-41213-0
100 x 10	ruby red	coarse	903-44213-0
120 x 13	ruby red	fine	901-41214-0
120 x 13	ruby red	medium	902-41214-0
120 x 12	ruby red	coarse	903-44216-0

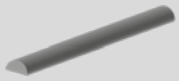
DEGUSSIT DD57



FINE-GRINDING TOOL - SEMI-CIRCULAR

Dimensions	Colour	Type	Product No.
100 x 10	ruby red	medium	902-41231-0
100 x 10	ruby red	coarse	903-44231-0

DEGUSSIT DD57



FINE-GRINDING TOOL - CIRCULAR

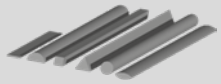
Dimensions	Colour	Type	Product No.
100 x 4	ruby red	fine	901-41270-0
100 x 4	ruby red	medium	902-41270-0
100 x 6	ruby red	fine	901-41271-0
100 x 6	ruby red	medium	902-41271-0
100 x 6	ruby red	coarse	903-44271-0
100 x 8	ruby red	fine	901-41272-0
100 x 8	ruby red	medium	902-41272-0
100 x 8	ruby red	coarse	903-44272-0
100 x 10	ruby red	fine	901-41273-0
100 x 10	ruby red	medium	902-41273-0
100 x 10	ruby red	coarse	903-44273-0

DEGUSSIT DD57



ASSORTMENT OF FILES

DEGUSSIT DD57



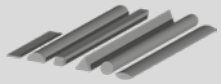
Type	Product No.
Assortment	900-00700-0

Shape	Dimensions	Colour	Type	Product No.
▲	100 x 10	ruby red	medium	902-41203-1
■	100 x 10	ruby red	medium	902-41213-3
▬	100 x 8 x 6	ruby red	fine	901-41221-2
●	100 x 6	ruby red	medium	902-41271-2
◗	100 x 10	ruby red	coarse	903-44231-2

The **assortment of files**, Product No. **900-00700-0**, contains one of each file listed above.
The Files are also available separately.

ASSORTMENT OF FILES - MIDGET FILES

DEGUSSIT DD57



Type	Product No.
Assortment	900-41420-0

Shape	Dimensions	Colour	Type	PU pcs.	Product No.
▲	50 x 2	ruby red	fine	20	901-41402-0
▲	100 x 3	ruby red	fine	10	901-41413-0
■	50 x 1	ruby red	fine	20	901-41400-0
■	100 x 2	ruby red	fine	10	901-41403-0
▬	50 x 3 x 0,3	ruby red	fine	20	901-41406-0
●	50 x 1	ruby red	fine	20	901-41401-0
●	100 x 2	ruby red	fine	10	901-41404-0
●	100 x 3	ruby red	fine	10	901-41405-0
◗	100 x 4	ruby red	fine	10	901-41407-0
◢	100 x 5 x 1,5	ruby red	fine	10	901-41409-0
⬭	100 x 4 x 1,5	ruby red	fine	10	901-41411-0

The **assortment of midget files**, Product No. **900-41420-0**, contains 1 holder and 2 collets as well as one of each midget file listed above.
PU= packing unit
The files are also available separately

BLADE SHARPENER

DEGUSSIT DD57

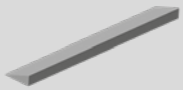


Dimensions	Colour	Type	Product No.
10 x 200	ruby red	fine	991-41273-3

FINE-GRINDING TOOL - BLADE

Dimensions	Colour	Type	Product No.
100 x 15 x 3/0,5	ruby red	fine	901-41291-0
100 x 15 x 3/0,5	ruby red	medium	902-41291-0

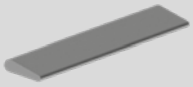
DEGUSSIT DD57



FINE-GRINDING TOOL - TAPERED

Dimensions	Colour	Type	Product No.
100 x 30 x 7/2	ruby red	medium	902-41105-0

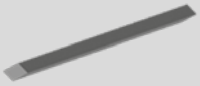
DEGUSSIT DD57



FINE-GRINDING TOOL - RHOMBOID

Dimensions	Colour	Type	Product No.
100 x 13 x 5	ruby red	coarse	903-44240-0

DEGUSSIT DD57



FINE-GRINDING TOOL - CONICAL

Dimensions	Colour	Type	Product No.
100 x 5 x 2	ruby red	fine	901-41255-0
100 x 5 x 2	ruby red	coarse	903-44255-0

DEGUSSIT DD57



FINE-GRINDING TOOL - PENCIL

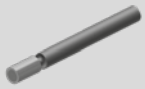
Dimensions	Colour	Type	Product No.
100 x 5	ruby red	fine	901-41261-0

DEGUSSIT DD57



FINE-GRINDING TOOL - MOUNTED POINT, CYLINDRICAL

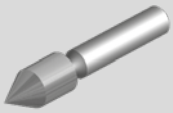
DEGUSSIT DD57



Ø D1	Ø D2	H	Type	Product No.
2	2.35	4	fine	921-41002-1
2	3	4	fine	921-41002-0
3	2.35	6	fine	921-41003-1
3	3	6	fine	921-41003-0
4	2.35	8	fine	921-41104-1
4	3	8	fine	921-41104-0
5	3	10	fine	921-41110-0
6	6	12	fine	921-41116-0
8	6	10	fine	921-41128-0
8	6	16	fine	921-41136-0
10	6	12	fine	921-41150-0
2	2.35	4	medium	922-44002-1
2	3	4	medium	922-44002-0
3	2.35	6	medium	922-44003-1
3	3	6	medium	922-44003-0
4	2.35	8	medium	922-44104-1
4	3	8	medium	922-44104-0
5	3	10	medium	922-44110-0
6	6	12	medium	922-44116-0
8	6	10	medium	922-44128-0
8	6	16	medium	922-44136-0
10	6	12	medium	922-44150-0
Order-Related Product				

FINE-GRINDING TOOL - MOUNTED POINT, CYLINDRICAL-CONICAL

DEGUSSIT DD57
Spitzwinkel 60°



Ø D1	Ø D2	H	Type	Product No.
4	2.35	8	fine	921-41204-1
4	3	8	fine	921-41204-0
5	3	10	fine	921-41210-0
6	6	12	fine	921-41216-0
8	6	16	fine	921-41236-0
10	6	20	fine	921-41255-0
4	2.35	8	medium	922-44204-1
4	3	8	medium	922-44204-0
5	3	10	medium	922-44210-0
6	6	12	medium	922-44216-0
8	6	16	medium	922-44236-0
10	6	20	medium	922-44255-0
Order-Related Product				

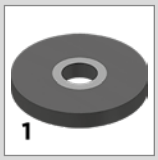
Length of the shaft 30 upto 35 mm
Ø D1: Ceramics
Ø D2: Metal Shaft
H: Ceramics

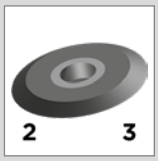
FINE-GRINDING WHEELS

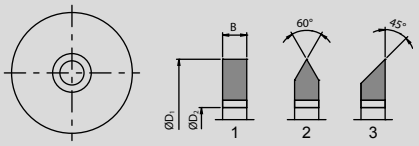
Ø D1	Ø D2	B	Design	Product No.
75	20	3	with metal bushing	911-41373-0
75	20	4	with metal bushing	911-41374-0
75	20	6	with metal bushing	911-41376-0
75	20	8	with metal bushing	911-41378-0
75	20	10	with metal bushing	911-41380-0
100	32	8	with metal bushing	911-41488-0
100	32	10	with metal bushing	911-41490-0
75	30	3	without metal bushing	911-41373-7
75	30	4	without metal bushing	911-41374-7
75	30	6	without metal bushing	911-41376-7
75	30	8	without metal bushing	911-41378-7
75	30	10	without metal bushing	911-41380-7
100	42	8	without metal bushing	911-41488-7
100	42	10	without metal bushing	911-41490-7
Order-Related Product				

Profile 2 and 3 upon request

DEGUSSIT DD57
fein



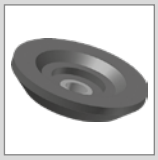


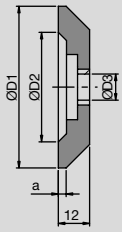


BURNISHING WHEELS

Ø D1	Ø D2	Ø D3	a	Product No.
62	42	10	3	931-41906-1
62	42	10	4	931-41906-2
62	42	10	6	931-41906-3
Order-Related Product				

DEGUSSIT DD57
fein

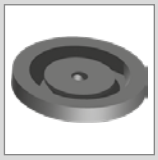


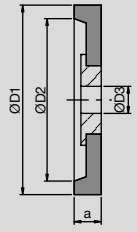


BURNISHING WHEELS

Ø D1	Ø D2	Ø D3	a	Product No.
70	60	10	8	931-41970-4
70	60	10	10	931-41970-5
70	60	10	12	931-41970-6
70	60	10	15	931-41970-7
80	60	10	8	931-41980-4
80	60	10	10	931-41980-5
80	60	10	12	931-41980-6
80	60	10	15	931-41980-7
Order-Related Product				

DEGUSSIT DD57
fein





ABOUT KYOCERA





The global Kyocera corporation - a strong partner.

Headquarters:	Kyoto, Japan
Foundation:	1959
Employees:	over 80,000 worldwide
European headquarters:	Esslingen, Germany
European production sites:	Mannheim, Germany Selb, Germany Erfurt, Germany Waiblingen, Germany (further subsidiaries in Europe)

KYOCERA = KYOTO CERAMICS

KYOCERA – it all began with ceramics

KYOCERA Fineceramics Europe GmbH is a subsidiary of KYOCERA Europe GmbH, which has been successful in Europe for over 50 years. The Kyocera Group is one of the world's leading providers of high-performance ceramic components for the technology industry, offering over 200 different ceramic materials, as well as state-of-the-art technologies and services tailored to the specific needs of each market.

KYOCERA Fineceramics Europe GmbH has grown steadily in recent years – and is now one of the leading European suppliers of customised solutions made of technical ceramics. Working in partnership, we develop and manufacture products that offer our customers added value in their respective markets and secure their technological lead in the long term. Our extensive R&D activities underline this commitment every day.

We have also been active in the field of environmental technology for 30 years. Our solutions for treatment of exhaust air and waste water from chemical laboratories and industrial processes are known worldwide under the FRIDURIT brand.

Throughout Europe, we are represented by four production sites in Mannheim, Selb, Erfurt, and Waiblingen (Germany), as well as seven sales offices – in Mannheim, Selb, Neuss, Erfurt, Waiblingen (Germany), Rungis (France), and Frimley (United Kingdom).

Our business partners benefit from the fact that we think and work across divisions within the Kyocera Group. Because innovations and real milestones can only be achieved together – across industries and national borders.

About the KYOCERA Group

KYOCERA Europe GmbH is a company of the KYOCERA Corporation headquartered in Kyoto/Japan, a worldwide, renowned supplier for semiconductor, industrial and automotive components as well as electronic components, printing and multifunction systems, and communications technology.
Kyocera is one of the most experienced technology producers, with more than 65 years of industry expertise. The Kyocera Group comprises of around 300 subsidiaries.

Kyocera aims to create a better future for the world, using the power of technology to solve issues we face as a global society. This ambition is rooted in our Kyocera Management Rationale: to contribute to the advancement of society and humankind.

We will continue to work together with people around the world to solve issues critical to society leveraging all of the technologies and management capabilities we have accumulated during our 60-plus year history.

The company also takes an active interest in cultural affairs. The Kyoto Prize, a prominent international award, is presented each year by the Inamori Foundation established by Kyocera founder Dr Kazuo Inamori to individuals worldwide who have contributed significantly to the scientific, cultural, and spiritual betterment of humankind.



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