

SAN[®] Electro Heat Process HEATING



Mounting/Electrical Accessories

Gillelejevej 30

DK-3230 Graested

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SAN[®]

Electro Heat

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CVR No.: 42 16 59 13 - A/S reg. No.: 53 053

2. MOUNTING/ ELECTRICAL ACCESSORIES

Mounting accessories

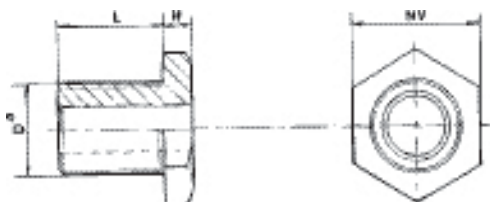
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BUSHINGS

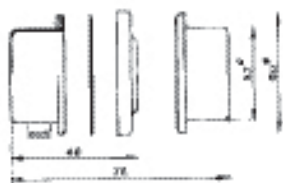
The following mounting bushings are stocked standard types for brazing onto the SAN tubular heating elements.



DØ	Dim. mm			Material	No. of holes for heating element					Part no.
	NV	H	L		S	B	D	R	P	
M10x1,5	14	4	12	Stainless	-	-	1	-	-	42428
M14x1,5	19	5	15	Iron	-	-	1	1	-	42158
	19	4	20	Brass	-	-	1	1	-	42324
¼"RG	19	4	12	Brass	-	-	1	1	-	42300
	19	4	30	Brass	-	-	1	1	-	42302
	19	4	18	Stainless	-	-	1	1	-	42429
⅜" RG	21	4	15	Brass	1	-	1	1	-	42310
½" RG	27	6	10	Brass	1	1	2	2	1	42355
	27	6	18	Brass	1	1	2	2	1	42356
	27	6	30	Brass	1	1	2	2	1	42357
	27	6	18	Stainless	1	1	2	2	1	42446
⅝" RG	32	6	30	Iron	1	1	2	2	1	42153
¾" RG	36	6	40	Iron	2	2	2	2	1	42157
	36	6	30	Stainless	2	2	2	2	1	42434
1" RG	40	6	16	Brass	3	2	4	4	1	42314
⅝" RG	57	8	13	Brass	6	3	4	4	1	42315
1½"RG	58	9	12	Brass	6	4	6	6	3	42317
	-	11	14	Iron	6	4	6	6	3	42466
2" RG	74	11	14	Brass	10	6	6	6	5	42318
	-	11	14	Iron	10	6	6	6	5	42435

NB! Holes for thermo well for thermo sensor has not been calculated.
Gasket and nut to be delivered according to requirement. Not included in the part no.

TERMINAL BOXES



Box-type	Protection class	Part no.
Silumine-terminal box, 37 mm high	IP 67	70524

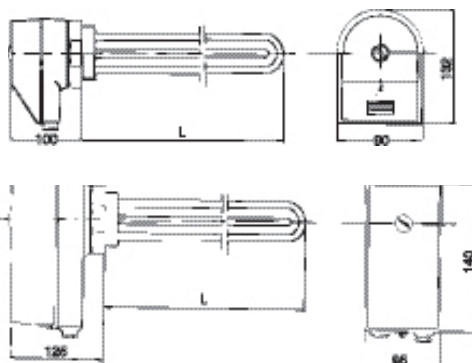
Sheet iron terminal box, 46 mm high, 2"	IP 34	70552
Sheet iron terminal box, 78 mm high, 2"	IP 34	70553
Sheet iron terminal box, 46 mm high, 1½"	IP 34	70550
Sheet iron terminal box, 78 mm high, 1½"	IP 34	70551

Sheet iron terminal box, 80 mm high,	IP 54	70183
Stainless terminal box, 80 mm high	IP 54	70184

Box-type for 2" and 1 1/2" immersion heaters	Protection class	Part no.
Silumin-terminal box for 2" and 1 1/2" RG bushing, small model	IP 34	70556
Silumin-terminal box for 2" and 1 1/2" RG bushing, large model	IP 55	70555

Small model can be mounted with thermostat.
Big model can be mounted with thermostat and over-heating fuse.

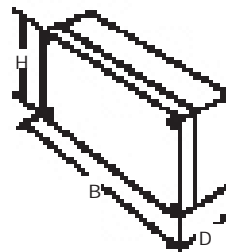
TERMINAL BOXES



Grey painted sheet iron casing IP 65				Part no.
Type 1500210	Width = 150	Depth = 120	Height = 150	70202
Type 1529210	Width = 200	Depth = 120	Height = 150	70204
Type 1502210	Width = 200	Depth = 120	Height = 200	70206
Type 1501210	Width = 300	Depth = 120	Height = 150	70208
Type 1503210	Width = 300	Depth = 120	Height = 200	70210

Delivered with BK-couplings in size and quantity according to requirements.

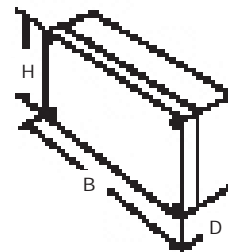
TERMINAL BOXES



Die casted aluminium casing, grey painted, IP 54				Part no.
Type K 01	Width = 64	Depth = 34	Height = 58	70116
Type K 4	Width = 130	Depth = 72	Height = 82	70530
Type K 41	Width = 122	Depth = 80	Height = 120	70531
Type K 5	Width = 170	Depth = 90	Height = 130	70532

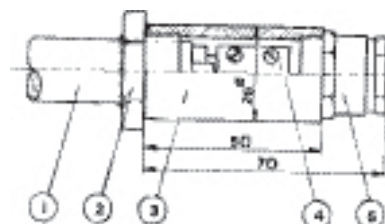
Delivered with BK couplings in size and quantity according to requirements.

Other types of terminal boxes - also Ex-safe - delivered according to requirement.

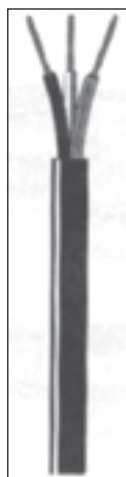
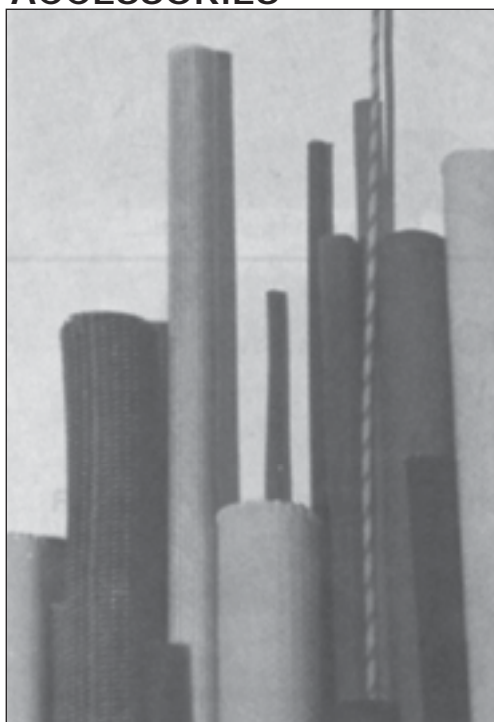


Cable connections for tubular heating elements brazed, 1/2" bushing. Protection class: IP 54	Part no.
Tube sleeve PVC, 3-wire conductor crown joint 1.5 mm ² , 1/2" BK connection PVC, however with no bushing.	42948
Tube sleeve galvanized steel, 3-wire crown joint 1.5 mm ² 1/2" BK connection nickled brass, with no bushing.	42949
1/2" Bakelite with PG 11 connection L = 75. Ø = 30 mm with 3-pole porcelain crown joint 1.5 mm ²	42851
Cable relief, brass 1/2"	373091

RM-CONNECTION



ELECTRICAL CONNECTION ACCESSORIES



Description	Dimension	Part no.
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CERAMIC CONNECTORS

Round, 2-pole	2.5 mm ²	15 mm [∅] x 20 mm	18005
Round, 3-pole	2.5 mm ²	16.5 mm [∅] x 23 mm	18007
Square, 1-pole	2.5 mm ²	8 x 17.5 x 14 mm high	18008
Square, 1-pole	6.0 mm ²	8.5 x 20 x 18.5 mm high	18010
Square, 1-pole	10.0 mm ²	12.5 x 24 x 24 mm high	18011
Square, 1-pole	16.0 mm ²	15 x 28 x 28 mm high	18013
Square, 2-pole	2.5 mm ²	19 x 19 x 16 mm high	18003
Square, 3-pole	2.5 mm ²	37 x 20 x 17 mm high	18006

TERMINAL BLOCKS, ceramic

w/6 taps M 4		34 x 54 x 14 mm thick	199001
w/6 taps M 5		40 x 64 x 16 mm thick	19901
w/6 taps M 6		48 x 78 x 19 mm thick	19902
w/6 taps M 8		60 x 96 x 21 mm thick	19903
Porcelain terminal blocks f/ DIN rail, 2.5 mm ²		8 x 38 x 46 mm high	18026

CONNECTION LEADS

Tombak no insulation	1.5 mm ²	68342
Tombak no insulation	2.5 mm ²	68343
Chrome nickel no insulation	1.5 mm ²	68440
Chrome nickel no insulation	2.5 mm ²	68441
Chrome nickel, glass thread-wound and silicone-impregnated	0.5 mm ²	68436
	0.75 mm ²	68437
	1.5 mm ²	68438
Max. 250°C	2.5 mm ²	68439
Chrome nickel, glass thread-wound. Max 600°C	1.5 mm ²	68445
	2.5 mm ²	68446
	4.0 mm ²	68447
	6.0 mm ²	68448

GLASSFLEX HOSES

Silicone-impregnated Max. 250°C	1.0 mm [∅]	68720
	1.5 mm [∅]	68721
	2.0 mm [∅]	68722
	2.5 mm [∅]	68723
	3.0 mm [∅]	68724
	4.0 mm [∅]	68725
	5.0 mm [∅]	68705
	6.0 mm [∅]	68726
	8.0 mm [∅]	68729
	10.0 mm [∅]	68727
	2.5 mm [∅] , black	68731
	2.5 mm [∅] , yellow/green	68711
Unimpregnated Max. 400°C	2.5 mm [∅]	68709
	3.0 mm [∅]	68710
	4.0 mm [∅]	68712
	5.0 mm [∅]	68713
	6.0 mm [∅]	68714
	10.0 mm [∅]	68716
	12.0 mm [∅]	68717
16.0 mm [∅]	687181	

CABLES

MT170: Silicone rubber-insulated W/glass silk braiding Max. 170°C	0.75 mm ² /white	68744
	1.5 mm ² /white	68745
	2.5 mm ² /white	68746
	4.0 mm ² /white	68747
	10.0 mm ² /white	68748
Silicone rubber-insulated Max. 250°C	0.75 mm ² /grey	68743
Teflon-insulated Max. 250°C	1.5 mm ²	68766

Description	Dimension	Part no.
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SILICONE-RUBBER CABLE

Approx. 6.4 mm \emptyset	2 x 0.75 mm ²	68758
Approx. 6.8 mm \emptyset	3 x 0.75 mm ²	68757
Approx. 7.8 mm \emptyset	4 x 0.75 mm ²	68751
Approx. 7.4 mm \emptyset w/earth connection	3 x 1.0 mm ²	68755
Approx. 8.0 mm \emptyset w/earth connection	4 x 1.0 mm ²	68764
Approx. 7.6 mm \emptyset	2 x 1.5 mm ²	68759
Approx. 8.0 mm \emptyset w/earth connection	3 x 1.5 mm ²	68754
Approx. 8.0 mm \emptyset	3 x 1.5 mm ²	68749
Approx. 8.8 mm \emptyset w/earth connection	4 x 1.5 mm ²	68763
Approx. 9.2 mm \emptyset	2 x 2.5 mm ²	68753
Approx. 9.7 mm \emptyset	3 x 2.5 mm ²	68750

FASTENERS

Stainless steel	1.5 mm ²	36232
	2.5 mm ²	36234
	4.0 mm ²	36237

EQUIPMENT PLUGS

Aluminium 2-pin	See dim. sketch	67907
Chrome nickel. Tangential CEE 3-flat pin	See dim. sketch	67919
Chrome nickel. Radial CEE 3-flat pin	See dim. sketch	67918

EQUIPMENT SOCKETS

Ceramic/Alu, straight 2-pin \emptyset	110 x 45	67905
Ceramic/Alu, angle 2-pin \emptyset	70 x 50	67906
Silicone rubber, straight 2-pin \emptyset	100 x 45	67909
Silicone rubber, angle 2-pin \emptyset	70 x 50	67915
Silicone rubber, straight CEE 3-flat pin	110 x 40	67920
Dure plastics/ceramic, angle CEE 3-flat pin	70 x 50	67921
Dure plast./ceram., straight CEE 3-flat pin	110 x 40	69922

BUSHINGS

Type no.	f/sensor type	Thread size	Part no.
N 4	TEF 4	3/8" RG	32410
N 4	TEF 4	1/4" RG	32409
N 4	TEF 4	M14 x 1,5	32408
N 11	TEF 11	M14 x 1,5	32412
N 16	TEF 16	M12	32414
Separate bajonet jacket		12.3 \emptyset mm	32407

MULTI PLUG

Type no.	Pole qty.	Description	Part no.
T 3200	2-pole	13 \emptyset w/thread	32430
T 3260	3-pole	13 \emptyset w/thread	32432
T 3300	4-pole	13 \emptyset w/thread	32434
T 3300-006	4-pole	13 \emptyset angle plug w/thread	32436
T 3079	3-pole	21 \emptyset w/thread	32438
T 3083	5-pole	21 \emptyset w/thread	32440
T 3008	3-pole	21 \emptyset w/bajonet lock	32442
T 3012	5-pole	21 \emptyset w/bajonet lock	32444

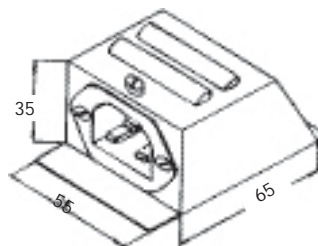
ELECTRICAL CONNECTION ACCESSORIES



67920

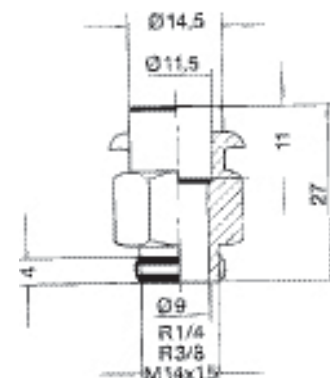


67915

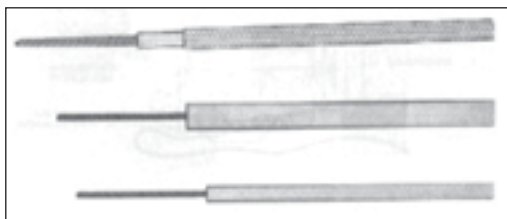


67919

BUSHINGS and PLUGS for temperature sensors

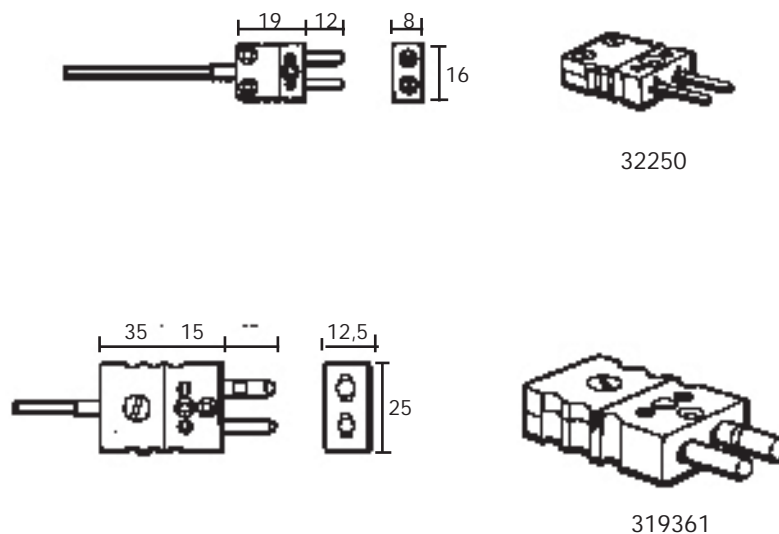


ACCESSORIES TEMPERATURE SENSORS



Description		Part no.
Male plug for Ni/CrNi, green	Max. temperature 135°C	319361
Female plug for Ni/CrNi, green	Max. temperature 135°C	31936
Miniature plug male + female for Ni/CrNi (green)	Max. temperature 135°C	32250
Miniature plug male + female for Fe/CuNi (black)		32255
Compensation cable XFPF for element Ni/CrNi 2 x 0.22 mm ²		36510
Compensation cable XFPF for element Fe/CuNi 2 x 0.22 mm ²		336511
Heat conductive alu-paste, max. 100°C		31915
Heat conductive silicone-paste, max. 200°C, 150 g tube		319151
Stainless tube mounting fitting		85723
Heat conductive cement max. 400°C		72920
Heat conductive cement max. 630°C		72921

Dimension sketch for plug for thermo element:



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- Air Duct Heaters
- High-voltage
- Resistors
- Controllers



With more than 50 years of experience SAN Electro Heat's most valuable asset is special knowhow about design, product development and manufacturing of professional electrical heating equipment for industrial use.

The company is geared to deliver 100% customized products, and thus functions both as a catalyst for a development project and as supplier of the final product. At the same time we insure and maintain the required quality level, mechanical and electrical dimensioning, approvals and documentation.

