

**The main features and advantages**

**Variety of potential uses**

Small size, low space requirement.  
 2, 3, 4 and 5-pole versions with ground contact in each case.  
 Numerous types for a variety of applications.

**Sturdy design**

Casing of impact-proof fibre-reinforced polyamide. Also suitable for machinery and equipment. Can be interlocked to eliminate vibrations. Crimping connections of the 5-pole series also suitable for use in equipm. subject to major vibrations.

**Protection class DIN 40 050, IP 54** Splash-proof.

**Cable connector with internal strain relief in accordance with VDE regulations.**

STAS 2/STAK 2 without strain relief.

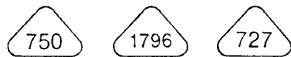
**SEV approval**

The connectors are cleared for general sale in Switzerland by the Material Test Institution of the Swiss Electrical Engineering Association (SEV) as specified in test reports.

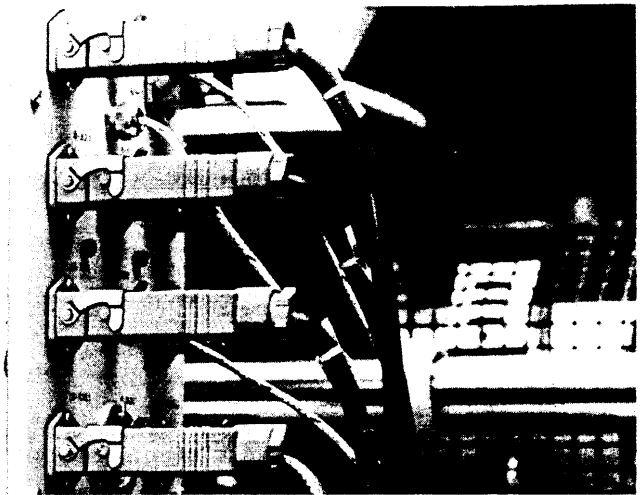


**VDE expertise**

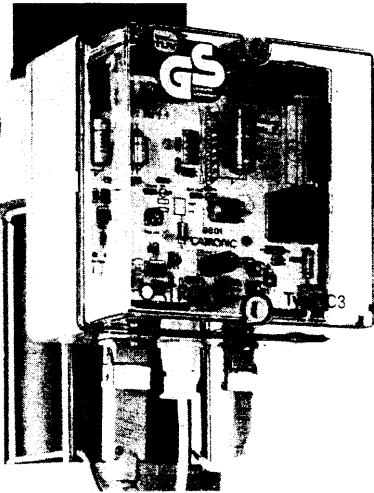
VDE expertises with process inspection have been issued for these connectors. Their design, terminals and materials comply with the regulations pursuant to VDE 0660. The creepage distances and clearances satisfy the requirements as per VDE 0110 for the insulation groups and reference voltages.



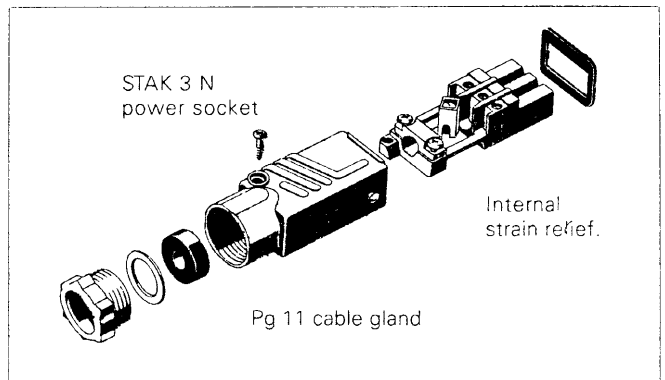
According to DIN VDE 0627, **connectors** are devices which must not be plugged or unplugged when used for their intended purpose (when conducting electricity). The standard VDE regulations DIN VDE 0100 T 410 and DIN VDE 0113 T1 (EN 60 204 T1) must be complied with during service.



*Control unit of an injection molding machine*



*Water processing unit*



**Application examples**

- Small drives (Venetian blinds, tube and servo drives...)
- Power feeders in lighting systems
- Power supply with more stringent requirements (Technical Control Boards-(TÜV), such as for electrical medical equipment, measuring equipment, etc.

- Power and control lead connections to appliances, machinery, plant.
- Plug connections to equipment subject to vibrations (ST series, 5-pole)

**We will gladly advise**

if you have any questions concerning the possible applications, technical data or special designs.



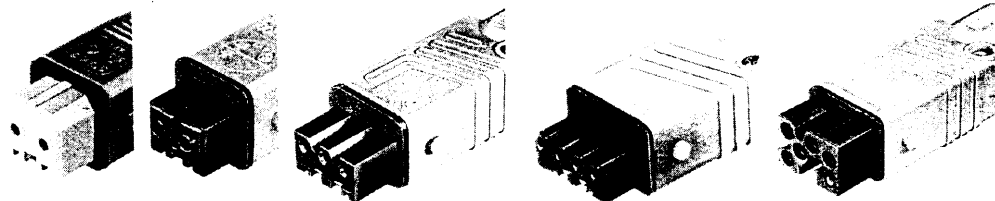
ST series

2 pole + ⊕

3 pole + ⊕

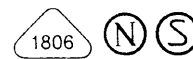
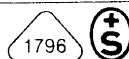
4 pole + ⊕

5 pole + ⊕



Programme summary

Power connector	STAS 2				
- with strain relief	STAS 20	STAS 200	STAS 3		STAS 5
- with moulded-on lead			STAS 3 K		
- with moulded-on lead and safety bracket				STAS 4 K 075 SI	
Cable socket	STAK 2				
- with strain relief	STAK 20	STAK 200	STAK 3	STAK 4	STAK 5
- with moulded-on lead			STAK 3 K		
Panel-mounted plug	STASEI 2	STASEI 200	STASEI 3		STASEI 5
Surface-mounted plug	STASAP 2	STASAP 200	STASAP 300		STASAP 5
Panel-mounted socket	STAKEI 2	STAKEI 200	STAKEI 3		STAKEI 5
Surface-mounted socket	STAKAP 2	STAKAP 200	STAKAP 3		STAKAP 5
Angled connector			STAKWI 3		
Safety bracket	STASI 2	STASI 2	STASI 3		STASI 3



The connectors in these series cannot be plugged into small appliance connectors as per DIN 49 454

Technical data

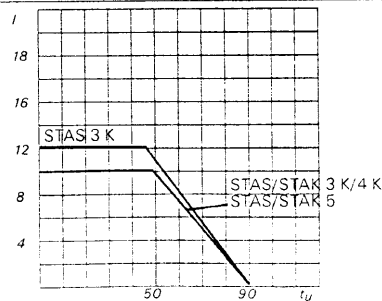
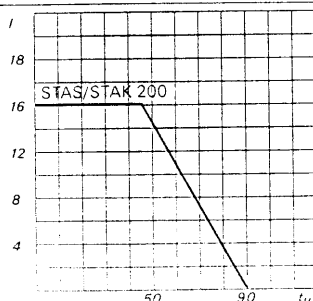
	2 + ⊕	2 + ⊕	3 + ⊕	4 + ⊕	5 + ⊕
Number of poles	2 + ⊕	2 + ⊕	3 + ⊕	4 + ⊕	5 + ⊕
Operating voltage	UC 250 V (≅)	UC 250 V (≅)	UC 250 V (≅)	UC 250 V (≅)	UC 250 V (≅)
Reference voltage DIN VDE 0110	250~/300 V-	250~/300 V-	380~/450 V-	380~/450 V-	380~/450 V-
Insulation group DIN VDE 0110	C	C	B	B	B
Continuous load current	16 A	16 A	16 A	10 A	10 A
Contact resistance	≤ 5mΩ	≤ 5mΩ	≤ 5 mΩ	≤ 10 mΩ	≤ 10 mΩ
Contact elements:	Pin and spring socket	Pin and spring socket	Pin and spring socket	Pin and spring socket	Pin and spring socket
Pin diameter	2 mm	2 mm	2 mm	1,6 mm	1,6 mm
Contact material/ Surface	Cu Zn/ gal Ni 2 Sn 4	Cu Zn/ gal Ni 2 Sn 4	Cu Zn/ gal Ni 2 Sn 4	Cu Zn silver plated	Cu Zn silver plated
Type of connection	screw/ solder	screw	screw	crimp	crimp
Maximum cross-section	1 mm <sup>2</sup>	1 mm <sup>2</sup>	1.5 mm <sup>2</sup>	1.5 mm <sup>2</sup>	1.5 mm <sup>2</sup>
Outer lead diameter	4 - 6.5 mm	4 - 6.5 mm	6 - 10 mm	6 - 10 mm	6 - 10 mm
Cable gland	Pg 7	Pg 7	Pg 11	Pg 11	Pg 11
Material/ fire properties	Contact bearer PA66 - GF25/UL94 - V1 Casing PA6 - GF30/UL94 - HB	Contact bearer PA66 - GF25/UL94 - V1 Casing PA6 - GF30/UL94 - HB	Contact bearer PA66 - GF25/UL94 - V1 Casing PA6 - GF30/UL94 - HB	Contact bearer PA66 - GF25/UL94 - V1 Casing PA6 - GF30/UL94 - HB	Contact bearer PA66 - GF25/UL94 - V1 Casing PA6 - GF30/UL94 - HB
Protection class to DIN 40 050	IP 54	IP 54	IP 54	IP 54	IP 54
Ambient temperature t <sub>u</sub>	-30 ... 90 °C	-30 ... 90 °C	-30 ... 90 °C	-30 ... 90 °C	-30 ... 90 °C

Derating curve

(Current carrying capacity)

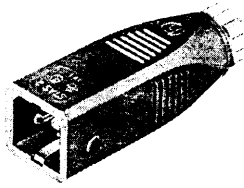
I = continuous load current for one pair of contacts in A

t<sub>u</sub> = ambient temperature in °C

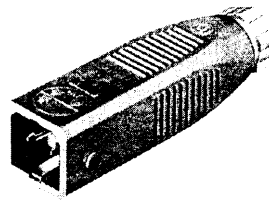


2 pole + ⊕  
Protection class IP 54

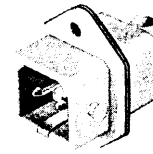
STAS 2



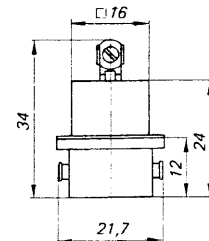
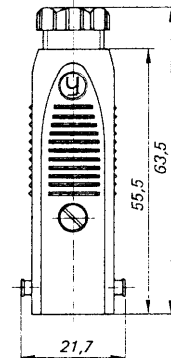
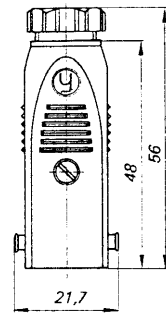
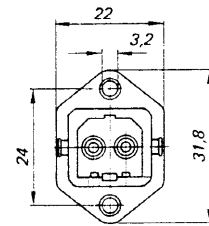
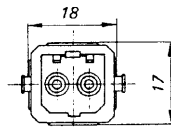
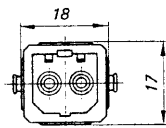
STAS 20



STASEI 2



Electrical data, refer to page 9



Sectional view,  
refer to page 22

Technical data

Design/ Description	Cable connector <b>without strain relief</b>	Cable connector <b>with strain relief</b>	Panel-mounted connector
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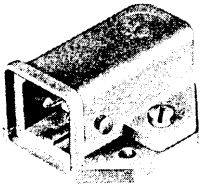
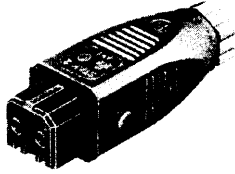
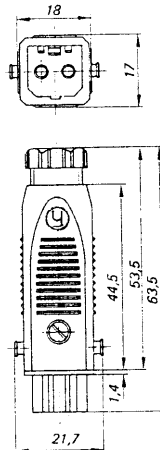
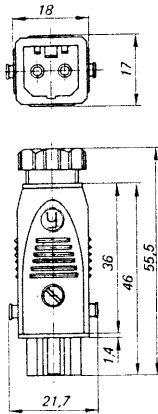
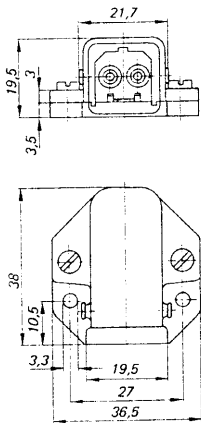
Number of poles	2 + ⊕	2 + ⊕	2 + ⊕
Type of connection	screw	screw	screw
Scope of supply	1 cable connector, pre-assembled	1 cable connector, pre-assembled	1 panel-mounted connector with gasket, pre-assembled
Colour of casing	grey	grey	grey
Can be plugged into	STAK 2, STAK 20, STAKEI 2, STAKAP 2	STAK 2, STAK 20, STAKEI 2, STAKAP 2	STAK 2, STAK 20, STAKEI 2, STAKAP 2

Order data

Type	<b>STAS 2</b>	<b>STAS 20</b>	<b>STASEI 2</b>
Order no.	<b>930 620-106</b>	<b>931 265-106</b>	<b>930 622-106</b>
Quantity boxed	100 each	100 each	100 each

Accessories - must be ordered separately

	Page	Type	Order no.	Type	Order no.	Type	Order no.
Safety bracket	14	STASI 2	732 044-000	STASI 2	732 044-000	STASI 2	732 044-000

**STASAP 2**

**STAK 2**

**STAK 20**


Sectional view,  
refer to page 22

**Technical data**

Surface-mounted connector with cast baseplate for installation on flat surfaces. An electrical connection must be established between the baseplate and the equipment if a protective earth conductor is required. The connector must be additionally sealed after installation in order to achieve protection class IP 54.

Cable socket  
**without strain relief**

Cable socket  
**with strain relief**

2 + ⊕

2 + ⊕

2 + ⊕

screw

screw

screw

1 surface-mounted connector,  
pre-assembled

1 cable socket, pre-assembled

1 cable socket, pre-assembled

grey

grey

grey

STAK 2, STAK 20, STAKEI 2

STAS 2, STAS 20, STASEI 2,  
STASAP 2

STAS 2, STAS 20, STASEI 2,  
STASAP 2

**Order data**

**STASAP 2**

**STAK 2**

**STAK 20**

**930 822-106**

**930 621-106**

**931 264-106**

100 each

100 each

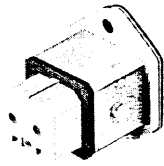
100 each

**Accessories must be ordered separately**

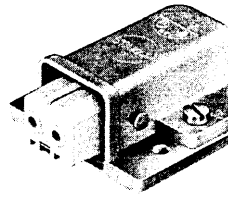
Type	Order no.	Type	Order no.	Type	Order no.
STASI 2	732 044-000	STASI 2	732 044-000	STASI 2	732 044-000

2 pole + E  
Protection class IP 54

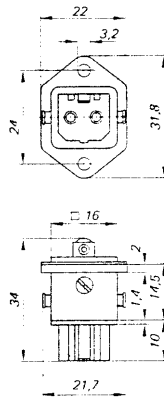
STAKEI 2



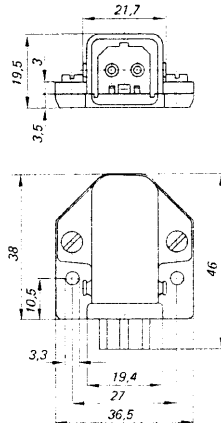
STAKAP 2



Electrical data, refer to page 9



Sectional view,  
refer to page 22



Sectional view,  
refer to page 22

**Technical data**

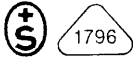
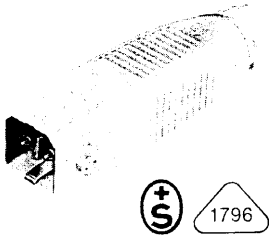
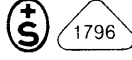
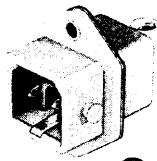
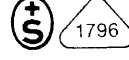
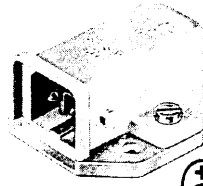
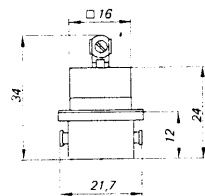
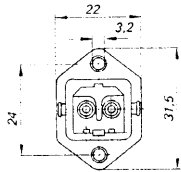
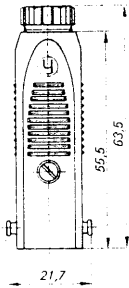
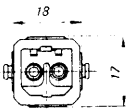
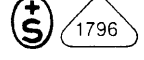
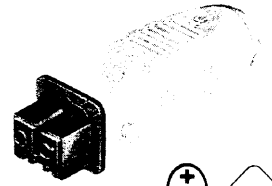
Design/ Description	Panel-mounted socket	Surface-mounted socket with cast baseplate for installation on flat surfaces. An electrical connection must be established between the baseplate and the equipment if a protective earth conductor is required. The connector must be additionally sealed after installation in order to achieve protection class IP 54.
Number of poles	2 + E	2 + E
Type of connection	screw	screw
Scope of supply	1 panel-mounted socket, pre-assembled	1 surface-mounted socket, pre-assembled
Colour of casing	grey	grey
Can be plugged into	STAS 2, STAS 20, STASEI 2, STASAP 2	STAS 2, STAS 20, STASEI 2

**Order data**

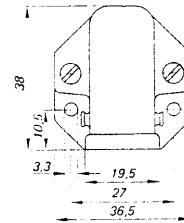
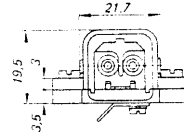
Type	STAKEI 2	STAKAP 2
Order no.	930 647-106	931 329-106
Quantity boxed	100 each	100 each

**Accessories – must be ordered separately**

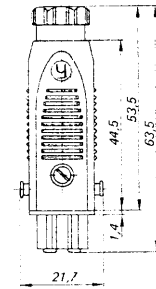
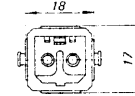
	Page	Type	Order no.	Type	Order no.
Safety bracket	14	STASI 2	732 044-000	STASI 2	732 044-000

**STAS 200**

**STASEI 200**

**STASAP 200**

**STAK 200**


Sectional view,  
refer to page 22



Sectional view,  
refer to page 22


**Technical data**

Cable connector  
with strain relief

Panel-mounted connector

Surface-mounted connector  
with cast baseplate for  
installation on flat surfaces. The  
protective earth conductor is  
connected to the soldering lug  
on the underside of the  
installation plate. The connector  
must additionally be sealed after  
installation in order to achieve  
protection class IP 54.

Cable socket  
with strain relief

2 + ⊕	2 + ⊕	2 + ⊕	2 + ⊕
screw	screw	screw/solder	screw
1 cable connector, pre-assembled	1 panel-mounted connector, pre-assembled	1 surface-mounted connector, pre-assembled	1 cable socket, pre-assembled
grey	grey	grey	grey
STAK 200, STAKEI 200, STAKAP 200	STAK 200, STAKEI 200, STAKAP 200	STAK 200, STAKEI 200	STAS 200, STASEI 200, STASAP 200

**Order data**

<b>STAS 200</b>	<b>STASEI 200</b>	<b>STASAP 200</b>	<b>STAK 200</b>
<b>932 038-106</b>	<b>932 048-106</b>	<b>932 046-106</b>	<b>932 037-106</b>
100 each	100 each	100 each	100 each

**Accessories – must be ordered separately**

Type	Order no.	Type	Order no.	Type	Order no.	Type	Order no.
STASI 2	732 044-000	STASI 2	732 044-000	STASI 2	732 044-000	STASI 2	732 044-000

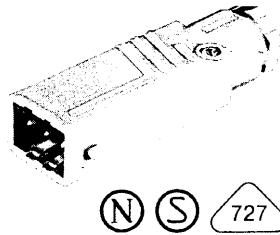
3 pole +  $\ominus$   
Protection class IP 54



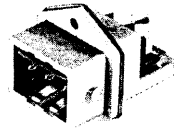
VDE expertise  
with process  
inspection

Electrical data, refer to page 9

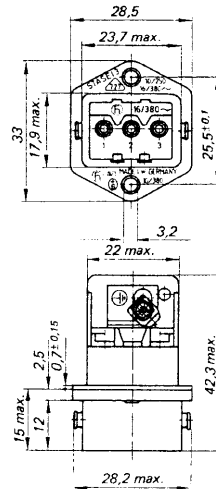
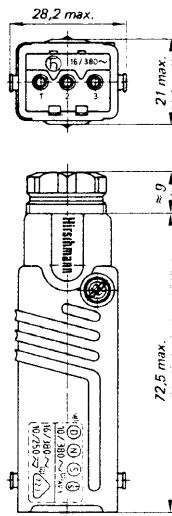
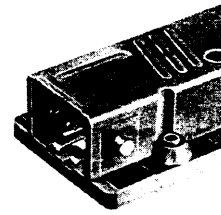
STAS 3



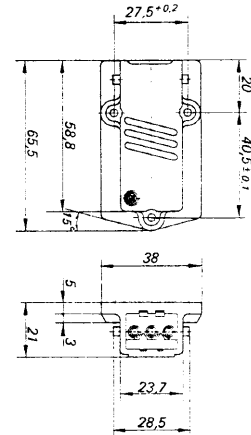
STASEI 3



STASAP 3



Sectional view,  
refer to page 22



Sectional view,  
refer to page 22

**Technical data**

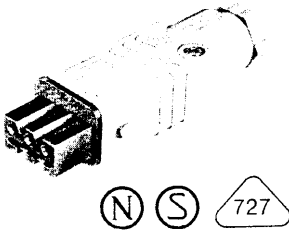
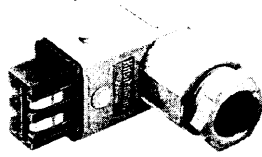
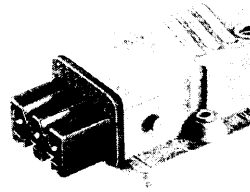
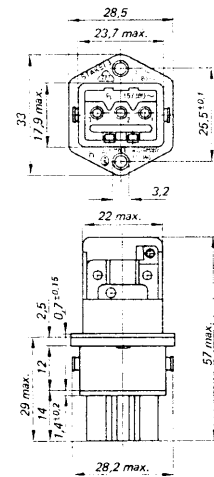
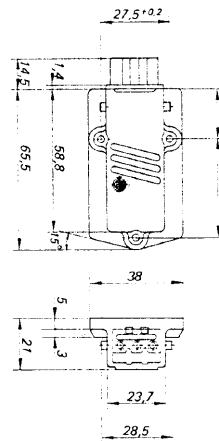
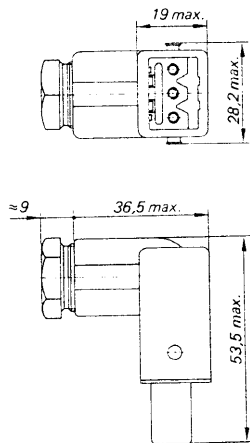
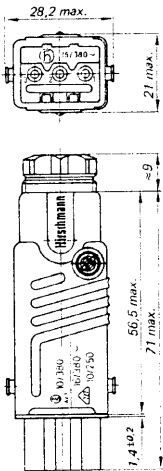
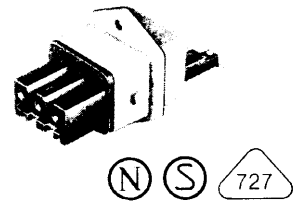
Design/ Description	Cable connector with strain relief	Panel-mounted connector	Surface-mounted connector
Number of poles	3 + $\ominus$	3 + $\ominus$	3 + $\ominus$
Type of connection	screw	screw	screw
Scope of supply	1 cable connector, pre-assembled	1 panel-mounted connector, pre-assembled, 1 gasket	1 surface-mounted connector, pre-assembled, 1 gasket
Colour of casing	grey	grey	grey
Can be plugged into	STAK 3, STAK 3 K, STAKEI 3, STAKAP 3, STAKWI 3	STAK 3, STAK 3 K, STAKEI 3, STAKAP 3, STAKWI 3	STAK 3, STAKEI 3, STAKWI 3, STAK 3 K

**Order data**

Type	STAS 3	STASEI 3	STASAP 3
Order no.	932 143-106	932 145-106	932 514-106
Quantity boxed	100 each	100 each	100 each

**Accessories – must be ordered separately**

	Page	Type	Order no.	Type	Order no.	Type	Order no.
Safety bracket	18	STASI 3	732 045-001	STASI 3	732 045-001	STASI 3	732 045-001

**STAK 3**

**STAKWI 3**

**STAKAP 3**

**STAKEI 3**


Sectional view,  
refer to page 22

Sectional view,  
refer to page 22

**Technical data**

Cable socket with strain relief	Cable socket, angled	Surface-mounted socket	Panel-mounted socket
3 +	3 +	3 +	3 +
screw	screw	screw	screw
1 cable socket, pre-assembled	1 cable socket, pre-assembled	1 surface-mounted socket, pre-assembled, 1 gasket	1 panel-mounted socket, pre-assembled, 1 gasket
grey	grey	grey	grey
STAS 3, STAS 3 K, STASEI 3, STASAP 3 et STASEI 3/2 SF..	STAS 3, STAS 3 K, STASEI 3, STASAP 3 et STASEI 3/2 SF..	STAS 3, STAS 3 K, STASEI 3, STASAP 3 et STASEI 3/2 SF..	STAS 3, STAS 3 K, STASEI 3, STASAP 3 et STASEI 3/2 SF..

**Order data**

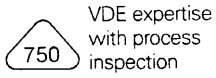
STAK 3	STAKWI 3	STAKAP 3	STAKEI 3
932 140-106	932 413-106	932 513-106	932 142-106
100 each	100 each	100 each	100 each

**Accessories — must be ordered separately**

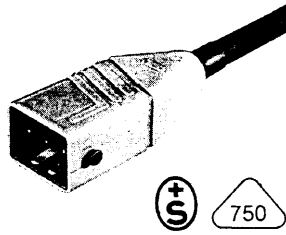
Type	Order no.	Type	Order no.	Type	Order no.	Type	Order no.
STASI 3	732 045-001	STASI 3	732 045-001	STASI 3	732 045-001	STASI 3	732 045-001



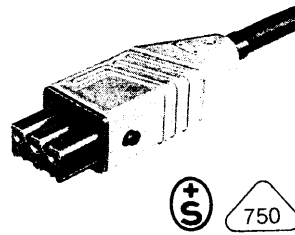
**3 pole + ⊕**  
 Protection class IP 54



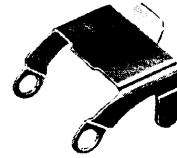
**STAS 3 K**



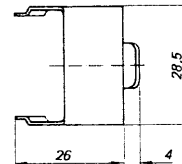
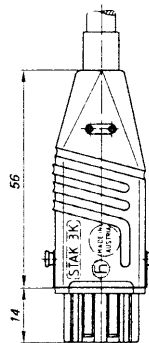
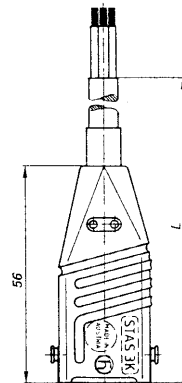
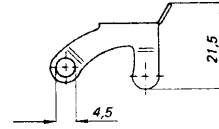
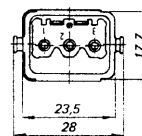
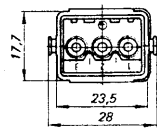
**STAK 3 K**



**STASI 3**



Electrical data, refer to page 9



**Technical data**

Design/ Description	Cable connector with moulded-on cable. VDE expertise with cable A 05 RN-F 4 G 0.75 (custom design on request)	Cable socket with moulded-on cable. VDE expertise with cable A 05 RN-F 4 G 0.75 (custom design on request)	Safety bracket, nickel-plated brass
Number of poles	3 + ⊕	3 + ⊕	
Type of connection	Wire ends stripped, tin-plated	Wire ends stripped, tin-plated	
Scope of supply	1 cable connector with moulded-on cable	1 cable socket with moulded-on cable	1 safety bracket
Colour of casing	grey/black	grey/black	nickel-plated
Can be plugged into	STAK 3, STAKEI 3, STAKAP 3, STAKWI 3	STAS 3, STASEI 3, STASAP 3	All 3 + ⊕ and 5 + ⊕-pole connectors in series ST
	Please specify the required cable cross-section and length in your order!	Please specify the required cable cross-section and length in your order!	

**Order data**

Type	STAS 3 K	STAK 3 K	STASI 3
Order no.	931 299-...	932 187-...	732 045-001
Quantity boxed	Minimum quantity: 500	Minimum quantity: 500	100 each

**Accessories must be ordered separately**

	Page	Type	Order no.	Type	Order no.
Safety bracket	18	STASI 3	732 045-001	STASI 3	732 045-001

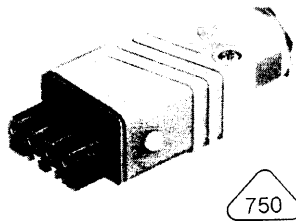
**4 pole + Ⓢ**  
Protection class IP 54



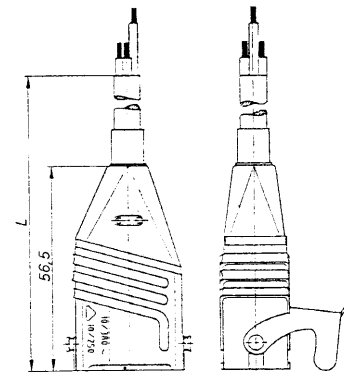
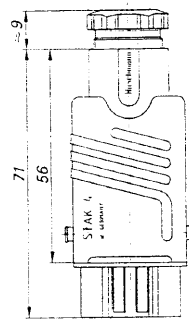
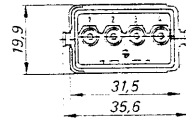
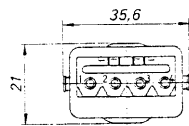
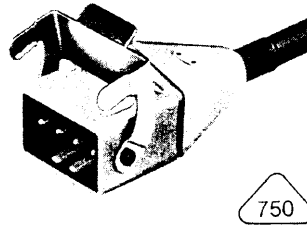
VDE expertise  
with process  
inspection

Electrical data, refer to page 9

**STAK 4**



**STAS 4K 075 SI**



Sectional view,  
refer to page 22

**Technical data**

Design/ Description	Cable socket <b>with strain relief</b>	Cable socket with pre-assembled safety bracket STASI 4 and moulded- on cable. VDE expertise with cable A 05 RN-F 5 G 0.75
Number of poles	4 + Ⓢ	4 + Ⓢ
Type of connection	screw	Wire ends stripped, tin-plated
Scope of supply	1 cable socket, pre-assembled	1 cable socket + moulded-on cable and pre-assembled safety bracket
Colour of casing	grey	grey/black
Can be plugged into	STAS 4K 075 SI	STAK 4

Please specify the required  
cable cross-section and length  
in your order!

**Order data**

Type	<b>STAK 4</b>	<b>STAS 4K 075 SI</b>
Order no.	<b>932 533-106</b>	<b>932 578-001 (L = 800)</b>
Quantity boxed	100 each	100 each

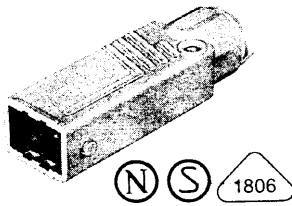
**Accessories must be ordered separately**

5 pole + ⊕  
Protection class IP 54

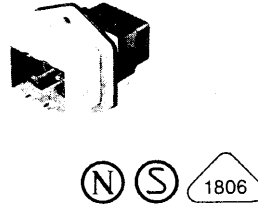
1806 VDE expertise  
with process  
inspection

Electrical data, refer to page 9

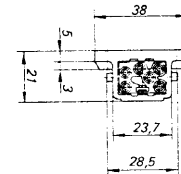
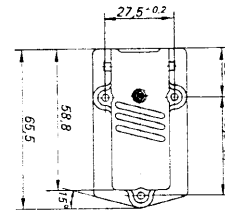
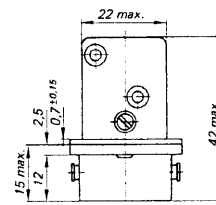
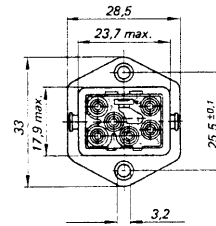
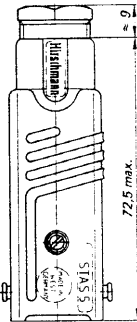
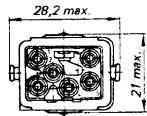
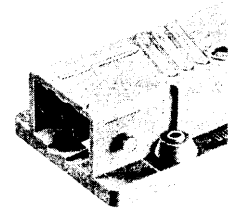
STAS 5



STASEI 5



STASAP 5



Sectional view,  
refer to page 22

### Technical data

Design/ Description	Cable connector with strain relief	Panel-mounted connector	Surface-mounted connector
Number of poles	5 + ⊕	5 + ⊕	5 + ⊕
Type of connection	crimp	crimp	crimp
Scope of supply	1 cable connector, not assembled, 6 pin contacts RSC 162, in polythene bag	1 panel-mounted conn., not assembled, 6 pin contacts RSC 162, 1 gasket in polythene bag	1 surface-mounted connector, not assembled, 6 pin contacts RSC 162, in polythene bag
Colour of casing	grey	grey	grey
Can be plugged into	STAK 5, STAKEI 5, STAKAP 5	STAK 5, STAKEI 5, STAKAP 5	STAK 5

### Order data

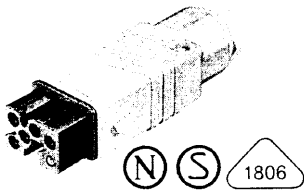
Type	STAS 5	STASEI 5	STASAP 5
Order no.	931 692-106	931 697-106	932 512-106
Quantity boxed	100 each	100 each	100 each

### Accessories – must be ordered separately

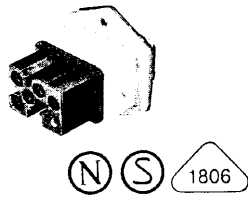
	Page	Type	Order no.	Type	Order no.	Type	Order no.
Safety bracket	21	STASI 3	732 045-001	STASI 3	732 045-001	STASI 3	732 045-001



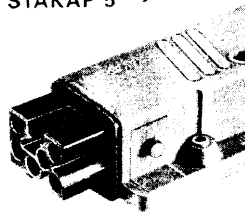
**STAK 5**



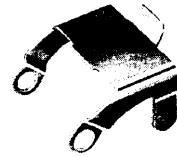
**STAKEI 5**



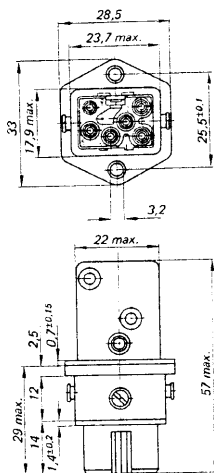
**STAKAP 5**



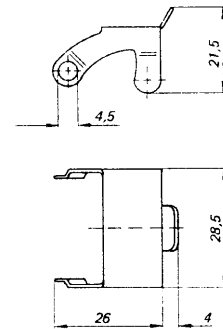
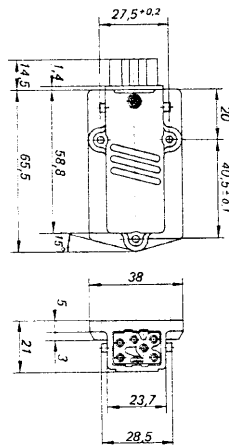
**STASI 3**



Sectional view, refer to page 22



Sectional view, refer to page 22



**Technical data**

Cable socket with strain relief

Panel-mounted socket

Surface-mounted socket

Safety bracket, nickel-plated brass

5 + ⊕ crimp	5 + ⊕ crimp	5 + ⊕ crimp	1 safety bracket
1 cable socket, not assembled, 6 socket contacts RBC 162, in polythene bag	1 panel-mounted socket, not assembled, 6 socket contacts RBC 162, in polythene bag	1 surface-mounted socket, not assembled, 6 socket cont. RBC 162, 1 gasket in polythene bag	
grey	grey	grey	nickel plated
STAS 5, STASEI 5	STAS 5, STASEI 5	STAS 5	All 3 + ⊕ and 5 + ⊕-pole connectors in series ST

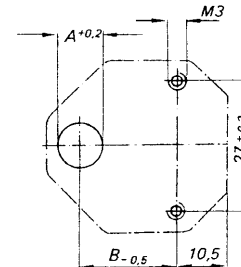
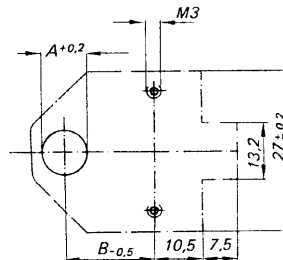
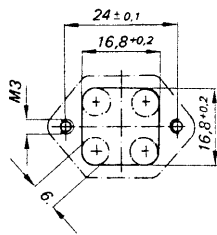
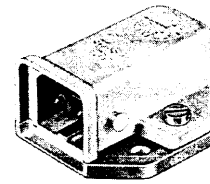
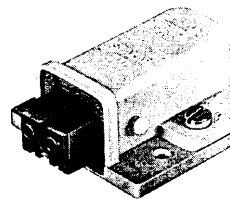
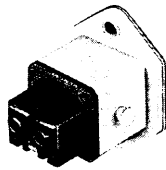
**Order data**

<b>STAK 5</b>	<b>STAKEI 5</b>	<b>STAKAP 5</b>	<b>STASI 3</b>
<b>931 691-106</b>	<b>931 694-106</b>	<b>932 511-106</b>	<b>732 045-001</b>
100 each	100 each	100 each	100 each

**Accessories must be ordered separately**

Type	Order no.	Type	Order no.	Type	Order no.
STASI 3	732 045-001	STASI 3	732 045-001	STASI 3	732 045-001

Survey  
Sectional views  
2-pole + ⊕



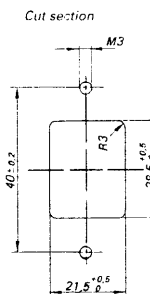
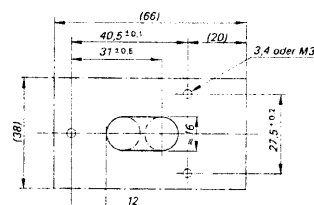
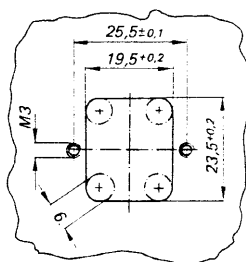
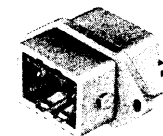
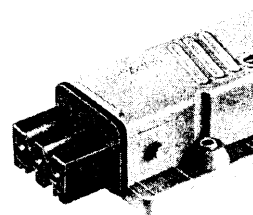
Sectional view for types

STAKEI 2  
STASEI 2  
STAKEI 200  
STASEI 200

STAKAP 2	10	20
STAKAP 200	18	16
	A	B

STASAP 2	10	20
STASAP 200	18	16
	A	B

Survey  
Sectional views  
3-pole + ⊕    5-pole + ⊕



Sectional view for types

STAKEI 3  
STAKEI 5  
STASEI 3  
STASEI 5

STASAP 3  
STAKAP 3  
STAKAP 5  
STASAP 5

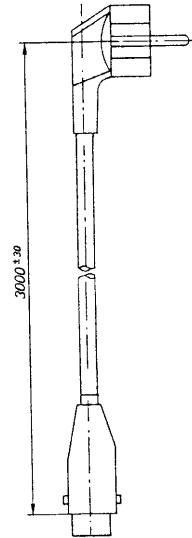
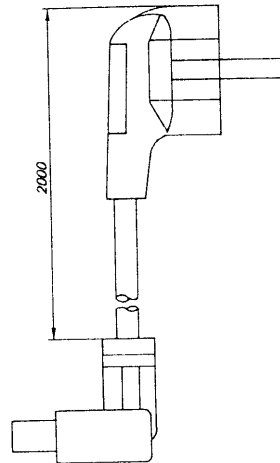
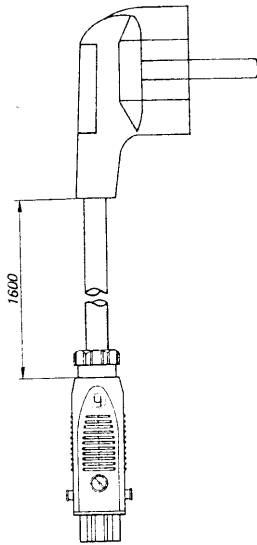
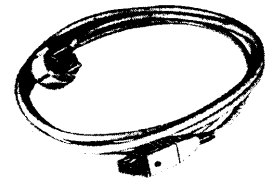
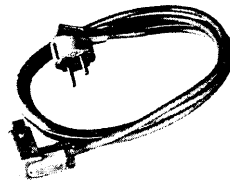
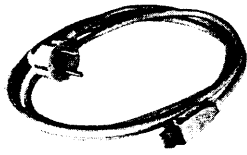
STASEI 3/2 SF 00  
STASEI 3/2 SF 05

Power leads

STAK 200 NL

STAKWI 3/2 NL

STAK 3K NL



**Technical data**

Design/ Description	Power lead with cable socket STAK 200 and connector R2 DIN 49 441	Power lead with cable socket STAKWI 3 and connector R2 DIN 49 441	Power lead with cable socket STAK 3 and connector R2 DIN 49 441
Number of poles	2 + ⊕	2 + ⊕	2 + ⊕
Pin assignment STAK/STAKWI	1, 2, ⊕	1, 3, ⊕	2, 3, ⊕
Scope of supply	1 power lead	1 power lead	1 power lead
Colour of casing	grey	grey	grey
Cable type/ cross-section	H03VV-F 3G 0.75 3 x 0,75 mm <sup>2</sup>	H03VV-F 3G 0.75 3 x 0,75 mm <sup>2</sup>	H05VV-F 3G 0.75 3 x 0,75 mm <sup>2</sup>
Can be plugged into:	STAS 200, STASEI 200, STASAP 200	STAS 3, STASEI 3, STASAP 3, STASEI 3/2 SF..	STAS 3, STASEI 3, STASAP 3

**Order data**

<b>Type</b>	<b>STAK 200 NL</b>	<b>STAKWI 3/2 NL</b>	<b>STAK 3K NL</b>
<b>Order number</b>	<b>932 337-001</b>	<b>932 515-001</b>	<b>932 372-001</b>
<b>Quantity boxed</b>	10 each	10 each	10 each