Heynen works for innovators
Standard and Econom Connecting Patch Fields

**ASF 1x32 AV Blueline**
**ASF 1x32 AV Light**
**ASF 1x24 AV 3/1 xx Econom**

32 (24) input and output channels in 19”, 1 U
For 2 and 3 pole signals up to 12 Mb/s

** with back lighted front panel

**ASF 1x32 AV Light**  with back lighted front panel

The **Blueline** connecting patch panels are designed for connecting and patching of 32 digital or analog 2 or 3-pole signal lines. The panels are equipped with a special channel shielding and are therefore suitable for all digital and analog signals up to 12 Mb/s.

Many different interconnecting modules are available and ensure a quick and cost-effective wiring. Routing and switching is made by 2 pole, 3 pole or 6 pole normalising plugs or 3 pole and 6 pole patch cords.

The **Ghielmetti self-cleaning double gold contact system** guarantees a high secure connecting system over live time.
ASF 1x32 AV 3/1 xx Blueline

delivery including all 32 normalising connectors
cable bar and designation strips.

xx: indicates the connector modules
ref. page 4

ASF 1x32 AV 3/1 SA Blueline
673.113.900.01
for connecting modules or 3-pole connectors
incl. 32 normalising plugs, white
incl. 2 designation strips
incl. 1 cable bar

ASF 1x32 AV 3/1 LA M Blueline
673.113.900.05
incl. 4 solder lug connecting modules
incl. 32 normalising plugs, white
incl. 2 designation strips
incl. 1 cable bar

ASF 1x32 AV 3/1 SA G Blueline
673.113.900.61
incl. 64 solder lug connectors GAS 323 LA C
incl. 32 normalising plugs, white
incl. 2 designation strips
incl. 1 cable bar

ASF 1 x 32 A 3/1 xx Blueline
673.113.910.01
for connecting modules or 3-pole connectors
incl. 1 cable bar
incl. 1 designation strips

ASF 1 x 32 A 3/1 LA Blueline
673.113.910.05
incl. 4 solder lug connecting modules (LA 1x8 A)
incl. 1 cable bar
incl. 1 designation strips

ASF 1 x 32 A 3/1 SA G Blueline
673.113.910.61
incl. 32 solder lug connectors GAS 323 LA C
incl. 1 cable bar
incl. 1 designation strips

ASF 1 x 32 AP 3/1 xx Blueline
673.113.950.01
for connecting modules or 3-pole connectors
incl. 1 cable bar
incl. 1 designation strips

ASF 1 x 32 AP 3/1 LA Blueline
673.113.950.05
incl. 4 solder lug connecting modules (LA 1x8 A)
incl. 1 cable bar
incl. 1 designation strips

ASF 1 x 32 AP 3/1 SA G Blueline
673.113.950.61
incl. 32 solder lug connectors GAS 323 LA C
incl. 1 cable bar
incl. 1 designation strips

ASF 2 x 32 A 3/1 xx Blueline
673.113.960.01
for connecting modules or 3-pole connectors
incl. 1 cable bar
incl. 2 designation strips

ASF 2 x 32 A 3/1 LA M Blueline
673.113.960.05
incl. 4 solder lug connecting modules (LA 1x8 A)
incl. 1 cable bar
incl. 2 designation strips

ASF 2 x 32 A 3/1 SA G Blueline
673.113.960.61
incl. 64 solder lug connectors GAS 323 LA C
incl. 1 cable bar
incl. 2 designation strips
Functional description

<table>
<thead>
<tr>
<th>Connecting Patch Panel</th>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>A access point, lp V normalizing connecting ASF 1x32 AV 315A</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3-pole connecting plug
connect 3-pole from the upper row with the line from the bottom row (i.e.: a,b,screen) or Rx,Tx,GND

3-pole connecting plug “parked”
(no connection)

3-pole connecting plug (red)
connect the 3-pole from the upper row with the line from the and prevent a double access with a patch cord in the upper row

6-pole Patch cord
connect 6-pole from the upper row with the line from the bottom row (i.e.: Tx+,Tx,-,GND,Rx+,Rx,-,GND or stereo: aL,bl,screenR, aR,br,screenL)

Interconnecting of the ASF 1x32 AV Blueline

RJ11 2x8 AV 673.130.478.00
MX 2x8 AV 673.130.474.00
WA 2x8 AV 673.130.495.00
D25 2x8 AV 673.130.522.00

LA 2x8 AV 673.130.473.00
GMX 8S 673.130.474.02 MOLEX connector set, 8 pcs

<table>
<thead>
<tr>
<th>D-Sub 25 pole, female TASCAM</th>
<th>D-Sub 25 pole, female Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Channel</td>
<td>Signal</td>
</tr>
<tr>
<td>-----------------</td>
<td>--------</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>13</td>
<td>14</td>
</tr>
<tr>
<td>15</td>
<td>16</td>
</tr>
<tr>
<td>17</td>
<td>18</td>
</tr>
<tr>
<td>19</td>
<td>20</td>
</tr>
<tr>
<td>21</td>
<td>22</td>
</tr>
<tr>
<td>23</td>
<td>24</td>
</tr>
<tr>
<td>25</td>
<td></td>
</tr>
</tbody>
</table>
**ASF 1x32 AV 3/1 SA Blueline**
plug-in facility, (without connector modules) 673.113.900.01

**ASF 1x32 AV 3/1 LAM Blueline**
solder lug modules 673.113.900.05

**ASF 1x32 AV 3/1 LAM Blueline**
RJ11 connector modules 673.113.900.21

**ASF 1x32 AV 3/1 D25Sff Blueline**
D-Sub 25-pole connector modules 673.113.900.31

**ASF 1x32 AV 3/1 SAG Blueline**
incl. 64 solder lug connectors 673.113.900.61

**ASF 1x32 AV 3/1 D25Sff Blueline**
WAGO clamp connector modules 673.113.900.91
ASF 1x32 AV 3/1 xx Light
Standard Connecting Patch Panel with integrated illumination
For the "Light"- version all connector facilities are available

ASF patch panels of the "Light" edition are equipped with a background illumination. This enables a safe operation even in a dark environment. The background illumination lights up not only all connecting points but also the designation strips so that the text can be read perfectly. The brightness may be adjusted stepwise by the turn on button. Several CSF Patch Panels may be cascaded with a jumper cable.

The technical specifications are equivalent to the ones of the respective standard types of each model. The background illumination is fed by a 12V/500mA/6W power source or by a commercial power supply adapter 230VAC/12VDC/500mA/6W. Several CSF light panels may be fed with a suitable power supply adapter.

**Inserting the label strips**
Use standard (thin) overhead transparency foil to make the label strip... Our templates, which can obtained online at [http://www.ghielmetti.ch/docs/xls/bezeichnungsstreifen_d_e.xls](http://www.ghielmetti.ch/docs/xls/bezeichnungsstreifen_d_e.xls) allows you to fill out the form, print, and cut out such strips.

**Please note how the label strip is inserted** – carefully by slightly lifting the insertion slit. The black part must be added when cutting out the strip.

**Operating instructions for the front panel lighting**
Pressure switch with signalling LED
a) Turn lighting on/off
b) Program lighting level (LED blinks)

Once the device is connected to the 12VDC power supply, the on/off switch is glowing permanently.
Turn on with automatic switch-off after 60 seconds (mode 1)

**Turn on:** push briefly for less than 1 second
The lighting turns on and switches back off again automatically after **60 seconds**.

**Turn off:** push briefly.

Turn on/off manually (mode 2)

**Turn on:** Push for more than 1 sec. but less than 5 sec.
The lighting turns on and stays on until turned off explicitly.

**Turn off:** push briefly.

Setting the lighting level (programming mode: the signal LED blinks)

**Entering programming mode:** Push the button for more than 5 sec.
Control enters programming mode: both LEDs blink alternately.
This mode allows adjusting the lighting level.

**Setting the lighting level:**
Pushing the button repeatedly increases the lighting level by one level per push.
The highest level is followed by a return to the lowest level. There are 8 levels to choose from.

If the button is not pushed again within **3 seconds**, the chosen level is saved and the lighting stays on at that level (mode 2). It will not switch off automatically.

**Turn off:** push briefly of the button.

Reprogramming between single supply & common supply

CSF Patch panels can be reprogrammed for single supply or common supply. In the common supply mode the patch panel is activated/deactivated solely through a common supply unit (GLS). Programming is made by on/off button and can be executed anytime.

Detection of programming mode

- If the panel is lighted/unlighted after short pressing of the **ON/OFF BUTTON** the unit is in the single supply mode.
- If lighting remains and cannot be switched off after short pressing of the **ON/OFF BUTTON** the unit will be in the common supply mode.

Reprogramming into the common supply mode

- Recreate initial state: Switch off the common supply unit (GLS).
- Push continuously the **ON/OFF-BUTTON** of the patch panel.
- **Switch on simultaneously** the common supply unit.
- **Keep pushed the ON/OFF-button** for more than 5 seconds until the patch panel is lighted. The unit in now in the common supply mode.

**Switch on and off is done exclusively through the GLS power module.**

The brightness can be programmed through the ON/OFF button on the patch panel (see operating instructions for the front panel lighting).
Reprogramming into the single supply mode

- Recreate initial state: Take out the AC adapter from socket.
- Push continuously the ON/OFF-BUTTON of the patch panel.
- **PLUG-IN simultaneously** the single supply into the socket.
- **Keep pushed the ON/OFF-button** for more than 5 seconds until the patch panel is lighted. The unit in now in the single supply mode.

**Switch on and off is done exclusively through the ON/OFF BUTTON on the patch panel.**

The brightness can be programmed through the ON/OFF button on the patch panel (see operating instructions for the front panel lighting).

Multiple output power module

3 special power modules are available to power multiple back lighted patch panels from a single source:

- **GLS 8 230/12** Power supply for up to 8 “Light” patch panels
- **GLS 16 230/12** Power supply for up to 16 “Light” patch panels
- **GLS 24 230/12** Power supply for up to 24 “Light” patch panels

Operating instructions

A briefly push of the ON/OFF button turns on the lighting of all „Light“ patch panels. The lighting of each panel will turn on at the level that has been individually configured for that panel.

The LEDs to the left of the ON/OFF switch show the operating mode:

- **1 min On**: LED green, all patch panels will turn off after 1 minute.
- **2 min On**: LED green, all patch panels will turn off after 2 minutes.
- **5 min On**: LED green, all patch panels will turn off after 5 minutes.
- **On**: LED yellow, all patch panels will remain turned on.
ASF 1x24 AV 3/1 xx Econom

24 input and output channels in 19", 1 U
xx: indicates the connector modules - ref. page 3

70 dB separation loss – without channel separation shields
to replace TT Jack Fields

ASF 1x24 AV 3/1 SA G Econom incl. 48 solder lug connectors and 24 normalling plugs

ASF 1x24 AV 3/1 D25Sff Econom incl. 3 Sub-D 25-pol connecting modules and 24 normalling plugs

ASF 1x24 AV 3/1 WA Econom incl. 3 WAGO connecting modules and 24 normalling plugs
Accessories

3-pole-normalising plugs

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>GVS 323 c sw</td>
<td>3-pole, black</td>
<td>673.910.079.00</td>
</tr>
<tr>
<td>GVS 323 c rt</td>
<td>3-pole, red</td>
<td>673.910.079.02</td>
</tr>
<tr>
<td>GVS 323 c gb</td>
<td>3-pole, yellow</td>
<td>673.910.079.04</td>
</tr>
<tr>
<td>GVS 323 c gn</td>
<td>3-pole, green</td>
<td>673.910.079.05</td>
</tr>
<tr>
<td>GVS 323 c bl</td>
<td>3-pole, blue</td>
<td>673.910.079.06</td>
</tr>
<tr>
<td>GVS 323 c ws</td>
<td>3-pole, white</td>
<td>673.910.079.09</td>
</tr>
</tbody>
</table>

3-pole-normalising plugs with locking function

<table>
<thead>
<tr>
<th>Model</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>GVS 323 d rt</td>
<td>673.910.302.02</td>
</tr>
<tr>
<td>GVS 323 d ws</td>
<td>673.910.302.09</td>
</tr>
</tbody>
</table>

2-pole-normalising plugs

<table>
<thead>
<tr>
<th>Model</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>GVS 322 c ws</td>
<td>673.910.313.09</td>
</tr>
<tr>
<td>GVS 322 c rt</td>
<td>673.910.313.02</td>
</tr>
</tbody>
</table>

2-pole-normalising plugs with locking function

<table>
<thead>
<tr>
<th>Model</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>GVS 322 d ws</td>
<td>673.910.302.19</td>
</tr>
<tr>
<td>GVS 322 d rt</td>
<td>673.910.302.12</td>
</tr>
</tbody>
</table>

3-pole-locking plug: avoids parallel tap of the incoming channel

**Patch Cord Connectors (G3P)**
(not recommended for CSF patch panels)

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>GKS 313 m sw</td>
<td>black</td>
<td>673.910.201.10</td>
</tr>
<tr>
<td>GKS 313 m rt</td>
<td>red</td>
<td>673.910.201.12</td>
</tr>
<tr>
<td>GKS 313 m gb</td>
<td>yellow</td>
<td>673.910.201.14</td>
</tr>
<tr>
<td>GKS 313 m gn</td>
<td>green</td>
<td>673.910.201.15</td>
</tr>
<tr>
<td>GKS 313 m bl</td>
<td>blue</td>
<td>673.910.201.16</td>
</tr>
</tbody>
</table>

**Adapter cables XLR to G3P**
(Ghielmetti 3-pole connector)

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>GXX 313/30 f</td>
<td>black, 30 cm, female</td>
<td>673.910.301.05</td>
</tr>
<tr>
<td>GXX 313/30 m</td>
<td>black, 30 cm, male</td>
<td>673.910.300.05</td>
</tr>
<tr>
<td>GXX 313/60 f</td>
<td>black, 60 cm, female</td>
<td>673.910.301.02</td>
</tr>
<tr>
<td>GXX 313/60 m</td>
<td>black, 60 cm, male</td>
<td>673.910.300.02</td>
</tr>
<tr>
<td>GXX 313/90 f</td>
<td>black, 90 cm, female</td>
<td>673.910.301.01</td>
</tr>
<tr>
<td>GXX 313/90 m</td>
<td>black, 90 cm, male</td>
<td>673.910.300.01</td>
</tr>
<tr>
<td>GXX 313/120 f</td>
<td>black, 120 cm, female</td>
<td>673.910.301.00</td>
</tr>
<tr>
<td>GXX 313/120 m</td>
<td>black, 120 cm, male</td>
<td>673.910.300.00</td>
</tr>
<tr>
<td>GXX 313/180 f</td>
<td>black, 180 cm, female</td>
<td>673.910.301.03</td>
</tr>
<tr>
<td>GXX 313/180 m</td>
<td>black, 180 cm, male</td>
<td>673.910.300.03</td>
</tr>
<tr>
<td>GXX 313/250 f</td>
<td>black, 250 cm, female</td>
<td>673.910.301.04</td>
</tr>
<tr>
<td>GXX 313/250 m</td>
<td>black, 250 cm, male</td>
<td>673.910.300.04</td>
</tr>
</tbody>
</table>

**Patch cord with colour marks:**

- **673.910.269.06** blue, 60 cm
- **673.910.269.02** red, 60 cm
- **673.910.269.05** green, 60 cm

- **673.910.269.20** black, 30 cm
- **673.910.269.00** black, 60 cm
- **673.910.269.10** black, 90 cm
- **673.910.269.30** black, 120 cm
- **673.910.269.40** black, 180 cm
- **673.910.269.50** black, 250 cm

---

GHIEMMETTI AG, Industriestrasse 6, CH-4562 Biberist, Schweiz - www.ghielmetti.ch - info@ghielmetti.ch - Tel.: +41 32 671 13 13 - Fax.: +41 32 671 13 14
## Technical Data

### Electrical data (transmission)

<table>
<thead>
<tr>
<th></th>
<th>Measuring range</th>
<th>GKV series 300</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signal level</td>
<td>0 Hz &lt; f &lt; 5 MHz</td>
<td>-64 dB to + 36 dB</td>
<td></td>
</tr>
<tr>
<td>Cross talk</td>
<td>(30 Hz &lt; f &lt; 30 kHz)</td>
<td>&gt; 90 dB</td>
<td></td>
</tr>
<tr>
<td>Switch off attenuation</td>
<td>(30 Hz &lt; f &lt; 30 kHz)</td>
<td>&gt; 90 dB</td>
<td></td>
</tr>
<tr>
<td>Insertion loss</td>
<td>(30 Hz &lt; f &lt; 30 kHz)</td>
<td>&lt; 0.61 dB</td>
<td></td>
</tr>
<tr>
<td>Symmetry loss</td>
<td>(30 Hz &lt; f &lt; 30 kHz)</td>
<td>&gt; 50 dB</td>
<td></td>
</tr>
<tr>
<td>Operation voltage*</td>
<td>max</td>
<td>50 VDC</td>
<td></td>
</tr>
<tr>
<td>Test voltage</td>
<td></td>
<td>1000 V</td>
<td></td>
</tr>
<tr>
<td>Line distances (pitch)</td>
<td></td>
<td>3 mm</td>
<td></td>
</tr>
<tr>
<td>Therm. rated current**</td>
<td></td>
<td>6 A</td>
<td></td>
</tr>
<tr>
<td>Contact resistance (bus bar – plug – bus bar)</td>
<td>0.8 – 1 m Ω</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resistance of a pair of contact bands per line</td>
<td>0.4 m Ω</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insulation resistance of parallel pair of contact bands</td>
<td>per 10 insertion points with 80 - 95% humidity</td>
<td>5 x 10^3 M Ω</td>
<td></td>
</tr>
<tr>
<td>Capacity of 2 parallel pairs of bands</td>
<td>distance: 10 insertion points</td>
<td>~ 5 pF</td>
<td></td>
</tr>
<tr>
<td>Capacity of 2 crossed pairs of bands</td>
<td>distance: 10 insertion points</td>
<td>~ 3.1 pF</td>
<td></td>
</tr>
<tr>
<td>(IEC / EMC / ESD)</td>
<td></td>
<td>yes</td>
<td></td>
</tr>
</tbody>
</table>

### Mechanical data (contact material)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Insulation material</td>
<td>Polycarbonate</td>
</tr>
<tr>
<td>Air and surface leakage paths</td>
<td>min. 1 mm</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>-20 - +50°C</td>
</tr>
<tr>
<td>Humidity (no condensation)</td>
<td>95%</td>
</tr>
<tr>
<td>Bus bars</td>
<td>Cu Be</td>
</tr>
<tr>
<td>Plugs</td>
<td>Material: brass</td>
</tr>
<tr>
<td>Inserting and extracting forces</td>
<td></td>
</tr>
<tr>
<td>2-pole</td>
<td>4.5 N</td>
</tr>
<tr>
<td>3-pole</td>
<td>7 N</td>
</tr>
<tr>
<td>4-pole</td>
<td>11 N</td>
</tr>
<tr>
<td>6-pole</td>
<td>20 N</td>
</tr>
<tr>
<td>8-pole</td>
<td>24 N</td>
</tr>
<tr>
<td>2-pole/4-layers</td>
<td>15 N</td>
</tr>
<tr>
<td>Contact force</td>
<td>~ 2 N</td>
</tr>
<tr>
<td>Number of insertions without loss of contact force</td>
<td>&gt;10,000</td>
</tr>
<tr>
<td>Pin diameter</td>
<td>Ø 1.6 mm</td>
</tr>
</tbody>
</table>
Switch off attenuation
10 Hz < f < 5 MHz

Cross talk attenuation
10 Hz < f < 5 MHz

Ausschaltdämpfung
10 kHz - 5 MHz

Nebensprechdämpfung
10 kHz - 5 MHz
Audio @ Video @ Data Communications

Europe & Africa

Ghielmetti in Austria
Ing. Johann Götz
Tel.: +43 699 1509 22 60
Fax: +43 699 1514 29 51
johann.gotz@ghielmetti.at
www.ghielmetti.ch

Ghielmetti in Belgium / Luxembourg
Wenglor and Lambda Bvba Sprl
Tel.: +32 2 412 47 90
Fax: +32 2 412 47 99
info@wenglor.com
www.wenglor.com

Ghielmetti in Czech Republic
MediaTech spol. s r.o.
Tel.: +420 469 631 555
Fax: +420 469 631 888
sales@mediatech.cz
www.mediatech.cz

Ghielmetti in Denmark
Kinoxov A/S
Tel.: +45 70 22 38 11
Fax: +45 44 53 06 06
is@kinoxov.dk
www.kinoxov.com

Ghielmetti in France
AUVIDIS
Tel.: +33 1 43 59 99 04
Fax: +33 1 43 59 10 55
E-mail: info@auvidis.fr
www.auvidis.fr

Ghielmetti in Germany
Ghielmetti, Berlin
Tel. +49 30 71 60 746
Fax +49 30 71 60 549
brodtzik@ghielmetti.ch
www.ghielmetti.ch

Ghielmetti in Great Britain
Argosy
Tel.: +44 1844 202 101
Fax: +44 1844 202 025
sales@argosycable.com
www.argosycable.com

Ghielmetti in Greece
AUDIGYS
Tel.: +30 210 764 94 35
Fax: +30 210 764 94 34
info@audigys.gr
www.audigys.gr

Ghielmetti in Holland
Ceevan Techniek
Tel. +31 413 25 60 60
Fax: +31 413 25 51 60
www.ceevan.nl

Ghielmetti in Italy
CPE Italia spa
Tel.: +39 02 39 09 61
Fax: +39 02 35 70 765
sales@cpeliaitalia.it
www.cpeliaitalia-group.com

Ghielmetti in Portugal
Pinto Basto
Tel.: +351 21 397 20 41
Fax: +351 21 397 29 95
Moura.Lambardo@pintobasto.pt
www.pintobasto.pt

Ghielmetti in Russia
Binar ProSound + Light
Tel.: +7 495 739 73 33
Fax: +7 495 257 58 97
binar@binar.ru
www.binars.ru

Ghielmetti in Slovenia
Albin Promotion
Tel.: +386 2 761 97 00
Fax: +386 2 761 97 29
info@albin-promotion.si

Ghielmetti in Spain
Promovisa S.A.
Tel.: +34 914 562 090
Fax: +34 915 332 166
info@promovisa.es
www.promovisa.es

Ghielmetti in Sweden
Slenskakonturn AB
Tel.: +46 6 556 765 50
Fax: +46 6 556 765 55
www.slenskakonturn.se

Ghielmetti in Sweden
Seimar Mediatechnik AB
Tel.: +46 6 556 765 50
Fax: +46 6 556 765 55
www.seimar.se

Middle East

Ghielmetti in Israel
Broadcast Design - Micha Blum
Tel.: +972 2 666 02 61
Fax: +972 2 677 89 41
micha@broadcastdesign.co.il
www.broadcastdesign.co.il

Ghielmetti in Iran
Bsat Broadcasting Systems Co.
Tel.: +9821 677 87 11
Fax: +9821 677 87 11

Asia

Ghielmetti in China/Hong Kong
Deisco Wire & Cable (Asia) Ltd.
Tel.: +852 2 9799 339
Fax: +852 2 9799 333
sales@deisco.com
www.deisco.com

Ghielmetti in India
AVP Distributors Pvt Ltd.
Tel.: +91 22 2405 7187
Fax: +91 22 2405 41 90
info@avpindia.com
www.avpindia.com

Ghielmetti in Korea
Ko Hoong Multimedia Co., Ltd.
Tel.: +82 2 474 06 08
Fax: +82 2 474 06 08
kmsong@chol.com
www.kohoong.com

Ghielmetti in Singapore
Broadcast Professional Pte. Ltd.
Tel.: +65 622 55 00
Fax: +65 622 55 00
gary_too@broadcastpro.com.sg
www.broadcastpro.com.sg
Heynen werkt voor vernieuwers
Hierbij een document van Heynen. Deze producten worden door ons exclusief vertegenwoordigd in de Benelux. Voor een demo of offerte kan u rechtstreeks contact opnemen met onze account managers.

Heynen travaille pour des innovateurs

Heynen works for Innovators
Here is a document from Heynen. We represent these products exclusively for the Benelux. Please contact our account managers for a quotation or demonstration.

Heynen Leistung für Neuerer

heynen@heynen.com • www.heynen.com • LinkedIn