PROFILE

Uniquely clean, quiet, and smooth

Key Features:

• Vibration-free operation - No polygon effect = Low oscillation operation
• No links, no wear = Suitable for clean room environments
• Extremely durable: > 25 million cycles of operation = Incredibly long service life
• Special design allows for additional 3D and torsional movement
• Less stress and wear on cables since there is no polygon effect
• Various combination options from individual modules to multi-module systems
• Easy “press-in” cable and hose installation
• Select from standard modules for round cables and special modules optimized for flat cables
How to calculate the length of PROFILE required:

For the most economical use of PROFILE, the fixed (non-moving) connection point should be mounted at the center of the total travel*, then...

The required length \( L_R \) = \( ((\text{Mounting Height} \div 2) \times 3.14) + \left(\text{the total machine travel} \div 2\right) + 60 \text{ mm} \)**

* If the fixed connection point must be moved away from the center point, add the distance that the fixed point is off-center to the overall length determined by the above equation to determine the length of PROFILE required.

** Then round up to the next pitch (multiples of 20 mm)
PROFILE System Typical Installation Options

**Horizontal**
Single or Side by Side

**Nested Horizontal**
Single or Side by Side

**Opposed**
Single or Side by Side

**Multi-Axis**
Single or Side by Side

**Vertical Loop Up or Loop Down**
Single or Side by Side

---

**Side by Side Assembly**

PROFILE standard modules can be combined with one another as required to increase the overall system width and number of cavities. For this purpose, the module side walls can be joined by connecting rivets.

Nylon rivets can be used to easily connect standard PROFILE module sections for side by side operation (P/N EN-0100 for 100 rivets)

Design Recommendation: 1 cable per cavity or a maximum of 2 stacked one above the other

---

### PROFILE Series

<table>
<thead>
<tr>
<th>Module</th>
<th>Recommended Cable Type</th>
<th>Maximum Suggested Travel Length (Self Supporting Mode)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EM-0808</td>
<td>Round</td>
<td>59” (1500 mm)</td>
</tr>
<tr>
<td>EM-1212</td>
<td>Round</td>
<td>158” (4000 mm)</td>
</tr>
<tr>
<td>EM-1717</td>
<td>Round</td>
<td>158” (4000 mm)</td>
</tr>
<tr>
<td>EM-2222</td>
<td>Round</td>
<td>158” (4000 mm)</td>
</tr>
<tr>
<td>EM-2727</td>
<td>Round</td>
<td>158” (4000 mm)</td>
</tr>
<tr>
<td>EM-3232</td>
<td>Round</td>
<td>158” (4000 mm)</td>
</tr>
</tbody>
</table>

---

### Bend Radius (KR) Clips

The minimum bending radius (KR) of the extruded PROFILE modules is determined by their intrinsic stiffness. PROFILE standard modules can be fitted with radius clips to limit the minimum bending radius (see table below).

When used on individual modules, the radius clips are placed along the entire length of the module; in the case of multiple module combinations, radius clips are placed only on the outer modules.

<table>
<thead>
<tr>
<th>Module</th>
<th>Available Bending Radii (KR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EM-1212</td>
<td>2.95 (75) 3.94 (100) 5.91 (150) 7.87 (200) 9.84 (250)</td>
</tr>
<tr>
<td>EM-1717</td>
<td>2.95 (75) 3.94 (100) 5.91 (150) 7.87 (200) 9.84 (250)</td>
</tr>
<tr>
<td>EM-2222</td>
<td>2.95 (75) 3.94 (100) 5.91 (150) 7.87 (200) 9.84 (250)</td>
</tr>
<tr>
<td>EM-2727</td>
<td>--- 3.94 (100) 5.91 (150) 7.87 (200) 9.84 (250)</td>
</tr>
<tr>
<td>EM-3232</td>
<td>--- 3.94 (100) 5.91 (150) 7.87 (200) 9.84 (250)</td>
</tr>
</tbody>
</table>

Specifications are subject to change without notice.

Need help? 1-800-443-4216 or www.kabelschlepp.com
Mounting Options

PROFILE standard mounting brackets with integral cable strain relief are only available for the Series 1212, 1717, 2222, 2727, 3232:

High Bracket
for mounting surface on outside of radius

Low Bracket
for mounting surface on inside of radius

Note: For applications where desired and for series S45 and S67, PROFILE can be directly mounted (screwed) down onto machinery with self-tapping screws.

<table>
<thead>
<tr>
<th>Series</th>
<th>1212</th>
<th>1717</th>
<th>2222</th>
<th>2727</th>
<th>3232</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Y” Dimension</td>
<td>1.42 (36)</td>
<td>1.81 (46)</td>
<td>2.20 (56)</td>
<td>2.60 (66)</td>
<td>2.97 (75.5)</td>
</tr>
<tr>
<td>“Z” Dimension</td>
<td>0.71 (18)</td>
<td>0.79 (20)</td>
<td>1.18 (30)</td>
<td>1.58 (40)</td>
<td>1.97 (50)</td>
</tr>
</tbody>
</table>

Custom designed, Made-To-Order PROFILE types are available upon request. Please call KabelSchlepp at 1.800.443.4216 or E-MAIL us at sales@kabelschlepp.com for information.

How To Order

1-800-443-4216

Number of Systems Req. x Carrier Type x Carrier Length

Mounting Brackets

1 set of 1212 mounting brackets attached MA/Fl
### GENERAL DATA

**Standard Ideal for FLAT Cables**

<table>
<thead>
<tr>
<th>Standard</th>
<th>Minimum Mounting Height (H min)</th>
<th>Minimum Bend Radius (KR min)</th>
<th>Single Cavity Width (B_j)</th>
<th>Single Cavity Height (h_i)</th>
<th>Cavity Access Opening Width (C)</th>
<th>Overall Cross Section Height (h_G)</th>
<th>Minimum Allowable Cable Width</th>
<th>Maximum Allowable Cable Width</th>
</tr>
</thead>
<tbody>
<tr>
<td>EM-S15</td>
<td>2.80 (71)</td>
<td>0.55 (14)</td>
<td>0.59 (15)</td>
<td>0.24 (6)</td>
<td>-</td>
<td>0.69 (17.5)</td>
<td>-</td>
<td>0.55 (14)</td>
</tr>
<tr>
<td>EM-S43.20</td>
<td>7.28 (185)</td>
<td>0.55 (70)</td>
<td>1.69 (43)</td>
<td>0.79 (20)</td>
<td>1.10 (28)</td>
<td>1.89 (48)</td>
<td>1.30 (33)</td>
<td>1.65 (42)</td>
</tr>
<tr>
<td>EM-S45.20</td>
<td>7.28 (185)</td>
<td>0.55 (70)</td>
<td>1.77 (45)</td>
<td>0.79 (20)</td>
<td>1.30 (33)</td>
<td>1.93 (49)</td>
<td>1.50 (38)</td>
<td>1.73 (44)</td>
</tr>
<tr>
<td>EM-S42.16.5</td>
<td>7.28 (185)</td>
<td>0.55 (70)</td>
<td>1.77 (45)</td>
<td>0.85 (16.5)</td>
<td>1.30 (33)</td>
<td>1.93 (49)</td>
<td>1.50 (38)</td>
<td>1.73 (44)</td>
</tr>
<tr>
<td>EM-S67.11</td>
<td>7.28 (185)</td>
<td>0.55 (70)</td>
<td>2.64 (67)</td>
<td>0.43 (11)</td>
<td>1.97 (50)</td>
<td>2.83 (72)</td>
<td>2.17 (55)</td>
<td>2.56 (65)</td>
</tr>
<tr>
<td>QM-45.23</td>
<td>7.87 (200)</td>
<td>0.55 (70)</td>
<td>1.97 (50)</td>
<td>0.93 (23.5)</td>
<td>1.18 (30)</td>
<td>1.97 (50)</td>
<td>1.50 (38)</td>
<td>1.73 (44)</td>
</tr>
</tbody>
</table>

**Material:** 100% recyclable extruded Polypropylene with a wall thickness of 2.5 mm (see diagram)

**Operating Temperatures:** -40°C to +85°C

**Resistant to:** All common greases, lubricants, oils and coolants present in most machinery

**Cleanliness:** Class 10 (without operating contents)

**Operational Noise:** 9 - 12 dba quieter than traditional “link” carrier systems

**Longevity:** Up to 25+ million back and forth cycles

**Segment Length or Pitch:** 20 mm (see diagram)

**How to calculate the length of PROFILE required:**

For the most economical use of PROFILE, the fixed (non-moving) connection point should be mounted at the center of the total travel*, then...

\[
\text{The required length (LK) = ((Mounting Height ÷ 2) x 3.14) + (the total machine travel ÷ 2) + 60 mm **}
\]

* If the fixed connection point must be mounted away from the center point, add the distance that the fixed point is off-center to the overall length determined by the above equation to determine the length of PROFILE required.

** Then round up to the next pitch (multiples of 20 mm)

### The PROFILE System Basics:

**Mounting Instructions**

For EM and QM modules for flat cables, mounting brackets are not required. These modules can be attached directly to the machine's fixed and driven points by screwing directly through the module and then fastening with a self-tapping screw and washer.

---

**How To Order**

1-800-443-4216

major credit cards accepted

<table>
<thead>
<tr>
<th>Number of Systems Req.</th>
<th>Carrier Type</th>
<th>Carrier Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>EM-S43.20</td>
<td>2420 mm</td>
</tr>
</tbody>
</table>

Specifications are subject to change without notice.  \( \text{EM-S15} \rightarrow 0.27 \text{(6.75)} \)

\( \text{EM-S43.20} \rightarrow 0.53 \text{(13.5)} \)

\( \text{EM-S45.20} \rightarrow 0.53 \text{(13.5)} \)

\( \text{EM-S45.16.5} \rightarrow 0.53 \text{(13.5)} \)

\( \text{EM-S67.11} \rightarrow 0.53 \text{(13.5)} \)

\( \text{QM-45.23} \rightarrow 0.59 \text{(15)} \)

0.00 = inches (00.00) = (mm)
PROFILE Special Modules Optimized for Flat Cables

Special closed module with small dimensions

![Module Image]

**Modules:**
- EM-515

Special module for flat cables with opening on outside radius

![Module Image]

**Modules:**
- EM-543.20
- EM-545.20
- EM-545.16.5
- EM-567.11

Special module for flat cables with opening on inside radius

![Module Image]

**Modules:**
- QM-45.23

Custom designed, made-to-order PROFILE types are available upon request. Please call KabelSchlepp at **1.800.443.4216** or E-MAIL us at **sales@kabelschlepp.com** for information.