Global provider of medical devices, plastics solutions and pharmaceutical systems

Guide Wires
SP Medical develops, manufactures and distributes disposable items such as Guide Wires to the hospital sector focusing on minimally invasive procedures in the field of radiology, urology, gastro and cardiology.

At our state-of-the-art facilities in Denmark and Poland, we manufacture components, medical devices, single-use devices, and we apply function-enhancing coatings to a number of products.

SP Medical is a company in SP Group A/S, an international plastics group headquartered in Denmark. SP Group is listed on NASDAQ OMX Copenhagen.
Global provider of medical devices, plastics solutions and pharmaceutical systems

A Brief Guide Wire Introduction

Guide Wires and coating
SP Medical is a Danish company with more than 30 years’ experience and know-how in the field of development, manufacturing and sales of guide wires for the medical industry. Over the past 40 years, we have built up our know-how of PTFE coated semi-products and medical devices for leading suppliers of for example guide wires on an OEM basis.

It is SP Medical’s goal to offer customers a complete guide wire programme of high quality and, if required, of special features.

Vision
SP Medical develops, manufactures and distributes disposable items such as guide wires to the hospital sector focusing on minimally invasive procedures in the field of:
– Angiography use (PTA)
– Cardiology (PTCA)
– Urology use (PTC)
– Gastro-enterology use

Moreover SP Medical contributes to the manufacturing of other companies’ medical devices, primarily by applying coating to improve functionality.

Policy
SP Medical’s high quality product programme is currently being enlarged with customized special articles by means of structured product development of both process and machinery construction.

SP Medical’s articles are manufactured in controlled hygienic environment by a trained staff. The manufacturing is performed with the greatest possible extend of automation to achieve both conform and good quality at competitive prices.

SP Medical A/S develops and manufactures own branded CE marked Guide Wires as well as OEM products.

The articles are sold and marketed either to manufacturers of medical devices or through our international distributor’s network.

Core products and features

Champion™ PTCA Guide Wire:
– Platinum Tip for excellent radiopacity.
– One core construction with superior torque ability.
– PTFE coated shaft for smooth surface.
– Various tip coatings for reduced friction.
– For both Cardiology and CTO.

Accoat™ Guide Wire:
– Complete and functional coating from distal to proximal end.
– Polished and 100% inspected in both ends.
– No possibility for drainage of blood due to special coating method.
– Smooth surface due to homogeneous coating.

Poseidon™ Hydrophilic Nitinol Guide Wire:
– Excellent radiopacity.
– Reduced friction due to superior hydrophilic surface features.
– Different tip flexibilities.
– Kink-resistant nitinol core.
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Accoat™ Guide Wire – Seldinger

**Dimensions**
- Ø 0.018” / 0.46 mm
- Ø 0.021” / 0.53 mm
- Ø 0.025” / 0.63 mm
- Ø 0.028” / 0.71 mm
- Ø 0.032” / 0.81 mm
- Ø 0.035” / 0.89 mm
- Ø 0.038” / 0.96 mm

**Length**
30 – 450 cm

**Surface**
Stainless steel with or without markers
PTFE coated

**Distal tip form**
- Straight tip
- J-tip radius: 1.5 – 3 – 6 – 15 mm

**Distal flexible length**
Standard 4.5 cm flexible tip

**Shaft stiffness**
- Standard
- Stiff
- Extra stiff
- Super stiff

*Extra stiff & Super stiff not available in dim: 0.018”; 0.021”; 0.025”*

**Markers**
- Uncoated stainless steel
- OEM
- Length 30-150 cm
- 1 mm wide surface markers
- 10 cm step

**Customised products on request**

**Description of item code**
(H/X/X)-S/Jx–(C)–0xx-L
(example: J3-C-035-150)

<table>
<thead>
<tr>
<th>Description</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stiff Guide Wire</td>
<td>H</td>
</tr>
<tr>
<td>Extra Stiff Guide Wire</td>
<td>H-X</td>
</tr>
<tr>
<td>Super Stiff Guide Wire</td>
<td>H-X-X</td>
</tr>
<tr>
<td>Straight tip</td>
<td>S</td>
</tr>
<tr>
<td>J-tip radius 1.5 mm</td>
<td>Jx</td>
</tr>
<tr>
<td>J-tip radius 3 mm</td>
<td>Jx</td>
</tr>
<tr>
<td>J-tip radius 6 mm</td>
<td>Jx</td>
</tr>
<tr>
<td>J-tip radius 15 mm</td>
<td>Jx</td>
</tr>
<tr>
<td>PTFE coated</td>
<td>C</td>
</tr>
<tr>
<td>Stainless steel</td>
<td>Without C</td>
</tr>
<tr>
<td>Surface marker</td>
<td>M</td>
</tr>
</tbody>
</table>

**0xx:** Diameter of the guide wire
- 018: 0.018” (0.46 mm)
- 021: 0.021” (0.53 mm)
- 025: 0.025” (0.63 mm)
- 028: 0.028” (0.71 mm)
- 032: 0.032” (0.81 mm)
- 035: 0.035” (0.89 mm)
- 038: 0.038” (0.96 mm)

**L:** Length of the guide wire
(from 30 – 450 cm)
**Description of item code**

(H)-D-S-Jx–(C)–0xx-L  
(example: D-S-J3-C-035-150)

<table>
<thead>
<tr>
<th>H</th>
<th>Stiff Guide Wire</th>
</tr>
</thead>
<tbody>
<tr>
<td>D</td>
<td>Double ended</td>
</tr>
<tr>
<td></td>
<td>(flexible tip in both ends)</td>
</tr>
<tr>
<td>S</td>
<td>Straight tip (one end)</td>
</tr>
<tr>
<td>Jx</td>
<td>J-tip radius (the other end)</td>
</tr>
<tr>
<td></td>
<td>J1.5 mm</td>
</tr>
<tr>
<td></td>
<td>J3 mm</td>
</tr>
<tr>
<td></td>
<td>J6 mm</td>
</tr>
<tr>
<td></td>
<td>J15 mm</td>
</tr>
<tr>
<td>C</td>
<td>PTFE coated</td>
</tr>
<tr>
<td>Without</td>
<td>stainless steel</td>
</tr>
<tr>
<td>M</td>
<td>Surface marker</td>
</tr>
<tr>
<td>0xx:</td>
<td>Diameter of the guide wire</td>
</tr>
<tr>
<td></td>
<td>025: 0.025” (0,63 mm)</td>
</tr>
<tr>
<td></td>
<td>032: 0.032” (0,81 mm)</td>
</tr>
<tr>
<td></td>
<td>035: 0.035” (0,89 mm)</td>
</tr>
<tr>
<td></td>
<td>038: 0.038” (0,96 mm)</td>
</tr>
<tr>
<td>L:</td>
<td>Length of the guide wire</td>
</tr>
<tr>
<td></td>
<td>(from 30 – 450 cm)</td>
</tr>
</tbody>
</table>

**Dimensions**

Ø 0.025” / 0,63 mm  
Ø 0.032” / 0,81 mm  
Ø 0.035” / 0,89 mm  
Ø 0.038” / 0,96 mm

**Length**

30 – 450 cm

**Surface**

Stainless steel with or without markers  
PTFE coated

**Tip form**

J-tip radius: 1,5 – 3 – 6 – 15 mm in one end and straight tip in the other

**Flexible tip length**

Standard 5 cm flexible tip

**Shaft stiffness**

Standard  
Stiff

**Markers**

Uncoated stainless steel  
OEM  
Length 30-150 cm  
1 mm wide surface markers  
10 cm step

**Customised products on request**
Accoat™ Guide Wire – Movable

Dimensions
Ø 0.032" / 0,81 mm
Ø 0.035" / 0,89 mm
Ø 0.038" / 0,96 mm

Length
50 – 260 cm

Surface
Stainless steel
PTFE coated

Distal tip form
Straight tip
J-tip radius: 1,5 – 3 – 6 – 15 mm

Shaft stiffness
Standard
Stiff

Customised products on request

Description of item code
(H)-M-(X)-S/Jx-(C)-0xx-L
(example: M-S-C-035-150)

M Movable Guide Wire
H-M Stiff Movable Guide Wire
S Straight tip
Jx J-tip radius
  J1.5 mm
  J3 mm
  J6 mm
  J15 mm
C PTFE coated
Without C stainless steel

0xx: Diameter of the guide wire
  032: 0.032" (0,81 mm)
  035: 0.035" (0,89 mm)
  038: 0.038" (0,96 mm)

L: Length of the guide wire
  (from 30 – 450 cm)
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Accoat™ Standard Guide Wire – Lunderquist PTC

Dimensions
Ø 0.025” / 0.63 mm
Ø 0.035” / 0.89 mm

Length
50 cm
60 cm
70 cm
80 cm
90 cm
100 cm
120 cm
150 cm
160 cm
180 cm
200 cm

Surface
Stainless steel
PTFE coated

Distal tip form
Straight tip
J-tip radius: 1.5 – 3 – 6 mm

Distal flexible length
5 cm
7 cm
10 cm
12 cm
15 cm
17 cm

Customised products on request

Description of item code
PTC-S/Jx-C-Fx-0xx-L
(example: PTC-S-J-C-F5-035-150)

S Straight tip
Jx J-tip radius
J1.5 mm tip
J3 mm tip
J6 mm tip
C PTFE coated
Without C stainless steel
Fx Distal flexible length
F5 - 5 cm flexible tip
F7 - 7 cm flexible tip
F10 - 10 cm flexible tip
F12 - 12 cm flexible tip
F15 - 15 cm flexible tip
F17 - 17 cm flexible tip
0xx: Diameter of the guide wire
025: 0.025” (0.63 mm)
035: 0.035” (0.89 mm)
L Length of the guide wire
50, 60, 70, 80, 90, 100,
120, 150 and 260 cm
Global provider of medical devices, plastics solutions and pharmaceutical systems

**Accoat™ Standard Guide Wire – Schüller PTC**

**Description of item code**

PTC-SCH-S/Jx-C-Fx-yy-zz-0xx-L
(example: PTC-SCH-S-F5-40-55-035-100)

<table>
<thead>
<tr>
<th>S</th>
<th>Straight tip</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jx</td>
<td>J-tip radius:</td>
</tr>
<tr>
<td></td>
<td>J1,5 mm tip</td>
</tr>
<tr>
<td></td>
<td>J3 mm tip</td>
</tr>
<tr>
<td></td>
<td>J6 mm tip</td>
</tr>
<tr>
<td>C</td>
<td>PTFE coated</td>
</tr>
<tr>
<td>Without C</td>
<td>stainless steel</td>
</tr>
<tr>
<td>Fx</td>
<td>Distal flexible length</td>
</tr>
<tr>
<td></td>
<td>x = cm ex. F5 = 5 cm</td>
</tr>
<tr>
<td></td>
<td>Available in 5, 7, 10, 12, 15 or 17 cm</td>
</tr>
<tr>
<td>yy</td>
<td>Proximal flexible length</td>
</tr>
<tr>
<td></td>
<td>cm</td>
</tr>
<tr>
<td>zz</td>
<td>Proximal flexible length</td>
</tr>
<tr>
<td></td>
<td>cm</td>
</tr>
<tr>
<td></td>
<td>Available in 30, 33, 35, 38, 40, 43, 45, 50, 53, 55, 60, 63 or 65 cm</td>
</tr>
<tr>
<td>0xx:</td>
<td>Diameter of the guide wire</td>
</tr>
<tr>
<td>025:</td>
<td>0.025&quot; (0.63 mm)</td>
</tr>
<tr>
<td>035:</td>
<td>0.035&quot; (0.89 mm)</td>
</tr>
<tr>
<td>L:</td>
<td>Length of the guide wire (Sum of Fx+yy+zz)</td>
</tr>
<tr>
<td></td>
<td>Available in 50, 60, 70, 80, 90, 100, 110, 120, 150 or 260 cm</td>
</tr>
</tbody>
</table>

**Dimensions**

Ø 0.025” / 0.63 mm
Ø 0.035” / 0.89 mm

**Length**

50 cm
60 cm
70 cm
80 cm
90 cm
100 cm
110 cm
120 cm
150 cm
260 cm

**Surface**

Stainless steel
PTFE coated

**Distal tip form**

Straight tip
J-tip radius:
1.5 – 3 – 6 mm

**Distal flexible length**

5 cm
7 cm
10 cm
12 cm
15 cm
17 cm
30 cm
33 cm
35 cm
38 cm
40 cm
43 cm

**Proximal flexible length**

45 cm
50 cm
53 cm
55 cm
60 cm
63 cm
65 cm

**Customised products on request**
Poseidon™ Hydrophilic Nitinol Guide Wire

**Dimensions**
- Ø 0.018” / 0.46 mm
- Ø 0.025” / 0.63 mm
- Ø 0.032” / 0.81 mm
- Ø 0.035” / 0.89 mm
- Ø 0.038” / 0.96 mm

**Length**
30 – 260 cm

**Surface**
Hydrophilic coated - Black

**Distal tip form**
- Angled
- Straight
- Reshapable

**Shaft stiffness**
- Standard
- Stiff
  (Stiff not available in dim: 0.018”)

**Tip stiffness**
- Standard
- Soft
- Floppy

**Speciality Guide Wire:**

**Double Ended Flexible Tip**
One end angled standard tip, other end straight soft tip.
Stiff shaft stiffness.
Available in 150 & 180 cm.

Customised products on request
Global provider of medical devices, plastics solutions and pharmaceutical systems

CHAMPION™ PTCA Guide Wire – For Cardiology use (CAR)

- **Dimension**
  - Ø 0.014” / 0.36 mm

- **Length**
  - 175 cm
  - 195 cm
  - 300 cm

- **Distal tip form**
  - Straight
  - J-tip

- **Stent zone stiffness**
  - Standard
  - Stiff

- **Tip stiffness**
  - Standard
  - Intermediate
  - Floppy
  - Extra Floppy

- **Radiopaque length**
  - 3 cm

- **Coil surface**
  - Uncoated – Stainless Steel
  - Hydrophilic coated
  - Silicone coated

- **Shaft surface**
  - PTFE coated

**Description of item code**

PTCA-CAR-SJ-M/HY/SI-EF/F/H-ST-D/H-014-L
(example: PTCA-CAR-S-HY-F-D-014-175)

<table>
<thead>
<tr>
<th>CAR</th>
<th>For cardiology use</th>
</tr>
</thead>
<tbody>
<tr>
<td>S</td>
<td>Straight tip</td>
</tr>
<tr>
<td>J</td>
<td>J-tip</td>
</tr>
<tr>
<td>M</td>
<td>Coil surface uncoated – stainless steel</td>
</tr>
<tr>
<td>HY</td>
<td>Coil surface hydrophilic</td>
</tr>
<tr>
<td>SI</td>
<td>Coil surface silicone</td>
</tr>
<tr>
<td>EF</td>
<td>Tip stiffness extra floppy</td>
</tr>
<tr>
<td>F</td>
<td>Tip stiffness floppy</td>
</tr>
<tr>
<td>I</td>
<td>Tip stiffness intermediate</td>
</tr>
<tr>
<td>ST</td>
<td>Tip stiffness standard</td>
</tr>
<tr>
<td>D</td>
<td>Stent zone stiffness standard</td>
</tr>
<tr>
<td>H</td>
<td>Stent zone stiffness stiff</td>
</tr>
</tbody>
</table>

- **014:** Diameter of the guide wire 0.014” (0.36 mm)

- **L:** Length of the guide wire
  - Available in 175, 195, 300 cm

**Contact Information**

- SP Medical A/S
- Møllevej 1
- DK-4653 Karise
- Denmark
- Tel.: (+45) 5676-6000
- Fax: (+45) 5676-6001
- E-mail: gw@sp-medical.com
CHAMPION™ PTCA Guide Wire – Stiff tip for highly stenosed lesions (CTO)

Dimension
Ø 0.014” / 0.36 mm

Length
195 cm
300 cm

Distal tip form
Straight
J-tip

Stent zone stiffness
Standard

Tip stiffness (Gram Force)
3,0gf
4,5gf
6,0gf
9,0gf
12,0gf

Radiopaque length
3 cm

Coil surface
Hydrophilic coated
Silicone coated

Shaft surface
PTFE coated

Description of item code
PTCA-CTO-S/J-SI/HY-3/4,5/6/9/12-D-014-L
(example: PTCA-CTO-S-HY-3-D-014-175)

CTO For highly stenosed lesions
S Straight tip
J J-tip
HY Coil surface hydrophilic
SI Coil surface silicone
3 Tip stiffness 3 Gram Force
4,5 Tip stiffness 4,5 Gram Force
6 Tip stiffness 6 Gram Force
9 Tip stiffness 9 Gram Force
12 Tip stiffness 12 Gram Force
D Stent zone stiffness standard
014: Diameter of the guide wire
0.014” (0.36 mm)
L: Length of the guide wire
Available in 195, 300 cm
SP Medical has developed a wide range of hydrophobic and hydrophilic coatings for optimizing of different product features.

Typical features are: Low friction, electrical insulation, chemical resistance and markers.

The coatings are specially designed for devices and components as: Guide wires, needles, electrodes, tubes, coils, cores, displays etc.

Coatings can either be spray- or dip coated in the following colours:

- Blue
- Black
- Green
- Grey
- Transparent

A special feature as masking or partial coating is available.

Customised products on request
Global provider of medical devices, plastics solutions and pharmaceutical systems

Accessories and packing material

SP Medical has developed a very flexible programme of packing materials to supply optimal protection of Guide Wires and Catheters.

**Clipless Dispensers**
The new design – No Clip Penetration – ensures the highest level of sterility during transportation and storage.

- Suitable for Guide Wires from 40 – 200 cm
- Internal Dispenser diameter from 9 to 19 cm
- Standard tubing dimension is Ø 4,0 x 2,75 mm.
- Tubing material is PP

**Dispenser with clips**
- Suitable for Guide Wires of any length up to 450 cm
- Internal Dispenser diameter is 14,5 cm
- Standard tubing dimension is Ø 4,0 x 2,75 mm
- Tubing material is PP or PE

**Customised products on request**
- Variable Dispenser shape
- Variable Dispenser diameter
- Variable tubing dimensions
- Variable tubing material and colour

**Available packing components**
- J-Straightner in different colours
- Female Luerlock with protection grid
- 2, 3 and 4 cavity clips
- Peel pouches
- Tip protector
Quality and Regulatory Affairs

Quality and Regulatory

SP Medical’s management system takes into account all the demands on and expectations faced by providers to the global medical device industry:

- We are certified to the ISO 9001, ISO 13485 and ISO 14001 standards.
- We have CE mark certification under the Medical Device Directive 93/42/EEC as amended by 2007/47/EEC.
- We comply with the Global Harmonization Task Force Guidelines.
- We build and maintain our cleanroom environments in accordance with ISO 14644 and ISO 14698.