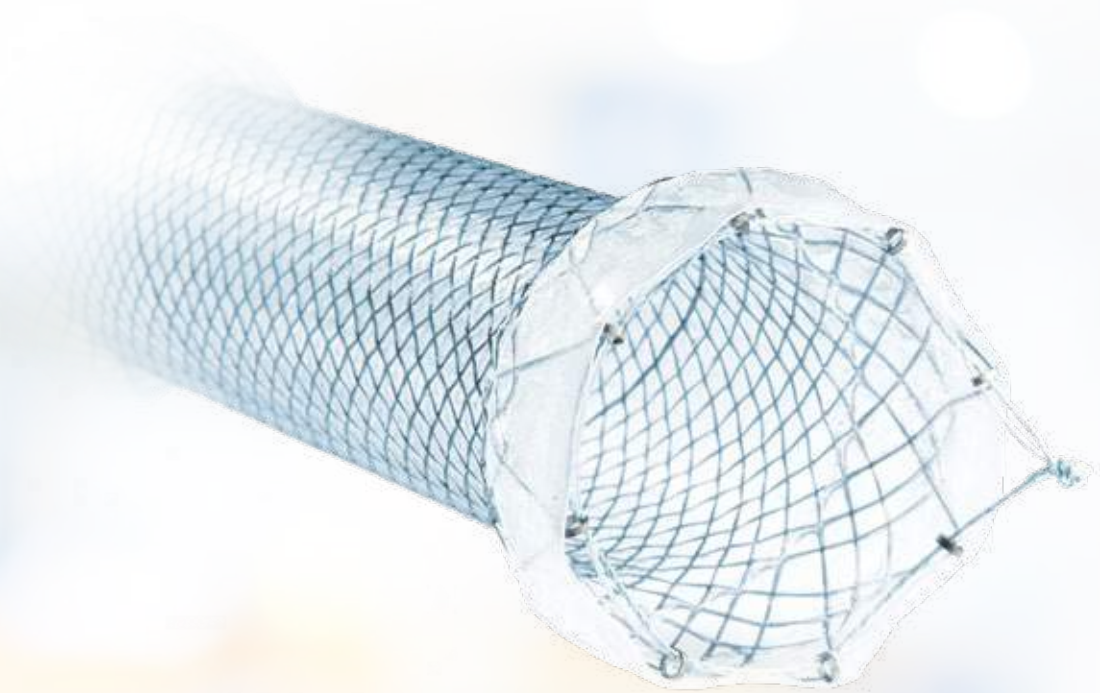


NITINOL STENTS

GASTROINTESTINAL



NITINOL STENTS FOR GASTROENTEROLOGY

Reliable bypassing of stenoses in the area of the digestive or respiratory tract places high expectations on a stent. With its extensive range of stents, MICRO-TECH Endoscopy, as one of the leading international manufac-

tures, meets these requirements and offers a suitable solution for many challenges. Rely on the utmost in quality and optimum positional stability.



SELF-EXPANDING STENTS

Every stent from the MICRO-TECH Endoscopy range is manufactured using high quality Nitinol wire. The “thermal memory effect” of Nitinol causes the released stent to unfold into its predetermined dimensions at body temperature. It therefore adapts to the anatomy and achieves the desired dilation of the stenosis in an optimum manner.

SIMPLE TO RELEASE

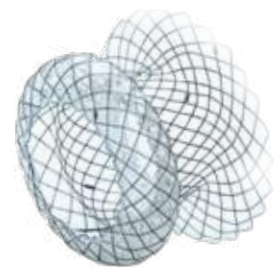
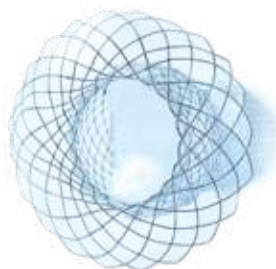
In order to make release of the stent as easy as possible, the stents are preloaded on an introducer. The system can be manipulated intuitively and effortlessly. With some stents you even have the opportunity to correct the positioning of the stent during implantation.

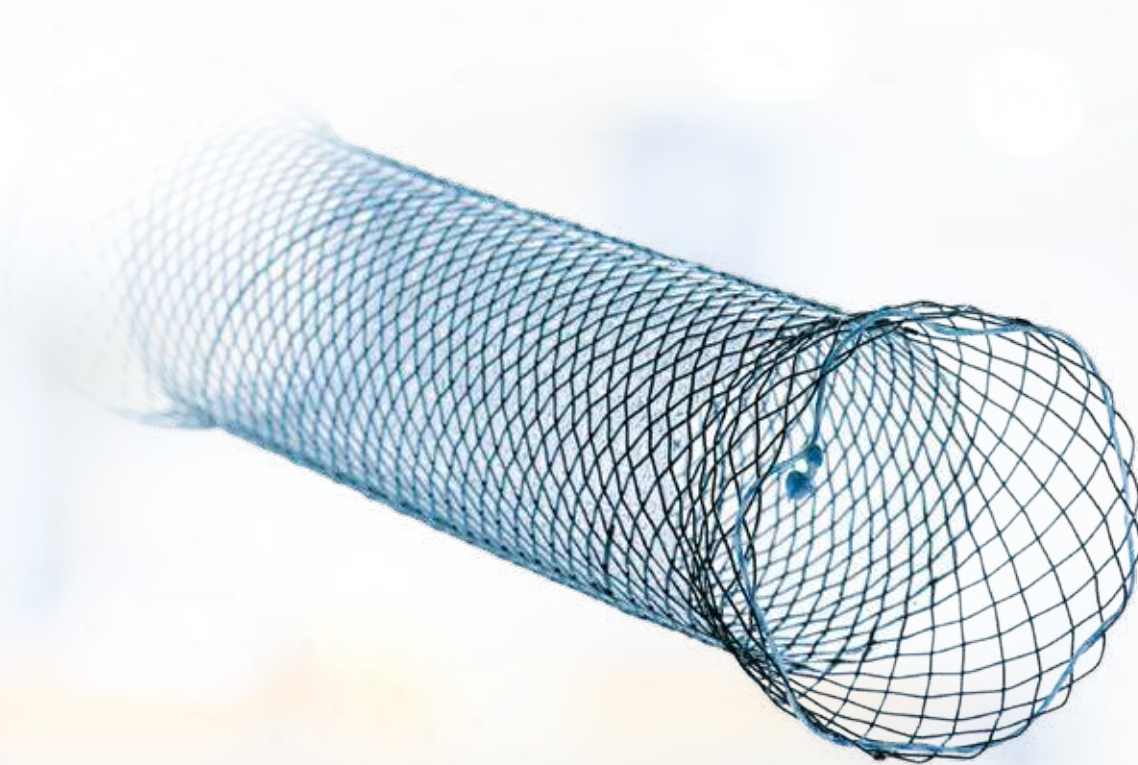
MANUFACTURED FROM ONE WIRE

MICRO-TECH Endoscopy Nitinol stents are – with the exception of the segmented stent – braided from one single wire. This significantly minimises the risk of a stent fracture at connecting loops.

PRECISE POSITIONING VIA X-RAY MARKINGS

In order to allow you to position the stent precisely, additional X-ray markings are provided on the introducer and the stent, which can be easily distinguished under X-ray fluoroscopy. The good radiopacity of the stents further reinforces this effect.





OESOPHAGUS STENTS (GEN-I)

HIGHEST QUALITY FOR EVERY INDICATION

MICRO-TECH provides you with a comprehensive selection of self-expanding stents for bypassing oesophageal stenoses. The stents are characterised by very high flexibility and are available with and without covering. The

working diameter of the stent is 20, 24 or 28 mm while lengths vary of between 60 and 140 mm. Therefore, the optimum solution is always at hand for every indication.

SPECIFIC CHARACTERISTICS

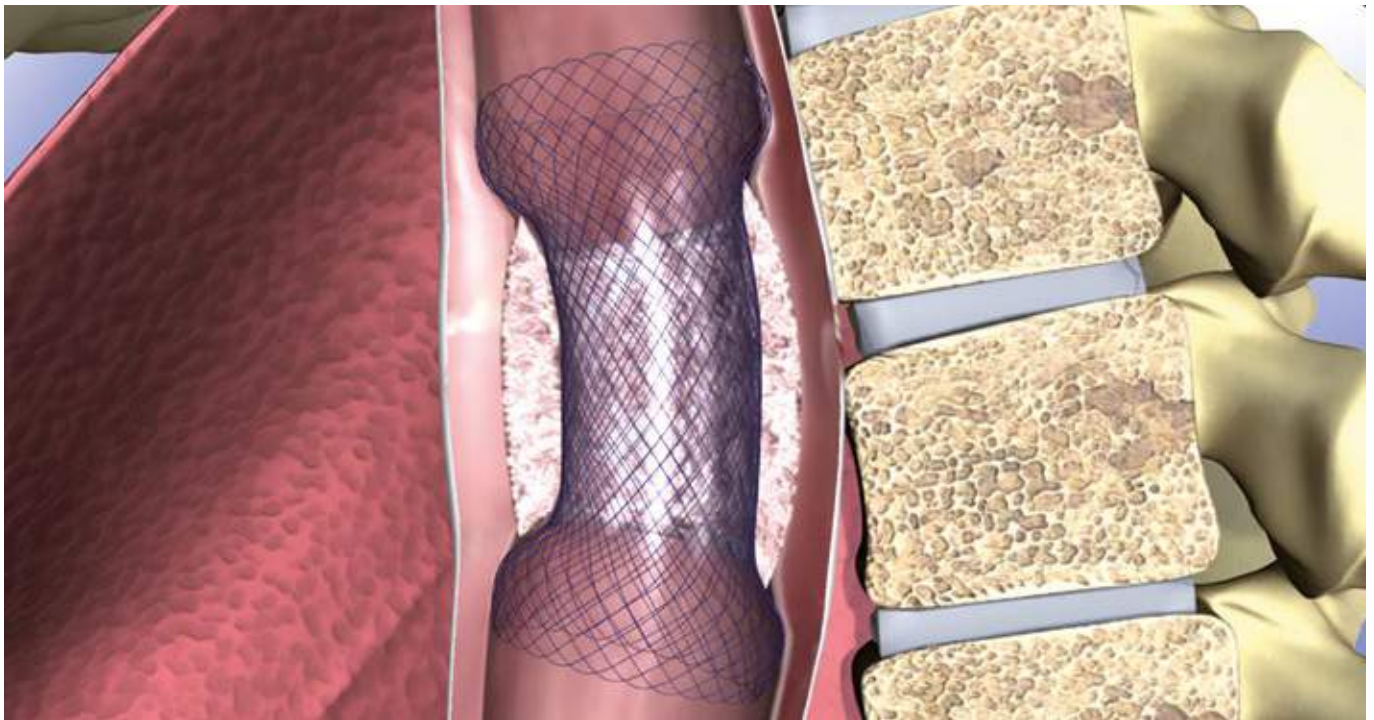
- Self-expanding
- Nitinol mesh with atraumatic ends
- Excellent positional stability
- High radial force
- Resistant and elastic covering
- Fully covered stents available
- Parylene coated
- High radiopacity
- Extraction threads for removal and repositioning
- Guide wire-compatible up to 0.035 inches



X-ray markings



Extraction thread



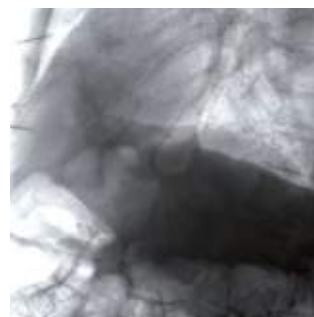
SUCCESSFUL IN PRACTICAL USE

The MICRO-TECH oesophagus stent has already proved its worth thousands of times in practice owing to its reliability, positional stability, excellent handling and the wide selection of lengths.

The stent adapts to the oesophageal wall in the best possible manner thanks to its atraumatic shape and high radial force. Furthermore, the stent possesses excellent radiopacity and can be positioned with good visibility and precision at significant points with the aid of the additional X-ray markings.



View of the proximal tulip



Released under X-ray



Control with contrast medium

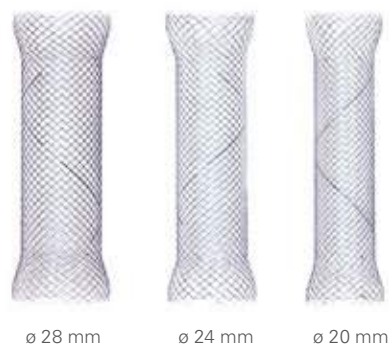
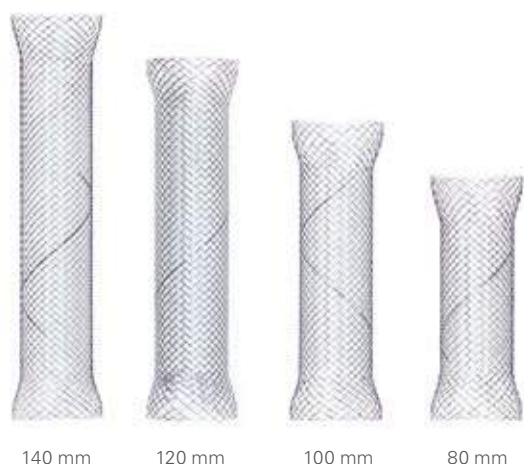


POSITIONALLY STABLE STENT DESIGN

The oesophagus stent is extremely positionally stable. Its self-expanding Nitinol wire adapts itself perfectly to the patient's anatomy and the atraumatic ends ensure a maximum hold.

DIAMETERS UP TO 28 MM

MICRO-TECH always offers you the appropriate solution with the oesophagus stent in three different diameters: 20, 24 or 28 mm in the central section. The stent end is 6 mm wider in each case.

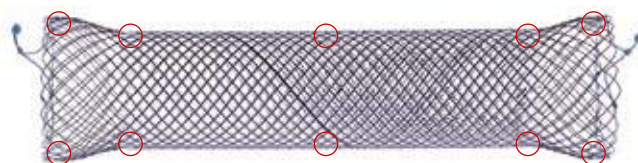


NUMEROUS STANDARD LENGTHS

Depending on the length of the site to be bypassed, you can resort to one of five standard lengths: short stents measuring 60 and 80 mm, medium lengths of 100 and 120 mm and long versions of 140 mm.

RADIOPAQUE MARKERS FOR SECURE INSERTION OF STENTS

All of our esophagus stents are equipped with up to 10 radiopaque markers. They are clearly visible under radiological control and thus enable a secure and precise stent release.



10 X-ray markers on all significant positions

WITH AND WITHOUT COVERING

Depending on the model, the stents have a protective covering. Choose between a complete covering from one stent end to the other, a partial covering in which the ends remain free and a cover-free stent.

POINT OF NO RETURN

A mark on the delivery system shows the "point of no return" at stent placement.



INTRODUCER FOR PRECISE RELEASE

All stents are preloaded on the easy-to-manipulate introducer, which allows rapid and precise stent release. The system also allows you to bring the stent into the desired position even when in the oral cavity during release.

SPECIFICATIONS

REF	Ø centre mm	Ø end mm	Length mm	Covering mm		
STENTS WITHOUT COVERING						
ST01-101.20.080	20	26	80	Without		
ST01-101.20.100	20	26	100	Without		
ST01-101.20.120	20	26	120	Without		
ST01-101.20.140	20	26	140	Without		
ST01-101.24.080	24	30	80	Without		
ST01-101.24.100	24	30	100	Without		
ST01-101.24.120	24	30	120	Without		
ST01-101.24.140	24	30	140	Without		
STENTS WITH PARTIAL COVERING						
ST01-102.20.060	20	26	60	30		
ST01-102.20.080	20	26	80	50		
ST01-102.20.100	20	26	100	70		
ST01-102.20.120	20	26	120	90		
ST01-102.20.140	20	26	140	110		
ST01-102.24.080	24	30	80	50		
ST01-102.24.100	24	30	100	70		
ST01-102.24.120	24	30	120	90		
ST01-102.24.140	24	30	140	110		
STENTS WITH END-TO-END COVERING						
ST01-103.20.060	20	26	60	60		
ST01-103.20.080	20	26	80	80		
ST01-103.20.100	20	26	100	100		
ST01-103.20.120	20	26	120	120		
ST01-103.20.140	20	26	140	140		
ST01-103.24.060	24	30	60	60		
ST01-103.24.080	24	30	80	80		
ST01-103.24.100	24	30	100	100		
ST01-103.24.120	24	30	120	120		
ST01-103.24.140	24	30	140	140		
ST01-103.28.100	28	34	100	100		
ST01-103.28.120	28	34	120	120		
	Ø mm/Fr	Length mm	Guide wire	RM ^{*1}	IC ^{*2}	Lock ^{*3}
INTRODUCER SYSTEM						
	8/24	700	0.035 inch	2	Yes	Yes

Recommended guide wire: 600375-5

*1 RM – radiopaque markings / *2 IC – irrigation channel / *3 Lock – secures the introducer system during storage, transportation and introduction



VAC Stent GI
A product of
VAC Stent GmbH

VAC STENT GI

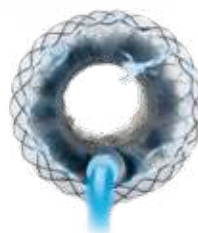
INNOVATIVE TREATMENT OF LEAKAGE AND ANASTOMOTIC INSUFFICIENCY

The VacStent GI™ combines two reliable methods for the treatment of leakage and anastomotic insufficiency: while the fully encased stent completely covers the defects, the wound cavity is drained by continuous suction. In addition, the sponge supports the formation of granulation tissue. One advantage of this procedure

is that it preserves oesophageal/intestinal passage. The VacStent GI™ is preloaded on a flexible introducer, which not only shortens the time required for the treatment but also makes it much more comfortable than the traditional method of treating a wound cavity.

SPECIFIC CHARACTERISTICS

- Continuous drainage
- Reliable vacuum
- For leakages up to 30 mm
- Covers the wound cavity
- Easy and precise placement of the stent by means of OTW (over-the-wire)
- Promotes granulation
- Open passage and thus no feeding tube required

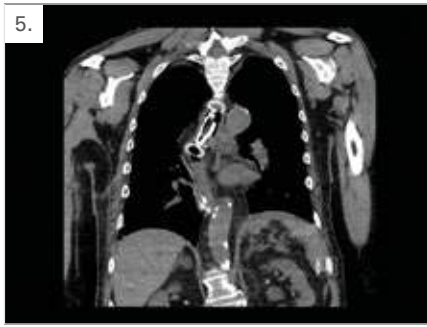


VacStent GI™ view into the stent



The VacStent GI™ complete system

CLINICAL USE



- 1. View onto the VacStent GI™
- 2. Newly implanted stent
- 3. After stent removal
- 4. Check-up after 2 days
- 5. CT control

SPECIFICATIONS

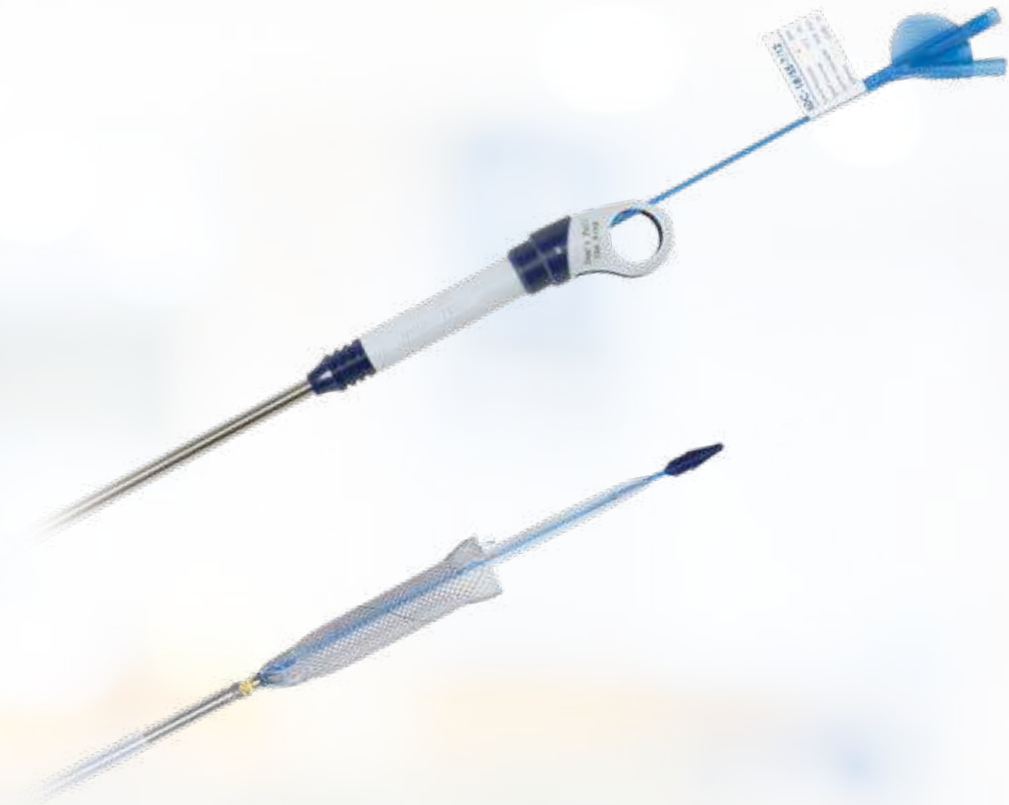
REF	Ø tulip mm	Ø stent mm	Stent total length mm	Sponge length mm	Covering	Ø distal end/ Intro-ducer system mm	Working length mm	Recommended GW inch
VACSTENT GI								
00003820	30	14	70	50	Full cover	14/11	1000	0.035"

Packaging unit: 1 piece

REF	Ø inches	Total length mm	Tip length mm	Tip shape	Set-up	Covering
GUIDE WIRE						
600505-5	0.035"	2600	130	Straight	Extra stiff, radiopaque	black

Packaging unit: 1 piece

VacStent GI™ is a product of VAC Stent GmbH. Distributed by MICRO-TECH Europe GmbH.



ACCURASIS®

THE REVOLUTIONARY INTRODUCER SYSTEM: RETRIEVABLE AFTER 100% STENT RELEASE

An exact positioning of the stent is of greatest importance to ensure successful therapy. With its new generation of introducer systems, MICRO-TECH now sets new standards for highest precision. AccuraSIS® stands for “Accurate

Stent Introducer System” and enables a yet more exact and safe stent release. Via its innovative system the stent can completely be opened and resealed up to the proximal end. Thus, an exact positioning and release is possible.

SPECIFIC CHARACTERISTICS

- Precise and safe stent placement
- Integrated dilatation balloon
- Easy handling
- Enormous positioning stability
- Ergonomically shaped handles
- Stable stainless steel tension rod
- Radiopaque olive tip, easily introducible
- Minimum length reduction
- Extreme flexibility of the introducer system
- 10 radiopaque markers
- Calibration in cm on the metal coil



Handle with ergonomic design



Optimized olive tip for easy insertion

ERGONOMIC PRECISION DESIGN

The system can be comfortably handled owing to the optimized design of the handles. The new designed radio-paque olive tip is shaped in such a manner that it is ideally flush with the introducer catheter and safely harbors the pre-mounted stent inside the introducer catheter.

INTEGRATED DILATATION BALLOON

The in-built dilatation balloon measuring 14 mm in diameter additionally supports the expansion of the stent and can also be used for the purpose of pre-dilatating the stenosis. It also facilitates the removal of the introducer system in cases of very narrow strictures in which the olive would otherwise result in the dislocation of the stent or the examiner would have to accept a prolonged waiting period to safely remove the introducer system.

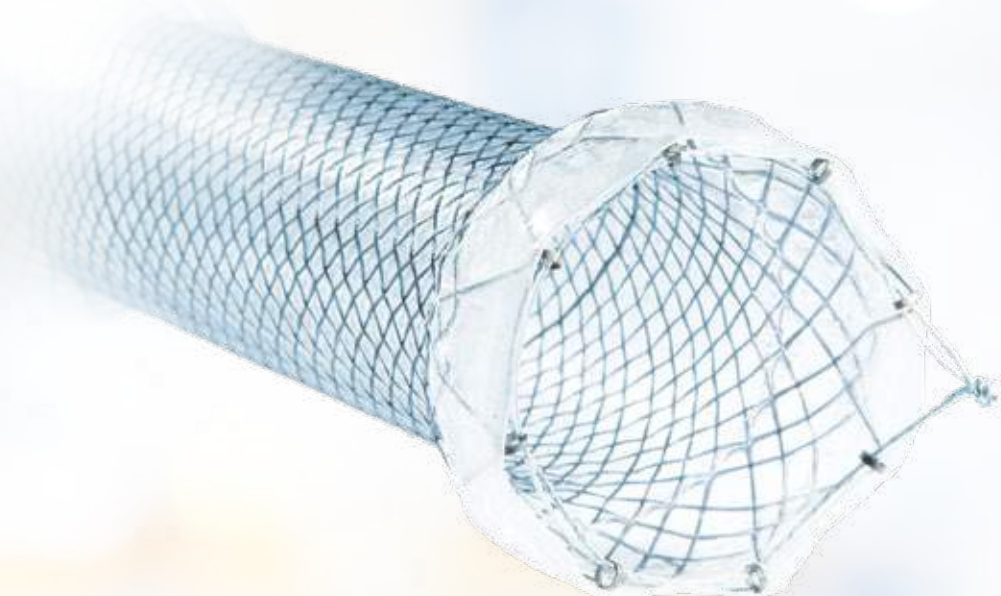


SPECIFICATIONS

REF	Centre/end Ø mm	Length mm	RM* Stent/RM* Introducer system
INTRODUCER SYSTEM, PARTIAL SILICONE COVERING			
ST11-102.20.080	20/26	80	10 / 2
ST11-102.20.100	20/26	100	10 / 2
ST11-102.20.120	20/26	120	10 / 2
ST11-102.20.140	20/26	140	10 / 2
ST11-102.24.080	24/30	80	10 / 2
ST11-102.24.100	24/30	100	10 / 2
ST11-102.24.120	24/30	120	10 / 2
ST11-102.24.140	24/30	140	10 / 2
INTRODUCER SYSTEM, COMPLETE SILICONE COVERING			
ST11-103.20.080	20/26	80	10 / 2
ST11-103.20.100	20/26	100	10 / 2
ST11-103.20.120	20/26	120	10 / 2
ST11-103.20.140	20/26	140	10 / 2
ST11-103.24.080	24/30	80	10 / 2
ST11-103.24.100	24/30	100	10 / 2
ST11-103.24.120	24/30	120	10 / 2
ST11-103.24.140	24/30	140	10 / 2
ST11-103.28.100	28/34	100	10 / 2
ST11-103.28.120	28/34	120	10 / 2

Recommended guide wire: 600375-5 / Outer diameter of the integrated dilation balloon: 14 mm / Guide wire extractable 0.035 inch-GW / Introduction-system 24 Fr/8 mm

*RM – radiopaque markings



SOFTCUP OESOPHAGUS STENT

INCREASED COMFORT FOR PATIENTS WITH HIGH-SEATED STENOSES

High-seated oesophageal stenoses place special demands on the stent. Stent positioning in this extremely sensitive area just under the pharynx can result in unpleasant irritative stress for the patient. The Softcup oesophagus stent from MICRO-TECH is equipped with a particularly soft proximal stent end, which makes the stent more tolerable for the patient. In order to perform positioning of the stent

as precisely as possible, the stent is preloaded on the high-precision PRODIS introducer. This guarantees reliable release and simultaneously leaves the choice open to the user as to whether the stent should be released from the proximal towards the distal direction (PROximal release) or from the distal towards the proximal direction (DISTal release)

SPECIFIC CHARACTERISTICS

- Nitinol mesh with atraumatic ends
- Proximal Softcup design
- Excellent positional stability, high radial force
- Resistant and elastic covering
- Complete covering
- High radiopacity
- Extraction threads for removal and repositioning
- PRODIS introducer
- Guide wire-compatible up to 0.035 inches



X-ray marking



Extraction thread

SUCCESSFUL IN PRACTICAL USE

The Softcup oesophagus stent is completely covered and reduces the irritative stress for the patient with its particularly soft short proximal tulip and complete covering. Its special design and the high radial force render the stent extremely positionally stable and ensure a very snug fit on the oesophageal wall. The good radiopacity and additional X-ray markings at significant points also facilitate orientation during stent placement.



View into the released stent



Released stent



MAXIMUM HOLD, MAXIMUM COMFORT

The special design of the Softcup oesophagus stent ensures excellent positional stability and is gentle on the patient at the same time. The soft end reduces the unpleasant sensation of carrying a foreign body in the oesophagus and enables a high proximal positioning.

SPECIFICATIONS

REF	Ø centre mm	Ø end mm	Length mm	Covering mm	End design	
					Proximal	Distal
STENTS WITH END-TO-END COVERING						
ST01-156.20.100	20	26	100	100	Softcup	Spherical
ST01-156.24.100	24	30	100	100	Softcup	Spherical
	Ø mm/Fr	Length mm	Guide wire	RM ^{*1}	IC ^{*2}	Lock ^{*3}
INTRODUCER SYSTEM						
PRODIS	8/24	700	0.035 inch	2	Yes	Yes

Recommended guide wire: 600375-5

*1 RM – radiopaque markings / *2 IC – irrigation channel / *3 Lock – secures the introducer system during storage, transportation and introduction



SEGMENTED STENT

FLEXIBILITY REDEFINED

This oesophagus stent with segmented design maximizes flexibility and adaptability when stenting stenoses and leakages. In contrast to conventional one-piece stents, this design comprises several segments that are independently mobile. This enables the stent to adapt perfectly to both

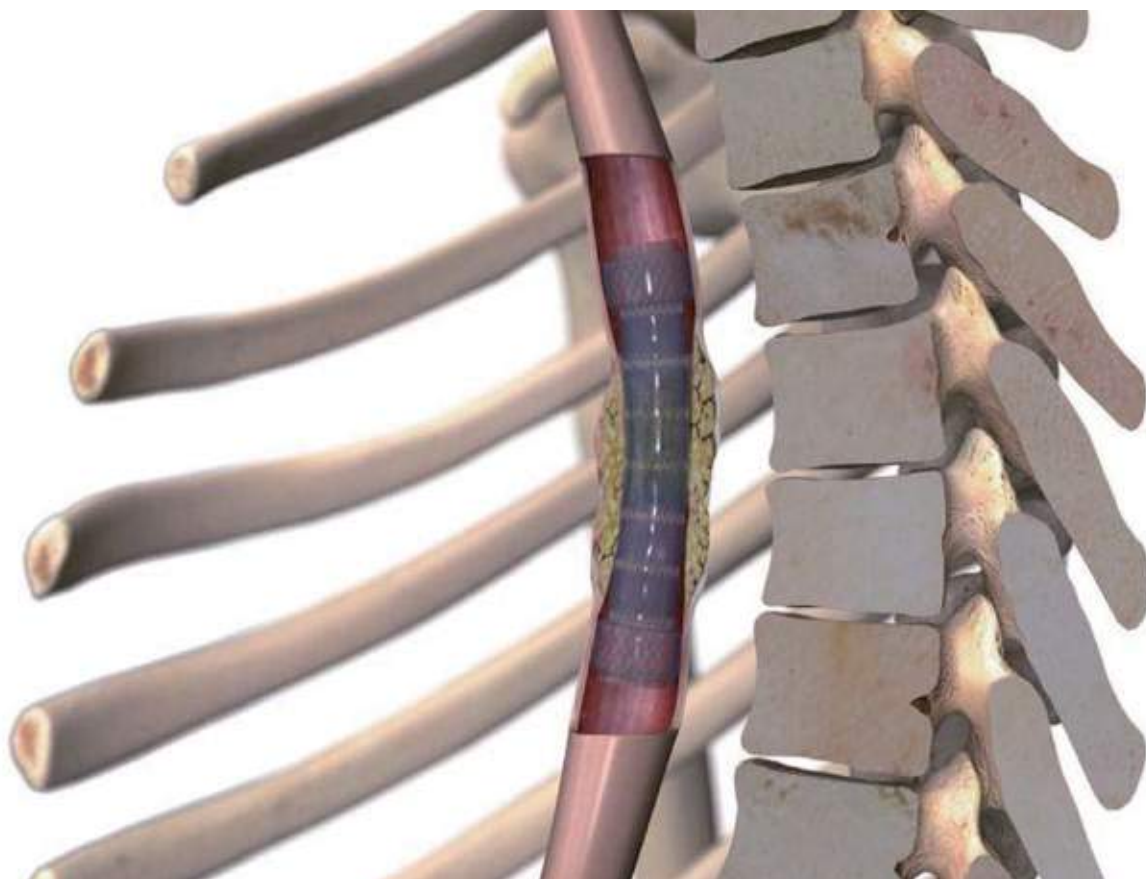
anatomy and peristalsis and ensures maximum positional stability. All segmented stents have a double full-cover and two extraction threads for a safe removal and repositioning of the stents. By the segmentation the stent loses at no time the defined lumen.

SPECIFIC CHARACTERISTICS

- Segmented stent design
- Self-expanding nitinol fabric
- High level of radial force and positional stability
- Robust, elastic covering
- Guide wire passage up to 0.035 inches



Stent with eight segments

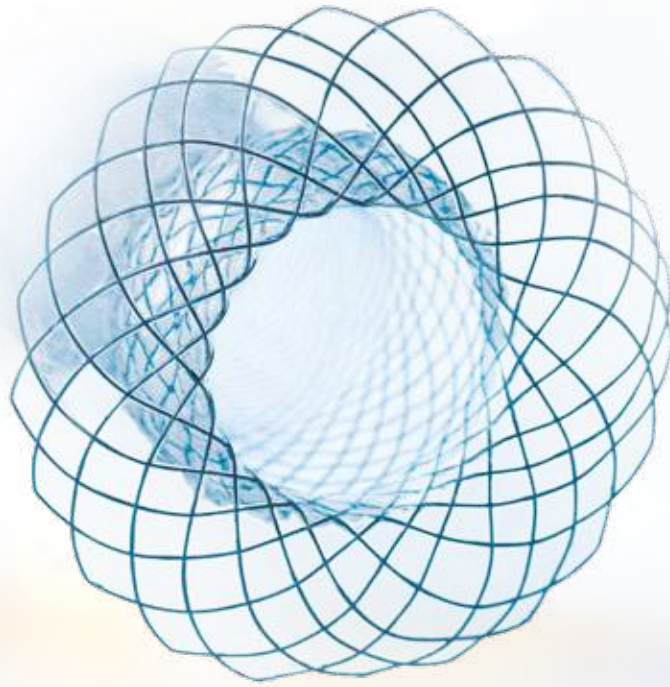


SPECIFICATIONS

REF	Ø centre mm	Ø end mm	Length mm	Covering mm		
SEGMENTED STENT						
ST71-224-18.060	18	24	60	With covering, double-cup		
ST71-224-18.080	18	24	80	With covering, double-cup		
ST71-224-18.100	18	24	100	With covering, double-cup		
ST71-224-18.120	18	24	120	With covering, double-cup		
ST71-224-18.140	18	24	140	With covering, double-cup		
ST71-224-22.060	22	28	60	With covering, double-cup		
ST71-224-22.080	22	28	80	With covering, double-cup		
ST71-224-22.100	22	28	100	With covering, double-cup		
ST71-224-22.120	22	28	120	With covering, double-cup		
ST71-224-22.140	22	28	140	With covering, double-cup		
	Ø mm/Fr	Length mm	Guide wire	RM ^{*1}	IC ^{*2}	Lock ^{*3}
INTRODUCER SYSTEM						
	8/24	650	0.035 inch	2	Yes	Yes

Recommended guide wire: 600375-5

*1 RM – radiopaque markings / *2 IC – irrigation channel / *3 Lock – secures the introducer system during storage, transportation and introduction



CARDIA-UMBRELLA-STENT

FOR A PERFECT HOLD IN THE CARDIA AREA

The Cardia-Umbrella-Stent by MICRO-TECH is a specially designed stent perfectly tailored to the challenging anatomical diagnosis of the cardia. Its unique design gives the stent extremely high positional stability and prevents its migration in both the gastric and oral directions. Since the lower oesophageal sphincter lies between the bulbous section and the distal end of the stent we have implemen-

ted a special feature which is an “opened umbrella” type shape to facilitate this anatomical challenge. Furthermore, the stent does not protrude into the stomach as a result of this umbrella-shaped design, ending directly behind the oesophageal gastric junction. The risk of pressure necrosis is thus significantly reduced and any potential patient discomfort is decreased.

SPECIFIC CHARACTERISTICS

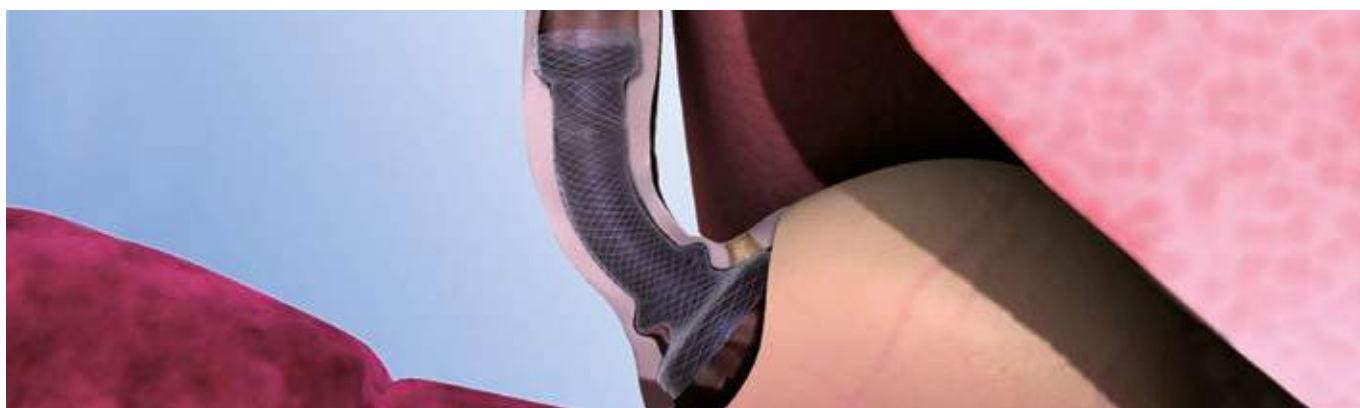
- Unique umbrella design
- Self-expanding
- Nitinol mesh with atraumatic ends
- Excellent positional stability
- High radial force
- Resistant and elastic covering
- Fully covered stents available
- High radiopacity
- Extraction threads for removal and repositioning
- Guide wire-compatible up to 0.035 inches



X-ray marking



Extraction thread



SUCCESSFUL IN PRACTICAL USE

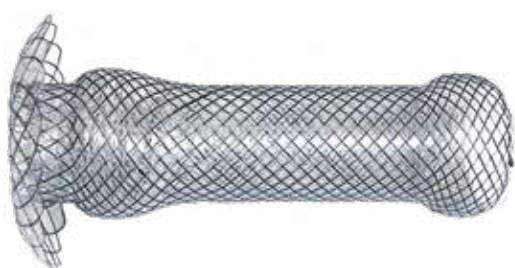
The inverse view from the stomach of the distal end of the stent shows how the umbrella end clings to the gastric mucosa directly behind the cardia without protruding into the stomach. From the perspective of the oesophagus into the stent, the bulge before the cardia and the shaping of the stent in the area of the cardia can be clearly distinguished. Both guarantee excellent positional stability for the stent.



Inverted view of the stomach showing the umbrella end



View into the released stent (oesophagus)



KEEPS ITS PROMISES

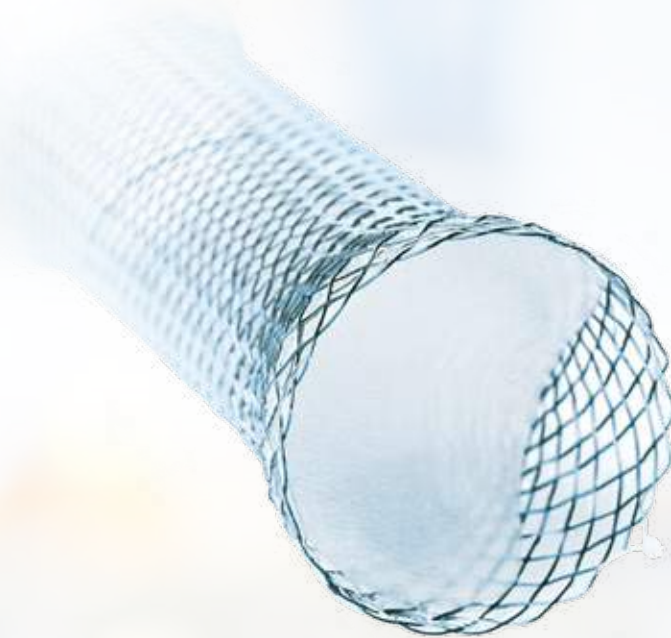
Together with the high radial force, the spherical proximal end and the complete covering, the innovative umbrella design guarantees ideal hold in the area of the cardia. Radiopaque markers in prominent positions ease the placement of the stent under radiological view.

SPECIFICATIONS

REF	Ø centre mm	Ø end prox./bulge/end dist. mm	Length mm	Covering mm	End design		
					Proximal	Distal	
STENTS WITH PARTIAL COVERING							
ST01-108.24.100	24	30/30/50	100	85	Spherical	Umbrella	
ST01-108.24.120	24	30/30/50	120	105	Spherical	Umbrella	
STENTS WITH END-TO-END COVERING							
ST01-109.24.100	24	30/30/50	100	100	Spherical	Umbrella	
ST01-109.24.120	24	30/30/50	120	120	Spherical	Umbrella	
	Ø mm/Fr	Length mm	Guide wire	RM ^{*1}	IC ^{*2}	Lock ^{*3}	
INTRODUCER SYSTEM							
	8.5/25	700	0.035 inch	2	Yes	Yes	

Recommended guide wire: 600375-5

*1 RM – radiopaque markings / *2 IC – irrigation channel / *3 Lock – secures the introducer system during storage, transportation and introduction



CARDIA-VALVE-STENT

THE EFFECTIVE SOLUTION AGAINST REFLUX

Bypass of the cardia with a stent results in gastroesophageal reflux. In order to prevent the latter and thereby minimise the risk of bronchopulmonary aspirations, the Cardia-Valve-Stent from MICRO-TECH is equipped with a unique valve system. The revolutionary aspect of the valve is its 2-way function which imitates the human protective mechanism perfectly. On the one hand, it allows food

and liquids to enter the stomach unimpeded and reliably prevents reflux. On the other, it opens in the oral direction in case of excessive pressure. The patient can therefore obtain relief by vomiting in spite of the valve. The valve is particularly flexible and at the same time highly resistant to gastric acid.

SPECIFIC CHARACTERISTICS

- Innovative 2-way valve system
- Self-expanding
- Nitinol mesh with atraumatic ends
- Excellent positional stability
- High radial force
- Resistant and elastic covering
- High radiopacity
- Extraction threads for removal and repositioning
- Guide wire-compatible up to 0.035 inches



X-ray marking



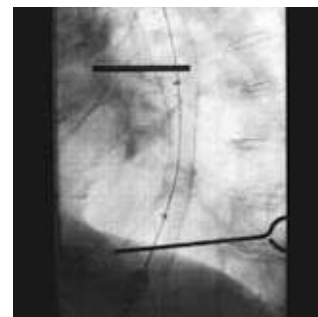
Anti-reflux valve

SUCCESSFUL IN PRACTICAL USE

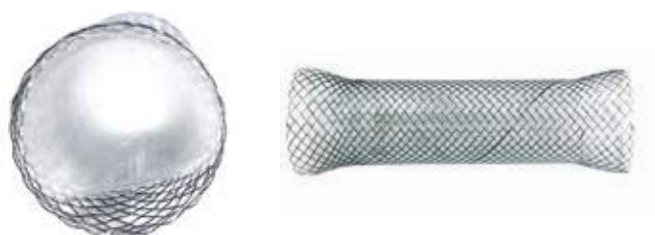
Up to now, use of anti-reflux stents, which are intended to prevent unimpeded reflux, have been controversial. With the Cardia-Valve-Stent, MICRO-TECH is offering a solution that almost perfectly imitates the natural closing mechanism. The 2-way valve, which is flat at the distal end of the stent endeavours to achieve the functional opening and closing of the sphincter.



View of the proximal tulip



Released under X-ray



INNOVATIVE STENT DESIGN

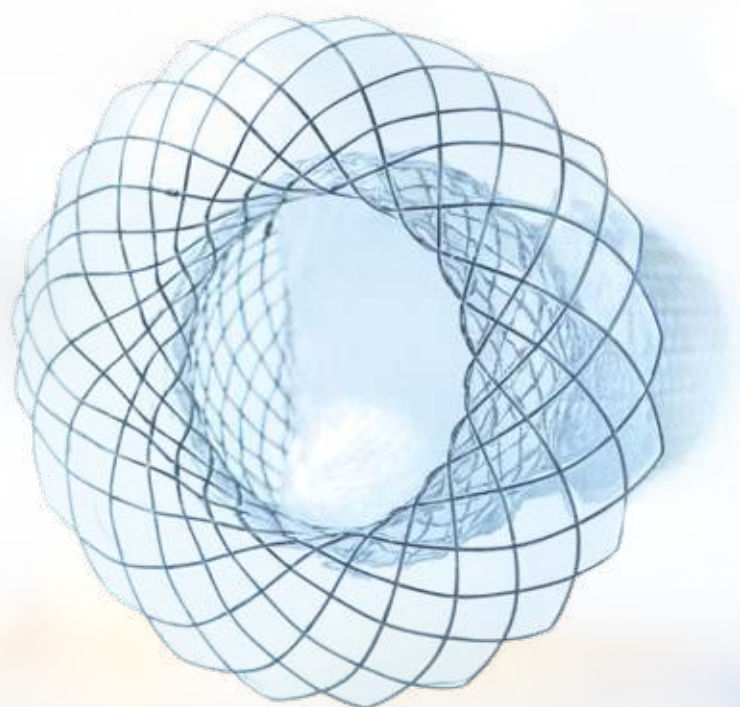
In addition to the unique 2-way valve system, the Cardia-Valve-Stent possesses a series of features that makes it very safe. The reliable covering for instance, which is available in different versions: partially and completely covered.

SPECIFICATIONS

REF	Ø centre mm	Ø end mm	Length mm	Covering mm	Anti-reflux valve	
STENTS WITH PARTIAL COVERING						
ST01-111.20.100	20	26	100	85	Distal	
ST01-111.20.120	20	26	120	105	Distal	
ST01-111.24.100	24	30	100	85	Distal	
ST01-111.24.120	24	30	120	105	Distal	
STENTS WITH END-TO-END COVERING						
ST01-112.20.100	20	26	100	100	Distal	
ST01-112.24.080	24	30	80	80	Distal	
ST01-112.24.100	24	30	100	100	Distal	
	Ø mm/Fr	Length mm	Guide wire	RM ^{*1}	IC ^{*2}	Lock ^{*3}
INTRODUCER SYSTEM						
	8.5/25	700	0.035 inch	2	Yes	Yes

Recommended guide wire: 600375-5

*1 RM – radiopaque markings / *2 IC – irrigation channel / *3 Lock – secures the introducer system during storage, transportation and introduction



UMBRELLA-VALVE-STENT

THE ULTIMATE SOLUTION FOR PERFECT HOLD AND REFLUX PREVENTION

With the Umbrella-Valve-Stent, MICRO-TECH combines perfect hold with effective protection against reflux. Its innovative design prevents stent migration and avoids development of pressure necrosis in the stomach. For even greater patient comfort, the stent is also equipped

with the unique 2-way valve system from MICRO-TECH. Liquids and foods reach the stomach unimpeded through the valve system and reflux is dramatically prevented. In the event of excessive pressure, the valve opens towards the oral direction allowing the patient to vomit.

SPECIFIC CHARACTERISTICS

- Unique umbrella design
- Innovative 2-way valve system
- Self-expanding
- Nitinol mesh with atraumatic ends
- Excellent positional stability
- High radial force
- Resistant and elastic covering
- Fully covered stents available
- High radiopacity
- Extraction threads for removal and repositioning
- Guide wire-compatible up to 0.035 inches



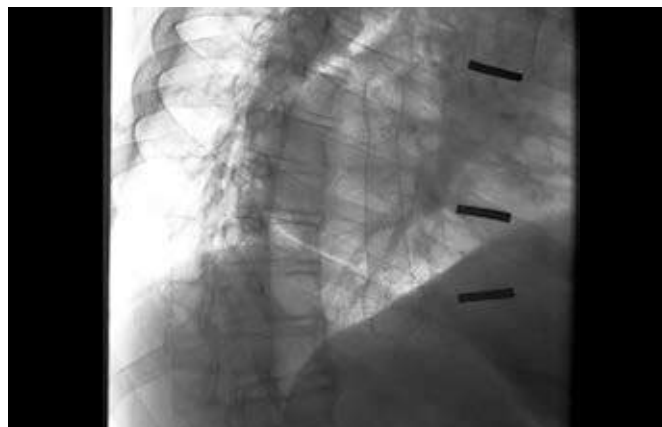
X-ray marking



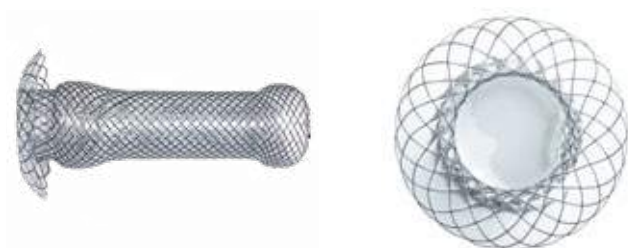
Valve

SUCCESSFUL IN PRACTICAL USE

Like every stent from MICRO-TECH, the Umbrella-Valve-Stent is characterised by excellent radiopacity which renders release of the stent easier from a radiological standpoint. Additional X-ray markings at significant points on the stent facilitate orientation and assist precise placement of the stent.



Released stent



TOP FORM DESIGN

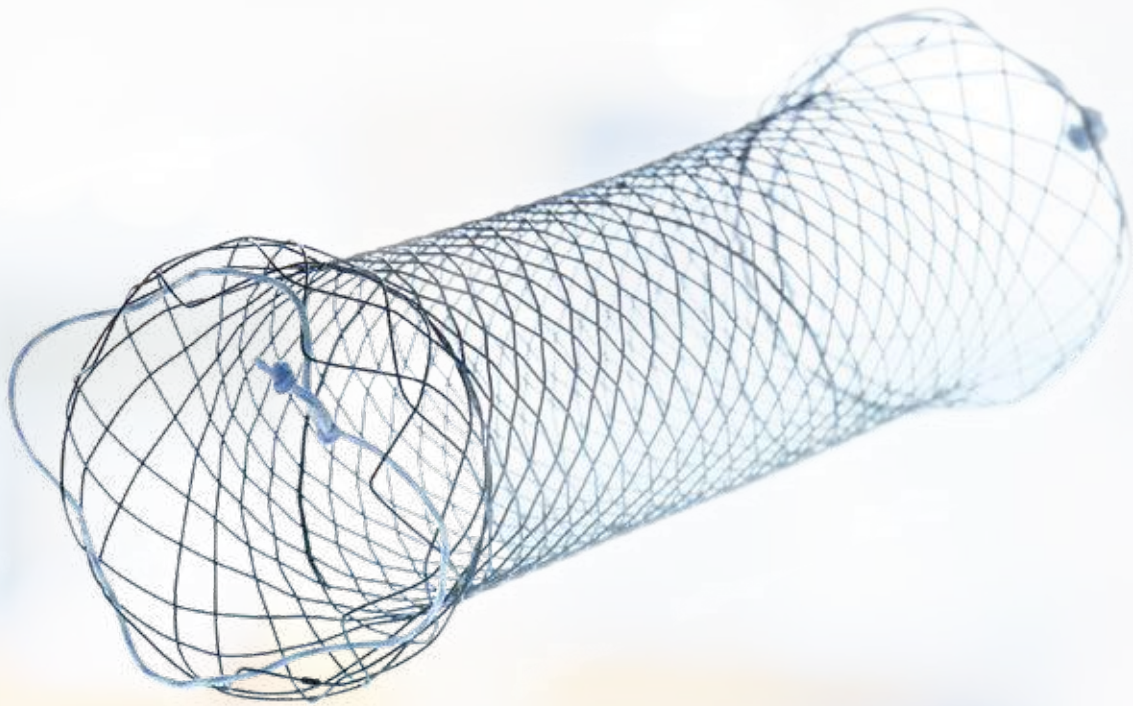
The unique umbrella design prevents migration of the stent in the oral and gastric directions. The stents' adaptability in the area of the cardia eliminates the possibility of protruding into the stomach, which in turn prevents development of pressure necrosis to a great extent.

SPECIFICATIONS

REF	Ø centre mm	Ø end prox./bulge/end dist. mm	Length mm	Covering mm	End design	
					proximal	distal
STENTS WITH END-TO-END COVERING						
ST01-115.24.080	24	30/30/50	80	80	Spherical	Umbrella anti-reflux-valve
ST01-115.24.100	24	30/30/50	100	100	Spherical	Umbrella anti-reflux-valve
	Ø mm/Fr	Length mm	Guide wire	RM ^{*1}	IC ^{*2}	Lock ^{*3}
INTRODUCER SYSTEM						
	8.5/25	700	0.035 inch	2	Yes	Yes

Recommended guide wire: 600375-5

*1 RM – radiopaque markings / *2 IC – irrigation channel / *3 Lock – secures the introducer system during storage, transportation and introduction



DUODENUM STENTS

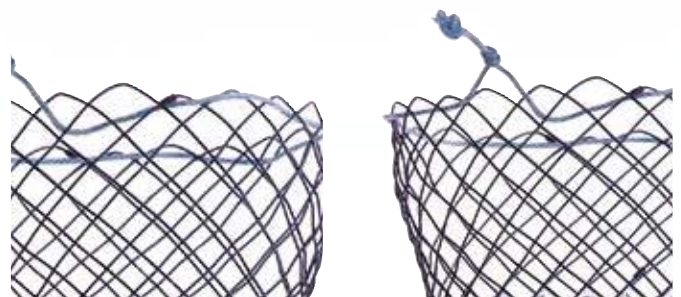
HIGH LEVEL OF POSITIONAL STABILITY VIA ANATOMICAL DESIGN

The self-expanding Nitinol stents are used to bypass stenoses in the duodenum. Their spherical ends adapt perfectly to the anatomy of the duodenum, thereby guaranteeing maximum positional stability. Stents with and without covering are available depending on the indication. The duodenal stent is preloaded on a TTS introducer

(through-the-scope) as standard. Insertion is therefore carried out through the working channel of the endoscope and release of the stent is observed endoscopically. X-ray markings on the introducer and on the stent itself ensure optimum radiological visualisation.

SPECIFIC CHARACTERISTICS

- Spherical ends
- Self-expanding
- Nitinol mesh with atraumatic ends
- Release under endoscopic observation
- Excellent positional stability
- Resistant and elastic covering
- High radiopacity
- Extraction threads for removal and repositioning
- Guide wire-compatible up to 0.035 inches

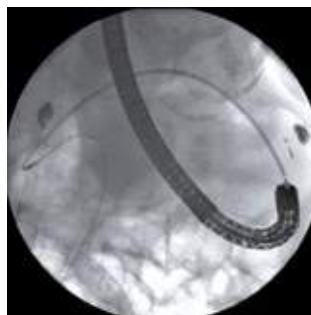


X-ray marking

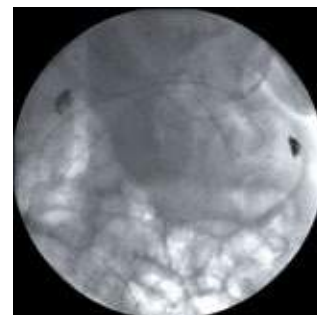
Extraction thread

SUCCESSFUL IN PRACTICAL USE

The X-ray images show the release process under radiological monitoring. The good radiopacity plus additional X-ray markings on the stent assist orientation and facilitate the release of the duodenal stent. The endoscopic position control clarifies the stent's optimum expansion.



Stent during release



Deployed stent



View deployed stent



100 mm

80 mm

60 mm

ALWAYS THE APPROPRIATE SOLUTION

With a diameter of 20 mm and different lengths of 60, 80, 100 or 120 mm, the range of duodenal stents always provides the right size for your patient.

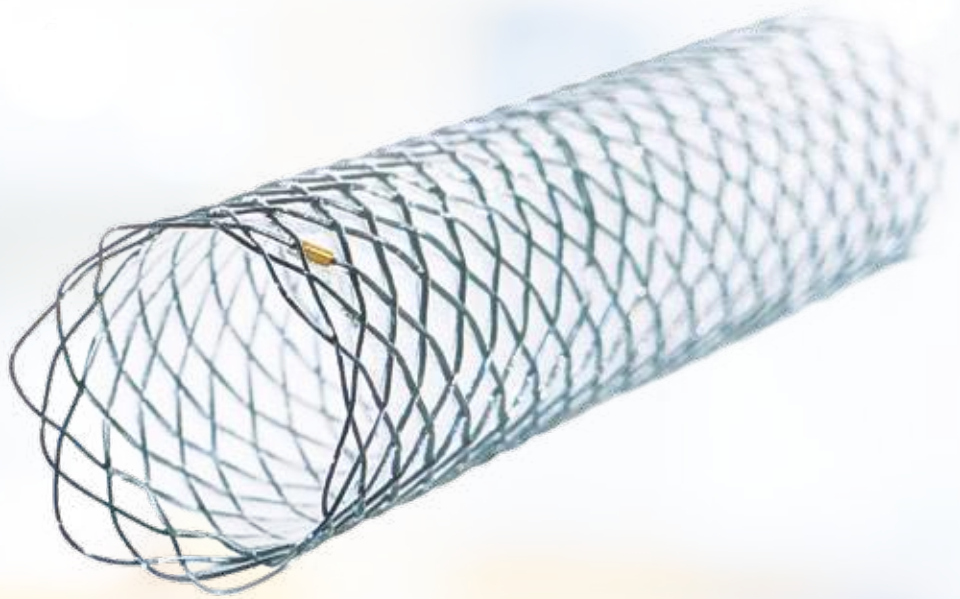
SPECIFICATIONS

REF	Ø centre mm	Ø end mm	Length mm	Covering mm
STENTS WITHOUT COVERING				
ST02-101.20.060	20	26	60	Without
ST02-101.20.080	20	26	80	Without
ST02-101.20.100	20	26	100	Without
ST02-101.20.120	20	26	120	Without
STENTS WITH PARTIAL COVERING				
ST02-102.20.060	20	26	60	40
ST02-102.20.080	20	26	80	60
ST02-102.20.100	20	26	100	80

	Ø mm/Fr	Length mm	Guide wire	RM ^{*1}	IC ^{*2}	Lock ^{*3}
INTRODUCER SYSTEM	3.3/10	1800	0.035 inch	2	Yes	Yes

Recommended guide wire: 600360-5 Alternative: 600358-5 with a longr tip or 600382-5 extra stiff

*1 RM – radiopaque markings / *2 IC – irrigation channel / *3 Lock – secures the introducer system during storage, transportation and introduction



BILIARY DUCT STENTS

ALWAYS THE IDEAL SOLUTION

With the biliary stents manufactured by MICRO-TECH you will always make the ideal choice to bridge-graft biliary duct stenoses. The high expansion force of the Nitinol wire mesh accounts for an excellent positional stability. The resistant cover prevents the stent from growing into

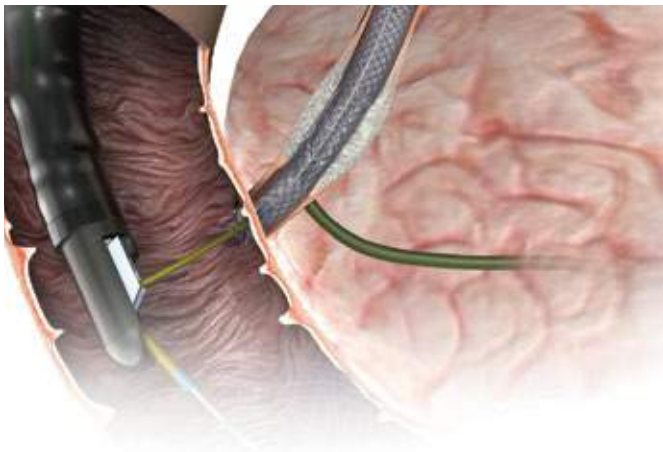
the tissue. The product range comprises two stent lines and offers a first-class solution that suits all requirements: the classic line and the platinum line. The comprehensive platinum line is especially distinguished by its extraordinary high radiopacity.

SPECIFIC CHARACTERISTICS

- Self-expanding
- Available for TTS and PTC
- Classic- and Platinum-Line
- Nitinol wire mesh with atraumatic ends
- Release under visual endoscopic control
- Enormous position stability
- Resistant and elastic cover
- High radiopacity
- Guiding wire passable to a maximum of 0.035 inches



X-ray marking



Removal of the introducer



Endoscopic positional control



Released stent

CLASSIC-LINE. FIRST-CHOICE FOR ALL APPLICATIONS

The Classic-Line is perfectly suited for all standard interventions. With two different approaches consisting of TTS and PTCD, it perfectly meets every requirement. These stents are made of highly flexible Nitinol wire mesh. Ten additional radiopaque markers account for the good visibility of our Classic-Line stents under fluoroscopy. Our product range comprises uncovered and partially covered stents.

PTCD FOR PERCUTANEOUS ACCESS

In case of therapeutic interventions into the biliary duct, it sometimes occurs that a transpapillary access cannot be accomplished. In such cases MICRO-TECH offers PTCD systems (percutaneous transhepatic cholangio drainage) as the ideal solution.

INTRODUCER SYSTEM FOR AN EXACT RELEASE

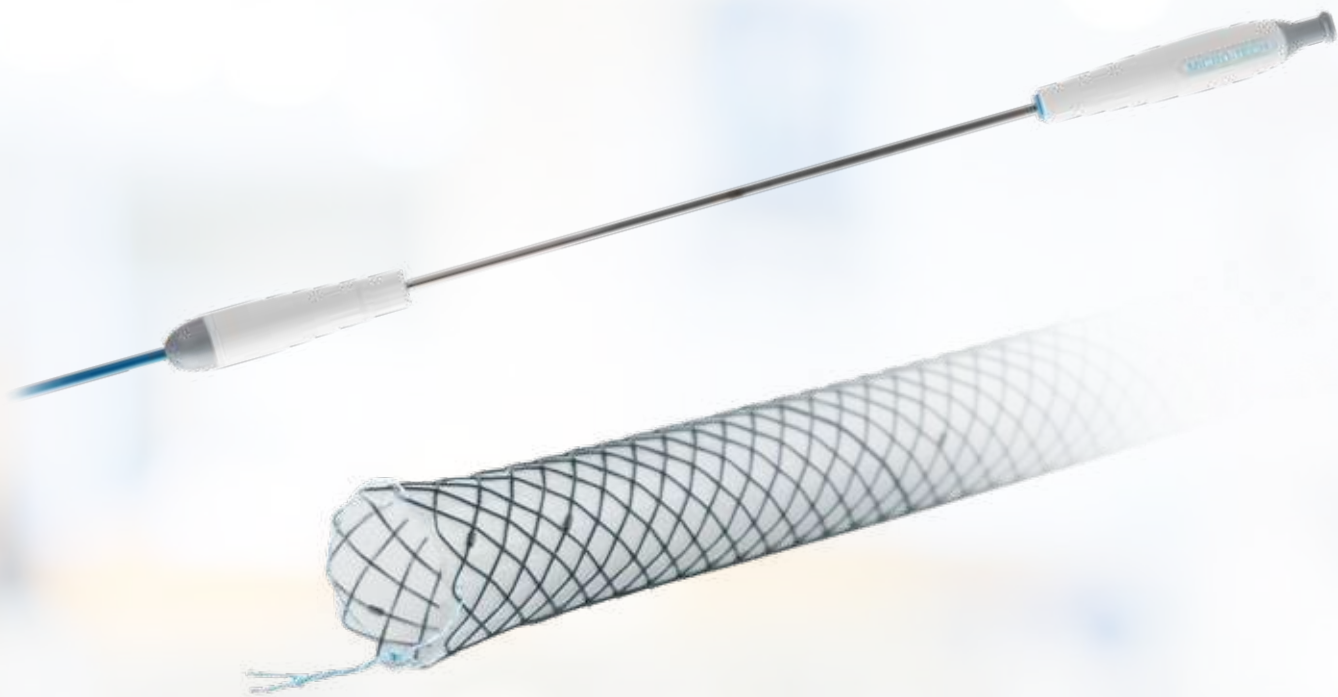
Additional radiopaque markers on the distal end of the introducer system and on the tip of the pusher catheter provide for additional orientation. In the endoscopic image, the tip of the pusher catheter can be unambiguously and easily distinguished from the proximal end of the stent. The permanent visual endoscopic control of the stent's proximal end considerably facilitates the exact release of the stent.

TTS STENTS FOR ROUTINE INTERVENTIONS

We offer uncovered as well as partially covered biliary duct stents in three different lengths. All stents can be placed through the working channel of the duodenoscope over the inserted guide wire (TTS – through-the-scope).

TEN PLATINUM RADIOPAQUE MARKERS

In order to achieve improved visibility under X-ray control each stent bears a total of ten radiopaque markers: four markers located at each end, and two in the middle of the stent. The two radiopaque markers in the middle guarantee for the controllability of the stent's optimal position during deployment.



BILIARY-STENT (GEN-II)

HIGH PRECISION IN SLIM DESIGN

The next generation of MICRO-TECH's biliary stents takes the bridging of bile-duct stenosis to a new level. Thanks to its slim design, the system can be pushed almost frictionless through the endoscope and released easily in the bile-duct. A high flexible, specially developed Nitinol wire and the tantalum markers ensure optimal placement under

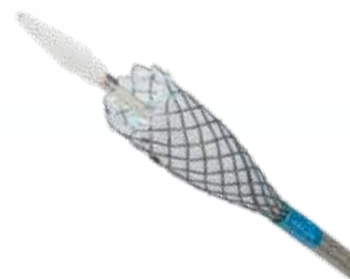
X-ray vision. The range of stents are available in lengths from 40 to 100 mm as well as fully, partially and uncovered stents. Uncovered and partially covered variants are produced with a "point-of-no-return" that allows to re-insert the stent into the sheath again and make the repositioning much easier.

SPECIFIC CHARACTERISTICS

- Slimmer introducer set
- Point-of-no-return for uncovered and partially covered stents
- Stent system does not need to be flushed before application
- Stent with tantalum marker for good visibility under X-ray



Tantalum X-ray markings



Partly expanded

SPECIFICATIONS

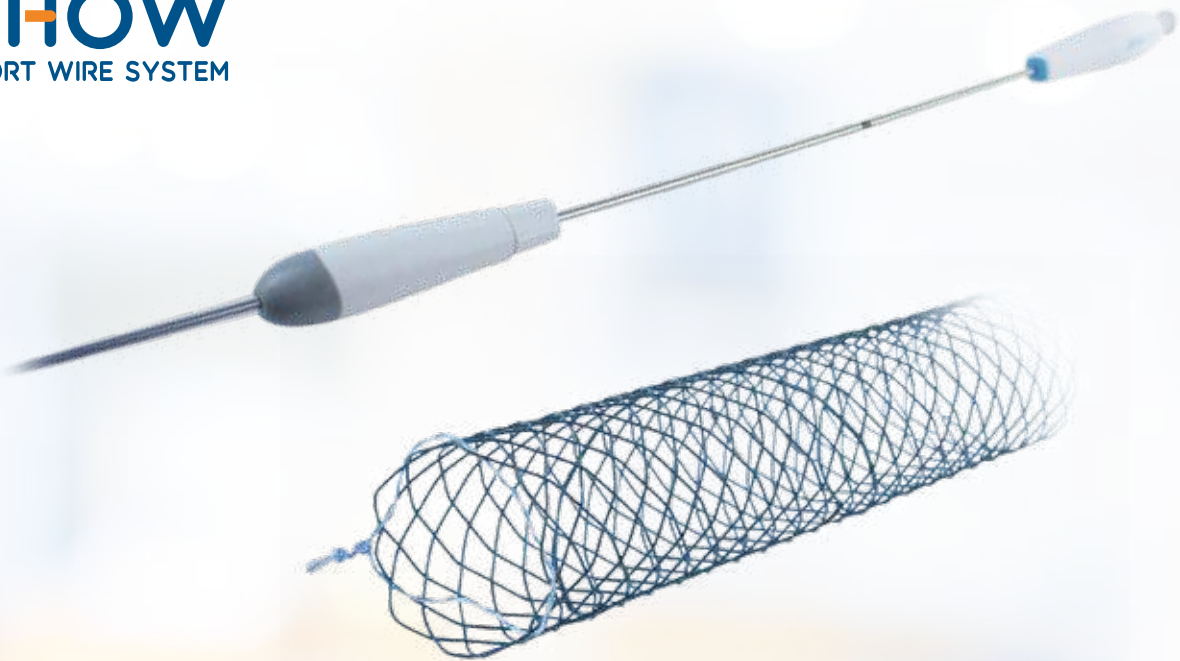
REF	Ø mm	Length mm	Working channel mm	Covering	
STENTS STRAIGHT					
NST03-001-10.040	10	40	3.7	Without	
NST03-001-10.060	10	60	3.7	Without	
NST03-001-10.080	10	80	3.7	Without	
NST03-001-10.100	10	100	3.7	Without	
NST03-002-10.040	10	40	3.7	Partial	
NST03-002-10.060	10	60	3.7	Partial	
NST03-002-10.080	10	80	3.7	Partial	
NST03-002-10.100	10	100	3.7	Partial	
NST03-004-10.040	10	40	3.7	Complete	
NST03-004-10.060	10	60	3.7	Complete	
NST03-004-10.080	10	80	3.7	Complete	
NST03-004-10.100	10	100	3.7	Complete	
STENTS WITH EXTENDED TULIPS					
NST03-111-10.040	10/13	40	3.7	Without	
NST03-111-10.060	10/13	60	3.7	Without	
NST03-111-10.080	10/13	80	3.7	Without	
NST03-111-10.100	10/13	100	3.7	Without	
NST03-112-10.040	10/13	40	3.7	Partial	
NST03-112-10.060	10/13	60	3.7	Partial	
NST03-112-10.080	10/13	80	3.7	Partial	
NST03-112-10.100	10/13	100	3.7	Partial	
NST03-114-10.040	10/13	40	3.7	Complete	
NST03-114-10.060	10/13	60	3.7	Complete	
NST03-114-10.080	10/13	80	3.7	Complete	
NST03-114-10.100	10/13	100	3.7	Complete	
	Ø mm/Fr	Length mm	Guide wire	RM ^{*1}	Lock ^{*2}
INTRODUCER SYSTEM					
	2.5/7.5; 2.8/8.5	1800	0.035 inch	2	Yes

*1 RM – radiopaque markings / *2 Lock – secures the introducer system during transport, storage and insertion

Recommended guide wires:

Straight: MTN-BM-89/45-A, MTN-BM-63/45-A, MTN-BM-53/45-A, MTN-BM-45/45-A.

J-tip: MTN-BM-89/45-A-J, MTN-BM-63/45-A-J.



SHOW-METAL-STENT

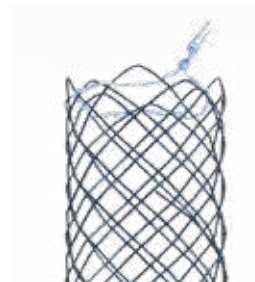
INDEPENDENCE AT ITS BEST

The SHOW-Metal-Stent from MICRO-TECH is indicated for applications in the bile duct and is suitable for both short and long wire systems. Time-consuming preparation and irrigation is no longer necessary. Made of flexible nitinol wire, the stent is designed to adapt ideally to biliary conditions. The atraumatic stent ends are characterized by their soft edges. For precise placement, there are overall

10 radiopaque markers on the stent itself and three more on the introducer set. The point-of-no-return (for uncovered and partially covered stents) allows resheathing of the stent which means it can be repositioned. The guide wire exit is located at approx. 30 cm. Our range includes stents with four different lengths of 40 to 100 mm and thus offers for each operation the ideal solution.

SPECIFIC CHARACTERISTICS

- Short and long wire compatible
- No preparation or flushing necessary
- Easy handling
- Uncovered, partially covered and fully covered
- Available in a straight form
- Automatic guide wire exit
- Point-of-no-return
- Very good visibility through tantalum markers
- Very flexible application system facilitates the placement



Extraction suture at proximal Stent-End



Guidewire discharge at ca. 30 cm from distal end

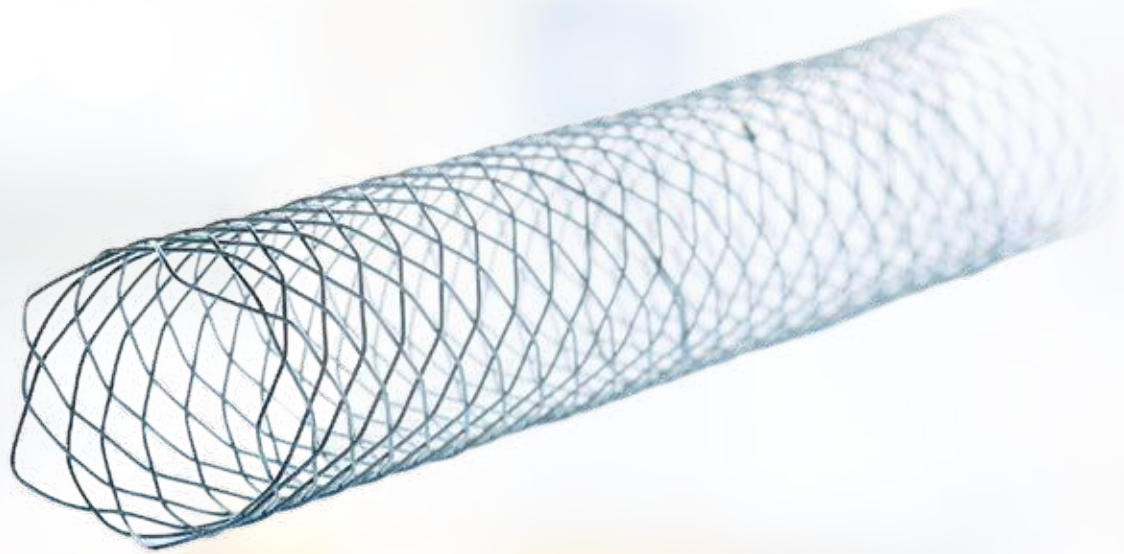
SPECIFICATIONS

REF	Ø mm	Length mm	Covering mm	Ø Catheter mm	Working length mm	Repositionable	Recommended GW inch
SHOW-METAL-STENTS							
RST43-001-10.040	10	40	without	2.83	1900	Yes	0.035"
RST43-001-10.060	10	60	without	2.83	1900	Yes	0.035"
RST43-001-10.080	10	80	without	2.83	1900	Yes	0.035"
RST43-001-10.100	10	100	without	2.83	1900	Yes	0.035"
RST43-002-10.040	10	40	30	2.83	1900	Yes	0.035"
RST43-002-10.060	10	60	50	2.83	1900	Yes	0.035"
RST43-002-10.080	10	80	70	2.83	1900	Yes	0.035"
RST43-002-10.100	10	100	90	2.83	1900	Yes	0.035"
RST43-004-10.040	10	40	40	2.83	1900	No	0.035"
RST43-004-10.060	10	60	60	2.83	1900	No	0.035"
RST43-004-10.080	10	80	80	2.83	1900	No	0.035"
RST43-004-10.100	10	100	100	2.83	1900	No	0.035"

Packaging unit: 1 piece

REF	Ø inches	Total length mm	Tip length mm	Tip form	Set-up	Covering
GUIDEWIRE						
MTN-BM-89/26-A	0.035"	2600	65	straight	hydrophilic, radiopaque	blue-yellow covering
MTN-BM-89/26-A-J	0.035"	2600	65	J-form	hydrophilic, radiopaque	blue-yellow covering

Packaging unit: 2 pieces



PLATINUM-LINE

PERFECT VISIBILITY FOR HIGHEST PRECISION

With its Platinum-Line, MICRO-TECH heralds a new generation of biliary duct stents. Under X-ray control, they are more visible than ever before, making their release even safer and precise. The secret of their extremely good visi-

bility lies in the specially developed Nitinol wire. Now with enhanced radiopacity, these platinum stents virtually glow in X-ray images. This accounts for extremely good visibility of the stent over its entire length under fluoroscopy.

UNCHALLENGED: VISIBILITY UNDER X-RAY CONTROL

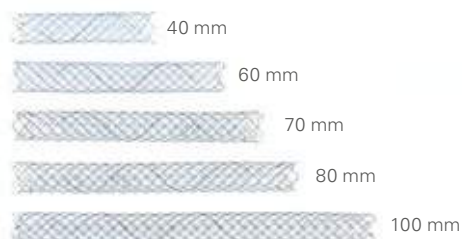
Apart from the innovative Nitinol wire, each stent of the Platinum-Line is distinguished by two additional radiopaque markers which are located in the middle of the stent. This enables pinpointing the exact position of the stent's center line while the stent is being released. Additional radiopaque markers on the introducer system also facilitate orientation.



Released Platinum-Line stent

THE RIGHT CHOICE, WHETHER SHORT OR LONG

The biliary stents from MICRO-TECH are 10 mm wide throughout and differ in length according to the indication: a choice of five lengths is available, namely 40. 60. 70. 80 and 100 mm.



SPECIFICATIONS

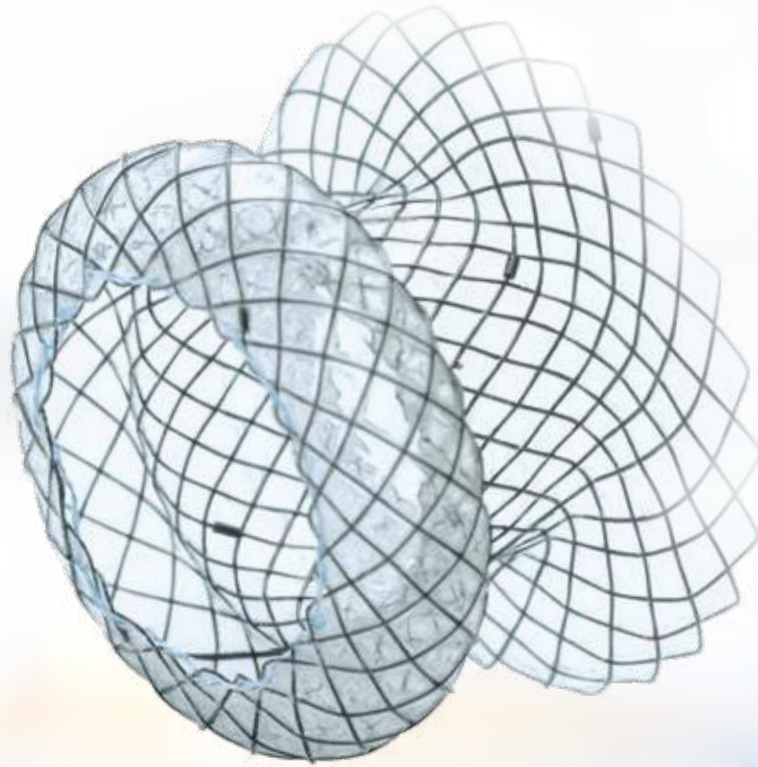
REF	Ø centre mm	Ø end mm	Length mm	Covering mm
CLASSIC-LINE TTS				
ST03-101.10.040	10	10	40	Without
ST03-101.10.060	10	10	60	Without
ST03-101.10.080	10	10	80	Without
ST03-101.10.100	10	10	100	Without
ST03-102.10.060	10	10	60	50
ST03-102.10.080	10	10	80	70
ST03-102.10.100	10	10	100	90
CLASSIC-LINE PTCD				
ST03-111.10.060	10	10	60	Without
ST03-111.10.080	10	10	80	Without
ST03-112.10.060	10	10	60	50
ST03-112.10.080	10	10	80	70
PLATINUM-LINE TTS				
ST03-104.10.040	10	10	40	Without
ST03-104.10.060	10	10	60	Without
ST03-104.10.080	10	10	80	Without
ST03-104.10.100	10	10	100	Without
ST03-105.10.040	10	10	40	30
ST03-105.10.060	10	10	60	50
ST03-105.10.080	10	10	80	70
ST03-105.10.100	10	10	100	90
ST03-106.10.040	10	10	40	40
ST03-106.10.060	10	10	60	60
ST03-106.10.080	10	10	80	80
PLATINUM-LINE TTS, EXTENDED ENDS, EXTRACTION THREADS PRE-PAPILLARY				
ST03-126.10.040	10	10	40	30
ST03-126.10.060	10	10	60	50
ST03-126.10.080	10	10	80	70
ST03-127.10.040	10	10	40	40
ST03-127.10.060	10	10	60	60
ST03-127.10.070	10	10	70	70
ST03-127.10.080	10	10	80	80

	Ø mm/Fr	Length mm	Guide wire	RM ^{*1}	IC ^{*2}	Lock ^{*3}
INTRODUCER SYSTEM						
ST03-101... (TTS)	2.7/8	1800	0.035 inch	2	Yes	Yes
ST03-102 + 103... (TTS)	3.0/9	1800	0.035 inch	2	Yes	Yes
ST03-111... (PTCD)	2.7/8	500	0.035 inch	2	Yes	Yes
ST03-112... (PTCD)	2.8/8.5	500	0.035 inch	2	Yes	Yes
ST03-126... (TTS)	3.0/9	1800	0.035 inch	2	Yes	Yes
ST03-127... (TTS)	3.3/10	1800	0.035 inch	2	Yes	Yes

Recommended guide wire (TTS): 600360-5 Alternative: 600358-5 with a longer tip

Recommended guide wire (Perkutan): 600371-5

*1 RM – radiopaque markings / *2 IC – irrigation channel / *3 Lock – secures the introducer system during storage, transportation and introduction



PSEUDOCYST STENT (GEN-II)

SECURE HOLD FOR RELIABLE DRAINAGE

The Pancreatic pseudocyst stent is used for reliable drainage of endoscopically removed concretions. The design of the stent with its distal umbrella and proximal tulip shapes, ensures that during an eventual migration a dislocation would only occur into the stomach and not into the cyst. The large diameter of 16 mm in the middle of the

stent allows for endoscopic removal of concretions. The 10.5 French TTS (through-the-scope) insertion system is brought into position through the working channel of the endoscope with the aid of a guide wire. When the stent is released, 4 radiopaque markers at each end of the stent guarantee excellent identification on radiological images.

SPECIFIC CHARACTERISTICS

- Stent with complete silicone covering
- High degree of positional stability
- Atraumatic tips
- High level of radial force
- Tantalum radiomarkers
- Guide wire passage up to 0.035 inches
- TTS insertion system with 3.5 mm diameter, 1,800 mm length, two x-ray markings, rinsing attachment and lock to secure the introducer set during transport, storage and insertion



Transgastric access from stomach into pseudocyst

SPECIFICATIONS

REF	Ø centre mm	End Ø mm proximal/distal	Total length mm	Covering mm	End design proximal-distal	System length mm	System Ø mm
PSEUDOCYST STENT							
NST33-544-16.015	16	26/30	15	15	mushroom-umbrella	1800	3.5 (=10.5F)
NST33-544-16.020	16	26/30	20	20	mushroom-umbrella	1800	3.5 (=10.5F)
NST33-544-16.025	16	26/30	25	25	mushroom-umbrella	1800	3.5 (=10.5F)
NST33-544-16.030	16	26/30	30	30	mushroom-umbrella	1800	3.5 (=10.5F)

	Ø mm/Fr	Length mm	Guide wire	RM ^{*1}	IC ^{*2}	Lock ^{*3}
INTRODUCER SYSTEM	3.5/10.5	1800	0.035 inch	2	Yes	Yes

Recommended guide wire: 600358-5

*1 RM – radiopaque markings / *2 IC – irrigation channel / *3 Lock – secures the introducer system during storage, transportation and introduction

REF	Tip length mm	Needle length mm	Partly insulated cutting wire	Preloaded guide wire	Ø working channel mm
NEEDLE KNIFE					
DSP-30505-121111	0	5	No	No	2.8
DSP-30505-121211	0	5	Yes	No	2.8
DSP-30507-121111	0	7	No	No	2.8
DSP-30507-121211	0	7	Yes	No	2.8



COLONIC STENTS TTS

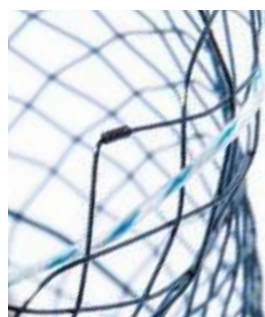
SECURE PLACEMENT UNDER VISUAL ENDOSCOPIC CONTROL

Whereas OTW systems can be placed over-the-wire, TTS (through-the-Scope) colonic stents can be delivered through the working channel of the colonoscope. This way, application time is reduced dramatically. Due to the visible endoscopic control during placement stent deployment

takes place in an even more controlled fashion. In comparison with OTW colonic and rectal stents, TTS applications are especially flexible and better suited for the curved segments of the colon, e.g. the right and left colonic flexures.

SPECIFIC CHARACTERISTICS

- Self-expanding
- Nitinol wire mesh with atraumatic ends
- Flexible and positionally stable
- 10 Radiopaque markers for enhanced visibility under X-ray
- Extraction threads for removal and repositioning
- Guide wire passable up to 0.035 inches



X-ray marking



Dispenser for guide wires

ALWAYS IN IDEAL SHAPE

As a standard among TTS colonic stents, you can choose from four different lengths: 60, 80, 100, and 120 mm for stents without covering. In all other versions the stent end working diameter amounts to 25 mm and to 30 mm. The introducer system for MICRO-TECH TTS colonic stents has a diameter of 10 Fr (= 3.3 mm). It therefore fits to all working channels having a diameter of at least 3.6 mm.

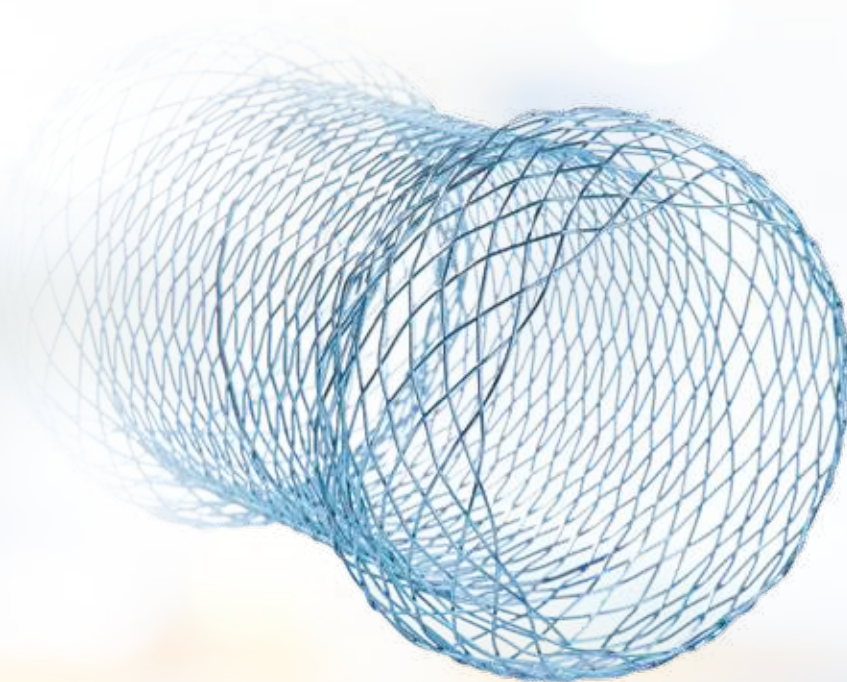


SPECIFICATIONS

REF	Ø centre mm	Ø end mm	Length mm	Covering mm	Application	End design
STENTS WITHOUT COVERING						
ST04-104.25.060	25	30	60	Without	Colon	Spherical
ST04-104.25.080	25	30	80	Without	Colon	Spherical
ST04-104.25.100	25	30	100	Without	Colon	Spherical
ST04-104.25.120	25	30	120	Without	Colon	Spherical
	Ø mm/Fr	Length mm	Guide wire	RM ^{*1}	IC ^{*2}	Lock ^{*3}
INTRODUCER SYSTEM						
	3.3/10	2300	0.035 inch	2	Yes	Yes

Recommended guide wire: 600382-5 extra stiff

*1 RM – radiopaque markings / *2 IC – irrigation channel / *3 Lock – secures the introducer system during storage, transportation and introduction



COLONIC AND RECTAL STENTS OTW

MAXIMUM HOLD FOR MAXIMUM PATIENT COMFORT

The OTW (over-the-wire) colonic and rectal stents of MICRO-TECH have a particularly high positional stability. In the OTW colonic stents this is achieved via a square-edged transition, situated near each end of the stent. This virtually anchors the stent inside the lumen and adapts it optimally to the anatomy and peristalsis of the colon. In contrast, rectal stents are less stimulating and hence more

“ball-shaped”. This ensures the patient experiences less irritations in this sensitive area, thus decisively increasing quality of life. The partially sheathed OTW colonic and rectal stents produce very high radial forces. Therefore, they should be placed into straight segments of the colon, and not into the bent segments, such as the right and left flexure of the colon.

SPECIFIC CHARACTERISTICS

- Nitinol mesh with atraumatic ends
- Anatomical design
- Excellent positional stability
- High radial force
- Resistant and elastic covering
- High radiopacity
- Extraction threads for removal and repositioning
- Guide wire-compatible up to 0.035 inches



Spherical end



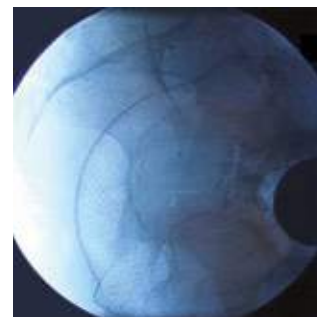
Mushroom design

SUCCESSFUL IN PRACTICAL USE

The stents are convincing in practice by their good opening performance and the special distinctive end shape of this type with which the stents can be firmly anchored in the semilunar folds of the colon. In order to facilitate orientation during deployment, the stents have additional X-ray markings at all significant points.



Control with contrast medium



Released colon stent



Colon stents

Rectum stents

POSITIONALLY STABLE IN ALL SIZES

Colonic and rectal stents are available in lengths of 80 mm and 100 mm. Stents for patients who have undergone anastomosis have a length of 60 mm. You can choose between non-covered, partially covered and end-to-end covered versions.

SPECIFICATIONS

REF	Ø centre mm	Ø end mm	Length mm	Covering mm	Application	End design
STENTS WITHOUT COVERING						
ST04-101.30.080	30	36	80	Without	Colon	Mushroom
ST04-101.30.100	30	36	100	Without	Colon	Mushroom
ST04-111.30.080	30	36	80	Without	Rectum	Spherical
ST04-111.30.100	30	36	100	Without	Rectum	Spherical
STENTS WITH PARTIAL COVERING						
ST04-102.30.080	30	36	80	50	Colon	Mushroom
ST04-102.30.100	30	36	100	70	Colon	Mushroom
ST04-112.30.080	30	36	80	50	Rectum	Spherical
ST04-112.30.100	30	36	100	70	Rectum	Spherical
ANASTOMOSIS STENTS WITH END-TO-END COVERING						
ST04-109.20.060	20	26	60	60	Colon	Spherical
ST04-109.26.060	26	32	60	60	Colon	Spherical
ST04-109.30.060	30	36	60	60	Colon	Spherical
	Ø mm/Fr	Length mm	Guide wire	RM ^{*1}	IC ^{*2}	Lock ^{*3}
INTRODUCER SYSTEM						
ST04-111 + 112...	8/24	700	0.035 inch	2	Yes	Yes
ST04-101 + 102 + 109...	8/24	1100	0.035 inch	2	Yes	Yes

Recommended guide wire: (Colon): 600382-5; (Rectum): 600375-5

*1 RM – radiopaque markings / *2 IC – irrigation channel / *3 Lock – secures the introducer system during storage, transportation and introduction

NOTES





