THE PERFECT SOLUTION TO MEET YOUR NEEDS

Magnetic Black Star[®] XS rounds off the product range

Cystoscopic removal of standard ureteral stents is both time and labor intensive. It requires an available cystoscope, which needs to be reprocessed after use. The patient is also anesthetized and may experience pain. Magnetic Black Star®offers a new and improved alternative. Magnetic ureteral stenting negates the need for repeated cystoscopies. A flexible, magnetic retrieval device only a few millimeters in diameter removes the ureteral stent through the urethra ensuring minimal discomfort and no pain, offering a significant advantage to conventional removal. The new Magnetic Black Star® XS also solves the challenges posed by ureteral stent insertion in children. The magnet at the pigtail-end on the bladder side has been reduced in size by 30 percent to facilitate cystoscopic insertion with a working channel as of 6 FR/CH.

The right size for every patient

Find the perfect size for every patient with three available magnet sizes and various lengths and diameters.

NEW: Magnetic Black Star[®] XS



Broader range of uses thanks to three magnet sizes

Magnet size S

Magnetic Black Star[®]

The future of ureteral stenting has arrived. Magnetic and versatile

Size (FR/CH)	Length cm	Size Stent magnet	Order number without guide wire with retrieval device	Order number with guide wire with retrieval device	Order number with guide wire without retrieval device	Order number without guide wire without retrieval device
4.8	10	4.8	MR-414810 - XS	MR-364810 - XS	MR-304810 - XS	MR-404810 - XS
4.8	10	7	MR-414810	MR-364810	MR-304810	MR-404810
4.8	12	4.8	MR-414812 - XS	MR-364812 - XS	MR-304812 - XS	MR-404812 - XS
4.8	12	7	MR-414812	MR-364812	MR-304812	MR-404812
4.8	15	4.8	MR-414815 - XS	MR-364815 - XS	MR-304815 - XS	MR-404815 - XS
4.8	15	7	MR-414815	MR-364815	MR-304815	MR-404815
4.8	18	4.8	MR-414818 - XS	MR-364818 - XS	MR-304818 - XS	MR-404818 - XS
4.8	18	7	MR-414818	MR-364818	MR-304818	MR-404818
4.8	20	4.8	MR-414820 - XS	MR-364820 - XS	MR-304820 - XS	MR-404820 - XS
4.8	20	7	MR-414820	MR-364820	MR-304820	MR-404820
4.8	22	4.8	MR-414822 - XS	MR-364822 - XS	MR-304822 - XS	MR-404822 - XS
4.8	22	7	MR-414822	MR-364822	MR-304822	MR-404822
4.8	24	4.8	MR-414824 - XS	MR-364824 - XS	MR-304824 - XS	MR-404824 - XS
4.8	24	7	MR-414824	MR-364824	MR-304824	MR-404824
4.8	26	4.8	MR-414826 - XS	MR-364826 - XS	MR-304826 - XS	MR-404826 - XS
4.8	26	7	MR-414826	MR-364826	MR-304826	MR-404826
6	15	9	MR-410615	MR-360615	MR-300615	MR-400615
6	18	9	MR-410618	MR-360618	MR-300618	MR-400618
6	20	9	MR-410620	MR-360620	MR-300620	MR-400620
6	22	9	MR-410622	MR-360622	MR-300622	MR-400622
6	24	9	MR-410624	MR-360624	MR-300624	MR-400624
6	26	9	MR-410626	MR-360626	MR-300626	MR-400626
7	15	9	MR-410715	MR-360715	MR-300715	MR-400715
7	18	9	MR-410718	MR-360718	MR-300718	MR-400718
7	20	9	MR-410720	MR-360720	MR-300720	MR-400720
7	22	9	MR-410722	MR-360722	MR-300722	MR-400722
7	24	9	MR-410724	MR-360724	MR-300724	MR-400724
7	26	9	MR-410726	MR-360726	MR-300726	MR-400726



Magnet design

Smaller than a pinhead with no compromises in terms of power. The Magnetic Black Star[®]'s three magnets are configured for the respective use to ensure quick and easy insertion and removal with minimal discomfort for the patient.

Rough guide to selecting the right size:

- XS for endoscopic stent insertion (≥ FR/CH 6 working channel)
- S for endoscopic stent insertion in adults (≥ FR/CH 8 working channel)
- L for retrograde insertion using the Seldinger technique

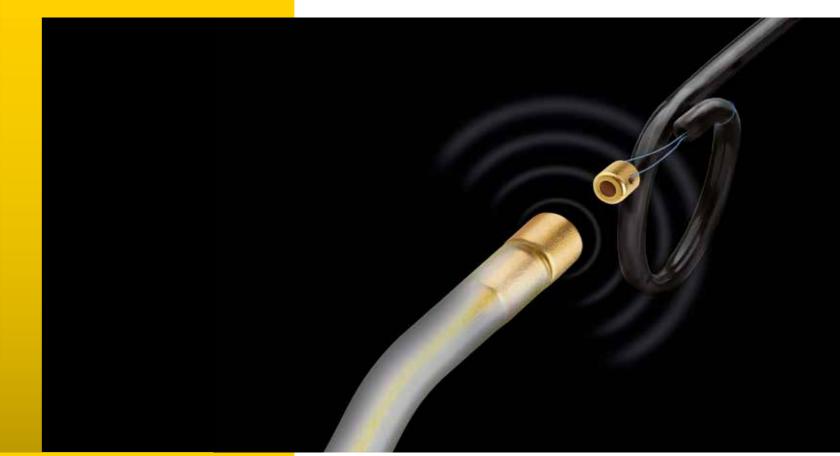
Retrieval Device

Size (FR/CH)	Length cm	Size Magnet	Order number Suitable for FR/CH 4.8	Order number Suitable for FR/CH 6/7	
09	40	9	R-Device-S	-	
15	40	9	-	R-Device-L	



Magnetic Black Star[®]

Fast • Less pain • Effective • Cost efficient



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Your partner for your endourology needs – WE ARE URO

Setting new standards for the safety, comfort and efficiency of ureteral stent removal. Sophisticated ureteral stents for easy removal.

Your exclusive partner for Magnetic Black Star[®]

MAGIC -THE MAGNETIC WAY

Magnetic Black Star[®] - The easiest way to remove stents

The insertion of a ureteral stent is a recognized standard for a variety of indications. In common practice, the ureteral stent is inserted using the Seldinger technique and removed with a cystoscopy. Take advantage of a smarter solution:

Quicker, more comfortable and gentler removal with the superior Magnetic Black Star[®].

Magnets are thread-anchored to the bladder end of the black ureteral stent. The opposite pole is anchored in the Tiemann tip of the supplied catheter, i.e. the retrieval device. Magnetic force enables quick and easy removal of the Magnetic Black Star[®] through the urethra.

SAFETY, COMFORT AND EFFICIENCY

The advantages of Magnetic Black Star[®] compared to conventional ureteral stents

Benefits for patients:

- Quick and easy removal ^{1, 2}
- No second anesthesia required²
- Increased patient compliance
- Less pain compared to a cystoscopy⁴

Insertion of the Magnetic Black Star® is comparable to the insertion of a conventional ureteral stent. Please note: Magnetic Black Star[®] must be removed prior to a scheduled MRI scan. The Magnetic Black Star® must not be implanted in patients with pacemakers due to interference from the magnets.

Easy to use into the urethra up to the bladder to emove the Magnetic Black Star® retrieval device, a process that is clearly noticeable and sometimes

Quick

Removal < 30 seconds¹

Less pain

Removal without a cystoscopy or painkillers/sedatives² Effective

Pigtail bladder-side end

Saves hospital resources

Cost-efficient

Saves money approx. € 100 per stent removal²



Clinically proven

Over 15 clinical studies and case reports have verified the speed, simplicity and efficiency of the Magnetic Black Star®. One study¹ demonstrated that the removal of the Magnetic Black Star[®] took less than 30 seconds in 19 out of 20 patients. Patients seldom reported discomfort (based on the Ureteric Stent Symptoms Questionnaire, USSQ).

A study⁴ to assess pain related to the insertion of magnetic ureteral stents included 151 consecutive patients who had undergone a semirigid ureteroscopy for stone removal. Patients experienced significantly less pain during ureteral stent removal with a Magnetic Black Star[®] compared to patients with conventional ureteral stents. As a result, magnetic stents are regarded as a safer and less traumatic alternative.

¹ Blasl F. et al: Patientenkomfort und Kosteneffektivität durch neuen, magnetisch entfernbaren DJ-Katheter, Katharinenhospital, Klinikum Stuttgart (2016);

² Rassweiler et al: Ureteral stent removal without cystoskopy. Department of Urology, University Medical Center Mannheim (2015);

³ O'Connell L. et al: Magnetic Stent Removal in a Nurse-Led Clinic; A Nine Month Experience. James Connolly Memorial Hospital Blanchardstown, Dublin

⁴ Klinger et al: Evaluation of pain perception associated with use of the magnetic-end ureteric double-J stent for short-term ureteric stenting. Springer Nature 2017

Benefits for institutions & users:

• Improved surgical capacities due to lack of anesthesia²

- Quick and easy removal that can be carried out by nursing staff, for example ^{1, 3}
- Resource friendly save time and money ²
- No instrument preparation required

CHILDREN'S UROLOGY

Clinical benefits of magnetic ureteral stenting verified in study

As part of a monocentric study, 100 children (65 boys; average age 7.8 years old) were treated with a Magnetic Black Star® between November 2016 and December 2019.⁵ The stents were removed using the special magnetic retrieval device in an outpatient procedure without general anesthetic. Summary: A safe method with a high rate of success and wide acceptance among patients.

Benefits for the treatment of children

- Quick, atraumatic removal of ureteral stents
- Outpatient procedure
- No risk of trauma from a second operation
- Comfortable solution for patients, parents and medical professionals
- Saves resources at your hospital

Minimal pain during stent removal, average 3/10 (0-7)





Fast stent removal: Average removal time: 4_min (1 - 25) with 2/3 < 2 min.

The Magnetic Black Star[®] is removed with a slow and continuous pull. This generally takes less than 30 seconds.



84 % success with stent removal

- The retrograde cystoscopic and open-surgery insertion of the MBS did not lead to any issues.
- In certain cases, stent insertion was an issue in children due to a narrow UVJ. Dr. T. Blanc: "Based on experience, we believe that passage through the UVJ will be simplified primarily by the development of smaller magnets." ⁵

The solution: Magnetic Black Star® XS

98 % success with stent removal

- Problem-free insertion of the retrieval device through the urethra in boys.
- All children were able to go home without any issues after removal of the stent.
- Cystoscopic removal was required in 2 % of cases due to bladder diverticulum.
- ⁵ Dr. Thomas BLANC, Necker-Enfants Malades University, Children's Hospital, Paris, France, Feasibility and safety of magnetic-end double-J ureteral stent insertion and removal in children, World J Urol (2020)