



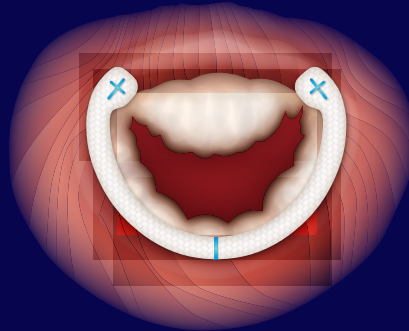
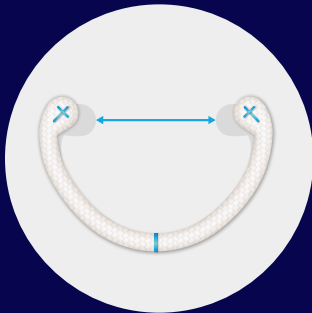
Designed for
physiologic motion

CG Future™
Annuloplasty Band

Medtronic

A band that does both

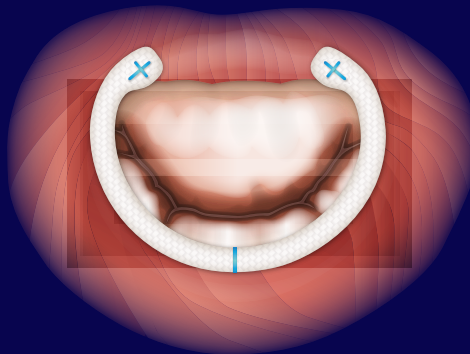
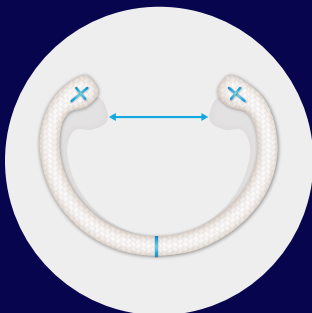
The CG Future band is designed to be implanted between the trigones to aggressively remodel the posterior annulus while maintaining the dynamic motion of the anterior mitral annulus.¹



For diastole

Provide posterior remodeling

As the intertrigonal distance expands during diastole, facilitating ventricular filling, CG Future bands are radially flexible to accommodate this motion.²



For systole

Enable anterior motion

CG Future bands enable the anterior saddle horn of the mitral annulus to form without restriction between the trigones, allowing folding away from the left ventricle outflow tract in systole in addition to expansion/contraction of the mitral annulus.²

Dynamic physiologic remodeling

The ratio of the transverse (SL) to anterior-posterior (AP) internal diameters is 1.75.^{2,3}

AP dimension

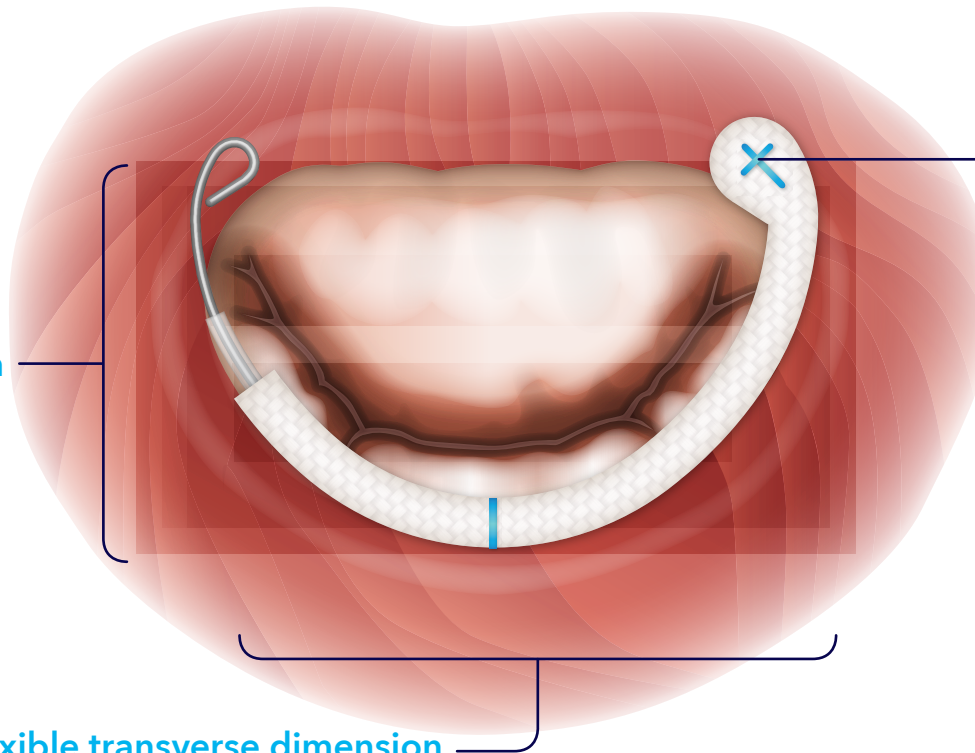
Aggressive AP dimension for remodeling.^{1,4}

Signature wire core eyelet design

Wire core eyelets are designed to enhance fixation to the fibrous trigones.^{2,3}

Flexible transverse dimension

The wire core is radially flexible, designed to permit annular and intertrigonal flexion during systole.²



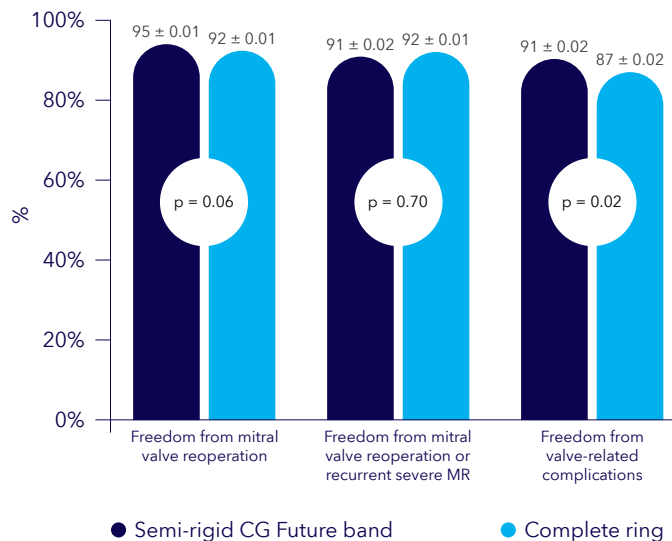
Long-term results of mitral valve repair with the CG Future band

"In the current era of mitral valve repair the gold standard should be both durability, in terms of freedom from reoperation and recurrent mitral insufficiency, and a physiologically normal valve

without functional mitral stenosis (FMS) or systolic anterior motion (SAM). The design characteristics of a semirigid posterior annuloplasty band can increase the likelihood of achieving this goal." ⁶

Eight-year cumulative freedom from adverse events with the CG Future band and a complete ring^{1,6}

retrospective analysis of 1,612 patients with degenerative mitral regurgitation.[†]



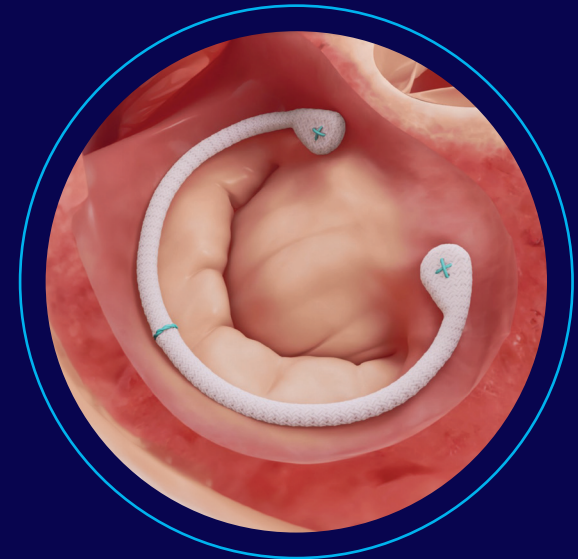
[†]Non-randomized, non-matched comparison with statistically different baseline and procedural characteristics.

Influences of mitral valve annuloplasty on aortic valve hemodynamics

A single-center study comparing 20 healthy volunteers and 14 patients who had undergone mitral repair with partial bands or semi-rigid complete rings found that:⁷

- Overall, mitral valve repair induced different vortex flow patterns compared with that of healthy volunteers.
- In healthy volunteers and six of the seven patients with partial band, the ejection flow streamed out smoothly to the aorta with Energy Loss elevation only near the aortic wall during middle systole.
- Conversely, semi-rigid complete rings restricted aortic annulus motion, disturbed aortic outflow patterns, resulting in significantly smaller EOAI in the ring group than the band group.

The partial band group consisted of semi-rigid CG Future Band and a flexible band; the semi-rigid complete ring group consisted of Carpentier-Edwards Physio II[™] annuloplasty ring.



CG Future
annuloplasty band

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Designed for implantability

The CG Future band can be used for small incisions where visibility and access to the anterior annulus may be limited.^{3,8}



Low profile design⁵



Two eyelets align with trigones for anchoring

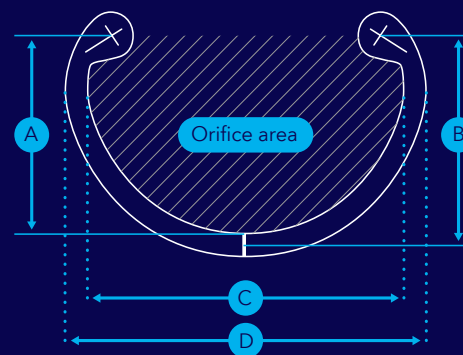
Product specifications

CG Future Annuloplasty Band, model 638B

Size (mm)	Product codes	A (mm)	B (mm)	C (mm)	D (mm)	Orifice area (mm ²)
26	638BL26	16.38	17.64	26.0	30.9	332.0
28	638BL28	17.48	18.73	28.0	32.9	382.8
30	638BL30	18.59	19.85	30.0	34.9	437.4
32	638BL32	19.71	20.97	32.0	36.9	496.3
34	638BL34	20.83	22.09	34.0	38.9	559.2
36	638BL36	21.92	23.18	36.0	40.9	625.1
38	638BL38	23.04	24.29	38.0	42.9	695.7

CG Future Annuloplasty Band ordering information

Order number	Components and accessories
7638S	CG Future sizer set (8 sizers)
7615	Annuloplasty handle (216 mm length)
7615XL	Annuloplasty handle (373 mm length)
T7630	CG Future accessory tray



References

- ¹ Yaffee D, Loulmet D, Zias E, et al. Long-term results of mitral valve repair with semi-rigid posterior band annuloplasty. *J Heart Valve Dis.* January 2014;23(1):66-71.
- ² Sharony R, Saunders P, Nayar A, et al. Semirigid partial annuloplasty band allows dynamic mitral annular motion and minimizes valvular gradients: an echocardiographic study. *Ann Thorac Surg.* February 2004;77(2):518-522.
- ³ Lange R, Guenther T, Kiefer B, et al. Mitral valve repair with the new semirigid partial Colvin-Galloway Future annuloplasty band. *J Thorac Cardiovasc Surg.* May 2008;135(5):1087-1093.
- ⁴ Loulmet D, Yaffee D, Ursomanno P, et al. Systolic anterior motion of the mitral valve: a 30-year perspective. *J Thorac Cardiovasc Surg.* December 2014;148(6):2787-2794.
- ⁵ Data on file at Medtronic. Report #1109076, 05/20/2010.
- ⁶ James L, Grossi EA, Loulmet DF, Galloway AC. Semirigid posterior annuloplasty band: Reshaping the mitral orifice while preserving its physiology. *JTCVS Tech.* October 7, 2021:37-42.
- ⁷ Morichi H, Itatani K, Yamazaki S et al. Influences of mitral annuloplasty on left ventricular flow dynamics assessed with 3-dimensional cine phase-contrast flow magnetic resonance imaging. *J Thorac Cardiovasc Surg.* March 2022;163(3):947-959.
- ⁸ Lang M, Vitanova K, Voss B, et al. Beyond the 10-Year Horizon: Mitral Valve Repair Solely With Chordal Replacement and Annuloplasty. *Ann Thorac Surg.* January 2023;115(1):96-103.

CG Future™ Annuloplasty Ring and Band

Indications: The CG Future annuloplasty ring and the CG Future annuloplasty band are indicated for the reconstruction or remodeling of pathological mitral valves. Valvular insufficiency or stenosis may be corrected by appropriate repair and annular remodeling. Contraindications: Heavily calcified valves, valvular retraction with severely reduced mobility, active bacterial endocarditis. Warnings/Precautions/Adverse Events: Only physicians who have received proper training in valve repair should use this device. Adverse events can include: thromboembolism, dehiscence, hemolysis, stenosis, residual incompetence, heart block, endocarditis, systolic anterior motion, left ventricular outflow tract obstruction, anticoagulant-related hemorrhage, low cardiac output, damage to coronary arteries or sinus, thrombosis, ring or band fracture, or leaflet perforation. Caution: Federal law (USA) restricts these devices to sale by or on the order of a physician.

For a listing of indications, contraindications, precautions, warnings, and potential adverse events, please refer to the Instructions for Use. For countries that use eIFUs, consult instructions for use at [medtronic.com/manuals](https://www.medtronic.com/manuals). Note: Manuals can be viewed using a current version of any major internet browser.

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