

Masters HP™ Mechanical Heart Valve Standard Cuff

Aortic Valves



Product Highlights

- Sewing cuff redesigned to facilitate supra-annular placement, allowing for an increase in orifice size for a given tissue annulus diameter
- Increased effective orifice area (EOA), lower pressure gradients and improved performance¹⁻⁵
- 85 degree leaflet opening angle offers improved laminar flow and reduces turbulence^{1,2,6}
- Controlled torque rotation mechanism allows for easy rotation and intraoperative adjustment
- St. Jude Medical heart valves are MR conditional⁷

Ordering Information

Contents: Aortic Valve (1 unit per box)

Model/Reorder Number	Tissue Annulus Diameter (mm)	Valve Orifice Inner Diameter (mm)	Geometric Orifice Area (cm ²)	Effective Orifice Area ⁸ (cm ²)	Cuff Style
17AHPJ-505	17	14.8	1.63	1.16	Standard
19AHPJ-505	19	16.7	2.06	1.51	Standard
21AHPJ-505	21	18.6	2.55	2.03	Standard
23AHPJ-505	23	20.4	3.09	2.59	Standard
25AHPJ-505	25	22.5	3.67	3.08	Standard
27AHPJ-505	27	24.2	4.41	3.73	Standard

1. Feng Z, Nakamura T, Fujimoto T, et al. In vitro investigation of opening behavior and hydrodynamics of bileaflet valves in the mitral position. *Artificial Organs*. 2002;26(1):32-9.
2. Shipkowitz T, Ambrus J, Kurk J, et al. Evaluation technique for bileaflet mechanical valves. *J Heart Valve Dis*. 2002;11(2):275-82.
3. Vitale N, Calderara I, Muneretto C, et al. Italian Multicenter Study Group for the St. Jude Medical Hemodynamic Plus Aortic Valve Prosthesis. Clinical evaluation of St. Jude Medical Hemodynamic Plus versus standard aortic valve prostheses: The Italian multicenter, prospective, randomized study. *J Thorac Cardiovasc Surg*. 2001;122(4):691-8.
4. Carrel T, Zingg U, Jenni R, et al. Early in vivo experience with the Hemodynamic Plus St. Jude Medical heart valves in patients with narrowed aortic annulus. *Ann Thorac Surg*. 1996;61(5):1418-22.
5. Ismeno G, Renzulli A, De Feo M, et al. Standard versus Hemodynamic Plus 19-mm St. Jude Medical aortic valves. *J Thorac Cardiovasc Surg*. 2001;121(4):723-8.
6. King M, David T, Fisher J. An initial parametric study on fluid flow through bileaflet mechanical heart valves using computational fluid dynamics. *J Eng Med*. 1994;208:63-72.
7. St. Jude Medical MRI Safety Document.
8. Walker DK, Brendzel AM, Scotten LN. The new St. Jude Medical Regent mechanical heart valve: Laboratory measurements of hydrodynamic performance. *J Heart Valve Dis*. 1999;8(6):687-96.

Please review the Instructions for Use prior to using these devices for a complete listing of indications, contraindications, warnings, precautions, potential adverse events and directions for use.

Product referenced is approved for CE Mark.

HP, ST. JUDE MEDICAL, the nine-squares symbol and MORE CONTROL, LESS RISK are registered and unregistered trademarks and service marks of St. Jude Medical, Inc. and its related companies.

Structural Heart International Catalogue
GMCS0176EN (May 2012)

©2012 St. Jude Medical, Inc. All Rights Reserved.

Page MH4



ST. JUDE MEDICAL
MORE CONTROL. LESS RISK.