# hydra

Transcatheter Aortic Valve

**Self-expanding**
**Supra-annular**
**Bovine pericardium**

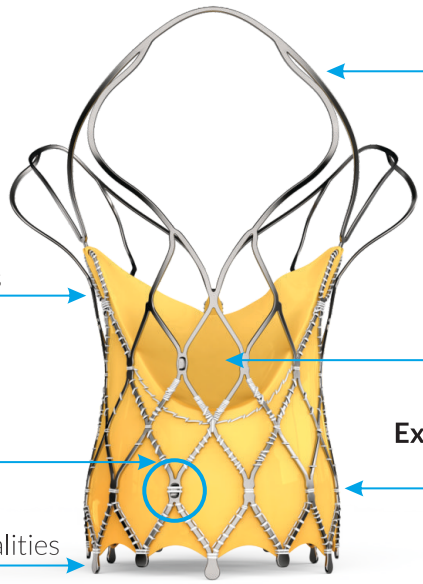


SMT | VASCULAR INNOVATIONS

hydra

# Key Features

## Self-expanding, Supra-annular & Bovine pericardium



**Three tentacle design**
Offers flexibility to navigate through the aortic arch

**Supra-annular valve**
For optimized hemodynamics

**Large frame cells (≥15 F)**
Facilitates easy access to the coronary arteries

**Radiopaque frame markers**
For accurate positioning

**Extended internal sealing skirt**
Mitigates paravalvular leak

**Non-flared inflow part**
Reduces conduction abnormalities

**Outflow**

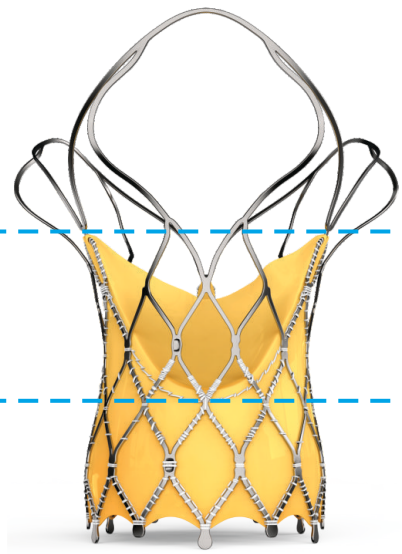
**Low radial strength**
Provides conformability to the shape of the aorta

**Mid Frame**

**High hoop strength**
Ensures circular configuration of the bioprosthetic valve

**Inflow**

**High radial strength**
Provides fixation to the native aortic annulus



# New Delivery System

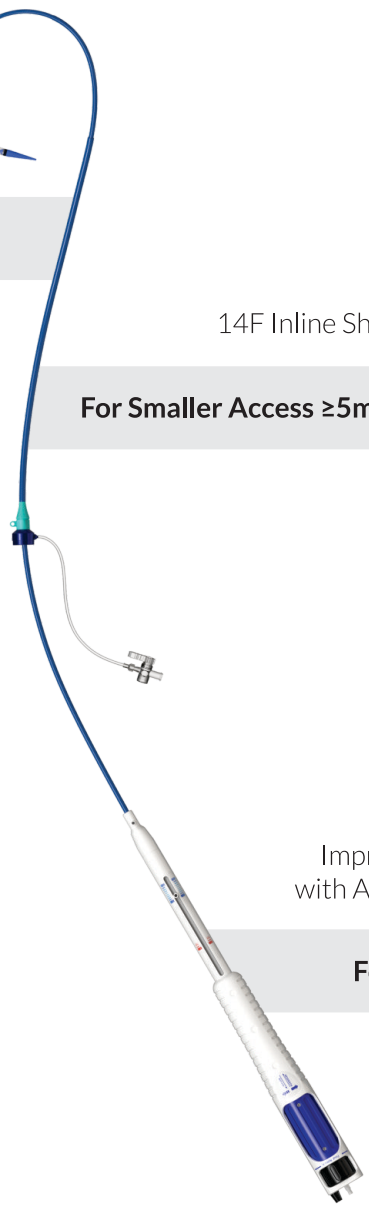
Non-Braided Transparent
Capsule & Flexible Shaft

**For Better Deliverability**

**14F***

14F Inline Sheath*

**For Smaller Access ≥5mm***



Improved Control Handle
with Active Release Feature

**For Ease of Release**

**High Flexibility**

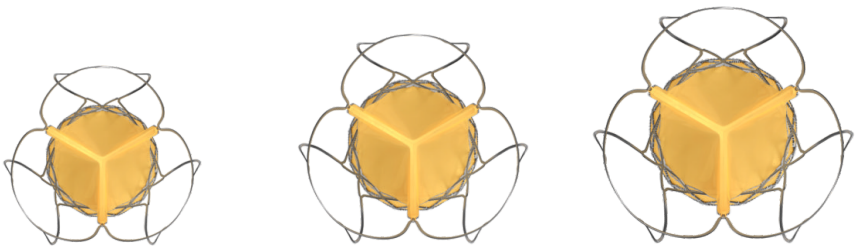
**Better Control**

**Up to 80% Recapturable**

**Recapture** **Retrieve** **Reposition**

* 14F equivalent integrated sheath diameter for patients requiring 22 mm or 26 mm Hydra valve.

# Intended Annular Treatment Range



| 22 | 26 | 30 |
|---|---|---|

18 19 20 21 22 23 24 25 26 27

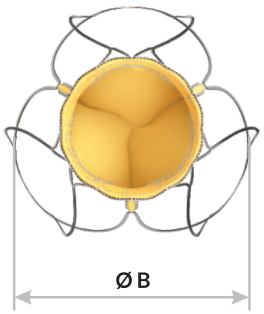
**Annulus Size (mm)**

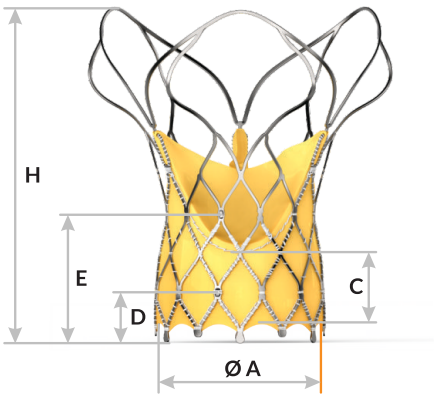



**Crimped**

| Dimensions | | Hydra 22 | Hydra 26 | Hydra 30 |
|---|---|---|---|---|
| Diameter at Bottom | A | 22 | 26 | 30 |
| Diameter at Top | B | 39 | 43 | 47 |
| Sealing Skirt Height | C | 12 | 13 | 14 |
| First Marker Crimped | X | 8 | 9 | 10 |
| First Marker | D | 5 | 6 | 7 |
| Second Marker | E | 15 | 18 | 21 |
| Height | H | 55 | 53 | 51 |

Sizes mentioned in "mm"



hydra

# Designed with Purpose

## Frame

- Highly flexible design and easy navigation
- Large open cells (>15F) for easy coronary access
- Two sets of radiopaque markers on the frame for precise positioning
- Extended sealing skirt

## Valve

- Supra-annular design
- Bovine pericardial tissue
- Anti-calcification treatment



## Delivery System

- High flexibility and improved control
- Unique color-coded indicators for deployment guidance
- Ease of release of the valve
- 14F equivalent integrated sheath diameter for patients requiring 22 mm or 26 mm Hydra valve

## Safety features

- Recapturable
- Repositionable
- Retrievable

# Ordering Information

| Reference Number | Size |
|---|---|
| HYDRA22 | 22 mm |
| HYDRA26 | 26 mm |
| HYDRA30 | 30 mm |

HYDRA/BRO/EN03 REV 00

**Disclaimers:** This product is intended for use by or under the directions of a physician. Prior to use, refer to the "Instructions for use" supplied with the product for indications, contraindications, side effects, suggested procedure warnings and precautions. As part of our continuous product development policy we reserve the right to change product specifications without prior notification.
Caution: Check the regulatory status of the device before distribution in area where CE marking is not the regulation in force. Illustrations are artist's representation only and should not be considered as engineering drawings or photographs. This document does not replace medical advice from the doctor / physician.
Hydra is manufactured by Vascular Innovations Co., Ltd. Thailand, an SMT group company, Hydra is a trademark of Vascular Innovations Co., Ltd.
©2025 Sahajanand Medical Technologies Limited - All Rights Reserved. www.smtpl.com

Registered Office: Sahajanand Medical Technologies Limited
'Sahajanand Estate', Wakharia Wadi, Near Dabholi Char Rasta, Ved Road,
Surat 395004, Gujarat, INDIA Tel.: +91 261 3602300
• CIN: U33119GJ2001PLC040121 • www.smtpl.com

Scan this QR code for more information