

# Vaginal Speculum

## Description

A **Vaginal Speculum** is a medical instrument used in **gynaecology** to dilate the vaginal canal, allowing visual and physical access to the cervix and vagina during **examinations, diagnostics, and minor procedures**. It plays a key role in **Pap smears, IUD insertions, colposcopy, and biopsies**.

Available in multiple sizes, it allows selection based on **patient anatomy (nulliparous, multiparous, or postmenopausal)** or **clinical requirement**.

## Specification

- **Sizes Available:** 4, 5, 6, 8, 10, 12, 14
- **Type:** Bivalve or Duckbill
- **Design:** Adjustable screw or ratchet lock
- **Blades:** Smooth, rounded ends for patient comfort
- **Opening Mechanism:** Self-retaining or manual
- **Sterilization:** Autoclavable (metal), Pre-sterilized (plastic)
- **Usage:** Reusable (SS) or Disposable (plastic/polymer)

## Sizes & Measurement Guide

Size	Blade Width (mm)	Blade Length (mm)	Patient Type / Use
4	18–20 mm	75–80 mm	Paediatric / Narrow vaginal canal
5	20–22 mm	85 mm	Small-framed adults / Virginal use
6	22–24 mm	90 mm	Average nulliparous woman
8	24–26 mm	95 mm	Multiparous / General adult use
10	26–28 mm	100 mm	Postnatal or slight prolapse cases
12	28–30 mm	105 mm	Advanced gynaecological procedures
14	30–32 mm	110–115 mm	Obese patients / Surgical access

 *Measurements may slightly vary based on manufacturer.*

## Types

- **Graves Speculum:** Broad blades, used in general gynaecology
- **Cusco's Speculum:** Self-retaining bivalve; popular in clinics
- **Pederson Speculum:** Narrow blades; ideal for virginal or elderly patients
- **Sims Speculum:** Single-blade, non-self-retaining; used with retractor
- **Disposable Speculum:** Made from transparent medical-grade plastic

## Material

- **Reusable:**
  - Medical/Surgical grade stainless steel (SS 304/316)
  - Corrosion-resistant, autoclavable
- **Disposable:**
  - BPA-free, transparent medical-grade plastic (polycarbonate)
  - Individually packed and pre-sterilized

## Category

- OB/GYN Instruments
- Diagnostic Gynaecology Tools
- Outpatient & Surgical Examination Instruments

## Product Form

- **Form:** Scissor-like with screw or ratchet lock mechanism
- **Blade Design:** Smooth, rounded, and atraumatic
- **Control:** Finger rings or thumb press (on disposable units)

## Usage

- Routine pelvic exams
- Visual inspection of cervix
- Papanicolaou (Pap) smear testing
- IUD insertion and removal/ Vaginal cervical swab collection
- Colposcopy and cervical biopsy

## Advantages

- Multiple sizes ensure accurate patient fit
- Reusable options are durable and cost-effective
- Disposable models eliminate cross-contamination risk
- Adjustable opening for customizable access
- Stainless steel offers long shelf-life and high heat resistance

## Disadvantages

- Improper size may cause patient discomfort
- Cold metal may cause unease (unless pre-warmed)
- Overuse without lubrication may lead to mucosal injury
- Requires trained personnel to use properly

## Precautions

- Choose the right size based on patient history
- Lubricate properly to avoid mucosal trauma
- Pre-warm metal speculum for comfort
- Use sterilized instrument (or sealed disposable)
- Avoid overexpansion to prevent cervical trauma

## HS / HSN Code

- **HS Code:** 9018.90 – Instruments and appliances for medical or veterinary use
- **HSN Code (India):** 9018.90.99 – Other medical instruments (includes speculums)

## Handling & Sterilization Details

- **Reusable (Stainless Steel):**
  - Clean thoroughly post-procedure with enzymatic detergent
  - Sterilize via autoclave (121°C for 15–20 min) or EO gas
  - Inspect lock and blade for damage before reuse
- **Disposable (Plastic):**
  - Use one time only/ Discard in biohazard bin after use

## Human and Veterinary Application

### Veterinary Application

- Used for **canine, feline, bovine, and equine gynaecological exams**
- Helps with **vaginal cytology, AI procedures, and visual inspection**
- Large-size specula (sizes 10–14) used in **farm and large animal practices**
- Critical for **vaginal prolapse assessment and reproductive health checks**

### Human Application

- Standard instrument for **pelvic and cervical examinations**
- Used across hospitals, clinics, and OB/GYN practices
- Critical in **women's health screenings** such as cervical cancer detection
- Sizes vary to accommodate **virginal, post-menopausal, pregnant, and obese patients**

### **? FAQ's (Frequently Asked Questions)**

#### **Q1: How do I choose the correct vaginal speculum size?**

A1: It depends on the patient's age, parity, anatomy, and purpose of exam. Sizes 4–6 for narrow anatomy, 8–10 for general use, 12–14 for larger anatomy or surgical access.

#### **Q2: What's the difference between metal and plastic speculums?**

A2: Metal is reusable and autoclavable; plastic is disposable, lightweight, and pre-sterilized.

#### **Q3: Is it safe to use a speculum without lubrication?**

A3: Lubrication is recommended to reduce discomfort and avoid mucosal injury.

#### **Q4: Can veterinary speculums be reused?**

A4: Yes, stainless steel versions are reusable and sterilizable, commonly used in animal clinics and farms.

#### **Q5: Are all speculums self-retaining?**

A5: No. Cusco's are self-retaining, while Sims speculum requires an assistant or retractor.