

Product Overview

*Discover the fascinating world of
PENTAX Medical endoscopy.*





PENTAX Medical Europe Innovation and responsibility.

With a combination of technological innovations and medical responsibility, PENTAX Medical sets new standards for endoscopic diagnosis and therapy.

State-of-the-art medical and technological equipment of the highest quality that come with intelligent system compatibility as well as a comprehensive system program. Furthermore an efficient service program provides the highest level of investment security for endoscopists of all relevant disciplines.

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Gastroenterology



High Performance Video Endoscopes

Product	Insertion tube [ø mm]	Distal end [ø mm]	Instrument channel [ø mm]	Working length [mm]	Field of view [°]	Tip deflection up/down [°]	Tip deflection right/left [°]	Remarks
Gastrosopes								
Ultraslim								
EG16-K10	5.4	5.2	2.0	1,100	140	210/120	120/120	Transnasal, wide angle
Slim								
EG27-i10	9.0	9.2	2.8	1,050	140	210/120	120/120	HD+, CF, TO
Routine								
EG29-i10	9.8	9.9	3.2	1,050	140	210/120	120/120	HD+, CF, TO, Water Jet System
Duodenoscope								
ED34-i10T	11.6	13.0	4.2	1,250	100 (retro 10)	120/90	105/90	HD+, detachable cap, PENTAX "CleanCap-System"
Colonoscopes								
Slim								
EC34-i10L/F/M	11.6	11.5	3.8	1,700 1,500 1,300	140	180/180	160/160	HD+, CF, TO, New GDF, Water Jet System
Routine								
EC38-i10L/F/M	13.2	13.2	3.8	1,700 1,500 1,300	140	180/180	160/160	HD+, New GDF, Water Jet System
EC38-i10F2/M2	13.2	13.2	3.8	1,500 1,300	140	180/180	160/160	HD+, New GDF, increased rigidity, Water Jet System

- Transnasal = Suitable for transnasal gastroscopy
- HD+ = High-Definition New Chip
- CF = Close Focus
- TO = Wide Therapeutic Option. Optimal ratio outer diameter/working channel
- PENTAX "CleanCap-System" = Detachable distal end cap for a safe and quick mechanical cleaning of air and water channels
- New GDF = New graduate flexibility of the colonoscope insertion tube
- Increased rigidity = Insertion tube with increased rigidity in comparison with standard equipment

Gastroenterology



High-Definition Video Endoscopes

Product	Insertion tube [ø mm]	Distal end [ø mm]	Instrument channel [ø mm]	Working length [mm]	Field of view [°]	Tip deflection up/down [°]	Tip deflection right/left [°]	Remarks
Gastrosopes								
Routine								
EG-2990i	9,8	10,8	2,8	1,050	140	210/120	120/120	HD+, Water Jet System
MagniView								
EG-2990Zi	9,8	10,6	2,8	1,050	140	210/120	120/120	HD+, MagniView, Water Jet System Distal Rubber Hood
Colonoscopes								
Ultraslim								
EC-2990Li/Fi/Mi	9,8	10,2	2,8	1,700 1,500 1,300	140	180/180	160/160	HD+, GDF, Water Jet System
RetroView								
EC-3490TLi/TFi/TMi	11,6	10,5	3,2	1,700 1,500 1,300	140	210/180	160/160	HD+, RetroView radius, GDF, Water Jet System
MagniView								
EC-3890LZi/FZi/MZi	13,2	13,0	3,8	1,700 1,500 1,300	140	180/180	160/160	HD+, MagniView, GDF, Water Jet System Distal Rubber Hood (OE-A59)
Routine								
EC-3890Li/Fi	13,2	13,2	3,8	1,700 1,500	140	180/180	160/160	HD+, GDF, Water Jet System
EC-3890Fi2	13,2	13,2	3,8	1,500	140	180/180	160/160	HD+, GDF, Water Jet System, increased rigidity
Enteroscope								
VSB-2990i	9,8	9,8	2,8	2,200	140	180/180	160/160	HD+

HD+ = High-Definition
MagniView = HD+ optical zoom endoscope

Gastroenterology



High-Resolution Video Endoscopes

Product	Insertion tube [ø mm]	Distal end [ø mm]	Instrument channel [ø mm]	Working length [mm]	Field of view [°]	Tip deflection up/down [°]	Tip deflection right/left [°]	Remarks
Gastrosopes								
Ultra Slim								
EG-1690K	5.4	5.3	2.0	1,100	120	210/120	120/120	transnasal
Slim								
EG-2490K	8.0	7.1	2.4	1,050	140	210/120	120/120	–
EG-2790K	9.0	9.2	2.8	1,050	140	210/120	120/120	–
Routine								
EG-2990K	9.8	10.2	2.8	1,050	140	210/120	120/120	Water Jet System
Therapeutic								
EG-3490K	11.6	11.5	3.8	1,050	140	210/120	120/120	Water Jet System
Twin-Channel								
EG-3890TK	12.8	13.2	3.8/2.8	1,050	140	180/120	120/120	Water Jet System
Duodenoscope								
ED-3490TK	11.6	13.2	4.2	1,250	100 (retro 10)	120/90	105/90	–
Colonoscopes								
Slim								
EC-3490LK/FK	11.6	11.5	3.8	1,700 1,500	140	180/180	160/160	GDF, Water Jet System
Twin-Channel								
EC-3890TLK/TFK	13.2	13.2	3.8/2.8	1,700 1,500	140	180/180	160/160	GDF, Water Jet System
Routine								
EC-3890LK/FK/MK	13,2	13,2	4,2	1,700 1,500 1,300	140	180/180	160/160	GDF, Water Jet System
EC-3890FK2/MK2	13,2	13,2	4,2	1,500 1,300	140	180/180	160/160	GDF, Water Jet System, increased rigidity

Transnasal = Suitable for transnasal gastroscopy
 HD+ = High-Definition
 MagniView = HD+ optical zoom endoscope

Gastroenterology



High-Resolution Video Ultrasound scopes

Product	Insertion tube [ø mm]	Distal end [ø mm]	Instrument channel [ø mm]	Working length [mm]	Field of view [°]	Tip deflection up/down [°]	Tip deflection right/left [°]	Remarks
Endoscopic Ultrasound (EUS)								
Linear								
EG-3270UK	10.8	12.0	2.8	1,250	120	130/130	120/120	electronically longitudinal, freq.
EG-3870UTK	12.8	14.3	3.8	1,250	120 (retro 45)	130/130	120/120	electronically longitudinal, freq.
Radial								
EG-3670URK	12.1	10.3	2.4	1,250	140	130/60	60/60	360°, electronically radial, freq.

Value solution endoscopes

Product	Insertion tube [ø mm]	Distal end [ø mm]	Instrument channel [ø mm]	Working length [mm]	Field of view [°]	Tip deflection up/down [°]	Tip deflection right/left [°]	Remarks
Gastrosopes								
Routine								
EG-290Kp	9.8	9.8	2.8	1,050	140	210/120	120/120	
Colonoscopes								
Routine								
EC-380LKp/ FKp	13.2	13.0	3.8	1,700 1,500	140	180/180	160/160	GDF
EC-380FK2p/ MK2p	13.2	13.0	3.8	1,500 1,300	140	180/180	160/160	GDF, increased rigidity

GDF
Increased rigidity

Freq.

= Graduated flexibility of the insertion tube.
= Insertion tube with increased rigidity in comparison with standard equipment.
= Frequency 5, 6.5, 7.5, 9, 10 MHz

Pulmonology



High-Definition Video Bronchoscope

Product	Insertion tube [ø mm]	Distal end [ø mm]	Instrument channel [ø mm]	Working length [mm]	Field of view [°]	Tip deflection up/down [°]	Tip deflection right/left [°]	Remarks
Bronchoscope								
EB-1990i	6.4	6.6	1.2	600	120	180/130	-/-	HD+, STERRAD® compatible

High-Resolution Video Bronchoscopes

Product	Insertion tube [ø mm]	Distal end [ø mm]	Instrument channel [ø mm]	Working length [mm]	Field of view [°]	Tip deflection up/down [°]	Tip deflection right/left [°]	Remarks
Bronchoscopes								
Slim								
EB-1170K	3.7	3.8	1.2	600	120	210/130	-/-	-
Routine								
EB-1575K	5.2	5.5	2.0	600	120	210/130	-/-	HR, STERRAD® compatible
Therapeutic								
EB-1970TK	6.3	6.2	3.2	600	120	180/130	-/-	-
EB-1975K	6.4	6.3	2.8	600	120	180/130	-/-	HR, STERRAD® compatible

High-Resolution Ultrasound Video Bronchoscope

Product	Insertion tube [ø mm]	Distal end [ø mm]	Instrument channel [ø mm]	Working length [mm]	Field of view [°]	Tip deflection up/down [°]	Tip deflection right/left [°]	Remarks
Endobronchial Ultrasound (EBUS)								
EB-1970UK	6.3	7.4	2.0	600	100 (retro 45)	120/90	-/-	electronically longitudinal, freq.

HD+ = High-Definition
 Freq. = Acoustic Frequency: 5–10 MHz switchable
 HR = High-Resolution

Pulmonology



High-Quality Fiberoptic Bronchoscopes

Product	Insertion tube [ø mm]	Distal end [ø mm]	Instrument channel [ø mm]	Working length [mm]	Field of view [°]	Tip deflection up/down [°]	Tip deflection right/left [°]	Remarks
Bronchoscopes								
Ultra Slim								
FB-8V	2.8	2.7	1.2	600	100	180/130	-/-	-
Slim								
FB-10V	3.5	3.4	1.2	600	120	180/130	-/-	-
Routine								
FB-15RBS	4.9	4.8	2.0	600	100	180/130	-/-	portable
FB-15V	4.9	4.9	2.1	600	120	180/130	-/-	-
Therapeutic								
FB-18RBS	6.0	5.9	2.6	600	100	180/90	-/-	portable
FB-18V	6.0	5.9	2.7	600	120	180/130	-/-	-
FB-19TV	6.2	6.2	3.0	600	120	180/130	-/-	-

Speech, Voice and Swallowing



High-Definition Video Endoscopes

Product	Insertion tube [ø mm]	Distal end [ø mm]	Instrument channel [ø mm]	Working length [mm]	Field of view [°]	Tip deflection up/down [°]	Tip deflection right/left [°]	Remarks
Naso-Pharyngo-Laryngoscope								
Routine								
VNL-1590STi	5.1	5.6	-/-	300	100	130/130	-/-	HD+

High-Resolution Video Endoscopes

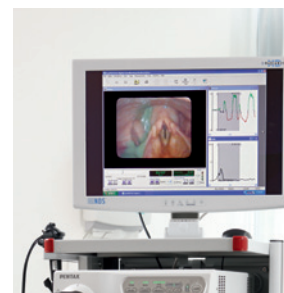
Product	Insertion tube [ø mm]	Distal end [ø mm]	Instrument channel [ø mm]	Working length [mm]	Field of view [°]	Tip deflection up/down [°]	Tip deflection right/left [°]	Remarks
Naso-Pharyngo-Laryngoscopes								
Slim								
VNL-1070STK	3.3	2.9	-/-	300	85	130/130	-/-	-
Routine								
VNL-1190STK	3.7	4.1	-/-	300	80	130/130	-/-	-
Therapeutic								
VNL-1570STK	4.9	4.9	2.0	300	85	130/130	-/-	-
EE-1580K	5.1	5.5	2	600	140	210/120	-/-	-

High-Quality Fibreoptic Endoscopes

Product	Insertion tube [ø mm]	Distal end [ø mm]	Instrument channel [ø mm]	Working length [mm]	Field of view [°]	Tip deflection up/down [°]	Tip deflection right/left [°]	Remarks
Naso-Pharyngo-Laryngoscopes								
Slim								
FNL-7RP3	2.4	2.4	-/-	300	75	130/130	-/-	-
Routine								
FNL-10RP3	3.5	3.4	-/-	300	75	130/130	-/-	-
FNL-10RBS	3.5	3.4	-/-	300	85	130/130	-/-	portable
Therapeutic								
FNL-15RP3	4.9	4.8	2.2	300	75	130/130	-/-	-

HR = High-Resolution

Speech, Voice and Swallowing



Stroboscopy and Laryngeal Imaging

Product	Description
9400 Rhinolaryngeal Stroboscope	Latest generation light source for high resolution endoscopy and stroboscopy. Computer interface for fundamental frequency and amplitude data. Offers automatic brightness control
9200C/E Digital Video Capture Module	Digital video recording system with all hardware and software for recording examinations and interfacing to camera, light source and printer.
9310 (HD/E) High Definition Digital Video Capture Module	See above and additionally this system has the ability to record and play back high definition or standard definition video.

The Stroboscopy system can be used with both rigid as well as flexible endoscopes.

Product	Description
Color High-Speed Video System	Includes high-speed video camera and audio recording hardware as well as software for recording and reviewing high speed images of vocal folds plus audio recording and playback. The system can be ordered with waveform analysis software and with a computer with all hardware and software for recording HSV examinations.

The Color High-Speed video system can be completed with a cart, rigid endoscope, Lens coupler and adapter, black/white camera head and a powerful Xenon light source.

Swallowing Instrumentation

Product	Description
7120B Swallowing Signals Lab	System which can be used for analysis and visual feedback of physiological signals including tongue pressure, EMG, acoustic, respiration and auxiliary signals.
7245C Digital Video Recording Module	Includes hardware and software for fluoroscopy and FEES digital recordings. Can be integrated with Swallowing Signals Lab and/or FEES components.

The Swallowing Instrumentation can be combined with equipment for FEES examinations. Both flexible video endoscopes with a video processor/light source combination, or a fibre optic endoscope with a separate light source and video camera can be used.

Speech Products

Product	Description
4500 Computerized Speech Lab (CSL)	Acoustic analysis system specifically designed to provide quality data for speech and voice research and clinical assessment.
3950B Visi-Pitch IV	Allows capturing and processing of speech/voice signals. Includes package of speech training programs.
6600 Phonatory Aerodynamic System	System for airflow, pressure, waveform, fundamental frequency, sound pressure and EGG measurements.
6103 Electroglottograph	For investigating the vibratory characteristics of the focal folds.
3200 Ambulatory Phonation Monitor (APM)	Portable (wearable) device for collecting phonatory data on a client over a full day of normal activity.
6450 Nasometer II	Complete hardware/software system for real-time display and analysis of nasality patterns.

*Not available in all countries

Intubation



High-Quality Fibreoptic Endoscopes

Product	Insertion tube [ø mm]	Distal end [ø mm]	Instrument channel [ø mm]	Working length [mm]	Field of view [°]	Tip deflection up/down [°]	Tip deflection right/left [°]	Remarks
Intubation Scopes								
FI-7RBS	2.4	2.4	—/—	600	95	130/130	—/—	portable
FI-9RBS	3.1	3.0	1.15	600	90	130/130	—/—	portable
FI-10RBS	3.5	3.4	1.31	600	90	130/130	—/—	portable
FI-13RBS	4.2	4.1	1.72	600	95	160/130	—/—	portable
FI-16RBS	5.2	5.1	2.55	600	95	160/130	—/—	portable

Urology

High-Resolution Video Endoscope

Product	Insertion tube [ø mm]	Distal end [ø mm]	Instrument channel [ø mm]	Working length [mm]	Field of view [°]	Tip deflection up/down [°]	Tip deflection right/left [°]	Remarks
Cystoscope								
ECY-1575K	5.2	5.5	2.0	400	120	210/130	—/—	HR, STERRAD® compatible

High-Quality Fibreoptic Endoscopes

Product	Insertion tube [ø mm]	Distal end [ø mm]	Instrument channel [ø mm]	Working length [mm]	Field of view [°]	Tip deflection up/down [°]	Tip deflection right/left [°]	Remarks
Cystoscope								
FCY-15RBS	4.9	4.9	2.15	400	125 (A), 83 (W)	220/120	—/—	portable
Ureteroscope								
FUR-9RBS	3.1	3.0	1.15	700	90 (A), 64 (W)	180/180	—/—	portable

HR = High-Resolution

Special Endoscopy Advanced Application



G-EYE Video Endoscopes

Product	Insertion tube [ø mm]	Distal end [ø mm]	Instrument channel [ø mm]	Working length [mm]	Field of view [°]	Tip deflection up/down [°]	Tip deflection right/left [°]	Remarks
G-EYE38-i10L/F	13.2	13.2	3.8	1,700 1,500	140	180/180	160/160	HD+, Water Jet, permanently integrated reusable balloon, inflated balloon diameter up to 60 mm
G-EYE38-i10F2	13.2	13.2	3.8	1,700 1,500	140	180/180	160/160	HD+, Water Jet, increased rigidity, permanently integrated reusable balloon, inflated balloon diameter up to 60 mm
G-EYE34-i10F	11.6	11.5	3.8	1,500	140	180/180	160/160	HD+, Water Jet, permanently integrated reusable balloon, inflated balloon diameter up to 60 mm

AB Single Balloon Disposable

Balloon Diameter [mm]	Catheter length [mm]	Compatible working channel diameter [mm]
40	3,500	≥ 3,7

Inflation System

Electrical input voltage [VAC]	Electrical input frequency [Hz]	Dimensions [mm]	Weight [Kg]	Set Pressure Tolerance [mbar]	Inflated Balloon Set Pressure [mbar]
Spark (Compatible with AB single Balloon)					
100-240	50-60	250 x 155 x 90	1.5	± 10	60
Spark² C (Compatible with G-EYE™ endoscopes and AB single balloon)					
100-240	50-60	280 x 195 x 90	1.9	± 10	Anchoring pressure 70. Controlled withdrawal™ pressure- 3 intermediate levels

Special Endoscopy Advanced Application



WavSTAT4 Optical Biopsy System

Electrical input voltage [VAC]	Electrical input frequency [Hz]	Dimensions [mm]	Weight [Kg]	Laser [nm]
100-240	50-60	1111 x 622 x 622	45.5	337.1 Nitrogen Pulsed

Optical Biopsy Forceps Disposable

Outer diameter [mm]	Working length [mm]
2.4	2,300

High-Quality Fiberoptic Endoscopes

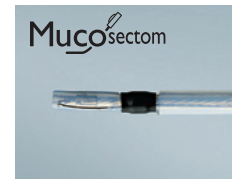
Product	Insertion tube [ø mm]	Distal end [ø mm]	Instrument channel [ø mm]	Working length [mm]	Field of view [°]	Tip deflection up/down [°]	Tip deflection right/left [°]	Remarks
Cholangioscope								
FCP-9P	3.1	3.0	1.15	1,900	90 (L), 64 (W)	90/90	-/-	ERCP babyscope
Choledocho-Nephroscope								
FCN-15X	5.1	4.8	2.1	350	125 (L), 83 (W)	180/130	-/-	-

Therapeutical Endoscopy ESD Accessories



Product	Type	Working length (mm)	Min. channel (mm)	Max. outer diameter (mm)	Knife length (mm)	Snare/Cup opening (mm)	Adjustable knife length (mm)
Splashneedle	DN-D2718A	1,800	2.8	2.7	2.5		
	DN-D2722A	2,800	2.8	2.7	2.5		
K-snare	DO-D2618	1,800	2.8	2.6	6.0	22	2.0-6.0
	DO-D2622	2,200	2.8	2.6	6.0	22	2.0-6.0
Swanblade	DC-D2618	1,800	2.8	2.6	2.1		
Hemostat-Y*	H-S2518	1,800	2.8	2.6		4.0	
	H-S2522	2,200	2.8	2.6		4.0	
Mucosectom	DP-D2518	1,800	2.8	2.5	5.0		
	DP-D2622	2,200	2.8	2.6	2.5		

*Equipped with active cord and plug



Video Processors & Light Sources



High-Definition Video Processors, HD+

EPK-i7000	
Light source	300W Xenon
Advanced imaging modalities	Full i-scan, Twin Mode
HD+ video outputs (wide screen)*	HD-SDI (2), DVI (1)
Standard video outputs	RGB, Y/C, CompOSITE
User interface	Touch screen, keyboard
HD Video Recording	Integrated function, external USB storage device
Electronic zoom / PinP	Yes/yes
Dimensions (W x H x D)	400 x 205 x 520 mm
Control Panel	LCD Touch Screen

EPK-i5000	
Light source	300W Xenon
Advanced imaging modalities	i-scan 1, 2, 3
Video outputs	DVI-D, VGA, RGB, Y/C, CompOSITE
Dimensions (W x H x D)	400 x 205 x 485 mm

High-Resolution Video Processors

EPK-1000	
High-Resolution Video Processor	
Light source	100W Xenon
Advanced imaging modalities	–
Video outputs	RGB, Y/C, CompOSITE
Dimensions (W x H x D)	380 x 155 x 420 mm

EPK-100p	
Classic Line Video Processor	
Light source	100W Xenon
Advanced imaging modalities	–
Video outputs	RGB, Y/C, CompOSITE
Dimensions (W x H x D)	380 x 155 x 420 mm

EPK-p Value Solution Processor	
Value Solution Processor (yellow, tbd)	
Light source	150W halogen
Advanced imaging modalities	–
Video outputs	RGB, Y/C, CompOSITE, Y
Dimensions (W x H x D)	390 x 155 x 430 mm

Light Source

LH-150PC	
Light source	150W halogen, with air/water insufflation pump
Dimensions (W x H x D)	177 x 145 x 305 mm



Notes

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In the interest of technical progress, specifications may change without notice.

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HOYA Corporation
certified according to EN ISO 13485