

Megapixel and HD lenses

www.boschsecurity.com



BOSCH

Invented for life



- ▶ High-quality optics
- ▶ Reliable, robust construction
- ▶ Focal length options

As surveillance cameras can now capture even higher picture resolutions through the use of HD sensor technology and advanced processing, the lenses also need to have an optical resolution that allows the camera to work at its optimal point.

This range of super resolution (SR) and P-iris megapixel lenses is designed to provide improved image resolution and sharpness, and better depth of field.

System overview

These lenses come with a standard C or CS mount for use with a variety of cameras.

The DC-iris or P-iris control connection is a four-pin standard plug that fits directly into the camera's iris output.

The lenses deliver impressive optical quality due to their megapixel resolution, contrast reproduction, and coating.

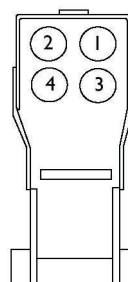
The mechanical construction is designed to withstand both frequent iris control operations and the environmental stress of security installations. It provides long and reliable operation with no maintenance.

For flexible, high-quality, reliable lenses that match an HD camera's performance, this series is the ideal solution.

Certifications and approvals

Region	Regulatory compliance/quality marks	
Europe	CE	LVF-5005N-S1250
	CE	LVF-5005C-S4109
	CE	ST-VS 2016-E-051
	CE	CE

Installation/configuration notes



4-pin iris connector

- Pin 1: Damping coil -
Pin 2: Damping coil +

Pin 3: Driving coil + (open)

Pin 4: Driving coil -

Technical specifications

LVF-5003C-P2713	
Maximum sensor format	1/2.7-inch
Optical resolution	3 Megapixels
Focal length	2.7 - 13 mm
Iris range	F1.4 to close
Min object distance	0.3 m (1 ft)
Back focus distance (values in air)	8 mm (0.315 in)
Weight	87 g (0.19 lb)
Dimensions	Ø 47 mm (excluding focus and zoom knobs and iris block) x 75.11 mm
Lens mount	CS
Angle of view (HxV) 1/3-inch sensor 4:3	102 x 74° Wide 22.4 x 16.9° Tele
Angle of view (HxV) 1/3-inch sensor 16:9	113 x 60° Wide 24.3 x 13.8° Tele
Angle of view (HxV) 1/2.7-inch sensor 16:9	126 x 66° Wide 26.7 x 15.2° Tele
Angle of view (HxV) 1/2.8-inch sensor 16:9	122 x 64° Wide 25.9 x 14.7° Tele
Iris control	4-pin, P-iris control
Focus ctrl	manual
Zoom ctrl	manual
IR corrected	yes
Environmental	
- Operating Temperature	-10°C to +50°C (+14°F to +122°F)
- Storage Temperature	-40°C to +60°C (-40°F to + 140°F)
- Operating Humidity	Up to 60% RH non-condensing
LVF-5005C-S1803	
Maximum sensor format	1/2.5-inch (Sensor diagonal 7.2 mm)
Optical resolution	5 Megapixels
Focal length	1.8 - 3 mm
Iris range	F1.8 to F8

LVF-5005C-S1803	
Min object distance	0.5 m (1.64 ft)
Back focus distance (values in air)	8.3 mm (0.33 in)
Weight	63 g (0.134 lb)
Dimensions	Ø 50 mm x 49.3 mm
Lens mount	CS
Angle of view (HxV) 1/3-inch sensor 4:3	102.7 x 86.4° Wide 74.6 x 59.5° Tele
Angle of view (HxV) 1/3-inch sensor 16:9	110.4 x 78.2° Wide 82.5 x 52.6° Tele
Angle of view (HxV) 1/2.7-inch sensor 16:9	115.5 x 83.7° Wide 87.9 x 57.1° Tele
Angle of view (HxV) 1/2.8-inch sensor 16:9	113.7 x 81.7° Wide 86 x 55.5° Tele
Iris control	4-pin, DC control
Focus ctrl	manual
Zoom ctrl	manual
IR corrected	yes
Environmental	
- Operating Temperature	-10°C to +50°C (+14°F to +122°F)
- Storage Temperature	-40°C to +70°C (-40°F to + 158°F)
- Operating Humidity	Up to 93% non-condensing
LVF-5005C-S4109	
Maximum sensor format	1/1.8-inch
Optical resolution	5 Megapixels
Focal length	4.1 - 9 mm
Iris range	F1.6 to F8
Min object distance	0.3 m (1 ft)
Back focus distance (values in air)	12.72 mm (wide), 19.94 mm (tele)
Weight	130 g (0.29 lb)
Dimensions	Ø 62.9 mm (excluding focus and zoom knobs) x 66.6 mm (excluding flange)
Lens mount	CS
Angle of view (HxV) 1/3-inch sensor 4:3	63 x 47.1° Wide 28.9 x 21.7° Tele

LVF-5005C-S4109	
Angle of view (HxV) 1/3-inch sensor 16:9	72.8 x 40.7° Wide 33.3 x 18.8° Tele
Angle of view (HxV) 1/2.7-inch sensor 16:9	80.4 x 44.8° Wide 36.7 x 20.7° Tele
Angle of view (HxV) 1/1.8-inch sensor 16:9	100.9 x 55.9° Wide 45.7 x 25.7° Tele
Iris control	4-pin, DC control
Focus ctrl	manual
Zoom ctrl	manual
IR corrected	yes
Environmental	
- Operating Temperature	-10°C to +50°C (+14°F to +122°F)
- Storage Temperature	-40°C to +70°C (-40°F to +158°F)
- Operating Humidity	Up to 93% non-condensing
LVF-5005C-S0940	
Maximum sensor format	1/2.5-inch (Sensor diagonal 7.2 mm)
Optical resolution	5 Megapixels
Focal length	9 - 40 mm
Iris range	F1.5 to F8
Min object distance	2.5 m (8.2 ft)
Back focus distance (values in air)	8.6 mm (wide); 13.19 mm (tele)
Weight	88 g (0.19 lb)
Dimensions	Ø 55 mm x 49.3 mm
Lens mount	CS
Angle of view (HxV) 1/3-inch sensor 4:3	28.4 x 21.2° Wide 6.7 x 5° Tele
Angle of view (HxV) 1/3-inch sensor 16:9	32.9 x 18.3° Wide 7.7 x 4.4° Tele
Angle of view (HxV) 1/2.7-inch sensor 16:9	36.3 x 20.2° Wide 8.5 x 4.8° Tele
Angle of view (HxV) 1/2.8-inch sensor 16:9	35.1 x 19.5° Wide 8.2 x 4.6° Tele
Iris control	4-pin, DC control
Focus ctrl	manual

LVF-5005C-S0940	
Zoom ctrl	manual
IR corrected	yes
Environmental	
- Operating Temperature	-10°C to +50°C (+14°F to +122°F)
- Storage Temperature	-40°C to +70°C (-40°F to +158°F)
- Operating Humidity	Up to 93% non-condensing
LVF-5005N-S1250	
Maximum sensor format	1/1.8-inch
Optical resolution	5 Megapixels
Focal length	12 - 50 mm
Iris range	F1.8 to T360
Min object distance	0.8 m (2.63 ft)
Back focus distance (values in air)	10.19 mm (wide), 10.12 mm (tele) values in air
Weight	175 g (0.386 lb)
Dimensions	Ø 52.4 mm x 89.3 mm
Lens mount	C
Angle of view (HxV) 1/3-inch sensor 4:3	20.9 x 15.7° Wide 5.3 x 4° Tele
Angle of view (HxV) 1/3-inch sensor 16:9	24.1 x 13.5° Wide 6.1 x 3.4° Tele
Angle of view (HxV) 1/2.7-inch sensor 16:9	26.6 x 14.9° Wide 6.7 x 3.8° Tele
Angle of view (HxV) 1/1.8-inch sensor 16:9	33.2 x 18.6° Wide 8.3 x 4.7° Tele
Iris control	4-pin, DC control
Focus ctrl	manual
Zoom ctrl	manual
IR corrected	yes
Environmental	
- Operating Temperature	-10°C to +50°C (+14°F to +122°F)
- Storage Temperature	-20°C to +60°C (-4°F to +140°F)
- Operating Humidity	35% to 90% non-condensing

Ordering information

LVF-5003C-P2713 Varifocal lens, 2.7-13mm, 3MP, CS mount

Varifocal P-iris megapixel IR corrected lens with 1/2.7 inch sensor and CS-mount

Order number **LVF-5003C-P2713**

LVF-5005C-S0940 Varifocal lens, 9-40mm, 5MP, CS mount

Varifocal SR megapixel IR corrected lens with 1/2.5" sensor and CS-mount

Order number **LVF-5005C-S0940**

LVF-5005C-S1803 Varifocal lens, 1.8-3mm, 5MP, CS mount

Varifocal SR megapixel IR corrected lens with 1/2.5" sensor and CS-mount

Order number **LVF-5005C-S1803**

LVF-5005C-S4109 Varifocal lens, 4.1-9mm, 5MP, CS mount

Varifocal SR megapixel IR corrected lens with 1/1.8" sensor and CS-mount

Order number **LVF-5005C-S4109**

LVF-5005N-S1250 Varifocal lens, 12-50mm, 5MP, C mount

Varifocal megapixel IR corrected lens with 1/1.8" sensor max and C-mount

Order number **LVF-5005N-S1250**

Represented by:

Europe, Middle East, Africa:
Bosch Security Systems B.V.
P.O. Box 80002
5600 JB Eindhoven, The Netherlands
Phone: + 31 40 2577 284
emea.securitysystems@bosch.com
emea.boschsecurity.com

Germany:
Bosch Sicherheitssysteme GmbH
Robert-Bosch-Ring 5
85630 Grasbrunn
Germany
www.boschsecurity.com

North America:
Bosch Security Systems, Inc.
130 Perinton Parkway
Fairport, New York, 14450, USA
Phone: +1 800 289 0096
Fax: +1 585 223 9180
onlinehelp@us.bosch.com
www.boschsecurity.us

Asia-Pacific:
Robert Bosch (SEA) Pte Ltd, Security Systems
11 Bishan Street 21
Singapore 573943
Phone: +65 6571 2808
Fax: +65 6571 2699
apr.securitysystems@bosch.com
www.boschsecurity.asia