# **Megapixel and HD lenses**

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- 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.

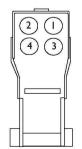
The mechanical construction is designed to withstand both frequent iris control operations and the environmental stress of security installations. It provides long and reliable operation with no maintenance.

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

Maximum sensor format1/2.7-inchOptical resolution3 MegapixelsFocal length2.7 - 13 mmIris range0.3 m (1f)Min object distance3 mm (0.315 in)Back focus distancem8 mm (0.315 in)Weight87 g (0.19 lb)Dimensions0/4 7 mm (excluding focus and zoom knobs and iris block) x 75.11 mmLens mountCSAngle of view (HxV)102 x 74° Wide 2.4 x 16.9° TeleAngle of view (HxV)13.8 60° Wide 2.4 x 16.9° TeleAngle of view (HxV)122 x 64° Wide 2.5 x 14.7° TeleAngle of view (HxV)122 x 64° Wide 2.5 x 14.7° TeleAngle of view (HxV)122 x 64° Wide 2.5 x 14.7° TeleFocus ctrlmanualFocus ctrlmanualFocus ctrlmanualFocus ctrlindicusJoperating-10°C to +50°C (+14°F to +122°F)eismerature-40°C to +60°C (+40°F to +140°F)-10°C to +50°C (+14°F to +122°F)-10°C to +50°C (+14°F to +122°F)-10°Derating Humidity1/2.5-inch (Sensor diagonal 7.2 mm)FUF-500SC-SIB031/2.5-inch (Sensor diagonal 7.2 mm)Cytical resolution5 Megapixels	formatIOptical resolution3Focal length2Iris rangeFMin object distance6Back focus distance (values in air)8Weight8Dimensions6Lens mount6Angle of view (HxV) 1/3-inch sensor 4:31	3 Megapixels 2.7 - 13 mm 5 1.4 to close 0.3 m (1 ft)	
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Temperature     -40°C to +60°C (-40°F to + 140°F)       - Operating Humidity     Up to 60% RH non-condensing       LVF-5005C-S1803	Environmental		
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Maximum sensor 1/2.5-inch (Sensor diagonal 7.2 mm) format	- Operating Humidity	Jp to 60% RH non-condensing	
format	LVF-5005C-S1803		
Optical resolution 5 Megapixels		L/2.5-inch (Sensor diagonal 7.2 mm)	
	Optical resolution 5		
Focal length 1.8 - 3 mm	Focal length 1	5 Megapixels	
Iris range F1.8 to F8	Iris range F		

LVF-5005C-S1803	
Min object distance	0.5 m (1.64 ft)
-	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	С	
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.soccuritysystems@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 2809 apr.security.systems@bosch.com www.boschsecurity.asia

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