

Varifocal Lenses



- For 1/3 (1/2.7)-inch format cameras
- Adjustable angle of view
- Adjustable focal length between two limits
- Autoiris models available
- Megapixel and IR corrected optics models available

Overview

The Vicon Series of Variable-Focal-Length Lenses are designed for use on 1/3-inch format CCTV cameras. The lenses have an adjustable angle of view, ranging from very-wide-angle to normal, permitting the camera to view the exact area desired.

These lenses eliminate the need for trial-and-error lens fitting and for stocking multiple fixed-focal-length lenses to cover different viewing angles.

Lenses are available with CS-G circuitry that allow automatic iris operation that responds to cameras featuring built-in autoiris control circuits. Models with IR in the model number have IR corrected optics for use with day/night cameras. Models with MP in the model number are for use with megapixel cameras.

Focal length is infinitely adjustable between the two limits. Optical construction of 10 elements in 7 groups assures sharp, high-contrast images. The lenses are equipped with CS-type mounts

Model Number	Product Code	Format	Iris
V2.8-12VF-IR	8305-10	1/3-inch	Adjustable, IR corrected optics
V2.8-12VF-IR-CS-G	8305-20	1/3-inch	CS-G autoiris, IR corrected optics
V2.8-12VF-MP	8305-30	1/3-inch	Adjustable, IR corrected optics, 1.3 megapixel
V2.9-8.2VF-IR	9221-20	1/3-inch	Adjustable, IR corrected optics
V2.9-8.2VF-IR-CS-G	9221-10	1/3-inch	CS-G autoiris, IR corrected optics
V2.9-8.2VF-CS-G	9221-00	1/3-inch	CS-G autoiris
V3-8VF-MP-IR-CS-G	9221-50	1/3-inch	Adjustable, IR corrected optics, 1.3 megapixel
V3.1-8VF-MP-IR-CS-G	9221-60	1/2.7-inch	Adjustable, IR corrected optics, 3 megapixel
V8.5-40VF-IR	9241-00	1/3-inch	Adjustable, IR corrected optics
V8.5-40VF-IR-CS-G	9241-10	1/3-inch	Adjustable, IR corrected optics
V12.5-50VF-MP-IR-CS-G	9221-70	1/2.7-inch	Adjustable, IR corrected optics, 3 megapixel
V5-50VF-CS-G	7731-00	1/3-inch	Adjustable

Table 1: Models and Descriptions

Model Number	Focal Length (mm)	Minimum Focusing Distance ft (m)	Aperture Range (f/)*	Horizontal Angle of View (degrees)		Zoom Ratio
				1/3-in.	1/4-in.	
V2.8-12VF-IR	2.8 - 12	1.0 (0.3)	1.3 - 16C	102.2 - 23.7	74.2 - 17.8	4X
V2.8-12VF-IR-CS-G	2.8 - 12	1.0 (0.3)	1.3 - 360	102.2 - 23.7	74.2 - 17.8	4X
V2.8-12VF-MP	2.8 - 12	1.0 (0.3)	1.3 - 16C	102.2 - 23.7	74.2 - 17.8	4X
V2.9-8.2VF-IR	2.9 - 8.2	1.6 (0.5)	1.0 - 16C	98.3 - 35.2	70.7 - 26.3	3X
V2.9-8.2VF-IR-CS-G	2.9 - 8.2	1.6 (0.5)	1.0 - 360	98.3 - 35.2	70.7 - 26.3	3X
V2.9-8.2VF-CS-G	2.9 - 8.2	1.6 (0.5)	1.0 - 360C	98.3 - 35.2	70.7 - 26.3	3X
V3-8VF-MP-IR-CS-G	3 - 8	1.2 (0.36)	1.2 - 360C	90.7 - 35.2	67.3 - 26.5	3X
V3.1-8VF-MP-IR-CS-G	3.1 - 8	1.0 (0.3)	1.2 - 360C	86.7 - 35.2	95.9 - 38.7 (1/2.7-in.)	3X
V8.5-40VF-IR	8.5 - 40	2.6 (0.8)	1.3 - 16C	33.5 - 7.1	24.4 - 5.3	5X
V8.5-40VF-IR-CS-G	8.5 - 40	2.6 (0.8)	1.3 - 360	33.5 - 7.1	24.4 - 5.3	5X
V12.5-50VF-MP-IR-CS-G	12.5 - 50	1.0 (0.3)	1.4 - 360C	21.7 - 5.6	24.0 - 6.2 (1/2.7-in.)	4X
V5-50VF-CS-G	5 - 50	2.6 (0.8)	1.3 - 360	51.8 - 5.6	39.2 - 4.3	10X

*C means completely closed.

Table 2: Optical Specifications

Model Number	Dimensions in. (mm)		Weight lb (kg)	Ambient Temperature Range °F (°C)
	Length	Diameter		
V2.8-12VF-IR	2.2 (56)	1.5 (37.5)	0.18 (0.08)	-4 to 122 (-20 to 50)
V2.8-12VF-IR-CS-G	2.2 (56)	1.6 (40.7)	0.15 (0.07)	-4 to 122 (-20 to 50)
V2.8-12VF-MP	2.2 (56)	1.6 (40.7)	0.14 (0.064)	-4 to 122 (-20 to 50)
V2.9-8.2VF-IR	1.74 (44.3)	1.32 (33.5)	0.097 (0.044)	-4 to 122 (-20 to 50)
V2.9-8.2VF-IR-CS-G	1.74 (44.3)	1.32 (33.5)	0.1 (0.047)	-4 to 122 (-20 to 50)
V2.9-8.2VF-CS-G	1.74 (44.3)	1.32 (33.5)	0.1 (0.047)	-4 to 122 (-20 to 50)
V3-8VF-MP-IR-CS-G	2.2 (56)	1.4 (37)	0.13 (0.061)	-4 to 122 (-20 to 50)
V3.1-8VF-MP-IR-CS-G	2.17 (55)	1.5 (37)	0.13 (0.059)	-4 to 122 (-20 to 50)
V8.5-40VF-IR	2.5 (62.9)	1.85 (47)	0.31 (0.126)	-4 to 122 (-20 to 50)
V8.5-40VF-IR-CS-G	2.5 (62.9)	1.6 (41.7)	0.25 (0.114)	-4 to 122 (-20 to 50)
V12.5-50VF-MP-IR-CS-G	2.3 (58.4)	1.8 (46)	TBD	-4 to 122 (-20 to 50)
V5-50VF-CS-G	2.28 (58)	1.1 (28)	0.28 (0.140)	-4 to 122 (-20 to 50)

Table 3: Measurements

Data Sheet Number: 813

Dated: 03/2011

Vicon Data Sheet Number: 8006-7813-12-00

Specifications subject to change without notice.

Vicon and its logo is a registered trademark of Vicon Industries Inc.
Copyright © 2011 Vicon Industries Inc. All rights reserved.