



Corning® Varioptic® C-C-39N0-A1-350 Auto Focus Lens Module

Overview

The Corning® Varioptic® C-C-39N0-A1-350 auto focus lens module is an electronically controllable focus C-Mount lens, based on the Corning® Varioptic® A-39N variable focus lens. It incorporates the necessary electronic components to drive the lens and just needs a DC power supply. Focus can be controlled through either an RS232, I2C or SPI input. With a 35 mm effective focal length and 1.1" 20MP sensor compatibility, it is specifically designed for machine vision applications.

Ordering Information

- **Corning® Varioptic® C-C-39N0-A1-350 auto focus lens module** : I2C, SPI, RS232 with 3.3 V signal.

Key Features

- Variable focus from 25 cm to infinity
- Supports I2C - RS232 - SPI interfaces
- Supports closed loop operation

Contents

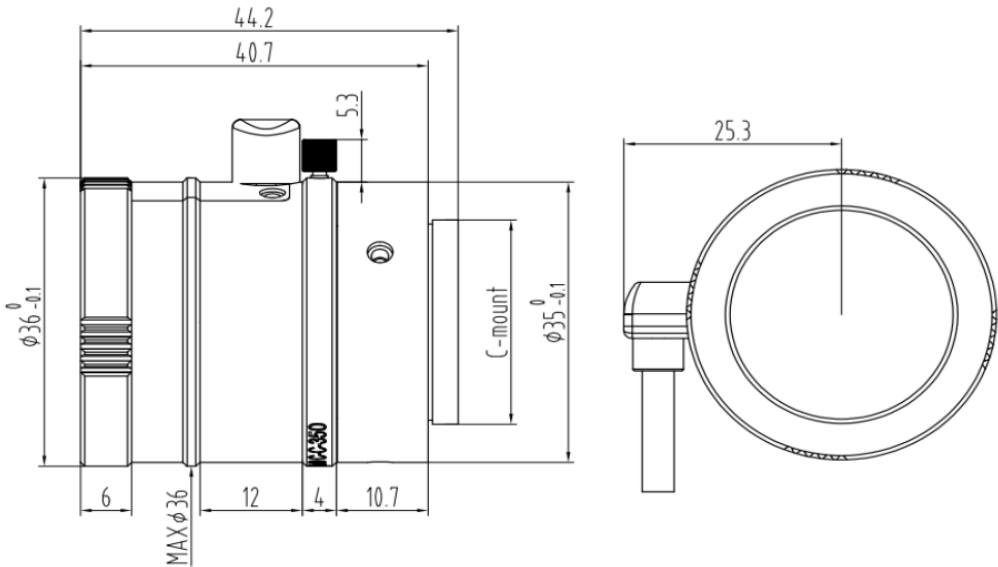
Overview	1
Ordering Information.....	1
Key Features.....	1
Opto-Electrical Performance	2
Temperature Range.....	2
Mechanical Dimensions.....	2
Electrical Connection.....	3
Communication Terminal JST_1	3
Time of Flight Terminal JST_2	3
Electrical Specifications.....	4

Opto-Electrical Performance

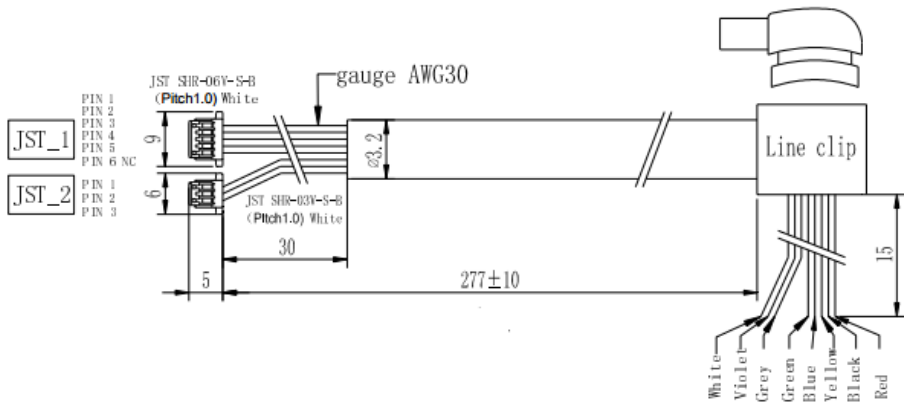
Temperature Range

Parameter	Unit	Min	Typ	Max	Notes
Operating temperature range	°C	-20°C	25	+60°C	
Storage temperature range	°C	-40°C	25	+85°C	

Mechanical Dimensions



Weight: 93.5g

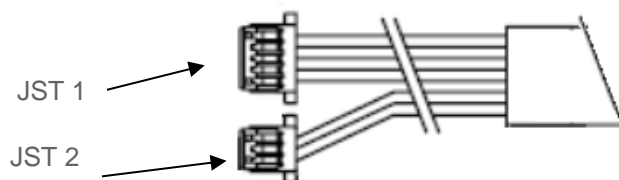


Electrical Connection

The module has a 6-pin connector for power and control (JST_1).

Connector reference: JST SHR-06V-S-B
Wire reference: JST SH3-SH3-28300

These pins have different functions depending on the module version.



Communication Terminal JST_1

Pin	Name	Description
1	VIN	Positive power supply (+3.3 to +24 VDC/ red wire)
2	GND	Ground (black wire)
3	I2Csd_Rx_SDI	Multipurpose pin (depending on the part/ yellow wire)
4	I2Csc_Tx_SCK	Multipurpose pin (depending on the part/ blue wire)
5	SDO_Ana	Multipurpose pin (depending on the part)
6		

The function of the multipurpose pins depends on the part number:

Corning® Varioptic® C-C-39N0-A1-350 Auto Focus Lens Module

Pin	Name	R12	R33	SPI	I2C
3	I2Csd_Rx_SDI	Rx (RS232)	Rx (3.3V)	SDI	SDA
4	I2Csc_Tx_SCK	Tx (RS232)	Tx (3.3V)	SCK	SCL
5	SDO_Ana	Analog input	Analog input	SDO	Analog input

Time of Flight Terminal JST_2

Pin	Name
1	TOF_SDA
2	TOF_SCL
3	TOF_VIN

Electrical Specifications

<i>Parameter</i>	<i>Symbol</i>	<i>Min</i>	<i>Typ</i>	<i>Max</i>	<i>Unit</i>	<i>Notes</i>
Power supply						
Input voltage	V _{CC}	3.3	5	24	V	
Current consumption - Active mode	I _{CC}		15		mA	(1)
Control voltage						
RS12						
I2C _{sda} _Rx_SDI / I2C _{scl} _Rx_SCK pins		-25		25	V	(2)
RS33/I2C/SPI						
I2C _{sda} _Rx_SDI / I2C _{scl} _Rx_SCK pins		-0.3		3.6	V	(2)
SDO_Ana pin		-0.3		3.6	V	(2)
MCLR pin		-0.3		3.6	V	

Notes:

- (1) Current consumption depends on the voltage applied to the lens.
- (2) Absolute maximum ratings.

Corning reserves the right to change its product specifications at any time without notice. Please ensure you have the latest applicable specification before purchasing a Corning product. Corning does not provide any warranty of merchantability or fitness for a particular purpose. Additionally, the products sold by Corning are not designed, intended or authorized for use in life support, life sustaining, medical device, healthcare, nuclear, military, or any applications in which the failure of such products could reasonably be expected to result in personal injury, loss of life or catastrophic property or environmental damage. Corning does not make any claims or statements that our products have been approved for such applications. Further, Corning has not tested its products for safety and efficacy in any such applications. The customer is responsible for determining the suitability of Corning's product for its application, including any testing, validation, and/or regulatory submissions that may be required to support the safety and efficacy of its intended use. Product specifications are available upon request at varioptic@corning.com