CORNING

Varioptic® Lenses

Marketing Datasheet

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
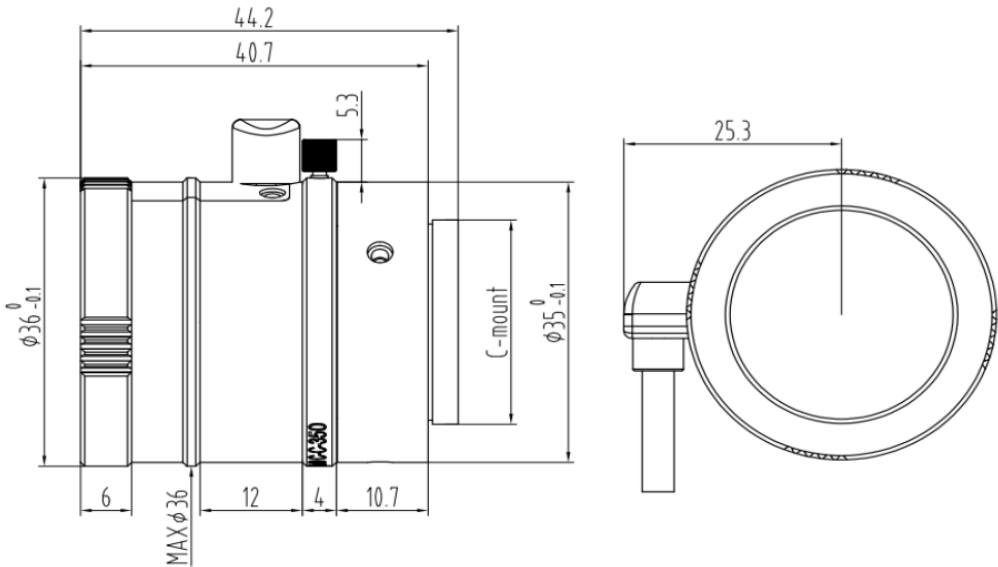- Supports closed loop operation

Contents

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
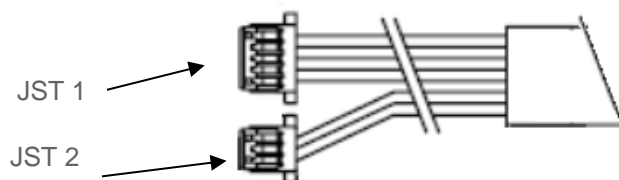

Weight: 93.5g
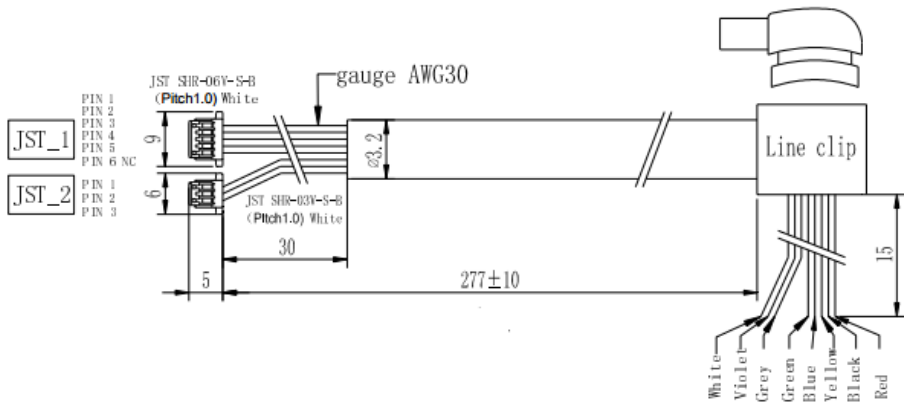
Electrical Connection

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.

JST 1

JST 2

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	I2Csda_Rx_SDI	Multipurpose pin (depending on the part/ yellow wire)
4	I2Cscl_Rx_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:

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Pin	Name	R12	R33	SPI	I2C
3	I2Csda_Rx_SDI	Rx (RS232)	Rx (3.3V)	SDI	SDA
4	I2Cscl_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

Parameter	Symbol	Min	Typ	Max	Unit	Notes
Power supply						
Input voltage	V_{cc}	3.3	5	24	V	
Current consumption - Active mode	I_{cc}		15		mA	(1)
Control voltage						
RS12						
I2Csda_Rx_SDI / I2Cscl_Rx_SCK pins		-25		25	V	(2)
RS33/I2C/SPI						
I2Csda_Rx_SDI / I2Cscl_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.

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