Multi camera vision sensor Manual — MVS-PM / EM / OCR

OPTEX FA

Safety Specifications
- Read the operating instructions before starting operation.
- Connection, assembly and settings only by competent technicians
- Protect the device against moisture and soiling when operating.
- No safety component in accordance with EU machine guidelines.

Proper Use
The MVS-D Multi camera vision sensor is a color vision sensor and is used for detection of optical non-contact detection of objects.
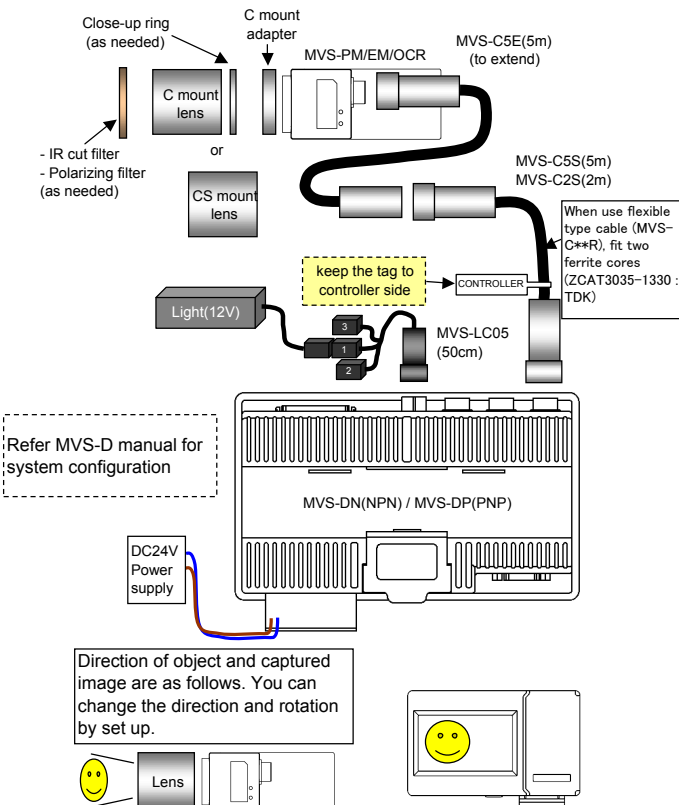
1. Specification

MODEL	MVS-PM / EM / OCR
Supply Voltage	DC 6V ±10% (From Controller)
Power consumption	Max. 100mA / 24V DC (in Controller)
Image sensor	430000 Pixel 1/3" CCD Color Image Sensor
Resolution	512 X 512 (512 X 256 by interlace processing)
Pixel size	H: 6.5 X V: 6.3μm (512 X 512 => 3.33 X 3.23 mm)
Lens type	CS mount (C mount adapter is included)
Image processing function	- Rotaion Search up to +/- 180 degree (+/- 45 degree for MVS-EM) - 16 Inspection Window (4 Inspection Window for MVS-OCR) - 6 Types of Pattern Recognition (MVS-PM) - 6 Types of Measurement (MVS-EM) - Optical character recognition (MVS-OCR) - Variable shutter speed with continuous capturing (up to 6 / 5 times) - Automatic Color/Black&White changeover (MVS-PM, OCR)
Communication I/F	LVDS (100Mbps) dedicated for Controller (Max. 10m)
Indicator	LED (Power, Status)
Operating Temp./Humid.	0~50°C, 35~85%/RH (Non Condensing)
Storage Temp.,	-20~70°C, 25~95%/RH (Non Condensing)
Vibration, Shock	Vibration : 10~ 55Hz /1.5mm, Shock : 15G
Approvals	CE (EN55011 Class-A, EN61000-4-2~6), RoHS
Material	Aluminum
Protection	IP50
Weight	Approx. 90g
Attachment	C mount adapter, mounting bracket

2. Accessories

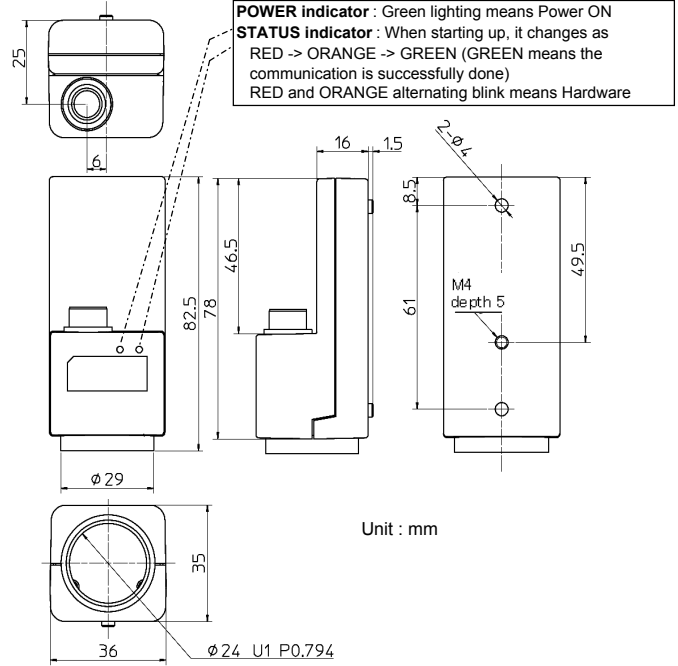|	
MVS-C2S	2m cable for camera head ~ controller
MVS-C5S	5m cable for camera head ~ controller
MVS-C5E	5m cable for camera head ~ controller for extension
MVS-C2SR	2m cable for camera head ~ controller (flexible type
MVS-C5SR	5m cable for camera head ~ controller (flexible type
MVS-C5ER	5m cable for camera head ~ controller for extension (flexible type
MVS-C5W	5m cable for camera head ~ controller with wiring for light
MVS-LC05	50cm cable for light
Other accessories: C/CS mount lens, Light unit, Polarizing filter, e.t.c.	

3. System configuration

Close-up ring (as needed)
C mount adapter
MVS-PM/EM/OCR
MVS-C5E(5m) (to extend)
C mount lens
or
CS mount lens
- IR cut filter
- Polarizing filter (as needed)
MVS-C5S(5m) MVS-C2S(2m)
When use flexible type cable (MVS-C**R), fit two ferrite cores (ZCAT3035-1330 : TDK)
keep the tag to controller side
CONTROLLER
Light(12V)
MVS-LC05 (50cm)
Refer MVS-D manual for system configuration
MVS-DN(NPN) / MVS-DP(PNP)
DC24V Power supply
Direction of object and captured image are as follows. You can change the direction and rotation by set up.
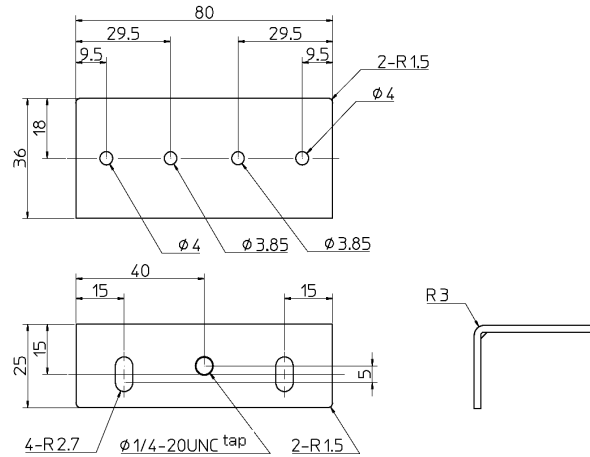Lens

4. Dimensions

Camera head

POWER indicator : Green lighting means Power ON
STATUS indicator : When starting up, it changes as RED -> ORANGE -> GREEN (GREEN means the communication is successfully done)
RED and ORANGE alternating blink means Hardware

Unit : mm

Mounting bracket

5. How to Lock Touch SW/Settings

Locking Touch SW
Touch the Touch SW that you want to lock while pushing [0] button. Then, the color of the Touch SW turns to blue. You can release the Lock by same manner.

Locking Settings
Select setting that you want to lock and push [SET] button while pushing [0] button. Then, the color of the setting turns to blue. You can release the Lock by same manner.

Locking Changeover of display
Set [2-Screen Lock] to ON in [Other Settings]. Then, you can't switchover the display except touching Touch SW pushing [0] button.

Changing language
You can change language by pushing [?] button when you power ON.