CONTRAS ECH

VISUAL ACCESSORIES



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GigE Cables

ContrasTech's high-quality GigE-compliant cables offer a robust interface for reliable high-speed data transmission. Camera-end locking screws ensure a secure interface despite the shocks and vibrations common to industrial environments. Available in 3, 5 and 10 meter lengths, these cables are a cost-effective solution for your machine vision application.

- GigE standard compliant
- Simple integration into image processing applications
- Camera-end locking screws
- 3, 5 and 10 m lengths available
- Low-cost GigE cable

Product Model	oduct Model Connects		Length
VT-NET-3LK(CAB)	RJ45(with locking screws)	RJ45	3M
VT-NET-5LK(CAB)	RJ45(with locking screws)	RJ45	5M
VT-NET-10LK(CAB)	RJ45(with locking screws)	RJ45	10M



USB3.0 Cables

Ideal for standard imaging applications, ContrasTech offers a selection of USB 3.0 cables. These robust cables feature camera-end locking screws to ensure application stability in industrial environments where shock and vibration are an issue.

- USB3.0 standard compliant
- Simple integration into all image processing applications
- Camera-end locking screws
- Plug and play functionality
- 3m, 5m and AOC 10m/20m lengths available
- Low-cost USB cable

Product Model	Connects	To	Length	Product Display
VT-USB3.0-3M(90D-RAU)	USB 3.0 (Type-A)	USB 3.0 (Micro-B) With locking screws	3M	As shown on page 4 (90° USB Cables Schematic Diagram)
VT-USB3.0-3M	USB 3.0 (Type-A)	USB 3.0 (Micro-B) With locking screws	3M	
VT-USB3.0-5M-H	USB 3.0 (Type-A)	USB 3.0 (Micro-B) With locking screws	5M	
VT-USB3.0-10M/20M-AOC	USB 3.0 (Type-A)	USB 3.0 (Micro-B) With locking screws	10M/20M	

Note: -H means High Flexibility; -AOC means Active Optical Fiber.

90° USB Cables Schematic Diagram



MICRO-B R/A UP w/Recessed Screws



MICRO-B R/A DOWN w/Recessed Screws



EXIT RIGHT w/Recessed Screws

MICRO-B EXIT LEFT w/Recessed Screws

AOC Schematic Diagram



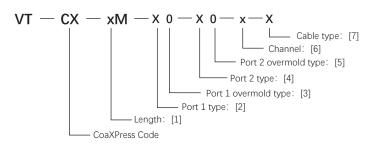


CoaXPress Cables

ContrasTech's provides a low-cost solution. A large variety of possible cables allowed: thick ones for large distance, thin or flexible for shorter distance. The easy possibility to install and terminate connectors in the field.

- CoaXPress standard compliant
- Simple integration into all image processing applications
- High transmission rate
- Plug and play functionality
- 3, 5, 10 and 15 m lengths available

Explanation of Model Code



[1]Length		[2][4]Port Type		[3][5]Overmold Type		[6]Channel		[7]C	able Type
Туре	Description	Туре	Description	Туре	Description	Туре	Description	Туре	Description
3		D	DIN	0	Straight	1	1 Channel CXP	S	Standard
5	Meter	MB/HB	HD-BNC/Micro-BNC	1	Right Angle	2	2 Channel CXP	Н	High Flex
						4	4 Channel CXP		
		214-	·						

Model		Connecto	Ta	Channel	Cable Tures	
Main Code	Sub Code	Connects	То	Channel	Cable Type	
	D0-D0	DIN Straight	DIN Straight			
	D0-D1	DIN Straight	DIN Right Angle			
	D0-HB/MB0	DIN Straight	HD-BNC Straight			
	D0-HB/MB1	DIN Straight	HD-BNC Right Angle	1/2/4	1/2/4	
VT-CX-3/5/xM	D1-D1	DIN Right Angle	DIN Right Angle			S:Standard /
VI-CA-3/5/XIVI	D1-HB/MB0	DIN Right Angle	HD-BNC Straight			H:High Flex
	D1-HB/MB1	DIN Right Angle	HD-BNC Right Angle			
HB/MB0-	HB/MB0-HB/MB0	HD-BNC Straight	HD-BNC Straight			
	HB/MB0-HB/MB1	HD-BNC Straight	HD-BNC Right Angle			
	HB/MB1-HB/MB1	HD-BNC Right Angle	HD-BNC Right Angle			



19 Ca

CameraLink Cables

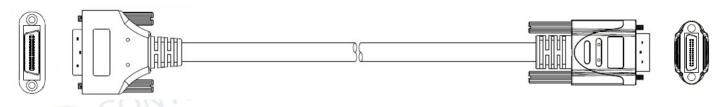
Purpose: Cameralink cable can realize high-speed image data transmission between Cmaeralink interface camera and frame grabber, supporting the use of special industrial environment.

- High transmission rate, plug and play function
- Connector molds are linear and right-angled
- Standard lengths 3m and 5m for option, and size customization available
- Static standard type and high flexibility and bending resistance / high sliding type cables for option

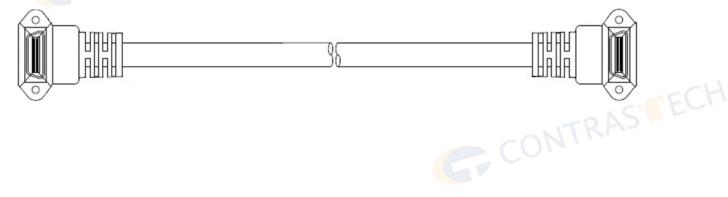
Product Model		Connector 1	Connector 2	Length	
Main Code	Sub Code	CONNECTOR T		Length	
VT-CL-3M/5M	M0M-S0M	MDR	SDR	3M / 5M	
	M0M-S0M-H	MDR	SDR	3M / 5M	
	S0M-S0M	SDR	SDR	3M / 5M	
	M0M-M0M	MDR	MDR	3M / 5M	
	M0M-M0M-H	MDR	MDR	3M / 5M	

Note: -H means High Flexibility.

• MDR26 Male (Straight Type) - SDR26 Male (Straight Type)



• SDR26 Male (Right Angle Type) - SDR26 Male (Right Angle Type)



Power and I/O Cables

VT-Hirose cables can be used to power and control the I/O on LEO/Mars area scan cameras and line scan cameras. This cable uses a Hirose 6-pin/12-pin connector on the camera side. The other end is open and the length can be customized, allowing the wire to be shortened to match individual requirements.

Product Model	Connector 1	Connector 2	Length
VT-Hirose6-7-0.5M	HRS 6pin	Open	0.5M
VT-Hirose12-13-1.5M	HRS 12pin	Open	1.5M
VT-TR4/6P-xxM	4/6 pin	Open	-
VT-TR5P-0.5M-MARS	5 pin	Open	0.5M

VT-TR cable is suitable for Board-level camera I/O control. The 4-pin/6-pin connector is used at the Board-level camera side, which can be selected according to the actual interface. The other end of the wire is open, allowing the wire to be shortened to meet individual needs.

Extension Cord for Light

Various lengths and other specifications of wire can be customized according to customer requirements.

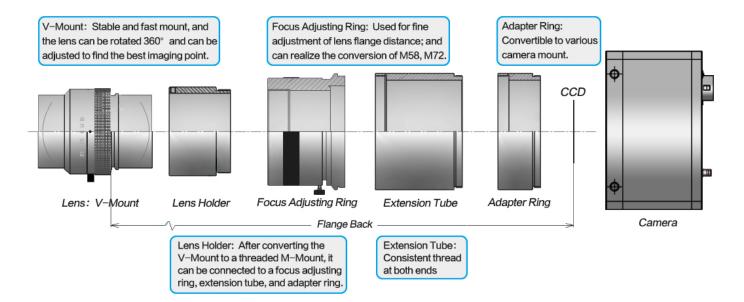
Product Model	Connector 1	Connector 2	Interface Type	Applicable Light	Length
VT-CB-2P-Lxx	2 pin	2 pin	Common	24V Lights	-
VT-CB-3P-Lxx	3 pin	3 pin	Common	24V Lights	-
VT-LICB-xx	4 pin	4 pin	Aviation	Line Scan Lights	-
VT-LICB46P-xxM	4 pin	6 pin	Aviation	Line Scan Lights	-

Note: For cables of different lengths, different types of controllers may need to be matched, please consult a sales engineer in advance.



Note: Schematic Diagram of Line Scan Lens Transfer

When a line scan lens is used with a line scan camera, various combinations of adapters are required due to different magnifications, camera interface and target surface size, etc., to achieve specific imaging needs.



Focus Adjusting Ring

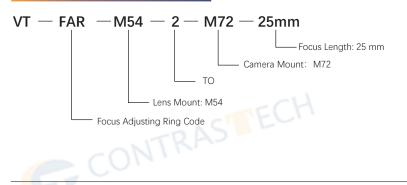
The focusing ring is a device installed on the camera lens to adjust the focal length. By rotating the focusing ring, the focal length of the lens can be adjusted, so that the object you want to shoot can be clearly imaged.

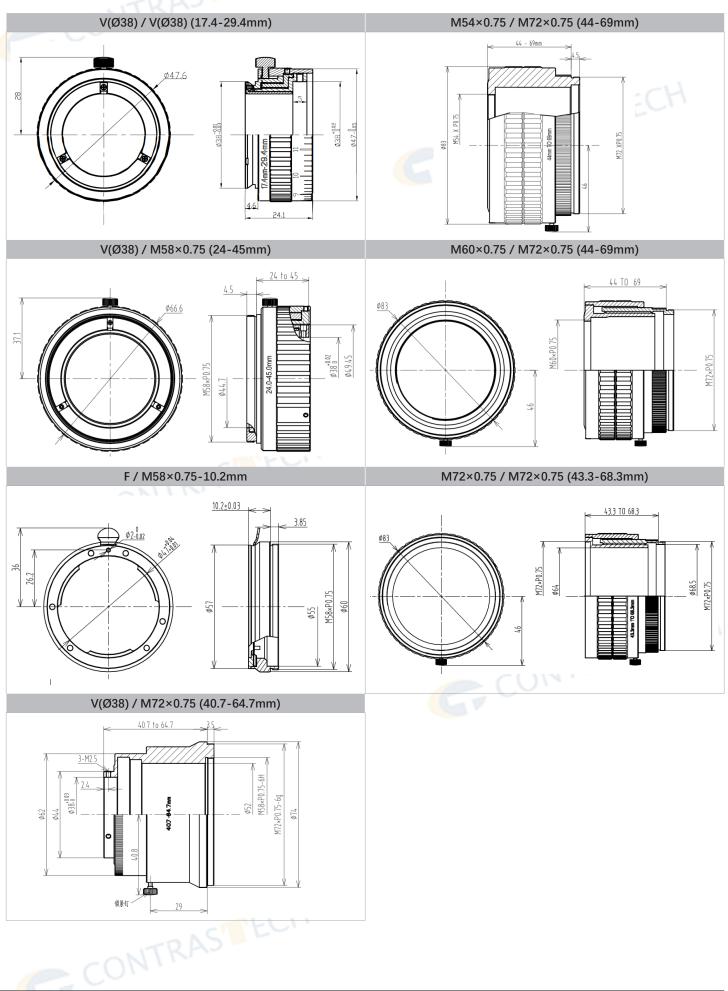
- Adjust the lens focus
- Various lens specifications are available
- Fine workmanship, no tooth loss, no paint peeling.

Lens Mount	Camera Mount	Focus Range (mm)	Focus Length (mm)
V (Ø38)	V(Ø38)	17.4-29.4	12
M54×P0.75	M72×P0.75	44-69	25
V (Ø38)	M58×P0.75	24-45	21
M60×P0.75	M72×P0.75	44-69	25
F Mount	M58×P0.75	-	10.2
M72×P0.75	M72×P0.75	43.3-68.3	25
V (Ø38)	M72×P0.75	40.7-64.7	24



Explanation of Model Code





Lens Focusing Adjusting Ring Dimension (mm)

Adapter Ring

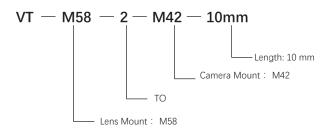
The back focus adjustment adapter ring is suitable for adjusting the standard back focus position of industrial vision lenses, shortening the minimum imaging distance, and realizing macro image capture and optical magnification functions.

- Length can be customized
- Various lens specifications are available
- Change field of view and object distance



Lens Mount	Camera Mount	Length (mm)	
M58×P0.75	C Mount	10	
M58×P0.75	F Mount	9	
M58×P0.75	M42×P0.75	10	
M58×P0.75	M42×P1	10	
M58×P0.75	M42×P1	24.3	
M58×P0.75	M48×P0.75	10	
M58×P0.75	M48×P0.75	29.74	
M58×P0.75	M72×P0.75	2	
M58×P0.75	M72×P0.75	16.75	
M58×P0.75	M72×P0.75	24.3	
M58×P0.75	M72×P0.75	25	
M58×P0.75	M72×P0.75	50	
M58×P0.75	M72×P0.75	100	
M58×P0.75	M95×P1	25	
M58×P0.75	M95×P1	50	
M58×P0.75	M95×P1	100	

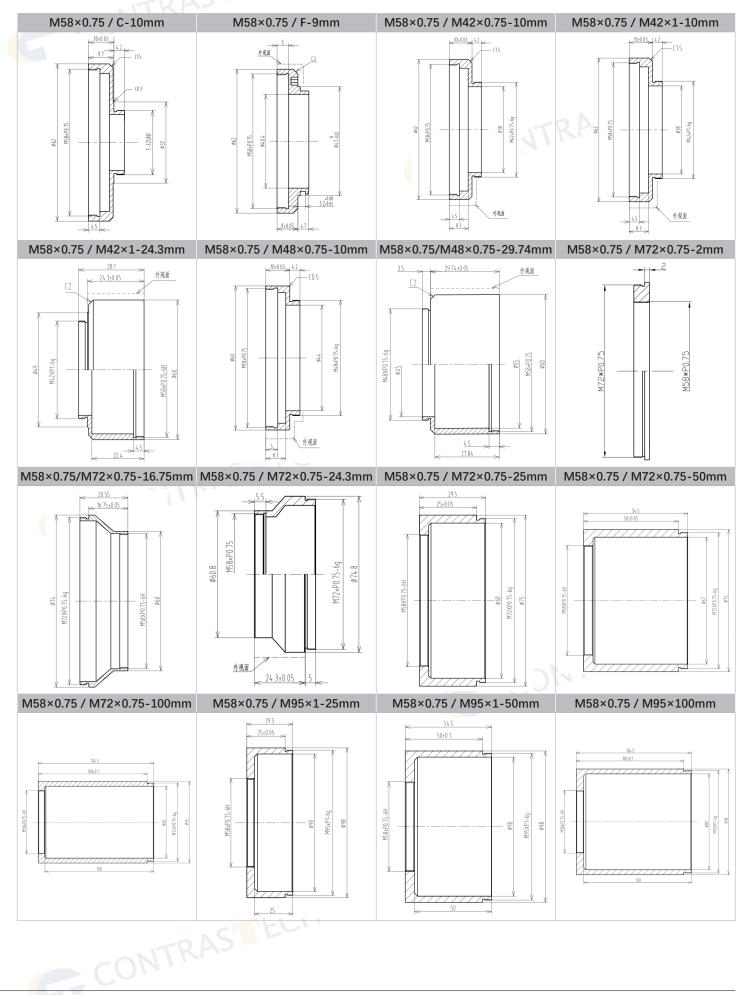
Explanation of Model Code



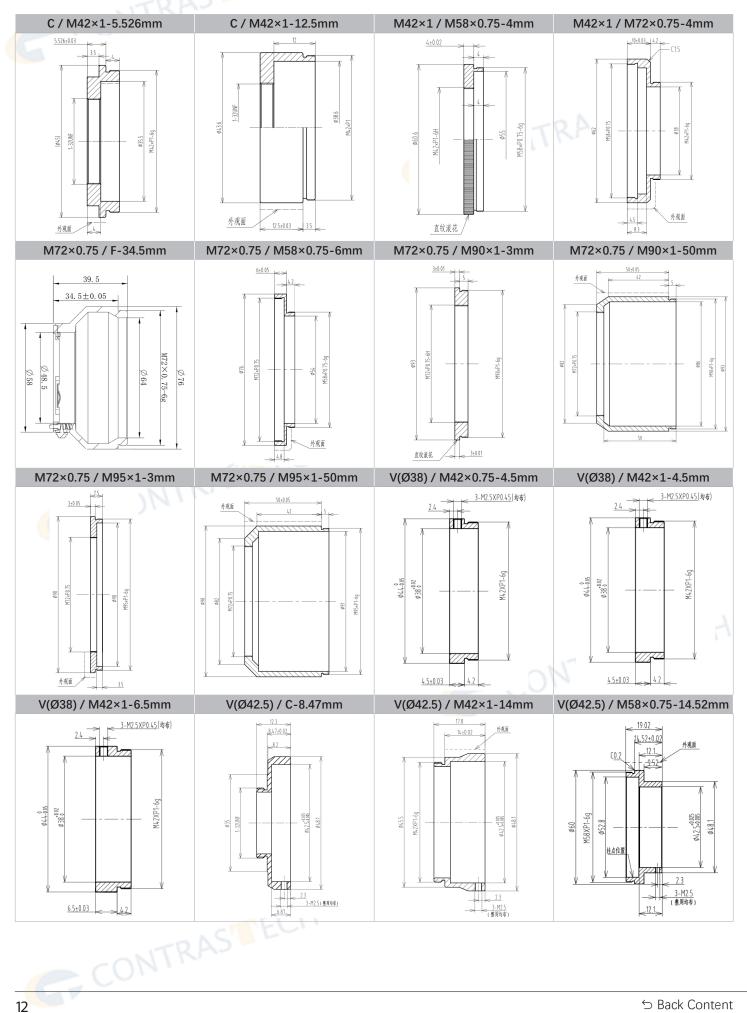


Lens Mount	Camera Mount	Length (mm)	
C Mount	M42×P1 5.526		
C Mount	M42×P1	12.5	
M42×P1	M58×P0.75	4	
M42×P1	M72×P0.75	4	
M72×P0.75	F Mount	34.5	
M72×P0.75	M58×P0.75	6	
M72×P0.75	M90×P1	3	
M72×P0.75	M90×P1	50	
M72×P0.75	M95×P1	M95×P1 3	
M72×P0.75	M95×P1	50	
V (Ø38)	M42×P0.75	4.5	
V (Ø38)	M42×P1	4.5	
V (Ø38)	M42×P1	6.5	
		- FI	
V (Ø42.5)	C Mount	8.47	
V (Ø42.5)	M42×P1	14	
V (Ø42.5)	M58×P0.75	14.52	

Adapter Ring Dimension (mm)



Adapter Ring Dimension (mm)



Extension Ring

The working distance of the lens has a certain range, and it cannot focus clearly at any object distance. When the working distance is less than the minimum working distance of the lens, the extension ring can be used to make the lens focus clearly.

- Little change in lens perspective
- Various lens specifications are available
- A variety of focusing lengths are available, and the length can be customized

Male	Female	Length (mm)
M58×P0.75	M58×P0.75	10
M58×P0.75	M58×P0.75	24
M58×P0.75	M58×P0.75	24.82
M58×P0.75	M58×P0.75	25
M58×P0.75	M58×P0.75	50
M58×P0.75	M58×P0.75	100
M72×P0.75	M72×P0.75	10
M72×P0.75	M72×P0.75	20
M72×P0.75	M72×P0.75	35
M72×P0.75	M72×P0.75	50
M90×P1	M90×P1	20
M90×P1	M90×P1	50
M95×P1	M95×P1	20
M95×P1	M95×P1	50

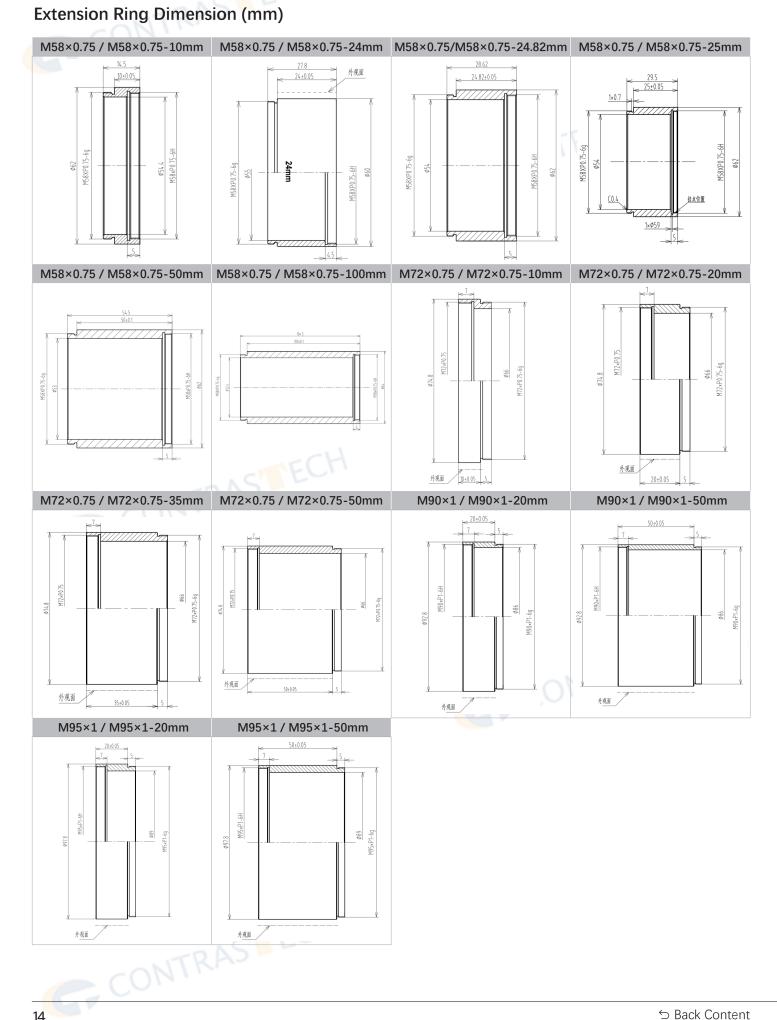


Explanation of Model Code









Lens Holder

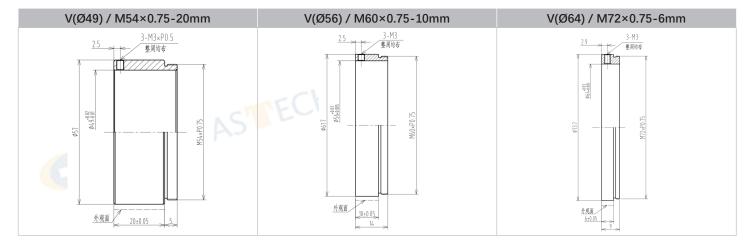
Lens holder to connect V-mount lens and threaded adapter.

- Length can be customized
- Various lens specifications are available

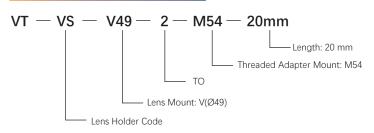
Mount 1	Mount 2	Length (mm)
V (Ø38)	M42 × P0.75	4.5
V (Ø38)	M42 × P0.75	6.5
V (Ø42.5)	M42 × P0.75	14
V (Ø42.5)	M58 × P0.75	14.52
V (Ø49)	M49 × P0.75	30
V (Ø49)	M54 × P0.75	20
V (Ø56)	M60 × P0.75	10
V (Ø64)	M72 × P0.75	6



Lens Holder Dimension (mm)



Explanation of Model Code





Magnifier

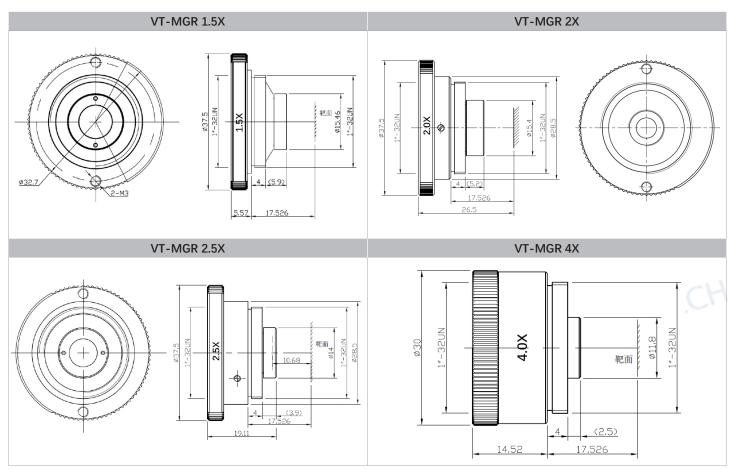
The extender is mounted between the lens and the camera body, and has the function of increasing the optical zoom factor of the camera.

- Small appearance and easy installation;
- The magnification can be increased by 1.5-4 times;
- Does not change the existing measurement environment (including working distance, depth of field, distortion, etc.)

Product Model	Focal Length	Mount
VT-MGR 1.5X	1.5x the original lens	С
VT-MGR 2X	2.0x the original lens	С
VT-MGR 2.5X	2.5x the original lens	С
VT-MGR 4X	4.0x the original lens	С



Magnifier Dimension (mm)



Filter

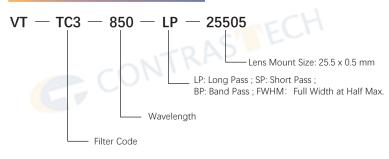
Filtering corrects the spectral properties of the light source, which can block or selectively allow some wavelengths of light to pass through, and can highlight or suppress the color characteristics of specific objects.

- A variety of categories and bands are available, suitable for a wide range of scenarios
- Spectrally flat, negligible color deviation
- Dust-proof design to better protect the lens

Filter	Common Wavelength Range
IR	715-1060 nm
Visible	400-695 nm
UV	220-390 nm

Туре	Description	
Long Pass Filter	Can be arbitrarily selected from ultraviolet to near-infrared band, high rejection stop band, high transmission pass band	
Short Pass Filter	In a specific wavelength range, the short-wave direction is passed, and the long-wave direction is cut off	
Band Pass Filter	The bandpass of the narrowband filter is relatively narrow, generally less than 5% of the central wavelength value	
Full Width at Half Max.	Refers to the distance between two general locations in the passband where the transmittance is peak transmittance	

Explanation of Model Code





Polarizing Lens

The polarizer can filter the interference caused by the reflection of the workpiece, so that the incident lens is light in a certain direction, so that the light can enter the visual image of the eye on the light transmission axis of the right track, so that the field of vision is clear and natural.

- Various lens mount can be customized;
- The surface is not easy to be scratched and wear-resistant;
- Suppresses reflections

Explanation of Model Code





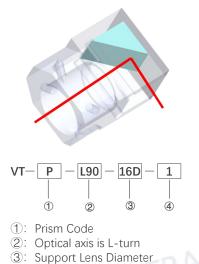
Optical Path Steering Prisms

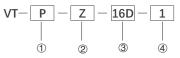
- Change path direction;
- Prisms can meet different mechanical structures;
- Achieve the minimum distance between the two lenses.



Product Model	Mount Size (mm)	IOPL (mm)	Beam Pitch (mm)
L-Shaped Steering Pris	m		
VT-PL90-16D-1.5	16	23.7	1.5
VT-PL90-16D-3S	16	23.5	3
VT-PL90-16D-5	16	20	5
/T-PL90-20D-3.2	20	42	3.2
/T-PL90-22D-3.2	22	21	3.2
/T-PL90-25D-13	25	30.9	13
/T-PL90-27D-14.3	27	31.1	14.3
/T-PL90-29D-12.6	29	32.7	12.6
/T-PL90-30D-5	30	26.5	5
/T-PL90-34D-12.2	34	31.9	12.2
/T-PL90-43D-23.5B	43	48.5	23.5
Z-Shaped Steering Pris	m		
/T-PZ-16D-5	16	39.5	1.5
/T-PZ-16D-3	16	36.4	3
/T-PZ-22D-3B	22	38	3
/T-PZ-29D-5	29	37	5
/T-PZ-30D-4	30	63.3	4
L-Shaped Steering Pri	sm		
/T-PZL-16D-1L	16	31	1
/T-P <mark>ZL-16</mark> D-1R	16	31	1
/T-PZL-16D-1.5L	16	31	1.5
/T-PZL-16D-1.5R	16	31	1.5
/T-PZL-16D-3B-L	16	29.5	3
	16	29.5	3

Explanation of Model Code

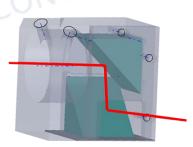


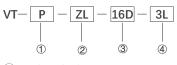




- 2: Optical axis is Z-turn
- 3: Support Lens Diameter

④: Beam Pitch

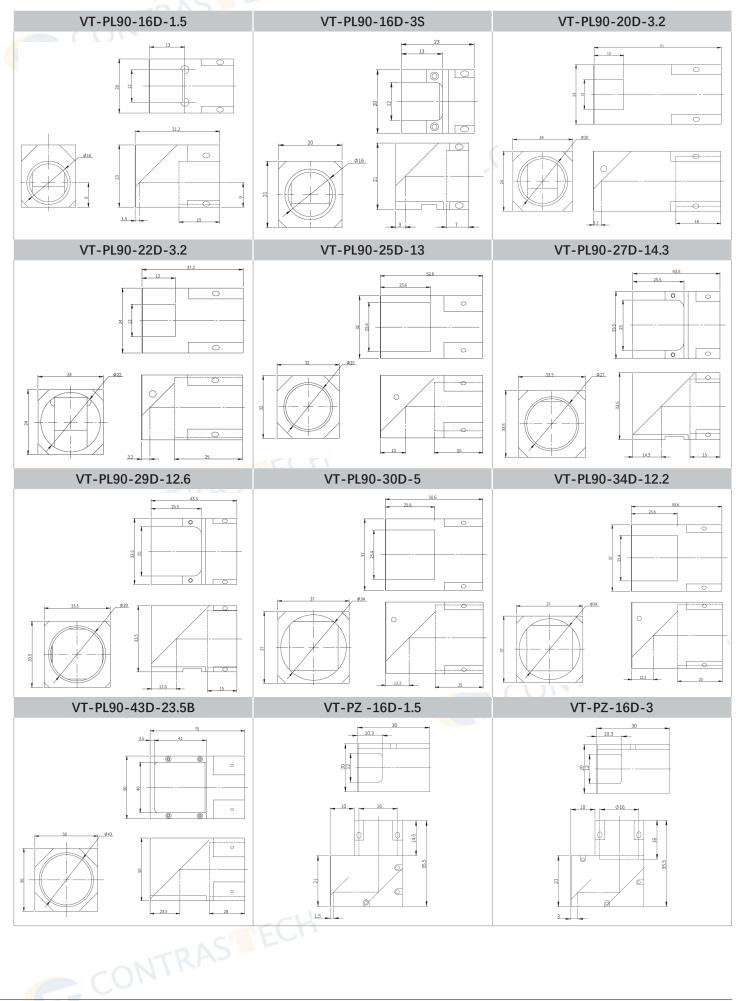


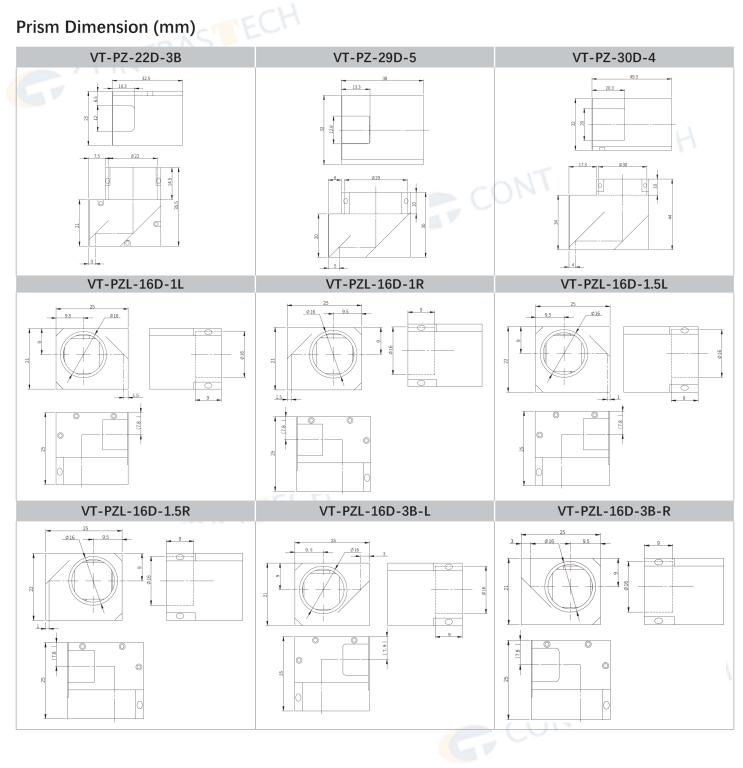


- 1: Prism Code
- 2: Optical axis space Z-turn
- ③: Support Lens Diameter
- (4): Beam Pitch

④: Beam Pitch

Prism Dimension (mm)





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Macro Lens Industrial Lens



System Solution No-programming Software



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