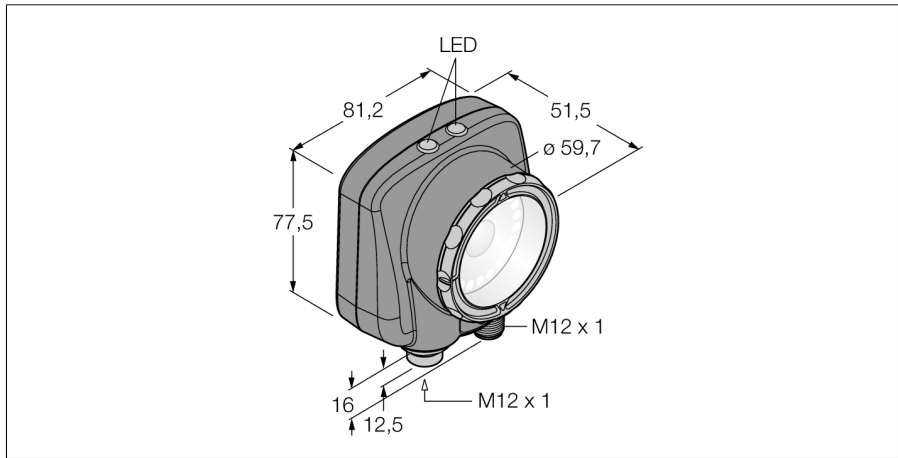


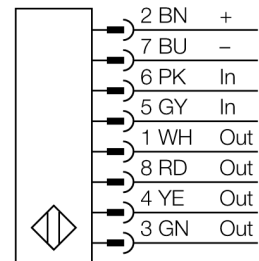
**Vision systems**  
**area, blemish, match**  
**IVUTGPG16**



- 1/3" CMOS, 752x480 pixels
- Integrated ring light: green
- Protection class IP67
- External strobe output + 5 VDC
- External trigger input
- Lens, 16 mm, M12x1
- Display: Integrated 65.5 mm LCD color display, 320 x 240 transreflective
- Operating voltage: 10...30 VDC
- M12 x 1 male, 8-pole
- 2 x PNP switching output
- USB-2.0 host: M12 x 1 male, 8-pole

<b>Type code</b>	IVUTGPG16
Ident no.	3081958
<b>Design</b>	rectangular, iVu
Dimensions	51.5 x 81.2 x 95.3 mm
Housing material	plastic, PBT
Window material	Acrylic, clear
Connection	male, M12 x 1, 8-wire
Protection class	IP67
Ambient temperature	0...+50 °C
<b>Power on display</b>	LED, green
Switching state	LED green
Error indication	LED red
<b>Operating voltage</b>	10...30VDC
DC rated operational current	≤ 500 mA
Short-circuit protection	yes/ cyclic
Reverse polarity protection	yes
Switch element function	NO contact, PNP
Output current	≥ 150 mA
<b>Operating mode</b>	gray value
Bildsensor	CMOS
Auflösung	752 x 480 Pixel
Bildfrequenz	100 fps
Light type	green
Brennweite	16 mm

**Wiring diagram**



**Functional principle**

Sensor with 3 integrated operation modes:

1. Pattern recognition, checks if a pattern on a target is identical to the reference pattern.
2. BLOB recognition, for recognition of one or more features.
3. BLOB and location tool for motion control.

Sensor configuration via PC is not required!  
Transmission of log files and firmware updates via USB interface.



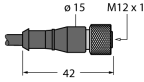
**Selecting the focal length**

With known object size or scan field the matching vision sensor is found simply by determining the ratio between the sensing range and the focal length. Use the graphics for selection. Here, the sensing ranges are put in relation to the field view and the lens focal length.

**Accessories**

Type code	Ident no.	Description	Dimension drawing
SMBIVURAR	3082547	Brackets for mounting on right side	 A technical drawing of a metal bracket for right-side mounting. It features a circular base with a central hole of diameter 25 mm and an outer diameter of 44 mm. A vertical arm extends from the base, with a hole of diameter 4.4 mm at the top. The distance from the base to the top hole is 16.8 mm. The total height of the bracket is 78.1 mm. The distance from the center of the base hole to the center of the top hole is 29.3 mm. The width of the base is 49 mm. A 1/4-20 thread hole is located on the side of the base.
SMBIVURAL	3082546	Brackets for mounting on left side	 A technical drawing of a metal bracket for left-side mounting, similar to SMBIVURAR but mirrored. It has a circular base with a central hole of diameter 25 mm and an outer diameter of 44 mm. A vertical arm extends from the base, with a hole of diameter 4.4 mm at the top. The distance from the base to the top hole is 16.8 mm. The total height of the bracket is 78.1 mm. The distance from the center of the base hole to the center of the top hole is 29.3 mm. The width of the base is 49 mm. A 1/4-20 thread hole is located on the side of the base.
SMBIVUU	3082549	U-bracket for base mounting (incl. SMBIVUB baseplate)	 A technical drawing of a U-shaped metal bracket. The base is 42 mm wide and 61.2 mm long. The height of the U-shaped part is 54 mm. The distance from the inner edge of the U to the outer edge is 30 mm. The thickness of the metal is 6.25 mm. There are eight holes with a diameter of 5.35 mm. A larger hole with a diameter of 25.4 mm is also present.
SMBIVUB	3082548	Baseplate to extend the installation	 A technical drawing of a metal baseplate. It has a total length of 56.8 mm and a total width of 23.8 mm. The thickness is 5.8 mm. There are two M5 x 0.8 (2x) holes and one 1/4-20 UNC hole. The distance between the two M5 holes is 29 mm, and the distance from the 1/4-20 hole to the right edge is 33.1 mm.

**Wiring accessories**

Type code	Ident no.	Description	Dimension drawing
MQDC2S-806	3070975	Connection cable 1.83 m, PVC, female M12 x 1, 8-pin, black	 A technical drawing of a cable connector. It has a total length of 42 mm. The diameter of the main body is 15 mm. It is designed for an M12 x 1 connector.
MQDC2S-806RA	3054616	Connection cable 1.83 m, PVC, female M12 x 1, angled, 8-pin, black	

**Wiring accessories**

Type code	Ident no.	Description	Dimension drawing
MQDEC-801-USB	3081158	USB adapter cable, M12x1 male, 8-pole, 0.3m	