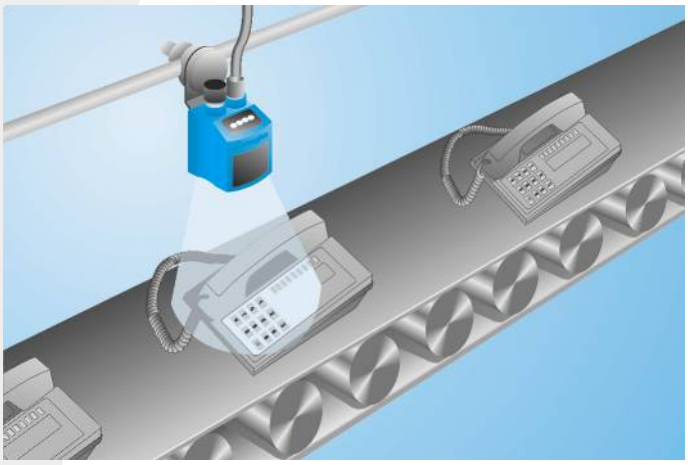
# Vision Sensor

# BS40M0I20

Part Number

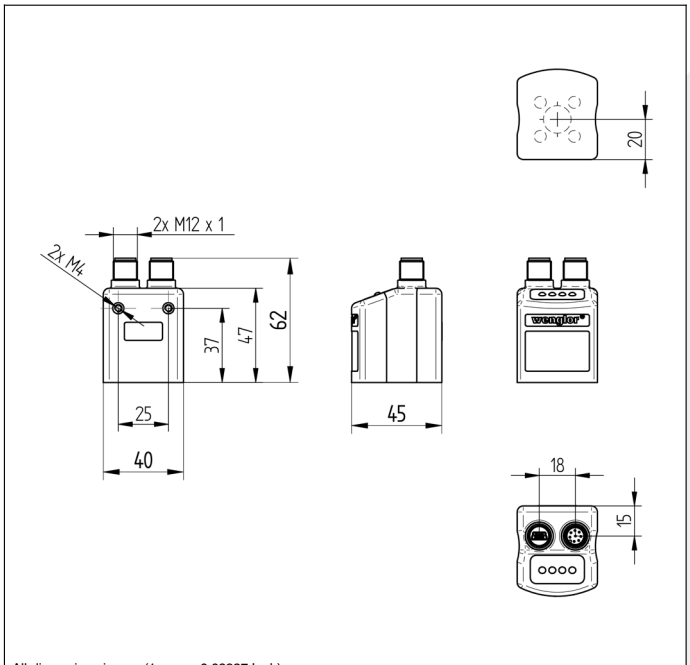
- **!!! AUTOFOCUS !!!**
- **10 projects can be saved inside the sensor**
- **Outputs and Inputs freely programmable**
- **Project selection via digital input**

This wenglor Vision Sensor combines camera, optic, illumination and evaluation unit in one compact housing. Especially it is suited if disturbing areas should be masked. The functions are working independently of the position of the object. Sorting, size control and good/bad part detection are realizable easily. The documentation of live- and diagnostic pictures can be executed via USB 2.0.



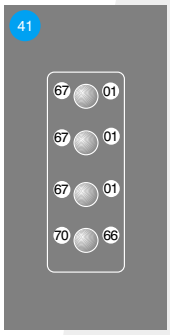
## Technical Data

| | |
|---|---|
| **Optical Data** | |
| Working Range | > 20 mm |
| Resolution | 640 × 480 Pixel |
| Image chip | monochrome |
| Light Source | Infrared Light |
| Service Life (T = +25 °C) | 100000 h |
| Risk Group (EN 62471) | 1 |
| Field of vision | see Table 1 |
| Image Repetition Rate | 100 Hz |
| **Electrical Data** | |
| Supply Voltage | 18...30 V DC |
| Current Consumption (Ub = 24 V) | < 200 mA |
| Response Time | > 10 ms |
| Temperature Range | 0...40 °C |
| Switching Outputs | 4 |
| Switching Output Voltage Drop | < 1,5 V |
| Switching Output / Switching Current | 200 mA |
| Short Circuit Protection | yes |
| Reverse Polarity Protection | yes |
| Digital Inputs | 2 |
| Protection Class | III |
| **Mechanical Data** | |
| Adjustment | USB 2.0 |
| Housing Material | Plastic |
| Degree of Protection | IP67 |
| Connection | M12 × 1; 8-pin |
| **Function** | |
| Presence Check | yes |
| Pixel Comparison | yes |
| Shape Analysis | yes |
| Reference Image Comparison | yes |
| Configurable as PNP/NPN/Push-Pull | ● |
| NO/NC switchable | ● |
| Ready Output | ● |
| Illumination Output | ● |
| USB Interface | ● |
| Connection Diagram No. | 761 |
| Control Panel No. | 41 |
| Suiting Connection Technology No. | 88 |
| Suiting Mounting Technology No. | 360 |




All dimensions in mm (1 mm = 0.03937 Inch)

## Ctrl.Panel




01 = Switching Status Indicator
66 = USB Status
67 = Busy
70 = Run / Trigger

## Complementary Products

| |
|---|
| Connection Cable BG2BSW1-08M |
| Floodlight ZFFx09-0x |
| Polarizing Filter ZVPB40001 |
| Protection Housing ZSV-0x-01 |
| Ring Illuminator ZFRx11-01 |
| Spot Light ZFSx08-0x |
| Spot Light ZFSx10-01 |

## Table 1

| **Working Distance** | 20 mm | 200 mm | 1000 mm |
|---|---|---|---|
| **Field of vision** | 16 × 12 mm | 120 × 90 mm | 600 × 450 mm |

Specifications are subject to change without notice