



V20W-0101000

V200 Work Station Extended

SAFE 3D CAMERAS

SICK
Sensor Intelligence.



Ordering information

Type	part no.
V20W-0101000	1042027

Other models and accessories → www.sick.com/V200_Work_Station_Extended

Illustration may differ



Detailed technical data

Features

Technology	2D camera
Resolution	20 mm, 24 mm, 30 mm ¹⁾
Protective field range	
20 mm resolution	1.41 m
24 mm resolution	1.7 m
30 mm resolution	2.12 m
Protective field size	
20 mm resolution	1 m x 1 m
24 mm resolution	1.2 m x 1.2 m
30 mm resolution	1.5 m x 1.5 m
Aspect ratio protective field	1:1 to 2:1
Response time	20 ms
Items supplied	Including teaching pen, operating instructions on CD-ROM and Quickstart (instructions for quick commissioning)

¹⁾ Depending on resolution set.

Safety-related parameters

Type	Type 2 (IEC 61496-1)
Safety integrity level	SIL 1 (IEC 61508)
Category	Category 2 (EN ISO 13849)
Test rate (internal test)	50 /s (EN ISO 13849)
Maximum demand rate	30 min ⁻¹ (EN ISO 13849) ¹⁾
Performance level	PL c (EN ISO 13849)
PFH_D (mean probability of a dangerous failure per hour)	5.6 x 10 ⁻⁹

¹⁾ Between two requirements on a safety-related response of the device, at least 100 internal or external tests must be carried out.

T_M (mission time)	20 years (EN ISO 13849)
Safe state in the event of a fault	At least one OSSD is in the OFF state.

¹⁾ Between two requirements on a safety-related response of the device, at least 100 internal or external tests must be carried out.

Functions

	Functions	Delivery status
Restart interlock	✓	Deactivated
External device monitoring (EDM)	✓	Deactivated
Cascading	✓	
Teach/sync	✓	

Interfaces

Connection type	Male connector M12, 8-pin
Permitted cable length	≤ 7.5 m ¹⁾
Display elements	LEDs

¹⁾ With a wire cross-section of 0.25 mm².

Electronics

Protection class	III (EN 50178)
Supply voltage V_S	24 V DC (19.2 V DC ... 28.8 V DC)
Power consumption	≤ 165 mA ¹⁾ ≤ 690 mA ²⁾
Output signal switching devices (OSSDs)	2 PNP semiconductors, short-circuit protected, cross-circuit monitored
ON state, switching voltage HIGH	V _S – 2.7 V DC ... V _S
OFF state, switching voltage LOW	≤ 3.5 V DC

¹⁾ At 24 V DC without output load.

²⁾ Including maximum output load.

Mechanics

Dimensions (W x H x D)	93.9 mm x 50 mm x 93.9 mm
Weight	355 g
Housing material	Aluminum die cast

Ambient data

Enclosure rating	IP54 (EN 60529)
Ambient operating temperature	0 °C ... +50 °C
Storage temperature	-25 °C ... +70 °C
Air humidity	15 % ... 95 %, Non-condensing
Vibration resistance	5 g, 10 Hz ... 55 Hz (EN 60068-2-6)

Other information

Wave length	850 nm
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Classifications

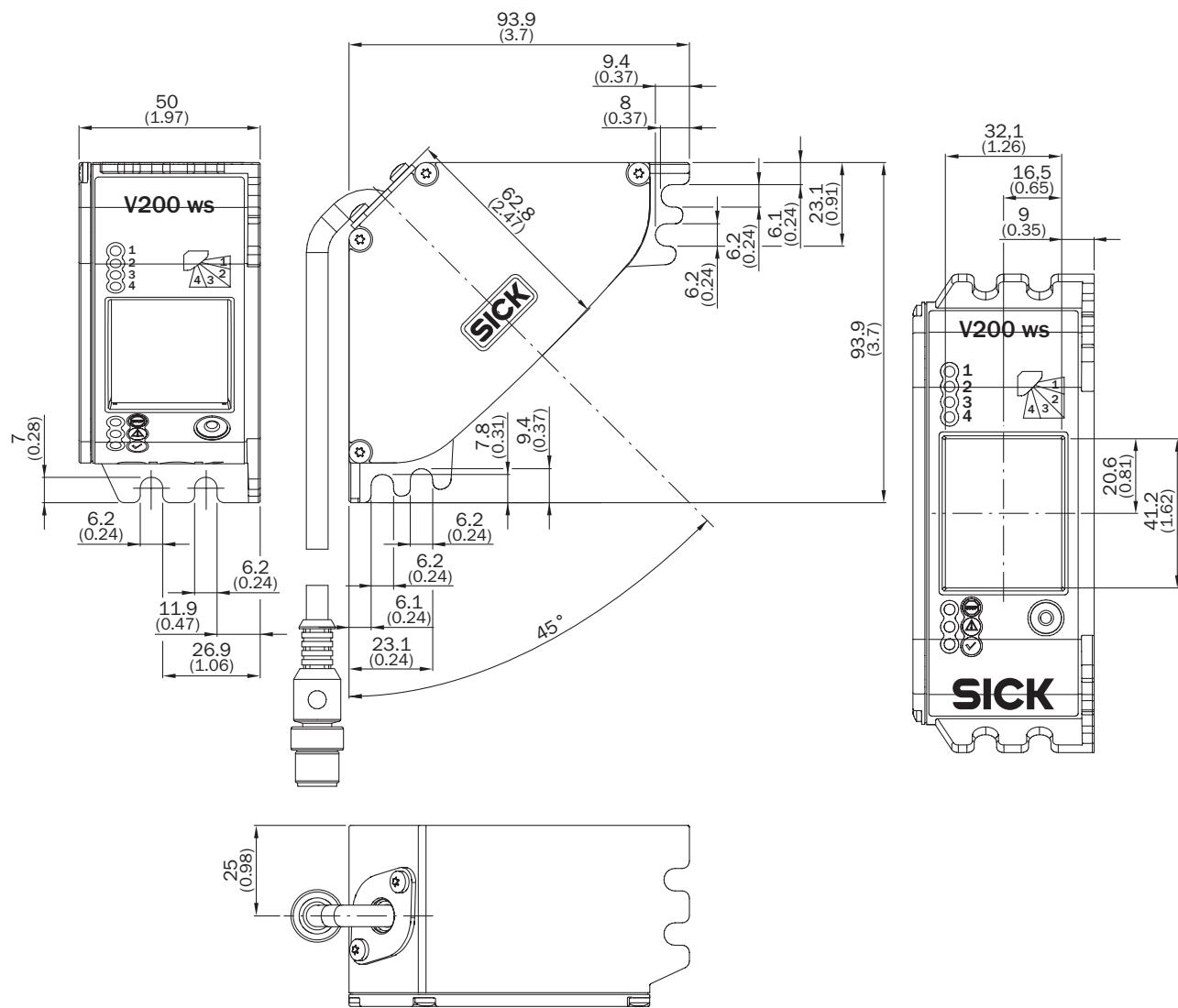
ECLASS 5.0	27272790
ECLASS 5.1.4	27272790
ECLASS 6.0	27272790

ECLASS 6.2	27272790
ECLASS 7.0	27272790
ECLASS 8.0	27272790
ECLASS 8.1	27272790
ECLASS 9.0	27272790
ECLASS 10.0	27272790
ECLASS 11.0	27272790
ECLASS 12.0	27272790
ETIM 5.0	EC001511
ETIM 6.0	EC001511
ETIM 7.0	EC001511
ETIM 8.0	EC001511
UNSPSC 16.0901	39121528

Certificates

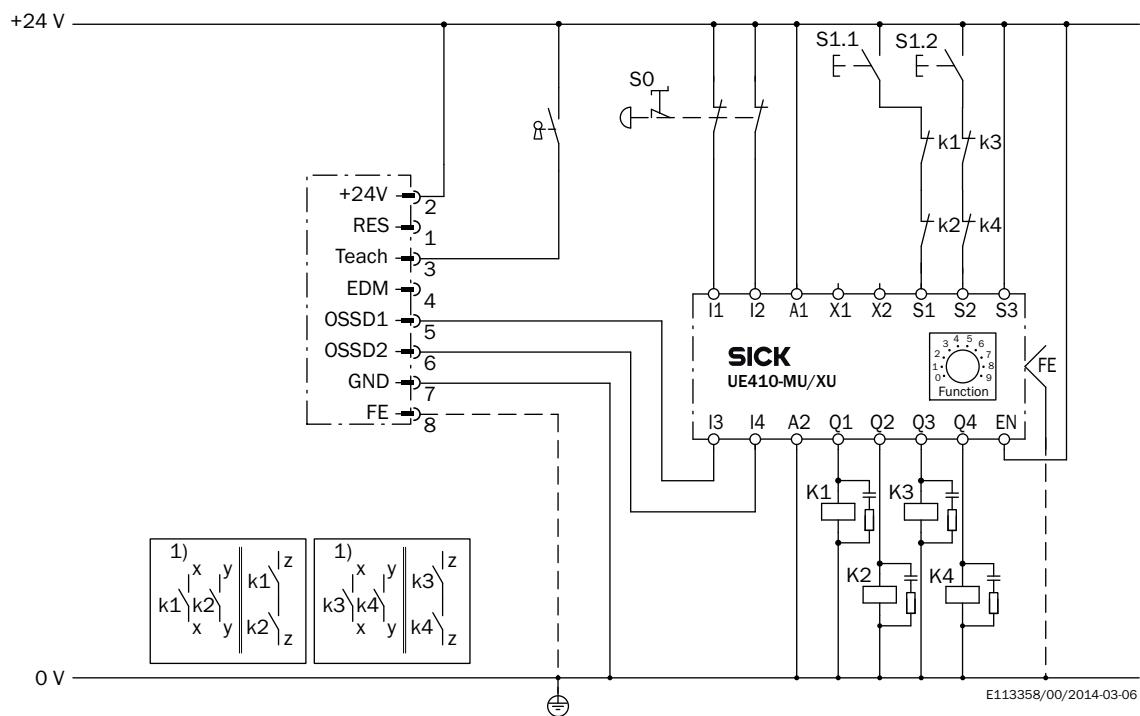
ACMA declaration of conformity	✓
China RoHS	✓
cULus certificate	✓

Dimensional drawing



Dimensions in mm (inch)

Connection diagram Secure camera system to Flexi Classic safety controller



Recommended accessories

Other models and accessories → www.sick.com/V200_Work_Station_Extended

	Brief description	Type	part no.
Mounting systems			
	<ul style="list-style-type: none"> Description: Mounting kit for mounting the sensor on the profile frame 	Mounting kit	2045375

	Brief description	Type	part no.
reflectors and optics			
	<ul style="list-style-type: none"> Description: Resolution set for 20 mm resolution and protective field size from 0.4 x 0.4 m to 1.0 m x 1.0 m 	Resolution set 20 mm	2051336
	<ul style="list-style-type: none"> Description: Resolution set for 24 mm resolution and protective field size from 0.4 x 0.4 m to 1.2 m x 1.2 m 	Resolution set 24 mm	2051338
	<ul style="list-style-type: none"> Description: Resolution set for 30 mm resolution and protective field size from 0.6 x 0.6 m to 1.5 m x 1.5 m 	Resolution set 30 mm	2051339
Commissioning aids and test equipment			
	<ul style="list-style-type: none"> Product: Configuration devices Description: Teach-in pin for safety camera systems 	Teaching pen	4052939

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is "Sensor Intelligence."

WORLDWIDE PRESENCE:

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