



M40S-025012EU0

M4000 Standard

MEHRSTRAHL-SICHERHEITSLICHTSCHRANKEN

SICK
Sensor Intelligence.



Abbildung kann abweichen



Bestellinformationen

Typ	Artikelnr.
M40S-025012EU0	1200016

Weitere Geräteausführungen und Zubehör → www.sick.com/M4000_Standard

Technische Daten im Detail

Merkmale

Besonderheit	Actuator Sensor Interface ersetzt den Systemanschluss
Funktionsprinzip	Sender/Empfänger
Systemteil	Sender
Reichweite	0,5 m ... 70 m, konfigurierbar
Kleine Reichweite	0,5 m ... 20 m
Große Reichweite	9 m ... 70 m
Strahlanzahl	2
Strahlabstand	500 mm
Synchronisation	Optische Synchronisation
Integrierte Laser-Ausrichthilfe	✓

Sicherheitstechnische Kenngrößen

Typ	Typ 4 (IEC 61496-1)
Sicherheits-Integritätslevel	SIL 3 (IEC 61508)
Kategorie	Kategorie 4 (EN ISO 13849)
Performance Level	PL e (EN ISO 13849)
PFH_D (mittlere Wahrscheinlichkeit eines Gefährdungsbringenden Ausfalls pro Stunde)	$6,6 \times 10^{-9}$ (EN ISO 13849)
T_M (Gebrauchsdauer)	20 Jahre (EN ISO 13849)

Funktionen

	Funktionen	Auslieferungszustand
Strahlcodierung	✓	Code 1
Konfigurierbare Reichweite	✓	

Schnittstellen

Actuator Sensor Interface	✓
Systemanschluss	Stecker M12, 4-polig
Art der Konfiguration	Konfigurationstasten
Anzeigeelemente	LEDs 7-Segment-Anzeige

Elektrik

Schutzklasse	III (IEC 61140)
Versorgungsspannung U_V	(26 V DC ... 31,6 V DC)
Stromaufnahme	≤ 0,2 A

Mechanik

Abmessungen	Siehe Maßzeichnung
Gehäusequerschnitt	52 mm x 55,5 mm
Material	
Gehäuse	Alulegierung ALMGSI 0,5, pulverbeschichtet
Frontscheibe	Polycarbonat, kratzfest beschichtet

Umgebungsdaten

Schutzart	IP65 (EN 60529)
Betriebsumgebungstemperatur	-30 °C ... +55 °C
Lagertemperatur	-30 °C ... +70 °C
Luftfeuchtigkeit	15 % ... 95 %, nicht kondensierend
Schwingfestigkeit	5 g, 10 Hz ... 55 Hz (EN 60068-2-6)
Schockfestigkeit	10 g, 16 ms (EN 60068-2-27)

Sonstige Angaben

Wellenlänge	850 nm
Integrierte Laser-Ausrichthilfe	✓

Zertifikate

EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓
China RoHS	✓
cTUVus certificate	✓
EC-Type-Examination approval	✓
Information according to Art. 3 of Data Act (Regulation EU 2023/2854)	✓

Klassifikationen

ECLASS 5.0	27272703
ECLASS 5.1.4	27272703
ECLASS 6.0	27272703
ECLASS 6.2	27272703

ECLASS 7.0	27272703
ECLASS 8.0	27272703
ECLASS 8.1	27272703
ECLASS 9.0	27272703
ECLASS 10.0	27272703
ECLASS 11.0	27272703
ECLASS 12.0	27272703
ETIM 5.0	EC001832
ETIM 6.0	EC001832
ETIM 7.0	EC001832
ETIM 8.0	EC001832
UNSPSC 16.0901	46171620

Technical drawing of the AS-Interface M12 cable assembly, showing front, side, and detail views with dimensions and labels.

Front View Dimensions:

- Overall length: L_2
- Length to first connector: L_1
- Length to first connector (alternative): S_1
- Length to second connector: S_1
- Length to third connector: 71.2
- Length to fourth connector: 99.8
- Length to fifth connector: 14.4
- Length to sixth connector: 23.5
- Length to seventh connector: 71.2
- Length to eighth connector: 99.8
- Length to ninth connector: 14.4
- Length to tenth connector: 23.5
- Length to eleventh connector: 71.2
- Length to twelfth connector: 99.8
- Length to thirteenth connector: 14.4
- Length to fourteenth connector: 23.5
- Length to fifteenth connector: 71.2
- Length to sixteenth connector: 99.8
- Length to seventeenth connector: 14.4
- Length to eighteenth connector: 23.5
- Length to nineteenth connector: 71.2
- Length to twentieth connector: 99.8
- Length to twenty-first connector: 14.4
- Length to twenty-second connector: 23.5
- Length to twenty-third connector: 71.2
- Length to twenty-fourth connector: 99.8
- Length to twenty-fifth connector: 14.4
- Length to twenty-sixth connector: 23.5
- Length to twenty-seventh connector: 71.2
- Length to twenty-eighth connector: 99.8
- Length to twenty-ninth connector: 14.4
- Length to thirtieth connector: 23.5
- Length to thirty-first connector: 71.2
- Length to thirty-second connector: 99.8
- Length to thirty-third connector: 14.4
- Length to thirty-fourth connector: 23.5
- Length to thirty-fifth connector: 71.2
- Length to thirty-sixth connector: 99.8
- Length to thirty-seventh connector: 14.4
- Length to thirty-eighth connector: 23.5
- Length to thirty-ninth connector: 71.2
- Length to fortieth connector: 99.8
- Length to forty-first connector: 14.4
- Length to forty-second connector: 23.5
- Length to forty-third connector: 71.2
- Length to forty-fourth connector: 99.8
- Length to forty-fifth connector: 14.4
- Length to forty-sixth connector: 23.5
- Length to forty-seventh connector: 71.2
- Length to forty-eighth connector: 99.8
- Length to forty-ninth connector: 14.4
- Length to fiftieth connector: 23.5
- Length to fifty-first connector: 71.2
- Length to fifty-second connector: 99.8
- Length to fifty-third connector: 14.4
- Length to fifty-fourth connector: 23.5
- Length to fifty-fifth connector: 71.2
- Length to fifty-sixth connector: 99.8
- Length to fifty-seventh connector: 14.4
- Length to fifty-eighth connector: 23.5
- Length to fifty-ninth connector: 71.2
- Length to sixtyth connector: 99.8
- Length to sixty-first connector: 14.4
- Length to sixty-second connector: 23.5
- Length to sixty-third connector: 71.2
- Length to sixty-fourth connector: 99.8
- Length to sixty-fifth connector: 14.4
- Length to sixty-sixth connector: 23.5
- Length to sixty-seventh connector: 71.2
- Length to sixty-eighth connector: 99.8
- Length to sixty-ninth connector: 14.4
- Length to seventieth connector: 23.5
- Length to seventy-first connector: 71.2
- Length to seventy-second connector: 99.8
- Length to seventy-third connector: 14.4
- Length to seventy-fourth connector: 23.5
- Length to seventy-fifth connector: 71.2
- Length to seventy-sixth connector: 99.8
- Length to seventy-seventh connector: 14.4
- Length to seventy-eighth connector: 23.5
- Length to seventy-ninth connector: 71.2
- Length to eightyth connector: 99.8
- Length to eighty-first connector: 14.4
- Length to eighty-second connector: 23.5
- Length to eighty-third connector: 71.2
- Length to eighty-fourth connector: 99.8
- Length to eighty-fifth connector: 14.4
- Length to eighty-sixth connector: 23.5
- Length to eighty-seventh connector: 71.2
- Length to eighty-eighth connector: 99.8
- Length to eighty-ninth connector: 14.4
- Length to ninetieth connector: 23.5
- Length to ninety-first connector: 71.2
- Length to ninety-second connector: 99.8
- Length to ninety-third connector: 14.4
- Length to ninety-fourth connector: 23.5
- Length to ninety-fifth connector: 71.2
- Length to ninety-sixth connector: 99.8
- Length to ninety-seventh connector: 14.4
- Length to ninety-eighth connector: 23.5
- Length to ninety-ninth connector: 71.2
- Length to onehundredth connector: 99.8

Side View Dimensions:

- Overall width: 55.5
- Width to first connector: 27.5
- Width to second connector: 27.5
- Width to third connector: 27.5
- Width to fourth connector: 27.5
- Width to fifth connector: 27.5
- Width to sixth connector: 27.5
- Width to seventh connector: 27.5
- Width to eighth connector: 27.5
- Width to ninth connector: 27.5
- Width to tenth connector: 27.5
- Width to eleventh connector: 27.5
- Width to twelfth connector: 27.5
- Width to thirteenth connector: 27.5
- Width to fourteenth connector: 27.5
- Width to fifteenth connector: 27.5
- Width to sixteenth connector: 27.5
- Width to seventeenth connector: 27.5
- Width to eighteenth connector: 27.5
- Width to nineteenth connector: 27.5
- Width to twentieth connector: 27.5
- Width to twenty-first connector: 27.5
- Width to twenty-second connector: 27.5
- Width to twenty-third connector: 27.5
- Width to twenty-fourth connector: 27.5
- Width to twenty-fifth connector: 27.5
- Width to twenty-sixth connector: 27.5
- Width to twenty-seventh connector: 27.5
- Width to twenty-eighth connector: 27.5
- Width to twenty-ninth connector: 27.5
- Width to thirtieth connector: 27.5
- Width to thirty-first connector: 27.5
- Width to thirty-second connector: 27.5
- Width to thirty-third connector: 27.5
- Width to thirty-fourth connector: 27.5
- Width to thirty-fifth connector: 27.5
- Width to thirty-sixth connector: 27.5
- Width to thirty-seventh connector: 27.5
- Width to thirty-eighth connector: 27.5
- Width to thirty-ninth connector: 27.5
- Width to fortieth connector: 27.5
- Width to forty-first connector: 27.5
- Width to forty-second connector: 27.5
- Width to forty-third connector: 27.5
- Width to forty-fourth connector: 27.5
- Width to forty-fifth connector: 27.5
- Width to forty-sixth connector: 27.5
- Width to forty-seventh connector: 27.5
- Width to forty-eighth connector: 27.5
- Width to forty-ninth connector: 27.5
- Width to fiftieth connector: 27.5
- Width to fifty-first connector: 27.5
- Width to fifty-second connector: 27.5
- Width to fifty-third connector: 27.5
- Width to fifty-fourth connector: 27.5
- Width to fifty-fifth connector: 27.5
- Width to fifty-sixth connector: 27.5
- Width to fifty-seventh connector: 27.5
- Width to fifty-eighth connector: 27.5
- Width to fifty-ninth connector: 27.5
- Width to sixtyth connector: 27.5
- Width to sixty-first connector: 27.5
- Width to sixty-second connector: 27.5
- Width to sixty-third connector: 27.5
- Width to sixty-fourth connector: 27.5
- Width to sixty-fifth connector: 27.5
- Width to sixty-sixth connector: 27.5
- Width to sixty-seventh connector: 27.5
- Width to sixty-eighth connector: 27.5
- Width to sixty-ninth connector: 27.5
- Width to seventyth connector: 27.5
- Width to seventy-first connector: 27.5
- Width to seventy-second connector: 27.5
- Width to seventy-third connector: 27.5
- Width to seventy-fourth connector: 27.5
- Width to seventy-fifth connector: 27.5
- Width to seventy-sixth connector: 27.5
- Width to seventy-seventh connector: 27.5
- Width to seventy-eighth connector: 27.5
- Width to seventy-ninth connector: 27.5
- Width to eightyth connector: 27.5
- Width to eighty-first connector: 27.5
- Width to eighty-second connector: 27.5
- Width to eighty-third connector: 27.5
- Width to eighty-fourth connector: 27.5
- Width to eighty-fifth connector:

Darstellung Sender (Empfänger spiegelbildlich)

Strahlanzahl	Strahlabstand S1	L1	L2
2	500	643	672
	600	743	772
3	220	583	612
	400	943	972
	450	1.043	1.072
4	220	803	832

Strahlanzahl	Strahlabstand S1	L1	L2
5 6 7 8	300	1.043	1.072
	220	1.023	1.052
		1.243	1.272
		1.462	1.491
		1.682	1.711

Empfohlenes Zubehör

Weitere Geräteausführungen und Zubehör → www.sick.com/M4000_Standard

	Kurzbeschreibung	Typ	Artikelnr.
Befestigungstechnik			
	Beschreibung: Befestigungssatz 6, Seithalterung, schwenkbar Material: Zinkdruckguss Details: Zinkdruckguss Packungseinheit: 4 Stück Geeignet für: Alle Schutzfeldhöhen	BEF-1SHABAZN4	2019506
	Beschreibung: Befestigungssatz 1, Haltewinkel, starr, L-förmig, inklusive Befestigungsschrauben und Unterlegscheiben Packungseinheit: 4 Stück Geeignet für: Alle Schutzfeldhöhen	BEF-3WNGBAST4	7021352
	Beschreibung: Befestigungssatz 12, schwenkbar, Swivel Mount Packungseinheit: 4 Stück Geeignet für: Alle Schutzfeldhöhen	BEF-2SMGEAKU4	2030510
Inbetriebnahmehilfen und Prüfmittel			
	Produkt: Ausrichthilfen Abmessungen (B x H x L): 19 mm 67,3 mm 66,9 mm Beschreibung: Laser-Ausrichthilfe für verschiedene Sensoren, Laserklasse 2 (IEC 60825): Nicht in den Strahl blicken!	AR60	1015741
	Produkt: Ausrichthilfen Beschreibung: Adapter AR60 für M4000 und M4000 Curtain	Adapter AR60, M4000	4040006

SICK AUF EINEN BLICK

SICK ist einer der führenden Hersteller von intelligenten Sensoren und Sensorlösungen für industrielle Anwendungen. Ein einzigartiges Produkt- und Dienstleistungsspektrum schafft die perfekte Basis für sicheres und effizientes Steuern von Prozessen, für den Schutz von Menschen vor Unfällen und für die Vermeidung von Umweltschäden.

Wir verfügen über umfassende Erfahrung in vielfältigen Branchen und kennen ihre Prozesse und Anforderungen. So können wir mit intelligenten Sensoren genau das liefern, was unsere Kunden brauchen. In Applikationszentren in Europa, Asien und Nordamerika werden Systemlösungen kundenspezifisch getestet und optimiert. Das alles macht uns zu einem zuverlässigen Lieferanten und Entwicklungspartner.

Umfassende Dienstleistungen runden unser Angebot ab: SICK LifeTime Services unterstützen während des gesamten Maschinenlebenszyklus und sorgen für Sicherheit und Produktivität.

Das ist für uns „Sensor Intelligence.“

WELTWEIT IN IHRER NÄHE:

Ansprechpartner und weitere Standorte → www.sick.com