



Systems from a single source of supply.

Mounting and connection methods, in conjunction with industrial sensors, are an integral part of an all-embracing systems concept. Anyone who adopts a uniform scheme for mounting and connection is at an advantage. SICK offers you this advantage from a single source of supply.

Mounting and connection. For any application and in any branch of industry.

Industrial environments are harsh environments. Each branch of industry and each application therefore require individual solutions to technical problems. Whether in the field of conveying, the packaging industry, the automotive industry or in the food and beverage industry, the solution to resolve problems in technical applications must be reliable for each requirement. Only technology, which is specifically matched for the particular application, will ensure safe and trouble-free operation.

Technology at its best.

Whether the demands imposed on technology are due to vibration, cable stress, coolant lubrication or due to cleaning processes using acids, lyes and cleaning agents under high pressure, SICK can offer the high-tech solution.



The direct route and the appropriate method

Typecode mounting systems

	BEF	WK	W24
Type			
Mounting Systems	BEF		
Type of mounting system			
Mounting bracket small		WK	
Mounting bracket large		WG	
Articulated mounting		GH	
Clamp		KH	
Double clamp		DKH	
Ball joint bracket		KK	
Brackets, large and small		WN	
Clamp for support rail		HPS	
Universal clamp		KHS	
Plate separately		KHP	
Mounting systems for cylinders		KHZ	
Sensor Type			
W 24			W24
W 12			W12
DME			DME
MINI 01			MINI01



Typecode connectors and cables

	DOL	-	12	04	-	G	02M	C	
Type									Special features
Female connector (terminal screwed)	DOS							‘ ‘	Standard (PVC)
Male connector (terminal screwed)	STE							A	Shielded
Female connector with molded cable	DOL							B	PUR
Male connector with molded cable	STL							C	PUR halogenfree
Extension cable	DSL							F	Special pin coding OD, shielded, PUR
Female, male connector	DSC							H	Partially shielded
Connector (diameter)									
Connector DIN 43650			03						
Connector DIN 43651			06						
M8 diameter			08				0M6		0.6 Meter
Special coding (with T-junction)			11				02M		2 Meter
M12 diameter			12				05M		5 Meter
Connector Q6, DC-coding			13						
Connector Q6, AC/UC-coding			14			B			Plug connector housings (injection moulded)
M14 diameter			15			C			Angled female/straight male connector (DSL)
M16 diameter			16			L			Straight female/angled male connector with LED (DSL)
M18 diameter			18			G			Angled 90° with LED
Connector Q7, DC-coding			21			W			Straight
Connector Q7, AC/UC-coding			22			T			Angled 90°
M23 diameter			23						T-connector
R16			26	03					Number of poles/wires
Connector DIN 43652			27	04					3 wire
7/8" connector			78						4 wire
M8 Female/M12 Male (DSL)			82						
M8 Female, D-Sub, 9-pin/Male (DSL)			8D						
D-Sub			0D						

Typecode splitter-box

	SB	L	-	08	D	12	-	K	A	05	
Type											cable length
Splitter-box passive	SB									05	5 Meter
Splitter-box DeviceNet	SD									10	10 Meter
Splitter-box passive (special Food & Beverage)	SN									15	15 Meter
Indicator											Connector/cable (connection) type
LED indicator		L							A		PVC-cable
without LED indicator		O							B		PUR-cable
Classification (large splitter box)											
2 sockets				02					C		PUR halogenfree, cable
4 sockets				04					E		M23 connector
8 sockets				08					F		M12 Plug (box for "T" piece)
Signals											Connection
1 signals per socket					C				K		Cable (horizontal connection)
2 signals per socket					D				S		Connector (vertical connection)
6 signals per socket					F	08					Socket type
											M8 connector
											Box/(plug for "T" piece) M12
											7/8" connector

Mounting and connection in summary



Connection systems

Safer and better connections

Molded connector cables make the installation easy, safe and effective. Where greater versatility is required, molded connector cables, together with an array of terminal screwed connectors available, provide the opportunity of creating individual solutions. M8/M12 standardised or device-specific plug connectors or field bus systems, specifically for use in particular branches of industry complete the supply programme.

Standard M8 and M12 connection

- Terminal screwed connectors
- Molded connectors
- Connector cables (with molded connection at one end only)
 - PVC
 - PUR halogenfree
 - Specific for the food and beverage industry
- Connector cables (with molded connectors both ends)
 - PVC
 - PUR halogenfree
 - Specific for the food and beverage industry

Special connection

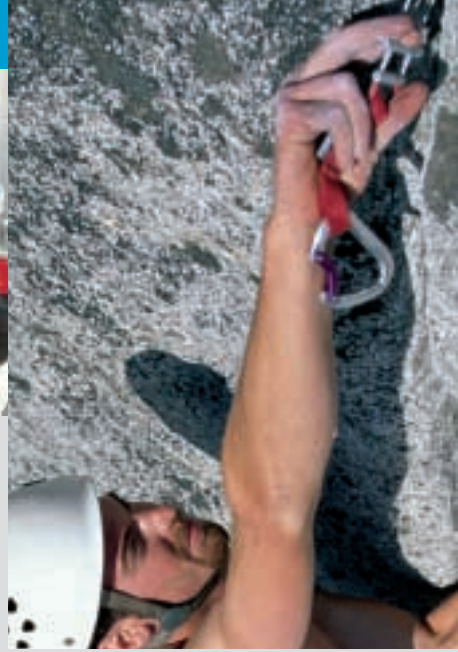
- Shielded M12, 8-pin connectors
- "T"-junction
- Field bus connection systems (Profibus, DeviceNet)
- Round connectors for specific devices
- Rectangular connectors for specific devices

Splitter boxes

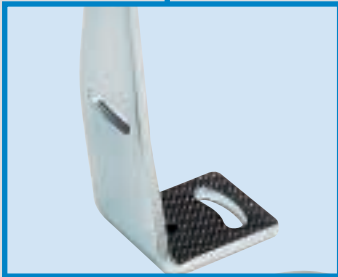
- Boxes with enclosure rating IP 67
 - M12 boxes, type of connection: cable
 - M12 boxes, type of connection: plug, M23
- Boxes with enclosure rating IP 69K (for the food and beverage industry)
 - M12 boxes, type of connection: cable



Mounting systems



Sensors



Mounting systems

Versatile mountings secure as required

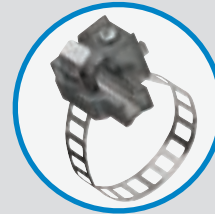
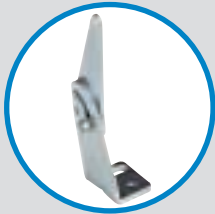
Irrespective of the shape of the sensors, SICK has the correct mounting system. Whether with metric, sleeve or square design – mounting brackets, supports and adapters will secure the mounting of each sensor, even in harsh conditions.

Standard mounting systems

- Mounting bracket
- Clamps
- Universal joints
- Ball-type bracket

Special purpose mounting systems

- Universal clamps for securing to bars and rods
- Adapter for magnetic cylinder sensors



Selection table for mounting brackets, clamps and articulated mountings

Sensor	Description	Type	Order no.
ST 130-S13, -S19, -S23, -S29	Mounting bracket	BEF-130-SM	5 306 246
ST 130-S33	Mounting bracket	BEF-130-SP	5 306 245
SS/SE 130-S33	Mounting bracket	BEF-130-ST	5 306 244
SI 130	Mounting bracket	BEF-WLL160	5 305 400
W 4-2	Mini ball joint bracket	BEF-GH-MINI01	2 023 160
W 150	Mounting bracket, horizontal*)	BEF-W150-A	5 306 217
W 150	Mounting bracket, vertical*)	BEF-W150-B	5 306 279
W 160	Mounting bracket	BEF-W160	5 305 197
WLL 160	Mounting bracket	BEF-WLL16	5 305 400
W 170	Mounting bracket	BEF-W170	5 305 686
WLL 170/WLL 190	Mounting bracket	BEF-WLL170	5 306 574
W 9-2	Mounting bracket	BEF-WN-W9-2	2 022 855
W 12-2, W 12L-2	Clamp	BEF-KH-W12	2 013 285
W 12-2, W 12L-2	Double clamp	BEF-DKH-W12	2 013 947
W 12-2, W 12L-2	Clamp for top-hat rail	BEF-HPS-W12	2 018 060
W 12-2, W 12L-2	Mounting bracket, large	BEF-WG-W12	2 013 942
W 12-2, W 12L-2	Mounting bracket, small	BEF-WK-W12	2 012 938
W 14-2, W 18-3	Mounting bracket	BEF-WN-W14	2 019 084
W 14-2, W 18-3	Mounting bracket	BEF-WN-W18	2 009 317
W 23	Mounting bracket	BEF-WN-W23	2 019 085
W 23	Mounting bracket	BEF-WN-W27	2 009 122
W 24-2, W 24 Exi	Mounting bracket, large	BEF-WG-W24	4 026 324
W 24-2, W 24 Exi	Mounting bracket, small	BEF-WK-W24	4 027 532
W 250	Mounting bracket	BEF-W250	5 305 850
W 260	Mounting bracket	BEF-W260	5 304 819
W 27-2	Mounting bracket	BEF-WN-W27	2 009 122
W 27-2	Mounting bracket	BEF-WN-W23	2 019 085
W 30, W 32, W 34	Mounting bracket	BEF-WN-W32	2 005 806
W 34	Mounting bracket, large	BEF-WG-W24	4 026 324
W 34	Mounting bracket, small	BEF-WK-W24	4 027 532
W 45	Universal joint, complete	BEF-KK-W45	2 011 436
W 45	Mounting bracket	BEF-WN-W45	2 011 480
V 12, IM 12, MM 12	Mounting bracket	BEF-WN-M12	5 308 447
V 18, IM 18, MM 18, CM 18	Mounting bracket	BEF-WN-M18	5 308 446
IM 30, CM 30	Mounting bracket	BEF-WN-M30	5 308 445
V 18, IM 18, MM 18, CM 18	Mounting bracket with ball-joint	BEF-WN-M18-ST02	5 312 973
WTR	Mounting bracket	BEF-WN-WTR	2 017 417
WLG 12	Mounting bracket	BEF-WN-WLG12	2 017 567
KT 2	Clamp	BEF-KH-W12	2 013 285
KT 2	Double clamp	BEF-DKH-W12	2 013 947
KT 2	Clamp for top-hat rail	BEF-HPS-W12	2 018 060
KT 2	Mounting bracket, large	BEF-WG-W12	2 013 942
KT 2	Mounting bracket, small	BEF-WK-W12	2 012 938
KT 3	Mounting bracket	BEF-WN-W9-2	2 022 855
DS 60	Mounting bracket	BEF-WN-DS60	4 032 937
WTA 24	Mounting bracket, large	BEF-WG-W24	4 026 324
DME 2000/3000	Articulated mounting	BEF-GH-DME	2 015 229
DMH/DMP	Articulated mounting	BEF-GH-DMH2	2 020 796
DMT/DML	Articulated mounting	BEF-GH-DMT	5 309 130
LUT	Articulated mounting	BEF-GH-LUT1-5	1 005 580
ISD 230/260/280	Three-point mounting	BEF-KH-ISD	5 306 369

*) including mounting material

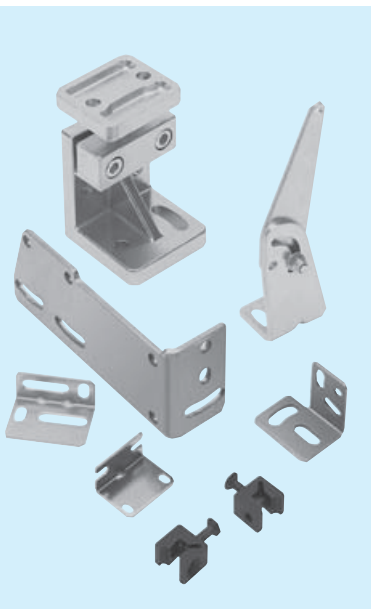


Table of adapters for pneumatic cylinders

For unit	Description	Type	Order no.
MZT 6/RZT 6, MZT 1/RZT 1	Mounting bracket for profile-/tie-rod cylinders	BEF-KHZ-PT1	2 022 702
MZT 6/RZT 6, MZT 1/RZT 1	Mounting bracket for round body cylinder/piston diameters of 8 ... 25 mm	BEF-KHZ-RT1-25	5 311 171
MZT 6/RZT 6, MZT 1/RZT 1	Mounting bracket for round body cylinder/piston diameters of 8 ... 63 mm	BEF-KHZ-RT1-63	5 311 172
MZT 6/RZT 6, MZT 1/RZT 1	Mounting bracket for cylinders with a dovetail slot	BEF-KHZ-ST1	2 022 703
MZU 2	Clamping piece for cylinder with "T" slot/dovetail slot	BEF-KS-U2-T1	2 019 822
MZU 2	Clamping piece for tie-rod cylinder	BEF-KS-U2-S1	4 030 922
MZU 2	Clamping piece for tie-rod cylinder (Teflon)	BEF-KS-U2-S1T	4 031 632
MZU 2	Clamping piece for profile rod cylinders up to a rod width 13 mm	BEF-KS-U2-P1	2 019 824
MZU 2	Clamping piece for profile rod cylinders up to a rod width 18 mm	BEF-KS-U2-P2	2 019 823

Table of mounting clamps for magnetic cylinder sensors MZR 1 on round body cylinders

For unit	Description	Type	Order no.
MZR 1	Cylinders with piston diameter 8 mm	BEF-S-R1-08	7 902 337
MZR 1	Cylinders with piston diameter 10 mm	BEF-S-R1-10	7 901 753
MZR 1	Cylinders with piston diameter 12 mm	BEF-S-R1-12	7 901 754
MZR 1	Cylinders with piston diameter 16 mm	BEF-S-R1-16	7 901 755
MZR 1	Cylinders with piston diameter 20 mm	BEF-S-R1-20	7 901 756
MZR 1	Cylinders with piston diameter 25 mm	BEF-S-R1-25	7 901 757
MZR 1	Cylinders with piston diameter 32 mm	BEF-S-R1-32	7 901 758
MZR 1	Cylinders with piston diameter 40 mm	BEF-S-R1-40	7 901 759
MZR 1	Cylinders with piston diameter 50 mm	BEF-S-R1-50	7 901 760
MZR 1	Cylinders with piston diameter 63 mm	BEF-S-R1-63	7 901 761

Table of clamping bands for magnetic cylinder sensors MZR 2 on round body cylinders

For unit	Description	Type	Order no.
MZR 2	Cylinders with piston diameter 8 ... 16 mm	BEF-S-R2-16	7 901 762
MZR 2	Cylinders with piston diameter 20 or 25 mm	BEF-S-R2-25	7 901 763
MZR 2	Cylinders with piston diameter 32 mm	BEF-S-R2-30	7 901 764
MZR 2	Cylinders with piston diameter 40 mm	BEF-S-R2-40	7 901 765
MZR 2	Cylinders with piston diameter 50 mm	BEF-S-R2-50	7 901 766
MZR 2	Cylinders with piston diameter 63 mm	BEF-S-R2-63	7 901 767
MZR 2	Cylinders with piston diameter 80 mm	BEF-S-R2-80	7 901 768
MZR 2	Cylinders with piston diameter 100 mm	BEF-S-R2-100	7 901 769

Selection table for clamps

Universal clamps, rod mounting

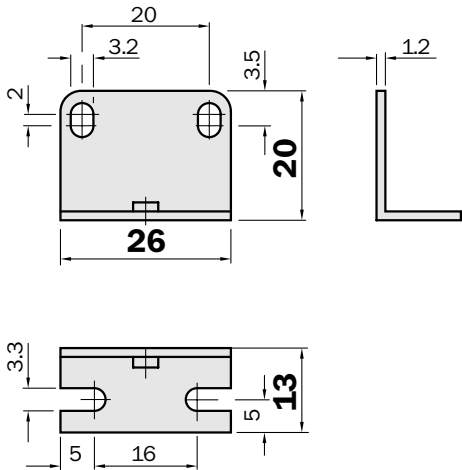
For equipment	Description	Type	Order no.**
Bar clamps			
W 23, W 27-2	Universal clamp/plate A	BEF-KHS-A01	2 022 458
P 250, P 250 F, PL 30 A, PL 40 A, PL 50 A, PL 80 A, C 110	Universal clamp/plate B	BEF-KHS-B01	2 022 459
W 14-2, W 18-3	Universal clamp/plate C	BEF-KHS-C01	2 022 460
W 11, W 12-2, W 12L-2, KT 2	Universal clamp/plate D	BEF-KHS-D01	2 022 461
W 30, W 32, W 34, W 36	Universal clamp/plate E	BEF-KHS-E01	2 022 462
PL 20 A, PL 20 F, P 250, P 250 F, W 260	Universal clamp/plate F	BEF-KHS-F01	2 022 463
W 24-2, W 24 Exi, WTA 24, KT 5, KT 10, CS 1/3, LUT 3	Universal clamp/plate G	BEF-KHS-G01	2 022 464
V 18, W 4-2, IM 18, MM 18, CM 18, UM 18	Universal clamp/plate H	BEF-KHS-H01	2 022 465
PL 20 A, PL 20 F, PL 40 A, PL 50 A, P 250, P 250 F, C 110	Universal clamp/plate J	BEF-KHS-J01	2 022 719
W 11, W 12-2, W 12L-2, W 14-2, W 18-3, W 23, W 24-2, W 27-2,	Universal clamp/plate K	BEF-KHS-K01	2 022 718
W 30, W 32, W 34, KT 2, KT 5, KT 10, CS, LUT 3, DS 60, PL 20 A,			
PL 20 F, PL 30 A, PL 40 A, PL 50 A, PL 80 A, P 250, P 250 F, C 110			
W 9-2, KT 3, P 250, P 250 F, W 250, W 140-2	Universal clamp/plate L	BEF-KHS-L01	2 023 057
Clamp without mounting plate		BEF-KHS-KH1	2 022 726

***) Order no. includes bar clip and installation material

Dimensional drawings and order information

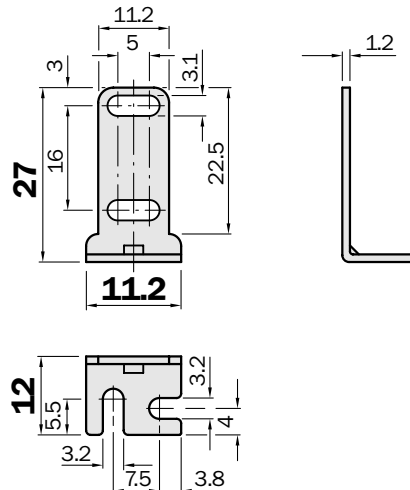
Mounting bracket for ST 130-S13, -S19, -S23, -S29*)

Type	Order no.
BEF-130-SM	5 306 246



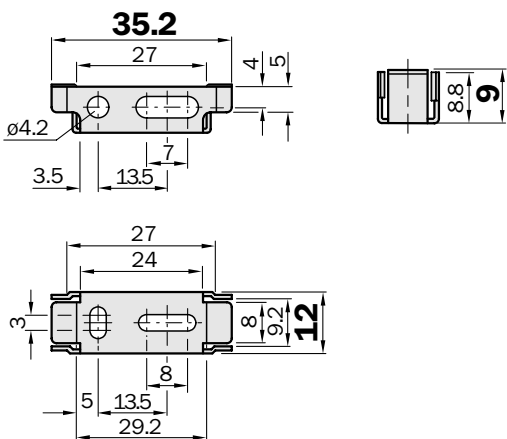
Mounting bracket for ST 130-S33*)

Type	Order no.
BEF-130-SP	5 306 245



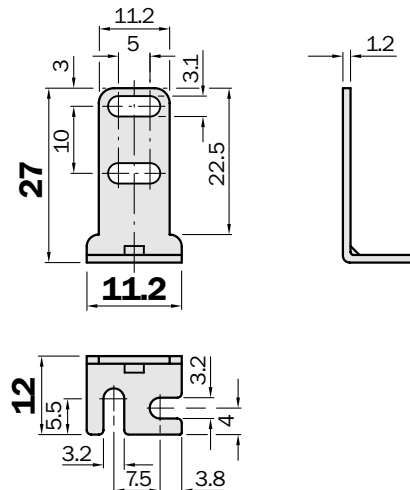
Mounting bracket for SI 130*), WLL 160*)

Type	Order no.
BEF-WLL 160	5 305 400



Mounting bracket for SS/SE 130-S33*)

Type	Order no.
BEF-130-ST	5 306 244



*) Included with delivery