



DUV60

QUICKLY CONFIGURABLE AND VERSATILE MEASURING WHEEL
INCREMENTAL ENCODER

Measuring wheel encoders

SICK
Sensor Intelligence.

QUICKLY CONFIGURABLE AND VERSATILE MEASURING WHEEL INCREMENTAL ENCODER



Product description

The DUV60 is a measuring wheel encoder with DIP switch configuration, designed to be optimized for conveyor and web feedback. The ability to configure the output voltage, resolution, and counting direction reduces the number of variants, enables easy replacement and quick commissioning, and increases the likelihood that spare parts will be in stock – all without any additional

programming tools. The on-board status and signal LEDs and optional fault output quickly indicate the functionality of the encoder, minimizing time required for both installation and troubleshooting. The DUV60 offers a range of mounting configurations for dual or single wheel applications, making the DUV60 the ideal solution for conveyor, web, and logistics applications.

At a glance

- Single or dual wheel measuring wheel encoder
- DIP switches for programming resolution, signal output, and counting direction
- Universal 4.5 V ... 30 V supply
- LEDs that indicate encoder status and output signal.
- M12 male connector, 4- or 8-pin, or universal cable outlet
- Optional fault output directly from encoder

Your benefits

- Quickly commission the encoder using the built-in DIP switches. No additional programming tool or laptop required
- Status and signal LEDs quickly indicate whether the encoder is properly connected, functional, or needs to be replaced
- Universal voltage supply and multiple bracket options for the measuring wheel encoder provide increased installation flexibility
- Maintain a high level of productivity using the anti-dither functionality
- Compatible with existing and low-cost input cards with output types like Clockwise/Counterclockwise and Signal/Direction



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→ www.sick.com/DUV60

For more information, simply enter the link or scan the QR code and get direct access to technical data, CAD design models, operating instructions, software, application examples, and much more.



Fields of application

Measuring the position, speed and distance in applications with low speeds and low resolution in the logistics and factory automation markets.

- Conveyor belts
- Packaging machines
- Printing machines
- Storage systems
- Web tracking applications

Detailed technical data

Performance

Pulses per revolution	1 ... 2400 ¹⁾
Resolution in pulses/mm	0.125 mm/pulse to 304.8 mm/pulse (type-dependent)
Measuring step	90° electric/pulses per revolution
Measuring step deviation	± 18°, / pulses per revolution
Error limits	Measuring step deviation x 3
Duty cycle	0.5 ± 5 %
Initialization time	< 5 ms ²⁾

¹⁾ Available pulses per revolution see type code.

²⁾ Valid positional data can be read once this time has elapsed.

Interfaces

Communication interface	Incremental
Communication Interface detail	TTL / HTL
Parameterising data	DIP switch, selectable output

Mechanical data

	Without measuring wheel	Single wheel mount	Dual wheel mount
Measuring wheel circumference	Without measuring wheel	300 mm	300 mm 12 "
Measuring wheel surface	-	O-ring NBR70 ¹⁾	O-ring NBR70 ¹⁾ Smooth plastic (urethane) ¹⁾
Spring arm design	Spring arm, encoder on mounting side Spring tension, under-belt flange mount Without mount	Spring arm, encoder on mounting side Spring arm, wheel on mounting side	Spring tension, under-belt yoke mount Spring tension, under-belt flange mount Counter-weight, under-belt yoke mount Over-belt yoke mount Without mount
Mass	0.45 kg ²⁾		0.9 kg ³⁾
Encoder material			
Shaft	Stainless steel		
Flange	Aluminum		
Housing	Aluminum		
Cable	PVC		
Spring arm mechanism material			
Spring element	Spring steel		
Measuring wheel, spring arm	Aluminum		

¹⁾ The surface of a measuring wheel is subject to wear. This depends on contact pressure, acceleration behavior in the application, traversing speed, measurement surface, mechanical alignment of the measuring wheel, temperature, and ambient conditions. We recommend you regularly check the condition of the measuring wheel and replace as required.

²⁾ Based on encoder with male connector.

³⁾ Based on an encoder with a plug connector output and urethane rollers, no mounting necessary (arm mount).

⁴⁾ Only applies to variants with spring arm mounting.

	Without measuring wheel	Single wheel mount	Dual wheel mount
Yoke	–		Aluminum
Counterweight	–		Aluminum
Start up torque	1.2 Ncm		0.5 Ncm
Operating torque	1.1 Ncm		0.4 Ncm
Operating speed	1,500 min ⁻¹		
Bearing lifetime	3.6 x 10 ⁹ revolutions		
Maximum travel/deflection of spring arm	14 mm ⁴⁾		40 mm ⁴⁾
Recommended pretension	10 mm ⁴⁾		20 mm ⁴⁾
Max. permissible working area for the spring (continuous operation)	± 3 mm		± 10 mm
Service life of spring element	> 1.4 million cycles ⁴⁾		–

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²⁾ Based on encoder with male connector.

³⁾ Based on an encoder with a plug connector output and urethane rollers, no mounting necessary (arm mount).

⁴⁾ Only applies to variants with spring arm mounting.

Electrical data

Operating power consumption (no load)	120 mA
Connection type	Male connector, M12, 8-pin, universal ¹⁾ Male connector, M12, 4-pin, universal ¹⁾ Cable, 8-wire, universal, 1.5 m ¹⁾ Cable, 8-wire, universal, 5 m ¹⁾
Pulses per revolution	✓
Output voltage	✓
Direction of rotation	✓
Power consumption max. without load	≤ 1.25 W
Supply voltage	4.75 V ... 30 V
Load current max.	≤ 30 mA, per channel
Maximum output frequency	60 kHz
Reference signal, number	1
Reference signal, position	180°, electric, gated with A
Reverse polarity protection	✓
Short-circuit protection of the outputs	✓
MTTFd: mean time to dangerous failure	275 years (EN ISO 13849-1) ²⁾

¹⁾ The universal connection is rotatable so that it is possible to position the connector in the radial or axial direction.

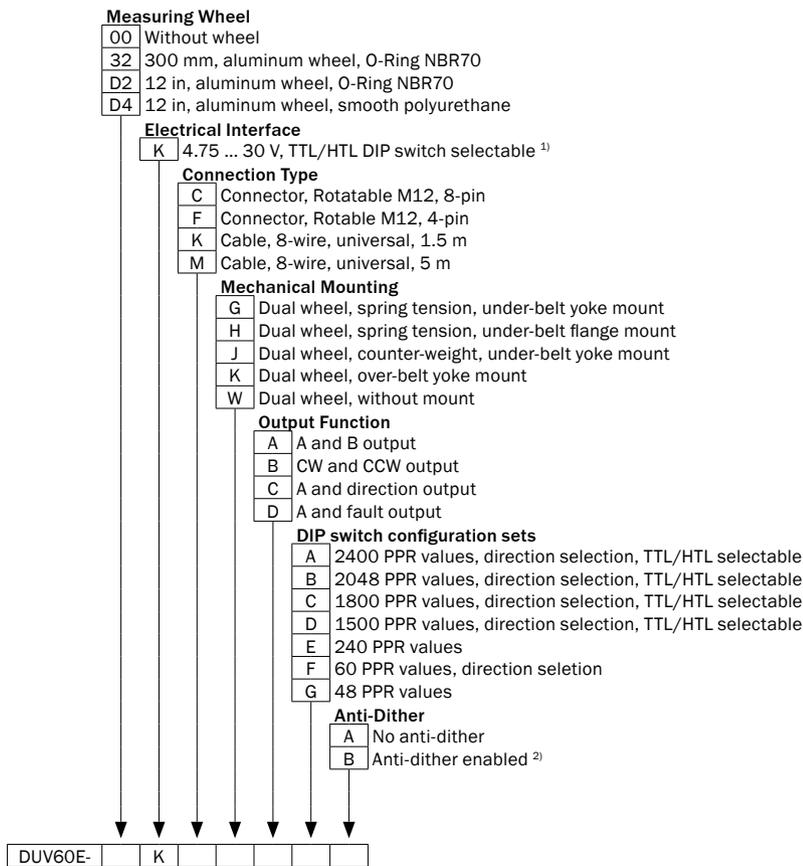
²⁾ This product is a standard product and does not constitute a safety component as defined in the Machinery Directive. Calculation based on nominal load of components, average ambient temperature 40 °C, frequency of use 8760 h/a. All electronic failures are considered hazardous. For more information, see document no. 8015532.

Ambient data

EMC	According to EN 61000-6-2 and EN 61000-6-3
Enclosure rating	IP65 ¹⁾
Permissible relative humidity	90 % (condensation of the optical scanning not permitted)
Operating temperature range	–30 °C ... +70 °C
Storage temperature range	–40 °C ... +75 °C

¹⁾ When the mating connector is installed and the DIP switch door is sealed with the encoder housing.

Dual wheel mount



¹⁾ Output voltage selection not available for DIP switch configurations E, F, and G. Output voltage level is dependent on supply voltage.

²⁾ Not available for Output Function A and B output (A). Connection Type must be male connector M12, 4-pin (F).

Ordering information

Without measuring wheel

- **Communication interface:** Incremental / TTL
- **Supply voltage:** 4.75 V ... 30 V

Connection type	Anti-dither	DIP switch configuration	Output function	Type	Part no.
Male connector, M12, 4-pin, universal ¹⁾	✓	2400 PPR values, direction selection, TTL/HTL selectable	A and B output	DUV60E-00KFAAAB	1086374
			A and Direction Output	DUV60E-00KFHCAB	1096221
	-	1500 PPR values, direction selection, TTL/HTL selectable	A and B output	DUV60E-00KFWADA	1101409
			A and B output	DUV60E-00KFHAAA	1096059

¹⁾ The universal connection is rotatable so that it is possible to position the connector in the radial or axial direction.

Connection type	Anti-dither	DIP switch configuration	Output function	Type	Part no.
Male connector, M12, 8-pin, universal ¹⁾	-	1500 PPR values, direction selection, TTL/HTL selectable	A and B output	DUV60E-00KCAADA	1088934
				DUV60E-00KCWADA	1084729
		1800 PPR values, direction selection, TTL/HTL selectable	A and B output	DUV60E-00KCAACA	1088935
				2048 PPR values, direction selection, TTL/HTL selectable	DUV60E-00KCAABA
2400 PPR values, direction selection, TTL/HTL selectable	A and B output	DUV60E-00KCAAAA	1097625		

¹⁾ The universal connection is rotatable so that it is possible to position the connector in the radial or axial direction.

Single wheel mount

- **Communication interface:** Incremental / TTL
- **Supply voltage:** 4.75 V ... 30 V

Connection type	Anti-dither	DIP switch configuration	Output function	Type	Part no.
Cable, 8-wire, universal, 1.5 m ¹⁾	✓	2048 PPR values, direction selection, TTL/HTL selectable	A and B output	DUV60E-32KKBABA	1102827
	-			DUV60E-32KKBABB	1084503
Cable, 8-wire, universal, 5 m ¹⁾	-	2400 PPR values, direction selection, TTL/HTL selectable	A and B output	DUV60E-32KAAAA	1090205
	-			DUV60E-32KMAAAA	1085276
Male connector, M12, 4-pin, universal ¹⁾	✓	2048 PPR values, direction selection, TTL/HTL selectable	A and B output	DUV60E-32KFBABB	1084502
	-	1500 PPR values, direction selection, TTL/HTL selectable	A and B output	DUV60E-32KFAADA	1084921
				DUV60E-32KFBADA	1084925
		1800 PPR values, direction selection, TTL/HTL selectable	A and Direction Output	DUV60E-32KFACCA	1088797
			Channel A, error	DUV60E-32KFADCB	1092454
		2048 PPR values, direction selection, TTL/HTL selectable	A and B output	DUV60E-32KFAABA	1101804
				DUV60E-32KFBABA	1084748
		2400 PPR values, direction selection, TTL/HTL selectable	A and B output	DUV60E-32KFAAAA	1084920
DUV60E-32KFBAAA	1084924				
60 PPR values, direction selection	A and Direction Output	DUV60E-32KFACAB	1096348		
Channel A, error	DUV60E-32KFADFB	1117482			

¹⁾ The universal connection is rotatable so that it is possible to position the connector in the radial or axial direction.

Connection type	Anti-dither	DIP switch configuration	Output function	Type	Part no.
Male connector, M12, 8-pin, universal ¹⁾	-	1500 PPR values, direction selection, TTL/HTL selectable	A and B output	DUV60E-32KCAADA	1084919
				DUV60E-32KCBADA	1084923
		1800 PPR values, direction selection, TTL/HTL selectable	A and B output	DUV60E-32KCAACA	1086888
			A and B output	DUV60E-32KCAABA	1086887
		240 PPR values	A and B output	DUV60E-32KCAAEA	1086889
		2400 PPR values, direction selection, TTL/HTL selectable	A and B output	DUV60E-32KCAAAA	1084918
				DUV60E-32KCBAAA	1084922
		48 PPR values	A and B output	DUV60E-32KCAAGA	1084501
60 PPR values, direction selection	A and B output	DUV60E-32KCAAFA	1086885		
	A and Direction Output	DUV60E-32KCACFA	1084731		

¹⁾ The universal connection is rotatable so that it is possible to position the connector in the radial or axial direction.

Dual wheel mount

- **Communication interface:** Incremental / TTL
- **Supply voltage:** 4.75 V ... 30 V

Connection type	Anti-dither	DIP switch configuration	Output function	Type	Part no.
Cable, 8-wire, universal, 1.5 m ¹⁾	✓	1500 PPR values, direction selection, TTL/HTL selectable	Channel A, error	DUV60E-D4KKHDDDB	1084727
	-		A and B output	DUV60E-D4KKHADA	1085779
		-	2048 PPR values, direction selection, TTL/HTL selectable	A and B output	DUV60E-D4KKWADA
	A and B output			DUV60E-32KKHABA	1096576
Cable, 8-wire, universal, 5 m ¹⁾	✓	48 PPR values	CW and CCW output	DUV60E-D4KKHBGA	1103836
	-		A and B output	DUV60E-D4KMGADA	1102786
Male connector, M12, 4-pin, universal ¹⁾	✓	1500 PPR values, direction selection, TTL/HTL selectable	A and B output	DUV60E-D4KMHADA	1106590
			A and Direction Output	DUV60E-D4KFKCDB	1092866
				DUV60E-D4KFWCDB	1092636
			CW and CCW output	DUV60E-D4KFKBDB	1089216
		1800 PPR values, direction selection, TTL/HTL selectable	Channel A, error	DUV60E-D4KFWBDB	1084728
			Channel A, error	DUV60E-D4KFGDDB	1087209
			A and Direction Output	DUV60E-D4KFWCCB	1098118
			Channel A, error	DUV60E-D4KFHDCB	1090682
240 PPR values	Channel A, error	DUV60E-D4KFGDEB	1091656		
		DUV60E-D4KFHDEB	1086339		

¹⁾ The universal connection is rotatable so that it is possible to position the connector in the radial or axial direction.

Connection type	Anti-dither	DIP switch configuration	Output function	Type	Part no.
Male connector, M12, 4-pin, universal ¹⁾	✓	240 PPR values	Channel A, error	DUV60E-D4KFWDEB	1086306
		2400 PPR values, direction selection, TTL/HTL selectable	A and B output	DUV60E-D4KFGAAA	1106042
			A and Direction Output	DUV60E-D4KFGCAB	1087297
		48 PPR values	A and Direction Output	DUV60E-D4KFHCGB	1084516
				DUV60E-D4KFJCGB	1084518
			Channel A, error	DUV60E-D4KFWCGB	1117985
		60 PPR values, direction selection	Channel A, error	DUV60E-D4KFWDGB	1095515
			Channel A, error	DUV60E-D4KFHDFB	1087569
		-	1500 PPR values, direction selection, TTL/HTL selectable	A and B output	DUV60E-D4KFHADA
	DUV60E-D4KFJADA				1084931
	Channel A, error			DUV60E-D4KFWADA	1092981
				DUV60E-32KFGDDA	1109621
	1800 PPR values, direction selection, TTL/HTL selectable		A and B output	DUV60E-32KFHACA	1094068
				DUV60E-32KFJACA	1093690
				DUV60E-D4KFHACA	1087195
				DUV60E-D4KFWACA	1092980
	2048 PPR values, direction selection, TTL/HTL selectable		A and B output	DUV60E-D2KFHABA	1111306
				DUV60E-D2KFWABA	1112193
				DUV60E-D4KFHABA	1092982
				DUV60E-D4KFWABA	1089409
	240 PPR values		A and B output	DUV60E-32KFWAEA	1092521
			A and Direction Output	DUV60E-32KFGCEA	1096506
	2400 PPR values, direction selection, TTL/HTL selectable		A and B output	DUV60E-32KFHAAA	1084933
				DUV60E-D4KFHAAA	1084927
				DUV60E-D4KFJAAA	1084930
				DUV60E-D4KFKAAA	1098944
		Channel A, error	DUV60E-D4KFWAAA	1084635	
DUV60E-D2KFWDAA			1109273		
48 PPR values	A and B output	DUV60E-D4KFHDAA	1084730		
		DUV60E-D4KFJAGA	1087137		

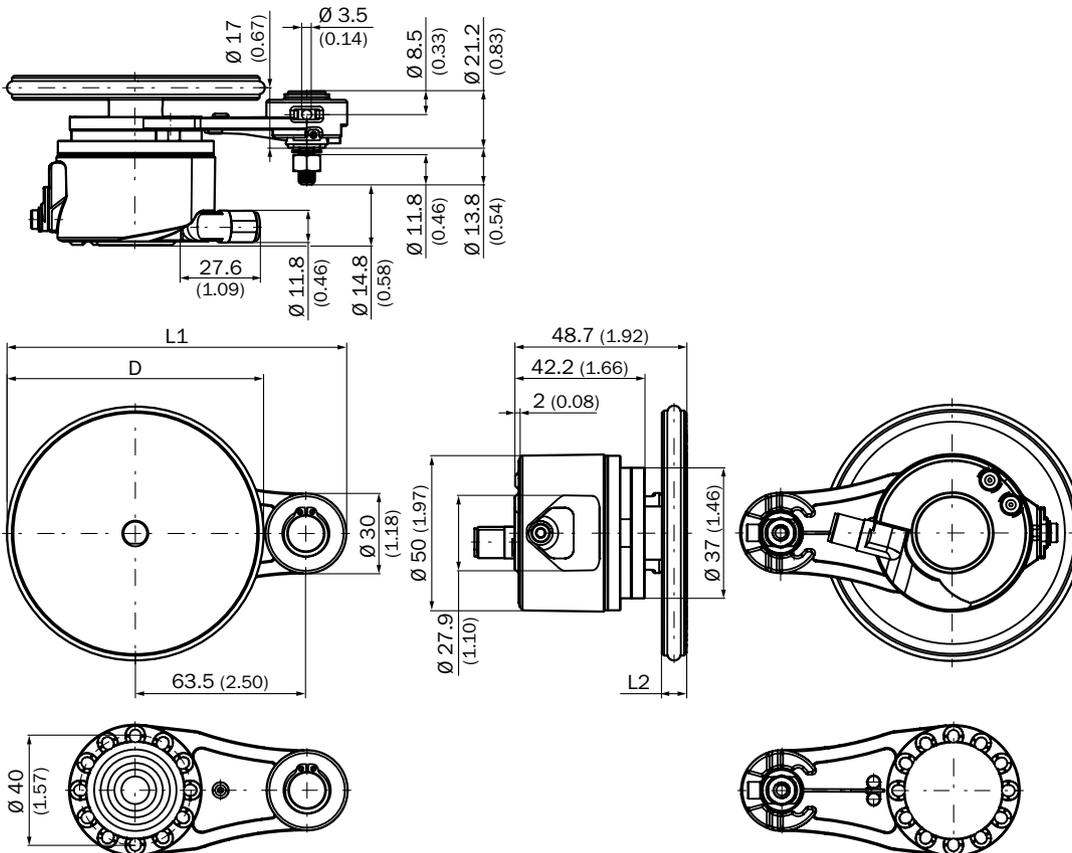
¹⁾ The universal connection is rotatable so that it is possible to position the connector in the radial or axial direction.

Connection type	Anti-dither	DIP switch configuration	Output function	Type	Part no.
Male connector, M12, 8-pin, universal ¹⁾	✓	1500 PPR values, direction selection, TTL/HTL selectable	A and B output	DUV60E-32KCWADA	1104231
			A and Direction Output	DUV60E-32KCKCDB	1084726
			A and B output	DUV60E-D4KCHADA	1090983
			A and B output	DUV60E-D4KCWADA	1104977
			A and Direction Output	DUV60E-D2KCKCDA	1100645
	-	1800 PPR values, direction selection, TTL/HTL selectable	A and B output	DUV60E-32KCHACA	1094067
			A and B output	DUV60E-D2KCHACA	1091749
		2048 PPR values, direction selection, TTL/HTL selectable	A and B output	DUV60E-32KCHABA	1114202
			A and B output	DUV60E-D4KCHABA	1096351
		2400 PPR values, direction selection, TTL/HTL selectable	A and B output	DUV60E-32KCHAAA	1084932
			A and B output	DUV60E-32KCKAAA	1096400
			A and B output	DUV60E-D2KCKAAA	1103004
			A and B output	DUV60E-D4KCHAAA	1084926
			A and B output	DUV60E-D4KCJAAA	1084929
					A and Direction Output

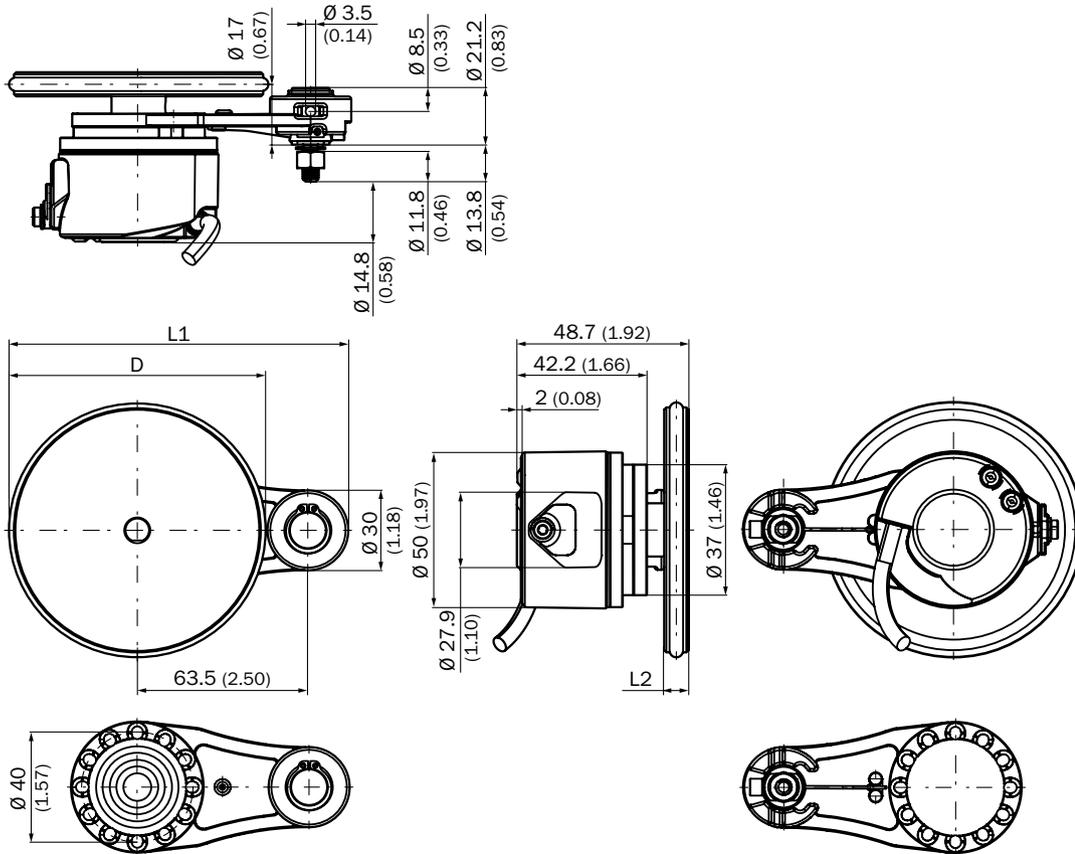
¹⁾ The universal connection is rotatable so that it is possible to position the connector in the radial or axial direction.

Dimensional drawings (Dimensions in mm (inch))

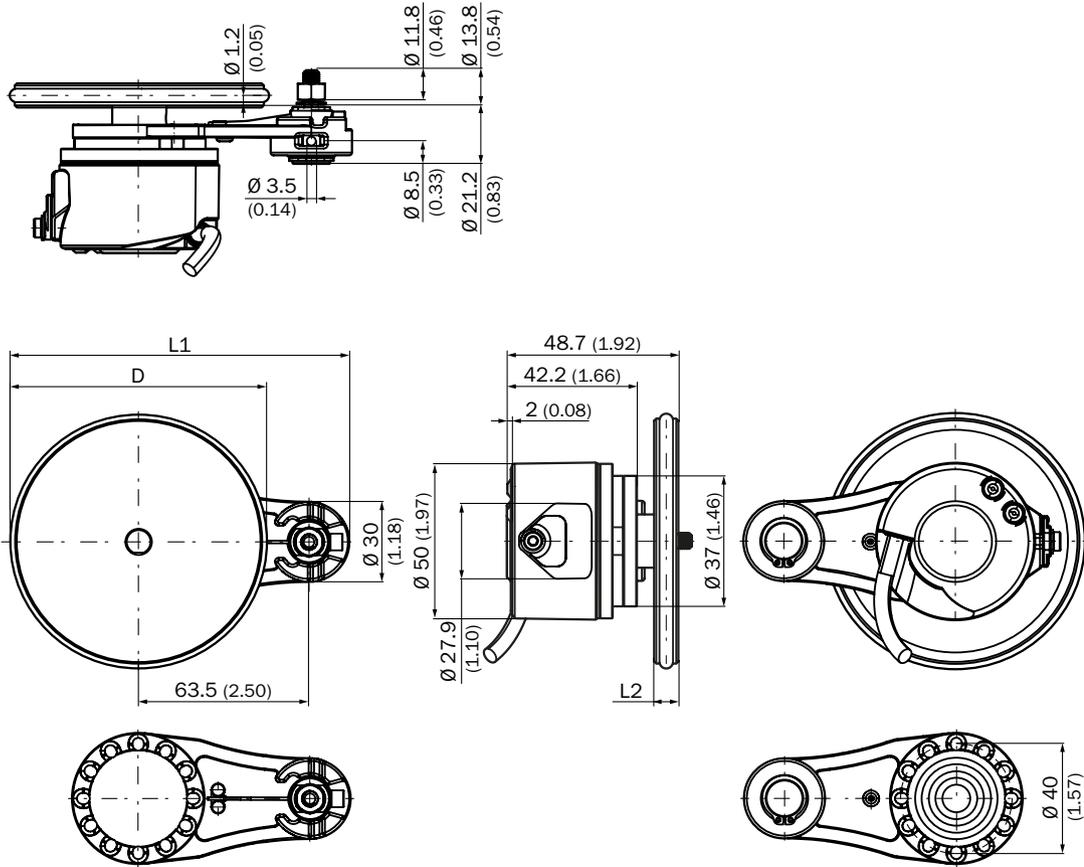
One measuring wheel, 63.5 mm spring arm, encoder on mounting side, male connector



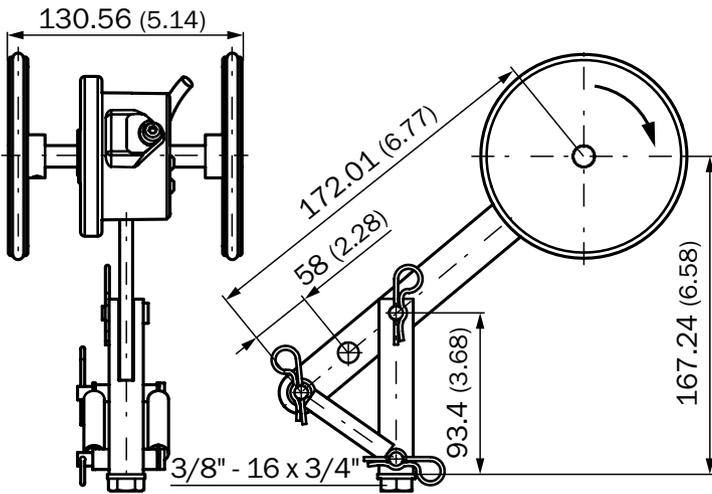
One measuring wheel, 63.5 mm spring arm, encoder on mounting side, cable



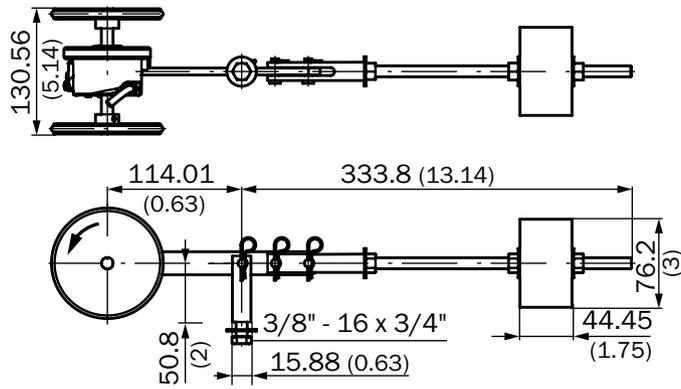
One measuring wheel, 63.5 mm spring arm, measuring wheel on mounting side, cable



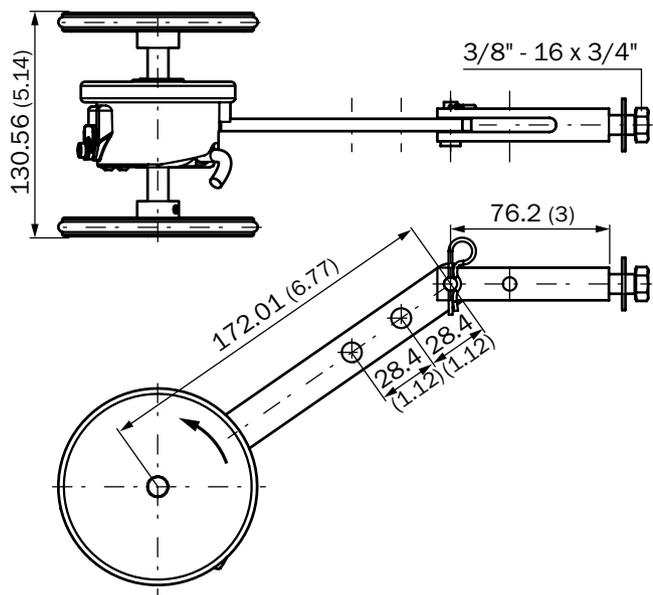
Dual measuring wheel, spring tension, under-belt yoke mount



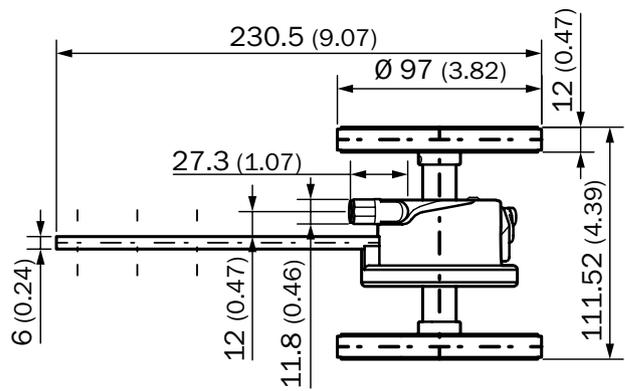
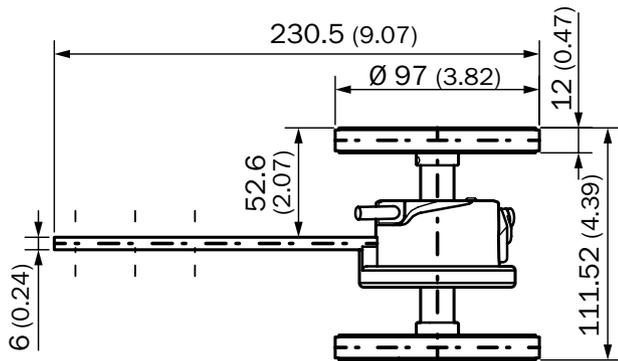
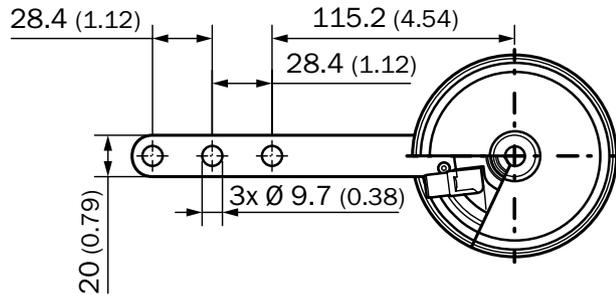
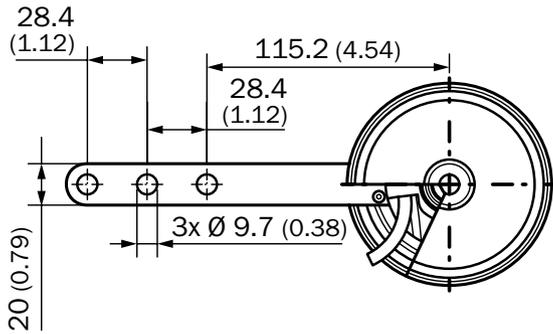
Dual measuring wheel, counter-weight, under-belt yoke mount



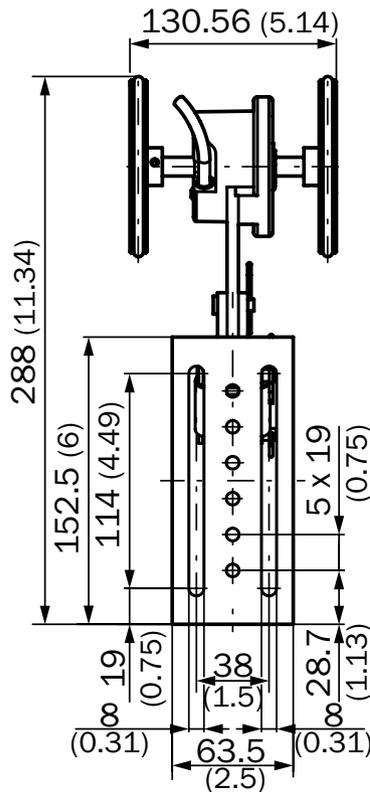
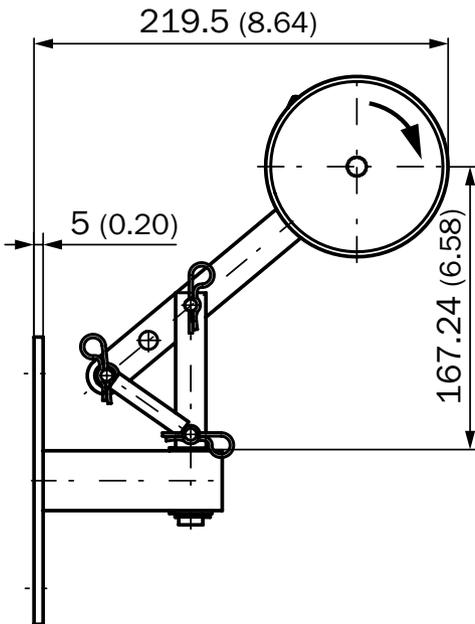
Dual measuring wheel, over-belt yoke mount



Dual measuring wheel, 12 in, aluminum wheel, smooth polyurethane, over-belt yoke mount, cable



Dual measuring wheel, spring tension, under-belt flange mount

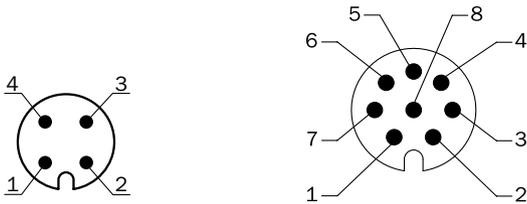


Output function

	Male connector M12, 4-pin	Male connector M12, 8-pin	Cable, 8-wire
Option A A and B output	A, B	A, A-, B, B-, Z, Z-	A, A-, B, B-, Z, Z-
Option B CW and CCW output	CW, CCW	CW, CW-, CCW, CCW-, Fault, Fault-	CW, CW-, CCW, CCW-, Fault, Fault-
Option C ¹⁾ A and Direction Output	A, Direction	A, A-, Direction, Direction-, Fault, Fault-	A, A-, Direction, Direction-, Fault, Fault-
Option D Channel A, error	A, Fault	A, A-, B, B-, Fault, Fault-	A, A-, B, B-, Fault, Fault-

¹⁾ when direction channel is LOW, encoder is rotating in the clockwise direction. When direction channel is HIGH, encoder is rotating counter-clockwise.

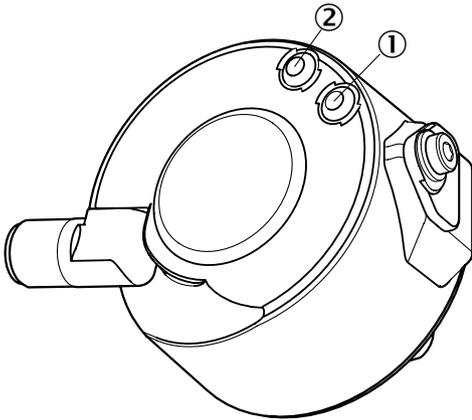
PIN assignment



Wire colors (cable connection)	Male connector M12, 4-pin	Male connector M12, 8-pin	Output function				Explanation
			A	B	C	D	
Brown	-	1	A-	CW-	A-	A-	Signal
White	4	2	A	CW	A	A	Signal
Black	-	3	B-	CCW-	Direction-	B-	Signal
Pink	2	4	B	CCW	Direction	Fault (M12, 4-pin) B (M12, 8-pin and cable connection)	Signal
Yellow	-	5	Z-	Fault-	Fault-	Fault-	Signal
Violet	-	6	Z	Fault	Fault	Fault	Signal
Blue	3	7	GND	GND	GND	GND	Ground connection
Red	1	8	U _s	U _s	U _s	U _s	Supply voltage
-	-	-	Case	Case	Case	Case	Earth fault protection
Shielding	-	-	Shielding	Shielding	Shielding	Shielding	Shielding

DIP switch configuration

Status indicator LED



- ① Signal
- ② Fault/Power

		DIP switch configuration A - 2400 pulses				
Pulses per revolution	1	10	32	100	400	
	2	12	40	120	480	
	3	15	48	150	600	
	4	16	60	160	800	
	5	20	75	200	1200	
	6	24	80	240	2400	
	8	30	96	300		

		DIP switch configuration B - 2048 pulses				
Pulses per revolution	1	8	64	256	1024	
	2	16	128	512	2048	
	4	32				

		DIP switch configuration C - 1800 pulses				
Pulses per revolution	1	9	30	120	600	
	2	10	36	150	900	
	3	12	40	180	1800	
	4	15	60	200		
	5	18	72	300		
	6	20	75	360		
	8	24	100	450		

		DIP switch configuration D - 1500 pulses				
Pulses per revolution	1	5	15	75	1500	
	2	6	20	100		
	3	10	30	150		
	4	12	60	300		

		DIP switch configuration E - 240 pulses				
Pulses per revolution	1	5	12	30	80	
	2	6	15	40	120	
	3	8	16	48	240	
	4	10	20	60		

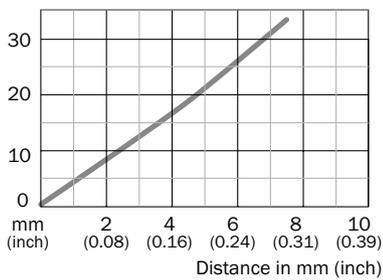
		DIP switch configuration F - 60 pulses				
Pulses per revolution	2	5	10	16	30	
	3	6	12	20	60	
	4	8	15	24		

		DIP switch configuration G - 48 pulses				
Pulses per revolution	1	3	6	12	24	
	2	4	8	16	48	

Force/distance diagram

Single wheel, 63.5 mm spring arm

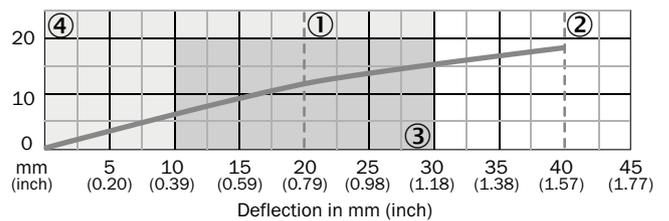
Force in N



- ① Recommended pre-tension (10 mm)
- ② Permissible working area (± 3 mm)
- ③ Recommended spring deflection (2 - 13 mm)
- ④ Maximum spring deflection (14 mm)

Dual wheel, spring tension, yoke mount

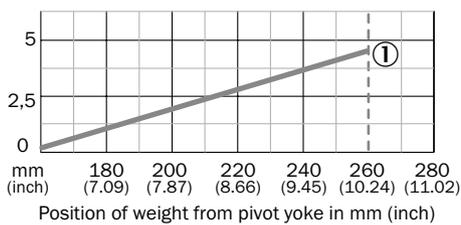
Force in N



- ① Recommended pre-tension (20 mm)
- ② Maximum deflection (40 mm)
- ③ Recommended deflection range (10 - 30 mm)
- ④ Permissible working area (0 - 30 mm)

Dual wheel, counter-weight, yoke mount

Force in N



- ① Maximum contact force when the counterweight is positioned at the end of the rod (260 mm)

Accessories

Mounting systems

Mounting brackets and plates

Mounting brackets

Figure	Brief description	Type	Part no.
	Mounting bracket for dual wheeled encoder systems, spring tension underbelt mount with flange bracket, Aluminum	BEF-MK-FA	2088626
	Mounting bracket for encoders with two mounting brackets, counterweight, mounting from below with mounting fork, Aluminum	BEF-MK-GG10Z	2057023
	Mounting bracket for dual wheeled encoder systems, overbelt yoke mount, Aluminum	BEF-MK-YOKE2A	2088625
	Mounting bracket for dual wheeled encoder systems, spring tension underbelt yoke mount, Aluminum	BEF-MK-YOKEUB	2088522
	Mounting bracket for encoder with spigot 36 mm	BEF-WF-MRS	2084709

Dimensional drawings → [page 21](#)

Other mounting accessories

Measuring wheels and measuring wheel systems

Figure	Brief description	Type	Part no.
	Measuring wheel shaft kit for dual wheel DUV60, includes 10mm shaft and collet, for measuring wheels with 10 mm bore	BEF-MK-DUV10	2088713
	Measuring wheel shaft kit for dual wheel DUV60, includes 3/8" shaft and collet, for measuring wheels with 3/8" bore	BEF-MK-DUV38	2088715
	Plastic measuring wheel with smooth plastic surface (Hytrell) for 10 mm solid shaft, circumference 500 mm	BEF-MR-010050	5312989
	Aluminium measuring wheel with O-ring (NBR70) for 10 mm solid shaft, circumference 300 mm	BEF-MR010030R	2049278
	Measuring wheel with O-ring (NBR70) for 10 mm solid shaft, circumference 500 mm	BEF-MR010050R	2055227
	Aluminum measuring wheel with cross-knurled surface for 10 mm solid shaft, circumference 500 mm	BEF-MR10500AK	4084733
	Aluminum measuring wheel with smooth polyurethane surface for 10 mm solid shaft, circumference 500 mm	BEF-MR10500AP	4084734
	Aluminum measuring wheel with ridged polyurethane surface for 10 mm solid shaft, circumference 500 mm	BEF-MR10500APG	4084736
	Aluminum measuring wheel with studded polyurethane surface for 10 mm solid shaft, circumference 500 mm	BEF-MR10500APN	4084735
	Measuring wheel with O-ring (NBR70) surface, for 3/8" solid shaft, 12" circumference	BEF-MR38Z12A0	2088716
	Measuring wheel with smooth polyurethane surface, for 3/8" solid shaft, 12" circumference	BEF-MR38Z12PU	2088717

Figure	Brief description	Type	Part no.
	O-ring for measuring wheels (circumference 300 mm), 2x O-ring	BEF-OR-083-050	2064076
	O-ring for measuring wheels (circumference 500 mm)	BEF-OR-145-050	2064074

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Modular measuring wheel system

Figure	Brief description	Type	Part no.
	SICK modular measuring wheel system for face mount flange encoder with S4 mechanical design (10 mm x 19 mm solid shaft), e.g., DFS60-S4: with O-ring measuring wheel, circumference 200 mm	BEF-MRS-10-U	2085714

Dimensional drawings → page 23

Plug connectors and cables

Plug connectors and cables

Cables (ready to assemble)

Figure	Brief description	Type	Part no.
	Head A: cable Head B: Flying leads Cable: SSI, Incremental, HIPERFACE®, PUR, halogen-free, shielded, 4 x 2 x 0.15 mm ² , 5.6 mm Signalart: SSI, Incremental, HIPERFACE®	LTG-2308-MWENC	6027529
	Head A: Flying leads Head B: Flying leads Cable: CANopen, DeviceNet™, shielded, 2 x 0.25 mm ² + 2 x 0.34 mm ² , 6.9 mm, twisted pair Signalart: CANopen, DeviceNet™ Details: wire shield Al-Pt film, overall shield C-screen tin-plated	LTG-2804-MW	6028328

Connecting cables

Figure	Brief description	Length of cable	Type	Part no.
	Head A: female connector, M12, 4-pin, straight, A-coded Head B: Flying leads Cable: PUR, halogen-free, shielded, 4.9 mm	2 m	DOL-1204-G02MAC	2088079
	Head A: female connector, M12, 4-pin, straight Head B: Flying leads Cable: PUR, halogen-free, shielded, 5.9 mm	5 m	DOL-1204-G05MAC	6038621
	Head A: female connector, M12, 4-pin, straight Head B: Flying leads Cable: Welding spark resistant, PUR, halogen-free, shielded, 4 x 0.34 mm ² , 5.9 mm	10 m	DOL-1204-G10MAC	6041797
	Head A: female connector, M12, 4-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PUR, halogen-free, shielded, 4.9 mm Signalart: Sensor/actuator cable	20 m	DOL-1204-G20MAC	2088080
	Head A: female connector, M12, 8-pin, straight	2 m	DOL-1208-G02MAC1	6032866
	Head B: Flying leads	5 m	DOL-1208-G05MAC1	6032867
	Cable: Incremental, SSI, PUR, halogen-free, shielded, 4 x 2 x 0.25 mm ² , 7 mm	10 m	DOL-1208-G10MAC1	6032868
	Signalart: Incremental, SSI	20 m	DOL-1208-G20MAC1	6032869

Dimensional drawings → [page 24](#)

Field-attachable connectors

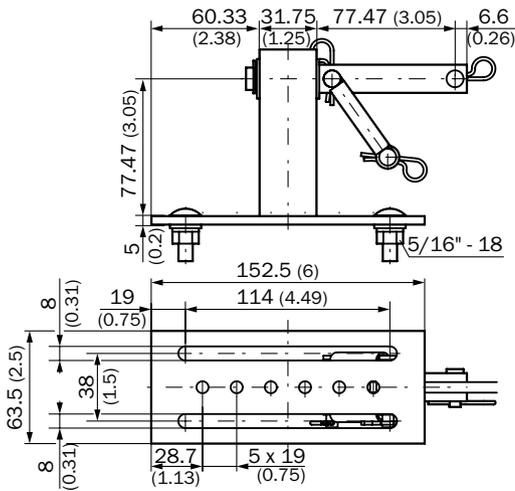
Figure	Brief description	Type	Part no.
	Head A: female connector, M12, 5-pin, straight Cable: CANopen, DeviceNet™, shielded Signalart: CANopen, DeviceNet™	DOS-1205-GA	6027534
	Head A: female connector, M12, 8-pin, straight, A-coded Head B: - Cable: Incremental, SSI, shielded, CAT5, CAT5e Signalart: Incremental, SSI	DOS-1208-GA01	6045001
	Head A: male connector, M12, 5-pin, straight, A-coded Cable: CANopen, DeviceNet™, shielded Signalart: CANopen, DeviceNet™	STE-1205-GA	6027533
	Head A: male connector, M12, 8-pin, straight, A-coded Head B: - Cable: Incremental, shielded, CAT5, CAT5e Signalart: Incremental	STE-1208-GA01	6044892

Dimensional drawings → [page 24](#)

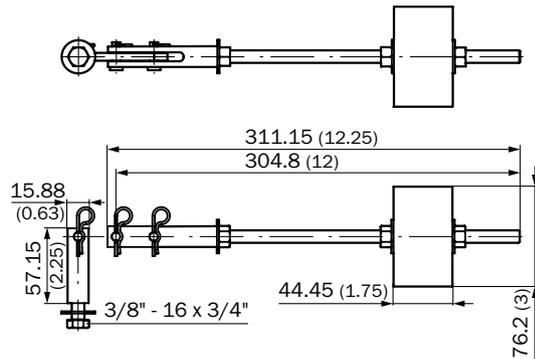
Dimensional drawings for accessories (Dimensions in mm (inch))

Mounting brackets and plates

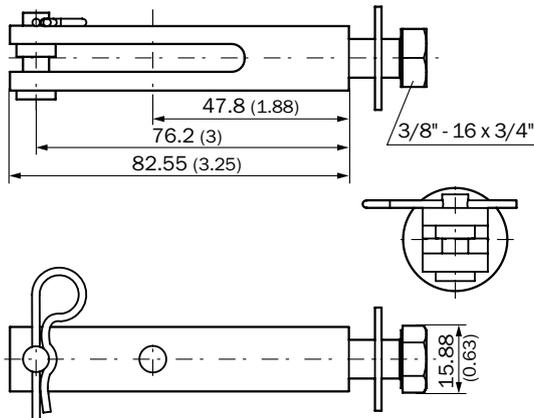
BEF-MK-FA



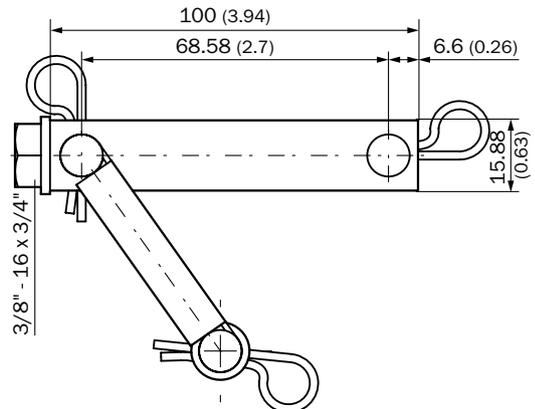
BEF-MK-GG10Z



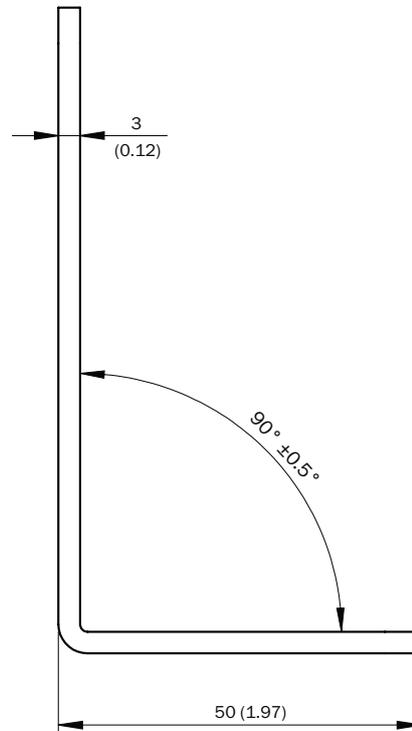
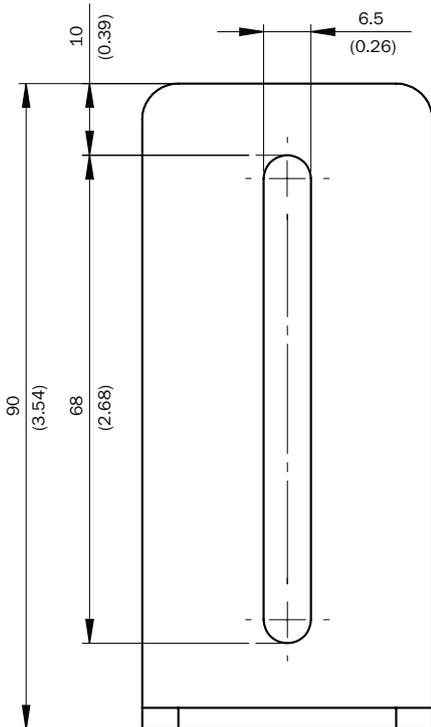
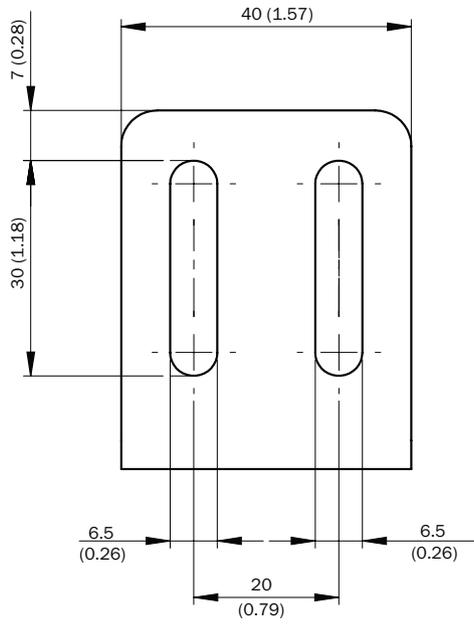
BEF-MK-YOKE2A



BEF-MK-YOKEUB

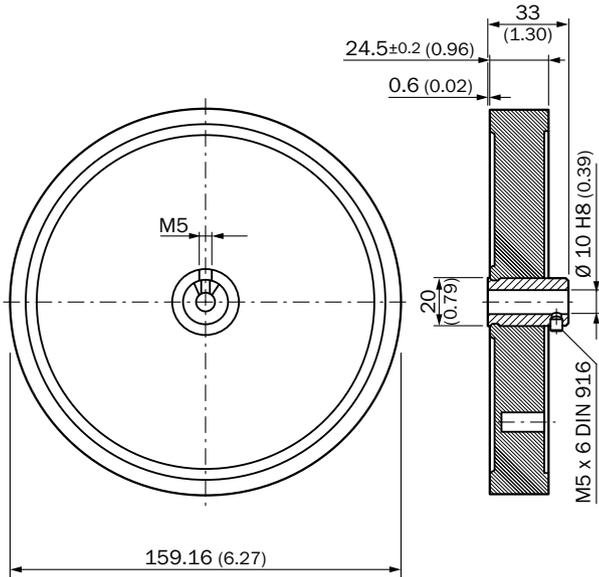


BEF-WF-MRS

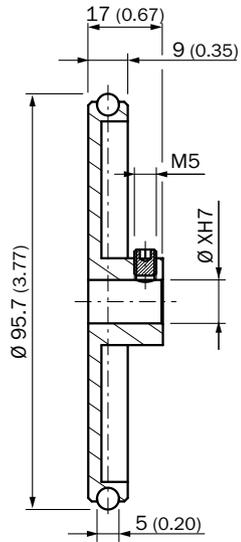


Other mounting accessories

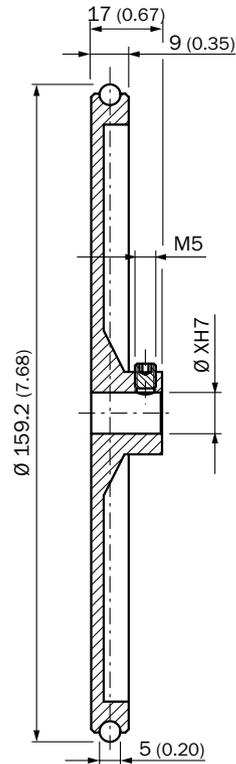
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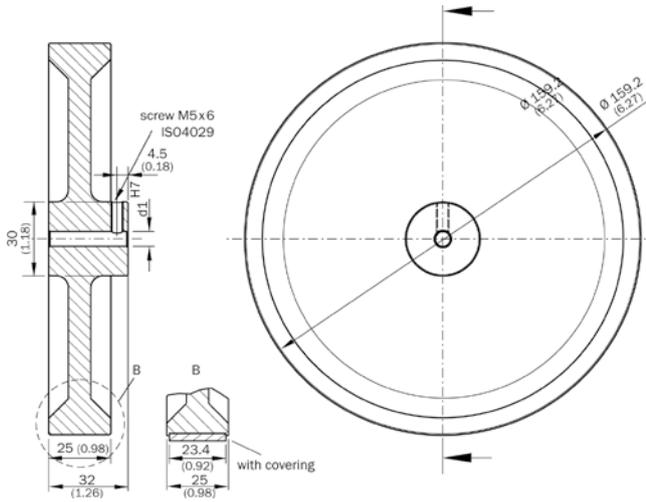
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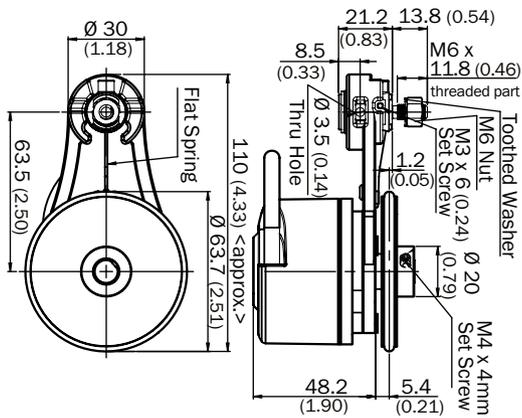
BEF-MR010050R



BEF-MR10500AK
 BEF-MR10500AP
 BEF-MR10500APG
 BEF-MR10500APN

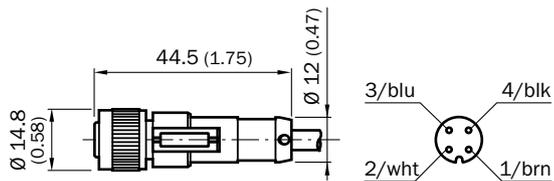


BEF-MRS-10-U
 Dimensional drawing

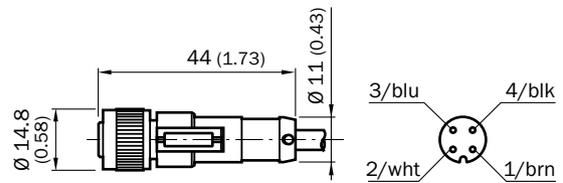


Plug connectors and cables

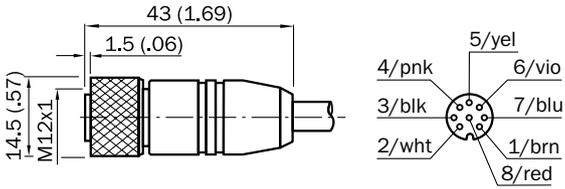
DOL-1204-G02MAC
 DOL-1204-G05MAC
 DOL-1204-G20MAC



DOL-1204-G10MAC

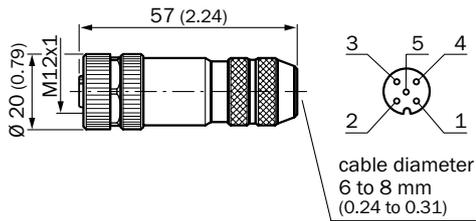


DOL-1208-G02MAC1
 DOL-1208-G05MAC1
 DOL-1208-G10MAC1
 DOL-1208-G20MAC1

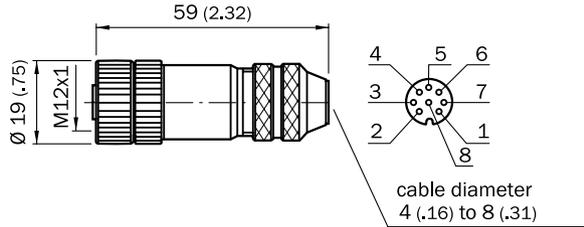


All dimensions in mm (inch)

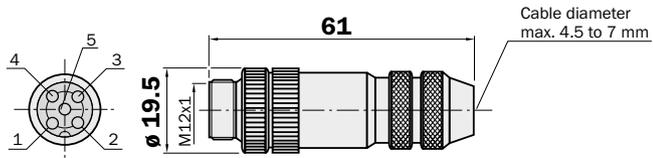
DOS-1205-GA



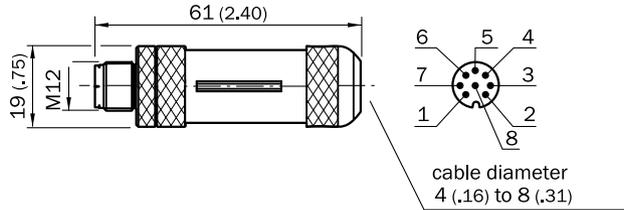
DOS-1208-GA01



STE-1205-GA



STE-1208-GA01



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