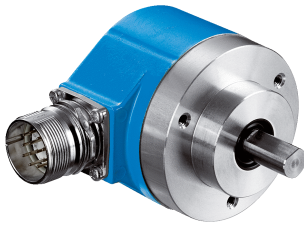




ARS60

Reliable and established

SICK
Sensor Intelligence.



Technical data overview

Encoder design	Singleturn																																																																		
Shaft type	Solid shaft, Servo flange Solid shaft, face mount flange Blind hollow shaft Through hollow shaft																																																																		
Shaft diameter	<table border="0"> <tr> <td>Solid shaft, Servo flange</td> <td>6 mm</td> </tr> <tr> <td>Solid shaft, face mount flange</td> <td>10 mm</td> </tr> <tr> <td>Blind hollow shaft</td> <td>15 mm ¹⁾</td> </tr> <tr> <td>Through hollow shaft</td> <td>12 mm ²⁾</td> </tr> </table>	Solid shaft, Servo flange	6 mm	Solid shaft, face mount flange	10 mm	Blind hollow shaft	15 mm ¹⁾	Through hollow shaft	12 mm ²⁾																																																										
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Connection type	Male connector, M23, 12-pin, radial Male connector, M23, 12-pin, axial Cable, 11-wire, radial Cable, 11-wire, axial Male connector, M23, 21-pin, radial Male connector, M23, 21-pin, axial Cable, 22-wire, radial Cable, 22-wire, axial																																																																		
Communication interface	SSI / parallel data world (depending on type)																																																																		
Number of steps per revolution (max. resolution)	<table border="0"> <tr> <td>SSI</td> <td>360</td> </tr> <tr> <td></td> <td>2,880</td> </tr> <tr> <td></td> <td>720</td> </tr> <tr> <td></td> <td>1,024 (10 bit)</td> </tr> <tr> <td></td> <td>1,892</td> </tr> <tr> <td></td> <td>2,048 (11 bit)</td> </tr> <tr> <td></td> <td>3,600</td> </tr> <tr> <td></td> <td>4,096 (12 bit)</td> </tr> <tr> <td></td> <td>5,000</td> </tr> <tr> <td></td> <td>7,200</td> </tr> <tr> <td></td> <td>8,129</td> </tr> <tr> <td></td> <td>8,192 (13 bit)</td> </tr> <tr> <td></td> <td>10,000</td> </tr> <tr> <td></td> <td>16,384 (14 bit)</td> </tr> <tr> <td></td> <td>18,000</td> </tr> <tr> <td></td> <td>21,600</td> </tr> <tr> <td></td> <td>32,767</td> </tr> <tr> <td></td> <td>32,768 (15 bit)</td> </tr> <tr> <td></td> <td>512 (9 bit)</td> </tr> <tr> <td></td> <td>256 (8 bit)</td> </tr> <tr> <td></td> <td>72</td> </tr> <tr> <td></td> <td>1,000</td> </tr> <tr> <td></td> <td>1,440</td> </tr> <tr> <td></td> <td>4,000</td> </tr> <tr> <td></td> <td>14,400</td> </tr> <tr> <td></td> <td>2,000</td> </tr> <tr> <td></td> <td>8,640</td> </tr> <tr> <td></td> <td>9,192</td> </tr> <tr> <td></td> <td>9,360</td> </tr> <tr> <td></td> <td>12,800</td> </tr> <tr> <td></td> <td>18,080</td> </tr> <tr> <td></td> <td>28,800</td> </tr> <tr> <td></td> <td>32,000</td> </tr> </table>	SSI	360		2,880		720		1,024 (10 bit)		1,892		2,048 (11 bit)		3,600		4,096 (12 bit)		5,000		7,200		8,129		8,192 (13 bit)		10,000		16,384 (14 bit)		18,000		21,600		32,767		32,768 (15 bit)		512 (9 bit)		256 (8 bit)		72		1,000		1,440		4,000		14,400		2,000		8,640		9,192		9,360		12,800		18,080		28,800		32,000
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¹⁾ Collets for 6, 8, 10, 12, 14 mm and 1/4", 3/8" and 1/2" as accessories, separate order item. For 15 mm shaft diameter collet is not needed.

²⁾ 12 mm requires the corresponding collet, this and other collets for 6, 8, 10 mm as well as 1/4", 3/8" and 1/2" need to be ordered separately as accessories.

³⁾ With mating connector fitted.

	32,400
	32,766
	500
	6,000
	7,400
	200
	4,320
	10
	1,576
	30,000
	8,196
	36
	1,638
	4,086
	9,000
	24,576
	28,672
	22,528
Parallel data word	800
	2,880
	9
	360
	256 (8 bit)
	1,024 (10 bit)
	512 (9 bit)
	2,000
	4,096 (12 bit)
	500
	5,000
	720
	8,192 (13 bit)
	32,768 (15 bit)
	2,048 (11 bit)
	3,600
	10,000
	32,767
	15
	16,384 (14 bit)
	64
	1,000
	7,200
	860
	2,500
	18,000
	8 (3 bit)
	12
	6,017
	1,440
	1,375
	18
	48
	24
	120
	34
	128 (7 bit)
	100
	180
	400
	454
	452
	8,100
	11,520
	1,360

¹⁾ Collets for 6, 8, 10, 12, 14 mm and 1/4", 3/8" and 1/2" as accessories, separate order item. For 15 mm shaft diameter collet is not needed.

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³⁾ With mating connector fitted.

	4,090
	7,920
	576
	3,621
	64 (6 bit)
	2,534
	4,000
	14,400
	10,240
	19
	200
	72
	232
	8,000
	7,999
	40
	16 (4 bit)
	42
	2,280
	2,400
	24,000
	36
	5,760
	5,808
	21,600
	49
	144
	900
	60
	54
	78
	1,924
	22,800
Max. resolution (number of steps per revolution x number of revolutions)	
Operating temperature range	-20 °C ... +85 °C
Enclosure rating	IP65 (IEC 60529) Male connector ³⁾ IP66 (IEC 60529) Cable IP64 (IEC 60529) Male connector ³⁾ IP64 (IEC 60529) Cable

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Product description

The modular setup of its CoreTech technology enables the compact ARS60 absolute singleturn encoder to provide a customized solution for all applications. All common mechanical variants are available with any number of increments between 2 and 32,768 and are either equipped with an SSI or parallel output, making the ARS60 a universal solution for nearly any application requirements

At a glance

- Absolute singleturn encoder
- Resolution: up to 15 bits (32,768 increments)
- Electrical interface: SSI with gray code type or gray capped
- Electrical interface: Parallel with gray, gray capped, binary, BCD code type
- Zero-set function
- Mechanical interfaces: face mount flange, servo flange, blind and through hollow shaft
- Enclosure rating: Up to IP66

Your benefits

- Freely programmable resolution (up to 15 bits)
-
- Easy zero adjustment directly on the encoder by pressing a button or via sub cable (cable version)
-
- Suitable for all mounting methods thanks to the individual mechanical interfaces
-
- A versatile base model thanks to the easily exchangeable collets for the blind hollow shaft and through hollow shaft
-
- Versions with cable and M23 connector connection in axial and radial designs available

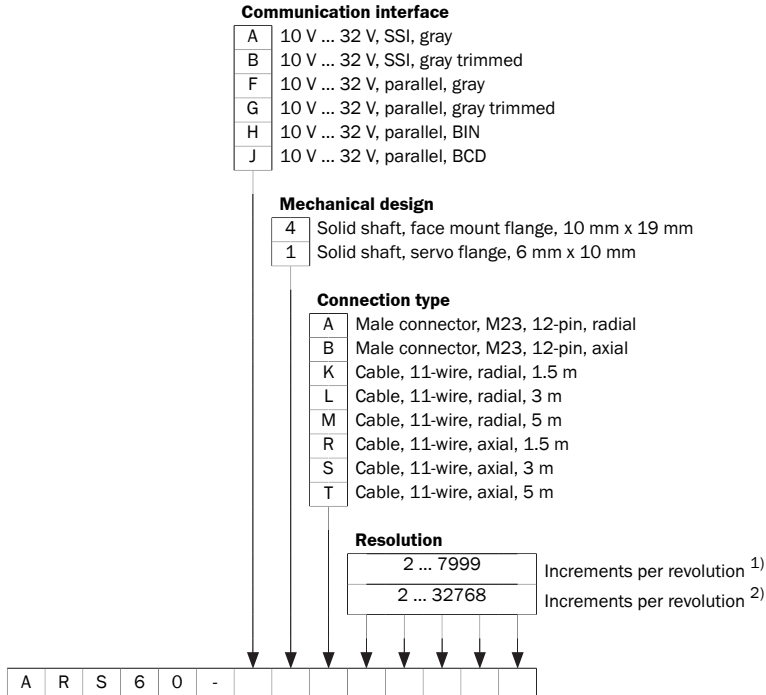
Fields of application

- Electronics and solar industries
- Textile machinery
- Packaging industry
- High-bay warehouses
- Woodworking machines
- Machine construction
- Automotive industry
- Material handling

Type code

Other models and accessories → www.sick.com/ARS60

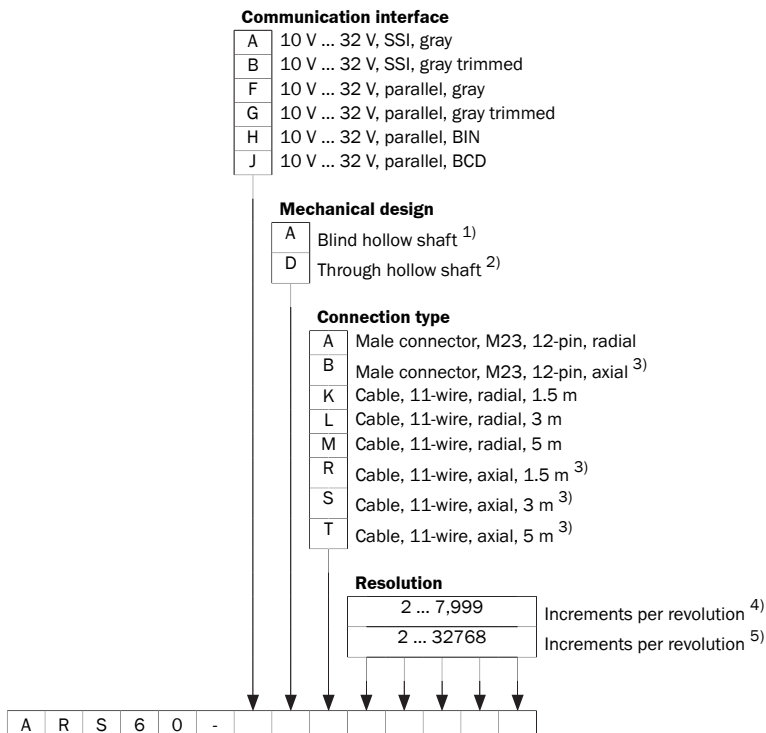
Solid shaft



¹⁾ Communication interface J: Increments per revolution 2 ... 7999 possible.

²⁾ Communication interface A, B, F, G and H: Increments per revolution 2 ... 32768 possible.

Hollow shaft



- 1) Order collets for 6, 8, 10, 12 and 14 mm as well as 1/4", 3/8" and 1/2" extra as accessories (see recommended accessories). No collets are necessary for 15 mm shaft diameter.
- 2) Order collets for 6, 8, 10 and 12 mm as well as 1/4", 3/8" and 1/2" extra as accessories (see recommended accessories). No collets are necessary for 15 mm shaft diameter.
- 3) Only for blind hollow shaft mechanical version.
- 4) Communication interface J: Increments per revolution 2 ... 7,999 possible.
- 5) Communication interface A, B, F, G and H: Increments per revolution 2 ... 32768 possible.

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:

Contacts and other locations –www.sick.com