

ARS60 SSI/Parallel

Reliable and established

ABSOLUTE ENCODERS







Technical data overview

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	
Solid shaft, Servo flange	6 mm
Solid shaft, face mount flange	10 mm
Blind hollow shaft	15 mm ¹⁾
Through hollow shaft	14 mm ²⁾
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) SSI	360 720 1,024 (10 bit) 1,892 2,048 (11 bit) 3,600 4,096 (12 bit) 5,000 7,200 8,192 (13 bit) 10,000 16,384 (14 bit) 18,000 21,600 32,767 32,768 (15 bit) 2,880 512 (9 bit) 256 (8 bit) 72 1,000 1,440 2,000 4,000 8,640 9,192 9,360 12,800 18,080 28,800 32,000 32,400 32,766 14,400 500 6,000

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

2) Order collets for 6, 8, 10, and 12 mm and 1/4", 3/8", and 1/2" separately as accessories.

```
7,400
                  200
                  4,320
                  10
                  1,576
                  30,000
                  32,768
                 36
                 25,000
                  1,638
                 2,018 (11 bit)
                 4,086
                 9,000
                 28,672
                  22,528
                  24,576
Parallel data world 9
                  256 (8 bit)
                 360
                 500
                  512 (9 bit)
                 720
                  1,024 (10 bit)
                  2,048 (11 bit)
                 3,600
                 4,096 (12 bit)
                 8,192 (13 bit)
                  10,000
                  32,767
                 32,768 (15 bit)
                 800
                  2,880
                  5,000
                  2,000
                  16,384
                 15
                  64 (6 bit)
                  16,384 (14 bit)
                  12
                  2,500
                 860
                 8
                  1,000
                  18,000
                  7,200
                 6,017
                 18
                 1,440
                  120
                  128
                  400
                  452
                  4,090
                  11,520
                 8,100
                 32,768
                 48
                 64
                 100
                 454
                  7,920
                  1,375
                 24
                 34
                 180
```

 $^{^{1)}}$ 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.

 $^{^{2)}}$ Order collets for 6, 8, 10, and 12 mm and 1/4", 3/8", and 1/2" separately as accessories.

Max. resolution (number of steps per revolution x number of revolutions)	
	1,360 4,000 576 2,534 14,400 3,621 10,240 19 72 232 8,000 7,999 200 40 5,760 5,808 16 42 2,280 2,400 24,000 36 720 (15 bit) 21,600 1,924 900 60 78 144 49 54 4,096 22,800

 $^{^{1)}}$ 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.

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

 $^{^{2)}}$ Order collets for 6, 8, 10, and 12 mm and 1/4", 3/8", and 1/2" separately as accessories.

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_SSI_Parallel

Hollow shaft

Communication interface A 10 V ... 32 V, SSI, gray 10 V ... 32 V, SSI, gray trimmed 10 V ... 32 V, parallel, gray 10 V ... 32 V, parallel, gray trimmed 10 V ... 32 V, parallel, BIN J 10 V ... 32 V, parallel, BCD Mechanical design Blind hollow shaft 1) Through hollow shaft 2) **Connection type** Male connector, M23, 12-pin, radial B Male connector, M23, 12-pin, axial 3) K Cable, 11-wire, radial, 1.5 m Cable, 11-wire, radial, 3 m L М Cable, 11-wire, radial, 5 m R Cable, 11-wire, axial, 1.5 m 3) S Cable, 11-wire, axial, 3 m 3) Cable, 11-wire, axial, 5 m 3) Resolution 2 ... 7,999 Increments per revolution 4) 2 ... 32768 Increments per revolution 5) A R S 6 0

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.

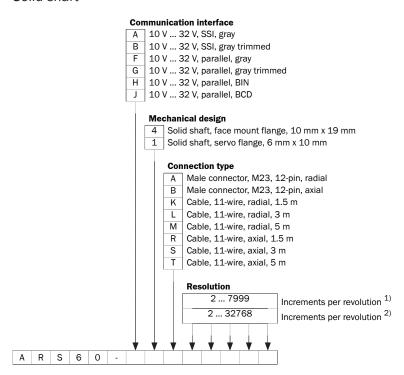
²⁾ Order collets for 6, 8, 10 and 12 mm as well as 1/4", 3/8" and 1/2" extra as accessories (see recommended accessories). No collets are necessary for 15 mm shaft diameter

³⁾ Only for blind hollow shaft mechanical version.

 $^{^{\}rm 4)}$ 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.

Solid shaft



 $^{^{1)}}$ Communication interface J: Increments per revolution 2 \dots 7999 possible.

 $^{^{2)}}$ Communication interface A, B, F, G and H: Increments per revolution 2 \dots 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

