

KUEBLER - INCREMENTAL ENCODER, SENDIX H120

SERIE H120

- High durability
- Many mounting options
- High degree of enclosure
- Wide temperature range



Product description

The Sendix H120 series is designed to fit in tough environments. Specialized for high voltage motors, generators, steel and crane industry. The sensor has a high enclosure degree, IP66, IP67 and a wide temperature range -40 to +100 ° C. It is also equipped with "HD-Safety Lock™, which includes double gaskets, against moisture and dust. All layers are also sturdier and stronger.

The many choices of contact types make this pulse sensor very flexible, sometimes the optical fiber, M12, M23 and terminal boxes are selected. The H120 can be delivered with a fastening lever in different lengths.

Please refer to the image below for ordering information.

Order code Hollow shaft version		8.H120 . XXXXX . XXXX					
		Type	a	b	c	d	e
a	Flange 1 = without mounting aid 2 = with fastening arm 70 mm [2.76"] ²⁾ 3 = with fastening arm 100 mm [3.93"] ²⁾ 4 = with fastening arm 150 mm [5.91"] ²⁾ 5 = with stator coupling, ø 119 mm [4.69"]	c	Output circuit / power supply 4 = RS422 (with inverted signal) / 5 V DC 1 = RS422 (with inverted signal) / 10 ... 30 V DC 5 = push-pull (with inverted signal) / 10 ... 30 V DC 6 = push-pull (with inverted signal) / 10 ... 30 V DC, power version up to 350 m B = optical fiber + RS422 (with inverted signal) / 5 V DC ³⁾ A = optical fiber + RS422 (with inverted signal) / 10 ... 30 V DC ³⁾ C = optical fiber + push-pull (with inverted signal) / 10 ... 30 V DC ³⁾	e	Pulse rate 50, 360, 512, 600, 1000, 1024, 1500, 2000, 2048, 2500, 4096, 5000 (e.g. 360 pulses => 0360) <i>Optional on request</i> - other pulse rates - Ex 2/22 ³⁾		
b	Through hollow shaft 2 = ø 16 mm [0.63"] 3 = ø 20 mm [0.79"] 5 = ø 25 mm [0.98"] 7 = ø 28 mm [1.10"] 6 = ø 1" <i>Blind hollow shaft, with central fastening insertion depth max. 53 mm [2.09"]</i> A = ø 12 mm [0.47"] B = ø 16 mm [0.63"] <i>Blind hollow shaft, cone with central fastening insertion depth max. 22.5 mm [0.89"]</i> K = ø 17 mm [0.67"], 1 : 10	d	Type of connection 1 = radial cable, 1 m [3.28'] PVC A = radial cable, special length PVC *) 2 = radial M12 connector, 8-pin, ccw 4 = radial M23 connector, 12-pin, ccw D = radial M23 connector, 12-pin, cw K = terminal box with plug-in spring terminal connectors, rotatable through 180° L = optical fiber connector + radial M23 connector, 12-pin, cw ⁴⁾				
		*) Available special lengths (connection type A): 2, 3, 5, 8, 10, 15 m [6.56, 9.84, 16.40, 26.25, 32.80, 49.21'] order code expansion .XXXX = length in dm ex.: 8.H120.121A.2048.0030 (for cable length 3 m)					

Connection Thread

Cable, M12, M23 contact

Housing diameter

120

IP Class

IP66, IP67

Mounting

Hollow shaft

Output

Push/Pull, RS422

Pulse Max

5000

Sensor type

Incremental

Shaft Diameter max

25

Shaft Diameter min

12

Supply Voltage DC Max

30

Supply Voltage DC Min

5

Temperature range from

-40

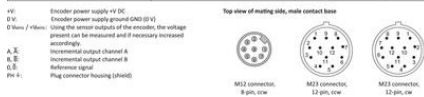
Temperature range to

100

Version

Multiturn

Output circuit type of connector	Cable (Isolate amount wires individually before initial start-up)
S, A, S, A	Signal
Cable colour	W/BK BN GY PK RD BU GR VE GY PK BU RD RD Shred
Output circuit type of connector	M12 connector, 8-pin
S, A, S, A	Signal
Pin	1 2 - - - 3 4 5 6 7 8 Pin ¹⁾
Output circuit type of connector	M23 connector, 12-pin
S, A, S, A, S, C	Signal
Pin	10 12 11 2 5 6 8 1 3 4 Pin ¹⁾
Output circuit type of connector	Terminal connections
S, A, S, A	Signal
Pin	B A - - + PE O X B B



Flange with stator coupling, ø 110 (ø 40)

Blind hollow shaft with central fastening

- 1) ø 1 MM, 7 (ø 20) deep
- 2) ø 1 MM, 8 (ø 31) deep

Shaft connection to the application



Flange with fastening arm

Blind hollow shaft with central fastening

- 1) ø 1 MM, 7 (ø 20) deep
- 2) ø 1 MM, 8 (ø 31) deep
- 3) ø 1 MM

Shaft connection to the application



Fastening arm	L1	L2
70 mm (2.76)	66.74 (2.627)	62.52 (2.465)
100 mm (3.94)	96.104 (3.784)	112.122 (4.414)
150 mm (5.91)	146.154 (5.754)	162.172 (6.387)

1) With a shaft diameter ø 12 mm (ø 20) the insulation resistance of 2.5 kV cannot be guaranteed.

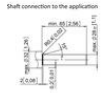
2) Pin 4 is attached to connector housing.

Flange with fastening arm

Through hollow shaft and terminal box (Type of connection K)

- 1) ø 1 MM, 7 (ø 20) deep
- 2) ø 1 MM, 8 (ø 31) deep
- 3) ø 1 MM

Shaft connection to the application



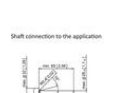
Fastening arm	L1	L2
70 mm (2.76)	66.74 (2.627)	62.52 (2.465)
100 mm (3.94)	96.104 (3.784)	112.122 (4.414)
150 mm (5.91)	146.154 (5.754)	162.172 (6.387)

Flange with fastening arm

Through hollow shaft and optical fibre connection (Type of connection L)

- 1) ø 1 MM, 7 (ø 20) deep
- 2) ø 1 MM, 8 (ø 31) deep
- 3) ø 1 MM

Shaft connection to the application



Fastening arm	L1	L2
70 mm (2.76)	66.74 (2.627)	62.52 (2.465)
100 mm (3.94)	96.104 (3.784)	112.122 (4.414)
150 mm (5.91)	146.154 (5.754)	162.172 (6.387)

1) With a shaft diameter ø 12 mm (ø 20) the insulation resistance of 2.5 kV cannot be guaranteed.

Flange with fastening arm

Blind hollow shaft with central fastening, cone ø 17 (ø 47), ø 10

- 1) ø 1 MM, 7 (ø 20) deep
- 2) ø 1 MM, 8 (ø 31) deep
- 3) ø 1 MM

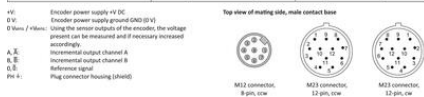
Shaft connection to the application



Fastening arm	L1	L2
70 mm (2.76)	66.74 (2.627)	62.52 (2.465)
100 mm (3.94)	96.104 (3.784)	112.122 (4.414)
150 mm (5.91)	146.154 (5.754)	162.172 (6.387)

1) With a shaft diameter ø 12 mm (ø 20) the insulation resistance of 2.5 kV cannot be guaranteed.

Output circuit type of connector	Cable (Isolate amount wires individually before initial start-up)
S, A, S, A	Signal
Cable colour	W/BK BN GY PK RD BU GR VE GY PK BU RD RD Shred
Output circuit type of connector	M12 connector, 8-pin
S, A, S, A	Signal
Pin	1 2 - - - 3 4 5 6 7 8 Pin ¹⁾
Output circuit type of connector	M23 connector, 12-pin
S, A, S, A, S, C	Signal
Pin	10 12 11 2 5 6 8 1 3 4 Pin ¹⁾
Output circuit type of connector	Terminal connections
S, A, S, A	Signal
Pin	B A - - + PE O X B B



Flange with stator coupling, ø 110 (ø 40)

Blind hollow shaft with central fastening

- 1) ø 1 MM, 7 (ø 20) deep
- 2) ø 1 MM, 8 (ø 31) deep

Shaft connection to the application



Flange with fastening arm

Blind hollow shaft with central fastening

- 1) ø 1 MM, 7 (ø 20) deep
- 2) ø 1 MM, 8 (ø 31) deep
- 3) ø 1 MM

Shaft connection to the application



Fastening arm	L1	L2
70 mm (2.76)	66.74 (2.627)	62.52 (2.465)
100 mm (3.94)	96.104 (3.784)	112.122 (4.414)
150 mm (5.91)	146.154 (5.754)	162.172 (6.387)

1) With a shaft diameter ø 12 mm (ø 20) the insulation resistance of 2.5 kV cannot be guaranteed.

2) Pin 4 is attached to connector housing.

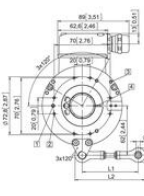
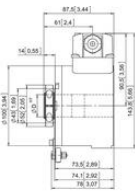
Flange with fastening arm
Through hollow shaft and terminal box (type of connection K)

- 3 x M4, 7 (2,28) deep
- 3 x M4, 8 (3,31) deep
- 6 x M4

□ Recommended torque for the clamping ring 2 Nm



Fastening arm	L1	L2
75 mm (2,95)	66,74 (2,627)	82,92 (3,265)
100 mm (3,93)	94,104 (3,705)	111,122 (4,371)
150 mm (5,91)	144,154 (5,675)	162,172 (6,386)



Flange with fastening arm
Through hollow shaft and optical fibre connection (type of connection L)

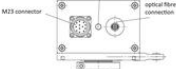
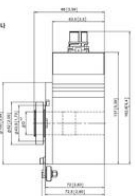
- 3 x M4, 7 (2,28) deep
- 3 x M4, 8 (3,31) deep
- 6 x M4

□ Recommended torque for the clamping ring 2 Nm



Fastening arm	L1	L2
75 mm (2,95)	66,74 (2,627)	82,92 (3,265)
100 mm (3,93)	94,104 (3,705)	111,122 (4,371)
150 mm (5,91)	144,154 (5,675)	162,172 (6,386)

□ With a shaft diameter > 12 mm (2,362) the maximum resistor of 1.5 A is correct to be guaranteed.



Flange with fastening arm
Blind hollow shaft with central fastening, cone, # 17 (A47), 1: 10

- 3 x M4, 7 (2,28) deep
- 3 x M4, 8 (3,31) deep
- 6 x M4

□ Recommended torque for the clamping ring 2 Nm



Fastening arm	L1	L2
75 mm (2,95)	66,74 (2,627)	82,92 (3,265)
100 mm (3,93)	94,104 (3,705)	111,122 (4,371)
150 mm (5,91)	144,154 (5,675)	162,172 (6,386)

□ With a shaft diameter > 12 mm (2,362) the maximum resistor of 1.5 A is correct to be guaranteed.

