

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"]						
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						
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⁾						
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)						
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 ⁵⁾						

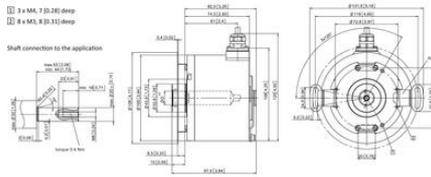
SPECIFICATIONS

Housing diameter	120
IP Class	IP66, IP67
Pulse Max	5000
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

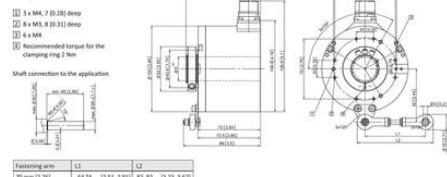
Output circuit	Type of connection	Cable (Isolate unground wires individually before initial start-up)
1, 4, 5, 6	1	Signal: 0 V +V -V 0 Vems +Vems Cable colour: BN BM GN BK RD BU GN YL QY PK BU RD Shld
Output circuit <th>Type of connection</th> <th>M12 connector, 8-pin</th>	Type of connection	M12 connector, 8-pin
1, 4, 5, 6	2	Signal: 0 V +V 0 Vems +Vems A X B B D B A Pin: 1 2 - - 3 4 5 6 7 8 Pin ¹⁾
Output circuit <th>Type of connection</th> <th>M12 connector, 12-pin</th>	Type of connection	M12 connector, 12-pin
1, 4, 5, 4, A, C	4, 0, 1	Signal: 0 V +V 0 Vems +Vems A X B B D B A Pin: 10 12 11 2 5 6 8 1 3 4 Pin ¹⁾
Output circuit <th>Type of connection</th> <th>Terminal connections</th>	Type of connection	Terminal connections
1, 4, 5, 6	K	Signal: B A 0 V -V 0 X B B D Pin: B A - - + PE 0 X B B D



Flange with motor coupling, ø 119 [4.69]
Blind-hollow shaft with control fastening

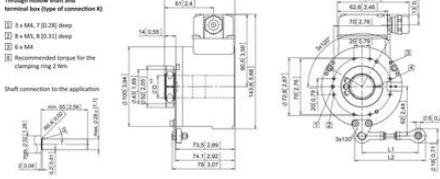


Flange with fastening arm
Through hollow shaft



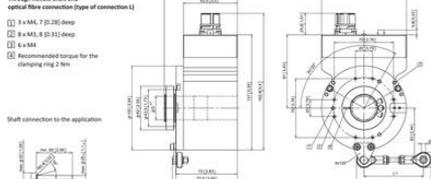
Fastening arm	L1		L2	
	70 mm (2.76)	64.74 (2.547 91)	82.92 (3.263 82)	73.25 (2.883 5)
100 mm (3.94)	94.104 (3.704 408)	112.122 (4.414 80)		
150 mm (5.91)	144.154 (5.674 06)	162.172 (6.386 77)		

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



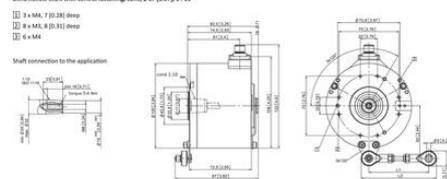
Fastening arm	L1		L2	
	70 mm (2.76)	64.74 (2.547 91)	82.92 (3.263 82)	73.25 (2.883 5)
100 mm (3.94)	94.104 (3.704 408)	112.122 (4.414 80)		
150 mm (5.91)	144.154 (5.674 06)	162.172 (6.386 77)		

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



Fastening arm	L1		L2	
	70 mm (2.76)	64.74 (2.547 91)	82.92 (3.263 82)	73.25 (2.883 5)
100 mm (3.94)	94.104 (3.704 408)	112.122 (4.414 80)		
150 mm (5.91)	144.154 (5.674 06)	162.172 (6.386 77)		

Flange with fastening arm
Blind-hollow shaft with control fastening, ø 119 [4.69], 1:10

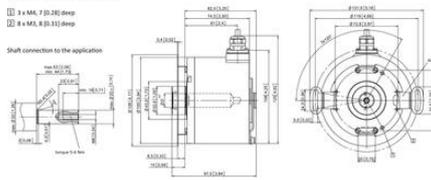


Fastening arm	L1		L2	
	70 mm (2.76)	64.74 (2.547 91)	82.92 (3.263 82)	73.25 (2.883 5)
100 mm (3.94)	94.104 (3.704 408)	112.122 (4.414 80)		
150 mm (5.91)	144.154 (5.674 06)	162.172 (6.386 77)		

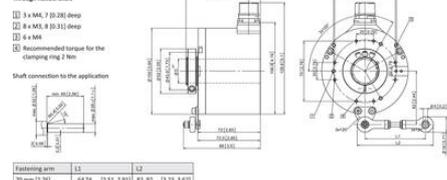
Output circuit	Type of connection	Cable (Isolate unground wires individually before initial start-up)
1, 4, 5, 6	1	Signal: 0 V +V -V 0 Vems +Vems Cable colour: BN BM GN BK RD BU GN YL QY PK BU RD Shld
Output circuit <th>Type of connection</th> <th>M12 connector, 8-pin</th>	Type of connection	M12 connector, 8-pin
1, 4, 5, 6	2	Signal: 0 V +V 0 Vems +Vems A X B B D B A Pin: 1 2 - - 3 4 5 6 7 8 Pin ¹⁾
Output circuit <th>Type of connection</th> <th>M12 connector, 12-pin</th>	Type of connection	M12 connector, 12-pin
1, 4, 5, 4, A, C	4, 0, 1	Signal: 0 V +V 0 Vems +Vems A X B B D B A Pin: 10 12 11 2 5 6 8 1 3 4 Pin ¹⁾
Output circuit <th>Type of connection</th> <th>Terminal connections</th>	Type of connection	Terminal connections
1, 4, 5, 6	K	Signal: B A 0 V -V 0 X B B D Pin: B A - - + PE 0 X B B D



Flange with motor coupling, ø 119 [4.69]
Blind-hollow shaft with control fastening

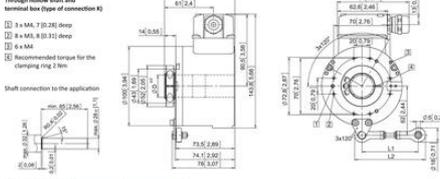


Flange with fastening arm
Through hollow shaft



Fastening arm	L1		L2	
	70 mm (2.76)	64.74 (2.547 91)	82.92 (3.263 82)	73.25 (2.883 5)
100 mm (3.94)	94.104 (3.704 408)	112.122 (4.414 80)		
150 mm (5.91)	144.154 (5.674 06)	162.172 (6.386 77)		

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



Fastening arm	L1		L2	
	70 mm (2.76)	64.74 (2.547 91)	82.92 (3.263 82)	73.25 (2.883 5)
100 mm (3.94)	94.104 (3.704 408)	112.122 (4.414 80)		
150 mm (5.91)	144.154 (5.674 06)	162.172 (6.386 77)		

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



Fastening arm	L1		L2	
	70 mm (2.76)	64.74 (2.547 91)	82.92 (3.263 82)	73.25 (2.883 5)
100 mm (3.94)	94.104 (3.704 408)	112.122 (4.414 80)		
150 mm (5.91)	144.154 (5.674 06)	162.172 (6.386 77)		

Flange with fastening arm
Blind-hollow shaft with control fastening, ø 119 [4.69], 1:10

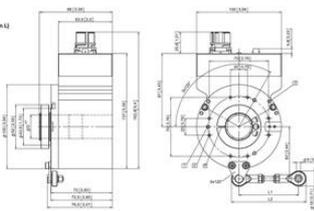


Fastening arm	L1		L2	
	70 mm (2.76)	64.74 (2.547 91)	82.92 (3.263 82)	73.25 (2.883 5)
100 mm (3.94)	94.104 (3.704 408)	112.122 (4.414 80)		
150 mm (5.91)	144.154 (5.674 06)	162.172 (6.386 77)		

Flange with fastening arm
Through hollow shaft and
optical fibre connection (type of connection 1)

- ① 3 x M4, 7 (0.28) deep
- ② 8 x M4, 8 (0.31) deep
- ③ 6 x M4
- ④ Recommended torque for the clamping ring 2 Nm

Shaft connection to the application



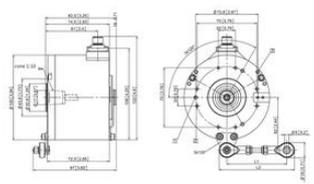
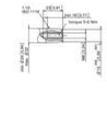
Fastening arm	L1	L2
70 mm (3.76)	64.74 (2.55.2.93)	62.92 (2.47.3.62)
100 mm (3.93)	94.104 (3.70.4.09)	112.122 (4.41.4.86)
150 mm (5.91)	144.124 (5.67.4.96)	162.172 (6.36.6.77)

① With a shaft diameter > 32 mm (1.26") the insulation resistance of 2.5 kV cannot be guaranteed.

Flange with fastening arm
Blind hollow shaft with central fastening, case, # 17 (0.67), 1: 10

- ① 3 x M4, 7 (0.28) deep
- ② 8 x M4, 8 (0.31) deep
- ③ 6 x M4

Shaft connection to the application



Fastening arm	L1	L2
70 mm (3.76)	64.74 (2.55.2.93)	62.92 (2.47.3.62)
100 mm (3.93)	94.104 (3.70.4.09)	112.122 (4.41.4.86)
150 mm (5.91)	144.124 (5.67.4.96)	162.172 (6.36.6.77)

① With a shaft diameter > 32 mm (1.26") the insulation resistance of 2.5 kV cannot be guaranteed.

