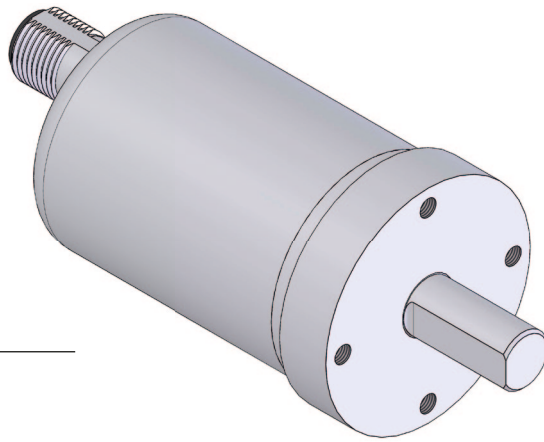


# Absolute encoder WV42HD



**Feature:**

- Heavy Duty Design with stainless steel
- compact design (diameter 42 mm)
- Protection IP69K, IP68
- Resistant to acids and salt spray
- CANopen, SSI, Analog interfaces
- Multiturn without battery
- High shaft load rating up to 270 N
- 16 bit multiturn (65536 revolution)
- 12 bit singleturn (4096 steps)

**SIKO GmbH**

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 Weihermattenweg 2  
 79256 Buchenbach

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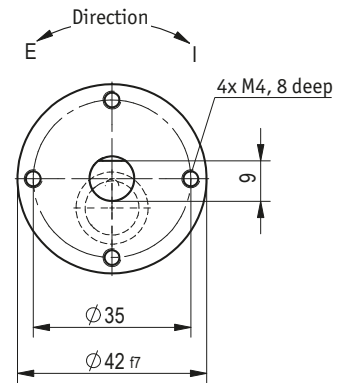
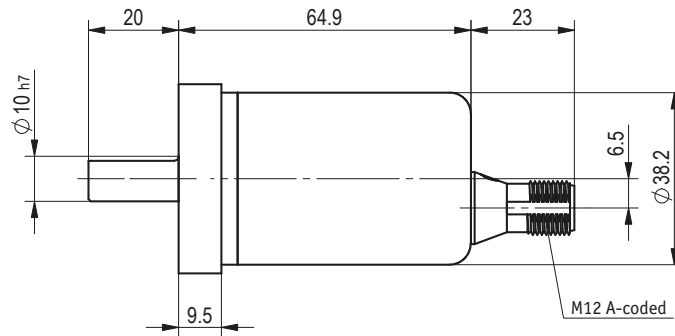
**eMail**  
 info@siko.de  
**Internet**  
 www.siko.de

Feature	Order text	Additional information	
Interface	CAN	CANopen (DS406)	
	MWI	4 ... 20 mA current output	
	MWU	0 ... 10 V voltage output	
	SSI/B	Binär	
	SSI/G	Gray	
Number of revolution	1	singleturn	
	8192	13 Bit	(only SSI or CAN)
	65536	16 Bit	(only transducer)
Connection type	M12	(A-coded)	

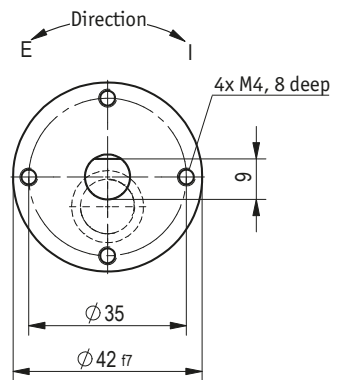
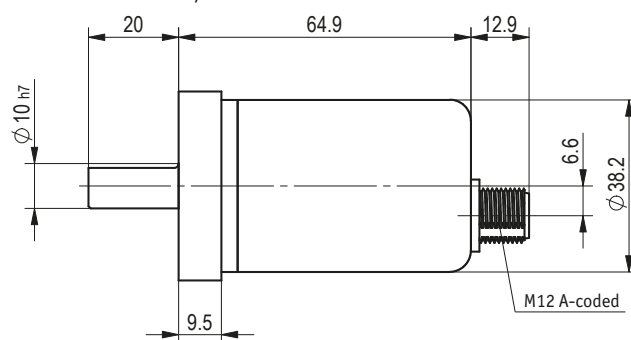
Your ordering: WV42HD - A - B - C

# Absolute encoder WV42HD

Interface CAN



Interface SSI + MWI/MWU



Pin assignment CAN

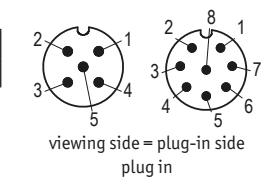
PIN	1	2	3	4	5
Signal	CAN_GND	+UB	GND	CAN_H	CAN_L

Pin assignment MWI/MWU

PIN	1	2	3	4	5
Signal	Iout/Uout	+UB	GND	Set 2	Set 1

Pin assignment SSI

PIN	1	2	3	4	5	6	7	8
Signal	GND	+UB	SSI Cycle+	SSI Cycle-	SSI Data +	SSI Data -	Calibration input	Direction



## Technical data

Mechanical data:	
Flange/housing	stainless steel
Shaft	stainless steel
Shaft loading	max. axial 270 N; max. radial 270 N
Speed	max. 12000 min <sup>-1</sup>
Starting torque	≤ 4 Ncm, at 25 °C
Shock resistance	≤ 300 g / 6 ms, EN 60068-2-27
Vibration resistance	≤ 30 g (10 Hz ... 1 kHz), EN 60068-2-6
Weight	ca. 0,35 kg
Protection	IP69K, IP68
Working temperature	-40 °C ... +85 °C
Storage temperature	-40 °C ... +85 °C
Humidity	98 %, without condensation

## Electrical data CANopen:

Operating voltage	+10 ... +30 VDC, polarity protection
Power consumption	max. 1,2 W
CAN interface	according ISO 11898, galvanically isolated CANopen (DS406)
Transmission rate	max. 1 M Baud
Device addressing	adjustable per SDO or Layer Setting Service (LSS)
Cycle time	< 1 ms
EMV	EN 61000-6-2; noise immunity/immission EN 61000-6-4; emitted interference/emission

## Electrical data SSI:

Operating voltage	+5 ... +30 VDC, polarity protection
SSI clock speed	100 kHz - 2 MHz
Power consumption	ca. 0,25 W

## Technical data

Cycle time (singleturn)	< 600 µs
SSI data output	line-driver according to RS422
EMV	EN 61000-6-2; noise immunity/immission EN 61000-6-4; emitted interference/emission

## Electrical data MWI/MWU:

	4 ... 20 mA	0 ... 10 V
Operating voltage	+15 ... +30 VDC	+12 ... +30 VDC
Load resistance (load against GND)	RL < 500 Ω	RL > 10 kΩ
Linearity	0,15 %	0,15 %
Starting time	< 1 s	< 1 s
Settling time	80 ms	80 ms
Power consumption	typical 40 mA	typical 15 mA
EMV	EN 61000-6-2; noise immunity/immission EN 61000-6-4; emitted interference/emission	

## Sensor data MWI/MWU:

Resolution analog output	12 bit over the preprogrammed measuring range
Smallest measuring range	22,5°
Accuracy singleturn	± 0,35°
Resolution singleturn	12 bit
Largest measuring range multiturn	65.536 revolution, 16 revolution (factory setting)

## Accessory

84109	Mating connector M12 (CAN/MWI/MWU) 5 pins circular cable connector A-coded
83006	Mating connector M12 (CAN/MWI/MWU) 5 pins angle cable connector A-coded
83525	Mating connector M12 (SSI) 8 pins circular cable connector A-coded
AK18	Flexible coupling