

# New!

## WV58M and WH58M

... absolutely magnetic, absolute precise, absolutely robust!

– two „absolutely“ strong types

### The problem:

Up to now, you have been using optical encoders for length and angle measurements. However, reliable measurements cannot always be guaranteed since humidity, vibration, shock and temperature fluctuation have a significant impact on the measurement results obtained from optical encoders ...

### SIKO provides the solution:

The absolute measuring, condensation-resistant angle encoders WV58M and WH58M rely on SIKO's proven, magnetical MAGLINE technology. Solid or hollow shafts made of stainless steel, with industry standard

flanges enable quick and safe mounting. This new encoder generation stands for absolute precision and reliability – even under the most difficult circumstances.

As a user you have a real competitive advantage, for this new technology guarantees increased functional safety. The encoder's compact and robust magnetic measuring method significantly improves sturdiness and stability of integrated distance and angle measurement. And, naturally, SIKO's developers have ensured perfect compatibility: The measuring system has standard interfaces.

### Quickinfo:

- fast, flexible and very easy installation via standard flange or shaft fastening.
- proven magnetic scanning technology of the MAGLINE product line
- “electronic gearing” ensures absolute values for over 10 years
- create “unbounded connections” thanks to integrated fieldbus functionality (SSI, Profi-, CAN bus as well as RS485 interface)



# Angle encoder WV58M/WH58M

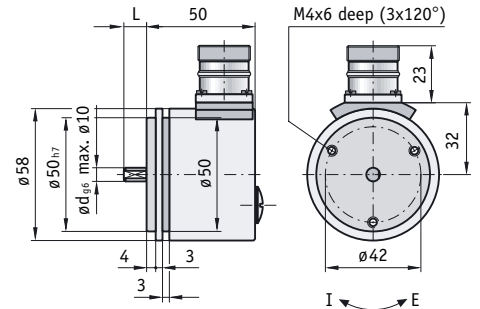
Absolute angle encoder with precise magnetic scanning and high-resolution capture of measured values in a compact design, developed for robust industrial use.



## Features:

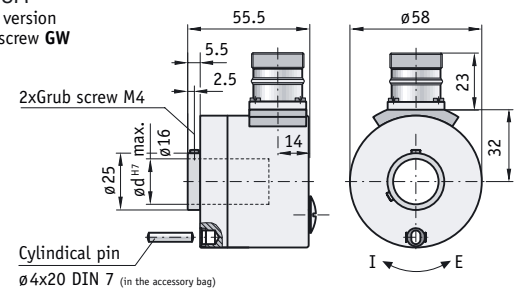
- Power supply +10 V ... +30 V
- Solid shaft up to 10 mm, hollow shaft (blind hole) up to 22 mm
- Single-turn 10/12 bit, multi-turn 12 bit
- Low height
- Monitoring of electronic gearing (alarm)
- freely programmable via menu-controlled programming tool

WV58M

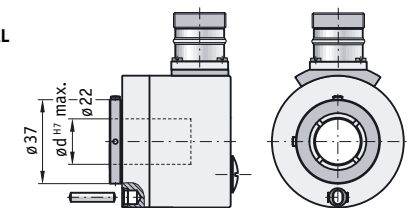


WH58M

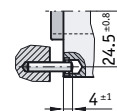
Shaft version  
Grub screw GW



Shaft version  
Clamping ring KL



## Recommended installation



RS485 (SIKONETZ3)

E4	E1V	Signal
1	green	DÜA
2	yellow	DÜB
3	grey	GND
4	-	N.C.
5	brown	+UB
6	-	N.C.
7	-	N.C.

RS422 (SSI)

E2	E4	E1V	Signal
1	F	grey	GND
2	E	brown	+UB
3	D	black	clock +
4	C	red	clock -
5	B	blue	data +
6	A	pink	data -
7 - 12	G-M	-	N.C.

Feature	WV58M WH58M Technical data			Additional information
<b>Mechanical data:</b>				
Type of protection			IP65	
Max. rotational speed			6000 min <sup>-1</sup>	
Rotor moment of inertia			approx. 5 x 10 <sup>-6</sup> kgm <sup>2</sup> for solid shaft	approx. 17 x 10 <sup>-6</sup> kgm <sup>2</sup> for hollow shaft
Starting torque			≤0.01 Nm for solid shaft	≤0.03 Nm for hollow shaft
Load capacity of shafts			radial 80 N, axial 40 N for solid shaft	
Weight			approx. 0.4 kg	
Operating temperature			-20 °C ... +100 °C	
Storage temperature			-30 °C ... +100 °C	
Shaft			stainless steel	
Cable sheath			PUR	
Material of flange/housing			aluminium/steel housing	
Shock resistance			50 g; 11 ms, according to DIN-IEC 68-2-27	
Vibration resistance			10 g; 5 ... 150 Hz, acc. to DIN-IEC 68-2-6	
<b>Electrical data:</b>				
Operating voltage			+10 V DC ... +30 V DC	
Output driver			RS485/RS422	
Power consumption			approx. 1 W	without load (typ.)
SSI clock speed min./max.			min. 65 kHz/max. 1 MHz	
Short-circuit-proof outputs			yes	(with short circuit output against output or output ag. GND)
Polarity protection on U <sub>B</sub>			yes	
Test mark			CE	according to EN 61000-6-2, EN 61000-6-4
<b>Ordering data:</b>				
Type	WV58M	A	solid shaft encoder	
		WH58M	hollow shaft encoder	
Interface/protocol	S6/04	S6/04	RS422/SSI	<b>standard</b>
	S3/06	S3/06	RS485/SIKONETZ-3	ProfiBus/CAN bus on request
Type of connection	E2	E2	connector	<b>standard</b> , 12 poles, M23 (only SSI)
	E1V	E1V	flying lead	
	E4	E4	connector	7 poles M16 (SIKONETZ3); 12 poles, M16 (SSI)
Cable length	OK	OK	without cable	<b>standard</b> with E2 and E4
	...	...	1 ... 10 m in 0.1 m steps	only E1V
Steps per revolution	1024	1024	10 bit	
	4096	4096	12 bit	
Number of revolutions	1	1		single-turn
	4096	4096		multi-turn
Shaft design	*	GW	fastening with torque pin	not ø20 mm, ø22 mm
	*	KL	fastening with clamping ring	only ø20mm, ø22 mm (others on request)
Shaft diameter x length	6 x 10	H	ød <sub>ø6</sub> x L	<b>standard</b>
	10 x 20		ød <sub>ø6</sub> x L	
Hollow shaft diameter		20	ød <sup>H7</sup>	<b>standard</b>
		...	10, 12, 14, 16	others on request

\* Ordering feature "G" (shaft design) not available for WV58M

Your order:  -  -  -  -  -  -  -

A      B      C      D      E      F      G      H

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