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Installation Kit for frequency-control lifts WDGAK58B with shaft encoder



The following installation kits are available for fitting the encoder to a frequency controlled lift. Every installation kit consists:

1 x Encoder, 1 x Mountingangle, 1 x shielded cable 15 m length,

1 x double loop coupling, 5 x Shaftadapter

Mechanical Data

Housing

Clamping flange: Aluminium

- Cap: die cast aluminum, powder coated

- Durchmesser: 58 mm

Shaft

Material: stainless steel
Diameter: 10 mm, H7
Lenght: 20 mm
Permitted load max. 220 N radial

Load: max. 120 N axial

- Starting torque:

approx. 1 Ncm at ambient temperature

Bearings

- Type: 2 precision ball bearings

- Service life: 1x 10° U revs. at 100 % shaft load

 $1x\ 10^{10}\ U$ revs. at 40 % shaft load $1x\ 10^{11}$ revs. at 20 % shaft load

Max. operating speed: 8000 rpm

Weight: approx. 250 g

Connections: SH8: radial connector, 8 pin

Operating temperature: -20 °C up to +80 °C Storage temperature: -30 °C up to +80 °C

Machinery Directive: basic data safety integrity level

MTTF $_a$: 200 a Mission time (T $_a$): 25 a

Nominale service life 1x 10" revs. at 8000 rpm and (L₁₀h): 20 % rated shaft load

Diagnostic coverage: 0 %

(DC)

Encoder-Order No.: WDGI58B-10-YYYY-ABN-H24-SH8

- YYYY: with 1024, 2048, 4096 PPR

- 3 channels, A, B and zero marker pulse N

- H24: 10 - 30 VDC HTL power supply

- SH8: radial connector, 8 pin

WDGI58B-10-YYYY-ABN-R05-SH8

- YYYY: with 1024, 2048, 4096 PPR
- 6 channels, A, B, zero marker pulse N and inv.
- 4,75 5 VDC TTL, power supply with inv. output circuit
- SH8: radial connector, 8 pin

WDGI58B-10-YYYY-AB-SIN-SH8

- YYYY: with 1024, 2048 PPR
- 4 channels, A, B (Sin/Cos)
- 4,75 VDC bis 5 VDC, power supply,1 Vpp Sin/Cos
- SH8: radial connector, 8 pin

YYYY: Please specify required PPR.

Pin identification SH8:

i iii iddi itiiiodtioii oi io.					
Function	PIN (HTL)	PIN (TTL)	PIN (Si		
Positive	2	2	2		
Negative	1	1	1		
Α	3	3	3		
A inv.	-	6	6		
В	4	4	4		
B inv.	-	7	7		
N	5	5	-		
N inv.	-	8	-		

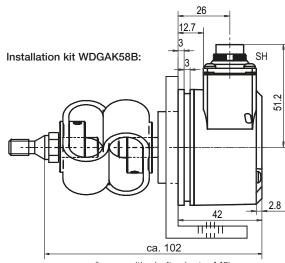


The view of the soldered side of the connector connector corresponds to the view of the pin arrangement on the

encoder.

- · Complete retrofit set
- Quickly and reliably fitted with the aid of the accessories
- Cost-effective modernisation solution
- TTL, HTL or sin/cos output
- Threads: M8, M10, M12, M16 und M20

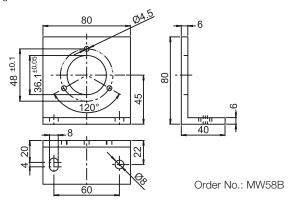
www.wachendorff-automation.com/wdgak58b



(in use with shaft adapter M8)

Mounting bracket:

The mounting bracket makes for easy installation of the encoder in the lift system. However care should be taken that the admissible load of the coupling is adhered to.



Cable:

The cable is 15 m in length and is shielded, however the shield is not connected to the connector housing at TTL/HTL. With a mated connector, the encoder meets protection class IP40.



The cable has a connection as follows:

THE Cable has a confident as follows:				
	Function	Colour (HTL/TTL)	Color (Sine)	
	Positive	brown	brown	
	Negative	white	white	
	A	green	green	
	A inv.	red	yellow	
	В	yellow	gray	
	B inv.	black	rosa	
	N	gray	-	
	N inv.	violet	-	
	Shield:	cable braiding	cable braiding	
	Order No:	KD84015	KD840SIN15	



Double loop coupling:

The double loop coupling serves to compensate for any mis-alignment between the drive and the encoder. The coupling has extremely high compensation capabilities.

Features: excellent compensation capabilities

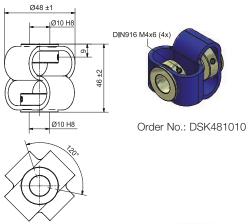
Max. offset of shafts: axial: max. ±4 mm radial: max. ±3 mm

angular: ± 12°

Max. operating speed: 3000 rpm Starting torque: max. 200 Ncm Material:

- Hub: zinc-plated - Compensating element: polyurethan Weight: 85 g

Fixing: DIN 916 M4x6 (4x) Operating temperature: -30 °C up to +80 °C

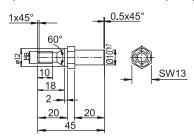


Shaft adapters



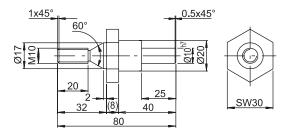
Shaft adapters:

The shaft adapters are screwed into an appropriate thread on the lift and allow a simple connection via the double loop coupling.



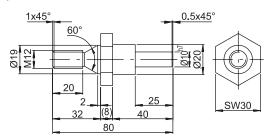
Shaft adapter M8

Order No.: WDGWA10M08



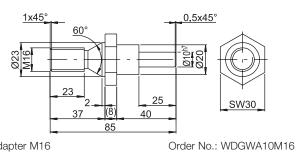
Shaft adapter M10

Order No.: WDGWA10M10

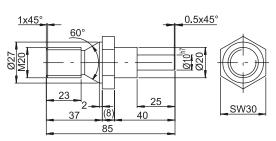


Wellenadapter M12

Bestell-Nr.: WDGWA10M12



Shaft adapter M16



Order No.: WDGWA10M20

WDGAK-58B-YYYY-H24

Order No.:

Shaft adapter M20

Description:

Installation kit 10-30 VDC HTL

Ordering information installation kit WDGAK58B:

	omprising: WDGI58B-10-YYYY-ABN-H24-SH8 - YYYY: with 1024, 2048, 4096 PPR - 3 channels, A, B, N - H24: 10 - 30 VDC power supply - SH8: radial connector, 8 pin MW58B KD84015: 15 m ready-made cable DSK481010	
In cc	Shaft adapter: 08, 10, 12, 16, 20 stallation kit 4,75-5VDC, TTL, RS422 omprising: WDGI58B-10-YYYY-ABN-R05-SH8 - YYYY: with 1024, 2048, 4096 PPR	WDGAK-58B-YYYY-R05
-	 6 channels, A, B, N, A, B, N R05: 4,75 - 5 VDC TTL power supply with inv. output circuit SH8: radial connector, 8 pin MW58B KD84015: 15 m ready-made cable DSK481010 Shaft adapter: 08, 10, 12, 16, 20 	
	stallation kit 4,75-5VDC,1VppSin/Cos	WDGAK-58B-YYYY-SIN
-	WDGI58B-10-YYYY-AB-SIN-SH8 - YYYY: with 1024, 2048 PPR - 4 channels, A, B, A, B - SIN: 4,75 - 5 VDC Sine power supply 1 Vpp Sin/Cos - SH8: radial connector, 8 pin	
-	MW58B	
-	KD840SIN15: 15 m ready-made cable	
	DSK481010	
-	Shaft adapter: 08, 10, 12, 16, 20	

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