

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
- Length: 20 mm
- Permitted load
Load: max. 220 N radial
max. 120 N axial
- Starting torque: approx. 1 Ncm at ambient temperature

Bearings

- Type: 2 precision ball bearings
- Service life: 1x 10⁶ U revs. at 100 % shaft load
1x 10¹⁰ U revs. at 40 % shaft load
1x 10¹¹ 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_m): 25 a

Nominal service life: 1x 10¹¹ revs. at 8000 rpm and

(L_{10h}): 20 % rated shaft load

Diagnostic coverage: 0 %

(DC)

Encoder-Order No.: WDG158B-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

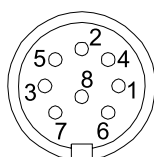
WDGI58B-10-YYYY-ABN-R05-SH8
- YYYY: with 1024, 2048, 4096 PPR
- 6 channels, A, B, zero marker pulse N and inv.
- 4,75 - 5 VDC TTL, power supply
with inv. output circuit
- SH8: radial connector, 8 pin

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.

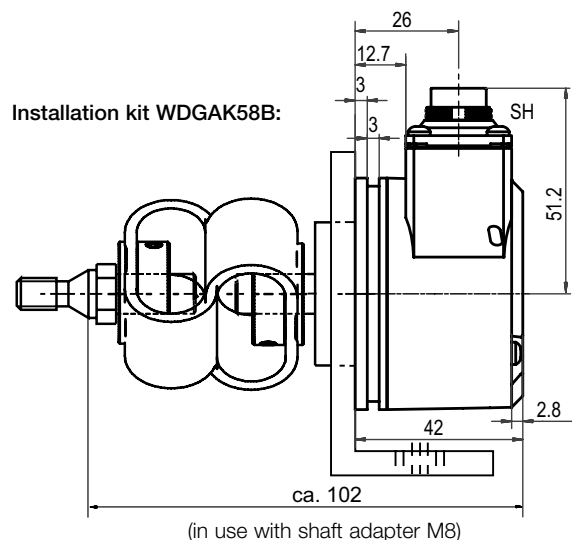
Pin identification SH8:

Function	PIN (HTL)	PIN (TTL)	PIN (Sine)
Positive	2	2	2
Negative	1	1	1
A	3	3	3
A inv.	-	6	6
B	4	4	4
B inv.	-	7	7
N	5	5	-
N inv.	-	8	-



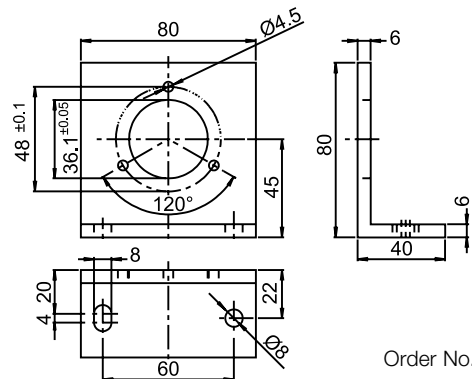
The view of the soldered side of the connector corresponds to the view of the pin arrangement on the encoder.

- 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



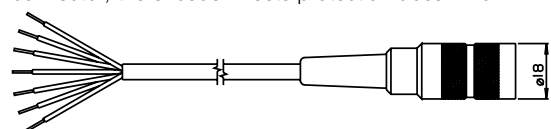
Mounting bracket:

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:

Function	Colour (HTL/TTL)	Color (Sine)
Positive	brown	brown
Negative	white	white
A	green	green
A inv.	red	yellow
B	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: $\pm 12^\circ$

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

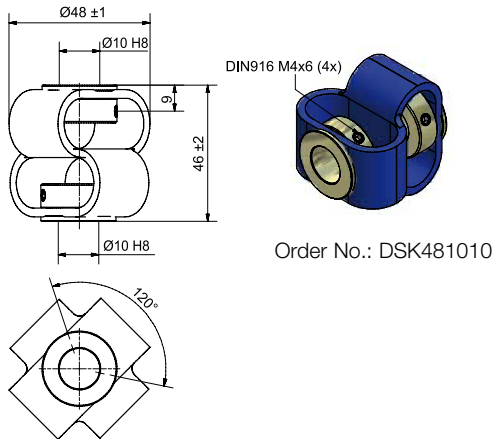
Material:

- Hub: zinc-plated
- Compensating element: polyurethan

Weight: 85 g

Fixing: DIN 916 M4x6 (4x)

Operating temperature: -30°C up to $+80^\circ\text{C}$



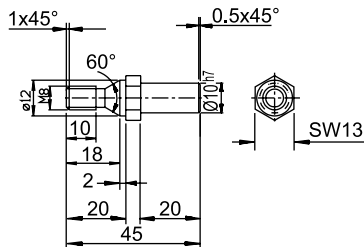
Order No.: DSK481010

Shaft adapters



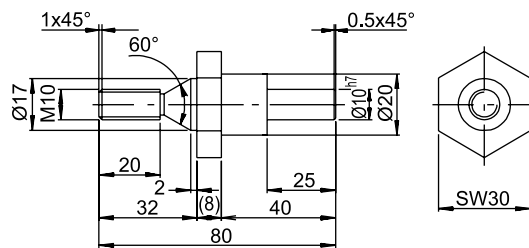
Shaft adapters:

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



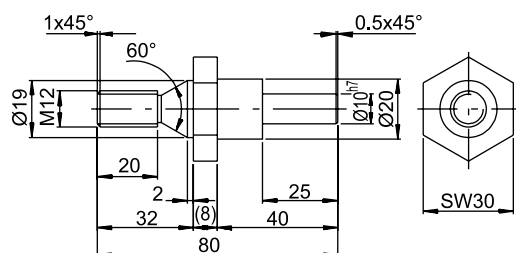
Shaft adapter M8

Order No.: WDGWA10M08



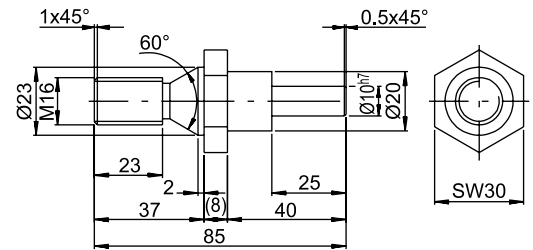
Shaft adapter M10

Order No.: WDGWA10M10



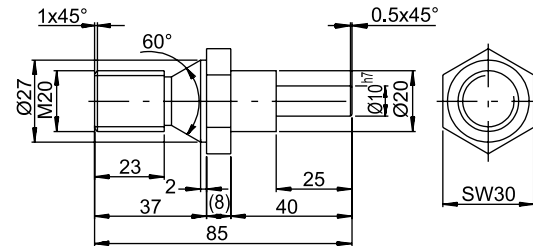
Wellenadapter M12

Bestell-Nr.: WDGWA10M12



Shaft adapter M16

Order No.: WDGWA10M16



Shaft adapter M20

Order No.: WDGWA10M20

Ordering information installation kit WDGAK58B:

Description:	Order No.:
Installation kit 10-30 VDC HTL comprising: - 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 - Shaft adapter: 08, 10, 12, 16, 20	WDGAK-58B-YYYY-H24
Installation kit 4,75 - 5VDC, TTL, RS422 comprising: - WDGI58B-10-YYYY-ABN-R05-SH8 - YYYY: with 1024, 2048, 4096 PPR 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	WDGAK-58B-YYYY-R05
Installation kit 4,75 - 5VDC, 1Vpp Sin/Cos comprising: - 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 - KD84015: 15 m ready-made cable - DSK481010 - Shaft adapter: 08, 10, 12, 16, 20	WDGAK-58B-YYYY-SIN