

## Installation Kit for frequency-control lifts WDGAK58E with end hollow 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 with 15 m ready-made shielded cable, 5 x shaft adapter

### Mechanical Data

Housing	
- Flange:	Aluminium
- Cap:	Aluminium, powder coated
- Torque Support:	
1. Spring plate	Incl. 1 spring plate WDGDS10001
Compensation:	axial: ±0.8 mm radial: ±0.2 mm
Max. operating speed:	6000 rpm

### Hollow bore (blind)

- Material:	stainless steel
- Diameter:	10
- Permitted load on shaft end:	max. 80 N radial max. 60 N axial
- Starting torque:	approx. 1.6 Ncm at ambient temperature
Attachment:	permanently attached clamping ring

### Bearings

- Type:	2 precision ball bearings
- Service life:	1x 10 <sup>9</sup> revs. at 100 % shaft load 1x 10 <sup>10</sup> revs. at 40 % shaft load 1x 10 <sup>11</sup> revs. at 20 % shaft load

### Weight:

Connections:	SH8: radial connector, 8 pin
Protection rating:	IP65

### (EN 60529)

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

### Machinery Directive: basic data safety integrity level

MTTF <sub>e</sub> :	200 a
Mission time (T <sub>M</sub> ):	25 a
Nominale service life (L <sub>10h</sub> ):	1x 10 <sup>11</sup> revs. at 6000 rpm and 20 % rated shaft load
Diagnostic coverage (DC):	0 %

Encoder-Order No.:	WDGI58E-10-YYYY-ABN-H24-SH8
	- YYYY: with 1024, 2048, 4096 PPR
	- 3 channels, A, B and zero marker pulse N
	- H24: 10 VDC up to 30 VDC HTL Power supply
	- SH8: radial connector, 8 pin

	WDGI58E-10-YYYY-ABN-R05-SH8
	- YYYY: with 1024, 2048, 4096 PPR
	- 6 channels, A, B, zero marker pulse N + Inv.
	- 5 VDC TTL Power supply with inv. output
	- SH8: radial connector, 8 pin

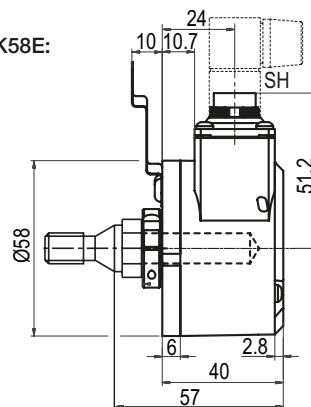
	WDGI58E-10-YYYY-AB-SIN-SH8
	- YYYY: with 1024, 2048 PPR
	- 4 channels, A, B (Sin/Cos)
	- 4,75 VDC up to 5 VDC, Power supply, 1 Vpp Sin/Cos
	- SH8: radial connector, 8 pin

YYYY: Please specify required PPR

- Easy installation on all motor shafts
- Flexible attachment possibilities
- Space-saving
- TTL, HTL, Sin/cos output
- Threads: M8, M10, M12, M16, M20

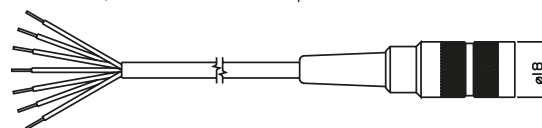
[www.wachendorff-automation.com/wdgak58e](http://www.wachendorff-automation.com/wdgak58e)

### Installation Kit WDGAK58E:



### 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.

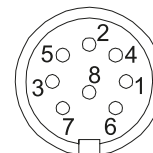


The cable has a connection as follows:

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

### 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	-



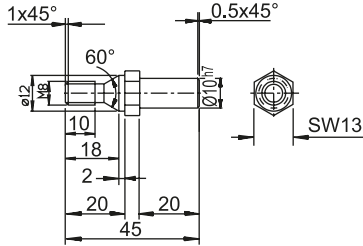
The view of the soldered side of the connector connector corresponds to the view of the pin arrangement on the encoder.

**Shaft adapters**



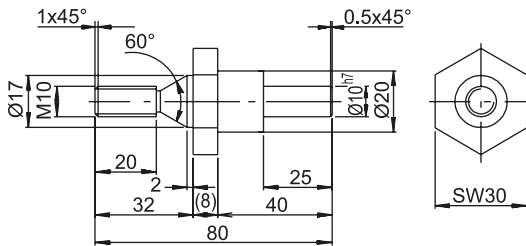
**Shaft adapters:**

The shaft adapters are screwed into an appropriate thread on the lift.



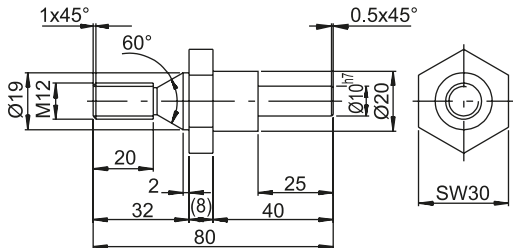
Shaft adapter M8

Order No.: WDGWA10M08



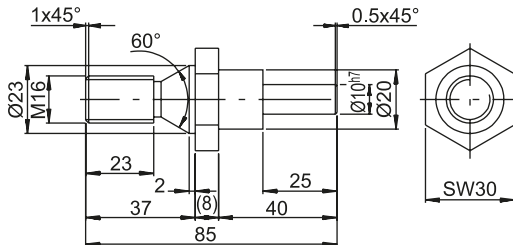
Shaft adapter M10

Order No.: WDGWA10M10



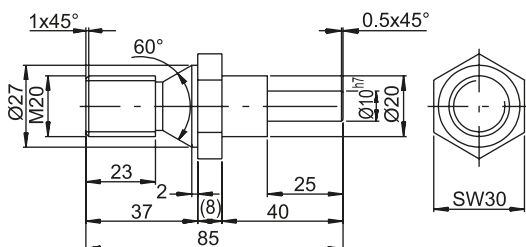
Shaft adapter M12

Order No.: WDGWA10M12



Shaft adapter M16

Order No.: WDGWA10M16



Shaft adapter M20

Order No.: WDGWA10M20

**Ordering information installation kit WDGAK58B:**

Description:	Order No.:
<b>Installation kit 10-30 VDC HTL</b> comprising: - WDG158E-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 - KD84015: 15 m ready-made cable - Shaft adapter: 08, 10, 12, 16, 20	WDGAK-58E-YYYY-H24
<b>Installation kit 4,75 - 5VDC, TTL, RS422</b> comprising: - WDG158E-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 - KD84015: 15 m ready-made cable - Shaft adapter: 08, 10, 12, 16, 20	WDGAK-58E-YYYY-R05
<b>Installation kit 4,75 - 5VDC, 1Vpp Sin/Cos</b> comprising: - WDG158E-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 - KD840SIN15: 15 m ready-made cable - Shaft adapter: 08, 10, 12, 16, 20	WDGAK-58E-YYYY-SIN

**Customs tariff number:** 90318020  
**Country of origin:** Germany