

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 10⁹ 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_d: 200 a

Mission time (T_M): 25 a

Nominale service life (L_{10h}): 1x 10¹¹ revs. at 8000 rpm and

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

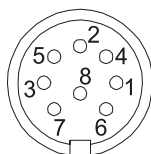
WDG158B-10-YYYY-ABN-R05-SH8
- YYYY: with 1024, 2048, 4096 PPR
- 6 channels, A, B, zero marker pulse N and inv.
- 4,75 - 5 VDC TTL, power supply
with inv. output circuit
- SH8: radial connector, 8 pin

WDG158B-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:

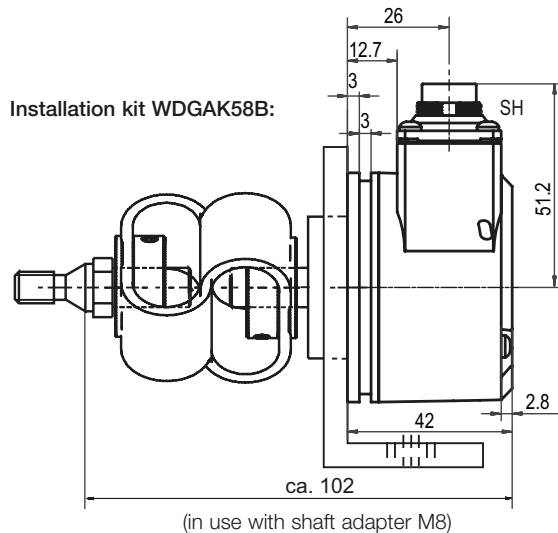
Function	PIN (HTL)	PIN (TTL)	PIN (Sine)
Positive	2	2	2
Negative	1	1	1
A	3	3	3
A inv.	-	6	6
B	4	4	4
B inv.	-	7	7
N	5	5	-
N inv.	-	8	-



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

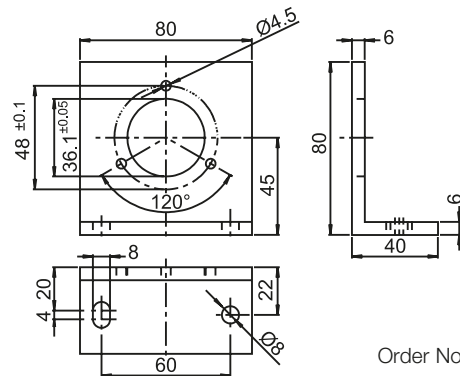
- Complete retrofit set
- Quickly and reliably fitted with the aid of the accessories
- Cost-effective modernisation solution
- TTL, HTL or sin/cos output
- Threads: M8, M10, M12, M16 und M20

www.wachendorff-automation.com/wdgak58b



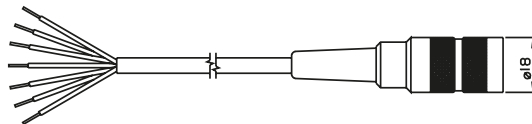
Mounting bracket:

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: ± 12°

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

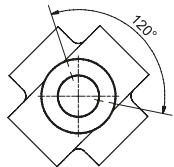
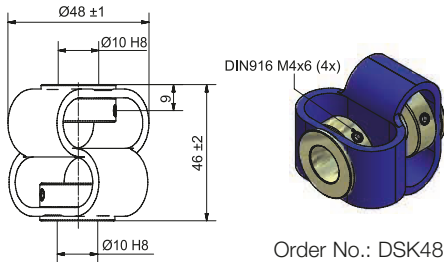
Material:

- Hub: zinc-plated
- Compensating element: polyurethan

Weight: 85 g

Fixing: DIN 916 M4x6 (4x)

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

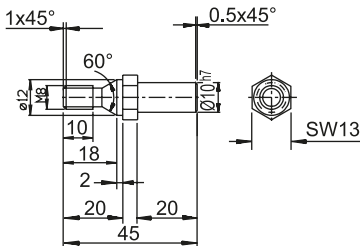


Shaft adapters



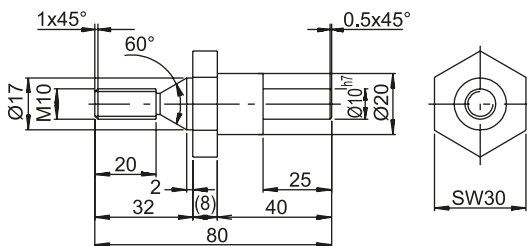
Shaft adapters:

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



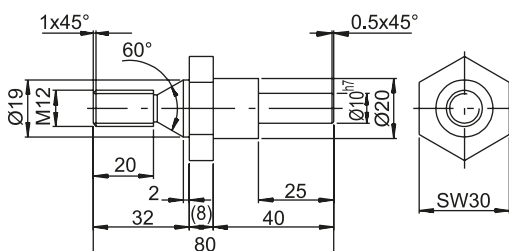
Shaft adapter M8

Order No.: WDGWA10M08



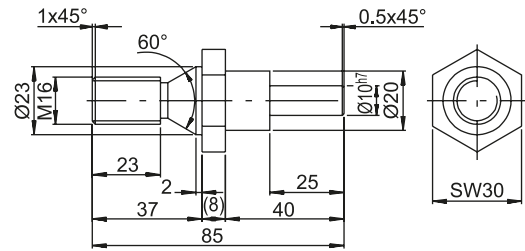
Shaft adapter M10

Order No.: WDGWA10M10



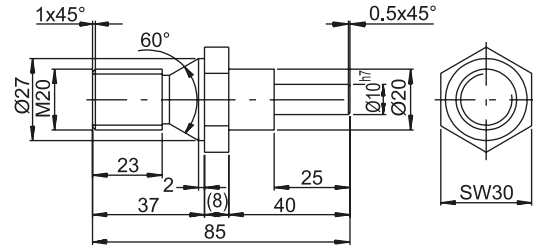
Wellenadapter M12

Bestell-Nr.: WDGWA10M12



Shaft adapter M16

Order No.: WDGWA10M16



Shaft adapter M20

Order No.: WDGWA10M20

Ordering information installation kit WDGAK58B:




Description:	Order No.:
Installation kit 10-30 VDC HTL comprising: - WDG158B-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 - 5 VDC, TTL, RS422 comprising: - WDG158B-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 - 5 VDC, 1Vpp Sin/Cos comprising: - WDG158B-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	WDGAK-58B-YYYY-SIN

Customs tariff number: 90318020
Country of origin: Germany

Montageanleitung Vollwellengeber WDG/WDGI,

Assembly instructions shaft encoder, Notice de montage codeur rotatif à arbre plein,

Instrucciones de montaje encoder ad albero pieno, istruzioni di montaggio encoders de eje saliente.

	WDGI (Stecker , connector, connecteur, conector, spina): -40 °C ... +85 °C (-40 °F ... +185 °F)		-30 °C...+80 °C (-22 °F...+176 °F)
	WDG* + WDGI** (Kabel , cable, Câble, Cable, cavo): -20 °C ... +80 °C (-4 °F ... +176 °F)		
	Option: * -40 °C ... +80 °C (-40 °F ... +176 °F) ** -40 °C ... +85 °C (-40 °F ... +185 °F)		
	1Vss (1Vpp): -10 °C ... +70 °C (14 °F ... +158 °F)		
	58T: -10 °C ... +70 °C (58T: +14 °F ... +158 °F)		



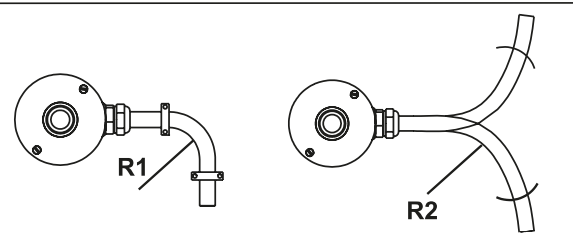
Montage nur qualifiziertes Personal, Assembly only qualified personnel,

Montage par qualifié personnel, Montaggio solo personale qualificato,

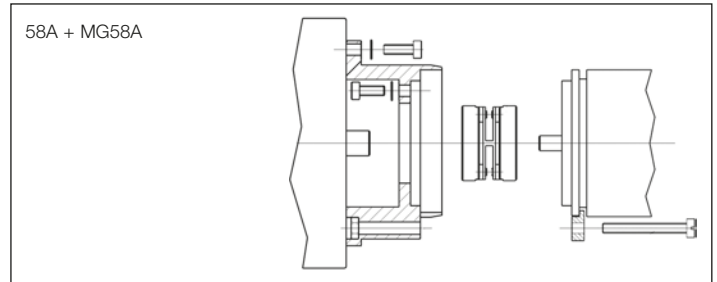
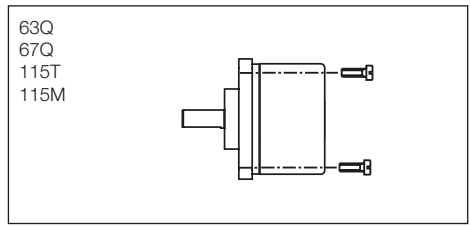
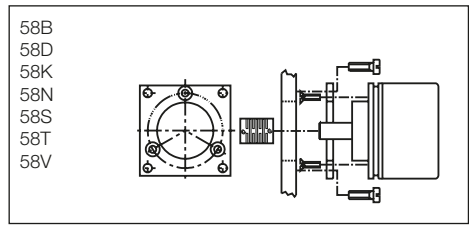
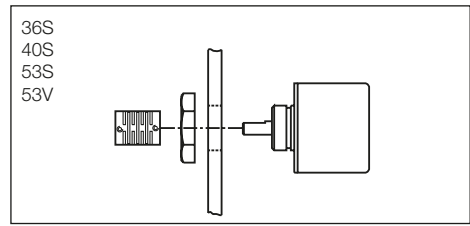
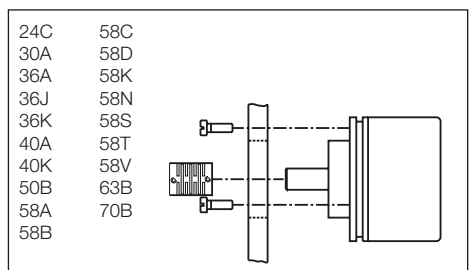
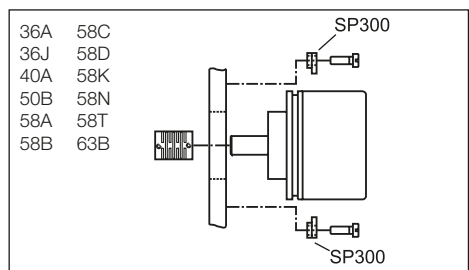
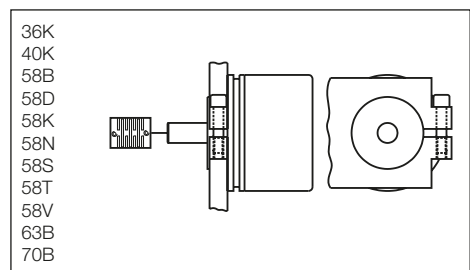
Montaje solamente personal cualificado

Sicherheitsmassnahmen/Safety instructions: Einsatz nur in Industrieumgebung und NICHT in sicherheitsrelevanten Bereich. Only for use in industrial environments and NOT for safety-relevant areas. Utilisation uniquement dans un environnement industriel et PAS dans un domaine lié à la sécurité. Utilicelo sólo en entornos industriales y NO en áreas relevantes para la seguridad. Utilizzare solo in ambienti industriali e NON in aree riguardanti la sicurezza.

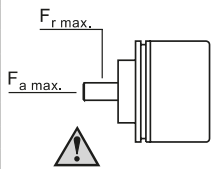
Power supply:
Class 2 only



Kabel ø cable, Câble, Cable, cavo	R1	R2	Temperatur Temperature, Température, Temperatura, Temperatura
≤ 7 mm	31,5 mm	94,5 mm	T > -20 °C (-4 °F)
> 7 mm	41,5 mm	124,5 mm	T > -20 °C (-4 °F)
≤ 7 mm	46,5 mm	139,5 mm	T > -40 °C (-40 °F)
> 7 mm	62,3 mm	186,9 mm	T > -40 °C (-40 °F)



Standard (no IP67)	F _r max.	F _a max.
24C, 30A, 36A/K/S, 40A/K/S, 58K	80 N	50 N
36J	300 N	300 N
50B	120 N	70 N
53S, 53V	20 N	10 N
58A	125 N	70 N
58B, 58N, 58T, 63B/Q, 67Q	220 N	120 N
WDG58D	400 N	400 N
WDGI58D	500 N	500 N
70B	200 N	150 N
115T/M, 58C	200 N	120 N
58S, 58V	100 N	100 N



Gewinde (8.8) Screw thread, Filet, Rosca, filetto
M2.5
M3
M4
M5, M14
M6

Empfohlenes Anzugsdrehmoment Recommended starting torque Moment de rotation recommandé appliqué à l'écrou Par de apriete recomendado coppia di spunto consigliata
1.5 Nm
1 Nm
2 Nm
3 Nm
6 Nm
8 Nm

Frühwarnausgang Early-warning output Sortie d'alerte Salida de advertencia prematura uscita di preavvertimento	IRLED	IRLED
Schaltung Circuit Couplage Conmutación collegamento	G24, I24, G05, I05, 524	high low

