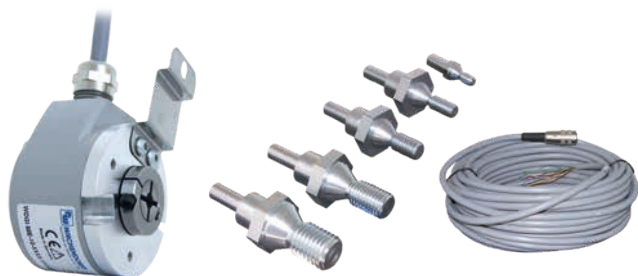


Installation Kit for frequency-control lifts WDGAK58E with end hollow shaft encoder



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
- Starting torque: approx. 1.6 Ncm at ambient temperature
- Attachment: permanently attached clamping ring

Bearings

- Type: 2 precision ball bearings
- Service life: 1x 10^9 revs. at 100 % shaft load
- 1x 10^{10} revs. at 40 % shaft load
- 1x 10^{11} revs. at 20 % shaft load
- approx. 220 g

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_a: 200 a

Mission time (T_M): 25 a

Nominale service life 1x 10^{11} revs. at 6000 rpm and

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

Diagnostic coverage (DC): 0 %

Encoder-Order No.: WDG158E-10-YYYY-ABN-M35-SH8

- YYYY: with 1 up to 16384 PPR

- 6 channels, A, B, zero marker pulse N + Inv.

- 4.75 VDC up to 30 VDC HTL (TTL at 5 VDC) with inv. output

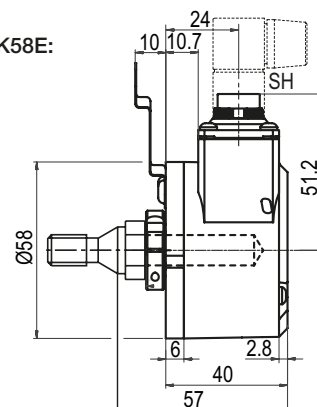
- SH8: radial connector, 8 pin

YYYY: Please specify required PPR

- Easy installation on all motor shafts
- Flexible attachment possibilities
- Space-saving
- HTL output (TTL at 5 VDC)
- Threads: M8, M10, M12, M16, M20

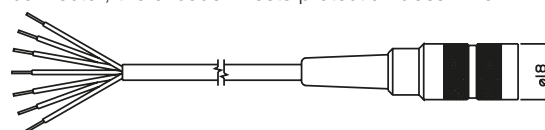
www.wachendorff-automation.com/wdgak58e

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.



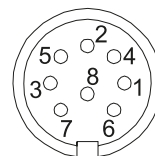
The cable has a connection as follows:

Function	Colour
Positive	brown
Negative	white
A	green
A inv.	red
B	yellow
B inv.	black
N	gray
N inv.	violet
Shield:	cable braiding

Order No: KD84015

Pin identification SH8:

Function	PIN
Positive	2
Negative	1
A	3
A inv.	6
B	4
B inv.	7
N	5
N inv.	8



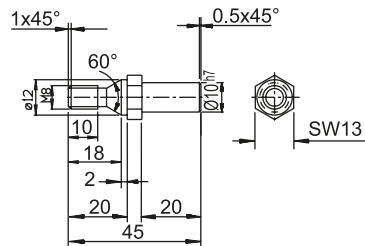
The view of the soldered side of the connector connector corresponds to the view of the pin arrangement on the encoder.

Shaft adapters



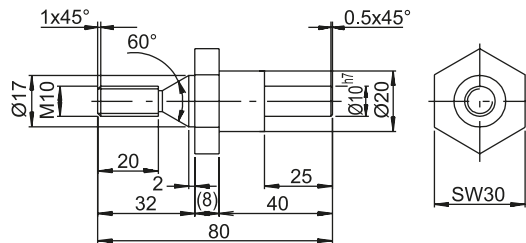
Shaft adapters:

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



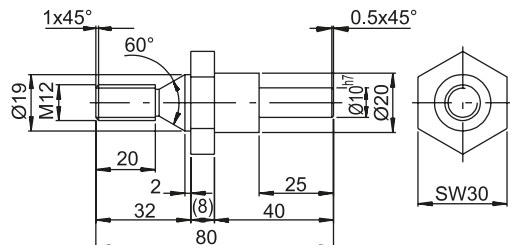
Shaft adapter M8

Order No.: WDGWA10M08



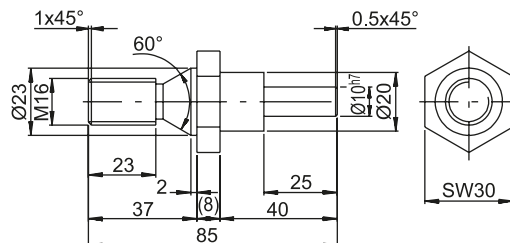
Shaft adapter M10

Order No.: WDGWA10M10



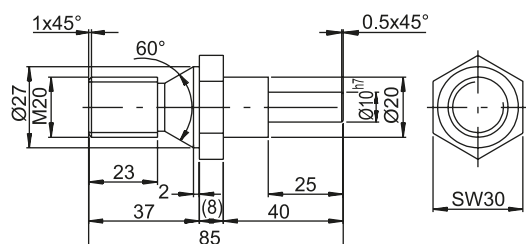
Shaft adapter M12

Order No.: WDGWA10M12



Shaft adapter M16

Order No.: WDGWA10M16



Shaft adapter M20

Order No.: WDGWA10M20

Note:

YYYY: Please specify required PPR.

Ordering information installation kit WDGAK58B:

Description:	Order No.:
Installation kit comprising: - WDGI58E-10-YYYY-ABN-M35-SH8 - YYYY: with 1 PPR to 16.384 PPR 6 channels, A, B, N, A, B, N - M35: 4,75 VDC up to 30 VDC HTL with inv. output circuit (TTL at 5 VDC, RS422) - SH8: radial connector, 8 pin - KD84015: 15 m ready-made cable - Shaft adapter: 08, 10, 12, 16, 20	WDGAK58EYYYYM35

Customs tariff number: 90318020

Country of origin: Germany

Montageanleitung Hohlwellengeber WDG/WDGI

Assembly instructions hollowshaft encoder, Notice de montage codeur rotatif à arbre creux, Instrucciones de montaje encoder ad albero cavo, istruzioni di montaggio encoders de eje hueco.

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 im 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. Utilízelo 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/LPS only

DIN EN 100015-1

58H/E 40E ArtikelNr., Item number, Numéro d'article, Número de artículo : WDGDS10001

d/mm	Lmin	Lmax	D
58H 6, 6.35 (1/4"), 7, 8, 9.525 (3/8"), 10, 12, 12.7 (1/2"), 14, 15	11	56	
58E opt. 6, 6.35 (1/4"), 7, 8, 9.525 (3/8"), 10, 12, 15	11	39	56
58E magn. 6, 6.35 (1/4"), 7, 8, 9.525 (3/8"), 10, 12	11	16	56
40E 6	11	20	50

M5 (8.8), Ma=3Nm
M3 (8.8), Ma=1Nm

80H ArtikelNr., Item number, Numéro d'article, Número de artículo : WDGDS10001

d/mm	Lmin	Lmax	D
80H 10, 12, 14, 15, 16, 18, 20, 25, 27	11	56	

M5 (8.8), Ma=3Nm
2x M4 (8.8), Ma=2Nm

100I/K ArtikelNr., Item number, Numéro d'article, Número de artículo : WDGDS10012

d/mm	Lmin	Lmax	D
WDG100I 25, 30, 32, 38, 40, 42	11	56	
WDG100K 45	11	39	56

M6 (8.8), Ma=3Nm
M4 (8.8), Ma=2Nm

Frühwarnausgang Early-warning output, Sortie d'alerte, Salida de advertencia prematura uscita di preavvertimento

OPEN-Collector

IRLED

IRLED

145H -> G24/I24/G05/I05; 80H -> SIF/G24/I24/G05/I05/524; 100G/H/I/K -> SIF

58H -> G24/I24/G05/I05/524; 58E -> G24/I24/G05/I05/524

Erdschleifen vermeiden, Avoid ground loops, Eviter les boucles de masse, Evitar bucles de tierra, Evitare loop di massa

Frühwarnausgang	OPEN-Collector	IRLED	IRLED
145H -> G24/I24/G05/I05; 80H -> SIF/G24/I24/G05/I05/524; 100G/H/I/K -> SIF	low	high	high
58H -> G24/I24/G05/I05/524; 58E -> G24/I24/G05/I05/524	high	low	low

WDGI (Stecker, connector, connecteur, conector, spina):
-40 °C ... +85 °C (-40 °F ... +185 °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: -10 °C ... +70 °C (14 °F ... +158 °F)

-30 °C ... +80 °C (-22 °F ... +176 °F)

Kabel ø, cable, Câble, Cable, cavo	R1	R2	Temperatur, Temperature, Température, 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)

WDGI36E ArtikelNr., Item number, Numéro d'article, Número de artículo : WDGDS10016

d/mm	Lmin	Lmax	D
WDGI36E 6, 6.35 (1/4")	8	17	42
WDGI36E 8, 10, 12, 14, 15	10	14.5	42

Ma = 0.5 Nm
M3 (8.8) Ma = 1 Nm
d = Ø 6 mm, 1/4"

100H/G ArtikelNr., Item number, Numéro d'article, Número de artículo : WDGDS10001

d/mm	Lmin	Lmax	D
100H/G 25, 12 (=25.4), 28, 30, 32, 35, 36, 38, 40, 42, 45	11	56	

M5 (8.8), Ma=3Nm
2x M4 (8.8), Ma=2Nm

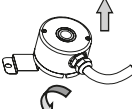
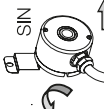
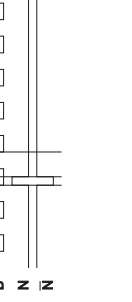
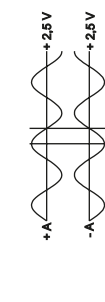
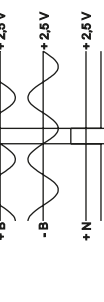
145H ArtikelNr., Item number, Numéro d'article, Número de artículo : WDGDS10001

d/mm	Lmin	Lmax	D
145H 45, 48, 50, 55, 60, 65, 72	11	56	

3x M5 (8.8), Ma=3Nm
M4 (8.8), Ma=2Nm

Standard	F _r max.	F _a max.	Standard	F _r max.	F _a max.
WDGI36E	80 N	50 N	WDGI58E optisch, optical, optique, óptico, ottico	80 N	60 N
WDG40E	100 N	50 N	WDGI58E magnetisch, magnetic, magnétique, magnético, magnetico	80 N	50 N
			WDGI58H	80 N	60 N
			WDG 80H/100H/100I/100G/145H	200 N	100 N

	Stecker, connector, Fiche, Connector, spina										M8-				M12-Sensorstecker, sensor-connector, : Fiche de palpeur, Conecto de sonda, spina sensore				Kabel, cable, Câble, Cable, cavo			
	S15 axial, SH5 radial, 5-pin	S16 axial, SH6 radial, 6-pin	S2 axial, S3 radial, 7-pin	S8 axial, SH8 radial, 8-pin	SH12 axial, SH12 radial, 12-pin	S4 axial, S5 radial, 12-pin	S6 radial, 6-pin	S7 axial, 4-pin	SK6 axial, 6-pin	SK8 axial, 8-pin	SC4 axial, 4-pin	SC5 axial, 5-pin	SC8 axial, 8-pin	SB12 axial, SC12 radial, 12-pin	K1/K7/L7 K2/L2 axial; K3/L3 radial T3 tangential							
Schaltung Circuit Couplage Commutación collegamento	F/H/05 F/H24 H30 N35	G/F/H/05 G/F/H24 H30 N35	G/F/H/05 H30 N35	F/H05 F/H24 H30 N35	G/F/H05 G/F/H24 H30 N35	G/F/H/05 G/F/H24 H30 N35	F/H/05 F/H24 H30 N35	N05 N30	N05 N30	F/H/05 F/H24 H30 N35	F05 H05 F24 H24 H30 N35	P05 R05 P24 R24 H30 N35	S H05 i u s	G/F/05/ H05 G/F/H24/ H24 H30 N35	G/F/H05 R30 M05 M30 N05 N30 N35	M05 M30 R24 M35	I/R/P05 I/R/P24 245 524 645 M35	SIN SIF	I/R/P05 I/R/P24 245 524 645 R30 M35	I/R/P05 I/R/P24 245 524 645 R30		
Minus U-	1	6	1	1	K/L	K/L	1	3	1	1	3	1	1	3	WH	WH	WH	WH	WH	WH		
Plus U+	2	1	2	2	M/B	M/B	2	2	2	2	1	2	2	1	BN	BN	BN	BN	BN	BN		
A	3	2	3	3	E	E	3	4	3	3	4	3	3	4	GN	GN	GN	GN	GN	GN		
B	4	4	4	4	H	H	4	5	4	4	4	4	4	6	YE	YE	YE	YE	YE	YE		
N	5	3	5	5	C	C	5	1	5	5	-	5	5	8	GY	GY	GY	GY	GY	GY		
Frühwarn- ausgang*1	-	5	6	-	G	G	-	-	-	-	-	-	-	5	PK	-	-	PK	RD	PK		
A inv.	-	-	-	-	-	F	-	-	-	6	-	-	6	4	-	RD	RD	RD	YE	RD		
B inv.	-	-	-	-	A	-	-	-	-	7	-	-	7	6	-	PK	BK	BK	BU	BU		
N inv.	-	-	-	-	D	-	-	-	-	8	-	-	8	8	-	BU	VT	VT	VT	VT		
n. c.	-	-	7	6, 7, 8	A, D, F, J	1, 2, 4, 6, 7, 9 Sinus 2, 9, 11	-	6	6, 7, 8	-	-	6, 7, 8	-	2, 7, 9, 10, 11, 12	-	-	-	-	-	-		
Schirm*2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	WH	WH	WH	WH	WH	WH		

 		 																																													
 		 																																													
0° 30° 360° A A B B N N		SIN, SIF +2.5 V -2.5 V +2.5 V -2.5 V +2.5 V -2.5 V																																													
<table> <tr> <td>R30, H30, N30, M30</td><td>U_B</td><td>I_{supply}</td><td>Output</td><td>I_{OUT max}</td></tr> <tr> <td rowspan="2">N35, M35</td><td>5...30 VDC</td><td>≤70 mA</td><td>H>U_B-10% U_B L<2.5VDC</td><td rowspan="2">40 mA</td></tr> <tr> <td>4,75...30 VDC</td><td>N05, N30, N35, M05, M30, M35</td><td>H>U_B-2.5VDC L<2.5VDC</td></tr> <tr> <td>G24, H24, F24, I24, R24, P24</td><td rowspan="2">10...30 VDC</td><td>≤ 40 mA</td><td>H>2.5VDC L<1,2VDC</td><td>N05, N30, M05, M30 = 30 mA</td></tr> <tr> <td>245, 524, 645</td><td>F05, P24, F05, P24, 645</td><td>H>2.5VDC L<0,5VDC</td><td></td></tr> <tr> <td>G05, H05, F05, I05, R05, N05, M05, P05</td><td>4,75...5.5 VDC</td><td>≤ 100 mA</td><td></td><td></td></tr> <tr> <td>Bemerkungen Remarks Notas Observaciones osservazioni</td><td></td><td>Ohne Last Without load resistance Sans charge Sin carga senza carico</td><td>Pro Kanal Per channel Par canal Por canal Per canale</td><td></td></tr> </table>		R30, H30, N30, M30	U _B	I _{supply}	Output	I _{OUT max}	N35, M35	5...30 VDC	≤70 mA	H>U _B -10% U _B L<2.5VDC	40 mA	4,75...30 VDC	N05, N30, N35, M05, M30, M35	H>U _B -2.5VDC L<2.5VDC	G24, H24, F24, I24, R24, P24	10...30 VDC	≤ 40 mA	H>2.5VDC L<1,2VDC	N05, N30, M05, M30 = 30 mA	245, 524, 645	F05, P24, F05, P24, 645	H>2.5VDC L<0,5VDC		G05, H05, F05, I05, R05, N05, M05, P05	4,75...5.5 VDC	≤ 100 mA			Bemerkungen Remarks Notas Observaciones osservazioni		Ohne Last Without load resistance Sans charge Sin carga senza carico	Pro Kanal Per channel Par canal Por canal Per canale		<table> <tr> <td>U_B</td><td>I_{supply}</td><td>Output</td></tr> <tr> <td>4,75...5,5 VDC</td><td>≤100mA</td><td>1V peak to peak +/- 25%</td></tr> <tr> <td></td><td>Ohne Last Without load resistance Sans charge Sin carga senza carico</td><td>Symmetrisch an Symmetrically at resistance Symétrique à Simétrico en simmetrico su Z_i=120 Ohm</td></tr> <tr> <td>Bemerkungen Remarks Notas Observaciones osservazioni</td><td></td><td></td></tr> </table>		U _B	I _{supply}	Output	4,75...5,5 VDC	≤100mA	1V peak to peak +/- 25%		Ohne Last Without load resistance Sans charge Sin carga senza carico	Symmetrisch an Symmetrically at resistance Symétrique à Simétrico en simmetrico su Z _i =120 Ohm	Bemerkungen Remarks Notas Observaciones osservazioni		
R30, H30, N30, M30	U _B	I _{supply}	Output	I _{OUT max}																																											
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G24, H24, F24, I24, R24, P24	10...30 VDC	≤ 40 mA	H>2.5VDC L<1,2VDC	N05, N30, M05, M30 = 30 mA																																											
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Bemerkungen Remarks Notas Observaciones osservazioni																																															
*1 Frühwarnausgang nur bei Early-warning output only for Sortie d'alerte précoce Salida de advertencia prematura uscita di preavvertimento G24, I24, G05, I05, 524, SIF		*2 Schirm Shield Blindage Malla Schermo																																													
Steckergehäuse aus Kunststoff (S7) Plastic connector housing (S7) Boîtier de connexion en matière plastique (S7) Caja de conector de plástico (S7) scatola prese in plastica (S7)		Steckergehäuse/Schirm mit Gebergehäuse leitend verbunden. (Nicht S7, K1, K2, K3) Connector housing/shield electrically connected to encoder housing (not S7, K1, K2, K3) Boîtier de connexion/Ecran avec boîtier d'émetteur liés de manière conductrice (No S7, K1, K2, K3) Caja de conector/Malla conectada en conductancia con caja de transmisor (No S7, K1, K2, K3) Scatola prese/Schermo con scatola trasmettitore collegata da condurre (No S7, K1, K2, K3)																																													
WH: weiss, white, blanc, bianco BN: braun, brown, brun, marrón, marrone GN: grün, green, vert, verde, verde YE: gelb, yellow, jaune, amarillo, giallo GY: grau, grey, gris, gris, grigio PK: rosa, pink, rose, rosa, rosa RD: rot, red, rouge, rojo, rosso BK: schwarz, black, noir, negro, nero BU: blau, blue, bleu, azul, blu VT: violett, violet, violet, violeta, violetto Litze: Litze, Flex, Toron, Cordón, Cavetto		WACHENDORFF www.wachendorff-automation.de www.wachendorff-automation.com Technical Support Germany: Tel.: +49 (0)67 22 /99 65 131 Fax: +49 (0)67 22 /99 65 70 eMail: support-wa@wachendorff.de Other countries, please contact your distributor. Autres pays, veuillez contacter votre distributeur. Otros países, rogamos contacten a su distribuidor. Per gli altri paesi si prega di contattare il vostro distributore.																																													