



Online Data sheet

Encoder WDG 40A

www.wachendorff-automation.com/wdg40am

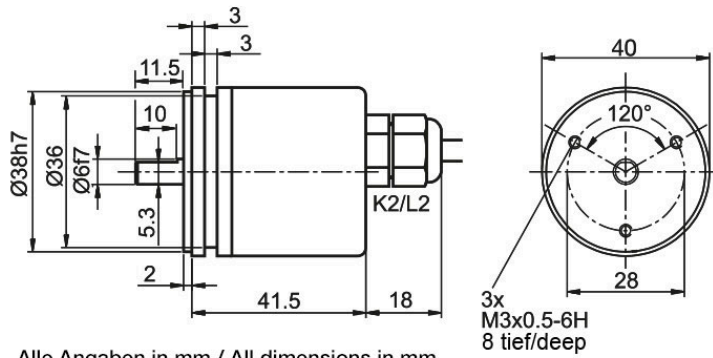
Discontinued product

Wachendorff Automation

... systems and encoders

- Complete systems
- Industrial rugged encoders to suit your application
- Standard range and customer versions
- Maximum permissible loads
- 48-hour express production
- Made in Germany
- Worldwide distributor network

Cable connection K2, L2 with 2 m cable



Alle Angaben in mm / All dimensions in mm

Description

K2 axial, shield not connected

L2 axial, shield connected to encoder housing

ABN inv. poss.

•

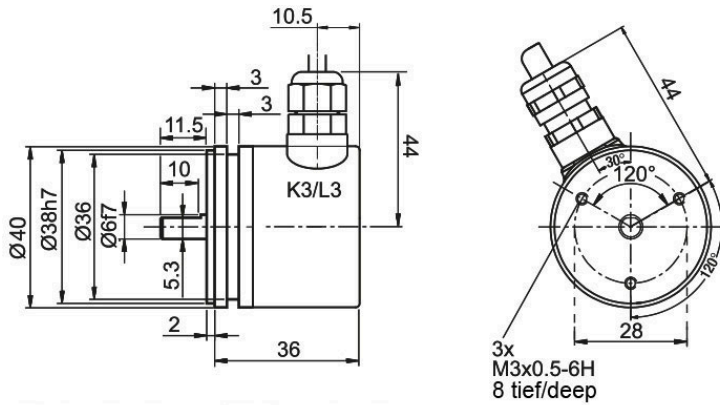
•

Assignments

	K2, L2	K2, L2
Circuit	N35	M35
GND	WH	WH
(+) Vcc	BN	BN
A	GN	GN
B	YE	YE
N	GY	GY
-	-	-
A inv.	-	RD
B inv.	-	BK
N inv.	-	VT
Shield	flex	flex

Discontinued product

Cable connection K3, L3 with 2 m cabel



Alle Abmessungen in mm / All dimensions in mm

Description

K3	radial, shield not connected
L3	radial, shield connected to encoder housing

ABN inv. poss.

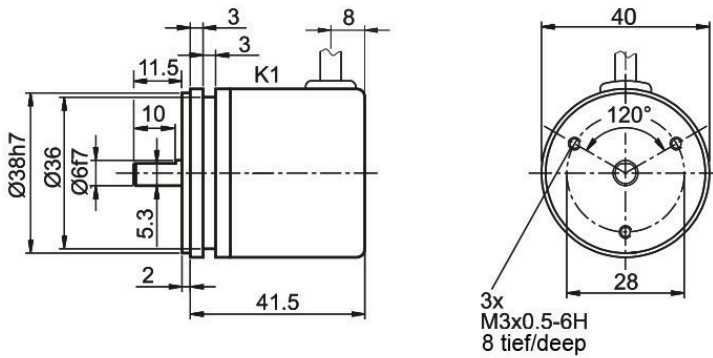
-
-

Assignments

	K3, L3	K3, L3
Circuit	N35	M35
GND	WH	WH
(+) Vcc	BN	BN
A	GN	GN
B	YE	YE
N	GY	GY
-	-	-
A inv.	-	RD
B inv.	-	BK
N inv.	-	VT
Shield	flex	flex

Discontinued product

Cable K1 (IP40) with 2 m cable



Alle Abmessungen in mm / All dimensions in mm

Description

K1 radial, shield not connected (IP40)

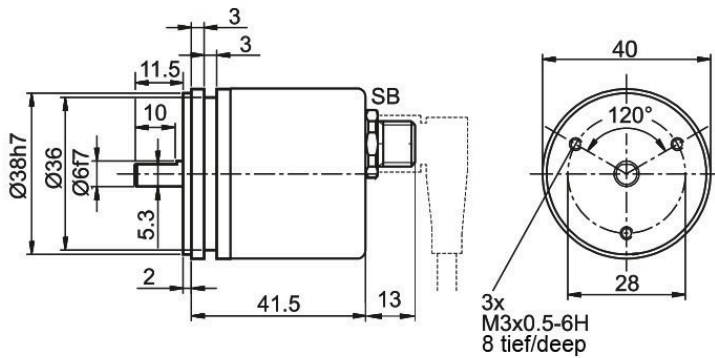
ABN inv. poss.

•

Assignments		
	K1	K1
Circuit	N35	M35
GND	WH	WH
(+) Vcc	BN	BN
A	GN	GN
B	YE	YE
N	GY	GY
-	-	-
A inv.	-	RD
B inv.	-	BK
N inv.	-	VT
Shield	flex	flex

Discontinued product

Sensor connector (M12x1) SB, 4-, 5-, 8-, 12-pin



Alle Abmessungen in mm / All dimensions in mm

Description	ABN inv. poss.
SB4 axial, 4-pin, Connector connected to encoder housing	-
SB5 axial, 5-pin, Connector connected to encoder housing	-
SB8 axial, 8-pin, Connector connected to encoder housing	•
SB12 axial, 12-pin, Connector connected to encoder housing	•

Assignments				
	SB4	SB5	SB8	SB12
	4-pin	5-pin	8-pin	12-pin
Circuit	N35	N35	M35	M35
GND	3	3	1	3
(+) Vcc	1	1	2	1
A	2	4	3	4
B	4	2	4	6
N	-	5	5	8
-	-	-	-	-
A inv.	-	-	6	9
B inv.	-	-	7	7
N inv.	-	-	8	10
n. c.	-	-	-	2, 5, 11, 12
Shield	-	-	-	-

Options

Low-friction bearings

The encoder WDG 40A is also available as a particularly smooth-running low-friction encoder. The starting torque is thereby changed to 0.1 Ncm [0.141 in-ozf] and the protection class at the shaft input to IP50.

Order key

AAC

IP67 all around

The encoder WDG 40A can be supplied in a full IP67 version.

Order key

AAO

Max. RPM: 3500 rpm

Permitted Shaft-Loading, axial: 30 N [3.059 kp], 3.059 kp

Permitted Shaft-Loading, radial: 45 N [4.589 kp], 4.589 kp

Max. PPR: 1024 ppr

Starting-torque: approx. 1.2 Ncm [1.699 in-ozf] at ambient temperature, approx. 1.699 in-ozf at ambient temperature

Low temperature

The encoder WDG 40A with the output circuit types M35, N35 is also available with the extended temperature range -40 °C up to +80 °C [-40 °F up to +176 °F] (measured at the flange).

Order key

ACA

Cable length

The encoder WDG 40A can be supplied with more than 2 m cable. The maximum cable length depends on the supply voltage and the frequency; see <https://www.wachendorff-automation.com/download-gtd-incremental-encoders/>

Please extend the standard order code with a three figure number, specifying the cable length in decimetres.

Example: 5 m cable = 050

Order key

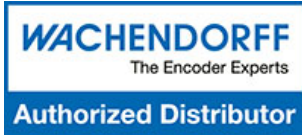
XXX = Decimeter

Discontinued product

Example Order No.	Type				Your encoder	
WDG 40A	WDG 40A				WDG 40A	
Pulses per revolution PPR:						
1024	1-1024 Other PPRs on request					
Channels:						
ABN	AB, ABN bis 1024 I/U					
Output circuit						
M35	Resolution PPR	Power supply VDC	Output circuit	-	Order key	
	up to 1024	5 - 30	HTL, inv. (TTL/RS422 comp. at 5 VDC)	-	M35	
		5 - 30	HTL (TTL at 5 VDC)	-	N35	
Electrical connections						
K2	Description			ABN inv. poss.	Order key	
	Cable: length (2 m standard, WDG 58T: 1 m)					
	radial, shield not connected (IP40)			•	K1	
	axial, shield not connected			•	K2	
	axial, shield connected to encoder housing			•	L2	
	radial, shield not connected			•	K3	
	radial, shield connected to encoder housing			•	L3	
	Connector: (shield connected to encoder housing)					
	sensor-connector, M12x1, 4-pin, axial			-	SB4	
	sensor-connector, M12x1, 5-pin, axial			-	SB5	
	sensor-connector, M12x1, 8-pin, axial			•	SB8	
	sensor-connector, M12x1, 12-pin, axial			•	SB12	
Options						
Description			Order key			
Low-friction bearings			AAC			
IP67			AAO			
Low temperature			ACA			
Without option			Empty			
Cable length			XXX = Decimeter			

Example Order No.=	WDG 40A	1024	ABN	M35	K2		WDG 40A					Your encoder
---------------------------	---------	------	-----	-----	----	--	---------	--	--	--	--	---------------------

Discontinued product



For further information please contact our local distributor.
Here you find a list of our distributors worldwide.
<https://www.wachendorff-automation.com/>

Discontinued product

WACHENDORFF

Wachendorff Automation GmbH & Co. KG
Industriestrasse 7 • 65366 Geisenheim
Germany

Phone: +49 67 22 / 99 65 25
E-Mail: wdg@wachendorff.de
www.wachendorff-automation.de

