

Accessories

Our accessories for motors include power-on brakes and spring-applied brakes, optical and magnetic encoders as well as integrated and external control electronics for targeted use.

In the tables presented on the following pages you will find a division into the individual segments. Further choices for you result from this division.





Accessoires

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Brakes

Spring-applied brakes



DC-Motors

	Torque	M28	M36	M42	M48	M63	M80
B37	0,24 Nm			•			
B47	0,5 Nm			•	•	-	-
B56	1,0 Nm				•	•	•
B60*	1,0 Nm				-	•	•

EC-Motors

	Torque	ECM35	ECM42	ECM48	ECM63	ECMa63	ECM75
B37	0,24 Nm	•	•				
B47	0,5 Nm		•	•	-	-	
B56	1,0 Nm			-	•	•	•
B60*	1,0 Nm			-	•	•	•

* KEB B60: Especially for pool cover (caoutchouc covering to protect against moisture)

Power-on brakes



DC-Motors

	Torque	M28	M36	M42	M48	M63	M80
ASB32	0,75 Nm			•			
ASB40	1,5 Nm					•	•
ASB31	0,6 Nm				-	•	-

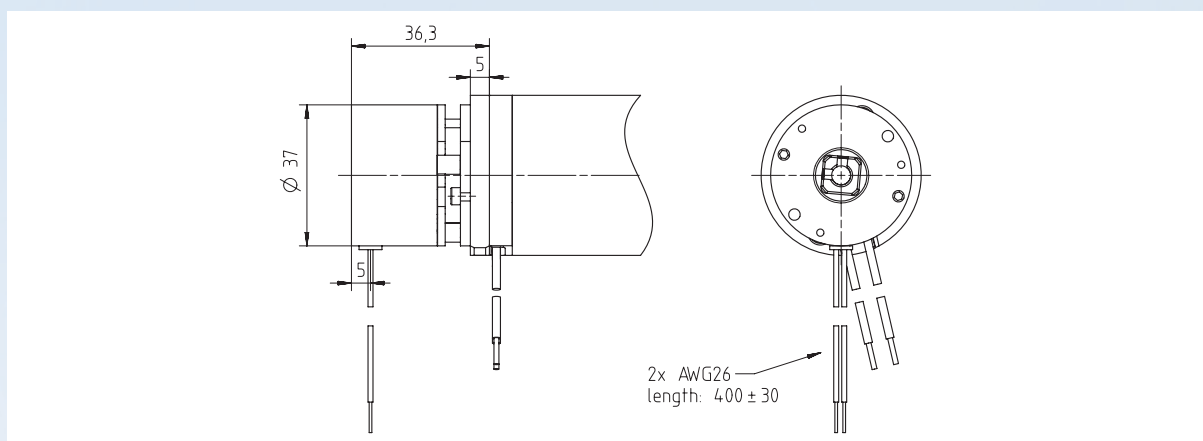
EC-Motors

	Torque	ECM35	ECM42	ECM48	ECM63	ECMa63	ECM75
ASB32	0,75 Nm	•	•				
ASB40	1,5 Nm				•	•	•
ASB31	0,6 Nm			-	•	•	-

• = Application - = possible but no current project

Brake B37 for motor series M42

- Electromagnetic fail-safe spring-applied brake
- Chromated coil housing
- Axial stroke max. 0.5 mm
- Degree of protection IP00



Application on request

Mechanical Data

Holding torque	Seperate time	Link time	max. speed	Weight	Temperature range
[Ncm]	[ms]	[ms]	[1/min]	[kg]	[°C]
24	17	11	5000	0,2	-40 to +105

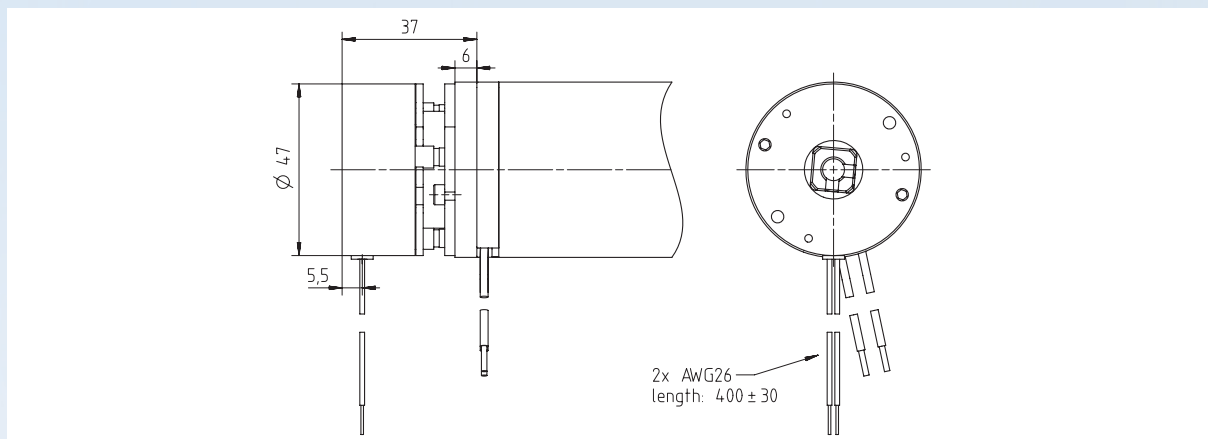
Electrical Data

Voltage	Power	Current	Resistance
[VDC]	[W]	[A]	[Ω]
24	5	0,21	114

Stand: 10. September 2014 – changes reserved

Brake B47 for motor series M48

- Electromagnetic fail-safe spring-applied brake
- Chromated coil housing
- Axial stroke max. 0.5 mm
- Degree of protection IP00
- optional hand breather



Application on request

Mechanical Data

Holding torque	Seperate time	Link time	max. speed	Weight	Temperature range
[Ncm]	[ms]	[ms]	[1/min]	[kg]	[°C]
50	17	8	5000	0,25	-40 to +105

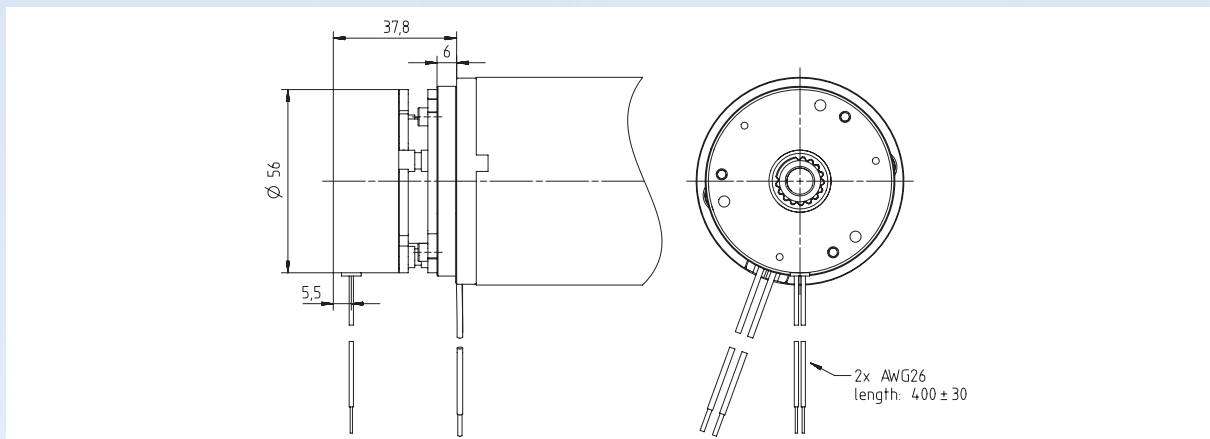
Electrical Data

Voltage	Power	Current	Resistance
[VDC]	[W]	[A]	[Ω]
24	6,6	0,275	87

Stand: 10. September 2014 – changes reserved

Brake B56 for motor series M63

- Electromagnetic fail-safe spring-applied brake
- Chromated coil housing
- Degree of protection IP00



Application on request

Mechanical Data

Holding torque	Seperate time	Link time	max. speed	Weight	Temperature range
[Ncm]	[ms]	[ms]	[1/min]	[kg]	[°C]
100	18	12.5	5000	0,4	-40 to +105

Electrical Data

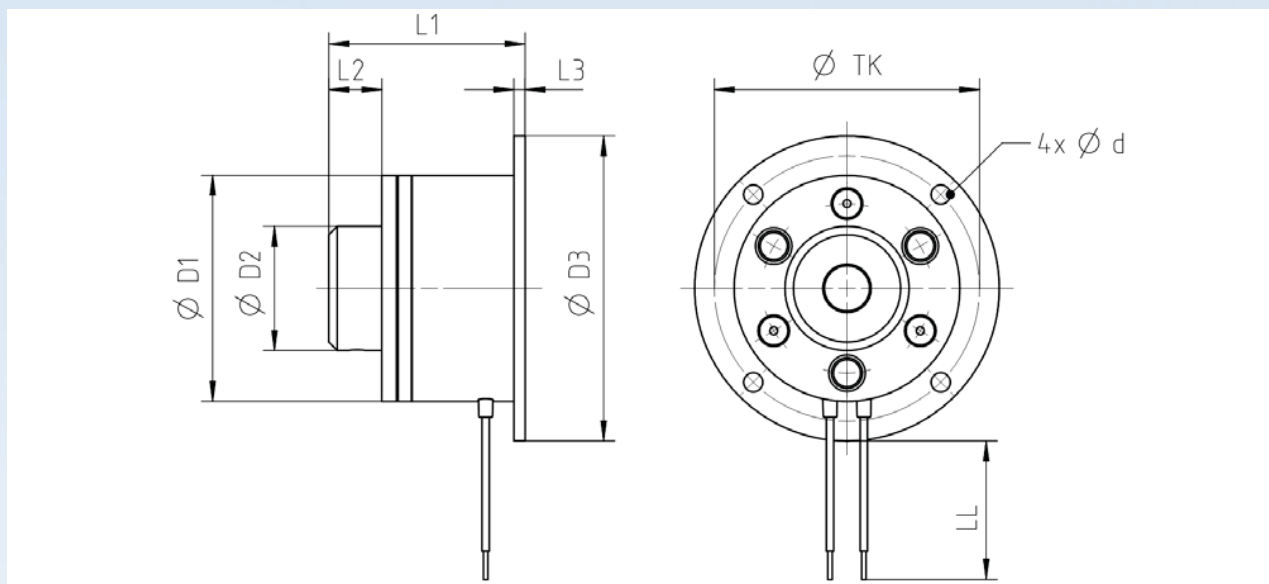
Voltage	Power	Current	Resistance
[VDC]	[W]	[A]	[Ω]
24	9	0,375	64

Stand: 10. September 2014 – changes reserved

Power-on brakes

ASB31, ASB32, ASB40

- Electromagnetic operating current brake
- Protection IP 00, optional IP65
- Chromated housing



Application on request

Technical Data

Brake	Holding torque	Voltage	Power	Temperature range	Weight	max. speed	t1	t2
[x]	[Ncm]	[V]	[W]	[°C]	[kg]	[1/min]	[ms]	[ms]
ASB32	75	24	6	-40 to +105	0,1	10000	8	4
ASB40	150	24	8	-40 to +105	0,15	10000	8	5
ASB31	60	24	6	-40 to +105	0,15	10000	15	3

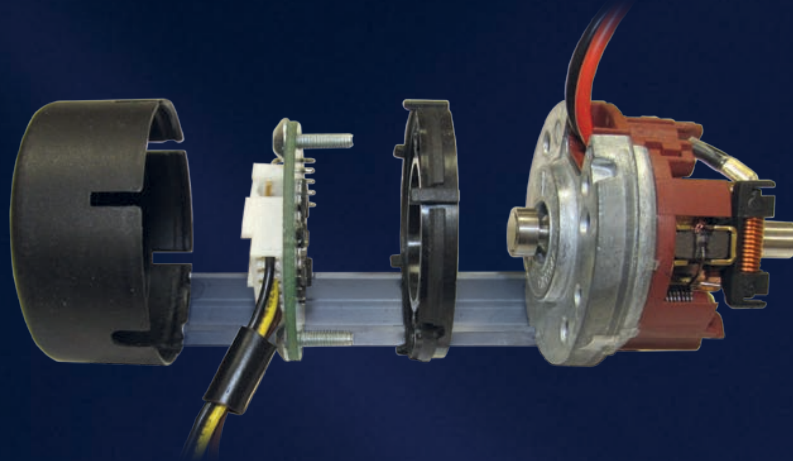
t1 = turn on time, t2 = break time

Dimensions

Brake	L1	L2	L3	D1	D2	D3	LL	Ø TK	Ø d
[x]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
ASB32	29,1	8	2	32	16	45	400	38	3,4
ASB40	34,7	9,4	2	40	22	54	400	47	3,4
ASB31	25,35	6	1,5	31	13	50	300	40	5,5

Stand: 13. November 2014 – changes reserved

Magnetic encoders



- IGM: 1 / 2 / 4 / 12
- IGM8 - 1024
- IGMi: 2 / 4 / 12 (i=inside motor housing)

Impulses [x]	1	2	4	8	12
IGM X/1	•	•	•	•	•
IGM x/2	•	•	•	-	•
IGMi X/2*	•	•	•	-	•
IGM8-1024	Impulses are selectable in typical bit steps from 8 - 1024				

* combinable easy and reliable with brake

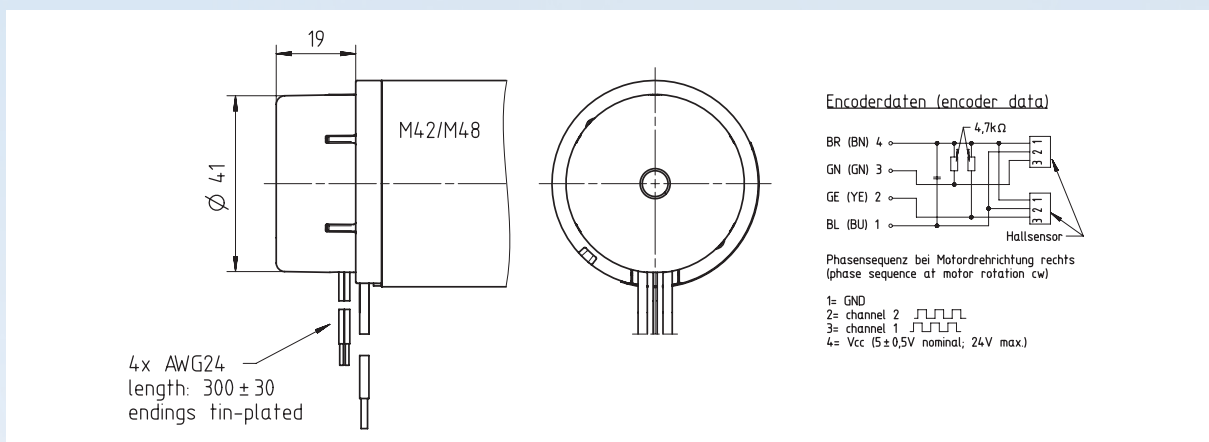
DC-Motors	M28	M36	M42	M48	M63	M80
IGM X/1	-	-	•	•	•	•
IGM x/2	-	-	•	•	•	•
IGMi X/2					•	•
IGM8-1024		-	•	•	•	•

EC-Motors	ECM35	ECM42	ECM48	ECM63	ECMa63	ECM75
IGM X/1	•	•	•	•	•	•
IGM x/2	•	•	•	•	•	•
IGMi X/2						
IGM8-1024	-	•	•	•	•	•

• = Application - = possible but no current project

Magnetic encoder IGM 1, 2, 4, 8, 12/2 for M42, M48

- Touchless and wear resistant magnetic incremental encoder
- This encoder supply symmetric amplitude in addition of supply voltage
- Open Collector output
- Integrate Pull-Up resistors



Application on request

General Data

Impulses per revolution	[x]	1*, 2*, 4, 8, 12*
Supply voltage	[V]	5 to 24
Current consumption	[mA]	4,2
Output current (operated) per channel	[mA]	max. 20
Temperature rang	[°C]	-40 to +100
Protection class with / without cover		IP30 / IP00

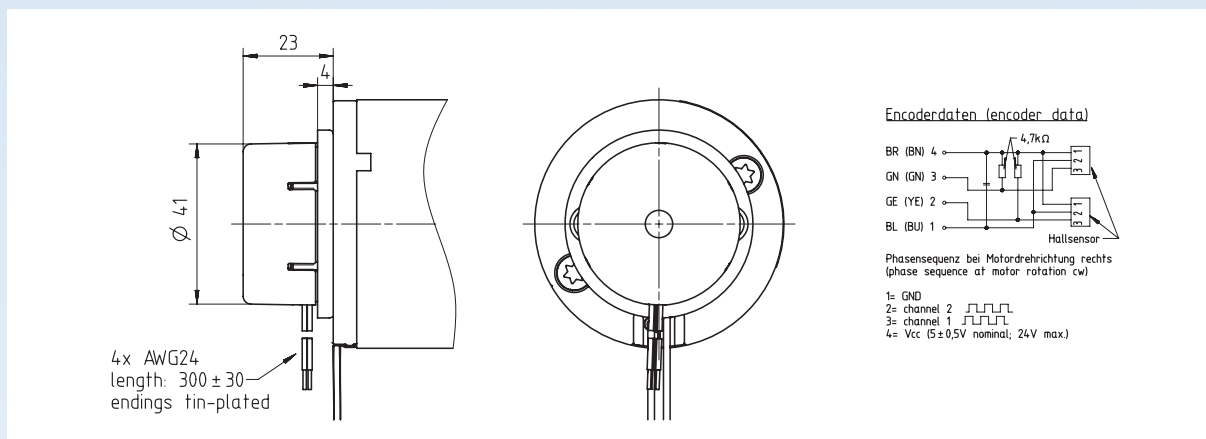
* The phase sequence may differ from the illustration

Impulses per revolution	Number of channels
1	1
2	2
4	2
8	1
12	2

Stand: 13. November 2014 – changes reserved

Magnetic encoder IGM 1, 2, 4, 8, 12/2 for M63, M80

- Touchless and wear resistant magnetic incremental encoder
- This encoder supply symmetric amplitude in addition of supply voltage
- Open Collector output
- Integrate Pull-Up resistors



Application on request

General Data

Impulses per revolution	[x]	1*, 2*, 4, 8, 12*
Supply voltage	[V]	5 to 24
Current consumption	[mA]	4,2
Output current (operated) per channel	[mA]	max. 20
Temperature rang	[°C]	-40 to +100
Protection class with / without cover		IP30 / IP00

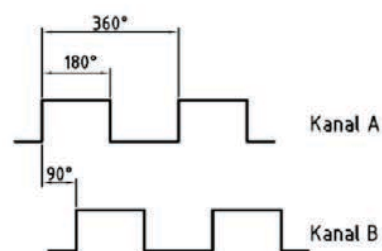
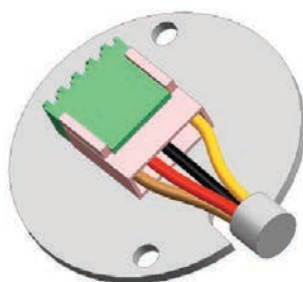
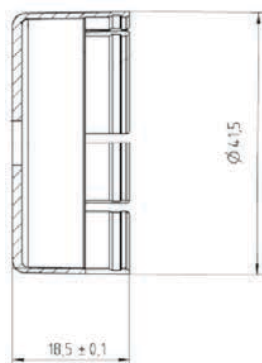
* The phase sequence may differ from the illustration

Impulses per revolution	Number of channels
1	1
2	2
4	2
8	1
12	2

Stand: 13. November 2014 – changes reserved

Magnetic encoder IGM 8 - 1024

- Touchless and wear resistant magnetic incremental encoder
- Magnetic encoder for accurate angular measurement
- Applicable to all KAG motors
- With connector or wire deliverable
- Hall technology



Applikation auf Anfrage

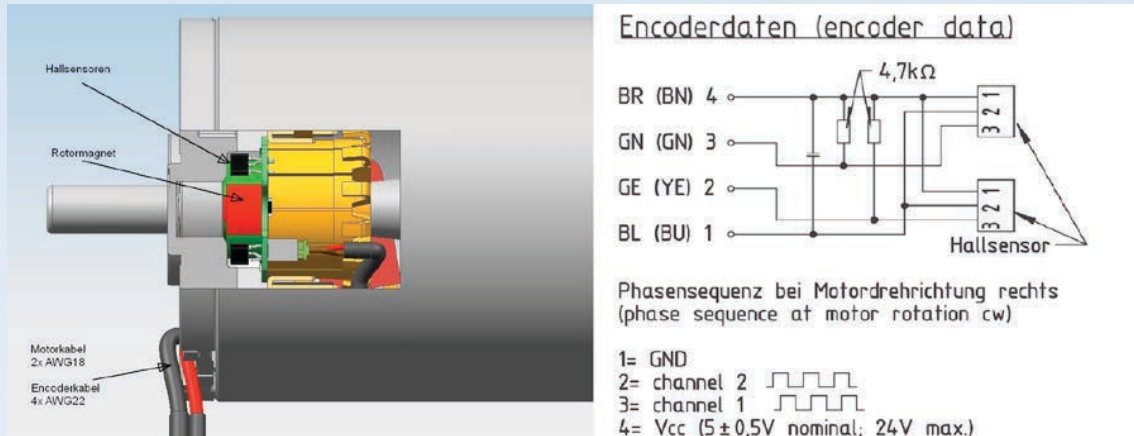
General Data

Impulses per revolution	[x]	8 - 1024
Number of channels	[y]	2, optional Indeximpuls
Supply voltage	[V]	5 bis 24
Resolution	[°]	0,09
Protection with / without cap		IP30 / IP00

Stand: 4. November 2014 – changes reserved

Internal magnetic encoder IGMi 2, 4, 12/2 for M63, M80

- Touchless and wear resistant magnetic incremental encoder
- This encoder supply symmetric amplitude in addition of supply voltage
- Open Collector output
- Integrate Pull-Up resistors



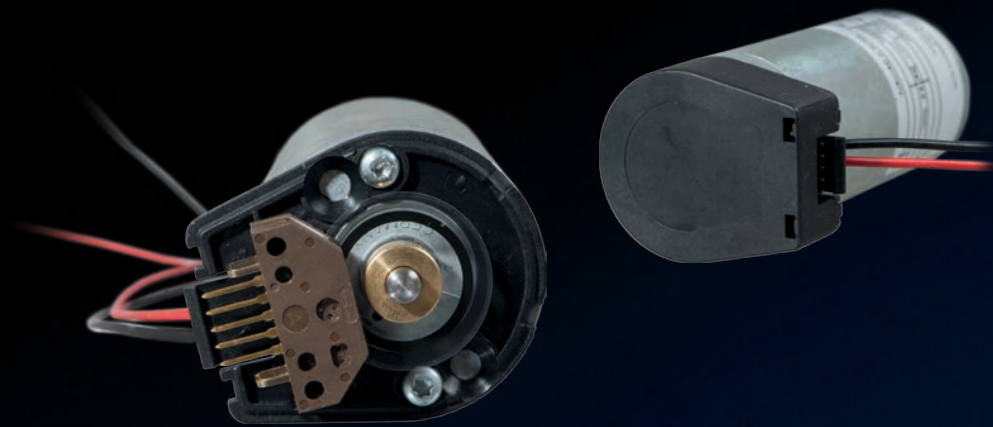
Application on request

General Data

Impulses per revolution	[x]	2, 4, 12
Number of channels		2
Supply voltage	[V]	5 to 24
Current consumption	[mA]	3,5
Output current (operated) per channel	[mA]	max. 20
Temperature rang	[°C]	-40 to +100
Protection class		IP40 - IP6K9K

Stand: 13. November 2014 – changes reserved

Optical encoders



- PWB
- HP 2 channel / 3 channel Index Impulse / Line Driver
- Sharp (Low Cost – 100 Impulse/2)
- limited temperature range

Impulses [x]	50	100	200	300	500	1.000
IGO X/2 RU		•	•	•		
IGOX/2	-	•	•	-	•	•
IGOX/3	-	-	-	-	•	•
IGO100/2 SN		•				

DC-Motors	M28	M36	M42	M48	M63	M80
IGO X/2 RU	•	•				
IGOX/2		-	•	•	•	•
IGOX/3		-	•	•	•	•
IGO100/2 SN			•	•	•	•

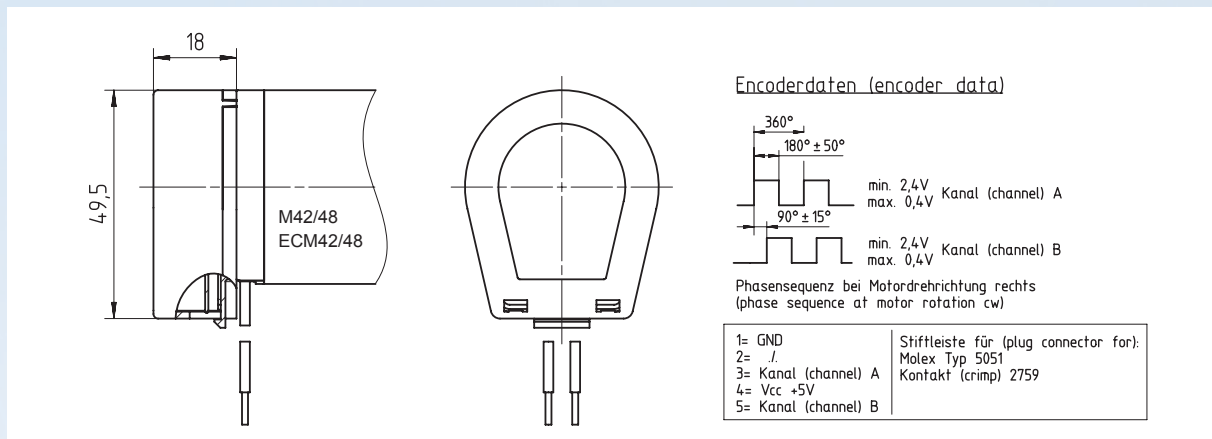
EC-Motors	ECM35	ECM42	ECM48	ECM63	ECMa63	ECM75
IGO X/2 RU	•					
IGOX/2	•	•	•	•	•	•
IGOX/3	•	•	•	•	•	•
IGO100/2 SN	-	•	•	•	•	•

• = Application - = possible but no current project

Optical encoder

IGO 100, 200, 500/2 for M42, M48

- Touchless and wear resistant optical incremental encoder
- This encoder supply two quadrature, TTL-compatible channels with phase 110°
- Connectors z.B. Molex plug 5poles type 5051M with bush Typ 2759
- Optional: reference pulse



Application on request

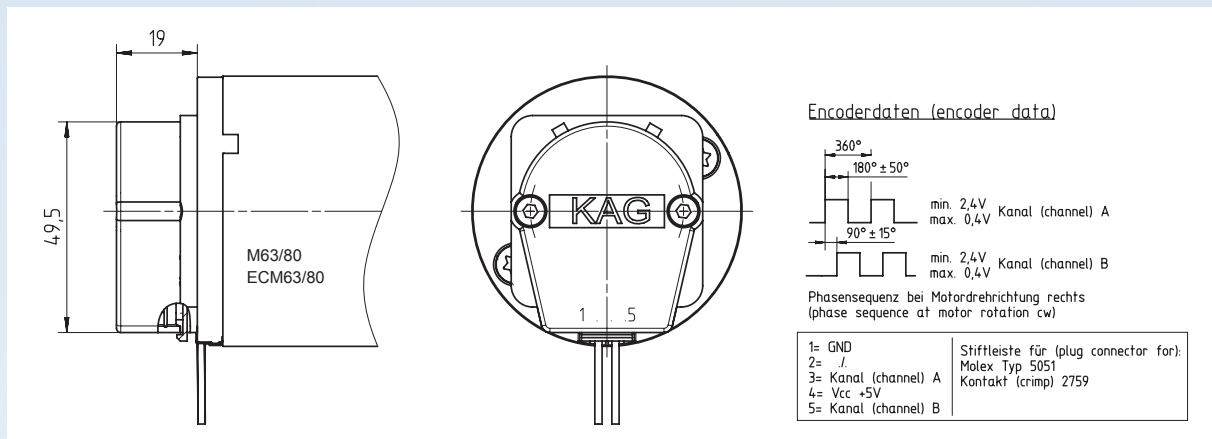
General Data

Impulses per revolution	[x]	100, 200, 500
Number of channels	[y]	2, optional Index pulse
Supply voltage	[V]	5 ±10%
Current consumption	[mA]	17
Output current (operated) per channel	[mA]	-
Temperature rang	[°C]	-40 to +100
Protection class with / without cover		IP30 / IP00

Stand: 4. November 2014 – changes reserved

Optical encoder IGO 100, 200, 500/2 for M63, M80

- Touchless and wear resistant optical incremental encoder
- This encoder supply two quadrature, TTL-compatible channels with phase 110°
- Connectors z.B. Molex plug 5poles type 5051M with bush Typ 2759
- Optional: reference pulse



Application on request

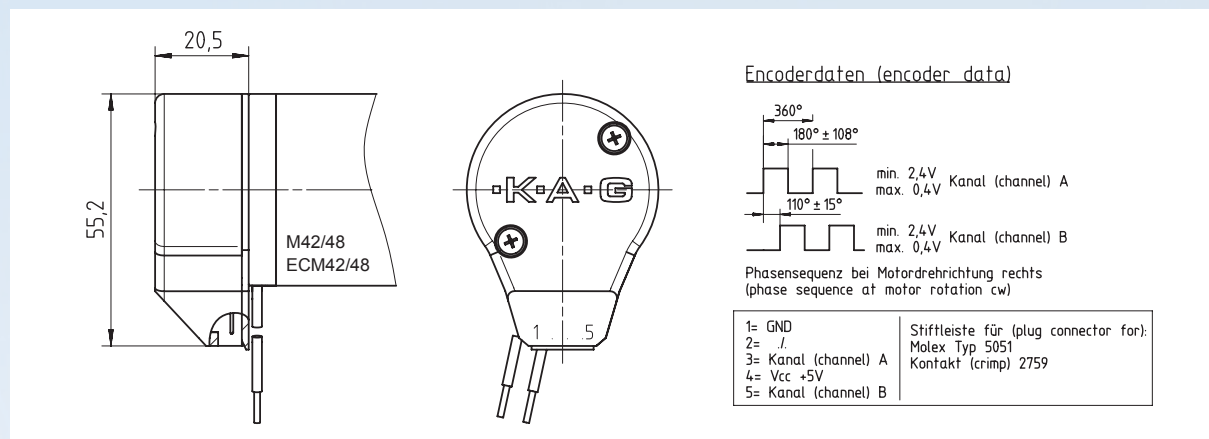
General Data

Impulses per revolution	[x]	100, 200, 500
Number of channels	[y]	2, optional Index pulse
Supply voltage	[V]	5 ±10%
Current consumption	[mA]	17
Output current (operated) per channel	[mA]	-
Temperature rang	[°C]	-40 to +100
Protection class with / without cover		IP30 / IP00

Stand: 4. November 2014 – changes reserved

Optical encoder IGO 100/2 "SN" for M42, M48

- Touchless and wear resistant optical incremental encoder
- This encoder supply two quadrature, TTL-compatible channels with phase 110°
- Connectors z.B. Molex plug 5poles type 5051M with bush Typ 2759
- Optional: reference pulse



Application on request

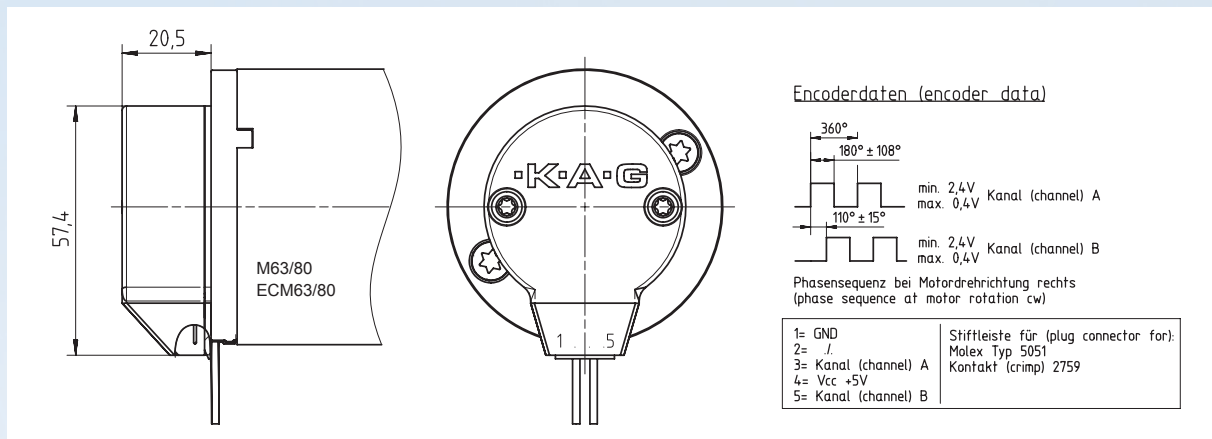
General Data

Impulses per revolution	[x]	100
Number of channels	[y]	2
Supply voltage	[V]	5 ±10%
Current consumption	[mA]	30
Output current (operated) per channel	[mA]	-
Temperature rang	[°C]	0 to +70
Protection class with / without cover		IP30 / IP00

Stand: 4. November 2014 – changes reserved

Optical encoder IGO 100/2 "SN" for M63, M80

- Touchless and wear resistant optical incremental encoder
- This encoder supply two quadrature, TTL-compatible channels with phase 110°
- Connectors z.B. Molex plug 5poles type 5051M with bush Typ 2759
- Optional: reference pulse



Application on request

General Data

Impulses per revolution	[x]	100
Number of channels	[y]	2
Supply voltage	[V]	5 ±10%
Current consumption	[mA]	30
Output current (operated) per channel	[mA]	-
Temperature rang	[°C]	0 to +70
Protection class with / without cover		IP30 / IP00

Stand: 4. November 2014 – changes reserved

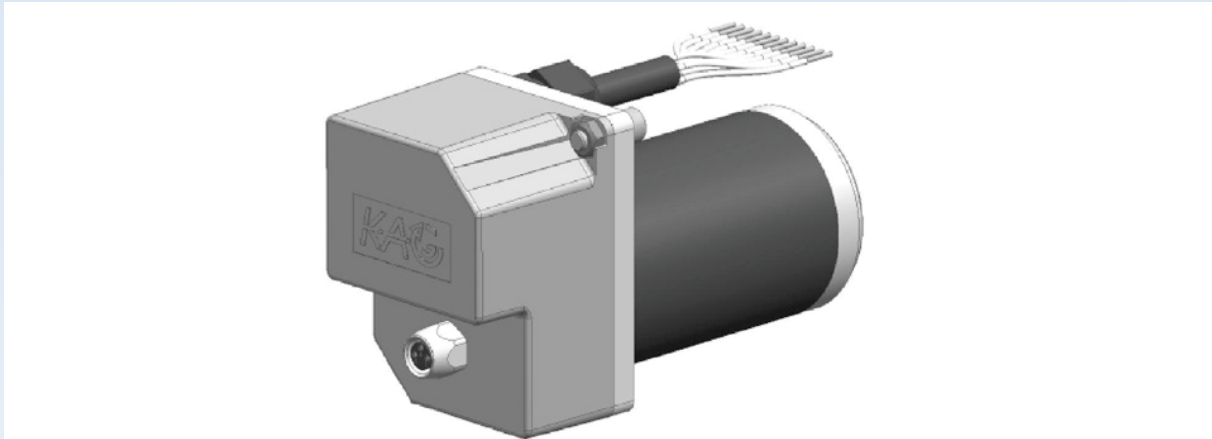
Electronics

Controller	KE30	i63	i42	i42dc
Motors	EC/DC	EC/DC	EC/DC	DC
Voltage max.	30V	30V	30V	30V
Voltage min.	14V	8V	12V	8V
Current max.	5A	10A	5A	5A
CAN-Bus	X	✓	✓	✓
IO-Signal	2	-	8	5
Outputs max.	-	-	5	2
Inputs max.	2	-	5	5
Encoder [pos/r]	-	256	360	256
Operation mode	2Q	4Q	4Q	4Q



Integrated Controller i42 for 42 and 48 series

- Nominal voltage 24V
- Sinuscommutation
- Angle resolution of 1°
- $I_N = 5A / I_{PEAK} = 50A$
- Can be used for EC and DC motors



Application on request

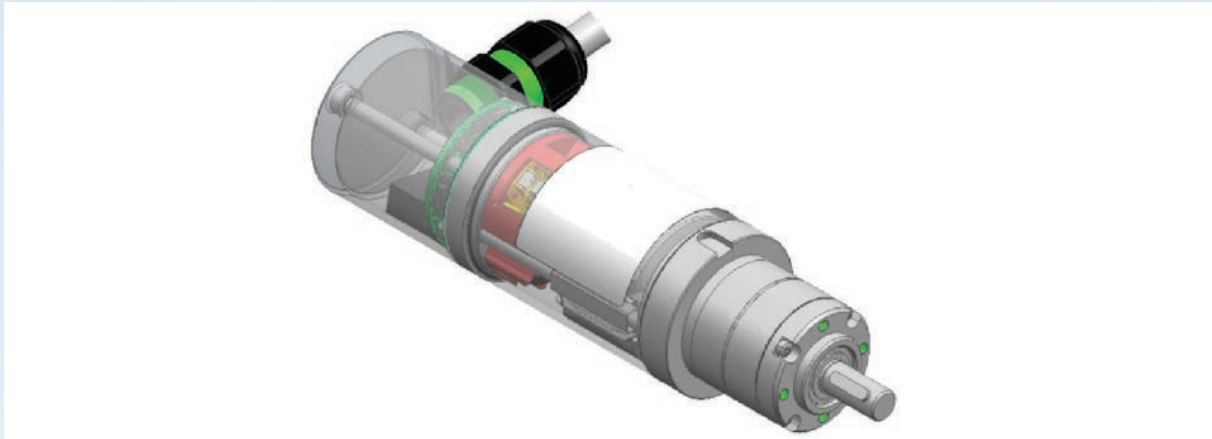
Features

- CAN and CANopen interface
- 8 I/O channels
- Integrated absolute encoder
- Up to 4 configurable analog inputs
- Up to 5 configurable digital inputs
- Up to 5 configurable digital outputs
- Incremental encoder output with scalable resolution
- Quadcount impulse input for high frequency signal
- Adjustable ramps/acceleration
- Firmware to customer needs
- Control over bus, analog or PWM
- IP67 option for motor mount
- 4Q operation
- Speed and position control

Stand: 11. September 2014 – changes reserved

Integrated controller i42dc for 42 and 48 series

- Nominal voltage 24V
- PWM-commutation
- Angle resolution of 1,4°
- $I_N = 5A / I_{PEAK} = 50A$
- Can be used for DC Motoren



Application on request

Features

- CAN and CANopen interface
- 5 I/O - channels
- Integrated absolute encoder
- Up to 3 configurable analog inputs
- Up to 3 configurable digital inputs
- Up to 4 configurable digital outputs
- Incremental encoder output with scalable resolution
- Quadcount impulse input for high frequency signal
- Adjustable ramps/acceleration
- Firmware to customer needs
- Control over bus, analog or PWM
- IP67 option for motor mount
- 4Q operation
- Speed and position control

Stand: 11. September 2014 – changes reserved

Integrated controller i63 from 63 to 80 series

- Nominal voltage 8 - 30V
- Sinuscommutation
- Angle resolution of 1,4°
- $I_N = 5A$ / $I_{PEAK} = 70A$
- Can be used for EC and DC motors



Application on request

Features

- CAN und CANopen interface
- 7 I/O - channels
- Integrated absolute encoder
- Up to 4 configurable analog inputs
- Up to 4 configurable digital inputs
- Up to 5 configurable digital outputs
- Incremental encoder output with scalable resolution
- Connector (DSUB) or cable outlet
- Quadcount impulse input for high frequency signal
- Adjustable ramps/acceleration
- Firmware to customer needs
- Control over bus, analog or PWM
- IP67 option for motor mount
- 4Q operation
- Speed and position control
- Amplifier and logic supplied separately (optional)

Stand: 11. September 2014 – changes reserved

External commutation controller KE 30/5

- External electronic for brushless motors (ECM) with hall-sensor
- Ability to adjust RPM and direction on board or through external tension of 0-10V, 2Q operation, open loop control
- Control-inputs usable within voltages up to 30V
- Sophisticated functions are easy adaptable to customer needs e.g. adjustable RPM ramp, speed, -current-control-loop, 4Q-operation, simple control functions
- Available as open frame or with housing
- Controls all brushless DC-motors with hall-sensor



Application on request

General Data

Supply Voltage	[V]	14 - 30
Maximum current without extra cooling	[A]	5
Peak current / with permanent cooling	[A]	8
Fastening	[°C]	DIN rail, etc.

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