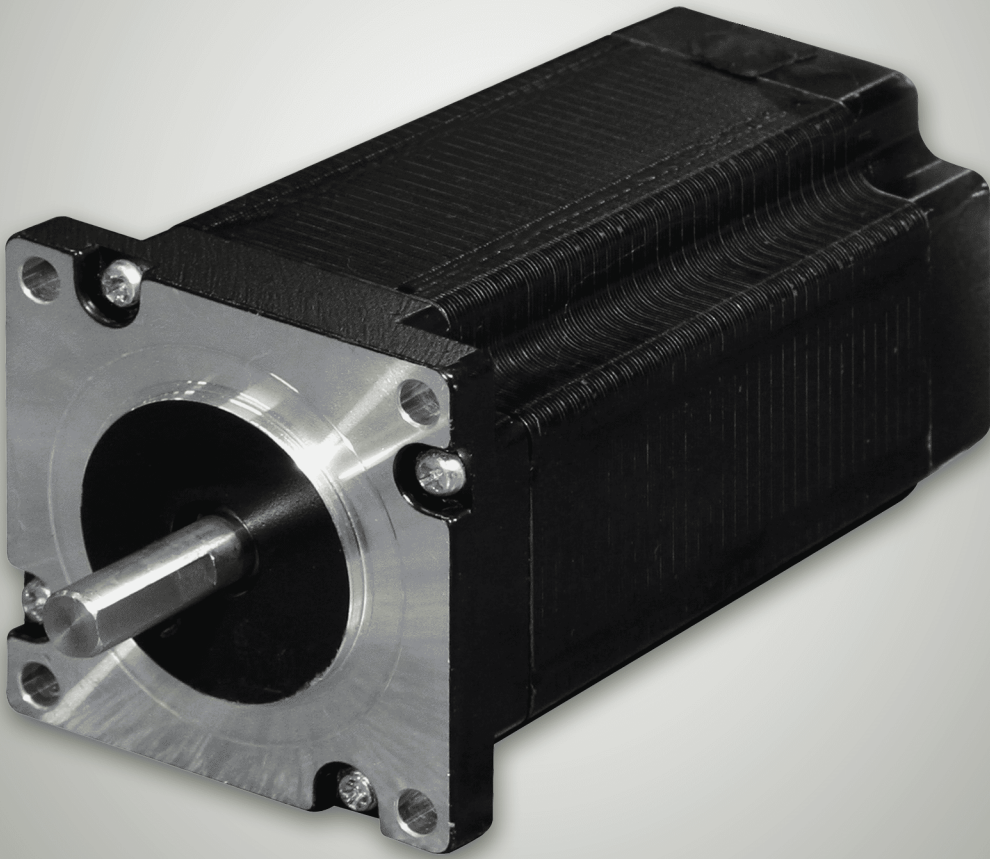




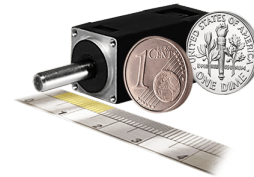
Stepper Motors – Hybrid Steppers

Stepper Motors – Hybrid Steppers

Inhaltsverzeichnis	Seite
HRSM – Size 6 [14mm]	4
6H2030	6
HRSM – Size 8 [20mm]	8
8H2028	12
8H2038	13
HRSM – Size 11 [28mm]	14
11H2033	19
11H2045	20
11H2052	21
HRSM – Size 14 [35mm]	22
14H2027	26
14H2037	27
HRSM – Size 17 [42mm]	28
17H2034	33
17H2041	34
17H2049	35
17H2061	36
HRSM – Size 23 [57mm]	37
23H2042	42
23H2051	43
23H2065	44
23H2076	45
HRSM – Size 24 [60mm]	46
24H2047	50
24H2056	51
24H2068	52
24H2085	53
HRSM – Size 34 [86mm]	54
34H2060	58
34H2075	59
34H2098	60
HSSM – Size 6 [14mm]	61

6HS2030	63
HSSM - Size 8 [20mm]	64
8HS2028	66
8HS2038	67
HSSM - Size 11 [28mm]	68
11HS2033	71
11HS2045	72
HSSM - Size 14 [35mm]	73
14HS2033	76
14HS2045	77
HSSM - Size 17 [42mm]	78
17HS2034	81
17HS2048	82
HSSM - Size 23 [57mm]	83
23HS2045	86
23HS2065	87
HSSM - Size 34 [86mm]	88
34HS2076	90
HSSM - Size 24 [60mm]	91
24HS2047	94
24HS2068	95

HRSM - Size 6 [14mm]



The size 6 [14mm] which is smallest hybrid rotary stepper motor from DINGS has Max. 0.005N-m of holding torque.



<https://www.kocomotion.de/produkt/hrsm-size-6-14mm/>

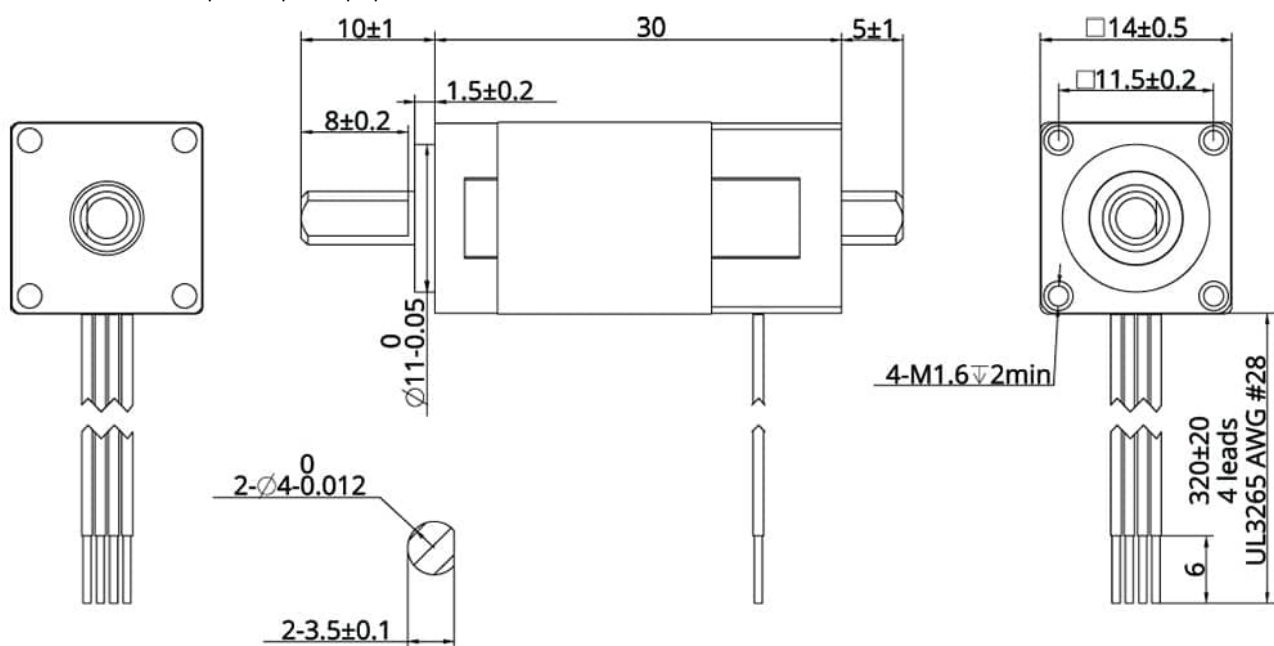
Produkte:

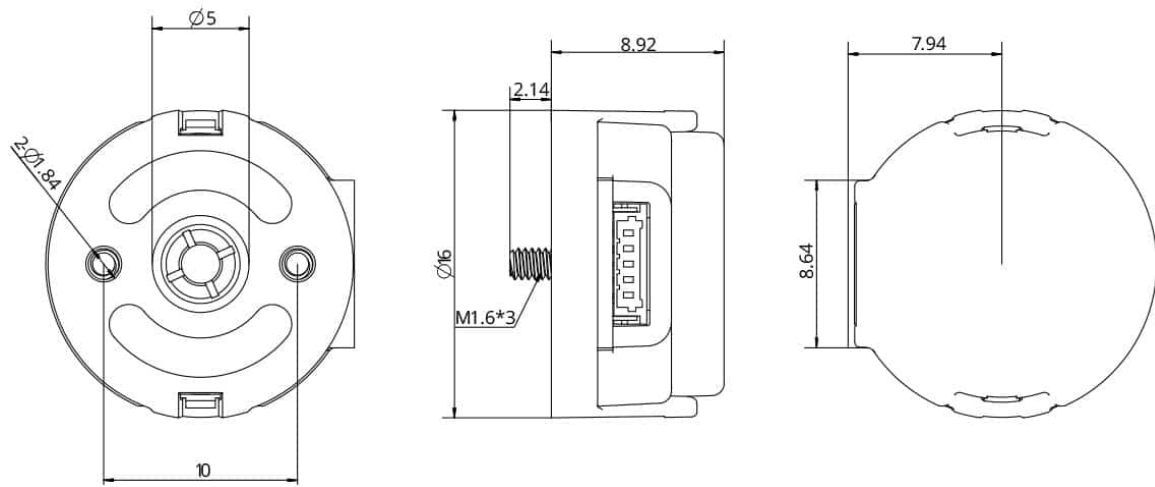
6H2030

Seite

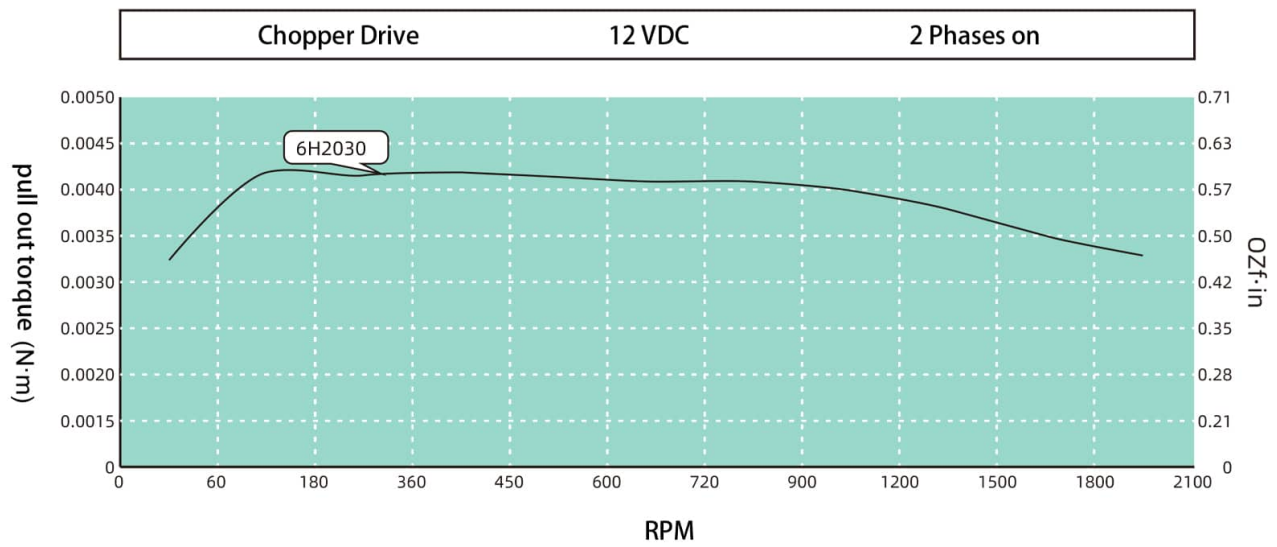
6

include __DIR__ . "/parts/spacer.php";





EK6 Encoder

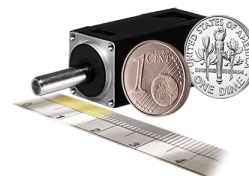


6H2030

The size 6 [14mm] which is smallest hybrid rotary stepper motor from DINGS has Max. 0.005N.m of holding torque.



<https://www.kocomotion.de/produkt/6h2030/>



Specification	
Accuracy step angle	1.8°±5%
Accuracy Resistance	±10% / 20 C
Accuracy Inductance	±20% / 1KHz
Insulation class	B
Duty type	S1
Dielectrical strength	250 VAC / 1 KHz / 1 mA / 1 s
Insulation resistance	100 MΩ/ 500 VDC
Permissible radial load(5MM distance from mounting surface)	15N
Permissible radial load(10MM distance from mounting surface)	12N
Permissible radial load(15MM distance from mounting surface)	8N
Permissible radial load(20MM distance from mounting surface)	6N
End bell	Aluminum alloy
Bearing	Deep groove ball bearing
Magnet	Sintered NdFeB
Shaft	Stainless steel
Wiring	UL 3265, 28 AWG
Current	0.3 A
Resistance	22 Ω
Inductance	3.6 mH
Holding Torque	0.005 N.m
Rotor Inertia	1.5 g·cm ²

Specification	
Length	30 mm
Mass	30 g
Size	6 Nema
Flange size	14 mm

Optionen

Encoder

- EK6

HRSM - Size 8

[20mm]

The size 8 [20mm] Hybrid Rotary Stepper Motor has Max. 0.02N·m of holding torque. Encoders and 22mm frame planetary gearbox solutions are available. For special windings or customization, Please contact KOCO for further information.



<https://www.kocomotion.de/produkt/hrsm-size-8-20mm/>



Produkte:

Seite

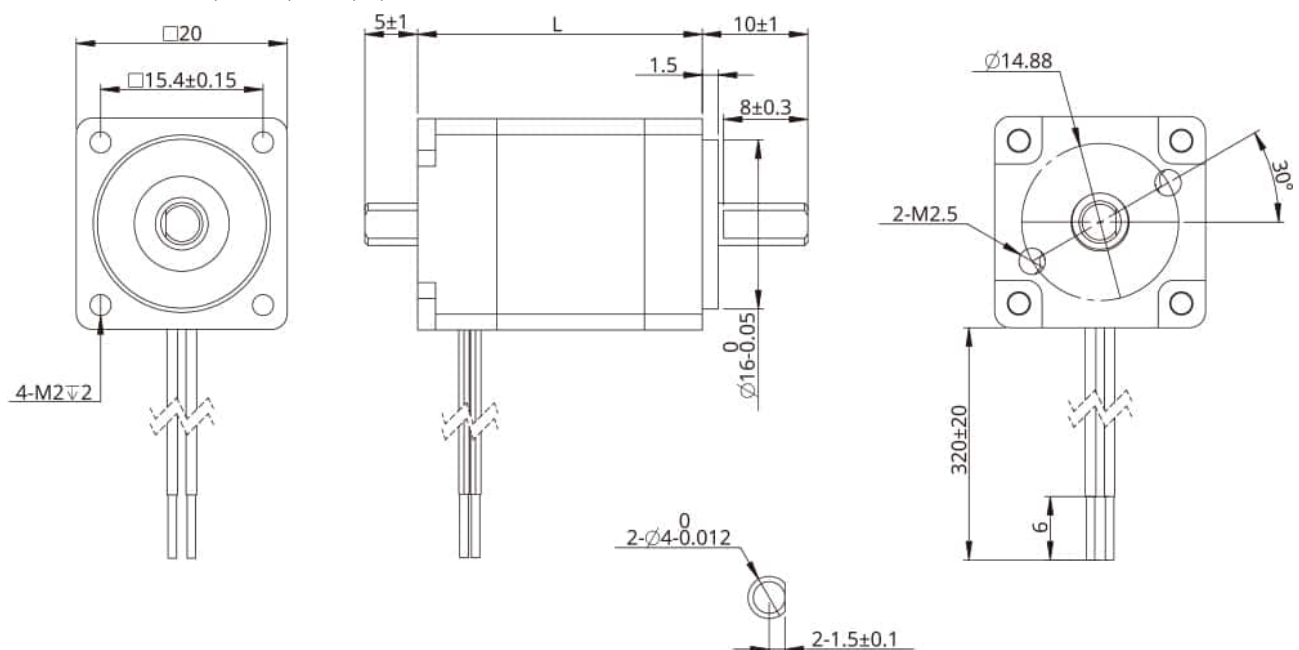
8H2028

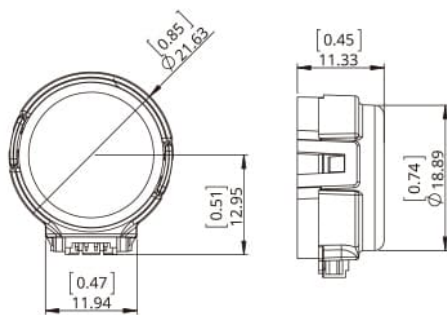
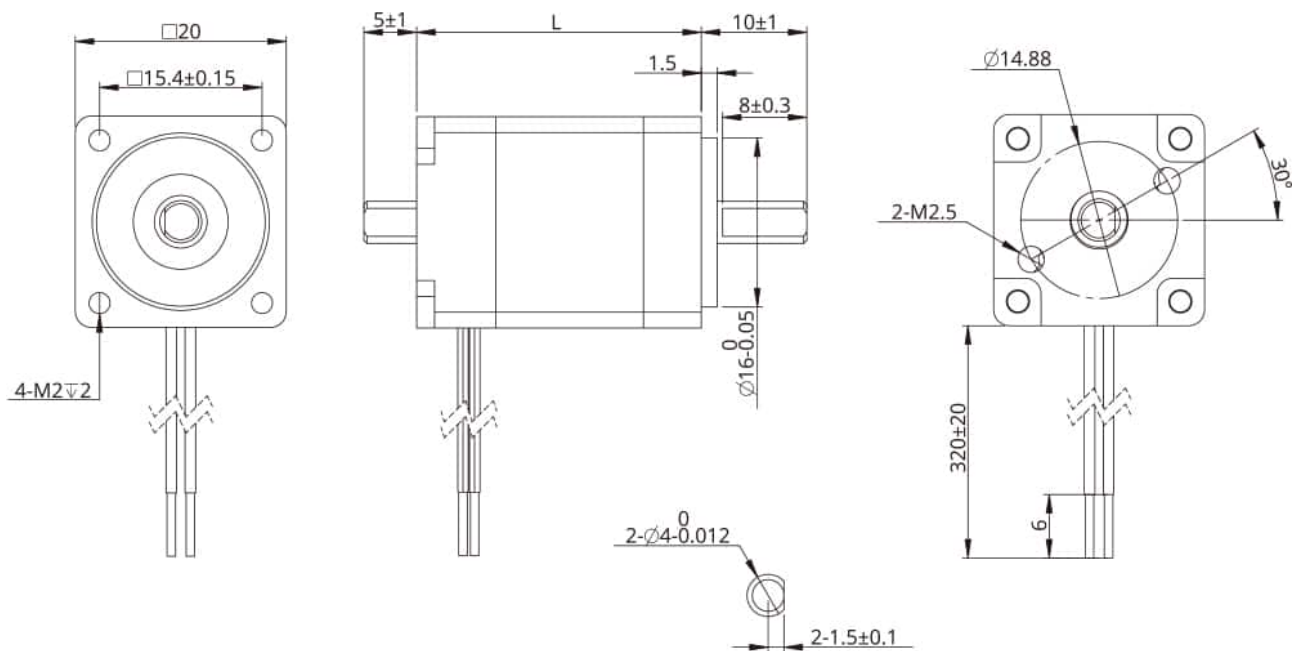
12

8H2038

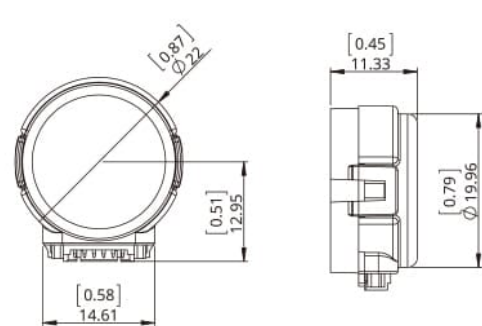
13

include __DIR__ . "/parts/spacer.php";

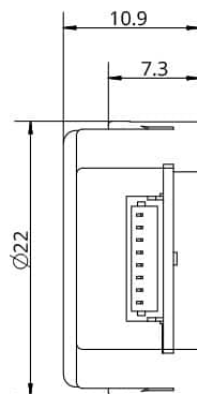
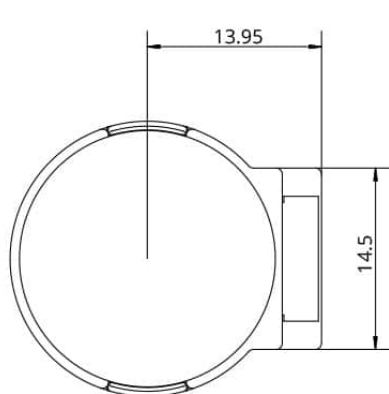




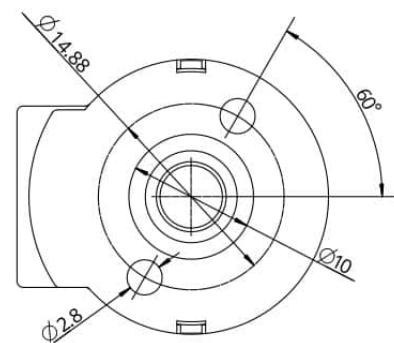
EK1 Encoder - Single ended output

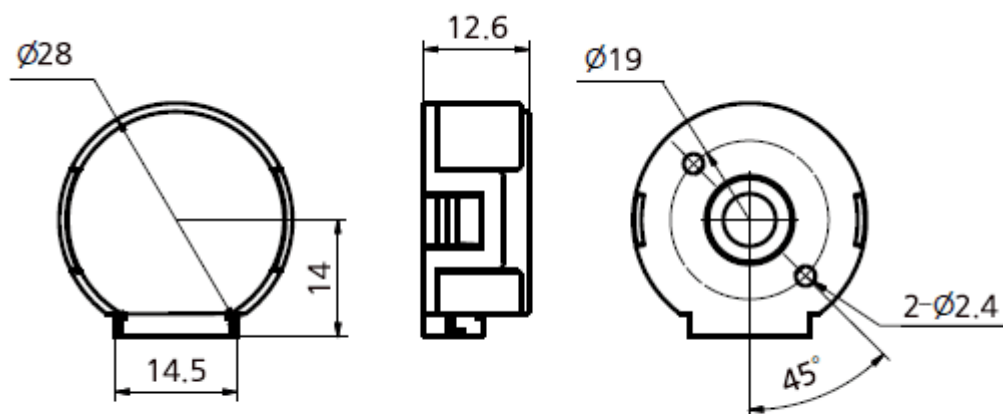


EK1 Encoder - Differential output

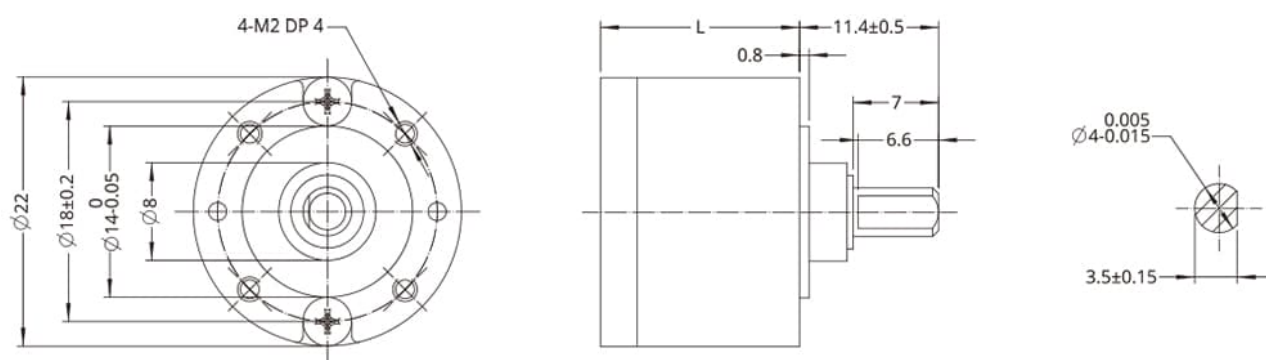


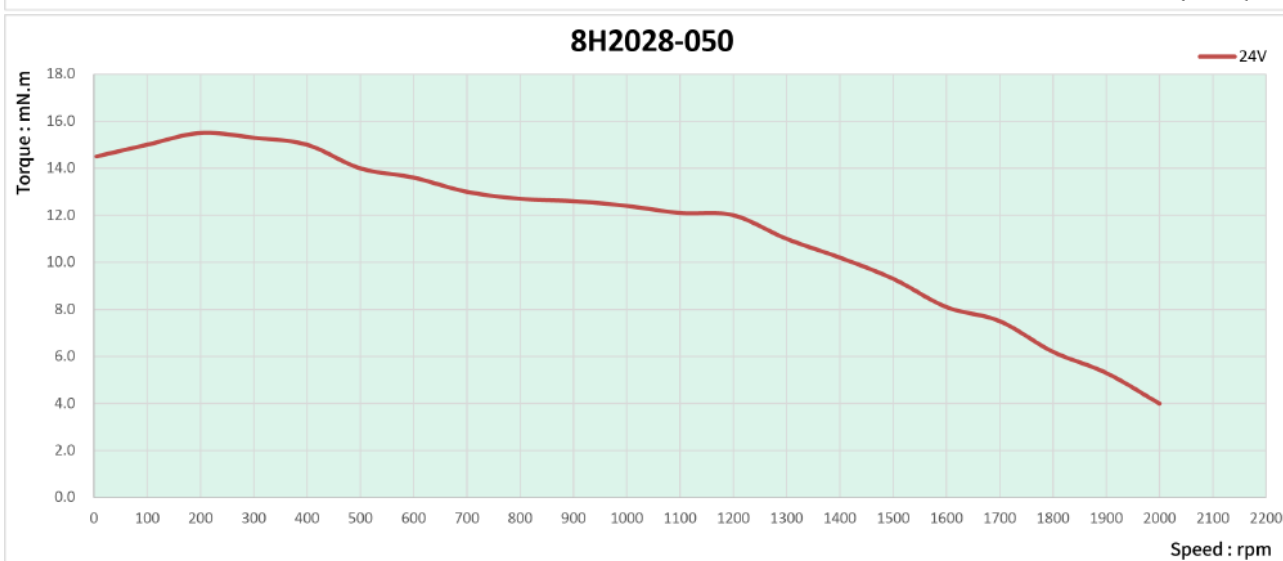
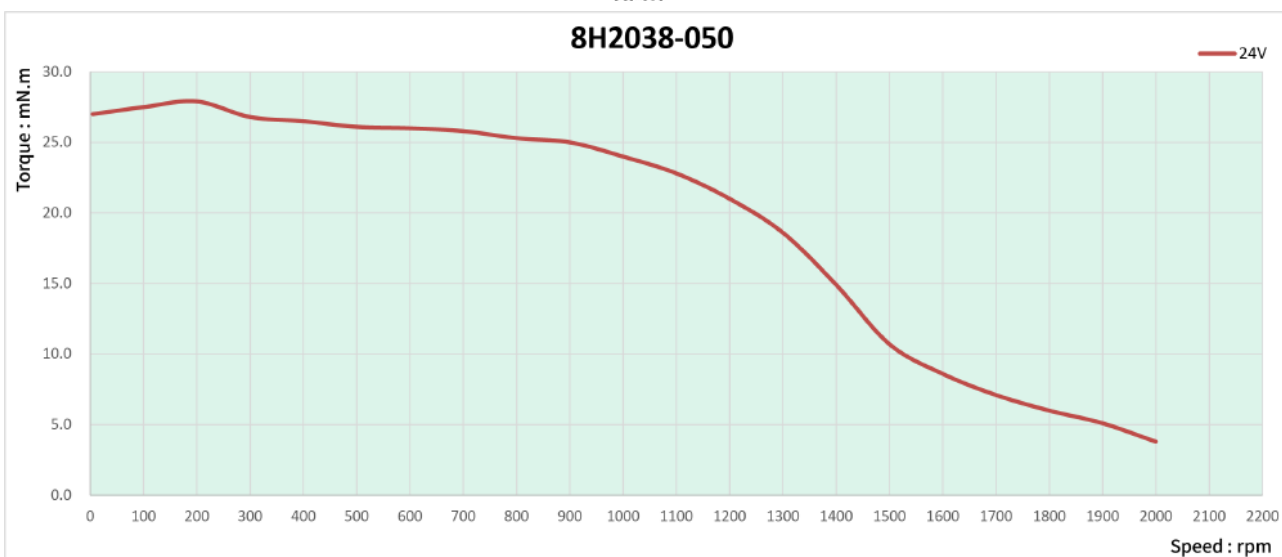
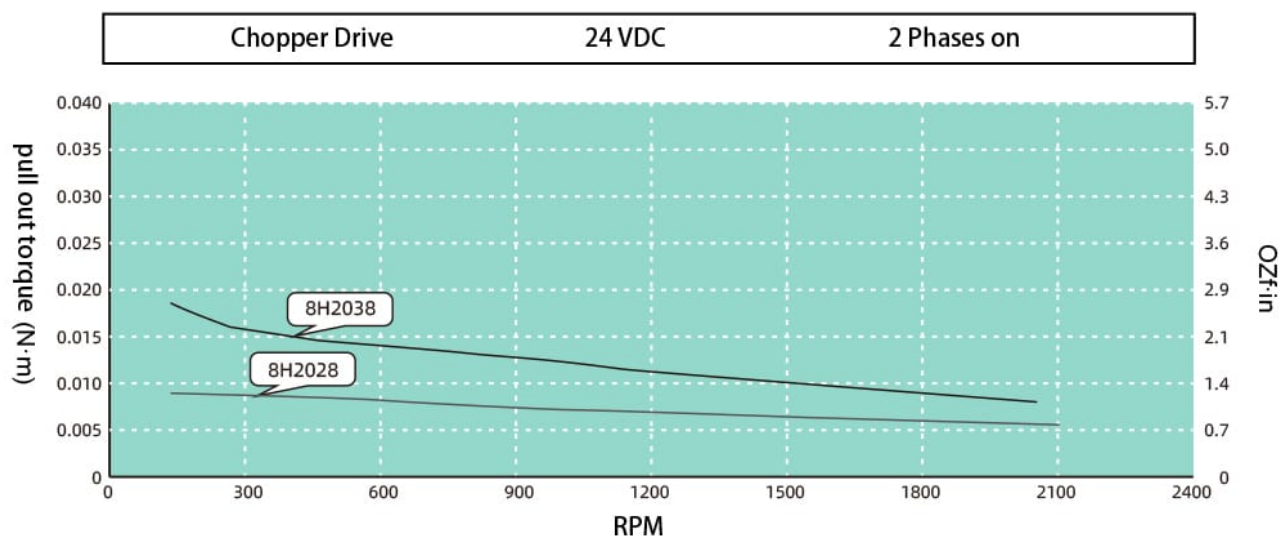
EK5 Encoder





KPL28 Encoder





8H2028

The size 8 [20mm] Hybrid Rotary Stepper Motor has Max. 0.02N·m of holding torque. Encoders and 22mm frame planetary gearbox solutions are available. For special windings or customization, Please contact KOCO for further information.



<https://www.kocomotion.de/produkt/8h2028/>



Specification	
Current	0.5 A
Resistance	5.1 Ω
Inductance	1.5 mH
Holding Torque	0.012 N.m
Rotor Inertia	2.7 g·cm ²
Length	27.2 mm
Mass	60 g
Size	8 Nema
Flange size	20 mm

Optionen

Encoder

- EK1
- EK5
- KPL28

Plantary Gearbox

- Metal House material
- 1° No load backlash
- Sleeve bearing

8H2038

The size 8 [20mm] Hybrid Rotary Stepper Motor has Max. 0.02N·m of holding torque. Encoders and 22mm frame planetary gearbox solutions are available. For special windings or customization, Please contact KOCO for further information.



<https://www.kocomotion.de/produkt/8h2038/>



Specification	
Current	0.5 A
Resistance	8.8 Ω
Inductance	2.7 mH
Holding Torque	0.02 N.m
Rotor Inertia	3.3 g·cm ²
Length	38 mm
Mass	80 g
Size	8 Nema
Flange size	20 mm

Optionen

Encoder

- EK1
- EK5
- KPL28

Plantary Gearbox

- Metal House material
- 1° No load backlash
- Sleeve bearing

HRSM - Size 11

[28mm]



The size 11 [28mm] Hybrid Rotary Stepper Motor has Max. 0.14N·m of holding torque. Encoders and 28mm frame planetary gearbox solutions are available. For special windings or customization, Please contact KOCO for further information.



<https://www.kocomotion.de/produkt/hrsm-size-11-28mm/>

Produkte:

Seite

11H2033

19

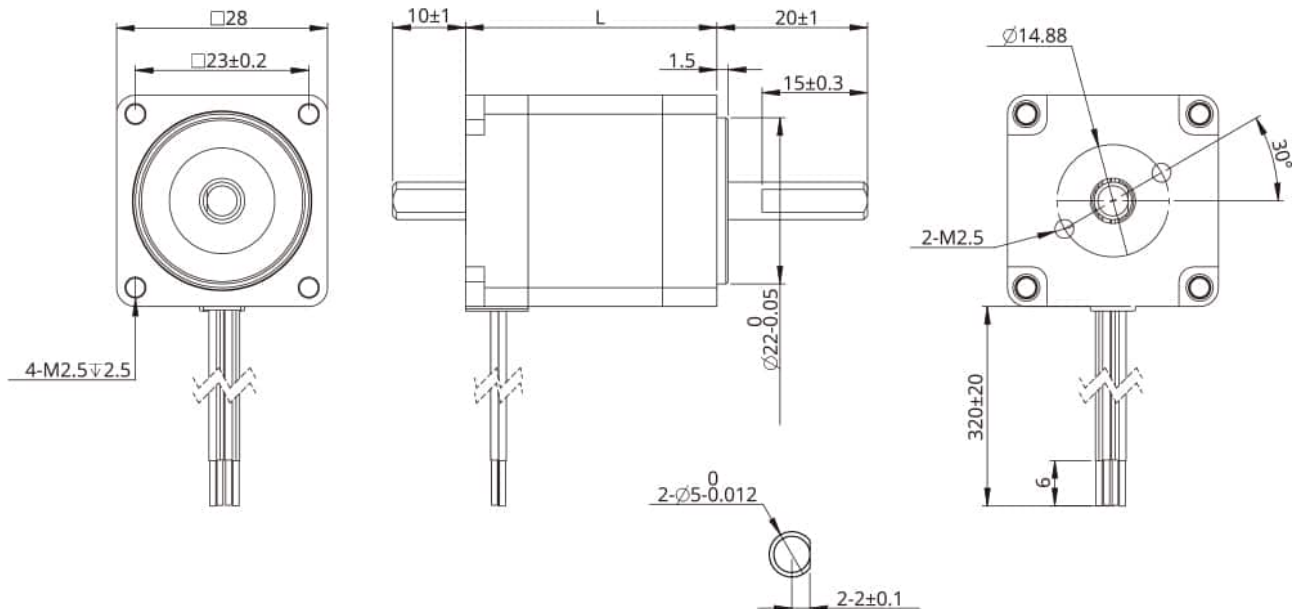
11H2045

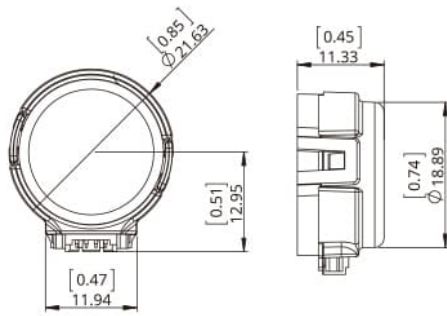
20

11H2052

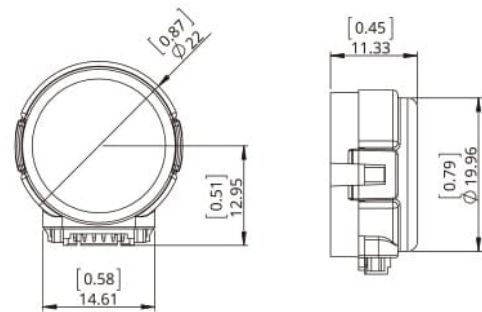
21

include __DIR__ . "/parts/spacer.php";

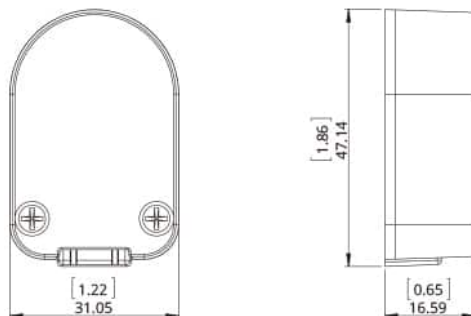




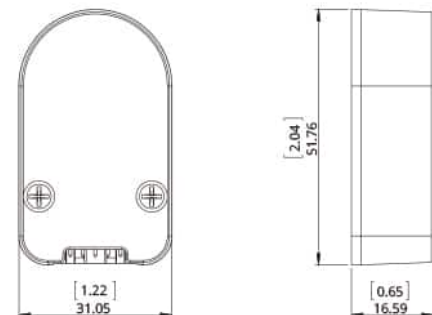
EK1 Encoder - Single ended output



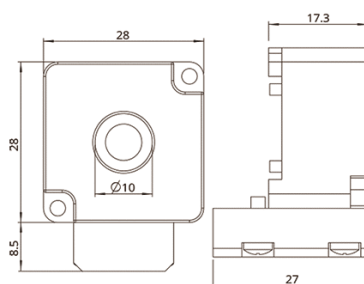
EK1 Encoder - Differential output



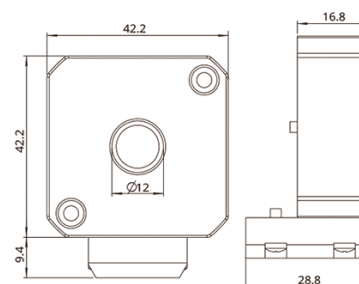
EK2 Encoder - Single ended output



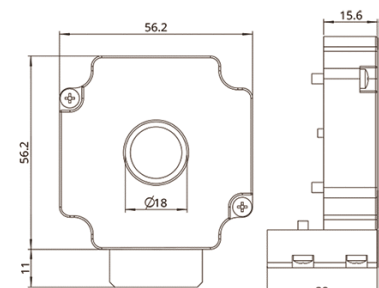
EK2 Encoder - Differential output



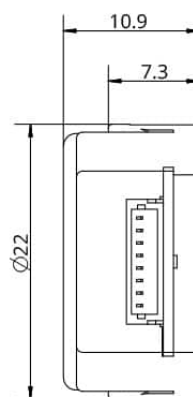
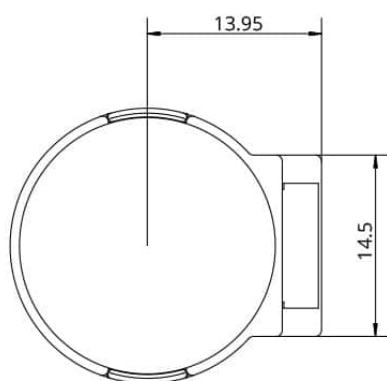
EK4 Encoder 11



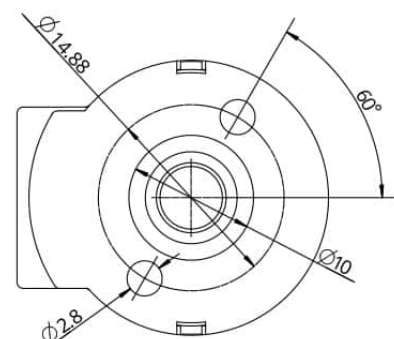
EK4 Encoder 17

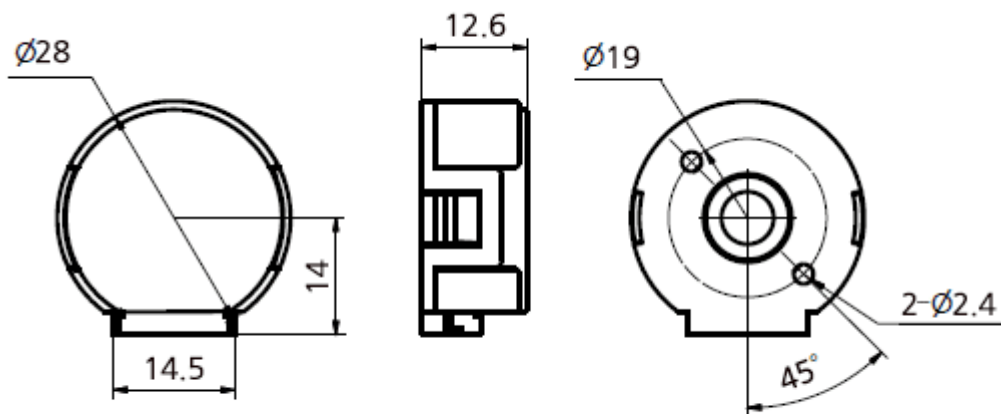


EK4 Encoder 23

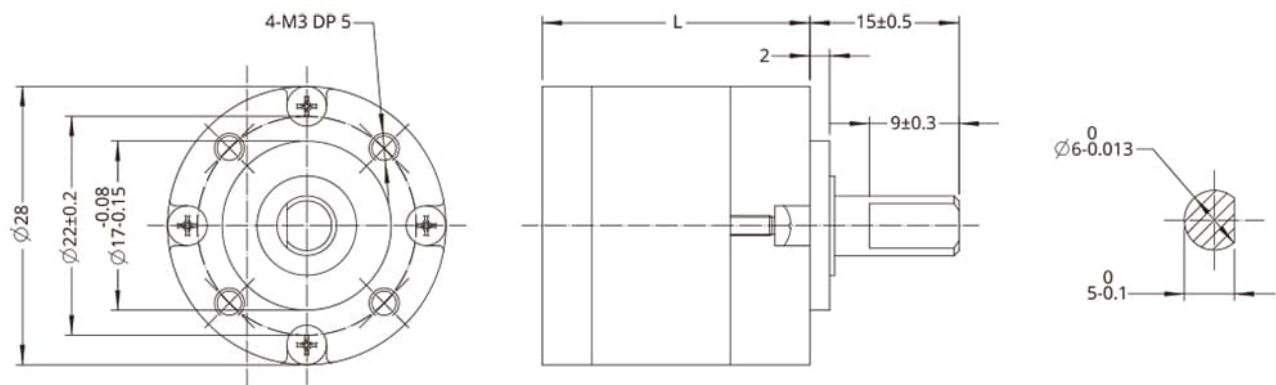


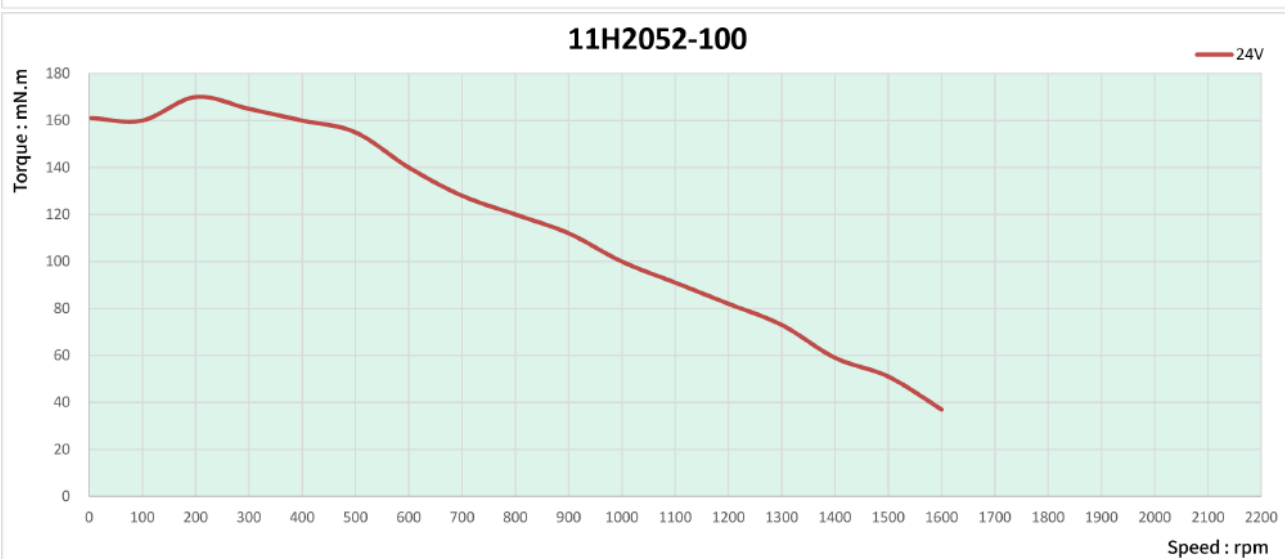
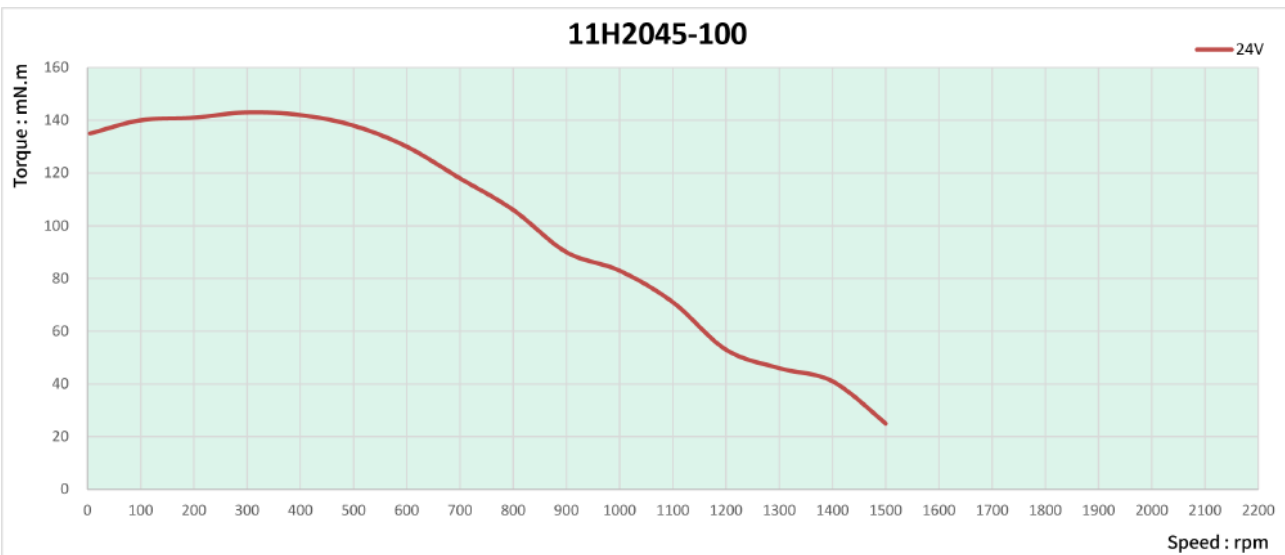
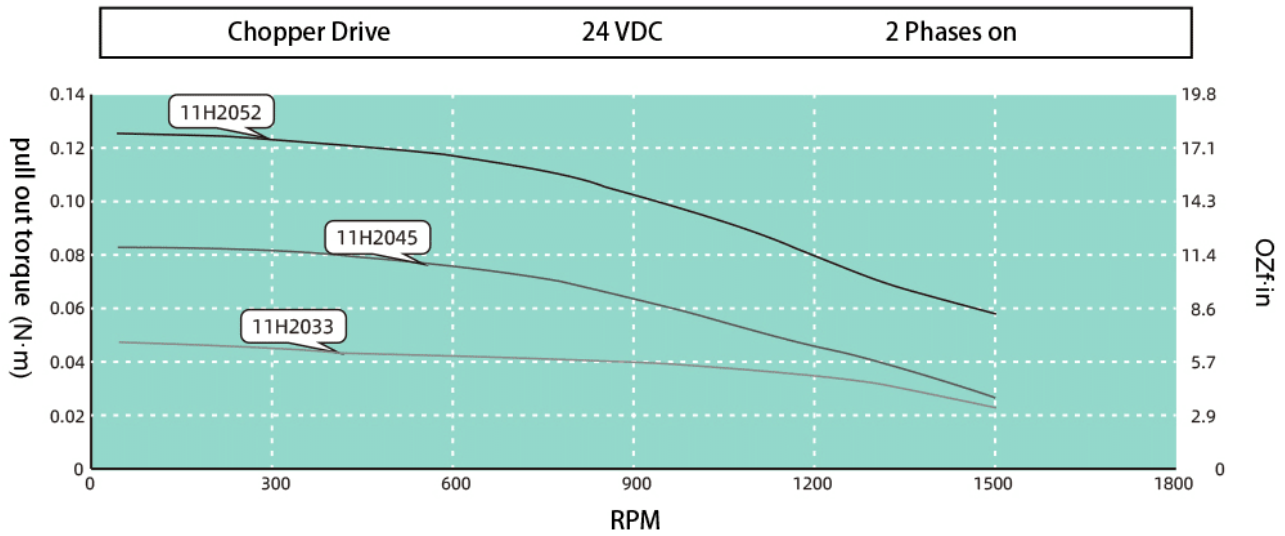
EK5 Encoder

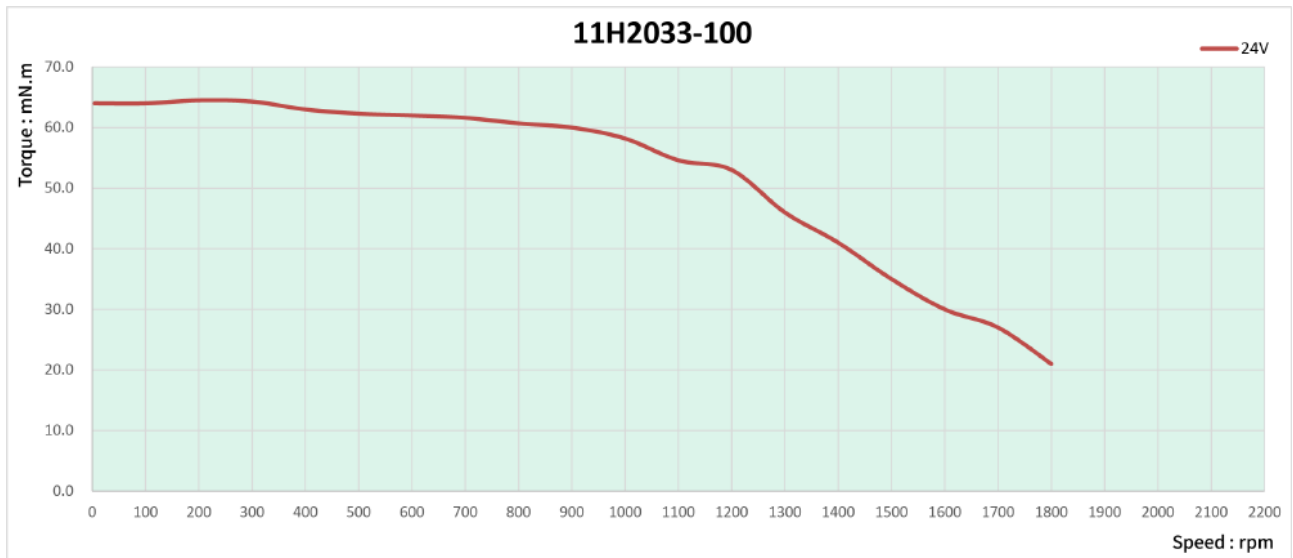




KPL28 Encoder







11H2033

The size 11 [28mm] Hybrid Rotary Stepper Motor has Max. 0.14N·m of holding torque. Encoders and 28mm frame planetary gearbox solutions are available. For special windings or customization, Please contact KOCO for further information.



<https://www.kocomotion.de/produkt/11h2033/>



Specification	
Current	1 A
Resistance	2.1 Ω
Inductance	1.5 mH
Holding Torque	0.06 N.m
Rotor Inertia	9 g·cm ²
Length	33.5 mm
Mass	110 g
Size	11 Nema
Flange size	28 mm

Optionen

Encoder

- EK1
- EK2
- EK4
- EK5
- KPL28

Planetary Gearbox

- Metal House material
- 1° No load backlash
- Ball bearing

11H2045

The size 11 [28mm] Hybrid Rotary Stepper Motor has Max. 0.14N·m of holding torque. Encoders and 28mm frame planetary gearbox solutions are available. For special windings or customization, Please contact KOCO for further information.



<https://www.kocomotion.de/produkt/11h2045/>



Specification	
Current	1 A
Resistance	4.1 Ω
Inductance	4.0 mH
Holding Torque	0.1 N.m
Rotor Inertia	13 g·cm ²
Length	45 mm
Mass	200 g
Size	11 Nema
Flange size	28 mm

Optionen

Encoder

- EK1
- EK2
- EK4
- EK5
- KPL28

Planetary Gearbox

- Metal House material
- 1° No load backlash
- Ball bearing

11H2052

The size 11 [28mm] Hybrid Rotary Stepper Motor has Max. 0.14N·m of holding torque. Encoders and 28mm frame planetary gearbox solutions are available. For special windings or customization, Please contact KOCO for further information.



<https://www.kocomotion.de/produkt/11h2052/>



Specification	
Current	1 A
Resistance	4.7 Ω
Inductance	4.6 mH
Holding Torque	0.14 N.m
Rotor Inertia	18 g·cm ²
Length	52 mm
Mass	280 g
Size	11 Nema
Flange size	28 mm

Optionen

Encoder

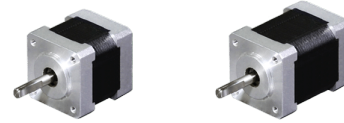
- EK1
- EK2
- EK4
- EK5
- KPL28

Planetary Gearbox

- Metal House material
- 1° No load backlash
- Ball bearing

HRSM - Size 14

[35mm]



The size 14 [35mm] Hybrid Rotary Stepper Motor has Max. 0.2N·m of holding torque. Encoders and 32mm frame planetary gearbox solutions are available. For special windings or customization, Please contact KOCO for further information.



<https://www.kocomotion.de/produkt/hrsm-size-14-35mm/>

Produkte:

Seite

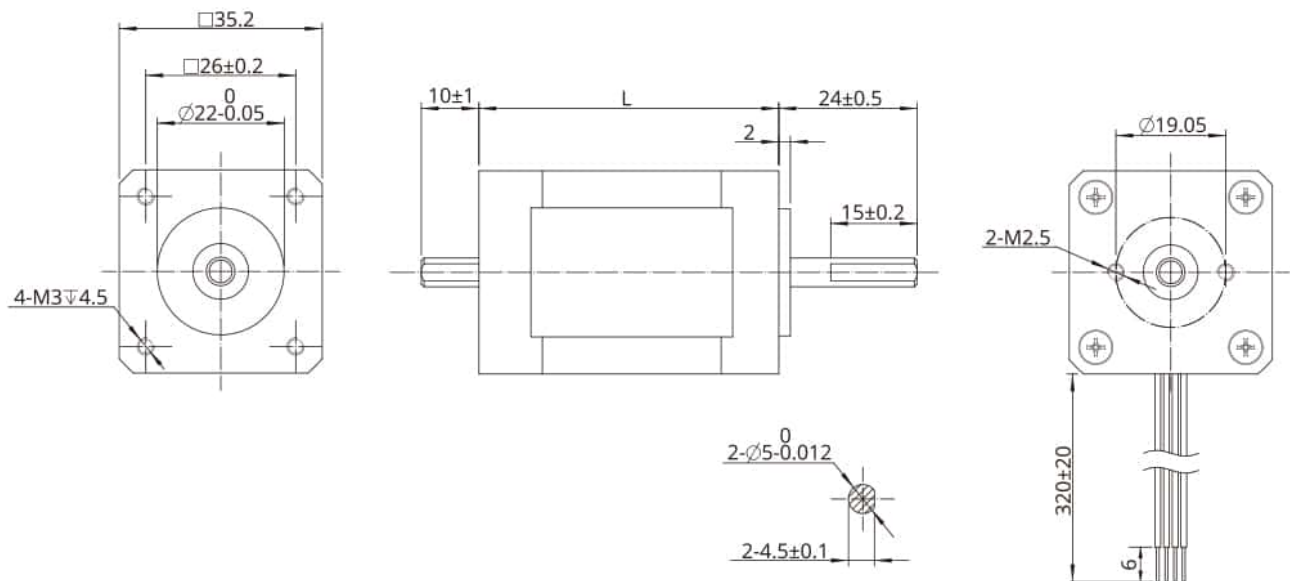
14H2027

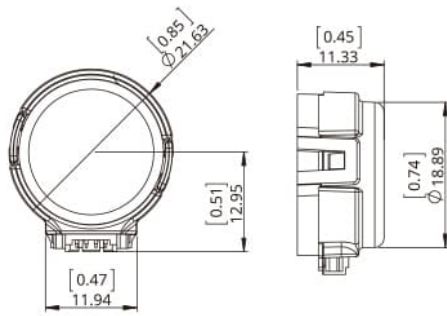
26

14H2037

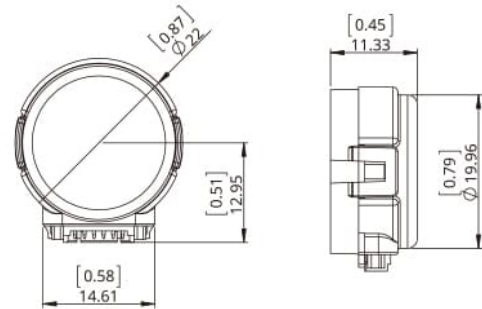
27

include __DIR__ . "/parts/spacer.php";

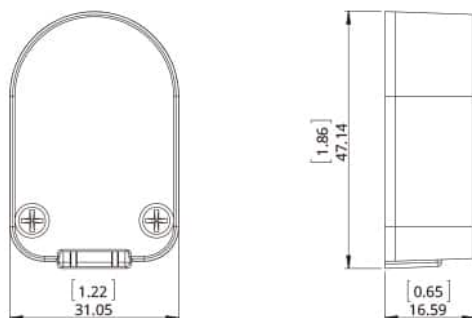




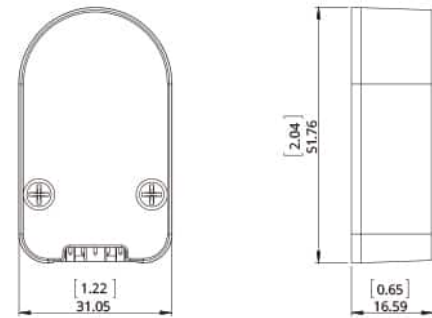
EK1 Encoder - Single ended output



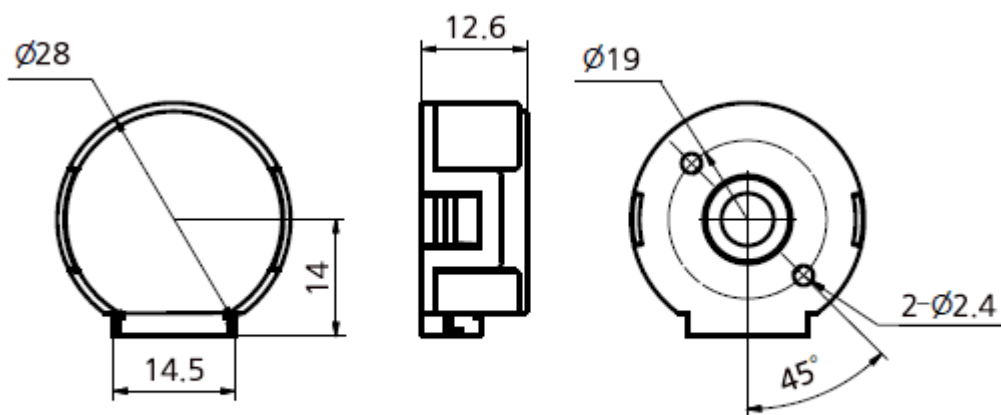
EK1 Encoder - Differential output



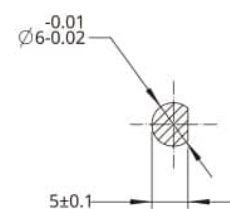
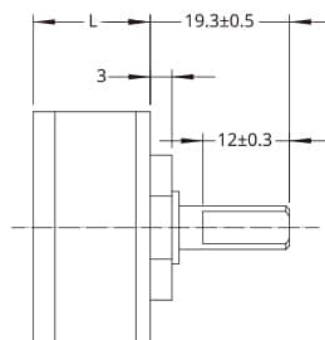
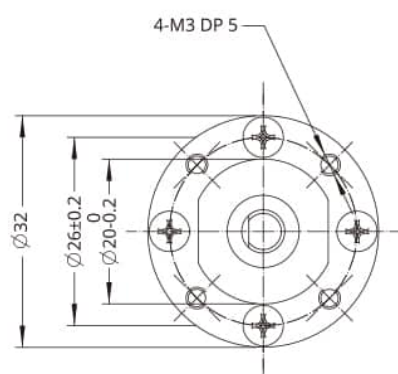
EK2 Encoder - Single ended output

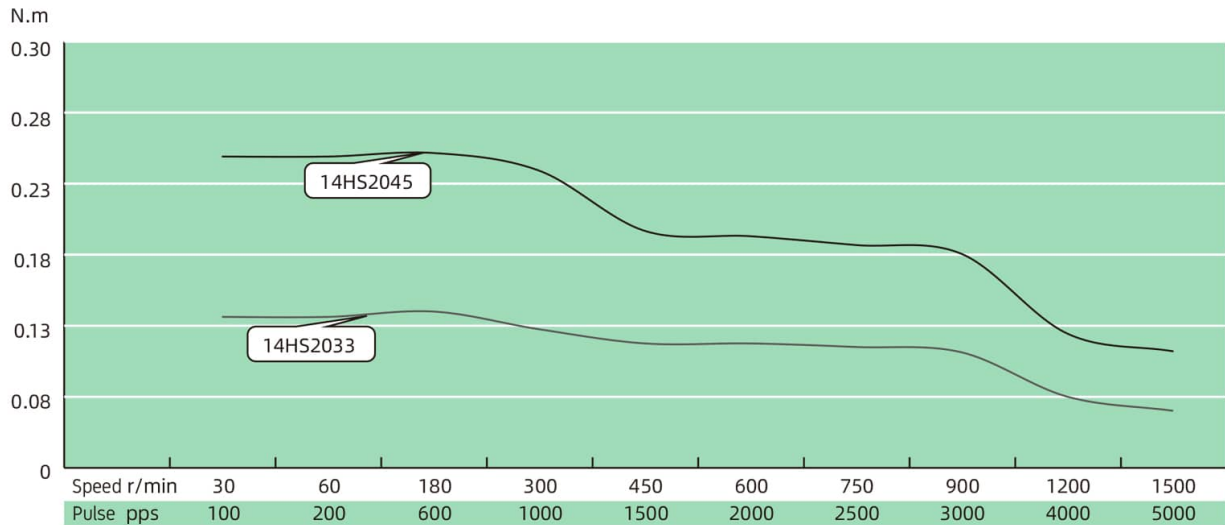


EK2 Encoder - Differential output



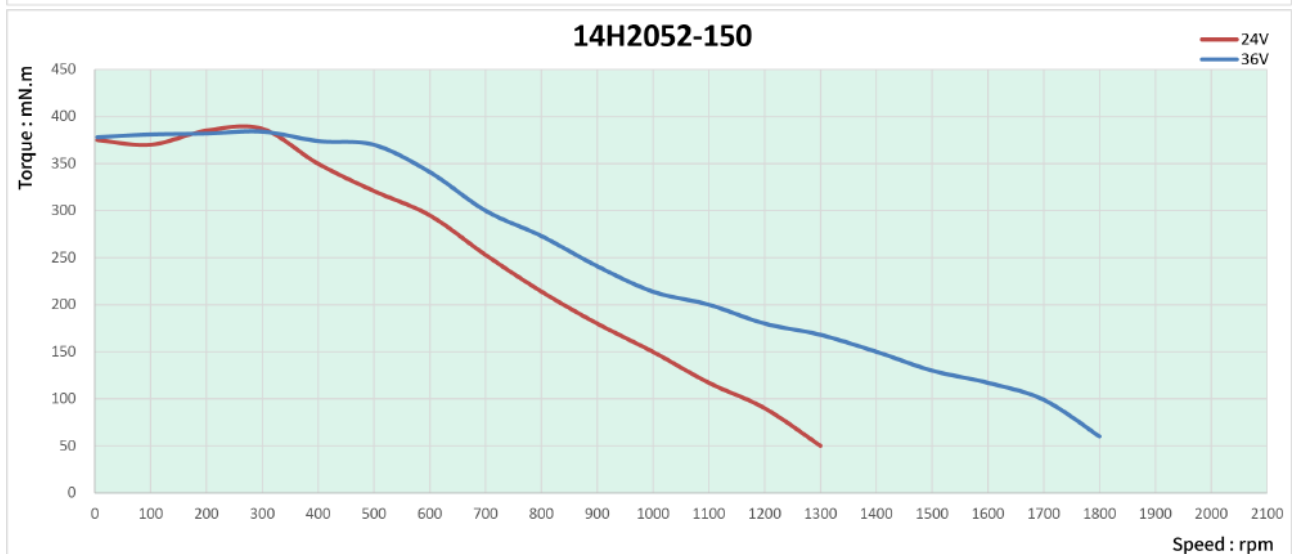
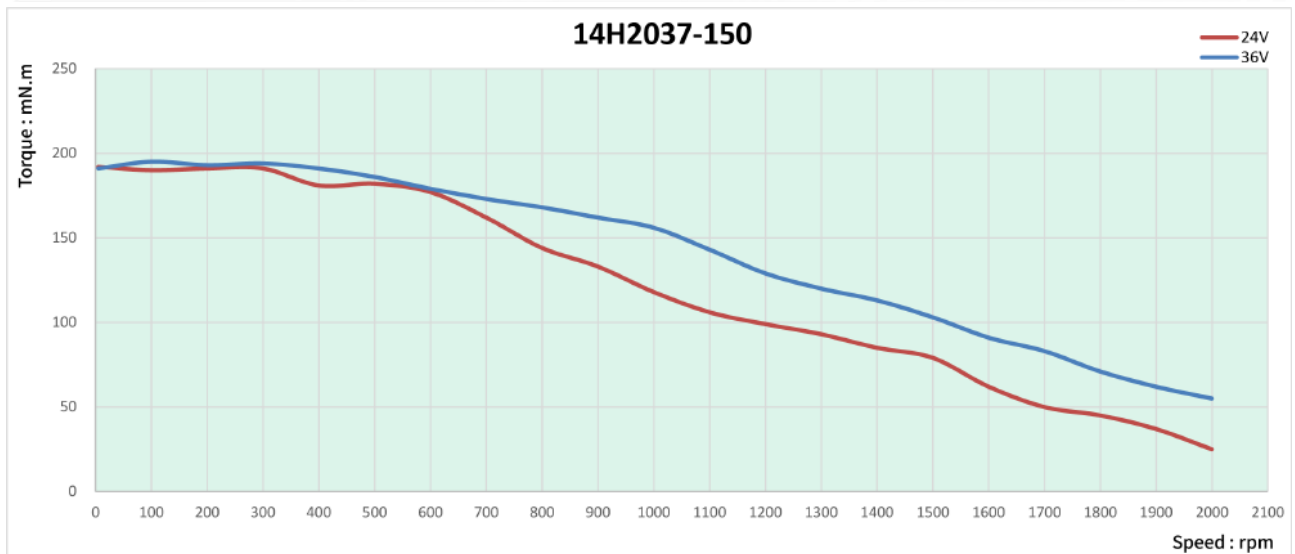
KPL28 Encoder

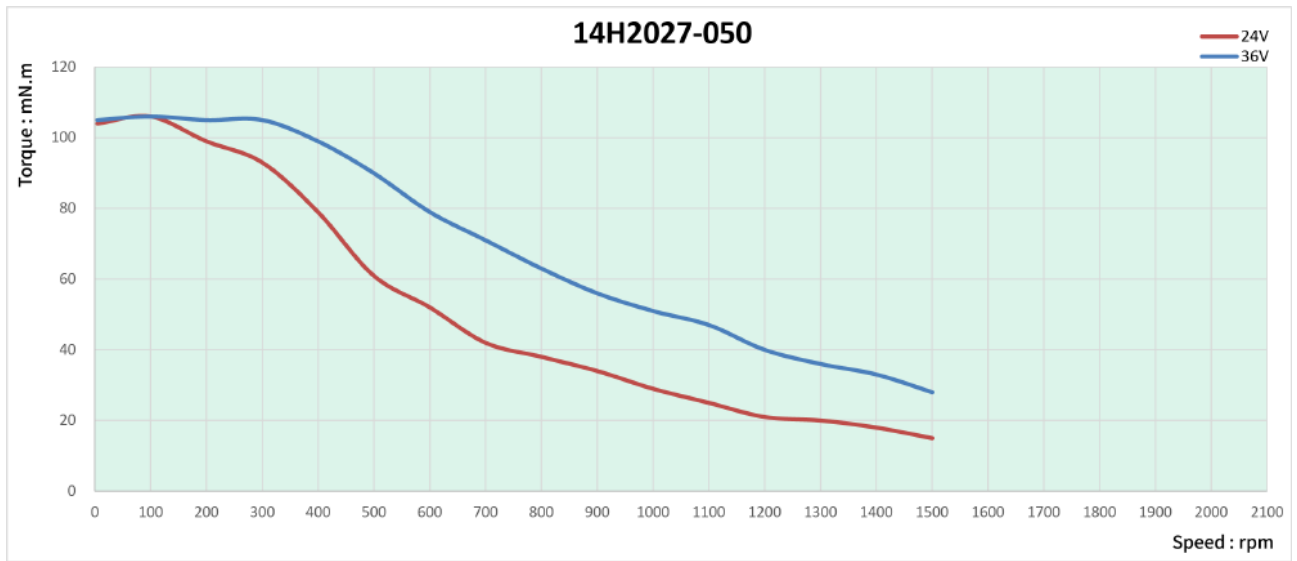




TEST CONDITION

The above curves are tested by DS-OLS2-FPD Bi-polar constant current chopper stepper driver under the condition of 24VDC. Different test conditions and operation conditions will lead to difference performance which is reasonable. The acceleration and deceleration of the motor will help to improve the performance of the motor, here for reference. In order to ensure the life cycle and reliability, it is recommended to have more than 50% margin when select products.



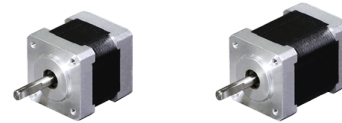


14H2027

The size 14 [35mm] Hybrid Rotary Stepper Motor has Max. 0.2N·m of holding torque. Encoders and 32mm frame planetary gearbox solutions are available. For special windings or customization, Please contact KOCO for further information.



<https://www.kocomotion.de/produkt/14h2027/>



Specification	
Current	0.5 A
Resistance	20 Ω
Inductance	23 mH
Holding Torque	0.15 N.m
Rotor Inertia	10 g·cm ²
Length	27 mm
Mass	140 g
Size	14 Nema
Flange size	35 mm

Optionen

Encoder

- EK1
- EK2
- KPL28

Plantary Gearbox

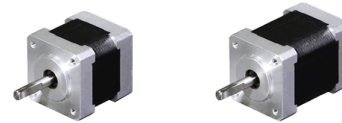
- Metal House material
- 1° No load backlash
- Ball bearing

14H2037

The size 14 [35mm] Hybrid Rotary Stepper Motor has Max. 0.2N·m of holding torque. Encoders and 32mm frame planetary gearbox solutions are available. For special windings or customization, Please contact KOCO for further information.



<https://www.kocomotion.de/produkt/14h2037/>



Specification	
Current	1.5 A
Resistance	2.0 Ω
Inductance	3.2 mH
Holding Torque	0.2 N.m
Rotor Inertia	28 g·cm ²
Length	37 mm
Mass	180 g
Size	14 Nema
Flange size	35 mm

Optionen

Encoder

- EK1
- EK2
- KPL28

Plantary Gearbox

- Metal House material
- 1° No load backlash
- Ball bearing

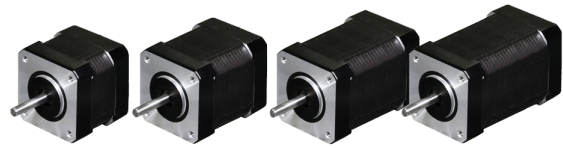
HRSM - Size 17

[42mm]

The size 17 [42mm] Hybrid Rotary Stepper Motor has Max. 0.72N·m of holding torque. Encoders and 42mm frame planetary gearbox solutions are available. For special windings or customization, Please contact KOCO for further information.

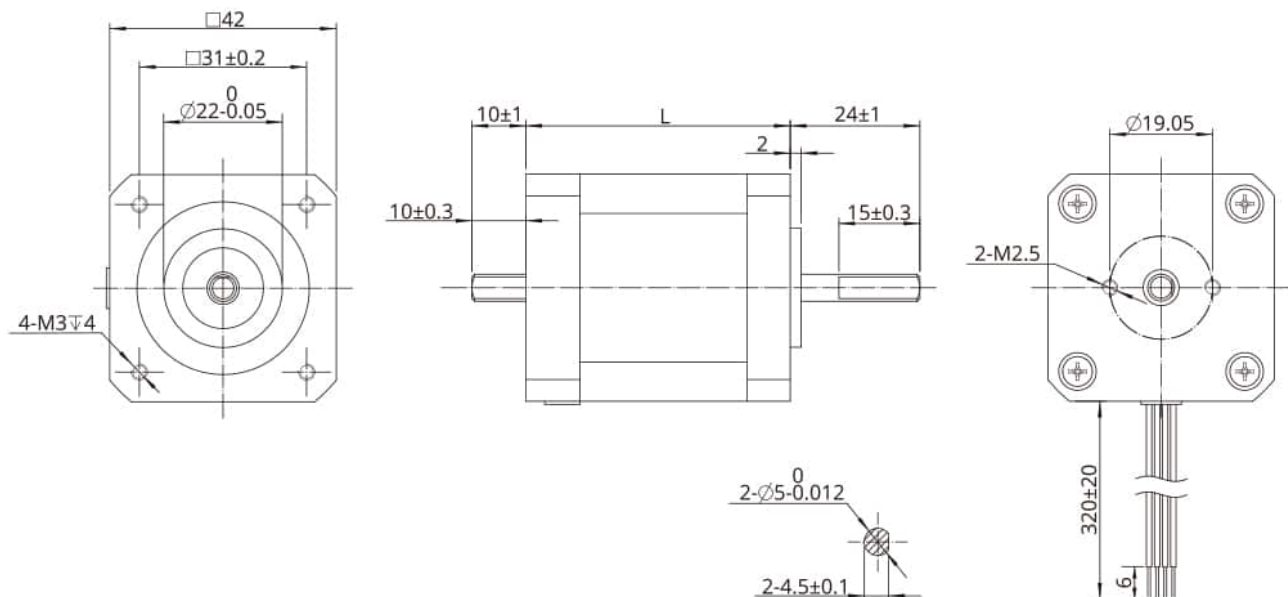


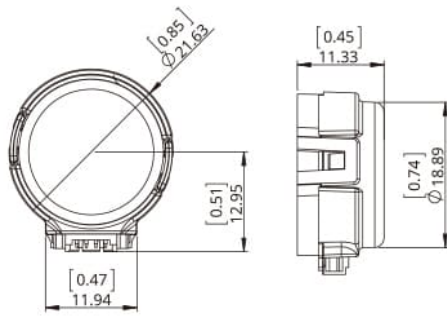
<https://www.kocomotion.de/produkt/hrsm-size-17-42mm/>



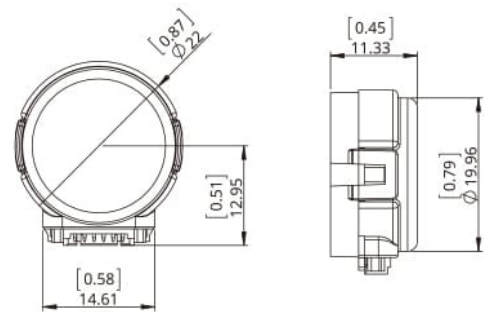
Produkte:	Seite
17H2034	33
17H2041	34
17H2049	35
17H2061	36

include __DIR__ . "/parts/spacer.php";

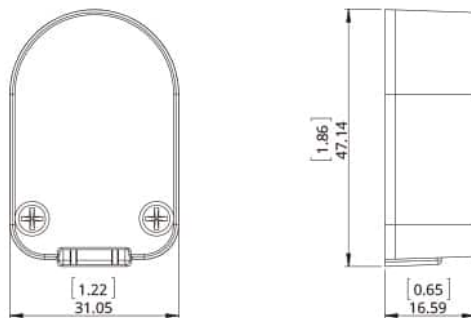




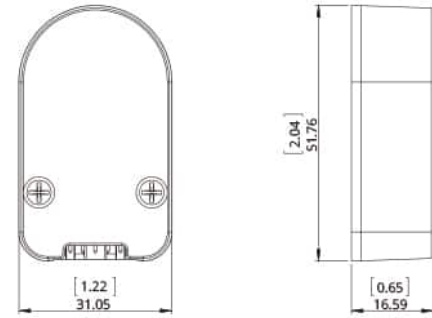
EK1 Encoder - Single ended output



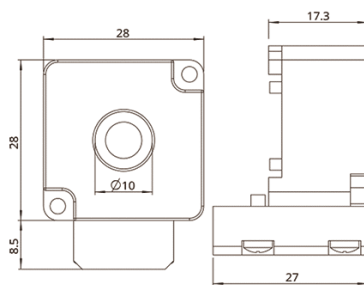
EK1 Encoder - Differential output



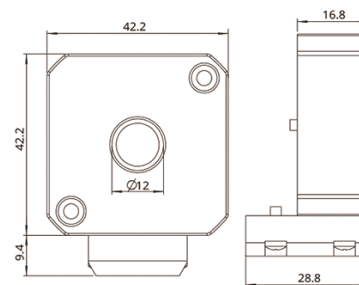
EK2 Encoder - Single ended output



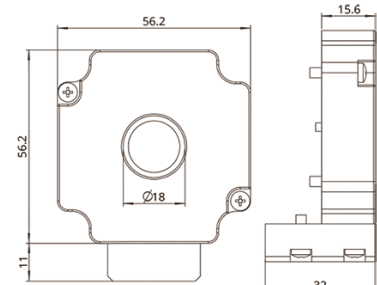
EK2 Encoder - Differential output



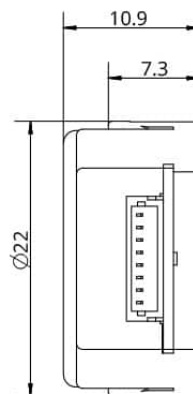
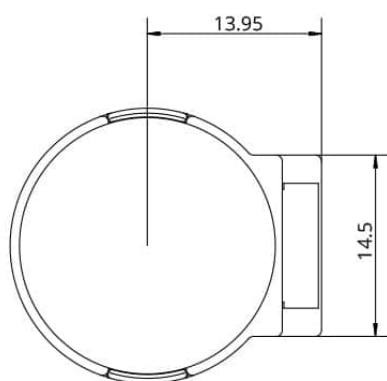
EK4 Encoder 11



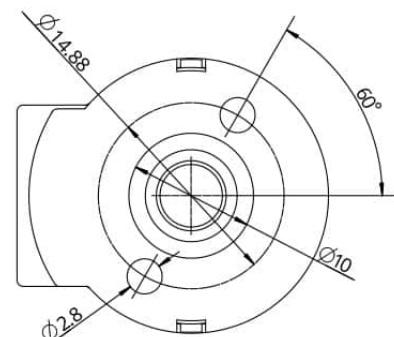
EK4 Encoder 17

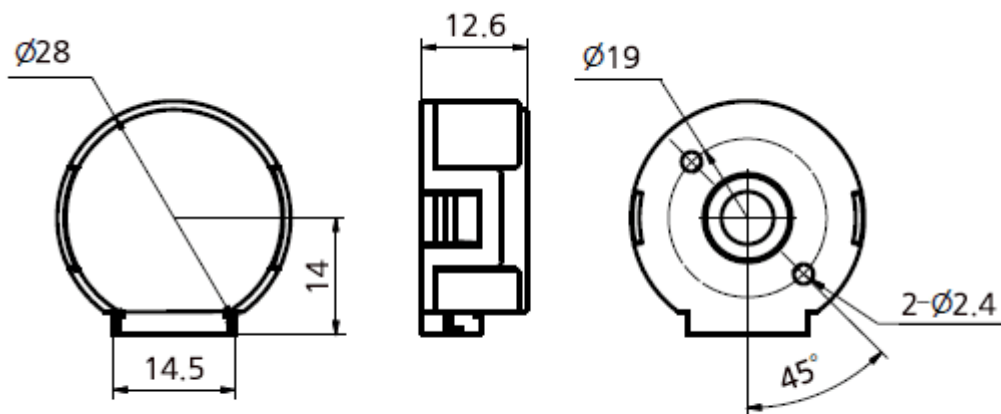


EK4 Encoder 23

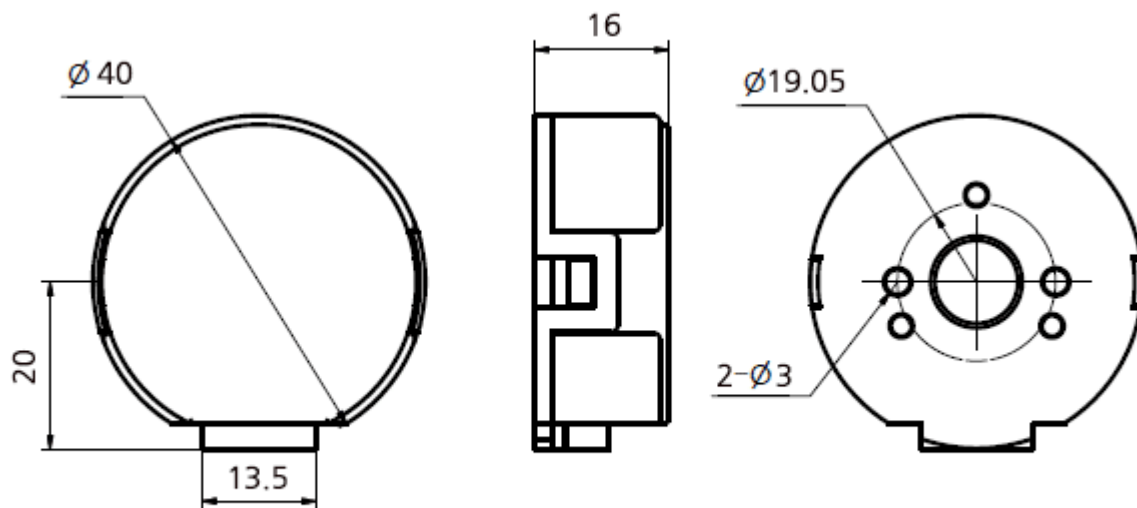


EK5 Encoder

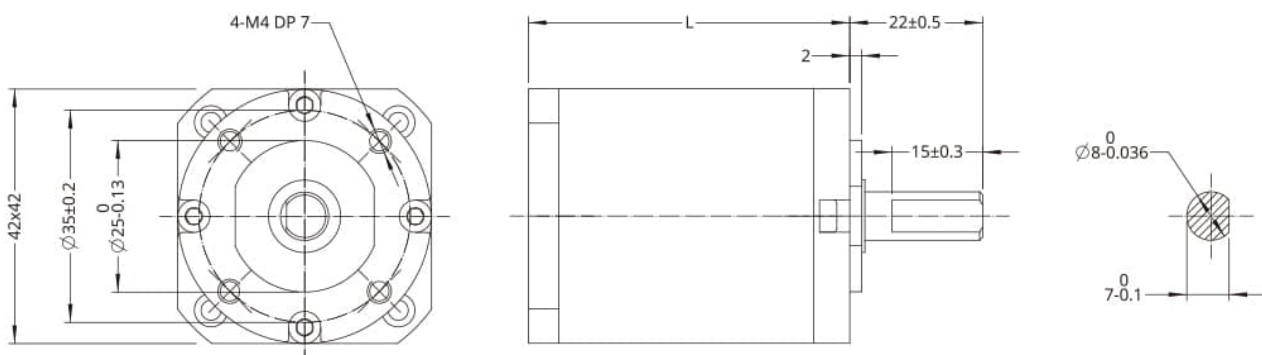


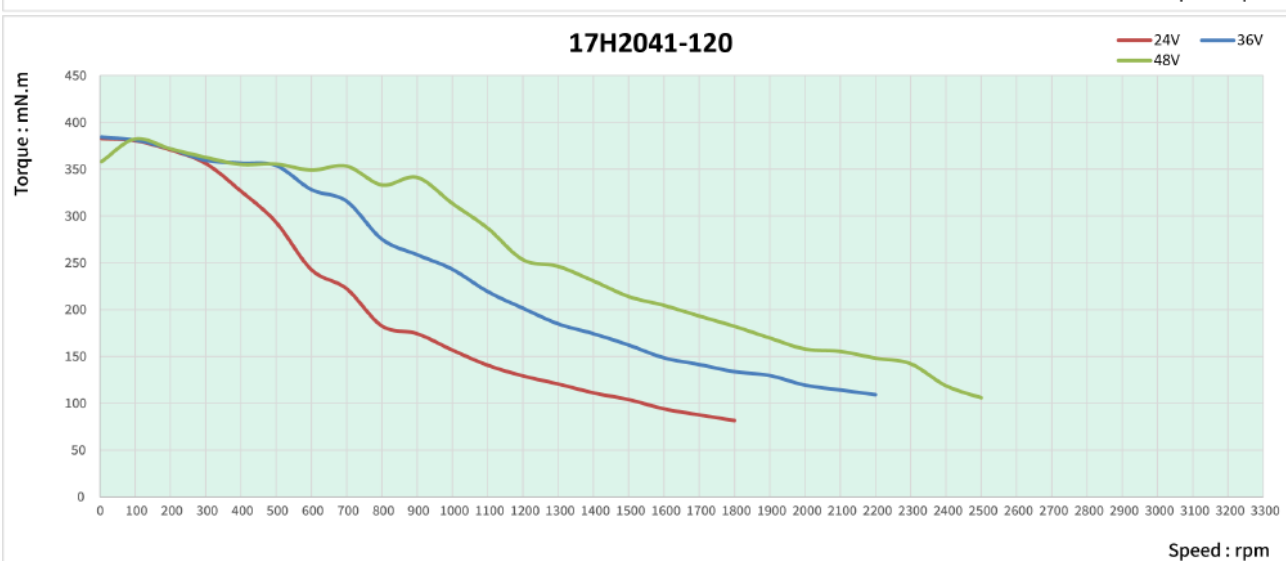
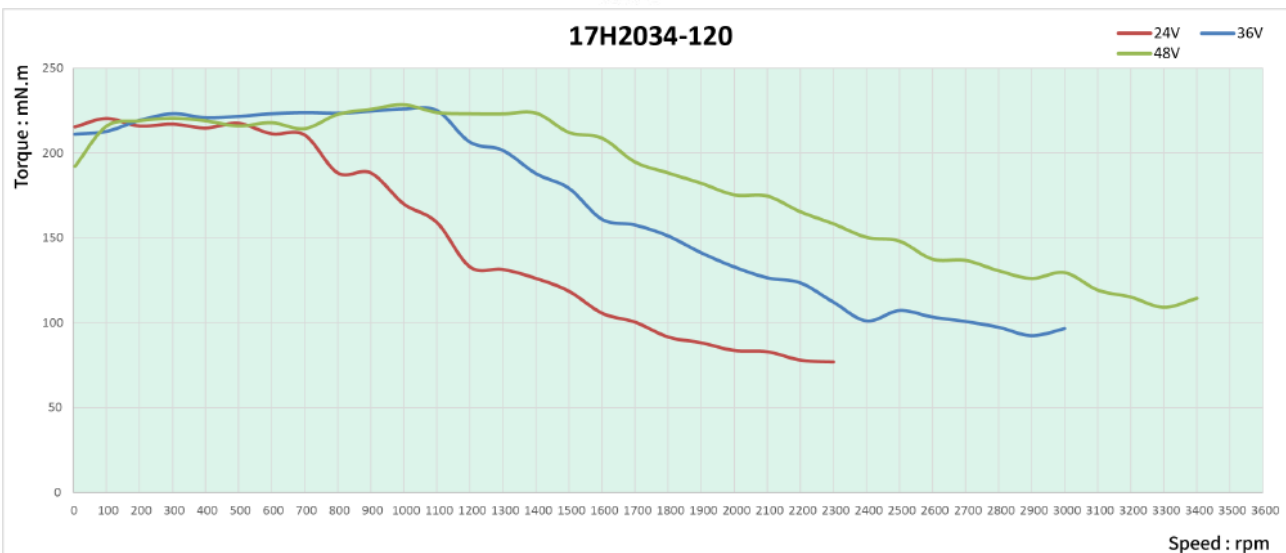
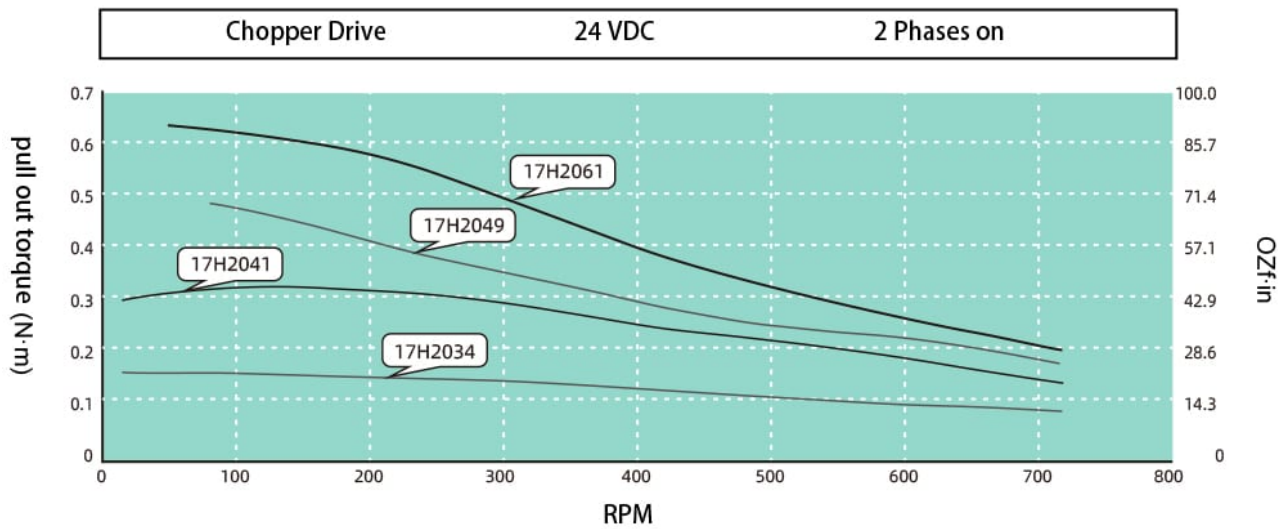


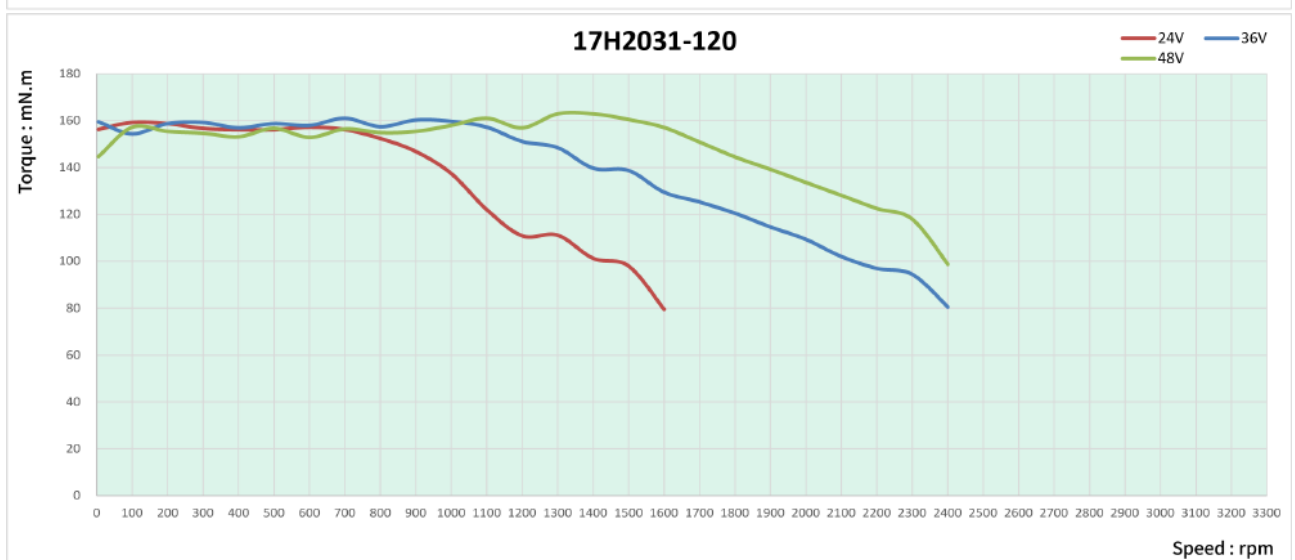
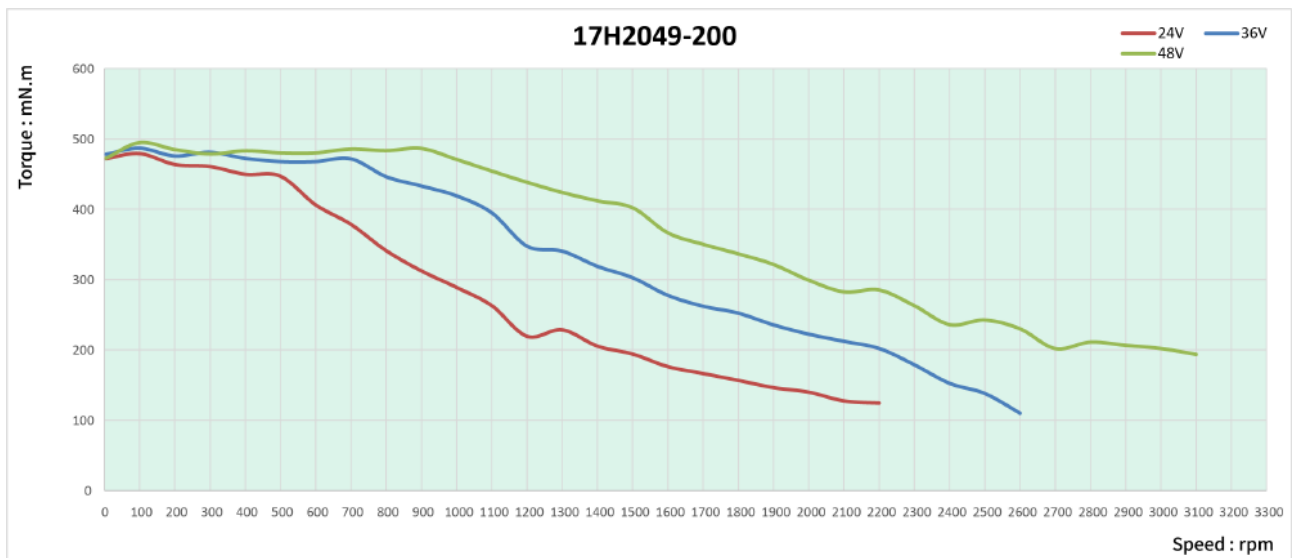
KPL28 Encoder



KPL40 Encoder





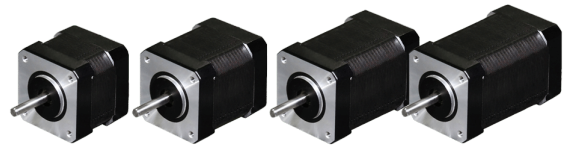


17H2034

The size 17 [42mm] Hybrid Rotary Stepper Motor has Max. 0.72N·m of holding torque. Encoders and 42mm frame planetary gearbox solutions are available. For special windings or customization, Please contact KOCO for further information.



<https://www.kocomotion.de/produkt/17h2034/>



Specification	
Current	0.5 A
Resistance	15.0 Ω
Inductance	21.0 mH
Holding Torque	0.25 N.m
Rotor Inertia	25 g·cm ²
Length	35 mm
Mass	230 g
Size	17 Nema
Flange size	42 mm

Optionen

Encoder

- EK1
- EK2
- EK4

Plantary Gearbox

- Metal House material
- 1.2° No load backlash
- Ball bearing

Encoder

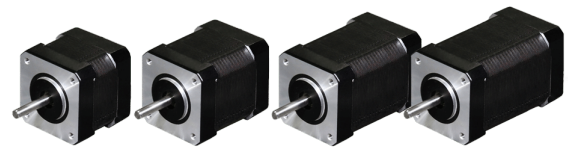
- EK5
- KPL28
- KPL40

17H2041

The size 17 [42mm] Hybrid Rotary Stepper Motor has Max. 0.72N·m of holding torque. Encoders and 42mm frame planetary gearbox solutions are available. For special windings or customization, Please contact KOCO for further information.



<https://www.kocomotion.de/produkt/17h2041/>



Specification	
Current	1.2 A
Resistance	2.5 Ω
Inductance	5.5 mH
Holding Torque	0.4 N.m
Rotor Inertia	54 g·cm ²
Length	41 mm
Mass	300 g
Size	17 Nema
Flange size	42 mm

Optionen

Encoder

- EK1
- EK2
- EK4

Plantary Gearbox

- Metal House material
- 1.2° No load backlash
- Ball bearing

Encoder

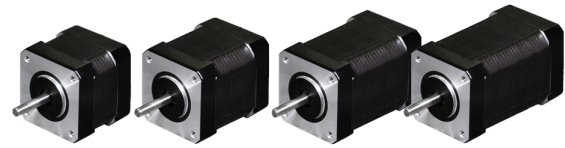
- EK5
- KPL28
- KPL40

17H2049

The size 17 [42mm] Hybrid Rotary Stepper Motor has Max. 0.72N·m of holding torque. Encoders and 42mm frame planetary gearbox solutions are available. For special windings or customization, Please contact KOCO for further information.



<https://www.kocomotion.de/produkt/17h2049/>



Specification	
Current	1.5 A
Resistance	2.0 Ω
Inductance	5.4 mH
Holding Torque	0.48 N.m
Rotor Inertia	77 g·cm ²
Length	49 mm
Mass	360 g
Size	17 Nema
Flange size	42 mm

Optionen

Encoder

- EK1
- EK2
- EK4

Plantary Gearbox

- Metal House material
- 1.2° No load backlash
- Ball bearing

Encoder

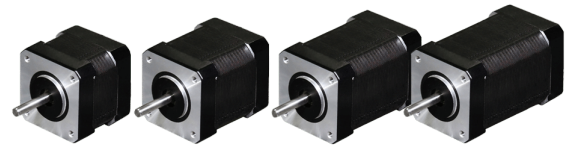
- EK5
- KPL28
- KPL40

17H2061

The size 17 [42mm] Hybrid Rotary Stepper Motor has Max. 0.72N·m of holding torque. Encoders and 42mm frame planetary gearbox solutions are available. For special windings or customization, Please contact KOCO for further information.



<https://www.kocomotion.de/produkt/17h2061/>



Specification	
Current	2.0 A
Resistance	1.8 Ω
Inductance	4 mH
Holding Torque	0.72 N.m
Rotor Inertia	110 g·cm ²
Length	61 mm
Mass	500 g
Size	17 Nema
Flange size	42 mm

Optionen

Encoder

- EK1
- EK2
- EK4

Plantary Gearbox

- Metal House material
- 1.2° No load backlash
- Ball bearing

Encoder

- EK5
- KPL28
- KPL40

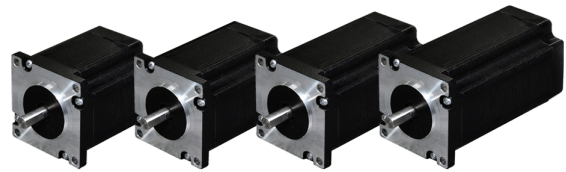
HRSM - Size 23

[57mm]

The size 23 [57mm] Hybrid Rotary Stepper Motor has Max. 2N·m of holding torque. Encoders and 57mm frame planetary gearbox solutions are available. For special windings or customization, Please contact KOCO for further information.

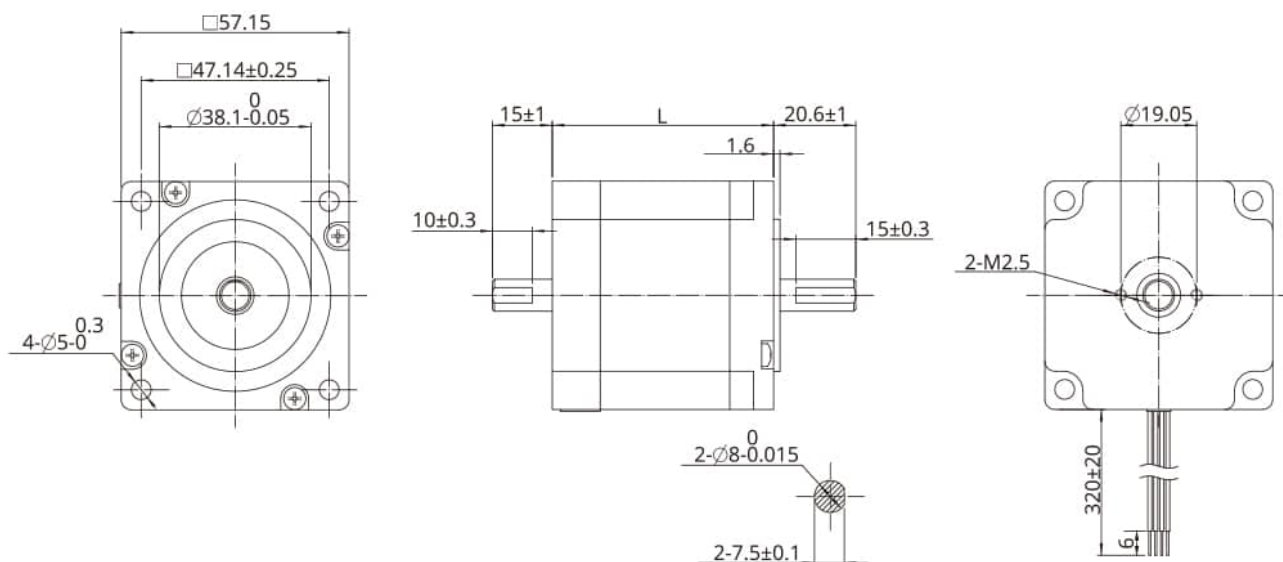


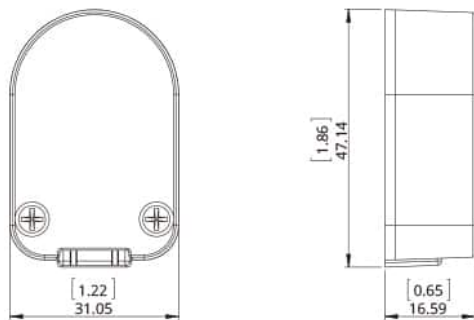
<https://www.kocomotion.de/produkt/hrsm-size-23-57mm/>



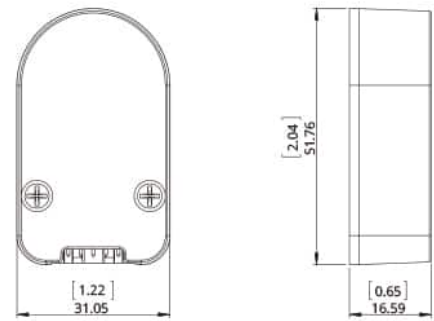
Produkte:	Seite
23H2042	42
23H2051	43
23H2065	44
23H2076	45

include __DIR__ . "/parts/spacer.php";

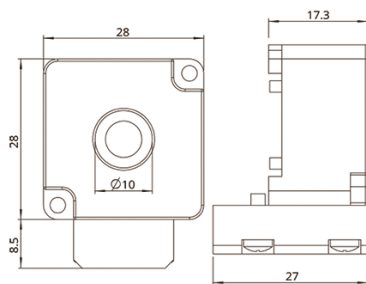




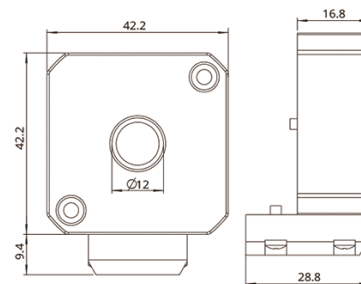
EK2 Encoder - Single ended output



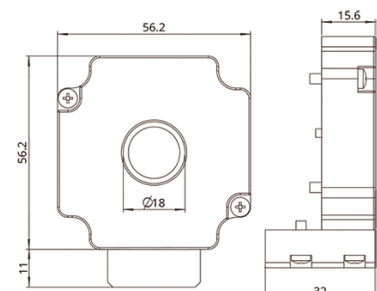
EK2 Encoder - Differential output



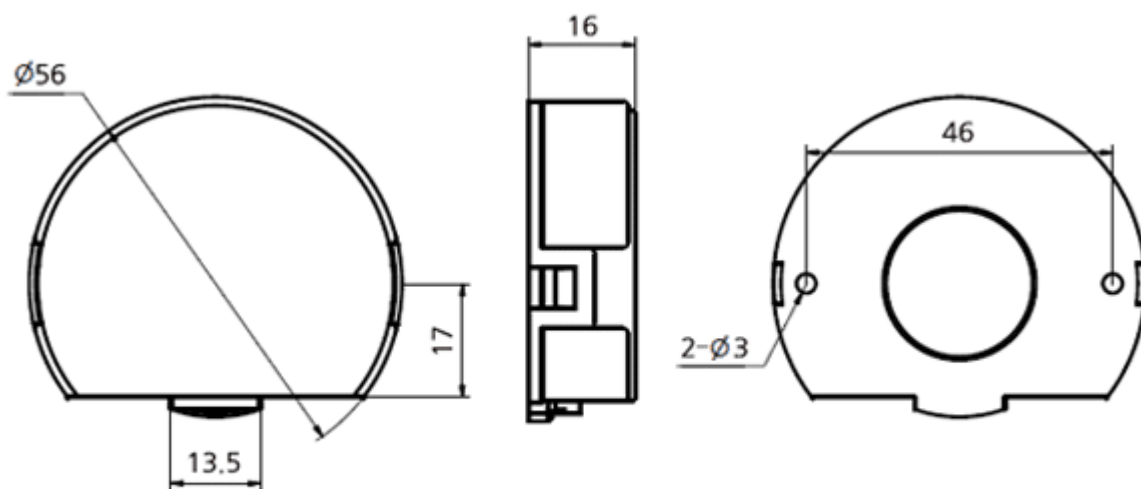
EK4 Encoder 11



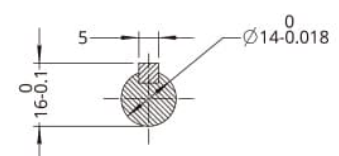
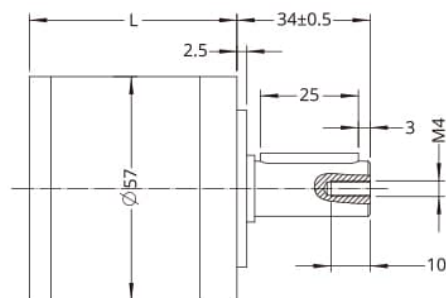
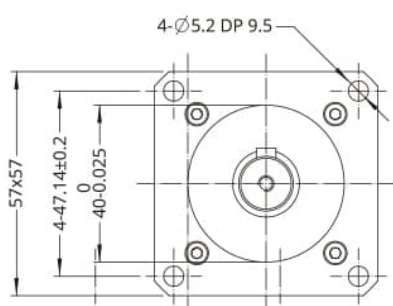
EK4 Encoder 17

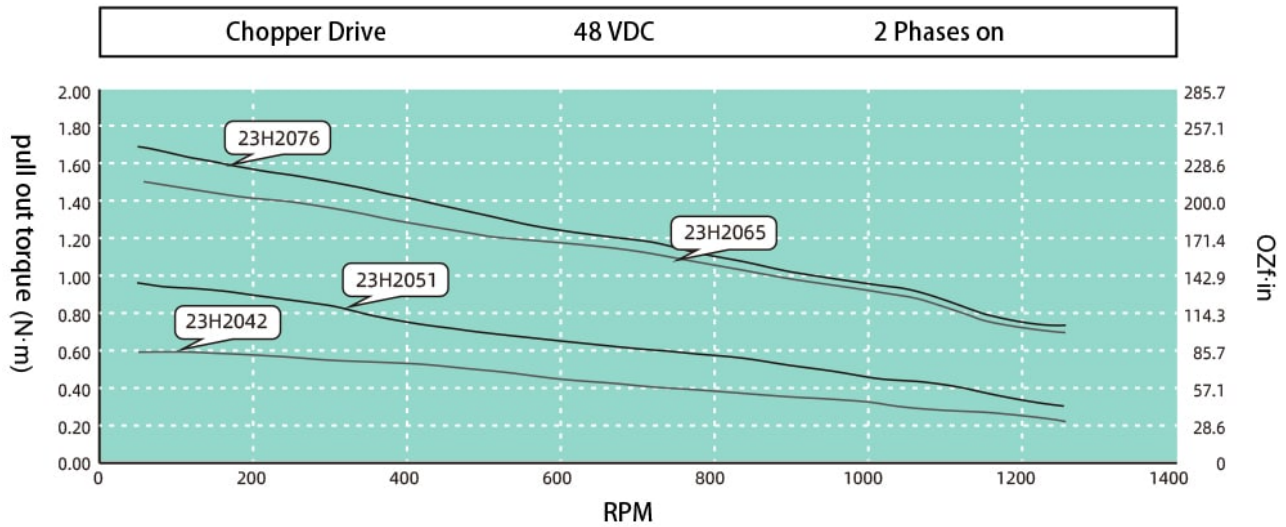


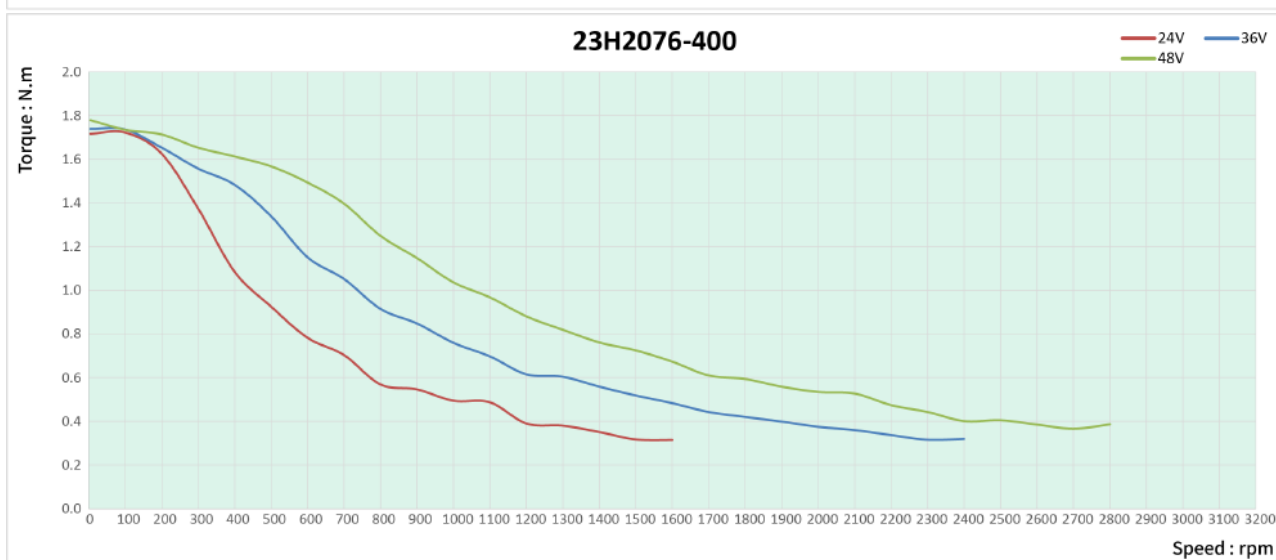
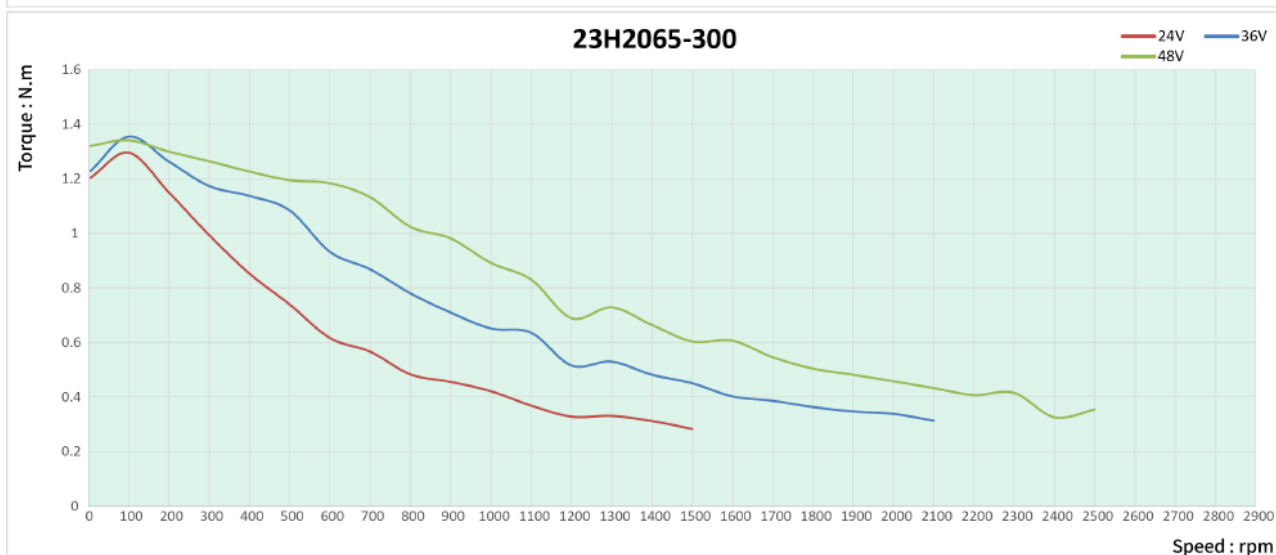
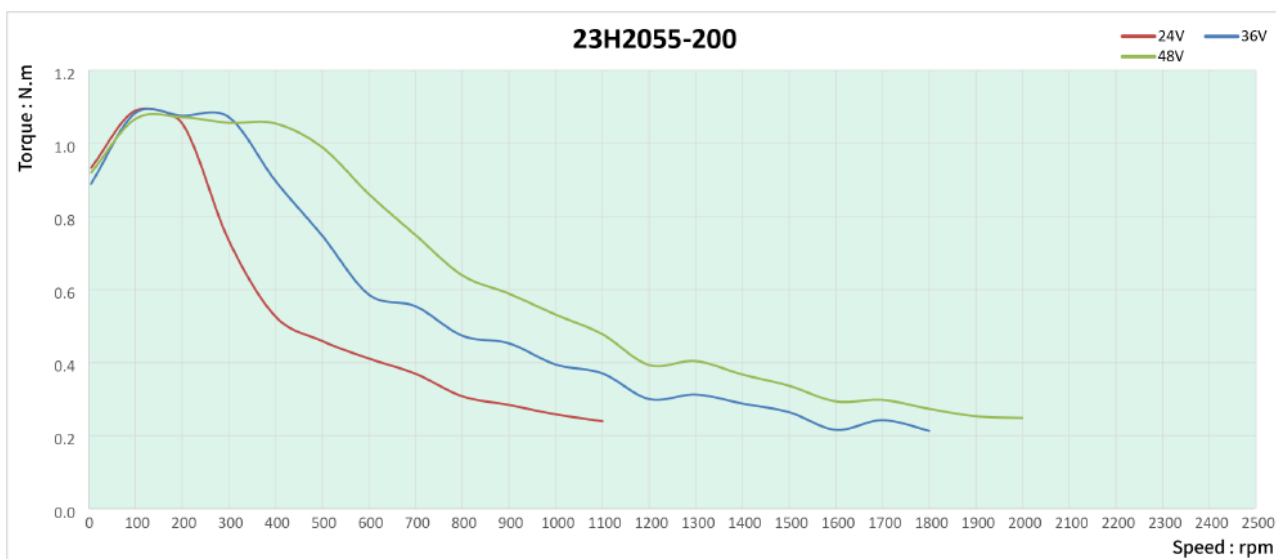
EK4 Encoder 23

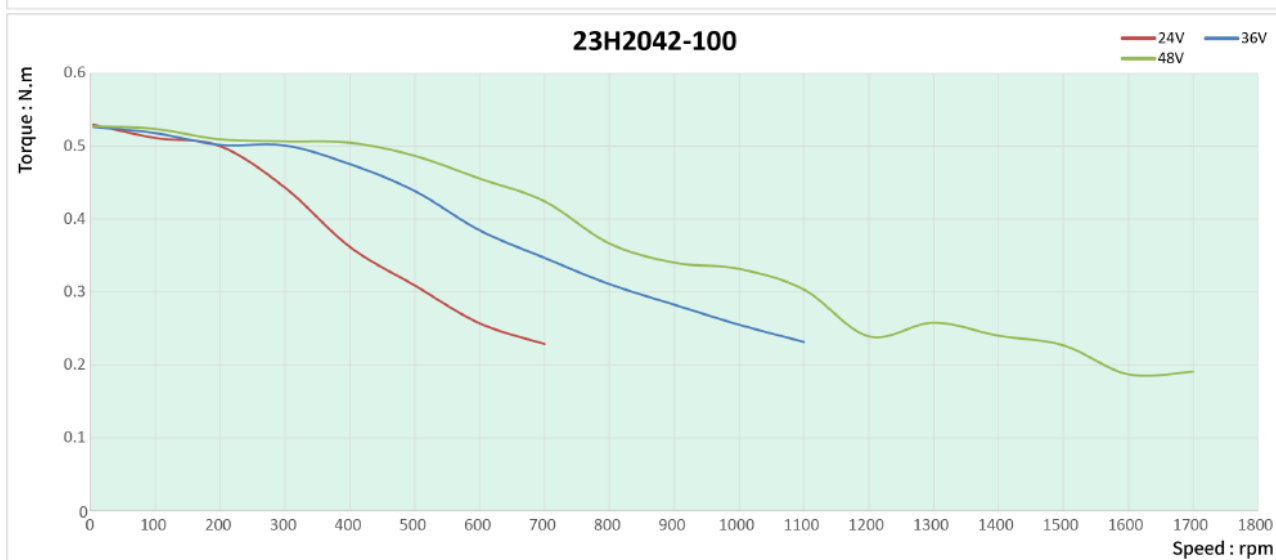
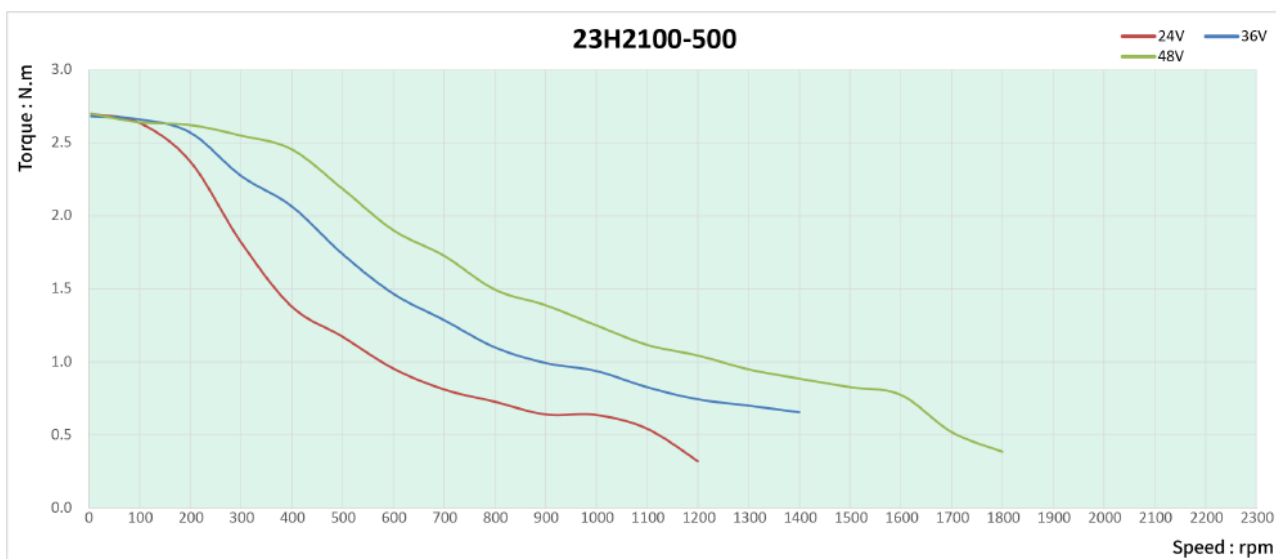


KPL56 Encoder







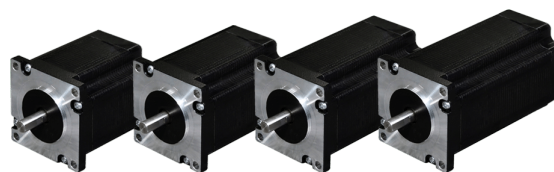


23H2042

The size 23 [57mm] Hybrid Rotary Stepper Motor has Max. 2N·m of holding torque. Encoders and 57mm frame planetary gearbox solutions are available. For special windings or customization, Please contact KOCO for further information.



<https://www.kocomotion.de/produkt/23h2042/>



Specification	
Current	1.0 A
Resistance	4.2 Ω
Inductance	9 mH
Holding Torque	0.6 N.m
Rotor Inertia	140 g·cm ²
Length	42.5 mm
Mass	460 g
Size	23 Nema
Flange size	57 mm

Optionen

Encoder

- EK2
- EK4
- KPL56

Plantary Gearbox

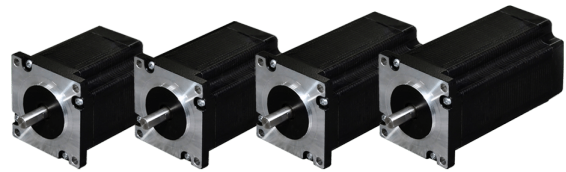
- Metal House material
- No load backlash: One stage 15 arcmin, two stages 25 arcmin
- Ball bearing

23H2051

The size 23 [57mm] Hybrid Rotary Stepper Motor has Max. 2N·m of holding torque. Encoders and 57mm frame planetary gearbox solutions are available. For special windings or customization, Please contact KOCO for further information.



<https://www.kocomotion.de/produkt/23h2051/>



Specification	
Current	2.0 A
Resistance	1.5 Ω
Inductance	4.4 mH
Holding Torque	1.0 N.m
Rotor Inertia	240 g·cm ²
Length	51.5 mm
Mass	640 g
Size	23 Nema
Flange size	57 mm

Optionen

Encoder

- EK2
- EK4
- KPL56

Plantary Gearbox

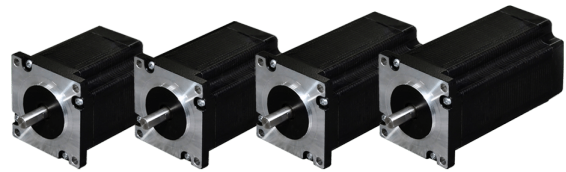
- Metal House material
- No load backlash: One stage 15 arcmin, two stages 25 arcmin
- Ball bearing

23H2065

The size 23 [57mm] Hybrid Rotary Stepper Motor has Max. 2N·m of holding torque. Encoders and 57mm frame planetary gearbox solutions are available. For special windings or customization, Please contact KOCO for further information.



<https://www.kocomotion.de/produkt/23h2065/>



Specification	
Current	3.0 A
Resistance	0.9 Ω
Inductance	2.7 mH
Holding Torque	1.6 N.m
Rotor Inertia	350 g·cm ²
Length	65.5 mm
Mass	860 g
Size	23 Nema
Flange size	57 mm

Optionen

Encoder

- EK2
- EK4
- KPL56

Plantary Gearbox

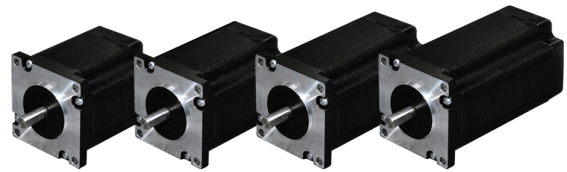
- Metal House material
- No load backlash: One stage 15 arcmin, two stages 25 arcmin
- Ball bearing

23H2076

The size 23 [57mm] Hybrid Rotary Stepper Motor has Max. 2N·m of holding torque. Encoders and 57mm frame planetary gearbox solutions are available. For special windings or customization, Please contact KOCO for further information.



<https://www.kocomotion.de/produkt/23h2076/>



Specification	
Current	4.0 A
Resistance	0.6 Ω
Inductance	2.4 mH
Holding Torque	2.0 N.m
Rotor Inertia	480 g·cm ²
Length	76.5 mm
Mass	1060 g
Size	23 Nema
Flange size	57 mm

Optionen

Encoder

- EK2
- EK4
- KPL56

Plantary Gearbox

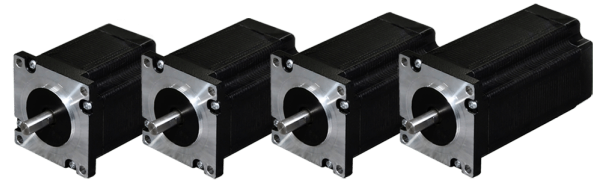
- Metal House material
- No load backlash: One stage 15 arcmin, two stages 25 arcmin
- Ball bearing

HRSM - Size 24 [60mm]

The size 24 [60mm] Hybrid Rotary Stepper Motor has Max. 3.0N·m of holding torque. Encoders and 60mm frame planetary gearbox solutions are available. For special windings or customization, Please contact KOCO for further information.

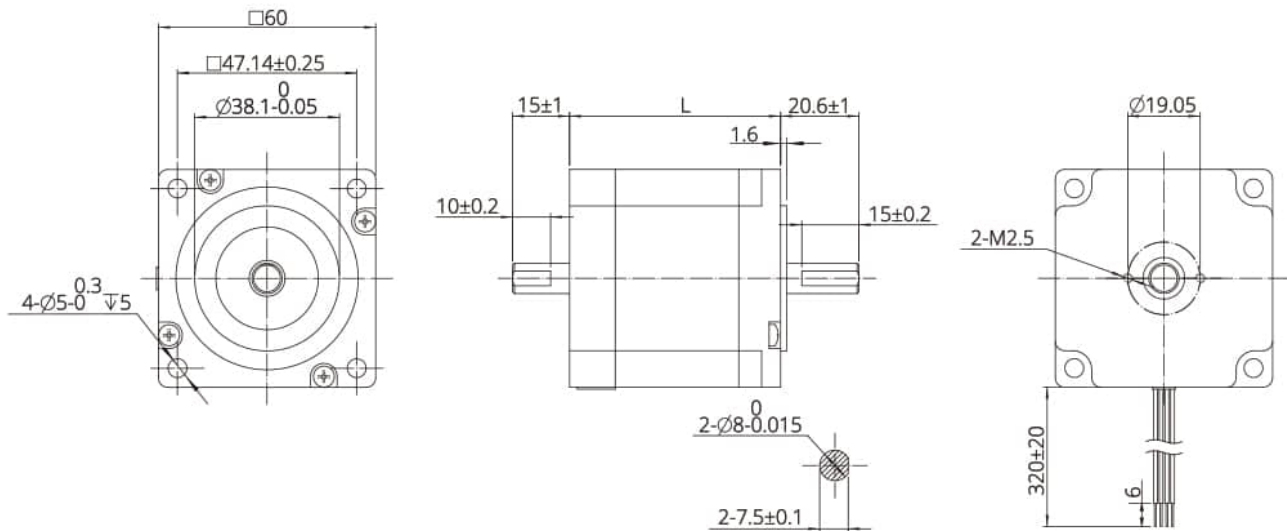


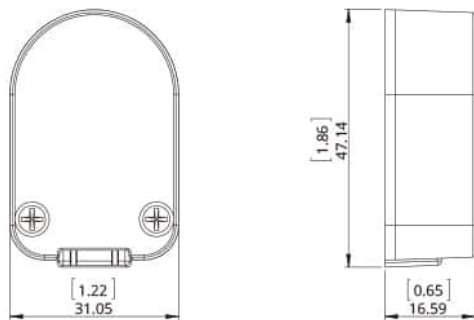
<https://www.kocomotion.de/produkt/hrsm-size-24-60mm/>



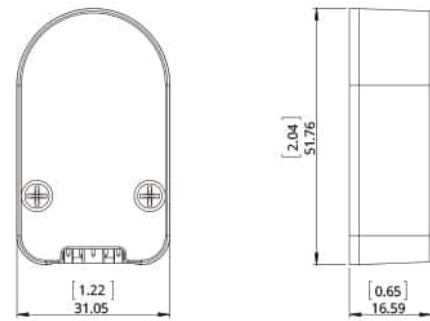
Produkte:	Seite
24H2047	50
24H2056	51
24H2068	52
24H2085	53

include __DIR__ . "/parts/spacer.php";

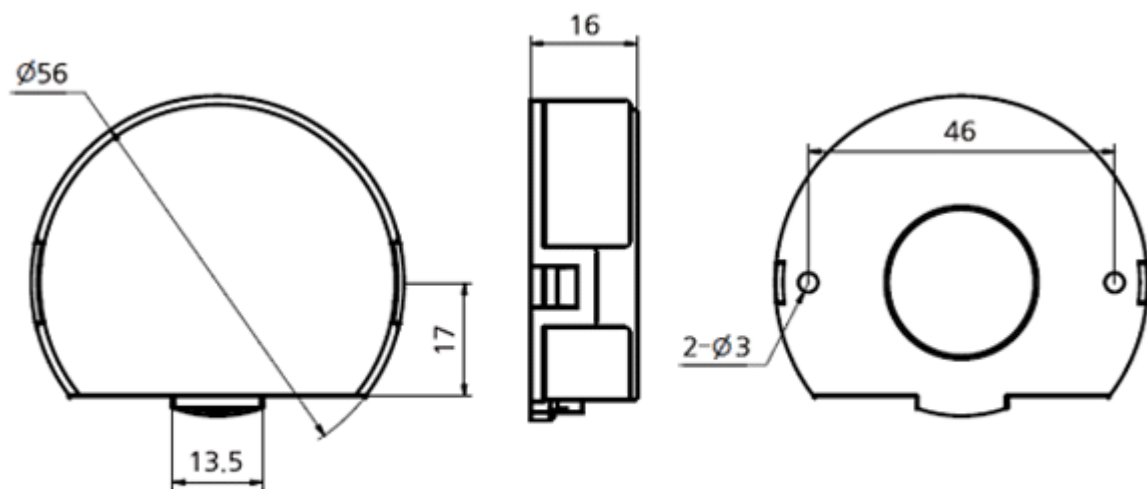




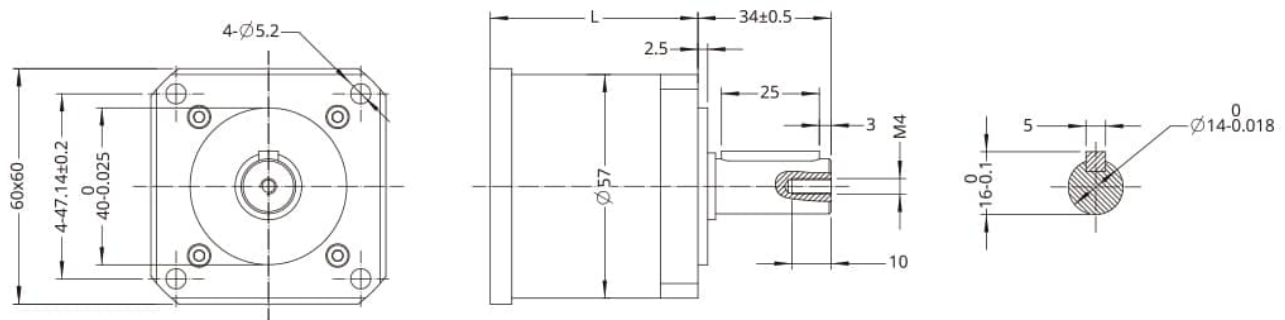
EK2 Encoder - Single ended output

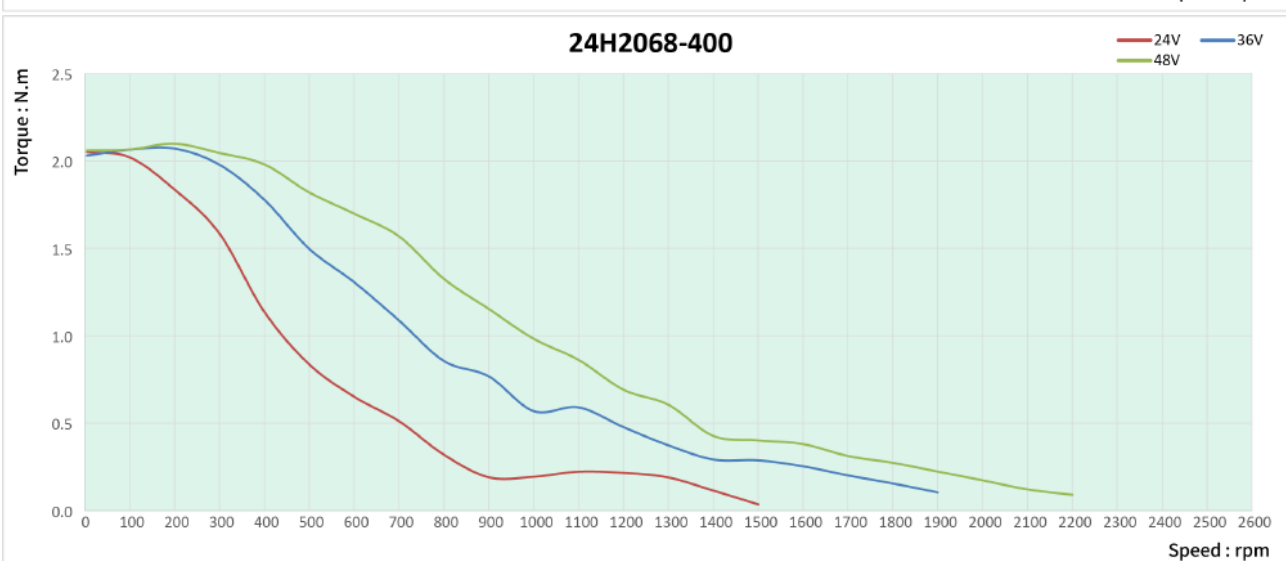
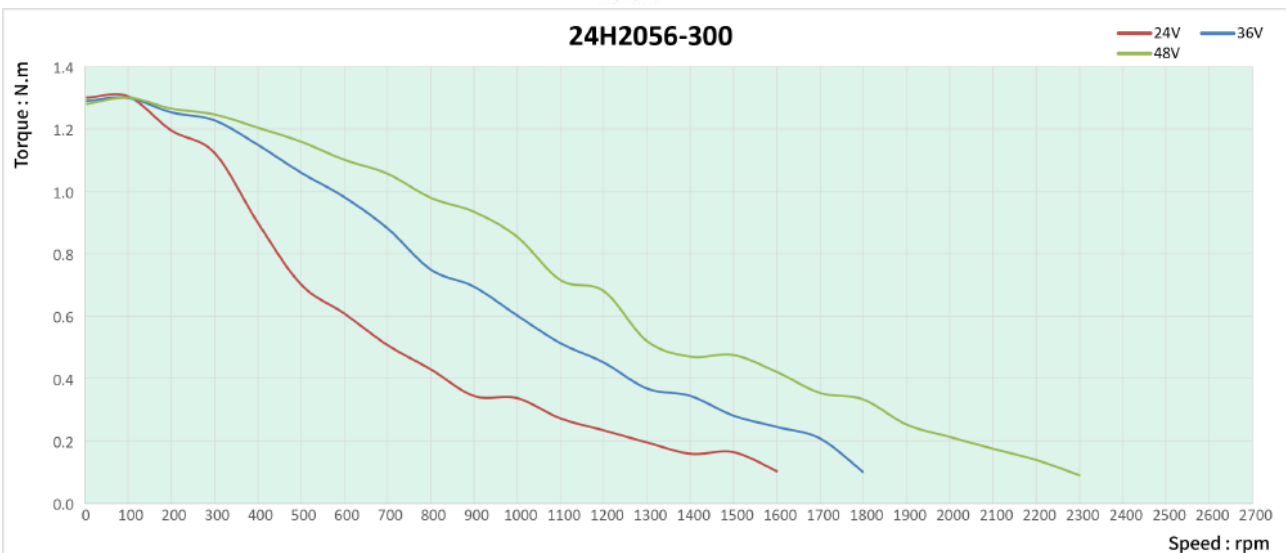
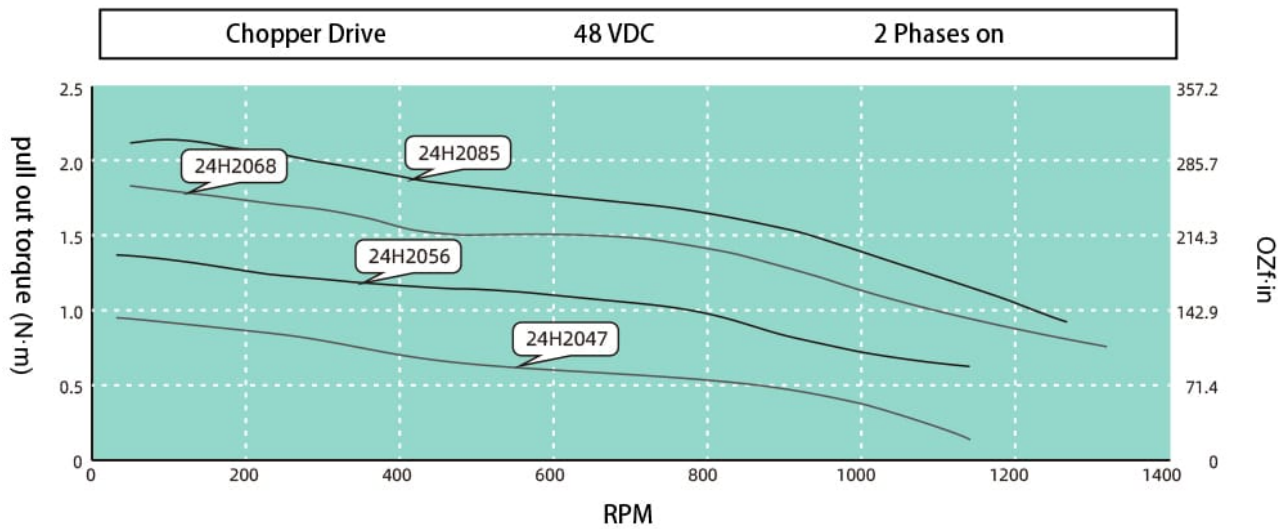


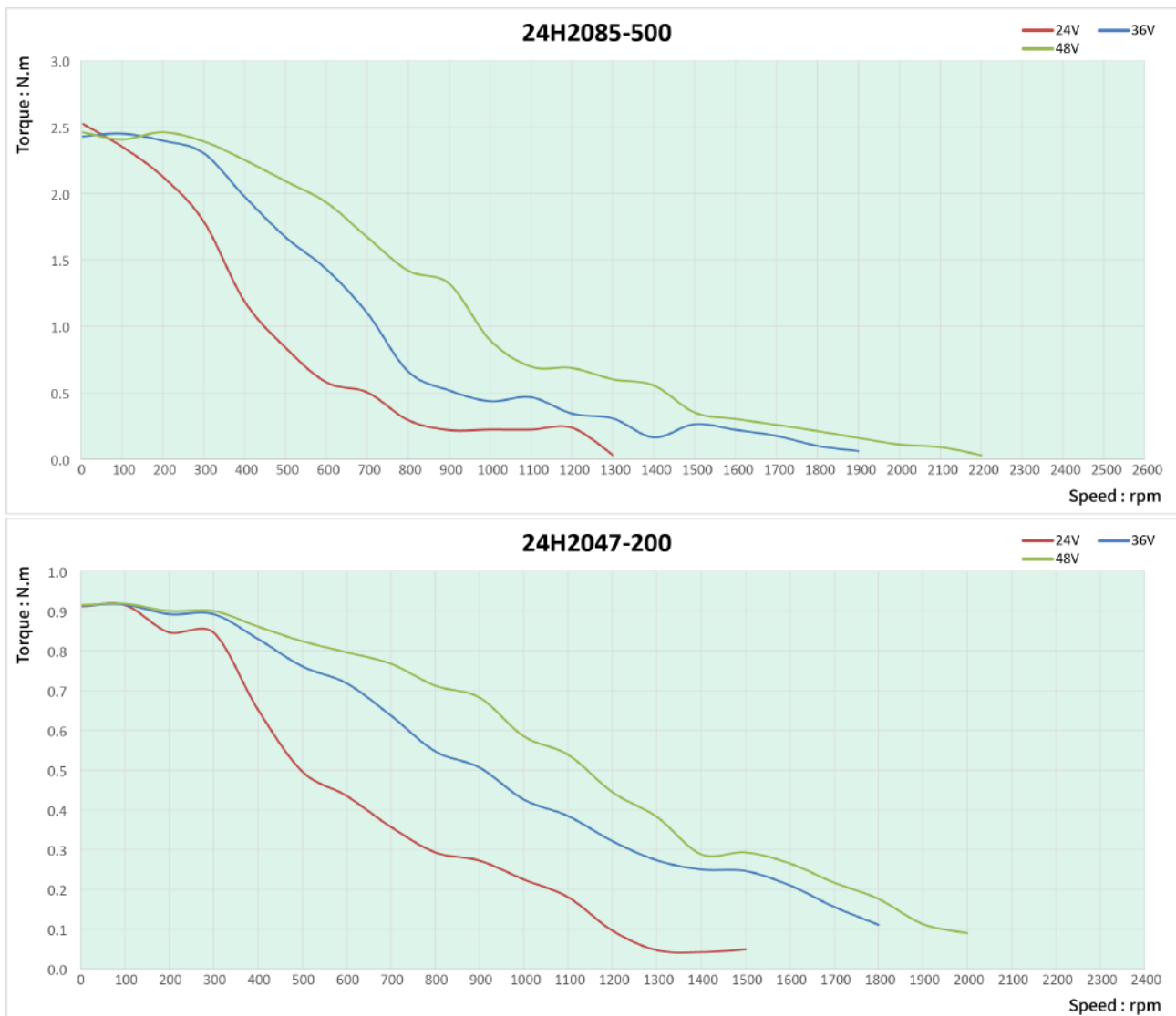
EK2 Encoder - Differential output



KPL56 Encoder





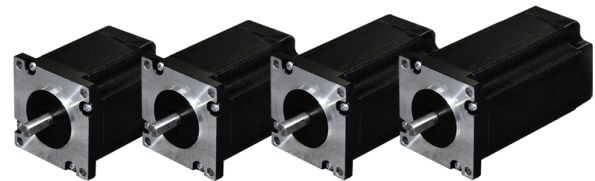


24H2047

The size 24 [60mm] Hybrid Rotary Stepper Motor has Max. 3.0N·m of holding torque. Encoders and 60mm frame planetary gearbox solutions are available. For special windings or customization, Please contact KOCO for further information.



<https://www.kocomotion.de/produkt/24h2047/>



Specification	
Current	2.0 A
Resistance	1.5 Ω
Inductance	3.4 mH
Holding Torque	1 N.m
Rotor Inertia	240 g·cm ²
Length	47 mm
Mass	600 g
Size	24 Nema
Flange size	60 mm

Optionen

Encoder

- EK2
- KPL56

Planetary Gearbox

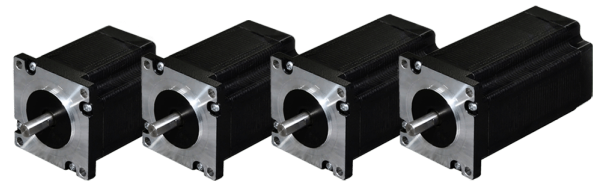
- Metal House material
- One stage 15 arcmin, two stages 25 arcmin
- Ball bearing

24H2056

The size 24 [60mm] Hybrid Rotary Stepper Motor has Max. 3.0N·m of holding torque. Encoders and 60mm frame planetary gearbox solutions are available. For special windings or customization, Please contact KOCO for further information.



<https://www.kocomotion.de/produkt/24h2056/>



Specification	
Current	3.0 A
Resistance	0.8 Ω
Inductance	2.3 mH
Holding Torque	1.5 N.m
Rotor Inertia	340 g·cm ²
Length	56 mm
Mass	800 g
Size	24 Nema
Flange size	60 mm

Optionen

Encoder

- EK2
- KPL56

Planetary Gearbox

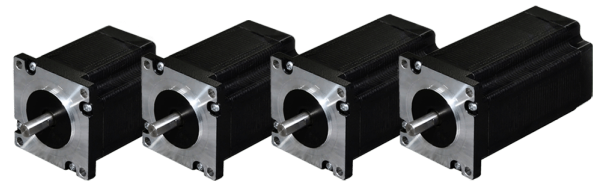
- Metal House material
- One stage 15 arcmin, two stages 25 arcmin
- Ball bearing

24H2068

The size 24 [60mm] Hybrid Rotary Stepper Motor has Max. 3.0N·m of holding torque. Encoders and 60mm frame planetary gearbox solutions are available. For special windings or customization, Please contact KOCO for further information.



<https://www.kocomotion.de/produkt/24h2068/>



Specification	
Current	4.0 A
Resistance	0.6 Ω
Inductance	1.9 mH
Holding Torque	2.1 N.m
Rotor Inertia	490 g·cm ²
Length	68 mm
Mass	1000 g
Size	24 Nema
Flange size	60 mm

Optionen

Encoder

- EK2
- KPL56

Planetary Gearbox

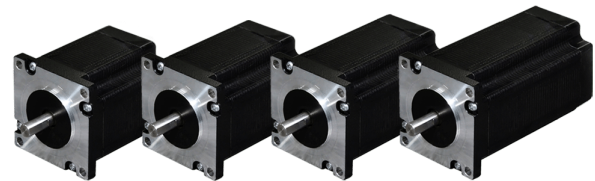
- Metal House material
- One stage 15 arcmin, two stages 25 arcmin
- Ball bearing

24H2085

The size 24 [60mm] Hybrid Rotary Stepper Motor has Max. 3.0N·m of holding torque. Encoders and 60mm frame planetary gearbox solutions are available. For special windings or customization, Please contact KOCO for further information.



<https://www.kocomotion.de/produkt/24h2085/>



Specification	
Current	5.0 A
Resistance	0.4 Ω
Inductance	1.8 mH
Holding Torque	3 N.m
Rotor Inertia	690 g·cm ²
Length	85 mm
Mass	1300 g
Size	24 Nema
Flange size	60 mm

Optionen

Encoder

- EK2
- KPL56

Planetary Gearbox

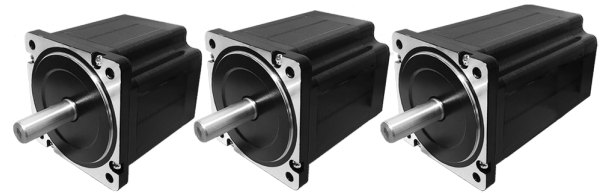
- Metal House material
- One stage 15 arcmin, two stages 25 arcmin
- Ball bearing

HRSM - Size 34 [86mm]

The size 34 [86mm] Hybrid Rotary Stepper Motor has Max. 7.0N·m of holding torque. Encoders and 86mm frame planetary gearbox solutions are available. For special windings or customization, Please contact KOCO for further information.



<https://www.kocomotion.de/produkt/hrsm-size-34-86mm/>



Produkte:

Seite

34H2060

58

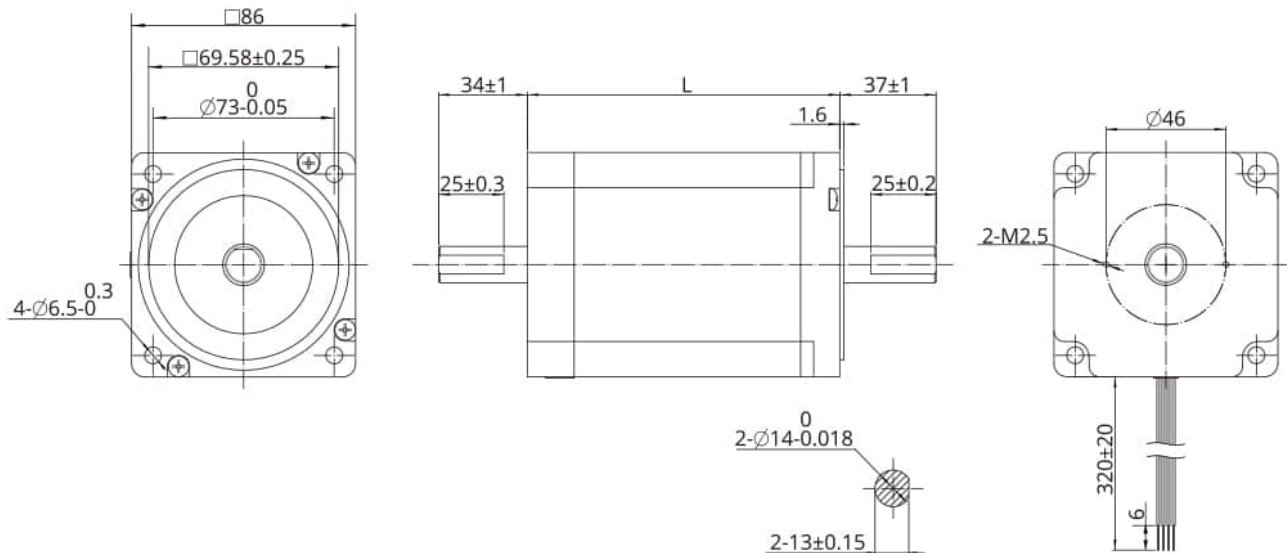
34H2075

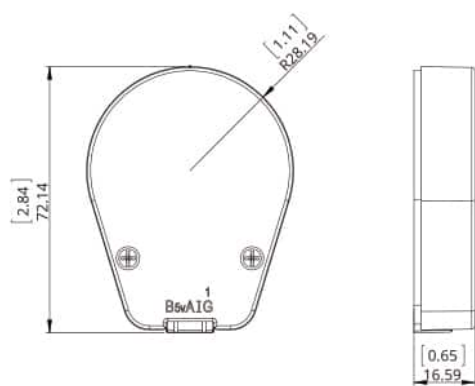
59

34H2098

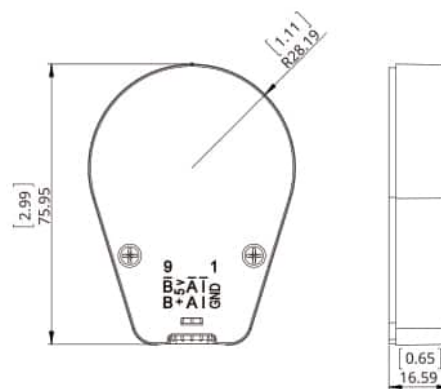
60

include __DIR__ . "/parts/spacer.php";

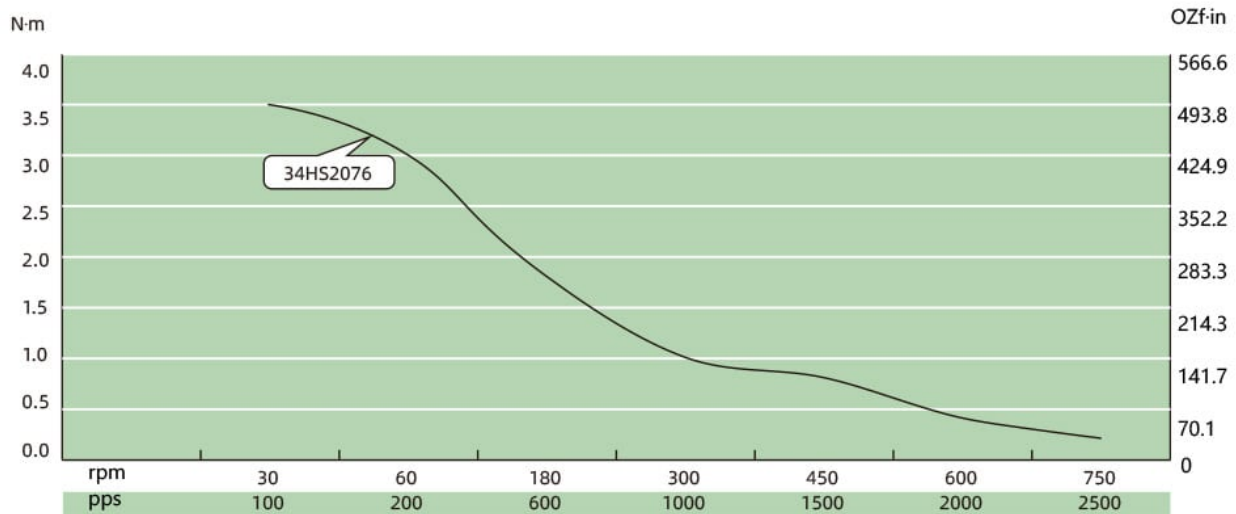




EK3 Encoder - Single ended output

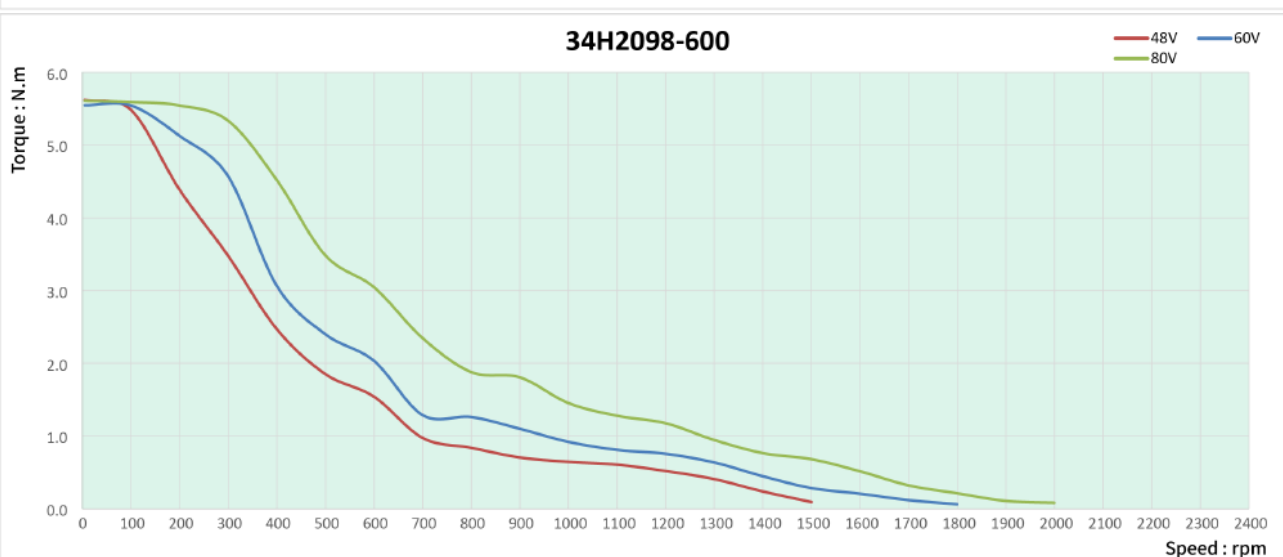
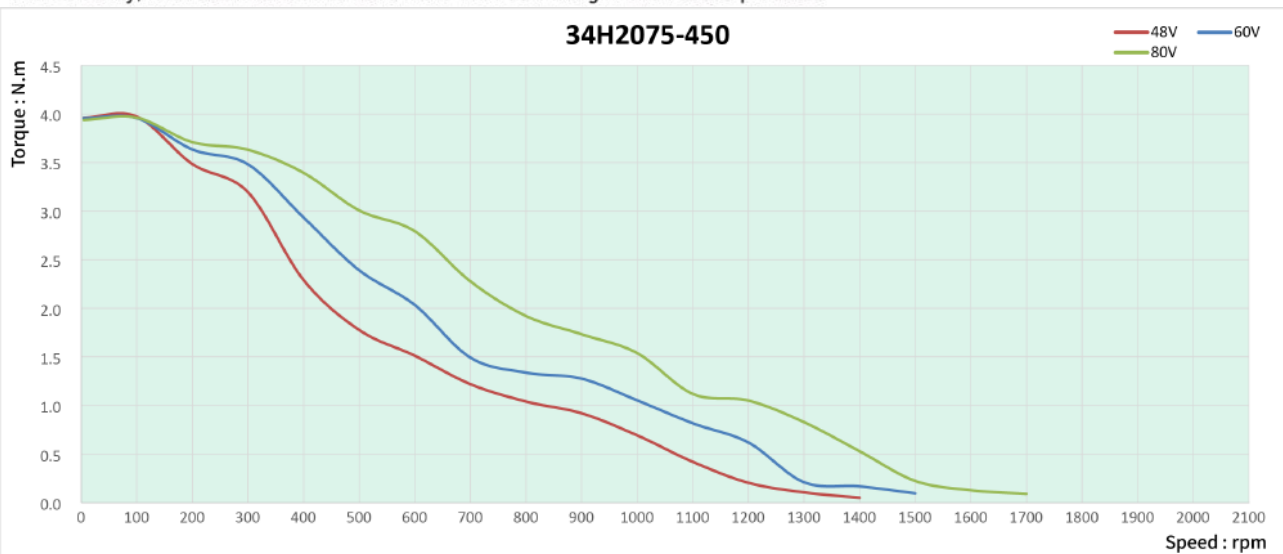


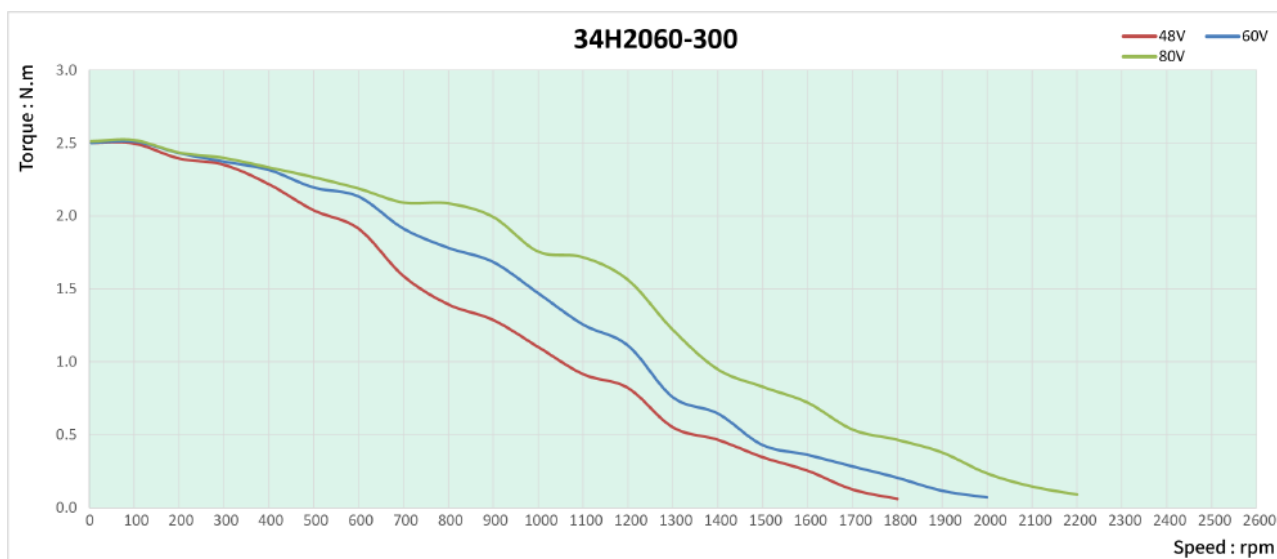
EK3 Encoder - Differential output



TEST CONDITION

The above curves are tested by DS-OLS8-FPD Bi-polar constant current chopper stepper driver under the condition of 48VDC. Different test conditions and operation conditions will lead to difference performance which is reasonable. The acceleration and deceleration of the motor will help to improve the performance of the motor, here for reference. In order to ensure the life cycle and reliability, it is recommended to have more than 50% margin when select products.



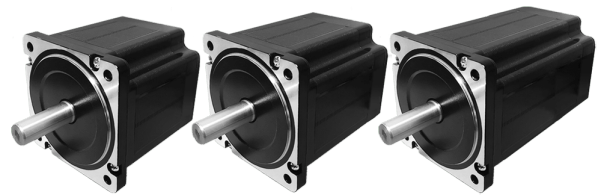


34H2060

The size 34 [86mm] Hybrid Rotary Stepper Motor has Max. 7.0N·m of holding torque. Encoders and 86mm frame planetary gearbox solutions are available. For special windings or customization, Please contact KOCO for further information.



<https://www.kocomotion.de/produkt/34h2060/>



Specification	
Current	3.0 A
Resistance	1 Ω
Inductance	6 mH
Holding Torque	3 N.m
Rotor Inertia	1100 g·cm ²
Length	60.5 mm
Mass	1600 g
Size	34 Nema
Flange size	86 mm

Optionen

Encoder

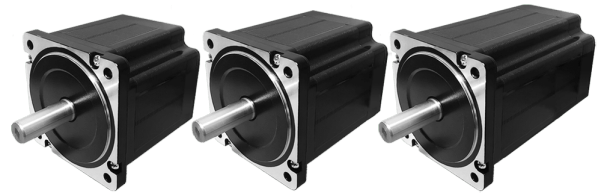
- EK3

34H2075

The size 34 [86mm] Hybrid Rotary Stepper Motor has Max. 7.0N·m of holding torque. Encoders and 86mm frame planetary gearbox solutions are available. For special windings or customization, Please contact KOCO for further information.



<https://www.kocomotion.de/produkt/34h2075/>



Specification	
Current	4.5 A
Resistance	0.6 Ω
Inductance	4.5 mH
Holding Torque	4.5 N.m
Rotor Inertia	1800 g·cm ²
Length	75 mm
Mass	2100 g
Size	34 Nema
Flange size	86 mm

Optionen

Encoder

- EK3

34H2098

The size 34 [86mm] Hybrid Rotary Stepper Motor has Max. 7.0N·m of holding torque. Encoders and 86mm frame planetary gearbox solutions are available. For special windings or customization, Please contact KOCO for further information.



<https://www.kocomotion.de/produkt/34h2098/>



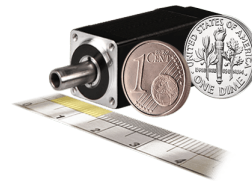
Specification	
Current	6.0 A
Resistance	0.5 Ω
Inductance	3.5 mH
Holding Torque	7 N.m
Rotor Inertia	2800 g·cm ²
Length	96.5 mm
Mass	2900 g
Size	34 Nema
Flange size	86 mm

Optionen

Encoder

- EK3

HSSM - Size 6 [14mm]



The size 6 [14mm] Hollow Shaft Stepper Motor is the smallest hollow shaft motor from KOCO. It has Max. 0.005N·m of holding torque. For special windings or customization of shaft, please contact KOCO for further information.



<https://www.kocomotion.de/produkt/hssm-size-6-14mm/>

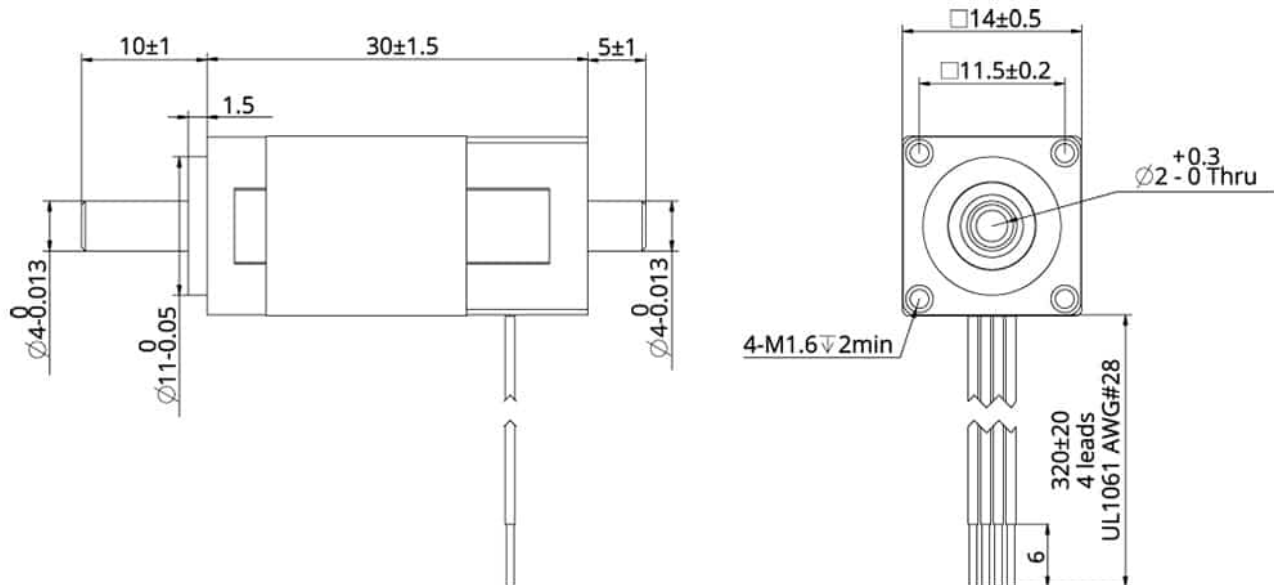
Produkte:

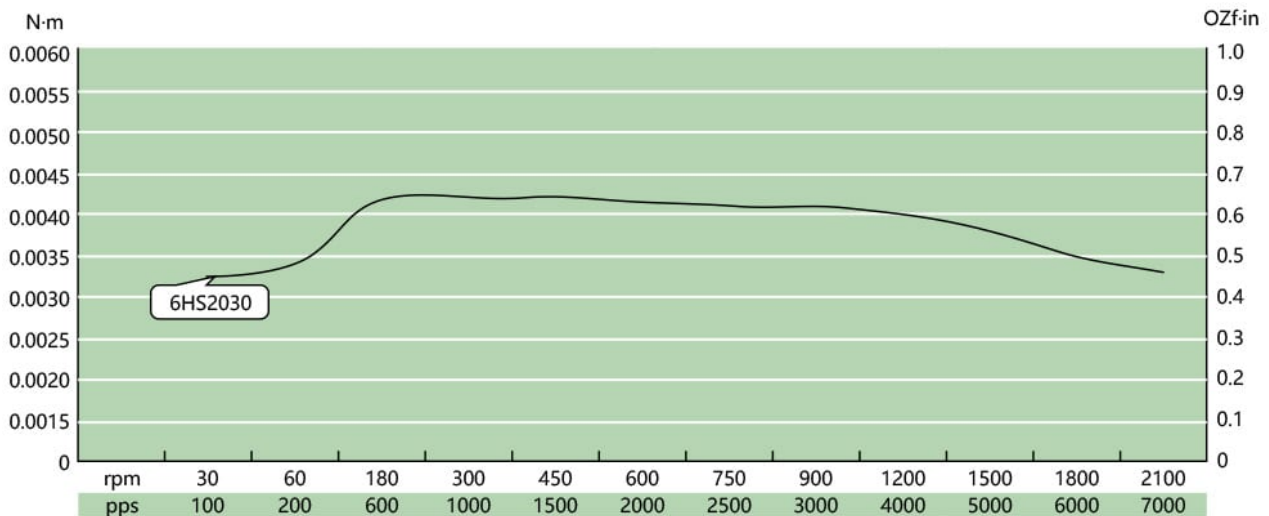
6HS2030

Seite

63

include __DIR__ . "/parts/spacer.php";



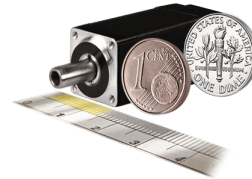


TEST CONDITION

The above curves are tested by DS-OLS2-FPD Bi-polar constant current chopper stepper driver under the condition of 24VDC. Different test conditions and operation conditions will lead to difference performance which is reasonable. The acceleration and deceleration of the motor will help to improve the performance of the motor, here for reference. In order to ensure the life cycle and reliability, it is recommended to have more than 50% margin when select products.

6HS2030

The size 6 [14mm] Hollow Shaft Stepper Motor is the smallest hollow shaft motor from KOCO It has Max. 0.005N·m of holding torque. For special windings or customization of shaft, please contact KOCO for further information.



<https://www.kocomotion.de/produkt/6hs2030/>

Specification	
Rated Voltage	6.6 A
Current	0.3 V
Resistance	22 Ω
Inductance	3.6 mH
Holding Torque	0.005 Nm
Detent Torque	0.002 Nm
Motor length	30.0 mm
Size	6 Nema
Flange size	14 mm

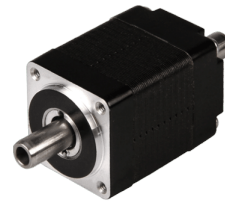
HSSM - Size 8

[20mm]

The size 8 [20mm] Hollow Shaft Stepper Motor has Max. 0.02N·m of holding torque. For special windings or customization of shaft, also hollow type of encoder assembly, Please contact KOCO for further information.



<https://www.kocomotion.de/produkt/hssm-size-8-20mm/>



Produkte:

Seite

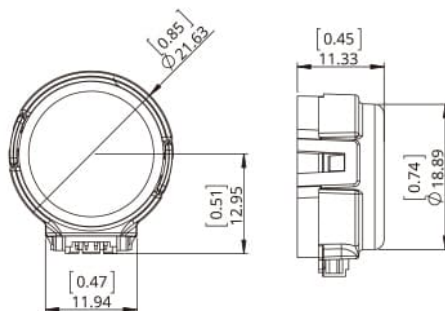
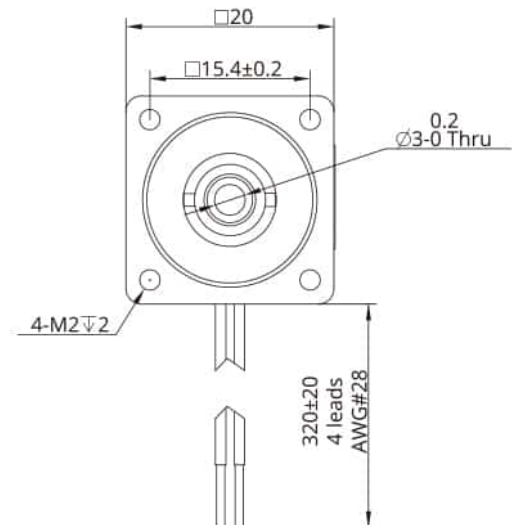
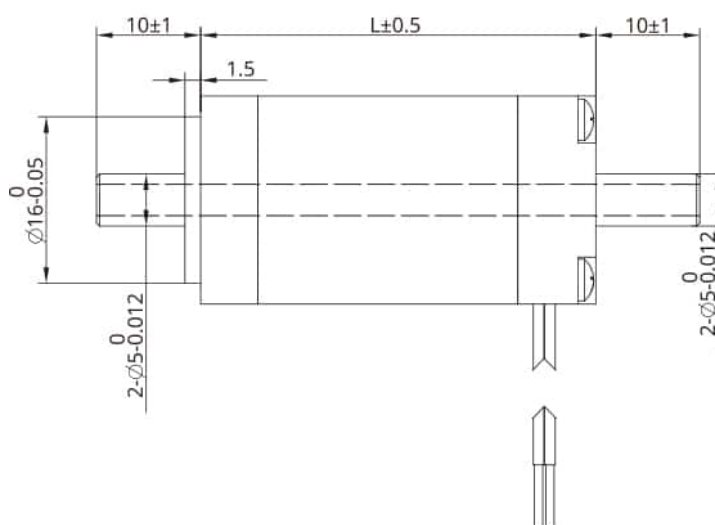
8HS2028

66

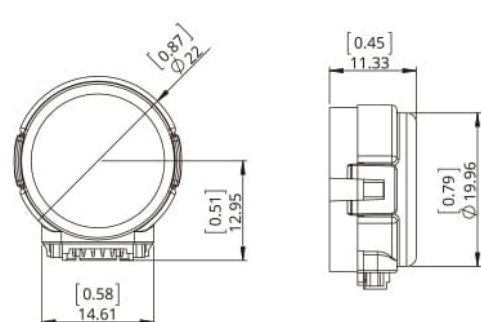
8HS2038

67

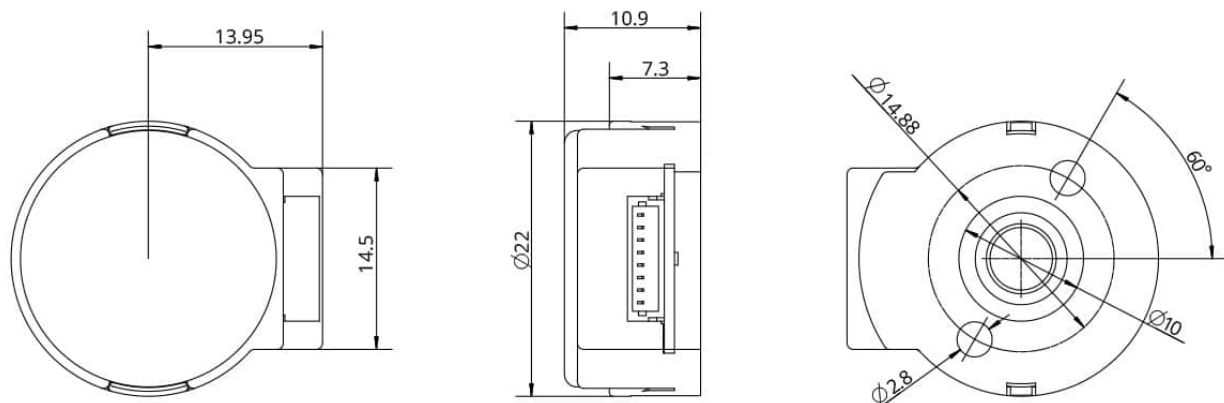
include __DIR__ . "/parts/spacer.php";



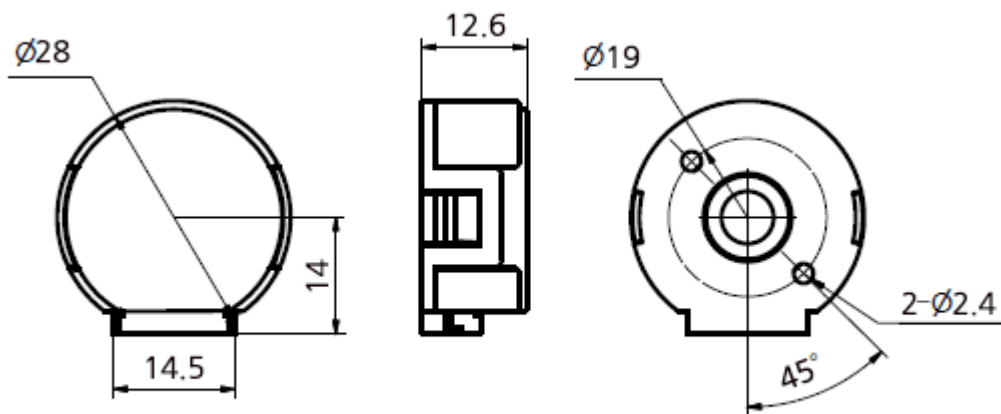
EK1 Encoder - Single ended output



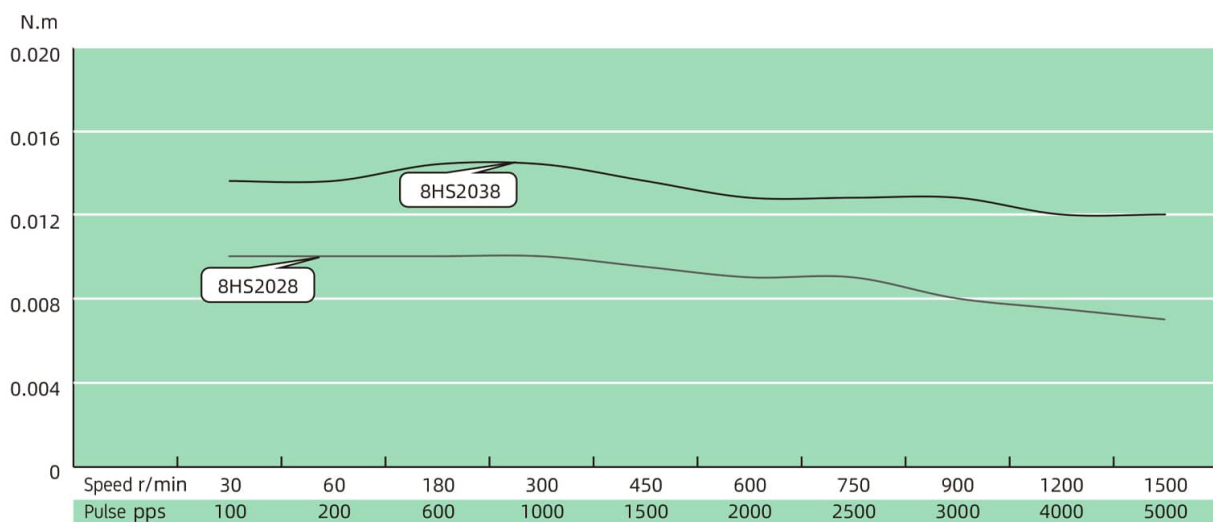
EK1 Encoder - Differential output



EK5 Encoder



KPL28 Encoder

**TEST CONDITION**

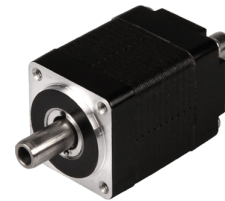
The above curves are tested by DS-OLS2-FPD Bi-polar constant current chopper stepper driver under the condition of 24VDC. Different test conditions and operation conditions will lead to difference performance which is reasonable. The acceleration and deceleration of the motor will help to improve the performance of the motor, here for reference. In order to ensure the life cycle and reliability, it is recommended to have more than 50% margin when select products.

8HS2028

The size 8 [20mm] Hollow Shaft Stepper Motor has Max. 0.02N·m of holding torque. For special windings or customization of shaft, also hollow type of encoder assembly, Please contact KOCO for further information.



<https://www.kocomotion.de/produkt/8hs2028/>



Specification	
Rated Voltage	2.55 A
Current	0.5 V
Resistance	5.1 Ω
Inductance	1.5 mH
Holding Torque	0.014 Nm
Detent Torque	0.002 Nm
Motor length	28 mm
Size	8 Nema
Flange size	20 mm

Optionen

Encoder

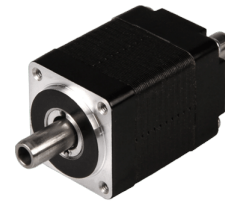
- EK1
- EK5
- KPL28

8HS2038

The size 8 [20mm] Hollow Shaft Stepper Motor has Max. 0.02N·m of holding torque. For special windings or customization of shaft, also hollow type of encoder assembly, Please contact KOCO for further information.



<https://www.kocomotion.de/produkt/8hs2038/>



Specification	
Rated Voltage	4.4 A
Current	0.5 V
Resistance	8.8 Ω
Inductance	2.7 mH
Holding Torque	0.020 Nm
Detent Torque	0.004 Nm
Motor length	38 mm
Size	8 Nema
Flange size	20 mm

Optionen

Encoder

- EK1
- EK5
- KPL28

HSSM - Size 11

[28mm]

The size 11 [28mm] Hollow Shaft Stepper Motor has Max. 0.1N·m of holding torque. For special windings or customization of shaft, also hollow type of encoder assembly, Please contact KOCO for further information.



<https://www.kocomotion.de/produkt/hssm-size-11-28mm/>



Produkte:

Seite

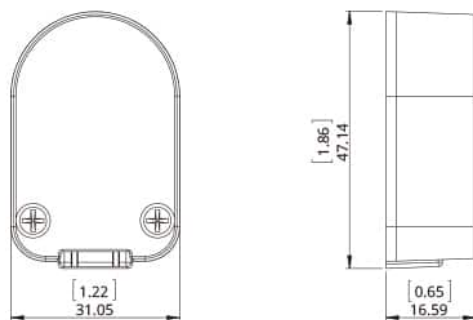
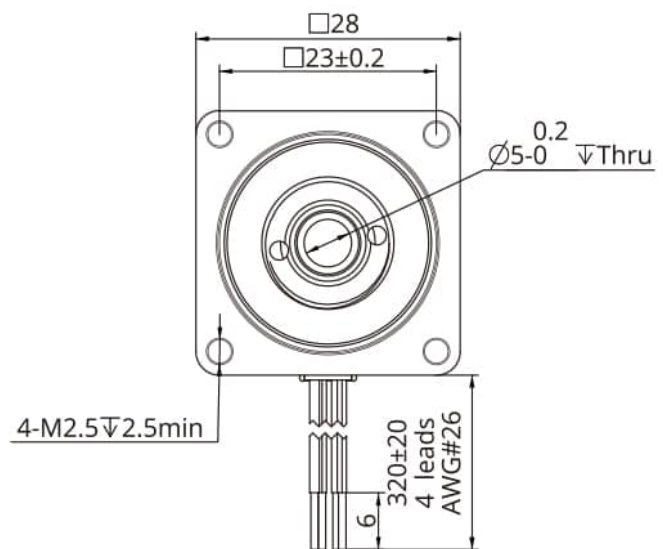
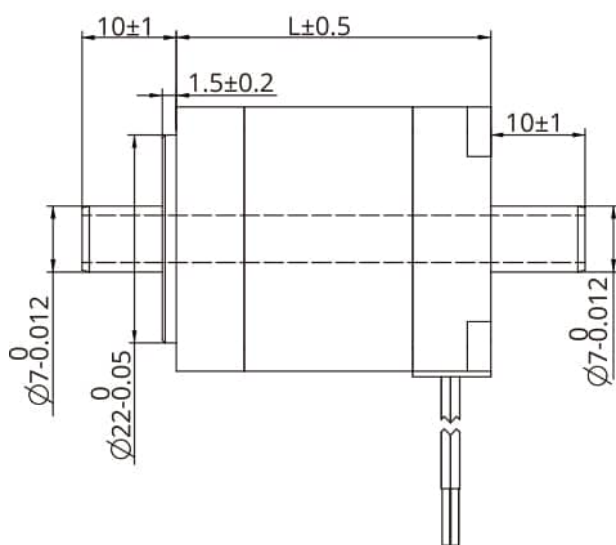
11HS2033

71

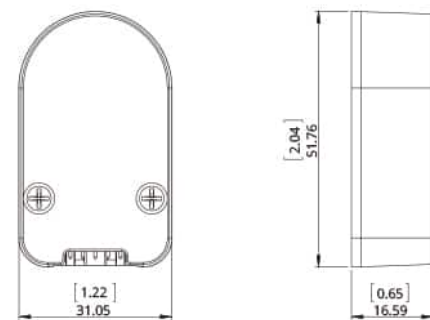
11HS2045

72

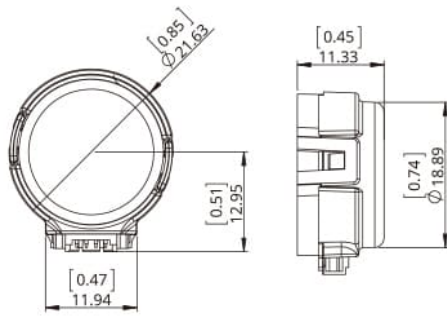
include __DIR__ . "/parts/spacer.php";



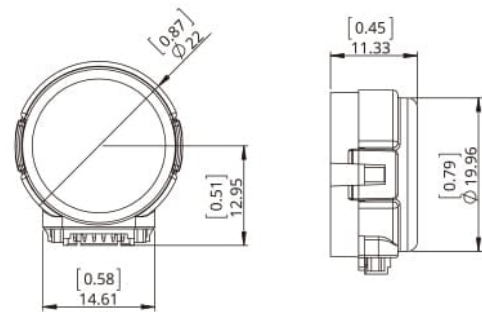
EK2 Encoder - Single ended output



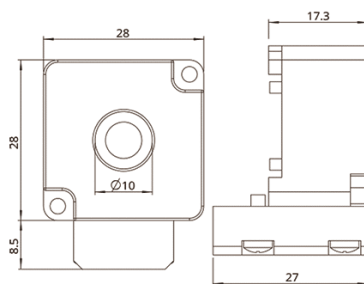
EK2 Encoder - Differential output



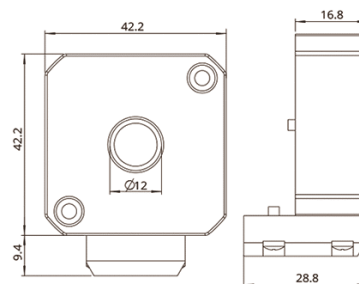
EK1 Encoder - Single ended output



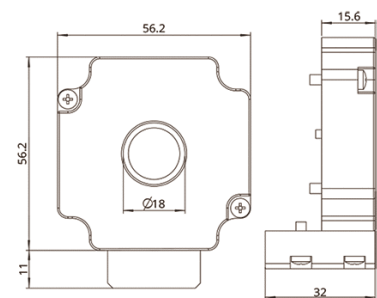
EK1 Encoder - Differential output



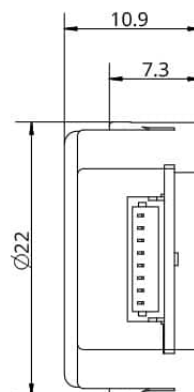
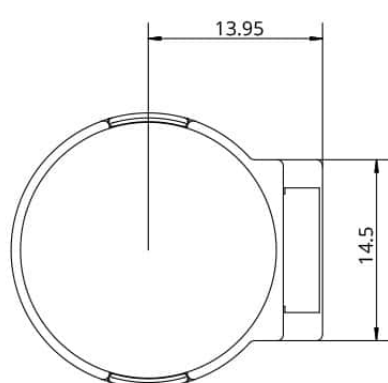
EK4 Encoder 11



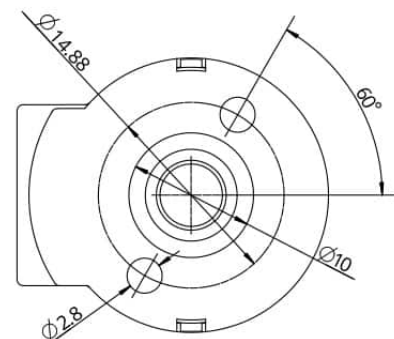
EK4 Encoder 17

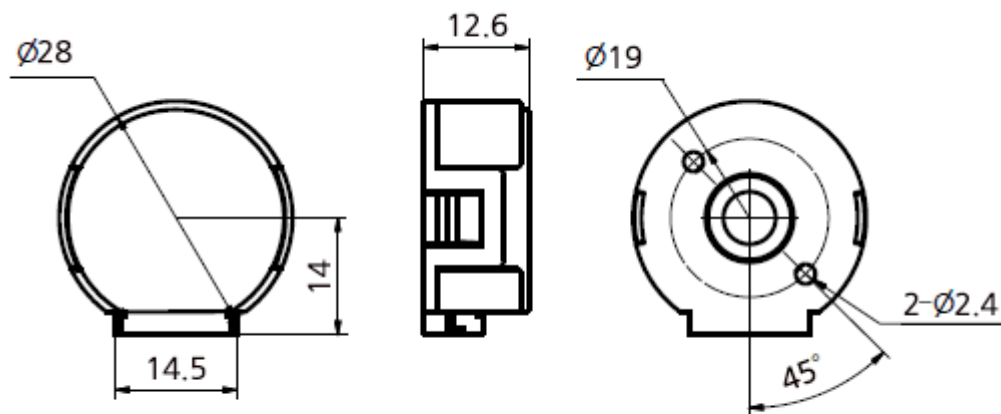


EK4 Encoder 23

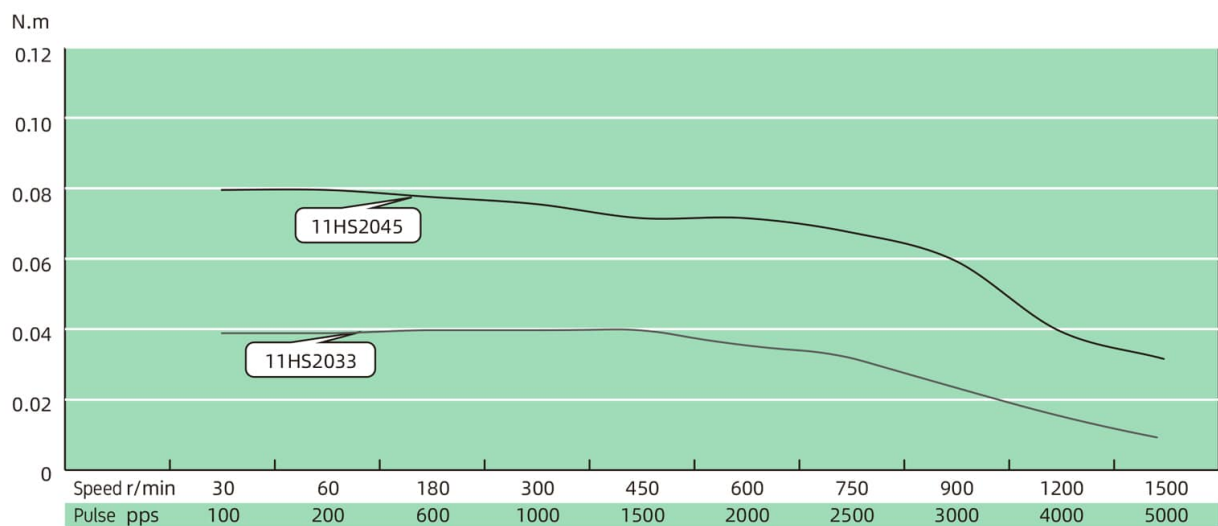


EK5 Encoder





KPL28 Encoder

**TEST CONDITION**

The above curves are tested by DS-OLS2-FPD Bi-polar constant current chopper stepper driver under the condition of 24VDC. Different test conditions and operation conditions will lead to difference performance which is reasonable. The acceleration and deceleration of the motor will help to improve the performance of the motor, here for reference. In order to ensure the life cycle and reliability, it is recommended to have more than 50% margin when select products.

11HS2033

The size 11 [28mm] Hollow Shaft Stepper Motor has Max. 0.1N·m of holding torque. For special windings or customization of shaft, also hollow type of encoder assembly, Please contact KOCO for further information.



<https://www.kocomotion.de/produkt/11hs2033/>



Specification	
Rated Voltage	2.1 A
Current	1.0 V
Resistance	2.1 Ω
Inductance	1.5 mH
Holding Torque	0.053 Nm
Detent Torque	0.004 Nm
Motor length	33 mm
Size	11 Nema
Flange size	28 mm

Optionen

Encoder

- EK1
- EK2
- EK4
- EK5
- KPL28

11HS2045

The size 11 [28mm] Hollow Shaft Stepper Motor has Max. 0.1N·m of holding torque. For special windings or customization of shaft, also hollow type of encoder assembly, Please contact KOCO for further information.



<https://www.kocomotion.de/produkt/11hs2045/>



Specification	
Rated Voltage	4.1 A
Current	1.0 V
Resistance	4.1 Ω
Inductance	4.0 mH
Holding Torque	0.1 Nm
Detent Torque	0.004 Nm
Motor length	45 mm
Size	11 Nema
Flange size	28 mm

Optionen

Encoder

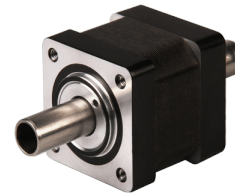
- EK1
- EK2
- EK4
- EK5
- KPL28

HSSM - Size 14 [35mm]

The size 14 [35mm] Hollow Shaft Stepper Motor has Max. 0.36N·m of holding torque. For special windings or customization of shaft, also hollow type of encoder assembly, Please contact KOCO for further information.



<https://www.kocomotion.de/produkt/hssm-size-14-35mm/>



Produkte:

Seite

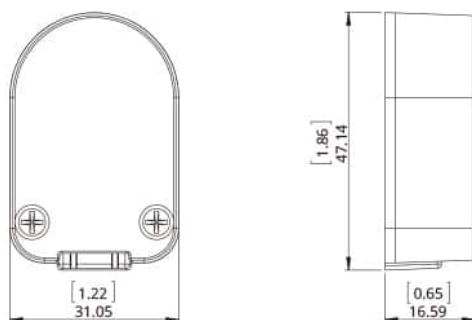
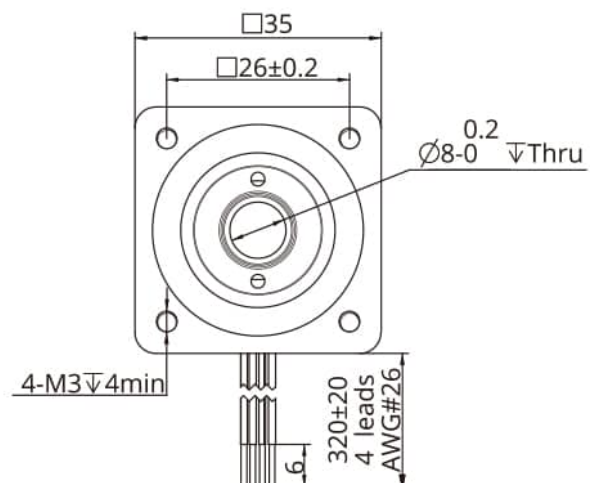
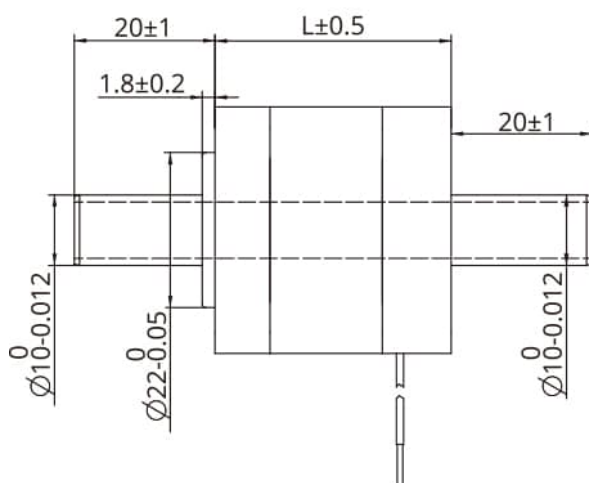
14HS2033

76

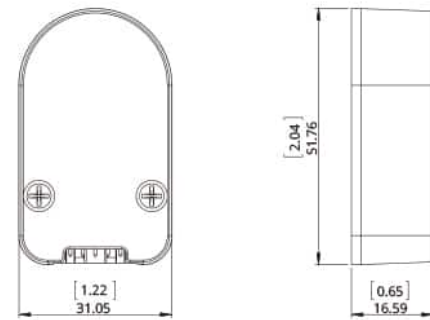
14HS2045

77

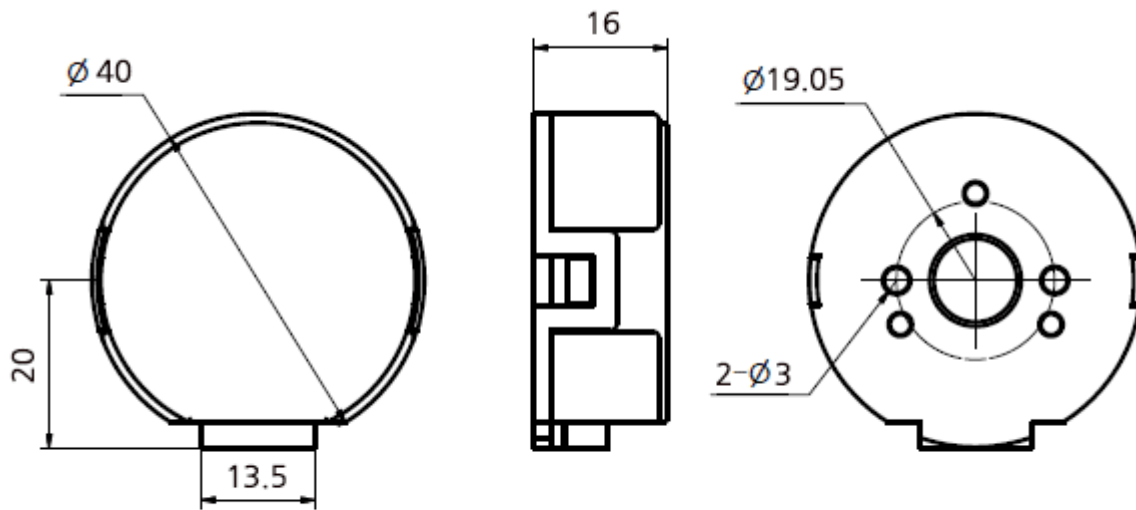
include __DIR__ . "/parts/spacer.php";



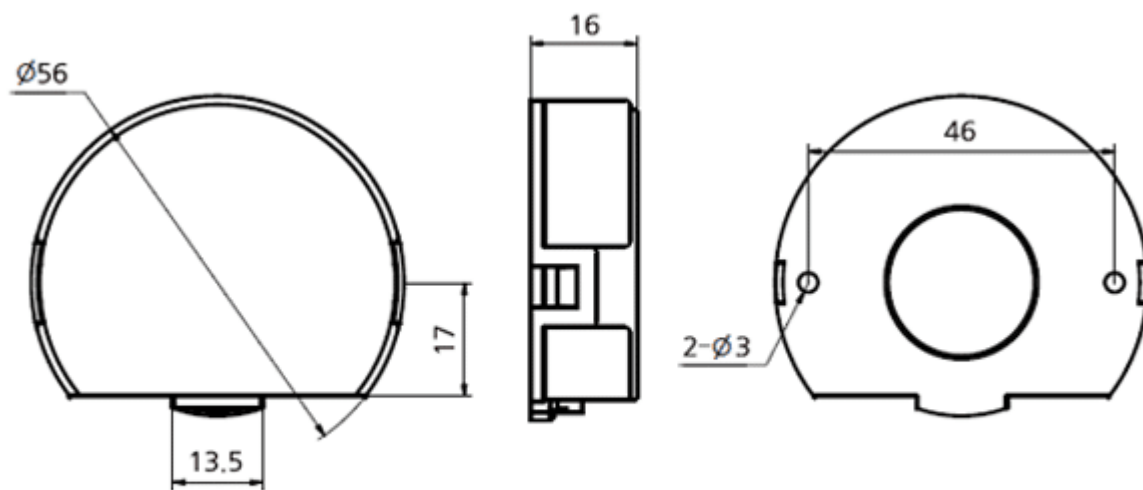
EK2 Encoder - Single ended output



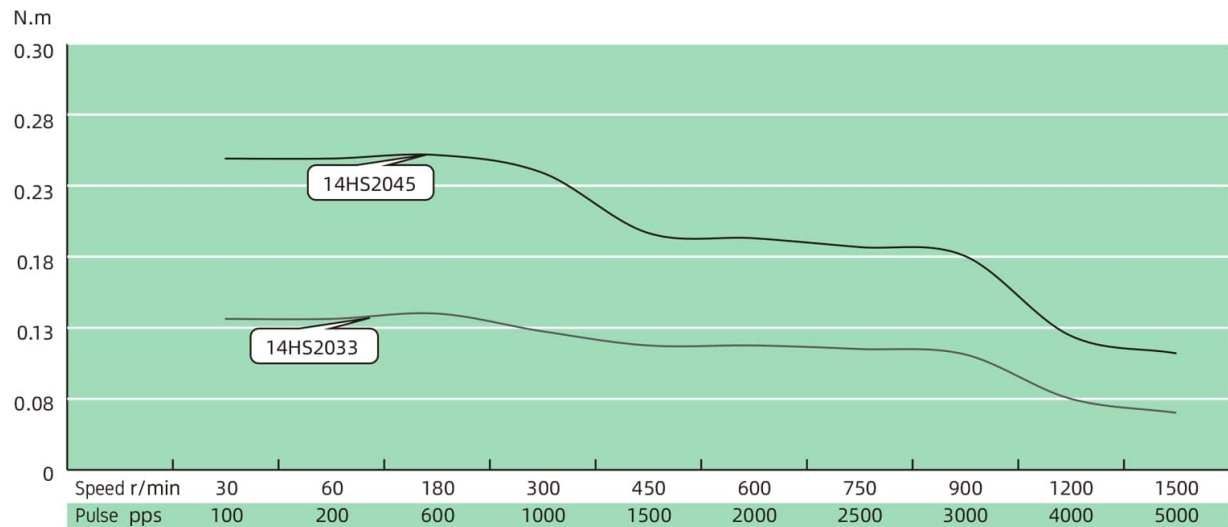
EK2 Encoder - Differential output



KPL40 Encoder



KPL56 Encoder



TEST CONDITION

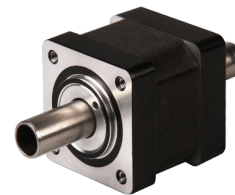
The above curves are tested by DS-OLS2-FPD Bi-polar constant current chopper stepper driver under the condition of 24VDC. Different test conditions and operation conditions will lead to difference performance which is reasonable. The acceleration and deceleration of the motor will help to improve the performance of the motor, here for reference. In order to ensure the life cycle and reliability, it is recommended to have more than 50% margin when select products.

14HS2033

The size 14 [35mm] Hollow Shaft Stepper Motor has Max. 0.36N·m of holding torque. For special windings or customization of shaft, also hollow type of encoder assembly, Please contact KOCO for further information.



<https://www.kocomotion.de/produkt/14hs2033/>



Specification	
Rated Voltage	3.5 A
Current	1.0 V
Resistance	3.5 Ω
Inductance	3.6 mH
Holding Torque	0.19 Nm
Detent Torque	0.008 Nm
Motor length	33.6 mm
Size	14 Nema
Flange size	35 mm

Optionen

Encoder

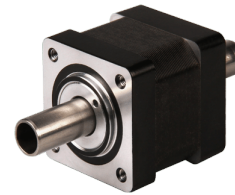
- EK2
- KPL40
- KPL56

14HS2045

The size 14 [35mm] Hollow Shaft Stepper Motor has Max. 0.36N·m of holding torque. For special windings or customization of shaft, also hollow type of encoder assembly, Please contact KOCO for further information.



<https://www.kocomotion.de/produkt/14hs2045/>



Specification	
Rated Voltage	6 A
Current	1.0 V
Resistance	6 Ω
Inductance	7.2 mH
Holding Torque	0.36 Nm
Detent Torque	0.013 Nm
Motor length	45.6 mm
Size	14 Nema
Flange size	35 mm

Optionen

Encoder

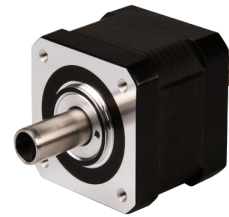
- EK2
- KPL40
- KPL56

HSSM - Size 17 [42mm]

The size 17 [42mm] Hollow Shaft Stepper Motor has Max. 0.48N·m of holding torque. For special windings or customization of shaft, also hollow type of encoder assembly, Please contact KOCO for further information.

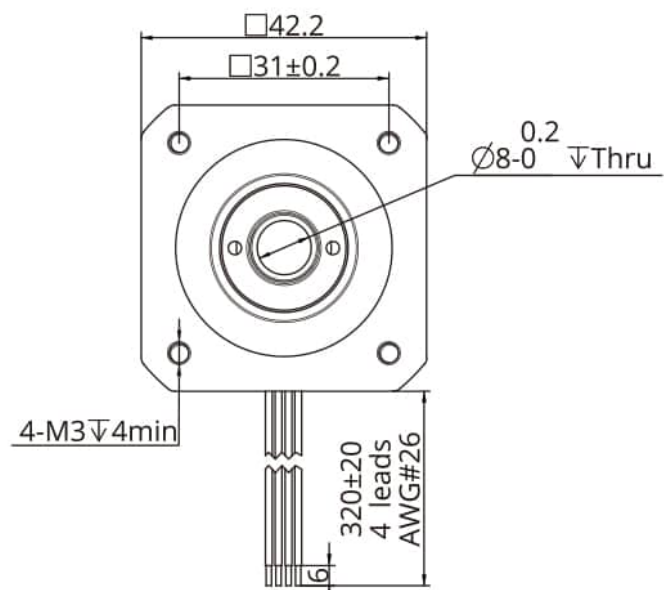
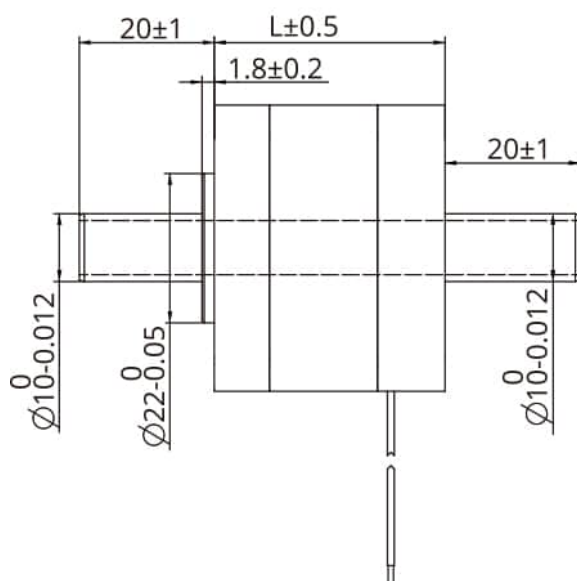


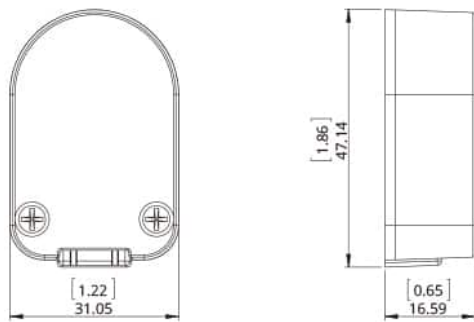
<https://www.kocomotion.de/produkt/hssm-size-17-42mm/>



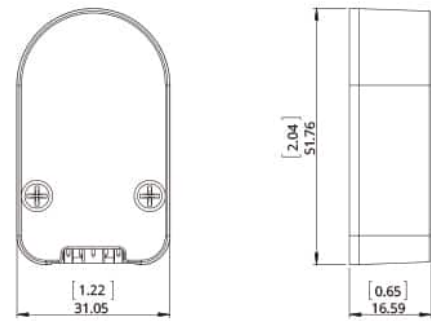
Produkte:	Seite
17HS2034	81
17HS2048	82

```
include __DIR__ . "/parts/spacer.php";
```

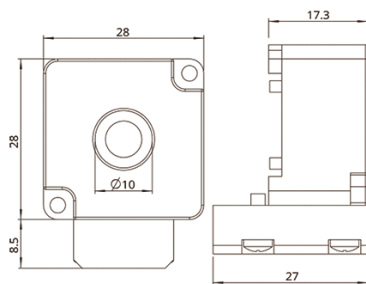




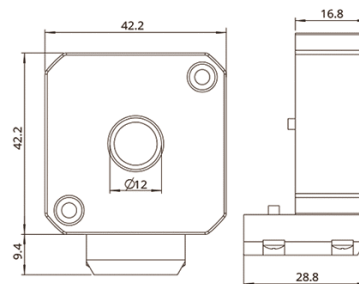
EK2 Encoder - Single ended output



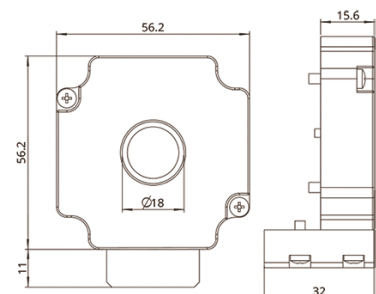
EK2 Encoder - Differential output



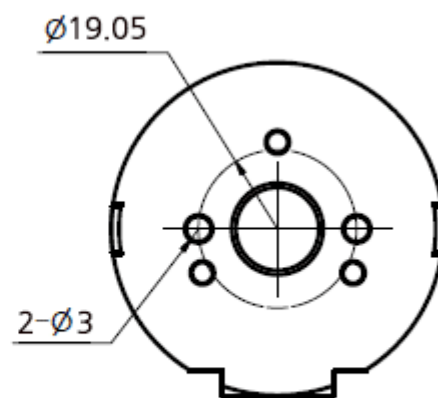
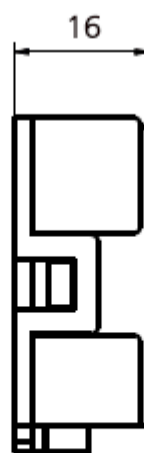
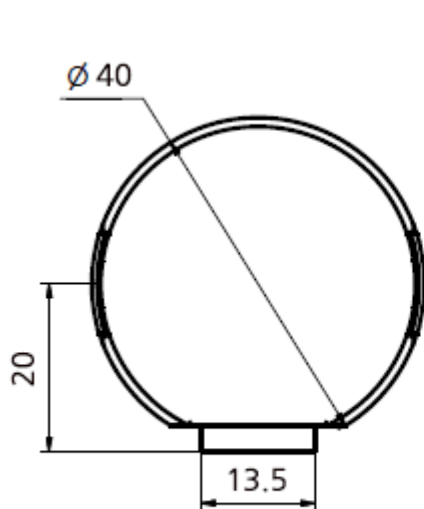
EK4 Encoder 11



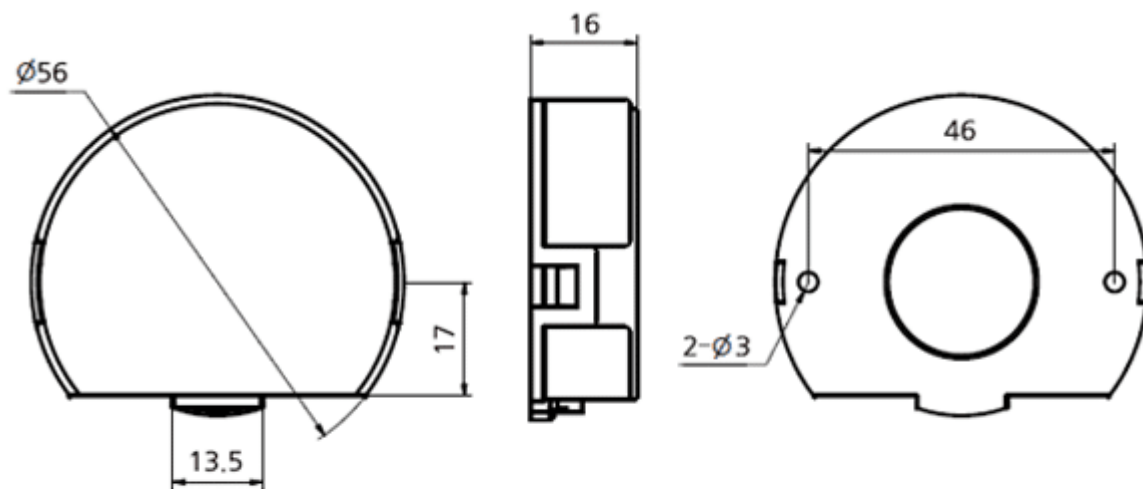
EK4 Encoder 17



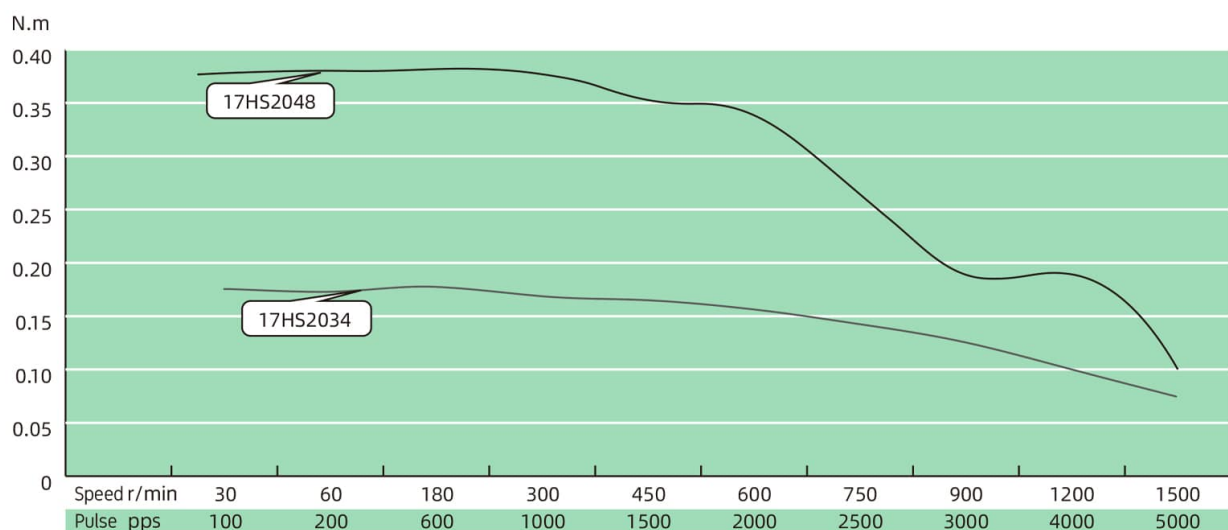
EK4 Encoder 23



KPL40 Encoder



KPL56 Encoder

**TEST CONDITION**

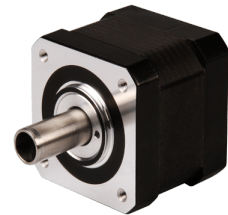
The above curves are tested by DS-OLS2-FPD Bi-polar constant current chopper stepper driver under the condition of 24VDC. Different test conditions and operation conditions will lead to difference performance which is reasonable. The acceleration and deceleration of the motor will help to improve the performance of the motor, here for reference. In order to ensure the life cycle and reliability, it is recommended to have more than 50% margin when select products.

17HS2034

The size 17 [42mm] Hollow Shaft Stepper Motor has Max. 0.48N·m of holding torque. For special windings or customization of shaft, also hollow type of encoder assembly, Please contact KOCO for further information.



<https://www.kocomotion.de/produkt/17hs2034/>



Specification	
Rated Voltage	3.8 A
Current	1.0 V
Resistance	3.6 Ω
Inductance	5.0 mH
Holding Torque	0.25 Nm
Detent Torque	0.014 Nm
Motor length	34.1 mm
Size	17 Nema
Flange size	42 mm

Optionen

Encoder

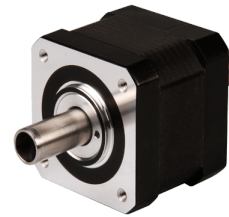
- EK2
- EK4
- KPL40
- KPL56

17HS2048

The size 17 [42mm] Hollow Shaft Stepper Motor has Max. 0.48N·m of holding torque. For special windings or customization of shaft, also hollow type of encoder assembly, Please contact KOCO for further information.



<https://www.kocomotion.de/produkt/17hs2048/>



Specification	
Rated Voltage	2.25 A
Current	2.5 V
Resistance	1.0 Ω
Inductance	1.8 mH
Holding Torque	0.48 Nm
Detent Torque	0.018 Nm
Motor length	48.1 mm
Size	17 Nema
Flange size	42 mm

Optionen

Encoder

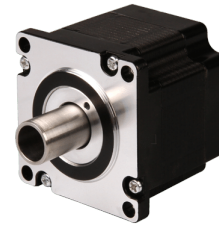
- EK2
- EK4
- KPL40
- KPL56

HSSM - Size 23 [57mm]

The size 23 [57mm] Hollow Shaft Stepper Motor has Max. 1.6N·m of holding torque. For special windings or customization of shaft, also hollow type of encoder assembly, Please contact KOCO for further information.



<https://www.kocomotion.de/produkt/hssm-size-23-57mm/>



Produkte:

Seite

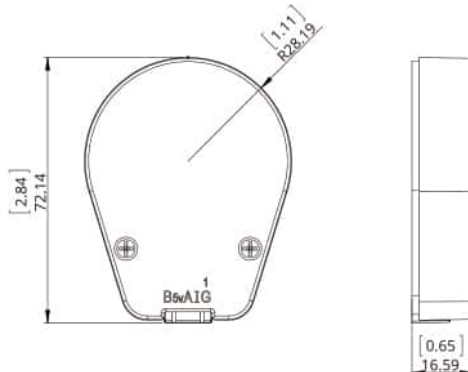
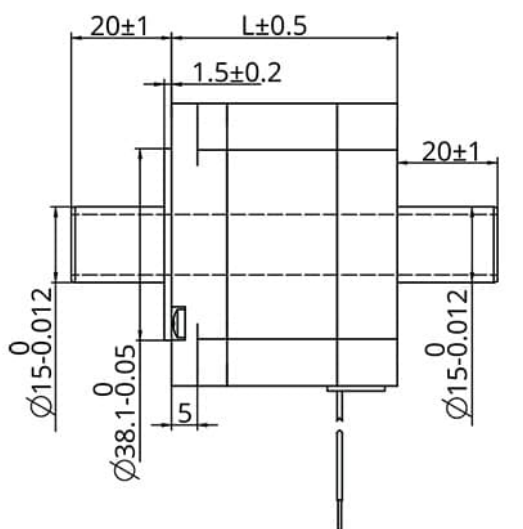
23HS2045

86

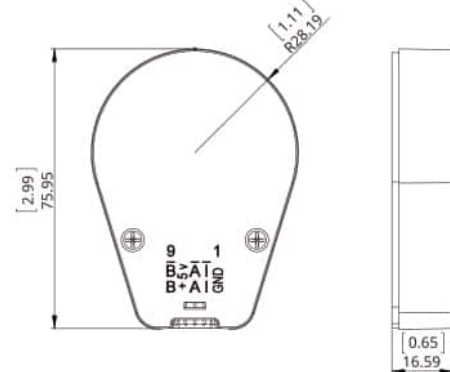
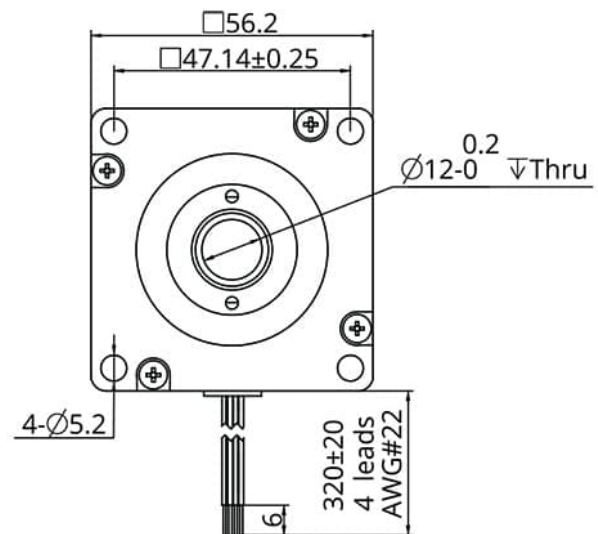
23HS2065

87

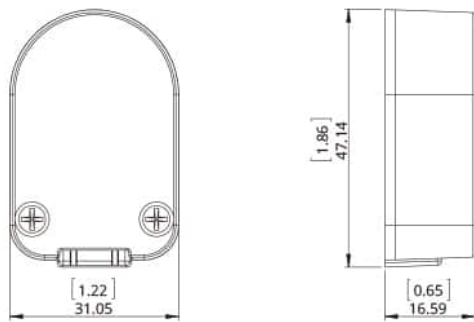
include __DIR__ . "/parts/spacer.php";



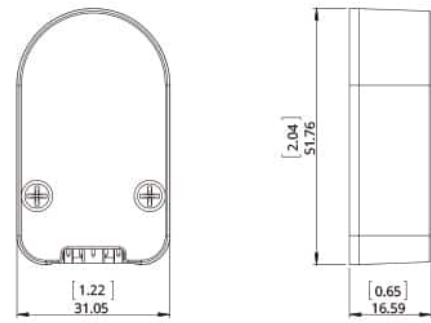
EK3 Encoder - Single ended output



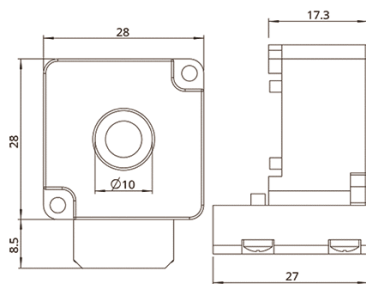
EK3 Encoder - Differential output



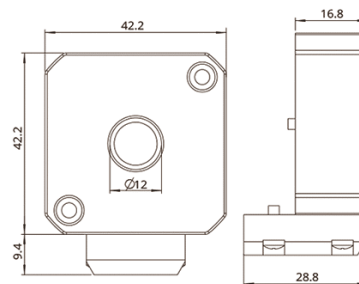
EK2 Encoder - Single ended output



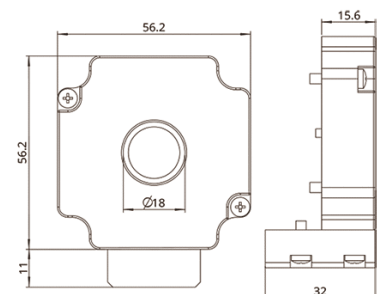
EK2 Encoder - Differential output



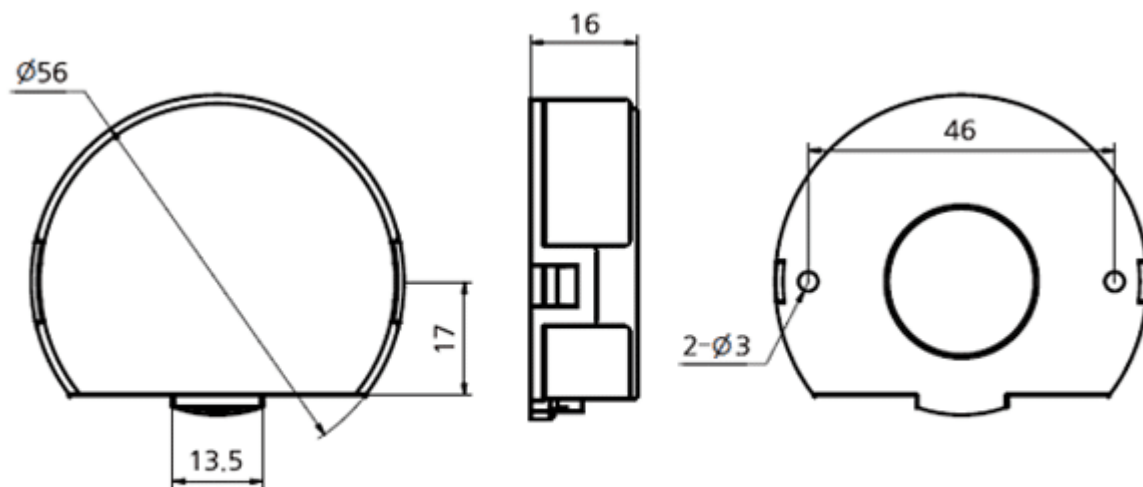
EK4 Encoder 11



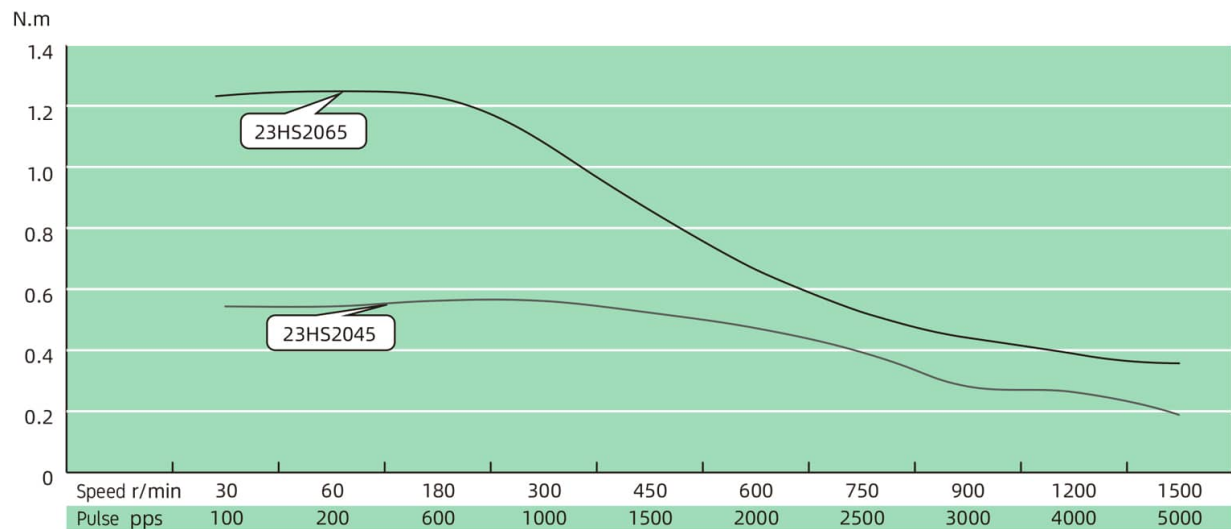
EK4 Encoder 17



EK4 Encoder 23



KPL56 Encoder



TEST CONDITION

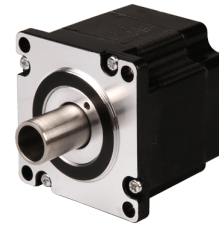
The above curves are tested by DS-OLS4-FPD Bi-polar constant current chopper stepper driver under the condition of 36VDC. Different test conditions and operation conditions will lead to difference performance which is reasonable. The acceleration and deceleration of the motor will help to improve the performance of the motor, here for reference. In order to ensure the life cycle and reliability, it is recommended to have more than 50% margin when select products.

23HS2045

The size 23 [57mm] Hollow Shaft Stepper Motor has Max. 1.6N·m of holding torque. For special windings or customization of shaft, also hollow type of encoder assembly, Please contact KOCO for further information.



<https://www.kocomotion.de/produkt/23hs2045/>



Specification	
Rated Voltage	3.5 A
Current	2.0 V
Resistance	1.75 Ω
Inductance	4.1 mH
Holding Torque	0.8 Nm
Detent Torque	0.020 Nm
Motor length	45 mm
Size	23 Nema
Flange size	57 mm

Optionen

Encoder

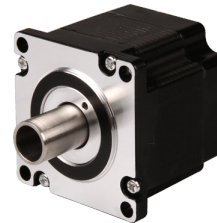
- EK2
- EK3
- EK4
- KPL56

23HS2065

The size 23 [57mm] Hollow Shaft Stepper Motor has Max. 1.6N·m of holding torque. For special windings or customization of shaft, also hollow type of encoder assembly, Please contact KOCO for further information.



<https://www.kocomotion.de/produkt/23hs2065/>



Specification	
Rated Voltage	5.0 A
Current	2.5 V
Resistance	2.0 Ω
Inductance	5.2 mH
Holding Torque	1.6 Nm
Detent Torque	0.040 Nm
Motor length	65 mm
Size	23 Nema
Flange size	57 mm

Optionen

Encoder

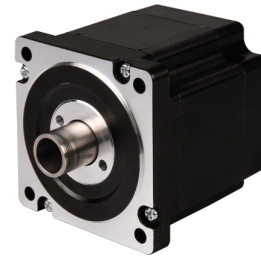
- EK2
- EK3
- EK4
- KPL56

HSSM - Size 34 [86mm]

The size 34 [86mm] Hollow Shaft Stepper Motor has Max. 4.5N·m of holding torque. For special windings or customization of shaft, also hollow type of encoder assembly, Please contact KOCO for further information.



<https://www.kocomotion.de/produkt/hssm-size-34-86mm/>



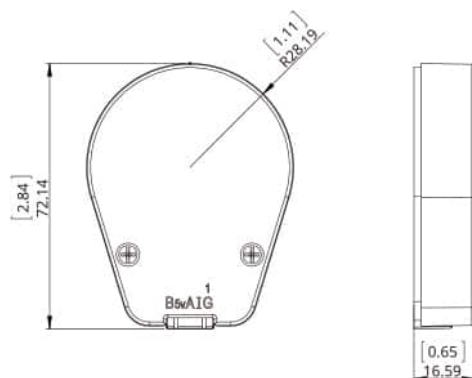
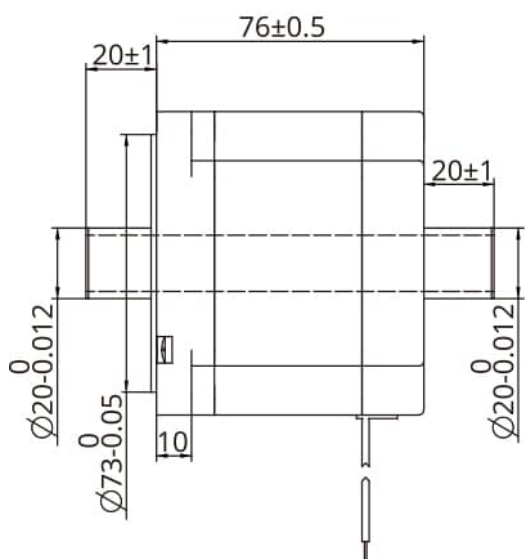
Produkte:

Seite

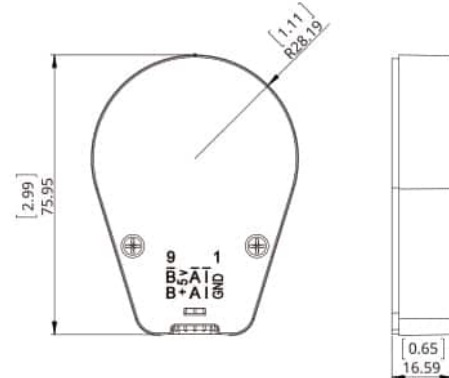
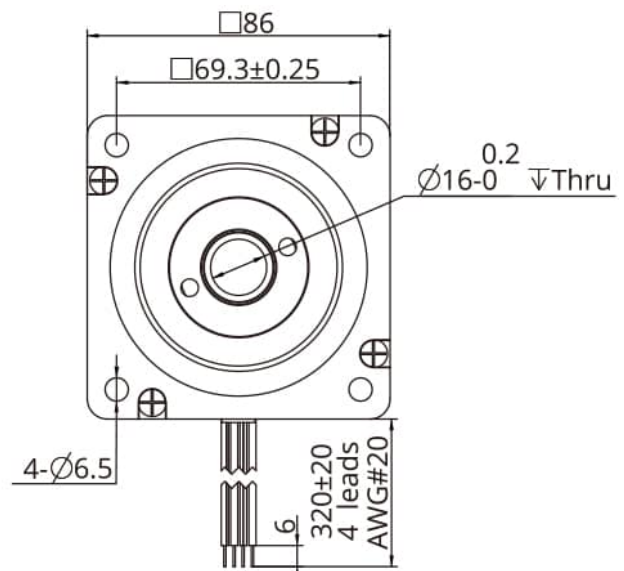
34HS2076

90

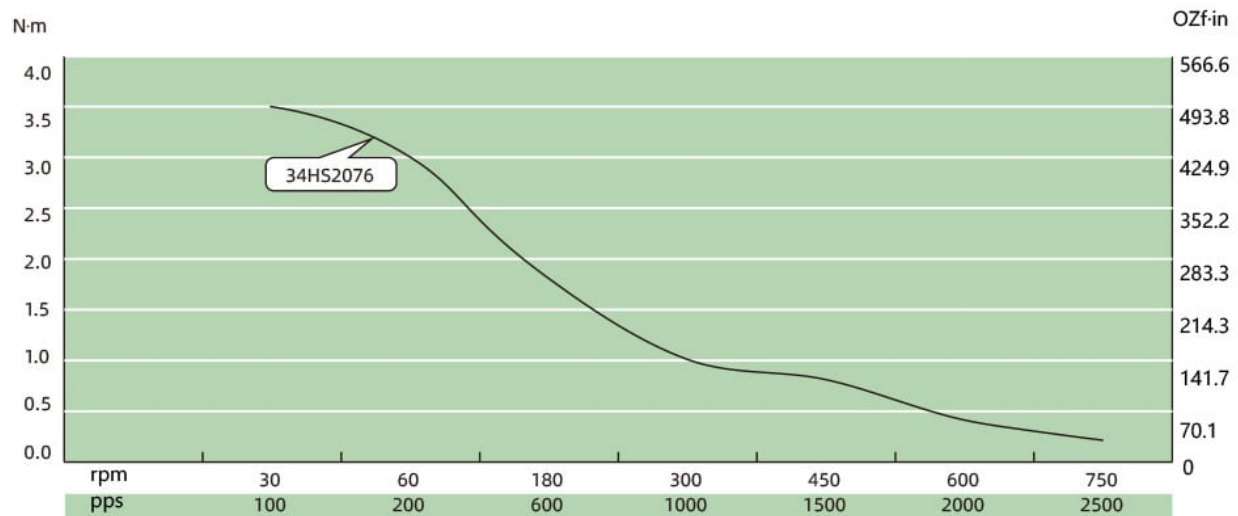
```
include __DIR__ . "/parts/spacer.php";
```



EK3 Encoder - Single ended output



EK3 Encoder - Differential output



TEST CONDITION

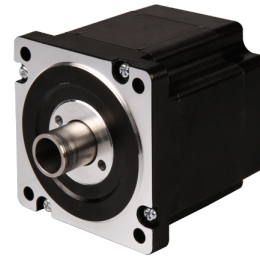
The above curves are tested by DS-OLS8-FPD Bi-polar constant current chopper stepper driver under the condition of 48VDC. Different test conditions and operation conditions will lead to difference performance which is reasonable. The acceleration and deceleration of the motor will help to improve the performance of the motor, here for reference. In order to ensure the life cycle and reliability, it is recommended to have more than 50% margin when select products.

34HS2076

The size 34 [86mm] Hollow Shaft Stepper Motor has Max. 4.5N·m of holding torque. For special windings or customization of shaft, also hollow type of encoder assembly, Please contact KOCO for further information.



<https://www.kocomotion.de/produkt/34hs2076/>



Specification	
Rated Voltage	5.7 A
Current	3.0 V
Resistance	1.9 Ω
Inductance	15 mH
Holding Torque	4.5 Nm
Detent Torque	0.095 Nm
Motor length	76 mm
Size	24 Nema
Flange size	86 mm

Optionen

Encoder

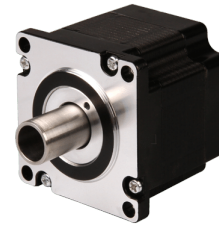
- EK3

HSSM - Size 24 [60mm]

The size 24 [60mm] Hollow Shaft Stepper Motor has Max. 1.9N·m of holding torque. For special windings or customization of shaft, also hollow type of encoder assembly, Please contact KOCO's for further information.

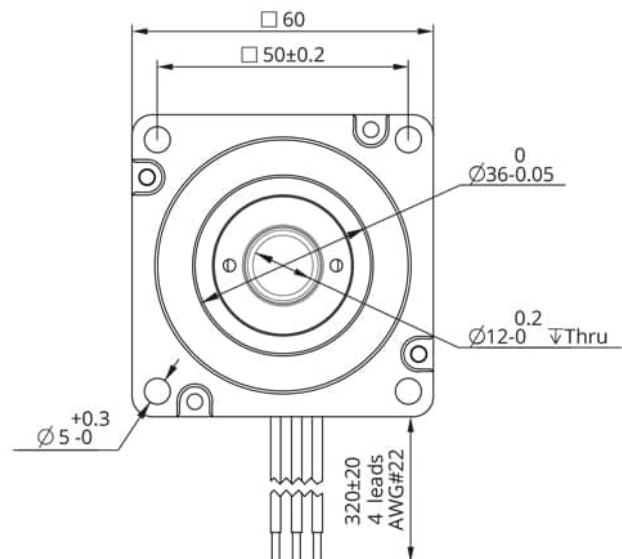
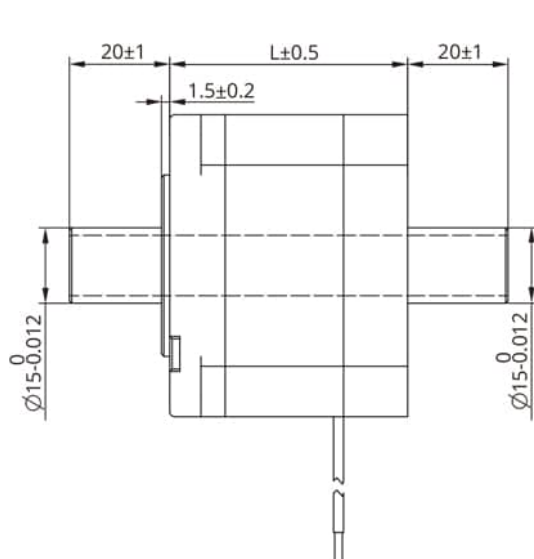


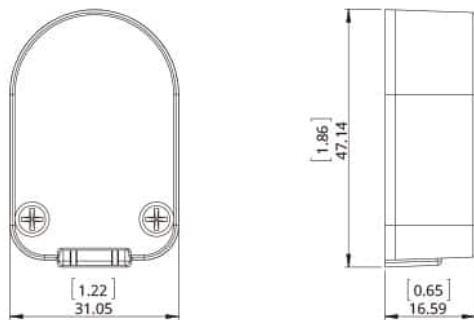
<https://www.kocomotion.de/produkt/hssm-size-24-60mm/>



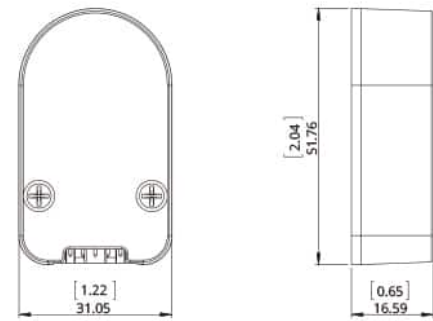
Produkte:	Seite
24HS2047	94
24HS2068	95

```
include __DIR__ . "/parts/spacer.php";
```

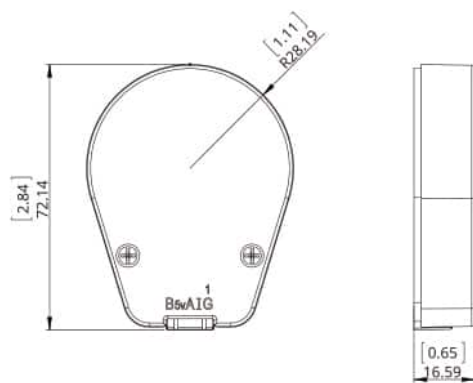




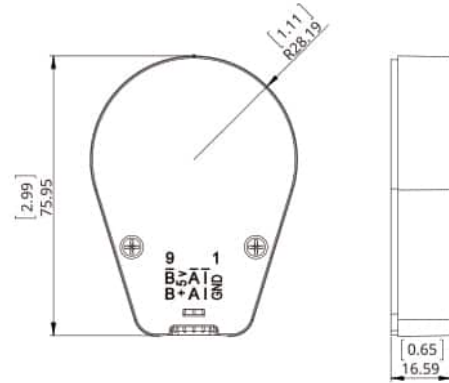
EK2 Encoder - Single ended output



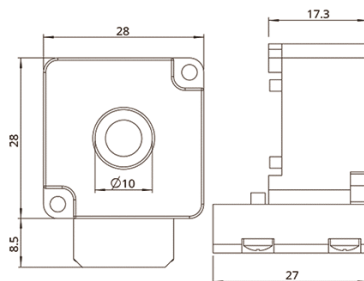
EK2 Encoder - Differential output



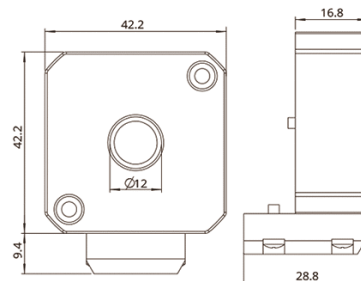
EK3 Encoder - Single ended output



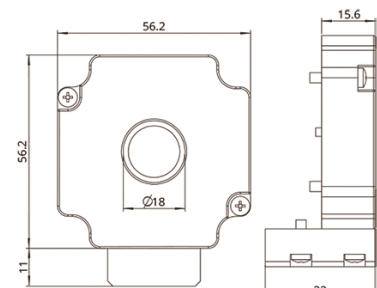
EK3 Encoder - Differential output



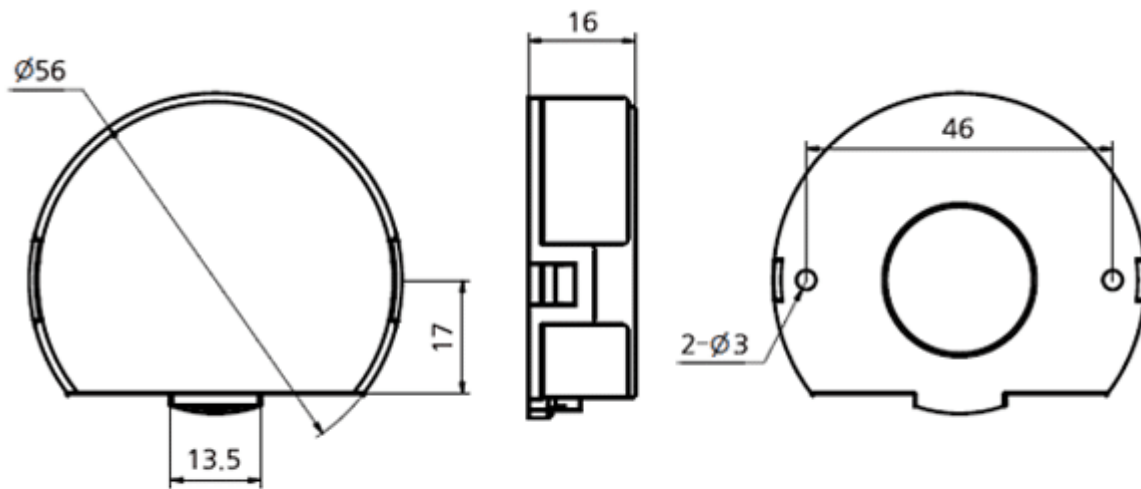
EK4 Encoder 11



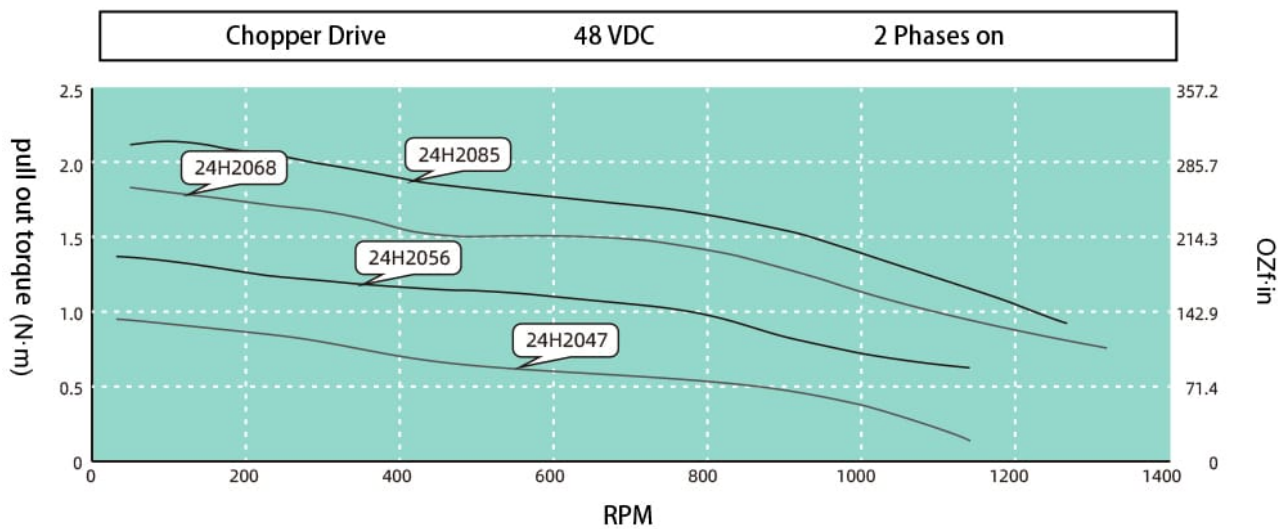
EK4 Encoder 17



EK4 Encoder 23



KPL56 Encoder

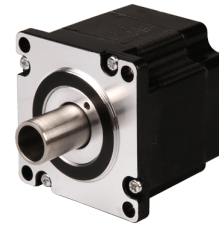


24HS2047

The size 24 [60mm] Hollow Shaft Stepper Motor has Max. 1.9N·m of holding torque. For special windings or customization of shaft, also hollow type of encoder assembly, Please contact KOCO's for further information.



<https://www.kocomotion.de/produkt/24hs2047/>



Specification	
Rated Voltage	1.52 A
Current	4 V
Resistance	0.38 Ω
Inductance	0.78 mH
Holding Torque	0.9 Nm
Detent Torque	0.03 Nm
Motor length	47 mm
Size	34 Nema
Flange size	60 mm

Optionen

Encoder

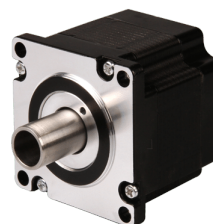
- EK2
- EK3
- EK4
- KPL56

24HS2068

The size 24 [60mm] Hollow Shaft Stepper Motor has Max. 1.9N·m of holding torque. For special windings or customization of shaft, also hollow type of encoder assembly, Please contact KOCO's for further information.



<https://www.kocomotion.de/produkt/24hs2068/>



Specification	
Rated Voltage	2.4 A
Current	4 V
Resistance	0.6 Ω
Inductance	1.9 mH
Holding Torque	1.9 Nm
Detent Torque	0.06 Nm
Motor length	68 mm
Size	34 Nema
Flange size	60 mm

Optionen

Encoder

- EK2
- EK3
- EK4
- KPL56



KOCO MOTION GmbH

Niedereschacher Straße 54
78083 Dauchingen
Deutschland

+49 7720 995858-0
info@kocomotion.de
www.kocomotion.de