

A series of horizontal dotted lines for taking notes.



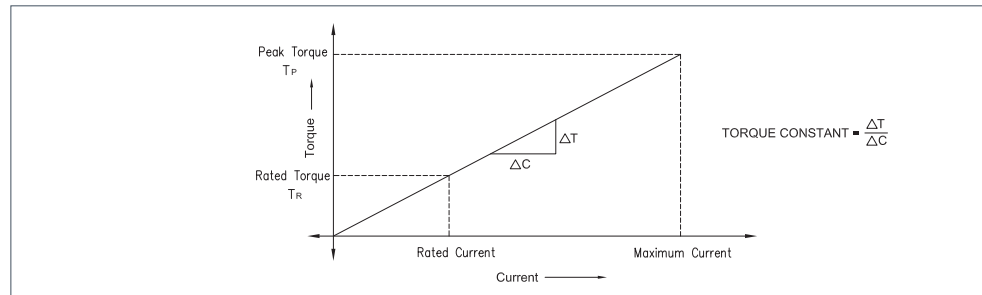
ADVANTAGES

- Significantly higher efficiency and power density than induction motors (with approx. 35% less volume and weight at the same output)
- Very high expected service life and smooth running in brushless technology with precision ball race
- Thanks to the linear torque curve, an exceptionally large speed range at full motor output and therefore improved matching to the required load conditions
- Reduced electrical interference emission along with excellent thermal properties
- Mechanically interchangeable with stepper motors, and hence less construction expense and greater parts variety

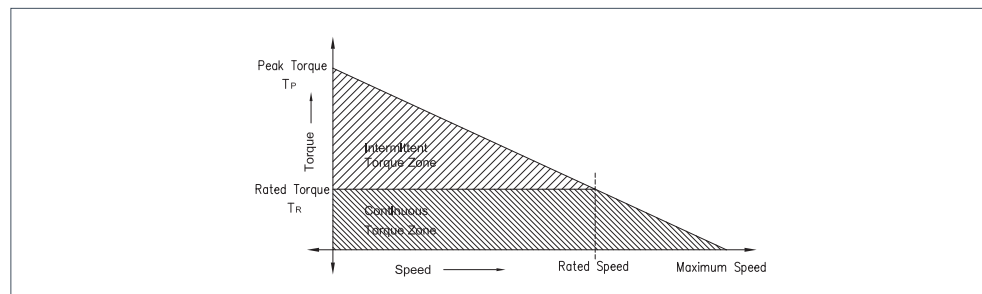
Electronically commutated 3-phase brushless motors (EC motors) are particularly well suited for applications that need smooth running and long service life. The high-energy permanent magnets allow high acceleration and speeds of up to 14,000 rpm with exceptional efficiency. The rotor position is reported electronically using three hall sensors offset by 60 and 120°. Optional encoders with up to 2000 CPR allow high-resolution position controlling.

PROPERTIES

TORQUE/CURRENT CHARACTERISTICS



TORQUE/SPEED CHARACTERISTICS



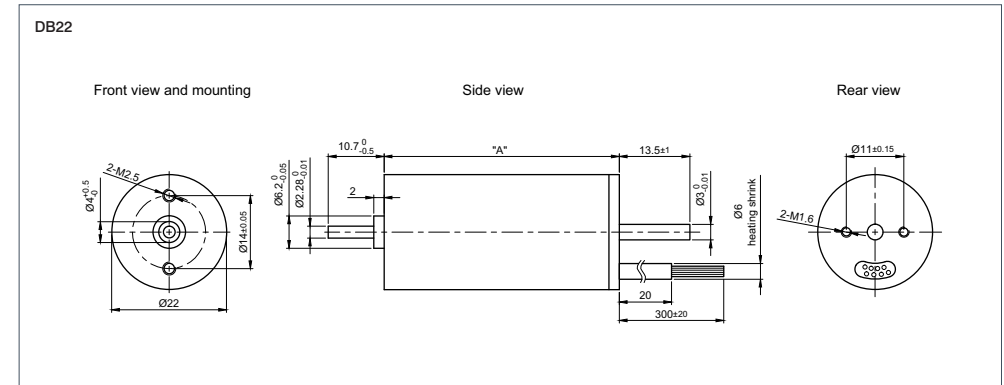
OPTION



VERSIONS

Type	Nominal Output W	Nominal Torque Ncm	Nominal Current A	Nominal Voltage V	Nominal Speed rpm	Torque Constant Ncm/A	Rotor Inertia gcm ²	Weight kg	Length „A“ mm
DB22M01	3.8	0.8	0.265	24	4800	3.02	0.66	0.07	45
DB22L01	7.7	2.2	0.62	24	3500	3.55	1.32	0.12	68

DIMENSIONS (IN MM)



DB28

Brushless DC Motor



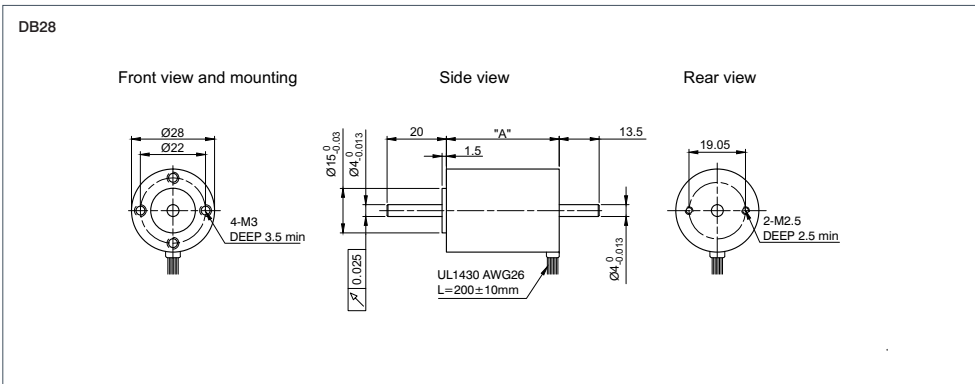
OPTION



VERSIONS

Type	Nominal Output W	Nominal Torque Ncm	Nominal Current A	Nominal Voltage V	Nominal Speed rpm	Torque Constant Ncm/A	Rotor Inertia gcm ²	Weight kg	Length „A“ mm
DB28S01	6	0.7	0.51	15	8000	1.37	1.23	0.06	26
DB28M01	14	1.4	0.88	24	10000	1.6	2.12	0.082	38
DB28L01	16	5	1	24	3700	5	5.98	0.28	77

DIMENSIONS (IN MM)



DB33

Brushless DC Motor



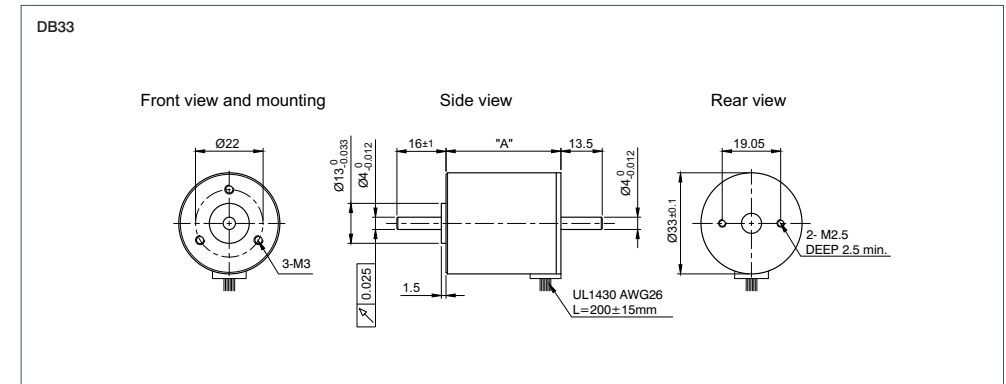
OPTION



VERSIONS

Type	Nominal Output W	Nominal Torque Ncm	Nominal Current A	Nominal Voltage V	Nominal Speed rpm	Torque Constant Ncm/A	Rotor Inertia gcm ²	Weight kg	Length „A“ mm
DB33S01	7	2.2	0.56	24	3000	4.6	2.94	0.115	38

DIMENSIONS (IN MM)



DB42

Brushless DC Motor



OPTION



VERSIONS

Type	Nominal Output W	Nominal Torque Ncm	Nominal Current A	Nominal Voltage V	Nominal Speed rpm	Torque Constant Ncm/A	Rotor Inertia gcm ²	Weight kg	Length „A“ mm
DB42S01	40	5	0.88	48	6000	5.7	24	0.25	41
DB42S02	40	5	3.57	17	8000	1.4	24	0.25	41
DB42S03	26	6.25	1.79	24	4000	3.5	24	0.3	41
DB42M01	70	11	2.12	48	6000	5.2	48	0.45	61
DB42M02	70	7	1.63	48	8500	4.3	48	0.45	61
DB42M03	52.5	12.5	3.47	24	4000	3.6	48	0.45	61
DB42L01	77.5	18	5.14	24	4000	3.6	72	0.65	81
DB42C01	160	25	4.63	48	6000	5.4	96	0.75	100
DB42C02	160	10	3.57	48	14000	2.8	96	0.75	100
DB42C03	105	25	6.65	24	4000	3.76	96	0.75	100

ACCESSORIES



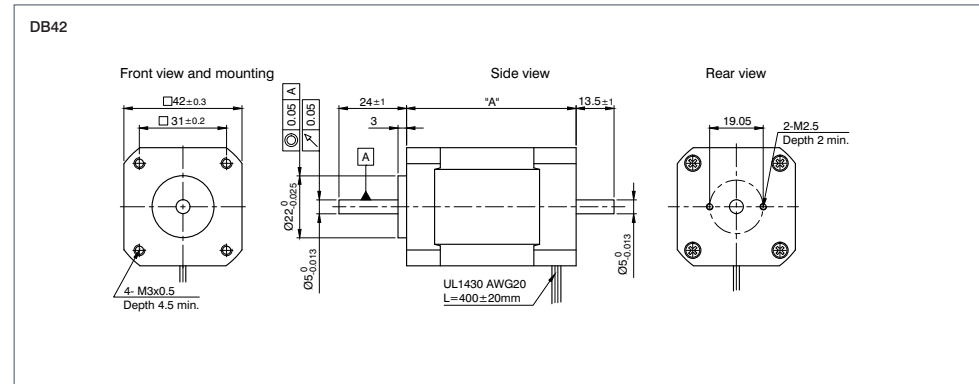
- ZD-D28 Damper
- ZD-D40 Damper

DB42

Brushless DC Motor



DIMENSIONS (IN MM)





OPTION



VERSIONS

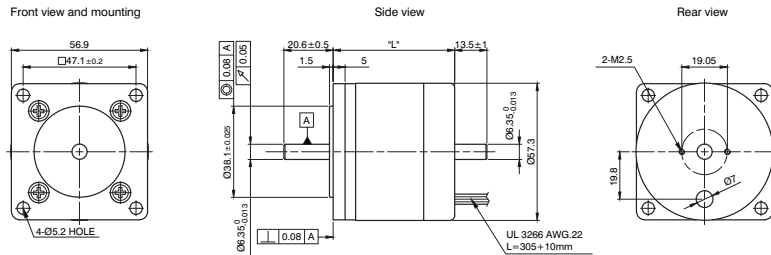
Type	Nominal Output W	Nominal Torque Ncm	Nominal Current A	Nominal Voltage V	Nominal Speed rpm	Torque Constant Ncm/A	Rotor Inertia gcm ²	Weight kg	Length „A“ mm
DB57S01	50	19	3.58	24	2700	5.3	200	0.6	50.8
DB57L01	75	28	4.67	24	2740	6	330	1.1	76.2
DB57C01	110	37	6.5	24	2800	6.3	500	1.5	101.6

ACCESSORIES

ZD-D56 Damper

DIMENSIONS (IN MM)

DB57



OPTION



VERSIONS

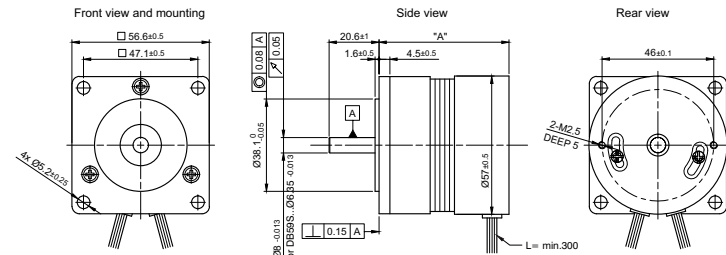
Type	Nominal Output W	Nominal Torque Ncm	Nominal Current A	Nominal Voltage V	Nominal Speed rpm	Torque Constant Ncm/A	Rotor Inertia gcm ²	Weight kg	Length „A“ mm
DB59S024035-A	84	23	5	24	3500	4.5	75	0.52	54
DB59M024035-A	135	37	8	24	3500	4.6	105	0.65	69
DB59L024035-A	172	47	9.4	24	3500	5	119	0.72	74
DB59C024035-A	220	60	13.6	24	3500	4.4	173	0.95	94

ACCESSORIES

ZD-DF56 Damper

DIMENSIONS (IN MM)

DB59





OPTION



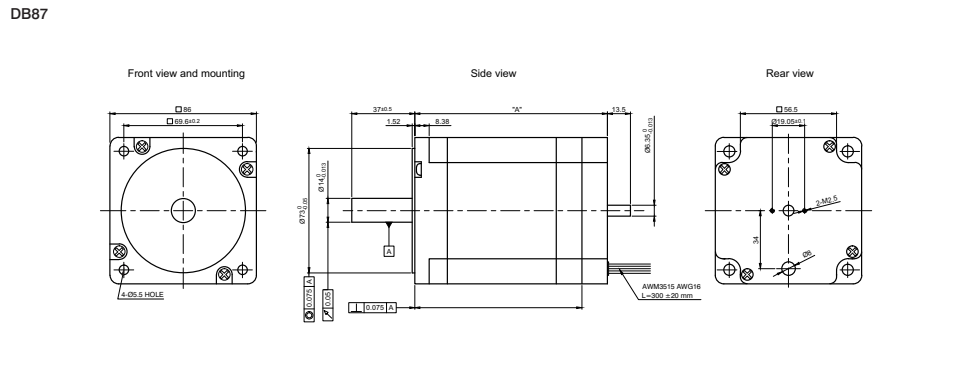
VERSIONS

Type	Nominal Output W	Nominal Torque Ncm	Nominal Current A	Nominal Voltage V	Nominal Speed rpm	Torque Constant Ncm/A	Rotor Inertia gcm ²	Weight kg	Length „A“ mm
DB87S01-S	250	70	6.25	48	3000	11.2	800	1.85	86
DB87M01-S	440	140	10.77	48	3000	13	1600	2.6	113
DB87L01-S	750	210	17.95	48	3000	11.7	2400	4	140

ACCESSORIES

ZD-D56 Damper

DIMENSIONS (IN MM)





OPTION



VERSIONS

Type	Nominal Output W	Nominal Torque Ncm	Nominal Current A	Nominal Voltage V	Nominal Speed rpm	Torque Constant Ncm/A	Rotor Inertia gcm ²	Weight kg	Length „A“ mm
DF45S024050	30	5	1.58	24	4840	3.55	99	0.08	18
DF45M024053	50	8.4	2.36	24	5260	3.35	135	0.12	21.6
DF45L024048	65	13	3.26	24	4840	3.69	181	0.15	27

BESTELLBEZEICHNUNG



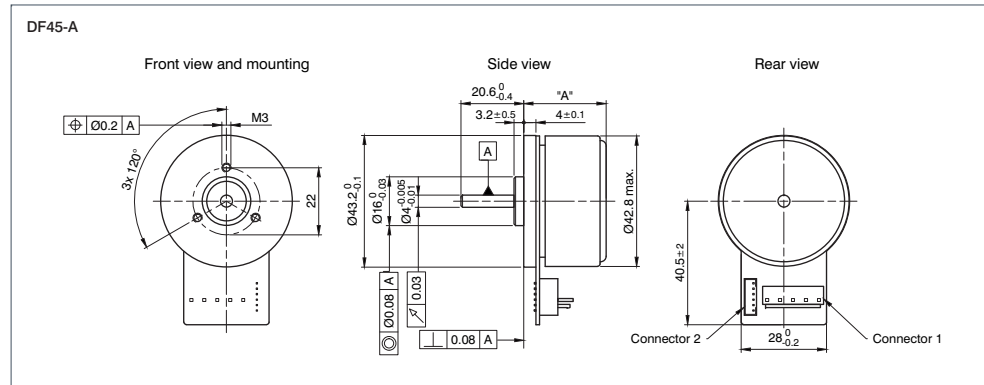
DF45S024050-
A = PCB Connector
A2 = Connector with leads

ACCESSORIES

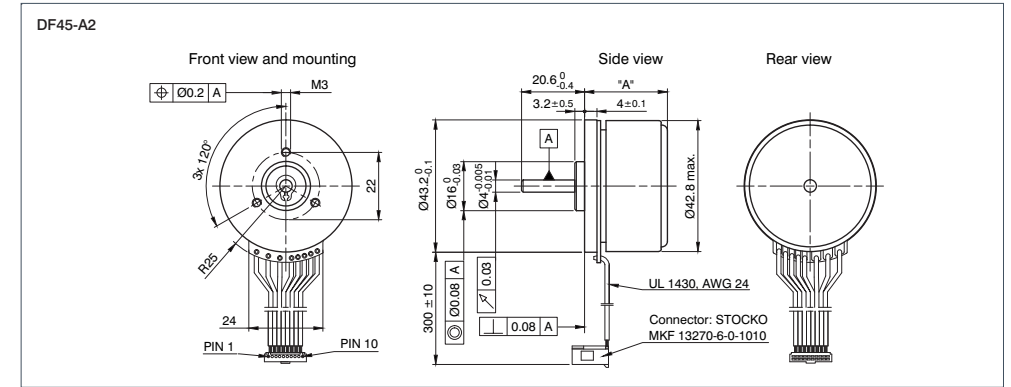


ZK-JST-PHR-6-0.3M
Cable for PCB Version
ZK-JST-VHR-5N-0.3M
Cable for PCB Version

DIMENSIONS (IN MM)



DIMENSIONS (IN MM)



Distributeur Nederland:

Motion Control Systems b.v.
Specialist in Motion control.
Touwslagerij 19 4762AT Zevenbergen
Tel: 0168 325077 - Fax 0168 328134
info@motion.nl - www.motion.nl

Product advies en technische info: service@motion.nl
Bestellingen doorsturen naar : sales@motion.nl

EUROPE:

Nanotec Electronic GmbH & Co. KG
Kapellenstraße 6
85622 Feldkirchen/Munich, Germany

Phone: +49 (0) 89 900 686-0
Fax: +49 (0) 89 900 686-50
E-mail: info@nanotec.de

NORTH AMERICA:

Nanotec Electronic, U.S., Inc.
98 Sheridan Avenue
Medford, MA 02155 USA

Phone: +1 781 219 33 43
Fax: +1 781 498 13 44
E-mail: info@us.nanotec.com

ASIA:

Nanotec Electronics (ChangZhou) Co., Ltd.
Building 1,18 QingJiang Road, New District
ChangZhou City, JiangSu Province
P.R. China 213022

Phone: +86 519 830 211 77
Fax: +86 519 830 211 17
E-mail: info@cn.nanotec.com