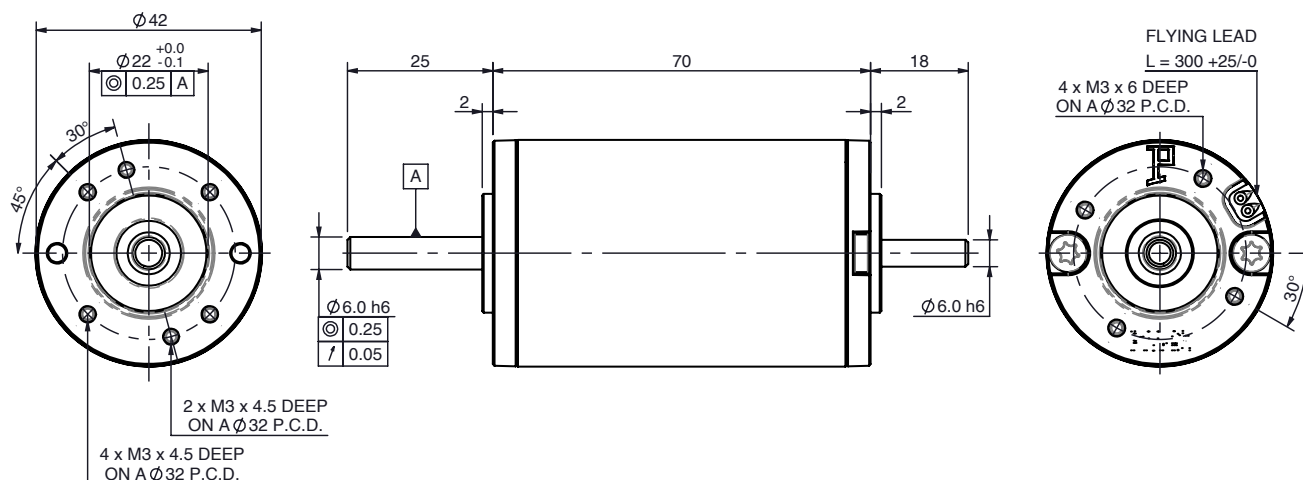


BRx42-25 PMDC motor

Ø42 mm frame // 19 mm stack

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all dimensions in mm

Part number key

Modular	#####
Standard	#####
Calculated data	#####

Please see our customisation options page for details on the modifications available on our products. Advice and guidance on these options are available from your local sales engineer.

Technical data

1 Part number		781076	781077
2 Nominal power	W	12	12
3 Nominal voltage	V	12	24
4 No load speed	rpm	4091	4006
5 No load current	A	0.280	0.150
6 Nominal speed	rpm	3000	3000
7 Nominal continuous torque (S1)	Nm	0.038	0.038
8 Nominal continuous current (S1)	A	1.60	0.78
9 Max. intermittent torque (S2 - 15 minutes)	Nm	0.06	0.06
10 Stall current	A	5.30	2.78
11 Stall torque	Nm	0.13	0.14
12 Stack length	mm	19	19
13 Maximum efficiency	%	71	71
14 Terminal resistance	Ω	2.09	7.02
15 Terminal inductance	mH	1.56	7.26
16 Speed constant	rpm/V	354.6	175.1
17 Torque constant	Nm/A	0.03	0.05
18 Speed torque gradient	rpm/Nm	32623	29121
19 Rotor inertia	gcm ²	1.0 x 10 ⁻⁵	1.0 x 10 ⁻⁵

Thermal data

20 Ambient temperature	°C	40
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Mechanical data

21 Radial load [distance from flange]	N [mm]	60 [15]
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Other data

22 Number of poles		2
23 Weight	Kg	0.39
24 IP rating		IP54
25 Enclosure		Enclosed
26 Insulation Class		F
27 Reversible		Yes

Compatible products

Gearbox	Page #	Brake	Page #	Controller	Page #
S Box	216	On request	-	SC 50/15	82
GB58	219			EPOS	265
PGx42	248			ESCON	274
Encoder	Page #				
Incr. 5-pin	78				
Incr. 10-pin	78				
Diff. 10-pin	79				

Key

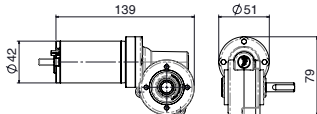
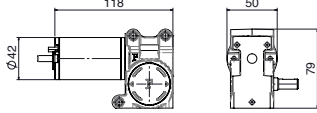
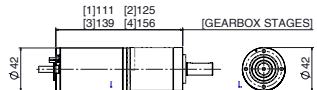
Standard combination

Modular combination

BRx42-25 combinations

Quickview - combination drawing and technical data

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Combination drawing		Technical data							
BRx42-25-S-Box		Gear material ¹	Comp.	Comp.	Comp.	Bronze	Bronze	Bronze	
		Gear ratio ²	:1	4	30	70	4	30	70
		Speed	rpm	750.0	100.0	42.9	750.0	100.0	42.9
		Nominal torque	Nm	0.1	0.7	1.1	0.1	0.6	0.9
		Intermittent torque	Nm	0.2	1.2	1.7	0.2	1.0	1.5
BRx42-25-GB58		Gear material ¹	Comp.	Comp.	Comp.	Bronze	Bronze	Bronze	
		Gear ratio ²	:1	4	15	25	-	-	-
		Speed	rpm	750.0	200.0	120.0	-	-	-
		Nominal torque	Nm	0.1	0.4	0.6	-	-	-
		Intermittent torque	Nm	0.2	0.7	1.0	-	-	-
BRx42-25-PGx42		Gear material ¹	Bronze	Bronze	Bronze	Bronze	Bronze		
		Gear ratio [stages] ²	:1	4.3 [1]	19 [2]	66 [3]	150 [4]	353 [4]	
		Speed	rpm	697.7	157.9	45.5	20.0	8.5	
		Nominal torque	Nm	0.1	0.6	1.8	3.6	8.6	
		Intermittent torque	Nm	0.2	0.9	2.9	5.8	13.6	

Key

Standard combination / standard gear ratio

Modular combination / modular gear ratio

Notes

¹ Comp. = Composite gears

² Full gear ratio options displayed on individual gearbox datasheets

- Technical data displayed above calculated based on **BRx42-25 24V 3000 rpm** motor. Intermittent torque displayed based on S2 - 15 minute duty cycle.
- Simplified drawings displayed above show overall envelope size of the combination. Please see individual motor and gearbox datasheets for detailed technical drawings.