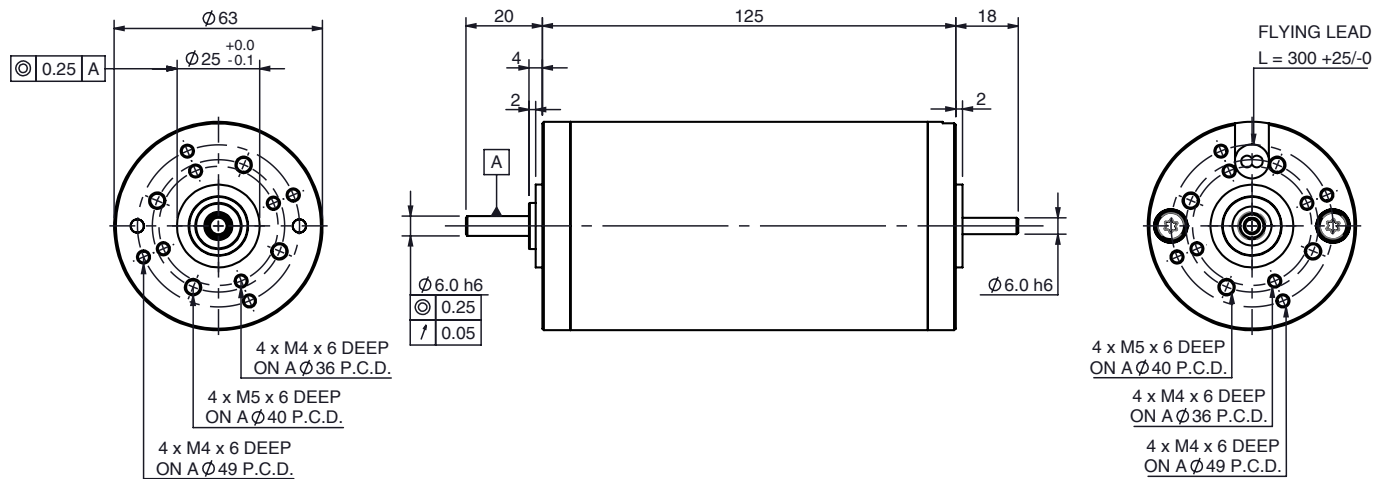


BRx63-55 PMDC motor

Ø63 mm frame // 55 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

		781088	781089	781090
1 Part number		781088	781089	781090
2 Nominal power	W	79	85	85
3 Nominal voltage	V	12	24	48
4 No load speed	rpm	3665	3617	3613
5 No load current	A	0.70	0.31	0.18
6 Nominal speed	rpm	2800	3000	3000
7 Nominal continuous torque (S1)	Nm	0.27	0.27	0.27
8 Nominal continuous current (S1)	A	9.2	4.7	2.4
9 Max. intermittent torque (S2 - 15 minutes)	Nm	0.45	0.45	0.45
10 Stall current	A	38.3	27.9	19.2
11 Stall torque	Nm	1.16	1.65	2.20
12 Stack length	mm	55	55	55
13 Maximum efficiency	%	76	81	85
14 Terminal resistance	Ω	0.745	0.593	2.300
15 Terminal inductance	mH	0.198	0.92	3.60
16 Speed constant	rpm/V	303.1	150.9	75.4
17 Torque constant	Nm/A	0.03	0.06	0.10
18 Speed torque gradient	rpm/Nm	3181	2336	1741
19 Rotor inertia	gcm²	9.3 x 10 ⁻⁵	9.3 x 10 ⁻⁵	9.3 x 10 ⁻⁵

Thermal data

20 Ambient temperature	°C	40
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Mechanical data

21 Radial load [distance from flange]	N [mm]	150 [15]
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Other data

22 Number of poles		2
23 Weight	Kg	1.16
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	1.5 Nm	80	SC 50/15	82
GB28	66			EPOS	265
GB58	219			ESCON	274
M Box	222				
GB80	67				
GB36	231				
PGx52	249				
		Encoder	Page #		
		Incr. 5-pin	78		
		Incr. 10-pin	78		
		Diff. 10-pin	79		
		Magnetic	256		

Key

Standard combination
Modular combination

BRx63-55 combinations

Quickview - combination drawing and technical data

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Combination drawing		Technical data							
BRx63-55-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	0.9	3.0	2.0	0.8	4.5	3.0
		Intermittent torque	Nm	1.4	4.8	3.2	1.3	7.2	4.8
BRx63-55-GB28		Gear material ¹	Comp.	Comp.	Comp.	Bronze	Bronze	Bronze	
		Gear ratio ²	:1	-	-	-	15	30	60
		Speed	rpm	-	-	-	200.0	100.0	50.0
		Nominal torque	Nm	-	-	-	3.0	5.0	5.0
		Intermittent torque	Nm	-	-	-	5.1	8.0	8.0
BRx63-55-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	0.9	3.0	4.0	-	-	-
		Intermittent torque	Nm	1.5	5.1	7.7	-	-	-
BRx63-55-M-Box		Gear material ¹	Comp.	Comp.	Comp.	Bronze	Bronze	Bronze	
		Gear ratio ²	:1	4	30	72	4	30	72
		Speed	rpm	750.0	100.0	41.7	750.0	100.0	41.7
		Nominal torque	Nm	0.9	5.7	5.0	0.8	4.9	7.8
		Intermittent torque	Nm	1.5	9.5	8.0	1.3	8.2	12.0
BRx63-55-GB80		Gear material ¹	Comp.	Comp.	Comp.	Bronze	Bronze	Bronze	
		Gear ratio ²	:1	15	30	60	-	-	-
		Speed	rpm	200.0	100.0	50.0	-	-	-
		Nominal torque	Nm	3.1	5.7	6.0	-	-	-
		Intermittent torque	Nm	5.2	9.5	10.0	-	-	-
BRx63-55-GB36		Gear material ¹	Comp.	Comp.	Comp.	Bronze	Bronze	Bronze	
		Gear ratio ²	:1	24	120	1400	-	-	-
		Speed	rpm	125.0	25.0	2.1	-	-	-
		Nominal torque	Nm	4.9	22.0	45.0	-	-	-
		Intermittent torque	Nm	8.2	22.0	45.0	-	-	-
BRx63-55-P-GX52		Gear material ¹	Comp.	Comp.	Comp.	Bronze	Bronze	Bronze	
		Gear ratio [stages] ²	:1	-	-	-	3.9 [1]	44 [2]	172 [3]
		Speed	rpm	-	-	-	769.2	68.2	17.4
		Nominal torque	Nm	-	-	-	1.0	10.9	30.0
		Intermittent torque	Nm	-	-	-	1.7	18.2	45.0

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 **BRx63-55 48V 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.