

Mobility modular solutions



Gearbox

Combined with our modular motors through use of a simple mounting flange, our gearbox range offers a range of gear ratios and comes as standard with a hollow shaft.

Motor

With options in both motor voltage and output speed, you can configure your DC brushed or DC brushless motor to meet your exact performance requirements.

Encoder

Add our incremental encoder to your modular configuration to enable further control to the power supply of your system.

Brake

Intelligently designed to fit around our encoders through use of a mounting flange, our 1.5 Nm brakes combine seamlessly with our modular range motors.



Controller

Our Parvalux controller, designed with parent company maxon, offers precise control with both our PMDC and BLDC motors.

Shaft

Secured through a keyway and slot, our shaft extension kits offer a quick-fit solution where a hollow shaft isn't quite right for your application.

Simply Modular

Quick to configure. Quick to build. Quick to deliver.

Configure your own solution online; selecting your motor and gearbox, and adding accessories such as encoders, brakes, controllers, and shaft extension kits to create a solution perfectly suited to your specific application.

Visit www.parvalux.com to build your own solution through our online product configurator.

Available in quantities of up to **10 pieces**

Mobility

Modular solutions

It's a fact of life that advances in healthcare mean people are now living longer and as we age, we become more reliant on mobility products to support independent living. Our ability to travel, go shopping, take outdoor recreation and even play sports can be extended with the help of a range of mobility solutions.

Parvalux has demonstrable experience providing reliable and robust drive systems for a range of mobility products, from electric wheelchairs to mobility scooters and even golf buggies and carts. Manufacturers benefit from our ability to customise our geared motor products to meet their specific need and our willingness to develop fully custom solutions, where required.



Stairlifts

05 - 16



Patient hoists

17 - 24



Platform lifts

25 - 36

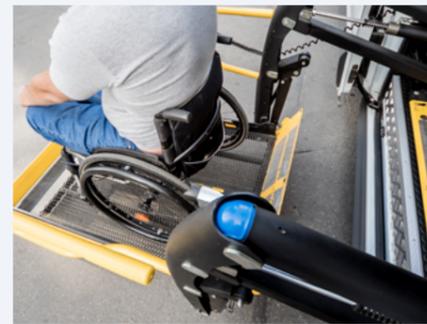
The Parvalux modular range includes a number of different combinations that are well suited to many of the applications found in this ever-growing industry.

Although many of the solutions we provide for this sector usually require some customisation, our modular range is available on a rapid delivery, enabling you to quickly test a close to perfect solution that can later be modified to match your requirements when your project progresses to mass production.



Powered wheelchairs

37 - 44



Wheelchair lifts

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We also have extensive experience in providing geared motor solutions to a number of different mobility applications, such as;

- Mobility scooters
- Mobility vehicles
- Taxi step actuators
- Wheelchair ramps



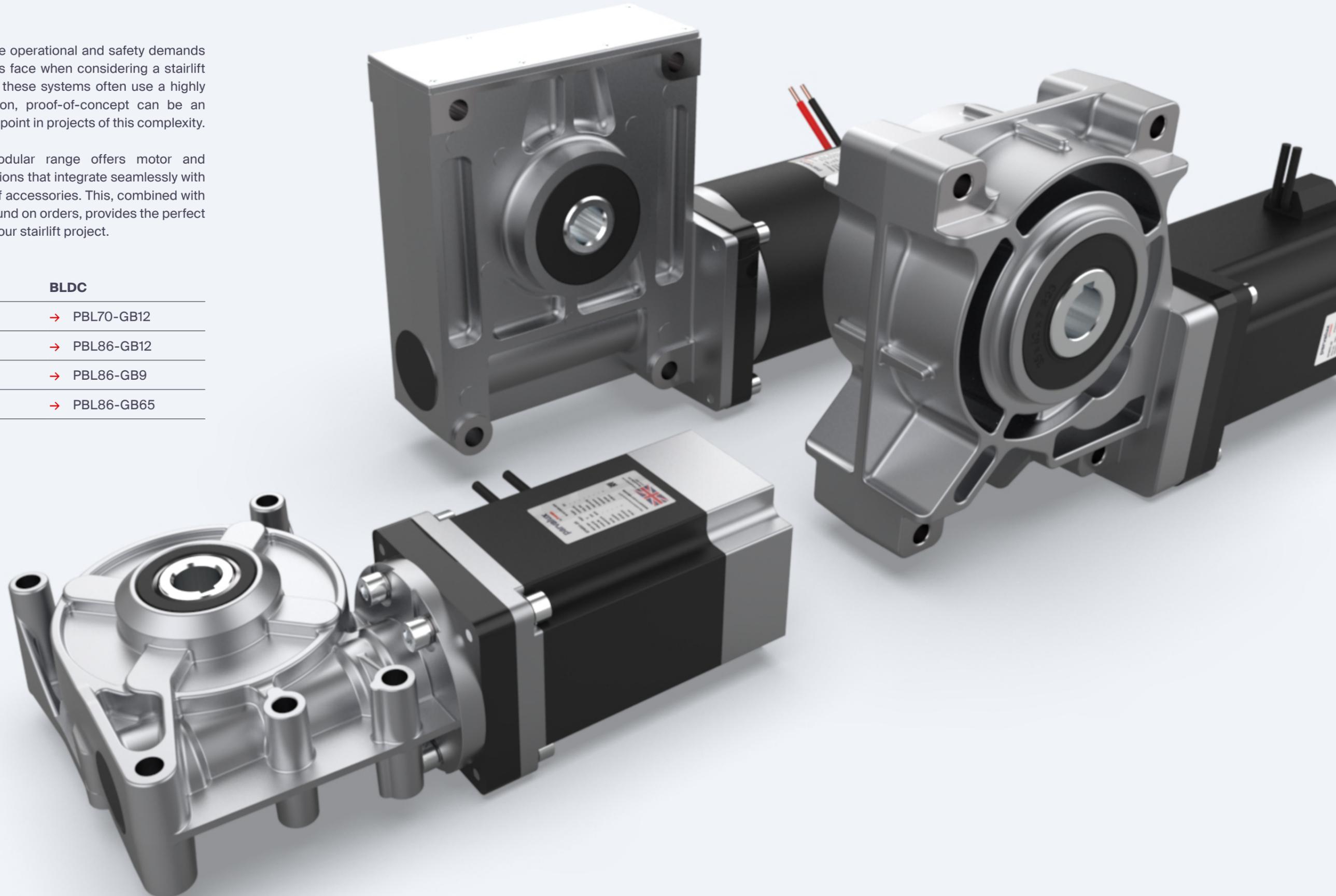
Recommended combinations for these applications will be added in the near future. Please contact our sales team if assistance is needed in selecting your solution.

Stairlifts

We understand the operational and safety demands that manufacturers face when considering a stairlift application. While these systems often use a highly customized solution, proof-of-concept can be an important starting point in projects of this complexity.

The Parvalux modular range offers motor and gearbox combinations that integrate seamlessly with a wide selection of accessories. This, combined with a 48-hour turnaround on orders, provides the perfect starting point for your stairlift project.

PMDC	BLDC
→ BRx70-GB12	→ PBL70-GB12
→ BRx90-GB12	→ PBL86-GB12
→ BRx90-GB9	→ PBL86-GB9
→ BRx90-GB65	→ PBL86-GB65



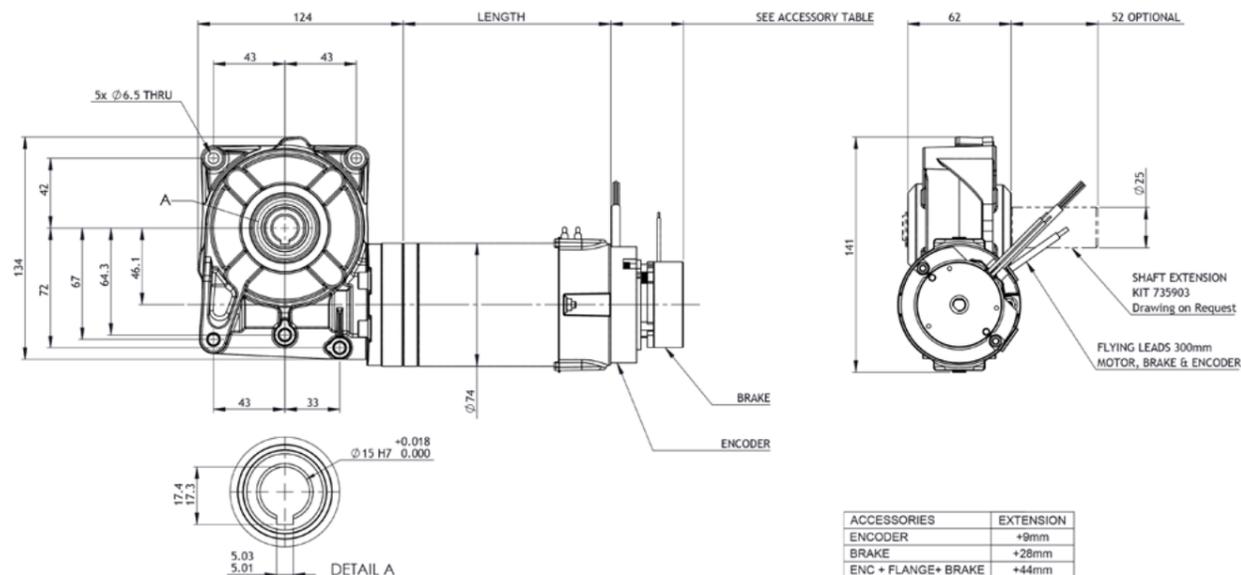
BRx70-GB12

PMDC right-angle geared motor

12 - 48 V // 79 - 157 W // 50 - 200 rpm // 2.8 - 26.4 Nm

Stairlift solution

all dimensions in mm



Combination data							
Motor		BRx70-40	BRx70-40	BRx70-40	BRx70-60	BRx70-60	BRx70-60
Voltage	V	12 - 48	12 - 48	12 - 48	12 - 48	12 - 48	12 - 48
Nominal motor power	W	79	79	79	157	157	157
Gearbox ratio	:1	15	30	60	15	30	60
Nominal speed	rpm	200	100	50	200	100	50
Nominal continuous torque (S1)	Nm	2.8	4.9	7.5	5.6	9.8	15.0
Nominal intermittent torque (S2 - 15 minutes)	Nm	4.7	8.2	12.6	9.9	17.2	26.4

Motor data							
Motor		BRx70-40 12V	BRx70-40 24V	BRx70-40 48V	BRx70-60 12V	BRx70-60 24V	BRx70-60 48V
Part number		781092	781093	781094	781095	781096	781097
Nominal power	W	79	79	79	157	157	157
Nominal voltage	V	12	24	48	12	24	48
Nominal speed	rpm	3000	3000	3000	3000	3000	3000
Nominal continuous torque (S1)	Nm	0.25	0.25	0.25	0.50	0.50	0.50
Nominal intermittent torque (S2 - 15 minutes)	Nm	0.42	0.42	0.42	0.88	0.88	0.88
Weight	Kg	1.85	1.85	1.85	2.25	2.25	2.25
Length	mm	125	125	125	146	146	146

Gearbox data				
Part number		735900	735901	735902
Ratio	:1	15	30	60
Max. continuous torque (S1) ¹	Nm	30.0	30.0	30.0
Max. intermittent torque	Nm	48.0	48.0	48.0
Efficiency	%	75	65	50
Max. axial load (dynamic)	N	600	600	600
Max. radial load, 12mm from flange	N	800	800	800
Weight	Kg	1.5	1.5	1.5
Gear material		Bronze	Bronze	Bronze

¹S1 duty cycle based on 3000rpm input speed

Combination accessories							
Brake	Part number	Encoder	Part Number	Controller	Part Number	Shaft extension	Part number
1.5 Nm	735914	Incremental	735912	SC 50/15	735903	GB12 shaft	735898
Mounting flange	781277						

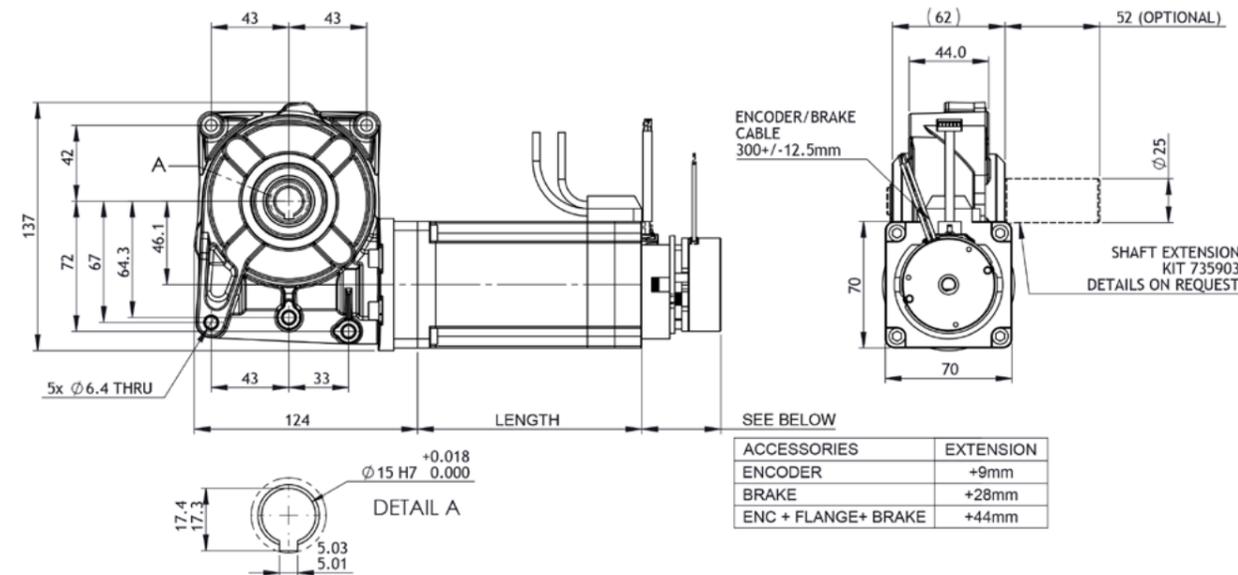
PBL70-GB12

BLDC right-angle geared motor

48 V // 363 - 415 W // 75 - 300 rpm // 8.7 - 46.5 Nm

Stairlift solution

all dimensions in mm



Combination data							
Motor		PBL70-70	PBL70-70	PBL70-70	PBL70-80	PBL70-80	PBL70-80
Voltage	V	48	48	48	48	48	48
Nominal motor power	W	363	363	363	415	415	415
Gearbox ratio	:1	15	30	60	15	30	60
Nominal speed	rpm	300	150	75	300	150	75
Nominal continuous torque (S1)	Nm	8.7	15.0	23.1	9.9	17.2	26.4
Nominal intermittent torque (S2 - 15 minutes)	Nm	15.2	26.3	40.5	17.4	30.2	46.5

Motor data				Connection details		
Motor		PBL70-70 48V	PBL70-80 48V	Lead colour	Lead gauge	Function
Part number		776622	776623	Red	UL1569/26 AWG	VCC
Nominal power	W	363	415	Black	UL1569/26 AWG	GND
Nominal voltage	V	48	48	Blue	UL1569/26 AWG	Hall A
Nominal speed	rpm	4500	4500	Green	UL1569/26 AWG	Hall B
Nominal continuous torque (S1)	Nm	0.77	0.88	White	UL1569/26 AWG	Hall C
Nominal intermittent torque (S2 - 15 minutes)	Nm	1.35	1.54	Red	UL3266/16 AWG	Phase U
Weight	Kg	2.20	2.60	Yellow	UL3266/16 AWG	Phase V
Length	mm	114	124	Black	UL3266/16 AWG	Phase W

Gearbox data				
Part number		735900	735901	735902
Ratio	:1	15	30	60
Max. continuous torque (S1) ¹	Nm	30.0	30.0	30.0
Max. intermittent torque	Nm	48.0	48.0	48.0
Efficiency	%	75	65	50
Max. axial load (dynamic)	N	600	600	600
Max. radial load, 12mm from flange	N	800	800	800
Weight	Kg	1.5	1.5	1.5
Gear material		Bronze	Bronze	Bronze

¹S1 duty cycle based on 3000rpm input speed

Combination accessories							
Brake	Part number	Encoder	Part Number	Controller	Part Number	Shaft extension	Part number
1.5 Nm	735914	Incremental	735912	SC 50/15	738950	GB12 shaft	735903
Mounting flange	781281						

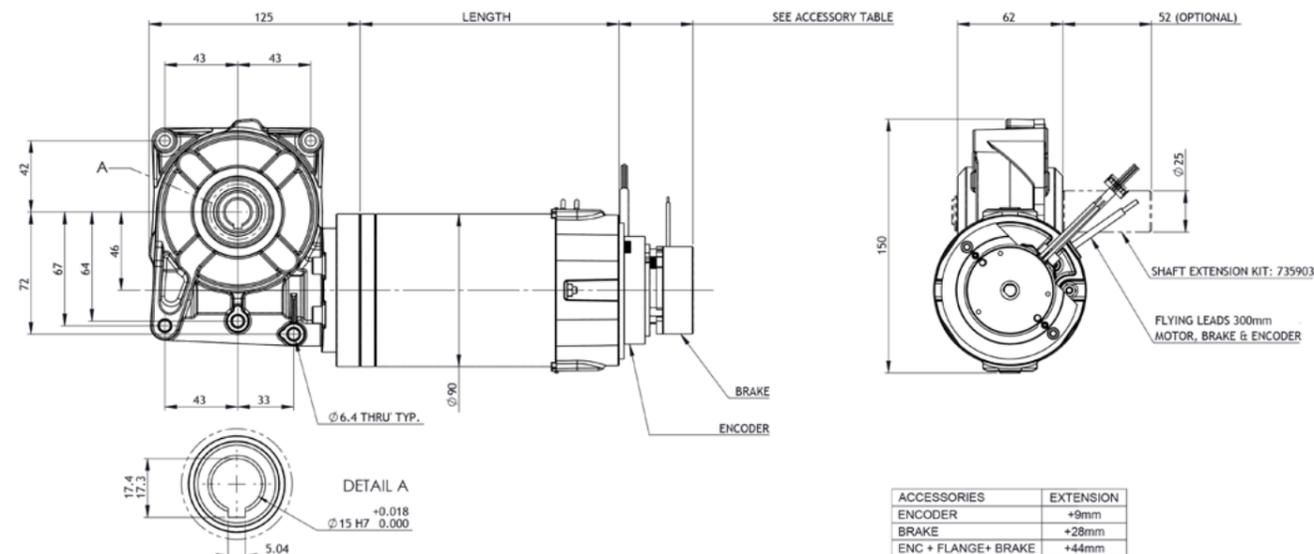
BRx90-GB12

PMDC right-angle geared motor

12 - 48 V // 157 - 283 W // 50 - 200 rpm // 7.5 - 45.0 Nm

Stairlift solution

all dimensions in mm



Combination data

Motor	BRx90-50	BRx90-50	BRx90-50	BRx90-75	BRx90-75	BRx90-75
Voltage	V	12 - 48	12 - 48	12 - 48	12 - 48	12 - 48
Nominal motor power	W	157 - 210	157 - 210	157 - 210	236 - 283	236 - 283
Gearbox ratio	:1	15	30	60	15	30
Nominal speed	rpm	200	100	50	200	100
Nominal continuous torque (S1)	Nm	7.5	16.4	20.1	10.1	21.9
Nominal intermittent torque (S2 - 15 minutes)	Nm	13.2	22.8	35.1	16.9	29.3

Motor data

Motor	BRx90-50 12V	BRx90-50 24V	BRx90-50 48V	BRx90-75 12V	BRx90-75 24V	BRx90-75 48V
Part number	781102	781103	781104	781106	781107	781108
Nominal power	W	157	210	210	236	283
Nominal voltage	V	12	24	48	12	24
Nominal speed	rpm	3000	3000	3000	3000	3000
Nominal continuous torque (S1)	Nm	0.50	0.67	0.67	0.90	0.90
Nominal intermittent torque (S2 - 15 minutes)	Nm	1.17	1.17	1.17	1.50	1.50
Weight	Kg	3.60	3.60	3.60	4.00	4.00
Length	mm	153	153	153	183	183

Gearbox data

Part number	735900	735901	735902
Ratio	:1	15	30
Max. continuous torque (S1) ¹	Nm	30.0	30.0
Max. intermittent torque	Nm	48.0	48.0
Efficiency	%	75	65
Max. axial load (dynamic)	N	600	600
Max. radial load, 12mm from flange	N	800	800
Weight	Kg	1.5	1.5
Gear material		Bronze	Bronze

¹S1 duty cycle based on 3000rpm input speed

Combination accessories

Brake	Part number	Encoder	Part Number	Controller	Part Number	Shaft extension	Part number
1.5 Nm	735914	Incremental	735912	SC 50/15	735903	GB12 shaft	735898
Mounting flange	781279						

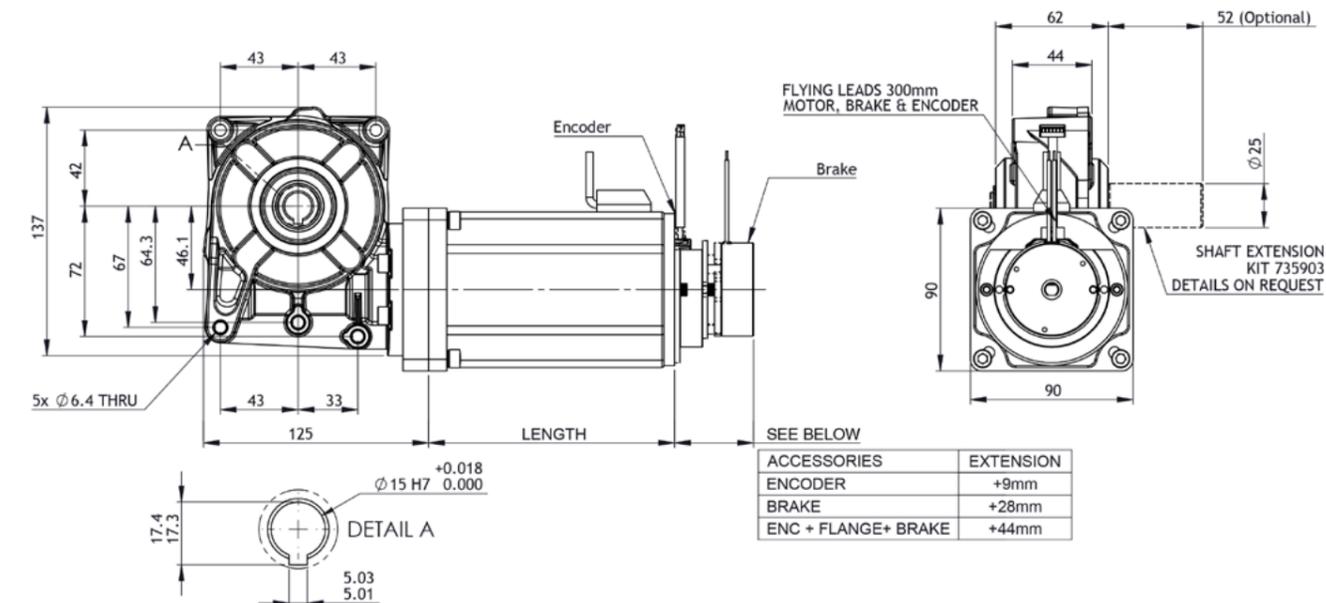
PBL86-GB12

BLDC right-angle geared motor

48 V // 419 - 586 W // 67 - 267 rpm // 11.3 - 48.0 Nm

Stairlift solution

all dimensions in mm



Combination data

Motor	PBL86-55	PBL86-55	PBL86-55	PBL86-80	PBL86-80	PBL86-80
Voltage	V	48	48	48	48	48
Nominal motor power	W	419	419	419	586	586
Gearbox ratio	:1	15	30	60	15	30
Nominal speed	rpm	267	133	67	267	133
Nominal continuous torque (S1)	Nm	11.3	19.5	30.0	15.8	27.3
Nominal intermittent torque (S2 - 15 minutes)	Nm	19.7	34.1	48.0	27.6	47.8

Motor data

Motor	PBL86-55 48 V	PBL86-80 48 V
Part number	776624	776625
Nominal power	W	419
Nominal voltage	V	48
Nominal speed	rpm	4000
Nominal continuous torque (S1)	Nm	1.00
Nominal intermittent torque (S2 - 15 minutes)	Nm	1.75
Weight	Kg	3.20
Length	mm	111

Connection details

Lead colour	Lead gauge	Function
Red	UL1569/26 AWG	VCC
Black	UL1569/26 AWG	GND
Blue	UL1569/26 AWG	Hall A
Green	UL1569/26 AWG	Hall B
White	UL1569/26 AWG	Hall C
Red	UL1569/14 AWG	Phase U
Yellow	UL1569/14 AWG	Phase V
Black	UL1569/14 AWG	Phase W

Gearbox data

Part number	735900	735901	735902
Ratio	:1	15	30
Max. continuous torque (S1) ¹	Nm	30.0	30.0
Max. intermittent torque	Nm	48.0	48.0
Efficiency	%	75	65
Max. axial load (dynamic)	N	600	600
Max. radial load, 12mm from flange	N	800	800
Weight	Kg	1.5	1.5
Gear material		Bronze	Bronze

¹S1 duty cycle based on 3000rpm input speed

Combination accessories

Brake	Part number	Encoder	Part Number	Controller	Part Number	Shaft extension	Part number
1.5 Nm	735914	Incremental	735912	SC 50/15	738950	GB12 shaft	735903
Mounting flange	781284						

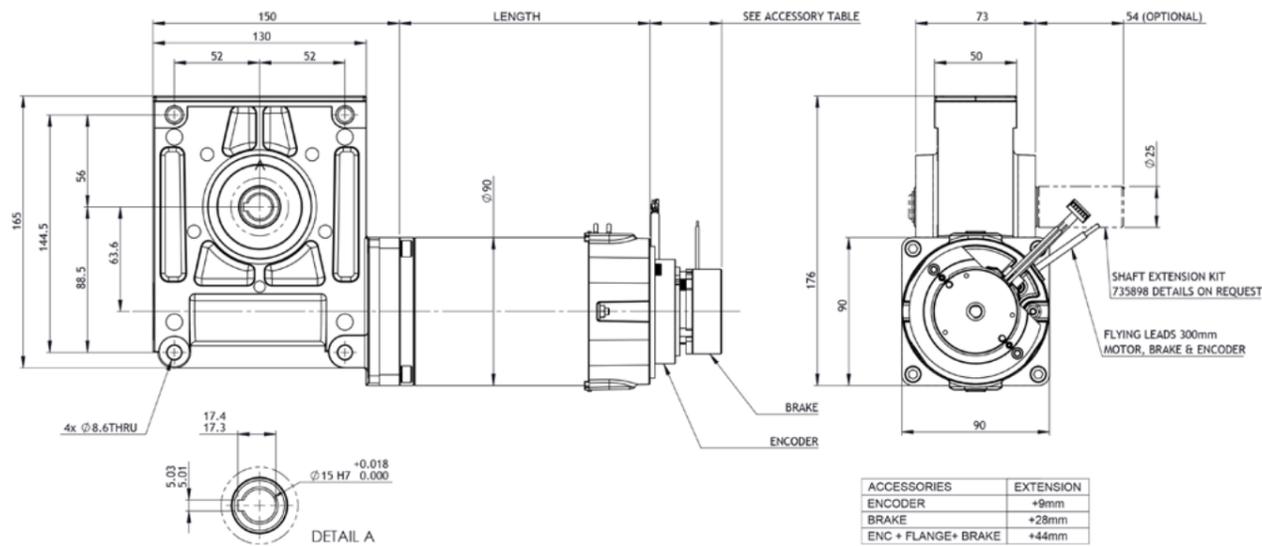
BRx90-GB9

PMDC right-angle geared motor

12 - 48 V // 157 - 283 W // 50 - 200 rpm // 8.5 - 58.5 Nm

Stairlift solution

all dimensions in mm



Combination data							
Motor		BRx90-50	BRx90-50	BRx90-50	BRx90-75	BRx90-75	BRx90-75
Voltage	V	12 - 48	12 - 48	12 - 48	12 - 48	12 - 48	12 - 48
Nominal motor power	W	157 - 210	157 - 210	157 - 210	236 - 283	236 - 283	236 - 283
Gearbox ratio	:1	15	30	60	15	30	60
Nominal speed	rpm	200	100	50	200	100	50
Nominal continuous torque (S1)	Nm	8.5	15.1	26.1	11.5	20.3	35.1
Nominal intermittent torque (S2 - 15 minutes)	Nm	14.9	26.3	45.6	19.1	33.8	58.5

Motor data							
Motor		BRx90-50 12V	BRx90-50 24V	BRx90-50 48V	BRx90-75 12V	BRx90-75 24V	BRx90-75 48V
Part number		781102	781103	781104	781106	781107	781108
Nominal power	W	157	210	210	236	283	283
Nominal voltage	V	12	24	48	12	24	48
Nominal speed	rpm	3000	3000	3000	3000	3000	3000
Nominal continuous torque (S1)	Nm	0.50	0.67	0.67	0.90	0.90	0.90
Nominal intermittent torque (S2 - 15 minutes)	Nm	1.17	1.17	1.17	1.50	1.50	1.50
Weight	Kg	3.60	3.60	3.60	4.00	4.00	4.00
Length	mm	153	153	153	183	183	183

Gearbox data				
Part number		735894	735895	735896
Ratio	:1	15	30	60
Max. continuous torque (S1) ¹	Nm	50.0	50.0	50.0
Max. intermittent torque	Nm	80.0	80.0	80.0
Efficiency	%	85	75	65
Max. axial load (dynamic)	N	600	600	600
Max. radial load, 12mm from flange	N	800	800	800
Weight	Kg	2.3	2.3	2.3
Gear material		Composite	Composite	Composite

¹ S1 duty cycle based on 3000rpm input speed

Combination accessories							
Brake	Part number	Encoder	Part Number	Controller	Part Number	Shaft extension	Part number
1.5 Nm	735914	Incremental	735912	SC 50/15	738950	GB9 shaft	735898
Mounting flange	781279						

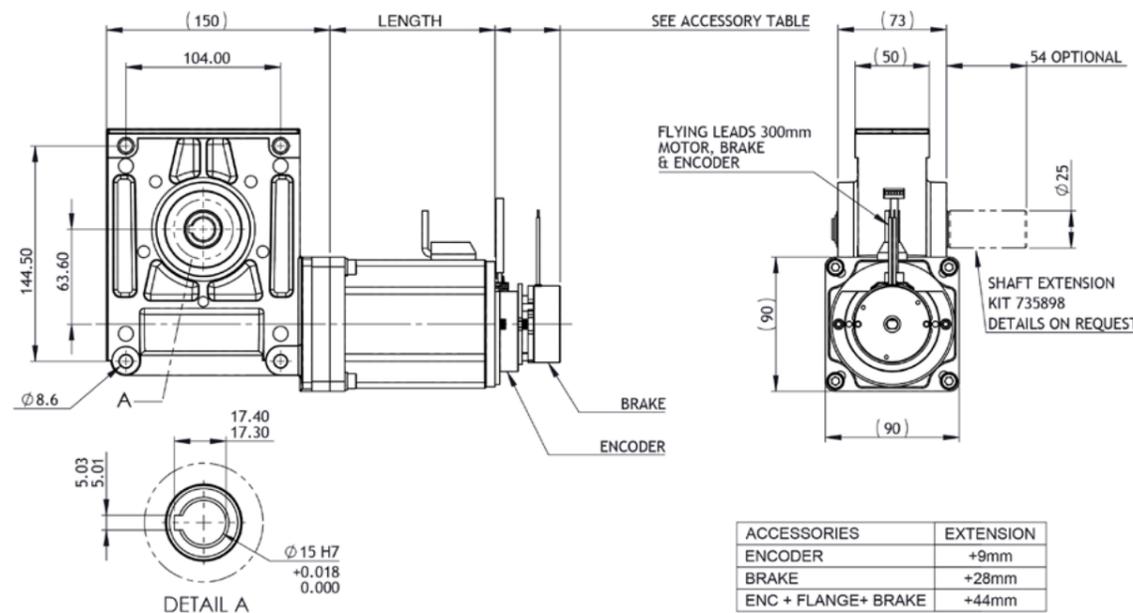
PBL86-GB9

BLDC right-angle geared motor

48 V // 419 - 586 W // 67 - 267 rpm // 12.8 - 80.0 Nm

Stairlift solution

all dimensions in mm



Combination data							
Motor		PBL86-55	PBL86-55	PBL86-55	PBL86-80	PBL86-80	PBL86-80
Voltage	V	48	48	48	48	48	48
Nominal motor power	W	419	419	419	586	586	586
Gearbox ratio	:1	15	30	60	15	30	60
Nominal speed	rpm	267	133	67	267	133	67
Nominal continuous torque (S1)	Nm	12.8	22.5	39.0	17.9	31.5	50.0
Nominal intermittent torque (S2 - 15 minutes)	Nm	22.3	39.4	68.3	31.2	55.1	80.0

Motor data				Connection details		
Motor		PBL86-55 48 V	PBL86-80 48 V	Lead colour	Lead gauge	Function
Part number		776624	776625	Red	UL1569/26 AWG	VCC
Nominal power	W	419	586	Black	UL1569/26 AWG	GND
Nominal voltage	V	48	48	Blue	UL1569/26 AWG	Hall A
Nominal speed	rpm	4000	4000	Green	UL1569/26 AWG	Hall B
Nominal continuous torque (S1)	Nm	1.00	1.40	White	UL1569/26 AWG	Hall C
Nominal intermittent torque (S2 - 15 minutes)	Nm	1.75	2.45	Red	UL1569/14 AWG	Phase U
Weight	Kg	3.20	4.20	Yellow	UL1569/14 AWG	Phase V
Length	mm	111	136	Black	UL1569/14 AWG	Phase W

Gearbox data				
Part number		735894	735895	735896
Ratio	:1	15	30	60
Max. continuous torque (S1) ¹	Nm	50.0	50.0	50.0
Max. intermittent torque	Nm	80.0	80.0	80.0
Efficiency	%	85	75	65
Max. axial load (dynamic)	N	600	600	600
Max. radial load, 12mm from flange	N	800	800	800
Weight	Kg	2.3	2.3	2.3
Gear material		Composite	Composite	Composite

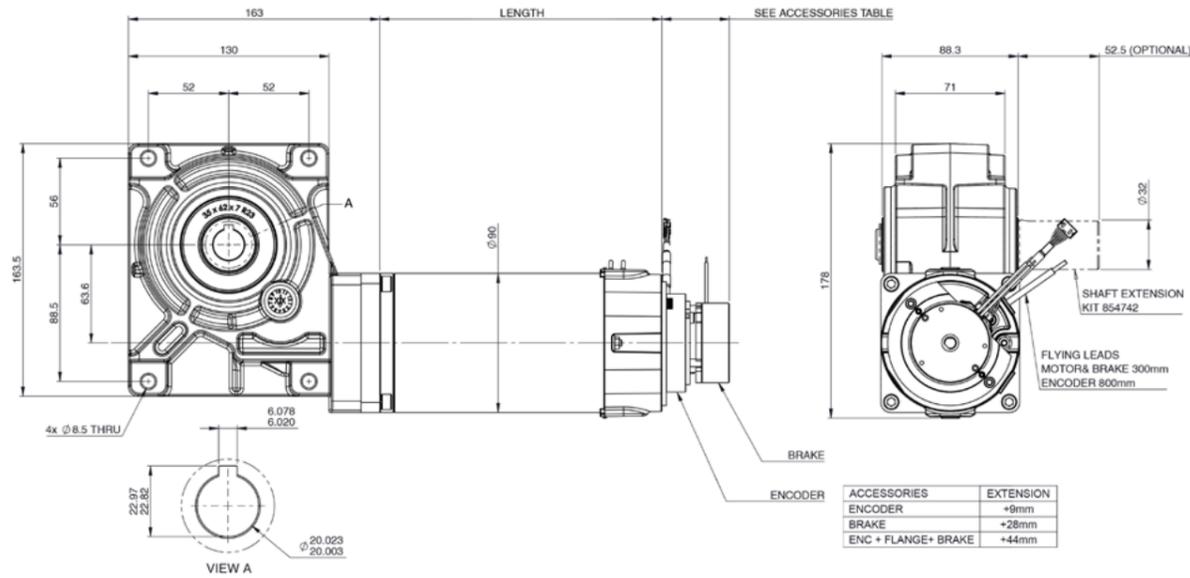
¹ S1 duty cycle based on 3000rpm input speed

Combination accessories							
Brake	Part number	Encoder	Part Number	Controller	Part Number	Shaft extension	Part number
1.5 Nm	735914	Incremental	735912	SC 50/15	738950	GB9 shaft	735898
Mounting flange	781284						

BRx90-50-GB65 PMDC right-angle geared motor

12 - 48 V // 157 - 210 W // 19 - 150 rpm // 11.5 - 88.9 Nm

Stairlift solution
all dimensions in mm



Combination data

Motor	BRx90-50	BRx90-50	BRx90-50	BRx90-50	BRx90-50
Voltage	V 12 - 48	12 - 48	12 - 48	12 - 48	12 - 48
Nominal motor power	W 157 - 210	157 - 210	157 - 210	157 - 210	157 - 210
Gearbox ratio	:1 20	40	80	120	160
Nominal speed	rpm 150	75	38	25	19
Nominal continuous torque (S1)	Nm 11.5	21.6	38.2	49.6	50.9
Nominal intermittent torque (S2 - 15 minutes)	Nm 20.0	37.8	66.7	86.7	88.9

Motor data

Motor	BRx90-50 12V	BRx90-50 24V	BRx90-50 48V
Part number	781102	781103	781104
Nominal power	W 157	210	210
Nominal voltage	V 12	24	48
Nominal speed	rpm 3000	3000	3000
Nominal continuous torque (S1)	Nm 0.50	0.67	0.67
Nominal intermittent torque (S2 - 15 minutes)	Nm 1.17	1.17	1.17
Weight	Kg 3.60	3.60	3.60
Length	mm 153	153	153

Gearbox data

Part number	854060	853270	827936	827934	827943
Ratio	:1 20	40	80	120	160
Max. continuous torque (S1) ¹	Nm 120.0	120.0	120.0	120.0	120.0
Max. intermittent torque	Nm 300.0	300.0	300.0	300.0	300.0
Efficiency	% 86	81	71	62	48
Max. axial load (dynamic)	N 1750	1750	1750	1750	1750
Max. radial load, 12mm from flange	N 2335	2335	2335	2335	2335
Weight	Kg 3.5	3.5	3.5	3.5	3.5
Gear material ²	S / B	S / B	S / B	S / B	S / B

¹ S1 duty cycle based on 3000rpm input speed ² Gear material: S = Steel / B = Bronze

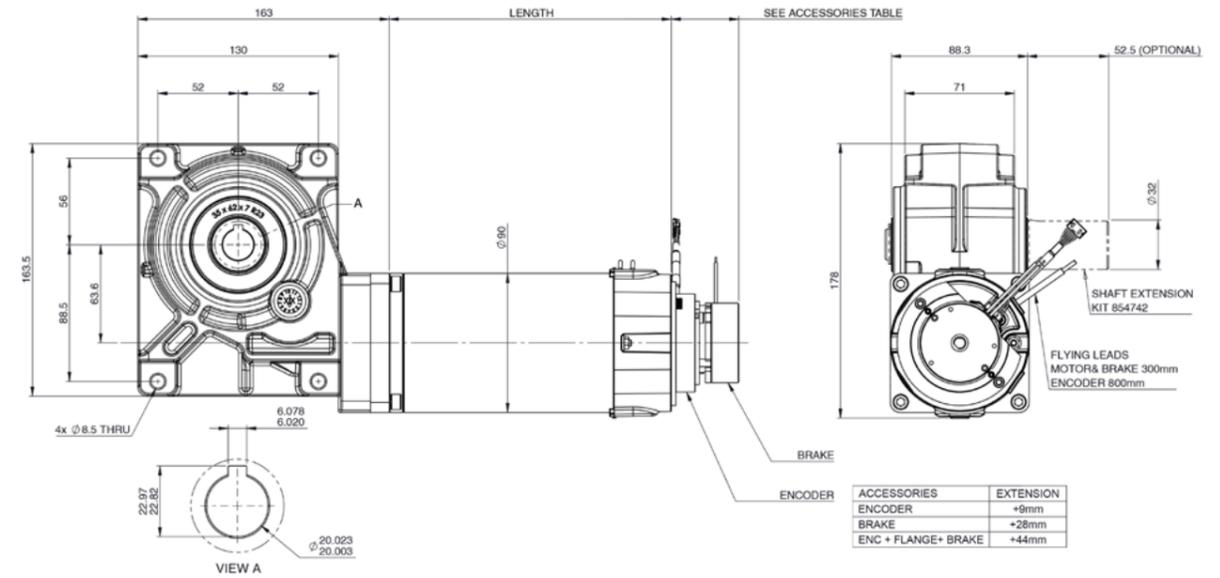
Combination accessories

Brake	Part number	Encoder	Part Number	Controller	Part Number	Shaft extension	Part number
1.5 Nm	735914	Incremental	735912	SC 50/15	738950	GB65 shaft	854742
Mounting flange	781279						

BRx90-75-GB65 PMDC right-angle geared motor

12 - 48 V // 236 - 283 W // 19 - 150 rpm // 15.4 - 114.0 Nm

Stairlift solution
all dimensions in mm



Combination data

Motor	BRx90-75	BRx90-75	BRx90-75	BRx90-75	BRx90-75
Voltage	V 12 - 48	12 - 48	12 - 48	12 - 48	12 - 48
Nominal motor power	W 236 - 283	236 - 283	236 - 283	236 - 283	236 - 283
Gearbox ratio	:1 20	40	80	120	160
Nominal speed	rpm 150	75	38	25	19
Nominal continuous torque (S1)	Nm 15.4	29.1	51.3	66.7	68.4
Nominal intermittent torque (S2 - 15 minutes)	Nm 25.7	48.5	85.5	111.2	114.0

Motor data

Motor	BRx90-75 12V	BRx90-75 24V	BRx90-75 48V
Part number	781106	781107	781108
Nominal power	W 236	283	283
Nominal voltage	V 12	24	48
Nominal speed	rpm 3000	3000	3000
Nominal continuous torque (S1)	Nm 0.90	0.90	0.90
Nominal intermittent torque (S2 - 15 minutes)	Nm 1.50	1.50	1.50
Weight	Kg 4.00	4.00	4.00
Length	mm 183	183	183

Gearbox data

Part number	854060	853270	827936	827934	827943
Ratio	:1 20	40	80	120	160
Max. continuous torque (S1) ¹	Nm 120.0	120.0	120.0	120.0	120.0
Max. intermittent torque	Nm 300.0	300.0	300.0	300.0	300.0
Efficiency	% 86	81	71	62	48
Max. axial load (dynamic)	N 1750	1750	1750	1750	1750
Max. radial load, 12mm from flange	N 2335	2335	2335	2335	2335
Weight	Kg 3.5	3.5	3.5	3.5	3.5
Gear material ²	S / B	S / B	S / B	S / B	S / B

¹ S1 duty cycle based on 3000rpm input speed ² Gear material: S = Steel / B = Bronze

Combination accessories

Brake	Part number	Encoder	Part Number	Controller	Part Number	Shaft extension	Part number
1.5 Nm	735914	Incremental	735912	SC 50/15	738950	GB65 shaft	854742
Mounting flange	781279						

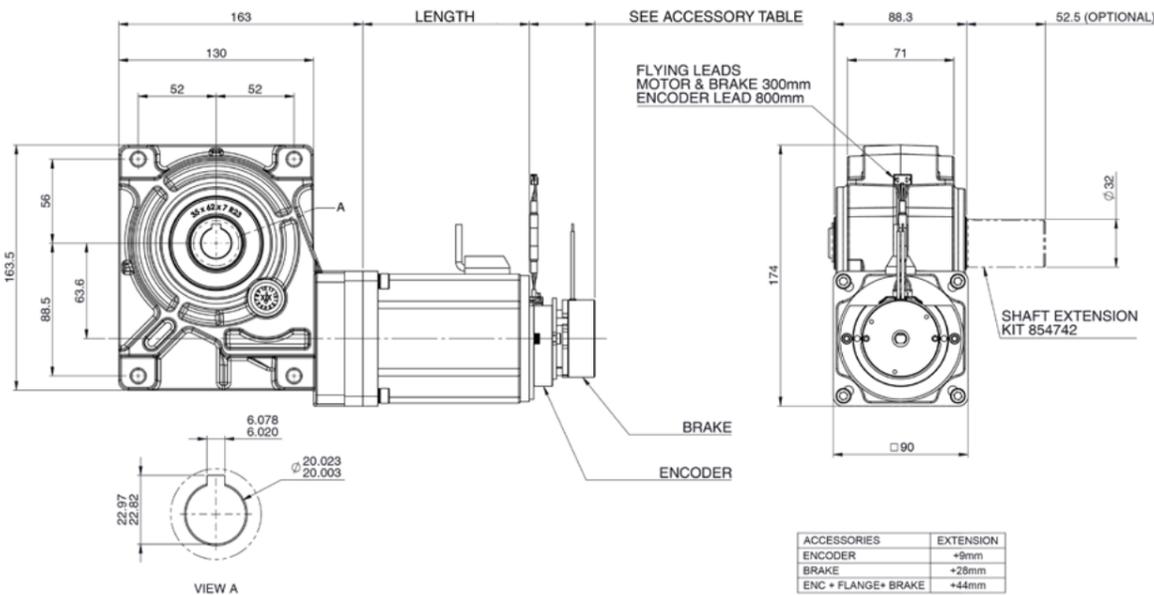
PBL86-55-GB65

BLDC right-angle geared motor

48 V // 419 W // 25 - 200 rpm // 17.1 - 133.0 Nm

Stairlift solution

all dimensions in mm



Combination data					
Motor		PBL86-55	PBL86-55	PBL86-55	PBL86-55
Voltage	V	48	48	48	48
Nominal motor power	W	419	419	419	419
Gearbox ratio	:1	20	40	80	120
Nominal speed	rpm	200	100	50	33
Nominal continuous torque (S1)	Nm	17.1	32.3	57.0	74.1
Nominal intermittent torque (S2 - 15 minutes)	Nm	29.9	56.5	99.8	129.7

Motor data		Connection details		
Motor	PBL86-55 48 V	Lead colour	Lead gauge	Function
Part number	776624	Red	UL1569/26 AWG	VCC
Nominal power	W 419	Black	UL1569/26 AWG	GND
Nominal voltage	V 48	Blue	UL1569/26 AWG	Hall A
Nominal speed	rpm 4000	Green	UL1569/26 AWG	Hall B
Nominal continuous torque (S1)	Nm 1.00	White	UL1569/26 AWG	Hall C
Nominal intermittent torque (S2 - 15 minutes)	Nm 1.75	Red	UL1569/14 AWG	Phase U
Weight	Kg 3.20	Yellow	UL1569/14 AWG	Phase V
Length	mm 111	Black	UL1569/14 AWG	Phase W

Gearbox data					
Part number		854060	853270	827936	827934
Ratio	:1	20	40	80	120
Max. continuous torque (S1) ¹	Nm	120.0	120.0	120.0	120.0
Max. intermittent torque	Nm	300.0	300.0	300.0	300.0
Efficiency	%	86	81	71	62
Max. axial load (dynamic)	N	1750	1750	1750	1750
Max. radial load, 12mm from flange	N	2335	2335	2335	2335
Weight	Kg	3.5	3.5	3.5	3.5
Gear material ²		S / B	S / B	S / B	S / B

¹ S1 duty cycle based on 3000rpm input speed ² Gear material: S = Steel / B = Bronze

Combination accessories						
Brake	Part number	Encoder	Part Number	Controller	Part Number	Shaft extension
1.5 Nm	735914	Incremental	735912	SC 50/15	738950	GB65 shaft
Mounting flange	781284					854742

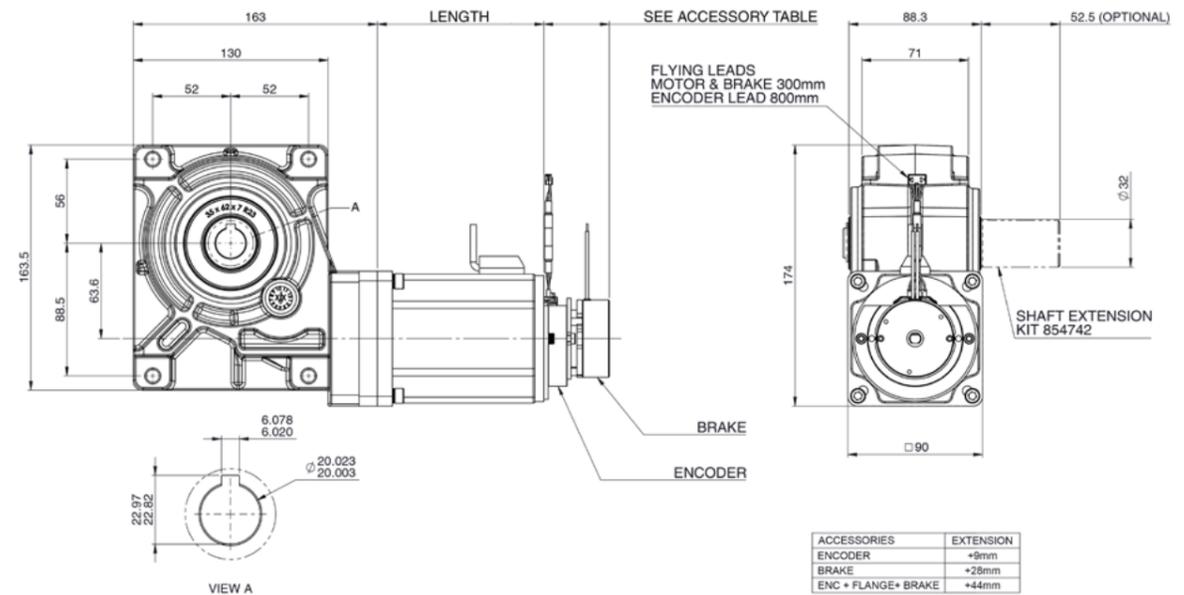
PBL86-80-GB65

BLDC right-angle geared motor

48 V // 586 W // 25 - 200 rpm // 23.9 - 186.2 Nm

Stairlift solution

all dimensions in mm



Combination data					
Motor		PBL86-80	PBL86-80	PBL86-80	PBL86-80
Voltage	V	48	48	48	48
Nominal motor power	W	586	586	586	586
Gearbox ratio	:1	20	40	80	120
Nominal speed	rpm	200	100	50	33
Nominal continuous torque (S1)	Nm	23.9	45.2	79.8	103.7
Nominal intermittent torque (S2 - 15 minutes)	Nm	41.9	79.1	139.7	181.5

Motor data		Connection details		
Motor	PBL86-80 48 V	Lead colour	Lead gauge	Function
Part number	776625	Red	UL1569/26 AWG	VCC
Nominal power	W 586	Black	UL1569/26 AWG	GND
Nominal voltage	V 48	Blue	UL1569/26 AWG	Hall A
Nominal speed	rpm 4000	Green	UL1569/26 AWG	Hall B
Nominal continuous torque (S1)	Nm 1.40	White	UL1569/26 AWG	Hall C
Nominal intermittent torque (S2 - 15 minutes)	Nm 2.45	Red	UL1569/14 AWG	Phase U
Weight	Kg 4.20	Yellow	UL1569/14 AWG	Phase V
Length	mm 136	Black	UL1569/14 AWG	Phase W

Gearbox data					
Part number		854060	853270	827936	827934
Ratio	:1	20	40	80	120
Max. continuous torque (S1) ¹	Nm	120.0	120.0	120.0	120.0
Max. intermittent torque	Nm	300.0	300.0	300.0	300.0
Efficiency	%	86	81	71	62
Max. axial load (dynamic)	N	1750	1750	1750	1750
Max. radial load, 12mm from flange	N	2335	2335	2335	2335
Weight	Kg	3.5	3.5	3.5	3.5
Gear material ²		S / B	S / B	S / B	S / B

¹ S1 duty cycle based on 3000rpm input speed ² Gear material: S = Steel / B = Bronze

Combination accessories						
Brake	Part number	Encoder	Part Number	Controller	Part Number	Shaft extension
1.5 Nm	735914	Incremental	735912	SC 50/15	738950	GB65 shaft
Mounting flange	781284					854742

Patient hoists

Thanks to our reliability and build quality, we're the first choice for a wide range of patient hoist manufacturers. Our motors deliver smooth and quiet operation and we understand the importance of getting the right combination of torque, power and speed.

Our modular range possesses all of these qualities with the added benefit of a quicker delivery than our standard range. With components kept on the shelf, and a rapid build process, a modular combination can provide a more efficient project timeline.

PMDC	BLDC
→ BRx63-GB28	→ PBL60-GB28
→ BRx70-GB12	→ PBL70-GB12
→ BRx90-GB12	→ PBL86-GB12



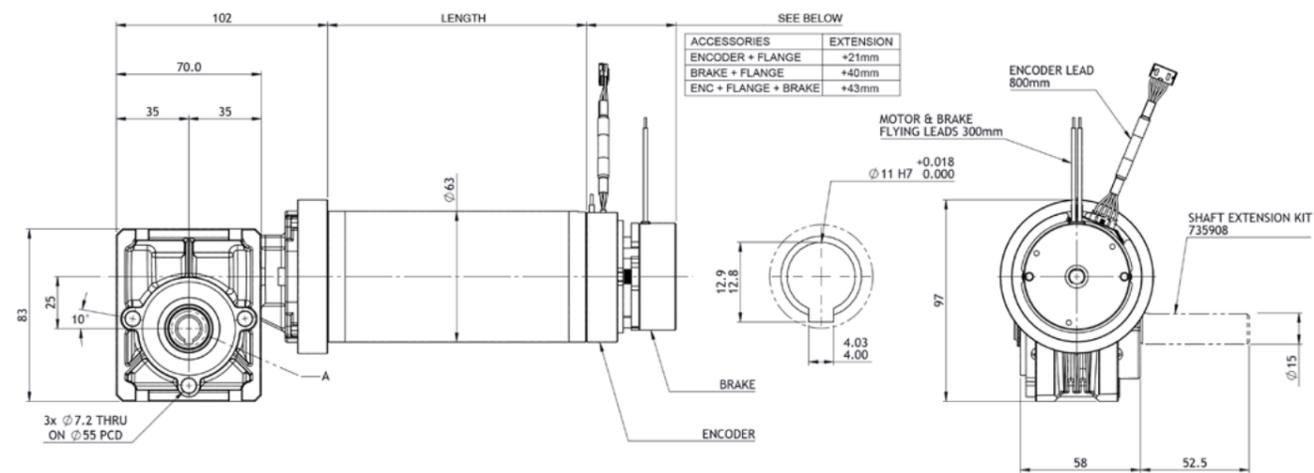
BRx63-GB28

PMDC right-angle geared motor

12 - 48 V // 47 - 85 W // 42 - 200 rpm // 1.9 - 8.0 Nm

Patient hoist solution

all dimensions in mm



Combination data							
Motor		BRx63-25	BRx63-25	BRx63-25	BRx63-55	BRx63-55	BRx63-55
Voltage	V	12 - 48	12 - 48	12 - 48	12 - 48	12 - 48	12 - 48
Nominal motor power	W	47 - 57	47 - 57	47 - 57	79 - 85	79 - 85	79 - 85
Gearbox ratio	:1	15	30	60	15	30	60
Nominal speed	rpm	167 - 200	83 - 100	42 - 50	187 - 200	93 - 100	47 - 50
Nominal continuous torque (S1)	Nm	1.9	3.0	4.9	2.9	4.5	5.0
Nominal intermittent torque (S2 - 15 minutes)	Nm	3.2	5.0	8.0	4.9	7.4	8.0

Motor data							
Motor		BRx63-25 12V	BRx63-25 24V	BRx63-25 48V	BRx63-55 12V	BRx63-55 24V	BRx63-55 48V
Part number		781102	781103	781104	781106	781107	781108
Nominal power	W	47	57	57	79	85	85
Nominal voltage	V	12	24	48	12	24	48
Nominal speed	rpm	2500	3000	3000	2800	3000	3000
Nominal continuous torque (S1)	Nm	0.18	0.18	0.18	0.27	0.27	0.27
Nominal intermittent torque (S2 - 15 minutes)	Nm	0.30	0.30	0.30	0.45	0.45	0.45
Weight	Kg	0.85	0.85	0.85	1.16	1.16	1.16
Length	mm	95	95	95	125	125	125

Gearbox data				
Part number		735904	735906	735907
Ratio	:1	15	30	60
Max. continuous torque (S1) ¹	Nm	5.0	5.0	5.0
Max. intermittent torque	Nm	8.0	8.0	8.0
Efficiency	%	72	55	45
Max. axial load (dynamic)	N	300	300	300
Max. radial load, 12mm from flange	N	400	400	400
Weight	Kg	0.83	0.83	0.83
Gear material		Bronze	Bronze	Bronze

¹S1 duty cycle based on 3000rpm input speed

Combination accessories							
Brake	Part number	Encoder	Part Number	Controller	Part Number	Shaft extension	Part number
1.5 Nm	735914	Incremental	735912	SC 50/15	735903	GB28 shaft	735908
Mounting flange	781276	Mounting flange	781276				

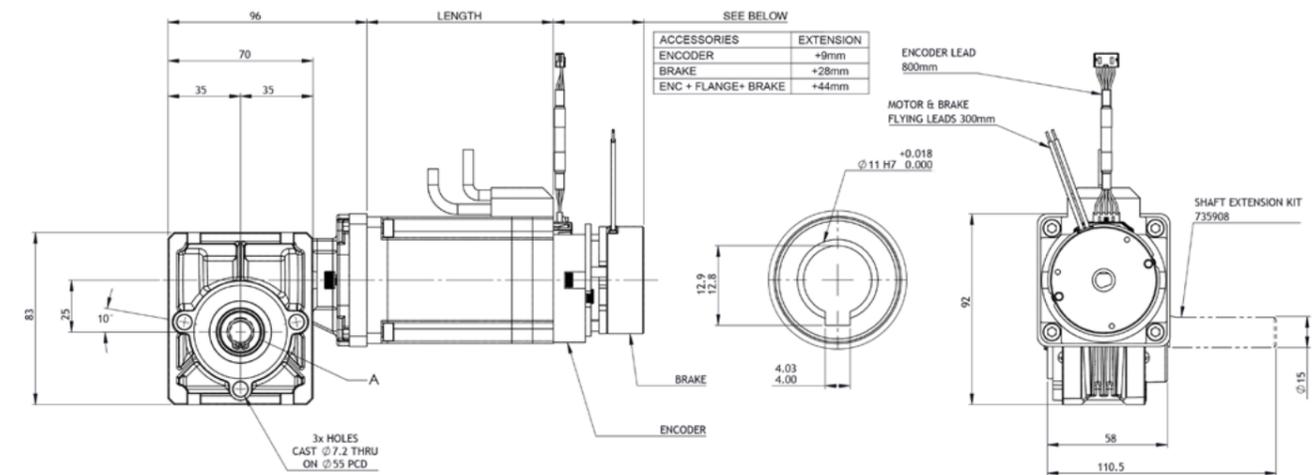
PBL60-GB28

BLDC right-angle geared motor

24 - 48 V // 104 - 157 W // 50 - 200 rpm // 3.7 - 8.0 Nm

Patient hoist solution

all dimensions in mm



Combination data							
Motor		PBL60-50	PBL60-50	PBL60-50	PBL60-70	PBL60-70	PBL60-70
Voltage	V	24 - 48	24 - 48	24 - 48	24 - 48	24 - 48	24 - 48
Nominal motor power	W	104	104	104	157	157	157
Gearbox ratio	:1	15	30	60	15	30	60
Nominal speed	rpm	200	100	50	200	100	50
Nominal continuous torque (S1)	Nm	3.6	5.0	5.0	5.0	5.0	5.0
Nominal intermittent torque (S2 - 15 minutes)	Nm	6.3	8.0	8.0	8.0	8.0	8.0

Motor data					Connection details			
Motor		PBL60-50 24V	PBL60-50 48V	PBL60-70 24V	PBL60-70 48V	Lead colour	Lead gauge	Function
Part number		776618	776619	776620	776621	Red	UL1569/26 AWG	VCC
Nominal power	W	104	104	157	157	Black	UL1569/26 AWG	GND
Nominal voltage	V	24	48	24	48	Blue	UL1569/26 AWG	Hall A
Nominal speed	rpm	3000	3000	3000	3000	Green	UL1569/26 AWG	Hall B
Nominal continuous torque (S1)	Nm	0.33	0.33	0.50	0.50	White	UL1569/26 AWG	Hall C
Nominal intermittent torque (S2 - 15 minutes)	Nm	0.58	0.58	0.88	0.88	Red	UL3266/18 AWG	Phase U
Weight	Kg	1.20	1.20	1.60	1.60	Yellow	UL3266/18 AWG	Phase V
Length	mm	90	90	110	110	Black	UL3266/18 AWG	Phase W

Gearbox data				
Part number		735904	735906	735907
Ratio	:1	15	30	60
Max. continuous torque (S1) ¹	Nm	5.0	5.0	5.0
Max. intermittent torque	Nm	8.0	8.0	8.0
Efficiency	%	72	55	45
Max. axial load (dynamic)	N	300	300	300
Max. radial load, 12mm from flange	N	400	400	400
Weight	Kg	0.83	0.83	0.83
Gear material		Bronze	Bronze	Bronze

¹S1 duty cycle based on 3000rpm input speed

Combination accessories							
Brake	Part number	Encoder	Part Number	Controller	Part Number	Shaft extension	Part number
1.5 Nm	735914	Incremental	735912	SC 50/15	738950	GB28 shaft	735908
Mounting flange	781281						

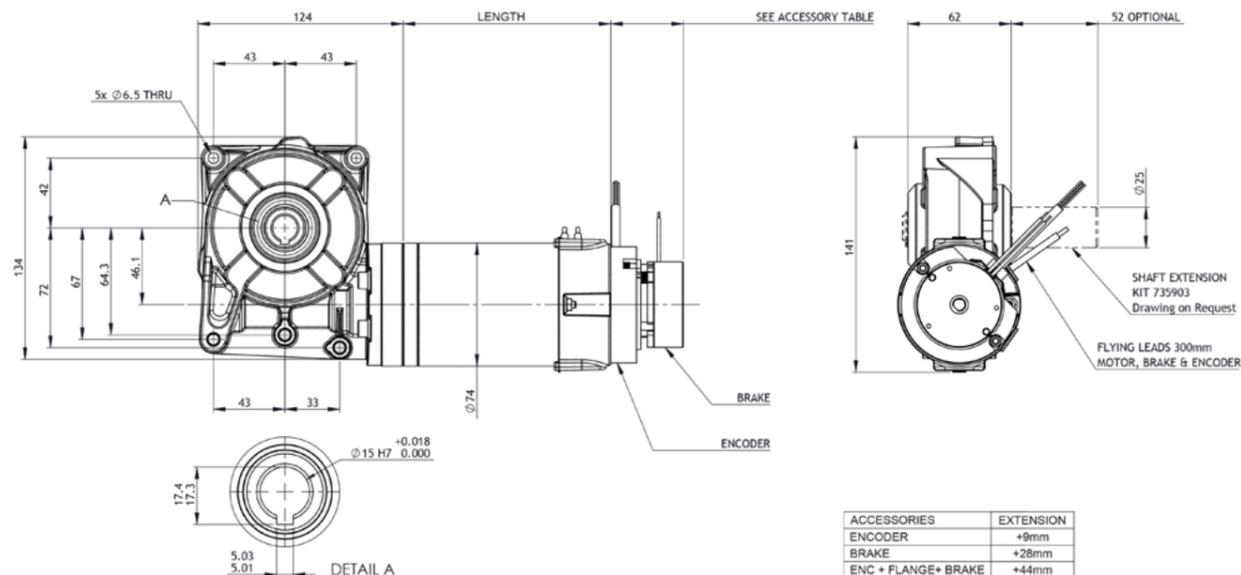
BRx70-GB12

PMDC right-angle geared motor

12 - 48 V // 79 - 157 W // 50 - 200 rpm // 2.8 - 26.4 Nm

Patient hoist solution

all dimensions in mm



Combination data							
Motor		BRx70-40	BRx70-40	BRx70-40	BRx70-60	BRx70-60	BRx70-60
Voltage	V	12 - 48	12 - 48	12 - 48	12 - 48	12 - 48	12 - 48
Nominal motor power	W	79	79	79	157	157	157
Gearbox ratio	:1	15	30	60	15	30	60
Nominal speed	rpm	200	100	50	200	100	50
Nominal continuous torque (S1)	Nm	2.8	4.9	7.5	5.6	9.8	15.0
Nominal intermittent torque (S2 - 15 minutes)	Nm	4.7	8.2	12.6	9.9	17.2	26.4

Motor data							
Motor		BRx70-40 12V	BRx70-40 24V	BRx70-40 48V	BRx70-60 12V	BRx70-60 24V	BRx70-60 48V
Part number		781092	781093	781094	781095	781096	781097
Nominal power	W	79	79	79	157	157	157
Nominal voltage	V	12	24	48	12	24	48
Nominal speed	rpm	3000	3000	3000	3000	3000	3000
Nominal continuous torque (S1)	Nm	0.25	0.25	0.25	0.50	0.50	0.50
Nominal intermittent torque (S2 - 15 minutes)	Nm	0.42	0.42	0.42	0.88	0.88	0.88
Weight	Kg	1.85	1.85	1.85	2.25	2.25	2.25
Length	mm	125	125	125	146	146	146

Gearbox data				
Part number		735900	735901	735902
Ratio	:1	15	30	60
Max. continuous torque (S1) ¹	Nm	30.0	30.0	30.0
Max. intermittent torque	Nm	48.0	48.0	48.0
Efficiency	%	75	65	50
Max. axial load (dynamic)	N	600	600	600
Max. radial load, 12mm from flange	N	800	800	800
Weight	Kg	1.5	1.5	1.5
Gear material		Bronze	Bronze	Bronze

¹S1 duty cycle based on 3000rpm input speed

Combination accessories							
Brake	Part number	Encoder	Part Number	Controller	Part Number	Shaft extension	Part number
1.5 Nm	735914	Incremental	735912	SC 50/15	735903	GB12 shaft	735898
Mounting flange	781277						

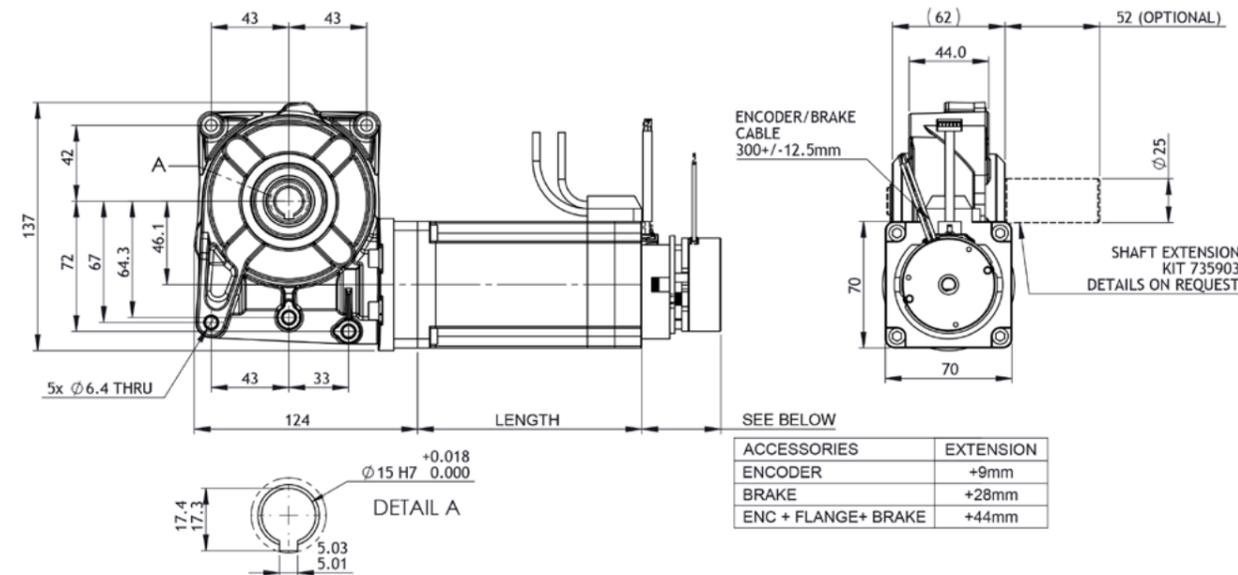
PBL70-GB12

BLDC right-angle geared motor

48 V // 363 - 415 W // 75 - 300 rpm // 8.7 - 46.5 Nm

Patient hoist solution

all dimensions in mm



Combination data							
Motor		PBL70-70	PBL70-70	PBL70-70	PBL70-80	PBL70-80	PBL70-80
Voltage	V	48	48	48	48	48	48
Nominal motor power	W	363	363	363	415	415	415
Gearbox ratio	:1	15	30	60	15	30	60
Nominal speed	rpm	300	150	75	300	150	75
Nominal continuous torque (S1)	Nm	8.7	15.0	23.1	9.9	17.2	26.4
Nominal intermittent torque (S2 - 15 minutes)	Nm	15.2	26.3	40.5	17.4	30.2	46.5

Motor data				Connection details		
Motor		PBL70-70 48V	PBL70-80 48V	Lead colour	Lead gauge	Function
Part number		776622	776623	Red	UL1569/26 AWG	VCC
Nominal power	W	363	415	Black	UL1569/26 AWG	GND
Nominal voltage	V	48	48	Blue	UL1569/26 AWG	Hall A
Nominal speed	rpm	4500	4500	Green	UL1569/26 AWG	Hall B
Nominal continuous torque (S1)	Nm	0.77	0.88	White	UL1569/26 AWG	Hall C
Nominal intermittent torque (S2 - 15 minutes)	Nm	1.35	1.54	Red	UL3266/16 AWG	Phase U
Weight	Kg	2.20	2.60	Yellow	UL3266/16 AWG	Phase V
Length	mm	114	124	Black	UL3266/16 AWG	Phase W

Gearbox data				
Part number		735900	735901	735902
Ratio	:1	15	30	60
Max. continuous torque (S1) ¹	Nm	30.0	30.0	30.0
Max. intermittent torque	Nm	48.0	48.0	48.0
Efficiency	%	75	65	50
Max. axial load (dynamic)	N	600	600	600
Max. radial load, 12mm from flange	N	800	800	800
Weight	Kg	1.5	1.5	1.5
Gear material		Bronze	Bronze	Bronze

¹S1 duty cycle based on 3000rpm input speed

Combination accessories							
Brake	Part number	Encoder	Part Number	Controller	Part Number	Shaft extension	Part number
1.5 Nm	735914	Incremental	735912	SC 50/15	738950	GB12 shaft	735903
Mounting flange	781281						

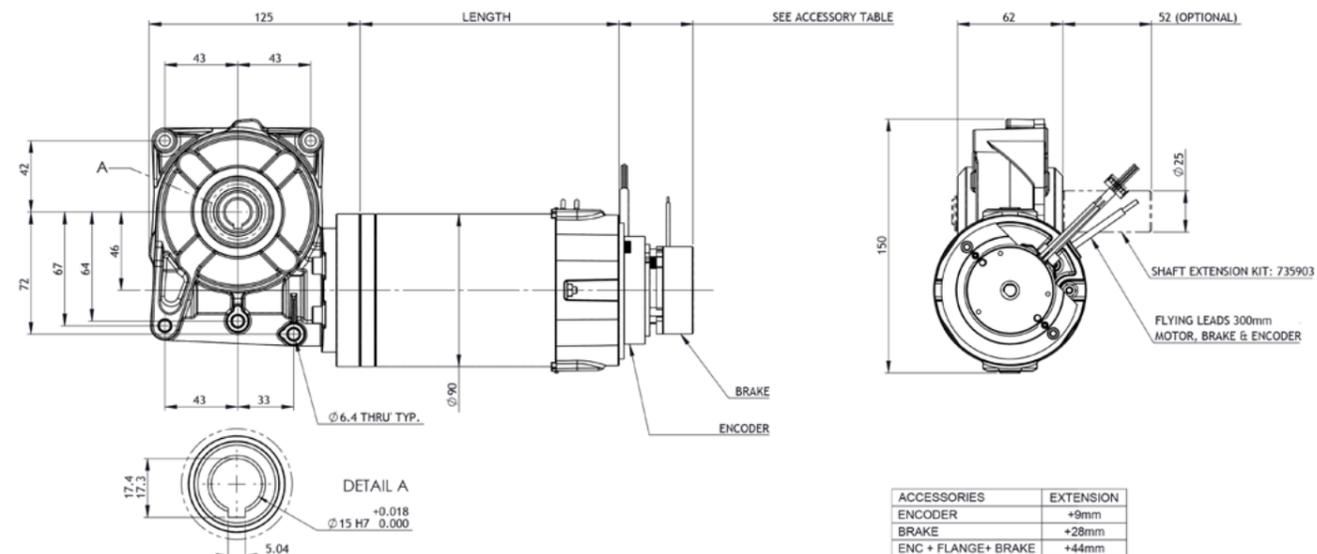
BRx90-GB12

PMDC right-angle geared motor

12 - 48 V // 157 - 283 W // 50 - 200 rpm // 7.5 - 45.0 Nm

Patient hoist solution

all dimensions in mm



Combination data							
Motor		BRx90-50	BRx90-50	BRx90-50	BRx90-75	BRx90-75	BRx90-75
Voltage	V	12 - 48	12 - 48	12 - 48	12 - 48	12 - 48	12 - 48
Nominal motor power	W	157 - 210	157 - 210	157 - 210	236 - 283	236 - 283	236 - 283
Gearbox ratio	:1	15	30	60	15	30	60
Nominal speed	rpm	200	100	50	200	100	50
Nominal continuous torque (S1)	Nm	7.5	16.4	20.1	10.1	21.9	27.0
Nominal intermittent torque (S2 - 15 minutes)	Nm	13.2	22.8	35.1	16.9	29.3	45.0

Motor data							
Motor		BRx90-50 12V	BRx90-50 24V	BRx90-50 48V	BRx90-75 12V	BRx90-75 24V	BRx90-75 48V
Part number		781102	781103	781104	781106	781107	781108
Nominal power	W	157	210	210	236	283	283
Nominal voltage	V	12	24	48	12	24	48
Nominal speed	rpm	3000	3000	3000	3000	3000	3000
Nominal continuous torque (S1)	Nm	0.50	0.67	0.67	0.90	0.90	0.90
Nominal intermittent torque (S2 - 15 minutes)	Nm	1.17	1.17	1.17	1.50	1.50	1.50
Weight	Kg	3.60	3.60	3.60	4.00	4.00	4.00
Length	mm	153	153	153	183	183	183

Gearbox data				
Part number		735900	735901	735902
Ratio	:1	15	30	60
Max. continuous torque (S1) ¹	Nm	30.0	30.0	30.0
Max. intermittent torque	Nm	48.0	48.0	48.0
Efficiency	%	75	65	50
Max. axial load (dynamic)	N	600	600	600
Max. radial load, 12mm from flange	N	800	800	800
Weight	Kg	1.5	1.5	1.5
Gear material		Bronze	Bronze	Bronze

¹ S1 duty cycle based on 3000rpm input speed

Combination accessories							
Brake	Part number	Encoder	Part Number	Controller	Part Number	Shaft extension	Part number
1.5 Nm	735914	Incremental	735912	SC 50/15	735903	GB12 shaft	735898
Mounting flange	781279						

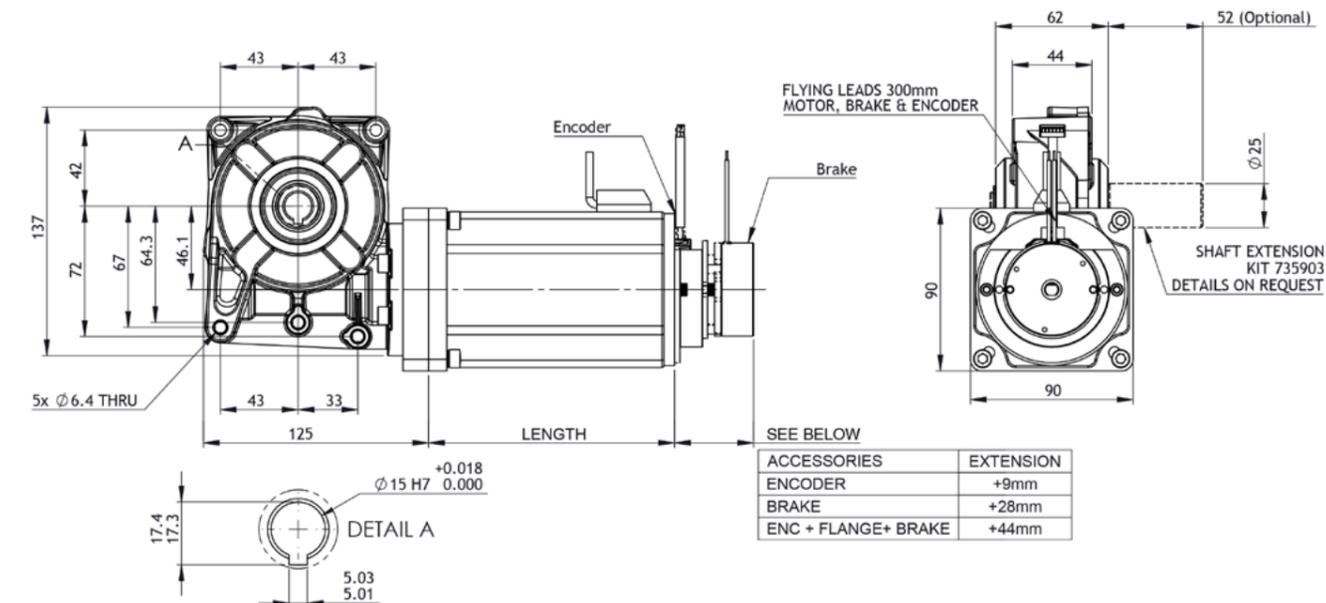
PBL86-GB12

BLDC right-angle geared motor

48 V // 419 - 586 W // 67 - 267 rpm // 11.3 - 48.0 Nm

Patient hoist solution

all dimensions in mm



Combination data							
Motor		PBL86-55	PBL86-55	PBL86-55	PBL86-80	PBL86-80	PBL86-80
Voltage	V	48	48	48	48	48	48
Nominal motor power	W	419	419	419	586	586	586
Gearbox ratio	:1	15	30	60	15	30	60
Nominal speed	rpm	267	133	67	267	133	67
Nominal continuous torque (S1)	Nm	11.3	19.5	30.0	15.8	27.3	30.0
Nominal intermittent torque (S2 - 15 minutes)	Nm	19.7	34.1	48.0	27.6	47.8	48.0

Motor data				Connection details		
Motor		PBL86-55 48 V	PBL86-80 48 V	Lead colour	Lead gauge	Function
Part number		776624	776625	Red	UL1569/26 AWG	VCC
Nominal power	W	419	586	Black	UL1569/26 AWG	GND
Nominal voltage	V	48	48	Blue	UL1569/26 AWG	Hall A
Nominal speed	rpm	4000	4000	Green	UL1569/26 AWG	Hall B
Nominal continuous torque (S1)	Nm	1.00	1.40	White	UL1569/26 AWG	Hall C
Nominal intermittent torque (S2 - 15 minutes)	Nm	1.75	2.45	Red	UL1569/14 AWG	Phase U
Weight	Kg	3.20	4.20	Yellow	UL1569/14 AWG	Phase V
Length	mm	111	136	Black	UL1569/14 AWG	Phase W

Gearbox data				
Part number		735900	735901	735902
Ratio	:1	15	30	60
Max. continuous torque (S1) ¹	Nm	30.0	30.0	30.0
Max. intermittent torque	Nm	48.0	48.0	48.0
Efficiency	%	75	65	50
Max. axial load (dynamic)	N	600	600	600
Max. radial load, 12mm from flange	N	800	800	800
Weight	Kg	1.5	1.5	1.5
Gear material		Bronze	Bronze	Bronze

¹ S1 duty cycle based on 3000rpm input speed

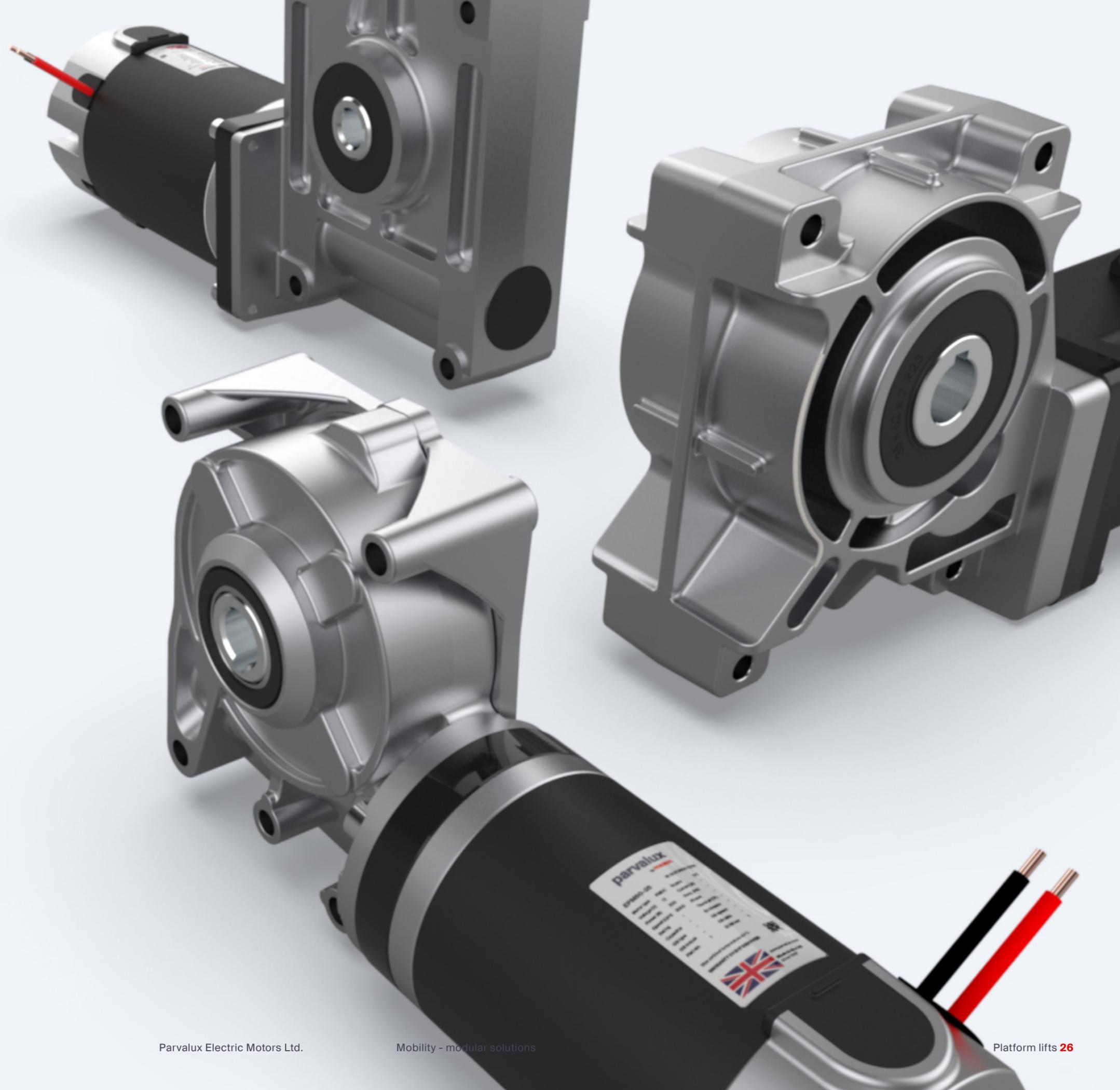
Combination accessories							
Brake	Part number	Encoder	Part Number	Controller	Part Number	Shaft extension	Part number
1.5 Nm	735914	Incremental	735912	SC 50/15	738950	GB12 shaft	735903
Mounting flange	781284						

Platform lifts

Platform lifts make travelling between floors possible for wheelchair users and those with mobility issues in both workplace and domestic environments.

Whether you are developing a vertical platform lift (VPL), cabin, step or inclined platform lift, our platform lift motor solutions provide the power required to meet stringent standards and requirements for the industry, making Parvalux the first choice for geared motor solutions.

PMDC	BLDC
→ BRx70-GB12	→ PBL70-GB12
→ BRx90-GB12	→ PBL86-GB12
→ BRx90-GB9	→ PBL86-GB9
→ BRx90-GB65	→ PBL86-GB65



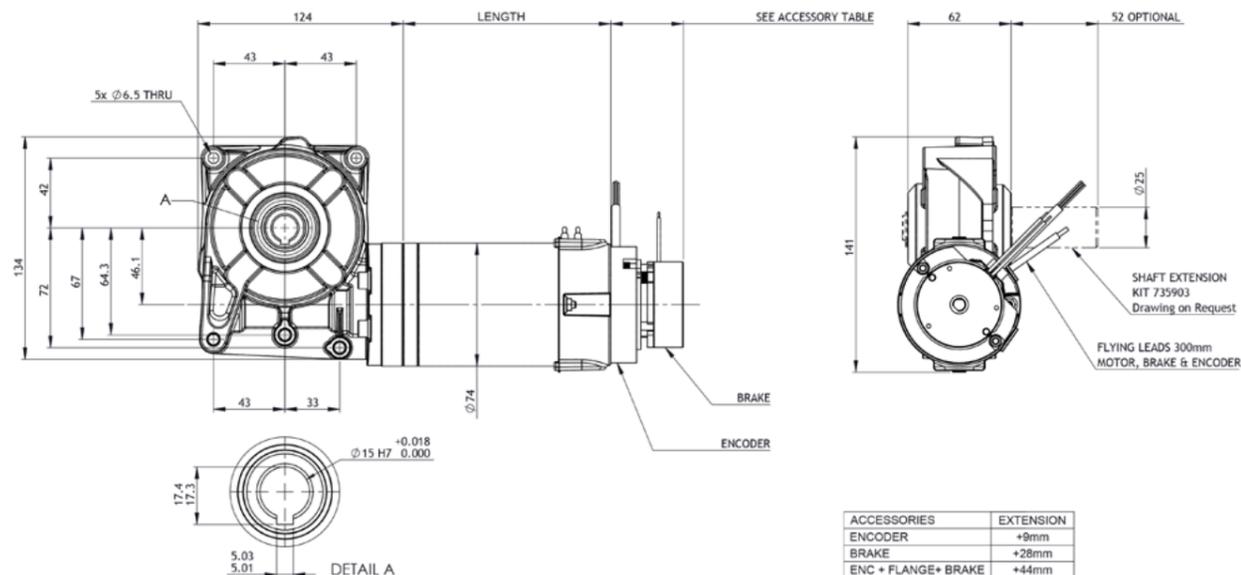
BRx70-GB12

PMDC right-angle geared motor

12 - 48 V // 79 - 157 W // 50 - 200 rpm // 2.8 - 26.4 Nm

Platform lift solution

all dimensions in mm



Combination data							
Motor		BRx70-40	BRx70-40	BRx70-40	BRx70-60	BRx70-60	BRx70-60
Voltage	V	12 - 48	12 - 48	12 - 48	12 - 48	12 - 48	12 - 48
Nominal motor power	W	79	79	79	157	157	157
Gearbox ratio	:1	15	30	60	15	30	60
Nominal speed	rpm	200	100	50	200	100	50
Nominal continuous torque (S1)	Nm	2.8	4.9	7.5	5.6	9.8	15.0
Nominal intermittent torque (S2 - 15 minutes)	Nm	4.7	8.2	12.6	9.9	17.2	26.4

Motor data							
Motor		BRx70-40 12V	BRx70-40 24V	BRx70-40 48V	BRx70-60 12V	BRx70-60 24V	BRx70-60 48V
Part number		781092	781093	781094	781095	781096	781097
Nominal power	W	79	79	79	157	157	157
Nominal voltage	V	12	24	48	12	24	48
Nominal speed	rpm	3000	3000	3000	3000	3000	3000
Nominal continuous torque (S1)	Nm	0.25	0.25	0.25	0.50	0.50	0.50
Nominal intermittent torque (S2 - 15 minutes)	Nm	0.42	0.42	0.42	0.88	0.88	0.88
Weight	Kg	1.85	1.85	1.85	2.25	2.25	2.25
Length	mm	125	125	125	146	146	146

Gearbox data				
Part number		735900	735901	735902
Ratio	:1	15	30	60
Max. continuous torque (S1) ¹	Nm	30.0	30.0	30.0
Max. intermittent torque	Nm	48.0	48.0	48.0
Efficiency	%	75	65	50
Max. axial load (dynamic)	N	600	600	600
Max. radial load, 12mm from flange	N	800	800	800
Weight	Kg	1.5	1.5	1.5
Gear material		Bronze	Bronze	Bronze

¹S1 duty cycle based on 3000rpm input speed

Combination accessories							
Brake	Part number	Encoder	Part Number	Controller	Part Number	Shaft extension	Part number
1.5 Nm	735914	Incremental	735912	SC 50/15	735903	GB12 shaft	735898
Mounting flange	781277						

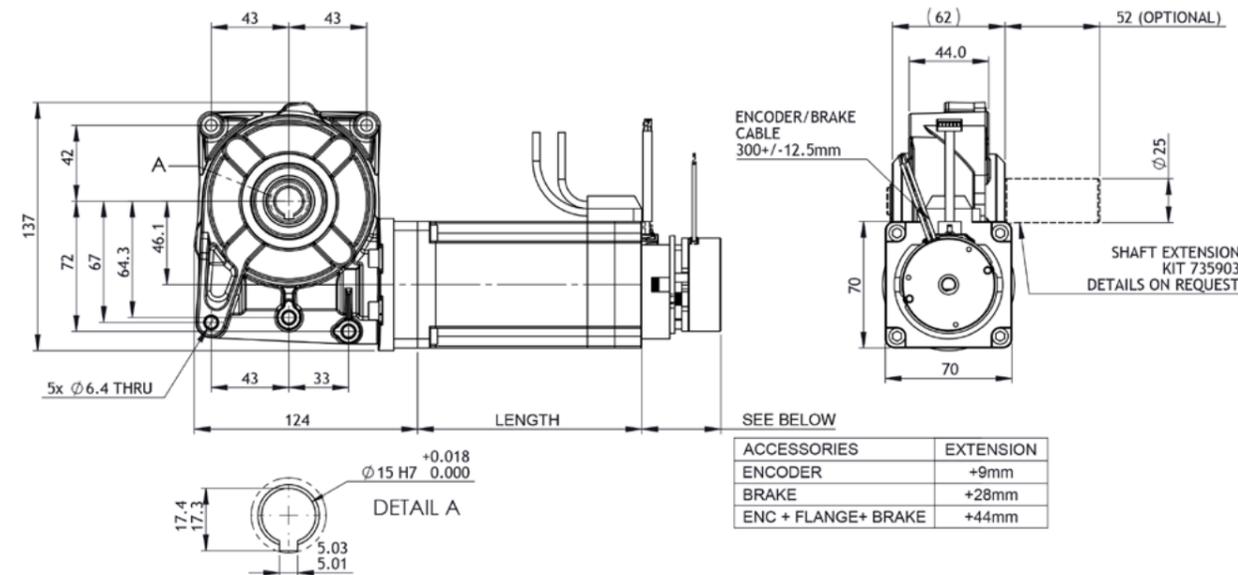
PBL70-GB12

BLDC right-angle geared motor

48 V // 363 - 415 W // 75 - 300 rpm // 8.7 - 46.5 Nm

Platform lift solution

all dimensions in mm



Combination data							
Motor		PBL70-70	PBL70-70	PBL70-70	PBL70-80	PBL70-80	PBL70-80
Voltage	V	48	48	48	48	48	48
Nominal motor power	W	363	363	363	415	415	415
Gearbox ratio	:1	15	30	60	15	30	60
Nominal speed	rpm	300	150	75	300	150	75
Nominal continuous torque (S1)	Nm	8.7	15.0	23.1	9.9	17.2	26.4
Nominal intermittent torque (S2 - 15 minutes)	Nm	15.2	26.3	40.5	17.4	30.2	46.5

Motor data				Connection details		
Motor		PBL70-70 48V	PBL70-80 48V	Lead colour	Lead gauge	Function
Part number		776622	776623	Red	UL1569/26 AWG	VCC
Nominal power	W	363	415	Black	UL1569/26 AWG	GND
Nominal voltage	V	48	48	Blue	UL1569/26 AWG	Hall A
Nominal speed	rpm	4500	4500	Green	UL1569/26 AWG	Hall B
Nominal continuous torque (S1)	Nm	0.77	0.88	White	UL1569/26 AWG	Hall C
Nominal intermittent torque (S2 - 15 minutes)	Nm	1.35	1.54	Red	UL3266/16 AWG	Phase U
Weight	Kg	2.20	2.60	Yellow	UL3266/16 AWG	Phase V
Length	mm	114	124	Black	UL3266/16 AWG	Phase W

Gearbox data				
Part number		735900	735901	735902
Ratio	:1	15	30	60
Max. continuous torque (S1) ¹	Nm	30.0	30.0	30.0
Max. intermittent torque	Nm	48.0	48.0	48.0
Efficiency	%	75	65	50
Max. axial load (dynamic)	N	600	600	600
Max. radial load, 12mm from flange	N	800	800	800
Weight	Kg	1.5	1.5	1.5
Gear material		Bronze	Bronze	Bronze

¹S1 duty cycle based on 3000rpm input speed

Combination accessories							
Brake	Part number	Encoder	Part Number	Controller	Part Number	Shaft extension	Part number
1.5 Nm	735914	Incremental	735912	SC 50/15	738950	GB12 shaft	735903
Mounting flange	781281						

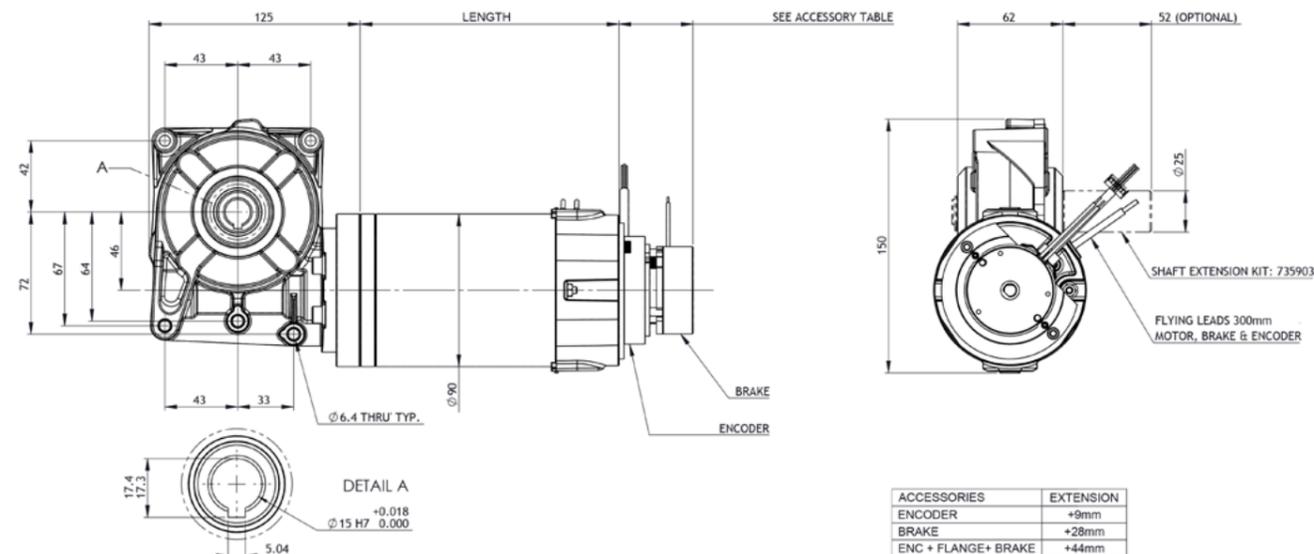
BRx90-GB12

PMDC right-angle geared motor

12 - 48 V // 157 - 283 W // 50 - 200 rpm // 7.5 - 45.0 Nm

Platform lift solution

all dimensions in mm



Combination data							
Motor		BRx90-50	BRx90-50	BRx90-50	BRx90-75	BRx90-75	BRx90-75
Voltage	V	12 - 48	12 - 48	12 - 48	12 - 48	12 - 48	12 - 48
Nominal motor power	W	157 - 210	157 - 210	157 - 210	236 - 283	236 - 283	236 - 283
Gearbox ratio	:1	15	30	60	15	30	60
Nominal speed	rpm	200	100	50	200	100	50
Nominal continuous torque (S1)	Nm	7.5	16.4	20.1	10.1	21.9	27.0
Nominal intermittent torque (S2 - 15 minutes)	Nm	13.2	22.8	35.1	16.9	29.3	45.0

Motor data							
Motor		BRx90-50 12V	BRx90-50 24V	BRx90-50 48V	BRx90-75 12V	BRx90-75 24V	BRx90-75 48V
Part number		781102	781103	781104	781106	781107	781108
Nominal power	W	157	210	210	236	283	283
Nominal voltage	V	12	24	48	12	24	48
Nominal speed	rpm	3000	3000	3000	3000	3000	3000
Nominal continuous torque (S1)	Nm	0.50	0.67	0.67	0.90	0.90	0.90
Nominal intermittent torque (S2 - 15 minutes)	Nm	1.17	1.17	1.17	1.50	1.50	1.50
Weight	Kg	3.60	3.60	3.60	4.00	4.00	4.00
Length	mm	153	153	153	183	183	183

Gearbox data				
Part number		735900	735901	735902
Ratio	:1	15	30	60
Max. continuous torque (S1) ¹	Nm	30.0	30.0	30.0
Max. intermittent torque	Nm	48.0	48.0	48.0
Efficiency	%	75	65	50
Max. axial load (dynamic)	N	600	600	600
Max. radial load, 12mm from flange	N	800	800	800
Weight	Kg	1.5	1.5	1.5
Gear material		Bronze	Bronze	Bronze

¹ S1 duty cycle based on 3000rpm input speed

Combination accessories							
Brake	Part number	Encoder	Part Number	Controller	Part Number	Shaft extension	Part number
1.5 Nm	735914	Incremental	735912	SC 50/15	735903	GB12 shaft	735898
Mounting flange	781279						

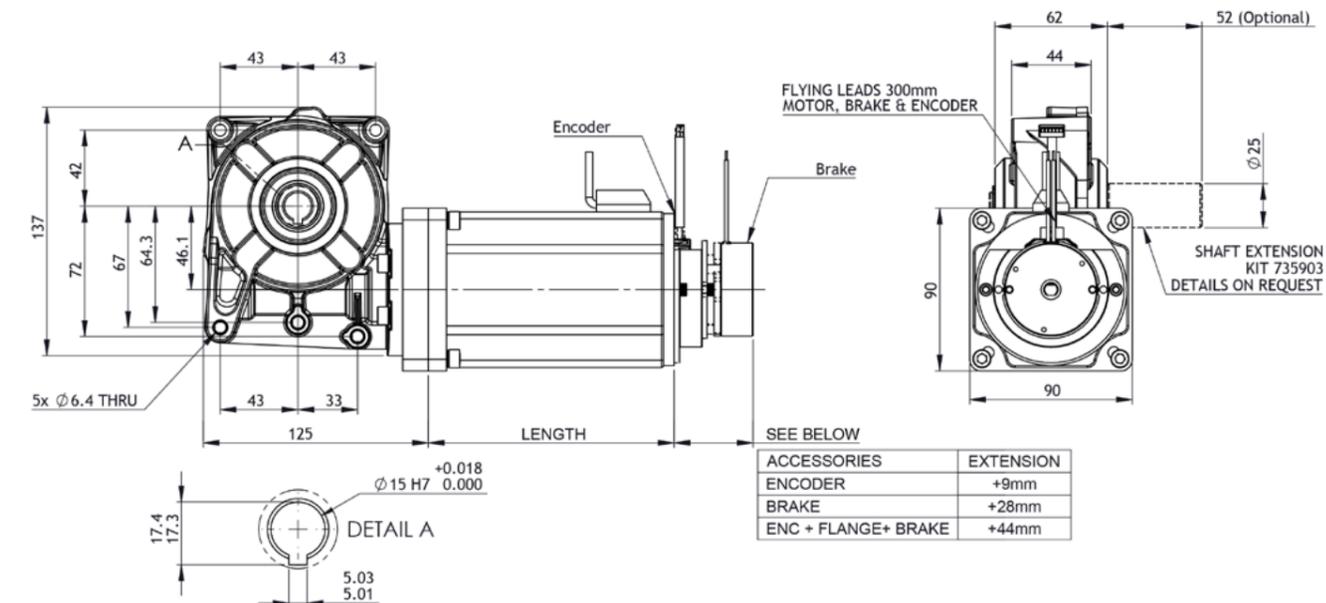
PBL86-GB12

BLDC right-angle geared motor

48 V // 419 - 586 W // 67 - 267 rpm // 11.3 - 48.0 Nm

Platform lift solution

all dimensions in mm



Combination data							
Motor		PBL86-55	PBL86-55	PBL86-55	PBL86-80	PBL86-80	PBL86-80
Voltage	V	48	48	48	48	48	48
Nominal motor power	W	419	419	419	586	586	586
Gearbox ratio	:1	15	30	60	15	30	60
Nominal speed	rpm	267	133	67	267	133	67
Nominal continuous torque (S1)	Nm	11.3	19.5	30.0	15.8	27.3	30.0
Nominal intermittent torque (S2 - 15 minutes)	Nm	19.7	34.1	48.0	27.6	47.8	48.0

Motor data				Connection details		
Motor		PBL86-55 48 V	PBL86-80 48 V	Lead colour	Lead gauge	Function
Part number		776624	776625	Red	UL1569/26 AWG	VCC
Nominal power	W	419	586	Black	UL1569/26 AWG	GND
Nominal voltage	V	48	48	Blue	UL1569/26 AWG	Hall A
Nominal speed	rpm	4000	4000	Green	UL1569/26 AWG	Hall B
Nominal continuous torque (S1)	Nm	1.00	1.40	White	UL1569/26 AWG	Hall C
Nominal intermittent torque (S2 - 15 minutes)	Nm	1.75	2.45	Red	UL1569/14 AWG	Phase U
Weight	Kg	3.20	4.20	Yellow	UL1569/14 AWG	Phase V
Length	mm	111	136	Black	UL1569/14 AWG	Phase W

Gearbox data				
Part number		735900	735901	735902
Ratio	:1	15	30	60
Max. continuous torque (S1) ¹	Nm	30.0	30.0	30.0
Max. intermittent torque	Nm	48.0	48.0	48.0
Efficiency	%	75	65	50
Max. axial load (dynamic)	N	600	600	600
Max. radial load, 12mm from flange	N	800	800	800
Weight	Kg	1.5	1.5	1.5
Gear material		Bronze	Bronze	Bronze

¹ S1 duty cycle based on 3000rpm input speed

Combination accessories							
Brake	Part number	Encoder	Part Number	Controller	Part Number	Shaft extension	Part number
1.5 Nm	735914	Incremental	735912	SC 50/15	738950	GB12 shaft	735903
Mounting flange	781284						

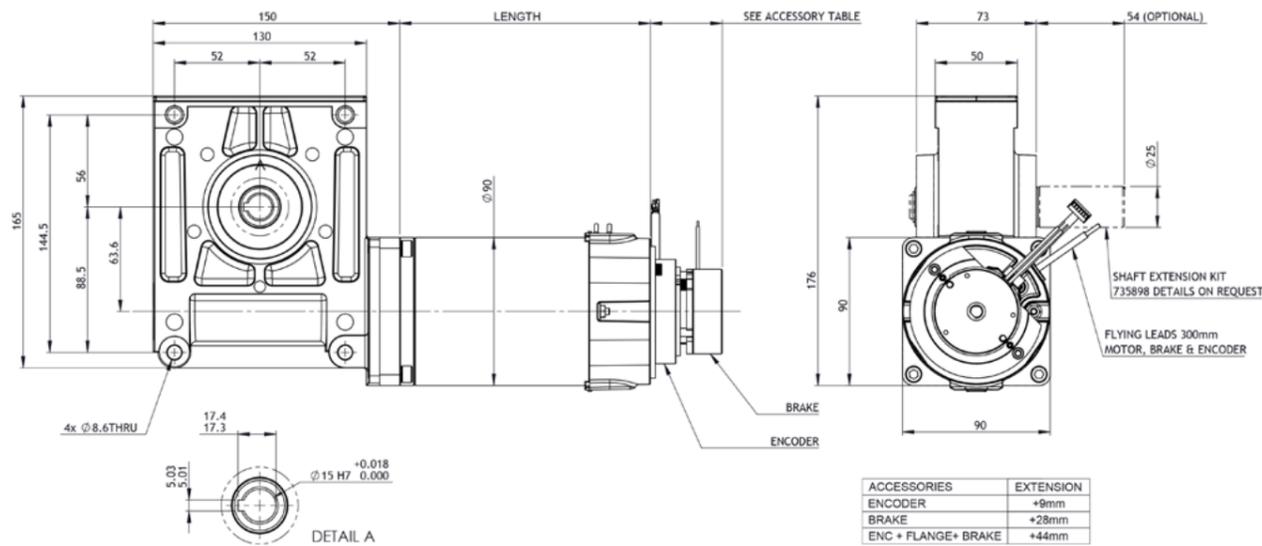
BRx90-GB9

PMDC right-angle geared motor

12 - 48 V // 157 - 283 W // 50 - 200 rpm // 8.5 - 58.5 Nm

Platform lift solution

all dimensions in mm



Combination data							
Motor		BRx90-50	BRx90-50	BRx90-50	BRx90-75	BRx90-75	BRx90-75
Voltage	V	12 - 48	12 - 48	12 - 48	12 - 48	12 - 48	12 - 48
Nominal motor power	W	157 - 210	157 - 210	157 - 210	236 - 283	236 - 283	236 - 283
Gearbox ratio	:1	15	30	60	15	30	60
Nominal speed	rpm	200	100	50	200	100	50
Nominal continuous torque (S1)	Nm	8.5	15.1	26.1	11.5	20.3	35.1
Nominal intermittent torque (S2 - 15 minutes)	Nm	14.9	26.3	45.6	19.1	33.8	58.5

Motor data							
Motor		BRx90-50 12V	BRx90-50 24V	BRx90-50 48V	BRx90-75 12V	BRx90-75 24V	BRx90-75 48V
Part number		781102	781103	781104	781106	781107	781108
Nominal power	W	157	210	210	236	283	283
Nominal voltage	V	12	24	48	12	24	48
Nominal speed	rpm	3000	3000	3000	3000	3000	3000
Nominal continuous torque (S1)	Nm	0.50	0.67	0.67	0.90	0.90	0.90
Nominal intermittent torque (S2 - 15 minutes)	Nm	1.17	1.17	1.17	1.50	1.50	1.50
Weight	Kg	3.60	3.60	3.60	4.00	4.00	4.00
Length	mm	153	153	153	183	183	183

Gearbox data				
Part number		735894	735895	735896
Ratio	:1	15	30	60
Max. continuous torque (S1) ¹	Nm	50.0	50.0	50.0
Max. intermittent torque	Nm	80.0	80.0	80.0
Efficiency	%	85	75	65
Max. axial load (dynamic)	N	600	600	600
Max. radial load, 12mm from flange	N	800	800	800
Weight	Kg	2.3	2.3	2.3
Gear material		Composite	Composite	Composite

¹ S1 duty cycle based on 3000rpm input speed

Combination accessories							
Brake	Part number	Encoder	Part Number	Controller	Part Number	Shaft extension	Part number
1.5 Nm	735914	Incremental	735912	SC 50/15	738950	GB9 shaft	735898
Mounting flange	781279						

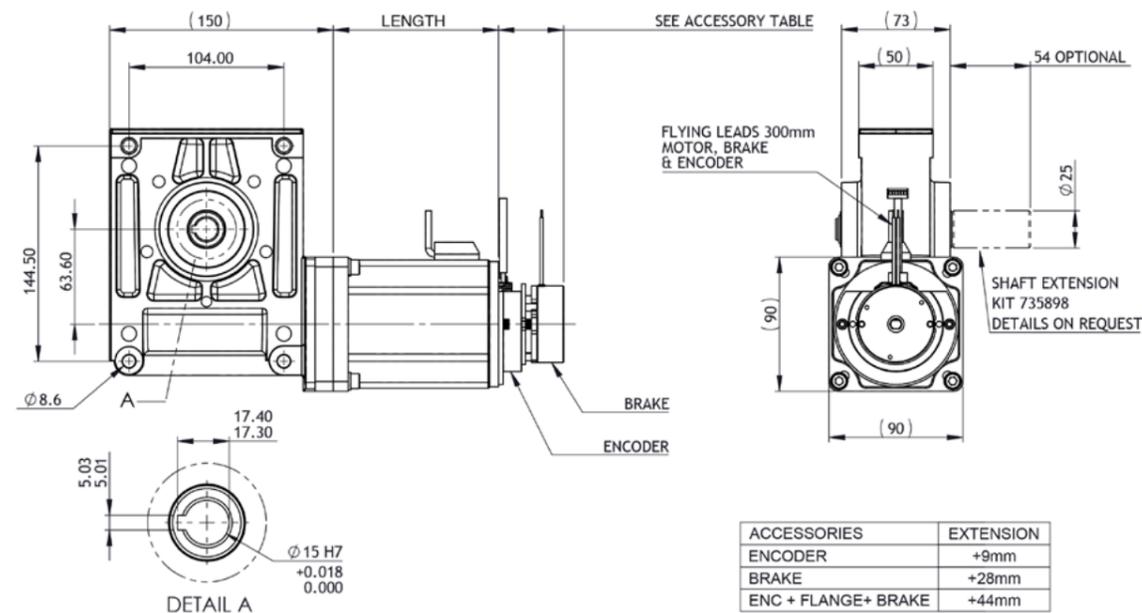
PBL86-GB9

BLDC right-angle geared motor

48 V // 419 - 586 W // 67 - 267 rpm // 12.8 - 80.0 Nm

Platform lift solution

all dimensions in mm



Combination data							
Motor		PBL86-55	PBL86-55	PBL86-55	PBL86-80	PBL86-80	PBL86-80
Voltage	V	48	48	48	48	48	48
Nominal motor power	W	419	419	419	586	586	586
Gearbox ratio	:1	15	30	60	15	30	60
Nominal speed	rpm	267	133	67	267	133	67
Nominal continuous torque (S1)	Nm	12.8	22.5	39.0	17.9	31.5	50.0
Nominal intermittent torque (S2 - 15 minutes)	Nm	22.3	39.4	68.3	31.2	55.1	80.0

Motor data				Connection details		
Motor		PBL86-55 48 V	PBL86-80 48 V	Lead colour	Lead gauge	Function
Part number		776624	776625	Red	UL1569/26 AWG	VCC
Nominal power	W	419	586	Black	UL1569/26 AWG	GND
Nominal voltage	V	48	48	Blue	UL1569/26 AWG	Hall A
Nominal speed	rpm	4000	4000	Green	UL1569/26 AWG	Hall B
Nominal continuous torque (S1)	Nm	1.00	1.40	White	UL1569/26 AWG	Hall C
Nominal intermittent torque (S2 - 15 minutes)	Nm	1.75	2.45	Red	UL1569/14 AWG	Phase U
Weight	Kg	3.20	4.20	Yellow	UL1569/14 AWG	Phase V
Length	mm	111	136	Black	UL1569/14 AWG	Phase W

Gearbox data				
Part number		735894	735895	735896
Ratio	:1	15	30	60
Max. continuous torque (S1) ¹	Nm	50.0	50.0	50.0
Max. intermittent torque	Nm	80.0	80.0	80.0
Efficiency	%	85	75	65
Max. axial load (dynamic)	N	600	600	600
Max. radial load, 12mm from flange	N	800	800	800
Weight	Kg	2.3	2.3	2.3
Gear material		Composite	Composite	Composite

¹ S1 duty cycle based on 3000rpm input speed

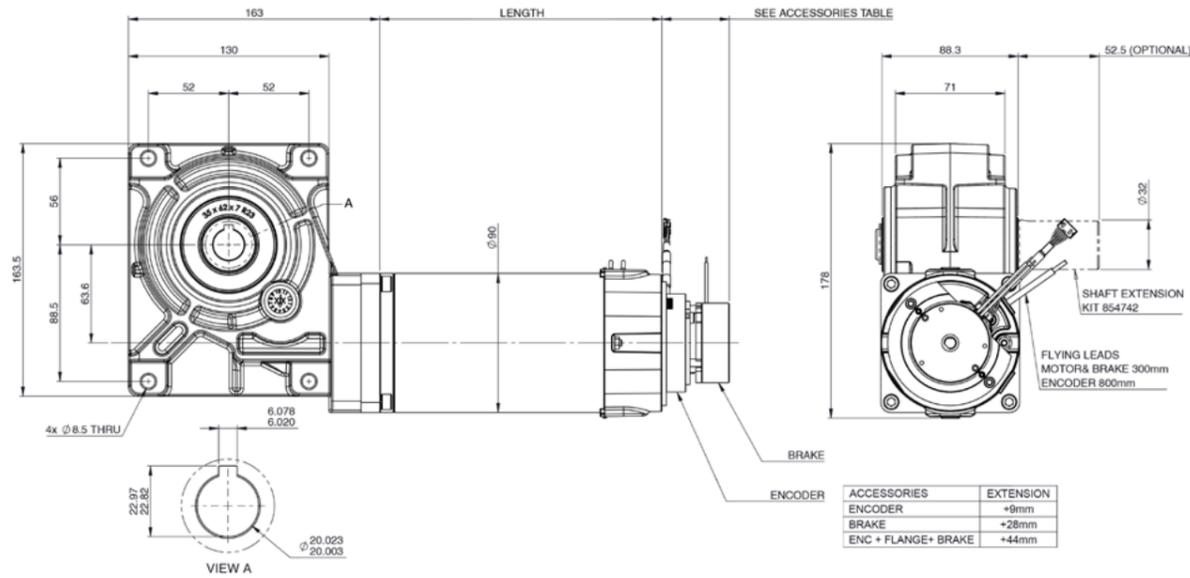
Combination accessories							
Brake	Part number	Encoder	Part Number	Controller	Part Number	Shaft extension	Part number
1.5 Nm	735914	Incremental	735912	SC 50/15	738950	GB9 shaft	735898
Mounting flange	781284						

BRx90-50-GB65 PMDC right-angle geared motor

12 - 48 V // 157 - 210 W // 19 - 150 rpm // 11.5 - 88.9 Nm

Platform lift solution

all dimensions in mm



Combination data

Motor	BRx90-50	BRx90-50	BRx90-50	BRx90-50	BRx90-50
Voltage	V 12 - 48	12 - 48	12 - 48	12 - 48	12 - 48
Nominal motor power	W 157 - 210	157 - 210	157 - 210	157 - 210	157 - 210
Gearbox ratio	:1 20	40	80	120	160
Nominal speed	rpm 150	75	38	25	19
Nominal continuous torque (S1)	Nm 11.5	21.6	38.2	49.6	50.9
Nominal intermittent torque (S2 - 15 minutes)	Nm 20.0	37.8	66.7	86.7	88.9

Motor data

Motor	BRx90-50 12V	BRx90-50 24V	BRx90-50 48V
Part number	781102	781103	781104
Nominal power	W 157	210	210
Nominal voltage	V 12	24	48
Nominal speed	rpm 3000	3000	3000
Nominal continuous torque (S1)	Nm 0.50	0.67	0.67
Nominal intermittent torque (S2 - 15 minutes)	Nm 1.17	1.17	1.17
Weight	Kg 3.60	3.60	3.60
Length	mm 153	153	153

Gearbox data

Part number	854060	853270	827936	827934	827943
Ratio	:1 20	40	80	120	160
Max. continuous torque (S1) ¹	Nm 120.0	120.0	120.0	120.0	120.0
Max. intermittent torque	Nm 300.0	300.0	300.0	300.0	300.0
Efficiency	% 86	81	71	62	48
Max. axial load (dynamic)	N 1750	1750	1750	1750	1750
Max. radial load, 12mm from flange	N 2335	2335	2335	2335	2335
Weight	Kg 3.5	3.5	3.5	3.5	3.5
Gear material ²	S / B	S / B	S / B	S / B	S / B

¹ S1 duty cycle based on 3000rpm input speed ² Gear material: S = Steel / B = Bronze

Combination accessories

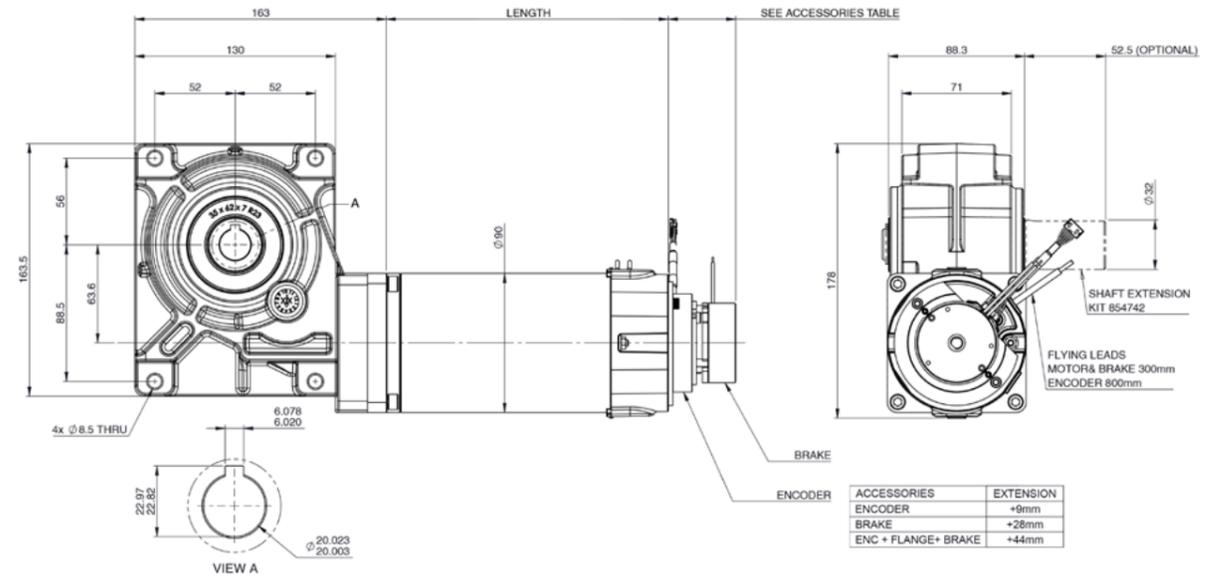
Brake	Part number	Encoder	Part Number	Controller	Part Number	Shaft extension	Part number
1.5 Nm	735914	Incremental	735912	SC 50/15	738950	GB65 shaft	854742
Mounting flange	781279						

BRx90-75-GB65 PMDC right-angle geared motor

12 - 48 V // 236 - 283 W // 19 - 150 rpm // 15.4 - 114.0 Nm

Platform lift solution

all dimensions in mm



Combination data

Motor	BRx90-75	BRx90-75	BRx90-75	BRx90-75	BRx90-75
Voltage	V 12 - 48	12 - 48	12 - 48	12 - 48	12 - 48
Nominal motor power	W 236 - 283	236 - 283	236 - 283	236 - 283	236 - 283
Gearbox ratio	:1 20	40	80	120	160
Nominal speed	rpm 150	75	38	25	19
Nominal continuous torque (S1)	Nm 15.4	29.1	51.3	66.7	68.4
Nominal intermittent torque (S2 - 15 minutes)	Nm 25.7	48.5	85.5	111.2	114.0

Motor data

Motor	BRx90-75 12V	BRx90-75 24V	BRx90-75 48V
Part number	781106	781107	781108
Nominal power	W 236	283	283
Nominal voltage	V 12	24	48
Nominal speed	rpm 3000	3000	3000
Nominal continuous torque (S1)	Nm 0.90	0.90	0.90
Nominal intermittent torque (S2 - 15 minutes)	Nm 1.50	1.50	1.50
Weight	Kg 4.00	4.00	4.00
Length	mm 183	183	183

Gearbox data

Part number	854060	853270	827936	827934	827943
Ratio	:1 20	40	80	120	160
Max. continuous torque (S1) ¹	Nm 120.0	120.0	120.0	120.0	120.0
Max. intermittent torque	Nm 300.0	300.0	300.0	300.0	300.0
Efficiency	% 86	81	71	62	48
Max. axial load (dynamic)	N 1750	1750	1750	1750	1750
Max. radial load, 12mm from flange	N 2335	2335	2335	2335	2335
Weight	Kg 3.5	3.5	3.5	3.5	3.5
Gear material ²	S / B	S / B	S / B	S / B	S / B

¹ S1 duty cycle based on 3000rpm input speed ² Gear material: S = Steel / B = Bronze

Combination accessories

Brake	Part number	Encoder	Part Number	Controller	Part Number	Shaft extension	Part number
1.5 Nm	735914	Incremental	735912	SC 50/15	738950	GB65 shaft	854742
Mounting flange	781279						

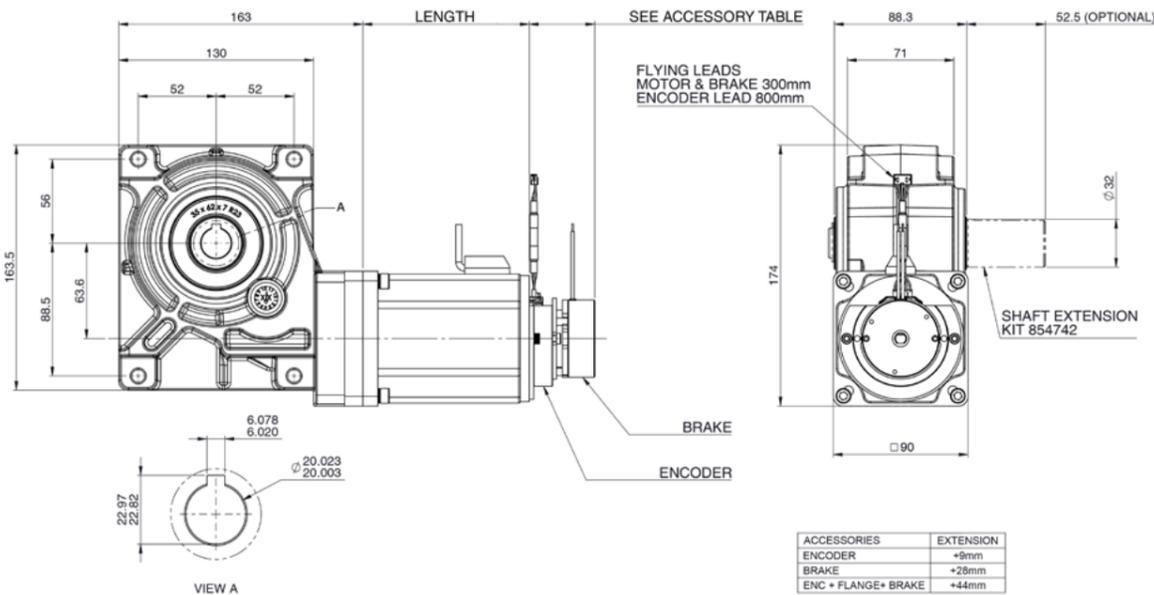
PBL86-55-GB65

BLDC right-angle geared motor

48 V // 419 W // 25 - 200 rpm // 17.1 - 133.0 Nm

Platform lift solution

all dimensions in mm



Combination data					
Motor		PBL86-55	PBL86-55	PBL86-55	PBL86-55
Voltage	V	48	48	48	48
Nominal motor power	W	419	419	419	419
Gearbox ratio	:1	20	40	80	120
Nominal speed	rpm	200	100	50	33
Nominal continuous torque (S1)	Nm	17.1	32.3	57.0	74.1
Nominal intermittent torque (S2 - 15 minutes)	Nm	29.9	56.5	99.8	129.7

Motor data		Connection details		
Motor	PBL86-55 48 V	Lead colour	Lead gauge	Function
Part number	776624	Red	UL1569/26 AWG	VCC
Nominal power	W 419	Black	UL1569/26 AWG	GND
Nominal voltage	V 48	Blue	UL1569/26 AWG	Hall A
Nominal speed	rpm 4000	Green	UL1569/26 AWG	Hall B
Nominal continuous torque (S1)	Nm 1.00	White	UL1569/26 AWG	Hall C
Nominal intermittent torque (S2 - 15 minutes)	Nm 1.75	Red	UL1569/14 AWG	Phase U
Weight	Kg 3.20	Yellow	UL1569/14 AWG	Phase V
Length	mm 111	Black	UL1569/14 AWG	Phase W

Gearbox data					
Part number		854060	853270	827936	827934
Ratio	:1	20	40	80	120
Max. continuous torque (S1) ¹	Nm	120.0	120.0	120.0	120.0
Max. intermittent torque	Nm	300.0	300.0	300.0	300.0
Efficiency	%	86	81	71	62
Max. axial load (dynamic)	N	1750	1750	1750	1750
Max. radial load, 12mm from flange	N	2335	2335	2335	2335
Weight	Kg	3.5	3.5	3.5	3.5
Gear material ²		S / B	S / B	S / B	S / B

¹ S1 duty cycle based on 3000rpm input speed ² Gear material: S = Steel / B = Bronze

Combination accessories							
Brake	Part number	Encoder	Part Number	Controller	Part Number	Shaft extension	Part number
1.5 Nm	735914	Incremental	735912	SC 50/15	738950	GB65 shaft	854742
Mounting flange	781284						

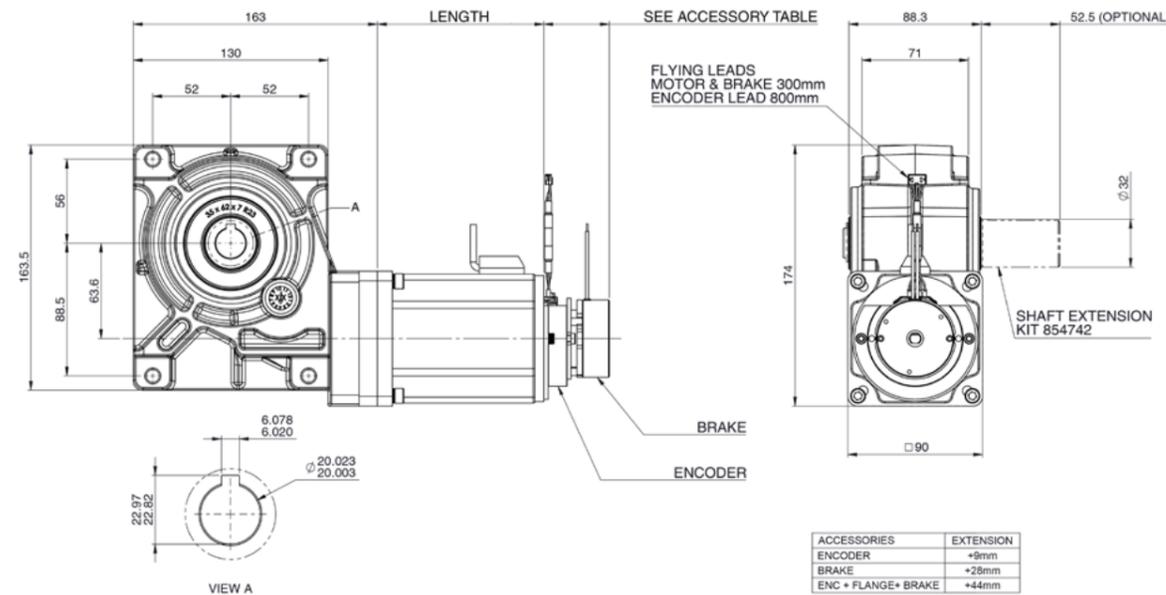
PBL86-80-GB65

BLDC right-angle geared motor

48 V // 586 W // 25 - 200 rpm // 23.9 - 186.2 Nm

Platform lift solution

all dimensions in mm



Combination data					
Motor		PBL86-80	PBL86-80	PBL86-80	PBL86-80
Voltage	V	48	48	48	48
Nominal motor power	W	586	586	586	586
Gearbox ratio	:1	20	40	80	120
Nominal speed	rpm	200	100	50	33
Nominal continuous torque (S1)	Nm	23.9	45.2	79.8	103.7
Nominal intermittent torque (S2 - 15 minutes)	Nm	41.9	79.1	139.7	181.5

Motor data		Connection details		
Motor	PBL86-80 48 V	Lead colour	Lead gauge	Function
Part number	776625	Red	UL1569/26 AWG	VCC
Nominal power	W 586	Black	UL1569/26 AWG	GND
Nominal voltage	V 48	Blue	UL1569/26 AWG	Hall A
Nominal speed	rpm 4000	Green	UL1569/26 AWG	Hall B
Nominal continuous torque (S1)	Nm 1.40	White	UL1569/26 AWG	Hall C
Nominal intermittent torque (S2 - 15 minutes)	Nm 2.45	Red	UL1569/14 AWG	Phase U
Weight	Kg 4.20	Yellow	UL1569/14 AWG	Phase V
Length	mm 136	Black	UL1569/14 AWG	Phase W

Gearbox data					
Part number		854060	853270	827936	827934
Ratio	:1	20	40	80	120
Max. continuous torque (S1) ¹	Nm	120.0	120.0	120.0	120.0
Max. intermittent torque	Nm	300.0	300.0	300.0	300.0
Efficiency	%	86	81	71	62
Max. axial load (dynamic)	N	1750	1750	1750	1750
Max. radial load, 12mm from flange	N	2335	2335	2335	2335
Weight	Kg	3.5	3.5	3.5	3.5
Gear material ²		S / B	S / B	S / B	S / B

¹ S1 duty cycle based on 3000rpm input speed ² Gear material: S = Steel / B = Bronze

Combination accessories							
Brake	Part number	Encoder	Part Number	Controller	Part Number	Shaft extension	Part number
1.5 Nm	735914	Incremental	735912	SC 50/15	738950	GB65 shaft	854742
Mounting flange	781284						

Powered wheelchairs

From lightweight paediatric to rugged off-road all-terrain chairs, our huge range of modular drive solutions for powered wheelchairs provide the smooth, safe power needed for a myriad of conditions, giving people the freedom to live life on their own terms.

With extra focus spent on the design of our products to maximise efficiency, any powered wheelchair driven by a Parvalux geared-motor delivers an extended range to their customers, ultimately providing a pleasant and reliable driving experience.

PMDC	BLDC
→ BRx70-GB12	→ PBL70-GB12
→ BRx90-GB12	→ PBL86-GB12
→ BRx90-GB9	→ PBL86-GB9



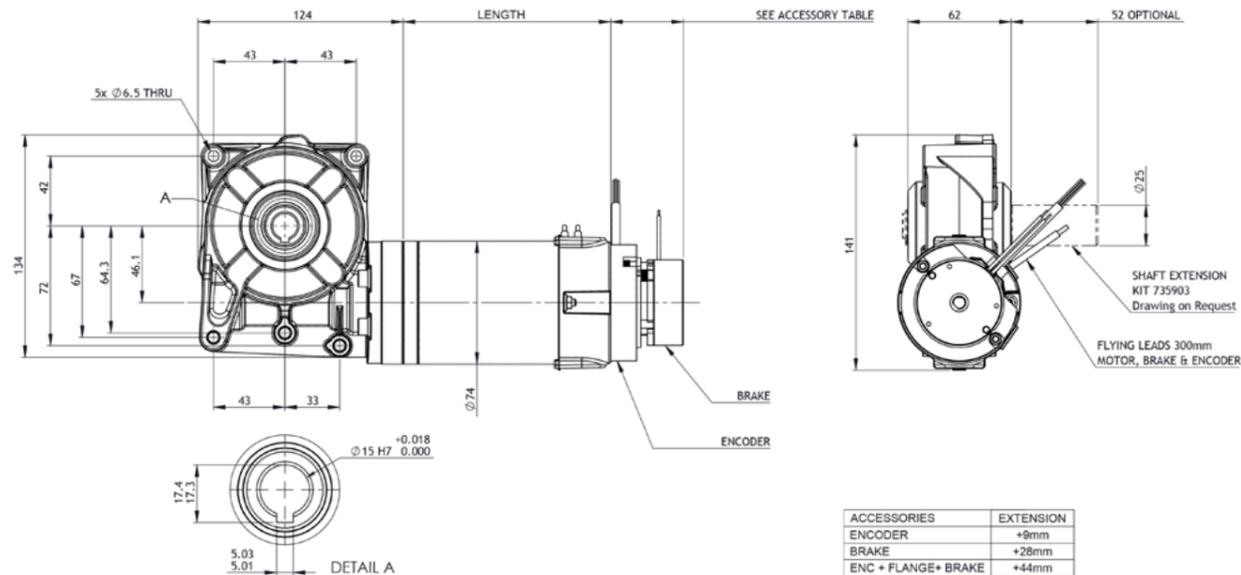
BRx70-GB12

PMDC right-angle geared motor

12 - 48 V // 79 - 157 W // 50 - 200 rpm // 2.8 - 26.4 Nm

Powered wheelchair solution

all dimensions in mm



Combination data							
Motor		BRx70-40	BRx70-40	BRx70-40	BRx70-60	BRx70-60	BRx70-60
Voltage	V	12 - 48	12 - 48	12 - 48	12 - 48	12 - 48	12 - 48
Nominal motor power	W	79	79	79	157	157	157
Gearbox ratio	:1	15	30	60	15	30	60
Nominal speed	rpm	200	100	50	200	100	50
Nominal continuous torque (S1)	Nm	2.8	4.9	7.5	5.6	9.8	15.0
Nominal intermittent torque (S2 - 15 minutes)	Nm	4.7	8.2	12.6	9.9	17.2	26.4

Motor data							
Motor		BRx70-40 12V	BRx70-40 24V	BRx70-40 48V	BRx70-60 12V	BRx70-60 24V	BRx70-60 48V
Part number		781092	781093	781094	781095	781096	781097
Nominal power	W	79	79	79	157	157	157
Nominal voltage	V	12	24	48	12	24	48
Nominal speed	rpm	3000	3000	3000	3000	3000	3000
Nominal continuous torque (S1)	Nm	0.25	0.25	0.25	0.50	0.50	0.50
Nominal intermittent torque (S2 - 15 minutes)	Nm	0.42	0.42	0.42	0.88	0.88	0.88
Weight	Kg	1.85	1.85	1.85	2.25	2.25	2.25
Length	mm	125	125	125	146	146	146

Gearbox data				
Part number		735900	735901	735902
Ratio	:1	15	30	60
Max. continuous torque (S1) ¹	Nm	30.0	30.0	30.0
Max. intermittent torque	Nm	48.0	48.0	48.0
Efficiency	%	75	65	50
Max. axial load (dynamic)	N	600	600	600
Max. radial load, 12mm from flange	N	800	800	800
Weight	Kg	1.5	1.5	1.5
Gear material		Bronze	Bronze	Bronze

¹S1 duty cycle based on 3000rpm input speed

Combination accessories							
Brake	Part number	Encoder	Part Number	Controller	Part Number	Shaft extension	Part number
1.5 Nm	735914	Incremental	735912	SC 50/15	735903	GB12 shaft	735898
Mounting flange	781277						

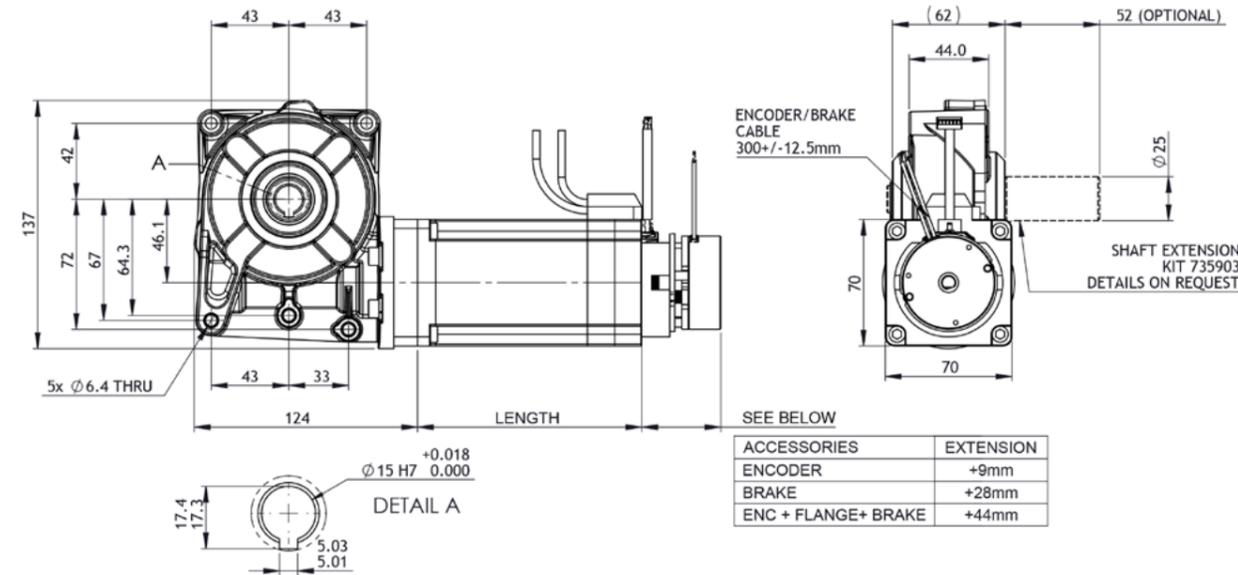
PBL70-GB12

BLDC right-angle geared motor

48 V // 363 - 415 W // 75 - 300 rpm // 8.7 - 46.5 Nm

Powered wheelchair solution

all dimensions in mm



Combination data							
Motor		PBL70-70	PBL70-70	PBL70-70	PBL70-80	PBL70-80	PBL70-80
Voltage	V	48	48	48	48	48	48
Nominal motor power	W	363	363	363	415	415	415
Gearbox ratio	:1	15	30	60	15	30	60
Nominal speed	rpm	300	150	75	300	150	75
Nominal continuous torque (S1)	Nm	8.7	15.0	23.1	9.9	17.2	26.4
Nominal intermittent torque (S2 - 15 minutes)	Nm	15.2	26.3	40.5	17.4	30.2	46.5

Motor data				Connection details		
Motor		PBL70-70 48V	PBL70-80 48V	Lead colour	Lead gauge	Function
Part number		776622	776623	Red	UL1569/26 AWG	VCC
Nominal power	W	363	415	Black	UL1569/26 AWG	GND
Nominal voltage	V	48	48	Blue	UL1569/26 AWG	Hall A
Nominal speed	rpm	4500	4500	Green	UL1569/26 AWG	Hall B
Nominal continuous torque (S1)	Nm	0.77	0.88	White	UL1569/26 AWG	Hall C
Nominal intermittent torque (S2 - 15 minutes)	Nm	1.35	1.54	Red	UL3266/16 AWG	Phase U
Weight	Kg	2.20	2.60	Yellow	UL3266/16 AWG	Phase V
Length	mm	114	124	Black	UL3266/16 AWG	Phase W

Gearbox data				
Part number		735900	735901	735902
Ratio	:1	15	30	60
Max. continuous torque (S1) ¹	Nm	30.0	30.0	30.0
Max. intermittent torque	Nm	48.0	48.0	48.0
Efficiency	%	75	65	50
Max. axial load (dynamic)	N	600	600	600
Max. radial load, 12mm from flange	N	800	800	800
Weight	Kg	1.5	1.5	1.5
Gear material		Bronze	Bronze	Bronze

¹S1 duty cycle based on 3000rpm input speed

Combination accessories							
Brake	Part number	Encoder	Part Number	Controller	Part Number	Shaft extension	Part number
1.5 Nm	735914	Incremental	735912	SC 50/15	738950	GB12 shaft	735903
Mounting flange	781281						

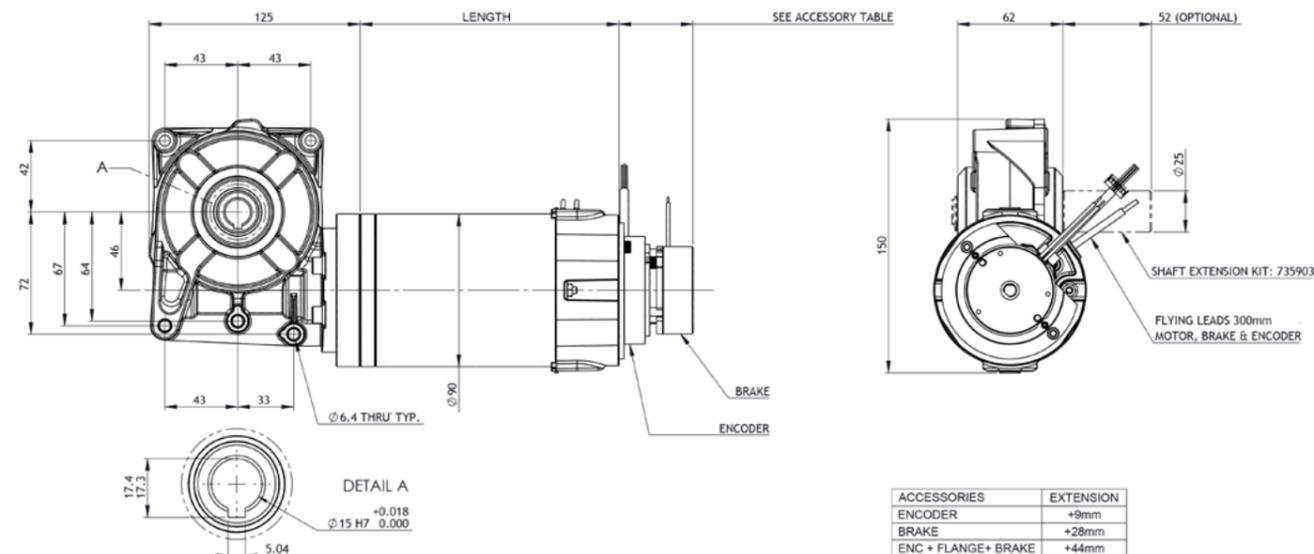
BRx90-GB12

PMDC right-angle geared motor

12 - 48 V // 157 - 283 W // 50 - 200 rpm // 7.5 - 45.0 Nm

Powered wheelchair solution

all dimensions in mm



Combination data						
Motor		BRx90-50	BRx90-50	BRx90-50	BRx90-75	BRx90-75
Voltage	V	12 - 48	12 - 48	12 - 48	12 - 48	12 - 48
Nominal motor power	W	157 - 210	157 - 210	157 - 210	236 - 283	236 - 283
Gearbox ratio	:1	15	30	60	15	30
Nominal speed	rpm	200	100	50	200	100
Nominal continuous torque (S1)	Nm	7.5	16.4	20.1	10.1	21.9
Nominal intermittent torque (S2 - 15 minutes)	Nm	13.2	22.8	35.1	16.9	29.3

Motor data						
Motor		BRx90-50 12V	BRx90-50 24V	BRx90-50 48V	BRx90-75 12V	BRx90-75 24V
Part number		781102	781103	781104	781106	781107
Nominal power	W	157	210	210	236	283
Nominal voltage	V	12	24	48	12	24
Nominal speed	rpm	3000	3000	3000	3000	3000
Nominal continuous torque (S1)	Nm	0.50	0.67	0.67	0.90	0.90
Nominal intermittent torque (S2 - 15 minutes)	Nm	1.17	1.17	1.17	1.50	1.50
Weight	Kg	3.60	3.60	3.60	4.00	4.00
Length	mm	153	153	153	183	183

Gearbox data			
Part number		735900	735901
Ratio	:1	15	30
Max. continuous torque (S1) ¹	Nm	30.0	30.0
Max. intermittent torque	Nm	48.0	48.0
Efficiency	%	75	65
Max. axial load (dynamic)	N	600	600
Max. radial load, 12mm from flange	N	800	800
Weight	Kg	1.5	1.5
Gear material		Bronze	Bronze

¹S1 duty cycle based on 3000rpm input speed

Combination accessories						
Brake	Part number	Encoder	Part Number	Controller	Part Number	Shaft extension
1.5 Nm	735914	Incremental	735912	SC 50/15	735903	GB12 shaft
Mounting flange	781279					

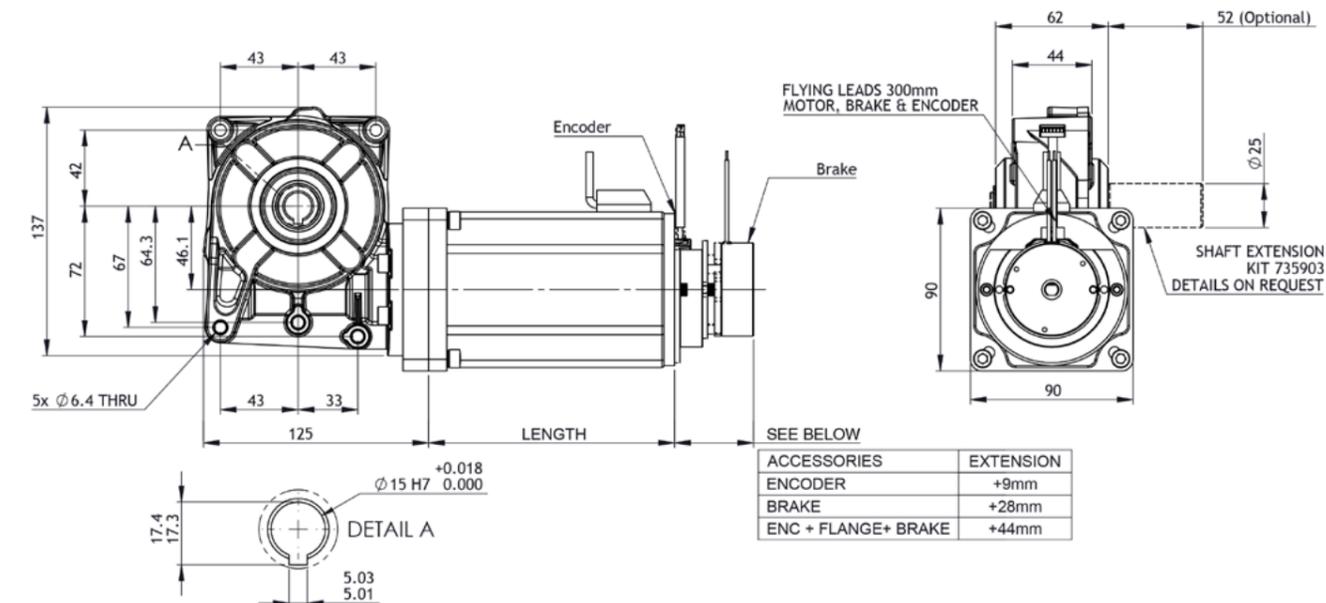
PBL86-GB12

BLDC right-angle geared motor

48 V // 419 - 586 W // 67 - 267 rpm // 11.3 - 48.0 Nm

Powered wheelchair solution

all dimensions in mm



Combination data						
Motor		PBL86-55	PBL86-55	PBL86-55	PBL86-80	PBL86-80
Voltage	V	48	48	48	48	48
Nominal motor power	W	419	419	419	586	586
Gearbox ratio	:1	15	30	60	15	30
Nominal speed	rpm	267	133	67	267	133
Nominal continuous torque (S1)	Nm	11.3	19.5	30.0	15.8	27.3
Nominal intermittent torque (S2 - 15 minutes)	Nm	19.7	34.1	48.0	27.6	47.8

Motor data			Connection details		
Motor		PBL86-55 48 V	Lead colour	Lead gauge	Function
Part number		776624	Red	UL1569/26 AWG	VCC
Nominal power	W	419	Black	UL1569/26 AWG	GND
Nominal voltage	V	48	Blue	UL1569/26 AWG	Hall A
Nominal speed	rpm	4000	Green	UL1569/26 AWG	Hall B
Nominal continuous torque (S1)	Nm	1.00	White	UL1569/26 AWG	Hall C
Nominal intermittent torque (S2 - 15 minutes)	Nm	1.75	Red	UL1569/14 AWG	Phase U
Weight	Kg	3.20	Yellow	UL1569/14 AWG	Phase V
Length	mm	111	Black	UL1569/14 AWG	Phase W

Gearbox data			
Part number		735900	735901
Ratio	:1	15	30
Max. continuous torque (S1) ¹	Nm	30.0	30.0
Max. intermittent torque	Nm	48.0	48.0
Efficiency	%	75	65
Max. axial load (dynamic)	N	600	600
Max. radial load, 12mm from flange	N	800	800
Weight	Kg	1.5	1.5
Gear material		Bronze	Bronze

¹S1 duty cycle based on 3000rpm input speed

Combination accessories						
Brake	Part number	Encoder	Part Number	Controller	Part Number	Shaft extension
1.5 Nm	735914	Incremental	735912	SC 50/15	738950	GB12 shaft
Mounting flange	781284					

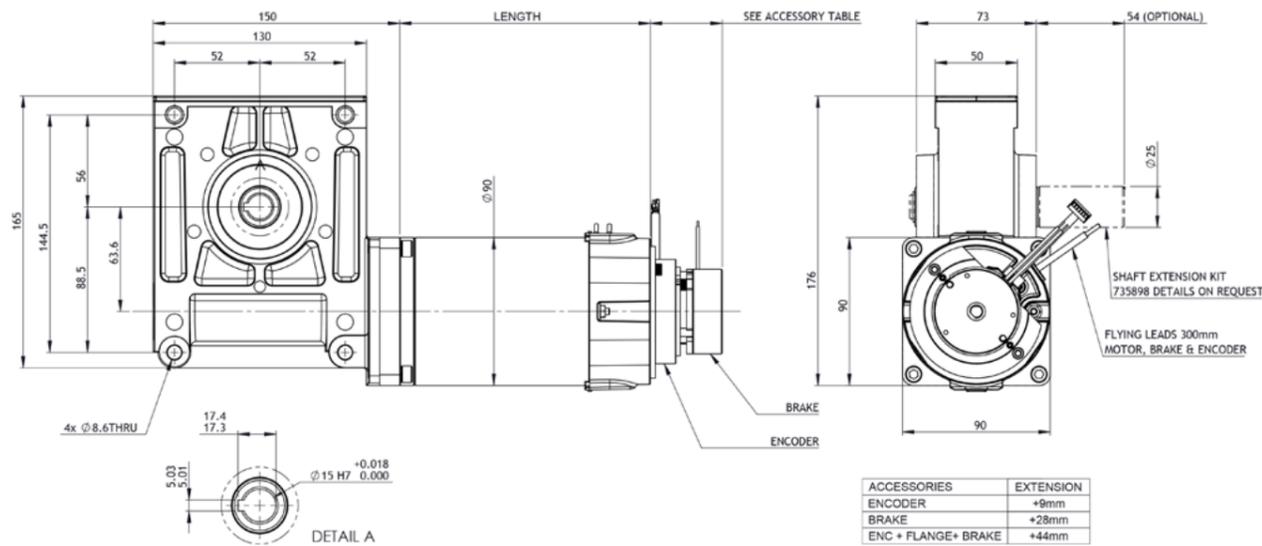
BRx90-GB9

PMDC right-angle geared motor

12 - 48 V // 157 - 283 W // 50 - 200 rpm // 8.5 - 58.5 Nm

Powered wheelchair solution

all dimensions in mm



Combination data							
Motor		BRx90-50	BRx90-50	BRx90-50	BRx90-75	BRx90-75	BRx90-75
Voltage	V	12 - 48	12 - 48	12 - 48	12 - 48	12 - 48	12 - 48
Nominal motor power	W	157 - 210	157 - 210	157 - 210	236 - 283	236 - 283	236 - 283
Gearbox ratio	:1	15	30	60	15	30	60
Nominal speed	rpm	200	100	50	200	100	50
Nominal continuous torque (S1)	Nm	8.5	15.1	26.1	11.5	20.3	35.1
Nominal intermittent torque (S2 - 15 minutes)	Nm	14.9	26.3	45.6	19.1	33.8	58.5

Motor data							
Motor		BRx90-50 12V	BRx90-50 24V	BRx90-50 48V	BRx90-75 12V	BRx90-75 24V	BRx90-75 48V
Part number		781102	781104	781104	781106	781107	781108
Nominal power	W	157	210	210	236	283	283
Nominal voltage	V	12	24	48	12	24	48
Nominal speed	rpm	3000	3000	3000	3000	3000	3000
Nominal continuous torque (S1)	Nm	0.50	0.67	0.67	0.90	0.90	0.90
Nominal intermittent torque (S2 - 15 minutes)	Nm	1.17	1.17	1.17	1.50	1.50	1.50
Weight	Kg	3.60	3.60	3.60	4.00	4.00	4.00
Length	mm	153	153	153	183	183	183

Gearbox data				
Part number		735894	735895	735896
Ratio	:1	15	30	60
Max. continuous torque (S1) ¹	Nm	50.0	50.0	50.0
Max. intermittent torque	Nm	80.0	80.0	80.0
Efficiency	%	85	75	65
Max. axial load (dynamic)	N	600	600	600
Max. radial load, 12mm from flange	N	800	800	800
Weight	Kg	2.3	2.3	2.3
Gear material		Composite	Composite	Composite

¹ S1 duty cycle based on 3000rpm input speed

Combination accessories							
Brake	Part number	Encoder	Part Number	Controller	Part Number	Shaft extension	Part number
1.5 Nm	735914	Incremental	735912	SC 50/15	738950	GB9 shaft	735898
Mounting flange	781279						

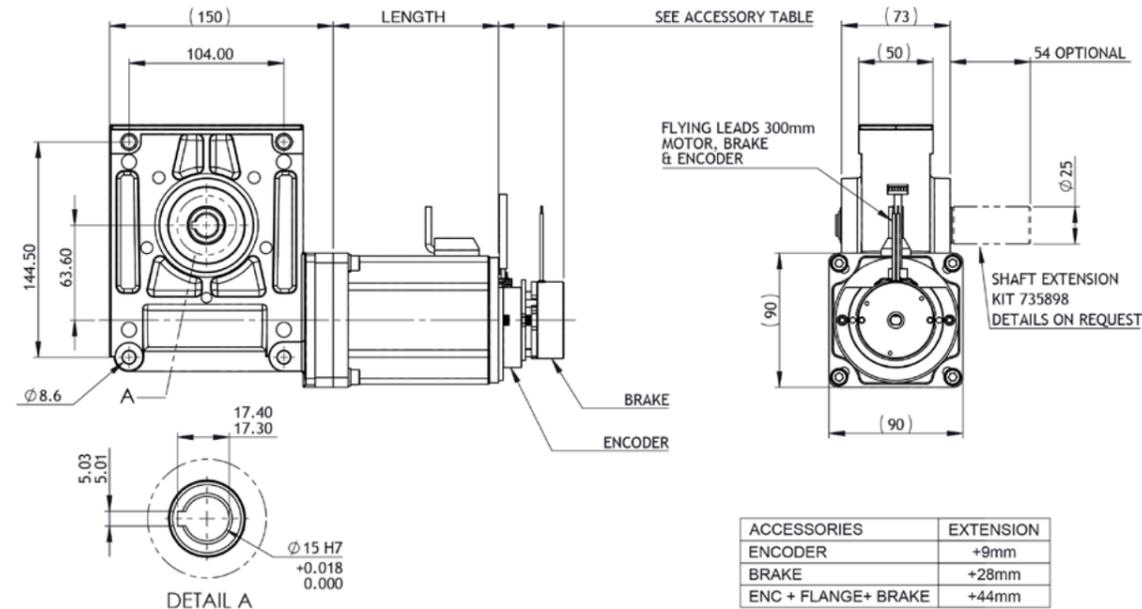
PBL86-GB9

BLDC right-angle geared motor

48 V // 419 - 586 W // 67 - 267 rpm // 12.8 - 80.0 Nm

Powered wheelchair solution

all dimensions in mm



Combination data							
Motor		PBL86-55	PBL86-55	PBL86-55	PBL86-80	PBL86-80	PBL86-80
Voltage	V	48	48	48	48	48	48
Nominal motor power	W	419	419	419	586	586	586
Gearbox ratio	:1	15	30	60	15	30	60
Nominal speed	rpm	267	133	67	267	133	67
Nominal continuous torque (S1)	Nm	12.8	22.5	39.0	17.9	31.5	50.0
Nominal intermittent torque (S2 - 15 minutes)	Nm	22.3	39.4	68.3	31.2	55.1	80.0

Motor data				Connection details		
Motor		PBL86-55 48 V	PBL86-80 48 V	Lead colour	Lead gauge	Function
Part number		776624	776625	Red	UL1569/26 AWG	VCC
Nominal power	W	419	586	Black	UL1569/26 AWG	GND
Nominal voltage	V	48	48	Blue	UL1569/26 AWG	Hall A
Nominal speed	rpm	4000	4000	Green	UL1569/26 AWG	Hall B
Nominal continuous torque (S1)	Nm	1.00	1.40	White	UL1569/26 AWG	Hall C
Nominal intermittent torque (S2 - 15 minutes)	Nm	1.75	2.45	Red	UL1569/14 AWG	Phase U
Weight	Kg	3.20	4.20	Yellow	UL1569/14 AWG	Phase V
Length	mm	111	136	Black	UL1569/14 AWG	Phase W

Gearbox data				
Part number		735894	735895	735896
Ratio	:1	15	30	60
Max. continuous torque (S1) ¹	Nm	50.0	50.0	50.0
Max. intermittent torque	Nm	80.0	80.0	80.0
Efficiency	%	85	75	65
Max. axial load (dynamic)	N	600	600	600
Max. radial load, 12mm from flange	N	800	800	800
Weight	Kg	2.3	2.3	2.3
Gear material		Composite	Composite	Composite

¹ S1 duty cycle based on 3000rpm input speed

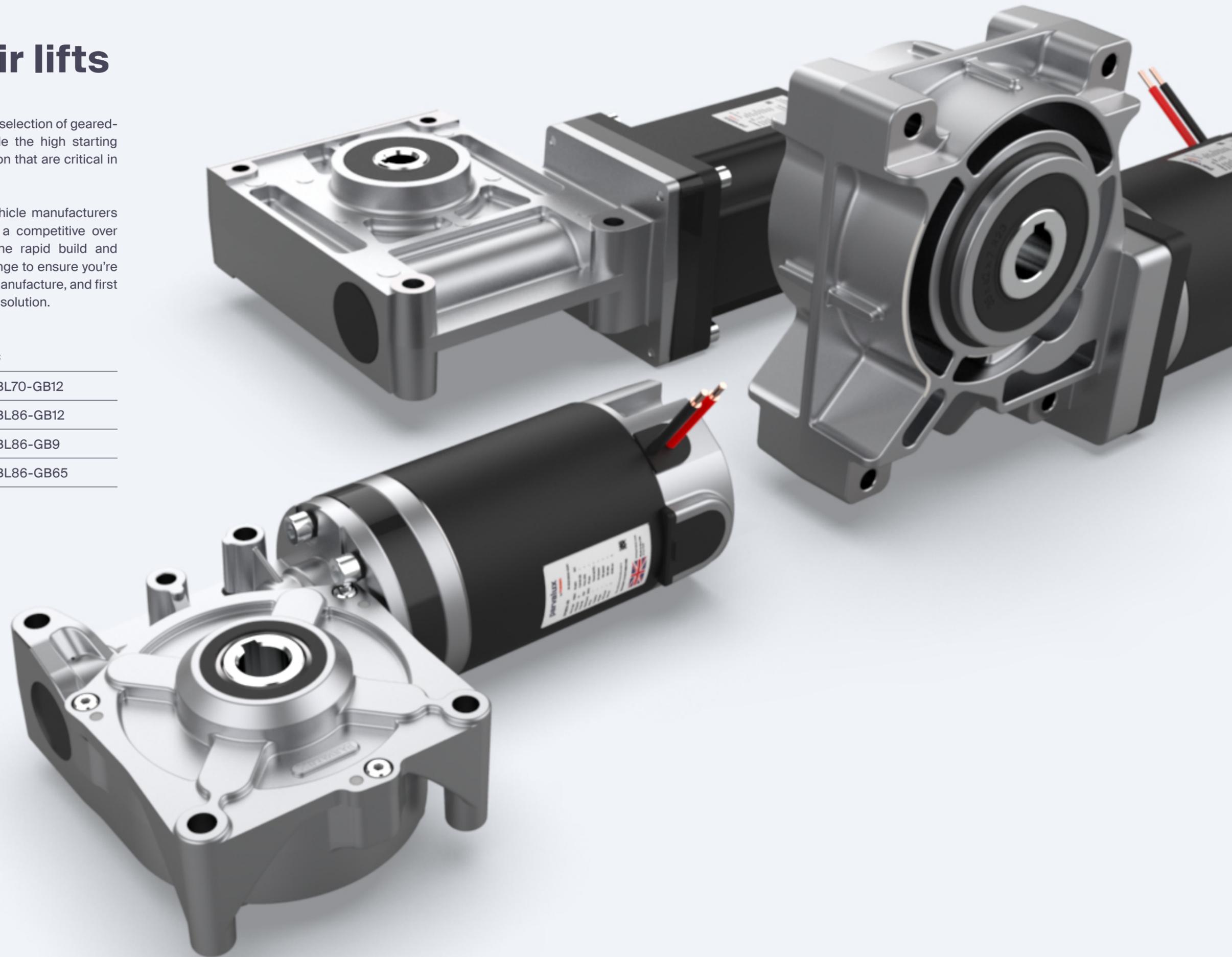
Combination accessories							
Brake	Part number	Encoder	Part Number	Controller	Part Number	Shaft extension	Part number
1.5 Nm	735914	Incremental	735912	SC 50/15	738950	GB9 shaft	735898
Mounting flange	781284						

Wheelchair lifts

The modular range offers a wide selection of geared-motor combinations that provide the high starting torque and safe, reliable operation that are critical in wheelchair lift motor design.

Currently in high demand by vehicle manufacturers and modifiers, worldwide; gain a competitive over your competitors by utilising the rapid build and delivery times of our modular range to ensure you're first to proof of concept, first to manufacture, and first to delivery on your wheelchair lift solution.

PMDC	BLDC
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→ BRx90-GB12	→ PBL86-GB12
→ BRx90-GB9	→ PBL86-GB9
→ BRx90-GB65	→ PBL86-GB65



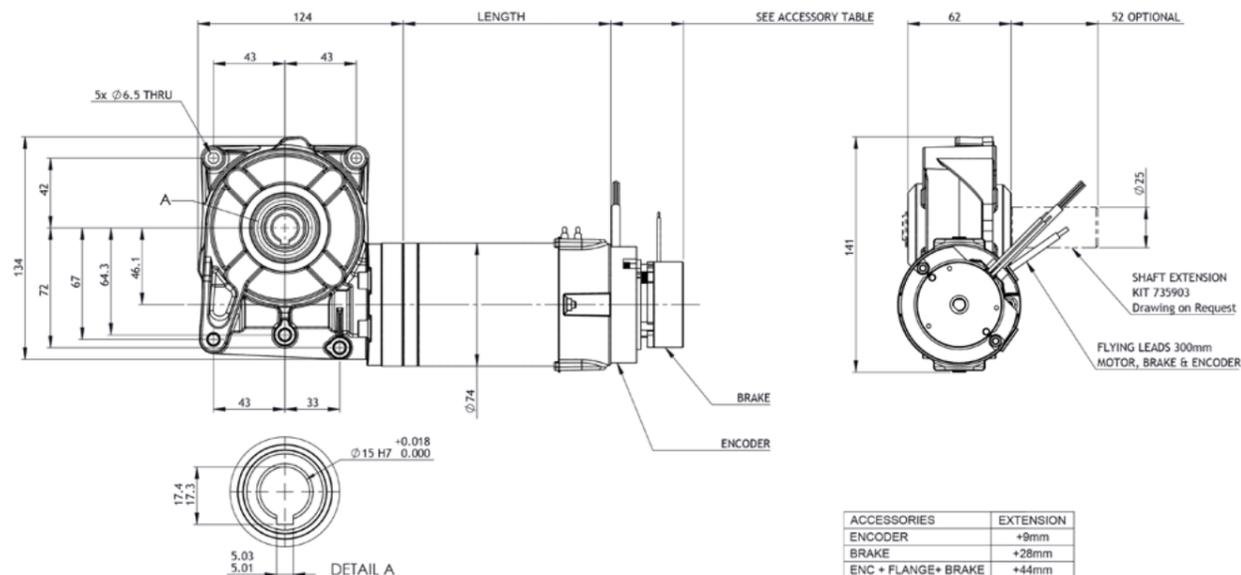
BRx70-GB12

PMDC right-angle geared motor

12 - 48 V // 79 - 157 W // 50 - 200 rpm // 2.8 - 26.4 Nm

Wheelchair lift solution

all dimensions in mm



Combination data							
Motor		BRx70-40	BRx70-40	BRx70-40	BRx70-60	BRx70-60	BRx70-60
Voltage	V	12 - 48	12 - 48	12 - 48	12 - 48	12 - 48	12 - 48
Nominal motor power	W	79	79	79	157	157	157
Gearbox ratio	:1	15	30	60	15	30	60
Nominal speed	rpm	200	100	50	200	100	50
Nominal continuous torque (S1)	Nm	2.8	4.9	7.5	5.6	9.8	15.0
Nominal intermittent torque (S2 - 15 minutes)	Nm	4.7	8.2	12.6	9.9	17.2	26.4

Motor data							
Motor		BRx70-40 12V	BRx70-40 24V	BRx70-40 48V	BRx70-60 12V	BRx70-60 24V	BRx70-60 48V
Part number		781092	781093	781094	781095	781096	781097
Nominal power	W	79	79	79	157	157	157
Nominal voltage	V	12	24	48	12	24	48
Nominal speed	rpm	3000	3000	3000	3000	3000	3000
Nominal continuous torque (S1)	Nm	0.25	0.25	0.25	0.50	0.50	0.50
Nominal intermittent torque (S2 - 15 minutes)	Nm	0.42	0.42	0.42	0.88	0.88	0.88
Weight	Kg	1.85	1.85	1.85	2.25	2.25	2.25
Length	mm	125	125	125	146	146	146

Gearbox data				
Part number		735900	735901	735902
Ratio	:1	15	30	60
Max. continuous torque (S1) ¹	Nm	30.0	30.0	30.0
Max. intermittent torque	Nm	48.0	48.0	48.0
Efficiency	%	75	65	50
Max. axial load (dynamic)	N	600	600	600
Max. radial load, 12mm from flange	N	800	800	800
Weight	Kg	1.5	1.5	1.5
Gear material		Bronze	Bronze	Bronze

¹S1 duty cycle based on 3000rpm input speed

Combination accessories							
Brake	Part number	Encoder	Part Number	Controller	Part Number	Shaft extension	Part number
1.5 Nm	735914	Incremental	735912	SC 50/15	735903	GB12 shaft	735898
Mounting flange	781277						

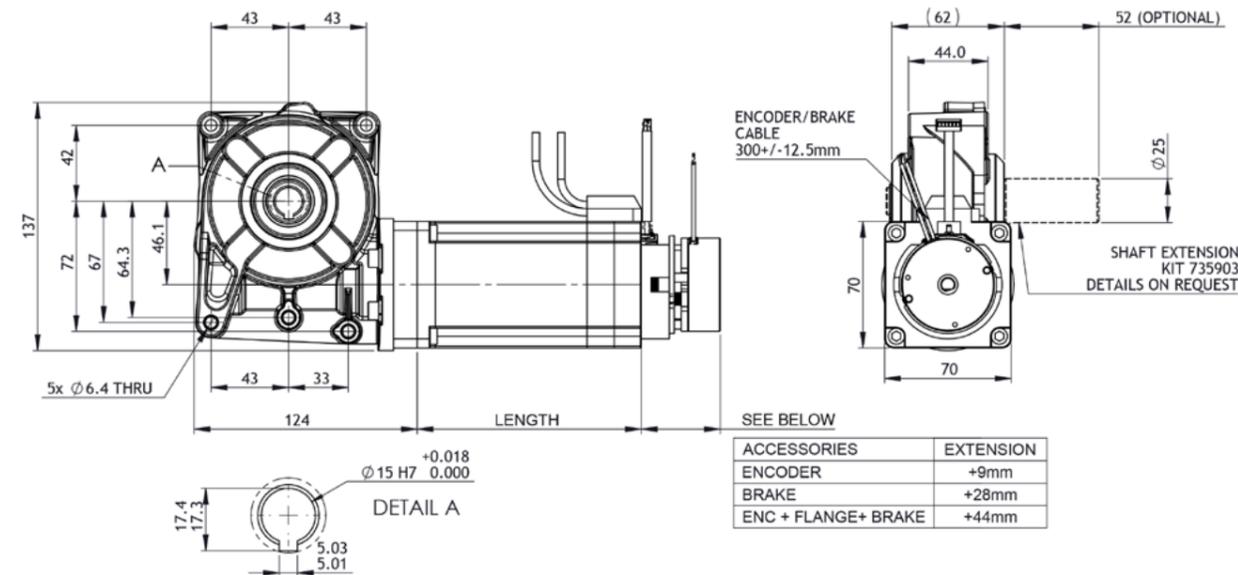
PBL70-GB12

BLDC right-angle geared motor

48 V // 363 - 415 W // 75 - 300 rpm // 8.7 - 46.5 Nm

Wheelchair lift solution

all dimensions in mm



Combination data							
Motor		PBL70-70	PBL70-70	PBL70-70	PBL70-80	PBL70-80	PBL70-80
Voltage	V	48	48	48	48	48	48
Nominal motor power	W	363	363	363	415	415	415
Gearbox ratio	:1	15	30	60	15	30	60
Nominal speed	rpm	300	150	75	300	150	75
Nominal continuous torque (S1)	Nm	8.7	15.0	23.1	9.9	17.2	26.4
Nominal intermittent torque (S2 - 15 minutes)	Nm	15.2	26.3	40.5	17.4	30.2	46.5

Motor data				Connection details		
Motor		PBL70-70 48V	PBL70-80 48V	Lead colour	Lead gauge	Function
Part number		776622	776623	Red	UL1569/26 AWG	VCC
Nominal power	W	363	415	Black	UL1569/26 AWG	GND
Nominal voltage	V	48	48	Blue	UL1569/26 AWG	Hall A
Nominal speed	rpm	4500	4500	Green	UL1569/26 AWG	Hall B
Nominal continuous torque (S1)	Nm	0.77	0.88	White	UL1569/26 AWG	Hall C
Nominal intermittent torque (S2 - 15 minutes)	Nm	1.35	1.54	Red	UL3266/16 AWG	Phase U
Weight	Kg	2.20	2.60	Yellow	UL3266/16 AWG	Phase V
Length	mm	114	124	Black	UL3266/16 AWG	Phase W

Gearbox data				
Part number		735900	735901	735902
Ratio	:1	15	30	60
Max. continuous torque (S1) ¹	Nm	30.0	30.0	30.0
Max. intermittent torque	Nm	48.0	48.0	48.0
Efficiency	%	75	65	50
Max. axial load (dynamic)	N	600	600	600
Max. radial load, 12mm from flange	N	800	800	800
Weight	Kg	1.5	1.5	1.5
Gear material		Bronze	Bronze	Bronze

¹S1 duty cycle based on 3000rpm input speed

Combination accessories							
Brake	Part number	Encoder	Part Number	Controller	Part Number	Shaft extension	Part number
1.5 Nm	735914	Incremental	735912	SC 50/15	738950	GB12 shaft	735903
Mounting flange	781281						

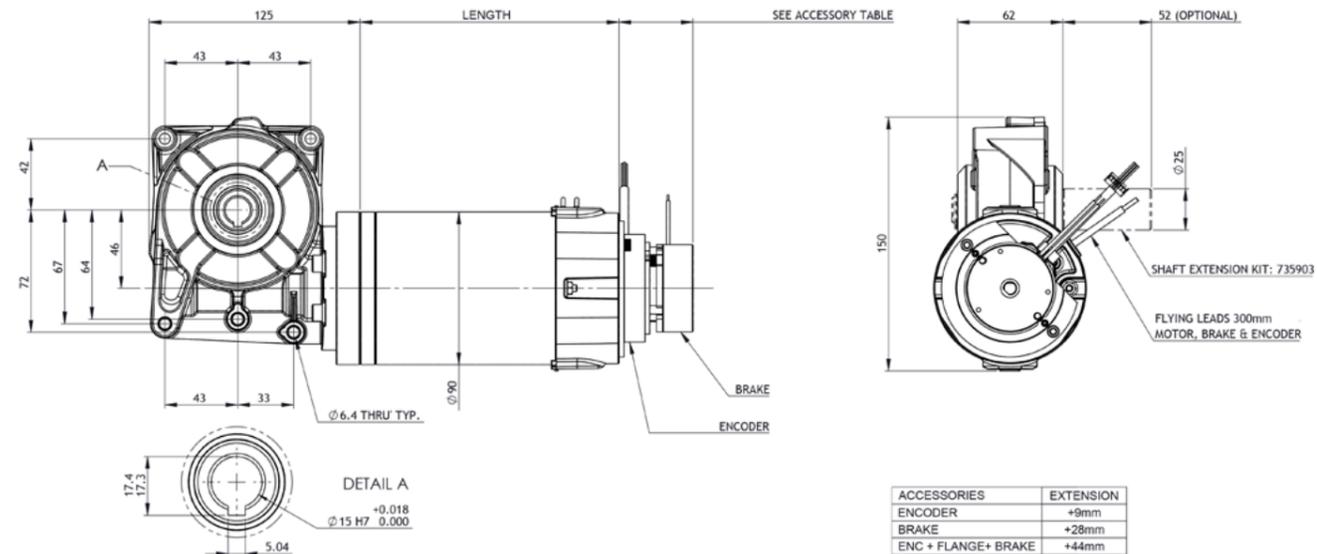
BRx90-GB12

PMDC right-angle geared motor

12 - 48 V // 157 - 283 W // 50 - 200 rpm // 7.5 - 45.0 Nm

Wheelchair lift solution

all dimensions in mm



Combination data							
Motor		BRx90-50	BRx90-50	BRx90-50	BRx90-75	BRx90-75	BRx90-75
Voltage	V	12 - 48	12 - 48	12 - 48	12 - 48	12 - 48	12 - 48
Nominal motor power	W	157 - 210	157 - 210	157 - 210	236 - 283	236 - 283	236 - 283
Gearbox ratio	:1	15	30	60	15	30	60
Nominal speed	rpm	200	100	50	200	100	50
Nominal continuous torque (S1)	Nm	7.5	16.4	20.1	10.1	21.9	27.0
Nominal intermittent torque (S2 - 15 minutes)	Nm	13.2	22.8	35.1	16.9	29.3	45.0

Motor data							
Motor		BRx90-50 12V	BRx90-50 24V	BRx90-50 48V	BRx90-75 12V	BRx90-75 24V	BRx90-75 48V
Part number		781102	781103	781104	781106	781107	781108
Nominal power	W	157	210	210	236	283	283
Nominal voltage	V	12	24	48	12	24	48
Nominal speed	rpm	3000	3000	3000	3000	3000	3000
Nominal continuous torque (S1)	Nm	0.50	0.67	0.67	0.90	0.90	0.90
Nominal intermittent torque (S2 - 15 minutes)	Nm	1.17	1.17	1.17	1.50	1.50	1.50
Weight	Kg	3.60	3.60	3.60	4.00	4.00	4.00
Length	mm	153	153	153	183	183	183

Gearbox data				
Part number		735900	735901	735902
Ratio	:1	15	30	60
Max. continuous torque (S1) ¹	Nm	30.0	30.0	30.0
Max. intermittent torque	Nm	48.0	48.0	48.0
Efficiency	%	75	65	50
Max. axial load (dynamic)	N	600	600	600
Max. radial load, 12mm from flange	N	800	800	800
Weight	Kg	1.5	1.5	1.5
Gear material		Bronze	Bronze	Bronze

¹S1 duty cycle based on 3000rpm input speed

Combination accessories							
Brake	Part number	Encoder	Part Number	Controller	Part Number	Shaft extension	Part number
1.5 Nm	735914	Incremental	735912	SC 50/15	735903	GB12 shaft	735898
Mounting flange	781279						

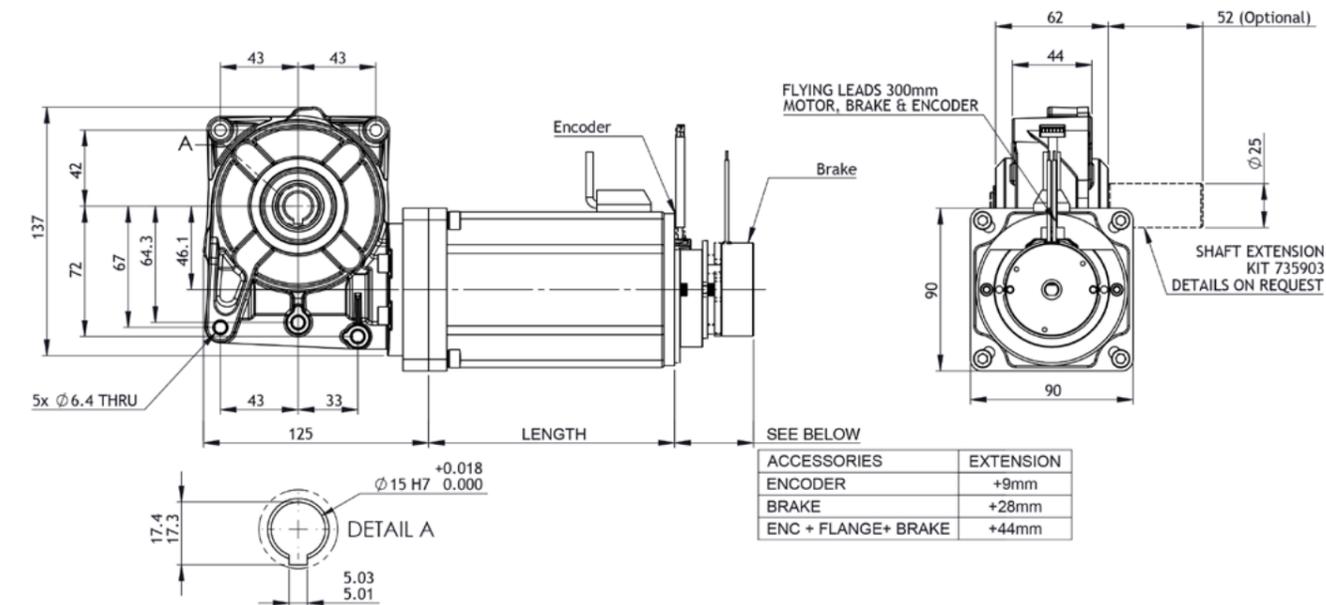
PBL86-GB12

BLDC right-angle geared motor

48 V // 419 - 586 W // 67 - 267 rpm // 11.3 - 48.0 Nm

Wheelchair lift solution

all dimensions in mm



Combination data							
Motor		PBL86-55	PBL86-55	PBL86-55	PBL86-80	PBL86-80	PBL86-80
Voltage	V	48	48	48	48	48	48
Nominal motor power	W	419	419	419	586	586	586
Gearbox ratio	:1	15	30	60	15	30	60
Nominal speed	rpm	267	133	67	267	133	67
Nominal continuous torque (S1)	Nm	11.3	19.5	30.0	15.8	27.3	30.0
Nominal intermittent torque (S2 - 15 minutes)	Nm	19.7	34.1	48.0	27.6	47.8	48.0

Motor data				Connection details		
Motor		PBL86-55 48 V	PBL86-80 48 V	Lead colour	Lead gauge	Function
Part number		776624	776625	Red	UL1569/26 AWG	VCC
Nominal power	W	419	586	Black	UL1569/26 AWG	GND
Nominal voltage	V	48	48	Blue	UL1569/26 AWG	Hall A
Nominal speed	rpm	4000	4000	Green	UL1569/26 AWG	Hall B
Nominal continuous torque (S1)	Nm	1.00	1.40	White	UL1569/26 AWG	Hall C
Nominal intermittent torque (S2 - 15 minutes)	Nm	1.75	2.45	Red	UL1569/14 AWG	Phase U
Weight	Kg	3.20	4.20	Yellow	UL1569/14 AWG	Phase V
Length	mm	111	136	Black	UL1569/14 AWG	Phase W

Gearbox data				
Part number		735900	735901	735902
Ratio	:1	15	30	60
Max. continuous torque (S1) ¹	Nm	30.0	30.0	30.0
Max. intermittent torque	Nm	48.0	48.0	48.0
Efficiency	%	75	65	50
Max. axial load (dynamic)	N	600	600	600
Max. radial load, 12mm from flange	N	800	800	800
Weight	Kg	1.5	1.5	1.5
Gear material		Bronze	Bronze	Bronze

¹S1 duty cycle based on 3000rpm input speed

Combination accessories							
Brake	Part number	Encoder	Part Number	Controller	Part Number	Shaft extension	Part number
1.5 Nm	735914	Incremental	735912	SC 50/15	738950	GB12 shaft	735903
Mounting flange	781284						

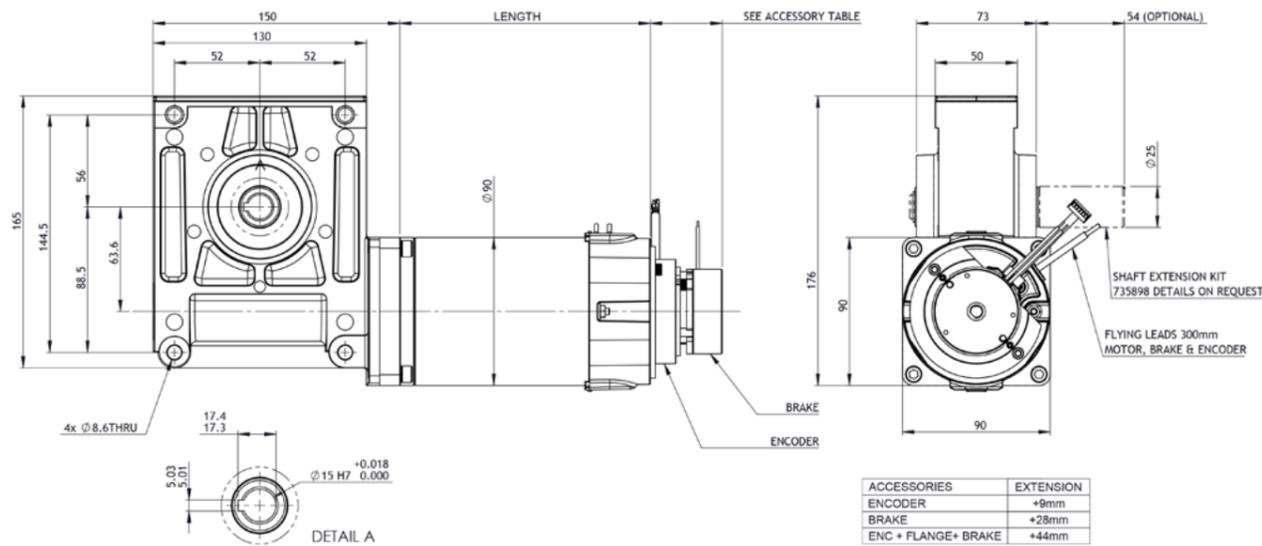
BRx90-GB9

PMDC right-angle geared motor

12 - 48 V // 157 - 283 W // 50 - 200 rpm // 8.5 - 58.5 Nm

Wheelchair lift solution

all dimensions in mm



Combination data							
Motor		BRx90-50	BRx90-50	BRx90-50	BRx90-75	BRx90-75	BRx90-75
Voltage	V	12 - 48	12 - 48	12 - 48	12 - 48	12 - 48	12 - 48
Nominal motor power	W	157 - 210	157 - 210	157 - 210	236 - 283	236 - 283	236 - 283
Gearbox ratio	:1	15	30	60	15	30	60
Nominal speed	rpm	200	100	50	200	100	50
Nominal continuous torque (S1)	Nm	8.5	15.1	26.1	11.5	20.3	35.1
Nominal intermittent torque (S2 - 15 minutes)	Nm	14.9	26.3	45.6	19.1	33.8	58.5

Motor data							
Motor		BRx90-50 12V	BRx90-50 24V	BRx90-50 48V	BRx90-75 12V	BRx90-75 24V	BRx90-75 48V
Part number		781102	781103	781104	781106	781107	781108
Nominal power	W	157	210	210	236	283	283
Nominal voltage	V	12	24	48	12	24	48
Nominal speed	rpm	3000	3000	3000	3000	3000	3000
Nominal continuous torque (S1)	Nm	0.50	0.67	0.67	0.90	0.90	0.90
Nominal intermittent torque (S2 - 15 minutes)	Nm	1.17	1.17	1.17	1.50	1.50	1.50
Weight	Kg	3.60	3.60	3.60	4.00	4.00	4.00
Length	mm	153	153	153	183	183	183

Gearbox data				
Part number		735894	735895	735896
Ratio	:1	15	30	60
Max. continuous torque (S1) ¹	Nm	50.0	50.0	50.0
Max. intermittent torque	Nm	80.0	80.0	80.0
Efficiency	%	85	75	65
Max. axial load (dynamic)	N	600	600	600
Max. radial load, 12mm from flange	N	800	800	800
Weight	Kg	2.3	2.3	2.3
Gear material		Composite	Composite	Composite

¹ S1 duty cycle based on 3000rpm input speed

Combination accessories							
Brake	Part number	Encoder	Part Number	Controller	Part Number	Shaft extension	Part number
1.5 Nm	735914	Incremental	735912	SC 50/15	738950	GB9 shaft	735898
Mounting flange	781279						

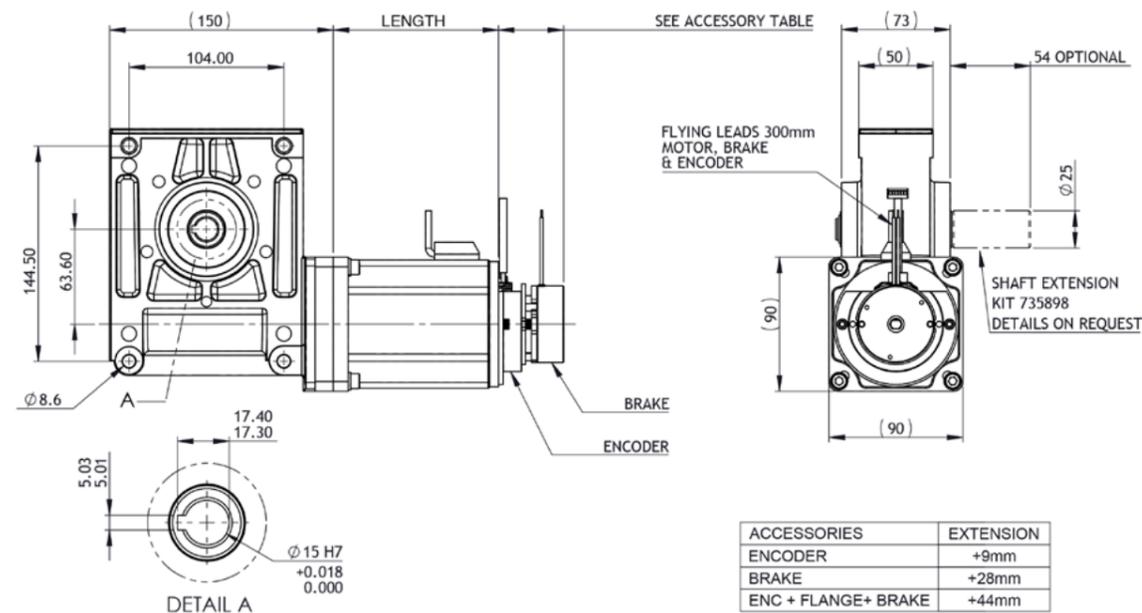
PBL86-GB9

BLDC right-angle geared motor

48 V // 419 - 586 W // 67 - 267 rpm // 12.8 - 80.0 Nm

Wheelchair lift solution

all dimensions in mm



Combination data							
Motor		PBL86-55	PBL86-55	PBL86-55	PBL86-80	PBL86-80	PBL86-80
Voltage	V	48	48	48	48	48	48
Nominal motor power	W	419	419	419	586	586	586
Gearbox ratio	:1	15	30	60	15	30	60
Nominal speed	rpm	267	133	67	267	133	67
Nominal continuous torque (S1)	Nm	12.8	22.5	39.0	17.9	31.5	50.0
Nominal intermittent torque (S2 - 15 minutes)	Nm	22.3	39.4	68.3	31.2	55.1	80.0

Motor data				Connection details		
Motor		PBL86-55 48 V	PBL86-80 48 V	Lead colour	Lead gauge	Function
Part number		776624	776625	Red	UL1569/26 AWG	VCC
Nominal power	W	419	586	Black	UL1569/26 AWG	GND
Nominal voltage	V	48	48	Blue	UL1569/26 AWG	Hall A
Nominal speed	rpm	4000	4000	Green	UL1569/26 AWG	Hall B
Nominal continuous torque (S1)	Nm	1.00	1.40	White	UL1569/26 AWG	Hall C
Nominal intermittent torque (S2 - 15 minutes)	Nm	1.75	2.45	Red	UL1569/14 AWG	Phase U
Weight	Kg	3.20	4.20	Yellow	UL1569/14 AWG	Phase V
Length	mm	111	136	Black	UL1569/14 AWG	Phase W

Gearbox data				
Part number		735894	735895	735896
Ratio	:1	15	30	60
Max. continuous torque (S1) ¹	Nm	50.0	50.0	50.0
Max. intermittent torque	Nm	80.0	80.0	80.0
Efficiency	%	85	75	65
Max. axial load (dynamic)	N	600	600	600
Max. radial load, 12mm from flange	N	800	800	800
Weight	Kg	2.3	2.3	2.3
Gear material		Composite	Composite	Composite

¹ S1 duty cycle based on 3000rpm input speed

Combination accessories							
Brake	Part number	Encoder	Part Number	Controller	Part Number	Shaft extension	Part number
1.5 Nm	735914	Incremental	735912	SC 50/15	738950	GB9 shaft	735898
Mounting flange	781284						

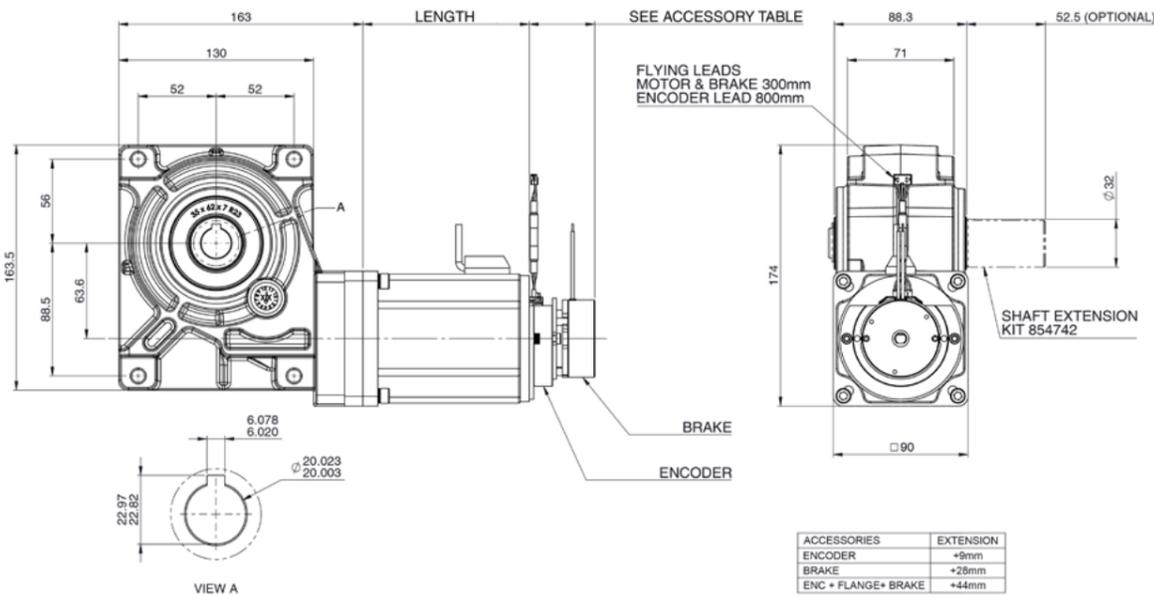
PBL86-55-GB65

BLDC right-angle geared motor

48 V // 419 W // 25 - 200 rpm // 17.1 - 133.0 Nm

Wheelchair lift solution

all dimensions in mm



Combination data					
Motor		PBL86-55	PBL86-55	PBL86-55	PBL86-55
Voltage	V	48	48	48	48
Nominal motor power	W	419	419	419	419
Gearbox ratio	:1	20	40	80	120
Nominal speed	rpm	200	100	50	33
Nominal continuous torque (S1)	Nm	17.1	32.3	57.0	74.1
Nominal intermittent torque (S2 - 15 minutes)	Nm	29.9	56.5	99.8	129.7

Motor data		Connection details		
Motor	PBL86-55 48 V	Lead colour	Lead gauge	Function
Part number	776624	Red	UL1569/26 AWG	VCC
Nominal power	W 419	Black	UL1569/26 AWG	GND
Nominal voltage	V 48	Blue	UL1569/26 AWG	Hall A
Nominal speed	rpm 4000	Green	UL1569/26 AWG	Hall B
Nominal continuous torque (S1)	Nm 1.00	White	UL1569/26 AWG	Hall C
Nominal intermittent torque (S2 - 15 minutes)	Nm 1.75	Red	UL1569/14 AWG	Phase U
Weight	Kg 3.20	Yellow	UL1569/14 AWG	Phase V
Length	mm 111	Black	UL1569/14 AWG	Phase W

Gearbox data					
Part number		854060	853270	827936	827934
Ratio	:1	20	40	80	120
Max. continuous torque (S1) ¹	Nm	120.0	120.0	120.0	120.0
Max. intermittent torque	Nm	300.0	300.0	300.0	300.0
Efficiency	%	86	81	71	62
Max. axial load (dynamic)	N	1750	1750	1750	1750
Max. radial load, 12mm from flange	N	2335	2335	2335	2335
Weight	Kg	3.5	3.5	3.5	3.5
Gear material ²		S / B	S / B	S / B	S / B

¹ S1 duty cycle based on 3000rpm input speed ² Gear material: S = Steel / B = Bronze

Combination accessories						
Brake	Part number	Encoder	Part Number	Controller	Part Number	Shaft extension
1.5 Nm	735914	Incremental	735912	SC 50/15	738950	GB65 shaft
Mounting flange	781284					854742

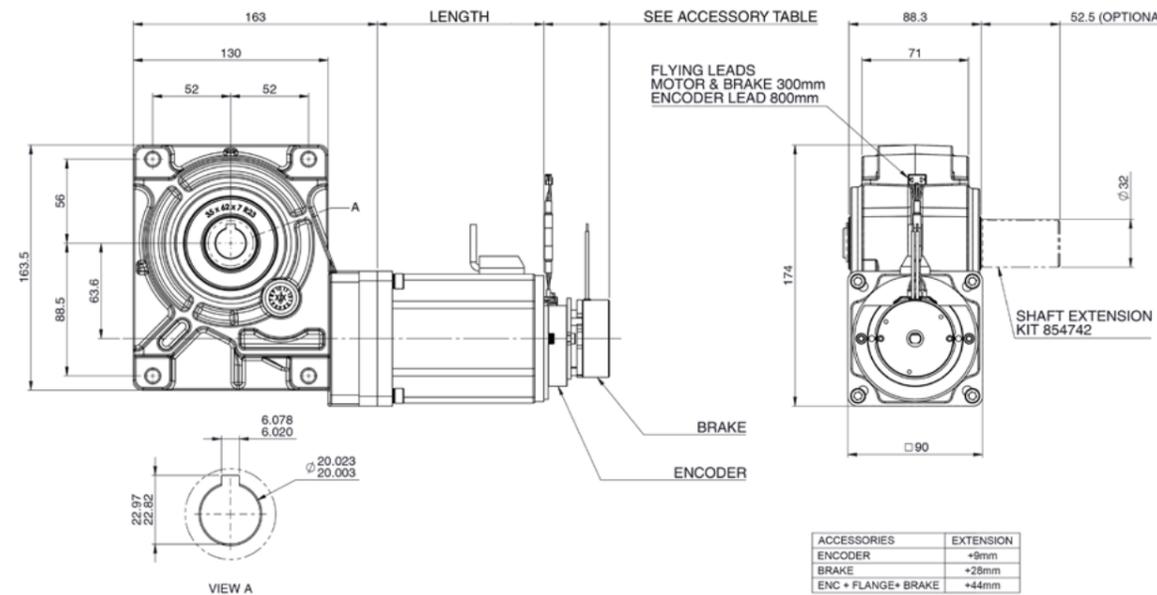
PBL86-80-GB65

BLDC right-angle geared motor

48 V // 586 W // 25 - 200 rpm // 23.9 - 186.2 Nm

Wheelchair lift solution

all dimensions in mm



Combination data					
Motor		PBL86-80	PBL86-80	PBL86-80	PBL86-80
Voltage	V	48	48	48	48
Nominal motor power	W	586	586	586	586
Gearbox ratio	:1	20	40	80	120
Nominal speed	rpm	200	100	50	33
Nominal continuous torque (S1)	Nm	23.9	45.2	79.8	103.7
Nominal intermittent torque (S2 - 15 minutes)	Nm	41.9	79.1	139.7	181.5

Motor data		Connection details		
Motor	PBL86-80 48 V	Lead colour	Lead gauge	Function
Part number	776625	Red	UL1569/26 AWG	VCC
Nominal power	W 586	Black	UL1569/26 AWG	GND
Nominal voltage	V 48	Blue	UL1569/26 AWG	Hall A
Nominal speed	rpm 4000	Green	UL1569/26 AWG	Hall B
Nominal continuous torque (S1)	Nm 1.40	White	UL1569/26 AWG	Hall C
Nominal intermittent torque (S2 - 15 minutes)	Nm 2.45	Red	UL1569/14 AWG	Phase U
Weight	Kg 4.20	Yellow	UL1569/14 AWG	Phase V
Length	mm 136	Black	UL1569/14 AWG	Phase W

Gearbox data					
Part number		854060	853270	827936	827934
Ratio	:1	20	40	80	120
Max. continuous torque (S1) ¹	Nm	120.0	120.0	120.0	120.0
Max. intermittent torque	Nm	300.0	300.0	300.0	300.0
Efficiency	%	86	81	71	62
Max. axial load (dynamic)	N	1750	1750	1750	1750
Max. radial load, 12mm from flange	N	2335	2335	2335	2335
Weight	Kg	3.5	3.5	3.5	3.5
Gear material ²		S / B	S / B	S / B	S / B

¹ S1 duty cycle based on 3000rpm input speed ² Gear material: S = Steel / B = Bronze

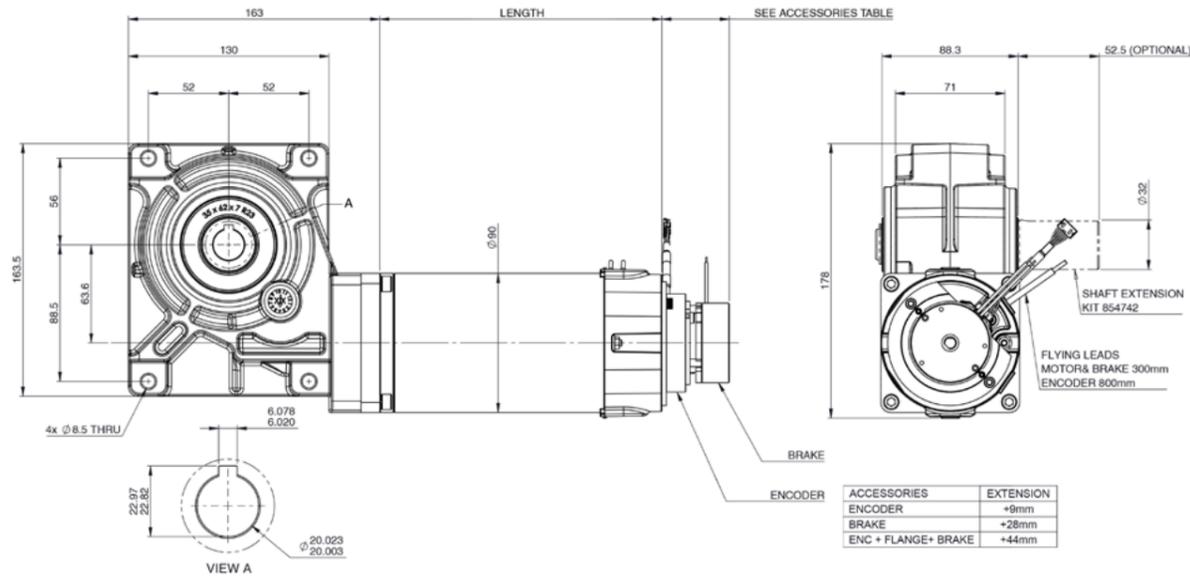
Combination accessories						
Brake	Part number	Encoder	Part Number	Controller	Part Number	Shaft extension
1.5 Nm	735914	Incremental	735912	SC 50/15	738950	GB65 shaft
Mounting flange	781284					854742

BRx90-50-GB65 PMDC right-angle geared motor

12 - 48 V // 157 - 210 W // 19 - 150 rpm // 11.5 - 88.9 Nm

Wheelchair lift solution

all dimensions in mm



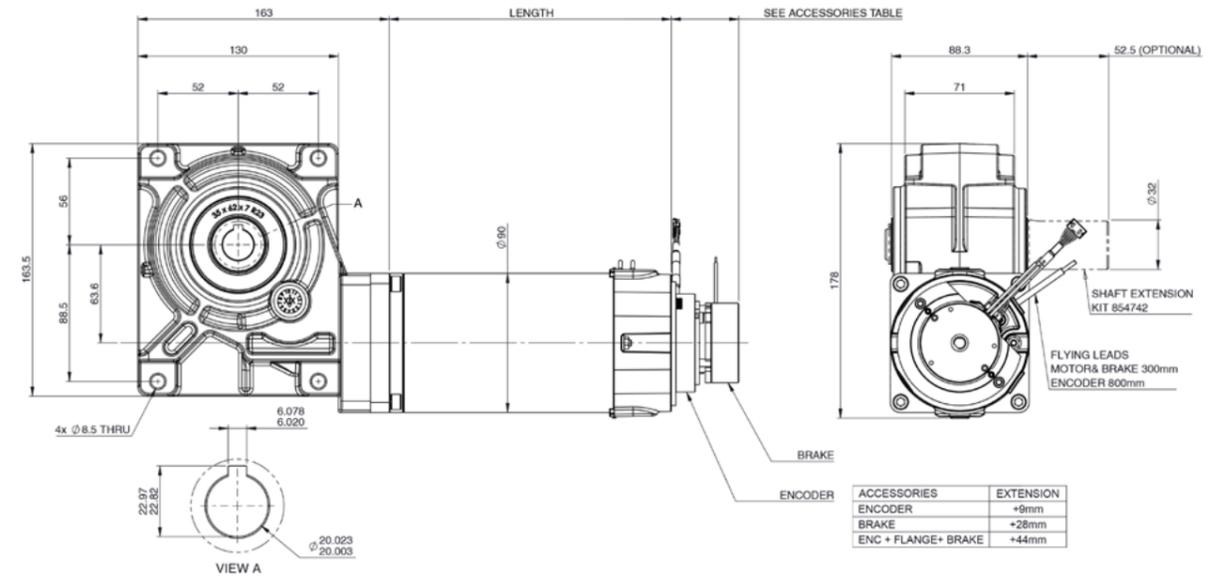
ACCESSORIES	EXTENSION
ENCODER	+9mm
BRAKE	+28mm
ENC + FLANGE+ BRAKE	+44mm

BRx90-75-GB65 PMDC right-angle geared motor

12 - 48 V // 236 - 283 W // 19 - 150 rpm // 15.4 - 114.0 Nm

Wheelchair lift solution

all dimensions in mm



ACCESSORIES	EXTENSION
ENCODER	+9mm
BRAKE	+28mm
ENC + FLANGE+ BRAKE	+44mm

Combination data

Motor	BRx90-50	BRx90-50	BRx90-50	BRx90-50	BRx90-50
Voltage	V 12 - 48	12 - 48	12 - 48	12 - 48	12 - 48
Nominal motor power	W 157 - 210	157 - 210	157 - 210	157 - 210	157 - 210
Gearbox ratio	:1 20	40	80	120	160
Nominal speed	rpm 150	75	38	25	19
Nominal continuous torque (S1)	Nm 11.5	21.6	38.2	49.6	50.9
Nominal intermittent torque (S2 - 15 minutes)	Nm 20.0	37.8	66.7	86.7	88.9

Motor data

Motor	BRx90-50 12V	BRx90-50 24V	BRx90-50 48V
Part number	781102	781103	781104
Nominal power	W 157	210	210
Nominal voltage	V 12	24	48
Nominal speed	rpm 3000	3000	3000
Nominal continuous torque (S1)	Nm 0.50	0.67	0.67
Nominal intermittent torque (S2 - 15 minutes)	Nm 1.17	1.17	1.17
Weight	Kg 3.60	3.60	3.60
Length	mm 153	153	153

Gearbox data

Part number	854060	853270	827936	827934	827943
Ratio	:1 20	40	80	120	160
Max. continuous torque (S1) ¹	Nm 120.0	120.0	120.0	120.0	120.0
Max. intermittent torque	Nm 300.0	300.0	300.0	300.0	300.0
Efficiency	% 86	81	71	62	48
Max. axial load (dynamic)	N 1750	1750	1750	1750	1750
Max. radial load, 12mm from flange	N 2335	2335	2335	2335	2335
Weight	Kg 3.5	3.5	3.5	3.5	3.5
Gear material ²	S / B	S / B	S / B	S / B	S / B

¹ S1 duty cycle based on 3000rpm input speed ² Gear material: S = Steel / B = Bronze

Combination accessories

Brake	Part number	Encoder	Part Number	Controller	Part Number	Shaft extension	Part number
1.5 Nm	735914	Incremental	735912	SC 50/15	738950	GB65 shaft	854742
Mounting flange	781279						

Combination data

Motor	BRx90-75	BRx90-75	BRx90-75	BRx90-75	BRx90-75
Voltage	V 12 - 48	12 - 48	12 - 48	12 - 48	12 - 48
Nominal motor power	W 236 - 283	236 - 283	236 - 283	236 - 283	236 - 283
Gearbox ratio	:1 20	40	80	120	160
Nominal speed	rpm 150	75	38	25	19
Nominal continuous torque (S1)	Nm 15.4	29.1	51.3	66.7	68.4
Nominal intermittent torque (S2 - 15 minutes)	Nm 25.7	48.5	85.5	111.2	114.0

Motor data

Motor	BRx90-75 12V	BRx90-75 24V	BRx90-75 48V
Part number	781106	781107	781108
Nominal power	W 236	283	283
Nominal voltage	V 12	24	48
Nominal speed	rpm 3000	3000	3000
Nominal continuous torque (S1)	Nm 0.90	0.90	0.90
Nominal intermittent torque (S2 - 15 minutes)	Nm 1.50	1.50	1.50
Weight	Kg 4.00	4.00	4.00
Length	mm 183	183	183

Gearbox data

Part number	854060	853270	827936	827934	827943
Ratio	:1 20	40	80	120	160
Max. continuous torque (S1) ¹	Nm 120.0	120.0	120.0	120.0	120.0
Max. intermittent torque	Nm 300.0	300.0	300.0	300.0	300.0
Efficiency	% 86	81	71	62	48
Max. axial load (dynamic)	N 1750	1750	1750	1750	1750
Max. radial load, 12mm from flange	N 2335	2335	2335	2335	2335
Weight	Kg 3.5	3.5	3.5	3.5	3.5
Gear material ²	S / B	S / B	S / B	S / B	S / B

¹ S1 duty cycle based on 3000rpm input speed ² Gear material: S = Steel / B = Bronze

Combination accessories

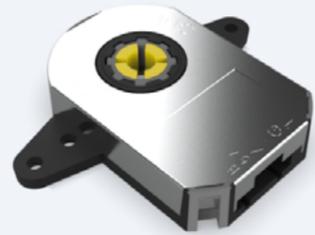
Brake	Part number	Encoder	Part Number	Controller	Part Number	Shaft extension	Part number
1.5 Nm	735914	Incremental	735912	SC 50/15	738950	GB65 shaft	854742
Mounting flange	781279						

Modular Accessories

Fine tune your configuration

Here at Parvalux, we appreciate that sometimes it's the small things that can really make a difference. That's why we offer a range of accessories to enable more precise control of your motor-gearbox system.

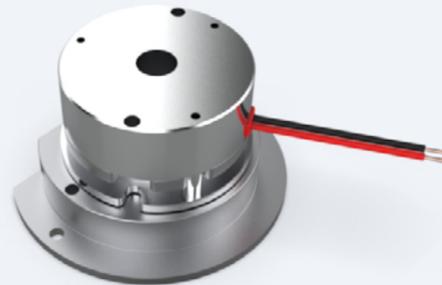
💡 Our 1.5 Nm brake can be used on our PBL60, PBL70, and PBL86 brushless motors, and our BRx63, BRx70, and BRx90 brushed motors.



Encoders

Add our incremental encoder to your modular configuration to enable further control to the power supply of your system.

Our incremental encoder offers 48 - 2048 PPR, 6.0 mA of current consumption, and fits seamlessly to the rear of the PMDC and BLDC motors within the modular range.



Brakes

Adding a brake to your modular configuration couldn't be easier. Mounting directly to the back of the motor, or onto a mounting flange that fits around the encoder when needed, our 1.5 Nm brake adds that extra reassurance when holding a load on your system.

Currently, the 1.5 Nm brake is only suitable for a few motors within the modular range, however, we plan to extend our brake range in the near future.



Shafts

Our current range of modular gearboxes are supplied with a hollow shaft as standard; however, we also offer shaft extension kits for both our GB9 and GB12 gearboxes.

Secured through a keyway and slot, our shaft extension kits offer a quick-fit solution where a hollow shaft isn't quite right for your application.



Controllers

Intelligent motion control can extend the possibilities of your configuration.

The Parvalux SC 50/15 controller has been developed in conjunction with our parent company, maxon, and integrates seamlessly with the PMDC and BLDC motors within the modular range.

Standard range

With selected motor voltages and speeds, as well as specific gear ratios offered on our modular gearboxes, we recognise that the output performance of our modular range may not meet your exact specification - for instances such as these, our standard range of products are on-hand for applications outside of our modular capabilities.

Our standard range includes a wider selection of PMDC, BLDC, and AC motors - as well as a range of right-angle and inline gearboxes. Offering a wider range of options for each product type, including variances in motor voltage and output speed, as well as a greater number of ratios for the gearbox range, the standard range extends our capabilities where the modular range can not currently meet requirements.

The tables below shows the performance range of each product type.

Motor range		BLDC	PMDC	AC
Voltage	V	12 - 48	12 - 220	115 - 400
Output speed	rpm	3000 - 4000	1500 - 4500	50 - 60
Power	W	110 - 147	15 - 236	1400 - 3400
Continuous torque	Nm	0.35	0.05 - 0.90	8 - 250
Intermittent torque	Nm	0.60	0.08 - 1.50	0.05 - 1.30

Gearbox range		Right-angle	Inline
Continuous torque	Nm	2.0 - 120.0	7.0 - 74.0
Intermittent torque	Nm	3.2 - 300.0	7.0 - 100.0



Semi-custom design

We also a wide range of semi-custom options for our standard range. This is includes modifications in shaft length, diameter and position, to special windings for alterations in voltage and output speed.

Our team of engineers can quickly customise any aspect of your product to perfectly suit your desired application - a number of our customisation options are shown below:

- Shaft modifications
- Improved IP rating
- Custom paint finish
- Alternate mounting options
- Accessories

Fully custom design

Where possible, our sales team will always attempt to offer a standard solution, even if slightly customised, to meet your applications requirements. However, sometimes a standard solution wont quite meet the expectations of your final product.

In times such as these, our experienced team of expert design engineers are on-hand to design and prototype a fully custom solution, from scratch, to met your exact specification. Whether it's fitting your motor-gearbox inside the constraints of your chassis, increasing torque or fine-tuning the output speed of your solution, our engineers our well-versed in producing custom design solutions.

Our team includes some of the brightest engineering minds, who work alongside project managers and product specialists, to ensure that Parvalux remains at the cutting edge of electric geared motor design and manufacturing.

Please get in touch with your local sales contact, found on the next page, to discuss the possibilities available in the design and manufacture of your geared-motor solution.

Made in the UK...

...Available Worldwide

Parvalux products are used in a range of different industries all over the world, so it's important that we can support you wherever you may be.

Our global network ensures that we can answer your questions quickly and clearly, and, of course, get your order to you as soon as possible.

America

 **USA (East Coast)**
maxon precision motors, inc.
125 Dever Drive, Taunton, MA 02780, USA
sales.us@maxongroup.com // +1/508-916 6620

 **USA (West Coast)**
maxon precision motors, inc.
2860 Zanker Rd. Suite 107, San Jose, CA 95134, USA
info.us@maxongroup.com // +1/650-524-8822

 **Mexico**
maxon mexico
Av. de las Americas 1501, Piso 21, int. 2130, Col. Providencia 44630, Guadalajara, Jalisco, Mexico
ventas.mx@maxongroup.com // +52 33 2101 2540

 **Brazil**
Treffer Ltda. (maxon sales agent)
AV. Protásio de Oliveira Penna 366 / 101, Cep 30575-360 Bairro Buritis, Belo Horizonte - MG, Brazil
motores@treffer.com.br // +55 31 3378 6222

 **Canada**
Electromate Inc. (maxon sales agent)
6221 Highway 7, Unit #15, Vaughan, Ontario L4H 0K8, Canada
sales@electromate.com // +1/877 737 8698

Europe / Middle-East / Africa

 **Austria, Hungary, Slovenia, Romania, Croatia, Serbia, and Bulgaria**
Kwapil & Co GmbH
Kammelweg 9, 1210 Wien, Austria
verkauf@kwapil.com // +43/1 - 278 85 85

 **Czech Republic and Slovakia**
Kwapil & Co. Gesellschaft m.b.H
Hlavní 1054/131, 624 00 Brno, Czech Republic
sales@kwapil.com // +420 541 211 538

 **Denmark**
DJ Stork Drives ApS
Naverland 2, 10., 2600 Glostrup, Denmark
ulrik.eriksen@storkdrives.com // +45 8988 2416

 **Finland, Estonia, Latvia, and Lithuania**
DJ Stork Drives OY
Mököistenkatu 2, 241 00 Salo, Finland
jyrki.leinonen@storkdrives.fi // +358 45 11 06 433

 **France**
maxon France
201 - 715 rue du Chat Botté, 01700 Beignost, France
contact.fr@maxongroup.com // +33/472 - 018 300

 **Germany**
maxon motor gmbh
Truderinger Strasse 210, 81825 München, Germany
sales.de@maxongroup.com // +49/89 - 42 04 93 - 0

 **Great Britain and Ireland**
maxon motor uk Ltd.
maxon House, Hogwood Lane, Finchampstead, Berkshire, RG40 4QW, UK
sales.uk@maxongroup.com // +44 (0) 1189 733337

 **Israel**
maxon motor Israel Ltd.
Leshem Industrial Park 6, P.O. Box 3094, Caesarea 3079870, Israel
sales.il@maxongroup.com // +972 74 749 0888

 **Italy**
maxon motor italia S.r.l.
Società Unipersonale, Via Sirtori 35, 20017 Rho MI, Italy
sales.it@maxongroup.com // +39 02 93580588

Europe / Middle-East / Africa

 **Netherlands, Belgium, and Luxembourg**
maxon motor benelux bv
Josink Kolkweg 38, 7545 PR Enschede, Netherlands
sales.nl@maxongroup.com // +31 53 744 07 44

 **Norway**
DJ Stork Drives AS
Garverivegen 6, 2740 Roa, Norway
arve.stensrud@storkdrives.com // +47/6199 3001

 **Poland**
maxon Polska sp. z o.o
Poznań Technology and Industry Park, 28 Czerwca 1956 r. 404, 61 - 441 Poznań, Poland
sprzedaz@maxongroup.com // +48 618 800 830

 **Spain and Portugal**
maxon motor iberica
C/ Polo Norte N° 9, 28850 Torrejón de Ardoz, Spain
info.es@maxongroup.com // +34 916 564 973

 **Sweden and Iceland**
Stork Drives AB
Box 1158, Solna Strandväg 116, 171 54 Solna, Sweden
info@storkdrives.se // +46/8 - 635 60 00

 **Switzerland**
maxon Switzerland ag
Industriestrasse 23, 6055 Alpnach, Switzerland
sales.ch@maxongroup.com // +41 (0) 41 662 95 95

 **South Africa**
DNH Technologies
P.O. Box 31151, 1684 Kyalami, South Africa
info@dnhtrade.co.za // +27 11 468 2722

 **Turkey**
Ensatek Muhendisilik Otomsyon Sanayi Ticaret Limited Sirketi
Cevizli Mah. Mustafa Kemal Cad. No: 66/B, Kat: 13 D : 88 34865 Kartal/Istanbul, Turkey
ensatek@ensatek.com.tr // +90 216 510 88 64

Pacific

 **Australia and New Zealand**
maxon motor australia Pty Ltd
Unit 1, 12-14 Beaumont Road, Mount Kuring-Gai, NSW 2080, Australia
sales.au@maxongroup.com // +61 2 9457 7477

Asia

 **China**
maxon motor (Suzhou) Co., Ltd.
5F, Block 1 No. 1128, East Jiangxing Road, Wujiang Economic Developing Zone, 215200 Suzhou, Jiangsu Province, China
sales.cn@maxongroup.com // +86/512-8207 9287

 **India**
maxon precision motor India Pvt. Ltd.
Niran Arcade, No. 563/564, New BEL Road, RMV 2nd Stage, Bangalore - 560 094, India
sales.in@maxongroup.com // +91 80417 34132

 **Japan**
maxon Japan
5-1-15 Shinjuku, Shinjuku-Ku, Tokyo 160-0022, Japan
sales.jp@maxongroup.com // +81/3 - 3350 42 61

 **South Korea**
maxon motor Korea Co., Ltd.
27, Banpo-daero 14-gil, Seocho-Gu, Seoul, South Korea 06652
info.kr@maxongroup.com // +82 2 3486 3441

 **Singapore**
maxon motor SEA Pte. Ltd.
33 UBI Avenue 3 #08-40, Singapore 408868
admin.sg@maxongroup.com // +65/6950 4628

 **Taiwan**
maxon motor Taiwan Co. Ltd.
6F.-7 No. 16, Lane 609, Sec. 5, Chongxin Rd., Sanchong Dist., New Taipei City 241, Taiwan (R.O.C.)
sales.tw@maxongroup.com // +886-2-2999-3558

 **Hong Kong**
Servo Dynamics (H.K) Ltd.
Rm. 1504, 15/F, Yuen Long Trading Centre, 33 Wang Yip Street West, Yuen Long, N.T., Hong Kong
sales.servodynamics.com.hk // +852/2409 9986

 **Malaysia**
Servo Engineering Sdn. Bhd.
No. 15 G, Ground Floor, Highway Center, Jalan 51/205, 46050 Petaling Jaya, Selangor Darul Ehsan, Malaysia
sales-rfq@servo.my // +603-7782 3540

 **Thailand**
Servo Dynamics (Thailand) Co. LTD
52/210 Moo 2, Soi Wadnamdaeng, Srinakarini Rd. 10540 Bangkaew Bangplee Samutprakarn, Thailand
dmk@servoline.com // +66 2 753 56 25

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