

# Lenze Simplabloc electromagnetic clutch brakes

14.800.□□.11.1

B3 foot mounted

High operating frequency without stopping the motor

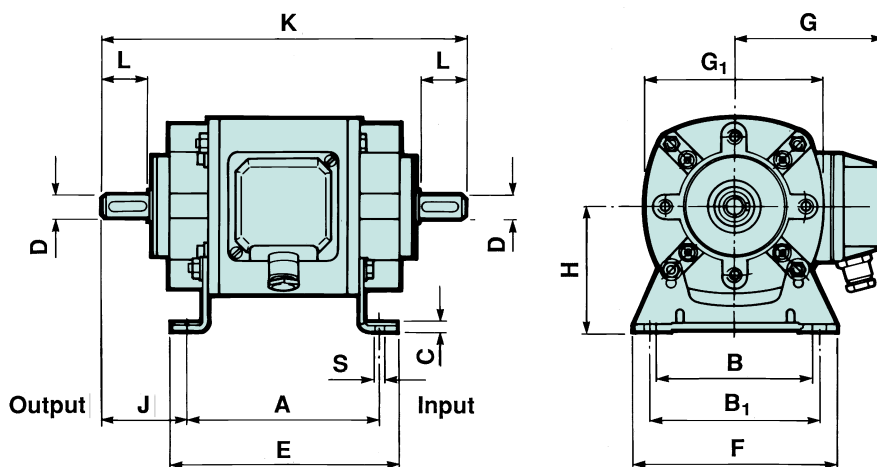
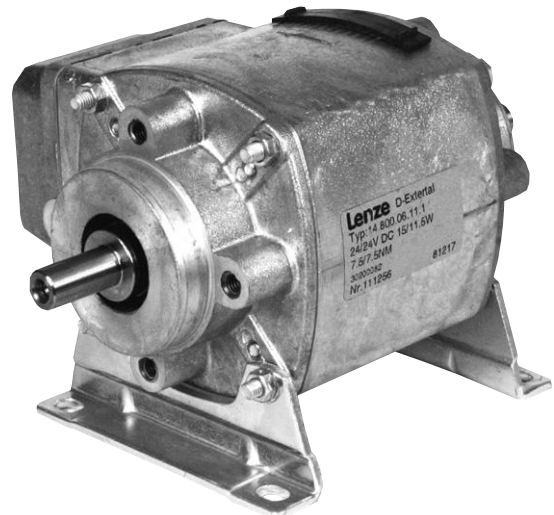
Fast response times

Cycle times as short as 20ms possible with Simplapower fast excitation units

Simple and quick wear adjustment in-situ

No running-in required

Terminal box rotates in 90° steps



Model	Torques Clutch/brake Nm	Max coil power W	Stockline No.	A	B	B <sub>1</sub>	C	D k6	E	F	G	G <sub>1</sub>	H*	J	K	L	S	Wt. kg
14.800.06.11.1	7.5	15	<b>A2-204 404</b>	100	80	85	3	11	115	100	89	90	63	41.5	183	23	7	3
14.800.08.11.1	15	20	<b>A2-208 718</b>	120	105	110	3	14	140	130	95	112	71	55	230	30	9	4.5
14.800.10.11.1	30	28	<b>A2-135 626</b>	140	130	140	4	24	165	160	110	140	90	80	300	50	9	8
14.800.12.11.1	60	35	<b>A2-208 848</b>	160	150	160	5	28	184	180	136	167	112	92	344	60	11	13
14.800.16.11.1	120	50	<b>A2-231 710</b>	185	185	195	6	38	215	223	158	210	132	117.5	420	80	13	25

Keys to BS 4235  
Other shaft sizes on request.

\*Alternative feet heights – see facing page

Flanges can be fitted to the threads provided. On the input side B5 flanges are available, for example to suit Lenze Simplabloc drives. On the output side either B5 or B14 flanges can be supplied. See end of section for dimensions.

## Ordering example

(10) off Simplabloc foot mounted clutch brakes model 14.800.10.11.1, 24mm shaft

Stockline No. **A2-135 626**

Size	Fr (N)
06	320
08	400
10	600
12	800
16	1250

# Lenze Simplabloc® clutch brakes

## Special face mounting

- Can allow shorter build length
- Reduced mounting diameter
- Saves the cost of flanges or feet

All Simplabloc units have provision for special face mounting on the output side (model 14.800.□□.11.1 has an identical input side also).

On the flange mounted models the special face mounting is exposed by removing the output flange.

Size	a	b hs	c	d	e	l	s
06	90	52	10	$\frac{11}{14}$	67	$\frac{35}{42}$	M6
08	112	65	10	$\frac{14}{19}$	90	$\frac{42}{52}$	M8
10	140	78	19	24	115	72	M10
12	167	78	20	28	115	82	M10
16	210	98	20	38	145	102	M12

## Foot mounting/motorised units

The Simplabloc model 14.800.□□.10.4 can be fitted with feet instead of the B14 flange. Details for ordering feet are given below. This allows a compact assembly of a motorised clutch brake. Suitable motors can be selected from the Simplabloc inputs and outputs table shown earlier. Two foot options are available to give different shaft heights:

Size	Option 1	Height mm	Option 2	Height mm
06	<b>A2-165 741</b>	63	<b>A2-103 305</b>	71
08	<b>A2-103 399</b>	71	<b>A2-165 75X</b>	80
10	<b>A2-165 768</b>	80	<b>A2-103 908</b>	90
12	<b>A2-165 776</b>	100	<b>A2-165 776</b>	112
16	<b>A2-109 700</b>	112	<b>A2-109 700</b>	132

Clutch brakes 14.800.□□.11.1 are normally supplied to option 1

Stockline numbers in black – delivery time on request.

## B14 output flanges

Size	Frame size/Dia	Stockline No.
06	71/105	<b>A2-204 605</b>
08	80/160	<b>A2-208 83X</b>
10	90/160	<b>A2-208 383</b>
12	100/160	<b>A2-208 383</b>

B5 flanges also available – details on request

## Enclosure protection

### Electrical

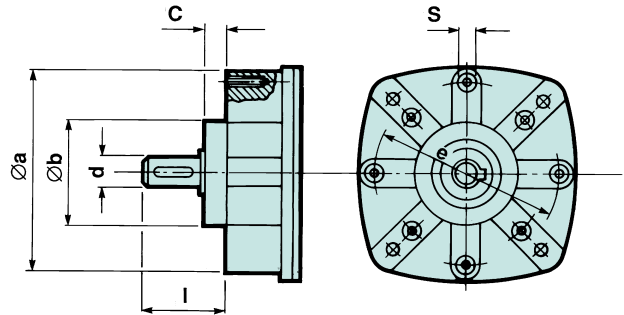
All Simplabloc units meet IP44. An optional terminal box is available to give IP55.

### Mechanical

Models 14.800 meet IP44. However, when shielded from direct hosed water, the 14.800 units can be considered equivalent to IP55.

## Input speeds

For good wear life it is recommended that the input speed to these clutch brakes be limited to 1500 r/min. The maximum permissible speed is 3000 r/min.



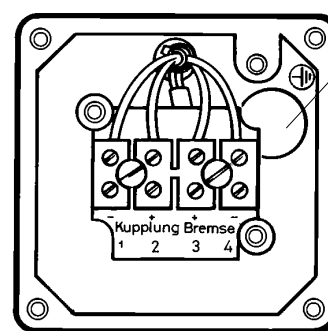
## Electrical supply and switching

Simplabloc clutch brakes are controlled by a 24V d.c. signal. Power supplies such as the Simplavolt d.c. power units can be used.

Cycle times of 200 milliseconds or less are possible using relays to switch power between clutch and brake.

Details of response times are available on request. Faster cycle times up to 25 per second are possible on 14.800 models using Lenze Simpower fast excitation units.

## Terminal box layout

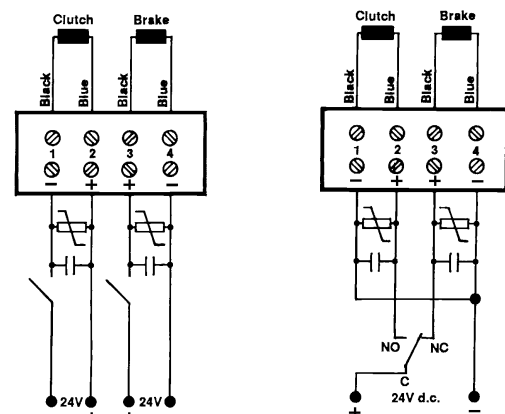


Air gap (SLü) inspection hole

Terminals 1 & 2 are for the clutch

Terminals 3 and 4 are for the brake

The clutch and brake coils can be separately switched. However only one coil should be energised at a time to prevent 'fighting' between clutch and brake. Change-over switching is used to prevent this. Connecting the clutch coil with reverse polarity to the brake as shown gives fastest switching. Suppression may be required across coils as shown.



Separate switching

Changeover switching

# Lenze Simplabloc electromagnetic clutch brakes

14.800.□□.10.4

B14 face input and output

**A building block between motor and gearbox**

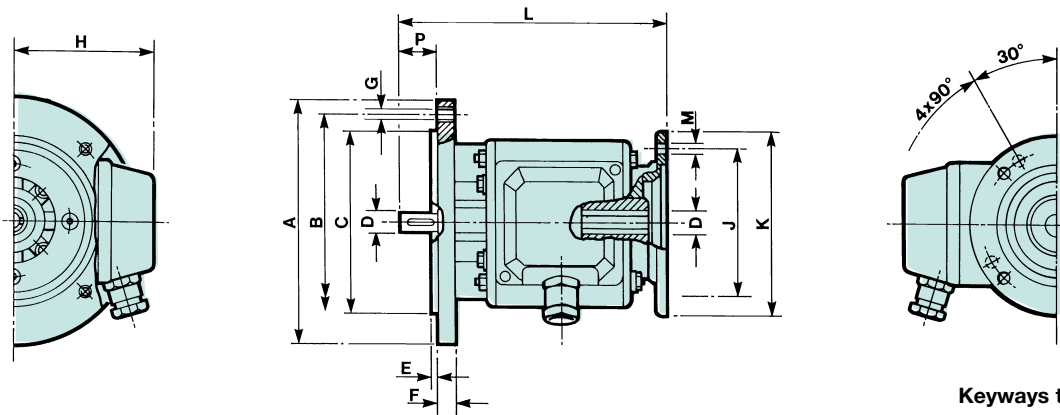
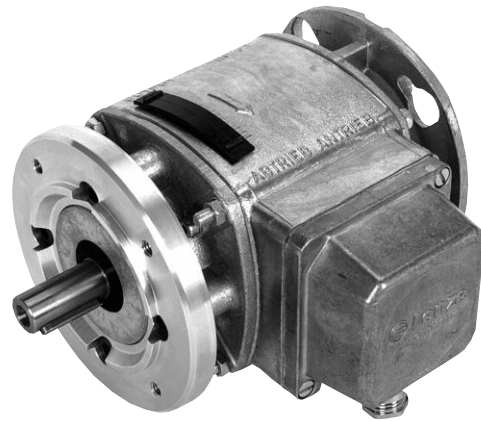
**B14 compact connections**

**No running-in required**

**Wear adjustment without dismantling**

**Allows high frequency indexing**

For guidance on motor inputs and gearbox outputs see the chart at the start of this Simplabloc section.



Keyways to BS 4235

Model B14 Output	Torques Clutch/brake Nm	Max coil power W	Input frame size design IM B14	Stockline No.	A	B	C	D	E	F	G	H	J	K	L	M	P	Wt. kg
							j7	k6/G7							(4x)			
14.800.06.10.4	7.5	15	71/C105	<b>A2-204 203</b>	105	85	70	14	3	12	4xM6	89	85	105	159	7	30	3.5
14.800.08.10.4	15	20	80/C120	<b>A2-208 750</b>	160	130	110	19	3	14	4xM8	95	100	120	196	7	40	5.5
14.800.10.10.4	30	28	90/C140	<b>A2-208 568</b>	160	130	110	24	3	17	4xM8	110	115	140	235	9	50	9
14.800.12.10.4	60	35	100/C160	<b>A2-208 880</b>	160	130	110	28	3	17	4xM8	136	130	160	271	9	60	14

Keys to BS 4235

Motor and gearbox connections are shown earlier in this Simplabloc section

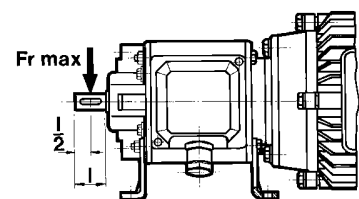
Inputs – check the 'C' face dimension on the motor, matches the clutch brake. For example the 80 frame motor should have a 'C' face, that is dimension K, of 120mm.

## Ordering example

(6) off Simplabloc B14 input and output clutch brakes, 80 frame, model 14.800.08.10.4.

Stockline No. **A2-208 750**

Size	Fr (N)
06	320
08	400
10	600
12	800
16	1250



Maximum shaft radial loads

A detailed bulletin on mounting and operating is available. Ask for Publication no. 127a

# Lenze Simplabloc electromagnetic clutch brakes

14.800.□□.12.3

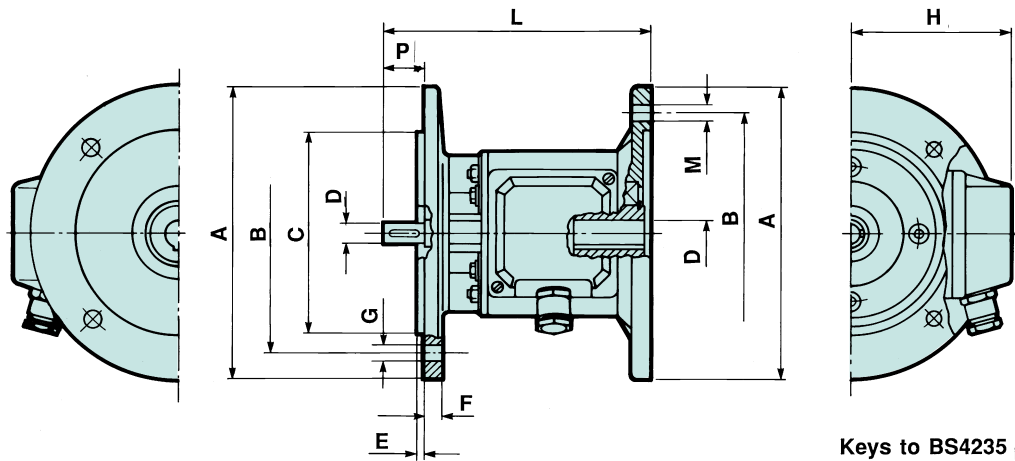
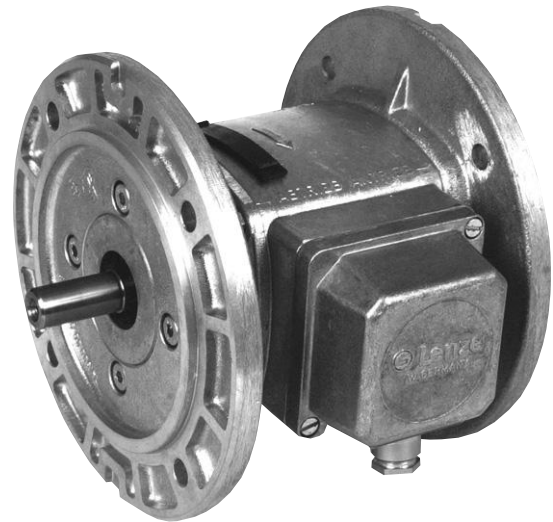
B5 flange input and output

Connects from B5 flange mounted motor to B5 flange input gearbox

Achieves frequent stop/start without loading the motor

Precision indexing and consistent stopping position

No running-in and simple maintenance



Keys to BS4235

Model	Torques Clutch/brake Nm	Max coil power W	Input frame size design B5	Stockline No.	A	B	C	D	E	F	G	H	L	M	P	Wt. kg
							j7	k6/G7			(4x)			(4x)		
14.800.06.12.3	7.5	15	71	<b>A2-135 504</b>	160	130	110	14	3.5	10	9	89	153	10	30	3.5
14.800.08.12.3	15	20	80	<b>A2-208 777</b>	200	165	130	19	3.5	9	11	95	194	11.5	40	5.5
14.800.10.12.3	30	28	90	<b>A2-135 669</b>	200	165	130	24	3.5	15	11	110	227	M10	50	9
14.800.12.12.3	60	35	100	<b>A2-208 900</b>	250	215	180	28	4	15	13.5	136	261	M12	60	14
14.800.16.12.3	120	50	132	<b>A2-231 690</b>	300	265	230	38	4	15	13.5	158	314	M12	80	26

## Other literature

Data sheets giving details of response times and full dimensions are available on request, also fitting and operating instructions.

## For other inputs and outputs

For each size one other shaft size is possible. Both input and output flanges can be unbolted and here again a second diameter is possible. The table below describes these non-standard options. Further details on request.

## Ordering example

(3) off Simplabloc clutch brakes with B5 input and output, 71 frame, model 14.800.06.12.3.

Stockline No. **A2-135 504**

Model	Inputs or outputs	
	Alternative shaft dia.	Alternative flange dia.
14.800.06	11	140
14.800.08	14	160
14.800.10	19	250
14.800.12	24	200
14.800.16	28	250