



B3 foot mounted

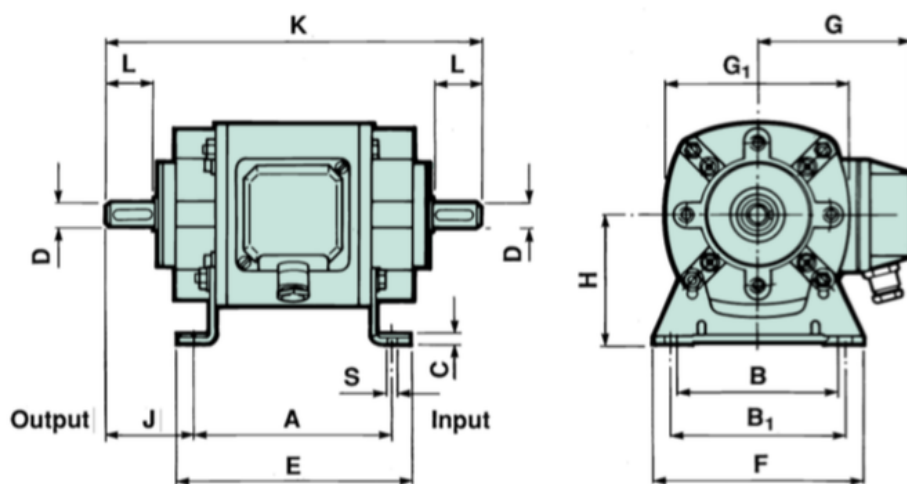
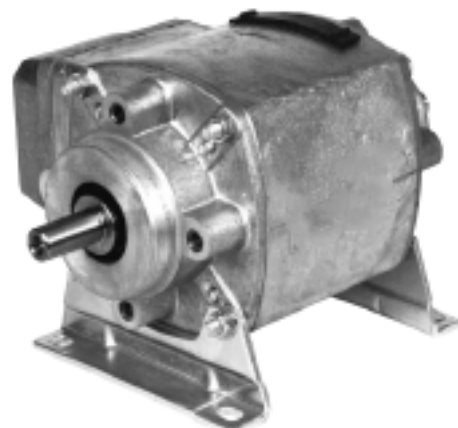
14.800.\_\_\_\_.11.1

## Simplatroll Replacement Electromagnetic Clutch Brakes

Our range of clutch/brakes gives maximum flexibility to machine drive systems.

### Key Features

- High operating frequency without stopping the motor
- Fast response times
- Cycle times as short as 20ms possible with fast excitation units
- Simple and quick wear adjustment in-situ
- No running-in required
- Terminal box rotates in 90° steps



| Model          | Torques<br>Clutch/brake<br>Nm | Max<br>coil<br>power<br>W | A   | B   | B <sub>1</sub> | C | D<br>k6 | E   | F   | G   | G <sub>1</sub> | H*  | J     | K   | L  | S  | Wt.<br>kg |
|----------------|-------------------------------|---------------------------|-----|-----|----------------|---|---------|-----|-----|-----|----------------|-----|-------|-----|----|----|-----------|
| 14.800.06.11.1 | 7.5                           | 15                        | 100 | 80  | 85             | 3 | 11      | 115 | 100 | 89  | 90             | 63  | 41.5  | 183 | 23 | 7  | 3         |
| 14.800.08.11.1 | 15                            | 20                        | 120 | 105 | 110            | 3 | 14      | 140 | 130 | 95  | 112            | 71  | 55    | 230 | 30 | 9  | 4.5       |
| 14.800.10.11.1 | 30                            | 28                        | 140 | 130 | 140            | 4 | 24      | 165 | 160 | 110 | 140            | 90  | 80    | 300 | 50 | 9  | 8         |
| 14.800.12.11.1 | 60                            | 35                        | 160 | 150 | 160            | 5 | 28      | 184 | 180 | 136 | 167            | 112 | 92    | 344 | 60 | 11 | 13        |
| 14.800.16.11.1 | 120                           | 50                        | 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 Simlabeled drives.

On the output side either B5 or B14 flanges can be supplied.  
See end of section for dimensions.

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



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# Simplatroll Replacement Electromagnetic Clutch Brakes

## Special face mounting

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

All 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<br>h <sub>s</sub> | c  | d        | e   | l        | s   |
|------|-----|---------------------|----|----------|-----|----------|-----|
| 06   | 90  | 52                  | 10 | 11<br>14 | 67  | 35<br>42 | M6  |
| 08   | 112 | 65                  | 10 | 14<br>19 | 90  | 42<br>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

Model 14.800.\_\_\_.10.4 can be fitted with feet instead of the B14 flange. 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<br>mm | Option 2   | Height<br>mm |
|------|------------|--------------|------------|--------------|
| 06   | A2-165 741 | 63           | A2-103 305 | 71           |
| 08   | A2-103 399 | 71           | A2-165 75X | 80           |
| 10   | A2-165 768 | 80           | A2-103 908 | 90           |
| 12   | A2-165 776 | 100          | A2-165 776 | 112          |
| 16   | A2-109 700 | 112          | A2-109 700 | 132          |

Clutch brakes 14.800.\_\_\_.11.1 are normally supplied to option 1

## B14 output flanges

| Size | Frame size/Dia |
|------|----------------|
| 06   | 71/105         |
| 08   | 80/160         |
| 10   | 90/160         |
| 12   | 100/160        |

B5 flanges also available upon request

## Enclosure protection

### Electrical

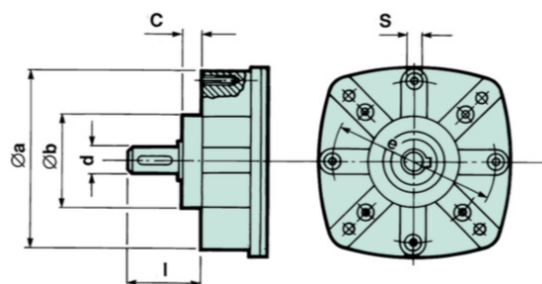
All units meet IP44. An optional terminal box is available to give IP55.

### 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

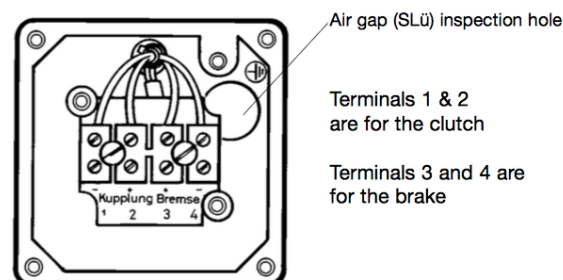
For good wear life it is recommended that the input speed to these clutch brakes be limited to 1500 r/min. The maximum permissible speed is 3000 r/min.



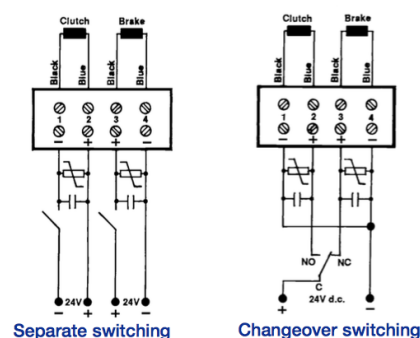
## Electrical supply and switching

Clutch brakes are controlled by a 24V d.c. signal. 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 fast excitation units. On the flange mounted models, the special face mounting is exposed by removing the output flange.

### Terminal box layout



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.



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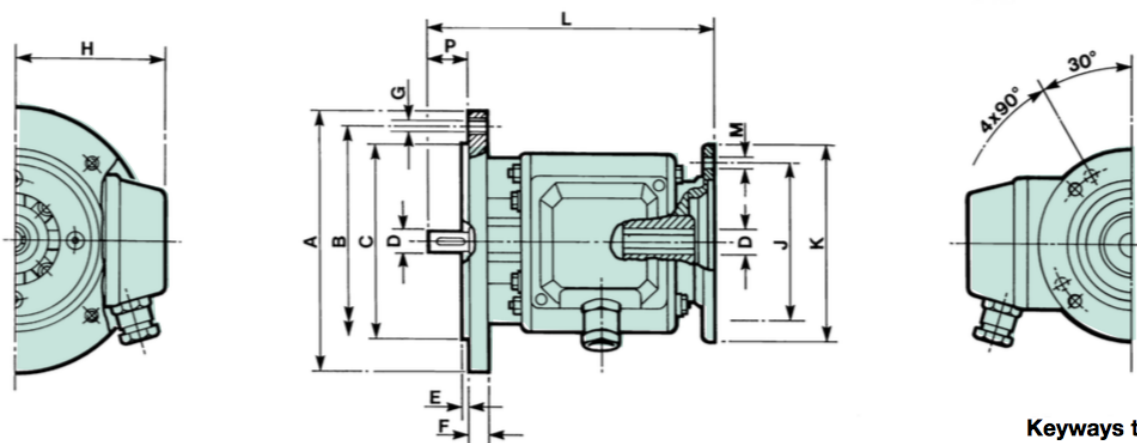
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## Simplatroll Replacement Electromagnetic Clutch Brakes

### Key Features

A building block between motor and gearbox  
B14 compact connections  
No running-in required  
Wear adjustment without dismantling  
Allows high frequency indexing



Keyways to BS 4235

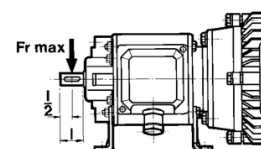
| Model<br>B14 Output | Torques<br>Clutch/brake<br>Nm | Max<br>coil<br>power<br>W | Input frame<br>size design<br>IM B14 | A   | B   | C   | D  | E | F  | G    | H   | J   | K   | L   | M<br>(4x) | P  | Wt.<br>kg |
|---------------------|-------------------------------|---------------------------|--------------------------------------|-----|-----|-----|----|---|----|------|-----|-----|-----|-----|-----------|----|-----------|
| 14.800.06.10.4      | 7.5                           | 15                        | 71/C105                              | 105 | 85  | 70  | 14 | 3 | 12 | 4xM6 | 89  | 85  | 105 | 159 | 7         | 30 | 3.5       |
| 14.800.08.10.4      | 15                            | 20                        | 80/C120                              | 160 | 130 | 110 | 19 | 3 | 14 | 4xM8 | 95  | 100 | 120 | 196 | 7         | 40 | 5.5       |
| 14.800.10.10.4      | 30                            | 28                        | 90/C140                              | 160 | 130 | 110 | 24 | 3 | 17 | 4xM8 | 110 | 115 | 140 | 235 | 9         | 50 | 9         |
| 14.800.12.10.4      | 60                            | 35                        | 100/C160                             | 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.

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



Maximum shaft radial loads



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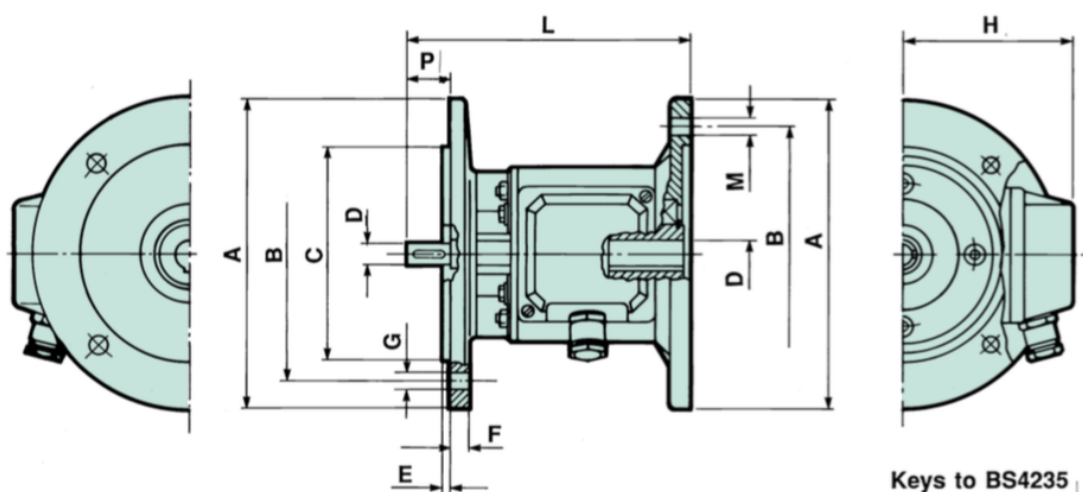
### Key Features

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<br>Clutch/brake<br>Nm | Max<br>coil<br>power<br>W | Input frame<br>size design<br>B5 | A   | B   | C   | D  | E   | F  | G    | H   | L   | M    | P  | Wt.<br>kg |
|----------------|-------------------------------|---------------------------|----------------------------------|-----|-----|-----|----|-----|----|------|-----|-----|------|----|-----------|
| 14.800.06.12.3 | 7.5                           | 15                        | 71                               | 160 | 130 | 110 | 14 | 3.5 | 10 | 9    | 89  | 153 | 10   | 30 | 3.5       |
| 14.800.08.12.3 | 15                            | 20                        | 80                               | 200 | 165 | 130 | 19 | 3.5 | 9  | 11   | 95  | 194 | 11.5 | 40 | 5.5       |
| 14.800.10.12.3 | 30                            | 28                        | 90                               | 200 | 165 | 130 | 24 | 3.5 | 15 | 11   | 110 | 227 | M10  | 50 | 9         |
| 14.800.12.12.3 | 60                            | 35                        | 100                              | 250 | 215 | 180 | 28 | 4   | 15 | 13.5 | 136 | 261 | M12  | 60 | 14        |
| 14.800.16.12.3 | 120                           | 50                        | 132                              | 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 to the right describes these non-standard options. Further details on request.

| 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                     |



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