



# RB11 and RB31 Switchboxes

# Description

The RB series switchboxes are for use with linear pneumatic actuators conforming to the NAMUR standard. The RB series provides switched electric or variable resistance outputs, relative to valve actuator position.

### **Applications**

The RB series switchboxes can be used with the following Spirax Sarco actuators using the fixing kit specified

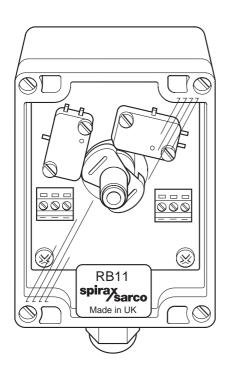
| Pneumatic linear types                            | Fixing kit | Weight |
|---|------------|--------|
| PN3000  |            |        |
| PN4000  | FK27       | 431g   |
| PN5100, PN5200, PN5300, PN5400, PN5500 and PN5600 | 1          |        |
| PN6100, PN6200, PN6300, PN6400, PN6500 and PN6600 | 1          |        |

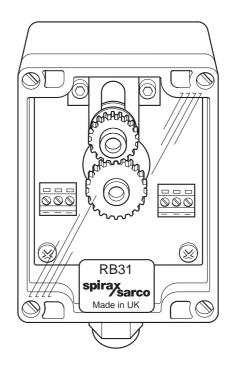
#### Technical data - RB11 (Electromechanical switch)

| •                          | •                           |
|----------------------------|-----------------------------|
| Enclosure rating           | IP65                        |
| Ambient temperature limits | -25°C to +70°C              |
| Housing material           | Black ABS                   |
| Cover material             | Clear ABS                   |
| Number of switches         | 2                           |
| Туре                       | V3 SPDT                     |
| Rating                     | 10 A at 250 Vac - Resistive |
| Rating                     | 6 A at 250 Vac - Inductive  |
| Contact material           | Silver plated               |
| Terminations               | Klippon                     |
| Electrical entry           | PG11                        |
| Weight                     | 247 g                       |
|                            |                             |

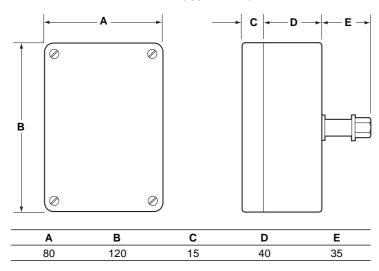
## Technical data - RB31 (Variable resistance feedback)

| Enclosure rating           | IP65               |
|----------------------------|--------------------|
| Ambient temperature limits | -25°C to +70°C     |
| Housing material           | Black ABS          |
| Cover material             | Clear ABS          |
| Gear material              | Delrin             |
| Resistance change          | 1 000 ohms nominal |
| Linearity and hysterisis   | ±10%               |
| Rating (at 70°C ambient)   | 0.25 W             |
| Travel                     | 20 mm              |
| Traver                     | 30 mm              |
| Terminations               | Klippon            |
| Electrical entry           | PG11               |
| Weight                     | 350 g              |





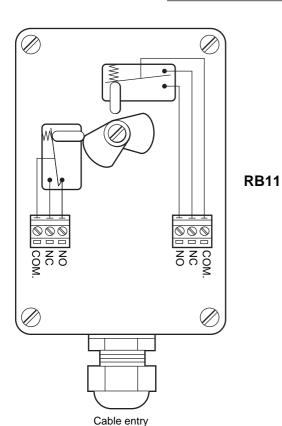
## Dimensions (approximate) in mm



RB31 gear identification
Standard units are available for 20 mm and 30 mm linear travel.
A table showing the combinations of gears is shown below:-

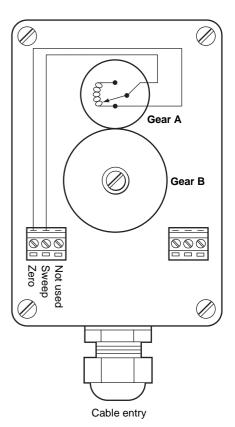
#### Refer to RB31 schematic for gear actuation

| Travel       | Gear A | Gear B |
|--------------|--------|--------|
| 20 mm linear | 20     | 100    |
| 30 mm linear | 25     | 84     |



#### **Connections**

**RB31** 



## How to order

Example: 1 off Spirax Sarco RB31 switchbox, 20 mm travel with FK27 fixing kit.

Note: when ordering RB31, valve travel must be stated.

A service to provide assembly and calibration of switchboxes to the valve / actuator of your choice is available. Please specify when ordering.

## Spare parts available

| RB11 | V3 microswitch                                    |  |
|------|---|--|
| KDII | Baseplate c/w V3 microswitches and terminal strip |  |
| RB31 | Potentiometer                                     |  |
|      | Baseplate c/w potentiometer and terminal strips   |  |