

3BR

Enclosed Terminal Microswitches

Standard

3BR

| | |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Characteristics | <ul style="list-style-type: none">■ Choice of IP54 or IP67 sealed versions■ Precise movements and exceptional repeat accuracy■ Robust plastic housing |
| Rating | Up to 125 VAC, 10 A |
| Dimensions (mm) | 53.1 × 20.6 × 30.8 |
| Actuator | Plunger |
| Approvals | UL, CSA |



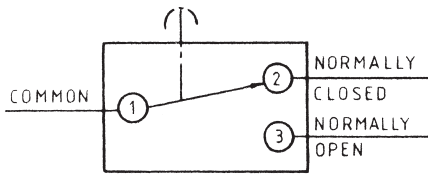
Preferred Range

| Ordering Reference | Actuating Force (N) (ozf) | | Sealing | Operating pos. (mm) (in) | | Terminal | Circuit | Actuator | Contacts | Electrical rating |
|--------------------|------------------------------|-------|---------|-----------------------------|------|----------|---------|----------|----------|---------------------|
| 3BR103 | 7.2 | 26.00 | IP54 | 39.3 | 1.55 | Screw | C0 | Plunger | Silver | Up to 125 VAC, 10 A |
| 3BR510 | 7.2 | 26.00 | IP67 | 39.3 | 1.55 | Screw | C0 | Plunger | Silver | Up to 125 VAC, 10 A |

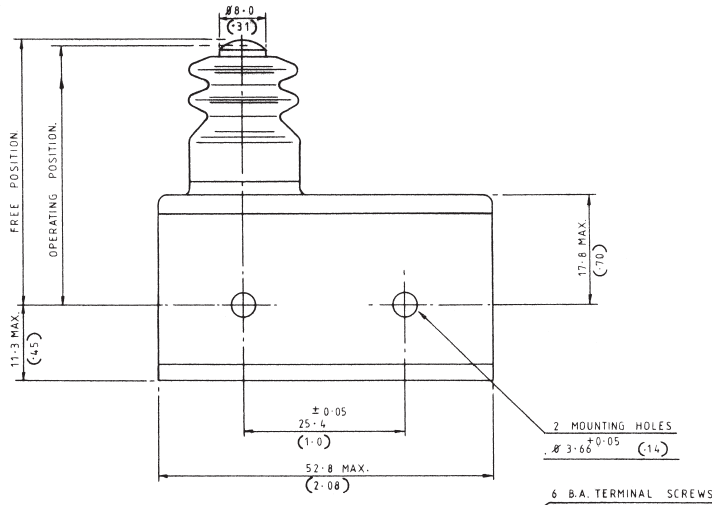
Specifications

| | |
|-----------------|--------------------------------------------------------|
| Housing | Phenolic |
| Plunger | Stainless steel |
| Cowl | Silicone rubber |
| Mechanism | Single pole change-over |
| Contacts | Silver |
| Terminals | Screw terminals with captive washers |
| Temperature | -10°C to +85°C |
| Mechanical life | 10 ⁶ cycles minimum (impact free actuation) |
| Protection | 3BR / 510 IP67 except terminals / 3BR103 IP54 |
| Mounting | Side mounting |

Circuit diagram



Dimensions



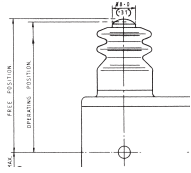
Recommended maximum electrical ratings

| Voltage (max) | Load (A) | Horsepower | Approval |
|---------------|--------------|----------------|------------------------------------|
| 250 VAC | 5 (0.75 pf) | - | CSA 22.2 No. 55 - 6,000 operations |
| 125 VAC | 10 (0.75 pf) | - | CSA 22.2 No. 55 - 6,000 operations |
| 250 VAC | - | ¼ HP (0.45 pf) | CSA 22.2 No. 55 - 6,000 operations |
| 125 VAC | - | ¼ HP (0.45 pf) | CSA 22.2 No. 55 - 6,000 operations |
| 0 - 15 VDC | 10 | - | General rating - 50,000 operations |
| 15 - 30 VDC | 5 | - | General rating - 50,000 operations |

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Operating Characteristics

| Actuator | Reference | Actuating Force Maximum | | Release Force Minimum | | Free Position Maximum | | Operating Position | | Movement Differential Maximum | | Overtravel | |
|----------|-------------------|-------------------------|-------|-----------------------|-------|-----------------------|------|--------------------|--------------|-------------------------------|-------|------------|------|
| | | (N) | (ozf) | (N) | (ozf) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) |
| Plunger | 3BR103 3BR/510 | 7.2 | 26.00 | 1.7 | 6 | 40.8 | 1.6 | 39.3 ± 0.4 | 1.55 ± 0.016 | 0.08 | 0.003 | 4.6 | 0.18 |



Ordering Reference

| | | | |
|-----------------------|-----|--------------------------|--|
| Type | 3BR | | |
| Environmental sealing | 103 | Mechanism sealed to IP54 | |
| | 510 | Mechanism sealed to IP67 | |