



Data Sheet

Tubular Solenoid Performance

RS stock numbers 431-7504 to 431-7627

| Nominal Voltage is that which can be applied continuously (100% duty). Considerably higher voltages may be used for reduced periods indicated by reduced % duty and maximum pulse duration. Duty is based on Power (Watts, or V x I) which increases to the square of the applied voltage. | | | | | | | |
|--|-----------------------------|---|---------------------------|--|---------------------------|--|---------------------------|
| Solenoid dia | Nominal Voltage (100% duty) | 2x Wattage, 1.41 x Nominal Voltage (50% Duty) | | 4 x Wattage 2 x Nominal Voltage (25% Duty) | | 10 x Wattage 3.16 x Nominal Voltage (10% Duty) | |
| At "home" position (ie magnetically centred) | Holding Force (Newtons) | Holding force (Newtons) | Max pulse duration (secs) | Holding Force (Newtons) | Max Pulse Duration (Secs) | Holding Force (Newtons) | Max Pulse Duration (Secs) |
| 13mm | 4 | 5.6 | 50 | 8 | 5 | 12.6 | 2 |
| 19mm | 12.8 | 18 | 230 | 25.4 | 25 | 40.4 | 6 |
| 25mm | 29.4 | 41.6 | 360 | 58.8 | 32 | 93 | 8 |
| At 2mm from home position | | | | | | | |
| 13mm | 1 | 1.4 | 50 | 2 | 5 | 3.1 | 2 |
| 19mm | 4.3 | 6 | 230 | 8.5 | 25 | 13.5 | 6 |
| 25mm | 14 | 19.8 | 360 | 28 | 32 | 44.3 | 8 |
| At 5mm from home position | | | | | | | |
| 13mm | 0.5 | 0.7 | 50 | 1 | 5 | 1.6 | 2 |
| 19mm | 2 | 2.8 | 230 | 4 | 25 | 6.3 | 6 |
| 25mm | 6 | 8.5 | 360 | 12 | 32 | 19 | 8 |
| All figures are approximate and for guidance only | | | | | | | |

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