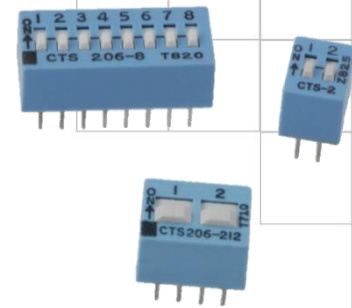




Series 206 Through-Hole DIP Switch

- Available with SPST, SPDT, DPST, 3PST circuit choices
- Available with low profile, standard, or extended actuator heights. Consult the ordering information for options.
- Blue housing
- RoHS compliant
- Optional top tape seal for board spray washing
- Gold plated contacts



Description

The terminals are molded into the thermoset base and provide an electrostatic discharge shield rating to 22KV when front row of terminals are connected to ground. The optimized contact design incorporating a dimple-to-flat surface wiping interface for long-term contact corrosion resistance, making it the ideal choice for any circuit breaker and HVAC applications.

Ordering Information

| Series | Number of Poles | Number of Throws | Number of Switch Positions | Actuator Height | Bottom Epoxy Seal | Top Tape Seal | Actuation Preset | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------|---|------------------|----------------------------|-----------------|--|---------------|-------------------|-------|---------------|---|----------------------------------|--|---|--|-------------------------|---------------|------------|------------------|-------------|---|-------------|---|-------------|---|-------------|---|-------------|---|-------------|---|-------------|---|-------------|----|--------------|----|--------------|--|--|------|-------|-------|-------------------------|---|-------------------------------------|----|--|--|---|------|-------|-------|----------------------|---|--|
| 206- | 1 | 2 | 1 | E | S | T | N | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | <table border="1"> <thead> <tr> <th>Code</th> <th>No. of poles</th> </tr> </thead> <tbody> <tr> <td>Blank</td> <td>For SPST</td> </tr> <tr> <td>1</td> <td>Single pole</td> </tr> <tr> <td>2</td> <td>Double pole</td> </tr> <tr> <td>3</td> <td>3 poles</td> </tr> </tbody> </table> | Code | No. of poles | Blank | For SPST | 1 | Single pole | 2 | Double pole | 3 | 3 poles | | <table border="1"> <thead> <tr> <th>Code</th> <th>No. of switch positions</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>1 position</td> </tr> <tr> <td>2</td> <td>2 positions</td> </tr> <tr> <td>3</td> <td>3 positions</td> </tr> <tr> <td>4</td> <td>4 positions</td> </tr> <tr> <td>5</td> <td>5 positions</td> </tr> <tr> <td>6</td> <td>6 positions</td> </tr> <tr> <td>7</td> <td>7 positions</td> </tr> <tr> <td>8</td> <td>8 positions</td> </tr> <tr> <td>9</td> <td>9 positions</td> </tr> <tr> <td>10</td> <td>10 positions</td> </tr> <tr> <td>12</td> <td>12 positions</td> </tr> </tbody> </table> | Code | No. of switch positions | 1 | 1 position | 2 | 2 positions | 3 | 3 positions | 4 | 4 positions | 5 | 5 positions | 6 | 6 positions | 7 | 7 positions | 8 | 8 positions | 9 | 9 positions | 10 | 10 positions | 12 | 12 positions | | <table border="1"> <thead> <tr> <th>Code</th> <th>Spec.</th> </tr> </thead> <tbody> <tr> <td>Blank</td> <td>Standard (0.89mm/.035")</td> </tr> <tr> <td>E</td> <td>Extended (3.43mm/.135") (SPST only)</td> </tr> <tr> <td>LP</td> <td>Low profile (Flush) (SPST & SPDT only)</td> </tr> </tbody> </table> | Code | Spec. | Blank | Standard (0.89mm/.035") | E | Extended (3.43mm/.135") (SPST only) | LP | Low profile (Flush) (SPST & SPDT only) | | <table border="1"> <thead> <tr> <th>Code</th> <th>Spec.</th> </tr> </thead> <tbody> <tr> <td>BLANK</td> <td>Ship at OFF position</td> </tr> <tr> <td>N</td> <td>Ship at ON position (SPST, DPST & 3PST only)</td> </tr> </tbody> </table> | Code | Spec. | BLANK | Ship at OFF position | N | Ship at ON position (SPST, DPST & 3PST only) |
| Code | No. of poles | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Blank | For SPST | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Single pole | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | Double pole | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 3 poles | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Code | No. of switch positions | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 1 position | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 2 positions | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 3 positions | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 4 positions | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | 5 positions | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | 6 positions | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | 7 positions | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | 8 positions | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | 9 positions | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | 10 positions | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | 12 positions | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Code | Spec. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Blank | Standard (0.89mm/.035") | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| E | Extended (3.43mm/.135") (SPST only) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LP | Low profile (Flush) (SPST & SPDT only) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Code | Spec. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| BLANK | Ship at OFF position | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| N | Ship at ON position (SPST, DPST & 3PST only) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | <table border="1"> <thead> <tr> <th>Code</th> <th>Spec.</th> </tr> </thead> <tbody> <tr> <td>Blank</td> <td>For SPST</td> </tr> <tr> <td>1</td> <td>Single throw</td> </tr> <tr> <td>2</td> <td>Double throw</td> </tr> </tbody> </table> | Code | Spec. | Blank | For SPST | 1 | Single throw | 2 | Double throw | | | | | <table border="1"> <thead> <tr> <th>Code</th> <th>Top tape seal</th> </tr> </thead> <tbody> <tr> <td>Blank</td> <td>No top tape seal</td> </tr> <tr> <td>T</td> <td>Top tape seal (Not available for extended actuator or 1-position SPST DIP switch)</td> </tr> </tbody> </table> | Code | Top tape seal | Blank | No top tape seal | T | Top tape seal (Not available for extended actuator or 1-position SPST DIP switch) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Code | Spec. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Blank | For SPST | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Single throw | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | Double throw | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Code | Top tape seal | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Blank | No top tape seal | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| T | Top tape seal (Not available for extended actuator or 1-position SPST DIP switch) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | <table border="1"> <thead> <tr> <th>Code</th> <th>Bottom epoxy seal</th> </tr> </thead> <tbody> <tr> <td>Blank</td> <td>No epoxy seal</td> </tr> <tr> <td>S</td> <td>Epoxy seal (Required for 206-1S)</td> </tr> </tbody> </table> | Code | Bottom epoxy seal | Blank | No epoxy seal | S | Epoxy seal (Required for 206-1S) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Code | Bottom epoxy seal | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Blank | No epoxy seal | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S | Epoxy seal (Required for 206-1S) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

- Notes:
- 1.Contact CTS for other common features not listed.
 2. Not available in a Double Pole Double Throw (DPDT) construction



Electrical Specifications

| Parameter | Conditions & Remarks | Min | Max | Unit |
|-----------------------|-----------------------------------|------|-----|-----------|
| Contact Resistance | Initial | | 50 | milliohms |
| | At end of life | | 100 | |
| Insulation Resistance | Between insulated terminals | 1000 | | Megohms |
| Dielectric Strength | 500 VAC between adjacent switches | | 1 | minute |
| Switch Capacitance | Between adjacent closed switches | | 5.0 | pF |
| Nonswitching Rating | | | 100 | mA |
| | | | 50 | or VDC |
| Circuit | SPST | 1 | 12 | Position |
| | SPDT | 1 | 6 | Position |
| | DPST | 1 | 6 | Position |
| | 3PST | 1 | 4 | Position |

Mechanical and Environmental

| | |
|-----------------------------|--|
| Actuation Life (206) | 10,000 cycles switching 50mA @ 24VDC |
| Soldering | Maximum wave temperature, 260°C for 5 seconds |
| Shock | Per MIL-STD-202F, method 213B, condition A(50G's) with no contact inconsistencies greater than 1 microsecond |
| Vibration | Per MIL-STD-202F, method 204D, condition B (.06" or 15G's between 10 HZ to 2K HZ) with no contact inconsistencies greater than 1 microsecond |
| Seal | Bottom epoxy seal optional Optional top tape seal for board spray washing |
| Marking | Special side or top marking available-consult CTS |
| Packaging: | Standard anti-static tube packaging |
| Operating Temperature Range | -55°C to +85°C |
| Storage Temperature Range | -55°C to +85°C |

Mechanical Specifications

Figure 1 - SPST

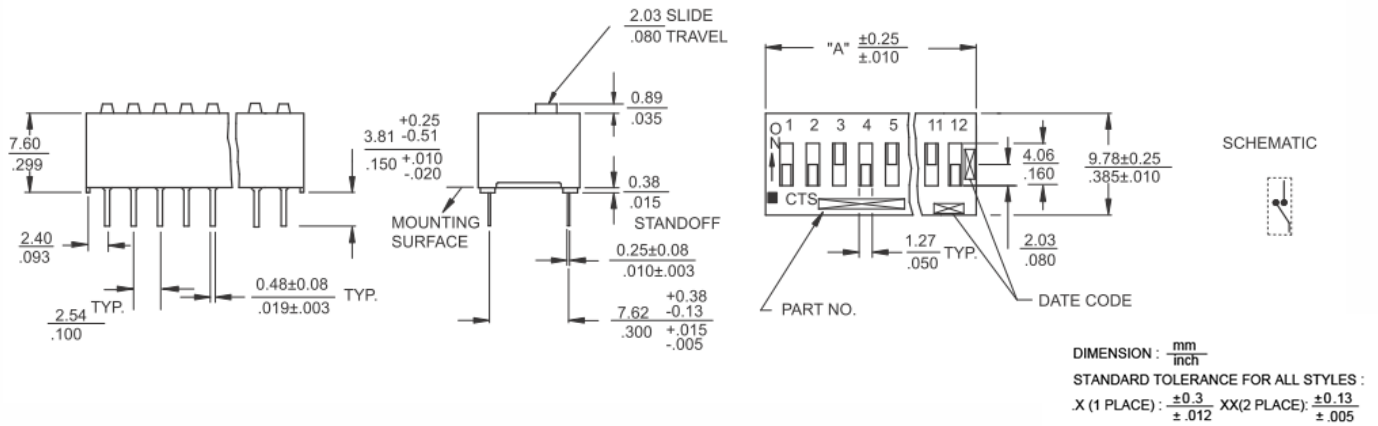


Figure 2 – SPDT

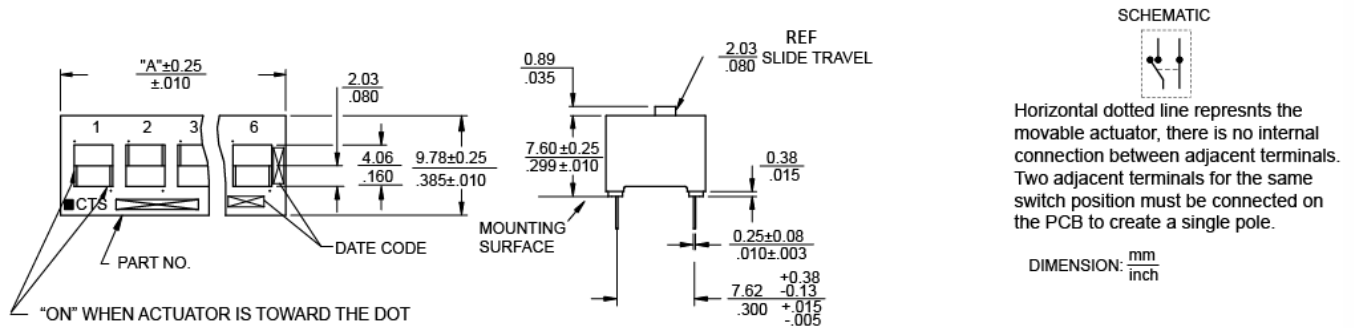


Figure 3 – DPST

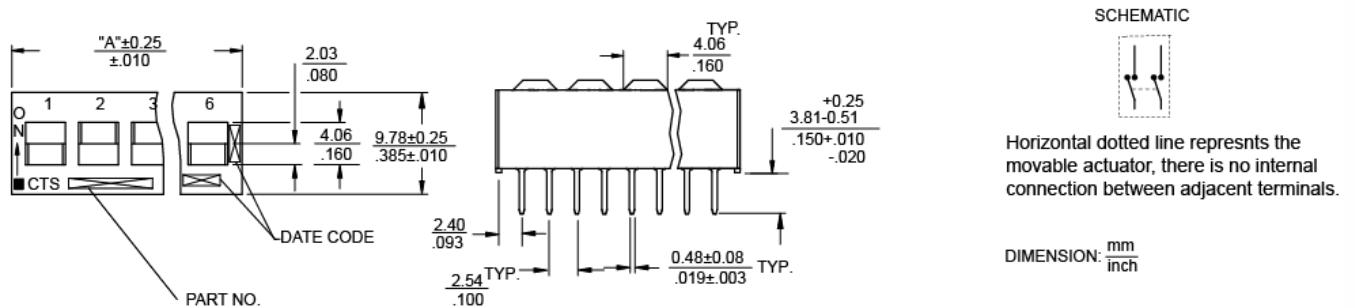


Figure 4 - 3PST

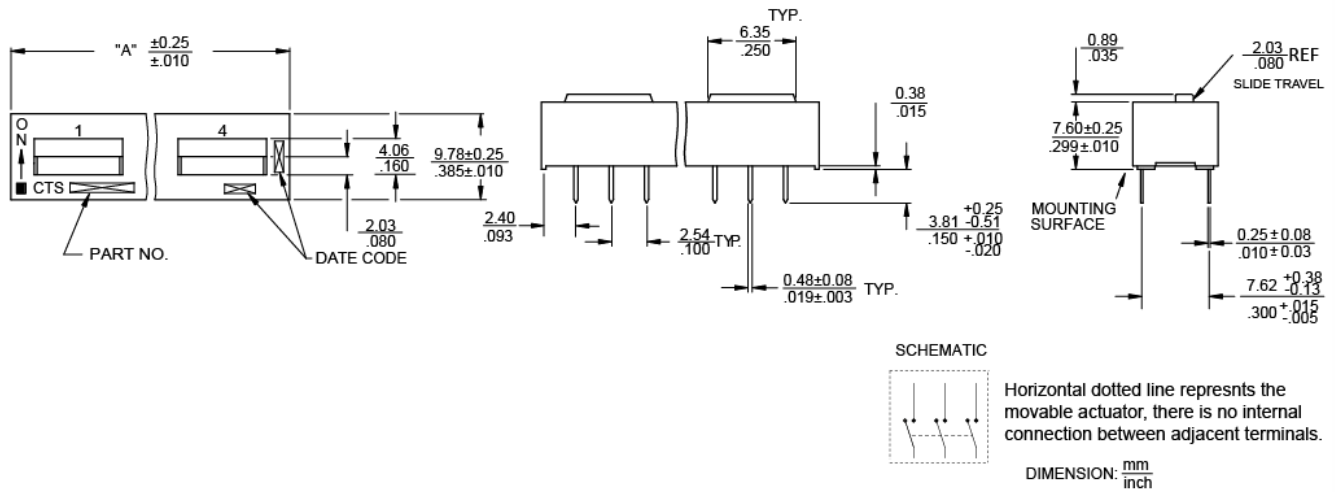


Figure 5 – Low Profile Actuators (SPST & SPDT only)

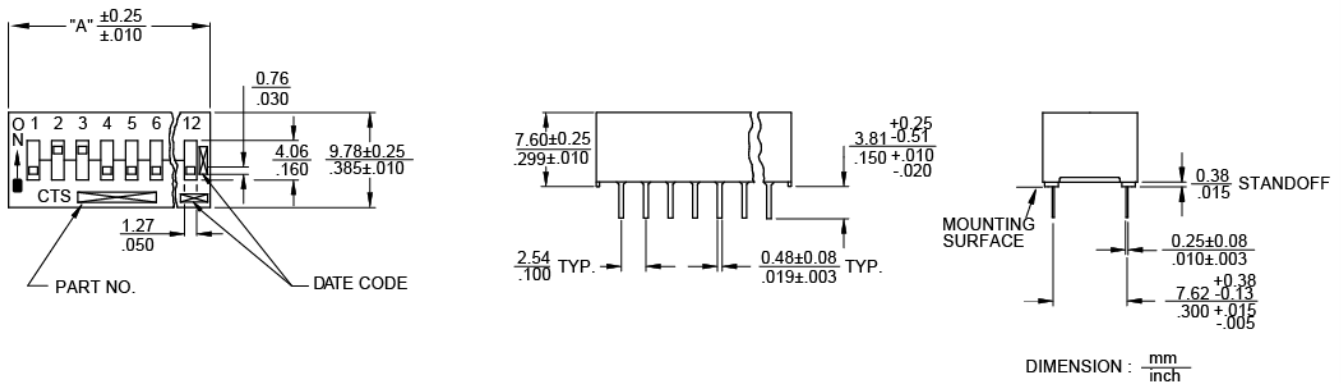
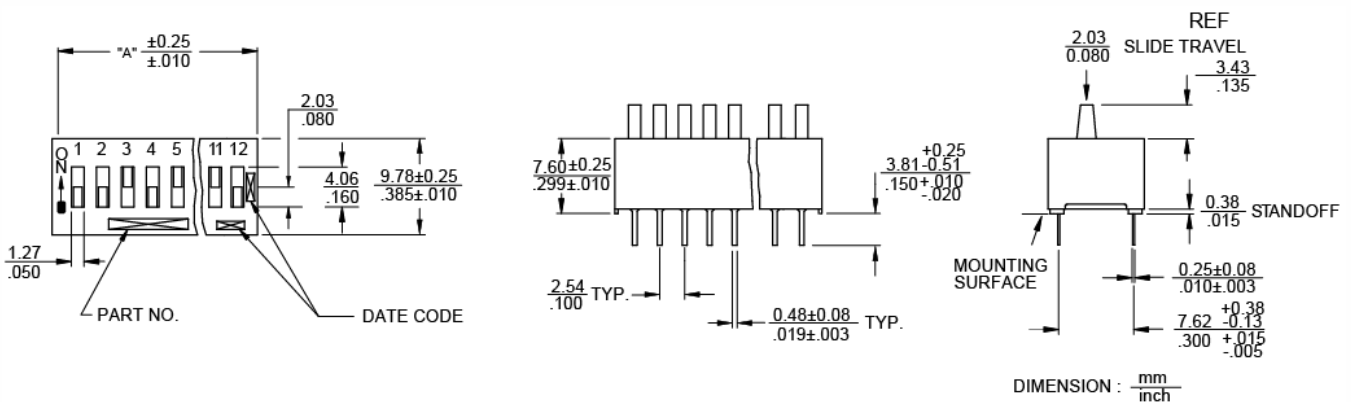


Figure 6 – Extended Actuators (SPST only)





| "A" Overall Dimensions | Number of Switch Positions | Actuation | Part Number | Both Bottom and Top Sealed | Low Profile Both Bottom and Top Sealed |
|------------------------|----------------------------|-----------|-------------|----------------------------|--|
| 3.96 / .156 | 2 | SPST | 206-1S | - | - |
| 7.26 / .286 | 2 | SPST | 206-2 | 206-2ST | 206-2LPST |
| 9.80 / .386 | 3 | SPST | 206-3 | 206-3ST | 206-3LPST |
| 12.34 / .486 | 4 | SPST | 206-4 | 206-4ST | 206-4LPST |
| 14.88 / .586 | 5 | SPST | 206-5 | 206-5ST | 206-5LPST |
| 17.42 / .686 | 6 | SPST | 206-6 | 206-6ST | 206-6LPST |
| 19.96 / .786 | 7 | SPST | 206-7 | 206-7ST | 206-7LPST |
| 22.50 / .886 | 8 | SPST | 206-8 | 206-8ST | 206-8LPST |
| 25.04 / .986 | 9 | SPST | 206-9 | 206-9ST | 206-9LPST |
| 27.58 / 1.086 | 10 | SPST | 206-10 | 206-10ST | 206-10LPST |
| 32.66 / 1.286 | 12 | SPST | 206-12 | 206-12ST | 206-12LPST |
| 7.26 / .286 | 1 | SPDT | 206-121 | 206-121ST | 206-121LPST |
| 12.34 / .486 | 2 | SPDT | 206-122 | 206-122ST | 206-122LPST |
| 17.42 / .686 | 3 | SPDT | 206-123 | 206-123ST | 206-123LPST |
| 22.50 / .886 | 4 | SPDT | 206-124 | 206-124ST | 206-124LPST |
| 27.58 / 1.086 | 5 | SPDT | 206-125 | 206-125ST | 206-125LPST |
| 32.66 / 1.286 | 6 | SPDT | 206-126 | 206-126ST | 206-126LPST |
| 7.26 / .286 | 1 | DPST | 206-211 | 206-211ST | |
| 12.34 / .486 | 2 | DPST | 206-212 | 206-212ST | |
| 17.42 / .686 | 3 | DPST | 206-213 | 206-213ST | |
| 22.50 / .886 | 4 | DPST | 206-214 | 206-214ST | |
| 27.58 / 1.086 | 5 | DPST | 206-215 | 206-215ST | |
| 32.66 / 1.286 | 6 | DPST | 206-216 | 206-216ST | |
| 9.80 / .386 | 1 | 3PST | 206-311 | 206-311ST | |
| 17.42 / .686 | 2 | 3PST | 206-312 | 206-312ST | |
| 25.04 / .986 | 3 | 3PST | 206-313 | 206-313ST | |
| 32.66 / 1.286 | 4 | 3PST | 206-314 | 206-314ST | |