

High Pressure - All-Metal Flowmeter and Switch



measuring
•
monitoring
•
analyzing

SM Series



- Accuracy: $\pm 5\%$ Full Scale
- Max. Pressure: 3600 / 5000 PSI
- Brass or Stainless Steel Versions
- Direct Reading Scales for Water or Air
- Small, Compact Design
- Easy to Install



Order from: **C A Briggs Company**

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Sales@cabriggs.com - www.cabriggs.com

KOBOLD Instruments, Inc.
1801 Parkway View Drive
Pittsburgh, PA 15205



Description

The SM Series flowmeters can be ordered with set point switches to actuate at a specific flow rate. The switches are mounted externally in a protective housing and are actuated by a magnet within the float. This same magnet can also be used to couple to an external flow indicator, allowing for reading of the flow rate without requiring visibility of the float. The SM offers all of the benefits inherent in an all-metal design, such as high pressure and shock resistance. They are designed to handle flow rates much larger than their stated maximum range without damage. At excessive flow rates, however, there is a larger pressure drop.

Applications

- Lubrication Circuits
- Paper-making Machines
- Machine Tools
- Glass-melting Tanks
- Cooling Circuits
- Welding Machines
- Induction Furnaces
- Pumps

Specifications for all SM Models

| | |
|----------------------------------|---|
| Accuracy: | ± 5% of Full Scale |
| Media: | Liquids or Gases |
| Installation | |
| SMV: | Vertical, Flow Bottom to Top |
| SMO: | Vertical, Flow Top to Bottom |
| SMW: | Horizontal, Flow Left to Right or Flow Right to Left |
| SMF: | Vertical, Flow Bottom to Top |
| Measuring Principle | |
| SMV: | Float and Cylindrical Control Tube |
| SMO, SMW, SMF: | Float Return Spring and Cylindrical Control Tube |
| Mode of Operation: | Dependent on Flow (not Pressure) |
| Max. Temperature: | 212 °F (PP Float 160 °F) |
| Max Pressure | |
| Brass Units: | 3600 PSIG |
| Stainless Steel Units: | 5000 PSIG |
| Units with PP Floats: | 230 PSIG |
| Materials of Construction | |
| Body: | Ni-plated Brass or 304 Stainless Steel |
| Slotted Nozzle: | Ni-plated Brass or Stainless Steel |
| Float: | Ni-plated Brass, Hard Anodized Aluminum, Polypropylene, or SS |
| Spring: | 301 Stainless Steel |
| Fittings: | Ni-plated Brass, or 304 Stainless Steel |
| Seals | |
| Brass Units: | NBR |
| SS Units: | FKM |
| Switch Housing: | Plastic |
| Pointer Indication: | Ni-plated Brass, Polycarbonate Lens (Magnetically Operated) |
| Reed Contact (cCSAus) | |
| N/O & SPDT: | max. 230 Vdc/0.26A/60W 60 Vdc/1A/60W max. 240 Vac/0.42A/100W 100 Vac/1A/100W |
| Ingress Protection: | IP54 (Side Indicator) IP65 (Electrical Switch) |



Switch shown 180° opposite the indicator for display purposes only. Standard switch location is 90° from the indicator

Order Details - Flow Direction of Top to Bottom - SMO: (Example: **SMO-6105B**)

| Range Water (GPM) | Stand. Conn. (NPT) | Pressure Drop Max. (PSI) | Float | Flow Switch 1 N/O Contact Water Scale | | Flowmeter Water Scale | | Flowmeter and Switch 1 N/O Contact Water Scale | |
|-------------------|--------------------|--------------------------|--------|---------------------------------------|-----------------|-----------------------|-----------------|--|-----------------|
| | | | | Brass | Stainless Steel | Brass | Stainless Steel | Brass | Stainless Steel |
| 0.04...0.6 | 1/4" | 2.90 | PP | SMO-5101 | SMO-5201 | SMO-6101 | SMO-6201 | SMO-7101 | SMO-7201 |
| 0.2...1.2 | 1/4" | 2.61 | PP | SMO-5102 | SMO-5202 | SMO-6102 | SMO-6202 | SMO-7102 | SMO-7202 |
| 0.2...1.1 | 1/4" | 2.90 | AL | SMO-5104 | SMO-5204 | SMO-6104 | SMO-6204 | SMO-7104 | SMO-7204 |
| 0.04...0.6 | 1/4" | 2.90 | SS | SMO-5105 | SMO-5205 | SMO-6105 | SMO-6205 | SMO-7105 | SMO-7205 |
| 0.1...1.0 | 1/4" | 2.90 | SS | SMO-5108 | SMO-5208 | SMO-6108 | SMO-6208 | SMO-7108 | SMO-7208 |
| 0.2...2.0 | 1/4" | 4.35 | AL | SMO-5110 | SMO-5210 | SMO-6110 | SMO-6210 | SMO-7110 | SMO-7210 |
| 0.1...1.8 | 1/4" | 4.35 | Brass* | SMO-5111 | SMO-5211 | SMO-6111 | SMO-6211 | SMO-7111 | SMO-7211 |
| 0.1...2.2 | 1/4" | 4.35 | SS | SMO-5112 | SMO-5212 | SMO-6112 | SMO-6212 | SMO-7112 | SMO-7212 |
| 0.2...6.0 | 1/4" | 5.80 | PP | SMO-5113 | SMO-5213 | SMO-6113 | SMO-6213 | SMO-7113 | SMO-7213 |
| 0.2...6.0 | 1/4" | 5.80 | AL | SMO-5114 | SMO-5214 | SMO-6114 | SMO-6214 | SMO-7114 | SMO-7214 |
| 0.4...7.0 | 1/4" | 2.90 | PP | SMO-5115 | SMO-5215 | SMO-6115 | SMO-6215 | SMO-7115 | SMO-7215 |
| 0.1...5.0 | 1/4" | 5.80 | Brass* | SMO-5116 | SMO-5216 | SMO-6116 | SMO-6216 | SMO-7116 | SMO-7216 |
| 0.1...6.0 | 1/4" | 2.90 | SS | SMO-5117 | SMO-5217 | SMO-6117 | SMO-6217 | SMO-7117 | SMO-7217 |
| 0.4...7.0 | 1/4" | 4.35 | AL | SMO-5118 | SMO-5218 | SMO-6118 | SMO-6218 | SMO-7118 | SMO-7218 |
| 1.0...9.0 | 1/4" | 5.80 | PP | SMO-5119 | SMO-5219 | SMO-6119 | SMO-6219 | SMO-7119 | SMO-7219 |
| 1.0...9.0 | 1/4" | 5.80 | AL | SMO-5120 | SMO-5220 | SMO-6120 | SMO-6220 | SMO-7120 | SMO-7220 |
| 0.4...7.0 | 1/2" | 5.80 | SS | SMO-5121 | SMO-5221 | SMO-6121 | SMO-6221 | SMO-7121 | SMO-7221 |
| 2.0...8.0 | 1/2" | 5.80 | SS | SMO-5123 | SMO-5223 | SMO-6123 | SMO-6223 | SMO-7123 | SMO-7223 |
| 0.5...18 | 3/4" | 7.25 | PP | SMO-5125 | SMO-5225 | SMO-6125 | SMO-6225 | SMO-7125 | SMO-7225 |
| 1.0...20 | 3/4" | 7.25 | PP | SMO-5126 | SMO-5226 | SMO-6126 | SMO-6226 | SMO-7126 | SMO-7226 |
| 0.5...18 | 3/4" | 7.25 | AL | SMO-5127 | SMO-5227 | SMO-6127 | SMO-6227 | SMO-7127 | SMO-7227 |
| 1.0...20 | 3/4" | 7.25 | AL | SMO-5129 | SMO-5229 | SMO-6129 | SMO-6229 | SMO-7129 | SMO-7229 |

| Options (Add Suffix to Model Number) | |
|--------------------------------------|--------------------------------|
| Range Air (SCFM) Suffix ..L | Special Conn. (NPT) Suffix ..B |
| 0.2...3.5 | 1/2" |
| 0.4...4.0 | 1/2" |
| 0.4...4.5 | 1/2" |
| 0.2...3.0 | 1/2" |
| 0.2...3.5 | 1/2" |
| 1.0...8.0 | 1/2" |
| 0.5...8.0 | 1/2" |
| 1.5...8.0 | 1/2" |
| 1.5...14 | 1/2" |
| 2.0...14 | 1/2" |
| 2.0...24 | 1/2" |
| 2.0...14 | 1/2" |
| 1.0...18 | 1/2" |
| 1.0...24 | 1/2" |
| 4.0...30 | 1/2" |
| 2.0...30 | 1/2" |
| 2.0...22 | --- |
| 4.0...24 | --- |
| 10...80 | --- |
| 30...110 | --- |
| 10...80 | --- |
| 30...100 | --- |

****Items highlighted in gray are the high pressure design****

| Additional Switch Options (Add Suffix to Model Number) | |
|--|---|
| Suffix ..C | 1/2" NPT Conduit Electrical Connection (SMO-5xxx & SMO-7xxx Only) |
| Suffix ..R | Additional Contact (SMO-5xxx & SMO-7xxx Only) |
| Suffix ..U | SPDT Contact (SMO-5xxx & SMO-7xxx Only) |

* With Stainless Steel Units the Float is also Stainless Steel



High Pressure - All-Metal Flowmeter and Switch SM Series



Switch shown 180° opposite the indicator for display purposes only. Standard switch location is 90° from the indicator

Order Details - Flow Direction of Bottom to Top - SMV: (Example: SMV-6114BL)

| Range Water (GPM) | Stand. Conn. (NPT) | Pressure Drop Max. (PSI) | Float | Flow Switch 1 N/O Contact Water Scale | | Flowmeter Water Scale | | Flowmeter and Switch 1 N/O Contact Water Scale | | Options (Add Suffix to Model Number) | |
|-------------------|--------------------|--------------------------|--------|---------------------------------------|-----------------|-----------------------|-----------------|--|-----------------|--------------------------------------|--------------------------------|
| | | | | Brass | Stainless Steel | Brass | Stainless Steel | Brass | Stainless Steel | Range Air (SCFM) Suffix ..L | Special Conn. (NPT) Suffix ..B |
| 0.05...0.15 | 1/4" | 0.29 | PP | SMV-5101 | SMV-5201 | SMV-6101 | SMV-6201 | SMV-7101 | SMV-7201 | 0.25...1.2 | 1/2" |
| 0.075...0.25 | 1/4" | 0.29 | PP | SMV-5102 | SMV-5202 | SMV-6102 | SMV-6202 | SMV-7102 | SMV-7202 | 0.2...1.1 | 1/2" |
| 0.1...0.3 | 1/4" | 0.58 | SS | SMV-5105 | SMV-5205 | SMV-6105 | SMV-6205 | SMV-7105 | SMV-7205 | 0.3...2.0 | 1/2" |
| 0.09...0.5 | 1/4" | 0.58 | Brass* | SMV-5106 | SMV-5206 | SMV-6106 | SMV-6206 | SMV-7106 | SMV-7206 | 0.4...2.0 | 1/2" |
| 0.2...0.5 | 1/4" | 0.29 | SS | SMV-5108 | SMV-5208 | SMV-6108 | SMV-6208 | SMV-7108 | SMV-7208 | 0.5...2.4 | 1/2" |
| 0.1...0.7 | 1/4" | 0.44 | AL | SMV-5110 | SMV-5210 | SMV-6110 | SMV-6210 | SMV-7110 | SMV-7210 | 0.5...3.0 | 1/2" |
| 0.2...1.0 | 1/4" | 0.58 | SS | SMV-5112 | SMV-5212 | SMV-6112 | SMV-6212 | SMV-7112 | SMV-7212 | 0.75...4.5 | 1/2" |
| 0.15...1.3 | 1/4" | 1.45 | AL | SMV-5113 | SMV-5213 | SMV-6113 | SMV-6213 | SMV-7113 | SMV-7213 | 0.4...5.5 | 1/2" |
| 0.15...1.9 | 1/4" | 1.45 | AL | SMV-5114 | SMV-5214 | SMV-6114 | SMV-6214 | SMV-7114 | SMV-7214 | 0.6...6.0 | 1/2" |
| 0.2...2.0 | 1/4" | 0.29 | PP | SMV-5115 | SMV-5215 | SMV-6115 | SMV-6215 | SMV-7115 | SMV-7215 | 1.0...8.0 | 1/2" |
| 0.5...3.0 | 1/4" | 0.58 | PP | SMV-5119 | SMV-5219 | SMV-6119 | SMV-6219 | SMV-7119 | SMV-7219 | 2.0...11 | 1/2" |
| 0.75...3.5 | 1/4" | 2.61 | SS | SMV-5121 | SMV-5221 | SMV-6121 | SMV-6221 | SMV-7121 | SMV-7221 | 2.0...14 | 1/2" |
| 1.0...5.0 | 1/4" | 0.87 | SS | SMV-5123 | SMV-5223 | SMV-6123 | SMV-6223 | SMV-7123 | SMV-7223 | 3.0...18 | 1/2" |
| 0.5...8.0 | 3/4" | 1.45 | PP | SMV-5125 | SMV-5225 | SMV-6125 | SMV-6225 | SMV-7125 | SMV-7225 | 2.5...28 | --- |
| 0.5...9.0 | 3/4" | 2.32 | AL | SMV-5127 | SMV-5227 | SMV-6127 | SMV-6227 | SMV-7127 | SMV-7227 | 2.5...35 | --- |
| 2.0...12 | 3/4" | 2.90 | SS | SMV-5128 | SMV-5228 | SMV-6128 | SMV-6228 | SMV-7128 | SMV-7228 | 3.4...40 | --- |
| 1.0...14 | 3/4" | 3.19 | SS | SMV-5130 | SMV-5230 | SMV-6130 | SMV-6230 | SMV-7130 | SMV-7230 | 5.0...45 | --- |
| 4.0...18 | 1-1/4" | 3.18 | PP | SMV-5132 | SMV-5232 | SMV-6132 | SMV-6232 | SMV-7132 | SMV-7232 | 5.0...60 | --- |
| 4.0...24 | 1-1/4" | 2.90 | AL | SMV-5134 | SMV-5234 | SMV-6134 | SMV-6234 | SMV-7134 | SMV-7234 | 5.0...70 | --- |
| 4.0...30 | 1-1/4" | 4.35 | SS | SMV-5137 | SMV-5237 | SMV-6137 | SMV-6237 | SMV-7137 | SMV-7237 | 5.0...110 | --- |
| 4.0...40 | 1-1/4" | 3.63 | SS | SMV-5138 | SMV-5238 | SMV-6138 | SMV-6238 | SMV-7138 | SMV-7238 | 5.0...130 | --- |

Items highlighted in gray are the high pressure design

| Additional Switch Options (Add Suffix to Model Number) | |
|--|---|
| Suffix ..C | 1/2" NPT Conduit Electrical Connection (SMV-5xxx & SMV-7xxx Only) |
| Suffix ..R | Additional Contact (SMV-5xxx & SMV-7xxx Only) |
| Suffix ..U | SPDT Contact (SMV-5xxx & SMV-7xxx Only) |

* With Stainless Steel Units the Float is also Stainless Steel



Switch shown 180° opposite the indicator for display purposes only. Standard switch location is 90° from the indicator

Order Details - Flow Direction of Right to Left or Left to Right - SMW: (Example: SMW-7220C)**

| Range Water (GPM) | Stand. Conn. (NPT) | Pressure Drop Max. (PSI) | Float | Flow Switch 1 N/O Contact Water Scale | | Flowmeter Water Scale | | Flowmeter and Switch 1 N/O Contact Water Scale | | Options (Add Suffix to Model Number) | |
|-------------------|--------------------|--------------------------|--------|---------------------------------------|-----------------|-----------------------|-----------------|--|-----------------|--------------------------------------|--------------------------------|
| | | | | Brass | Stainless Steel | Brass | Stainless Steel | Brass | Stainless Steel | Range Air (SCFM) Suffix ..L | Special Conn. (NPT) Suffix ..B |
| 0.06...0.8 | 1/4" | 3.48 | PP | SMW-5101 | SMW-5201 | SMW-6101 | SMW-6201 | SMW-7101 | SMW-7201 | 0.6...4.0 | 1/2" |
| 0.25...1.2 | 1/4" | 3.19 | PP | SMW-5102 | SMW-5202 | SMW-6102 | SMW-6202 | SMW-7102 | SMW-7202 | 0.6...5.0 | 1/2" |
| 0.06...0.8 | 1/4" | 2.90 | SS | SMW-5105 | SMW-5205 | SMW-6105 | SMW-6205 | SMW-7105 | SMW-7205 | 0.4...4.0 | 1/2" |
| 0.3...1.2 | 1/4" | 3.19 | Brass* | SMW-5107 | SMW-5207 | SMW-6107 | SMW-6207 | SMW-7107 | SMW-7207 | 1.0...5.0 | 1/2" |
| 0.25...1.2 | 1/4" | 3.19 | SS | SMW-5108 | SMW-5208 | SMW-6108 | SMW-6208 | SMW-7108 | SMW-7208 | 0.8...4.5 | 1/2" |
| 0.3...2.6 | 1/4" | 4.35 | PP | SMW-5109 | SMW-5209 | SMW-6109 | SMW-6209 | SMW-7109 | SMW-7209 | 1.0...10 | 1/2" |
| 0.25...2.6 | 1/4" | 5.80 | SS | SMW-5112 | SMW-5212 | SMW-6112 | SMW-6212 | SMW-7112 | SMW-7212 | 2.0...10 | 1/2" |
| 0.3...6.0 | 1/4" | 7.25 | PP | SMW-5113 | SMW-5213 | SMW-6113 | SMW-6213 | SMW-7113 | SMW-7213 | 2.0...14 | 1/2" |
| 0.3...6.0 | 1/4" | 4.35 | SS | SMW-5117 | SMW-5217 | SMW-6117 | SMW-6217 | SMW-7117 | SMW-7217 | 3.0...24 | 1/2" |
| 1.0...8.0 | 1/4" | 4.35 | AL | SMW-5118 | SMW-5218 | SMW-6118 | SMW-6218 | SMW-7118 | SMW-7218 | 2.5...18 | 1/2" |
| 2.0...10 | 1/4" | 5.80 | PP | SMW-5119 | SMW-5219 | SMW-6119 | SMW-6219 | SMW-7119 | SMW-7219 | 2.0...30 | 1/2" |
| 2.0...10 | 1/4" | 5.80 | AL | SMW-5120 | SMW-5220 | SMW-6120 | SMW-6220 | SMW-7120 | SMW-7220 | 4.0...30 | 1/2" |
| 1.0...8.0 | 1/2" | 5.80 | SS | SMW-5121 | SMW-5221 | SMW-6121 | SMW-6221 | SMW-7121 | SMW-7221 | 4.0...24 | --- |
| 2.0...10 | 1/2" | 5.80 | SS | SMW-5123 | SMW-5223 | SMW-6123 | SMW-6223 | SMW-7123 | SMW-7223 | 4.0...30 | --- |
| 0.5...20 | 3/4" | 7.25 | PP | SMW-5125 | SMW-5225 | SMW-6125 | SMW-6225 | SMW-7125 | SMW-7225 | 10...80 | --- |
| 8.0...31 | 3/4" | 7.25 | PP | SMW-5126 | SMW-5226 | SMW-6126 | SMW-6226 | SMW-7126 | SMW-7226 | 30...120 | --- |
| 1.0...20 | 3/4" | 7.25 | AL | SMW-5127 | SMW-5227 | SMW-6127 | SMW-6227 | SMW-7127 | SMW-7227 | 10...80 | --- |
| 8.0...34 | 3/4" | 8.70 | SS | SMW-5130 | SMW-5230 | SMW-6130 | SMW-6230 | SMW-7130 | SMW-7230 | 30...130 | --- |
| 8.0...22 | 3/4" | 8.70 | Brass* | SMW-5131 | SMW-5231 | SMW-6131 | SMW-6231 | SMW-7131 | SMW-7231 | 10...90 | --- |
| 8.0...34 | 3/4" | 8.70 | Brass* | SMW-5132 | SMW-5232 | SMW-6132 | SMW-6232 | SMW-7132 | SMW-7232 | 30...130 | --- |

Items highlighted in gray are the high pressure design

| Additional Switch Options (Add Suffix to Model Number) | |
|--|---|
| Suffix ..C | 1/2" NPT Conduit Electrical Connection (SMW-5xxx & SMW-7xxx Only) |
| Suffix ..R | Additional Contact (SMW-5xxx & SMW-7xxx Only) |
| Suffix ..U | SPDT Contact (SMW-5xxx & SMW-7xxx Only) |

* With Stainless Steel Units the Float is also Stainless Steel

** Additional Information for Ordering: Please Specify Flow Direction as "L to R" or "R to L"



High Pressure - All-Metal Flowmeter and Switch SM Series



Switch shown 180° opposite the indicator for display purposes only. Standard switch location is 90° from the indicator

Order Details - Flow Direction of Bottom to Top - SMF: (Example: SMF-5123RU)

| Range Water (GPM) | Stand. Conn. (NPT) | Pressure Drop Max. (PSI) | Float | Flow Switch 1 N/O Contact Water Scale | | Flowmeter Water Scale | | Flowmeter and Switch 1 N/O Contact Water Scale | | Options (Add Suffix to Model Number) | |
|-------------------|--------------------|--------------------------|--------|---------------------------------------|-----------------|-----------------------|-----------------|--|-----------------|--------------------------------------|--------------------------------|
| | | | | Brass | Stainless Steel | Brass | Stainless Steel | Brass | Stainless Steel | Range Air (SCFM) Suffix "L" | Special Conn. (NPT) Suffix "B" |
| 0.1...0.9 | 1/4" | 2.32 | PP | SMF-5101 | SMF-5201 | SMF-6101 | SMF-6201 | SMF-7101 | SMF-7201 | 0.2...1.0 | 1/2" |
| 0.3...1.3 | 1/4" | 1.89 | PP | SMF-5102 | SMF-5202 | SMF-6102 | SMF-6202 | SMF-7102 | SMF-7202 | 0.8...5.0 | 1/2" |
| 0.1...0.9 | 1/4" | 2.32 | SS | SMF-5105 | SMF-5205 | SMF-6105 | SMF-6205 | SMF-7105 | SMF-7205 | 0.4...4.0 | 1/2" |
| 0.3...1.3 | 1/4" | 2.61 | SS | SMF-5108 | SMF-5208 | SMF-6108 | SMF-6208 | SMF-7108 | SMF-7208 | 1.0...5.0 | 1/2" |
| 0.4...3.0 | 1/4" | 2.61 | PP | SMF-5109 | SMF-5209 | SMF-6109 | SMF-6209 | SMF-7109 | SMF-7209 | 1.0...9.0 | 1/2" |
| 0.4...3.0 | 1/4" | 2.90 | SS | SMF-5112 | SMF-5212 | SMF-6112 | SMF-6212 | SMF-7112 | SMF-7212 | 2.5...10 | 1/2" |
| 0.4...7.0 | 1/4" | 4.35 | PP | SMF-5113 | SMF-5213 | SMF-6113 | SMF-6213 | SMF-7113 | SMF-7213 | 2.5...20 | 1/2" |
| 1.0...8.0 | 1/4" | 5.80 | PP | SMF-5115 | SMF-5215 | SMF-6115 | SMF-6215 | SMF-7115 | SMF-7215 | 4.0...28 | 1/2" |
| 0.4...6.0 | 1/4" | 5.80 | Brass* | SMF-5116 | SMF-5216 | SMF-6116 | SMF-6216 | SMF-7116 | SMF-7216 | 4.0...20 | 1/2" |
| 0.4...7.0 | 1/4" | 4.35 | SS | SMF-5117 | SMF-5217 | SMF-6117 | SMF-6217 | SMF-7117 | SMF-7217 | 2.5...22 | 1/2" |
| 1.0...10 | 1/4" | 2.90 | PP | SMF-5119 | SMF-5219 | SMF-6119 | SMF-6219 | SMF-7119 | SMF-7219 | 4.0...30 | 1/2" |
| 1.0...11 | 1/4" | 4.35 | AL | SMF-5120 | SMF-5220 | SMF-6120 | SMF-6220 | SMF-7120 | SMF-7220 | 4.0...34 | 1/2" |
| 1.0...9.0 | 1/4" | 4.35 | SS | SMF-5121 | SMF-5221 | SMF-6121 | SMF-6221 | SMF-7121 | SMF-7221 | 6.0...28 | 1/2" |
| 2.0...12 | 1/4" | 4.35 | SS | SMF-5123 | SMF-5223 | SMF-6123 | SMF-6223 | SMF-7123 | SMF-7223 | 7.0...35 | 1/2" |
| 1.0...20 | 3/4" | 5.80 | PP | SMF-5125 | SMF-5225 | SMF-6125 | SMF-6225 | SMF-7125 | SMF-7225 | 10...80 | --- |
| 3.0...30 | 3/4" | 5.80 | PP | SMF-5126 | SMF-5226 | SMF-6126 | SMF-6226 | SMF-7126 | SMF-7226 | 30...115 | --- |
| 2.0...22 | 3/4" | 7.25 | SS | SMF-5128 | SMF-5228 | SMF-6128 | SMF-6228 | SMF-7128 | SMF-7228 | 10...90 | --- |

Items highlighted in gray are the high pressure design

| Additional Switch Options (Add Suffix to Model Number) | |
|--|---|
| Suffix ..C | 1/2" NPT Conduit Electrical Connection (SMF-5xxx & SMF-7xxx Only) |
| Suffix ..R | Additional Contact (SMF-5xxx & SMF-7xxx Only) |
| Suffix ..U | SPDT Contact (SMF-5xxx & SMF-7xxx Only) |

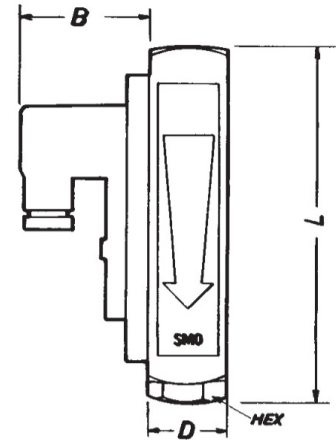
* With Stainless Steel Units the Float is also Stainless Steel



Dimensions

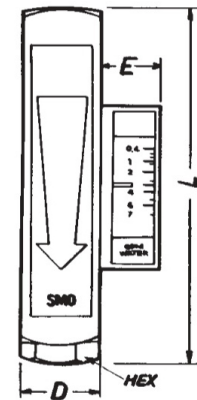
| SMO-5...: Flow Switch with 1 N/O Contact, Flow Top to Bottom | | | | | | | | |
|--|----------------------|-----------------|------------|---------------|----------|------------|-------|--------------|
| Model (Brass) | Model (SS) | Depth of Thread | | "D" | "L" | | "B" | Weight (lbs) |
| | | Standard | Suffix ..B | | Standard | Suffix ..B | | |
| SMO-5101 to SMO-5118 | SMO-5201 to SMO-5218 | 0.47" | 0.55" | 1.18" x 1.18" | 5.20" | 5.35" | 2.09" | 2.20 |
| SMO-5119 to SMO-5120 | SMO-5219 to SMO-5220 | 0.47" | 0.55" | 1.18" x 1.18" | 5.91" | 5.91" | 2.09" | 2.20 |
| SMO-5121 | SMO-5221 | 0.47" | 0.55" | 1.18" x 1.18" | 5.20" | 5.35" | 2.09" | 2.20 |
| SMO-5123 | SMO-5223 | 0.47" | 0.55" | 1.18" x 1.18" | 5.91" | 5.91" | 2.09" | 2.20 |
| SMO-5125 to SMO-5129 | SMO-5225 to SMO-5229 | 0.63" | --- | 1.58" x 1.58" | 5.91" | --- | 2.09" | 3.75 |

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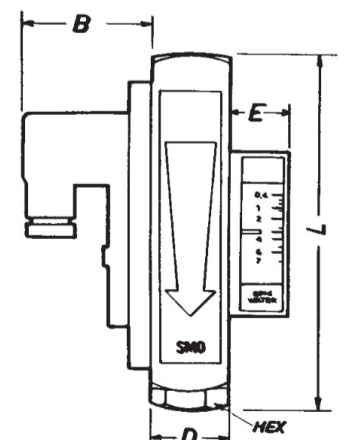
| SMO-6...: Flowmeter, Flow Top to Bottom | | | | | | | | |
|---|----------------------|-----------------|------------|---------------|----------|------------|-------|--------------|
| Model (Brass) | Model (SS) | Depth of Thread | | "D" | "L" | | "E" | Weight (lbs) |
| | | Standard | Suffix ..B | | Standard | Suffix ..B | | |
| SMO-6101 to SMO-6118 | SMO-6201 to SMO-6218 | 0.47" | 0.55" | 1.18" x 1.18" | 5.20" | 5.35" | 0.87" | 2.20 |
| SMO-6119 to SMO-6120 | SMO-6219 to SMO-6220 | 0.47" | 0.55" | 1.18" x 1.18" | 5.91" | 5.91" | 0.87" | 2.20 |
| SMO-6121 | SMO-6221 | 0.47" | 0.55" | 1.18" x 1.18" | 5.20" | 5.35" | 0.87" | 2.20 |
| SMO-6123 | SMO-6223 | 0.47" | 0.55" | 1.18" x 1.18" | 5.91" | 5.91" | 0.87" | 2.20 |
| SMO-6125 to SMO-6129 | SMO-6225 to SMO-6229 | 0.63" | --- | 1.58" x 1.58" | 5.91" | --- | 0.87" | 3.75 |

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| SMO-7...: Flowmeter and Switch with 1 N/O Contact, Flow Top to Bottom | | | | | | | | | |
|---|----------------------|-----------------|------------|---------------|----------|------------|-------|-------|--------------|
| Model (Brass) | Model (SS) | Depth of Thread | | "D" | "L" | | "B" | "E" | Weight (lbs) |
| | | Standard | Suffix ..B | | Standard | Suffix ..B | | | |
| SMO-7101 to SMO-7118 | SMO-7201 to SMO-7218 | 0.47" | 0.55" | 1.18" x 1.18" | 5.20" | 5.35" | 2.09" | 0.87" | 2.20 |
| SMO-7119 to SMO-7120 | SMO-7219 to SMO-7220 | 0.47" | 0.55" | 1.18" x 1.18" | 5.91" | 5.91" | 2.09" | 0.87" | 2.20 |
| SMO-7121 | SMO-7221 | 0.47" | 0.55" | 1.18" x 1.18" | 5.20" | 5.35" | 2.09" | 0.87" | 2.20 |
| SMO-7123 | SMO-7223 | 0.47" | 0.55" | 1.18" x 1.18" | 5.91" | 5.91" | 2.09" | 0.87" | 2.20 |
| SMO-7125 to SMO-7129 | SMO-7225 to SMO-7229 | 0.63" | --- | 1.58" x 1.58" | 5.91" | --- | 2.09" | 0.87" | 3.75 |

U.S. Patent Number 4,567,777

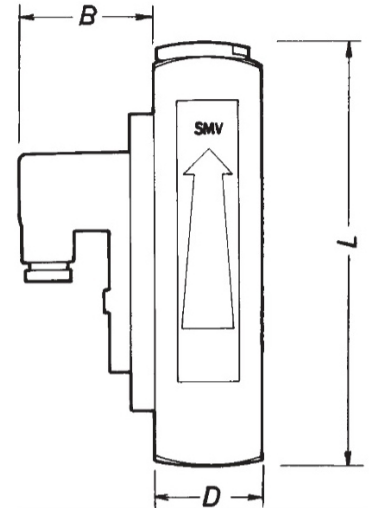


Note: Switches shown 180° opposite the indicator for display purposes only. Standard switch location is 90° from the indicator



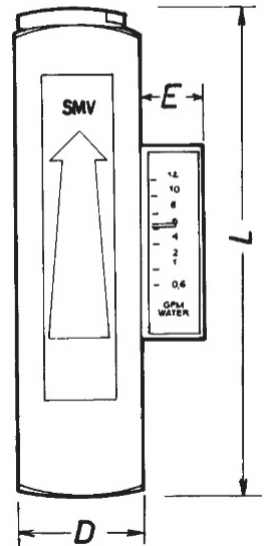
High Pressure - All-Metal Flowmeter and Switch SM Series

| SMV-5...: Flow Switch with 1 N/O Contact, Flow Bottom to Top | | | | | | | | |
|--|----------------------|-----------------|------------|---------------|----------|------------|-------|--------------|
| Model (Brass) | Model (SS) | Depth of Thread | | "D" | "L" | | "B" | Weight (lbs) |
| | | Standard | Suffix ..B | | Standard | Suffix ..B | | |
| SMV-5101 to SMV-5117 | SMV-5201 to SMV-5217 | 0.47" | 0.55" | 1.18" x 1.18" | 5.20" | 5.35" | 2.09" | 1.98 |
| SMV-5119 | SMV-5219 | 0.47" | 0.55" | 1.18" x 1.18" | 5.91" | 5.91" | 2.09" | 2.20 |
| SMV-5121 | SMV-5221 | 0.47" | 0.55" | 1.18" x 1.18" | 5.20" | 5.35" | 2.09" | 1.98 |
| SMV-5123 | SMV-5223 | 0.47" | 0.55" | 1.18" x 1.18" | 5.91" | 5.91" | 2.09" | 2.02 |
| SMV-5125 to SMV-5130 | SMV-5225 to SMV-5230 | 0.63" | --- | 1.58" x 1.58" | 5.91" | --- | 2.09" | 3.75 |
| SMV-5132 | SMV-5232 | 0.79" | --- | 1.97" x 1.97" | 6.50" | --- | 2.09" | 6.39 |
| SMV-5134 | SMV-5234 | 0.79" | --- | 1.97" x 1.97" | 6.50" | --- | 2.09" | 6.39 |
| SMV-5136 | SMV-5236 | 0.79" | --- | 1.97" x 1.97" | 7.09" | --- | 2.09" | 6.61 |
| SMV-5137 | SMV-5237 | 0.79" | --- | 1.97" x 1.97" | 6.50" | --- | 2.09" | 6.39 |
| SMV-5138 | SMV-5238 | 0.79" | --- | 1.97" x 1.97" | 7.09" | --- | 2.09" | 6.61 |



U.S. Patent Number 4,567,777

| SMV-6...: Flowmeter, Flow Bottom to Top | | | | | | | | |
|---|----------------------|-----------------|------------|---------------|----------|------------|-------|--------------|
| Model (Brass) | Model (SS) | Depth of Thread | | "D" | "L" | | "E" | Weight (lbs) |
| | | Standard | Suffix ..B | | Standard | Suffix ..B | | |
| SMV-6101 to SMV-6117 | SMV-6201 to SMV-6217 | 0.47" | 0.55" | 1.18" x 1.18" | 5.20" | 5.35" | 0.87" | 1.98 |
| SMV-6119 | SMV-6219 | 0.47" | 0.55" | 1.18" x 1.18" | 5.91" | 5.91" | 0.87" | 2.20 |
| SMV-6121 | SMV-6221 | 0.47" | 0.55" | 1.18" x 1.18" | 5.20" | 5.35" | 0.87" | 1.98 |
| SMV-6123 | SMV-6223 | 0.47" | 0.55" | 1.18" x 1.18" | 5.91" | 5.91" | 0.87" | 2.02 |
| SMV-6125 to SMV-6130 | SMV-6225 to SMV-6230 | 0.63" | --- | 1.58" x 1.58" | 5.91" | --- | 0.87" | 3.75 |
| SMV-6132 | SMV-6232 | 0.79" | --- | 1.97" x 1.97" | 6.50" | --- | 0.87" | 6.39 |
| SMV-6134 | SMV-6234 | 0.79" | --- | 1.97" x 1.97" | 6.50" | --- | 0.87" | 6.39 |
| SMV-6136 | SMV-6236 | 0.79" | --- | 1.97" x 1.97" | 7.09" | --- | 0.87" | 6.61 |
| SMV-6137 | SMV-6237 | 0.79" | --- | 1.97" x 1.97" | 6.50" | --- | 0.87" | 6.39 |
| SMV-6138 | SMV-6238 | 0.79" | --- | 1.97" x 1.97" | 7.09" | --- | 0.87" | 6.61 |



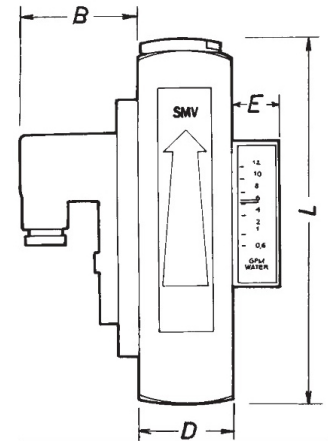
U.S. Patent Number 4,567,777

Note: Switches shown 180° opposite the indicator for display purposes only. Standard switch location is 90° from the indicator



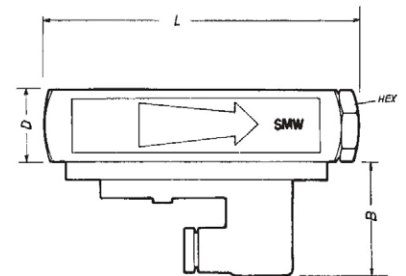
| SMV-7...: Flowmeter and Switch with 1 N/O Contact, Flow Bottom to Top | | | | | | | | | |
|---|----------------------|-----------------|------------|---------------|----------|------------|-------|-------|--------------|
| Model (Brass) | Model (SS) | Depth of Thread | | "D" | "L" | | "B" | "E" | Weight (lbs) |
| | | Standard | Suffix ..B | | Standard | Suffix ..B | | | |
| SMV-7101 to SMV-7117 | SMV-7201 to SMV-7217 | 0.47" | 0.55" | 1.18" x 1.18" | 5.20" | 5.35" | 2.09" | 0.87" | 1.98 |
| SMV-7119 | SMV-7219 | 0.47" | 0.55" | 1.18" x 1.18" | 5.91" | 5.91" | 2.09" | 0.87" | 2.20 |
| SMV-7121 | SMV-7221 | 0.47" | 0.55" | 1.18" x 1.18" | 5.20" | 5.35" | 2.09" | 0.87" | 1.98 |
| SMV-7123 | SMV-7223 | 0.47" | 0.55" | 1.18" x 1.18" | 5.91" | 5.91" | 2.09" | 0.87" | 2.02 |
| SMV-7125 to SMV-7130 | SMV-7225 to SMV-7230 | 0.63" | --- | 1.58" x 1.58" | 5.91" | --- | 2.09" | 0.87" | 3.75 |
| SMV-7132 | SMV-7232 | 0.79" | --- | 1.97" x 1.97" | 6.50" | --- | 2.09" | 0.87" | 6.39 |
| SMV-7134 | SMV-7234 | 0.79" | --- | 1.97" x 1.97" | 6.50" | --- | 2.09" | 0.87" | 6.39 |
| SMV-7136 | SMV-7236 | 0.79" | --- | 1.97" x 1.97" | 7.09" | --- | 2.09" | 0.87" | 6.61 |
| SMV-7137 | SMV-7237 | 0.79" | --- | 1.97" x 1.97" | 6.50" | --- | 2.09" | 0.87" | 6.39 |
| SMV-7138 | SMV-7238 | 0.79" | --- | 1.97" x 1.97" | 7.09" | --- | 2.09" | 0.87" | 6.61 |

U.S. Patent Number 4,567,777



| SMW-5...: Flow Switch with 1 N/O Contact, Flow Left to Right or Right to Left | | | | | | | | |
|---|----------------------|-----------------|------------|---------------|----------|------------|-------|--------------|
| Model (Brass) | Model (SS) | Depth of Thread | | "D" | "L" | | "B" | Weight (lbs) |
| | | Standard | Suffix ..B | | Standard | Suffix ..B | | |
| SMW-5101 to SMW-5117 | SMW-5201 to SMW-5217 | 0.47" | 0.55" | 1.18" x 1.18" | 5.20" | 5.35" | 2.09" | 1.98 |
| SMW-5119 to SMW-5120 | SMW-5219 to SMW-5220 | 0.47" | 0.55" | 1.18" x 1.18" | 5.91" | 5.91" | 2.09" | 2.02 |
| SMW-5121 | SMW-5221 | 0.47" | 0.55" | 1.18" x 1.18" | 5.20" | 5.35" | 2.09" | 1.98 |
| SMW-5123 | SMW-5223 | 0.47" | 0.55" | 1.18" x 1.18" | 5.91" | 5.91" | 2.09" | 2.02 |
| SMW-5125 to SMW-5132 | SMW-5225 to SMW-5232 | 0.63" | --- | 1.58" x 1.58" | 5.91" | --- | 2.09" | 3.75 |

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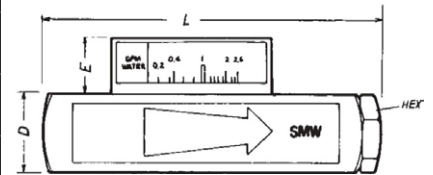
Note: Switches shown 180° opposite the indicator for display purposes only. Standard switch location is 90° from the indicator



High Pressure - All-Metal Flowmeter and Switch SM Series

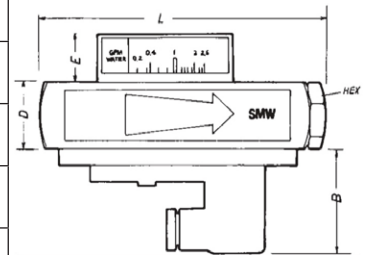
| SMW-6...: Flowmeter, Flow Left to Right or Right to Left | | | | | | | | |
|--|----------------------|-----------------|------------|---------------|----------|------------|-------|--------------|
| Model (Brass) | Model (SS) | Depth of Thread | | "D" | "L" | | "E" | Weight (lbs) |
| | | Standard | Suffix ..B | | Standard | Suffix ..B | | |
| SMW-6101 to SMW-6117 | SMW-6201 to SMW-6217 | 0.47" | 0.55" | 1.18" x 1.18" | 5.20" | 5.35" | 0.87" | 1.98 |
| SMW-6119 to SMW-6120 | SMW-6219 to SMW-6220 | 0.47" | 0.55" | 1.18" x 1.18" | 5.91" | 5.91" | 0.87" | 2.02 |
| SMW-6121 | SMW-6221 | 0.47" | 0.55" | 1.18" x 1.18" | 5.20" | 5.35" | 0.87" | 1.98 |
| SMW-6123 | SMW-6223 | 0.47" | 0.55" | 1.18" x 1.18" | 5.91" | 5.91" | 0.87" | 2.02 |
| SMW-6125 to SMW-6132 | SMW-6225 to SMW-6232 | 0.63" | --- | 1.58" x 1.58" | 5.91" | --- | 0.87" | 3.75 |

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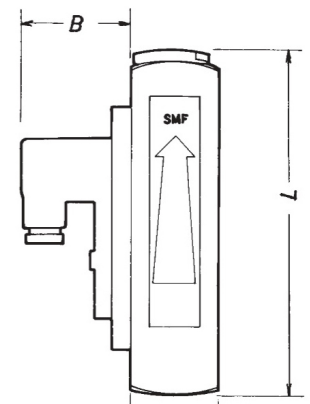
| SMW-7...: Flowmeter and Switch with 1 N/O Contact, Flow Left to Right or Right to Left | | | | | | | | | |
|--|----------------------|-----------------|------------|---------------|----------|------------|-------|-------|--------------|
| Model (Brass) | Model (SS) | Depth of Thread | | "D" | "L" | | "B" | "E" | Weight (lbs) |
| | | Standard | Suffix ..B | | Standard | Suffix ..B | | | |
| SMW-7101 to SMW-7117 | SMW-7201 to SMW-7217 | 0.47" | 0.55" | 1.18" x 1.18" | 5.20" | 5.35" | 2.09" | 0.87" | 1.98 |
| SMW-7119 to SMW-7120 | SMW-7219 to SMW-7220 | 0.47" | 0.55" | 1.18" x 1.18" | 5.91" | 5.91" | 2.09" | 0.87" | 2.02 |
| SMW-7121 | SMW-7221 | 0.47" | 0.55" | 1.18" x 1.18" | 5.20" | 5.35" | 2.09" | 0.87" | 1.98 |
| SMW-7123 | SMW-7223 | 0.47" | 0.55" | 1.18" x 1.18" | 5.91" | 5.91" | 2.09" | 0.87" | 2.02 |
| SMW-7125 to SMW-7132 | SMW-7225 to SMW-7232 | 0.63" | --- | 1.58" x 1.58" | 5.91" | --- | 2.09" | 0.87" | 3.75 |

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| SMF-5...: Flow Switch with 1 N/O Contact, Flow Left to Right or Right to Left | | | | | | | | | |
|---|----------------------|-----------------|------------|---------------|----------|------------|-------|-------|--------------|
| Model (Brass) | Model (SS) | Depth of Thread | | "D" | "L" | | "B" | "E" | Weight (lbs) |
| | | Standard | Suffix ..B | | Standard | Suffix ..B | | | |
| SMF-5101 to SMF-5117 | SMF-5201 to SMF-5217 | 0.47" | 0.55" | 1.18" x 1.18" | 5.20" | 5.35" | 2.09" | 0.87" | 1.98 |
| SMF-5119 to SMF-5120 | SMF-5219 to SMF-5220 | 0.47" | 0.55" | 1.18" x 1.18" | 5.91" | 5.91" | 2.09" | 0.87" | 2.02 |
| SMF-5121 | SMF-5221 | 0.47" | 0.55" | 1.18" x 1.18" | 5.20" | 5.35" | 2.09" | 0.87" | 1.98 |
| SMF-5123 | SMF-5223 | 0.47" | 0.55" | 1.18" x 1.18" | 5.91" | 5.91" | 2.09" | 0.87" | 2.02 |
| SMF-5125 to SMF-5128 | SMF-5225 to SMF-5228 | 0.63" | --- | 1.58" x 1.58" | 5.91" | --- | 2.09" | 0.87" | 3.75 |

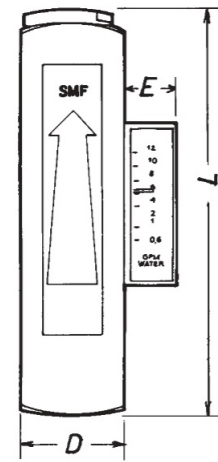
U.S. Patent Number 4,567,777



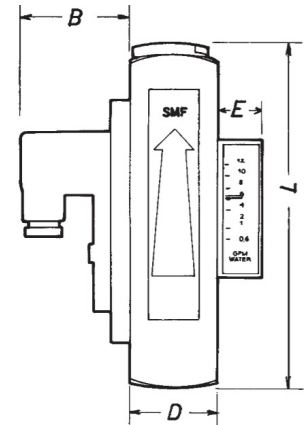
Note: Switches shown 180° opposite the indicator for display purposes only. Standard switch location is 90° from the indicator



| SMF-6...: Flowmeter, Flow Left to Right or Right to Left | | | | | | | | |
|--|----------------------|-----------------|------------|---------------|----------|------------|-------|--------------|
| Model (Brass) | Model (SS) | Depth of Thread | | "D" | "L" | | "E" | Weight (lbs) |
| | | Standard | Suffix ..B | | Standard | Suffix ..B | | |
| SMF-6101 to SMF-6117 | SMF-6201 to SMF-6217 | 0.47" | 0.55" | 1.18" x 1.18" | 5.20" | 5.35" | 0.87" | 1.98 |
| SMF-6119 to SMF-6120 | SMF-6219 to SMF-6220 | 0.47" | 0.55" | 1.18" x 1.18" | 5.91" | 5.91" | 0.87" | 2.02 |
| SMF-6121 | SMF-6221 | 0.47" | 0.55" | 1.18" x 1.18" | 5.20" | 5.35" | 0.87" | 1.98 |
| SMF-6123 | SMF-6223 | 0.47" | 0.55" | 1.18" x 1.18" | 5.91" | 5.91" | 0.87" | 2.02 |
| SMF-6125 to SMF-6128 | SMF-6225 to SMF-6228 | 0.63" | --- | 1.58" x 1.58" | 5.91" | --- | 0.87" | 3.75 |
| U.S. Patent Number 4,567,777 | | | | | | | | |



| SMF-7...: Flowmeter and Switch with 1 N/O Contact, Flow Left to Right or Right to Left | | | | | | | | | |
|--|----------------------|-----------------|------------|---------------|----------|------------|-------|-------|--------------|
| Model (Brass) | Model (SS) | Depth of Thread | | "D" | "L" | | "B" | "E" | Weight (lbs) |
| | | Standard | Suffix ..B | | Standard | Suffix ..B | | | |
| SMF-7101 to SMF-7117 | SMF-7201 to SMF-7217 | 0.47" | 0.55" | 1.18" x 1.18" | 5.20" | 5.35" | 2.09" | 0.87" | 1.98 |
| SMF-7119 to SMF-7120 | SMF-7219 to SMF-7220 | 0.47" | 0.55" | 1.18" x 1.18" | 5.91" | 5.91" | 2.09" | 0.87" | 2.02 |
| SMF-7121 | SMF-7221 | 0.47" | 0.55" | 1.18" x 1.18" | 5.20" | 5.35" | 2.09" | 0.87" | 1.98 |
| SMF-7123 | SMF-7223 | 0.47" | 0.55" | 1.18" x 1.18" | 5.91" | 5.91" | 2.09" | 0.87" | 2.02 |
| SMF-7125 to SMF-7128 | SMF-7225 to SMF-7228 | 0.63" | --- | 1.58" x 1.58" | 5.91" | --- | 2.09" | 0.87" | 3.75 |
| U.S. Patent Number 4,567,777 | | | | | | | | | |



Note: Switches shown 180° opposite the indicator for display purposes only. Standard switch location is 90° from the indicator