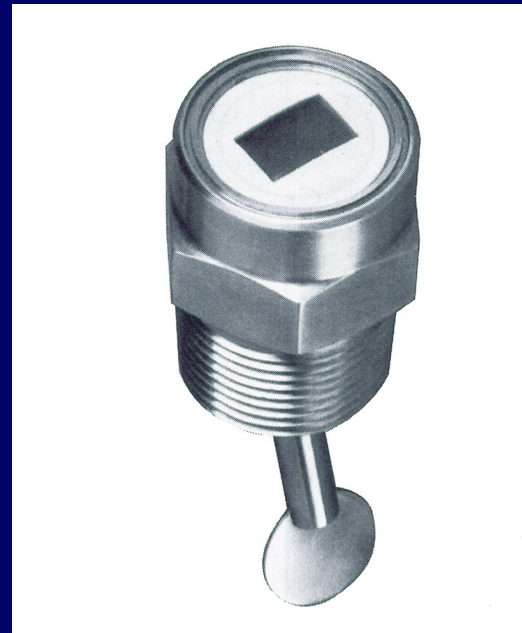
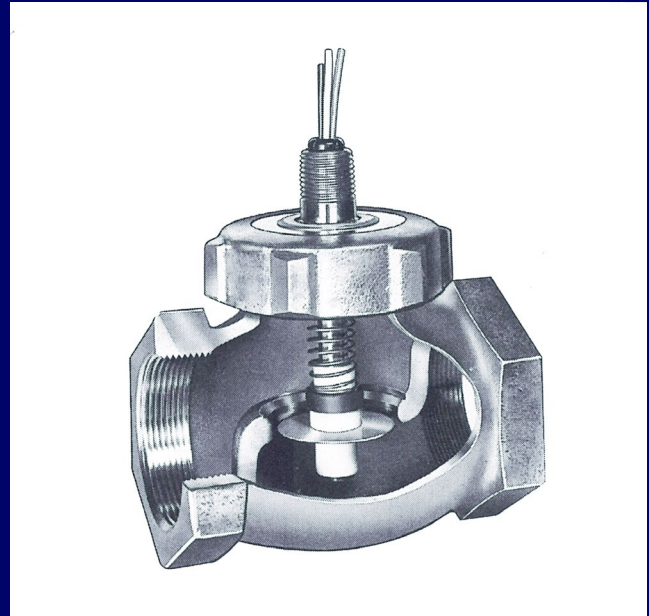
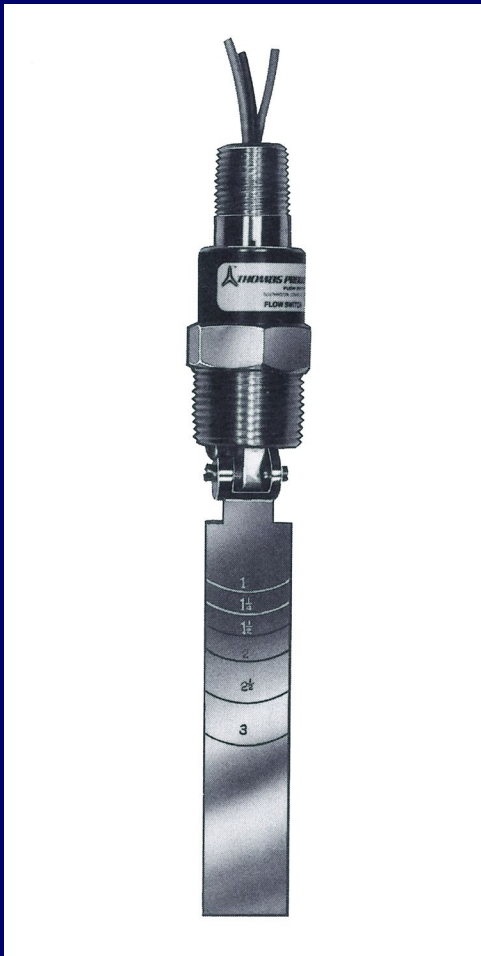
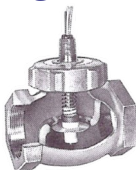
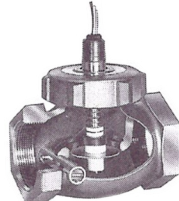
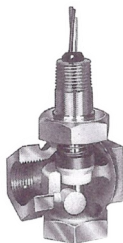
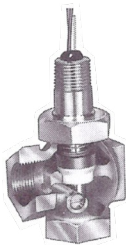









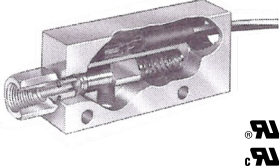
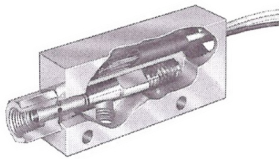
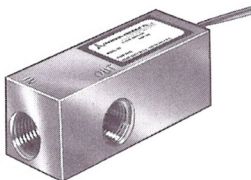
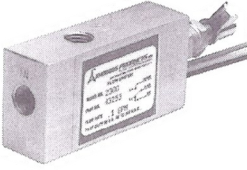

FLOW SWITCH SELECTION GUIDE




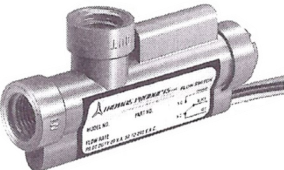



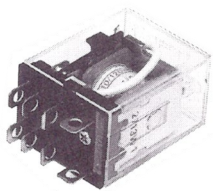
Standard Product Selection Guide

<div>1100</div> <div>1100M-SB</div> <div></div> <div>NAV SEA</div>	Bronze or SST	Brass, SST & Ceramic or SST & Ceramic & Monel	True globe body shape housings eliminate turbulence & reduce ΔP, 25% heavier wall thickness approved tested for shock, vibration, salt spray, accelerated life.	1100 MSB Listed QPL 16032	3/4" - 3" NPT	1100 MSB SPST, 10 Watt Lampload	.5 - 100 GPM	-20°F to +300°F	400 PSI @ 100°F operating 800 PSI @ 100°F proof load	Complement of outlined switches is to show product line breadth. Our in-house manufacturing capabilities can customize any unit to suit.
<div>1200</div> <div></div>	Bronze or SST			1" NPT	20 VA SPDT	.75 - 15 GPM				
<div>1300</div> <div></div>	Bronze			3/4" NPT		.75 - 10 GPM				
<div>1400</div> <div></div>						Brass, SST, Delrin & Ceramic	.75 - 14 GPM			
<div>1800</div> <div></div> <div>Pat. No.5,162,624</div> <div></div>	PVC	PVC & Ceramic	True flow switch operation, removable bonnet assembly, economical.	1" slip, accepts standard adapters	20 VA SPST, 20 VA SPDT	.5 & 1.0 GPM 6.0 GPM Max.	0°F to +140°F	150 PSIG Max.		
<div>2600</div> <div></div> <div>Pat. No.5,162,624</div> <div></div>			Bypass design, low ΔP, economical.	2" slip, accepts standard adapters		.5, 1.0 & 2.0 GPM				

Standard Product Selection Guide

Product Selection Guide		Housing Material	Trim Materials	Advantages	Process Connections	Reed Switch	Set Points	Operating Temperature	Operating Pressure	Notes	
1500		Brass or 316 Stainless Steel	Brass, 316 Stainless Steel or Polysulfone	Field adjustable or factory set from either side, available graduated scale.	1/2" NPT	20 VA SPDT  20 VA SPST 	Liquid: .1 - 20.0 GPM Gas: 1.0 - 250 SCFM	-20°F to +300°F	1000 PSIG Max.	Complement of outlined switches is to show product line breadth. Our in-house manufacturing capabilities can customize any unit to suit.	
1600				Long-lasting pistons with wide lands. Hardened and lapped bore. Replacement parts.	1/4" NPT		Liquid: .1 - 1.5 GPM Gas: .5 - 40.0 SCFM				
1700							Liquid: 2.0 - 300 cc/min Gas: 2.0 to 50 SCFH				
1900			Brass or 316 Stainless Steel	Self-cleaning, 3 ports, serviceable while in line.		20 VA SPST 20 VA SPDT	.1 - 1.5 GPM	Brass unit: -20°F to +250°F; SST unit: -20°F to +300°F			
2300	 <i>Patent Pending</i>					20 VA SPDT		-20°F to +300°F			
2000				Self-cleaning, true 1/2" IPS, silicone potted, shock & vibration resistant.	1/2" NPT	20 VA SPST	.5 - 3.0 GPM	Brass unit: -20°F to +250°F; SST unit: -20°F to +300°F			1500 PSIG Max.

Standard Product Selection Guide

<div>2100</div> <div></div> <div>UL®</div>	Polysulfone	Polysulfone 316 SST	Stronger one-piece housing silicone potted, shock & vibration resistant, reverse taper bore, self-cleaning. All wetted material PSF.	9/16" - 18 UNF 2 B Accepts variety of adapters	15 VA SPST or 20 VA SPDT	.1 - 1.5 GPM Optional 1 cc/min to 300 cc/min	-40°F to +225°F	700 PSI @ 70°F	Complement of outlined switches is to show standard product line breadth. Our in-house manufacturing capabilities can customize any unit to suit.
<div>2200</div> <div></div>		Polysulfone			20 VA SPDT	.1 - .75 GPM			
<div>2400</div> <div></div>	Brass or 316 Stainless Steel	316 Stainless Steel	SPDT reed switch assembly, all metal wetted parts, rugged investment cast components.	1" NPT	20 VA SPDT	4.0 GPM Min.	-30°F to +300°F	850 PSIG Max.	
<div>2500</div> <div></div>	Polysulfone	Polysulfone 316 SST					SPDT reed switch assembly.	-40°F to +225°F	
<div>5200</div> <div></div> <div>Pat. No.5,245,271</div>	Brass or 316 Stainless Steel	316 Stainless Steel	Indicator use in hazardous locations, 2 color flag.	3/4" NPT	N/A	1.5 - 5.0 GPM	400 PSI @ 70°F		
<div>Accessories</div> <div></div>	Explosion-proof junction boxes.	Relays DPDT general purpose.	Relays OPDT latching pumpcontrols.	Crimp on terminals.	Terminal strips.	TFE tape & TFE paste.	Cable Glands.		

FLOW SWITCH SELECTION GUIDE

Calibration: flow stands are calibrated to the National Bureau of Standards and Thomas Products Ltd. recalibration schedule.

☐ Ideas

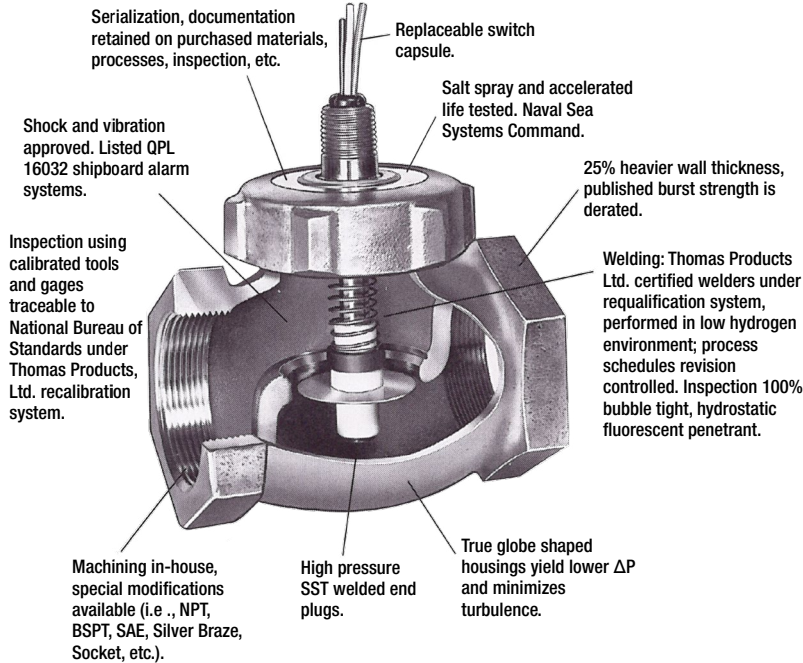
☐ Solutions

☐ Technical Support

☐ On-Time Delivery

☐ Quality

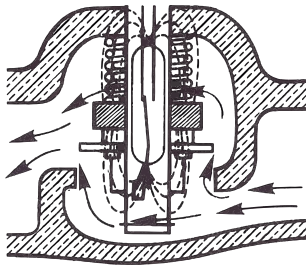
Model 1100



Operational Q.C. system and manual, MIL I 45208 MIL STD 45662.

Raw materials inventoried in a controlled and segregated department under Thomas Products, Ltd. stock rotation program.

Call-outs presented are typical to their respective models.



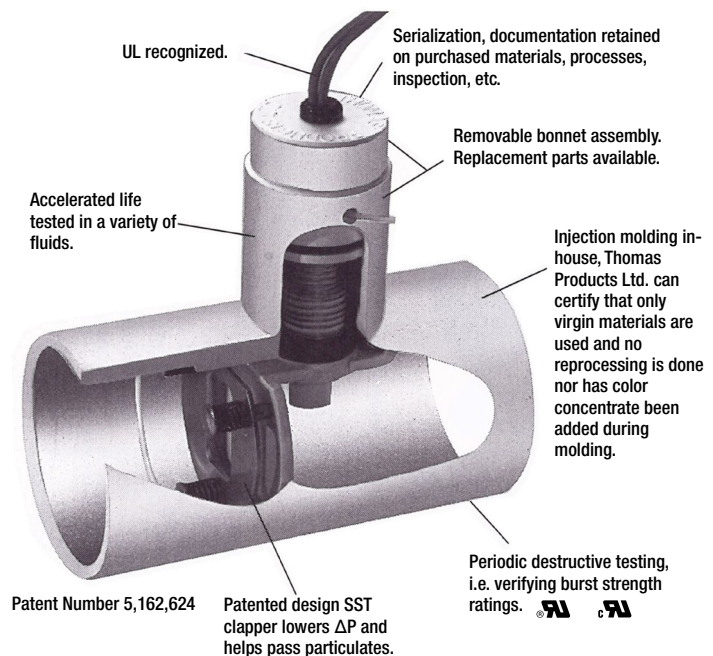
Typical Shuttle Type:

A magnet equipped shuttle is displaced at the proper calibrated flow of either liquid or gas to actuate the hermetically sealed reed switch.

At flow rates under the set point, clearance is provided for the liquid or gas to continue to flow.

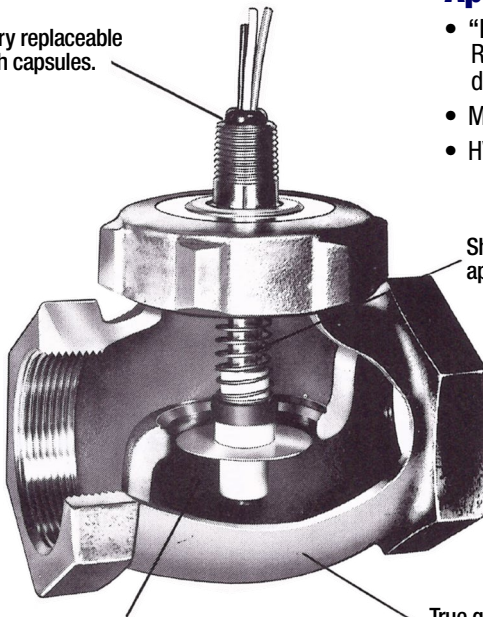
When flow rates exceed the set point the shuttle or piston is displaced even further to reveal a smooth, clear opening for a low pressure drop.

Model 2600



FIXED SET POINTS, 3/4" - 3" NPT, BRONZE & SST

Factory replaceable switch capsules.



Applications:

- "INDUSTRIAL STANDARD" Rugged and accurate flow detection for most applications.
- Machine Tool Industry
- HVAC Equipment

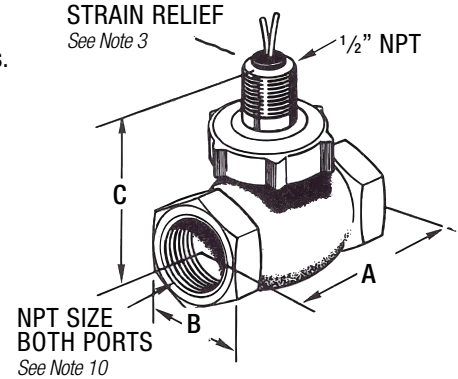
Shock and vibration approved.

Welding performed in low hydrogen environment.

True globe-shaped housings yield lower ΔP and minimize turbulence.

Dimensional Data:

STRAIN RELIEF
See Note 3



NPT SIZE BOTH PORTS
See Note 10

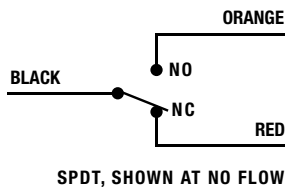
SIZE NPT	A	B HEX	C
3/4"	2 ⁷ / ₈	1 ³ / ₈	2 ³ / ₄
1"	3 ¹ / ₄	1 ²⁵ / ₃₂	3
1 ¹ / ₄ "	4	2 ³ / ₁₆	3 ³ / ₁₆
1 ¹ / ₂ "	4 ¹ / ₂	2 ¹ / ₂	3 ¹ / ₂
2"	5 ³ / ₈	3 ³ / ₃₂	4
2 ¹ / ₂ "	6 ⁵ / ₁₆	3 ⁵ / ₈	4 ¹ / ₂
3"	7 ³ / ₈	4 ³ / ₈	5 ⁵ / ₃₂

Specifications:

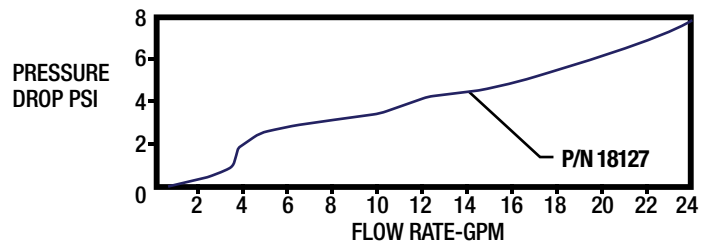
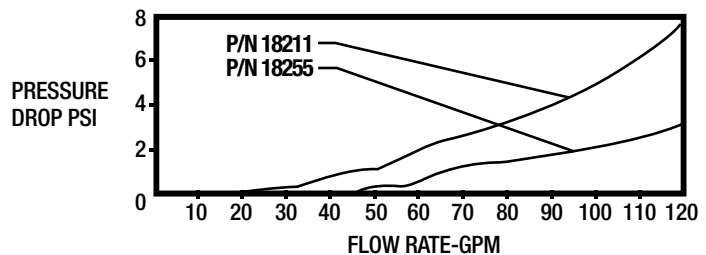
Housing	Shuttle	Spring	"O" Ring	Reed Switch	Wire	Oper. Temp.	Oper. Pres.	Proof Load	Burst Strength	Set Pt. Accur.	Set. Pt. Diff.	Repeat-ability
Bronze or 316 SST	Teflon See Note 7	316 SST	Viton "A"	20 Watt SPDT See Notes 4,5	18 AWG 24" Lg. Polymeric See Note 6	-20°F to +300°F See Note 11	400 PSI @ 100°F	800 PSI @ 100°F	1200 PSI @ 100°F	±10% MAX. See Note 14	±10%	1% Max. Deviation

Electrical:

Reed switch shown in NO FLOW condition.



Pressure Drop Δp :



Switch Ratings... Max Resistive Load

V.A.	VOLTS	AMPS DC	AMPS AC	AMPS AC MAX
20	0-50	.4	.4	1.0
	120	.15	.16	
	240	.06	.08	

Switch Rating 20 VA: 120-240 VAC Pilot Duty
UL File E86797

FIXED SET POINTS, 3/4" - 3" NPT, BRONZE & SST

Part No.

SIZE NPT	FLOW SETTING GPM <small>See Note 1, 12</small>	P/N BRONZE	P/N 316 SST
3/4" See Note 13	.5	18100	
	1.0	18101	
	2.0	18102	
	3.0	18103	
	4.0	18104	
	5.0	18105	
	6.0	18106	
	8.0	18107	
1"	.5	18127	18140
	1.0	18128	18141
	2.0	18129	18142
	3.0	18130	18143
	4.0	18131	18144
	5.0	18132	18145
	6.0	18133	18146
	8.0	18134	18147
1 1/4"	1.0	18153	
	2.0	18154	
	4.0	18155	
	6.0	18156	
	8.0	18157	
	10	18158	
	12	18159	
	16	18160	
	20	18161	
1 1/2"	1.5	18183	18197
	3	18184	18198
	5	18185	18199
	7.5	18186	18200
	10	18187	18201

SIZE NPT	FLOW SETTING GPM <small>See Note 1, 12</small>	P/N BRONZE	P/N 316 SST
1 1/2"	15	18188	18202
	20	18189	18203
	30	18190	18204
2"	2	18211	18225
	4	18212	18226
	5	18213	18227
	10	18214	18228
	15	18215	18229
	26	18216	18230
	35	18217	18231
	50	18218	18232
2 1/2"	5	18239	N/A
	10	18240	
	15	18241	
	20	18242	
	25	18243	
	30	18244	
	40	18245	
	50	18246	
	60	18247	
	75	18248	
3"	5	18255	N/A
	15	18256	
	20	18257	
	25	18258	
	30	18259	
	40	18260	
	50	18261	
	60	18262	
	75	18263	
	100	18264	

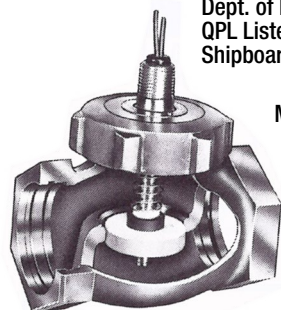
Notes:

Model 1100

- Standard flow calibration is in water @ 70°F. Calibrated on increasing flow.
- Temperature effect on flow settings: water calibration, slight change; oil varies with viscosity.
- Strain reliefs are standard. Optional silicone potting avail. Consult factory.
- Optional 100W SPST reed switches are stocked. Consult factory.
- Relays for higher loads, junction boxes, terminal strips, etc. are available. See accessories section for details (See Page 28)
- Optional cables available. Consult factory.
- Other wetted materials: ceramic ring magnet.
- Optional SST identification tags attached to unit. Consult factory.
- Optional MIS connector. MS3102E1 OS-3P
- Optional port sizes: BSP, SAE, silver braze, socket weld, etc. Consult factory.
- High temperature units available to 400°F. Consult factory.
- Standard flow settings are calibrated in water. Other set points in water or oil are available. Consult factory.
- For pipe sizes smaller than 3/4" , install appropriate size bushings.
- Calibration: Flow stands are calibrated to the National Bureau of Standards and Thomas Products Ltd. recalibration schedule.

Specialty Options:

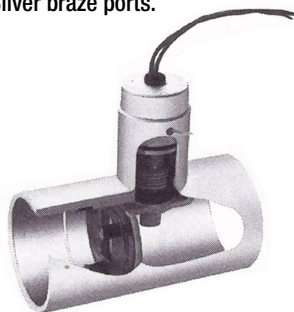
NAV SEA
Dept. of Navy
QPL Listed MIL-S-16032
Shipboard Alarm Systems.



MODEL 1100M-SB
Marine Flow Switch
for sea water
applications.

Monel trim.

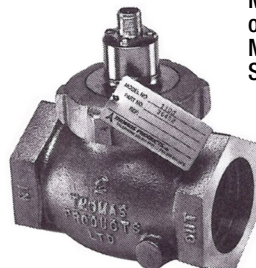
Silver braze ports.



Pat. No. 5,162,624

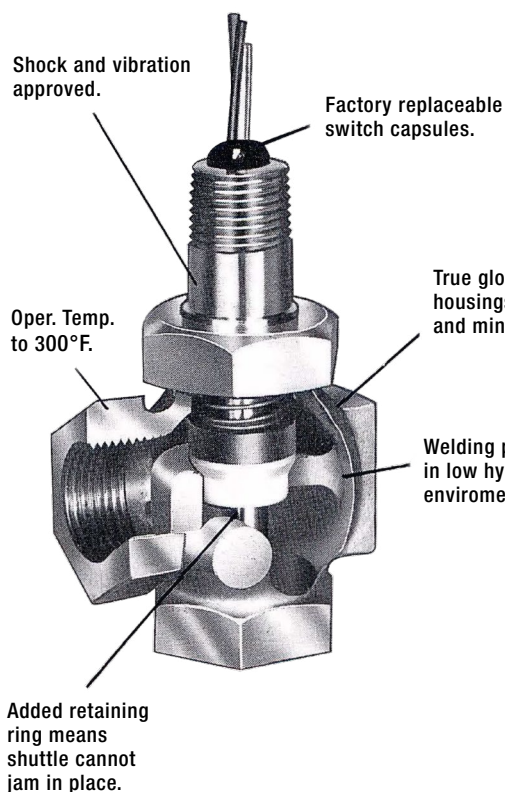
MODEL 2600
Economical PVC. Straight
through flow path.

MODEL 1100 with
optional M/S connector.
MS3102E10S-3P and
SST Ident. tag.



MODEL 1800
Economical PVC.
90° flow path.

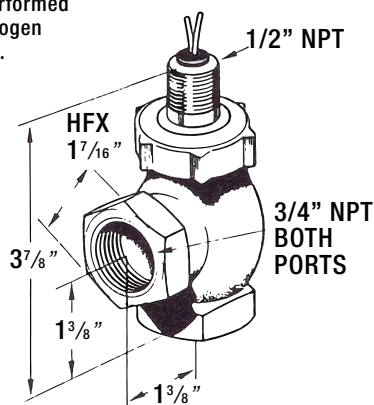
FIXED SET POINTS, 3/4" NPT, BRONZE



Applications:

- Coolant Systems
- HVAC Equipment
- Machine Tool Industry

Dimensional Data:



Notes: Model 1300

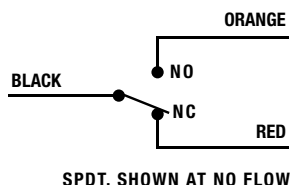
1. Standard flow calibration is in water @ 70°F. Calibrated on increasing flow.
2. Temperature effect on flow settings: water calibration, slight change; oil varies with viscosity.
3. Optional 100W SPST reed switches are stocked. Consult factory.
4. Relays for higher loads, junction boxes, terminal strips, etc. are available. See accessories section for details (See Page 28)
5. Optional cables available. Consult factory.
6. Other wetted materials: ceramic ring magnet.
7. Optional SST identification tags attached to unit. Consult factory.
8. Optional port sizes: BSPT, SAE, silver braze, socket weld, etc. Consult factory.
9. High temperature units available to 400°F. Consult factory.
10. Standard flow settings are calibrated in water. Other set points in water or oil are available. Consult factory.
11. Calibration: Flow stands are calibrated to the National Bureau of Standards and Thomas Products Ltd. recalibration schedule.

Specifications:

Housing	Shuttle	Spring	"O" Ring	Reed Switch	Wire	Oper. Temp.	Oper. Pres.	Proof Load	Brust Strenght	Set Pt. Accur.	Set. Pt. Diff.	Repeat-ability
Bronze	Teflon <i>See Note 6</i>	316 SST	Viton "A"	20 Watt SPDT <i>See Note 3,4</i>	18 AWG 24" Lg Polymeric <i>See Note 5</i>	-20°F to +300°F <i>See Note 9</i>	400 PSI @ 100°F	800 PSI @ 100°F	1200 PSI @ 100°F	±10% MAX. <i>See Note 11</i>	±10%	1% Max. Deviation

Electrical:

Reed switch shown in NO FLOW condition.



Part No.

SIZE NPT	FLOW SETTING GPM <i>See Note 1, 2, 10</i>	P/N
3/4" <i>See Note 8</i>	.75	18300
	1.5	18301
	2	18302
	2.5	18303
	5	18304
	7.5	18305
	10	18306

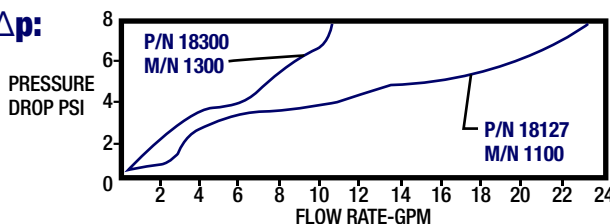
Switch Ratings...

Max Resistive Load

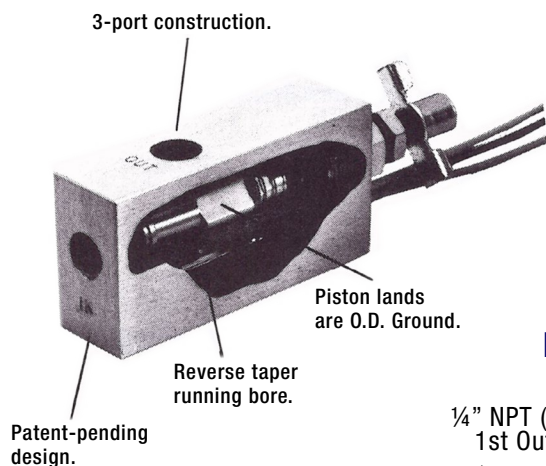
V.A.	VOLTS	AMPS DC	AMPS AC	AMPS AC MAX
20	0-50	.4	.4	1.0
	120	.15	.15	
	240	.06	.08	

Switch Rating 20 VA: 120-240 VAC Pilot Duty
UL File E86797

Pressure Drop Δp :



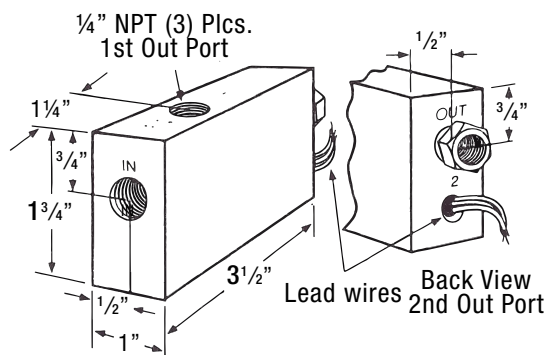
FIXED SET POINTS, 1/4" NPT, BRASS & SST



Applications:

- Designed to help pass 100 micron particulates.
- Serviceable in line.
- Optional petcock to continually bleed out particles.
- High pressure applications.

Dimensional Data:



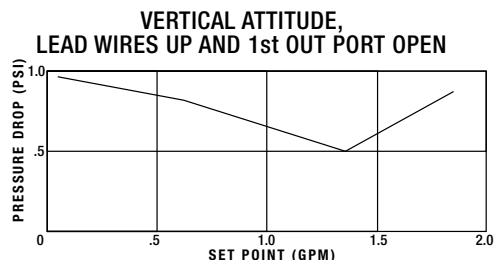
Notes: Model 2300

1. Standard flow calibration is in water @ 70°F with lead wires up. Calibrated on increasing flow.
2. Temperature effect on flow settings: water calibration, slight change; oil varies with viscosity.
3. Optional 100W SPST reed switches are stocked. Consult factory.
4. Relays for higher loads are available. See accessories section for details (See Page 28)
5. Optional cables available. Consult factory.
6. Other wetted materials: Hysol epoxy.
7. High temperature units available to 400°F. Consult factory.
8. Standard flow settings are calibrated in water. Other set points in water or oil are available. Consult factory.
9. Pistons: Brass for oil, polysulfone for water in either housing; SST in SST housing.
10. Calibration: Flow stands are calibrated to the National Bureau of Standards and Thomas Products Ltd. recalibration schedule.

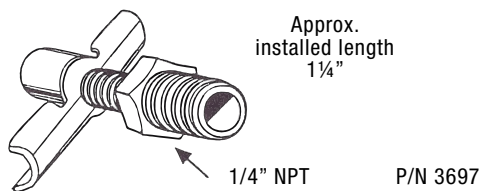
Specifications:

Housing	Piston	Spring	Reed Switch	Wire	Oper. Temp. <i>Select Piston</i>	Oper. Pres.	Proof Load	Burst Strength	Set Pt. Accur.	Set Pt. Diff.
Brass or 316 SST	Polysulfone Brass, or 316 SST <i>See Note 6,9</i>	316 SST	20 Watt SPDT <i>See Note 3,4</i>	18 AWG 24" Lg Polymeric <i>See Note 5</i>	w/Brass or SST Piston <i>See Note 7</i> -20°F to +300°F w/Polysulfone Piston -20°F to +225°F	1000 PSIG*	2500 PSIG*	5000 PSIG*	±10% MAX. <i>See Note 10</i>	±20% MAX.
						*Without use of optional Petcock				

Pressure Drop Δp :



OPTIONS: BRASS PETCOCK



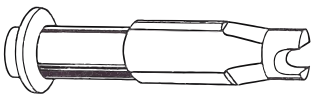
Electrical & Switch Ratings:

See Model 1300. Page 8

Part No.

SIZE NPT	FLOW SET GPM	BRASS Housing	PISTON P/N Specify	316 SS Construction
1/4"	.1	43253 - _____		43259
	.25	43254 - _____		43260
	.5	43255 - _____		43261
	.75	43256 - _____		43262
	1.0	43257 - _____		43263
	1.5	43258 - _____		43264

PISTONS FOR BRASS OR 316 SST HOUSINGS:

	BRASS	P/N 3699
	316 SST	P/N 3700
	POLYSULFONE	P/N 3701



See Note 9

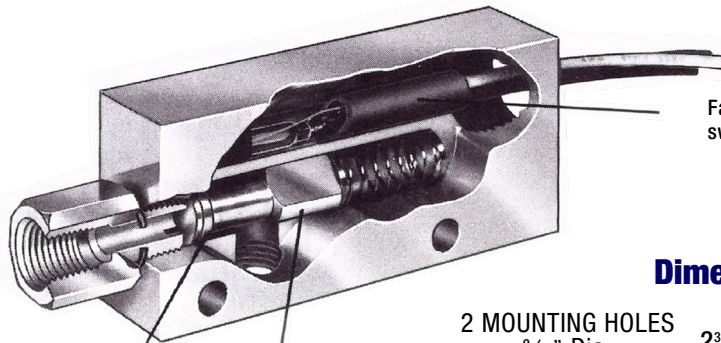
FIXED SET POINTS, 1/4" NPT, BRASS & SST

Model 1600

- Set points in water from .1 GPM to 1.5 GPM.
- Set points in airtrom .06 SCFM to 8 SCFM.

Applications:

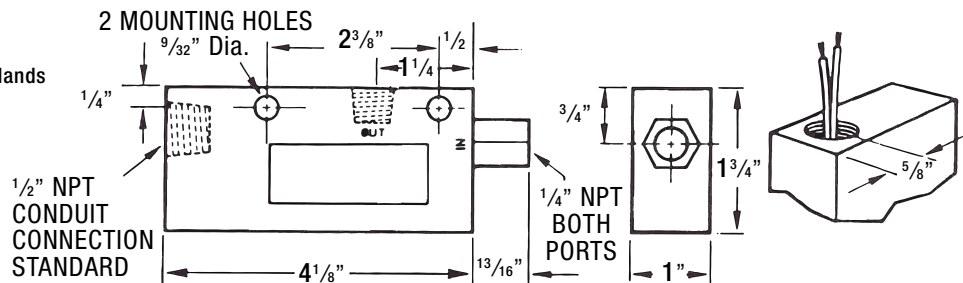
- UL Recognized (Note 4)  
- Machine Tool Industry
- Lubrication Systems
- Lasers



Factory replaceable switch capsules.

Increased piston lands are O.D. ground.
Hardened and lapped running bore.

Dimensional Data: Model 1600 & 1700



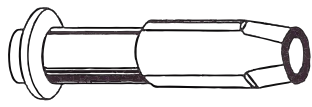
Specifications:

Housing	Piston	Spring	“O” Ring	Reed Switch	Wire	Oper. Temp.	Oper. Pres.	Proof Load	Brust Strenght	Set Pt. Accur.	Set Pt. Diff.	Repeat-ability
Brass or 316 SST	Polysulfone <i>See Note 15</i>	316 SST	Viton “A”	20 Watt SPDT <i>See Notes 4, 5</i>	18 AWG 24” Lg. Poly- meric <i>See Notes 6, 7</i>	w/ Brass or SST Piston -20°F to +300°F <i>See Note 8</i>	1000 PSIG	2500 PSIG	5000 PSIG	±10% MAX. <i>See Note 18</i>	1600 15% MAX.	1% Max. Devia- tion
	Brass <i>See Notes 12, 14, 16</i>					w/ Polysulfone Piston -20°F to +225°F					1700 20% MAX.	
	316 SST <i>See Notes 12, 14, 17</i>											

Part No.

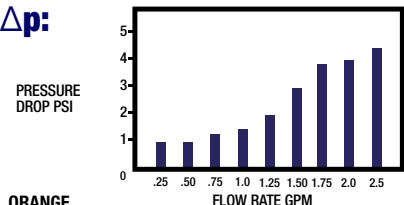
SIZE NPT	FLOW SET GPM <i>See Note 1-3, 9, 10</i>	BRASS Housing	PISTON P/N Specify	316 SST Construction
1/4"	.1	12600 - _____		12609
	.25	12601 - _____		12610
	.5	12602 - _____		12611
	.75	12603 - _____		12612
	1.0	12604 - _____		12613
	1.5	12605 - _____		12614

PISTONS FOR BRASS OR 316 SST HOUSINGS:

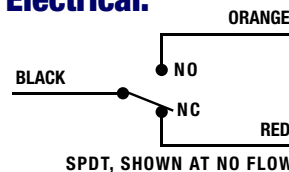
	POLYSULFONE	P/N 4054
	BRASS	P/N 4055
	316 SST	P/N 4056

See Note 12, 14-17

Pressure Drop Δp: Model 1600



Electrical:



Reed switch shown in NO FLOW condition.

Switch Ratings... Max Resistive Load

V.A.	VOLTS	AMPS DC	AMPS AC	AMPS AC MAX
20	0-50	.4	.4	1.0
	120	.15	.16	
	240	.06	.08	

Switch Rating of UL Recognized Unit 20 VA: 120-240 VAC Pilot Duty

1600 & 1700

Please turn to our *Company Profile* and *Level Switch Selection Guide* to learn more of the advantages in specifying *Thomas Products Ltd.* sensors.

FIXED SET POINTS, 1/4" NPT, BRASS & SST

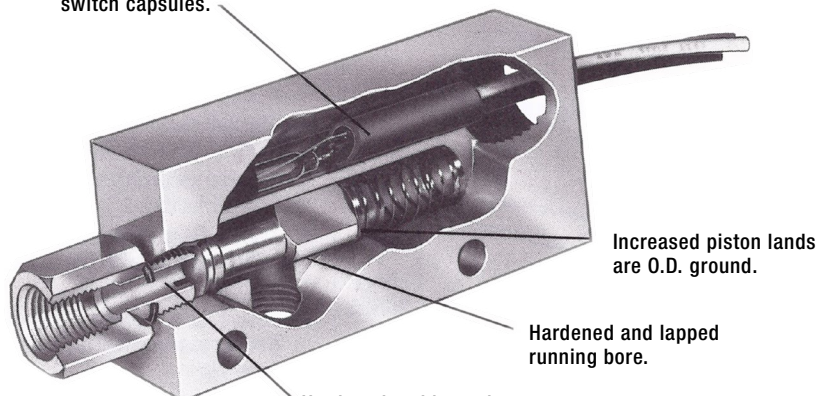
Model 1700:

- Water from 2 cc/min to 300 cc/min.
- Air from 2SCFH to 50SCFH.

Applications:

- U.L. File E86797
- Accurate low flow applications.
- Lubrication Systems

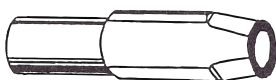
Factory replaceable switch capsules.



Part No.

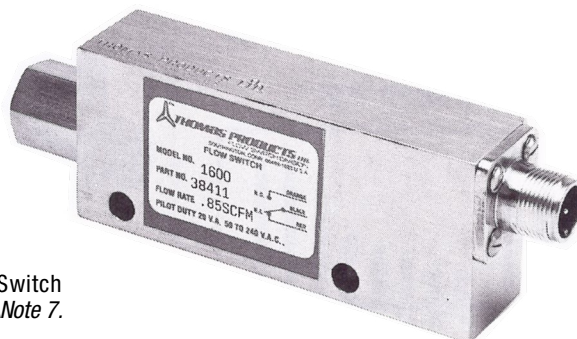
SIZE NPT	FLOW SETTING cc/min See Note 1, 2, 3, 9, 10	EQUIV. GPM APPX.	BRASS Housing	PISTON P/N Specify	316 SST Construction
1/4"	50	.013	12618 - _____		12628
	100	.026	12619 - _____		12629
	150	.040	12620 - _____		12630
	200	.053	12621 - _____		12631
	250	.066	12622 - _____		12632
	300	.079	12623 - _____		12633

PISTONS FOR BRASS OR 316 SST HOUSINGS:

 See Notes 12, 14	POLYSULFONE	P/N 4058
	BRASS	P/N 4059
	316 SST	P/N 4060

Electrical & Switch Ratings: Page 10.

Specialty Options:

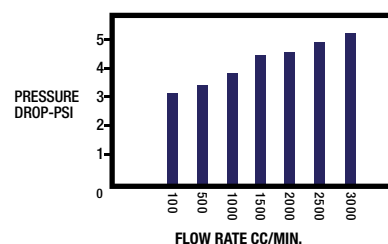


Model 1600 Air Flow Switch with MS connector See Note 7.

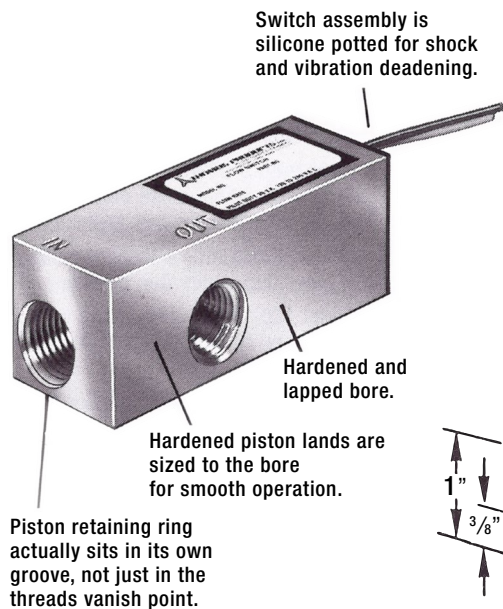
Notes: Model 1600 & 1700

- Standard flow calibration is in water @ 70°F with lead wires up. Calibrated on increasing flow.
- Temperature effect on flow settings: water calibration, slight change; oil varies with viscosity; gas, slight change.
- Set point accuracy will change slightly in other than calibrated position.
- Model 1600 is UL recognized with a SPST reed switch rated pilot duty 20 VA 120-240 VAC, 174°F.
- Relays for higher loads, junction boxes, terminal strips, etc. are available. See accessories section for details (See Page 28)
- Also available: leads in different lengths, cable, terminated ends, etc. Consult factory.
- Optional 3 Pin M/S connector - MS3102E10S-3P. Consult factory.
- High temperature units available to 400°F. Consult factory.
- Standard flow settings are calibrated in water. Other set points in water or oil are available. Consult factory.
- Optional air set points for Model 1600 are available. Consult factory with CFM and line pressure.
- Optional air set points for Model 1700 are available. Consult factory with CFH and line pressure.
- Other wetted materials: Hysol epoxy.
- Model 1700 orifice dia. is 5/16"; inlet fitting supplied by customer must be 3/8" I.D. minimum.
- All SST piston eliminating epoxy is available. Consult factory.
- Polysulfone for water in brass housing.
- Brass for oil in brass housing.
- SST for SST housing.
- Calibration: Flow stands are calibrated to the National Bureau of Standards and Thomas Products Ltd. recalibration schedule.

Pressure Drop Δp : Model 1700



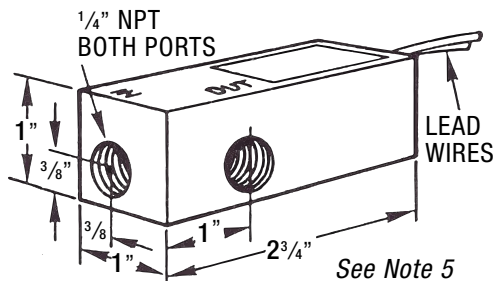
FIXED SET POINTS, 1/4" NPT, BRASS & SST



Applications:

- The "mini" small and accurate in line flow switch detects low or high flow rates.
- Fixed actuations from .1 GPM to 1.5 GPM
- UL File No. E86797

Dimensional Data:



Notes: Model 1900

1. Standard flow calibration is in water @ 70°F with lead wires up. Calibrated on increasing flow.
2. Temperature effect on flow settings: water calibration, slight change; oil varies with viscosity.
3. Set point accuracy will change slightly in other than calibrated position.
4. Optional aluminum housings with SST trim are stocked. Consult factory.
5. Optional mounting holes available. Consult factory.
6. Also available: leads in different lengths, cable, terminated ends, etc. Consult factory.
7. Relays for higher loads are available. See accessories section for details (See Page 28)
8. High temperature units available to 400°F. Consult factory.
9. Standard flow settings are calibrated in water. Other set points in water or oil are available. Consult factory.
10. Other wetted materials: Hysol Epoxy
11. All SST piston for either brass or SST housing, eliminating hysol epoxy. Consult factory.
12. Calibration: Flow stands are calibrated to the National Bureau of Standards and Thomas Products Ltd. recalibration schedule.

Part No.

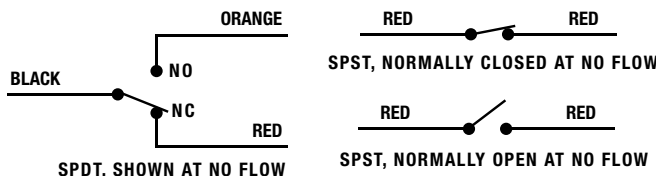
SIZE NPT	FLOW SETTING GPM <small>See Note 1, 2, 3, 9</small>	P/N BRASS N.O. SPST SWITCH	P/N BRASS N.C. SPST SWITCH	P/N BRASS SPDT SWITCH	P/N 316 SST SPDT SWITCH
1/4"	.1	18321	18327	18350	18360
	.25	18322	18328	18351	18361
	.5	18323	18329	18352	18362
	.75	18324	18330	18353	18363
	1	18325	18331	18354	18364
	1.5	18326	18332	18355	18365

Specifications:

Housing	Piston	Spring	Reed Switch	Wire	Oper. Temp. <small>See Note 8</small>	Oper. Pres.	Proof Load	Brust Strength	Set Pt. Accur.	Set. Pt. Diff.	Repet-ability
Brass <small>See Note 10</small>	316 SST		20 Watt 316 SPST or SPDT <small>See Note 7</small>	18 AWG 24" Lg. Polymeric <small>See Note 6</small>	-20°F to +250°F	1000 PSIG	2000 PSIG	4000 PSIG	±10% MAX. <small>See Note 12</small>	±15% MAX.	1% Max. Deviation
316 SST <small>See Notes 10, 11</small>					-20°F to +300°F						

Electrical:

Reed switch shown in NO FLOW condition.



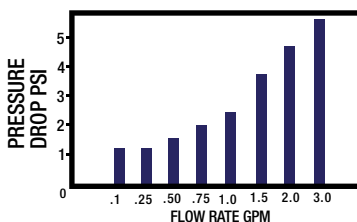
Switch Ratings...

Max Resistive Load

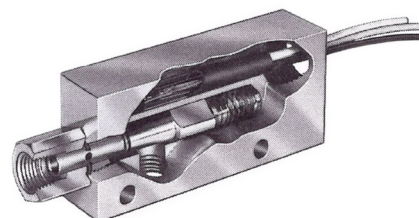
V.A.	VOLTS	AMPS DC	AMPS AC	AMPS AC MAX
20	0-50	.4	.4	1.0
	120	.15	.16	
	240	.06	.08	

Switch Rating 20 VA: 120-240 VAC Pilot Duty

Pressure Drop Δp :

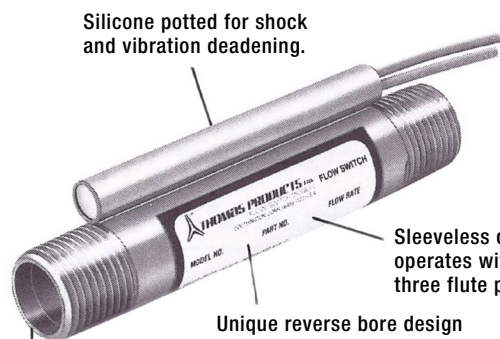


Specialty Options:



See Model 1700 for set points from 2 cc/min. to 300 cc/min.

FIXED SET POINTS, 1/2" NPT, BRASS & SST



Easy disassembly for cleaning or service.

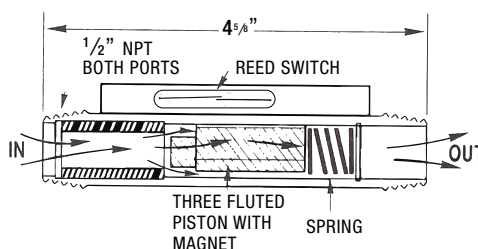
Applications:

- "Thomas Tube" designed for straight in line flow detection.
- Industry Standard Since 1986.
- .5 GPM to 3.0 GPM in brass or stainless steel
- U.L. No. E86797

Notes: Model 2000

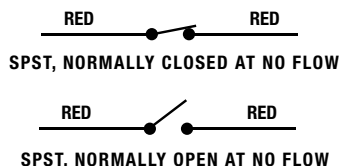
1. Standard flow calibration is in water @ 70°F with lead wires in horizontal position. Calibrated on decreasing flow.
2. Set point accuracy will change slightly in other than calibrated position.
3. Also available: Leads in different lengths, cable, terminated ends, etc. Consult factory.
4. High temperature units available to 400°F. Consult factory.
5. Standard flow settings are calibrated in water. Other set points in water or oil are available. Consult factory.
6. Other wetted materials: Hysol epoxy.
7. All SST piston for either brass or SST housings, eliminate hysol epoxy is available. Consult factory.
8. Relays for higher loads are available. See accessories section for details (Page 28)
9. Calibration: Flow stands are calibrated to the National Bureau of Standards and Thomas Products Ltd. recalibration schedule.

Dimensional Data:



Electrical:

Reed switch shown in NO FLOW condition.



Specifications:

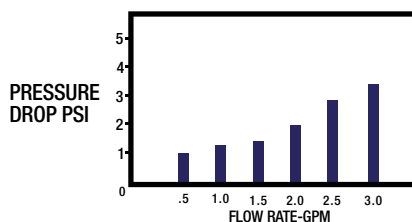
Housing	Piston	Spring	Reed Switch	Wire	Oper. Temp. See Note 4	Oper. Pres.	Set Pt. Accur.	Set Pt. Diff.
Brass See Note 6	316 SST	316 SST	50 Watt SPST See Note 8	18 AWG 24" Lg. Polymeric See Note 3	-20°F to +250°F	1500 PSIG MAX.	±20% MAX. See Note 9	20% MAX.
316 SST See Notes 6, 7					-20°F to +300°F			

Switch Ratings... Max Resistive Load

V.A.	VOLTS	AMPS DC	AMPS AC	AMPS AC MAX
50	0-50	1.0	1.0	0.5
	120	.4	.4	
	240	.2	.2	

Switch Rating 50 VA: 120-240 VAC Pilot Duty

Pressure Drop Δp :



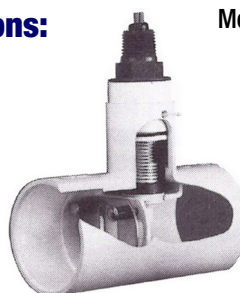
Part No.

SIZE NPT	FLOW SETTING GPM See Note 1,2,5	APPX. ΔP AT 10 GPM-PSIG	P/N BRASS N.O. SPST SWITCH	P/N BRASS N.C. SPST SWITCH	P/N 316 SST N.O. SPST SWITCH	P/N 316 SST N.C. SPST SWITCH
1/2"	.50	25	12666	12676	12723	12733
	1.0	25	12667	12677	12724	12734
	1.5	20	12668	12678	12725	12735
	2.0	20	12669	12679	12726	12736
	2.5	15	12670	12680	12727	12737
	3.0	15	12671	12681	12728	12738

Specialty Options:

Model 2000 Brass Flow Switch with cable.

Model 2600 for units with straight thru flow and pipe sizes to 3" NPT.



2100 & 2200

Please turn to our *Company Profile* and *Level Switch Selection Guide* to learn more of the advantages in specifying *Thomas Products Ltd.* sensors.

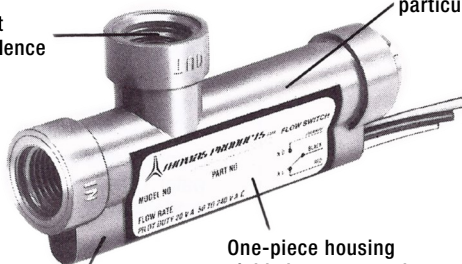
FIXED SET POINTS, 9/16" - 18" UNF-2B, PLASTIC

Model 2100

UL

Because we mold in-house, we can certify that our polysulfone flow switches use only virgin material and runners are not introduced nor have color concentrates been added during processing that can hinder FDA requirements or additive leaching.

Full size out port minimizes turbulence



Unique reverse taper design helps pass particulates.

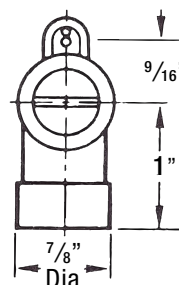
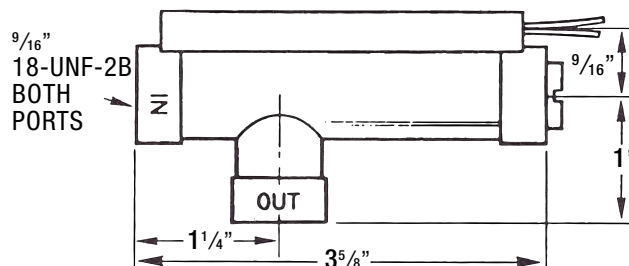
One-piece housing yields burst strength of 1500 ± PSI @ 70°.

Large, full size reed switch silicone potted for shock and vibration deadening.

Applications:

- Plastic configuration throughout.
- Rugged yet economical flow switch for monitoring liquid flow or no flow conditions.
- FDA Approved Polysulfone
- UL File No. E86797

Dimensional Data: Model 2100 & 2200



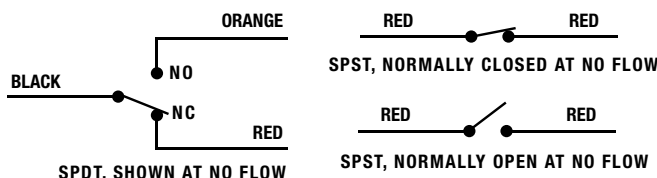
Specifications:

Housing	Piston	Spring	"O" Ring	Reed Switch	Wire	Oper. Temp.	Oper. Pres.	Set Pt. Accur.	Set Pt. Diff.
Polysulfone		316 SST	Viton "A"	20 Watt SPDT 15 Watt SPST See Note 6	18 AWG 24" Lg. Polymeric See Note 5	-20°F to +225°F	250 PSIG @ 70°F Max. See Note 7	15% MAX.	20% MAX.

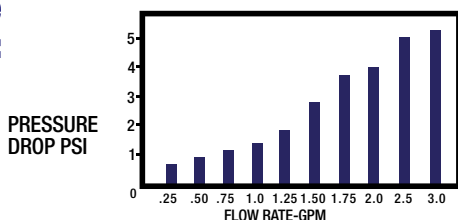
Part No.

SIZE PORT	FLOW SETTING GPM <i>See Note 1,2,8,9</i>	P/N N.O. SPST SWITCH	P/N N.C. SPST SWITCH	P/N SPDT SWITCH
9/16" - 18	.1	12686	12695	12704
	.25	12687	12696	12705
	.5	12688	12697	12706
	.75	12689	12698	12707
	1	12690	12699	12708
	1.5	12691	12700	12709

Electrical: Reed switch shown in NO FLOW condition.



Pressure Drop Δp :



Switch Ratings... Max Resistive Load

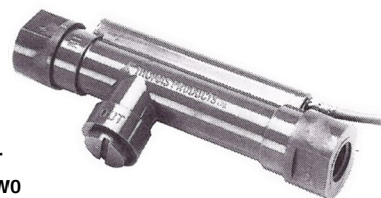
V.A.	VOLTS	AMPS DC	AMPS AC	AMPS AC MAX
20	0-50	.4	.4	1.0
	120	.15	.16	
	240	.06	.08	

Switch Rating 20 VA: 50-240 VAC Pilot Duty

Specialty Options



Model 2100 Ryton R4 with SST low flow orifice assembly, 1 cc/min water set point and cable.



Model 2100 Modified for straight-thru flow and two 1/4" NPT adapters.

2100 & 2200

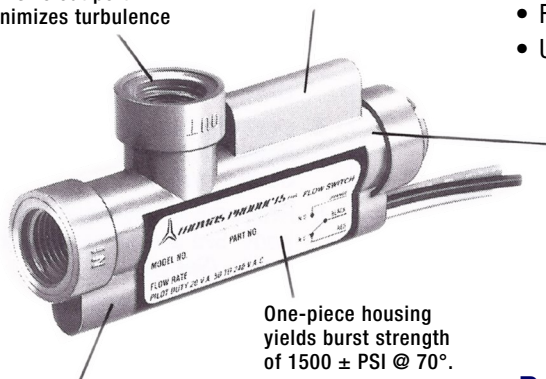
Please turn to our *Company Profile* and *Level Switch Selection Guide* to learn more of the advantages in specifying *Thomas Products Ltd.* sensors.

FIXED SET POINTS, 9/16"- 18" UNF-2B, PLASTIC

Model 2200

Exterior mounted alnico magnet returns the piston eliminating return spring.

Full size out port minimizes turbulence

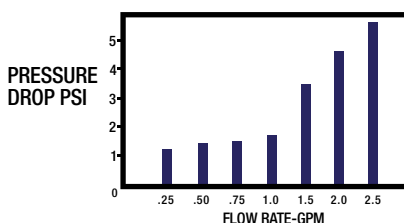


Applications:

- Similar to 2100. Ideally suited where no metal parts can come in contact with the liquid.
- FDA Approved Polysulfone.
- UL File No. E 86797

Springless design, no metal wetted components.

Pressure Drop Δp :



Notes: Model 2100/2200

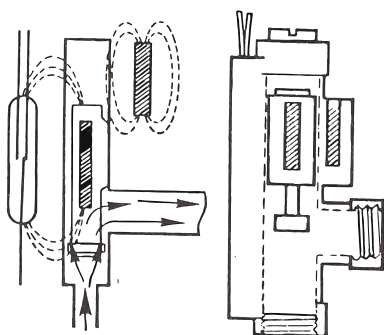
1. Standard flow calibration is in water @ 70°F with lead wires up. Calibrated on increasing flow.
2. Model 2100 set point accuracy will change slightly in other than calibrated position.
3. Model 2200 must be installed with lead wires up.
4. Polysulfone is a FDA approved material.
5. Lead wires are available in different lengths, terminated ends, cables, etc. Consult factory.
6. Relays are available for handling higher loads. See accessories section for details. (See Page 28)
7. Actual housing burst strength of 1500 PSI ± @ 70°F.
8. Standard flow settings are calibrated in water as low as 2 cc/min. Other set points in water are available. Consult factory.
9. Calibration: Flow stands are calibrated to the National Bureau of Standards and Thomas Products Ltd. recalibration schedule.

Specifications:

Housing	Piston	Spring	"O" Ring	Reed Switch	Wire	Oper. Temp.	Oper. Pres.	Set Pt. Accur.	Set Pt. Diff.
Polysulfone	Polysulfone	None	Viton "A"	20 Watt SPDT <i>See Note 6</i>	18 AWG 24" Lg. Polymeric <i>See Note 5</i>	-20°F to +225°F	250 PSIG @ 70°F Max. <i>See Note 7</i>	± 20%	25% MAX.

SPRINGLESS DESIGN:

Using a second magnet Model 2200 eliminates the need for a return spring. Model 2200 must be installed with lead wires up.



Part No.

SIZE PORT	FLOW SETTING GPM <i>See Note 1,3,9</i>	P/N SPDT SWITCH
9/16" - 18"	.1	12713
	.25	12714
	.5	12715
	.75	12716

Adapter fittings to convert the 9/16-18 UNF -2B threaded port to 1/8" NPT, 1/4" NPT or 1/2" barbed to accept 1/2" I.D. flexible hose. All fittings are made of polysulfone and are supplied with viton "A" "O" ring seals assembled in place.

ACCESSORY FITTINGS FOR MODEL 2100 and 2200

ADAPTER SIZE	P/N	'O' RING & FITTING DIMENSIONAL DATA
1/8" NPT	12720	9/16" - 18 UNF - 2A TYP. 5/8" Dia.
1/4" NPT	12721	1" Dia.
1/2" BARB ACCEPTS 1/2" I.D. FLEXIBLE HOSE	12722	1/2" Dia.

Electrical & Switch Ratings:

See previous page

FIXED SET POINTS, 1/2" - 1" PVC

Plastic components are molded in-house using only 100% virgin material. Runners are not reintroduced to the performance parts.

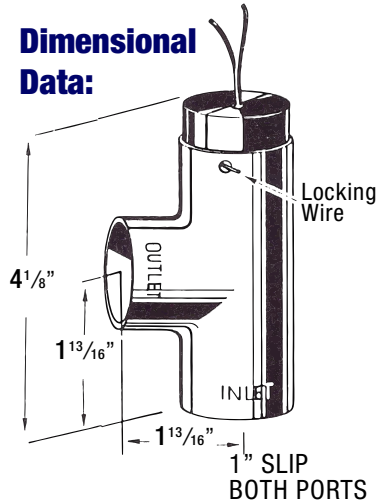
UL

RA

Applications:

- PVC construction
- Removable bonnet assembly
- Return spring for any mounting attitude.

Dimensional Data:



Solid one-piece removable bonnet assembly means safer use to 150 PSIG.

True-flow switch design utilizes a SST return spring for any mounting attitude.

Anti-menscous projections on shuttle prevents shuttle from drying in place after long machine shutdowns.

Specifications:

Housing	Shuttle	Spring	"O" Ring	Reed Switch	Wire	Oper. Temp.	Oper. Pres.	Set Pt. Accur.	Set Pt. Diff.
PVC <i>See Note 8</i>	PVC <i>See Note 8, 6</i>	316 SST	Viton "A"	20 Watt SPST <i>See Note 2, 5</i>	18 AWG 24" Lg. PVC <i>See Note 4</i>	-20°F to +140°F	150 PSIG	±20% <i>See Note 9</i>	20% MAX.

Part No.

STANDARD FLOW SETTING <i>See Notes 1, 9</i>	P/N
.5 GPM	42549
1.0 GPM	42545

Electrical:

Reed switch shown in NO FLOW condition.



Switch Ratings... Max Resistive Load

V.A.	VOLTS	AMPS DC	AMPS AC	AMPS AC MAX
20	0-50	.4	.4	1.0
	120	.15	.16	
	240	.06	.08	

Switch Rating 20 VA: 50-240 VAC Pilot Duty

ACCESSORY ADAPTERS FOR MODEL 1800
Model 1800 may be used as is with 1" slip ports or with any combination of adapters shown.

P/N	DIMENSIONAL DATA
42751	1" SLIP TYP. 1 1/2" OCTAGON TYP. 3/4" SLIP
42752	1/2" SLIP
42753	3/4" NPT
42754	1/2" NPT

Notes: Model 1800

1. Standard flow calibration is in water @ 70°F with lead wires up. Calibrated on increasing flow.
2. Optional SPDT reed switches are available. Consult factory.
3. Standard flow set points available to 6.0 GPM in water. Consult factory.
4. Lead wires are available in different lengths, terminated ends, cables, etc. Consult factory.
5. Relays are available for handling higher loads. See accessories section for details. (See page 28.)
6. Other wetted material: ceramic ring magnet.
7. When specifying Model 1800 with 1/2" NPT, conduit connector, only plastic junction box and flexible conduit should be used.
8. Model 1800 is available molded in CPVC. Consult factory.
9. Calibration: Flow stands are calibrated to the National Bureau of Standards and Thomas Products Ltd. recalibration schedule.

Specialty Option:

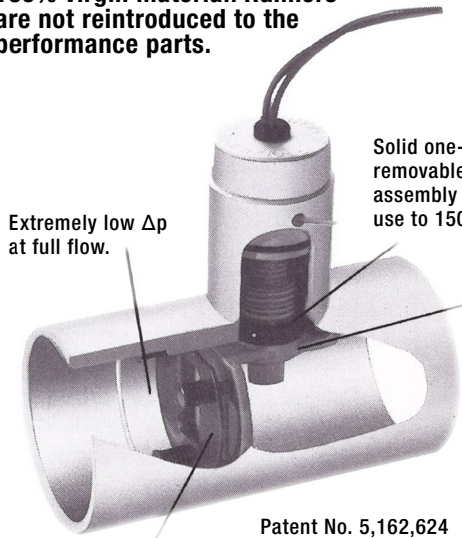
Model 1800 with 1/2" NPT conduit connector. See Note 7.



FIXED SET POINTS, 1/2" - 2" PVC

Plastic components are molded in-house using only certified 100% virgin material. Runners are not reintroduced to the performance parts.

UL



Extremely low Δp at full flow.

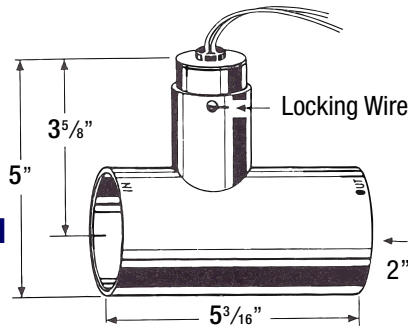
Solid one-piece removable bonnet assembly means safer use to 150 PSIG.

Anti-menscous projections on shuttle prevents shuttle from drying in place after long machine shutdowns.

Patent No. 5,162,624

Patented clapper design bypasses higher flow after the set point is reached to allow for full flow and help pass particulates.

Dimensional Data:



Applications:

- Straight thru flow design.
- PVC Construction.
- Removeable bonnet assembly.
- Return spring for any mounting attitude.
- Very low pressure drop.

Notes: Model 2600

1. Standard flow calibration is in water @ 70°F with lead wires up. Calibrated on decreasing flow.
2. Temperature effect on flow settings: water calibration, slight change; oil varies with viscosity.
3. Optional SPDT reed switches are available. Consult factory.
4. Lead wires are available in different lengths, terminated ends, cables, etc. Consult factory.
5. Relays are available for handling higher loads. See accessories section for details. (See Page -28)
6. Other wetted materials: ceramic ring magnet.
7. When specifying Model 2600 with 1/2" NPT conduit connector, only plastic junction box and flexible conduit should be used.
8. Calibration: Flow stands are calibrated to the National Bureau of Standards and Thomas Products Ltd. recalibration schedule.

Specifications:

Housing	Shuttle	Spring	"O" Ring	Reed Switch	Wire	Oper. Temp.	Oper. Pres.	Set Pt. Accur.	Set Pt. Diff.
PVC	PVC See Note 6	316 SST	Viton "A"	20 Watt SPST See Note 3,5	18 AWG 24" Lg. PVC See Note 4	-20°F to +140°F	150 PSIG	±20% See Note 8	20% MAX.

Electrical: Reed switch shown in NO FLOW condition.

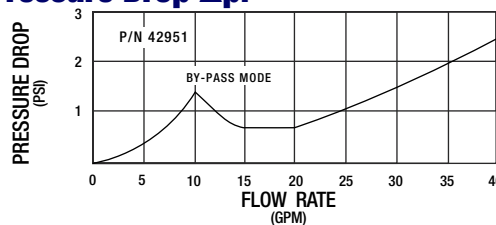


Switch Ratings... Max Resistive Load

V.A.	VOLTS	AMPS DC	AMPS AC	AMPS AC MAX
20	0-50	.4	.4	1.0
	120	.15	.16	
	240	.06	.08	

Switch Rating 20 VA: 50-240 VAC Pilot Duty

Pressure Drop Δp :

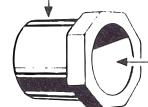


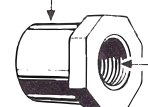
Part No.

STD. FLOW SETTING See Note 1,2,8	.5 GPM	1.0 GPM	2.0 GPM
P/N	42951	42952	42953

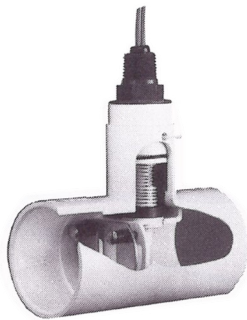
ACCESSORY ADAPTERS:

Model 2600 may be used as is with 2" slip ports or with any combination of adapters shown.

P/N	"A"	DIMENSIONAL DATA
42954	1 1/2"	2" SLIP TYP. 
42955	1 1/4"	
42956	1"	
42957	3/4"	
42958	1/2"	

P/N	"B"	DIMENSIONAL DATA
42959	1 1/2"	2" SLIP TYP. 
42960	1 1/4"	
42961	1"	
42962	3/4"	
42963	1/2"	

Specialty Option:



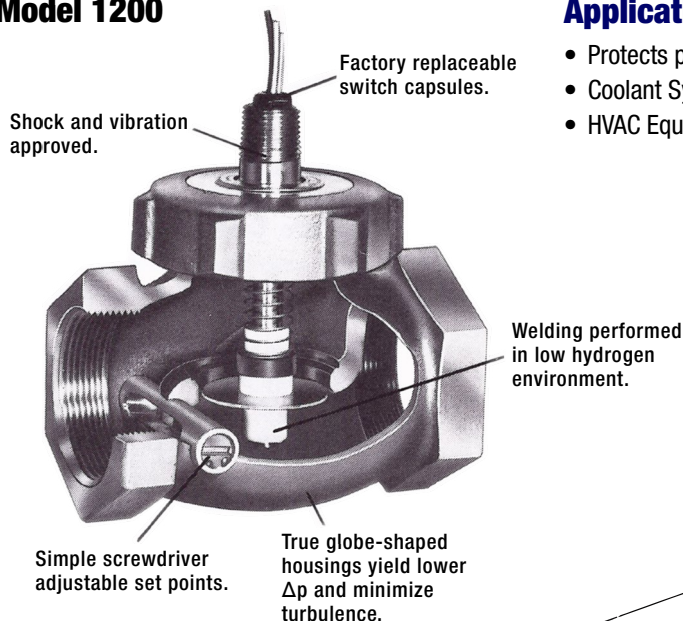
Model 2600 with 1/2" conduit connector. See Note 7.

1200 & 1400

Please turn to our *Company Profile* and *Level Switch Selection Guide* to learn more of the advantages in specifying *Thomas Products Ltd.* sensors.

ADJUSTABLE SET POINTS, 1" NPT, BRONZE

Model 1200



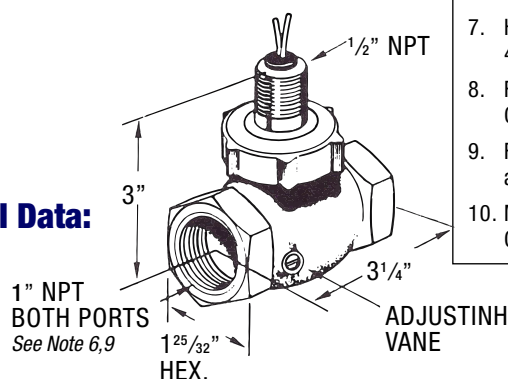
Applications:

- Protects pumps and bearings.
- Coolant Systems.
- HVAC Equipment.

Notes: Model 1200/1400

1. Strain reliefs are standard. Optional silicone potting avail. Consult factory.
2. Optional 100W SPST reed switches are stocked. Consult factory.
3. Relays for higher loads, junction boxes, terminal strips, etc. are available. See accessories section for details (See Page 28)
4. Also available: Leads in different lengths, cables, terminated ends, etc. Consult factory.
5. Other wetted materials: ceramic ring magnet.
6. Optional port sizes: BSP, SAE, silverbraz, socket weld, etc. Consult factory.
7. High temperature units available to 400°F. Consult factory.
8. Factory calibrated set points available. Consult factory.
9. For smaller pipe sizes, install appropriate size bushings.
10. Model 1200 is available in 316 SST. Consult factory.

Dimensional Data:

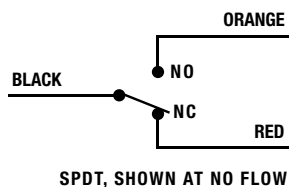


Specifications:

Housing	Shuttle	Spring	"O" Ring	Reed Switch	Wire	Oper. Temp.	Oper. Pres.	Proof Load	Burst Strength	Set Pt. Diff.	Repeat-ability
Bronze See Note 10	Teflon See Note 5	316 SST	Viton "A"	20 Watt SPDT See Note 2,3	18 AWG 24" Lg. Polymeric See Note 4	-20°F to +300°F See Note 7	400 PSI @ 100°F	800 PSI @ 100°F	1200 PSI @ 100°F	±10%	1% Max. Deviation

Electrical:

Reed switch shown in NO FLOW condition.



Part No.

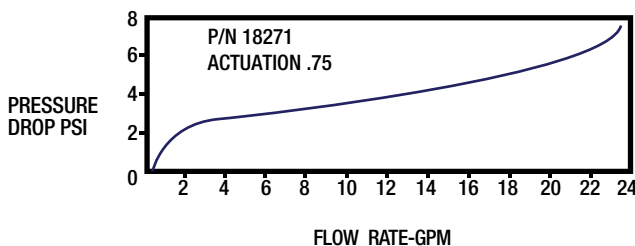
SIZE NPT	FLOW SETTING RANGE GPM See Note 8	P/N
1" See Note 6,9	.75 - 6.0	18271
	2.0 - 8.0	18272
	5.0 - 15.0	18273

Switch Ratings... Max Resistive Load

V.A.	VOLTS	AMPS DC	AMPS AC	AMPS AC MAX
20	0-50	.4	.4	1.0
	120	.15	.16	
	240	.06	.08	

Switch Rating 20 VA: 120-240 VAC Pilot Duty
U.L. File E86797

Pressure Drop Δp :

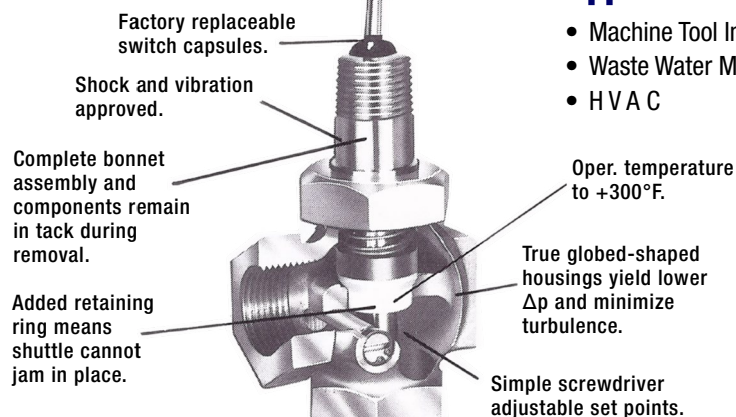


1200 & 1400

Please turn to our *Company Profile* and *Level Switch Selection Guide* to learn more of the advantages in specifying *Thomas Products Ltd.* sensors.

ADJUSTABLE SET POINTS, 3/4" NPT, BRONZE

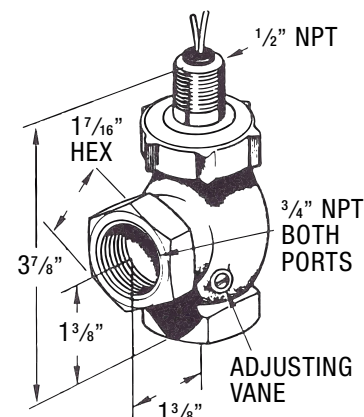
Model 1400



Applications:

- Machine Tool Industry
- Waste Water Monitoring
- H V A C

Dimensional Data:



Specifications:

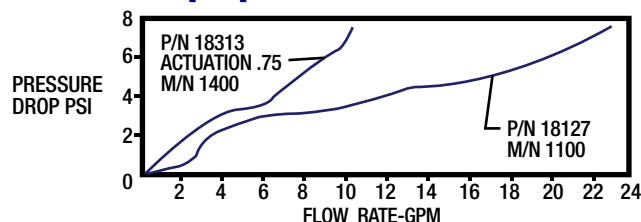
Housing	Shuttle	Spring	"O" Ring	Reed Switch	Wire	Oper. Temp.	Oper. Pres.	Proof Load	Burst Strength	Set Pt. Diff.	Repeat-ability
Bronze	Teflon <i>See Note 5</i>	316 SST	Viton "A"	20 Watt SPDT <i>See Note 2,3</i>	18 AWG 24" Lg. Polymeric <i>See Note 4</i>	-20°F to +300°F <i>See Note 7</i>	400 PSI @ 100°F	800 PSI @ 100°F	1200 PSI @ 100°F	±10%	1% Max. Deviation

Electrical: *See Model 1200*

Part No.

SIZE NPT	FLOW SETTING RANGE GPM <i>See Note 8</i>	P/N
3/4"	.75 - 4.0	18313
	2.0 - 8.0	18314
	7.0 - 14.0	18315

Pressure Drop Δp :



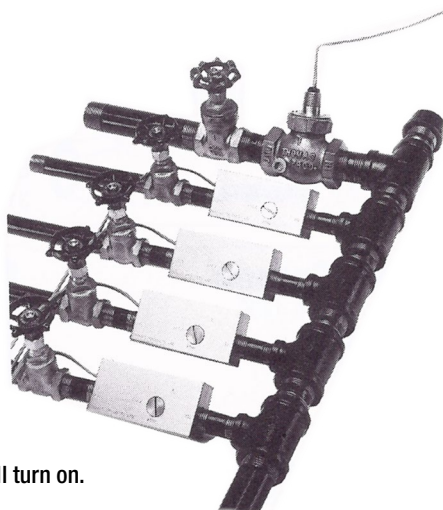
Applications:

COOLANT MANIFOLD ON AN INJECTION MOLDING MACHINE:

Eliminate constant visual inspection of minimum coolant flow by using flow switches. You can be sure sufficient flow is automatically monitored. Flow switches activate audible alarms, lights, etc., warning you of insufficient flow. Operation is simple:

1. Close all flow control valves.
2. Open all flow switch set point adjusting vanes (alarms will turn on).
3. Turn on coolant.
4. Open each flow control valve to correct flow rate (starting at highest flow).
5. Close each flow switch set point adjusting vane until alarms just turn off.

Whenever the flow rates drop under that set point, your alarms will turn on.

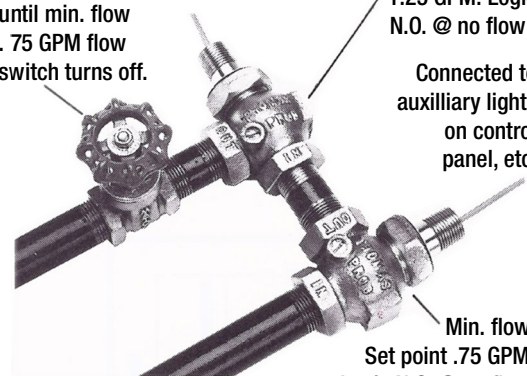


LUBE OIL MONITORING SYSTEM ON A ROLLING MACHINE: 1 GPM is needed in the oil bath to lubricate and cool large bronze bearings.

While lube oil is pumping, open adjusting valve until min. flow .75 GPM flow switch turns off.

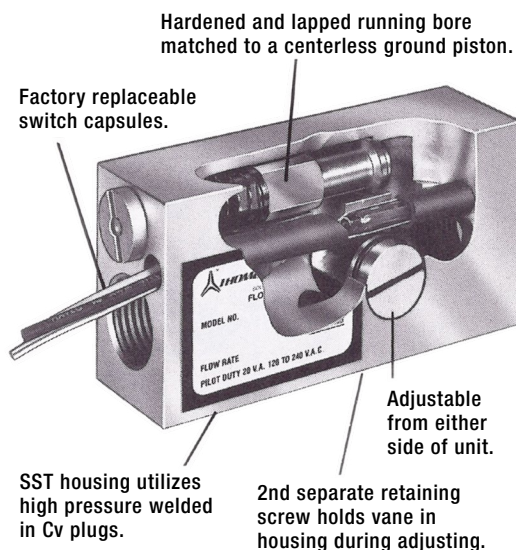
Max. flow: Set point 1.25 GPM. Logic N.O. @ no flow.

Connected to auxilliary lights on control panel, etc.

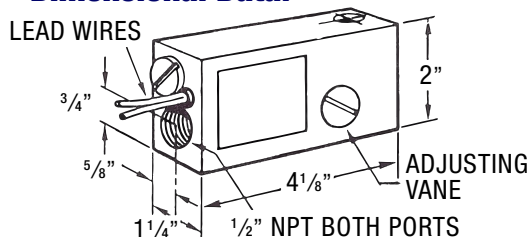
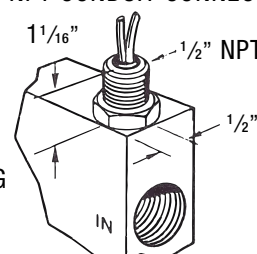


Min. flow: Set point .75 GPM. Logic N.C. @ no flow.

Whenever the flow rate rises or drops out of the set point range, your alarm will turn on.

ADJUSTABLE SET POINTS, 1/2" NPT, BRASS/SST**Notes: Model 1500**

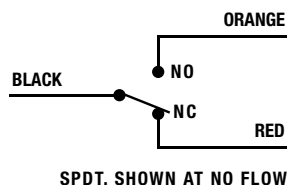
1. Approximate SCFM depending on line pressure.
2. Optional lower air set point range. Consult factory.
3. Optional lower water set point range .2-10 GPM. Consult factory.
4. Factory calibrated set points available. Consult factory.
5. Other wetted materials: epoxy.
6. Polysulfone for water in brass housing.
7. Brass for oil in brass housing.
8. SST for SST housing.
9. Relays for higher loads, junction boxes, terminal strips, etc. are available. See accessories section for details. Page 28.
10. High temperature units are available to 400°F. Consult factory.
11. Also available: leads in different lengths, cable, terminated ends, etc. Consult factory.

Dimensional Data:**1/2" NPT CONDUIT CONNECTOR****Specifications:**

Housing	Piston	Spring	"O" Ring Seal	Reed Switch	Wire	Oper. Temp.	Oper. Pres.	Proof Load	Burst Strength	Set Pt. Diff.	Repeat-ability
Brass or 316 SST	Polysulfone See Note 6	316 SST	Viton "A"	20 Watt SPDT See Note 9	18 AWG 24" Lg. Polymeric See Note 11	Polysulfone Piston -20°F to +225°F	1000 PSIG	2500 PSIG	5000 PSIG	±15% MAX.	1% Max. Deviation
	Brass See Notes 5, 7					Brass or SST Piston -20°F to +300°F See Note 10					
	316 SST See Notes 5, 8										

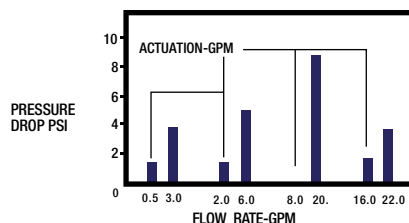
Electrical:

Reed switch shown in NO FLOW condition.

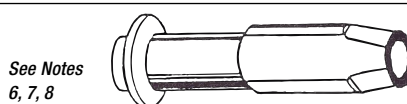
**Switch Ratings...****Max Resistive Load**

V.A.	VOLTS	AMPS DC	AMPS AC	AMPS AC MAX
20	0-50	.4	.4	1.0
	120	.15	.16	
	240	.06	.08	

Switch Rating 20 VA: 120-240 VAC Pilot Duty

Pressure Drop Δp :**Part No.**

SIZE NPT	FLOW SET RANGE		BRASS Housing	PISTON P/N Specify	316 SST Construction
1/2"	.5 to 20 Water GPM See Notes 3, 4	Lead Wires	18540 - _____		18541
		Conduit Conn.	18542 - _____		18543
1/2"	2 to 200 Air SCFM See Notes 1, 2, 4	Lead Wires	18545		18546
		Conduit Conn.	18547		18548

PISTONS FOR LIQUIDS IN BRASS OR SST HOUSINGS:

POLYSULFONE	P/N 4054
BRASS	P/N 4055
316 SST	P/N 4056

Specialty Options:

See Model 1200 & 1400 for more helpful application information

Model 1500 with M/S connector MS3102E10S-3P



ADJUSTABLE PADDLE TYPE, BRASS, SST, PLASTIC

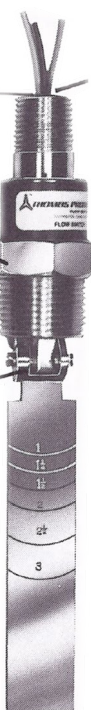
Model 2400

Model 2500

Factory replaceable switch capsules.

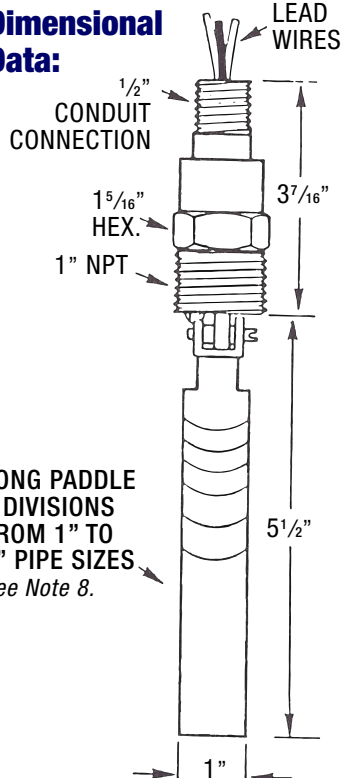
All metal design uses no plastic components.

Rugged investment cast components.



SPDT reed switch.

Dimensional Data:



LONG PADDLE
6 DIVISIONS
FROM 1" TO
3" PIPE SIZES
See Note 8.

Notes: Model 2400/2500

1. Flow tests were performed in water with unit installed into standard reducing tee.
2. Set point accuracy depends on paddle cut-off length.
3. Unit installs into a 1" reducing tee or weld-a-let etc. for 1" pipe sizes and up.
4. Install vertically as shown, lead wires up.
5. Higher temperature units available up to 450° F. Consult factory.
6. Relays for higher loads, junction boxes, terminal strips, etc. are available. See accessories section for details (See Page 28)
7. To adjust flow set point, simply cut paddle for the appropriate set point listed. See also installation/maintenance sheet.
8. For pipe sizes larger than 3", actuation of the 5" paddle is a velocity of approximately .5 ft./sec.
9. Also available: leads in different lengths, cable, terminated ends, etc. Consult factory.
10. Optional 100W SPST reed switches are stocked. Consult factory.

Specifications:

Model	Housing	Paddle	Shuttle	Spring	Reed Switch	Wire	Oper. Temp.	Oper. Pres. Max.	Set Pt. Accur.	Repeat-ability	Pressure Drop
2400	Brass or 316 SST	316 SST	316 SST	316 SST	20 Watt SPDT See Note 6,10	18 AWG 24" Lg. Polymeric See Note 9	-30°F to +300°F See Note 5	850 PSIG	±25% MAX. See Note 2	±5%	3 PSIG MAX.
2500	Polysulfone	Polysulfone	Polysulfone				-20° to +225°F	150 PSIG			

Part No.

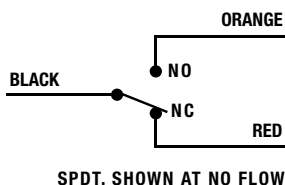
MODEL NO.	P/N BRASS	P/N 316 SST	P/N POLYSULFONE
2400	19650	19651	
2500			19652

Actuation-Deactuation in GPM/Water See Note 1-4, 7, 8

Paddle Cut-Off	PIPE LINE SIZES											
	1"		1 1/4"		1 1/2"		2"		2 1/2"		3"	
	ACT	DA	ACT	DA	ACT	DA	ACT	DA	ACT	DA	ACT	DA
1"	6	4	9	7	13	9						
1 1/4"			7	5	9	7	16	13				
1 1/2"					13	9	23	16	34	30		
2"							17	12	24	20	26	22
2 1/2"									18	15	22	19
3"											17	14

Electrical:

Reed switch shown in NO FLOW condition.



SPDT, SHOWN AT NO FLOW

Switch Ratings... Max Resistive Load

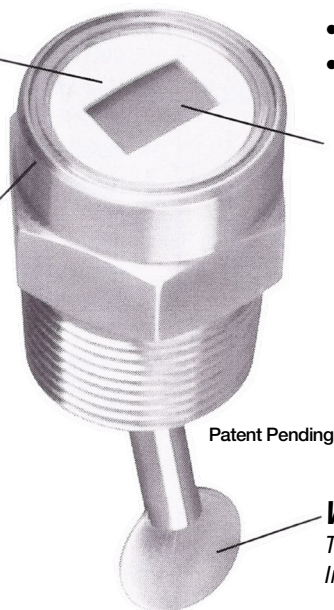
V.A.	VOLTS	AMPS DC	AMPS AC	AMPS AC MAX
20	0-50	.4	.4	1.0
	120	.15	.16	
	240	.06	.08	

Switch Rating 20 VA: 120-240 VAC Pilot Duty

FLOW INDICATOR, BRASS/SST, NON-ELECTRIC

DRY
Indicator
Not In
Contact
With Liquid

Safe Ambient
Pressure Side,
No Sight
Windows To
Leak Or Blow
Out



Applications:

- Replaces unreadable sight windows.
- Use in hazardous locations.
- Non-electrical.

RED means
no flow,
GREEN means
flow is OK

WET
Target Stays
In Liquid

Notes: Model 5200

1. Flow rates are for water, these valves will decrease as the viscosity increases.
2. All wetted parts in brass housing are brass and 316 SST or 316 SST housing is all 316 SST.
3. For pipe sizes larger than 1", indication can be seen at water velocity of 3 ft./sec.
4. High temperature modifications available.
5. Pressure drop < 1 PSIG.
6. 5.0 GPM indicators can be installed in any mounting attitude.
7. 1.5 GPM indicators must be installed horizontally in a vertical pipe run with the flow direction up.
8. If you need to know what direction the liquid is flowing either a 43702 or 43704 may be used. Unit must be installed in a horizontal pipe run, indicator housing up at 12:00. Depending on installation, the red and green side will indicate the direction of flow.

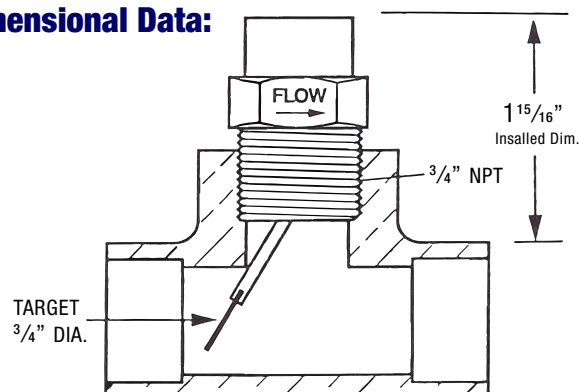
Specifications:

P/N	Indication GPM (Note 1, 3, 5)	Housing (Note 2)	Target Assembly	Operating Temperature	Operating Pressure
43701	5.0 (See Note 6)	Brass	316 SST	-40°F to +225°F (See Note 4)	400 PSI 70°F
43702	1.5 (See Note 7 & 8)				
43703	5.0 (See Note 6)	SST			
43704	1.5 (See Note 7 & 8)				

Operation:

The housing has 2 separate chambers. In the front chamber behind a transparent lens is a 2 color roller, half red, half green and it is equipped with a magnet. In the rear chamber is a magnet equipped target free to swing with the action of the liquid's flow. The poles of the 2 magnets are opposite creating a permanent interlock. As the liquid flow falls, the target and magnet swing to rotate the roller exposing the red side indicating low liquid flow. Accordingly, as the flow rises, the green side indicating a satisfactory liquid flow condition appears.

Dimensional Data:



Model 5200 illustrated at no flow condition, red side visible. Unit is installed into a standard PVC 1x1x3/4" SCH 40 reducing tee or a similar method may be used.