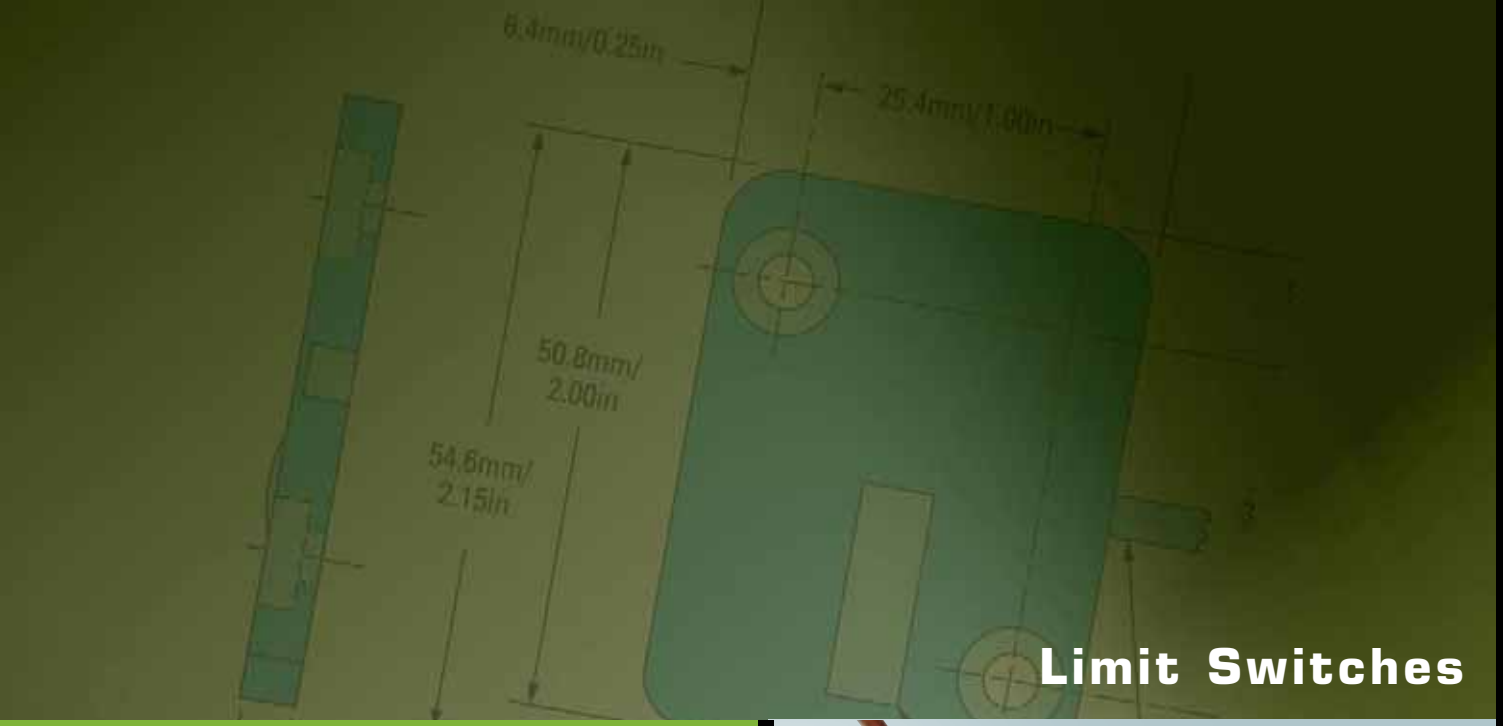


Limit Switches

QUALITY TESTED TO
PROVIDE LONG,
DEPENDABLE SERVICE

TOC

Thinswitch® Limit Switch

U.S. Patent No. 5,446,252

The Thinswitch® limit switch is specially designed to verify ejector plate return before permitting the mold to close in injection molding machines. Thin enough to fit inside the ejector housing, it can also be used for core slides, or any place space is limited.

The Thinswitch limit switch has been tested for reliability in more than 10 million cycles without failure. Two switches can be used in series for larger molds to ensure the ejector plate returns, preventing costly mold damage.

- Prevents costly damage by ensuring the ejector assembly is fully returned
- Adjustable operating point allows actuation between .187" and .250" from the base
- $^{3}/_{16}$" thick design fits snugly behind the ejector plate in the space provided by the rest buttons
- Included mounting hardware installs the Thinswitch Limit Switch easily
- Stripped and tinned 6 ft. wire leads make the switch ready to install without modification
- 175°F (79.4°C) standard temperature rating enables use for most molding applications
- **Quality tested over 10 million cycles to provide long, dependable service**
- Linear adjustment set screw can be set within .005 to .0025
- Premature spring and switch failure may result by adjusting the operating point more than .020" (.5mm) before the end of the ejector plate stroke
- In stock to provide same day delivery

RATED CURRENT VS. STEEL TEMPERATURE TSW 2220		
AMPS	°F	°C
5.0	85	29.4
4.0	120	49.0
3.0	155	68.3
2.0	175	79.4

NOTE: Please contact D-M-E for high-temperature applications.

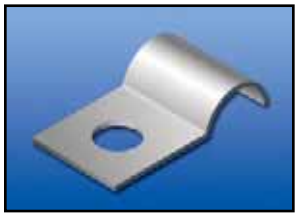
THINSWITCH LIMIT SWITCH CATALOG #TSW2220			
SPECIFICATIONS		MATERIALS	
ELECTRICAL:		BODY	FIBERGLASS-REINFORCED NYLON
250VAC	5 AMPS RESISTIVE	SPRING	STAINLESS STEEL
	4 AMPS INDUCTIVE	BACK COVER	POLYESTER FILM
28VDC (SEA LEVEL)	5 AMPS RESISTIVE	WIRE LEADS	22GA STRANDED, 3-CONDUCTOR, SHIELDED CABLE, 6 FT. (1.8M) LONG, ENDS STRIPPED AND TINNED
	4 AMPS INDUCTIVE		
OPERATING TEMPERATURE	175°F MAX (79.4°C MAX)		
SWITCHING	SPDT		

NOTE: Pressure required to activate the switch: 1 oz. min., 5 oz. max.

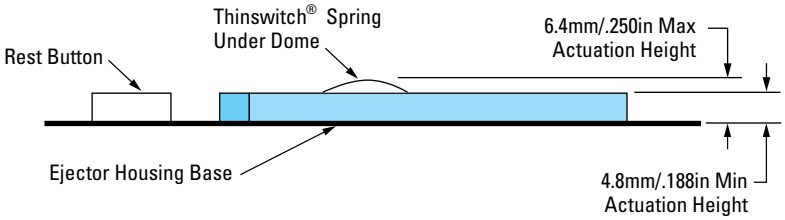
The Thinswitch Limit Switch is designed for use in very low power mold protection control circuits. It is not intended to switch heavy loads in power applications.

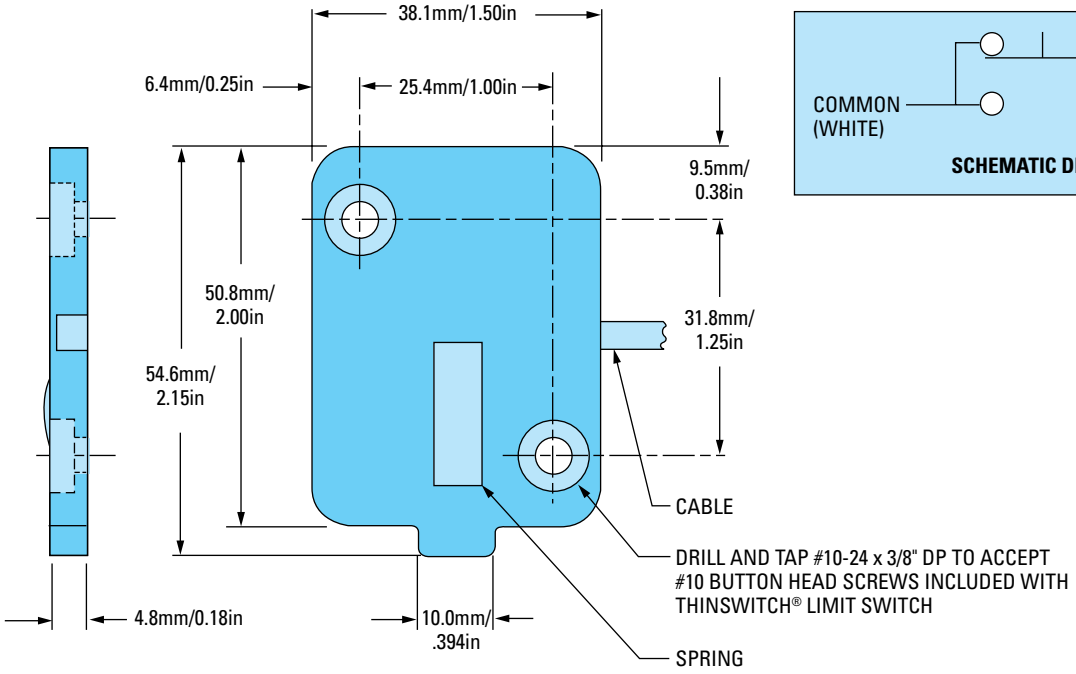
Thinswitch® Limit Switch

PARTS INCLUDED	
DESCRIPTION	QTY
THINSWITCH LIMIT SWITCH	1
4-40 ALLEN WRENCH (FOR HEIGHT ADJUSTMENT)	1
SCREWS (#10-24 X 1/2" BUTTON HEAD)	4
WIRE CLAMPS (.5" X .82" X .5" WITH .213" MOUNTING HOLE)	2
INSTRUCTION SHEET	1



Thinswitch includes
2 wire clamps.





Two- and three-dimensional part files are available from the D-M-E web site at www.dme.net.

NEW! Smartflow® Thinswitch® Liquid-Resistant Limit Switch

U.S. Patents 5,446,252 and 6,982,392

T-222-LR 175°F (79.4°C) operating temperature
HT-291-LR 250°F (121°C) operating temperature

SPECIFICATIONS

Part Number/Operating Temperature: T-222-LR Standard Model, 175°F max. (79.4°C max.)
HT-291-LR High Temp Model, 250° max. (121°C max.)
Switching: SPDT
Electrical: 250VAC – 5 amps resistive, 4 amps inductive (max)
28VDC (sea level) – 5 amps resistive, 4 amps inductive (max)

MATERIALS

Body: Fiberglass-reinforced nylon
Dome: Polyurethane
Back Cover: Polyester Film
Wire Leads: 22ga stranded, 3-conductor, shielded cable, 6 ft. (18m) long, ends stripped and tinned

General Description

Smartflow® Thinswitch® Liquid-Resistant Limit Switch is designed to verify ejector plate return in areas where occasional water or oil spray is present. The Thinswitch helps prevent accidental mold close in injection molding applications by providing a position switch that is tied to the injection molding machine control. The liquid resistant switch uses the same mounting hole locations as the original Thinswitch.

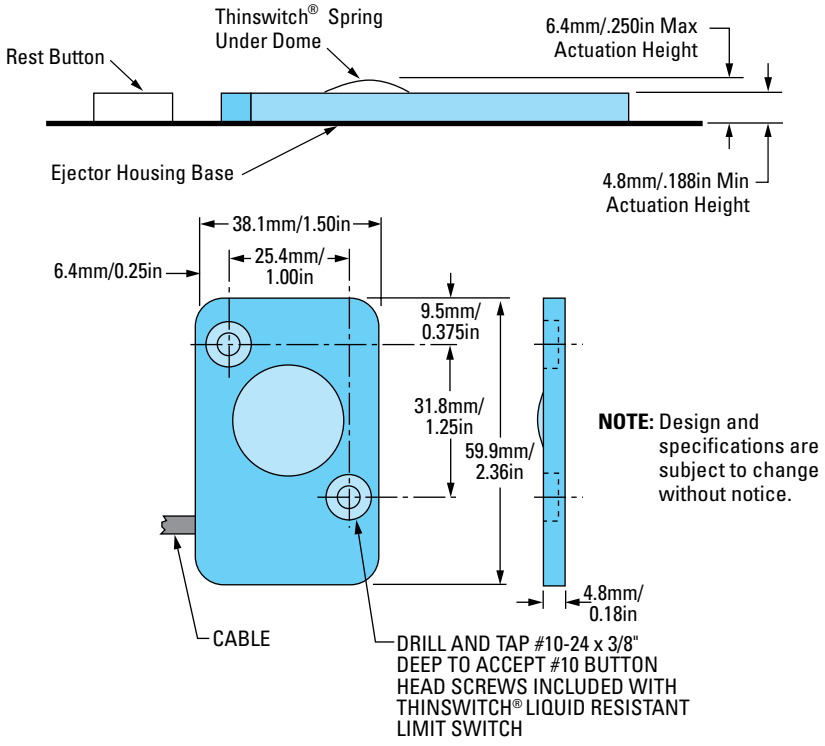
The Thinswitch has been tested for reliability over 10 million cycles without failure. Two switches can be used in series for larger molds to ensure the ejector plate return, preventing costly mold damage.

RATED CURRENT (RESISTIVE) VS. OPERATING STEEL TEMPERATURE					
T-222-LR			HT-291-LR		
AMPS	°F	°C	AMPS	°F	°C
5.0	85	29.4	5.0	100	37.7
4.0	120	49.0	4.5	155	68.3
3.0	155	68.3	4.0	210	98.8
2.0	175	79.4	3.5	250	121.1

The Thinswitch® Limit Switch is designed for use in very low power mold protection control circuits. It is not intended to switch heavy loads in power applications.

Features and Benefits

- **Over 10 million cycle life**
- 175°F (79.4°C) standard temperature rating
- 250°F (121°C) high-temperature unit for higher temperature needs
- Adjustable actuation between .187" and .250" from the mold base
- $^{3}/_{16}$" thick design fits snugly behind the ejector plate between the rest buttons
- Stripped and tinned 6 ft. wire leads
- Mounting screws and wire clips included



NOTE: Design and specifications are subject to change without notice.

NOTE: Premature spring and switch failure may result by adjusting the operating point more than .020" (.5mm) before the end of the ejector plate stroke.