

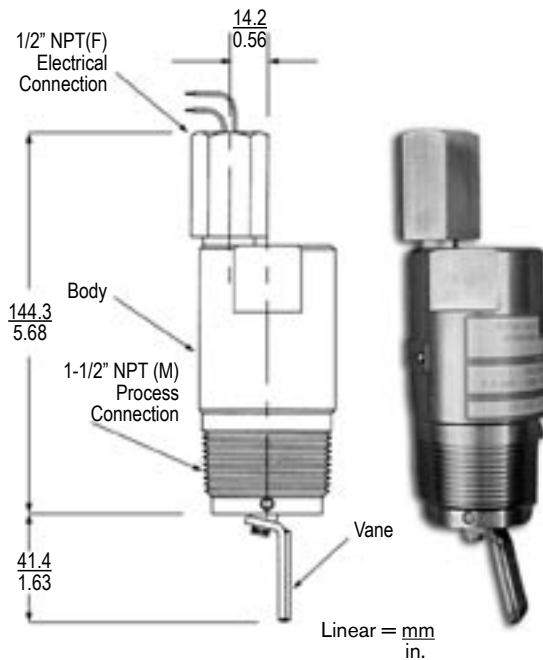


# Type 1520 Electric Flow Switch

Form 499

**Type 1520** is a vertically mounted, vane-operated flow switch suitable for plant and OEM applications where open or closed contacts are required to signal flow or no flow conditions. The vane extension arm moves a magnet which actuates (deactuates) a hermetically sealed reed switch.

## Dimensions



## Product Specifications

<b>Mounting</b>		
Orientation	Vertical mount only	
Connection Size	1-1/2" NPT(M) Standard	
<b>For</b>	<b>Change</b>	<b>To</b>
2" NPT(M)	F5A	F2A
Flanged Mounting	F5A	*
*See flange table below for option designator		
Maximum Process Pressure	1500 psi (103 bar)	
Process Temperature Range	-40 to 400°F (-40 to 204°C)	
<b>Electrical</b>		
Switch Type	Hermetically sealed reed switch with 18" 20 AWG wire leads	
Switch Rating (resistive)	1 amp at 110 VAC 3 amps at 28 VDC	
Housing	Class I, Group A, B, C & D; Division 1 & 2	
Optional Relay Housing	Class I, Groups C & D, Divisions 1 & 2	
Connection Size	1/2" NPT(F)	
Contact Form	SPST (For SPDT change W9 to W1 in the model number)	
Minimum Flow Rate	1 FPS	
Design Code	ANSI B31.3	
Shipping Weight	Approximately 6 lbs. (3 kg)	
Agency Listing	CSA Certified (optional). See page 2.	

*Design and specifications are subject to change without notice. For latest revision, see [www.sorinc.com](http://www.sorinc.com).*

## How to Order

Select model number from table below. Accessory designator(s) may be added after **EF** if required. See page 2.

Body Material	Vane Material	Model Number
303SS*	316SS (Standard)	1520B - F5A - C - W9 - EF
316SS	316SS	1520C - F5A - C - W9 - EF

\*Also known as ASME SA 320 Grade B8F.

## Optional Flanges (316SS construction only)

All flanges are welded to the switch body. CSA Certified option "CS" required.

Designator	Raised Face Flange		Designator	Raised Face Flange	
F7C	2-1/2"	150#	F4C	4"	150#
F7D		300#	F4D		300#
F7E		600#	F6C	6"	150#
F3C	3"	150#	F6E		300#
F3D		300#			
F3E		600#			

### Optional Accessories

Add option designators to end of model number.

Description	Designator
Wetted parts are cleaned for industrial oxygen service.	BB
3/4" NPT(F) conduit connection.	CR
CSA Certified Explosion Proof Class I, Groups C & D when used with RB or RC Relay Optional Accessories. CSA Certified Explosion Proof Class I, Groups A, B, C & D.	CS
Canadian Registration Number (CRN) - Process ratings may be affected. Consult the factory for details.	CV
Certificate of conformance to ANSI B31.3	CZ
Stainless steel terminal block housing. FM approved and CSA Certified Class I, Groups A, B, C & D; Class II, Groups E, F, & G, Class III; Division 1 (NEMA 4X)	HT
NACE constructionj - MR-01-75. Available only withy 316SS materials of construction.	NC
Tag, fiber. Attached with plastic wire to housing. Stamped with customer-specified tagging information.	PP
24 VDC-powered DPDT relay in explosion-proof terminal box. Contact rating: 10 amps @ 115 VAC. Class I, Groups C & D; Division 1.	RB
120 VAC-powered DPDT relay in explosion-proof terminal box. Contact rating: 10 amps @ 115 VAC. Class I, Groups C & D; Division 1.	RC
Tag, stainless steel. Attached with stainless steel wire to housing. Stamped with customer-specified tagging information. (2 lines, 18 characters and spaces per line.)	RR
Stainless steel nameplate or separate stainless steel tag. Permanently attached to housing. Stamped with customer-specified tagging information.	TT
Fungicidal varnish. Covers exterior and interior except working parts.	VV
Epoxy coating. Exterior only. Polyamide epoxy with 316SS pigment.	YY

### Replacement Parts

Part Number	Description
3130 - 091	SPST Hermetically Sealed Reed Switch Capsule
3130 - 242	SPDT Hermetically Sealed Reed Switch Capsule
3130 - 106	SPST Hermetically Sealed Reed Switch Capsule for CSA Certified units
3130 - 243	SPDT Hermetically Sealed Reed Switch Capsule
3130 - 118	316SS Vane Assembly
3130 - 403	Actuator Arm Replacement Kit (1-1/2" NPT and flanged process connections)
3130 - 404	Actuator Arm Replacement Kit (2" NPT process connection)

### Limited Warranty

SOR® agrees to repair or replace any switch found to be defective in material or workmanship within five years from date of shipment. The limited warranty is valid only if the switch was installed in accordance with published factory installation instructions, operated within the design limitations stated on the nameplate, and returned to the factory for inspection, freight prepaid, within the warranty period. Contact the factory for return authorization. No claim for labor or consequential damages will be allowed.

