Technical Specifications

The specifications listed on this page fully define the capabilities of the 6PS pressure switch. These two pages are designed to help you make an orderly selection of the variable parameters and is constructed to allow you to encode these parameters into a part number for ordering purposes.

Should your choices not fall within the outlined capabilities, do not hesitate to call Texas Instruments to discuss our capabilities in making custom devices.

NOTE: To configure a part to actuate on decreasing pressure, follow Step 1, then skip to Steps 4 and 5. Enter the desired tolerance and setpoint for decreasing pressure. These correspond to values in the right hand columns. Now select a pressure and tolerance from the two left hand columns which correspond to the deactuation pressure selected (read left across the table). Enter these values in Steps 2 and 3. Proceed with Step 6.

Customer Selected Specifications

Range of Actuation Pressure Settings at S.T.P. Form 45 psia to 600 psia

Range of Deactuation Pressure Settings

Standard	60% to 85% of actuation pressure
Special	85% to 90% of actuation pressure

Range of Tolerances on Actuating and Deactuation Pressure

Standard	up to ±6% of actuation pressure (±10 PSI min.)
Special	up to ±4% of actuation pressure (±5 PSI min.)

NOTE: Choice of deactuation pressure setting & tolerances affect price.

Design Specifications

Life at Rated Current	50,000 cycles
Current Capacity	Resistive . . . . . 5 amp @ 28 VDC Inductive . . . . . 2 amp @ 28 VDC Lamp . . . . . 1 amp @ 28 VDC
Vibration Resistance	25 G, 20-2000 cps (no contact chatter in excess of 10 micro-seconds) Non-operating . . . . . 200G (no damage)
Dielectric Withstanding Voltage	Terminal to terminal . . . . . 1000 vrms Terminal to case . . . . . 1250 vrms
Weight	30 grams max (without leads) 60 grams max (with connector)
Temperature Rating	−65°F to 275°F
Proof Pressure	8 times actuating pressure
Burst Pressure	8000 PSI min.
Metal Parts Exposed to Pressure Media and External Environment	300 Series Stainless Steel
Potting Material	Epoxy Resin

Physical Design Chart

Tube Fitting per MS33656 Modified	Flattened & Pierced Terminals SPDT only		Potted Leads SPDT only		MS33678-10SL-3P Connector SPDT only		MS33678-10SL-4P Connector SPST N.C. or N.O.		PT1H-8-3P Connector SPST only		Potted Leads SPST N.C. only		Potted Leads SPST N.O. only	
Lockwire holes when specified are .041/.053 dia. 2 places. Located .042/.058 from port face of hex	Without Lock-Wire Holes	With Lock-Wire Holes	Without Lock-Wire Holes	With Lock-Wire Holes	Without Lock-Wire Holes	With Lock-Wire Holes	Without Lock-Wire Holes	With Lock-Wire Holes	Without Lock-Wire Holes	With Lock-Wire Holes	Without Lock-Wire Holes	With Lock-Wire Holes	Without Lock-Wire Holes	With Lock-Wire Holes
⅛" OD Tubing MS33656-E2	6PS100	6PS150	6PS101	6PS151	6PS102	6PS152	6PS103	6PS153	6PS104	6PS154	6PS105	6PS155	6PS106	6PS156
3/16" OD Tubing MS33656-E3	6PS200	6PS250	6PS201	6PS251	6PS202	6PS252	6PS203	6PS253	6PS204	6PS254	6PS205	6PS255	6PS206	6PS256
¼" OD Tubing MS33656-E4	6PS300	6PS350	6PS301	6PS351	6PS302	6PS352	6PS303	6PS353	6PS304	6PS354	6PS305	6PS355	6PS306	6PS356
5/16" OD Tubing MS33656-E5	6PS400	6PS450	6PS401	6PS451	6PS402	6PS452	6PS403	6PS453	6PS404	6PS454	6PS405	6PS455	6PS406	6PS456
⅜" OD Tubing MS33656-E6	6PS500	6PS550	6PS501	6PS551	6PS502	6PS552	6PS503	6PS553	6PS504	6PS554	6PS505	6PS555	6PS506	6PS556
⅛" Pipe Fitting per MS33677	6PS600	6PS650	6PS601	6PS651	6PS602	6PS652	6PS603	6PS653	6PS604	6PS654	6PS605	6PS655	6PS606	6PS656
¼" Pipe Fitting per MS33677	6PS700	6PS750	6PS701	6PS751	6PS702	6PS752	6PS703	6PS753	6PS704	6PS754	6PS705	6PS755	6PS706	6PS756