

Switch Selection Questions

- 1** DOES THE SWITCH HAVE TO BE ADJUSTABLE?
Tamper-proof, tamper-resistant, fixed or adjustable
- 2** NORMAL SYSTEM PRESSURE?
Tells the pressure the switch normally sees
- 3** CRITICAL SET POINT?
Tells us the range required
Tells us if the set point is increasing or decreasing and if the deadband of the switch is important
- 4** WHAT IS THE PROCESS BEING SENSED?
Confirms the wetted materials
- 5** WHAT IS THE FUNCTION OF THE SWITCH?
Will confirm SPDT or DPDT
- 6** IS THE SWITCH GOING INTO A HAZARDOUS AREA (LISTED)?
Confirms electrical classification requirements

Model Selection Guide

Market	Pressure				Differential Pressure		Temperature	
	Ultra Low	Low	Mid	High	Ultra Low Diff. Pres	Low/Mid Diff. Pres	Direct	Remote
Agriculture (10)				200P1*C3/225P				
Automotive		110P1**3	100P1**3	200P1**3		160P1**3	100T3**3	100TC5**3
Biotech (8)		117P5S/173P 110P4**6	117P5S/173P 122P8**6 (General)				132T4**6 (Indoor) 132T4**6H (Outdoor)	132TC5**6 (Indoor) 132TC5**6H (Outdoor)
Chemical (2)	142P8**6	110P4**6S	112P8**6 (Flanged)		152P82*6	160P4**6	132T4**6H	100T3**3
Food-Beverage (4)		500P/130P	117P5**6					
Injection Molding			100P1*C3					
			100P1**3 (Adjustable) 131P1**3 (Alternate) 130P1**3 *(Tamper Proof)	200P1**3 (Adjustable) 225P1*3 (Tamper Proof)	151P1**3	160P1**3	100T3**3	100TC5**3
Machine Tool	151P1**3	110P1**3						
Military (3)								
Mining (11)			115P/130P	105PP4S				
Oil & Gas - Distribution		130P4**C6	132P4**6 132P4**6B (Indoor) 132P4**6BH (Outdoor)	232P4**6 232P4**6B (Indoor) 232P4**6BH *(Outdoor)		160P4**6 162P4**6H (Hi Pres)	132T4S**	132TC5**6
Oil & Gas - Production		110P4**6 130P4**6 (Panel Shops)	132P5**6H (Corrosive) 132P4**6BM (Low Voltage)	232P4**6BM (Low Voltage) 225P1C6B (OEM)		160P4**6B 160P4**6BS (NACE) 162P4**6H (Hi Pres)	132T4**6H 132T4**6M (Low Voltage)	132TC5**6H 132TC5**6HM (Low Voltage)
Petrochemical	142P8**6	110P4**6	122P8**6	152P82*6	160P4**6		132T4**6	132TC5**6
Pharmaceutical			117P5**6				173T4S**	
Power - Fossil (1)	142P8**6	110P4**6	100P4**6		152P82*6	160P4**6	100T3**6	100TC5**6
Power - Nuclear (5)	142P8**3	110P4**3	100P4**3		152P82*3	160P4**3	100T3**3	100TC5**3
			132P4**3 (General) 123P5**6 (Viscous) 122P8**6770 (Chlorine) 112P8**6*** (Flange)					
Pulp & Paper (2)	142P8**3448	110P4**6				160P4**3	100T3**3	100TC5**3
			132P4**6B (Indoor) 132P4**6BH (Outdoor) 132P5**6H (Corrosive) 132P4**6BM (Low Voltage)	232P4**6	152P8**6	160P4**6 (General) 160P4**6BS (Corrosive)	132T4**6 (Indoor) 132T4**6H (Outdoor)	132TC5**6 (Indoor) 132TC5**6H (Outdoor)
Refinery	142P8**6	132P4**6						
Semiconductor (9)	193P5S	173P5S					173T5S	
Steel Mfg.		110P1**3	100P1**3	200P1**3	152P82*3	160P1**3	100T3**3	100TC5**3
Transportation (7)		110P1**3/130P	100P1**3/130P					
Water / Wastewater (6)		110P1**3	100P1**3					

Notes:

- (1) Nuclear power select stainless steel diaphragm or welded capsule ("5" wetted material). Steam pressure applications.
- (2) Diaphragm seals may be required.
- (3) Specifications to be reviewed by Marketing and Engineering prior to switch selection.
- (4) Special part numbers assigned for Brewing: 103P5S35, 103P5S42, 103P5S44, 103P5S45, 103P5S46. Contact factory for more specific data.
- (5) Non-containment areas.

- (6) Referenced switches used in conjunction with diaphragm seals for wastewater.
- (7) Rail car manufactures use 110P/100P for adjustable switches and 130P's for built to order set points - Bulk of applications on brake systems.
- (8) Biotech applications involve special (non-catalog) switches - consult factory.
- (9) Special switches with VCR fittings for potentially lethal gasses used in chip manufacturing.
- (10) Adjustable (200P) and factory set (225P) used on bailing equipment.
- (11) 105PP used on breathing pacs. 115P/130P used on heavy equipment, e.g. earth-movers.



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Quick Reference Charts

Adjustable Pressure Switches

ADJUSTABLE PRESSURE RANGE	ENCLOSURE		PORT		WETTED MATERIAL			DIAPHRAGM				ELECTRICAL FORM			SERIES
	NEMA 3, 4, 13	NEMA 7, 9	ALUM.	STAIN.	HASTELLOY	MONEL	POLYIMIDE	BUNA N	STAIN.	TANTLM.	HASTELLOY	SPDT	DPDT	DOUBLE BRAKE	
0" to 40" H ₂ O	•	•		•	•		•				•	•	•	•	142P
7" H ₂ O to 15 psig	•	•	•	•			•					•	•	•	110P
2.3 to 2800 psig	•	•	•	•		•	•					•	•	•	100P/101P*
14 to 10000 psig	•	•	•									•	•	•	200P/201P*

*Applicable to Nema 3, 4 and 13 enclosure only

Compact Adjustable Pressure Switches

ADJUSTABLE PRESSURE RANGE	ENCLOSURE		PORT		WETTED MATERIAL			DIAPHRAGM		ELECTRICAL FORM		SERIES
	NEMA 3, 4, 13	NEMA 7, 9	ALUMINUM	STAINLESS	POLYIMIDE	STAINLESS	SPDT	DPDT				
1 to 170 psig	•	•	•	•	•	•	•	•	•	•	130P	
1 to 2300 psig		•		•			•	•	•	•	123P	
1 to 2300 psig	•	•		•			•	•	•	•	132P	
25 to 6000 psig	•	•		•			•	•	•	•	232P	
1 to 200 psig	•	•	•	•	•	•	•	•	•	•	131P	

Adjustable Pressure Switches for Chemical Processing Industry

ADJUSTABLE PRESSURE RANGE	ENCLOSURE		PORT		WETTED MATERIAL			DIAPHRAGM				ELECTRICAL FORM		SERIES
	NEMA 3, 4, 13	NEMA 7, 9	STEEL	STAIN.	HASTELLOY	MONEL	POLYIMIDE	STAIN.	TANTLM.	HASTELLOY	INCONEL	SPDT	DPDT	
1.5 to 325 psig		•	•	•				•	•	•	•	•	•	112P
1 to 2300 psig		•		•	•	•	•	•	•	•	•	•	•	122P

Adjustable Vacuum Switches

ADJUSTABLE VACUUM RANGE	ENCLOSURE		PORT		WETTED MATERIAL			DIAPHRAGM			ELECTRICAL FORM			SERIES
	NEMA 3, 4, 13	NEMA 7, 9	ALUMINUM	STAINLESS	HASTELLOY	POLYIMIDE	BUNA	STAINLESS	TANTALUM	HASTELLOY	SPDT	DPDT	DOUBLE BRAKE	
0" to 40" H ₂ O	•	•		•	•	•				•	•	•	•	142P
2" to 28" Hg	•	•	•	•		•					•	•	•	181P
2" to 28" Hg	•	•	•	•		•		•			•	•	•	182P

Adjustable Differential Pressure Switches

ADJUSTABLE PRESSURE RANGE	ENCLOSURE		PORT		WETTED MATERIAL			DIAPHRAGM		ELECTRICAL FORM			SERIES
	NEMA 3, 4, 13	NEMA 7, 9	ALUMINUM	STAINLESS	POLYIMIDE	STAINLESS	TANTALUM	HASTELLOY	SPDT	DPDT	DOUBLE BRAKE		
5 to 120 psid	•	•	•		•					•	•		155P/155PP
.5 to 100" H ₂ O Diff.	•	•	•	•	•	•	•	•	•	•	•	•	152P
1 to 150" H ₂ O		•	•	•	•					•	•		151P
.3 to 60 psid	•	•	•	•	•	•				•	•	•	160P
1 to 200 psid		•	•	•	•	•				•	•		162P

Adjustable Temperature Switches

ADJUSTABLE TEMPERATURE RANGE	ENCLOSURE		WETTED MATERIALS			ELECTRICAL FORM			SERIES
	NEMA 3, 4, 13	NEMA 7, 9	STEEL & STAINLESS	STAINLESS	BRASS/STAINLESS	SPDT	DPDT	DOUBLE BRAKE	
-69° to +500°F	•	•	•			•	•	•	100T
-69° to +925°F	•	•			•	•	•	•	100TC
-69° to +395°F	•	•			•	•	•	•	132T
-69° to +655°F	•	•			•	•	•	•	132TC

Factory Set/Tamperproof Pressure Switches

FIXED SET-POINT RANGE	ENCLOSURE			PORT		WETTED MATERIAL		DIAPHRAGM		ELECTRICAL FORM		SERIES
	NEMA 1&2	NEMA 3,4,13	NEMA 7,9	ALUMINUM	STAINLESS	POLYIMIDE	STAINLESS	SPDT	DPDT			
1.5 to 250 psig		•	•	•	•	•	•	•	•	•	115P/115PP	
2 to 2000 psig	•			•	•	•	•	•	•	•	105P/115PP	
20 to 3050 psig		•	•	•	•	•					125P	
15 to 7500 psig		•	•	•							225P	

Pharmaceutical/Biochem

ADJUSTABLE SET-POINT RANGE	ENCLOSURE			PORT		WETTED MATERIAL		DIAPHRAGM		ELECTRICAL FORM		SERIES
	NEMA 1&2	NEMA 3,4,13	NEMA 7,9	ALUMINUM	STAINLESS	POLYIMIDE	STAINLESS	SPDT	DPDT			
1 to 725 psig			•		•		•	•	•	•	117P	