

Model 718D

DISPLACER SWITCH - TOP INSERTED 3 STATION DIFFERENTIAL CONTROL, ON/OFF CONTROL OF 3 PUMPS, OR CONTROL 2 PUMP + HIGH OR LOW ALARM, OR CONTROL 1 PUMP + HIGH AND LOW ALARM

The Model 718D utilizes a mechanism and displacers similar to the Model 718a four-point alarm. The difference is that an adjustable differential device has been added and only three switch stations are utilized.

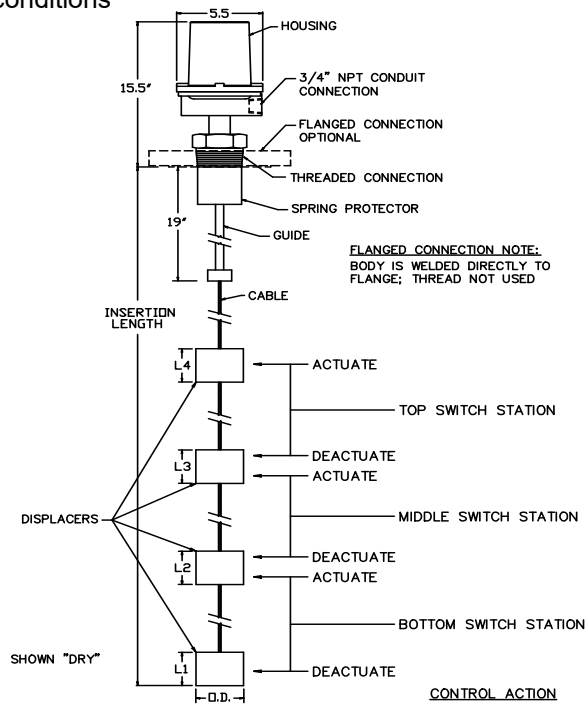
The lower switch station activates when the liquid level covers the "L2" displacer, and stays activated until the liquid level drops below the "L1" displacer.

The middle switch station activates when the liquid level covers the "L3" displacer and stays activated until the liquid level drops below the "L2" displacer.

The upper switch station activates when the liquid level covers the "L4" displacer and stays activated until the liquid level drops below the "L3" displacer.

This is very versatile unit and can perform complex control functions. Common applications include:

- A. Control 3 pumps
- B. Control 2 pumps with a high or low alarm
- C. Control 1 pump with a high and low alarm
- D. Provide staging for operation of 3 pumps on storm water inflow conditions



Delta Controls
CORPORATION

BASIC TYPE -
 SENSING DISPLACER -
 INSERTION DISTANCE -
 PROCESS CONNECTION -
 SWITCH AND HOUSING -
 OPTIONS

MODEL
 EXAMPLE: 718D - 20Y - 10' - 3"NPTS - D1W - AA

BASIC TYPE

M/N	DESCRIPTION
718D	3 STATION 4 DISPLACER

316 S.S. SPRING: 250°F MAXIMUM;
 INCONEL SPRING TO 450°F
 BASIC: 316 S.S. TRIM,
 416 S.S. ATTRACTOR

INSERTION DISTANCE

M/N	DESCRIPTION
10	10 FT OF 316 S.S. CABLE
#	UP TO 50 FEET OF 316 S.S. CABLE, MAXIMUM

REPLACE "#" WITH REQ'D FEET OF CABLE.
 FOR MONEL OR HASTELLOY "C" CABLE: C/F

PROCESS CONNECTION

M/N	PROCESS CONNECTIONS
3" NPT* 3" 150R*	3" NPT 3" 150# ANSI FLANGE
3" 300R* 3" 600R*	3" 300# ANSI FLANGE 3" 600# ANSI FLANGE
4" 150R* 4" 300R*	4" 150# ANSI FLANGE 4" 300# ANSI FLANGE

REPLACE "*" WITH "S" FOR STEEL,
 "B" FOR 304 S.S., OR
 "Y" FOR 316 S.S.
 CONSULT FACTORY FOR OTHER SIZES &
 RATINGS.

SENSING DISPLACER

M/N	MAT*	DISPLACERS (INCHES)				LENGTHS	WKG PRESS @ °F			MINIMUM ANSI FLANGED	
		MIN SPG	MAX SPG	O.D.			100°F	250°F	400°F	N/A	4" SCH 80
84Y	316 S.S.	0.45	0.51	3.5	10, 12.5, 12.5, 12.5	385	300	250	N/A	4" SCH 80	
85Y	316 S.S.	0.48	0.54	3.5	10, 12.5, 12.5, 12.5	385	300	250	N/A	4" SCH 80	
86Y	316 S.S.	0.50	0.57	3.5	8.1, 10, 12.5, 10	385	300	250	N/A	4" SCH 80	
87Y	316 S.S.	0.55	0.64	3.5	8.1, 10, 12.5, 10	385	300	250	N/A	4" SCH 80	
88Y	316 S.S.	0.60	0.70	3.5	5.9, 8.1, 10, 8.1	385	300	250	N/A	4" SCH 80	
89Y	316 S.S.	0.65	0.76	3.5	5.9, 8.1, 10, 8.1	385	300	250	N/A	4" SCH 80	
20Y	316 S.S.	0.70	0.82	3.5	5.9, 8.1, 10, 8.1	385	300	250	N/A	4" SCH 80	
21Y	316 S.S.	0.75	0.85	2.9	7.1, 10, 12, 10	500	400	325	3"	3" SCH 80	
22Y	316 S.S.	0.80	0.94	2.9	7.1, 10, 12, 10	500	400	325	3"	3" SCH 80	
23Y	316 S.S.	0.90	1.06	2.9	7.1, 10, 10, 10	500	400	325	3"	3" SCH 80	
25Y	316 S.S.	1.01	1.20	2.9	5.9, 8.2, 10, 8.2	500	400	325	3"	3" SCH 80	
26Y	316 S.S.	1.10	1.30	2.9	5.9, 8.2, 10, 8.2	500	400	325	3"	3" SCH 80	
27Y	316 S.S.	1.20	1.40	2.9	4.8, 7.1, 8.2, 7.1	500	400	325	3"	3" SCH 80	
28Y	316 S.S.	1.30	1.50	2.9	4.8, 7.1, 8.2, 7.1	500	400	325	3"	3" SCH 80	
29Y	316 S.S.	1.40	1.65	2.9	4.8, 7.1, 8.2, 7.1	500	400	325	3"	3" SCH 80	

* 316 S.S. ALSO AVAILABLE IN SOLID POLYPROPYLENE; WORKING PRESSURE OF 2200 PSIG @ 100°F; LIMITED TO 1520 PSIG @ 220°F MAX. CHANGE "Y" TO "P"

SWITCH AND HOUSING

M/N FIRST CHARACTER	SWITCH TYPE - SERVICE AND LOAD RATINGS	Switch Temp Rating
S	GENERAL USE, COMPACT, 4 AMP @ 28VDC, 5 AMP @ 125VAC, 250VAC	-65 to 250°F (-54 to 121°C)
T	HIGH TEMPERATURE; 5 AMP @ 125VAC, 250VAC; 0.5A@125VDC; 0.25A@250VDC	-65 to 400°F (-54 to 204°C)
H	SEALED SWITCHES, 15 AMPS @ 125/250VAC, 0.5 AMPS @ 125 VDC, 0.25A @ 250VDC, 1/8HP 125VAC, 1/4HP 250VAC	-67 to 185°F (-55 to 85°C)
L	A.C. MOTOR LOADS; 15 AMP @ 125,250,480VAC, 0.25 HP @ 250VAC, 1/8HP@125VAC; 1/4HP@250VAC; 0.5A@125VDC; 0.25A@250VDC	-67 to 185°F (-55 to 85°C)
D	HIGH D.C. LOADS; 10 AMP @ 125VAC/DC; 0.25 HP @ 125VAC/DC; 3A(resistive)@250VDC; 1/2HP@125VDC POLARIZED (i.e., with negative side connected to common.)	-67 to 180°F (-55 to 82°C)
M/N SECOND CHARACTER	NUMBER OF CONTACTS	
1	1 SPDT CONTACT	
2	2 SPDT CONTACTS	
4	4 SPDT CONTACTS (TYPE S ONLY)	
M/N THIRD CHARACTER	HOUSING RATING	
W	Type 4X, IP65	
X	TYPE 4X, IP65 (EPOXY COATED)	
C	ALUMINUM - FOR HAZARDOUS LOCATIONS; SEE CSA RATINGS	
T	300 STAINLESS STEEL - FOR HAZARDOUS LOCATIONS; SEE CSA RATINGS	

OPTIONS

M/N	DESCRIPTION
AA	NONE
IN	INCONEL SPRING 450°F INCREASE MIN. SPG BY 6%
SA	316 S.S. SHEATHED ATTRACTOR
HH	120VAC ELECTRICAL HOUSING HEATER TO PREVENT CONDENSATION & ICING



CSA Ratings:
 Housing types 'C' and 'T'
 Cl I Div 1, Gr B,C,D; Cl II, Div 1 Gr E,F,G; Cl III Div 1
 Class I Zone 1, Ex/AEx d IIB+H₂
 Maximum contact ratings 480Vac, 15A, T5 with max ambient 80°C. T6 without heater with max ambient 60°C



Engineered Reliability

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