

Neptune® TRICON-S

TRICON-S Register

Features & Benefits

Register

- Reed switch technology
- Large, easy-to-read numerals
- Rugged thermoplastic housing
- Monitoring capability permits locating registers up to 1000 feet from controller
- Readily available for any Neptune T-10® Disc Meter, Neptune HP Turbine, Tru/Flo™ Compound, HP Fire Service Turbine, or HP Protectus III Meter
- Wide variety of calibrated switch closures available
- Tamperproof – only one seal wire screw to secure register and terminal cover

Applications

The Neptune TRICON-S register mounts on the meter maincase. The bayonet type mount allows the Tricon-S to be easily retrofitted to many existing Neptune meters without interruption. The Tricon-S can be used in applications where a switch closure that is proportional to the flow rate is required. Several switch configurations are available.

Every Neptune meter and TRICON-S register meets or exceeds the latest standards of the American Water Works Association, ensuring accurate, dependable performance.

The Neptune TRICON-S Register is ideally suited for controlling/monitoring total flow rate data such as:

- Water softening regeneration
- Demineralization reverse osmosis
- Chemical treatment/injection
- Batch processing
- Filtration
- Boiler feed water make-up
- Cooling tower water make-up
- Irrigation

Warranty

Schlumberger provides a limited warranty with respect to its TRICON-S Register System for performance, materials, and workmanship.



Metering
Systems

Specifications

Sizes

T-10 (5/8"-2")
 Neptune Trident Turbine (3"-10")
 Neptune HP Turbine (1 1/2"-20")
 Tru/Flo Compound (2"-6"x8")
 HP Fire Service (3"-10")
 HP Protectus III (4"-10")

Units of Measure

U.S. Gallons
 Imperial Gallons
 Litres
 Cubic Feet
 Cubic Metres

Connection Wire

Distances up to 300 feet
 (91 metres) – AWG #22
 Distances from 300 to 500 feet
 (91–152 metres) – AWG #20
 Distances 500–1000 feet*
 (152–304 metres) – AWG #18

Electrical Characteristics (at 25° C unless specified)

Absolute Maximums (Not to be exceeded
 without possible damage)

Switch Power: 10 watts (DC)
 Switch Current: 0.5 amps (DC)
 Switch Voltage: 200 volts (DC)

*Recommended installation: Register should be in an
 upright position. Not recommended for pit applications.

Electrical Characteristics (at 25° C unless specified)

Switch Ratings	Min	Typ	Max	Units
Operating Temperature	-40		125	°C
Open Circuit Resistance	10			Ohms
Closed Circuit Resistance			0.1	Ohms
Break Down Voltage (DC)	250			Volts
Capacitance		1.5		pF
Actuation Time	0.0005			sec
Shock with No Contact			100	G

Available Switch Closures (for T-10s and Neptune Turbines)

Gal., Imp. Gal., or Litres/ Contact	5/8-1" T-10	1 1/2-2" T-10	1 1/2-4" HPT	6-12" HPT	16-20" HPT	Cubic Feet/ Contact	5/8-1" T-10	1 1/2-2" T-10	1 1/2-4" HPT	6-12" HPT	16-20" HPT	Cubic Metres/ Contact	1 1/2-6" HPT	8-12" HPT	16-20" HPT
												0.1	✓		
1	✓					1	✓	✓	✓			1	✓	✓	
10	✓	✓	✓			10	✓	✓	✓	✓		10	✓	✓	✓
100	✓	✓	✓	✓		100	✓	✓	✓	✓	✓	100	✓	✓	✓
1000		✓	✓	✓	✓	1000		✓	✓	✓	✓	1000		✓	✓
10,000					✓	10,000					✓	10,000			✓
100,000					✓	100,000					✓	100,000			

Use of Litres per contact not available for 1 1/2"-20" HPT.

Meter Application Guide

Meter/Size	Normal Flow Range (GPM)	Max Continuous Flow	Meter Length (in.)
T-10			
5/8"	1/2–20	10	7 1/2
5/8" x 3/4"	1/2–20	10	7 1/2
3/4"	3–30	15	9
3/4" x 1"	3/4–30	15	9
1"	1–50	25	10 3/4
1 1/2" Screw End	2–100	50	12 5/8
1 1/2" Flanged End	2–100	50	13
2" Screw End	2 1/2–160	80	15 1/4
2" Flanged End	2 1/2–160	80	17
Trident Turbine			
3"	5–450	450	12
4"	10–1000	1000	14
6"	20–2000	2000	18
8"	35–3500	3500	20
10"	50–5500	5500	26
Neptune HP Turbine			
1 1/2"	4–160	160	10
2"	4–160	200	10
3"	5–450	560	12
4"	10–1200	1500	14
6"	20–3000	3750	18
8"	35–4000	5000	20
10"	50–6500	8000	26
12"	120–8000	10000	19 11/16
16"	200–13500	16500	23 5/8
20"	300–22000	27500	31 1/2

Your Local Schlumberger Representative:

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