

A PRODUCT SHEET OF NEPTUNE TECHNOLOGY GROUP

Tricon®/S Register

The 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 meet or exceed the latest standards of the American Water Works Association ensuring accurate, dependable performance.

The 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

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

Electrical Characteristics (at 25°C unless specified)

Switch Ratings	Min	Тур	Max	Units
Operating Temperature	-40		125	°C
Open Circuit Resistance	10			MOhms
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



KEY FEATURES

Register

- Reed switch technology
- Large, easy-to-read numerals
- Rugged thermoplastic housing
- Monitoring capability permits locating registers up to 1,000 feet from controller
- Wide variety of calibrated switch closures available
- Tamperproof only one seal wire screw to secure register and terminal cover

Readily available for all Neptune meters:

- T-10[®] Disc
- HP Turbine
- TRU/FLO® Compound
- HP Fire Service Turbine
- HP PROTECTUS® III

Meter Application Guide

Meter/Size	Normal Flow Range (GPM)	Max Continuous Flow	Meter Length (in.)		
T-10®	'				
5/8"	1/2 - 20	10	71/2		
5/8" X 3/4"	1/2 - 20	10	71/2		
3/4"	3/4 - 30	15	9		
³ / ₄ " × 1"	3/4 - 30	15	9		
1"	1 - 50	25	103/4		
1½" Threaded End	2 - 100	50	125/8		
1½" Flanged End	2 - 100	50	13		
2" Threaded End	21/2 - 160	80	151/4		
2" Flanged End	21/2 - 160	80	17		
Trident Turbine					
3"	5 - 450	450	12		
4"	10 - 1,000	1,000	14		
6"	20 - 2,000	2,000	18		
8"	35 - 3,500	3,500	20		
10"	50 - 5,500	5,500	26		
HP Turbine					
11/2"	4 - 160	160	10		
2"	4 - 160	160	10		
3"	5 - 450	450	12		
4"	10 - 1,200	1,200	14		
6"	20 - 2,500	2,500	18		
8"	35 - 4,000	4,000	20		
10"	50 - 6,500	6,500	26		
12"	120 - 8,000	8,000	1911/16		
16"	200 - 13,500	13,500	235/8		
20"	300 - 22,000	22,000	31½		

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

Gal, Imp. Gal, or Litres*/ Contact	⁵⁄8- 1″ T-10	1½- 2″ T-10	4"	12"	16"- 20" HPT	Cubic Feet/ Contact	%- 1" T-10	1½- 2″ T-10	1½- 4" HPT	6"- 12" HPT	16"- 20" HPT	Cubic Metres/ Contact	1½- 4" HPT	6"- 12" HPT	16"- 20" HPT
												.01	1		
1	1					1	1	1	1			1	1	1	
10	1	1	1			10	1	1	1	1		10	1	1	1
100	1	1	1	1		100	1	1	1	1	1	100	1	1	1
1000	1	1	1	1	1	1000		1	1	1	1	1000		1	1
10,000		1	1	1	1	10,000				1	1	10,000			1
100,000				1	1	100,000					1	100,000			

Specifications

Sizes

- T-10 (5/8"-2")
- Trident Turbine (3"-10")
- HP Turbine (1½"–20")
- TRU/FLO Compound (2"- 6" x 8")
- 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.



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