



# TRICON®/S REGISTER



The TRICON/S can be used in applications where a switch closure that is proportional to the flow rate is required.



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

**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 Meter
  - HP Turbine
  - Tru/Flo Compound
  - HP Fire Service Turbine
  - HP Protectus III Meter

**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	Typ	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

**AVAILABLE SWITCH CLOSURES** (for T-10s and Turbines)

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

**METER APPLICATION GUIDE**

Meter/Size	Normal Flow Range (GPM)	Max Continuous Flow	Meter Length (in.)
<b>T-10</b>			
5/8"	1/2 - 20	10	7 1/2
5/8" x 3/4"	1/2 - 20	10	7 1/2
3/4"	3/4 - 30	15	9
3/4" x 1	3/4 - 30	15	9
1"	1 - 50	25	10 3/4
1 1/2" Threaded End	2 - 100	50	12 5/8
1 1/2" Flanged End	2 - 100	50	13
2" Threaded End	2 1/2 - 160	80	15 1/4
2" Flanged End	2 1/2 - 160	80	17
<b>Trident Turbine</b>			
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
<b>HP Turbine</b>			
1 1/2"	4 - 160	160	10
2"	4 - 160	160	10
3"	5 - 450	450	12
4"	10 - 1200	1200	14
6"	20 - 2500	2500	18
8"	35 - 4000	4000	20
10"	50 - 6500	6500	26
12"	120 - 8000	8000	19 11/16
16"	200 - 13500	13500	23 5/8
20"	300 - 22000	22000	31 1/2

**SPECIFICATIONS**

- Sizes:
  - T-10 (5/8"–2")
  - Trident Turbine (3"–10")
  - 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.

Neptune engages in ongoing research and development to improve and enhance its products. Therefore, Neptune reserves the right to change product or system specifications without notice.

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