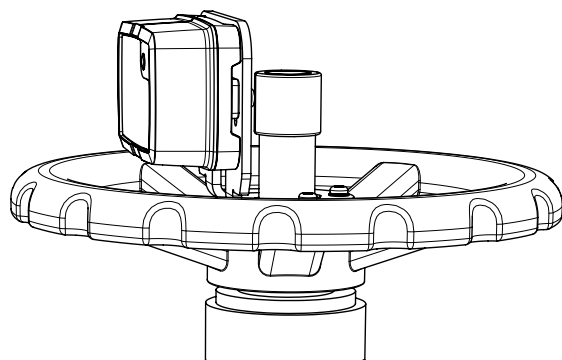


■ NEON Data Sheet

Valve Sensor Multi-turn



Product	
Product name	TWTG NEON Valve Sensor Multi-turn
Type identification	VS-868-01-MTxx / VS-915-01-MTxx / VS-923-01-MTxx Where "xx" indicates the applicable country. Visit https://www.twtg.io/markets/industry for more information
Connectivity	
Protocol	LoRaWAN Private LoRa-WAN, public LoRa-WAN upon request
Frequency band	868 MHz / 915 MHz / 923 MHz compatible Region specific frequencies and certifications upon request
Maximum RF output power	13.8 dBm
Functionality	
User interaction	Magnet key
Status notification	RGB LED
Angle detection	State change after 2.0 mm vertical movement Configurable over Lora For accurate (absolute) temperature measurement, insulation of the sensor and the measured object is required.
Error offset	1.0 mm Configurable over Lora
Message frequency	On state change, Every 24 hours Configurable over Lora
Message information	State change open/close, Battery condition
Mechanical	
Enclosure	Molded plastic
Color	NEON green
Dimensions	95x64x39mm
Weight	150g
Installation	
Required installation qualification	IEC 60079-14

Method	Multi-turn valves with rising stem in size range 4"-10", Hand-wheel fastened with a nut. Sensor is mounted with a bracket and custom hand-wheel nut. The magnet is mounted on the (rising) stem of the valve. Bigger valve sizes can be accommodated upon request for a custom solution. Band clamp Dimension limits depending on available band clamp sizes	
Battery		
Battery life	3-5 Years, at 25°C Depending on average ambient temperature and network quality	
Battery type (replaceable)	1x Type A	
Voltage	3.6 V	
Capacity	1x 3600 mAh	
Environmental conditions		
Operating temperature range	-40°C - 80°C	
Storage temperature range	10°C - 30°C	
Vibration	Per MIL-STD-202F	
Water & dust resistance	IP65	
Certification		
ATEX/IECEx rating	Ex II 2G Ex ia IIB T4 Gb	
ATEX/IECEx standards	EN IEC 60079-0 EN 60079-11	IEC 60079-0 IEC 60079-11
ATEX/IECEx certifications	18ATEX0106 DEK 18.0063	
FM Rating	Class I Division 1, Groups C, D; T4 Ta = -40°C to +80°C; Zone 1, Ex ia IIB T4 Gb Ta = -40°C to +80°C;	
FM Standards	FM Class 3810 CAN/CSA-C22.2 No. 60079-0 CAN/CSA-C22.2 No. 60079-11 CAN/CSA-C22.2 No. 61010-1	
FM Certificates	FM20US0015X FM20CA0007X	
Regional approvals	CE EU: Covers RoHS, ATEX, RED FCC US & CA IMDA SG FM US & CA Other countries regional approvals can be certified upon request	
Accessories ans Spare Parts		
Type	Battery replacement kit	

