



# BROIL

FLOW | CONTROLLER | AUTOMATION

GLOBAL  
SOLUTIONS  
FOR YOUR MEASURING

## TURBINE ROTOR



**BROIL SENSOTEK INDUSTRIES** has evolved into a beacon of innovation and excellence within the manufacturing and service industries. As an ISO 9001:2015 and CE certified company

- Cutting-Edge Technology Solutions
- Custom Software Development Expertise
- Entrepreneurial Leadership
- Global Recognition High Quality Products
- Comprehensive Customer Support
- State of the art infrastructure
- Dynamic Marketing Strategies
- Cutting-Edge Manufacturing Facility

Turbine flow meter use the mechanical energy of flowing fluid, causing a rotor to rotate at an angular velocity proportional to the fluid flow rate or velocity within the flow path and pickup coils capture this angular velocity and generating an electrical signal which is directly proportional to flow rate.

THE WORLD BEST PROCESS  
INSTRUMENT AND SOFTWARE  
COMPANY OFFERING BEST QUALITY  
PRODUCTS EVERYWHERE AT WORLD WIDE



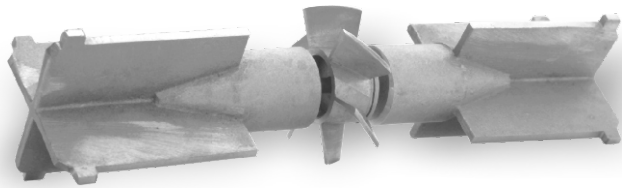
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### PERFORMANCE DATA

0.65 L/min to 15,500 L/min and can withstand pressures up to 300 Bar. It supports various connection types, including BSP, NPT, Flanged, Hygienic, Autoclave, and Nova Swiss connections, Offer pulse & analogue O/P and Complies with ATEX standards.

### MARKETS & AREAS OF APPLICATION

In order of magnitude from largest to smallest, these are used in oil, water and chemical. In Industries like aerospace, food & beverage, metals & mining, pharmaceutical, power, pulp & paper.

### GENERAL SPECIFICATION

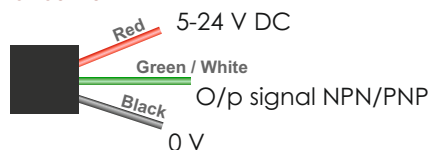
Flow Tube : SS - 304 / SS - 316 / on request  
 Rotor : Cd4mCu / SS410 with Teflon coating  
 Shaft & Bush : Hard Carbon  
 Repeatability : 0.2%  
 Accuracy (standard position):  $\pm 1\%$  RS /  $\pm 0.75\%$  FSD  
 Maximum Working Pressure : 60 Bar / 300 Bar  
 Fluid & Ambient Temperature :  $-20^{\circ}$  to  $120^{\circ}$  C  
 Connection : Thread (M) / Sandwich Flange / Tc End

### OUTPUT SENSOR

Power Voltage : 5 / 12 / 24 V DC  
 Output Signal : NPN/PNP  
 High Electric Level : Higher Than 8 V DC (Input 12 Vdc)  
 Low Electric Level : Lower Than 0.8 V DC (Input 12 Vdc)

### ELECTRIC CONNECTION

#### PULSE OUTPUT



#### DISPLAY OUTPUT

\* Please Check Display Manual

calculate pulse/liter at : 25%, 50%, 75% and 100% flow rate with pure water at room temperature

### DISPLAY WITH VARIOUS OUTPUT

Power Voltage : 24 V DC

#### Output Signal

Retransmit : (4 ~ 20) mA / Pulse (programmable)  
 Communication : RS - 485 / HART Protocol  
 Relay : High & Low Flow

#### Battery Operated Meter

Power Voltage : 3.6 V DC Lithium Batteries  
 Display Mode : Double row LCD as below

**Q X.XXXXX** Six Digit Instantaneous Flow  
 ( $m^3/h$ , L/h, L/M,  $m^3/M$ ,  $m^3/h$ , L/h, kg/M, GPM, T/h, kg/h)  
**XXXX.XXXX** Eight Digit Cumulative Flow

Cumulative flow : Automatically expand the display precision.

*The cumulative flow values can be reset.*

Power - fail protection : The instrument coefficient ensures that total flow values for the past ten years are retained even in the event of a power supply drop.

### ADVANTAGES

A cost-effective solution for flow measuring, this system ensures a long service life even in severe operating environments. It boasts high accuracy, repeatability, and range ability tailored for specific viscosities and measuring ranges. Designed for nonconductive liquids, it also has the capability of heating the measuring device. Additionally, it proves suitable for very low flow rates.

### MODEL RANGE

Model Number	Line Size	Range	Liter / Pulse
BT-DTFS - 006	6 mm	40 ~ 400 L/H	0.000095
BT-DTFS - 009	9 mm	200 ~ 2000 L/H	0.000571
BT-DTFS - 012	12 mm	400 ~ 4000 L/H	0.001219
BT-DTFS - 020	20 mm	800 ~ 8000 L/H	0.002544
BT-DTFS - 025	25 mm	1000 ~ 10000 L/H	0.004629
BT-DTFS - 032	32 mm	1500 ~ 15000 L/H	0.00740
BT-DTFS - 040	40 mm	2000 ~ 20000 L/H	0.01250
BT-DTFS - 050	50 mm	4000 ~ 40000 L/H	0.03571
BT-DTFS - 080	80 mm	10000 ~ 100000 L/H	0.10752
BT-DTFS - 100	100 mm	20000 ~ 200000 L/H	0.23809
BT-DTFS - 150	150 mm	30000 ~ 300000 L/H	0.33222
BT-DTFS - 200	200 mm	40000 ~ 400000 L/H	0.45454

