



Speed Measurement Solutions for Hazardous Areas

Speed sensors & Ex measurement chains

For applications in:

Refineries

Oil & gas platforms

Fertilizer plants

Mills & mining

Petrochemical industry

Anywhere there is the risk of explosion or ignition.

Speed sensors

Green Line Z1D1 & Z2D2 models

Hall DSF sensor series

DSH series for aluminium targets

Electromagnetic DSE series

Differential Hall DSD sensors

Custom sensor housings

Can be used with JAUQUET's complete line of tachometers and over-speed protection systems located in safe areas or installed in explosion proof housings.



Speed sensors, Custom sensor housings matched to the application



Green Line models from M10, including M12, 3/8", 5/8", 3/4"

CLASS 2258 82 - PROCESS CONTROL EQUIPMENT - For Hazardous Locations - CERTIFIED TO U.S. Standards

Class I, Division 1 and 2, Groups C and D; Class II Division 1 and 2, Groups E, F, and G; Class III:

Models EX34H, EX34H35, EX58H, EX58H35 and EX58H85 Electromagnetic Speed Sensor, output rated 13.0Vac, 10.0mA nominal.

Electromagnetic DSE series in M16, M18, M20, M22 and 5/8" – 18 UNF

DSE **xxxy.21/22/23 xHZ Ex-atex** series sensors are certified according to EN 60079-0:2012 and EN 60079-11:2012

- II 2 G Ex ia IIC T6 for use in flammable gas atmospheres

They have been designed, manufactured and tested according to the state of the art. For their application the restrictions listed in the European Certificate of Conformity ZELM 03 ATEX 0138X, its 1st, 2nd and 3rd Supplement must be observed.

Hall DSF series in M12 ... M22 and 5/8" – 18 UNF

DSF **xx10.xx xHV Ex-atex** series sensors are certified according to EN 50014:1997, EN 50020:1994 and EN 50281-1-1:1998 (see main certificate):

- II 2 G EEx ia IIC T6 for use in flammable gas atmospheres
- II 2 D T147°C IP65 for use in flammable dust atmospheres

In addition, the sensors meet the standards EN 60079-0: 2006, EN 60079-11: 2007, EN 61241-0:2006 and EN 61241-11:2006 (see 2. supplement):

- II 2 G Ex ia IIC T6 for use in flammable gas atmospheres
- II 2 D Ex iaD 21 T147°C IP65 for use in flammable dust atmospheres

DSD differential Hall models, M10 housing or CuNi77n39Mn2Pb3 or X2CrNiMo

Type #

FTG 1088.00 Ex (DSD 1005.00 KTV Ex-atex T6-T1)

FTG 1088.00 Ex KTV-B (DSD 1005.00 KTV-B Ex-atex T6-T1)

FTG 1088.01 Ex (DSD 1005.00 PTV Ex-atex T6-T1)

FTG 1088.00 S4 Ex

Sensor types FTG 1088.xx Ex are certified according to the standards

EN 60079-0:2006, EN60079-11:2007, EN 61241-0:2006 and EN 61241-11:2006

- II 1 G Ex ia IIC T6
- II 1 D Ex iaD 20 T 125°C

DSH series for aluminium targets & having separate sensor head and electronics

DSH 1420.03 PHV Ex-atex, DSH 1480.03 PHV Ex-atex, DSH 1820.03 PHV Ex-atex

DSH 1880.03 PHV Ex-atex, DSH 1820.13 PHV Ex-atex, DSH 1880.13 PHV Ex-atex

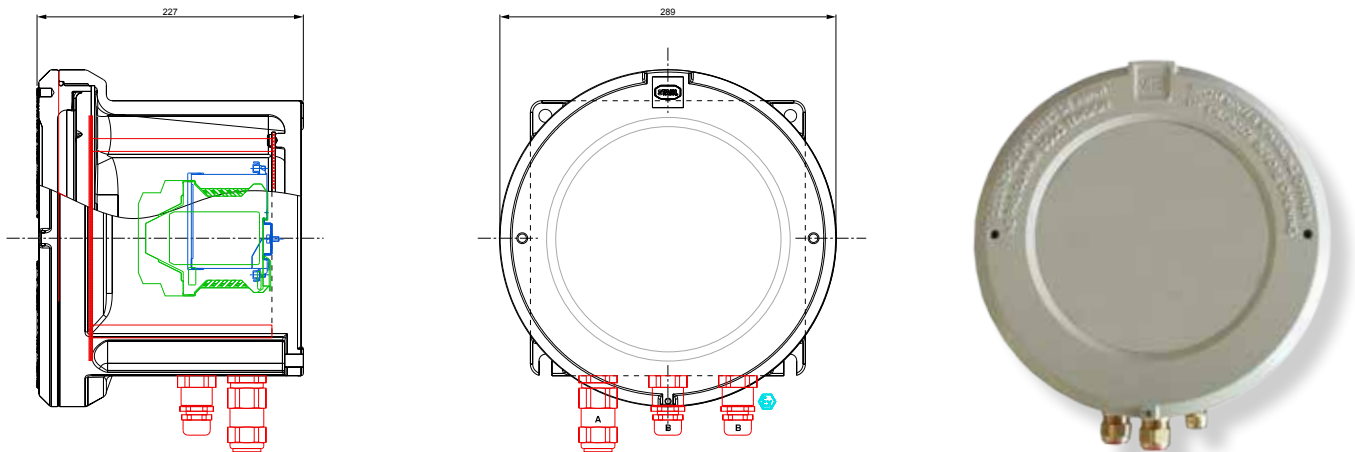
DSH **xxxx.x3 PHV Ex-atex** series sensors are certified according to EN 60079-0:2006 and EN 60079-11:2007:

- II 2G Ex ib IIB T4 (sensor head)
- II 2G Ex ib IIB T4/T3 (amplifier)

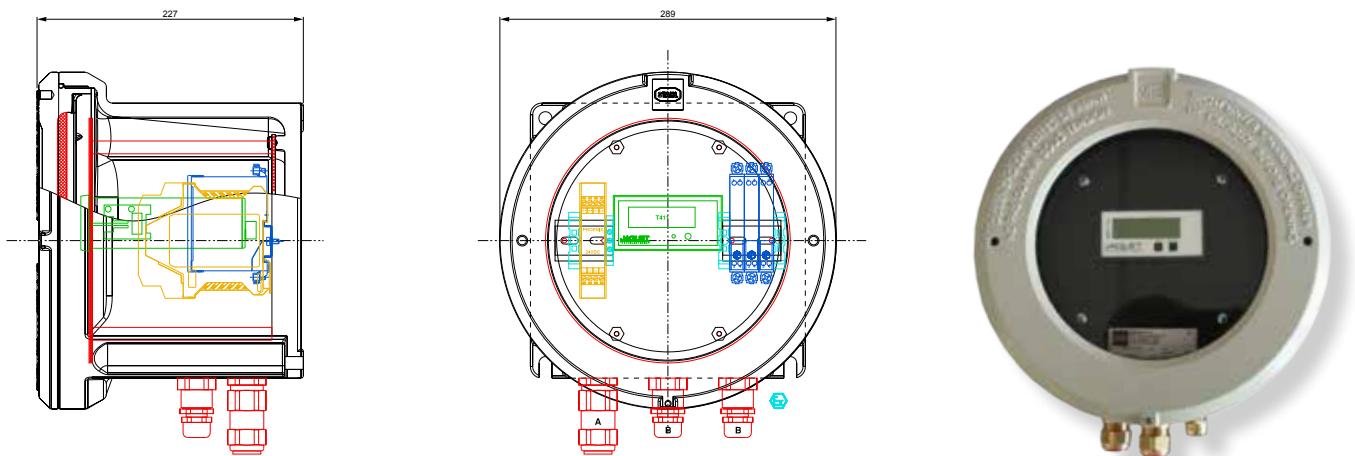
EX housing setups

For applications including local indication, signal amplification for long transmission distances & over-speed protection. Ex approved housings with either blind front or viewing window can be located directly in the hazardous area.

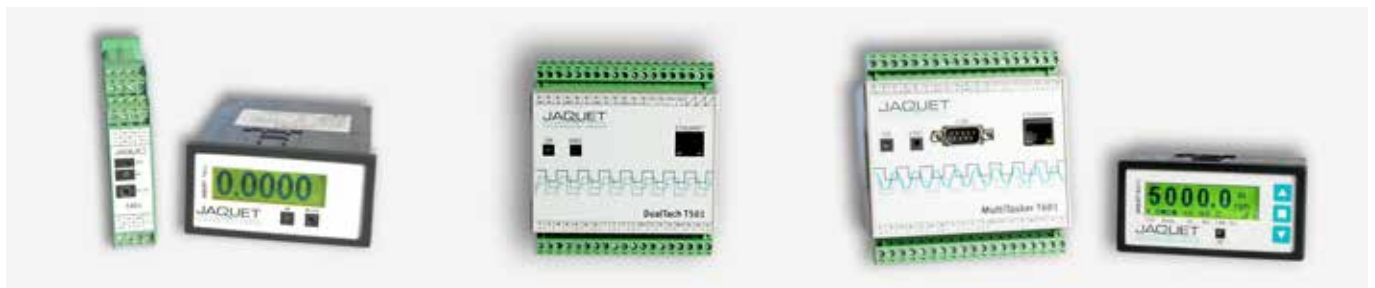
Blind front



Viewing window



All JAQUET instruments such as: T401 T411 T501 T601 together with any necessary power / signal isolators or zener barriers can be incorporated to build versatile Ex approved measurement chains for use with JAQUET's Ex speed sensors.



T401 & T411

T501

T601

Swiss know-how and quality matched to your demands

JAQUET manufactures speed sensors in quantities from 1 to 200,000 per project per year. These typically customer specific solutions add value through being matched to individual applications. **Since 1889, a spirit of excellence complementing tradition and innovation.**



Automotive turbochargers

Turbocharger for trucks, passenger cars, construction equipment

- Speed of VG/VNT turbochargers
- Gearbox shaft and retarder speed



Railway systems

- Optimum traction control
- WSP (wheel slide protection) systems
- Speed information for automatic train control



Power generation

Gas, hydro, steam and wind turbines

- Overspeed protection
- Speed measurement and control



Hydraulics

Agricultural machinery, construction and mining equipment, cranes, ROV – remote operated vehicles

- Motors and pumps, flowrate measurement
- Position measurement, traction synchronization



Diesel and gas engines

Large diesel and gas engines in marine, rail, off-road applications and power production.

- Cam and crank shaft for dynamic position
- Turbocharger speed, engine diagnostics

Quality systems

ISO TS 16949
ISO 9001
AS 9100
IRIS



Worldwide and local to you through

JAQUET Technology sales offices, subsidiaries and distributors.