

RETURN TO
MENU

F106 Turbine Meter Pre-amplifier and H27 enclosure



FEATURES

- ▶ ***Outdoor enclosure, BASEEFA certified Ex s II T6.***
- ▶ ***High gain, frequency compensated amplifier allows reliable turbine meter operation from 2Hz to 2 KHz.***
- ▶ ***Automatic pick up coil continuity test.***
- ▶ ***Low CMOS circuitry power.***
- ▶ ***Differential line driver output for long distance transmission.***
- ▶ ***Line reflection diode-clamps and termination resistors included.***
- ▶ ***Complimentary outputs allow transmission continuity check***
- ▶ ***Protected against reverse power and overvoltage.***

F106 PRE-AMPLIFIERS

The F106 Pre-amplifier is used to raise the small mV signals of the Turbine Flow-Meter pick up coils to a satisfactory level for transmission over several kilometres. One preamplifier is required for each pick-up coil. The equipment is designed for use in the petrochemicals industry and is BASEEFA certified for hazardous areas. Two F106 pre-amps in combination with a dual pulse receiver satisfies Institute of Petroleum level 'A' requirements, defined in IP252/76 when used with an appropriate enclosure such as the H27.

The pre-amplifiers may be used for other applications where a frequency-induced emf requires amplification.

H27 ENCLOSURE

The H27 enclosure has been specifically designed for use with the F106 pre-amplifier and can contain up to two pre-amplifiers and the assembly is certified Ex s II T6.

The enclosure is Aluminium Alloy and comes pre drilled with four M6 holes for mounting.

The pre-amplifiers are rail mounted in the enclosure for ease of maintenance and all connections and terminations are via screw terminals.

The enclosure has four 20mm entries, two per side to allow for different cable entries.

F106 SPECIFICATION

Certification

Certification Ex s II T6 suitable for zone 1 and zone 2 operation with all gases when used with H27 enclosure. Certification BASEEFA No.77224.

Note: When used in hazardous areas, the d.c. supply voltage must be safe area protected by a 150mA fuse.

Connections

Terminals No.	Descriptions
1	Q } Differential Output
2	
3	+ } d.c. supply 5-12V max
4	
5	⊥ screen } Pickup-coil
6	
7	

Electrical Parameters

Supply Voltage	= 12V max, 5V min.
Quiescent current	= 7mA with coil OK 4mA with o/c coil
Signal pulse current	= 7mA (ie 14mA total)
Open Collector Voltage	= 10V max
Open Collector current	= 50mA max
Differential Q, Q*	= 7V ±0.5V (unloaded).
Input Impedance	= 100KΩ
Input sensitivity @ 50Hz	= 10mV min
Input sensitivity @ 1kHz	= 200mV min

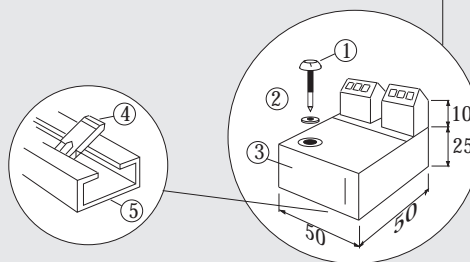
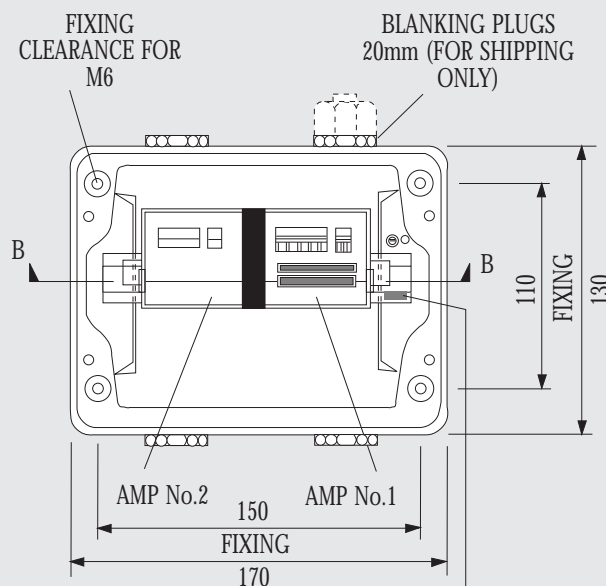
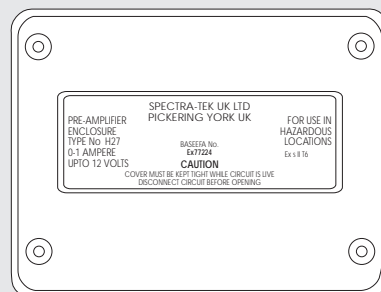
H27 SPECIFICATION

Dimensions	= 170 x 130 x 90mm
Mounting	= 150 x 110mm - 4 x M6 threaded holes
Physical	= Aluminium Alloy

Further Information

Further information on any Spectra-Tek products may be obtained from our Sales Offices shown below or from any of our Distributors and Sales Representatives world-wide

GENERAL ARRANGEMENT OF ENCLOSURE WITH TURBINE METER PRE-AMPLIFIER - H27



1. M5 x 35 Pozi Pan Head Screw
2. M5 Shake Proof Washer
3. Amp. F106' 003'F
4. Mounting bracket Klippon 4809.6
5. Klippon TS 32 rail