

TRANSMITTER PROTECTOR

Protects field-mounted process transmitters against surges and transients induced onto the unit from field cabling

- ◆ **Intrinsically safe and flameproof**
- ◆ **Multi-stage protection offers exceptional safety**
- ◆ **Full range of voltage**
- ◆ **All mode protection**
- ◆ **Full range of thread size**
- ◆ **Compact and easy installation**
- ◆ **Five years warranty**



Intrinsically safe and flameproof -

LEPS TSP series protectors are specially designed to protect field-mount process transmitters. All the models are intrinsically safe, flameproof (explosionproof) and certified to Exd ia IIC T4. They can be added directly to the hazardous area transmitter's casing without affecting the level of safety.

Multi-stage protection offers exceptional safety -

TSP series protectors are multi-stage design which makes it outperform the optional transient protection available from the transmitter manufacturer. They employed high power SAD and high energy gas discharge tube which ensures excellent protections without impeding normal operation.

Full range of voltage - Any kind of process control transmitters, TSP series protectors has the suitable voltage models to fulfill users' expectations.

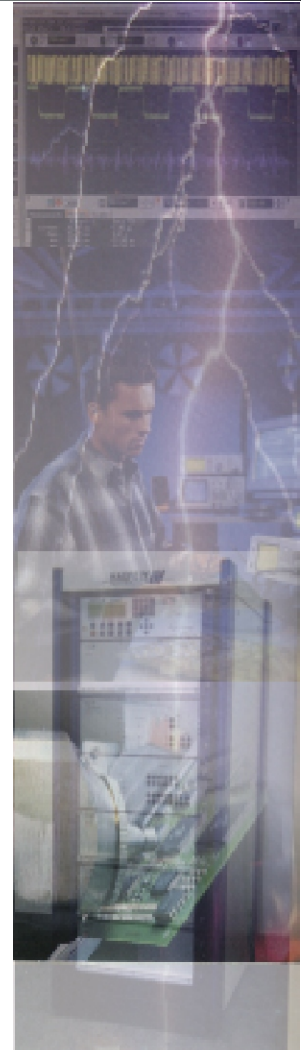
All mode protection - Transients appearing between any signal pairs which commonly called transverse

mode and between signal line and earth is common mode are all effectively and reliably protected by the TSP protectors.

Full range of thread size - No matter it is the NPT, ISO or BSP thread standard, TSP series has the right model to just perfectly fitted into the spare conduit entry of any process transmitter housing.

Compact and easy installation - TSP protectors are housed in a compact, safe and all metal ANSI 316 enclosure. It can be easily screwed into any existing spare conduit of the process transmitter housing. The leads are connected in parallel to the positive, negative and earth stud inside the transmitter housing which avoids introduction of any resistance into the loop and not causing any attenuation of the signal.

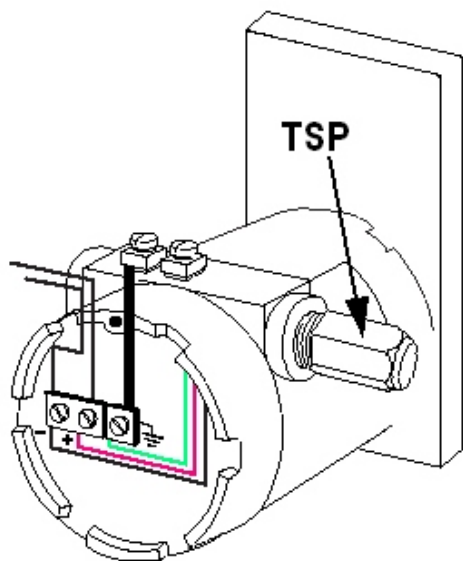
Five years warranty - All LEPS protectors are tested to comply with many international safety standards and with five years warranty.





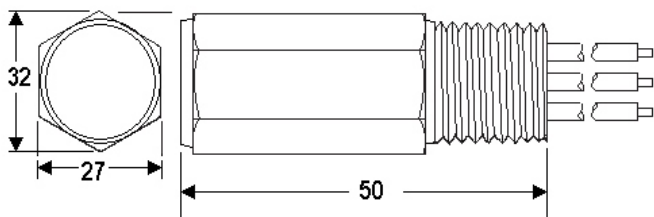
SPECIFICATIONS AND DRAWINGS

Installation



For detail installation requirements, pls refer to relevant user manual.

Dimensions



Ordering Information

MODEL	MAX. WORKING VOLTAGE	LET-THROUGH VOLTAGE	DESCRIPTION
TSP-V5/N1	7V	10V	1/2" NPT
TSP-V12/N1	17V	26V	Thread,
TSP-V24/N1	34V	50V	transmitter
TSP-V36/N1	48V	73V	protector
TSP-V5/N2	7V	10V	3/4" NPT
TSP-V12/N2	17V	26V	Thread,
TSP-V24/N2	34V	50V	transmitter
TSP-V36/N2	48V	73V	protector
TSP-V5/B	7V	10V	BSP 1/2"
TSP-V12/B	17V	26V	Thread,
TSP-V24/B	34V	50V	transmitter
TSP-V36/B	48V	73V	protector
TSP-V5/M	7V	10V	M20x1.5
TSP-V12/M	17V	26V	Thread,
TSP-V24/M	34V	50V	transmitter
TSP-V36/M	48V	73V	protector

Notes:

- (1) Other thread sizes are available on requested
- (2) Other voltage models are available on requested

General Specifications

Max. working voltage:	7 - 48V(see ordering information)
Protection modes:	common and transverse
Protection stages:	2 stages
Earth leakage current:	<1µA
In-line resistance:	No resistance added into loop
Bandwidth:	10MHz
Capacitance:	<50pF
Response time:	1ns
Max. Surge rating:	10KA(8/20µs)
Let through voltage: (At 5KV 10/700µs)	10 - 73V (see ordering information)
Standards compliance:	BS6651-1999 Cat.A.B.C AS1768-2003 Cat.A.B.C IEC 61643 - 21 ITU(CCITT)1X K17 CP33-1996 Cat.A.B.C UL497B

EMC compliance:

BS EN 60950: 1992
BS EN 61000-6-2:1999

Approved for:

EEx ia IIC T4
EEx d IIC T4

Connection:

Parallel (3 flying leads)

Enclosure material:

Nickel plated brass

Conductor size:

2.5mm²

Threads:

1/2" NPT, 3/4" NPT, 1/2" BSP· 20mm ISO

Operating temperature:

-40-85°C

Humidity:

0-95%(R.H.)

Altitude:

0-3650m

Weight:

TSP-x/N1	114g
TSP-x/N2	114g
TSP-x/B	158g
TSP-x/M	246g

Local Distributor: