



THE TEMPTECH
I N S T R U M E N T S

PRODUCT CATALOG

Temperature sensors and industrial instruments

Thermocouples, RTDs, pyrometers, indicators, controllers, signal processing, accessories, clutches and brakes. Designed and manufactured in Udaipur since 2000.

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TEMPERATURE SENSORS

Compensating Cables

High-quality cables with SS braiding for reliable thermocouple and RTD connections.



PRODUCT FAMILY

Temperature Sensors

CALIBRATION

IS/DIN/ANSI/JIS/BS

TYPE

K, T, J, E, R, S, B & RTD

CONDUCTOR SIZE

**3/22, 1/22, 3/24, 1/24, 7/24, 48/36, 40/36,
14/36, 7/36 SWG**

MANUFACTURING

In-house, Udaipur

Technical specifications

CALIBRATION	IS/DIN/ANSI/JIS/BS
TYPE	K, T, J, E, R, S, B & RTD
CONDUCTOR SIZE	3/22, 1/22, 3/24, 1/24, 7/24, 48/36, 40/36, 14/36, 7/36 SWG
CORES	2, 3, 4 & 6
INSULATION	PVC, Asbestos, Fiber glass, Teflon/PTFE, Kepton, Silk, Cotton, Silicon, Neoprene
PAIRS	Single & multi-pair cables
PROTECTION	Screened, SS braided & armoured

TEMPERATURE SENSORS

Resistance Temperature Detectors (RTDs)

Precision-engineered RTDs for accurate measurements from -200°C to 600°C, trusted in pharmaceuticals.



PRODUCT FAMILY

Temperature Sensors

CALIBRATION

IS/DIN/ANSI/JIS/BS

TYPE

Pt-50, Pt-100, Pt-200, Pt-500, Pt-1000, Cu-53

ELEMENT

Simplex, Duplex, Triplex

MANUFACTURING

In-house, Udaipur

Technical specifications

CALIBRATION	IS/DIN/ANSI/JIS/BS
TYPE	Pt-50, Pt-100, Pt-200, Pt-500, Pt-1000, Cu-53
ELEMENT	Simplex, Duplex, Triplex
CONFIGURATION	2, 3 & 4 Wire
INSULATION	Mineral Insulated, Ceramic, Teflon
TERMINATION	Ceramic block with Ni-plated brass terminals or extension cable
HEAD	Weather Proof, Ex-Proof, SS
SPECIAL	Motor Bearing, Slide Shoe, Handheld Probes, Bayonet

TEMPERATURE SENSORS

Thermocouples

Durable thermocouples for extreme conditions, -200°C to 1800°C, ideal for steel industries.



PRODUCT FAMILY

Temperature Sensors

CALIBRATION

IS/DIN/ANSI/JIS/BS

TYPE

J, K, T, E, R, S, B, N

ELEMENT

Simplex, Duplex, Triplex

MANUFACTURING

In-house, Udaipur

Technical specifications

CALIBRATION	IS/DIN/ANSI/JIS/BS
TYPE	J, K, T, E, R, S, B, N
ELEMENT	Simplex, Duplex, Triplex
JUNCTION	Grounded, Ungrounded, Exposed Tip
INSULATION	Mineral Insulated, Ceramic
TERMINATION	Ceramic block, extension cable, omega plug & socket
HEAD	Weather Proof, Ex-Proof, SS
SPECIAL	Auto calve, bare element, bolt, handheld, adjustable ring, bayonet



Sheath specifications

SHEATH	MELTING POINT	USABLE TEMP.	CHARACTERISTICS
SS-304	1430°C	900°C	Fair corrosion resistant
SS-316	1400°C	900°C	Good corrosion resistant to heat, acid & alkalies
SS-310	1400°C	1100°C	Good oxidation resistant & used in sulphurous atmosphere
HRS-446	1400°C	1100°C	High resistance to oxidation & sulphur atmosphere
Inconel 600	1400°C	1100°C	Excellent oxidation & carburisation resistance
Inconel 800	1370°C	1100°C	Superior resistance to oxidation & sulphurous compounds
Ceramic 610	-	1600°C	Excellent thermal, mechanical, electrical & corrosion resistant
Ceramic 710	-	1800°C	Excellent thermal, mechanical, electrical & corrosion resistant
Heatelloy X	1300°C	1220°C	Very resistant to oxidation & sulphurous compounds
Monel	1325°C	540°C	Suited to sulphuric acid & caustic solution

TEMPERATURE SENSORS

Thermowells

Robust thermowells for high-pressure environments, ensuring sensor longevity.



PRODUCT FAMILY

Temperature Sensors

MATERIAL

Traceable & certified, tested at standard lab

TYPES

Flanged, Screwed, Tapered, Solid drilled bar stock, Forged

PROTECTION

Ceramic, Tungsten carbide, Teflon (PTFE)

MANUFACTURING

In-house, Udaipur

Technical specifications

MATERIAL	Traceable & certified, tested at standard lab
TYPES	Flanged, Screwed, Tapered, Solid drilled bar stock, Forged
PROTECTION	Ceramic, Tungsten carbide, Teflon (PTFE)
MOUNTING	Flange: Welded or adjustable, SS & cast Aluminum or CS, up to 200 Kg/cm ³ ; Screwed: 1/4", 3/8", 1/2", 3/4", 1", 1 1/4", 1 1/2", 2" in BSP/NPT, in SS, Brass, MS, Teflon



PYROMETERS

Handheld Pyrometers

Portable non-contact pyrometers for precise measurements, -50°C to 1500°C.



PRODUCT FAMILY

Pyrometers

TYPE

Non-Contact

RANGE

-50°C to 1500°C (different models)

FEATURES

Laser aiming, 32 data storage, adjustable emissivity (0.30-1.00), backlight LCD, sound alarm, °F/°C selection, automatic shutdown

MANUFACTURING

In-house, Udaipur

Technical specifications

TYPE	Non-Contact
RANGE	-50°C to 1500°C (different models)
FEATURES	Laser aiming, 32 data storage, adjustable emissivity (0.30-1.00), backlight LCD, sound alarm, °F/°C selection, automatic shutdown

PYROMETERS

Online Pyrometers

Calex UK pyrometers, -20°C to 2500°C, with IP65 protection for industrial use.



PRODUCT FAMILY

Pyrometers

TYPE

Non-Contact (Calex, UK)

RANGE

-20°C to 2500°C (model dependent)

FEATURES

IP65 protection, digital/analog output, RS232/RS485 communication, laser aiming, adjustable emissivity

MANUFACTURING

In-house, Udaipur

Technical specifications

TYPE	Non-Contact (Calex, UK)
RANGE	-20°C to 2500°C (model dependent)
FEATURES	IP65 protection, digital/analog output, RS232/RS485 communication, laser aiming, adjustable emissivity



INDICATORS

Digital Indicators

Versatile indicators for T/C, RTD, and various inputs with reliable LED displays.



PRODUCT FAMILY

Indicators

INPUT

T/C (J, K, T, E, R, S), RTD (Pt-100, Cu-53), mV, V, mA

DISPLAY

3½ & 4½ digits, red/green LED, 0.5"/0.8"/1.8"/4" height

RETRANSMISSION

4-20 mA, 0-10V

MANUFACTURING

In-house, Udaipur

Technical specifications

INPUT	T/C (J, K, T, E, R, S), RTD (Pt-100, Cu-53), mV, V, mA
DISPLAY	3½ & 4½ digits, red/green LED, 0.5"/0.8"/1.8"/4" height
RETRANSMISSION	4-20 mA, 0-10V
SUPPLY	230V/110V AC, 24V DC
SPECIAL	Flameproof, dual display, bar graph



INDICATORS

Universal Indicators

µC-based indicators with universal input and programmable ranges for flexibility.



PRODUCT FAMILY

Indicators

INPUT

Universal (T/C, RTD, mV, V, mA)

DISPLAY

4½ digits, red/green LED, programmable range

RETRANSMISSION

4-20 mA, 0-10V

MANUFACTURING

In-house, Udaipur

Technical specifications

INPUT	Universal (T/C, RTD, mV, V, mA)
DISPLAY	4½ digits, red/green LED, programmable range
RETRANSMISSION	4-20 mA, 0-10V
SUPPLY	230V/110V AC, 24V DC
SPECIAL	µC-based, flameproof, large display

CONTROLLERS

Digital Controllers

Reliable controllers for various inputs with precise relay outputs.



PRODUCT FAMILY

Controllers

INPUT

T/C (J, K, T, E, R, S), RTD (Pt-100, Cu-53), mV, V, mA

DISPLAY

Single display, red/green LED

OUTPUT

Relay, SSR, 4-20 mA

MANUFACTURING

In-house, Udaipur

Technical specifications

INPUT	T/C (J, K, T, E, R, S), RTD (Pt-100, Cu-53), mV, V, mA
DISPLAY	Single display, red/green LED
OUTPUT	Relay, SSR, 4-20 mA
SUPPLY	230V/110V AC, 24V DC
SPECIAL	Flameproof, multi-setpoint



CONTROLLERS

PID Controllers

Advanced PID controllers with universal input for precise control.



PRODUCT FAMILY

Controllers

INPUT

Universal (T/C, RTD, mV, V, mA)

DISPLAY

Dual display, red/green LED

CONTROL

PID, On/Off

MANUFACTURING

In-house, Udaipur

Technical specifications

INPUT	Universal (T/C, RTD, mV, V, mA)
DISPLAY	Dual display, red/green LED
CONTROL	PID, On/Off
OUTPUT	Relay, SSR, 4-20 mA
SUPPLY	230V/110V AC, 24V DC
SPECIAL	Auto-tuning, flameproof



CONTROLLERS

Universal/Dual Display Controllers

µC-based controllers with universal input and dual display for automation.



PRODUCT FAMILY

Controllers

INPUT

Universal (T/C, RTD, mV, V, mA)

DISPLAY

Dual display, red/green LED,
programmable range

OUTPUT

Relay, SSR, 4-20 mA

MANUFACTURING

In-house, Udaipur

Technical specifications

INPUT	Universal (T/C, RTD, mV, V, mA)
DISPLAY	Dual display, red/green LED, programmable range
OUTPUT	Relay, SSR, 4-20 mA
SUPPLY	230V/110V AC, 24V DC
SPECIAL	µC-based, flameproof, retransmission

SIGNAL PROCESSING

Signal Converters/Isolators

4-wire converters with optical and galvanic isolation for signal integrity.



PRODUCT FAMILY

Signal Processing

INPUT

mV, V, mA, T/C, RTD

OUTPUT

4-20 mA, 0-10V

ISOLATION

Optical & galvanic, 1500V AC

MANUFACTURING

In-house, Udaipur

Technical specifications

INPUT	mV, V, mA, T/C, RTD
OUTPUT	4-20 mA, 0-10V
ISOLATION	Optical & galvanic, 1500V AC
SUPPLY	230V/110V AC, 24V DC
SPECIAL	4-wire, DIN rail, flameproof

SIGNAL PROCESSING

Transmitters

2-wire transmitters for RTD, T/C, and universal inputs with galvanic isolation.



PRODUCT FAMILY

Signal Processing

INPUT

T/C, RTD, mV, V, mA

OUTPUT

4-20 mA (2-wire)

ISOLATION

Galvanic, 1500V AC

MANUFACTURING

In-house, Udaipur

Technical specifications

INPUT	T/C, RTD, mV, V, mA
OUTPUT	4-20 mA (2-wire)
ISOLATION	Galvanic, 1500V AC
SUPPLY	10-36V DC
SPECIAL	Head-mounted, DIN rail, flameproof

ACCESSORIES

Junction Boxes

Customizable junction boxes with IP-55/IP-65 protection for industrial use.



PRODUCT FAMILY

Accessories

MATERIAL

SS, Aluminum, Plastic

PROTECTION

IP-55, IP-65, flameproof

TERMINALS

4, 6, 8, 12, 16

MANUFACTURING

In-house, Udaipur

Technical specifications

MATERIAL	SS, Aluminum, Plastic
PROTECTION	IP-55, IP-65, flameproof
TERMINALS	4, 6, 8, 12, 16
SPECIAL	Customizable, cable glands

ACCESSORIES

Proximity Switches

Inductive and capacitive switches with IP-67 protection for automation.



PRODUCT FAMILY

Accessories

TYPE

Inductive, Capacitive

RANGE

2-50 mm

OUTPUT

PNP/NPN, NO/NC

MANUFACTURING

In-house, Udaipur

Technical specifications

TYPE	Inductive, Capacitive
RANGE	2-50 mm
OUTPUT	PNP/NPN, NO/NC
PROTECTION	IP-67
SUPPLY	10-30V DC, 230V AC

ACCESSORIES

Speed Switches

Non-contact switches for low and zero speed detection in industrial systems.



PRODUCT FAMILY

Accessories

TYPE

Non-contact, zero speed

RANGE

1-5000 RPM

OUTPUT

Relay, PNP/NPN

MANUFACTURING

In-house, Udaipur

Technical specifications

TYPE	Non-contact, zero speed
RANGE	1-5000 RPM
OUTPUT	Relay, PNP/NPN
PROTECTION	IP-65, flameproof
SUPPLY	230V/110V AC, 24V DC



ACCESSORIES

Temperature Scanners

Multi-channel scanners for T/C and RTD inputs with programmable scan times.



PRODUCT FAMILY

Accessories

INPUT

T/C (J, K, T, E, R, S), RTD (Pt-100, Cu-53)

CHANNELS

8/16/24/32

SCAN TIME

Programmable, 1-99 sec

MANUFACTURING

In-house, Udaipur

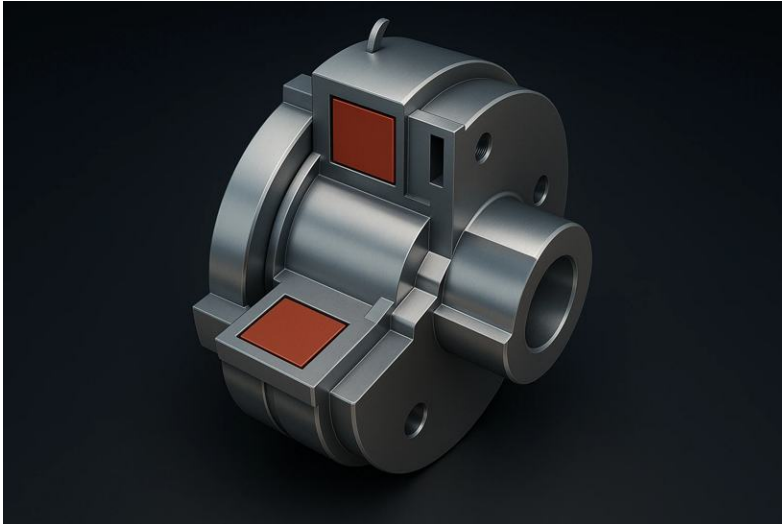
Technical specifications

INPUT	T/C (J, K, T, E, R, S), RTD (Pt-100, Cu-53)
CHANNELS	8/16/24/32
SCAN TIME	Programmable, 1-99 sec
DISPLAY	LED, channel number & temperature
OUTPUT	Relay, RS232/RS485
SUPPLY	230V/110V AC, 24V DC

CLUTCHES AND BRAKES

Bearing Mounted Clutches (EBMC)

Normally-off electromagnetic clutches with simple construction and stationary field for reliable torque transmission.



PRODUCT FAMILY

Clutches and Brakes

TYPE

Electromagnetic, Normally Off

CONSTRUCTION

Single plate dry type, stationary field (no slip rings)

OPERATION

Engages with DC voltage, disengages via prestressed springs

MANUFACTURING

In-house, Udaipur

Technical specifications

TYPE	Electromagnetic, Normally Off
CONSTRUCTION	Single plate dry type, stationary field (no slip rings)
OPERATION	Engages with DC voltage, disengages via prestressed springs
FEATURES	Slotted armature for torque stability, maintenance-free, backlash-free
APPLICATIONS	Industrial machinery requiring precise torque transmission

CLUTCHES AND BRAKES

Clutch Brake Combination (ECBC-DS)

Encased double shaft unit with strong bearing design for precise torque control.



PRODUCT FAMILY

Clutches and Brakes

TYPE

Electromagnetic, Double Shaft, Encased

CONSTRUCTION

Strong bearing design, totally encased

OPERATION

Combines clutch and brake for precise control

MANUFACTURING

In-house, Udaipur

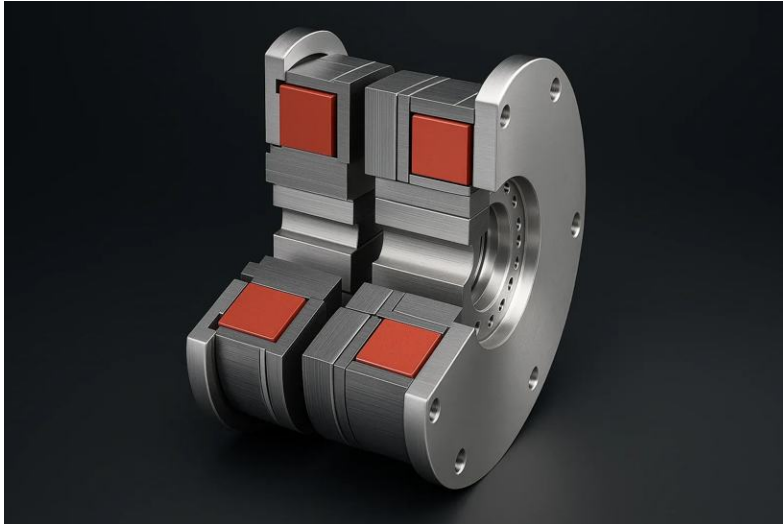
Technical specifications

TYPE	Electromagnetic, Double Shaft, Encased
CONSTRUCTION	Strong bearing design, totally encased
OPERATION	Combines clutch and brake for precise control
FEATURES	Adjustable without dismantling, good heat dissipation, slotted armature
APPLICATIONS	Machinery needing integrated clutch and brake functionality

CLUTCHES AND BRAKES

Clutch Brake Combination (ECBC-O)

Open-type unit with adjustable torque and good heat dissipation for industrial use.



PRODUCT FAMILY

Clutches and Brakes

TYPE

Electromagnetic, Open Type

CONSTRUCTION

Open design for enhanced heat dissipation

OPERATION

Combines clutch and brake with adjustable torque

MANUFACTURING

In-house, Udaipur

Technical specifications

TYPE	Electromagnetic, Open Type
CONSTRUCTION	Open design for enhanced heat dissipation
OPERATION	Combines clutch and brake with adjustable torque
FEATURES	Slotted armature, high-frequency operation, adjustable without dismantling
APPLICATIONS	Industrial systems requiring flexible clutch-brake solutions



CLUTCHES AND BRAKES

Fail Safe Brakes (EFSB)

Spring-loaded, normally-on brakes with manual release for high-frequency operations.



PRODUCT FAMILY

Clutches and Brakes

TYPE

Spring Loaded, Normally On

CONSTRUCTION

**Compact with two friction surfaces,
rust-protected**

OPERATION

**Electromagnetic and manual release,
engages without power**

MANUFACTURING

In-house, Udaipur

Technical specifications

TYPE	Spring Loaded, Normally On
CONSTRUCTION	Compact with two friction surfaces, rust-protected
OPERATION	Electromagnetic and manual release, engages without power
FEATURES	Class 'F' insulation coil, high operating frequency, simple wear adjustment
APPLICATIONS	Safety-critical systems, motor braking

CLUTCHES AND BRAKES

Flange Mounted Brakes (EFMB)

Normally-off brakes with special friction material for maintenance-free operation.



PRODUCT FAMILY

Clutches and Brakes

TYPE

Electromagnetic, Normally Off

CONSTRUCTION

Single plate dry type, special friction material

OPERATION

Engages with DC voltage, disengages when power is off

MANUFACTURING

In-house, Udaipur

Technical specifications

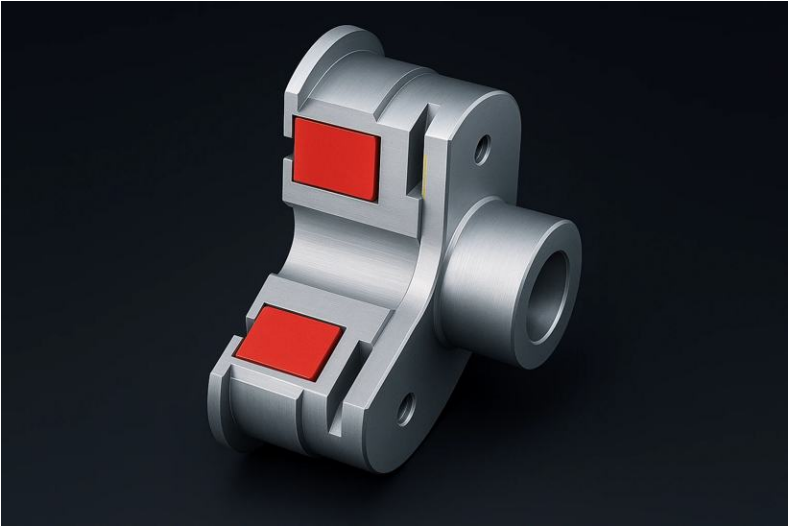
TYPE	Electromagnetic, Normally Off
CONSTRUCTION	Single plate dry type, special friction material
OPERATION	Engages with DC voltage, disengages when power is off
FEATURES	Maintenance-free, Class 'F' insulation, easy wear adjustment
APPLICATIONS	Automation systems requiring reliable braking



CLUTCHES AND BRAKES

Flange Mounted Clutches (EFMC)

Normally-off clutches with slotted armature for torque stability, ideal for industrial applications.



PRODUCT FAMILY

Clutches and Brakes

TYPE

Electromagnetic, Normally Off

CONSTRUCTION

Single plate dry type, stationary field

OPERATION

Engages with DC voltage, disengages without residual torque

MANUFACTURING

In-house, Udaipur

Technical specifications

TYPE	Electromagnetic, Normally Off
CONSTRUCTION	Single plate dry type, stationary field
OPERATION	Engages with DC voltage, disengages without residual torque
FEATURES	Slotted armature for stable torque, maintenance-free
APPLICATIONS	Industrial systems needing robust clutch mechanisms



CONTACT

Request a quote

Every product in this catalog can be configured to your process. Send the product, temperature range, dimensions, quantity and operating conditions, and we reply within 24 hours.

Request a quote

Share the temperature range, dimensions, quantity and operating conditions. Our engineers confirm the configuration and send a quotation.

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