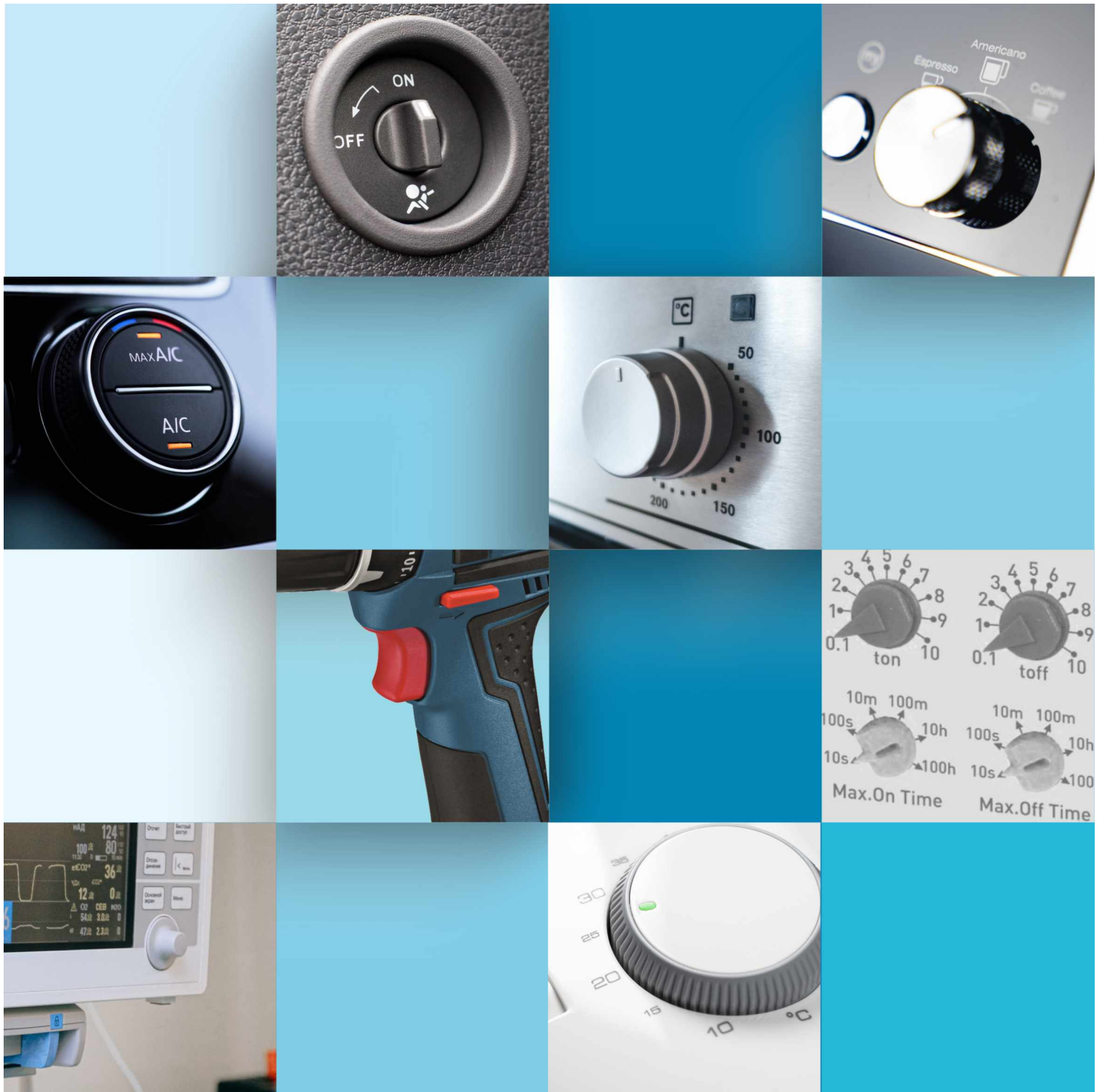


Product Guide

Potentiometers, Encoders and Panel Controls



Product Guide

Potentiometers, Encoders and Panel Controls



Adaptable to your requirements
Wide range of shafts and rotors, different packaging and detent options, switch and low torque versions.



Dust proof housing
IP54 protection according to IEC 60529.



Detents for haptic feedback
Mechanical detents add a click sensation to the rotation and allow for more precise position selection.



Flame retardant plastic (UL 94V-0)
Housing, rotor and shaft of cermet potentiometers are made of non-flammable plastic. Optional for carbon potentiometers.

SMD Potentiometers

	Model	Size	Electrical Angle	Technology	Power Rating (W)	Resistance Range	Taper	Standard Tolerance	Temperature Range	Rotational Life (max)	Detents
Trimmers	N-6R	6 mm	245° ±25°	Carbon	0.1 (50°C)	250Ω to 500 kΩ	Linear	±30%	-25°C to +70°C (up to +85°C)	10.000	n/a
	PS-6	6 mm	200° ±20°	Carbon	0.1 (50°C)	1 kΩ to 1 MΩ	Linear / Non-linear	±30%	-40°C to +85°C	10.000	New! Up to 10
	PS-10	10 mm	220° ± 20°	Carbon	0.15 (50°C)	1 kΩ to 1 MΩ	Linear	±30%	-40°C to +85°C	10.000	Up to 16
	PSC-10	10 mm	220° ± 20°	Cermet	0.33 (70°C)	100Ω to 5 MΩ	Linear / Non-linear	±20% / ±30%	-40°C to +90°C	10.000	Up to 16
Controls	PS-15	15 mm	240° ± 20°	Carbon	0.25 (50°C)	1 kΩ to 1 MΩ	Linear	±30%	-40°C to +85°C	100.000	Up to 38
	PSC-15	15 mm	240° ± 20°	Cermet	0.5 (70°C)	100Ω to 5 MΩ	Linear / Non-linear	±20% / ±30%	-40°C to +90°C	10.000	Up to 38
	STS-15	15 mm	333°	Carbon	0.25 (50°C)	1 kΩ to 1 MΩ	Linear	±30%	-40°C to +85°C	100.000	Up to 51
360° Endless Rotation											


Through-Hole Potentiometers

	Model	Size	Electrical Angle	Technology	Power Rating (W)	Resistance Range	Taper	Standard Tolerance	Temperature Range	Rotational Life (max)	Detents
Trimmers	N-6	6 mm	245° ±25°	Carbon	0.1 (50°C)	100Ω to 1 MΩ	Linear	±30%	-25°C to +70°C (up to +85°C)	100	n/a
	PT-6	6 mm	200° ±20°	Carbon	0.1 (50°C)	220Ω to 5 MΩ	Linear / Non-linear	±20%	-25°C to +70°C (up to +85°C)	10.000	New! Up to 10
	PT-10	10 mm	220° ± 20°	Carbon	0.15 (50°C)	100Ω to 5 MΩ	Linear / Non-linear	±20%	-25°C to +70°C (up to +85°C)	100.000	Up to 16
	PTC-10	10 mm	220° ± 20°	Cermet	0.33 (70°C)	100Ω to 5 MΩ	Linear / Non-linear	±20%	-40°C to +90°C (up to +120°C)	10.000	Up to 16
Controls	PT-15	15 mm	240° ± 20°	Carbon	0.25 (50°C)	100 Ω to 5 MΩ	Linear / Non-linear	±20%	-25°C to +70°C	100.000	Up to 38
	PTC-15	15 mm	240° ± 20°	Cermet	0.5 (70°C)	100Ω to 5 MΩ	Linear / Non-linear	±20%	-40°C to +90°C (up to +120°C)	10.000	Up to 38
	ST-15	15 mm	333°	Carbon	0.25 (50°C)	1 kΩ to 100 kΩ	Linear	±30%	-25°C to +70°C	200.000	Up to 51
360° Endless Rotation											


Product Guide

Potentiometers, Encoders and Panel Controls




Low Profile Resistive Position Sensor / Potentiometer

Model	Mounting	Electrical Angle	Technology	Power Rating (W)	Resistance Range	Taper	Relative Linearity	Standard Tolerance	Temperature Range	Rotational Life (max)
 N-15	THT / SMD	340° ±10°	Carbon	0.15 (50°C)	5 kΩ to 100 kΩ	Linear / Non-linear	±2%	±30%	-40°C to +120°C	2,000,000
360° Endless Rotation, 4.4 mm profile height										



Linear Potentiometer

Model	Mounting	Mechanical Travel	Technology	Power Rating (W)	Resistance Range	Taper	Relative Linearity	Standard Tolerance	Temperature Range	Mechanical Life
 NPL	THT	Up to 12 mm	Carbon	0.2 (50°C)	1 kΩ to 100 kΩ	Linear	±2%	±30%	-40°C to +105°C	50,000 cycles

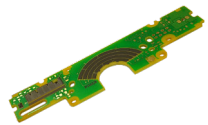
Panel-Mount Potentiometers

Model	Mounting	Size	Electrical Angle	Power Rating (W)	Resistance Range	Taper	Standard Tolerance	Temperature Range	Optional features
 T-16	Solder lugs / THT	16 mm	280° ±20°	0.2 (50°C)	100Ω to 5 MΩ	Linear / Non-linear	±20%	-25°C to +70°C (up to +85°C)	Detents, switch, stereo matching
 PC-16	Solder lugs / THT	16 mm	280° ±20°	0.2 (50°C)	100Ω to 5 MΩ	Linear / on-linear	±20%	-25°C to +70°C (up to +85°C)	Switch, stereo matching, up to 4 gangs
 T-21	Solder lugs / THT	21 mm	290° ± 20°	0.25 (50°C)	100Ω to 5 MΩ	Linear / on-linear	±20%	-25°C to +70°C (up to +85°C)	Detents, switch, stereo matching


Value-Added Panel Controls

Model	Mounting	Size	Electrical Angle	Power Rating (W)	Resistance Range	Taper	Standard Tolerance	Temperature Range	Optional features
 DCM-PTT	THT	21 mm	Up to 340° ± 10°	0.15 (50°C)	10 kΩ	Linear	±20%	-40°C to +120°C	Detents, end stop
Push-to-Turn Panel Control, available as gray code / incremental encoder, rotary switch or potentiometer version									
 DCM-PTT-DA	6-pin connector	21 mm	280° ± 10°	0.15 (50°C)	10 kΩ	Linear	±20%	-40°C to +120°C	Detents, end stop
Dual Shaft Push-to-Turn Panel Control, only on request									

Thick-Film Resistors

Life	Size	Electrical Travel	Resistance Range	Taper	Output	Films	Optional Features
 Up to 5M	Any	Any	10Ω to 1MΩ	Any	Linear Non-linear Stepped Custom	Conductive Resistive Dielectric	Redundancy Controlled linearity Ceramic substrates
Any combination of fixed resistors, switches, potentiometer tracks and conductors onto virtually any size, shape or PCB form							

Contactless Panel-Mount Control

Model	Mechanical Angle	Electrical Angle	Technology	Linearity	Resolution	Output Protocol	Output Range	Supply Voltage	Supply Current	Connection
 PSE-360	360°	40° to 360°	Hall-Effect	±1% absolute	12 bits	Analog, PWM	10% to 90% Vdc, 90% to 10% Vdc	5V ±10%	Typ 8.5 mA	Fly leads or connector
Compact Panel Mount Hall-Effect Rotary Sensor										
PSE-290	290°	270°	Hall-Effect	±1% absolute	12 bits	Analog, PWM	10% to 90% Vdc, 90% to 10% Vdc	5V ±10%	Typ 8.5 mA	Fly leads or connector
Compact Panel Mount Hall-Effect Rotary Sensor with mechanical end stop										

CONTACT

Piher Sensing Systems (HQ)
Polígono Industrial Municipal
Vial T2, N°22
31500 Tudela
Spain
www.piher.net

Piher Sensing Systems (China)
Building 10, Jinton Industrial Park
No. 8 Xihu Road,
Changzhou, Jiangsu 213164
China

Piher Sensing Systems (Mexico)
Andador Vecinal. 15801,
Fraccionamiento el Rosario,
Baja California Edificio 03,
Suite A, 22644 Tijuana, B.C.,
Mexico

 Virtual Assistant 24/7

One Stop Shop Multiple Advantages



Engineering
design-in
support



Output
customization



Cable harness and
connector assembly



One-stop solution provider for
different sensing
technologies

Hall-effect

TMR

Resistive

Inductive

Printed electronics



Global
footprint



Manufacturing
capabilities for high
and low volume
programs



Diverse portfolio of standard and customized
sensors: Tilt, Position, Speed and Current.

The product information in this catalog is for reference purposes. Please consult for the most up to date and accurate design information. Piher Sensors & Controls S.A., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Piher"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained herein or in any other disclosure relating to any product described herein.

Piher disclaims any and all liability arising out of the use or application of any product described herein or of any information provided herein to the maximum extent permitted by law. The product specifications do not expand or otherwise modify Piher's terms and conditions of sale, including but not limited to the warranty expressed therein, which apply to these products.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Piher.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications unless otherwise expressly indicated. Customers using or selling Piher products not expressly indicated for use in such applications do so entirely at their own risk and agree to fully indemnify Piher for any damages arising or resulting from such use or sale. Please contact authorized Piher personnel to obtain written terms and conditions regarding products designed for such applications.

Product names and markings noted herein may be trademarks of their respective owners. Information contained in and/or attached to this catalogue may be subject to export control regulations of the European Community, USA, or other countries. Each recipient of this document is responsible to ensure that usage and/or transfer of any information contained in this document complies with all relevant export control regulations. If you are in any doubt about the export control restrictions that apply to this information, please contact the sender immediately. For any Piher Exports, Note: All products / technologies are EAR99 Classified commodities. Exports from the United States are in accordance with the Export Administration Regulations. Diversion contrary to US law is prohibited.



PIHER *sensing*
systems
an Amphenol® company

www.piher.net

© Piher Sensors & Controls S.A.
Rev150425