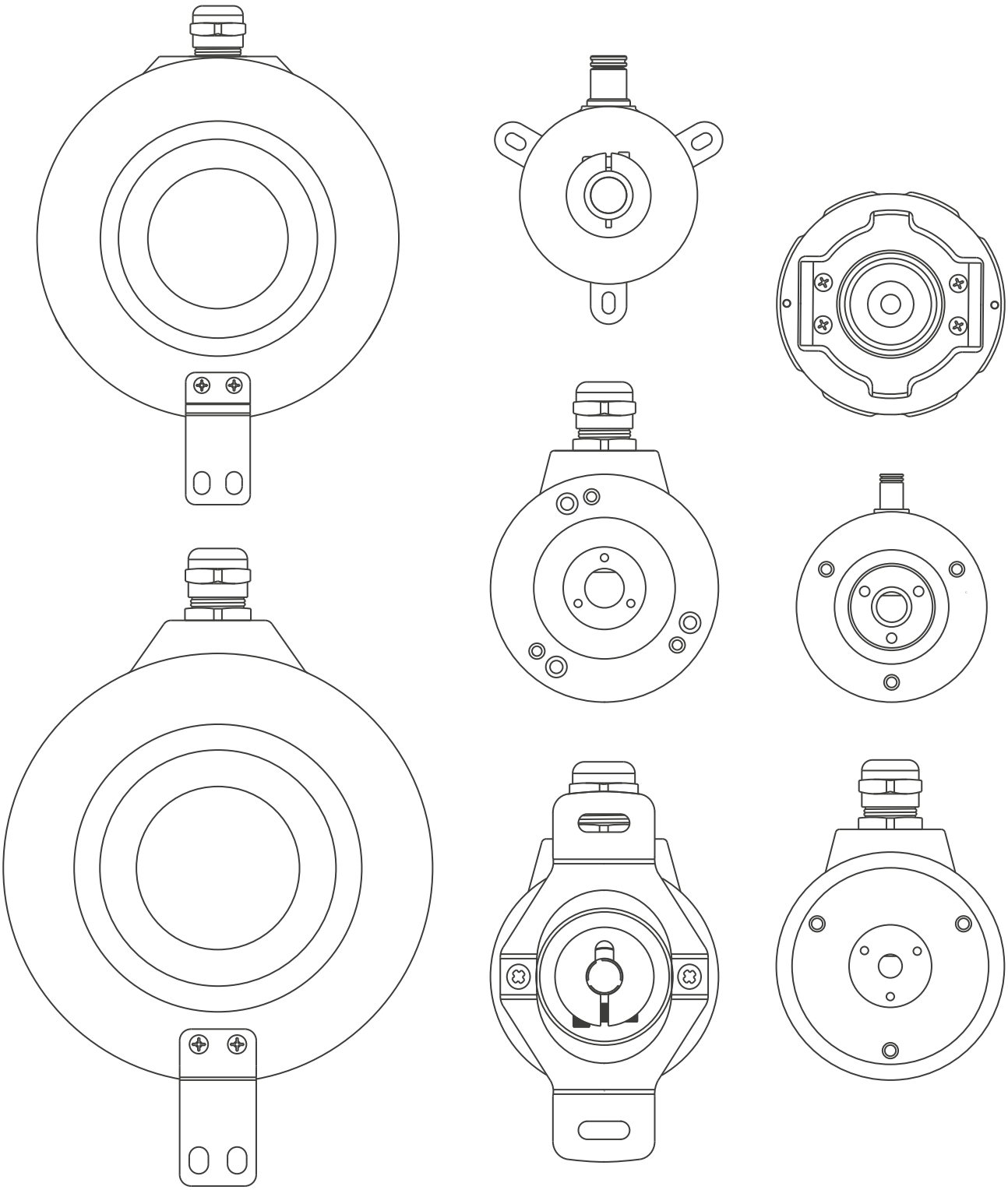
OPKON®

Sense the motion



ROTARY SENSORS
ROTARY ENCODERS

PRI 40A

Optic Rotary Incremental Encoder

Technical Specifications	
Resolution	300 - 1250 ppr.
Output channels	A, B, Z or A,$\bar{A}$, B,$\bar{B}$, Z,$\bar{Z}$
Output type	TTL, Linedriver, Push-Pull, High Linedriver
Power supply	5 VDC, 5 - 24 VDC or 8 - 24 VDC
Power consumption(without load)	<40 mA (24 VDC)
Cable	2,5 meter (standard) 5 wire + shield (Push-Pull)
	2,5 meter (standard) 8 wire + shield (Linedriver)
Max. permissible shaft loading radial	80 N
Displacement speed	3500 rpm
Rod diameter	Ø4 - 6 mm
Rod material	Stainless steel
Case dimensions	Ø40 mm
Case material	Aluminium and painted steel
Protection level	IP 54
Operating temperature	-20° ... +80°
Storage temperature	-30° ... +90°

PRI 40SH

Optic Rotary Incremental Encoder (Semi Hallow Shaft)

Technical Specifications	
Resolution	300 - 1250 ppr.
Output channels	A, B, Z or A,$\bar{A}$, B,$\bar{B}$, Z,$\bar{Z}$
Output type	TTL, Linedriver, Push-Pull, High Linedriver
Power supply	5 VDC, 5-24 VDC or 8 - 24 VDC
Power consumption(without load)	<40 mA (24 VDC)
Cable	1.5 meter (standard) 5 wire + shield (Push-Pull)
	1.5 meter (standard) 8 wire + shield (Linedriver)
Max. permissible shaft loading radial	80 N
Displacement speed	3500 rpm
Rod diameter	Ø6 - 8 mm
Rod material	Stainless steel
Case dimensions	Ø40 mm
Case material	Aluminium and painted steel
Protection level	IP 54
Operating temperature	-20° ... +80°
Storage temperature	-30° ... +90°

PRI 50A

Optic Rotary Incremental Encoder

Technical Specifications	
Resolution	100 - 5000 ppr.
Output channels	A, B, Z or A,$\bar{A}$, B,$\bar{B}$, Z,$\bar{Z}$
Output type	TTL, Linedriver, Push-Pull, High Linedriver
Power supply	5 VDC, 5 - 24 VDC or 8 - 24 VDC
Power consumption(without load)	<40 mA (24 VDC)
Cable	2,5 meter (standard) 5 wire + shield (Push-Pull)
	2,5 meter (standard) 8 wire + shield (Linedriver)
Max. permissible shaft loading radial	100 N
axial	60 N
Displacement speed	3500 rpm
Rod diameter	Ø6 - 8 - 10 mm
Rod material	Stainless steel
Case dimensions	Ø50 mm
Case material	Aluminium and painted steel
Protection level	IP 54
Operating temperature	-20° ... +80°
Storage temperature	-30° ... +90°

PRI 50SH/H

Optic Rotary Incremental Encoder (Semi Hallow Shaft / Hallow Shaft)

Technical Specifications	
Resolution	100 - 5000 ppr.
Output channels	A, B, Z or A,$\bar{A}$, B,$\bar{B}$, Z,$\bar{Z}$
Output type	TTL, Linedriver, Push-Pull, High Linedriver
Power supply	5 VDC, 5 - 24 VDC or 8 - 24 VDC
Power consumption(without load)	<40 mA (24 VDC)
Cable	2.5 meter (standard) 5 wire + shield (Push-Pull)
	2.5 meter (standard) 8 wire + shield (Linedriver)
Max. permissible shaft loading radial	100 N
axial	60 N
Displacement speed	3500 rpm
Rod diameter	Ø6 - 8 - 10 - 12 - 14 - 15 mm
Rod material	Stainless steel
Case dimensions	Ø50 mm
Case material	Aluminium and painted steel
Protection level	IP 54
Operating temperature	-20° ... +80°
Storage temperature	-30° ... +90°

PRI 58A/B

Optic Rotary Incremental Encoder

Technical Specifications	
Resolution	100 - 5000 ppr.
Output channels	A, B, Z or A,$\bar{A}$, B,$\bar{B}$, Z,$\bar{Z}$
Output type	TTL, Linedriver, Push-Pull, High Linedriver
Power supply	5 VDC, 5 - 24 VDC or 8 - 24 VDC
Power consumption(without load)	<40 mA (24 VDC)
Cable	2,5 meter (standard) 5 wire + shield (Push-Pull)
	2,5 meter (standard) 8 wire + shield (Linedriver)
Max. permissible shaft loading radial	60 N
axial	40 N
Displacement speed	3500 rpm
Rod diameter	Ø6 - 8 - 10 mm
Rod material	Stainless steel
Case dimensions	Ø58 mm
Case material	Aluminium and painted steel
Protection level	IP 54
Operating temperature	-20° ... +80°
Storage temperature	-30° ... +90°

PRI 58SH/H

Optic Rotary Incremental Encoder (Semi Hallow Shaft / Hallow Shaft)

Technical Specifications	
Resolution	100 - 5000 ppr.
Output channels	A, B, Z or A,$\bar{A}$, B,$\bar{B}$, Z,$\bar{Z}$
Output type	TTL, Linedriver, Push-Pull, High Linedriver
Power supply	5 VDC, 5 - 24 VDC or 8 - 24 VDC
Power consumption(without load)	<40 mA (24 VDC)
Cable	2.5 meter (standard) 5 wire + shield (Push-Pull)
	2.5 meter (standard) 8 wire + shield (Linedriver)
Max. permissible shaft loading radial	100 N
axial	60 N
Displacement speed	3500 rpm
Rod diameter	Ø6 - 8 - 10 - 12 - 14 - 15 mm
Rod material	Stainless steel
Case dimensions	Ø58 mm
Case material	Aluminium and painted steel
Protection level	IP 54
Operating temperature	-20° ... +80°
Storage temperature	-30° ... +90°

PRI 80

Optic Rotary Incremental Encoder

Technical Specifications	
Resolution	1024 ppr.
Output channels	A, B, Z or A,$\bar{A}$, B,$\bar{B}$, Z,$\bar{Z}$
Output type	TTL, Linedriver, Push-Pull, High Linedriver
Power supply	5 VDC, 5 - 24 VDC or 8 - 24 VDC
Power consumption(without load)	<40 mA (24 VDC)
Cable	2,5 meter (standard) 5 wire + shield (Push-Pull)
	2,5 meter (standard) 8 wire + shield (Linedriver)
Max. permissible shaft loading radial	180 N
axial	80 N
Displacement speed	3500 rpm
Rod diameter	Ø16 - 20 - 22 - 24 - 25 - 28 - 30 - 40 - 42 mm
Rod material	Stainless steel
Case dimensions	Ø80 mm
Case material	Aluminium and painted steel
Protection level	IP 50
Operating temperature	-20° ... +80°
Storage temperature	-30° ... +90°

PRI 100

Optic Rotary Incremental Encoder

Technical Specifications	
Resolution	1024 ppr.
Output channels	A, B, Z or A,$\bar{A}$, B,$\bar{B}$, Z,$\bar{Z}$
Output type	TTL, Linedriver, Push-Pull, High Linedriver
Power supply	5 VDC, 5 - 24 VDC or 8 - 24 VDC
Power consumption(without load)	<40 mA (24 VDC)
Cable	2.5 meter (standard) 5 wire + shield (Push-Pull)
	2.5 meter (standard) 8 wire + shield (Linedriver)
Max. permissible shaft loading radial	180 N
axial	80 N
Displacement speed	3500 rpm
Rod diameter	Ø25 - 28 - 30 - 35 - 38 - 40 - 42 mm
Rod material	Stainless steel
Case dimensions	Ø100 mm
Case material	Aluminium and painted steel
Protection level	IP 50
Operating temperature	-20° ... +80°
Storage temperature	-30° ... +90°

ERC 10 BISS/SSI - SINE

BISS/SSI Interface Encoder

Servo Motor Feedback Absolute Encoder

BISS/SSI - SINE Techinal Specifications	
Interface	BISS / SSI (up to 10 mhz)
Clock input	Full dublex entegre circuit
Clock frequency	20 kHz up to 10 mhz
Data output type	RS485 transceiver type
Data output code	Gray or binary
Current consumption (withtout load)	130 mA max. BISS/SSI, (without load) SINE
Power supply	5 - 20 VDC
Resolution	13 bit (up to 21 BISS)
Absolute channels	C, C inv. D, D inv. / 1 ppr. (SINE 1 Vpp)
Output circuit	BISS / SSI interface , SINE analog
Max. output frequency	<200 kHz
Working principle	Optic
Accuracy	<2048 / ±40
Incremental channels	A, A inv. B, B inv. (SINE 1 Vpp) 2048 ppr.
Flange	Special flange for servo motor
Case diameter	Ø56 mm
Rod diameter	Cone 1/10
Rod axial / radial load	max. 30 N
Starting torque	min. 0, 17 Ncm
Electrical connections	18 pin pcb type connector or DB15 connector with 20 cm cable (standard)
Weight	340 gr. (without cable)
Shock	100 gr. 5 m/s
Vibration	10 gr. 5-2000 Hz
Protection level	IP 47
Operating temperature	-20° ... +80°
Strorage temperature	-30° ... +90°

Sine Cosine | BiSS INTERFACE | SSI SYNCHRON SERIELLES INTERFACE

RPW F32

Rotary Potantiometer

Tecnical Specifications	
Measurement angle	345°± 2°
Linearity	%0,5
Resolution	Infinite
Resistance	2 k0hm, 5 k0hm or 10 k0hm
Resistance tolerance	± %20
Load resistance	100 k0hm min.
Recommended cursor current	< 1 µA
Power supply	28 VDC max.
Electrical connetions	Connector
Mechanical life	50 million movement
Case diameter	Ø32 mm
Case material	Plastic
Rod diameter	Ø6 mm
Protection level	IP 54
Operating temperature	-20°C ... +80°C
Storage temperature	-30°C ... +90°C

MRPF 28

Non-Contact Magnetic Rotary, Analog Output, Absolute Sensor

Technical Specifications	
Measurement type	Non-contact magnetic absolute encoder
Resolution	max. 12 bit
Linearity	≤±0,5 %FS
Measurement angle	Up to 0...360° (with 5° steps)
Output signal	Analog (voltage)
Output type	Voltage output : 0-5 VDC or 0-10 VDC
Power supply	8-24 VDC (0-5 VDC) 15-24 VDC (0-10 VDC)
Power consumption (without load)	< 40 mA (@24 VDC)
Reverse polarity protection	Up to 30 VDC
Cable	1 m cable (standard)
Displacement speed	1000 rpm
Rod diameter	Ø6 mm
Rod material	Stainless steel
Case diameter	Ø28 mm
Case material	Plastic
Protection level	IP 54
Operating temperature	-20°C ... +80°C
Storage temperature	-30°C ... +90°C

RPF 28

Rotary Potentiometer

Technical Specifications	
Measurement angle	345°± 2°
Linearity	%0,5
Resolution	Infinite
Resistance	2 k0hm, 5 k0hm or 10 k0hm
Resistance tolerance	± %20
Load resistance	100 k0hm min.
Recommended cursor current	< 1 µA
Power supply	28 VDC max.
Electrical connetions	Cable output
Mechanical life	50 million movement
Case dimensions	Ø28 mm
Case material	Plastic
Rod material	Stainless steel
Rod diameter	Ø6 mm
Protection level	IP 54
Operating temperature	-20°C ... +80°C
Storage temperature	-30°C ... +90°C

RTP / RTPM

Rotary Potentiometer

Technical Specifications	
Measurement angle	345°± 2°
Linearity	%0,5
Resolution	Infinite
Resistance	2 k0hm, 5 k0hm or 10 k0hm
Resistance tolerance	± %20
Load resistance	100 k0hm min.
Recommended cursor current	< 1 µA
Power supply	28 VDC max.
Electrical connetions	Cable output
Mechanical life	50 million movement
Case dimensions	Ø40 mm
Case material	RTP : Plastic, RTPM : Aluminium
Rod material	Stainless steel
Rod diameter	Ø6 mm
Protection level	IP 54
Operating temperature	-20°C ... +80°C
Storage temperature	-30°C ... +90°C

PRODUCTION RANGE

RESISTIVE POTENTIOMETRIC

Linear Potentiometers
Long Stroke Serie

RESISTIVE POTENTIOMETRIC

Linear Potentiometers
Short Stroke - Compact Serie

ANALOG V/mA

Linear Potentiometers
Internal Voltage - Current Conditioner Serie

Sensopulse® MAGNETOSTRICTIVE

ANALOG V/mA

Non-Contact Magnetostrictive
Position Sensors

Sensopulse® MAGNETOSTRICTIVE | Modbus | SSI | CANopen | PROFIBUS | BiSS INTERFACE | CANbus | EtherCAT®

Non-Contact Magnetostrictive
Position Sensors

Sensopulse® MAGNETOSTRICTIVE

RESISTIVE POTENTIOMETRIC

ANALOG V/mA

In-Cylinder
Position Sensors

PRODUCTION RANGE

INCREMENTAL

Optic / Magnetic
Rotary Encoders

Sine Cosine

BiSS INTERFACE

SSI

Optic Rotary Absolute Encoders
(for synhronous gearless motors)

RESISTIVE POTENTIOMETRIC

INCREMENTAL

ANALOG V/mA

Draw Wire Potentiometers
Draw Wire Encoders

RESISTIVE POTENTIOMETRIC

ANALOG V/mA

Rotary Sensors Magnetic,
Contactless Analog Output

INCREMENTAL

Magnetic Linear Encoders

PROFIBUS

CANopen

Modbus

EtherCAT

Analog-FieldBUS Converters

Panel-Type Measurement and Control Devices

Hot Runner Temperature Controls

NOTE:

OPKON®
Sense the motion

TÜRKİYE
Headquarter, R&D, Production

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