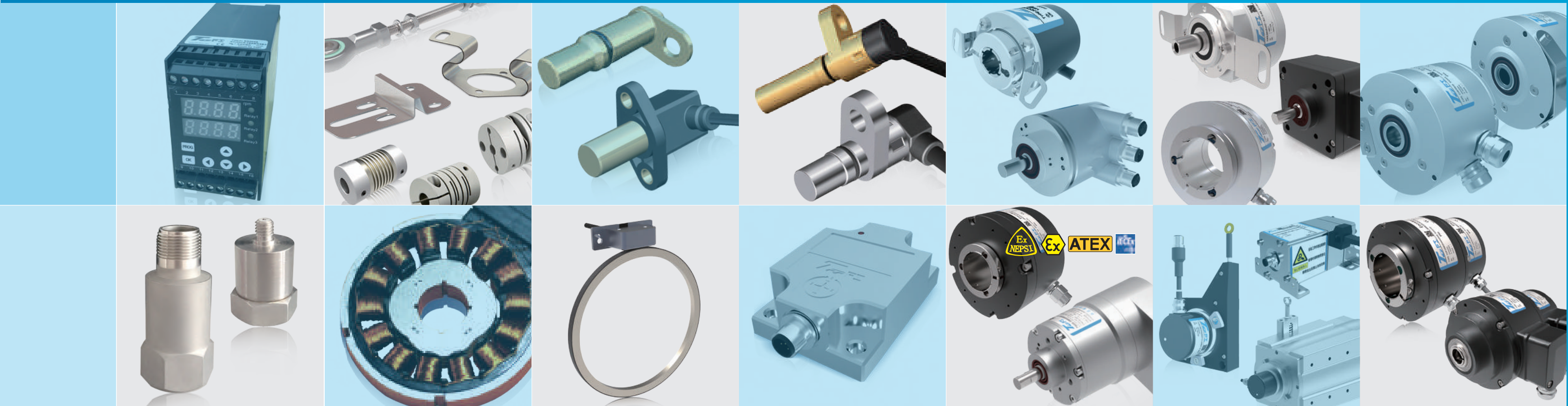


oct 2026



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TOFI sensing technology
High performance encoder and sensor solutions for industries

Motion control sensor

TOFI Sensing Technology (Shanghai) Co., Ltd founded in 2005, headquartered in Shanghai, wholly-owned subsidiaries: Changchun Moire Electronics Co., Ltd; Hunan TOFI Intelligent Technology Co.,Ltd; Changchun FengYue Precision Machining Co., Ltd. and Shanghai Joint Electronic Co., Ltd. Among them, TOFI Sensing Technology and Changchun Moire Electronics are the national high-tech enterprises.We are dedicated to the application design of magnetic and optomechanical sensing technology, providing high performance industrial sensor solutions.Our wide range of solutions help innovative industrial sensor performance to a higher level, which make the applications safer, smarter, easier to use and more environmentally friendly between humans and machines.Products are widely used in feedback of position,speed,an-gle,displacement,communicationconnection and related software for factory automation,robotic medical,construction machinery,electronic semiconductor,energy and other industries.

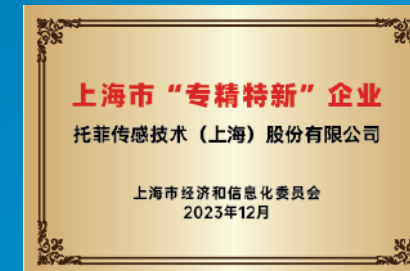
Customer-specific solutions

Through customized products, TOFI Sensing had helped many customers enhance competitiveness in terms of performance, size, and cost of products.Innovative encoder and sensor solutions can help you stay ahead in the fierce market competition.

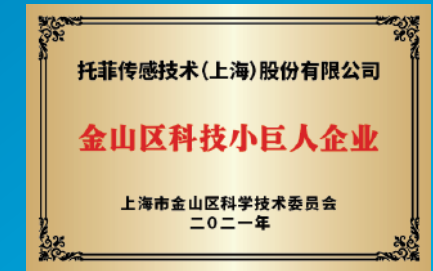
Innovative Technology, R&D Investment and Achievement



高新技术企业



上海专精特新企业



科技小巨人企业



两化融合管理体系认证



知识产权管理体系认证



ISO9001质量管理体系认证



环境管理体系认证



职业健康安全管理体系认证



RoHS认证



TÜV CE认证



CCC防爆认证



NEPSI防爆认证



IECEx国际防爆认证



ATEX国际防爆认证



集成电路布图设计登记证书



发明专利



实用新型专利

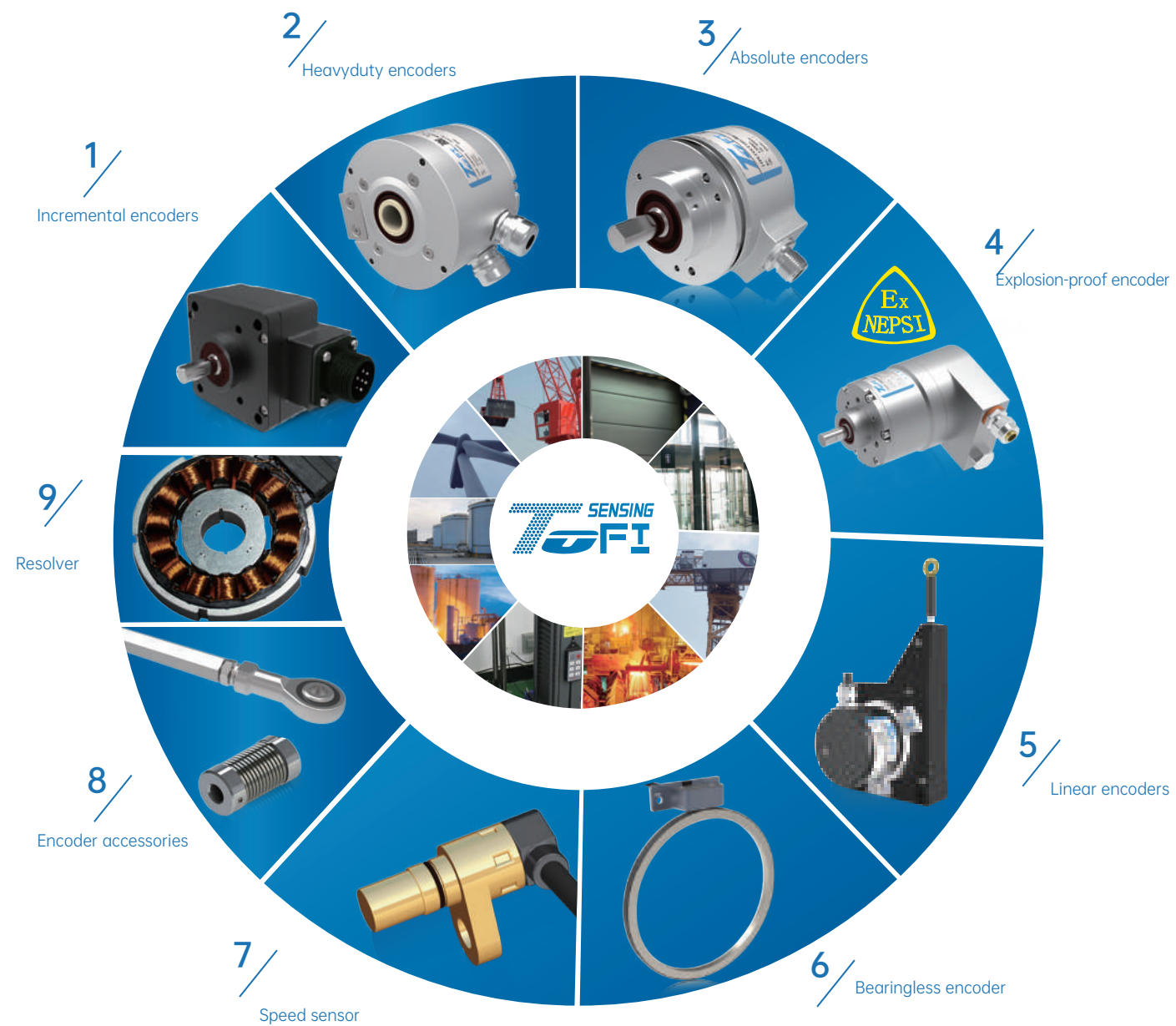


外观专利



软著





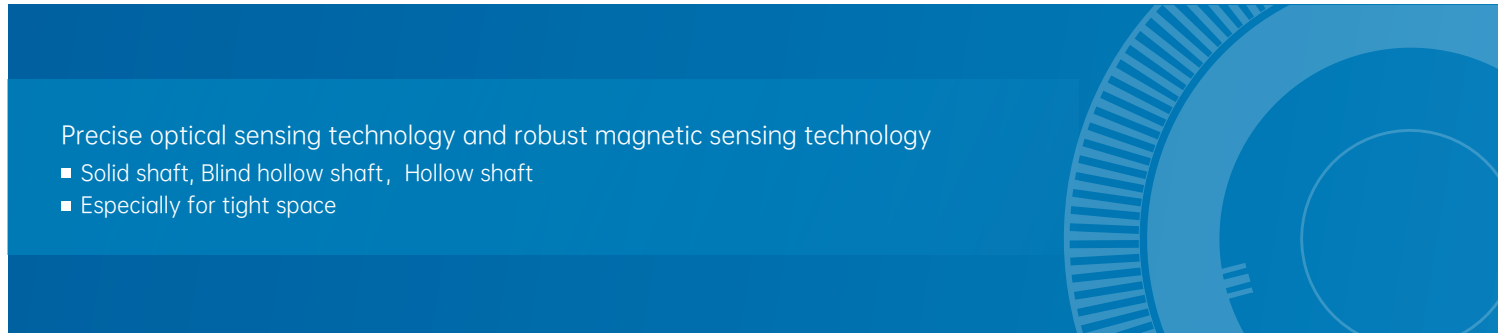
Incremental encoders
 Absolute encoders
 Heavyduty encoders
 Heavy-duty encoder+Overspeed switch
 Explosion-proof incremental encoder
 Explosion-proof absolute encoder

INCREMENTAL ENCODERS





Series	ECC38B	ECC3801B	ECC38S	ECC3801S
Sensing method	Magnetic	Magnetic	Magnetic	Magnetic
Housing size	Ø38mm	Ø38mm	Ø38mm	Ø38mm
Power supply	5VDC 9-26VDC 5-30VDC	5VDC 9-26VDC 5-30VDC	5VDC 9-26VDC 5-30VDC	5VDC 9-26VDC 5-30VDC
Output	RS422/TTL Push-Pull/HTL NPN Open Collector	RS422/TTL Push-Pull/HTL NPN Open Collector	RS422/TTL Push-Pull/HTL NPN Open Collector	RS422/TTL Push-Pull/HTL NPN Open Collector
Installation	Blind hollow shaft	Blind hollow shaft	Solid shaft	Solid shaft
Shaft	Ø8mm	Ø8mm	Ø6mm	Ø10mm
Resolution	≤4096PPR	≤4096PPR	≤4096PPR	≤4096PPR
Operating temperature	-40°C...+85°C	-40°C...+85°C	-40°C...+85°C	-40°C...+85°C
Protection	IP54	IP54	IP65	IP65
Max. allowed speed	6000RPM	6000RPM	6000RPM	6000RPM
Shaft load	40N Axial; 80N Radial	40N Axial; 80N Radial	40N Axial; 80N Radial	40N Axial; 80N Radial
Features				



Precise optical sensing technology and robust magnetic sensing technology

- Solid shaft, Blind hollow shaft, Hollow shaft
- Especially for tight space



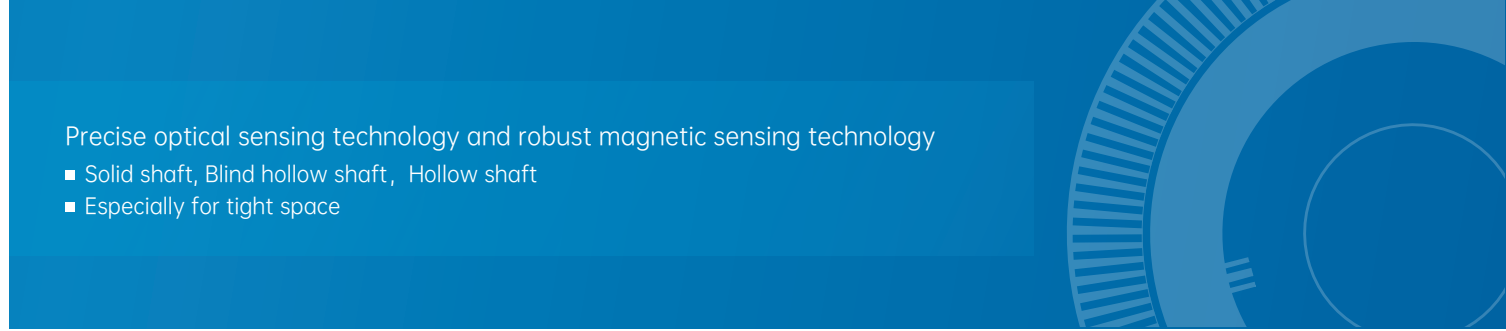
Series	ECC3802S	ESIC38S	ESG38S	ESG3804S	ECK38S
Sensing method	Magnetic	Optical	Optical	Optical	Optical
Housing size	Ø38mm	Ø38mm	Ø38mm	Ø38mm	Ø38mm
Power supply	5VDC 9-26VDC 5-30VDC	5VDC	5VDC 9-26VDC 5-30VDC	5VDC 9-26VDC 5-30VDC	9-26VDC
Output	RS422/TTL Push-Pull/HTL NPN Open Collector	RS422/TTL	RS422/TTL Push-Pull/HTL NPN Open Collector	RS422/TTL Push-Pull/HTL NPN Open Collector	Push-Pull/HTL NPN Open Collector
Installation	Solid shaft	Solid shaft	Solid shaft	Solid shaft	Solid shaft
Shaft	Ø6mm	Φ6 mm	Φ6mm L=12.5mm	Φ6mm	Φ6mm L=12.5mm
Resolution	≤4096PPR	5000PPR	≤2500PPR	≤2500PPR	≤600PPR
Operating temperature	-40°C...+85°C	-40°C...+85°C	-20°C...+70°C	-20°C...+70°C	-20°C...+70°C
Protection	IP65	IP54/IP65	IP54/IP65	IP65	IP54
Max. allowed speed	6000RPM	6000RPM	6000RPM	6000RPM	6000RPM
Shaft load	40N Axial; 80N Radial	20N Axial; 40N Radial	25N Axial; 50N Radial	25N Axial; 50N Radial	24N Axial; 40N Radial
Features				Housing size 38 shaft, Suitable for high protection level environment	

ESK, EDK series photoelectric technology

ESK, EDK series incremental encoders adopt a new integrated photoelectric induction technology, which can not only adapt to more harsh environments than traditional products, but also have more accurate and stable signal transmission.



Series	ESG38B	ESG3802B	EDC38H
Sensing method	Optical	Optical	Magnetic
Housing size	Ø38mm	Ø38mm	Ø38mm
Power supply	5VDC 9-26VDC 5-30VDC	5VDC 9-26VDC 5-30VDC	5-30VDC
Output	RS422/TTL Push-Pull/HTL NPN Open Collector	RS422/TTL Push-Pull/HTL NPN Open Collector	RS422/TTL Push-Pull/HTL NPN Open Collector
Installation	Blind hollow shaft	Blind hollow shaft	Hollow shaft
Shaft	Ø5、Ø6、Ø8mm	Ø8mm	Ø8mm
Resolution	≤2500PPR	≤2500PPR	≤4096PPR
Operating temperature	-20℃...+70℃	-20℃...+70℃	-40℃...+85℃
Protection	IP54/IP65	IP54	IP54
Max. allowed speed	6000RPM	6000RPM	6000RPM
Shaft load	25N Axial;50N Radial	25N Axial;50N Radial	20N Axial; 40N Radial
Features		Housing size 38 thickness of 35.5 blind hollow shaft, the elastic bracket wings	



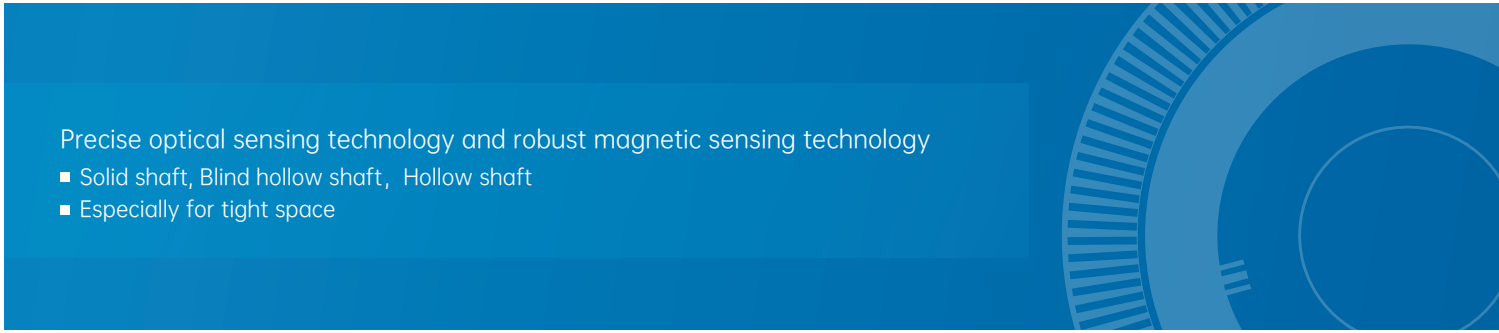
ECC50S	ESK50S	ESK5004SK25	ESG50S	ESG50S
Magnetic	Optical	Optical	Optical	Optical
Ø50mm	Ø50mm	Ø50mm	Ø50mm	Ø50mm
5VDC 9-26VDC 5-30VDC	5VDC 9-26VDC 5-30VDC	5VDC 9-26VDC 5-30VDC	5VDC 9-26VDC 5-30VDC	5VDC 9-26VDC 5-30VDC
RS422/TTL Push-Pull/HTL NPN Open Collector	RS422/TTL Push-Pull/HTL NPN Open Collector	RS422/TTL Push-Pull/HTL NPN Open Collector	RS422/TTL Push-Pull/HTL NPN Open Collector	RS422/TTL Push-Pull/HTL NPN Open Collector
Solid shaft	Solid shaft	Solid shaft	Solid shaft	Solid shaft
Ø6、Ø8mm	Ø8mm	Ø25mm	Ø8mm	Ø8mm
≤4096PPR	≤1200PPR	≤1200PPR	≤2500PPR	≤2500PPR
-40℃...+85℃	-40℃...+85℃	-40℃...+85℃	-20℃...+70℃	-20℃...+70℃
IP65	IP54/IP65	IP54/IP65	IP54/IP65	IP54/IP65
6000RPM	6000RPM	6000RPM	6000RPM	6000RPM
40N Axia; 80N Radial	40N Axial;80N Radial	40N Axial;80N Radial	30N Axial;60N Radial	30N Axial;60N Radial

ESK, EDK series photoelectric technology

ESK, EDK series incremental encoders adopt a new integrated photoelectric induction technology, which can not only adapt to more harsh environments than traditional products, but also have more accurate and stable signal transmission.



Series	ESK5801S	ESK5803S	ESK5804SK
Sensing method	Optical	Optical	Optical
Housing size	Ø58mm	Ø58mm	方法兰68*68mm
Power supply	5VDC 9-26VDC 5-30VDC	5VDC 9-26VDC 5-30VDC	5VDC 9-26VDC 5-30VDC
Output	RS422/TTL Push-Pull/HTL NPN Open Collector	RS422/TTL Push-Pull/HTL NPN Open Collector	RS422/TTL Push-Pull/HTL NPN Open Collector
Installation	Solid shaft	Solid shaft	Solid shaft with keyway
Shaft	Ø10mm	Ø6mm	Ø15mm
Resolution	≤1500PPR	≤1500PPR	≤1500PPR
Operating temperature	-40°C...+85°C	-40°C...+85°C	-40°C...+85°C
Protection	IP54/IP65	IP54/IP65	IP54/IP65
Max. allowed speed	6000RPM	6000RPM	6000RPM
Shaft load	40N Axial; 80N Radial	40N Axial; 80N Radial	40N Axial; 80N Radial
Features	Housing size 58, installation steps with 36mm solid shaft, clamping flange, allowing larger axial beat	Housing size 58, installation steps with 50mm solid shaft, synchro flange, allowing larger axial beat	Housing size 58, installation steps with 50mm solid shaft, square flange, allowing larger axial beat



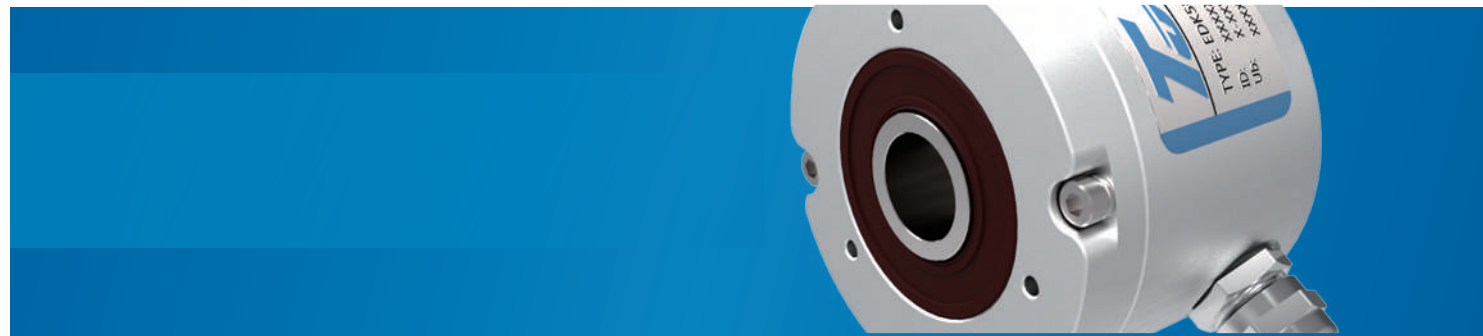
- Precise optical sensing technology and robust magnetic sensing technology
- Solid shaft, Blind hollow shaft, Hollow shaft
 - Especially for tight space



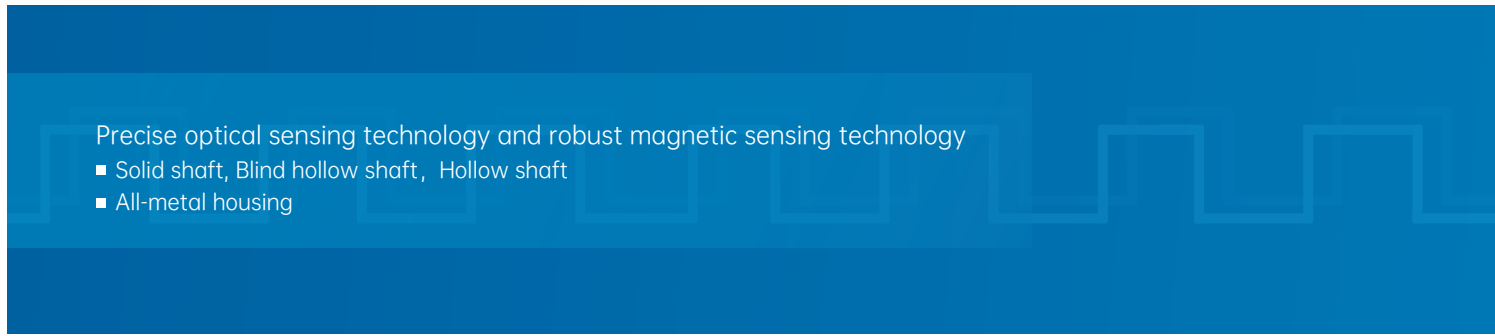
EDK58S	EDK5802S
Optical	Optical
Ø58mm	Ø58mm
5VDC 9-26VDC 5-30VDC	5VDC 9-26VDC 5-30VDC
RS422/TTL Push-Pull/HTL NPN Open Collector	RS422/TTL Push-Pull/HTL NPN Open Collector
Solid shaft	Solid shaft
Ø10mm	Ø6mm
≤1500PPR	≤1500PPR
-40°C...+85°C	-40°C...+85°C
IP65/IP67	IP65/IP67
6000RPM	6000RPM
40N Axial; 80N Radial	40N Axial; 80N Radial
Housing size 58, industrial encoder solid shaft, clamping flange, allowing larger axial beat	Housing size 58, industrial encoder, the synchro flange permits relatively large axial runout.

ESK, EDK series photoelectric technology

ESK, EDK series incremental encoders adopt a new integrated photoelectric induction technology, which can not only adapt to more harsh environments than traditional products, but also have more accurate and stable signal transmission.



Series	ESG58S	ESG5803S	ESG5805S	EDG58S
Sensing method	Optical	Optical	Optical	Optical
Housing size	Ø58mm	Ø58mm	63.5*63.5mm	Ø58mm
Power supply	5VDC 9-26VDC 5-30VDC	5VDC 9-26VDC 5-30VDC	5VDC 9-26VDC 5-30VDC	5VDC 9-26VDC 5-30VDC
Output	RS422/TTL Push-Pull/HTL NPN Open Collector	RS422/TTL Push-Pull/HTL NPN Open Collector	RS422/TTL Push-Pull/HTL NPN Open Collector	RS422/TTL Push-Pull/HTL NPN Open Collector
Installation	Solid shaft	Solid shaft	Solid shaft	Solid shaft
Shaft	Ø10mm	Ø6mm	Ø9.525、Ø10mm	Ø10mm
Resolution	≤5000PPR	≤5000PPR	≤5000PPR	≤5000PPR
Operating temperature	-20℃...+70℃	-20℃...+70℃	-20℃...+70℃	-20℃...+70℃
Protection	IP54/IP65	IP54/IP65	IP54/IP65	IP65/IP67
Max. allowed speed	10000PRM	10000PRM	6000PRM	6000RPM
Shaft load	40N Axial;80N Radial	40N Axial;80N Radial	40N Axial;80N Radial	40N Axial;80N Radial
Features	Housing size 58, installation steps with 50mm solid shaft, synchro flange	Housing size 58, installation steps with 50mm solid shaft, synchro flange	Housing size 58, clamping flange, allowing larger axial beat	Housing size 58, industrial encoder solid shaft, clamping flange



Precise optical sensing technology and robust magnetic sensing technology

- Solid shaft, Blind hollow shaft, Hollow shaft
- All-metal housing



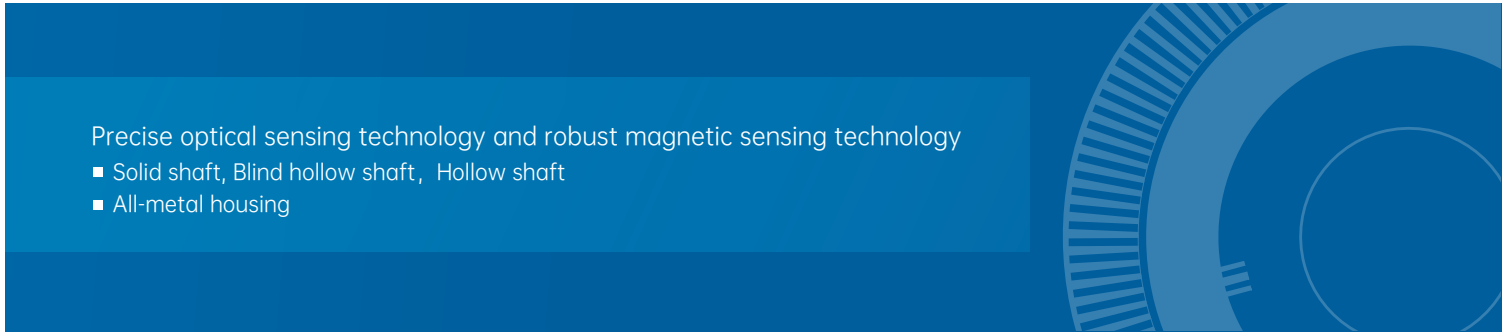
EDG5803S	ESK58H	EDK5802H	EDK68S
Optical	Optical	Optical	Optical
Ø58mm	Ø58mm	Ø58mm	Ø68mm
5VDC 9-26VDC 5-30VDC	5VDC 9-26VDC 5-30VDC	5VDC 9-26VDC 5-30VDC	5VDC 5-30VDC 9-26VDC
RS422/TTL Push-Pull/HTL NPN Open Collector	RS422/TTL Push-Pull/HTL NPN Open Collector	RS422/TTL Push-Pull/HTL NPN Open Collector	RS422/TTL Push-Pull/HTL NPN Open Collector
Solid shaft	Hollow shaft	Hollow shaft	Solid shaft
Ø6mm	Ø10、Ø12、Ø14mm	Ø10、Ø12、Ø14mm	Ø6...10mm
≤5000PPR	≤1500PPR	300...1200PPR	200...1200PPR
-20℃...+70℃	-40℃...+85℃	-40℃...+85℃	-40℃...+85℃
IP65/IP67	IP54/IP65	IP66	IP66
6000RPM	6000RPM	6000RPM	6000RPM
40N Axial;80N Radial	40N Axial;80N Radial	40N Axial;80N Radial	40N Axial;80N Radial
Housing size 58, industrial encoder, installation steps with 50mm solid shaft, synchro flange	Housing size 58, through hollow shaft, flexible bracket mounted, allowing larger axial beat		Housing size 68, industrial encoder, Allowing larger axial beat.

ESK, EDK series photoelectric technology

ESK, EDK series incremental encoders adopt a new integrated photoelectric induction technology, which can not only adapt to more harsh environments than traditional products, but also have more accurate and stable signal transmission.



Series	EDL58H	EDC58S	ESC58B
Sensing method	Optical	Magnetic	Magnetic
Housing size	Ø58mm	Ø58mm	Ø58mm
Power supply	5-30VDC	5-30VDC	5-30VDC
Output	RS422/TTL Push-Pull/HTL	RS422/TTL Push-Pull/HTL NPN Open Collector	RS422/TTL Push-Pull/HTL NPN Open Collector
Installation	Hollow shaft	Solid shaft	Blind hollow shaft
Shaft	Ø10、Ø12、Ø14、Ø15mm	Ø10mm	Ø10、Ø12mm
Resolution	≤5000PPR	≤4096PPR	≤4096PPR
Operating temperature	-40°C...+85°C	-40...+85°C	-40...+85°C
Protection	IP65/IP67	IP67	IP66
Max. allowed speed	6000RPM	6000RPM	6000RPM
Shaft load	40N Axial;80N Radial	40N Axial;80N Radial	40N Axial;80N Radial
Features			



Precise optical sensing technology and robust magnetic sensing technology

- Solid shaft, Blind hollow shaft, Hollow shaft
- All-metal housing



ECK58B	ESG58H	EDG58H	EBG58SZ
Optical	Optical	Optical	Optical
Ø58mm	Ø58mm	Ø58mm	Ø53mm
9-26VDC 5-30VDC	5VDC 9-26VDC 5-30VDC	5VDC 9-26VDC 5-30VDC	5-30VDC
RS422/TTL Push-Pull/HTL NPN Open Collector	RS422/TTL Push-Pull/HTL NPN Open Collector	RS422/TTL Push-Pull/HTL NPN Open Collector	RS422/TTL Push-Pull/HTL NPN Open Collector
Blind hollow shaft	Hollow shaft	Hollow shaft	Solid cone axis
Ø10、Ø12mm	Ø10、Ø12、Ø14mm	Ø10、Ø12、Ø14mm	Ø10mm 1:10
≤1200PPR	≤5000PPR	≤5000PPR	≤8192PPR
-40...+85°C	-20°C...+70°C	-20°C...+70°C	-40°C...+85°C
IP66	IP54/IP65	IP65/IP67	IP65
6000RPM	6000RPM	6000RPM	6000RPM
40N Axial;80N Radial	40N Axial;80N Radial	40N Axial;80N Radial	40N Axial;80N Radial
	Housing size 58, through hollow shaft, flexible bracket mounted	Housing size 58, industrial encoder, through hollow shaft, flexible bracket mounted	

ESK, EDK series photoelectric technology

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Series	IE76H	ESG90H	ESK90H	EE
Sensing method	Optical	Optical	Optical	Optical
Housing size	Ø76mm	Ø90mm	Ø90mm	Ø100mm
Power supply	5VDC 9-26VDC 5-30VDC	5VDC 9-26VDC 5-30VDC	5VDC 9-26VDC 5-30VDC	5VDC 9-26VDC 5-30VDC
Output	RS422/TTL Push-Pull/HTL NPN Open Collector	RS422/TTL Push-Pull/HTL NPN Open Collector	RS422/TTL Push-Pull/HTL NPN Open Collector	RS422/TTL Push-Pull/HTL NPN Open Collector
Installation	Hollow shaft	Hollow shaft	Hollow shaft	Hollow shaft
Shaft	Ø12、Ø20、Ø25mm	Ø12、Ø20、Ø25mm	Ø25mm	Ø30...55mm
Resolution	≤2048PPR	≤5000PPR	500...2500PPR	≤3000PPR
Operating temperature	-40℃...+85℃	-20℃...+70℃	-40℃...+85℃	-40℃...+85℃
Protection	IP54	IP54/IP65	IP65	IP54
Max. allowed speed	6000RPM	3500RPM	3000RPM	6000RPM
Shaft load	80N Axial;100N Radial	40N Axial;80N Radial	80N Axial; 100N Radial	40N Axial;80N Radial
Features	Housing size 76, through hollow shaft, flexible bracket mounted, allowing lager axial beat	Housing size 90, through hollow shaft, flexible bracket mounted	Housing size 90,through hollowShaft, flexible bracket mounted	Size 100 through hollow shaft flexible bracket mounted,allowing larger axial beat.

Precise optical sensing technology and robust magnetic sensing technology

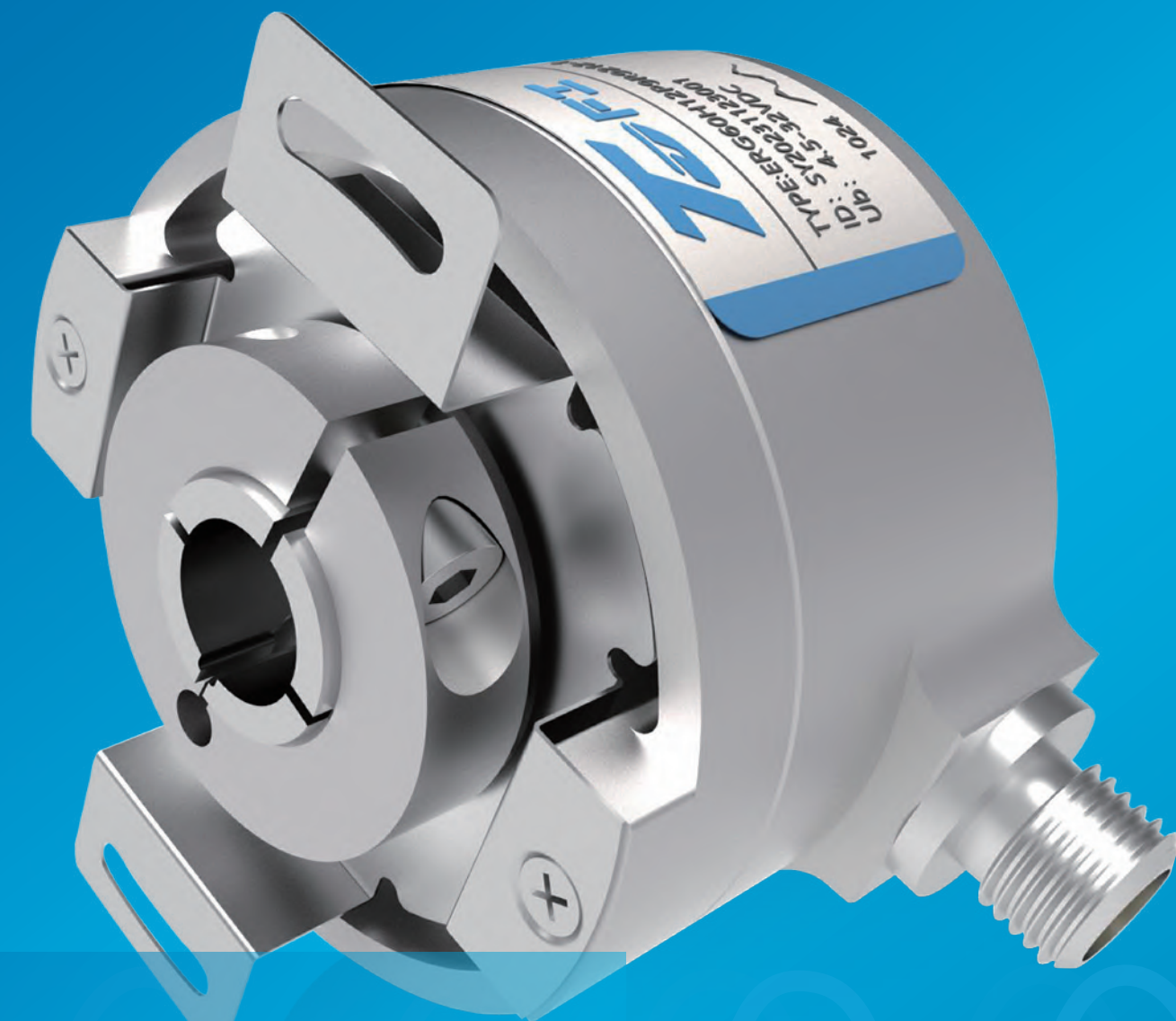
- Hollow shaft
- All-metal housing



EEA	EDK100H	ESK120H	ETF100-HS
Optical	Optical	Optical	Optical
Ø100mm	Ø100mm	Ø120mm	Ø100mm
5VDC 9-26VDC 5-30VDC	5VDC 9-26VDC 5-30VDC	5VDC 9-26VDC 5-30VDC	5VDC 9-26VDC 5-30VDC
RS422/TTL Push-Pull/HTL NPN Open Collector	RS422/TTL Push-Pull/HTL NPN Open Collector	RS422/TTL Push-Pull/HTL NPN Open Collector	RS422/TTL Push-Pull/HTL NPN Open Collector
Hollow shaft	Hollow shaft	Hollow shaft	Hollow shaft
Ø30...Ø45mm	Ø25...Ø45mm	Ø50,Ø55,Ø60,Ø65mm	Ø30mm
≤1024PPR	≤3000PPR	≤4096PPR	≤2500PPR
-40℃...+85℃	-40℃...+85℃	-40℃...+85℃	-40℃...+85℃
IP65	IP66	IP54/IP65	IP54/IP65
6000RPM	4000RPM	6000RPM	3000RPM
40N Axial;80N Radial	100N Axial;200N Radial	100N Axial;200N Radial	100N Axial;300N Radial
Size 100 through hollow shaft , flexible bracket mounted, allowing larger axial beat.	Size 100 Industrial encoder through hollow shaft, flexible bracket mounted, allowing larger axial beat	Size 120 through hollow shaft flexiblebracket mounted, allowing larger axial beat.	All stainless steel materialthrough hollow shaft, allowing the larger axial runout

ESK, EDK series photoelectric technology

ESK, EDK series incremental encoders adopt a new integrated photoelectric induction technology, which can not only adapt to more harsh environments than traditional products, but also have more accurate and stable signal transmission.



Sin/Cos ENCODER



TOFI

Size 60mm

Motion Control Transducer
Sin/Cos encoder



Series	ERG60S	ERG60B	ERG60H
Sensing method	Optical	Optical	Optical
Housing size	Ø60mm	Ø60mm	Ø60mm
Power supply	4.5-32VDC	4.5-32VDC	4.5-32VDC
Output	Sin/Cos 1Vpp	Sin/Cos 1Vpp	Sin/Cos 1Vpp
Installation	Solid shaft	Blind hollow shaft	Hollow shaft
Shaft	Ø6, Ø10mm	Ø6...14mm	Ø6...14mm
Resolution	≤2048PPR	≤2048PPR	≤2048PPR
Operating temperature	-25°C...+85°C	-25...+85°C	-25...+85°C
Protection	IP65	IP65	IP65
Max. allowed speed	6000RPM	6000RPM	6000RPM
Shaft load	40N Axial;80N Radial	40N Axial;80N Radial	40N Axial;80N Radial
Features	  	  	  



HEAVY-DUTY ENCODERS



Size 99、105mm

Motion Control Transducer
Heavy-Duty Encoders



Precise generator shaft-end speed feedback; suitable for extreme environments with severe temperature variations and harsh conditions.



Series	EHK99H	EHK9901H	EHK105HS
Sensing method	Optical	Optical	Optical
Housing size	Ø99mm	Ø99mm	Ø105mm
Power supply	5VDC 9-30VDC	5VDC 9-30VDC	5VDC、9-26VDC 5-30VDC
Output	RS422/TTL Push-Pull/HTL	RS422/TTL Push-Pull/HTL	RS422/TTL Push-Pull/HTL
Installation	Hollow shaft	Hollow shaft	Hollow shaft
Shaft	Ø12、Ø16mm Ø17mm（锥孔型Tapered Bore 1:10）	Ø12、Ø16mm Ø17mm（锥孔型Tapered Bore 1:10）	Ø12 ... Ø20mm Ø17mm（锥孔型Tapered Bore 1:10）
Resolution	≤2048PPR	≤2500PPR	≤2500PPR
Operating temperature	-40℃...+85℃	-40℃...+85℃	-40℃...+100℃
Protection	IP66	IP66	IP66
Max. allowed speed	6000RPM	6000RPM	6000RPM
Shaft load	100N Axial; 300N Radial	100N Axial; 300N Radial	100N Axial; 300N Radial
Features		Reliable with dual output redundant sensing	Blind hollow or cone shaft with torque support flexible bracket mounted, allowing larger axial beat.

EHK



Series	EHK90SK	EHK9001SK	EHK115S	EHK115SK
Sensing method	Optical	Optical	Optical	Optical
Housing size	Ø90mm	Ø90mm	Ø115mm	Ø115mm
Power supply	5VDC、9-26VDC 5-30VDC	5VDC、9-26VDC 5-30VDC	5VDC、9-30VDC	5VDC、9-30VDC
Output	RS422/TTL Push-Pull/HTL NPN Open Collector	RS422/TTL Push-Pull/HTL NPN Open Collector	RS422/TTL Push-Pull/HTL	RS422/TTL Push-Pull/HTL
Installation	Solid shaft	Solid shaft	Solid shaft	Solid shaft
Shaft	Ø11、Ø12、Ø15mm	Ø11、Ø12、Ø15mm	Ø10、Ø11、Ø12mm	Ø10、Ø11、Ø12mm
Resolution	≤2500PPR	≤2500PPR	≤2048PPR	≤2048PPR
Operating temperature	-40°C...+85°C	-40°C...+85°C	-40°C...+85°C	-40°C...+85°C
Protection	IP65/IP67	IP65/IP67	IP65/IP67	IP65/IP67
Max. allowed speed	6000RPM	6000RPM	6000RPM	6000RPM
Shaft load	70N Axial; 140N Radial	70N Axial; 140N Radial	70N Axial; 140N Radial	70N Axial; 140N Radial
Features			Heavy Duty encode through hollow shaft with EURO flange B10, flexible bracket mounted, allowing larger axial beat.	

EHK

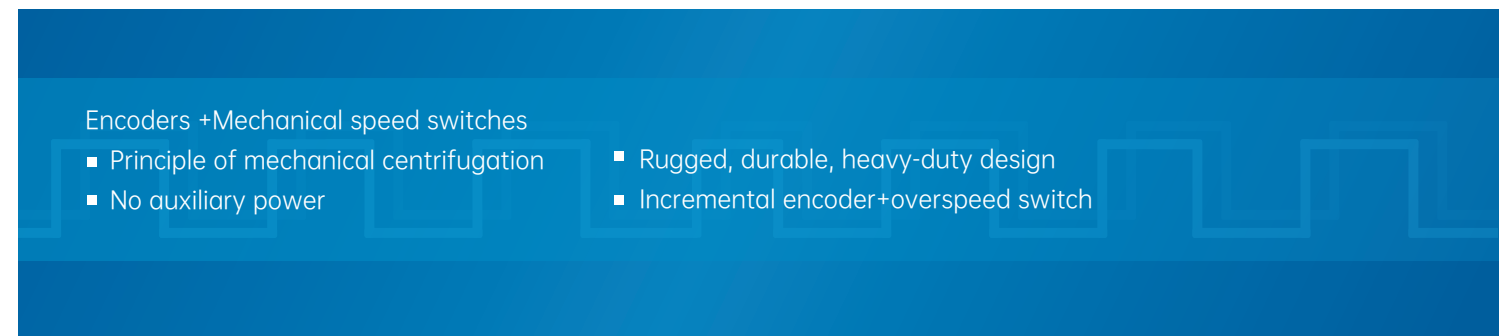


ENCODER + SPEED SWITCHES COMBINATIONS





Series	EHK100H+MS	EHK105HS+MS	EHK115SK+MS
Combinations	Encoder+Speed switches	Encoder+Speed switches	Encoder+Speed switches
Sensing method	Optical+Mechanical centrifugal	Optical+Mechanical centrifugal	Optical+Mechanical centrifugal
Housing size	Ø100mm	Ø105mm	Ø115mm
Power supply	5-30V	5-30V	5V, 9-30V
Output	RS422/TTL、Push-Pull/HTL NPN Open Collector	RS422/TTL、Push-Pull/HTL NPN Open Collector	RS422/TTL、Push-Pull/HTL NPN Open Collector
Installation	Hollow shaft	Hollow shaft	Solid shaft
Shaft	Ø30...Ø45mm	Ø16, Ø20mm Cone shaft Ø17mm (1:10)	Ø11mm
Resolution	≤3000PPR	≤2500PPR	≤2500PPR
Switching outputs	NO+NC, Speed available on request	NO+NC, Speed available on request	NO+NC, Speed available on request
Maximum Speed	3000RPM	3000RPM	6000RPM
Output switching capacity	≤6A/230VAC ; ≤1A/125VDC	≤6A/230VAC ; ≤1A/125VDC	≤6A/230VAC ; ≤1A/125VDC
Speed range	720...3600rpm	720...3600rpm	720...3600rpm
Operating temperature	-40°C...+85°C	-40°C...+85°C	-40°C...+85°C
Protection	IP66	IP66	IP66
Shaft load	100N Axial; 300N Radial	100N Axial; 300N Radial	100N Axial; 300N Radial
Features			



Encoders +Mechanical speed switches

- Principle of mechanical centrifugation
- No auxiliary power
- Rugged, durable, heavy-duty design
- Incremental encoder+overspeed switch



EHK9001SK+MS	ECK58+ES	EEA+ES
Encoder+Speed switches	Encoder+Speed switches	Encoder+Speed switches
Optical+Mechanical centrifugal	Optical & Electronic Overspeed Switch	Optical & Electronic Overspeed Switch
Ø90mm	Ø58mm	Ø100mm
5VDC、9-26VDC、5-30VDC	5VDC、9-26VDC、5-30VDC	5VDC、9-26VDC、5-30VDC
RS422/TTL、Push-Pull/HTL NPN Open Collector	RS422/TTL、Push-Pull/HTL NPN Open Collector	RS422/TTL、Push-Pull/HTL NPN Open Collector
Solid shaft	Blind hollow shaft	Hollow shaft
Ø11、Ø12、Ø15mm	Ø8、Ø10、Ø12mm	Ø45mm
≤2500PPR	≤2500PPR	≤2500PPR
NO+NC, Speed available on request	2	2
6000RPM	6000RPM	6000RPM
≤6A/230VAC ; ≤1A/125VDC	60VAC/0.2A	60VAC/0.2A
720...3600rpm	0...6000rpm	15...6000rpm
-40°C...+85°C	-40°C...+85°C	-40°C...+85°C
IP66	IP66	IP65
70N Axial; 140N Radial	40N Axial; 80N Radial	40N Axial; 80N Radial



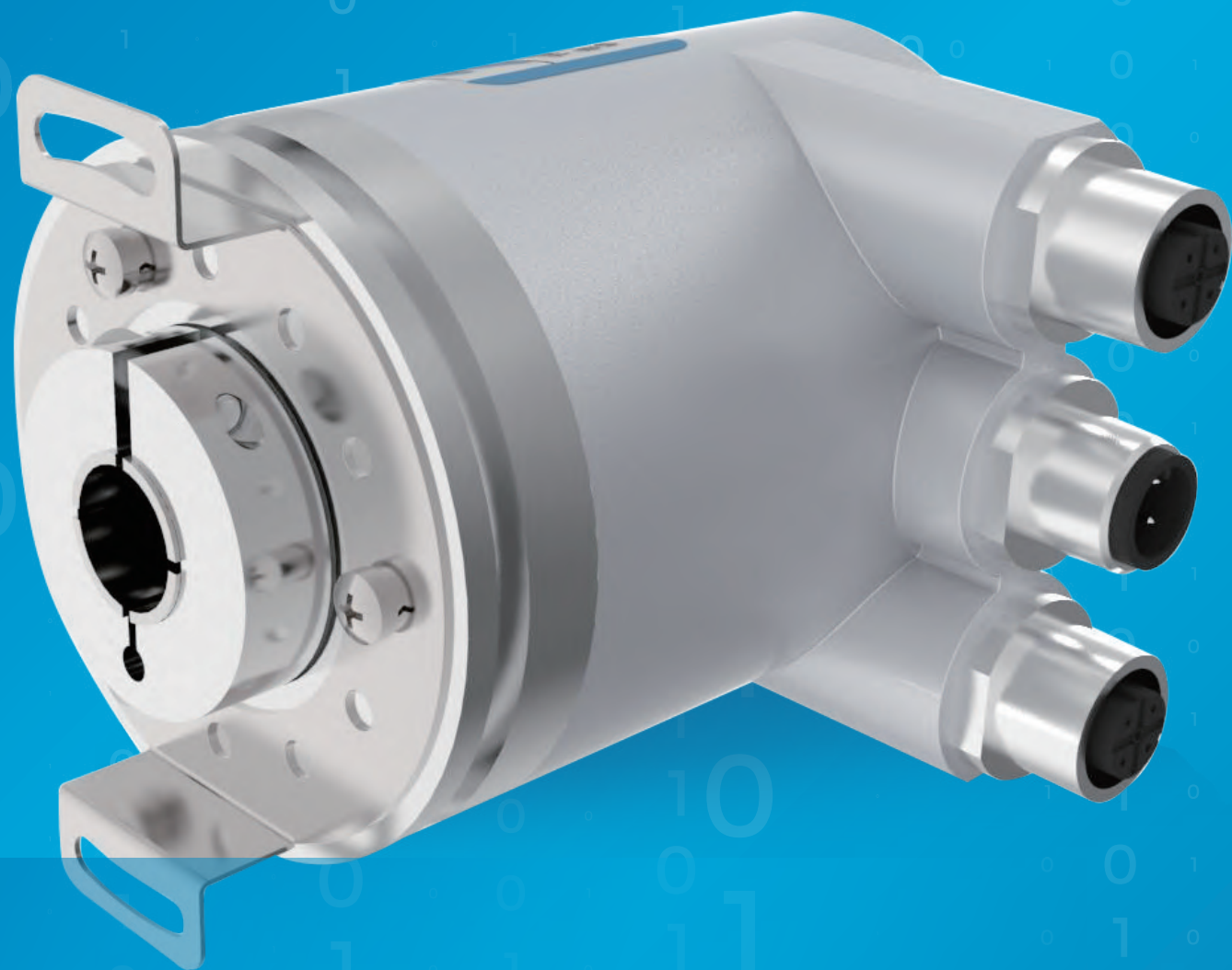
Series	SDM45	MS115	ES58S	ES75
Sensing method	Speed monitor	Mechanical overspeed switch	Electronic overspeed switch	Speed monitor
Housing size	78×45×75mm	Ø115mm	Ø58mm	107×75×42mm
Voltage supply	DC24V,18...36VDC DC12V,9...18VDC	-	10...30VDC	AC 85...265V DC 5V,10...3VDC
Output	Relay output	Relay output	Relay output	Relay output
Installation	-	Solid shaft	Solid shaft	Rail mounting
Shaft	-	Ø11mm	Ø10mm	-
Switching outputs	2 circuit normally closed	2 circuit normally closed	2 circuit normally closed	2 circuit normally closed
Maximum Speed	-	1.25ns	6000RPM	6000RPM 可设置
Maximum load current	-	50mA	200mA	200mA
Output switching capacity	-	≤6A/230VAC ≤1A/125VDC	0.2A/60VAC	DC60V/0.2V
Speed range	-	720...3600rpm	15...6000rpm	3450rpm
Operating temperature	-30℃...+70℃	-40℃...+85℃	-40℃...+85℃	-25℃...+70℃
Protection	IP20	IP66	IP65	IP20
Shaft load	-	100N Axial; 200N Radial	40N Axial; 80N Radial	-
Features	Speed lose, overspeed alarm, speed range can be set	Centrifugal mechanical overspeed switch, Heavy load type structure design	Key Settings (15, 20,22, 24, 31, 46) The above values are commonly used, other switching speed values should be based on request	

- Stall alarm and overspeed alarm functions, three relays can be set flexibly
- Maximum speed and memory, assist failure analysis.
- Sensor input line abnormal alarm function



Series	ES115SK
Sensing method	Electronic Overspeed Switch
Housing size	Ø115mm
Voltage supply	-
Output	Relay output
Installation	Solid shaft
Shaft	Ø15.8mm
Switching outputs	2 circuit normally closed
Maximum Speed	6000RPM
Maximum load current	200mA
Output switching capacity	0.2A/60VDC
Speed range	-999.9~999.9
Operating temperature	-40℃...+85℃
Protection	IP66
Shaft load	100N Axial; 300N Radial
Features	Heavy load type structure design

Series	EXQ90
Sensing method	Digital converter
Housing size	107×75×42mm
Voltage supply	9...26VDC
Output	Push-pull difference
Output signal	A $\bar{A}$ B $\bar{B}$ O $\bar{O}$
Current consumption	≤200mA
Protection	IP20
Operating temperature	-20℃...+70℃
Storage temperature	-20℃...+70℃
Connection	
Features	



ABSOLUTE ENCODERS



TOFI

Size **36mm**

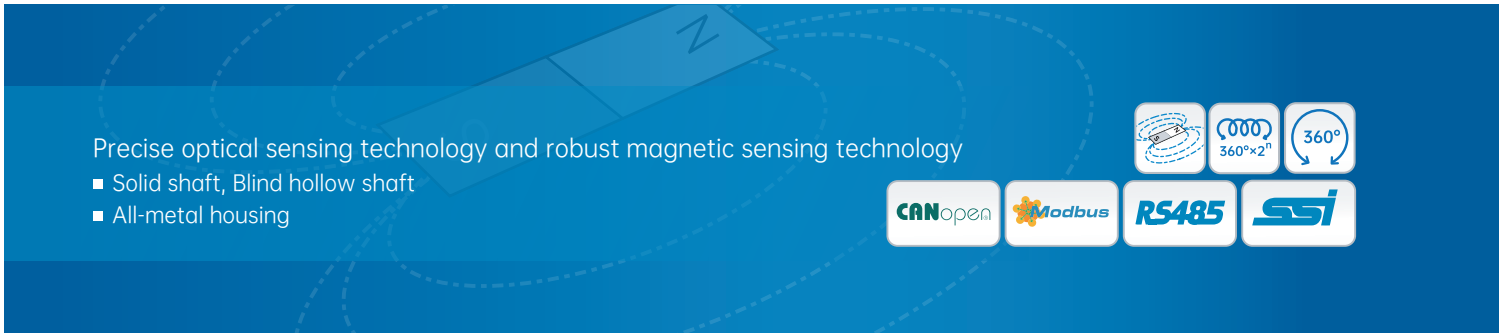
Motion Control Transducer
Absolute Encoders



Series	JDCE36S	JDCE36B	JDCE3601B
Sensing method	Magnetic	Magnetic	Magnetic
Function principle	Multiturn 	Multiturn 	Multiturn 
Multiturn technology	-	-	-
Housing size	Ø36.5mm	Ø36.5mm	Ø36.5mm
Power supply	10-30VDC	10-30VDC	10-30VDC
Interface	CANopen	CANopen	CANopen
Resolution	≤28bit	≤31bit	≤31bit
Steps per turn	≤16384/14bit	≤65536/16bit	≤65536/16bit
Number of turn	≤16384/14bit	≤32768/15bit	≤32768/15bit
Installation	Solid shaft	Blind hollow shaft	Blind hollow shaft
Shaft	Ø10mm	Ø6、Ø8mm	Ø6、Ø8、Ø10mm
Operating temperature	-40°C...+85°C	-40°C...+85°C	-40°C...+85°C
Protection	IP67	IP67	IP67
Max. allowed speed	4000RPM	4000RPM	4000RPM
Shaft load	180N Axial;180N Radial	20N Axial;40N Radial	20N Axial;40N Radial
Features			



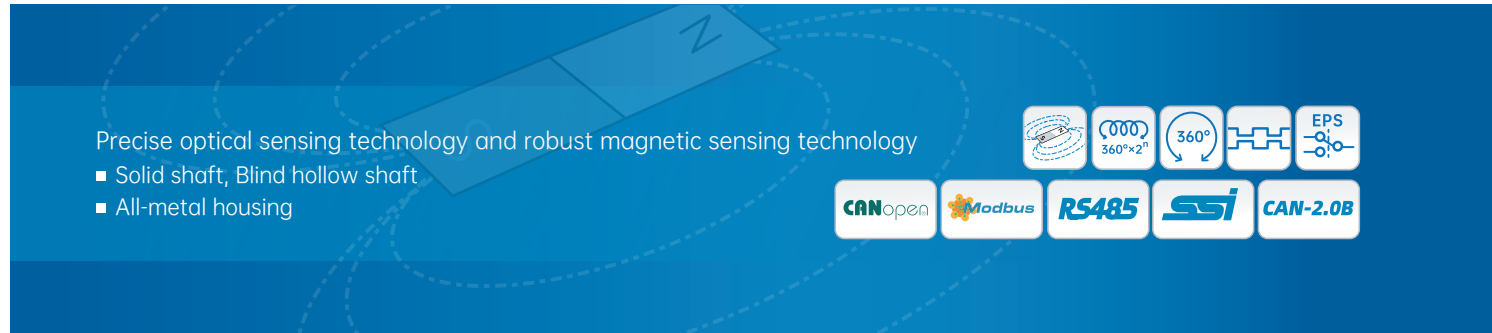
Series	JDCM36S	JDCM3601S	JCCM38S	JCCM38B
Sensing method	Magnetic	Magnetic	Magnetic	Magnetic
Function principle	Multiturn 	Multiturn 	Multiturn 	Multiturn 
Multiturn technology	Mechanical gear set	Mechanical gear set	Mechanical gear set	Mechanical gear set
Housing size	Ø36.5mm	Ø36.5mm	Ø38mm	Ø38mm
Power supply	10-30VDC	10-30VDC	10-30VDC	10-30VDC
Interface	CANopen、SSI	CANopen	CANopen	CANopen
Resolution	≤24bit	≤24bit	-	-
Steps per turn	≤4096/12bit	≤4096/12bit	≤ 65536/16Bit	≤ 65536/16Bit
Number of turn	≤4096/12bit	≤4096/12bit	43圈; 1806圈	23圈; 506圈
Installation	Solid shaft	Solid shaft	Solid shaft	Blind hollow shaft
Shaft	Ø6mm	Ø10mm	Ø6mm	Ø6、Ø8、Ø10mm
Operating temperature	-40°C...+85°C	-40°C...+85°C	-40°C...+85°C	-40°C...+85°C
Protection	IP67	IP67	IP66	IP66
Max. allowed speed	3000RPM	6000RPM	3000RPM	3000RPM
Shaft load	20N Axial;40N Radial	40N Axial;80N Radial	20N Axial;80N Radial	40N Axial;80N Radial
Features	 			



JCCM3801B	JSCS38B	JSCS3803S	JSCS46B
Magnetic	Magnetic	Magnetic	Magnetic
Multiturn 	Singleturn 	Singleturn 	Singleturn 
Mechanical gear set	-	-	-
Ø38mm	Ø38mm	Ø38mm	75.5*46*35mm
10-30VDC	10-30VDC	10-30VDC	7-26VDC
CANopen	CANopen、Modbus-RTU	CANopen、Modbus-RTU	RS485
-	≤14bit	≤14bit	≤13bit
≤ 65536/16Bit	≤16384/14bit	≤16384/14bit	≤8192/13bit
23圈; 506圈	-	-	-
Blind hollow shaft	Blind hollow shaft	Solid shaft	Blind hollow shaft
Ø6、Ø8、Ø10mm	Ø8mm	Ø6mm	Ø7.9mm
-40°C...+85°C	-40°C...+80°C	-40°C...+80°C	-20°C...+85°C
IP66	IP54	IP54	IP20
3000RPM	2400rpm	2400rpm	1000 rpm
40N Axial;80N Radial	30N Axial;60N Radial	30N Axial;60N Radial	≤25N
	 	 	



Series	JSCM50S	JSCM50B
Sensing method	Magnetic	Magnetic
Function principle	Multiturn 	Multiturn 
Multiturn technology	Mechanical gear set	Mechanical gear set
Housing size	Ø50mm	Ø50mm
Power supply	10-30VDC	10-30VDC
Interface	Modbus-RTU+2 CANopen+2	Modbus-RTU+2 CANopen+2
Resolution	≤24bit	≤24bit
Steps per turn	≤4096/12bit	≤4096/12bit
Number of turn	≤4096/12bit	≤4096/12bit
Installation	Solid shaft	Blind hollow shaft
Shaft	Ø6mm	Ø12mm
Operating temperature	-40°C...+85°C	-40°C...+85°C
Protection	IP66	IP66
Max. allowed speed	3000rpm	3000rpm
Shaft load	30N Axial ; 60N Radial	30N Axial ; 60N Radial
Features	     	     



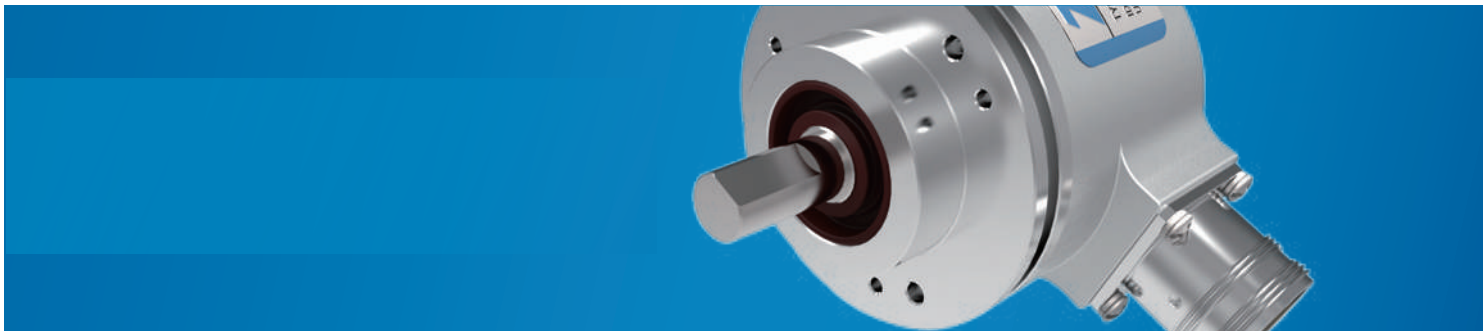
Series	JSCA50S	JSCA50SK	JSCA50B
Sensing method	Magnetic	Magnetic	Magnetic
Function principle	Multiturn 	Multiturn 	Multiturn 
Multiturn technology	Mechanical gear set	Mechanical gear set	Mechanical gear set
Housing size	Ø50mm	Ø50mm	Ø50mm
Power supply	10-30VDC	10-30VDC	10-30VDC
Interface	CANopen、CAN2.0 RS485、Modbus-RTU	CANopen、CAN2.0 RS485、Modbus-RTU	CANopen、CAN2.0 RS485、Modbus-RTU
Resolution	≤22bit	≤22bit	≤22bit
Steps per turn	≤4096/12bit	≤4096/12bit	≤4096/12bit
Number of turn	≤1024/10bit	≤1024/10bit	≤1024/10bit
Installation	Solid shaft	Solid shaft with keyway	Blind hollow shaft
Shaft	Ø6、Ø8mm	Ø25mm	Ø8、Ø10mm
Operating temperature	-40°C...+80°C	-40°C...+80°C	-40°C...+80°C
Protection	IP54/IP65	IP54/IP65	IP54/IP65
Max. allowed speed	3000RPM	3000RPM	3000RPM
Shaft load	30N Axial; 60N Radial	30N Axial; 60N Radial	30N Axial; 60N Radial
Features	    		



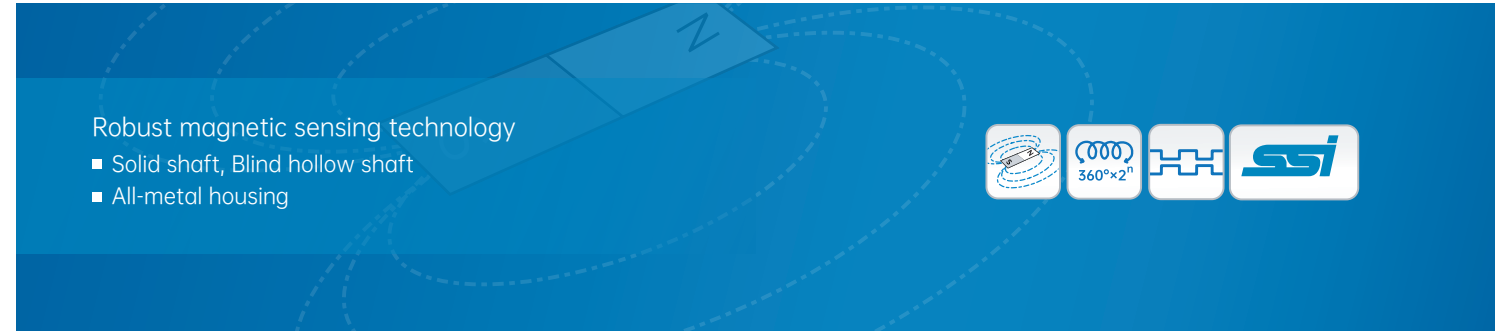
Series	FDCE58S	FDCE5801S	FDCE58B
Sensing method	Magnetic	Magnetic	Magnetic
Function principle	Multiturn 	Multiturn 	Multiturn 
Multiturn technology	-	-	-
Housing size	Ø60mm	Ø60mm	Ø60mm
Power supply	10-30VDC	10-30VDC	10-30VDC
Interface	CANopen, CANopen+ CANopen+Incremental signal	CANopen, CANopen+ CANopen+Incremental signal	CANopen, CANopen+ CANopen+Incremental signal
Resolution	≤32bit	≤32bit	≤32bit
Steps per turn	≤16384/14bit	≤16384/14bit	≤16384/14bit
Number of turn	≤262144/18bit	≤262144/18bit	≤262144/18bit
Pulse/turn (Incremental signal)	≤4096PPR	≤4096PPR	≤4096PPR
Installation	Solid shaft	Solid shaft	Blind hollow shaft
Shaft	Ø10mm	Ø6mm	Ø10... Ø15mm
Operating temperature	-40°C...+85°C	-40°C...+85°C	-40°C...+85°C
Protection	IP67	IP67	IP67
Max. allowed speed	6000RPM	6000RPM	6000RPM
Shaft load	40N Axial; 80N Radial	40N Axial; 80N Radial	40N Axial; 80N Radial
Features	 	 	 



FDCE5803S	FDCE5804S
Magnetic	Magnetic
Multiturn 	Multiturn 
-	-
Ø60mm	Ø60mm
10-30VDC	10-30VDC
CANopen, CANopen+ CANopen+Incremental signal	CANopen, CANopen+ CANopen+Incremental signal
≤32bit	≤32bit
≤16384/14bit	≤16384/14bit
≤262144/18bit	≤262144/18bit
≤4096PPR	≤4096PPR
Solid shaft	Solid shaft
Ø10mm	Ø6mm
-40°C...+85°C	-40°C...+85°C
IP67	IP67
6000RPM	6000RPM
250N Axial; 250N Radial	250N Axial; 250N Radial
 	 



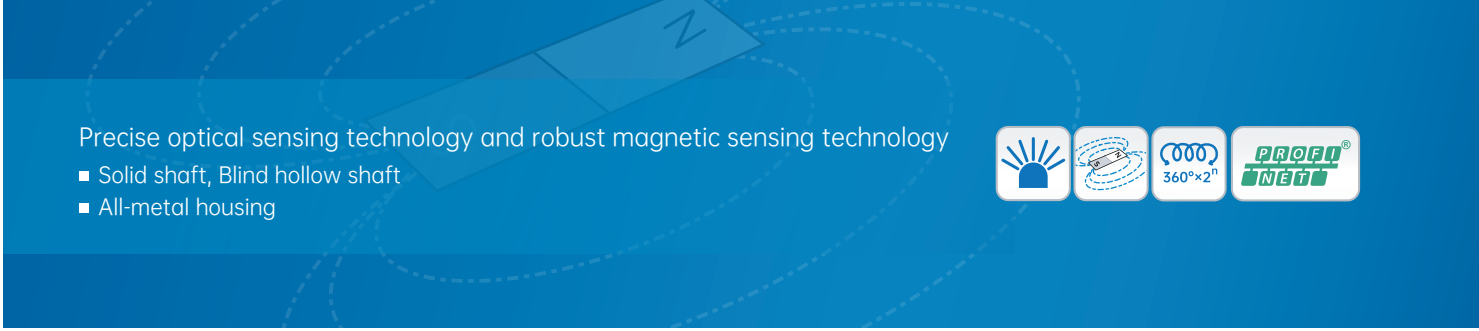
Series	FDCE58S	FDCE5801S	FDCE58B
Sensing method	Magnetic	Magnetic	Magnetic
Function principle	Multiturn 	Multiturn 	Multiturn 
Multiturn technology	-	-	-
Housing size	Ø60mm	Ø60mm	Ø60mm
Power supply	10-30VDC	10-30VDC	10-30VDC
Interface	SSI, SSI+ SSI+Incremental signal	SSI, SSI+ SSI+Incremental signal	SSI, SSI+ SSI+Incremental signal
Resolution	≤25bit	≤ 25bit	≤ 25bit
Steps per turn	≤8192/13bit	≤8192/13bit	≤8192/13bit
Number of turn	≤4096/12bit	≤4096/12bit	≤4096/12bit
Pulse/turn (Incremental signal)	≤4096PPR	≤4096PPR	≤4096PPR
Installation	Solid shaft	Solid shaft	Blind hollow shaft
Shaft	Ø10mm	Ø6mm	Ø10... Ø15mm
Operating temperature	-40°C...+85°C	-40°C...+85°C	-40°C...+85°C
Protection	IP67	IP67	IP67
Max. allowed speed	6000RPM	6000RPM	6000RPM
Shaft load	40N Axial; 80N Radial	40N Axial; 80N Radial	40N Axial; 80N Radial
Features	 	 	 



FDCE5803S	FDCE5804S	FDCM58S
Magnetic	Magnetic	Magnetic
Multiturn 	Multiturn 	Multiturn 
-	-	机械齿轮组无电池 Mechanical gear set
Ø60mm	Ø60mm	Ø60mm
10-30VDC	10-30VDC	10-30VDC
SSI, SSI+ SSI+Incremental signal	SSI, SSI+ SSI+Incremental signal	SSI, SSI+ SSI+Incremental signal
≤ 25bit	≤ 25bit	≤28bit
≤8192/13bit	≤8192/13bit	≤4096/12bit
≤4096/12bit	≤4096/12bit	≤65536/16Bit
≤4096PPR	≤4096PPR	≤4096PPR
Solid shaft	Solid shaft	Solid shaft
Ø10mm	Ø6mm	Ø10mm
-40°C...+85°C	-40°C...+85°C	-40°C...+85°C
IP67	IP67	IP67
6000RPM	6000RPM	6000RPM
250N Axial 250N Radial	250N Axial 250N Radial	250N Axial 250N Radial
 	 	 



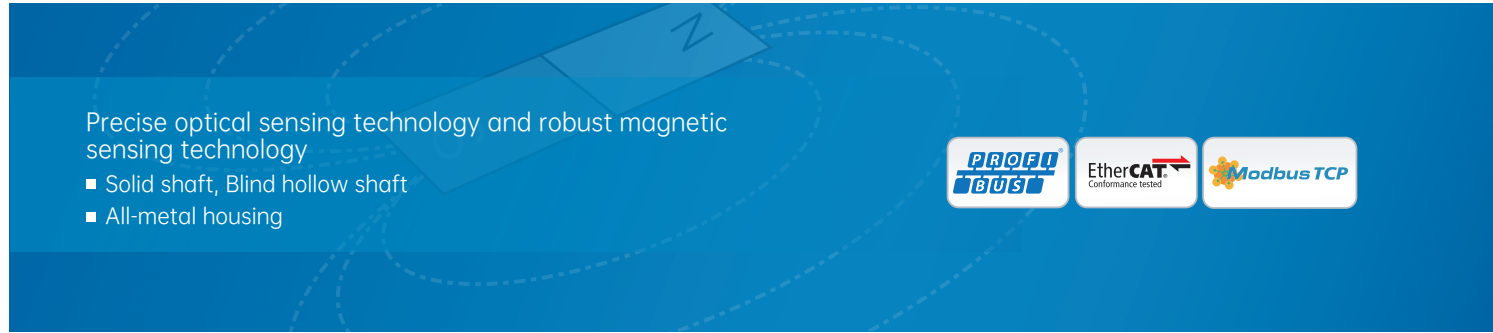
Series	JDCA58S	JDCA58B	JDCA5801S
Sensing method	Magnetic	Magnetic	Magnetic
Function principle	Multiturn 	Multiturn 	Multiturn 
Multiturn technology	Mechanical gear set	Mechanical gear set	Mechanical gear set
Housing size	Ø60mm	Ø60mm	Ø60mm
Power supply	10-30VDC	10-30VDC	10-30VDC
Interface	CANopen, Modbus-RTU, RS485 CAN2.0B, SSI, 4-20mA	CANopen, Modbus-RTU, RS485 CAN2.0B, SSI, 4-20mA	CANopen
Resolution	≤25bit	≤25bit	≤25bit
Steps per turn	≤8192/13bit	≤8192/13bit	≤8192/13bit
Number of turn	≤4096/12bit	≤4096/12bit	≤4096/12bit
Installation	Solid shaft	Blind hollow shaft	Solid shaft
Shaft	Ø6, Ø10mm	Ø10, Ø12, Ø14mm	Ø6mm
Operating temperature	-40°C...+85°C	-40°C...+85°C	-40°C...+85°C
Protection	IP65	IP65	IP65/IP67
Max. allowed speed	6000RPM	6000RPM	6000RPM
Shaft load	40N Axial;80N Radial	40N Axial;80N Radial	40N Axial;80N Radial
Features	     		



NCCA58S	NCCA5801S	NCCA58B	NCCA5801B
Magnetic	Magnetic	Magnetic	Magnetic
Multiturn 	Multiturn 	Multiturn 	Multiturn 
Mechanical gear set	Mechanical gear set	Mechanical gear set	Mechanical gear set
Ø60mm	Ø60mm	Ø60mm	Ø60mm
10-30VDC	10-30VDC	10-30VDC	10-30VDC
PROFINET	PROFINET	PROFINET	PROFINET
≤30bit	≤30bit	≤30bit	≤30bit
≤65536/16bit	≤65536/16bit	≤65536/16bit	≤65536/16bit
≤16384/14bit	≤16384/14bit	≤16384/14bit	≤16384/14bit
Solid shaft	Solid shaft	Blind hollow shaft	Blind hollow shaft
Ø10mm	Ø6mm	Ø10, Ø12, Ø14, Ø15mm	Ø10, Ø12, Ø14, Ø15mm
-40°C...+85°C	-40°C...+85°C	-40°C...+85°C	-40°C...+85°C
IP67	IP67	IP65	IP67
6000RPM	6000RPM	6000RPM	6000RPM
40N Axial;80N Radial	40N Axial;80N Radial	40N Axial;80N Radial	40N Axial;80N Radial
			



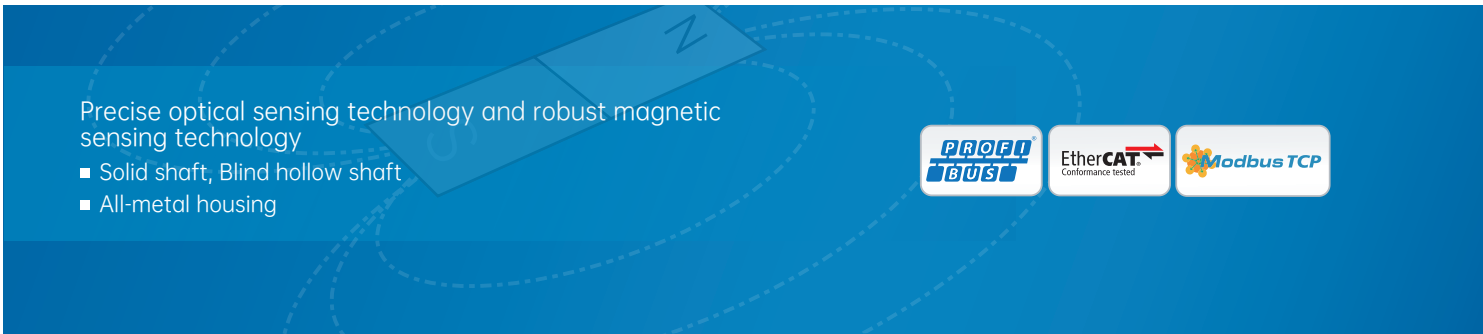
Series	PDCA58S	PDCA5801S	PDCA58B
Sensing method	Magnetic	Magnetic	Magnetic
Function principle	Multiturn 	Multiturn 	Multiturn 
Multiturn technology	Mechanical gear set	Mechanical gear set	Mechanical gear set
Housing size	Ø60mm	Ø60mm	Ø60mm
Power supply	10-30VDC	10-30VDC	10-30VDC
Interface	PROFIBUS-DP	PROFIBUS-DP	PROFIBUS-DP
Resolution	≤30bit	≤30bit	≤30bit
Steps per turn	≤65536/16bit	≤65536/16bit	≤65536/16bit
Number of turn	≤16384/14bit	≤16384/14Bit	≤16384/14bit
Installation	Solid shaft	Solid shaft	Blind hollow shaft
Shaft	Ø10mm	Ø6mm	Ø10、Ø12、Ø14、Ø15mm
Operating temperature	-40°C...+85°C	-40°C...+85°C	-40°C...+85°C
Protection	IP67	IP67	IP67
Max. allowed speed	6000RPM	6000RPM	6000RPM
Shaft load	40N Axial; 80N Radial	40N Axial; 80N Radial	40N Axial; 80N Radial
Features			



MTDCA58S	MTDCA58B	MTDCA5801B
Magnetic	Magnetic	Magnetic
Multiturn 	Multiturn 	Multiturn 
Mechanical gear set	Mechanical gear set	Mechanical gear set
Ø60mm	Ø60mm	Ø60mm
10-30VDC	10-30VDC	10-30VDC
Modbus TCP	Modbus TCP	Modbus TCP
≤30bit	≤30bit	≤30bit
≤65536/16bit	≤65536/16bit	≤65536/16bit
≤16384/14bit	≤16384/14bit	≤16384/14bit
Solid shaft	Blind hollow shaft	Blind hollow shaft
Ø10mm	Ø10、Ø12、Ø14、Ø15mm	Ø10、Ø12、Ø14、Ø15mm
-40°C...+85°C	-40°C...+85°C	-40°C...+85°C
IP67	IP67	IP67
6000RPM	6000RPM	6000RPM
40N Axial; 80N Radial	40N Axial; 80N Radial	40N Axial; 80N Radial
		



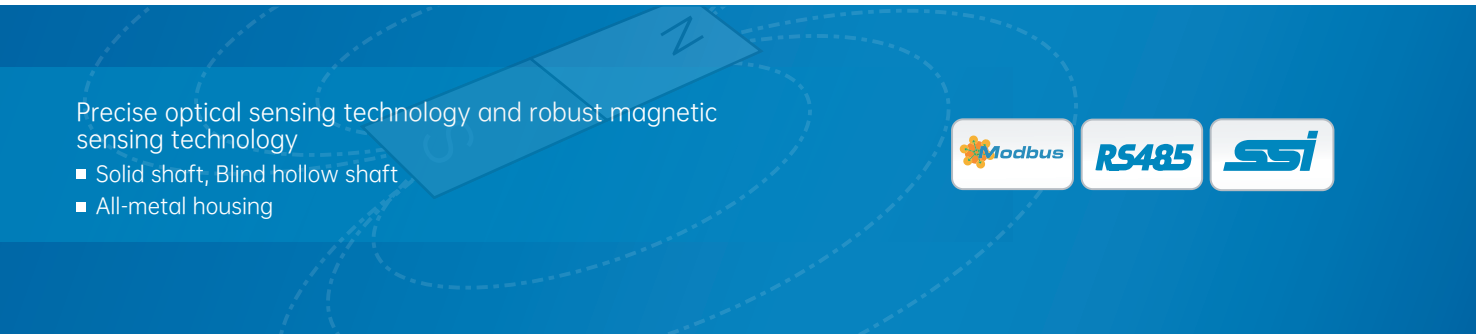
Series	ECDCA58S	ECDCA58B	ECDCA5801B
Sensing method	Magnetic	Magnetic	Magnetic
Function principle	Multiturn 	Multiturn 	Multiturn 
Multiturn technology	Mechanical gear set	Mechanical gear set	Mechanical gear set
Housing size	Ø60mm	Ø60mm	Ø60mm
Power supply	10-30VDC	10-30VDC	10-30VDC
Interface	PROFIBUS-DP	PROFIBUS-DP	PROFIBUS-DP
Resolution	≤30bit	≤30bit	≤30bit
Steps per turn	≤65536/16bit	≤65536/16bit	≤65536/16bit
Number of turn	≤16384/14bit	≤16384/14Bit	≤16384/14bit
Installation	Solid shaft	Solid shaft	Blind hollow shaft
Shaft	Ø10mm	Ø6mm	Ø10、Ø12、Ø14、Ø15mm
Operating temperature	-40°C...+85°C	-40°C...+85°C	-40°C...+85°C
Protection	IP67	IP67	IP67
Max. allowed speed	6000RPM	6000RPM	6000RPM
Shaft load	40N Axial; 80N Radial	40N Axial; 80N Radial	40N Axial; 80N Radial
Features			



JSCS58B	JSCS58S	JSCS5803S
Magnetic	Magnetic	Magnetic
Singleturn 	Singleturn 	Singleturn 
-	-	-
Ø58mm	Ø58mm	Ø58mm
10-30VDC	10-30VDC	10-30VDC
Modbus-RTU、RS485、SSI	Modbus-RTU、RS485、SSI	Modbus-RTU、RS485、SSI
≤15bit	≤15bit	≤15bit
≤32768/15bit	≤32768/15bit	≤32768/15bit
-	-	-
Blind hollow shaft	Solid shaft	Solid shaft
Ø10、Ø12、Ø14mm	Ø10mm	Ø6mm
-40°C...+80°C	-20°C...+70°C	-40°C...+80°C
IP54	IP54/IP65	IP54
3000RPM	3000RPM	3000RPM
40N Axial; 80N Radial	40N Axial; 80N Radial	40N Axial; 80N Radial
  	  	  



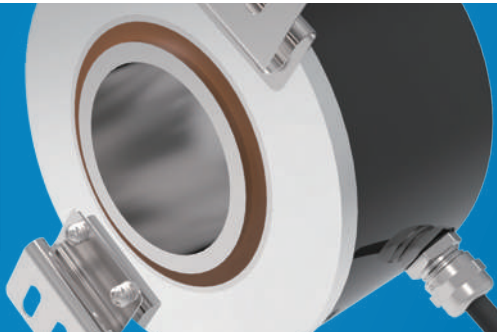
Series	JDDA58S	JDDA58B
Sensing method	Optical	Optical
Function principle	Multiturn 	Multiturn 
Multiturn technology	Mechanical gear set	Mechanical gear set
Housing size	Ø58mm	Ø58mm
Power supply	10-30VDC	10-30VDC
Interface	Modbus-RTU、RS485、SSI	Modbus-RTU、RS485、SSI
Resolution	≤28bit	≤28bit
Steps per turn	≤65536/16bit	≤65536/16bit
Number of turn	≤4096/12bit	≤4096/12bit
Installation	Solid shaft	Blind hollow shaft
Shaft	Ø6、Ø10mm	Ø10、Ø12、Ø14mm
Operating temperature	-40℃...+80℃	-40℃...+80℃
Protection	IP65/IP67	IP65
Max. allowed speed	6000RPM	6000RPM
Shaft load	40N Axial; 80N Radial	40N Axial; 80N Radial
Features	  	  



JDRS58S	JDRS5801S	JDRS58H
Optical	Optical	Optical
Singleturn 	Singleturn 	Singleturn 
-	-	-
Ø60mm	Ø60mm	Ø60mm
10-30VDC	10-30VDC	10-30VDC
SSI	SSI	SSI
8...23Bit	8...23Bit	8...23Bit
≤8388608/23it	≤8388608/23it	≤8388608/23it
-	-	-
Solid shaft	Solid shaft	Hollow shaft
Ø10mm	Ø6mm	Ø10...Ø15mm
-40℃...+85℃	-40℃...+85℃	-40℃...+85℃
IP65/IP67	IP65/IP67	IP65/IP67
6000RPM	6000RPM	6000RPM
40N Axial; 80N Radial	40N Axial; 80N Radial	40N Axial; 80N Radial
		

精确的光感应技术

- 大尺寸空心轴
- 坚固的全金属外壳



Series	JDRE58H	JDRE5801S	JDRE58S	JDRE58B
Sensing method	Optical	Optical	Optical	Optical
Function principle	Multiturn 	Multiturn 	Multiturn 	Multiturn 
Multiturn technology	Electronic Multi-turn	Electronic Multi-turn	Electronic Multi-turn	Electronic Multi-turn
Housing size	Ø60mm	Ø60mm	Ø60mm	Ø60mm
Power supply	10-30VDC	10-30VDC	10-30VDC	10-30VDC
Interface	SSI SSI+SIN/COS (1024PPR)	SSI	SSI	SSI
Resolution	32Bit	32Bit	32Bit	32Bit
Steps per turn	≤65536/16bit	≤65536/16bit	≤65536/16bit	≤65536/16bit
Number of turn	≤65536/16bit	≤65536/16bit	≤65536/16bit	≤65536/16bit
Installation	Hollow shaft	Solid shaft	Solid shaft	Blind hollow shaft
Shaft	Ø10、Ø12mm	Ø6、Ø10mm	Ø10mm	Ø10、Ø12、Ø14mm
Operating temperature	-40°C...+85°C	-40°C...+85°C	-40°C...+85°C	-40°C...+85°C
Protection	IP65/IP67	IP65/IP67	IP65/IP67	IP65/IP67
Max. allowed speed	6000RPM	6000RPM	6000RPM	6000RPM
Shaft load	250N Axial 250N Radial	250N Axial 250N Radial	250N Axial 250N Radial	250N Axial 250N Radial
Features	 			

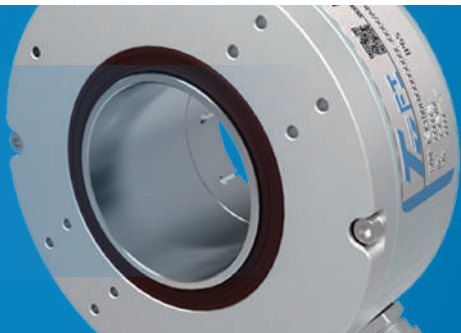


NEPSI防爆标志: Ex db IIC T5/T6 Gb, Ex tb IIIC T95°C/T80°C Db
ATEX防爆标志: Ex II 2GD Ex db IIC T5/T6 Gb, Ex tb IIIC T95°C/T80°C Db
IECEX防爆标志: Ex db IIC T5/T6 Gb, Ex tb IIIC T95 °C/T80°C Db



EXPLOSION-PROOF ENCODER

- NEPSI: Ex ib IIC T4 Gb, Ex tb IIIC T80°C Db, Ex ib IIIC T130°C Db



Series	BDEEX58HB	BDEEX68SB	BDEEX100HA	BDEEX115SA
Sensing method	Optical	Optical	Optical	Optical
Housing size	Ø68mm	Ø68mm	Ø100mm	Ø115mm
Power supply	8-18VDC、24VDC	8-18VDC、24VDC	8-18VDC、24VDC	8-18VDC、24VDC
Output	Push-Pull/HTL	Push-Pull/HTL	Push-Pull/HTL	Push-Pull/HTL
Installation	Hollow shaft	Solid shaft	Hollow shaft	Solid shaft
Shaft	Ø10、Ø12、Ø14mm	Ø6、Ø8、Ø10mm	Ø20...Ø45mm	Ø10、Ø11、Ø12mm
Resolution	≤1024PPR	≤1024PPR	≤3000PPR	≤1024PPR
Operating temperature	-40°C...+80°C	-40°C...+80°C	-40°C...+80°C	-40°C...+80°C
Protection	IP66	IP66	IP66	IP66
Max. allowed speed	3000RPM	3000RPM	3000RPM	3000RPM
Shaft load	70N Axial;140N Radial	70N Axial;140N Radial	100N Axial;200N Radial	70N Axial;140N Radial
Features			5/8",3/4",7/8",1",1-1/8",1-3/8"	

Intrinsically explosion-proof encoders for 1/21 hazardous areas

- Equipment Type: Class II (Gas)、Class III (Gust)
- Explosion proof type: Intrinsically

NEPSI: Ex ib IIC T4 Gb





Series	BETF100-HT
Sensing method	Optical
Housing size	Ø100mm
Power supply	10-23VDC
Output	Push-Pull/HTL
Installation	Hollow shaft
Shaft	Ø25...Ø45mm
Resolution	20...5000PPR
Operating temperature	-40°C...+80°C
Protection	IP64
Max. allowed speed	3000RPM
Shaft load	50N Axial;80N Radial
Features	5/8",3/4",7/8",1",1-1/8",1-3/8"

- NEPSI: Ex db IIC T5/T6 Gb, Ex tb IIIC T95°C/T80°C Db ATEX:
- Ex II 2GD Ex db IIC T5/T6 Gb, Ex tb IIIC T95°C/T80°C Db
- IECEx: Ex db IIC T5/T6 Gb, Ex tb IIIC T95 °C/T80°C Db
-



Series	EXDE68S	EXDE68B	EXDE100H	EXDE116S
Sensing method	Optical	Optical	Optical	Optical
Housing size	Ø68mm	Ø68mm	Ø112-122mm	Ø116mm
Power supply	5-30VDC	5-30VDC	5-30VDC	5-30VDC
Output	Push-Pull/HTL	Push-Pull/HTL	Push-Pull/HTL	Push-Pull/HTL
Installation	Solid shaft	Blind hollow shaft	Hollow shaft	Solid shaft
Shaft	Ø6、Ø8、Ø10mm	Ø10、Ø12mm	Ø20、Ø30、45mm Φ16、Ø20mm Cone shaft Ø17mm (1: 10)	Ø12mm
Pulse / ring	≤1200PPR	≤1200PPR	≤3000PPR	≤3000PPR
Operating temperature	-40°C...+85°C	-40°C...+85°C	-40°C...+85°C	-40°C...+85°C
Protection	IP66	IP66	IP66	IP66
Max. allowed speed	3000RPM	3000RPM	3000RPM	3000RPM
Shaft load	50N Axial; 80N Radial	50N Axial; 80N Radial	100N Axial; 200N Radial	100N Axial; 200N Radial
Features			5/8", 3/4", 7/8", 1", 1-1/8", 1-3/8"	

- NEPSI: Ex db IIC T5/T6 Gb, Ex tb IIIC T95°C/T80°C Db ATEX:
- Ex II 2GD Ex db IIC T5/T6 Gb, Ex tb IIIC T95°C/T80°C Db
- IECEx: Ex db IIC T5/T6 Gb, Ex tb IIIC T95 °C/T80°C Db
-



Series	EXDJ78S	EXDJ78B
Sensing method	Magnetic	Magnetic
Function principle	Multiturn 	Multiturn 
Multiturn technology	Mechanical gear set	
Housing size	Ø78mm	Ø78mm
Voltage supply	10-30VDC	10-30VDC
Interface	CANopen、Modbus-RTU CANopen、Modbus-RTU+	CANopen、Modbus-RTU CANopen、Modbus-RTU+
Resolution	≤30bit	≤30bit
Steps per turn	≤65536/16bit	≤65536/16bit
Number of turn	≤16384/14bit	≤16384/14bit
Installation	Solid shaft	Blind hollow shaft
Shaft	Ø10、Ø12mm	Ø12, Ø14, Ø16, Ø25.4mm
Operating temperature	-40°C...+85°C	-40°C...+85°C
Protection	IP66	IP66
Maximum speed	3000RPM	3000RPM
Shaft load	60N Axial;80N Radial	60N Axial;80N Radial
Features	   	   

- NEPSI: Ex db IIC T5/T6 Gb, Ex tb IIIC T95°C/T80°C Db ATEX:
- Ex II 2GD Ex db IIC T5/T6 Gb, Ex tb IIIC T95°C/T80°C Db
- IECEx: Ex db IIC T5/T6 Gb, Ex tb IIIC T95 °C/T80°C Db
-



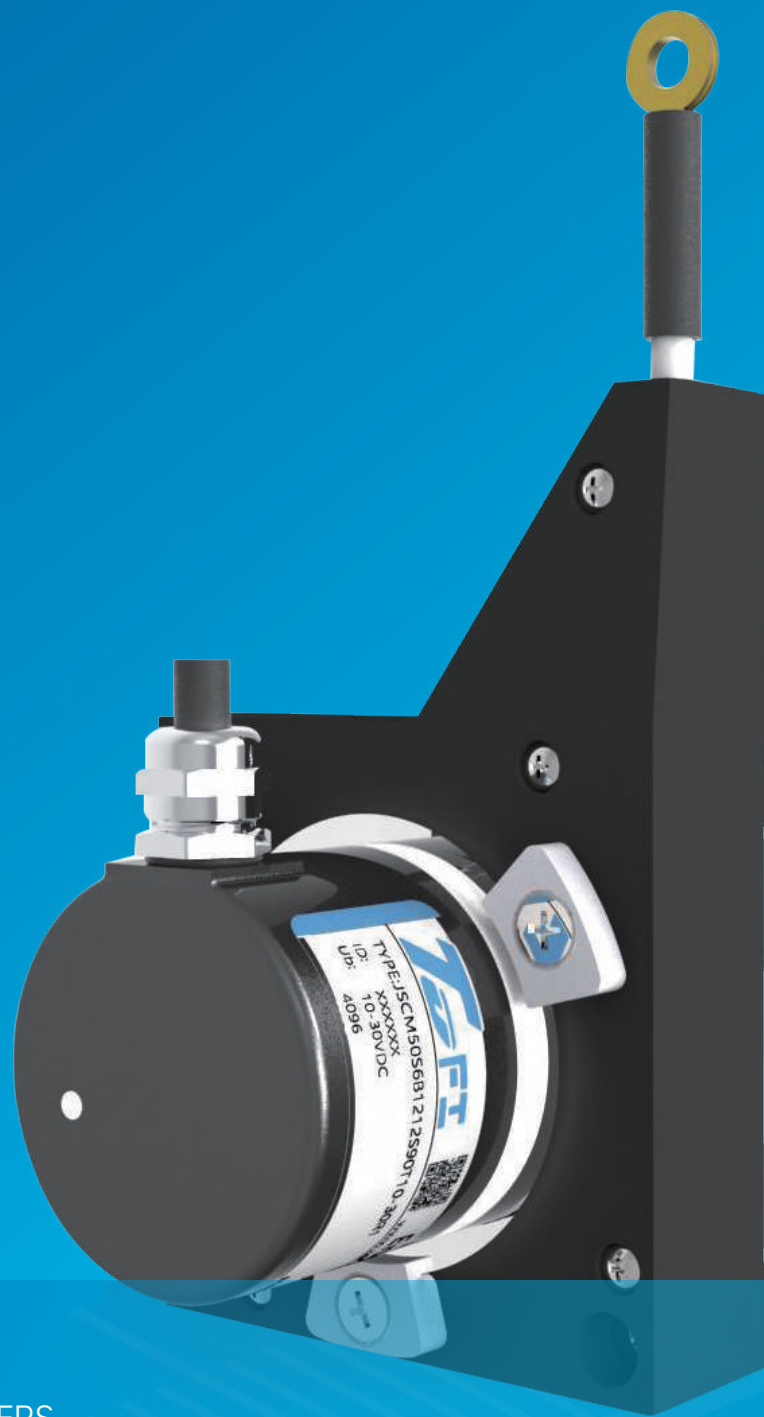
Series	EXDJ78S	EXDJ78B
Sensing method	Magnetic	Magnetic
Function principle	Multiturn 	Multiturn 
Multiturn technology	Mechanical gear set	Mechanical gear set
Housing size	Ø78mm	Ø78mm
Power supply	10-30VDC	10-30VDC
Interface	EtherCAT、PROFINET、Modbus-TCP	EtherCAT、PROFINET、Modbus-TCP
Resolution	≤30bit	≤30bit
Steps per turn	≤65536/16bit	≤65536/16bit
Number of turn	≤16384/14bit	≤16384/14bit
Installation	Solid shaft	Blind hollow shaft
Shaft	Ø10、Ø12mm	Ø12, Ø14, Ø16, Ø25.4mm
Operating temperature	-40°C...+85°C	-40°C...+85°C
Protection	IP66	IP66
Max. allowed speed	3000RPM	3000RPM
Shaft load	60N Axial;80N Radial	60N Axial;80N Radial
Features	  	  

Flameproof Absolute Encoder, Zone 1/21

- Equipment Group: II (Gas), III (Dust)
- Protection: Flameproof
- NEPSI: Ex db IIC T5/T6 Gb, Ex tb IIIC T95°C/T80°C Db
- ATEX: Ex II 2GD Ex db IIC T5/T6 Gb, Ex tb IIIC T95°C/T80°C Db
- IECEx: Ex db IIC T5/T6 Gb, Ex tb IIIC T95 °C/T80°C Db



Series	EXDJ78S	EXDJ78B
Sensing method	Magnetic	Magnetic
Function principle	Multiturn 	Multiturn 
Multiturn technology	Mechanical gear set	Mechanical gear set
Housing size	Ø78mm	Ø78mm
Power supply	10-30VDC	10-30VDC
Interface	PROFIBUS-DP、SSI	PROFIBUS-DP、SSI
Resolution	≤30bit	≤30bit
Steps per turn	≤65536/16bit	≤65536/16bit
Number of turn	≤16384/14bit	≤16384/14bit
Installation	Solid shaft	Blind hollow shaft
Shaft	Ø10、Ø12mm	Ø12, Ø14, Ø16, Ø25.4mm
Operating temperature	-40°C...+85°C	-40°C...+85°C
Protection	IP66	IP66
Max. allowed speed	3000RPM	3000RPM
Shaft load	60N Axial;80N Radial	60N Axial;80N Radial
Features	 	 



LINEAR ENCODERS



Length measurement 20m

Motion Control Transducer
Linear encoders



Series	LMF55	LTF50	LTF55	LTF63
Function principle	Incremental / absolute	Incremental	Incremental / absolute	Incremental / absolute
Sensing method	Optical/Magnetic	Optical	Optical/Magnetic	Optical/Magnetic
Length measurement	500mm	1000mm	1500mm	2000mm
Housing size	55*55mm	50*50mm	55*55mm	63*63mm
Power supply	5VDC 9-26VDC 5-30VDC	5VDC 9-26VDC 5-30VDC	5VDC 9-26VDC 5-30VDC	5VDC 9-26VDC 5-30VDC
Output	RS422/TTL、Push-Pull/HTL NPN Open Collector CANopen	RS422/TTL、Push-Pull/HTL NPN Open Collector	RS422/TTL、Push-Pull/HTL NPN Open Collector CANopen, Modbus-RTU RS485	RS422/TTL、Push-Pull/HTL NPN Open Collector CANopen, Modbus-RTU RS485
Resolution	≥ 0.0293mm	≥0.0195mm	≥0.0244mm	≥0.0244mm
Linearity	±0.05%FS	±0.05%FS	±0.05%FS	±0.05%FS
Operating temperature	-20℃...+70℃	-20℃...+70℃	-20℃...+70℃	-20℃...+70℃
Protection (Encoder)	IP66	IP54/IP65	IP66	IP66
Max. allowed speed	≤1000mm/s	≤1000mm/s	≤1000mm/s	≤1000mm/s
Features	Measure the length of 500m, with incremental or absolute encoder	Measure the length of 1m, with incremental encoder	Measure the length of 1.5m, with incremental or absolute encoder	Measure the length of 2m, with incremental or absolute encoder



Series	LTF81	LTF116	LTF156
Function principle	Incremental/Absolute	Incremental/Absolute	Incremental/Absolute
Sensing method	Optical/Magnetic	Optical/Magnetic	Optical/Magnetic
Length measurement	4000mm	6000mm	8000mm
Housing size	80*80mm	115*115mm	155*155mm
Power supply	5VDC 9-26VDC 5-30VDC	5VDC 9-26VDC 5-30VDC	5VDC 9-26VDC 5-30VDC
Output	RS422/TTL, Push-Pull/HTL, NPN Open Collector CANopen, Modbus-RTU, PROFINET, SSI, RS485		
Resolution	≥0.0488mm	≥0.0732mm	≥0.0977mm
Linearity	±0.05%FS	±0.05%FS	±0.05%FS
Operating temperature	-20°C...+70°C	-20°C...+70°C	-20°C...+70°C
Protection(encoder)	IP66	IP66	IP66
Max. allowed speed	≤1000mm/s	≤1000mm/s	≤1000mm/s
Features	Measure the length of 4m, with incremental or absolute encoder	Measure the length of 6m, with incremental or absolute encoder	Measure the length of 8m, with incremental or absolute encoder

Linear encoder, accurate and durable linear position feedback technology

- Convenient installation and reliable measurement results
- Various conventional interfaces can be configured
- Meet the most demanding requirements for measuring accuracy and service life



LDF80	LDF130SZ	LGF130X
Incremental/Absolute	Incremental/Absolute	Incremental/Absolute
Optical/Magnetic	Optical/Magnetic	Optical/Magnetic
4000mm	15000mm	20000mm
80*80mm	130*130mm	130*130mm
5VDC 9-26VDC 5-30VDC	5VDC 9-26VDC 5-30VDC	5VDC 9-26VDC 5-30VDC
RS422/TTL, Push-Pull/HTL, NPN Open Collector CANopen, Modbus-RTU, PROFINET, SSI, RS485	RS422/TTL, Push-Pull/HTL, NPN Open Collector CANopen, Modbus-RTU, EtherCAT,	
≥ 0.0488mm	≥0.0813mm	≥0.0813mm
±0.05%FS	±0.05%FS	±0.05%FS
-20°C...+70°C	-30°C...+70°C	-30°C...+70°C
IP66	IP66	IP66
≤1000mm/s	≤1000mm/s	≤1000mm/s
Measure the length of 4m, with incremental or absolute encoder	Measure the length of 15m, with incremental or absolute encoder	Measure the length of 20m, with incremental or absolute encoder



Series	LCF55	LCF80	LCF130	LCF190
Function principle	Absolute	Incremental / absolute	Incremental / absolute	Incremental / absolute
Sensing method	Magnetic	Optical/Magnetic	Optical/Magnetic	Optical/Magnetic
Length measurement	1250mm	3000mm	5000mm	10000mm
Housing size	55*55mm	81*81mm	130*130mm	190*190mm
Power supply	5VDC 9-26VDC 5-30VDC	5VDC 9-26VDC 5-30VDC	5VDC 9-26VDC 5-30VDC	5VDC 9-26VDC 5-30VDC
Output	CANopen, SSI	RS422/TTL, Push-Pull/HTL, NPN Open Collector CANopen, Modbus-RTU, RS485		
Resolution	≥0.0366mm	≥0.0562mm	≥0.094mm	≥0.1355mm
Linearity	±0.05%FS	±0.02%FS	±0.05%FS	±0.05%FS
Operating temperature	-30°C...+70°C	-30°C...+80°C	-30°C...+70°C	-30°C...+70°C
Protection (encoder)	IP67	IP66	IP66	IP66
Max. allowed speed	≤1000mm/s	≤1000mm/s	≤2000mm/s	≤1000mm/s
Features	Measure the length of 1.25m, with absolute encoder	Measure the length of 3m, with incremental or absolute encoder	Measure the length of 5m, with incremental or absolute encoder	Measure the length of 10m, with incremental or absolute encoder

Linear encoder, accurate and durable linear position feedback technology

- Convenient installation and reliable measurement results
- Various conventional interfaces can be configured
- Meet the most demanding requirements for measuring accuracy and service life



LCF45	LCF100	LHF130	TDF60
Absolute	Absolute	Absolute	Absolute
Magnetic	Magnetic	Magnetic	Magnetic
300mm	8300mm	4000mm	3000mm
45×45mm	106* 68mm	Ø130×141mm	130*89*66mm
10-30VDC	10-30VDC	10-30VDC	10-30VDC
CANopen	CANopen	CANopen	CANopen Modbus-RTU SSI
≥0.0293mm	≥0.1mm	≥0.0235mm	≥0.03157mm
±0.05%FS	±0.05%FS	±0.1%FS	±0.1%FS
-30°C...+70°C	-40...+85°C	-40°C...+85°C	-40°C...+85°C
IP67	IP67	IP66	IP67
≤1000mm/s	≤1000mm/s	≤10m/s	≤1000mm/s
Measure the length of 300mm with absolute encoder, Reliable with dual output redundant sensing	Measure the length of 8.3m, with absolute encoder, Reliable with dual output redundant sensing	Measure the length of 3m, with absolute encoder	Measure the length of 3m, with absolute encoder

We provide complete accessories matched for the encoder for you using our encoder fastly, conveniently and safely, include mounting brackets, couplings, torsion bar, cable connector and insulating bushings

The most suitable products for you is our infinite pursuit



Mounting bracket

For hollow-shaft encoders

Dual-wing bracket

Single-wing bracket

Torque arm

Eccentric clamp ring



Coupling

Spiral coupling

Spring coupling Bellows coupling



Connector

Connector and cable

Connecting cable

M12、M18、M23、M26

M12 / M18 / M23 / M26 & other standard mating connectors



Coupling

Surface: Knurled / Smooth

Wheel circumference:

100、200、300、500mm

Spigot diameter :

20、30、36mm



Signal processor

HTL

Input: Incremental HTL

HTL→HTL

Output: HTL → HTL

Signal regeneration for long-distance transmission



Insulating bushings

EDK100H45: 8663 45/38、
8663A 45/30、8663M 38/G3/4

EDK100H30: 8665 30/25.4、
8665A 30/25