

BASE EVO

Electronic limit switch



Compact electronic rotary limit switch, equipped with 4 electronic cams. It is used in a variety of industrial sectors, from automation to industrial handling machines, from intralogistics to stage technologies.

FEATURES

- Base EVO is an electronic limit switch with 4 relays emulating up to 4 cams, with 6 possible configurations (on-off, on-off, on-off) for each electronic cam (totalling 24 settings per limit switch).
- Maximum precision and extremely low hysteresis.
- Single turn measuring resolution guaranteed by 4096 points per revolution (12 bit) with accuracy $\pm 0,5\%$.
- Allowing to work without PLC or dedicated programming software.
- IP protection degree: Base EVO is classified IP 65 / IP 66 / IP 67 / IP 69K.
- Extreme temperature resistance: da -25°C a $+85^{\circ}\text{C}$.
- No need for maintenance and maximum reduction of installation time.
- Possibility of reducing stock and purchase product codes.
- Featuring technopolymer housing and non-magnetic stainless steel AISI 303 shaft.
- High quality materials and components guarantee maximum durability, precision, repeatability even in extreme conditions and great stability against vibrations.

OPTIONS

- It is completely compatible and can be integrated into systems using Base rotary limit switches.
- Available with revolution ratios 1:15, 1:20, 1:25, 1:50, 1:75, 1:100, 1:150.
- Equipped with 4 relays 24/250 Vac, 3/5A, NC or NO.
- Safety line capable of signalling possible "faults" to the system in case of damage (optional function).
- Available with ready-to-use configuration or with the possibility of on-site configuration by the customer.
- Dedicated cable gland.
- Available with anti-moisture plug fitted to the base by means of a lock nut, improving transpiration while maintaining protection against water.
- Available with flanges, pinion gears and couplings.
- Plates with universal adapters for replacing existing systems.

CERTIFICATIONS

- CE marking.

Fill in the "request form" for accurate product configuration.

Base EVO



Internal view



CERTIFICATIONS

Conformity to Community Directives	2014/30/UE Electromagnetic Compatibility (EMC) Directive
	2006/42/CE Machinery Directive
	2014/35/UE Low Voltage Directive (LVD)
Conformity to CE Standards	EN 60204-1 Safety of machinery - Electrical equipment of machines
	EN 60204-32 Safety of machinery - Electrical equipment of machines - Requirements for hoisting machines
	EN 60947-1 Low-voltage switchgear and controlgear
	EN 60947-5-1 Low-voltage switchgear and controlgear - Control circuit devices and switching elements - Electromechanical control circuit devices
	EN 60529 Degrees of protection provided by enclosures
	EN 61326-1 Electrical equipment for measurement, control and laboratory use - EMC requirements - General requirements
Markings and homologations	EN 61326-2-3 Electrical equipment for measurement, control and laboratory use - EMC requirements - Particular requirements - Test configurations, operational conditions and performance criteria for transducers with integrated or remote signal conditioning
	CE

GENERAL TECHNICAL SPECIFICATIONS

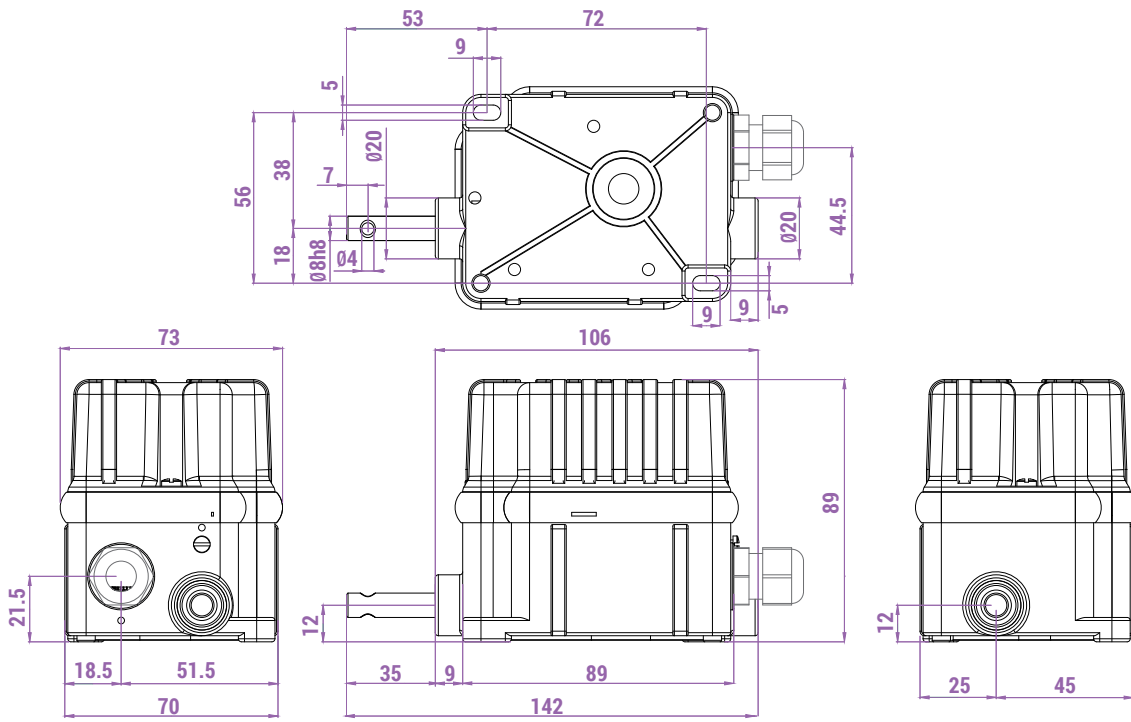
Ambient temperature	Storage -25°C/+85°C
	Operational -25°C/+85°C
IP protection degree	IP 65 / IP 66 / IP 67 / IP 69K
Insulation category	Class II
Rotation speed	Max. 800 rpm
Cable entry	Cable gland M16

ELECTRICAL SPECIFICATIONS

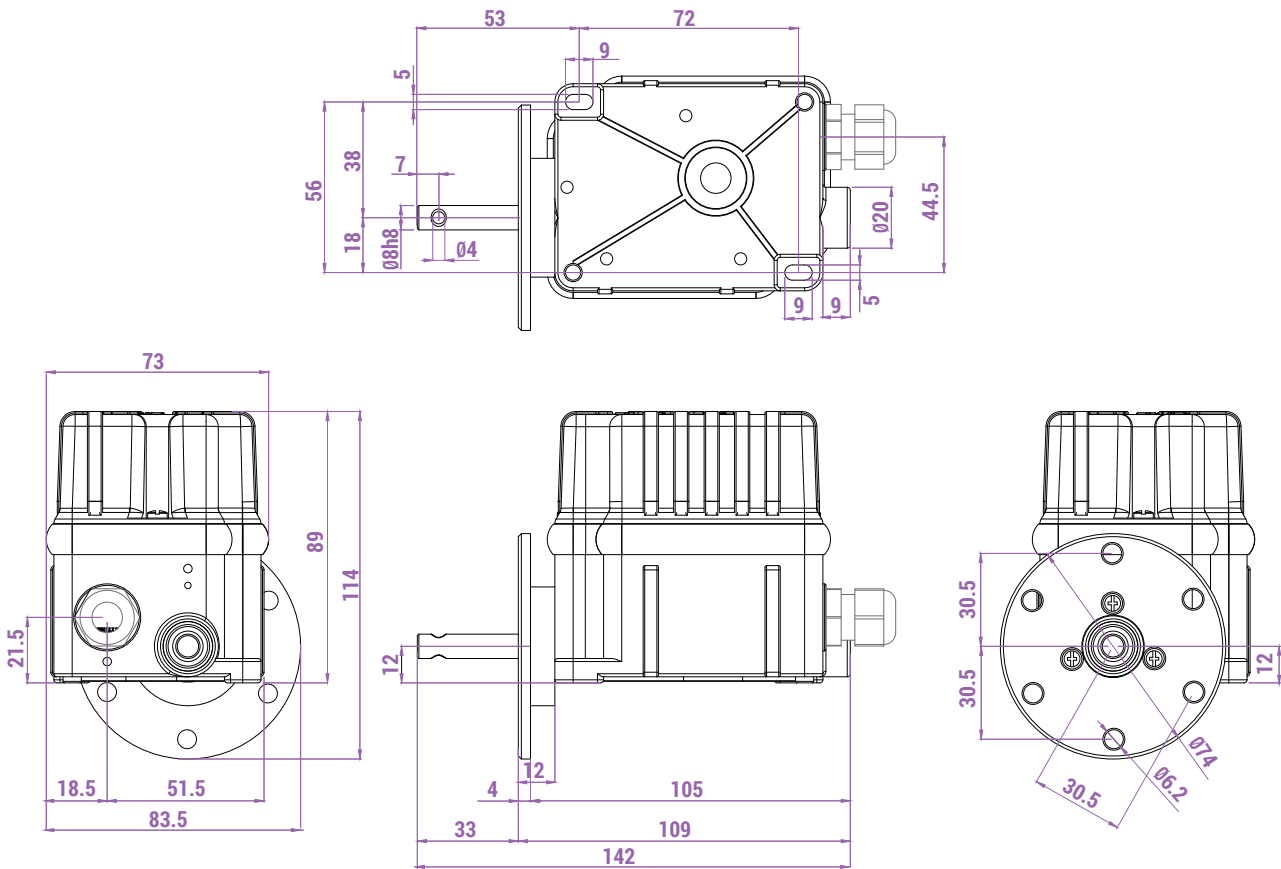
Power supply	24 Vdc ±15%
	48 Vdc ±15%
Consumption	80 mA max
Single-turn resolution	12 bit (4096 points per revolution), for internal process use
Accuracy	± 0.5%
Linearity	± 0.25%
Reverse polarity and short-circuit protection	Yes
Relays	2 or 4 relays 24/250 Vac, 3/5 A, NC or NO

OVERALL DIMENSIONS (mm)

Base EVO



Base EVO with flange



BASE EVO - REQUEST FORM FOR ELECTRONIC LIMIT SWITCH

Instructions

- 1 Power supply:** tick the box corresponding to power supply required.
- 2 Number of electronic cams:** tick the box corresponding to the number of electronic cams required.
- 3 Number of positions:** tick the box corresponding to the maximum number of positions required for the electronic cams.
- 4 Version:** tick the box corresponding to the version required.
- 5 Anti-moisture plug:** tick when the anti-moisture plug is required.
- 6 Cover holding wire:** tick when the wire holding the cover is required.
- 7 Revolution ratio:** tick the box corresponding to the revolution ratio required.
- 8 Shaft:** tick the box corresponding to the shaft required.
Customized shafts are available on request.
- 9 Coupling, flange, pinion gear:** tick the appropriate box when coupling, flange or pinion gear are required.
When a standard pinion gear is required, write the code number listed in the pinion gear tables in the next pages.
When a special pinion gear is required, write the number of teeth, the module and the primitive diameter.

Power supply 1

- 24 Vdc
- 48 Vdc

Number of electronic cams 2

- 2 cams
- 4 cams

Number of positions 3

- 2 positions
- 4 positions
- 6 positions

Version 4

- Standard
- Safety

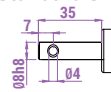
Anti-moisture plug 5

Cover holding wire 6

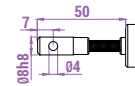
Revolution ratio 7

- 1:15 1:75
- 1:20 1:100
- 1:25 1:150
- 1:50

Standard shaft 8



Flexible shaft



Male coupling 9

- Male coupling
- Female coupling
- Coupling
- 12 mm high flange
- 22 mm high flange
- Pinion gear

Pinion gear code _____

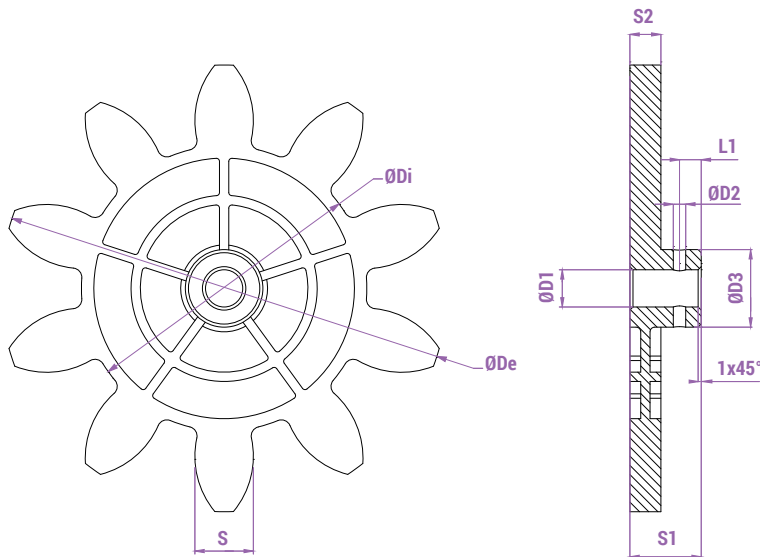
Customized pinion gear

No. of teeth _____

Module _____

Primitive diameter _____

Remarks

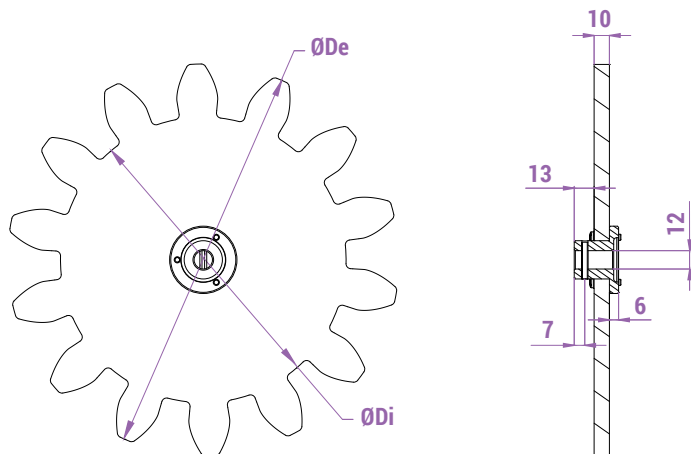


Legend	
Z	Number of teeth
M	Module
Dp	Primitive diameter
De	External diameter
Di	Internal diameter
a	Addendum
d	Dedendum
Alpha	Pressure angle

Code	Z	M	Dp	De	Di	a	d	S	Alpha	D1	D2	D3	S1	S2	L1
PRSL0971PI	8	2.50	20.00	25.00	14.15	2.50	2.93	3.93	20.00	8.00	2.50	14.00	18.00	8.00	4.00
PRSL0915PI	8	20.00	160.00	200.00	113.20	20.00	23.40	31.41	20.00	12.00	4.00	24.00	23.00	10.00	7.00
PRSL0964PI	9	2.50	22.50	27.50	16.25	2.50	3.13	3.93	20.00	8.00	2.50	13.50	18.00	8.00	4.00
PRSL0963PI	9	3.50	31.50	38.50	23.40	3.50	4.10	4.71	20.00	8.00	2.50	14.00	18.00	8.00	4.00
PRSL0892PI	9	5.00	45.00	56.00	36.00	5.50	4.50	9.19	20.00	8.00	2.50	16.00	18.00	8.00	4.00
PRSL0968PI	10	3.00	30.00	36.00	23.00	3.00	3.51	4.71	20.00	8.00	2.50	14.00	18.00	8.00	4.00
PRSL0912PI	10	12.00	120.00	144.00	92.00	12.00	14.00	18.85	20.00	12.00	4.00	25.00	23.00	10.00	7.00
PRSL0913PI	10	14.00	140.00	168.00	107.24	14.00	16.38	21.99	20.00	12.00	4.00	24.60	23.00	10.00	7.00
PRSL0914PI	10	16.00	160.00	192.00	122.67	16.00	18.67	25.13	20.00	12.00	4.00	24.00	23.00	10.00	7.00
PRSL0917PI	11	6.00	66.00	78.00	51.96	6.00	7.02	9.42	20.00	12.00	4.00	19.00	23.00	8.00	7.00
PRSL0916PI	12	5.00	60.00	70.00	48.30	5.00	5.83	7.85	20.00	12.00	4.00	20.00	23.00	8.00	7.00
PRSL0918PI	12	8.00	96.00	112.00	77.28	8.00	9.36	12.56	20.00	12.00	3.90	21.50	23.50	10.00	7.00
PRSL0911PI	12	10.00	120.00	140.00	96.67	10.00	11.67	15.71	20.00	12.00	4.00	25.00	23.50	10.00	7.00
PRSL0944PI	12	12.00	144.00	168.00	116.00	12.00	14.00	18.85	20.00	12.00	4.00	24.00	23.00	10.00	7.00

Measuring unit: mm.

Waterjet cut pinion gears **9**



Legend

Z	Number of teeth
M	Module
Dp	Primitive diameter
De	External diameter
Di	Internal diameter
a	Addendum
d	Dedendum
Alpha	Pressure angle

Code	Z	M	Dp	De	Di	a	d	Alpha
PRSL0857PI	8	18.00	144.00	180.00	102.00	18.00	21.00	20.00
PRSL0855PI	8	24.00	192.00	240.00	136.00	24.00	28.00	20.00
PRSL0992PI	9	10.00	90.00	110.00	66.67	10.00	11.67	20.00
PRSL0879PI	9	16.00	144.00	176.00	106.67	16.00	18.67	20.00
PRSL0854PI	9	18.00	162.00	198.00	120.00	18.00	21.00	20.00
PRSL0871PI	9	20.00	180.00	220.00	133.33	20.00	23.33	20.00
PRSL0849PI	9	24.00	216.00	264.00	160.00	24.00	28.00	20.00
PRSL0846PI	10	10.00	100.00	120.00	76.67	10.00	11.67	20.00
PRSL0993PI	10	18.00	180.00	216.00	138.00	18.00	21.00	20.00
PRSL0970PI	10	22.00	220.00	264.00	168.52	22.00	25.74	20.00
PRSL0856PI	10	24.00	240.00	288.00	18.00	24.00	28.00	20.00
PRSL0861PI	11	12.00	132.00	156.00	104.00	12.00	14.00	20.00
PRSL0998PI	11	18.00	198.00	234.00	156.00	18.00	21.00	20.00
PRSL0997PI	11	20.00	220.00	260.00	173.36	20.00	23.32	20.00
PRSL0859PI	11	24.00	264.00	312.00	204.00	24.00	30.00	20.00
PRSL0863PI	12	14.00	168.00	196.00	133.00	14.00	17.50	20.00
PRSL0897PI	12	16.00	192.00	224.00	154.67	16.00	18.67	20.00
PRSL0972PI	12	18.00	216.00	252.00	173.88	18.00	21.06	20.00
PRSL0845PI	12	20.00	240.00	280.00	193.34	20.00	23.32	20.00
PRSL0878PI	12	24.00	288.00	336.00	232.00	24.00	28.00	20.00
PRSL0860PI	13	6.00	78.00	90.00	63.00	6.00	7.50	20.00
PRSL0853PI	13	12.00	156.00	178.59	126.00	11.29	15.00	20.00
PRSL0898PI	13	16.00	208.00	240.00	170.67	16.00	18.66	20.00
PRSL0862PI	14	10.00	140.00	169.00	125.00	15.00	7.50	20.00
PRSL0896PI	14	16.00	224.00	256.00	186.67	16.00	18.67	20.00
PRSL0999PI	14	18.00	252.00	288.00	210.00	18.00	21.00	20.00
PRSL0848PI	14	20.00	280.00	320.00	233.33	20.00	23.33	20.00
PRSL0858PI	15	18.00	270.00	306.00	228.00	18.00	21.00	20.00
PRSL0847PI	16	20.00	320.00	360.00	273.33	20.00	23.33	20.00
PRSL0973PI	17	10.00	170.00	190.00	145.00	10.00	12.50	22.89
PRSL0974PI	17	14.00	238.00	266.00	203.00	14.00	17.50	22.89
PRSL0851PI	20	6.00	120.00	132.00	105.00	6.00	7.50	22.89

Measuring unit: mm.

