

## **Technical features**

Compliance with EEC Directives	98/37/CE 2006/95/CE				
Compliance with rules	CEI EN 60947-1 CEI EN 60947-5-1 CEI EN 60204-1 CEI EN 60529				
Insulation voltage	250V~				
Maximum operating voltage	250V~				
Casing	reinforced nylon				
Cover	high mechanical and thermal resistant thermoplastic				
Operating temperature	- 20 °C + 60 °C				
Drive	worm screw				
Cable entries	M16 x 1,5				
Insulation	according to CEI EN 60947-5-1				
Protection degree	IP 65 CEI EN 60529				
Protection against contact voltages	double insulation CEI EN 60439-1				
Weight	300 gr. approx. (mod. with 2 contacts)				

# **Rotary Limit Switch Driver FRS Series**

#### Main features

**Driver** rotary limit switch is a device with **IP65** protection degree which allows you to control the movement of industrial and building machines. The shaft is connected to the motor, so that, after a certain number of turns, the cams make the switches work, and then they can carry out their pre-set manoeuvre. The easy and thorough regulation of the cams allows you to set the rapid trip microswitches working point linearly and micrometrically.

The choice of different cam profiles allows you to modify the limit switches function diagram.

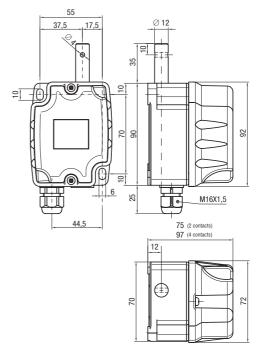
#### The range

Standard executions have the following reduction ratios:

1:15 turns 2 or 4 contacts	1:75 turns 2 or 4 contacts
1:25 turns 2 or 4 contacts	1 : 100 turns 2 or 4 contacts
1:35 turns 2 or 4 contacts	1:150 turns 2 or 4 contacts
1:50 turns 2 or 4 contacts	1:175 turns 2 or 4 contacts

You can ask for some data about all the real turns according to the different available types of cams.

#### Dimensions



Ed. 08.10 - pag.1



### **Contacts technical features**

## Cam profiles and tripping angles

Microswitch		1NO 11	NC rapid devi	ation and gu	aranteed ope	ning type <b>R</b>	Туре		profile	colour
Homologation		IMQ CA	A02.03310					,20°		
Insulating voltage U <sub>i</sub>		250 V ~					A	V		White
Test voltage		2000 V ~								
Category of usage		AC 15,	U <sub>e</sub> 250V, I <sub>e</sub>	3A				45%		
Breaking power		accord	ing to EN 60	947-5-1:2004	4		В	45°	Ì	Grey
Mechanical lifetime		30x106	op.							
Terminals		with so	crews							
Performances AC 15	V	24	48	110	230		90°	Ø	Red	
	A	10	10	6	3	C				
DC 13	V	24	48	110	230					
	А	3	1,5	0,8	0,4					

### Accessories

#### **Cog wheels**

A series of cog wheels of different diameters allows you to obtain an easy joining through pinions and belts.

Available wheels:

- Module 5 with 12 teeth
- Module 6 with 11 teeth
- Module 8 with 12 teeth
- Module 10 with 12 teeth
- Module 14 with 10 teeth

#### Male connection

• The male connection helps the joining to motors or reducing gears

#### **Flexible shaft**

• The flexible shaft allows you to couple the shafts that are not perfectly aligned.

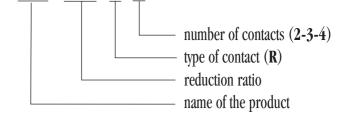




## **Order codes**

The product code is composed this way:

#### B F R S X X X R Y



If not specified, limit switches are supplied with white A cams. In case the cam you want to use is different from "A white" type, it is necessary to add at the end of the code:

> **B** for  $45^{\circ}$  lever **C** for  $90^{\circ}$  lever



