

# Rotary Limit Switch Driver FRS



## 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:

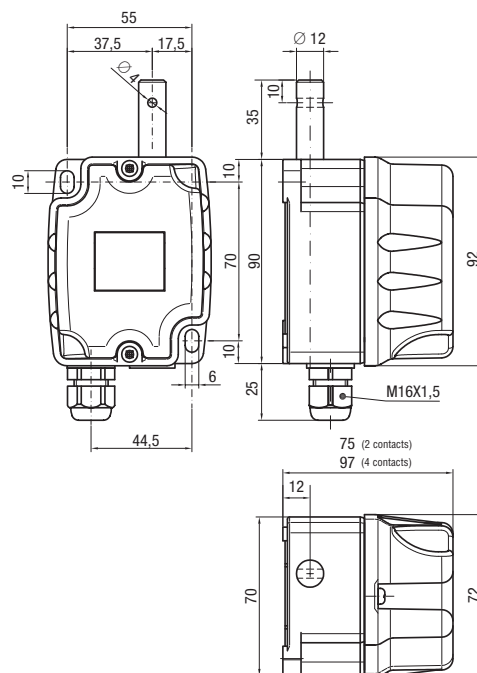
1 : 15 turns 2 or 4 contacts	1 : 75 turns 2 or 4 contacts
1 : 25 turns 2 or 4 contacts	1 : 100 turns 2 or 4 contacts
1 : 35 turns 2 or 4 contacts	1 : 150 turns 2 or 4 contacts
1 : 50 turns 2 or 4 contacts	1 : 175 turns 2 or 4 contacts

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

### 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)





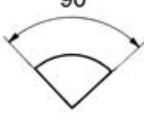

### Dimensions



## Contacts technical features

Microswitch	1NO 1NC rapid deviation and guaranteed opening type R					
Homologation	IMQ CA02.03310					
Insulating voltage $U_i$	250 V ~					
Test voltage	2000 V ~					
Category of usage	AC 15, $U_e$ 250V, $I_e$ 3A					
Breaking power	according to EN 60947-5-1:2004					
Mechanical lifetime	30x10 <sup>6</sup> op.					
Terminals	with screws					
Performances	AC 15	V	24	48	110	230
		A	10	10	6	3
	DC 13	V	24	48	110	230
		A	3	1,5	0,8	0,4

## Cam profiles and tripping angles

Type	profile	colour
A		 White
B		 Grey
C		 Red

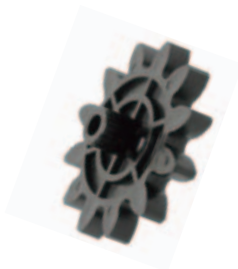
## Accessories

### 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



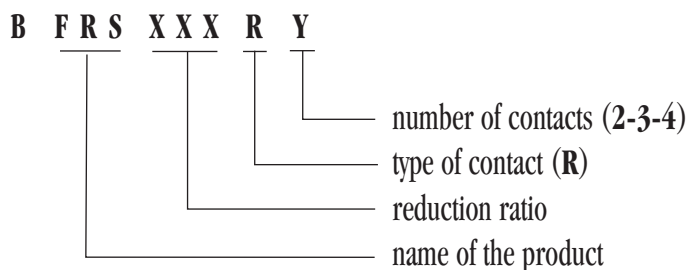
### Flexible shaft

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



## Order codes

The product code is composed this way:



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° lever
- C for 90° lever