

LIMIT SWITCHES - BASED ON HERMETICALLY SEALED MICROSWITCHES (250 °C)

BASIC CELL (-55°C TO +250 °C) TYPE 83 151 201

Criteria	
Pole(s)	1
W2 terminals output	83 770 211
// wires output	83 770 221
⊥ wires output	83 770 231
W2N terminals output	83 770 241

Dimensions (mm)

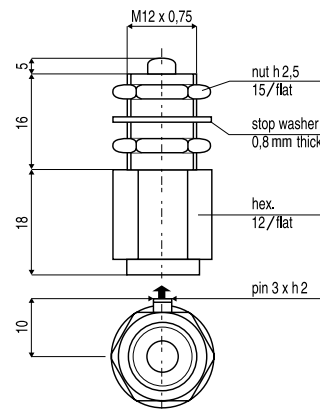
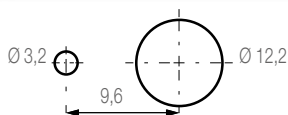
Add the dimensions of the various connections to find the total dimensions

Mechanical characteristics:

- Max. operating force 22 N
- Min. release force 1.5 N
- Max. permitted overtravel force 50 N positive overtravel stop
- Pre-travel 0.1 to 0.3 mm
- Max. differential travel 0.05 mm
- Min. overtravel 3 mm
- Weight (without wires) 20 g

► indicates the direction of the wires

Panel cut-out



LIMIT SWITCHES - BASED ON HERMETICALLY SEALED MICROSWITCHES (150 °C)

MECHANICAL CAPACITY

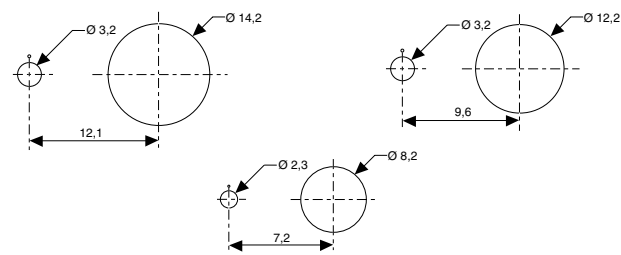
We have adapted the telescopic sub-assemblies for our hermetically sealed microswitch according to pressure and operating temperature requirements. Our products can therefore be used at atmospheric pressure or in an absolute vacuum and at a temperature of -50 °C to +150 °C.

BASIC CELL (-55 °C TO +150 °C) TYPE 83 151 001

Criteria	Connections	Short travel
Pole(s)		1
Soldered connections	W2	83 770 012
	W2N	83 770 042
Wire 0.38 mm ² 0.50 m long	with parallel wires	83 770 022
	with perpendicular wires	83 770 032

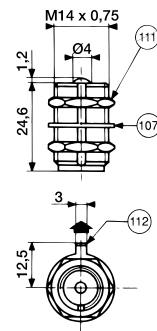
Characteristics	Unit	
Max. Operating force	N	12
Min. Release force	N	1.5
Permitted Overtravel force	N	20
Positive Overtravel stop		
Max. Pre-travel	mm	0.3
Max. Differential travel	mm	0.05
Min. Overtravel	mm	1
Shock resistance	G/ms	100/11
Vibration resistance	G/Hz	50/800 → 2 000
Weight (without wires)	g	21
Service life	Operations - min	100 000

Panel cut-out Dimensions (mm)

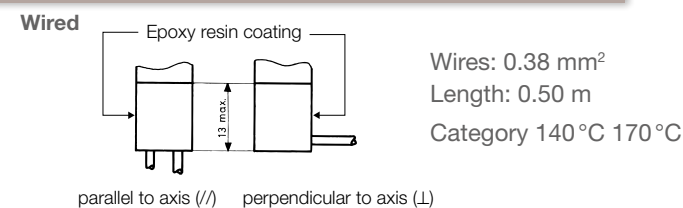
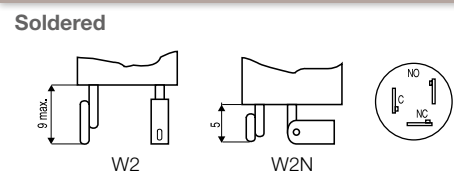


Add the dimensions of the various connections for the total dimensions
 indicates the direction of the wires

- 30 Ball bearing Ø 3
- 106 Nut h 2 - 11/flat
- 107 Stop washer - 0.8 thick
- 111 Nut h 2.5 - 17/flat
- 112 Locating pin - h.2
- 120 Nut h 2.5 - 15/flat



Connections



Plunger	Ball plunger	Roller Plunger	Plunger
1	1	1	2
83 770 011	83 770 014	83 770 015	83 771 011
83 770 041	83 770 044	83 770 045	83 771 041
83 770 021	83 770 024	83 770 025	83 771 021
83 770 031	83 770 034	83 770 035	83 771 031

12	12	12	30
1.5	1.5	1.5	3
50	50	50	80
•	•	•	•
0.3	0.3	0.3	0.5
0.05	0.05	0.05	0.15
3	3	3	5
100/11	100/11	100/11	100/11
50/800 → 2 000	50/800 → 2 000	50/800 → 2 000	50/800 → 2 000
15	15.5	20	47.5
100 000	100 000	100 000	100 000

Electrical diagram (actuator at rest)

