

## TECHNICAL FEATURES – SENSITIVE EDGES

Sensor	Type B0	Type B1N	Type B2N	
Max operating angle $\alpha$	90°	90°	80°	
Pre-run (test piece $\varnothing$ 80, at 100 mm/s) [mm]	3	6.6	7	
Overrun (test pieces $\varnothing$ 80, a 100 mm/s)	-	17.3 mm at 250 N 19.3 mm at 400 N 21.3 mm at 600 N	9.1 mm at 250 N 10.1 mm at 400 N 13.1 mm at 600 N	
Max operating force (test pieces $\varnothing$ 80, a 100 mm/s) [N]	-	137	141	
Operating distance [mm]	3	5		
Overrun operation [mm]	2	20	10	
Material	EPDM	PVC		
Length * (upon request) [m]	max 15	max 6		
Weight [kg/m]	-	0.9	0.8	
Mounting orientation	-	All		
Fastening material	Double-sided adhesive tape	Aluminium profile		
Chemical resistance	Acids, atmospheric agents	Oil, hydrocarbons		
Degree of protection	IP 54	IP 65		
Operating temperature	+5°C to +50°C			
Storage Temperature	+5°C to +50°C			
Max applicable thrust [N]	500			
Power cord**	4x0.35 mm <sup>2</sup>			
Output contact	N.O.			
Rated supply voltage	24 Vdc			
B <sub>10D</sub> sensor	-	113000	80000	
T <sub>10D</sub> [years] control unit	-	20	14	
Dead surface	25 mm from each side			
Part of human body which can be detected***	Hand, limb, body			
References Standard	-	EN ISO 13856-2; EN ISO 13849-1		
<b>Safety Parameters: Sensor + Control Unit</b>		<b>Sensor + GP02/E</b>	<b>Sensor + GP02R.T</b>	<b>Sensor + GP04T</b>
Category	-	3		
PL	-	d		
PFH <sub>D</sub> [1/h]	-	8.58*10 <sup>-8</sup>	9.29*10 <sup>-8</sup>	
No. of operations/year	-	5600		
Usage categories	-	DC13 - 1.5 A AC1 - 1.5 A	AC15 (230) 1.2 A	DC13 0.4 A
Response time with control unit (test piece $\varnothing$ 80 at 100 mm/sec T20°C) [ms]	-	59	66	70
Max controllable length [m]	-	12	20	
EC Declaration	-	20CMAC0013	20CMAC0014	
Other European Directives				
2012/19/UE	RAEE			
2011/65/UE	RoHS			
Regulation (CE) n. 1907/2006	REACH			

\* The max length for the edge assembled is 6000 mm

\*\* For length over 20 m, use wires with section of 1 mm<sup>2</sup>

\*\*\* Not suitable to detect fingers.

## TECHNICAL FEATURES - SENSITIVE EDGES

Sensor	Type B1NC - Type B1NC-AG			Type B2C - Type B2C-AG		
Max operating angle $\alpha$	90°					
Pre-run (test piece $\varnothing$ 80 - 100 mm/sec) [mm]	5.05			5.40		
Overrun (test pieces $\varnothing$ 80 - 10 mm/sec)	15.64 mm at 250N 17.94 mm at 400N 20.24 mm at 600 N			3.28 mm at 250N 4.18 mm at 400N 6.88 mm at 600N		
Max operating force (test piece $\varnothing$ 80 - 100 mm/sec)	146 N (-15°C)			84 N (-15°C)		
Max response time with Gamma System control units [ms]	50			54		
Material	TPE (black colour)					
Length*	Mounted version, max 6 m or 25 m-long roll					
Max length of sensor [m]	25 (can be controlled via control unit)					
Weight [kg/m]	0.6			0.4		
Mounting orientation	All					
Fastening material	Aluminium profile standard Length = 6 m					
Dimensions of non-sensitive surface	40 mm from each end					
Operating temperature	-15°C to +55°C					
Storage temperature	-15°C to +55°C					
Chemical resistance	See User Manual					
Max applicable thrust [N]	500					
Degree of protection (EN 60529)	IP65					
Power cord**	2x0.35 mm <sup>2</sup>					
Output contact	N.O.					
Max. length of connection cables [m]	100					
Rated supply voltage	24 Vdc					
Max contact voltage [V]	30					
Max contact current [mA]	30					
B <sub>10D</sub> sensor	192000					
T <sub>10D</sub> [years] Control unit	> 20					
Part of human body which can be detected***	Hand, limb, body					
References standard	EN ISO 13856-2; EN ISO 13849-1; EN ISO 12978					
<b>Safety Parameters: Sensor + Control Unit</b>	<b>Sensor + GP02R</b>	<b>Sensor + GP02R-C</b>	<b>Sensor + GP04R</b>	<b>Sensor + GP02R</b>	<b>Sensor + GP02R-C</b>	<b>Sensor + GP04R</b>
Category	3					
PL	d					
PFHD [1/h]	8.58*10 <sup>-8</sup>		9.29*10 <sup>-8</sup>	8.58*10 <sup>-8</sup>		9.29*10 <sup>-8</sup>
No. of operations/year****	9000					
Usage categories	AC15 (230) 4A	AC15 (230) / DC13 (24) 3A	DC13 0.4A	AC15 (230) 4A	AC15 (230) / DC13 (24) 3A	DC13 0.4A
EC Declaration	16CMAC0044			16CMAC0045		
Other European Directives						
2012/19/UE	RAEE					
2011/65/UE	RoHS					
Regulation (EC) n°1907/2006	REACH					

\* The maximum length for the edge assembled is 6000 mm. For longer lengths they can be split into more parts and then connecting the sensors in series between them.

\*\* For length over 20 meters, use wires with section of 1 mm<sup>2</sup>

\*\*\* Not suitable to detect fingers.

\*\*\*\* Considered the maximum number of operations.

## TECHNICAL FEATURES - SENSITIVE EDGES

Sensor	Type B0C		Type B0C-AG
Max operating angle $\alpha$	90°		
Pre-run (test piece $\varnothing$ 80 - 100 mm/sec) [mm]	1.9		
Overrun (test piece $\varnothing$ 80, 10 mm/sec)	3 mm at 250 N 3.3 mm at 400 N 4.3 mm at 600 N		
Max operating force (test piece $\varnothing$ 80, 10 mm/sec) [N]	140		
Response time with Gamma System control units [ms]	< 54		
Material	TPE (black colour)		
Length*	Roll of 100 m	Mounted version, max 6 m or roll of 100 m	
Max length of sensor [m]	25 (can be controlled via control unit)		
Weight [kg/m]	0.08	0.12	
Fastening Material	NA	Aluminium profile - standard L = 6 m	
Dimensions of non-sensitive surface	2 mm from each end		
Operating temperature	-15°C to +55°C		
Storage temperature	-15°C to +55°C		
Chemical resistance	<i>See User Manual</i>		
Max applicable thrust [N]	500		
Degree of protection (EN 60529)	IP65		
B <sub>10D</sub> sensor	200000		
T <sub>10D</sub> [years] Control unit	20		
Power cord**	2x0.25 mm <sup>2</sup>		
Output contact	N.O.		
Max length of connection cables [m]	100		
Rated supply voltage	24 Vdc		
Part of human body which can be detected ***	Hand, limb, body		
References standard	EN ISO 13856-2; EN ISO 13849-1; EN ISO 12978		
<b>Safety Parameters: Sensor + Control Unit</b>	<b>Sensor + GP02R</b>	<b>Sensor + GP02R-C</b>	<b>Sensor + GP04R</b>
Category	3		
PL	d		
PFH <sub>d</sub> [1/h]	8.58*10 <sup>-8</sup>	9.29*10 <sup>-8</sup>	
No. of operations/year ****	10000		
Usage categories	DC13 1 A	AC15 (230)/DC13 (24) 3A	DC13 0,4A
Response time with control unit (test piece $\varnothing$ 80, a 100 mm/s, T20°C) [ms]	23		
EC Declaration	20CMAC0015		
Other European Directives			
2012/19/UE	RAEE		
2011/65/UE	RoHS		
Regulation (CE) n°1907/2006	REACH		

\* The maximum length for the sensor assembled is 6000 mm. For longer lengths they can be split into more parts by connecting in series the sensors between them.

\*\* For length over 20 meters, use wires with section of 1 mm<sup>2</sup>

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