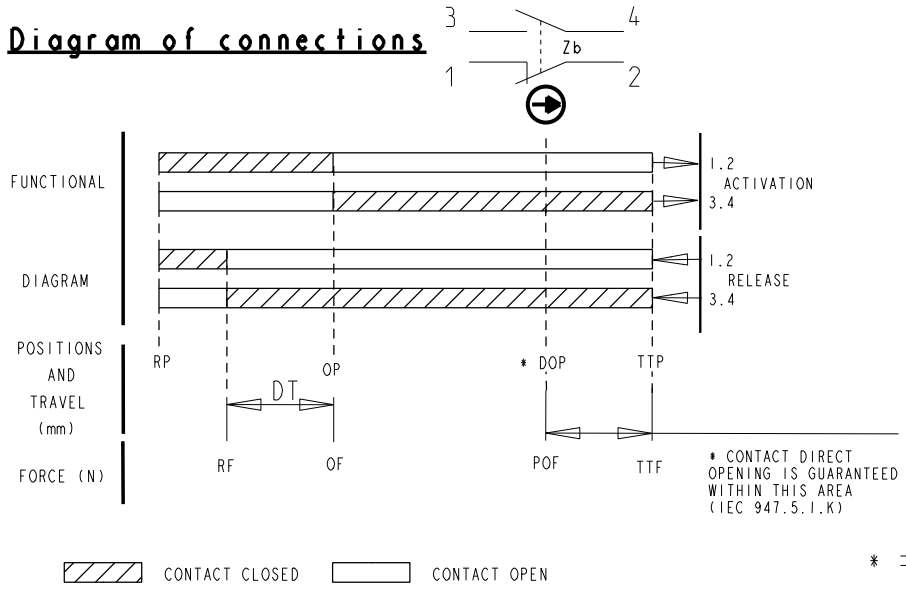


Position (mm)	X0	X1
Rest Position	8.9 Max	21 Max
Operating Position	6.6±0.25	16.6±0.6
*Direct Opening Position	4.4	13.2
Total Travel Position	3.4 Max	12 Max
Differential Travel	1±0.3	1.8±0.55
Force (N)	Plunger	Roller Lever
Operating Force (Standard / High Force)	4max / 6max	2.7max / 4max
* Direct Opening Force (Standard / High Force)	28max / 28max	19max / 19max
Release Force (Standard / High Force)	0.2min / 2.5min	0.12min / 1.5min
Total Travel Force (Standard / High Force)	30max / 30max	20max / 20max



ELECTRICAL FEATURES

- Change over, double gap, snap action contact element with 4 terminals, with electrically separated moving contacts (Form Zb) and with direct opening action ⊕
- * -Short circuit protective device according to IEC 60947.5.1 : 6AgI fuse
- Conventional enclosed thermal current I_{the}=10A
- Making and breaking capacities according to IEC 60947.5.1

Rated operational current : I_e (A)

Utilization category	24V	48V	110/127V	220/250V	380/440V	480V
AC-12	10	10	10	10	Please consult us	
AC-13	10	10	8	6		
AC-14	----- limite to 72 VA -----					
AC-15	10	10	8	6		
DC-12	10	4	1.2	0.6		
DC-13	8	2	0.6	0.3		
DC-14	1	0.2	0.06	0.03		

- * - Insulation coordination :

	IEC / EN 60 947-1	EN 50124-1
Pollution degree	3	PD3A
Overtoltage category	III / U _{imp} 4 Kv	OV3 / U _{ni} 2.5KV
Insulation voltage	U _i 400V	U _i 150 V

Note about manual operation : for version with roller lever and for U_e > 200V , the actuating device shall provide a supplementary insulation or shall be connected to electrical ground.

ENVIRONMENTAL FEATURES

- Operating & storage ambient temperature : -50°/+85°C
- Comparative tracking index for materials retaining live parts : CTI 250v (according to NFC 26220 or IEC 60112)
- Damp heat withstanding : according to NFC 20.730 or IEC 60068-2-30 (6 cycles)
- Salt spray withstanding according to NFC 20.711 or IEC 60068-2-11 : duration 96 hours
- Sulphur dioxide atmosphere corrosion withstanding according to IEC 60068.2.42 10 days severity
- Rapid changes of temperature withstanding according to NFC 20.714 or IEC 60068-2-14 method Na (5 cycles))
- Mould growth withstanding according to NFC 20710 or IEC 60068.2.10 (28 days severity)

* = SAFETY CHARACTERISTICS

NOTE: Unless otherwise specified, these are average values concerning new switches

-Terminology according to IEC 60947.5.1 or our catalog 'SWITCHES'

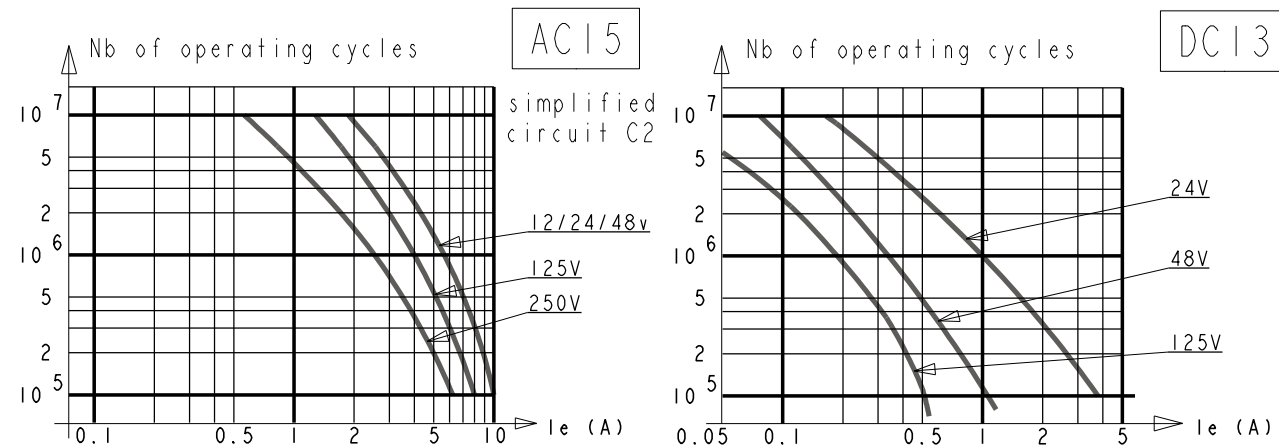
STANDARD CONFORMITY

- * -Low voltage directive 73/23/EEC and 93/68/EEC
- IEC/EN 60947.5.1
- Dimensional conformity to DIN 41636-6 Type F
- Incorporation declaration according to machinery directive 89/392/CEE (IEC/EN 60204.1)
- Degree of protection -according to IEC 60529 : Standard version IP40 (Terminals 00) Sealed version IP67 (Terminals 00)
- Flammability : UL 94 V0 and IEC 60695.2.12 960°C

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		Verified by	M_FAVAT	29/09/2009
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Toler. gene. Ang ± 5 degrees				
	General Raw surface Ra ✓	Scale 1/1		
2. rue du Dr ABEL BP 59. 26902. Valence CEDEX 9 France	Customer:	Customer Ref.:		
	Designation/FR:	DETECTEUR DE POSITION A OUVERTURE POSITIVE		PFT001:0<C>;0<M>
	Designation/GB:	POSITIVE BREAK SWITCH		Dispatching 06
Department: CI	Design by D_DELIAUD 28/01/2009	DATA SHEET		Index
	Verif. by L_NIGUET 28/01/2009	FT832400		Format
NATO code: FAQX2	Authorized by			Folio
				F A3 1/3

ELECTRICAL FEATURES (CONTINUED)

- Rated characteristics according to IEC 60947.5.1 and UL 508 : A300 - Q150
- Electrical durabilities with normal service for standard version (Ic/2s for AC ,Ic/6s for DC and actuating speed 0.25m/s max for DC)
- Note : for sealed version IP67 please consult CROUZET



- Contact gap : 1 mm x 2
- Contact resistance (according to NFC 93.050) condition A measured with IA, 30V : < 25 mΩ
- Power-frequency withstand voltage (according to NFC 93050) between open contacts in a given circuit : > 1500 V
- between contacts connected together and metal parts or electrical ground : > 2000v
- between electrically separated circuits : > 2000v
- Insulation resistance (according to NFC 93.050 at 500V) : > 5000 MΩ
- Short time overcurrent according to NFC 63145 : 100A, 30ms
- Low energy load switching (new switch)
 - min voltage : 10v
 - min current : 100mA

MECHANICAL FEATURES

- Mechanical durability with 1 operating cycle/s and 0.1m/s actuating speed : 10 millions of operating cycles
- Maximum frequency of operating cycles(at room temperature) : 5 cycles / s
- Actuating speed : from 1mm/mn to 0.5m/s
- Contact forces (at RP or TTP) : 0,8 N
- Changeover time including bounce time : 15ms
- Vibration withstanding according to NFC 20.706 or IEC 60068-2-6 : 10g - 10 to 500Hz with no micro opening of contacts >=10μs 3 axes
- Shock withstanding according to NFC 20.727 or IEC 60068-2-27 : 50g 11 ms with no micro opening of contacts >=10μs 3 axes
- Materials

Part	Material	Mass (g)	NFF 16-101/102 classification
Housing	PC GF20 Black	7.4	I2F1
Cover	PC GF20 Blue	3.3	I2F1
Actuator	PBT GF15	0.6	without classification
Cap + Seal	LSR	0.22	without classification
other plastic parts	PBT GF30	0.87	without classification
Sealing compound (IP67)	PU	0.5	without classification
Contacts (standard)	AgNi	-	-
Terminals	CuZn	-	-

- Fixing screw tightening torque : 1.3 N.m max for lateral mounting (∅4)
0.9 N.m max for front mounting (M3)
- Robustness of terminations according to IEC 60 068-2-21
Ua 100N (40 N lateral) / Ub method 1
- Max permitted Overtravel force : 10N
- Free fall withstanding according to NFC 20732 or IEC 60068.2.32 : 6 x 1m fall on concrete
- Repeat accuracy on operating and release positions < 0.05mm
- Weight : 22g for standard version without accessories

LOW ENERGY LOAD VERSION

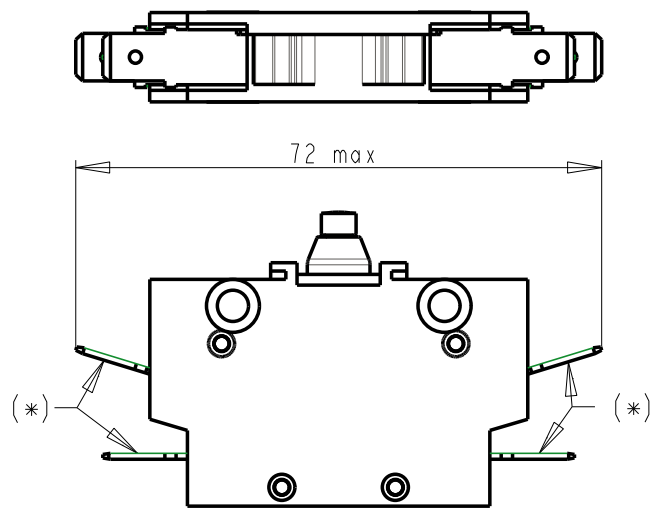
- Soon available. Please consult CROUZET
- Gold plated contacts
- Use from 4 to 30 V and from 1 to 100 mA (Direct Opening action not applicable)

NOTE: Unless otherwise specified, these are average values concerning new switches

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General Raw surface Ra ✓					Scale 1/1
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		Designation/FR: DETECTEUR DE POSITION A OUVERTURE POSITIVE Designation/GB: POSITIVE BREAK SWITCH			PFT001:0<C>;0<M>
Department: CI		Design by D_DELIAUD 28/01/2009 Verif. by L_NIGUET 28/01/2009			Dispatching 06 Index F Format A3 Folio 2/3
NATO code: FA0X2		Authorized by			<h1>FT832400</h1>

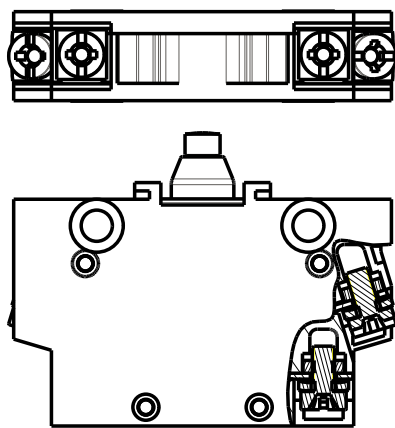
TERMINALS

6.3 x 0.8 flat quick-connect terminals



(*) Terminals can be angled by 90° max downwards. (on request)

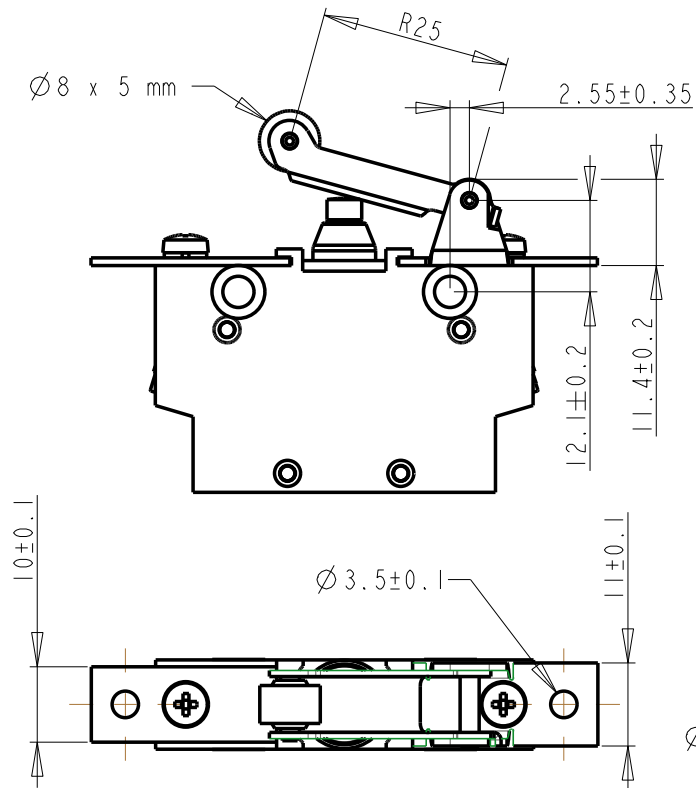
Screw terminals



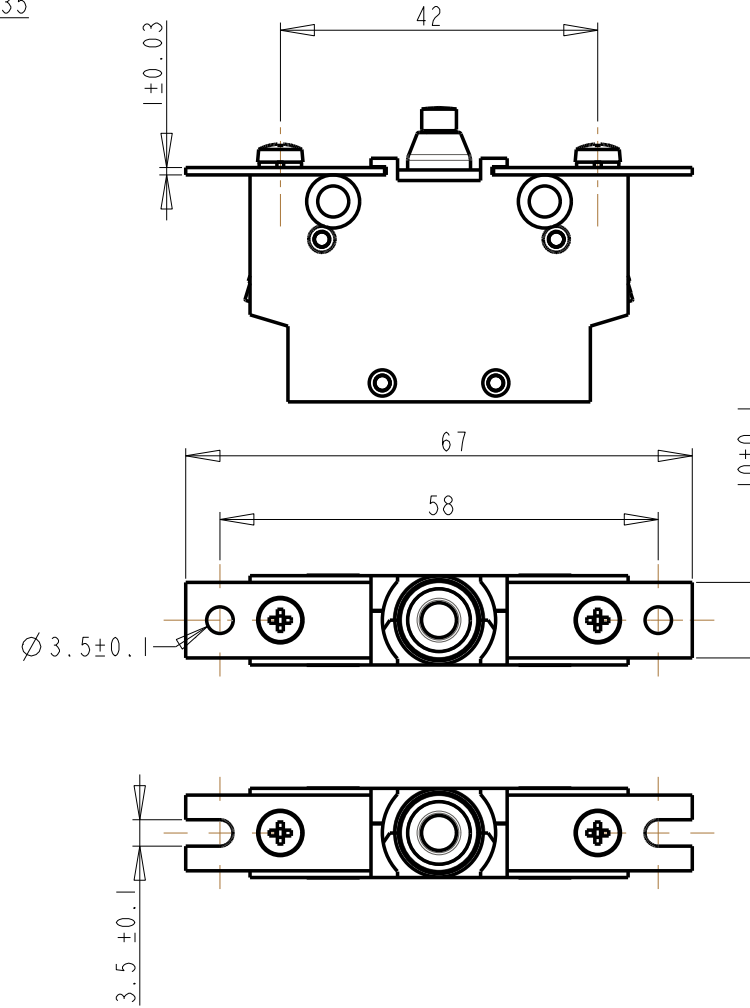
- Screws \varnothing M3 Pozidriv I type
- Max tightening torque : 0.8 N.m
- Wiring capacity : 0.75 to 2.5 mm²
Max 2 conductors with same gauge

ACCESSORIES

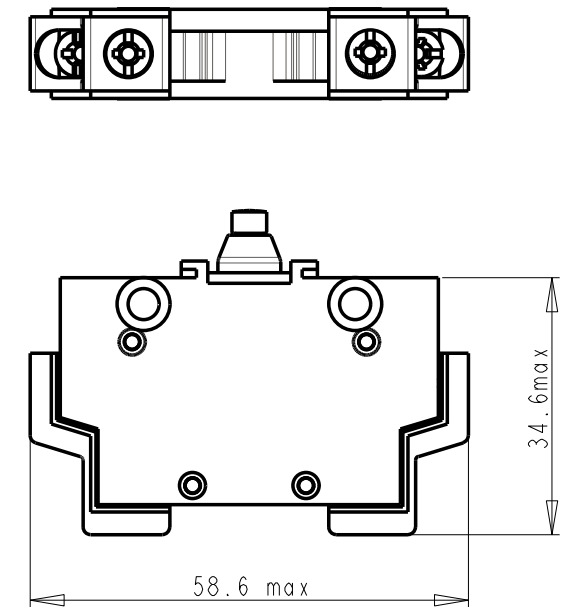
Roller lever



Mounting brackets



IP20 Screw terminals covers



83240

Product:

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		<p>General Raw surface R_a ✓</p>		
<p>2. rue du Dr ABEL BP 59. 26902. Valence CEDEX 9 France</p>		<p>Customer:</p>		<p>Customer Ref.:</p>
<p>Designation/FR:</p>		<p>DETECTEUR DE POSITION A OUVERTURE POSITIVE</p>		<p>PFT001:0<C>;0<M></p>
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<p>Department:</p>		<p>Design by D_DELIAUD 28/01/2009</p>		<p>Index</p>
<p>CI</p>		<p>Verif. by L_NIGUET 28/01/2009</p>		<p>Format</p>
<p>NATO code: FA0X2</p>		<p>Authorized by</p>		<p>Folio</p>
		<p>DATA SHEET</p>		<p>F A3 3/3</p>
		<p>FT832400</p>		