

MFI-EX

EXPLOSION PROOF EQUIPMENT

MICROSWITCHES

Operating temperature		-20 ... +89°C (-4 ... +192°F) USA / Canada (UL HazLoc): -20 ... +70°C (-4 ... +158°F)
Minimum life expectancy		
mechanical		1 × 10 ⁶ cycles
electrical		5 × 10 ⁵ cycles
Rated thermal current	I _{th}	8 A
Rated insulation voltage	U _i	250 V
Rated impulse withstand voltage	U _{imp}	1500 V
Rated operating current	ie	
resistive load		8 A - 250 V
inductive load		1 A - 250 V (cosφ = 0.6)
Pollution degree		2
Protection against electric shock		class II

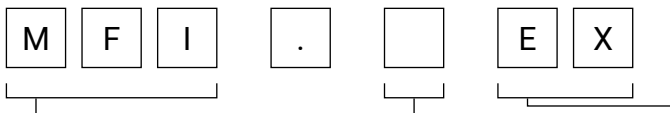
Marking



INSTRUCTION
MANUAL



Microswitches ATEX compliant with terminals with screws M3 for wire 1.5 mm²



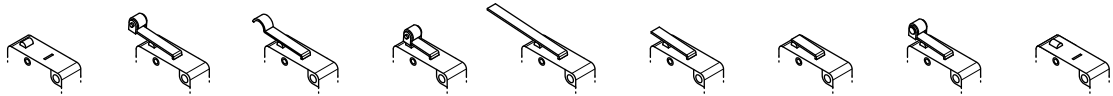
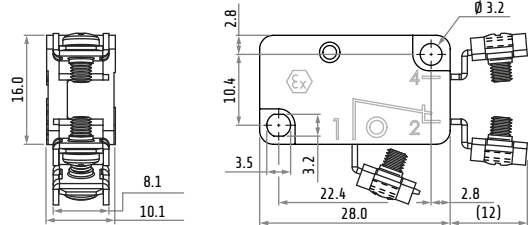
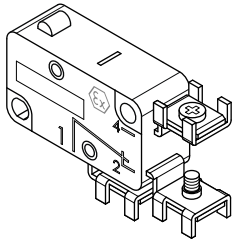
Compliance: IEC/EN61058

Series **Actuator** **Terminal type and other features**

MFI microswitches

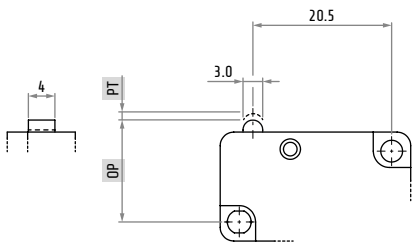
blank pin plunger **EX** ATEX compliant with M3 screws for 1.5 mm² wire

1 long roller lever
2 simulated roller lever
3 roller lever
4 long lever
5 medium lever
6 short lever
7 16 mm roller lever
8 rotated pin plunger

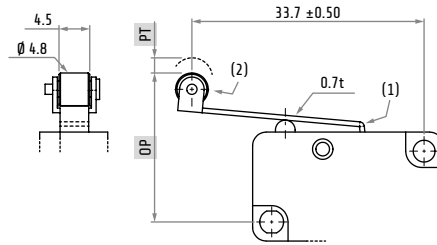


		MFI.Ex	MFI.1Ex	MFI.2Ex	MFI.3Ex	MFI.4Ex	MFI.5Ex	MFI.6Ex	MFI.7Ex	MFI.8Ex	
OF	max	5.1	3.2	3.2	5.1	1.3	3.2	5.1	4.5	5.1	N
RF	min	1.9	1.0	1.0	1.9	0.15	1.2	1.9	1.9	1.9	N
PT	max	1.4	3.3	3.3	1.4	7.6	3.3	1.6	1.8	1.4	mm
OT	min	0.8	0.8	0.8	0.6	2.2	0.8	0.6	0.8	0.8	mm
MD	max	0.3	0.8	0.8	0.6	2.2	0.8	0.6	0.6	0.3	mm
OP		14.4 ±0.5	20.3 ±1.2	18.4 ±1.2	20.3 ±0.8	15.1 ±2.6	15.1 ±1.2	15.1 ±0.6	21.1 ±0.6	14.4 ±0.5	mm

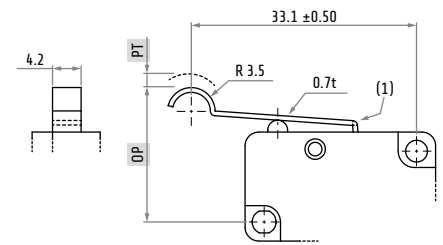
Dimensions in mm / illustrations NOT in scale (1) Stainless steel lever (2) Plastic material roller (3) Stainless steel roller



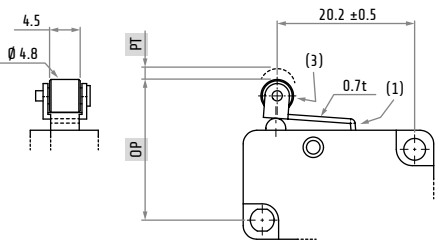
MFI.Ex



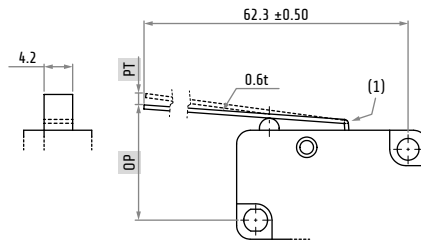
MFI.1Ex



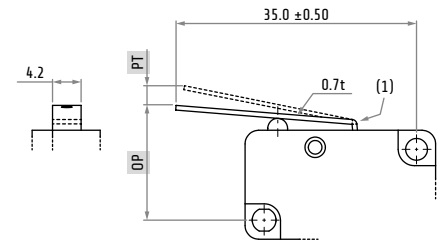
MFI.2Ex



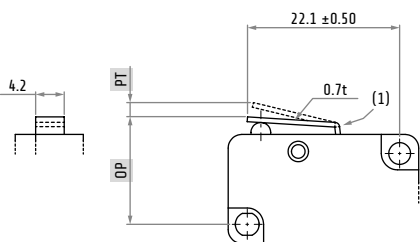
MFI.3Ex



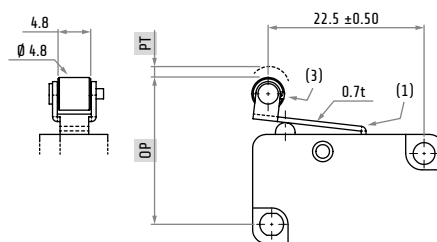
MFI.4Ex



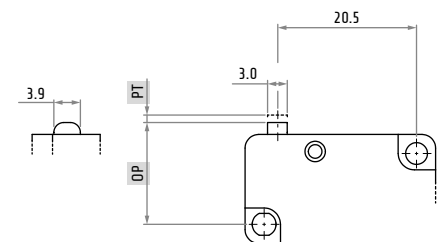
MFI.5Ex



MFI.6Ex

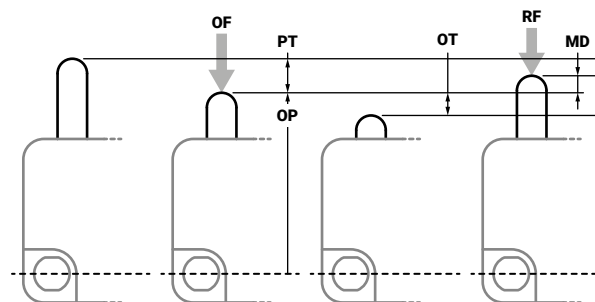


MFI.7Ex



MFI.8Ex

OF	[N]	Operating force Force, applied to the actuator, required to operate the contacts
RF	[N]	Release force Value to which the force applied to the actuator must be reduced to allow the contacts to return to the release position and reset
PT	[mm]	Pretravel The distance or angle that the operator travels from the starting position to the operating position
OP	[mm]	Operating position Position of the actuator in which the contacts are activated with a snap action, reached when the actuating force is applied
OT	[mm]	Overtravel The distance or angle that the operator travels from the operating position to the total travel position
MD	[mm]	Differential movement The distance or angle that the operator travels from the activation position to the release position in which the reset occurs



EQUIPMENT CLASSIFICATION IN ACCORDANCE WITH UTILIZATION ZONES

ATEX	2014/34/EU European Directive	
	0051 II 3G Ex dc ec IIB Gc	All the models of the series are verified to be in compliance with the follows: Apparatus Category 3 G, suitable for installation hazardous areas: Zone 2 (gas) according to EN/IEC 60079-10-1.
IECEx	EN IEC 60079-0 EN IEC 60079-1 EN IEC 60079-7	
	Ex dc ec IIB Db	Gas
UL Hazloc	UL 121201 CSA C22.2 No. 213-17	
	Class I Division 2 Group C, D	NFPA70 (NEC) art. 500 classification
EAC Ex	TR TS 012/2011 GOST 31610.0 GOST IEC 60079-1 GOST R MEK 60079-7	TP TC 012/2011 GOCT 31610.0 GOCT IEC 60079-1 GOCT P MЭК 60079-7
	See IECEx scheme reference	
INMETRO	Certificate issued in according to Brazilian requirements attached to INMETRO's Rule n°. 179 issued on May 18th, 2010 n°. 270 issued on May 21th, 2011 n°. 89 issued on May 23th, 2012	Certificado emitido conforme requisitos da avaliação da conformidade de equipamentos elétricos para atmosferas explosivas, anexo às Portarias Inmetro n°. 179 de 18 de maio de 2010 n°. 270 de 21 de junho de 2011 n°. 89 de 23 de fevereiro de 2012
	See IECEx scheme reference	