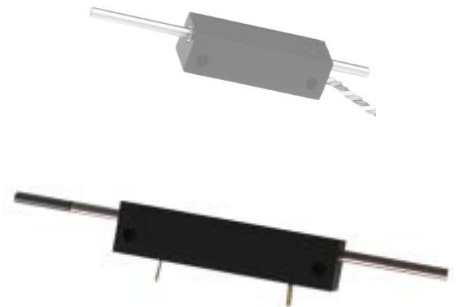


# MM10 SERIES

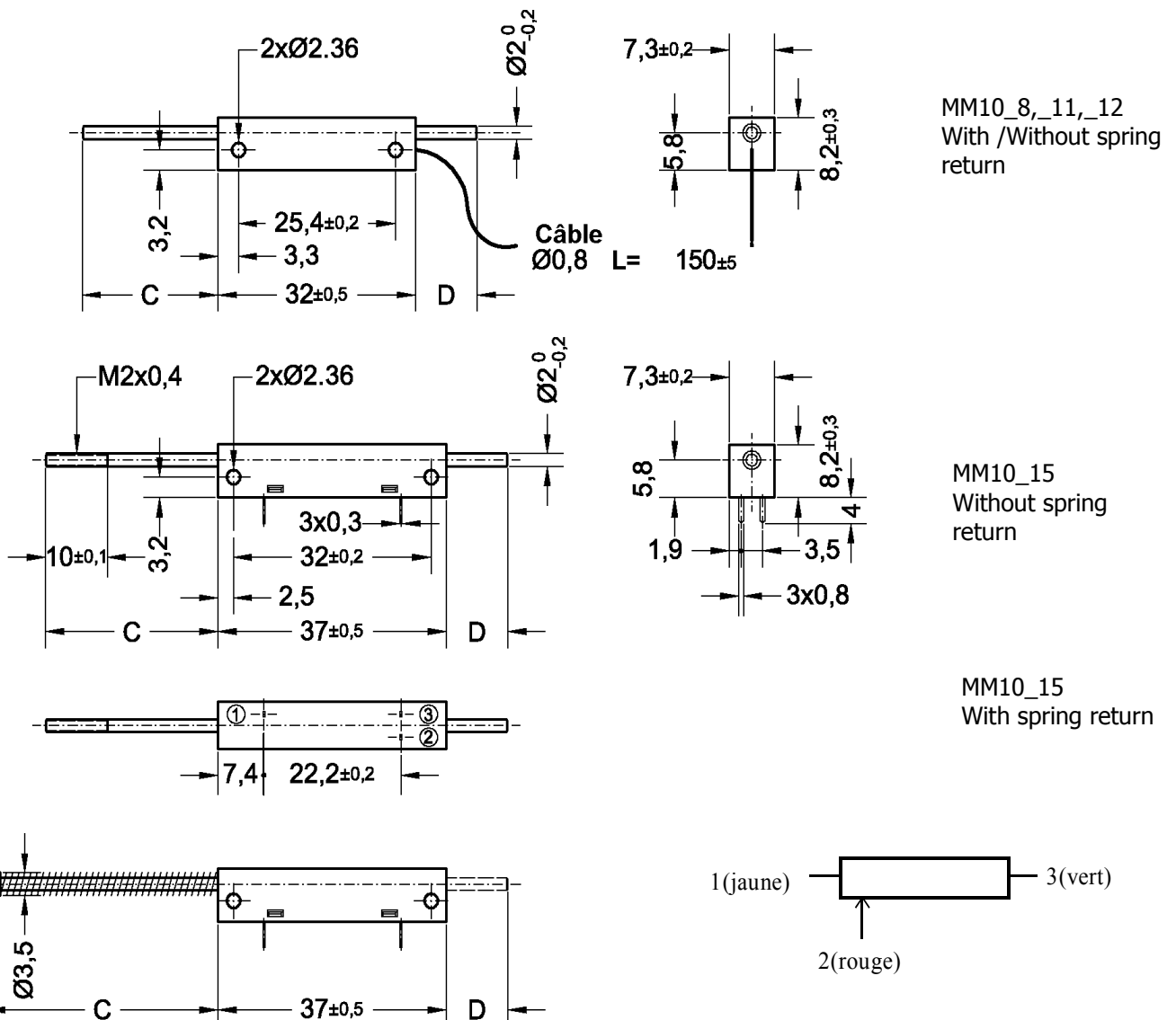
## CONDUCTIVE PLASTIC LINEAR POTENTIOMETER

This transducers can be used in distance measurement applications when easy installation is required. The MM10 potentiometers are made of a strong duroplast and compact housing. The shaft can be handled in both senses. It can be delivered with spring return device.

	MM(R)10_8	MM(R)10_11	MM(R)10_12	MM10_15	MMR10_15
C max ±1.0mm	18	22	23	28	37
C min ±1.5 mm	10	10	10	10	19
D max ±1.0mm	18	22	23	28	18
D min ±1.0mm	10	10	10	10	0



- Resolution < 0.01 mm
- Travel from 8 to 15 mm
- 1 kΩ to 50 kΩ



<b>Electrical spec.</b>	<b>MM10_8</b>	<b>MM10_11</b>	<b>MM10_12</b>	<b>MM10_15</b>
Electrical stroke ( $\pm 0.5\text{mm}$ )	8	11	12.7	15
Resistance value (kOhm)	1,2,5,10,20,50			1,2,5,10,20
Standard tolerance (%)	$\pm 15$			
Best tolerance (%)	$\pm 10$ (option)			
Standard linearity (%)	$\pm 2$			
Improved linearity (%)	$\pm 1$			
Best linearity (%)	-	$\pm 0.5$	-	-
Resolution (%)	< 0.01			
Max power at 40°C (W)	0.2			0.3
Temp. Coefficient / res. (ppm/K)	400			
Starting resistance (%)	< 2			
Insulation resistance (Mohm)	> 1000 (sous 500 VDC)			
Dielectric strength	500 V eff / 1 min			
Max wiper current (mA)	1			
Recommended wiper current ( $\mu\text{A}$ )	< 1			

<b>Mechanical specifications</b>	<b>MM10_8</b>	<b>MM10_11</b>	<b>MM10_12</b>	<b>MM10_15</b>
Mechanical stroke (mm)	8 $\pm$ 1	12 $\pm$ 1	13 $\pm$ 1	15 +5-0
Max. operating friction for MM (N)	0.3			0.5
Max. operating friction for MMR (N)	3			5
Stopper strength statically (N)	10			
Weight (g)	5			
Bearing	2 x sleeve			
Displacement speed (m/s)	2			
Life time (operations)	MM : 40E+6 / MMR : 20E+6			
Housing material	Duroplast			
Shaft housing	Stainless steel			
Connection	MM10_8,_11,_12 : cable diam 0.8 mm Long 150 $\pm$ 5 mm MM10_15 soldering pins (option câble)			

<b>Environmental specifications</b>	<b>MM10_8</b>	<b>MM10_11</b>	<b>MM10_12</b>	<b>MM10_15</b>
Operating Temperature (°C)	-25 ... + 105			
Storage Temperature (°C)	-40 ... +125			
Vibrations	15 g / 10 ... 2000 Hz			
Shock	50 g / 11 ms			
Protection	IP 40 (opt IP 54 )			

<b>Mechanical options</b>	<b>Electrical options</b>
Special shafts (length, shape, diameter)	Special tolerances
Spring return device	Special ohmic value
IP54	MM10_15 : with cable connection

<b>Serie</b>	<b>Spring return</b>	<b>stroke</b>	<b>Resistance</b>	<b>Tolerance</b>	<b>Linearity</b>
MM	R	10_11	R5KOHM	W $\pm$ 15%	L $\pm$ 2%
	- : without R : with				