

M12 Miniature Photoelectric Switches DM

IMO

- Diffused, polarised retro-reflective and through-beam
- Nickel-plated housing with IP67 protection
- Multifunction LED status indicator
- Pre-cabled or M12 plug connector
- NO/NC selectable
- Local and remote teach-in function



Options and ordering codes

DM	3	/	0	N	-	1	A	25
M12 photoelectric switch								DMP and DME only ¹
Diffused reflection 100mm ⁽¹⁾	2						A	Standard cable exit
Diffused reflection 100mm	3						H	M12 plug exit
Diffused reflection 200mm ⁽¹⁾	5							
Diffused reflection 300mm	7							
Polarised 2m	P							
Emitter 4m	E							
Receiver 4m ⁽¹⁾	R							
						1		Nickel plated housing
				N				NPN output
				P				PNP output
				O				Emitter
LON/DON selectable/emitter			0					
Emitter with check			X					

¹ without sensitivity adjustment

Specification

Model	DM2/0*-1*	DM3/0*-1*	DM5/0*-1*	DM7/0*-1*	DMP/0*-1*	DMR/0*-1*	DME/*0-1*
	Diffuse reflection				Polarised	Through-beam	
Nominal sensing distance	100mm ^a		200mm ^a	300mm ^b	2m ^c	4m	
Emission	Infrared (880nm)				Red (660nm)	Infrared (880nm)	
Tolerance	+ 15%/-5%						
Differential travel	10% maximum					20% maximum	
Repeat accuracy	5%						
Operating voltage	10-30VDC						
Ripple	10% maximum						
Load current	100mA						
No-load current	20mA						
Leakage current	10μA maximum (VDC maximum)						
Output voltage drop	2V maximum I _L =100mA						
Output type	NPN/PNP – Light On/Dark On selectable						
Switching frequency	400Hz					250Hz	
Time delay before availability	150ms						
Supply electrical protection	Polarity reversal and transient						
Output electrical protection	Short circuit (auto-reset)						
Operating temperature	-25 to +70 °C						
Interference by sunlight	10000 lux						
Protection degree	IEC IP67						
Sensitivity adjustment	N/A	Teach-in	N/A	Teach-in		N/A	Trimmer
Tightening torque	10 Nm						

^a Test target 100x100mm white paper ^b Test target 200x200mm white paper ^c Reflector RL110

DM2,3,5,7/0N-1*

1 Bn + 10-30VDC

2 Wh + Dark ON

4 Bk Load

3 BI 0V Teach (2-5 second)

DM2,3,5,7/0N-1*

1 Bn + 10-30VDC

2 Wh + Dark ON

4 Bk Load

3 BI 0V Teach (2-5 second)

DMP/0N-1*

1 Bn + 10-30VDC

2 Wh + Light ON

4 Bk Load

3 BI 0V Teach (2-5 second)

DMP/0P-1*

1 Bn + 10-30VDC

2 Wh + Light ON

4 Bk Load

3 BI 0V Teach (2-5 second)

DMR/0N-1*

1 Bn + 10-30VDC

2 Wh + Light ON

4 Bk Load

3 BI 0V Dark ON

DMR/0P-1*

1 Bn + 10-30VDC

2 Wh + Light ON

4 Bk Load

3 BI 0V Dark ON

DME/X0-1*

1 Bn + 10-30VDC

2 Wh Check +

4 Bk 10-30VDC

3 BI Check -

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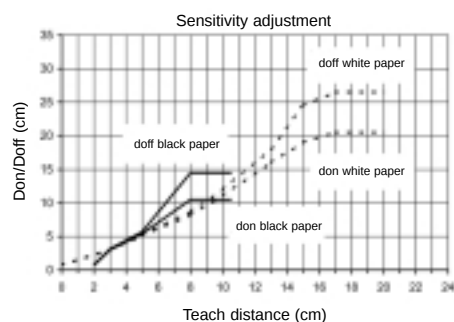
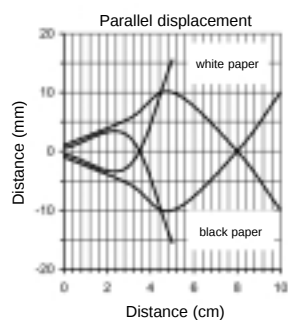
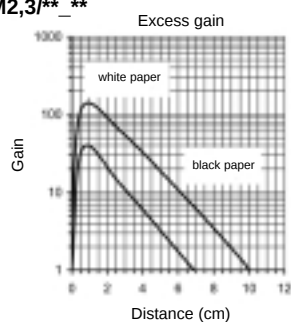
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DM continued

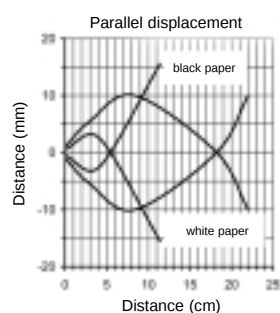
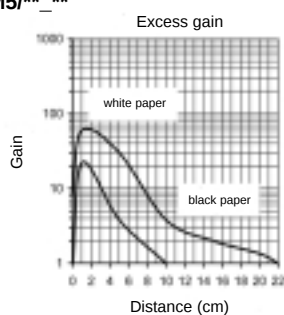
IMO

Characteristic curves

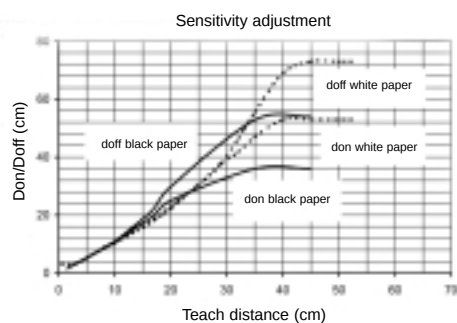
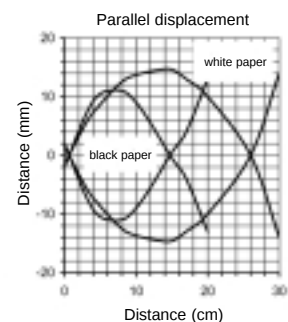
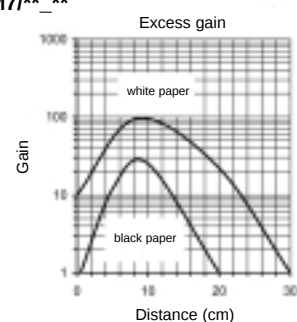
DM2,3/** **



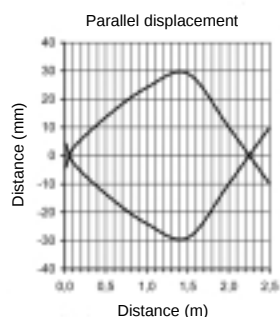
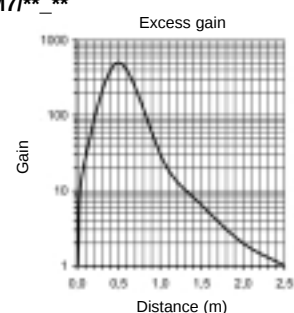
DM5/** **



DM7/** **



DM7/** **



DME/** ** DMR/** **

