

# Actuators

## magnetic actuators

operating distance & differential

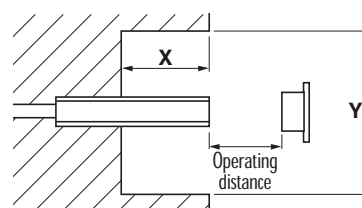
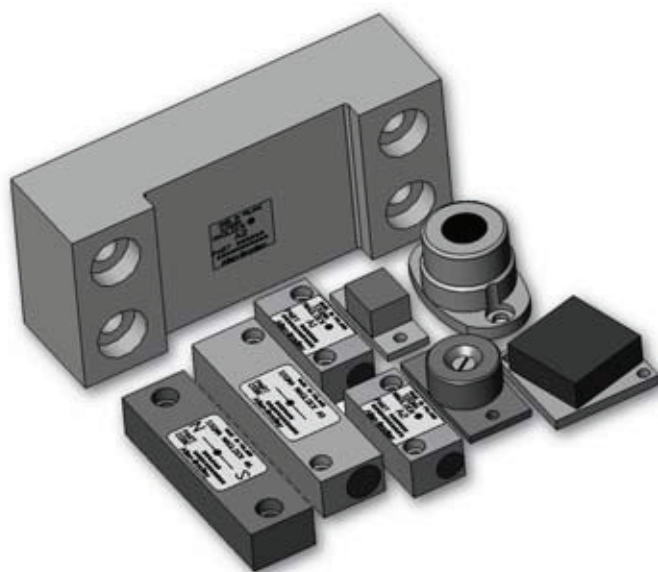
The 'operating distance' is the maximum distance at which the switch just operates, with the operating faces parallel and in line, the magnetic centres opposite each other and the actuator moving towards the switch. When the actuator is withdrawn the switch will reset itself at a distance greater than this, the difference between the two distances is termed as the differential.

Operating distances and differentials for all Maglock magnetic proximity switches are quoted below. They only apply however when both the switch and the actuator are mounted away from any ferro-magnetic materials.

Mounting on or close to such materials will reduce these distances, but if there is no alternative then mounting the switch and the actuator on spacers will help reduce the effect.

operating distance for end sensing switches

The operating information given applies for end-sensing models only if the switches are mounted away from ferro-magnetic materials by the minimum X and Y distances shown in the diagram. Reducing these clearances will reduce the operating distance and affect the differential.



actuators for end sensing switches

	Actuator type	Part number	Suitable for switch type	Clearance (mm) (see diagram)		Operating distance mm	Differential	
				X	Y		Max mm	Typical mm
M3 FIXING 	E1	440S-M545038	ES 1	25	60	10	6	3
M3 FIXING 	E2	440S-M545039	ES 1	25	70	13	5	3
			ES 2	32	80	10	6	3
			ES 24T/TH	33	80	8	6	3
			ES 34T/TH	33	80	8	6	3
M3 FIXING 	E3	440S-M545040	ES 1	25	80	30	4	3
			ES 2	32	110	25	6	4
			ES 24T/TH	33	110	23	6	4
			ES 34T/TH	33	110	23	6	4
M4 FIXING 	E10	440S-M545098 Stainless steel	ES 1	25	70	16	6	4
			ES 2	32	80	10	6	3
			ES 24T/TH	33	80	8	4	2
			ES 34T/TH	33	80	8	4	2

actuators for side sensing switches

	Actuator type	Part number	Suitable for switch type	Operating distance mm	Differential	
					Max mm	Typical mm
	A1	440S-M545002 Stainless steel	MPS3	10	10	7
	A2	440S-M545005 Stainless steel	MPS1 MPS2 MPS3 MPS14 MPS24D/DH MPS34D/DH MPS44	10 10 16 6 3 3 6	16 16 13 16 16 16 16	11 11 10 11 11 11 11
	A3	440S-M45008 Stainless steel	MPS1 MPS2 MPS3 MPS14 MPS24D/DH MPS34D/DH MPS44	22 22 25 19 16 16 19	25 25 25 25 25 25 25	17 17 17 17 17 17 17
	A4	440S-M545009 Alcomax III	MPS1 MPS2 MPS3 MPS14 MPS16 MPS24D/DH MPS26D/DH MPS34D/DH MPS36D/DH MPS44	95 95 108 86 29 83 27 83 27 86	63 63 51 63 42 63 42 63 42 63	50 50 38 50 32 50 32 50 32 50
	A6	440S-M545013 Alcomax III	MPS1 MPS2 MPS3 MPS14 MPS16 MPS24D/DH MPS26D/DH MPS34D/DH MPS36D/DH MPS44	48 48 59 47 17 44 15 44 15 47	42 42 29 42 29 42 29 42 29 42	25 25 17 25 17 25 17 25 17 25