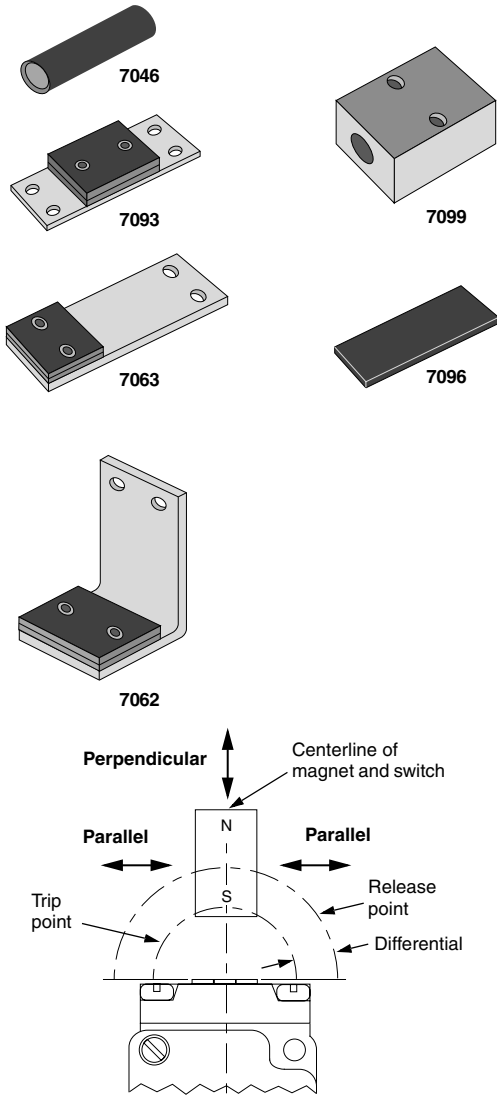


Figure 1: Magnets



## Sensing Range

Table 2: Nominal Sensing Ranges (in.)

Switch Model No.	Magnet					
	7096	7099	7046	7063	7093	7062
SGO-8003	0.3	0.5	1.3	0.5	0.7	0.5
SGI-8004	0.3	0.5	1.3	0.5	0.7	0.5
SGA-8005	0.3	0.5	1.3	0.5	0.7	0.5
SGA-8016	0.3	0.5	1.3	0.5	0.7	0.5
SGA-8182	0.3	0.5	1.3	0.5	0.7	0.5
SGA-8018	0.5	0.5	1.3	0.7	1.0	0.7
SGC-8025	0.2	0.2	1.0	0.2	0.4	0.2
SGO-8026	0.5	0.5	1.3	0.7	1.0	0.7
SGC-8027	0.2	0.3	0.9	0.2	0.4	0.2
SGA-8031	0.3	0.5	1.3	0.5	0.7	0.5
SGA-8038	0.1	0.2	0.8	0.2	0.4	0.2
SGA-8040	—	0.2	0.8	0.2	0.4	0.2
SGA-8056	0.3	0.5	1.3	0.5	0.7	0.5
SGI-8057	0.1	0.2	0.8	0.2	0.4	0.2
SGC-8058	0.1	0.2	0.8	0.2	0.4	0.2
SGA-8072	0.1	0.2	0.8	0.2	0.4	0.2
SGO-8079	0.3	0.5	1.3	0.5	0.7	0.5
SGO-8110	0.5	0.5	1.3	0.7	1.0	0.7
SGOB-8114	0.3	0.5	1.3	0.5	0.7	0.5
SGIB-8147	0.3	0.5	1.3	0.5	0.7	0.5
SGO-8168	0.3	0.5	1.3	0.5	0.7	0.5
SGA-8176	0.3	0.5	1.3	0.5	0.7	0.5
SGB-8175	0.3	0.5	1.3	0.5	0.7	0.5
SGA-8177	0.3	0.5	1.3	0.5	0.7	0.5
SGA-8179	0.1	0.2	1.2	0.4	0.5	0.4
SGA-8180	0.3	0.5	1.3	0.5	0.7	0.5
SGC-8181	0.1	0.2	0.8	0.2	0.4	0.2
SG2-8195	0.2	0.2	1.0	0.2	0.4	0.2
SGA-8189	0.1	0.2	0.8	0.2	0.4	0.2
SGO-8141	0.5	0.5	1.3	0.7	1.0	0.7
SGO-8239	0.3	0.5	1.3	0.5	0.7	0.5

The sensing range of magnet actuated proximity switches is a function of the strength (gauss) of the magnet being sensed by the switch. The MAG-SWITCH is designed and constructed to sense either the north or south pole of the magnet.

Typical operating magnets are shown. However, any commercial or industrial magnet, either permanent or electromagnetically polarized, can be used.

When using magnets other than those shown, the sensing range and hysteresis (differential) will be different.

## Operation

Mount the external magnet so that the centerline of the magnet is aligned with the center of the sensing head and is within the distance specified in Table 2. In this position, the switch is in the operated mode. Moving the magnet farther away from the sensing point resets the switch to the normal mode.

A permanent magnet can be mounted in a fixed position relative to the switch. Note that when a ferromagnetic material is placed in the gap between the magnet and the switch, it can short circuit enough of the field to reduce flux density below the switching level.

Table 3: Agency Listings

	UL File No. E42259	
Device	SGO-8003	SGO-8026
	SGO-8079	SGO-8110
	SGO-8168	SG1-8004
	SG1-8056	SG2-8195
	SGA-8018	SGA-8057
	SGA-8189	SGC-8058