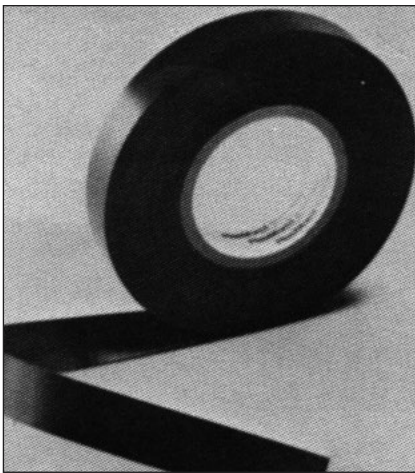


PLASTIFORM® 1016 Magnetic Strip and Sheeting

High energy level magnetic strip/sheet material

- 16 oz/in² minimum holding force
- Easily cut with scissors or knife
- Holds and remains flexible at low temperatures
- Available in two standard thicknesses and in widths from 1/4 in. to 24 in.
- Custom slit widths on special quotation



PLASTIFORM® Magnetic Strip 1016 is a flexible bonded magnet which is made using a special process that orients barium ferrite crystals in a polymer binder during manufacture. This orientation process yields a material with excellent magnetic properties.

The high energy magnet material is then permanently magnetized with multiple north and south poles along its length, providing a minimum holding force of 16 ounces per square inch (70 g/cm²).

The 0.020 in. and 0.030 in. products are magnetized 18 ppi; the 0.055 in. product is magnetized 11 ppi. The thicker material has the greater reach out factor. The holding force of the 0.055 in. is greater than that of the 0.030 in. in larger air gaps. (See "Holding Force" graphs following.)

The strong holding power of the PLASTIFORM® Magnetic Strip 1016 allows its use in relatively narrow widths where it combines economy with exceptional performance capabilities. This holding force can be increased 30% by backing the magnetic strip with 0.010 in. steel.

1016 Magnetic Strip/Sheeting can be bent, twisted and flexed without loss of magnetic energy. The product conforms readily to irregular surfaces without cracking. It will not lose its magnetic strength when dropped or struck. The Magnetic Strip/Sheeting is, indeed, permanently magnetic.

Temperature resistance

1016 Magnetic Strip retains its flexibility even in cold weather. The product performs well, indoors or out, in hot or cold climates. Extensive testing at temperatures ranging from -40°F to 160°F (-40°C to 71°C) has documented this broad temperature performance capability.

Magnetic holding force increases as temperature decreases and, conversely, will decrease as temperature increases from 72°F (23°C) test temperature.

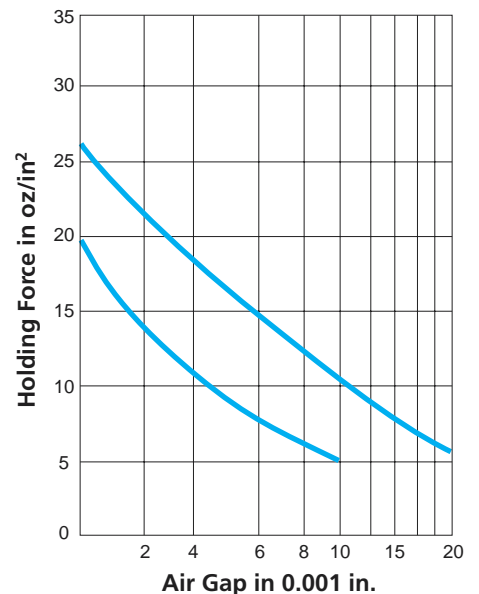
Application

The magnet material is easily cut with scissors or a knife. Mounting surfaces should be free of dirt, grease, oil and solvent.

Clean, safe handling

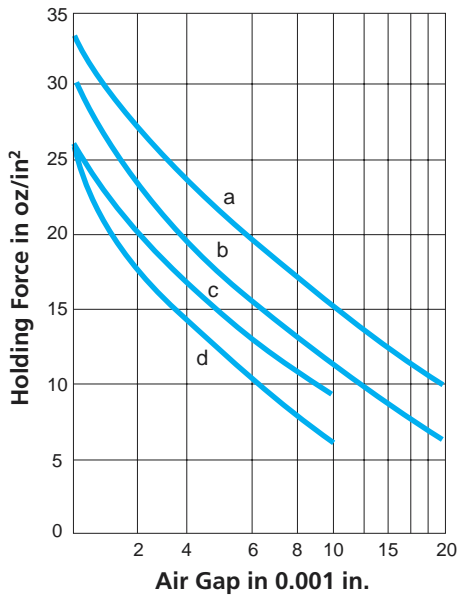
1016 material is specially coated to ensure clean attachment. This coating resists the external, physical conditions that might otherwise result in bonding between magnet and application surface.

Typical holding force without steel backup



PLASTIFORM® 1016 Magnetic Strip and Sheeting

Typical holding force with steel backup* (0.010 in. steel)

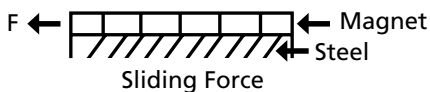


*Steel used in magnetic circuit was SAE 1010-1020.

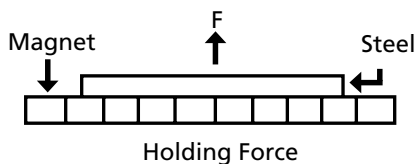
- (a) 8 ppi 0.055 in. (non-standard)
- (b) 11 ppi 0.055 in.
- (c) 11 ppi 0.030 in. (non-standard)
- (d) 18 ppi 0.030 in.

Definitions

Sliding force is defined as the force (measured in oz/in²) required to move one square inch of magnet, magnetically attached to a polished steel plate, in a direction parallel to the steel plate.



Holding force is defined as the force in oz/in² required to remove a one square inch (1.13 inch diameter) steel disc in a vertical direction from the magnet surface.



Availability

Thickness:	0.030 in. (0.76 mm) (approximately 1/32 in.) 0.055 in. (1.4 mm) (approximately 1/16 in.) 0.020 in. (0.50 mm) (approximately 1/50 in.) —Requires special order
Width:	3/8 in., 1/2 in., 3/4 in. and 1 in. (9.52, 12.7, 19 and 25 mm) are standard widths. By special order, product is available in widths up to 24 in. for 0.030 in. and 0.055 in., and up to 21 in. for 0.020 in.
Length:	Standard length is 100 feet (30.5 m). Special lengths are available on special quotation.
Magnetization:	0.020 in.—18 poles per inch of width (ppi) 0.030 in.—18 poles per inch of width (ppi) 0.055 in.—11 poles per inch of width (ppi) These thicknesses can be magnetized 18, 11 or 8 ppi, subject to special quotation. Custom thickness of 0.090 in. suitably magnetized multipole is available on special quotation. Custom magnetization is available on special quotation.

Physical and Magnetic Properties*

Magnetic Holding Force:	16 oz/in ² (70 g/cm ²) to bare steel
Sliding Force:	8 oz/in ² (35 g/cm ²) to polished steel
Temperature Range:	-40°F to 160°F (-40°C to 71°C)
Flexibility:	0.030 in. (0.76 mm) thick – Bend around 1/8 in. (3.2 mm) diameter mandrel. 0.055 in. (1.4 mm) thick – Bend around 1/4 in. (6.3 mm) diameter mandrel.
Chemical Resistance:	
Weather	Excellent
Water	Excellent
Ozone	Excellent
Dilute Acids	Good
Dilute Bases	Good
Oils and Common Solvents	Poor
Shelf Life:	1 year from delivery date

* All values shown are typical and are not intended for specification purposes. Specification values will be provided upon request.