DRAWING NUMBER
TD-02-1-J

A
PAPER SIZE

THIRD ANGLE PROJECTION

SCALE | NTS
CHKD
DRAWN | ALC
DATE | 8 OCT 93

02 MAGNETIC CATCH

02.

N

DESCRIPTION

DRAWN/CHKD | GDM
UPDATE FORMAT

REV | DATE
B | 09APR2002

southco®

REF:

GENERAL PERFORMANCE GUIDELINES

The information shown on this page was determined under one set of test conditions. Since conditions vary with each application, it is supplied as a general guide only. No safety factor has been applied. We recommend testing the product under actual application conditions to determine its suitability for the intended use.

BREAK-AWAY FORCE
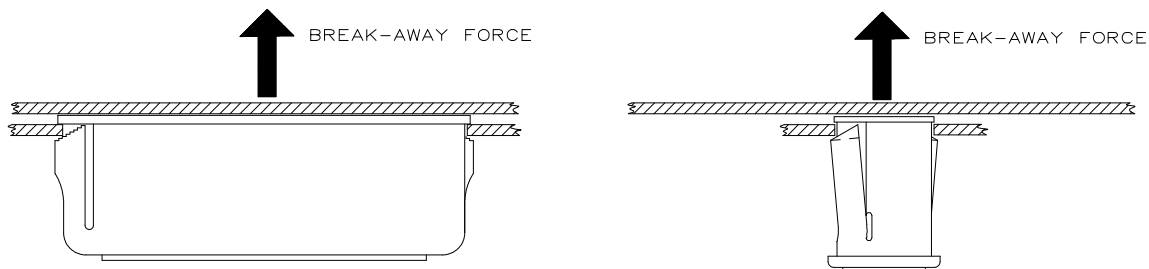
BREAK-AWAY FORCE

CATCH SERIES	MAGNET SHAPE	AVERAGE BREAK AWAY FORCE	SIGMA	± 3 SIGMA
100*	RECTANGULAR	39 N (8.7 LBS)	7.1 N (1.6 LBS)	17.4 to 60 N (3.9 to 13.5 LBS)
200*		52 N (11.8 LBS)	6.7 N (1.5 LBS)	32.5 to 72.5 N (7.3 to 16.3 LBS)
300*		18 N (4.1 LBS)	2.7 N (.6 LBS)	10.2 to 26.2 N (2.3 to 5.9 LBS)
400	ROUND	24.5 N (5.5 LBS)	3.3 N (.75 LBS)	14.7 to 34.7 N (3.3 to 7.8 LBS)
600		58 N (13 LBS)	6.7 N (1.5 LBS)	37.8 to 77.9 N (8.5 to 17.5 LBS)
800	RECTANGULAR	130 N (29.5 LBS)	22 N (4.9 LBS)	65.8 to 196.6 N (14.8 to 44.2 LBS)

* INCLUDES SELF-ADHESIVE MAGNETS

NOTE: HOLDING FORCE OF THE MAGNETIC CATCH IS RELATED TO THE SURFACE OF THE KEEPER AND THE MATERIAL. THE OPTIMUM KEEPER SURFACE FOR HOLDING POWER IS PLAIN STEEL, FLAT AND PERPENDICULAR TO THE POLE PIECES OF THE MAGNET. THE HOLDING FORCE OF THE CATCH AND KEEPER DECREASE FROM THE OPTIMUM WHEN:

A: THE KEEPER SURFACE IS PAINTED OR PLATED. THE THICKER THE FINISH, THE LOWER THE HOLDING FORCES.
B: ANY ANGULARITY OF THE LATCH TO THE KEEPER EXIST.
C: LACK OF FLATNESS EXISTS ON THE KEEPER SURFACE.

ALL MEASUREMENTS MADE AT 21° C (70° F)

The MEAN is the arithmatical average of the tested values.

SIGMA is the standard deviation from the mean (variation from the average).

3 SIGMA describes the range where 99.7% of all samples will reside. This range of values also statistically defines the Gaussian Distribution (bell-shaped curve) of all samples, assuming a normal distribution.