



# SUGATSUNE

SECTION 06 41 93  
CABINET AND DRAWER HARDWARE

Display hidden notes to specifier. (Don't know how? [Click Here](#))

*Copyright 2024 - 2024 ARCAT, Inc. - All rights reserved*

## PART 1 GENERAL

### 1.1 SECTION INCLUDES

- A. Cabinet and Drawer Hardware:
  - 1. Catches and latches.
  - 2. Catches and latches - touch.
  - 3. Concealed cabinet hinges.
  - 4. Lid supports.

### 1.2 RELATED SECTIONS

- A. Section 06 10 00 - Rough Carpentry.
- B. Section 06 20 00 - Finish Carpentry.
- C. Section 06 41 13 - Wood-Veneer-Faced Architectural Cabinets.

### 1.3 SUBMITTALS

- A. Submit under provisions of Section 01 30 00.
- B. Product Data:
  - 1. Manufacturer's data sheets on each product to be used.
  - 2. Preparation instructions and recommendations.
  - 3. Storage and handling requirements and recommendations.
  - 4. Typical installation methods.
- C. Verification Samples: Two representative units of each type, size, pattern, and color.
- D. Shop Drawings: Include details of materials, construction, and finish. Include relationship with adjacent construction.

#### 1.4 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section with a minimum of five years documented experience.
- B. Installer Qualifications: Company specializing in performing Work of this section with minimum two years documented experience with projects of similar scope and complexity.
- C. Source Limitations: Provide each type of product from a single manufacturing source to ensure uniformity.
- D. Mock-Up: Construct a mock-up with actual materials in sufficient time for Architect's review and to not delay construction progress. Locate mock-up as acceptable to Architect and provide temporary foundations and support.
  - 1. Intent of a Mock-Up: Demonstrate quality of workmanship and visual appearance.
  - 2. If the Mock-Up is Not Acceptable: Rebuild until satisfactory results are achieved.
  - 3. Retain mock-up during construction for comparison with completed work.
  - 4. Do not alter or remove mock-up until work is completed or removal is authorized.

#### 1.5 PRE-INSTALLATION CONFERENCE

- A. Convene a conference approximately two weeks before scheduled commencement of the Work. Attendees shall include Architect, Contractor and trades involved. Agenda shall include schedule, responsibilities, critical path items and approvals.

#### 1.6 DELIVERY, STORAGE, AND HANDLING

- A. Store and handle in strict compliance with manufacturer's written instructions and recommendations.
- B. Protect from damage due to weather, excessive temperature, and construction operations.

#### 1.7 PROJECT CONDITIONS

- A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's recommended limits.

#### 1.8 WARRANTY

- A. Manufacturer's standard limited warranty unless indicated otherwise.

### PART 2 PRODUCTS

#### 2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Sugatsune America, Inc., which is located at: 18101 Savarona Way; Carson, CA 90746; Toll Free Tel: 800-562-5267; Tel: 310-329-6373; Fax: 310-329-0819; Email:[request info \(sales@sugatsune.com\)](mailto:sales@sugatsune.com); Web:<http://www.sugatsune.com>
- B. Substitutions: Not permitted.
- C. Requests for substitutions will be considered in accordance with the provisions of Section 01 60 00.

#### 2.2 CATCHES AND LATCHES

- A. Model BCT-40. Tension Catch by Sugatsune.

1. Tension Force: Not adjustable. Pull Force: 6.6 lbs (3.0 kg).
  2. Material: Zinc Alloy. Weight: 0.56 oz (16 g).
  3. Length of Catch: 1.67 inches (42.5 mm). Length of Strike: 1 inch (25 mm).
  4. Dimensions (W x H w/ Strike): 0.31 x 0.54 inches (8 x 13.8 mm).
  5. Fasteners: Included. Fastener Type: Screws.
- B. Model BCT-50. Tension Catch by Sugatsune.
1. Tension Force: Not adjustable. Pull Force: 7.3 lbs (3.3 kg).
  2. Material: Zinc Alloy. Weight: 0.92 oz (26 g).
  3. Length of Catch: 1.97 inches (50 mm). Length of Strike: 1.18 inches (30 mm).
  4. Dimensions (W x H w/ Strike): 0.39 x 0.60 inches (10 x 15.3 mm).
  5. Fasteners: Included. Fastener Type: Screws.
- C. Model BCT-70. Tension Catch by Sugatsune.
1. Tension Force: Not adjustable. Pull Force: 7.7 lbs (3.5 kg).
  2. Material: Zinc Alloy. Weight: 2.47 oz (70 g).
  3. Length of Catch: 2.76 inches (70 mm). Length of Strike: 1.65 inches (42 mm).
  4. Dimensions (W x H w/ Strike): 0.53 x 0.83 inches (13.5 x 21.2 mm).
  5. Fasteners: Included. Fastener Type: Screws.
- D. Model BCTS-40. Stainless Steel Tension Catch by Sugatsune.
1. Tension Force: Not adjustable. Pull Force: 2.9 lbs (1.3 kg).
  2. Body and Strike Material: 316 Stainless Steel. Marine grade.
  3. Spring Material: 304 Stainless. Corrosion Resistant. Weight: 0.63 oz (18 g).
  4. Length of Catch: 1.69 inches (43 mm). Length of Strike: 0.98 inches (25 mm).
  5. Dimensions (W x H (w/ Strike): 0.31 x 0.53 inches (8 x 13.5 mm).
  6. Fasteners: Included. Fastener Type: Screws.
- E. Model BCTS-50. Stainless Steel Tension Catch by Sugatsune.
1. Tension Force: Not adjustable. Pull Force: 3.9 lbs (1.8 kg).
  2. Material: 304 Stainless steel. Corrosion resistant. Weight: 1.06 oz (30 g).
  3. Material: 316 Stainless Steel. Marine Grade. Weight: 1.06 oz (30 g).
  4. Length of Catch: 1.97 inches (50 mm). Length of Strike: 1.18 inches (30 mm).
  5. Dimensions (W x H): 0.39 x 0.63 inches (10 x 16.1 mm).
  6. Fasteners: Included. Fastener Type: Screws.
- F. Model BCTS-70. Stainless Steel Tension Catch by Sugatsune.
1. Tension Force: Not adjustable. Pull Force: 12.5 lbs (5.7 kg).
  2. Material: 316 Stainless Steel. Marine grade. Weight: 2.93 oz (83 g).
  3. Material: 304 Stainless steel. Corrosion resistance. Weight: 2.93 oz (83 g).
  4. Length of Catch: 2.76 inches (70 mm). Length of Strike: 1.65 inches (42 mm).
  5. Dimensions (W x H w/ Strike): 0.51 inches (13 mm) x 0.91 inches (23 mm).
  6. Fasteners: Included. Fastener Type: Screws.
- G. Model BCTS-85J. Stainless steel Adjustable Tension Catch by Sugatsune.
1. Tension Force: Adjustable. Pull Force: 1.8 to 18.4 lbf (0.8 to 8.4 kgf).
  2. Material: Stainless steel 316, Stainless steel 304. Weight: 5.93 oz (168 g).
  3. Allows for self-adjustment in case of door sags or cabinet movement.
  4. Alignment Tolerance: 1.5 mm.
  5. Sliding two-piece strike stops misalignment. Strike locks in place when installed.
  6. Multi-directional catch from side or front.
  7. Use 3 mm hex key for tension adjustment screw.
  8. Length of Catch: 3.35 inches (85 mm). Length of Strike: 2.05 inches (52 mm).
  9. Dimensions (W x H w/ Strike): 0.63 inches (16 mm) x 1.18 inches (30 mm).
  10. Fasteners: Not included. Fastener Type: 5 mm or No.10 screw.
- H. Model MC-0083. Heavy Duty Magnetic Catch by Sugatsune.

1. Material: Brass. Weight: 1.13 oz (32 g).
  2. Magnetic Force: 15.4 lbs (7 kg).
  3. Length of Catch: 1.97 inches (50 mm). Length of Strike: 1.18 inches (30 mm).
  4. Catch Dimensions (W x H): 0.67 inches (17 mm) x 0.51 inches (13 mm).
  5. Strike Dimensions (W x Thickness): 0.63 x 0.06 inches (16 x 1.6 mm).
  6. Fasteners: Not included. Fastener Type: 3mm screw.
- I. Model MC-0083D. Heavy Duty Magnetic Catch by Sugatsune.
1. Material: Brass. Weight: 2.22 oz (63 g).
  2. Magnetic Force: 22.0 lbs (10 kg)
  3. Length of Catch: 3.15 inches (80 mm). Length of Strike: 2.17 inches (55 mm).
  4. Catch Dimensions (W x H): 0.67 inches (17 mm) x 0.51 inches (13 mm).
  5. Strike Dimensions (W x Thickness): 0.63 inches (16 mm) x 0.06 inches (1.6 mm).
  6. Fasteners: Not included. Fastener Type: 3mm screw.
- J. Model MC-JM45BL. Sealed Magnetic Catch (Black) by Sugatsune.
1. NSF Certified.
  2. Hermetically sealed for high corrosion environments.
  3. No metal-to-metal contact, for cleanroom applications.
  4. Material: Plastic (PP). Weight: 0.3 oz (8.5 g).
  5. Magnet: Neodymium. Magnetic Force: 6.6 lbs (3 kg).
  6. Dimensions (W x H x L): 0.67 x 0.22 x 1.77 inches (17 x 5.6 x 45 mm).
  7. Fasteners: Not included. Fastener Type: 4 mm or No. 8 screw.
  8. Counterplate: Stainless Steel - MC-JM49.
  9. Counterplate: AS-68 - Plastic Sealed - MC-JMP45WT.
  10. Counterplate: AS-68 - Plastic Sealed - MC-JMP45BL.
- K. Model MC-JM45WT. Sealed Magnetic Catch (White) by Sugatsune.
1. NSF Certified.
  2. Hermetically sealed for high corrosion environments.
  3. No metal-to-metal contact, for cleanroom applications.
  4. Material: Plastic (PP). Weight: 0.3 oz (8.5 g).
  5. Magnet: Neodymium. Magnetic Force: 6.6 lbs (3 kg).
  6. Dimensions (W x H x L): 0.67 x 0.22 x 1.77 inches (17 x 5.6 x 45 mm).
  7. Fasteners: Not included. Fastener Type: 4 mm or No. 8 screw.
  8. Counterplate: Stainless Steel - MC-JM49.
  9. Counterplate: AS-68 - Plastic Sealed - MC-JMP45WT.
  10. Counterplate: AS-68 - Plastic Sealed - MC-JMP45BL.
- L. Model MC-JM49. Counterplate for MC-JM50 and MC-JM45 by Sugatsune.
1. Hermetically sealed strike eliminates metal particles.
  2. Special counterplate for MC-JM magnetic catches.
  3. Material: Stainless Steel. High corrosion resistance. Weight: 0.35 oz (10 g).
  4. Dimensions (L x W x H): 1.93 x 0.59 x 0.08 inches (49 x 15 x 2 mm).
  5. Fasteners: Not included. Fastener Type: 3.5 mm Self Tapping Flathead.
- M. Model MC-JMP49. Counterplate for MC-JM50 and MC-JM45 by Sugatsune.
1. Special counterplate for MC-JM magnetic catches.
  2. Material: Stainless Steel. High corrosion resistance. Weight: 0.35 oz (10 g).
  3. Dimensions (L x W x H): 1.93 x 0.59 x 0.08 inches (49 x 15 x 0.08 mm).
  4. Fasteners: Not included. Fastener Type: 3.5 mm Self Tapping Flathead.
- N. Model MC-JM50BL. Sealed Magnetic Catch by Sugatsune.
1. Hermetically sealed for high corrosion resistance.
  2. Material: Plastic (POM). Weight: 0.74 oz (21 g).
  3. Magnet: Neodymium. Magnetic Force: 6.6 lbs (3 kg).
  4. Dimensions (L x W x H): 1.97 x 0.51 x 0.83 inches (50 x 13 x 21 mm).

5. Fasteners: Not included. Fastener Type: 4 mm or No. 8 Self tapping panhead.
  6. No metal-to-metal contact for cleanroom application.
  7. Counterplate: AS-68 Plastic Sealed - MC-JMP45.
  8. Counterplate: Stainless Steel - MC-JM49
- O. Model MC-JM50WT. Sealed Magnetic Catch by Sugatsune.
1. Hermetically sealed for high corrosion resistance.
  2. Material: Plastic (POM). Weight: 0.74 oz (21 g).
  3. Magnet: Neodymium. Magnetic Force: 6.6 lbs (3 kg).
  4. Dimensions (L x W x H): 1.97 x 0.83 x 0.51 inches (50 x 21 13 mm).
  5. Fasteners: Not included. Fastener Type: 4 mm or No. 8 Self tapping panhead.
  6. No metal-to-metal contact, ideal for cleanroom application.
  7. Counterplate: AS-68 Plastic Sealed - MC-JMP45.
  8. Counterplate: Stainless Steel - MC-JM49.
- P. Model MC-JM63G15. Sealed Magnetic Catch by Sugatsune.
1. Hermetically sealed for high corrosion resistance.
  2. No metal-to-metal contact for cleanroom application.
  3. Material: Plastic (POM). Weight: 0.71 oz (20 g).
  4. Magnet: Neodymium. Magnetic Force: 3.3 lbs (1.5 kg).
  5. Dimensions (L x W x H): 2.48 x 0.75 x 0.55 inches (63 x 19 x 14 mm).
  6. Fasteners: Not included. Fastener Type: 4 mm or No. 8 Self tapping panhead.
  7. Counterplate: AS-68 Plastic Sealed - MC-JMP45.
  8. Counterplate: Stainless Steel - MC-JM49.
- Q. Model MC-JM63G30. Sealed Magnetic Catch by Sugatsune.
1. Hermetically sealed for high corrosion resistance.
  2. No metal-to-metal contact, ideal for cleanroom application. Strong magnetic force.
  3. Material: Plastic (POM). Weight: 0.71 oz (20 g).
  4. Magnet: Neodymium. Magnetic Force: 6.6 lbs (3 kg).
  5. Dimensions (L x W x H): 2.48 x 0.75 x 0.55 inches (63 x 19 x 14 mm).
  6. Fasteners: Not included. Fastener Type: 4 mm or No. 8 screw.
  7. Counterplate: AS-68 Plastic Sealed - MC-JMP45.
  8. Counterplate: Stainless Steel - MC-JM49.
- R. Model MC-JM63G50. Sealed Magnetic Catch by Sugatsune.
1. Hermetically sealed for high corrosion resistance.
  2. No metal-to-metal contact, ideal for cleanroom application.
  3. Material: Plastic (POM). Weight: 1.41 oz (40 g).
  4. Magnet: Neodymium. Magnetic Force: 11 lbs (5 kg).
  5. Dimensions (L x W x H): 2.48 x 0.75 x 0.55 inches (63 x 19 x 14 mm).
  6. Fasteners: Not included. Fastener Type: 4 mm or No. 8 Self tapping panhead.
  7. Counterplate: AS-68 Plastic Sealed - MC-JMP45.
  8. Counterplate: Stainless Steel - MC-JM49.

## 2.3 CATCHES AND LATCHES - TOUCH

- A. Model MC-28/Black. Non-Magnetic Touch Latch by Sugatsune.
1. Push to latch or unlatch. Floating strike allows easy alignment.
  2. Retaining Force: 6.6 lbs (3 kg).
  3. Material: Plastic (ABS). Weight: 0.53 oz (15 g).
  4. Dimensions:
    - a. Body Only (L x W x H): 1.46 x 1.43 x 0.52 inches ( 37 x 36 x 13 mm).
    - b. Body w/ Catch/Open (L x W x H): 1.43 x 1.46 x 0.52 inches (46 x 36 x 13 mm).
  5. Fasteners: Included. Fastener Type: Screws.
  6. Overlay Doors: 1/8 inch (3 mm) gap between door and cabinet frame for push space.
  7. Not Recommended:

- a. Pulling door with excessive force without unlatching the unit may damage the mechanism.
  - b. Constant loading over 6.6 lbf (3 kgf) or excessive pushing or pulling.
  
- B. Model MC-37/Black-1. Non-Magnetic Touch Latch, New Style, by Sugatsune.
  - 1. Push to latch or unlatch. Floating strike allows easy alignment.
  - 2. Keep doors shut when not in use.
  - 3. Retaining Force: 17.6 lbs (8 kg).
  - 4. Material: ABS. Weight: 1.13 oz (32 g).
  - 5. Body Dimensions (L x W x H): 2.24 inches (57 mm) x 1.57 inches (40 mm) x 0.63 inches (16 mm)
  - 6. Dimensions w/ Catch Open (L x W x H): 2.8 inches (71 mm) x 1.57 inches (40 mm) x 0.63 inches (16 mm).
  - 7. Fasteners: Included. Fastener Type: Screws.
  - 8. Overlay Doors: 1/8 inch (3 mm) gap between door and cabinet frame for push space.
  - 9. Not Recommended:
    - a. Pulling door with excessive force without unlatching the unit may damage the mechanism.
    - b. Constant loading over 6.6 lbf (3 kgf) or excessive pushing or pulling.
  
- C. Model MC-37/BRN-1. Non-Magnetic Touch Latch, New Style, by Sugatsune.
  - 1. Push to latch or unlatch. Floating strike allows for easy alignment.
  - 2. Keep doors shut when not in use.
  - 3. Retaining Force: 17.6 lbs (8 kg).
  - 4. Material: Plastic (ABS). Weight: 0.85 oz (24 g).
  - 5. Body Dimensions (L x W x H): 2.24 inches (57 mm) x 1.57 inches (40 mm) x 0.63 inches (16 mm).
  - 6. Dimensions w/ Catch Open (L x W x H): 2.8 inches (71 mm) x 1.57 inches (40 mm) x 0.63 inches (16 mm).
  - 7. Fasteners: Included. Fastener Type: Screws.
  - 8. Overlay Doors: 1/8 inch (3 mm) gap between door and cabinet frame for push space.
  - 9. Not Recommended:
    - a. Pulling door with excessive force without unlatching the unit may damage the mechanism.
    - b. Constant loading over 6.6 lbf (3 kgf) or excessive pushing or pulling.
  
- D. Model MC-37/WHT-1. Non-Magnetic Touch Latch, New Style, by Sugatsune.
  - 1. Push to latch or unlatch. Floating strike allows for easy alignment.
  - 2. Keep doors shut when not in use.
  - 3. Retaining Force: 17.6 lbs (8 kg).
  - 4. Material: Plastic (ABS). Weight: 0.85 oz (24 g).
  - 5. Body Dimensions (L x W x H): 2.24 inches (57 mm) x 1.57 inches (40 mm) x 0.63 inches (16 mm).
  - 6. Dimensions w/ Catch Open (L x W x H): 2.8 inches (71 mm) x 1.57 inches (40 mm) x 0.63 inches (16 mm).
  - 7. Fasteners: Included. Fastener Type: Screws.
  - 8. Overlay Doors: 1/8 inch (3 mm) gap between door and cabinet frame for push space.
  - 9. Not Recommended:
    - a. Pulling door with excessive force without unlatching the unit may damage the mechanism.
    - b. Constant loading over 6.6 lbf (3 kgf) or excessive pushing or pulling.
  
- E. Model ML-120/Black. Long Stroke Magnetic Touch Latch Black by Sugatsune.
  - 1. Push to latch or unlatch. Keep doors shut when not in use.
  - 2. Long Stroke for Medium Size Doors.
    - a. Door Tested (WxHxT): 23-5/8 x 70-7/8 x 1-3/16 inches (600 x 1800 x 30 mm).

3. CPSIA Compliant for furniture.
  4. Material: ABS, Steel, Ferrite. Weight: 1.13 oz (32 g).
  5. Length Closed: 2.97 inches (75.5 mm). Length Open: 4.55 inches (115.5 mm).
  6. Dimensions (W x H): 1.81 inches (46 mm) x 0.67 inches (17 mm).
  7. Fasteners: Included. Fastener Type: Screw.
  8. 1/8 inch (3 mm) gap between door and cabinet frame for push space.
- F. Model ML-120/BRN. Long Stroke Magnetic Touch Latch Brown by Sugatsune.
1. Push to latch or unlatch. Keep doors shut when not in use.
  2. Long stroke for medium size doors.
    - a. Door Tested (WxHxT): 23-5/8 x 70-7/8 x 1-3/16 inches (600 x 1800 x 30 mm).
  3. CPSIA Compliant for furniture.
  4. Material: Plastic (ABS). Weight: 1.87 oz (53 g).
  5. Length Closed: 2.97 inches (75.5 mm). Length Open: 4.55 inches (115.5 mm).
  6. Dimensions (W x H): 1.81 inches (46 mm) x 0.67 inches (17 mm).
  7. Fasteners: Included. Fastener Type: Screws.
  8. 1/8 inch (3 mm) gap between door and cabinet frame for push space.
- G. Model ML-120/WHT. Long Stroke Magnetic Touch Latch White by Sugatsune.
1. Push to latch or unlatch. Keep doors shut when not in use.
  2. Long stroke for medium size doors.
    - a. Door Tested (WxHxT): 23-5/8 x 70-7/8 x 1-3/16 inches (600 x 1800 x 30 mm).
  3. CPSIA Compliant for furniture.
  4. Material: Plastic (ABS), Steel, Ferrite. Weight: 1.87 oz (53 g).
  5. Length Closed: 2.97 inches (75.5 mm). Length Open: 4.55 inches (115.5 mm).
  6. Dimensions (W x H): 1.81 inches (46 mm) x 0.67 inches (17 mm).
  7. Fasteners: Included. Fastener Type: Self tapping screw.
  8. 1/8 inch (3 mm) gap between door and cabinet frame for push space.
- H. Model ML-80/Black. Magnetic Touch Latch Black by Sugatsune.
1. Push to latch or unlatch. Keep doors shut when not in use.
  2. Magnetic Force: 3.5 lbs (1.6 kg).
  3. Material: Plastic (ABS). Weight: 0.78 oz (22 g).
  4. Length Closed: 1.93 inches ( 49 mm). Length Open: 2.52 inches ( 64 mm).
  5. Dimensions (W x H): 1.42 inches (36 mm) x 0.59 inches (15 mm).
  6. Fasteners: Included. Fastener Type: Screws.
  7. Overlay and Inset Doors: A 0.14 inch (3.5 mm) gap between door and cabinet frame for room to push.
- I. Model ML-80/BRN. Magnetic Touch Latch Brown by Sugatsune.
1. Push to latch or unlatch. Keep doors shut when not in use.
  2. Magnetic Force: 3.5 lbs (1.6 kg).
  3. Material: Plastic (ABS). Weight: 0.78 oz (22 g).
  4. Length Closed: 1.93 inches ( 49 mm). Length of item Open: 2.52 inches ( 64 mm).
  5. Dimensions (W x H): 1.42 inches (36 mm) x 0.59 inches (15 mm).
  6. Fasteners: Included. Fastener Type: Screws - Pan Head.
  7. Overlay and Inset Doors: A 0.14 inch (3.5 mm) gap between door and cabinet frame for room to push.
- J. Model ML-80/WHT. Magnetic Touch Latch White by Sugatsune.
1. Push to latch or unlatch. Keep doors shut when not in use.
  2. Magnetic Force: 3.5 lbs (1.6 kg).
  3. Material: Plastic (ABS).
  4. Length Closed: 1.93 inches ( 49 mm). Length Open: 2.52 inches ( 64 mm).
  5. Dimensions (W x H): 1.42 inches (36 mm) x 0.59 inches (15 mm).
  6. Weight: 0.78 oz (22 g).
  7. Fasteners: Included. Fastener Type: Screws - Pan Head.

8. Overlay and Inset Doors: A 0.14 inch (3.5 mm) gap between door and cabinet frame for room to push.
- K. Model MLC-100BL. Non-Magnetic Touch Latch Black by Sugatsune.
1. Push to latch or unlatch. Retaining Force: 20.2 lbs (9.2 kg).
  2. Open/Close Cycle Test: 100,000 cycles.
  3. Self-adjusting strike plate:
    - a. Vertical: Plus or minus 0.08 inches (2 mm).
    - b. Horizontal: Plus or minus 1/8 inches (3.5 mm).
  4. Stroke: 0.91 inches (23 mm).
  5. Material: Glass-Reinforced Plastic (PA) and Polybutylene terephthalate (PBT).
  6. Weight: 1.13 oz (32 g).
  7. Dimensions (L x W x H): 3.05 x 1.77 x 0.63 inches (77.5 x 45 x 16 mm).
  8. Fasteners: Included. Fastener Type: Screws - Panhead.
- L. Model MLC-100WT. Non-Magnetic Touch Latch White by Sugatsune.
1. Push to latch or unlatch. Retaining Force: 20.2 lbs (9.2 kg)
  2. Open/Close Cycle Test: 100,000 cycles.
  3. Self-adjusting strike plate:
    - a. Vertical: Plus or minus 0.08 inches (2 mm).
    - b. Horizontal: Plus or minus 1/8 inches (3.5 mm).
  4. Stroke: 0.91 inches (23 mm).
  5. Material: Glass-Reinforced Plastic (PA) and Polybutylene terephthalate (PBT).
  6. Weight: 1.13 oz (32 g).
  7. Dimensions (L x W x H): 3.05 x 1.77 x 0.63 inches (77.5 x 45 x 16 mm).
  8. Fasteners: Included. Fastener Type: Screws - Panhead.
- M. Model ML-ZN80-BL by Sugatsune:
1. Push-to-open door latch. 11 lbs (5 kg) of push force ideal for large, heavy doors.
  2. For use with large inset or overlay doors.
  3. Hidden screws for a clean appearance.
  4. Magnetic Bolt: 1.5 degrees of play for alignment with strike plate.
  5. Magnetic Force: 6.6 lbs (3 kg).
  6. Material: Zinc alloy and flame resistant plastic (UL94V-0). Weight: 5.64 oz (160 g).
  7. Length Closed: 2.44 inches (62 mm). Length Open: 3.43 inches (87 mm).
  8. Body Dimensions (L x W x H): 2.17 x 1.554 x 0.87 inches (55 x 39 x 22 mm).
  9. Fasteners: Included. Fastener Type: Screws - Flatheads.
- N. Model ML-ZN80-WT by Sugatsune:
1. Push-to-open door latch. 11 lbs (5 kg) of push force ideal for large, heavy doors.
  2. For use with large inset or overlay doors up to 36 x 96 inches (914 x 2438 mm).
  3. Hidden screws for a clean appearance.
  4. Magnetic Bolt: 1.5 degrees of play for alignment with strike plate.
  5. Magnetic Force: 6.6 lbs (3 kg).
  6. Material: Zinc alloy and flame resistant plastic (UL94V-0). Weight: 5.64 oz (160 g).
  7. Length Closed: 2.44 inches (62 mm). Length Open: 3.43 inches (87 mm).
  8. Body Dimensions (L x W x H): 2.17 x 1.554 x 0.87 inches (55 x 39 x 22 mm).
  9. Fasteners: Included. Fastener Type: Screws - Flatheads.

## 2.4 CONCEALED CABINET HINGES

- A. Model 304B-46/14. Stainless Steel Hinge, 14 mm overlay, Free Swing by Sugatsune.
1. For frameless cabinets (Face frame bracket FFCEB-HG-1 sold separately).
  2. Stainless steel cup hinge for superior corrosion resistance.
  3. NSF Certified.
  4. 3/4 Overlay: 9/16 inches (14 mm).
  5. Material: 304 Stainless steel. Weight: 2.12 oz (60 g).



6. Opening Angle: 105 degrees.
  7. Cup Size: 1-3/8 inches (35 mm).
  8. Fasteners: Included. Fastener Type: Screws.
  9. Mounting Plates Sold Separately:
    - a. Part No.: 304B-P3A.
    - b. Part No.: 304B-P4A/32.
    - c. Part No.: 304B-P4A/32-3W.
- B. Model 304B-46/19. Stainless Steel Hinge, 19 mm overlay, Free Swing by Sugatsune.
1. For frameless cabinets (Face frame bracket FFCEB-HG-1 sold separately).
  2. Stainless steel cup hinge for superior corrosion resistance.
  3. Material: 304 Stainless steel. Weight: 2.12 oz (60 g).
  4. NSF Certified.
  5. Full Overlay: 3/4 inches (19 mm).
  6. Opening Angle: 105 degrees.
  7. Cup Size: 1-3/8 inches (35 mm).
  8. Fasteners: Included. Fastener Type: Screws.
  9. Mounting Plates Sold Separately:
    - a. Part No.: 304B-P3A.
    - b. Part No.: 304B-P4A/32.
    - c. Part No.: 304B-P4A/32-3W.
- C. Model 304B-46/9. Stainless Steel Hinge, 9mm, Free Swing by Sugatsune.
1. For frameless cabinets (Face frame bracket FFCEB-HG-1 sold separately).
  2. Stainless steel cup hinge for superior corrosion resistance.
  3. Material: 304 Stainless Steel. Weight: 2.12 oz (60 g).
  4. NSF Certified.
  5. Half Overlay: 3/8 inches (9 mm).
  6. Opening Angle: 105 degrees.
  7. Cup Size: 1-3/8 inches (35 mm).
  8. Fasteners: Included. Fastener Type: Screws.
  9. Mounting plate sold separately (Items: 304B-P3A, 304B-P4A/32, 304B-P4A/32-3W).
- D. Model 304B-C46/14. Stainless Steel Hinge, 14MM overlay, Spring Loaded Self Closing by Sugatsune.
1. For frameless cabinets (Face frame bracket FFCEB-HG-1 sold separately).
  2. Stainless steel cup hinge for superior corrosion resistance.
  3. Material: 304 Stainless Steel. Weight: 2.12 oz (60 g).
  4. NSF Certified.
  5. Half Overlay: 9/16 inches (14 mm).
  6. Opening Angle: 105 degrees.
  7. Cup Size: 1-3/8 inches (35 mm).
  8. Fasteners: Included. Fastener Type: Screws.
  9. Mounting Plates Sold Separately:
    - a. Part No.: 304B-P3A.
    - b. Part No.: 304B-P4A/32.
    - c. Part No.: 304B-P4A/32-3W.
- E. Model 304B-C46/19. Stainless Steel Hinge, 19MM overlay, Spring Loaded Self Closing by Sugatsune.
1. For frameless cabinets (Face frame bracket FFCEB-HG-1 sold separately).
  2. Stainless steel cup hinge for superior corrosion resistance.
  3. Material: 304 Stainless steel. Weight: 2.12 oz (60 g).
  4. NSF Certified.
  5. Full Overlay: 3/4 inches (19 mm).
  6. Opening Angle: 105 degrees.

7. Cup Size: 1-3/8 inches (35 mm).
  8. Fasteners: Included. Fastener Type: Screws.
  9. Mounting Plates Sold Separately:
    - a. Part No.: 304B-P3A.
    - b. Part No.: 304B-P4A/32.
    - c. Part No.: 304B-P4A/32-3W.
- F. Model 304B-C46/9. Stainless Steel Hinge, 9MM Overlay, Spring Loaded Self Closing by Sugatsune.
1. For frameless cabinets (Face frame bracket FFCB-HG-1 sold separately).
  2. Stainless steel cup hinge for superior corrosion resistance.
  3. Material: 304 Stainless steel. Weight: 2.12 oz (60 g).
  4. NSF Certified.
  5. Half Overlay: 3/8 inch (9 mm).
  6. Opening Angle: 105 degrees.
  7. Cup Size: 1-3/8 inches (35 mm).
  8. Fasteners: Included. Fastener Type: Screws.
  9. Mounting Plates Sold Separately:
    - a. Part No.: 304B-P3A.
    - b. Part No.: 304B-P4A/32.
    - c. Part No.: 304B-P4A/32-3W.
- G. Model 304B-P3A. 304B-P3A, In-Line Mounting Plate by Sugatsune.
1. For use with 304B hinges.
  2. Material: 304 Stainless steel. Weight: 1.41 oz (40 g).
  3. Center to Center: 0.98 inches (25 mm).
  4. Cabinet edge to plate distance: 0.3 inches (7.5 mm).
  5. Fasteners: Included. Fastener Type: Screws.
- H. Model 304B-P4A/32. Mounting Plate by Sugatsune.
1. For use with 304B hinges.
  2. Material: 304 Stainless steel. Weight: 1.41 oz (40 g).
  3. Follows the 1-1/4 inch 32 mm system.
  4. Cabinet edge to plate distance: 0.3 inches (7.5 mm).
  5. Fasteners: Included. Fastener Type: Screws.
- I. Model 304B-P4A/32-3W. 3-Way Adjustable Mounting Plate by Sugatsune.
1. For use with 304B hinges.
  2. Material: 304 Stainless steel. Weight: 1.41 oz (40 g).
  3. Follows the 1-1/4 inch 32 mm system.
  4. Cabinet edge to plate distance: 0.3 inches (7.5 mm).
  5. Fasteners: Included. Fastener Type: Screws.
- J. Model HES3D-70BL. 3-Way Adjustable Concealed Hinge by Sugatsune.
1. Hinge leaves separate for installation and removal.
  2. Cover caps hide screw heads.
  3. Material: Zinc Alloy. Weight: 3.35 oz (95 g).
  4. Length Closed: 1.38 inches (35 mm). Length Open: 1.42 inches (36 mm).
  5. Dimensions (W x H): 0.55 inches (14 mm) x 2.76 inches (70 mm).
  6. Fasteners: Included. Fastener Type: Countersunk Wood Screw.
  7. Maximum Door Weight for 2 Hinges: 19.8 lbs (9 kg). 3 Hinges: 26.4 lbs (12 kg).
  8. Maximum Door Size (W x H): 23.62 x 47.24 inches (600 x 1200 mm).
- K. Model HES3D-70DC. 3-Way Adjustable Concealed Hinge by Sugatsune.
1. Hinge leaves separate for installation and removal.
  2. Cover caps hide screw heads.
  3. Material: Zinc Alloy. Weight: 3.35 oz (95 g).

4. Length Closed: 1.38 inches (35 mm). Length Open: 1.42 inches (36 mm).
  5. Dimensions (W x H): 0.55 inches (14 mm) x 2.76 inches (70 mm).
  6. Fasteners: Included. Fastener Type: Countersunk Wood Screw.
  7. Maximum Door Weight for 2 Hinges: 19.8 lbs (9 kg). 3 Hinges: 26.4 lbs (12 kg).
  8. Maximum Door Size (W x H): 23.62 x 47.24 inches (600 x 1200 mm).
- L. Model HES3D-70DN. 3-Way Adjustable Concealed Hinge by Sugatsune.
1. Hinge leaves separate for easy installation and removal.
  2. Cover caps hide screw heads.
  3. Material: Zinc Alloy. Weight: 3.35 oz (95 g).
  4. Length Closed: 1.38 inches (35 mm). Length Open: 1.42 inches (36 mm).
  5. Dimensions (W x H): 0.55 inches (14 mm) x 2.76 inches (70 mm).
  6. Fasteners: Included. Fastener Type: Countersunk Wood Screw.
  7. Maximum Door Weight for 2 Hinges: 19.8 lbs (9 kg). 3 Hinges: 26.4 lbs (12 kg).
  8. Maximum Door Size (W x H): 23.62 x 47.24 inches (600 x 1200 mm).
- M. Model HES3D-90BL. 3-Way Adjustable Concealed Hinge by Sugatsune.
1. Hinge leaves separate for easy installation and removal.
  2. Cover caps hide screw heads.
  3. Material: Zinc Alloy. Weight: 6.98 oz (198 g).
  4. Length Closed: 1.38 inches (35 mm). Length Open: 1.78 inches (45.3 mm).
  5. Dimensions (W x H): 0.71 inches (18 mm) x 3.54 inches (90 mm).
  6. Fasteners: Included. Fastener Type: Countersunk Wood Screw.
  7. Maximum Door Weight for 2 Hinges: 26 lbs (12 kg). 3 Hinges: 35 lbs (16 kg).
  8. Maximum Door Size (W x H): 23.62 x 59.06 inches (600 x 1500 mm).
  9. Available Glass Bracket: HES3D-G90BKT-BL.
- N. Model HES3D-90DC. 3-Way Adjustable Concealed Hinge by Sugatsune.
1. Hinge leaves separate for easy installation and removal.
  2. Cover caps hide screw heads.
  3. Material: Zinc Alloy. Weight: 6.98 oz (198 g).
  4. Length Closed: 1.38 inches (35 mm). Length Open: 1.78 inches (45.3 mm).
  5. Dimensions (W x H): 0.71 inches (18 mm) x 3.54 inches (90 mm).
  6. Fasteners: Included. Fastener Type: Countersunk Wood Screw.
  7. Maximum Door Weight for 2 Hinges: 26 lbs (12 kg). 3 Hinges: 35 lbs (16 kg).
  8. Maximum Door Size (W x H): 23.62 x 59.06 inches (600 x 1500 mm).
  9. Available Glass Bracket: HES3D-G90BKT-DC.
- O. Model HES3D-90DN. 3-Way Adjustable Concealed Hinge by Sugatsune.
1. Hinge leaves separate for easy installation and removal.
  2. Cover caps hide screw heads.
  3. Material: Zinc Alloy. Weight: 6.98 oz (198 g).
  4. Length Closed: 1.38 inches (35 mm). Length Open: 1.78 inches (45.3 mm).
  5. Dimensions (W x H): 0.71 inches (18 mm) x 3.54 inches (90 mm).
  6. Fasteners: Included. Fastener Type: Countersunk Wood Screw.
  7. Maximum Door Weight for 2 Hinges: 26 lbs (12 kg). 3 Hinges: 35 lbs (16 kg).
  8. Maximum Door Size (W x H): 23.62 x 59.06 inches (600 x 1500 mm).
  9. Available Glass Bracket: HES3D-G90BKT-DN.
- P. Model J160-D22-25T-BN. Specialty Overlay Hinge with Soft Close, Black Nickel by Sugatsune.
1. Wide angle hinge allows 160 degree opening.
  2. Overlay: 1 inch (25 mm).
  3. Built-in soft close damper.
  4. 3-way adjustable.
  5. Cycles: 50,000 open/close.
  6. Includes mounting plate and screw covers.

7. Material: Steel, Zinc Alloy, Glass Filled Polyamide. Weight: 25.04 oz (710 g).
  8. Door Side Bore Dimension (L x W x Depth): 2.83 x 1.73 x 0.59 inches (72 x 44 x 15 mm).
  9. Door Edge to Bore (based on Opening Clearance):
    - a. 1/8 inches (3 mm): 0.79 inches (20 mm).
    - b. 3/16 inches (4 mm): 0.83 inches (21 mm).
    - c. 3/16 inches (5 mm): 0.87 inches (22 mm).
    - d. 1/4 inches (6 mm): 0.91 inches (23 mm).
    - e. 5/16 inches (8 mm): 0.98 inches (25 mm).
  10. Recommended Door Thickness: 0.71 to 1.42 inches (18 to 36 mm).
  11. Maximum Door Width for 2 hinges: 31.5 inches (800 mm) / 3 hinges: 35.43 inches (900 mm).
  12. Maximum Door Weight for 2 Hinges: 55 lbs (25 kg) / 3 hinges: 88 lbs (40 kg).
  13. Fasteners: Included. Fastener Type: Self tapping screw.
- Q. Model J160-D22-25T-NI. Specialty Overlay Hinge with Soft Close by Sugatsune.
1. Wide angle hinge allows 160 degree opening.
  2. Overlay: 1 inch (25 mm).
  3. Built-in soft close damper.
  4. 3-way adjustable.
  5. Cycles: 50,000 open/close.
  6. Includes mounting plate and screw covers.
  7. Material: Steel, Zinc Alloy, Glass Filled Polyamide. Weight: 25.04 oz (710 g).
  8. Door Side Bore Dimension (L X W x Depth): 2.83 x 1.73 x 0.59 inches (72 x 44 x 15 mm).
  9. Door Edge to Bore (based on overlay distance):
    - a. 1/8 inches (3 mm): 0.79 inches (20 mm)
    - b. 3/16 inches (4 mm): 0.83 inches (21 mm)
    - c. 3/16 inches (5 mm): 0.87 inches (22 mm)
    - d. 1/4 inches (6 mm): 0.91 inches (23 mm)
    - e. 5/16 inches (8 mm): 0.98 inches (25 mm)
  10. Recommended door thickness: 0.71 to 1.42 inches (18 to 36 mm)
  11. Door Width for 2 hinges: 31.5 inches (800 mm) / 3 hinges: 35.43 inches (900 mm).
  12. Door Weight for 2 hinges: 55 lbs (25 kg) / 3 hinges: 88 lbs (40 kg).
  13. Fasteners: Included. Fastener Type: Self tapping screw.
- R. Model J95-24/0T-BN. Heavy Duty Concealed Inset Hinge by Sugatsune.
1. Eliminates need to use 5 or more standard euro hinges in cabinets or furniture.
  2. 2 hinges hold 55 lbs (25 kg) and 3 hinges hold 88 lbs (40 kg).
  3. Short and wide panels can be supported.
  4. Door width 2 hinges: 31.5 inches (800 mm). 3 hinges: 35.43 inches (900 mm)
  5. Door weight: 2 hinges: 55 lbs (25 kg). 3 hinges: 88 lbs (40 kg)
  6. Clip-on type for easy installation.
  7. 3-way adjustability with door installed.
  8. For wide, heavy custom door applications.
  9. Overlay: Inset.
  10. Cup Size: 1.57 inches (40 mm).
  11. Door Edge to Bore Distance based on Opening Clearance:
    - a. 1/4 inch (6 mm): 0.12 inch (3 mm).
    - b. 3/16 inches (5 mm): 0.16 inches (4 mm).
    - c. 3/16 inches (4 mm): 0.20 inches (5 mm).
    - d. 1/8 inch (3 mm): 0.24 inch (6 mm).
    - e. 5/64 inches (2 mm): 0.28 inches (7 mm).
    - f. 1/32 inches (1 mm): 0.31 inches (8 mm).
  12. Opening: 95 degrees.
  13. Finish: Black nickel.

14. Material: Steel, zinc alloy. Weight: 5.22 oz (148 g).
  15. Fasteners: Included. Fastener Type: 5 mm or No. 10 Flathead self-tapping.
- S. Model J95-24/0T-NI. Heavy Duty Concealed Inset Hinge by Sugatsune.
1. Eliminates need to use 5 or more standard euro hinges in cabinets or furniture.
  2. 2 hinges hold 55 lbs (25 kg) and 3 hinges hold 88 lbs (40 kg).
  3. Short and wide panels can be supported.
  4. Door width 2 hinges: 31.5 inches (800 mm). 3 hinges: 35.43 inches (900 mm).
  5. Door weight: 2 hinges: 55 lbs (25 kg). 3 hinges: 88 lbs (40 kg).
  6. Clip-on type for easy installation.
  7. 3-way adjustability with door installed.
  8. For wide, heavy custom door applications.
  9. Overlay: Inset.
  10. Cup Size: 1.57 inches (40 mm).
  11. Door Edge to Bore Distance based on Opening Clearance:
    - a. 1/4 inch (6 mm): 0.12 inch (3 mm).
    - b. 3/16 inches (5 mm): 0.16 inches (4 mm).
    - c. 3/16 inches (4 mm): 0.20 inches (5 mm).
    - d. 1/8 inch (3 mm): 0.24 inch (6 mm).
    - e. 5/64 inches (2 mm): 0.28 inches (7 mm).
    - f. 1/32 inches (1 mm): 0.31 inches (8 mm).
  12. Opening: 95 degrees.
  13. Finish: Nickel.
  14. Material: Steel, zinc alloy. Weight: 5.22 oz (148 g).
  15. Fasteners: Included. Fastener Type: 5mm or No. 10 screw.
- T. Model J95-24/16T-BN. Heavy Duty Concealed 16 mm overlay Hinge by Sugatsune.
1. Eliminates need to use 5 or more standard euro hinges in cabinets or furniture.
  2. 2 hinges hold 55 lbs (25 kg) and 3 hinges hold 88 lbs (40 kg).
  3. Short and wide panels can be supported.
  4. Door width 2 hinges: 31.5 inches (800 mm). 3 hinges: 35.43 inches (900 mm).
  5. Door weight: 2 hinges: 55 lbs (25 kg). 3 hinges: 88 lbs (40 kg).
  6. Clip-on type for easy installation.
  7. 3-way adjustability with door installed.
  8. For wide, heavy custom door applications.
  9. Overlay: 5/8" (16 mm).
  10. Cup Size: 1.57 inches (40 mm).
  11. Door Edge to Bore Distance based on Opening Clearance:
    - a. 1/4 inch (6 mm): 0.12 inch (3 mm).
    - b. 3/16 inches (5 mm): 0.16 inches (4 mm).
    - c. 3/16 inches (4 mm): 0.20 inches (5 mm).
    - d. 1/8 inch (3 mm): 0.24 inch (6 mm).
    - e. 5/64 inches (2 mm): 0.28 inches (7 mm).
    - f. 1/32 inches (1 mm): 0.31 inches (8 mm).
  12. Opening: 95 degrees.
  13. Finish: Black nickel.
  14. Material: Steel, Zinc Alloy. Weight: 5.04 oz (143 g).
  15. Fasteners: Included. Fastener Type: 5mm or No. 10 screw.
- U. Model J95-24/16T-NI. 16 mm Overlay Hinge Free Swinging by Sugatsune.
1. Eliminates need to use 5 or more standard euro hinges in cabinets or furniture.
  2. 2 hinges hold 55 lbs (25 kg) and 3 hinges hold 88 lbs (40 kg).
  3. Short and wide panels can be supported.
  4. Door width 2 hinges: 31.5 inches (800 mm). 3 hinges: 35.43 inches (900 mm).
  5. Door weight: 2 hinges: 55 lbs (25 kg). 3 hinges: 88 lbs (40 kg).
  6. Clip-on type for easy installation.

7. 3-way adjustability with door installed.
  8. For wide, heavy custom door applications.
  9. Overlay: 5/8 inch (16 mm).
  10. Cup Size: 1.57 inches (40 mm).
  11. Door Edge to Bore Distance based on Opening Clearance:
    - a. 1/4 inch (6 mm): 0.12 inch (3 mm).
    - b. 3/16 inches (5 mm): 0.16 inches (4 mm).
    - c. 3/16 inches (4 mm): 0.20 inches (5 mm).
    - d. 1/8 inch (3 mm): 0.24 inch (6 mm).
    - e. 5/64 inches (2 mm): 0.28 inches (7 mm).
    - f. 1/32 inches (1 mm): 0.31 inches (8 mm).
  12. Opening: 95 degrees.
  13. Finish: Nickel.
  14. Material: Steel, Zinc Alloy Weight: 4.62 oz (131 g).
  15. Fasteners: Included. Fastener Type: 5mm or No. 10 screw.
- V. Model J95-24/25T-BN. Heavy Duty Concealed 25 mm Overlay Hinge by Sugatsune.
1. Eliminates need to use 5 or more standard euro hinges in cabinets or furniture.
  2. 2 hinges hold 55 lbs (25 kg) and 3 hinges hold 88 lbs (40 kg).
  3. Short and wide panels can be supported.
  4. Door width 2 hinges: 31.5 inches (800 mm). 3 hinges: 35.43 inches (900 mm).
  5. Door weight: 2 hinges: 55 lbs (25 kg). 3 hinges: 88 lbs (40 kg).
  6. Clip-on type for easy installation.
  7. 3-way adjustability with door installed.
  8. For wide, heavy custom door applications.
  9. Overlay: 1 inch (25 mm).
  10. Cup Size: 1.57 inches (40 mm).
  11. Door Edge to Bore Distance based on Opening Clearance:
    - a. 1/4 inch (6 mm): 0.12 inch (3 mm).
    - b. 3/16 inches (5 mm): 0.16 inches (4 mm).
    - c. 3/16 inches (4 mm): 0.20 inches (5 mm).
    - d. 1/8 inch (3 mm): 0.24 inch (6 mm).
    - e. 5/64 inches (2 mm): 0.28 inches (7 mm).
    - f. 1/32 inches (1 mm): 0.31 inches (8 mm).
  12. Opening: 95 degrees.
  13. Finish: Black nickel.
  14. Material: Steel. Weight: 4.62 oz (131 g).
  15. Fasteners: Included. Fastener Type: 5 mm or No. 10 Flathead self-tapping.
- W. Model J95-24/25T-NI. Heavy Duty Full Overlay Hinge Free Swinging by Sugatsune.
1. Eliminates need to use 5 or more standard euro hinges in cabinets or furniture.
  2. 2 hinges hold 55 lbs (25 kg) and 3 hinges hold 88 lbs (40 kg).
  3. Short and wide panels can be supported.
  4. Door width 2 hinges: 31.5 inches (800 mm). 3 hinges: 35.43 inches (900 mm)..
  5. Door weight: 2 hinges: 55 lbs (25 kg). 3 hinges: 88 lbs (40 kg)
  6. Clip-on type for easy installation.
  7. 3-way adjustability with door installed.
  8. For wide, heavy custom door applications.
  9. Overlay: 1 inch (25 mm).
  10. Cup Size: 1.57 inches (40 mm).
  11. Door Edge to Bore Distance based on Opening Clearance:
    - a. 1/4 inch (6 mm): 0.12 inch (3 mm).
    - b. 3/16 inches (5 mm): 0.16 inches (4 mm).
    - c. 3/16 inches (4 mm): 0.20 inches (5 mm).
    - d. 1/8 inch (3 mm): 0.24 inch (6 mm).
    - e. 5/64 inches (2 mm): 0.28 inches (7 mm).

- f. 1/32 inches (1 mm): 0.31 inches (8 mm).
  - 12. Opening: 95 degrees.
  - 13. Finish: Nickel.
  - 14. Material: Steel. Weight: 4.62 oz (131 g).
  - 15. Fasteners: Included. Fastener Type: 5 mm or No. 10 Flathead self-tapping.
- X. Model J95-C24/0T-BN. Heavy Duty Concealed Hinge (Inset, Spring Loaded Self-Close, Black Nickel) by Sugatsune.
- 1. Eliminates need to use 5 or more standard euro hinges in cabinets or furniture.
  - 2. 2 hinges hold 55 lbs (25 kg) and 3 hinges hold 88 lbs (40 kg).
  - 3. Short and wide panels can be supported.
  - 4. Door width 2 hinges: 31.5 inches (800 mm). 3 hinges: 35.43 inches (900 mm).
  - 5. Door weight: 2 hinges: 55 lbs (25 kg). 3 hinges: 88 lbs (40 kg)
  - 6. Clip-on type for easy installation..
  - 7. 3-way adjustability with door installed.
  - 8. For wide, heavy custom door applications.
  - 9. Overlay: Inset.
  - 10. Cup Size: 1.57 inches (40 mm).
  - 11. Door Edge to Bore Distance based on Opening Clearance:
    - a. 1/4 inch (6 mm): 0.12 inch (3 mm).
    - b. 3/16 inches (5 mm): 0.16 inches (4 mm).
    - c. 3/16 inches (4 mm): 0.20 inches (5 mm).
    - d. 1/8 inch (3 mm): 0.24 inch (6 mm).
    - e. 5/64 inches (2 mm): 0.28 inches (7 mm).
    - f. 1/32 inches (1 mm): 0.31 inches (8 mm).
  - 12. Opening: 95 degrees.
  - 13. Finish: Black nickel.
  - 14. Material: Steel, Zinc Alloy. Weight: 5.64 oz (160 g).
  - 15. Fasteners: Included. Fastener Type: 5 mm or No. 10 Flathead self-tapping.
- Y. Model J95-C24/0T-NI. Heavy Duty Concealed Hinge (Inset) by Sugatsune.
- 1. Eliminates need to use 5 or more standard euro hinges in cabinets or furniture.
  - 2. 2 hinges hold 55 lbs (25 kg) and 3 hinges hold 88 lbs (40 kg).
  - 3. Short and wide panels can be supported.
  - 4. Door width 2 hinges: 31.5 inches (800 mm). 3 hinges: 35.43 inches (900 mm).
  - 5. Door weight: 2 hinges: 55 lbs (25 kg). 3 hinges: 88 lbs (40 kg).
  - 6. Clip-on type for easy installation.
  - 7. 3-way adjustability with door installed.
  - 8. For wide, heavy custom door applications.
  - 9. Overlay: Inset.
  - 10. Cup Size: 1.57 inches (40 mm).
  - 11. Door Edge to Bore Distance based on Opening Clearance:
    - a. 1/4 inch (6 mm): 0.12 inch (3 mm).
    - b. 3/16 inches (5 mm): 0.16 inches (4 mm).
    - c. 3/16 inches (4 mm): 0.20 inches (5 mm).
    - d. 1/8 inch (3 mm): 0.24 inch (6 mm).
    - e. 5/64 inches (2 mm): 0.28 inches (7 mm).
    - f. 1/32 inches (1 mm): 0.31 inches (8 mm).
  - 12. Opening: 95 degrees
  - 13. Finish: Nickel.
  - 14. Material: Steel, Zinc Alloy. Weight: 5.64 oz (160 g).
  - 15. Fasteners: Included. Fastener Type: 5mm or No. 10 screw.
- Z. Model J95-C24/16T-BN. Heavy Duty Concealed 16 mm Overlay Hinge, Spring Loaded Self-Close, Black Nickel by Sugatsune.
- 1. Eliminates need to use 5 or more standard euro hinges in cabinets or furniture.

2. 2 hinges hold 55 lbs (25 kg) and 3 hinges hold 88 lbs (40 kg).
3. Short and wide panels can be supported.
4. Door width 2 hinges: 31.5 inches (800 mm). 3 hinges: 35.43 inches (900 mm)
5. Door weight: 2 hinges: 55 lbs (25 kg). 3 hinges: 88 lbs (40 kg).
6. Clip-on type for easy installation.
7. 3-way adjustability with door installed.
8. For wide, heavy custom door applications.
9. Overlay: 5/8 inch (16 mm).
10. Cup Size: 1.57 inches (40 mm).
11. Door Edge to Bore Distance based on Opening Clearance:
  - a. 1/4 inch (6 mm): 0.12 inch (3 mm).
  - b. 3/16 inches (5 mm): 0.16 inches (4 mm).
  - c. 3/16 inches (4 mm): 0.20 inches (5 mm).
  - d. 1/8 inch (3 mm): 0.24 inch (6 mm).
  - e. 5/64 inches (2 mm): 0.28 inches (7 mm).
  - f. 1/32 inches (1 mm): 0.31 inches (8 mm).
12. Opening: 95 degrees.
13. Finish: Black nickel.
14. Material: Steel, Zinc Alloy.
15. Material: Steel. Weight: 5.04 oz (143 g).
16. Fasteners: Included. Fastener Type: 5mm or No. 10 screw.

AA. Model J95-C24/16T-NI. Heavy Duty 16 mm Overlay Concealed Hinge, Spring Loaded Self-Close, Nickel by Sugatsune.

1. Eliminates need to use 5 or more standard euro hinges in cabinets or furniture.
2. 2 hinges hold 55 lbs (25 kg) and 3 hinges hold 88 lbs (40 kg).
3. Short and wide panels can be supported.
4. Door width 2 hinges: 31.5 inches (800 mm). 3 hinges: 35.43 inches (900 mm).
5. Door weight: 2 hinges: 55 lbs (25 kg). 3 hinges: 88 lbs (40 kg).
6. Clip-on type for easy installation.
7. 3-way adjustability with door installed.
8. For wide, heavy custom door applications.
9. Overlay: 5/8 inch (16 mm).
10. Cup Size: 1.57 inches (40 mm)
11. Door Edge to Bore Distance based on Opening Clearance:
  - a. 1/4 inch (6 mm): 0.12 inch (3 mm).
  - b. 3/16 inches (5 mm): 0.16 inches (4 mm).
  - c. 3/16 inches (4 mm): 0.20 inches (5 mm).
  - d. 1/8 inch (3 mm): 0.24 inch (6 mm).
  - e. 5/64 inches (2 mm): 0.28 inches (7 mm).
  - f. 1/32 inches (1 mm): 0.31 inches (8 mm).
12. Opening: 95 degrees.
13. Finish: Nickel.
14. Material: Steel. Weight: 5.04 oz (143 g).
15. Fasteners: Included. Fastener Type: 5mm or No. 10 screw.

BB. Model J95-C24/25T-BN. Heavy Duty Concealed Overlay Hinge, Spring Loaded Self-Close by Sugatsune.

1. Eliminates need to use 5 or more standard euro hinges in cabinets or furniture.
2. 2 hinges hold 55 lbs (25 kg) and 3 hinges hold 88 lbs (40 kg)
3. Short and wide panels can be supported.
4. Door width 2 hinges: 31.5 inches (800 mm). 3 hinges: 35.43 inches (900 mm).
5. Door weight: 2 hinges: 55 lbs (25 kg). 3 hinges: 88 lbs (40 kg).
6. Clip-on type for easy installation.
7. 3-way adjustability with door installed.
8. For wide, heavy custom door applications.



9. Overlay: 1 inch (25 mm).
  10. Cup Size: 1.57 inches (40 mm).
  11. Door Edge to Bore Distance based on Opening Clearance:
    - a. 1/4 inch (6 mm): 0.12 inch (3 mm).
    - b. 3/16 inches (5 mm): 0.16 inches (4 mm).
    - c. 3/16 inches (4 mm): 0.20 inches (5 mm).
    - d. 1/8 inch (3 mm): 0.24 inch (6 mm).
    - e. 5/64 inches (2 mm): 0.28 inches (7 mm).
    - f. 1/32 inches (1 mm): 0.31 inches (8 mm).
  12. Opening: 95 degrees.
  13. Finish: Black Nickel.
  14. Material: Steel. Weight: 5.04 oz (143 g).
  15. Fasteners: Included. Fastener Type: 5mm or No. 10 screw.
- CC. Model J95-C24/25T-NI. Heavy Duty Concealed Overlay Hinge by Sugatsune.
1. Eliminates need to use 5 or more standard euro hinges in cabinets or furniture.
  2. 2 hinges hold 55 lbs (25 kg) and 3 hinges hold 88 lbs (40 kg).
  3. Short and wide panels can be supported.
  4. Door width 2 hinges: 31.5 inches (800 mm). 3 hinges: 35.43 inches (900 mm).
  5. Door weight: 2 hinges: 55 lbs (25 kg). 3 hinges: 88 lbs (40 kg).
  6. Clip-on type for easy installation.
  7. 3-way adjustability with door installed.
  8. For wide, heavy custom door applications.
  9. Overlay: 1 inch (25 mm).
  10. Cup Size: 1.57 inches (40 mm).
  11. Door Edge to Bore Distance based on Opening Clearance:
    - a. 1/4 inch (6 mm): 0.12 inch (3 mm).
    - b. 3/16 inches (5 mm): 0.16 inches (4 mm).
    - c. 3/16 inches (4 mm): 0.20 inches (5 mm).
    - d. 1/8 inch (3 mm): 0.24 inch (6 mm).
    - e. 5/64 inches (2 mm): 0.28 inches (7 mm).
    - f. 1/32 inches (1 mm): 0.31 inches (8 mm).
  12. Opening: 95 degrees.
  13. Finish: Nickel.
  14. Material: Steel. Weight: 5.04 oz (143 g).
  15. Fasteners: Included. Fastener Type: 5mm or No. 10 screw.
- DD. Model J95-P6T-BN. Mounting Plate For J95-Black Nickel by Sugatsune.
1. Mounting plate for J95 hinges.
  2. 3-Way Adjustable.
  3. Material: Zinc Alloy. Weight: 3.32 oz (94 g).
  4. Mounting Holes (4): 1.26 x 1.02 inches (32 x 26 mm) pitch.
  5. Mounting plate height: 0.78 inches (22 mm).
  6. Fasteners: Included. Fastener Type: 5 mm or No. 10 Countersunk Head Tapping Screw or Wood Screw.
- EE. Model J95-P6T-NI. Mounting Plate For J95-Nickel by Sugatsune.
1. Mounting Plate for J95.
  2. 3-Way adjustable.
  3. Material: Zinc Alloy. Weight: 3.32 oz (94 g).
  4. Mounting Holes (4): 1.26 x 1.02 inches (32 x 26 mm) pitch.
  5. Mounting plate height: 0.78 inches (22 mm).
  6. Fasteners: Included. Fastener Type: 5 mm or No. 10 Flathead self-tapping.

## 2.5 LID SUPPORTS

- A. Model ARN-2-H-S. Aileron Top-Opening Lids With Hinges by Sugatsune. Integrated with

Sugatsune's Olympia European Cup hinge, creates lift assist, free-stop, and soft closing functions.

1. Cycle tested for 40,000 cycles.
2. Lift assist and soft-close independently adjustable.
3. Material: Steel (SPCC). Weight: 29.98 oz (850 g).
4. Max Torque for each set: 53.1 to 70.8 lbs-inch (61.2 to 81.6 kg-cm).
5. Additional arms or hinges can be added to support more torque (contact Sugatsune).
6. 360-D26-19 Cup: 35 mm with 32mm system mounting plate.
7. Hinge Overlay: 3/4 inch (19 mm).
8. Fasteners: Included. Fastener Type: Screws.

B. Model ARN-2-M-S. Aileron Top-Opening Lids With Hinges by Sugatsune. Integrated with Sugatsune's Olympia hinge, creates lift assist, free-stop, and soft closing functions.

1. Cycle tested for 40,000 cycles.
2. 360-D26-19 Cup: 35 mm with 32mm system mounting plate.
3. Hinge Overlay: 3/4 inch (19 mm).
4. Lift assist and soft-close independently adjustable.
5. Material: Steel (SPCC). Weight: 29.91 oz (848 g).
6. Max Torque for each set: 35.4 to 53.1 lbs-inch (40.8 to 61.2 kg-cm).
7. Additional arms or hinges can be added to support more torque (contact Sugatsune).
8. Fasteners: Included. Fastener Type: Screws.

C. Model ARN-3-H-S. Aileron Upward-Opening Lids With Hinges by Sugatsune. Integrated with Sugatsune's Olympia hinge, creates lift assist, free-stop, and soft closing functions.

1. Cycle Tested for 40,000 cycles
2. 360-D26-19 Cup: 35 mm with 32mm system mounting plate.
3. Hinge Overlay: 3/4 inch (19 mm).
4. Lift assist and soft-close independently adjustable.
5. Material: Steel (SPCC). Weight: 29.98 oz (850 g).
6. Max Torque for each set: 53.1 to 70.8 lbs-inch (61.2 to 81.6 kg-cm).
7. Additional arms or hinges can be added to support more torque (contact Sugatsune).
8. Fasteners: Included. Fastener Type: Screws.

D. Model ARN-3-M-S. Aileron Upward-Opening Lids With Hinges by Sugatsune. Integrated with Sugatsune's Olympia hinge, creates lift assist, free-stop, and soft closing functions.

1. Cycle tested for 40,000 cycles.
2. 360-D26-19 Cup: 35 mm with 32 mm system mounting plate.
3. Hinge Overlay: 3/4 inch (19 mm).
4. Lift assist and soft-close independently adjustable.
5. Material: Steel (SPCC). Weight: 29.88 oz (847 g).
6. Max Torque for each set: 35.4 to 53.1 lbs-inch (40.8 to 61.2 kg-cm).
7. Additional arms or hinges can be added to support more torque (contact Sugatsune).
8. Fasteners: Included. Fastener Type: Screws.

E. Model HDS-10HL/Black. Heavy Duty Soft Down Stay (Left) by Sugatsune.

1. For Downward-Opening Flap Door.
2. Use with piano hinges (LSN, HG-MH) or drop hinges (SDH-001, SDH-P). Used in pairs. Holds door in closed and opened position.
3. Soft-Closing Function.
4. Torque Calculation to Determine Hinge Type:  $0.5 \times \text{Door Height} \times \text{Door Weight}$ .
  - a. H-Type, Heavy Duty: 216 to 260 lbs.inch (250 to 300 kg.cm) per pair.
5. Material: Steel and Plastic. Weight: 10.93 oz (310 g).
6. Finish: Body: Black. Arm: Nickel rm).
7. Height of Item Closed (inside cabinet): 11.26 inches (286 mm).
8. Height of item Open (Body): 5.5 inches (139.5 mm).
9. Side Spacing of body (inside cabinet): 0.85 inches (21.5 mm).

10. Fasteners: Included. Fastener Type: Screws.
- F. Model HDS-10HL/White. Heavy Duty Soft Down Stay (Left) by Sugatsune.
1. For Downward-Opening Flap Door.
  2. Use with a piano hinge (LSN, HG-MH) or drop hinges (SDH-001, SDH-P). Used in pairs. Holds door in closed and opened position.
  3. Soft-Closing Function.
  4. Torque Calculation to Determine Hinge Type:  $0.5 \times \text{Door Height} \times \text{Door Weight}$ .
    - a. H-Type, Heavy Duty: 216 to 260 lbs.inch (250 to 300 kg.cm) per pair.
  5. Material: Steel and Plastic. Weight: 10.93 oz (310 g).
  6. Finish: Body: White. Arm: Nickel rm).
  7. Height of Item Closed (inside cabinet): 11.26 inches (286 mm).
  8. Height of item Open (Body): 5.5 inches (139.5 mm).
  9. Side Spacing of body (inside cabinet): 0.85 inches (21.5 mm).
  10. Fasteners: Included. Fastener Type: Screws.
- G. Model HDS-10HR/Black. Heavy Duty Soft Down Stay (Right) by Sugatsune.
1. For Downward-Opening Flap Door.
  2. Use with a piano hinge (LSN, HG-MH) or drop hinges (SDH-001, SDH-P). Used in pairs. Holds door in closed and opened position.
  3. Soft-Closing Function.
  4. Torque Calculation to Determine Hinge Type:  $0.5 \times \text{Door Height} \times \text{Door Weight}$ .
    - a. H-Type, Heavy Duty: 216 to 260 lbs.inch (250 to 300 kg.cm) per pair.
  5. Material: Steel and Plastic. Weight: 10.93 oz (310 g).
  6. Finish: Body: White. Arm: Nickel rm).
  7. Height of Item Closed (Inside Cabinet): 11.26 inches (286 mm).
  8. Height of item Open (Body): 5.5 inches (139.5 mm).
  9. Side Spacing of body (inside cabinet): 0.85 inches (21.5 mm).
  10. Fasteners: Included. Fastener Type: Screws.
- H. Model HDS-10HR/White. Heavy Duty Soft Down Stay (Right) by Sugatsune.
1. For Downward-Opening Flap Door.
  2. Use with a piano hinge (LSN, HG-MH) or drop hinges (SDH-001, SDH-P). Used in pairs. Holds door in closed and opened position.
  3. Soft-Closing Function.
  4. Torque Calculation to Determine Hinge Type:  $0.5 \times \text{Door Height} \times \text{Door Weight}$ .
    - a. H-Type, Heavy Duty: 216 to 260 lbs.inch (250 to 300 kg.cm) per pair.
  5. Material: Steel and Plastic. Weight: 10.93 oz (310 g).
  6. Finish: Body: White. Arm: Nickel rm).
  7. Height of Item Closed (Inside Cabinet): 11.26 inches (286 mm).
  8. Height of item Open (Body): 5.5 inches (139.5 mm).
  9. Side Spacing of body (inside cabinet): 0.85 inches (21.5 mm).
  10. Dimensions (W x H): 1.18 inches (30 mm) x 10.75 inches (273 mm).
  11. Fasteners: Included. Fastener Type: Screws.
- I. Model HDS-10KL/Black. Heavy Duty Soft Down Stay (Left) by Sugatsune.
1. For Downward-Opening Flap Door.
  2. Use with a piano hinge (LSN, HG-MH) or drop hinges (SDH-001, SDH-P). Used in pairs. Holds door in closed and opened position.
  3. Soft-Closing Function.
  4. Torque Calculation to Determine Hinge Type:  $0.5 \times \text{Door Height} \times \text{Door Weight}$ .
    - a. K-Type, Light Duty: 121 to 173 lbs.inch (140 to 200 kg.cm) per pair.
  5. Material: Steel and Plastic. Weight: 10.23 oz (290 g).
  6. Finish: Body: White. Arm: Nickel.
  7. Height of Item Closed (Inside Cabinet): 11.26 inches (286 mm).
  8. Height of item Open (Body): 5.5 inches (139.5 mm).

9. Side Spacing of body (Inside Cabinet): 0.85 inches (21.5 mm).
  10. Fasteners: Included. Fastener Type: Screws.
- J. Model HDS-10KL/White. Heavy Duty Soft Down Stay (Left) by Sugatsune.
1. For Downward-Opening Flap Door.
  2. Use with a piano hinge (LSN, HG-MH) or drop hinges (SDH-001, SDH-P). Used in pairs. Holds door in closed and opened position.
  3. Soft-Closing Function
  4. Torque Calculation to Determine Hinge Type:  $0.5 \times \text{Door Height} \times \text{Door Weight}$ .
    - a. K-Type, Light Duty: 121 to 173 lbs.inch (140 to 200 kg.cm) per pair.
  5. Material: Steel and Plastic. Weight: 10.23 oz (290 g).
  6. Finish: Body: White. Arm: Nickel.
  7. Height of Item Closed (Inside Cabinet): 11.26 inches (286 mm).
  8. Height item Open (Body): 5.5 inches (139.5 mm).
  9. Side Spacing of body (Inside Cabinet): 0.85 inches (21.5 mm).
  10. Fasteners: Included. Fastener Type: Screws.
- K. Model HDS-10KR/Black. Heavy Duty Soft Down Stay (Right) by Sugatsune.
1. For Downward-Opening Flap Door.
  2. Use with a piano hinge (LSN, HG-MH) or drop hinges (SDH-001, SDH-P). Used in pairs. Holds door in closed and opened position.
  3. Soft-Closing Function.
  4. Torque Calculation to Determine Hinge Type:  $0.5 \times \text{Door Height} \times \text{Door Weight}$ .
    - a. K-Type, Light Duty: 121 to 173 lbs.inch (140 to 200 kg.cm) per pair.
  5. Material: Steel and Plastic. Weight: 10.23 oz (290 g).
  6. Finish: Body: White. Arm: Nickel.
  7. Height of Item Closed (Inside Cabinet) 11.26 inches (286 mm).
  8. Height of item Open (Body): 5.5 inches (139.5 mm).
  9. Side Spacing of body (Inside Cabinet): 0.85 inches (21.5 mm)
  10. Fasteners: Included. Fastener Type: Screws.
- L. Model HDS-10KR/White. Heavy Duty Soft Down Stay (Right) by Sugatsune.
1. For Downward-Opening Flap Door.
  2. Use with a piano hinge (LSN, HG-MH) or drop hinges (SDH-001, SDH-P). Used in pairs. Holds door in closed and opened position.
  3. Soft-Closing Function.
  4. Torque Calculation to Determine Hinge Type:  $0.5 \times \text{Door Height} \times \text{Door Weight}$ .
    - a. K-Type, Light Duty: 121 to 173 lbs.inch (140 to 200 kg.cm) per pair.
  5. Material: Steel and Plastic. Weight: 10.23 oz (290 g).
  6. Finish: Body: White. Arm: Nickel.
  7. Height of Item Closed (Inside Cabinet): 11.26 inches (286 mm).
  8. Height of item Open (Body): 5.5 inches (139.5 mm).
  9. Side Spacing of body (Inside Cabinet): 0.85 inches (21.5 mm).
  10. Fasteners: Included. Fastener Type: Screws.
- M. Model HDS-10ML/Black. Heavy Duty Soft Down Stay (Left) by Sugatsune.
1. For Downward-Opening Flap Door.
  2. Use with a piano hinge (LSN, HG-MH) or drop hinges (SDH-001, SDH-P). Used in pairs. Holds door in closed and opened position.
  3. Used in pairs. Holds door in closed and opened position.
  4. Soft-Closing Function.
  5. Torque Calculation to Determine Hinge Type:  $0.5 \times \text{Door Height} \times \text{Door Weight}$ .
    - a. M-Type, Medium Duty: 173 to 216 lbs.inch (200 to 250 kg.cm) per pair.
  6. Material: Steel and Plastic. Weight: 10.23 oz (290 g).
  7. Finish: Body: Black. Arm: Nickel.
  8. Height of Item Closed (Inside Cabinet): 11.26 inches (268 mm).

9. Height of item Open: 5.5 inches (139.5 mm).
  10. Side Spacing of body (Inside Cabinet): 0.85 inches (21.5 mm).
  11. Fasteners: Included. Fastener Type: Screws.
- N. Model HDS-10ML/White. Heavy Duty Soft Down Stay (Left) by Sugatsune.
1. For Downward-Opening Flap Door.
  2. Use with a piano hinge (LSN, HG-MH) or drop hinges (SDH-001, SDH-P). Used in pairs. Holds door in closed and opened position.
  3. Soft-Closing Function.
  4. Torque Calculation to Determine Hinge Type:  $0.5 \times \text{Door Height} \times \text{Door Weight}$ .
    - a. M-Type, Medium Duty: 173 to 216 lbs.inch (200 to 250 kg.cm) per pair.
  5. Material: Steel and Plastic. Weight: 10.23 oz (290 g).
  6. Finish: Body: White. Arm: Nickel.
  7. Height of Item Closed (Inside Cabinet): 11.26 inches (286 mm).
  8. Height of item Open (Body): 5.5 inches (139.5 mm).
  9. Side Spacing of Body (Inside Cabinet): 0.85 inches (21.5 mm).
  10. Fasteners: Included. Fastener Type: Screws.
- O. Model HDS-10MR/Black. Heavy Duty Soft Down Stay (Right) by Sugatsune.
1. For Downward-Opening Flap Door.
  2. Use with a piano hinge (LSN, HG-MH) or drop hinges (SDH-001, SDH-P). Used in pairs. Holds door in closed and opened position.
  3. Soft-Closing Function.
  4. Torque Calculation to Determine Hinge Type:  $0.5 \times \text{Door Height} \times \text{Door Weight}$ .
    - a. M-Type, Medium Duty: 173 to 216 lbs.inch (200 to 250 kg.cm) per pair.
  5. Material: Steel and Plastic. Weight: 10.23 oz (290 g).
  6. Finish: Body: Black. Arm: Nickel.
  7. Height of Item Closed: 11.26 inches (286 mm).
  8. Height of item Open: 5.5 inches (139.5 mm).
  9. Side Spacing of Body (Inside Cabinet): 0.85 inches (21.5 mm).
  10. Fasteners: Included. Fastener Type: Screws.
- P. Model HDS-10MR/White. Heavy Duty Soft Down Stay (Right) by Sugatsune.
1. For Downward-Opening Flap Door.
  2. Use with a piano hinge (LSN, HG-MH) or drop hinges (SDH-001, SDH-P). Used in pairs. Holds door in closed and opened position.
  3. Soft-Closing Function.
  4. Torque Calculation to Determine Hinge Type:  $0.5 \times \text{Door Height} \times \text{Door Weight}$ .
    - a. M-Type, Medium Duty: 173 to 216 lbs.inch (200 to 250 kg.cm) per pair.
  5. Material: Steel and Plastic. Weight: 10.23 oz (290 g).
  6. Finish: Body: White. Arm: Nickel.
  7. Height of Item Closed (Inside Cabinet): 11.26 inches (286 mm).
  8. Height of item Open (Body): 5.5 inches (139.5 mm).
  9. Side Spacing of Body (Inside Cabinet): 0.85 inches (21.5 mm).
  10. Fasteners: Included. Fastener Type: Screws.
- Q. Model HDS-10S-HL/Black. Soft-Closing Lid Stay (Left) by Sugatsune.
1. For Downward-Opening Flap Door.
  2. Use with a piano hinge (LSN, HG-MH) or drop hinges (SDH-001, SDH-P). Used in pairs. Holds door in closed and opened position.
  3. Soft-Closing Function.
  4. Torque Calculation to Determine Hinge Type:  $0.5 \times \text{Door Height} \times \text{Door Weight}$ .
    - a. H-Type, Heavy Duty: 95 to 138 lbs.inch (110 to 160 kg.cm) per pair.
  5. Material: Steel and Plastic (ABS). Weight: 10.93 oz (310 g).
  6. Finish: Body: Black. Arm: Nickel.
  7. Height of Item Closed (Inside Cabinet): 11 inches (280 mm).

8. Height of item Open (Body): 5.5 inches (139 mm).
  9. Side Spacing of Body (Inside Cabinet): 0.77 inches (19.5 mm).
  10. Fasteners: Included. Fastener Type: Self tapping screw.
- R. Model HDS-10S-HL/White. Soft-Closing Lid Stay (Left) by Sugatsune.
1. For Downward-Opening Flap Door.
  2. Use with a piano hinge (LSN, HG-MH) or drop hinges (SDH-001, SDH-P).
  3. Designed to self-close and soft close. Used in pairs.
  4. Torque Calculation to Determine Hinge Type:  $0.5 \times \text{Door Height} \times \text{Door Weight}$ .
    - a. H-Type, Heavy Duty: 95 to 138 lbs.inch (110 to 160 kg.cm) per pair.
  5. Material: Steel and Plastic (ABS). Weight: 11.11 oz (315 g).
  6. Finish: Body: Black. Arm: Nickel.
  7. Height of Item Closed (Inside Cabinet): 11 inches (280 mm).
  8. Height or Depth of item Open (Body): 5.5 inches (139 mm).
  9. Side Spacing of Body (Inside Cabinet): 0.77 inches (19.5 mm).
  10. Fasteners: Included. Fastener Type: Self tapping screw.
- S. Model HDS-10S-HR/Black. Soft-Closing Lid Stay (Right) by Sugatsune.
1. For Downward-Opening Flap Door.
  2. Use with a piano hinge (LSN, HG-MH) or drop hinges (SDH-001, SDH-P). Designed to self-close and soft close. Used in pairs.
  3. Torque Calculation to Determine Hinge Type:  $0.5 \times \text{Door Height} \times \text{Door Weight}$ .
    - a. H-Type, Heavy Duty: 95 to 138 lbs.inch (110 to 160 kg.cm) per pair.
  4. Material: Steel and Plastic (ABS). Weight: 10.93 oz (310 g).
  5. Finish: Body: Black. Arm: Nickel.
  6. Height of Item Closed (Inside Cabinet): 11 inches (280 mm).
  7. Height of item Open (Body): 5.5 inches (139 mm).
  8. Side Spacing of Body (Inside Cabinet): 0.77 inches (19.5 mm).
  9. Fasteners: Included. Fastener Type: Self tapping screw.
- T. Model HDS-10S-HR/White. Soft-Closing Lid Stay (Right) by Sugatsune.
1. For Downward-Opening Flap Door.
  2. Use with a piano hinge (LSN, HG-MH) or drop hinges (SDH-001, SDH-P). When pushed to close, is designed to self-close and soft close. Used in pairs.
  3. Torque Calculation to Determine Hinge Type:  $0.5 \times \text{Door Height} \times \text{Door Weight}$ .
    - a. H-Type, Heavy Duty: 95 to 138 lbs.inch (110 to 160 kg.cm) per pair.
  4. Material: Steel and Plastic (ABS). Weight: 11.11 oz (315 g).
  5. Finish: Body: White. Arm: Nickel.
  6. Height of Item Closed (Inside Cabinet): 11 inches (280 mm).
  7. Height of item Open (Body): 5.5 inches (139 mm).
  8. Side Spacing of Body (Inside Cabinet): 0.77 inches (19.5 mm).
  9. Fasteners: Included. Fastener Type: Self tapping screw.
- U. Model HDS-10S-KL/Black. Soft-Closing Lid Stay (Left) by Sugatsune.
1. For Downward-Opening Flap Door.
  2. Use with a piano hinge (LSN, HG-MH) or drop hinges (SDH-001, SDH-P). When pushed to close, is designed to self-close and soft close. Used in pairs.
  3. Torque Calculation to Determine Hinge Type:  $0.5 \times \text{Door Height} \times \text{Door Weight}$ .
    - a. K-Type, Light Duty: 52 to 82 lbs.inch (60 to 95 kg.cm) per pair.
  4. Material: Steel and Plastic (ABS). Weight: 10.93 oz (310 g).
  5. Finish: Body: Black. Arm: Nickel.
  6. Height of Item Closed (Inside Cabinet): 11 inches (280 mm).
  7. Height of item Open (Body): 5.5 inches (139 mm).
  8. Side Spacing of Body (Inside Cabinet): 0.77 inches (19.5 mm).
  9. Fasteners: Included. Fastener Type: Self tapping screw.
- V. Model HDS-10S-KL/WT. Soft-Closing Lid Stay (Left) by Sugatsune.

1. For Downward-Opening Flap Door.
  2. Use with a piano hinge (LSN, HG-MH) or drop hinges (SDH-001, SDH-P). When pushed to close, is designed to self-close and soft close. Used in pairs.
  3. Torque Calculation to Determine Hinge Type:  $0.5 \times \text{Door Height} \times \text{Door Weight}$ .
    - a. K-Type, Light Duty: 52 to 82 lbs.inch (60 to 95 kg.cm) per pair.
  4. Material: Plastic (ABS). Weight: 0.21 oz (5.82 g).
  5. Finish: Body: White. Arm: Nickel.
  6. Height of Item Closed (Inside Cabinet): 11 inches (280 mm).
  7. Height of item Open: 5.5 inches (139 mm).
  8. Side Spacing of Body (Inside Cabinet): 0.77 inches (19.5 mm).
  9. Fasteners: Included. Fastener Type: Self tapping screw.
- W. Model HDS-10S-KR/Black. Soft-Closing Lid Stay (Right) by Sugatsune.
1. For Downward-Opening Flap Door.
  2. Use with a piano hinge (LSN, HG-MH) or drop hinges (SDH-001, SDH-P). When pushed to close, is designed to self-close and soft close. Used in pairs.
  3. Torque Calculation to Determine Hinge Type:  $0.5 \times \text{Door Height} \times \text{Door Weight}$ .
    - a. K-Type, Light Duty: 52 to 82 lbs.inch (60 to 95 kg.cm) per pair.
  4. Material: Steel and Plastic (ABS). Weight: 10.93 oz (310 g).
  5. Finish: Body: Black. Arm: Nickel.
  6. Height of Item Closed (Inside Cabinet): 11 inches (280 mm).
  7. Height of item Open (Body): 5.5 inches (139 mm).
  8. Side Spacing of Body (Inside Cabinet): 0.77 inches (19.5 mm).
  9. Fasteners: Included. Fastener Type: Self tapping screw.
- X. Model HDS-10S-KR/White. Soft-Closing Lid Stay (Right) by Sugatsune.
1. For Downward-Opening Flap Door.
  2. Use with a piano hinge (LSN, HG-MH) or drop hinges (SDH-001, SDH-P). When pushed to close, is designed to self-close and soft close. Used in pairs.
  3. Torque Calculation to Determine Hinge Type:  $0.5 \times \text{Door Height} \times \text{Door Weight}$ .
    - a. K-Type, Light Duty: 52 to 82 lbs.inch (60 to 95 kg.cm) per pair.
  4. Material: Steel and Plastic (ABS). Weight: 10.41 oz (295 g).
  5. Finish: Body: White. Arm: Nickel.
  6. Height of Item Closed (Inside Cabinet): 11 inches (280 mm).
  7. Height of item Open (Body): 5.5 inches (139 mm).
  8. Side Spacing of Body (Inside Cabinet): 0.77 inches (19.5 mm).
  9. Fasteners: Included. Fastener Type: Self tapping screw.
- Y. Model HDS-10S-ML/Black. Soft-Closing Lid Stay (Left) by Sugatsune.
1. For Downward-Opening Flap Door.
  2. Use with a piano hinge (LSN, HG-MH) or drop hinges (SDH-001, SDH-P). When pushed to close, is designed to self-close and soft close. Used in pairs.
  3. Torque Calculation to Determine Hinge Type:  $0.5 \times \text{Door Height} \times \text{Door Weight}$ .
    - a. M-Type, Medium Duty: 82 to 112 lbs.inch (95 to 130 kg.cm) per pair.
  4. Material: Plastic (ABS). Weight: 10.93 oz (310 g).
  5. Finish: Body: Black. Arm: Nickel.
  6. Height of Item Closed (Inside Cabinet): 11 inches (280 mm).
  7. Height of item Open (Body) : 5.5 inches (139 mm).
  8. Side Spacing of Body (Inside Cabinet): 0.77 inches (19.5 mm).
  9. Fasteners: Included. Fastener Type: Self tapping screw.
- Z. Model HDS-10S-ML/White. Soft-Closing Lid Stay (Left) by Sugatsune.
1. For Downward-Opening Flap Door.
  2. Use with a piano hinge (LSN, HG-MH) or drop hinges (SDH-001, SDH-P). When pushed to close, is designed to self-close and soft close. Used in pairs.
  3. Torque Calculation to Determine Hinge Type:  $0.5 \times \text{Door Height} \times \text{Door Weight}$ .

- a. M-Type, Medium Duty: 82 to 112 lbs.inch (95 to 130 kg.cm) per pair.
  - 4. Material: Steel and Plastic (ABS). Weight: 10.93 oz (310 g).
  - 5. Finish: Body: White. Arm: Nickel.
  - 6. Height of Item Closed (Inside Cabinet): 11 inches (280 mm).
  - 7. Height of item Open (Body): 5.5 inches (139 mm).
  - 8. Side Spacing of Body (Inside Cabinet): 0.77 inches (19.5 mm).
  - 9. Fasteners: Included. Fastener Type: Self tapping screw.
- AA. Model HDS-10S-MR/Black. Soft-Closing Lid Stay (Right) by Sugatsune.
- 1. For Downward-Opening Flap Door.
  - 2. Use with a piano hinge (LSN, HG-MH) or drop hinges (SDH-001, SDH-P). When pushed to close, is designed to self-close and soft close. Used in pairs.
  - 3. Torque Calculation to Determine Hinge Type: 0.5 x Door Height x Door Weight.
    - a. M-Type, Medium Duty: 82 to 112 lbs.inch (95 to 130 kg.cm) per pair.
  - 4. Material: Steel and Plastic (ABS). Weight: 10.93 oz (310 g).
  - 5. Finish: Body: Black. Arm: Nickel.
  - 6. Height of Item Closed (Inside Cabinet): 11 inches (280 mm).
  - 7. Height of item Open (Body): 5.5 inches (139 mm).
  - 8. Side Spacing of Body (Inside Cabinet): 0.77 inches (19.5 mm).
  - 9. Fasteners: Included. Fastener Type: Self tapping screw.
- BB. Model HDS-10S-MR/White. Soft-Closing Lid Stay (Right) by Sugatsune.
- 1. For Downward-Opening Flap Door.
  - 2. Use with a piano hinge (LSN, HG-MH) or drop hinges (SDH-001, SDH-P). When pushed to close, is designed to self-close and soft close. Used in pairs.
  - 3. Torque Calculation to Determine Hinge Type: 0.5 x Door Height x Door Weight.
    - a. M-Type, Medium Duty: 82 to 112 lbs.inch (95 to 130 kg.cm) per pair.
  - 4. Material: Steel and Plastic (ABS). Weight: 0.21 oz (5.91 g).
  - 5. Finish: Body: White. Arm: Nickel.
  - 6. Height of Item Closed (Inside Cabinet): 11 inches (280 mm).
  - 7. Height of item Open (Body): 5.5 inches (139 mm).
  - 8. Side Spacing of Body (Inside Cabinet): 0.77 inches (19.5 mm).
  - 9. Fasteners: Included. Fastener Type: Self tapping screw.
- CC. Model HDS-10S-SL/Black. Soft-Closing Lid Stay (Left) by Sugatsune.
- 1. For Downward-Opening Flap Door.
  - 2. Use with a piano hinge (LSN, HG-MH) or drop hinges (SDH-001, SDH-P). When pushed to close, is designed to self-close and soft close. Used in pairs.
  - 3. Torque Calculation to Determine Hinge Type: 0.5 x Door Height x Door Weight.
    - a. S-Type: Extra Heavy Duty: 121 to 156 lbs inch (140 to 180 kg cm) per pair.
  - 4. Material: Steel and Plastic (ABS). Weight: 10.93 oz (310 g).
  - 5. Finish: Body: Black. Arm: Nickel.
  - 6. Height of Item Closed (Inside Cabinet): 11 inches (280 mm).
  - 7. Height of item Open (Body): 5.5 inches (139 mm).
  - 8. Side Spacing of Body (Inside Cabinet): 0.77 inches (19.5 mm).
  - 9. Fasteners: Included. Fastener Type: Self tapping screw.
- DD. Model HDS-10S-SL/White. Soft-Closing Lid Stay (Left) by Sugatsune.
- 1. For Downward-Opening Flap Door.
  - 2. Use with a piano hinge (LSN, HG-MH) or drop hinges (SDH-001, SDH-P). When pushed to close, is designed to self-close and soft close. Used in pairs.
  - 3. Torque Calculation to Determine Hinge Type: 0.5 x Door Height x Door Weight.
    - a. S-Type: Extra Heavy Duty: 121 to 156 lbs inch (140 to 180 kg cm) per pair.
  - 4. Material: Steel and Plastic (ABS). Weight: 11.29 oz (320 g).
  - 5. Finish: Body: White. Arm: Nickel.
  - 6. Height of Item Closed (Inside Cabinet): 11 inches (280 mm).



7. Height of item Open (Body): 5.5 inches (139 mm).
  8. Side Spacing of Body (Inside Cabinet): 0.77 inches (19.5 mm).
  9. Fasteners: Included. Fastener Type: Self tapping screw.
- EE. Model HDS-10S-SR/Black. Soft-Closing Lid Stay (Right) by Sugatsune.
1. For Downward-Opening Flap Door.
  2. Use with a piano hinge (LSN, HG-MH) or drop hinges (SDH-001, SDH-P). When pushed to close, is designed to self-close and soft close. Used in pairs.
  3. Torque Calculation to Determine Hinge Type:  $0.5 \times \text{Door Height} \times \text{Door Weight}$ .
    - a. S-Type: Extra Heavy Duty: 121 to 156 lbs inch (140 to 180 kg cm) per pair.
  4. Material: Steel and Plastic (ABS). Weight: 10.93 oz (310 g).
  5. Finish: Body: Black. Arm: Nickel.
  6. Height of Item Closed (Inside Cabinet): 11 inches (280 mm).
  7. Height of item Open (Body): 5.5 inches (139 mm).
  8. Side Spacing of Body (Inside Cabinet): 0.77 inches (19.5 mm).
  9. Fasteners: Included. Fastener Type: Self tapping screw.
- FF. Model HDS-10S-SR/White. Soft-Closing Lid Stay (Right) by Sugatsune.
1. For Downward-Opening Flap Door.
  2. Use with a piano hinge (LSN, HG-MH) or drop hinges (SDH-001, SDH-P). When pushed to close, is designed to self-close and soft close. Used in pairs.
  3. Torque Calculation to Determine Hinge Type:  $0.5 \times \text{Door Height} \times \text{Door Weight}$ .
    - a. S-Type: Extra Heavy Duty: 121 to 156 lbs inch (140 to 180 kg cm) per pair.
  4. Material: Steel and Plastic (ABS). Weight: 11.29 oz (320 g).
  5. Finish: Body: White. Arm: Nickel.
  6. Height of Item Closed (Inside Cabinet): 11 inches (280 mm).
  7. Height of item Open (Body): 5.5 inches (139 mm).
  8. Side Spacing of Body (Inside Cabinet): 0.77 inches (19.5 mm).
  9. Fasteners: Included. Fastener Type: Self tapping screw.
- GG. Model HDS-20HL/Black. Heavy Duty Soft Down Stay (Left) by Sugatsune.
1. For Top-Opening Flap Door. Soft-Closing Function.
  2. To be used with piano, butt or concealed hinges.
  3. Use in pairs to hold door in fully opened position.
  4. Torque Calculation to Determine Hinge Type:  $0.5 \times \text{Door Height} \times \text{Door Weight}$ .
    - a. H-Type, Heavy Duty: 216 to 260 lbs.inch (250 to 300 kg.cm) per pair.
  5. Material: Steel and Plastic. Weight: 10.58 oz (300 g).
  6. Finish: Body: Black. Arm: Nickel.
  7. Length of Item Closed (Inside Box):
    - a. Concealed Hinge (Inset): 11.26 inches (286 mm).
    - b. Concealed Hinge (Overlay): 11.16 inches (283.5 mm).
    - c. Piano/Butt Hinge (Inset): 10.75 inches (273 mm).
    - d. Piano/Butt Hinge (Overlay): 11.06 inches (281 mm).
  8. Length or Depth of item Open (Body): 5.5 inches (139.5 mm).
  9. Side Spacing of Body (Inside Cabinet): 0.85 inches (21.5 mm).
  10. Fasteners: Included. Fastener Type: Screws.
- HH. Model HDS-20HL/White. Heavy Duty Soft Down Stay (Left) by Sugatsune.
1. For Top-Opening Flap Door. Soft-closing Function.
  2. To be used with piano, butt or concealed hinges.
  3. Used in pairs to hold door in fully opened position.
  4. Torque Calculation to Determine Hinge Type:  $0.5 \times \text{Door Height} \times \text{Door Weight}$ .
    - a. H-Type, Heavy Duty: 216 to 260 lbs.inch (250 to 300 kg.cm) per pair.
  5. Material: Steel and Plastic. Weight: 10.58 oz (300 g).
  6. Finish: Body: White. Arm: Nickel.
  7. Length of Item Closed (Inside Box):

- a. Concealed Hinge (Inset): 11.26 inches (286 mm).
  - b. Concealed Hinge (Overlay): 11.16 inches (283.5 mm).
  - c. Piano/Butt Hinge (Inset): 10.75 inches (273 mm).
  - d. Piano/Butt Hinge (Overlay): 11.06 inches (281 mm).
  - 8. Length or Depth of item Open (Body): 5.5 inches (139.5 mm).
  - 9. Side Spacing of Body (Inside Cabinet): 0.85 inches (21.5 mm).
  - 10. Fasteners: Included. Fastener Type: Screws.
- II. Model HDS-20HR/Black. Heavy Duty Soft Down Stay (Right) by Sugatsune.
- 1. For Top-Opening Flap Door. Soft-Closing Function.
  - 2. To be used with piano, butt or concealed hinges.
  - 3. Used in pairs to hold door in fully opened position.
  - 4. Torque Calculation to Determine Hinge Type: 0.5 x Door Height x Door Weight.
    - a. H-Type, Heavy Duty: 216 to 260 lbs.inch (250 to 300 kg.cm) per pair.
  - 5. Material: Steel and Plastic. Weight: 10.58 oz (300 g).
  - 6. Finish: Body: Black. Arm: Nickel.
  - 7. Length of Item Closed (Inside Box):
    - a. Concealed Hinge (Inset): 11.26 inches (286 mm).
    - b. Concealed Hinge (Overlay): 11.16 inches (283.5 mm).
    - c. Piano/Butt Hinge (Inset): 10.75 inches (273 mm).
    - d. Piano/Butt Hinge (Overlay): 11.06 inches (281 mm).
  - 8. Length or Depth of item Open (Body): 5.5 inches (139.5 mm).
  - 9. Side Spacing of Body (Inside Cabinet): 0.85 inches (21.5 mm).
  - 10. Fasteners: Included. Fastener Type: Screws.
- JJ. Model HDS-20HR/White. Heavy Duty Soft Down Stay (Right) by Sugatsune.
- 1. For Top-Opening Flap Door. Soft-Closing Function.
  - 2. Use with piano, butt or concealed hinges.
  - 3. Use in pairs to hold door in fully opened position.
  - 4. Torque Calculation to Determine Hinge Type: 0.5 x Door Height x Door Weight.
    - a. H-Type, Heavy Duty: 216 to 260 lbs.inch (250 to 300 kg.cm) per pair.
  - 5. Material: Steel and Plastic. Weight: 10.58 oz (300 g).
  - 6. Finish: Body: White. Arm: Nickel.
  - 7. Length of Item Closed (Inside Box):
    - a. Concealed Hinge (Inset): 11.26 inches (286 mm).
    - b. Concealed Hinge (Overlay): 11.16 inches (283.5 mm).
    - c. Piano/Butt Hinge (Inset): 10.75 inches (273 mm).
    - d. Piano/Butt Hinge (Overlay): 11.06 inches (281 mm).
  - 8. Length or Depth of item Open (Body): 5.5 inches (139.5 mm).
  - 9. Side Spacing of Body (Inside Cabinet): 0.85 inches (21.5 mm).
  - 10. Fasteners: Included. Fastener Type: Screws.
- KK. Model HDS-20KL/Black. Heavy Duty Soft Down Stay (Left) by Sugatsune.
- 1. For Top-Opening Flap Door. Soft-Closing Function.
  - 2. To be used with piano, butt or concealed hinges.
  - 3. Used in pairs to hold door in fully opened position.
  - 4. Torque Calculation to Determine Hinge Type: 0.5 x Door Height x Door Weight.
    - a. K-Type, Light Duty: 121 to 173 lbs.inch (140 to 200 kg.cm) per pair.
  - 5. Material: Steel and Plastic. Weight: 10.58 oz (300 g).
  - 6. Finish: Body: Black. Arm: Nickel.
  - 7. Length of Item Closed (Inside Box):
    - a. Concealed Hinge (Inset): 11.26 inches (286 mm).
    - b. Concealed Hinge (Overlay): 11.16 inches (283.5 mm).
    - c. Piano/Butt Hinge (Inset): 10.75 inches (273 mm).
    - d. Piano/Butt Hinge (Overlay): 11.06 inches (281 mm).
  - 8. Length or Depth of item Open (Body): 5.5 inches (139.5 mm).

9. Side Spacing of Body (Inside Cabinet): 0.85 inches (21.5 mm).
  10. Fasteners: Included. Fastener Type: Screws.
- LL. Model HDS-20KL/White. Heavy Duty Soft Down Stay (Left) by Sugatsune.
1. For Top-Opening Flap Door. Soft-Closing Function.
  2. to be used with piano, butt or concealed hinges.
  3. Used in pairs to hold door in fully opened position.
  4. Torque Calculation to Determine Hinge Type:  $0.5 \times \text{Door Height} \times \text{Door Weight}$ .
    - a. K-Type, Light Duty: 121 to 173 lbs.inch (140 to 200 kg.cm) per pair.
  5. Material: Steel and Plastic. Weight: 9.88 oz (280 g).
  6. Finish: Body: White. Arm: Nickel.
  7. Length of Item Closed (Inside Box):
    - a. Concealed Hinge (Inset): 11.26 inches (286 mm).
    - b. Concealed Hinge (Overlay): 11.16 inches (283.5 mm).
    - c. Piano/Butt Hinge (Inset): 10.75 inches (273 mm).
    - d. Piano/Butt Hinge (Overlay): 11.06 inches (281 mm).
  8. Length or Depth of item Open (Body): 5.5 inches (139.5 mm).
  9. Side Spacing of Body (Inside Cabinet): 0.85 inches (21.5 mm).
  10. Fasteners: Included. Fastener Type: Screws.
- MM. Model HDS-20KR/Black. Heavy Duty Soft Down Stay (Right) by Sugatsune.
1. For Top-Opening Flap Door. Soft-Closing Function.
  2. To be used with piano, butt or concealed hinges.
  3. Used in pairs to hold door in fully opened position.
  4. Torque Calculation to Determine Hinge Type:  $0.5 \times \text{Door Height} \times \text{Door Weight}$ .
    - a. K-Type, Light Duty: 121 to 173 lbs.inch (140 to 200 kg.cm) per pair.
  5. Material: Steel and Plastic. Weight: 9.88 oz (280 g).
  6. Finish: Body: Black. Arm: Nickel.
  7. Length of Item Closed (Inside Box):
    - a. Concealed Hinge (Inset): 11.26 inches (286 mm).
    - b. Concealed Hinge (Overlay): 11.16 inches (283.5 mm).
    - c. Piano/Butt Hinge (Inset): 10.75 inches (273 mm).
    - d. Piano/Butt Hinge (Overlay): 11.06 inches (281 mm).
  8. Length or Depth of item Open (Body): 5.5 inches (139.5 mm).
  9. Side Spacing of Body (Inside Cabinet): 0.85 inches (21.5 mm).
  10. Fasteners: Included. Fastener Type: Screws.
- NN. Model HDS-20KR/White. Heavy Duty Soft Down Stay (Right) by Sugatsune.
1. For Top-Opening Flap Door. Soft-Closing Function.
  2. To be used with piano, butt or concealed hinges.
  3. Used in pairs to hold door in fully opened position.
  4. Torque Calculation to Determine Hinge Type:  $0.5 \times \text{Door Height} \times \text{Door Weight}$ .
    - a. K-Type, Light Duty: 121 to 173 lbs.inch (140 to 200 kg.cm) per pair.
  5. Material: Steel and Plastic. Weight: 10.58 oz (300 g).
  6. Finish: Body: White. Arm: Nickel.
  7. Length of Item Closed (Inside Box):
    - a. Concealed Hinge (Inset): 11.26 inches (286 mm).
    - b. Concealed Hinge (Overlay): 11.16 inches (283.5 mm).
    - c. Piano/Butt Hinge (Inset): 10.75 inches (273 mm).
    - d. Piano/Butt Hinge (Overlay): 11.06 inches (281 mm).
  8. Length or Depth of item Open (Body): 5.5 inches (139.5 mm).
  9. Side Spacing of Body (Inside Cabinet): 0.85 inches (21.5 mm).
  10. Fasteners: Included. Fastener Type: Screws.
- OO. Model HDS-20ML/Black. Heavy Duty Soft Down Stay (Left) by Sugatsune.
1. For Top-Opening Flap Door. Soft-Closing Function.

2. To be used with piano, butt or concealed hinges.
3. Used in pairs to hold door in fully opened position.
4. Torque Calculation to Determine Hinge Type:  $0.5 \times \text{Door Height} \times \text{Door Weight}$ .
  - a. M-Type, Medium Duty: 173 to 216 lbs.inch (200 to 250 kg.cm) per pair.
5. Material: Steel and Plastic. Weight: 10.23 oz (290 g).
6. Finish: Body: Black. Arm: Nickel.
7. Length of Item Closed (Inside Box):
  - a. Concealed Hinge (Inset): 11.26 inches (286 mm).
  - b. Concealed Hinge (Overlay): 11.16 inches (283.5 mm).
  - c. Piano/Butt Hinge (Inset): 10.75 inches (273 mm).
  - d. Piano/Butt Hinge (Overlay): 11.06 inches (281 mm).
8. Length or Depth of item Open (Body): 5.5 inches (139.5 mm).
9. Side Spacing of Body (Inside Cabinet): 0.85 inches (21.5 mm).
10. Fasteners: Included. Fastener Type: Screws.

PP. Model HDS-20ML/White. Heavy Duty Soft Down Stay (Left) by Sugatsune.

1. For Top-Opening Flap Door. Soft-Closing Function.
2. To be used with piano, butt or concealed hinges.
3. Used in pairs to hold door in fully opened position.
4. Torque Calculation to Determine Hinge Type:  $0.5 \times \text{Door Height} \times \text{Door Weight}$ .
  - a. M-Type, Medium Duty: 173 to 216 lbs.inch (200 to 250 kg.cm) per pair.
5. Material: Steel and Plastic. Weight: 10.23 oz (290 g).
6. Finish: Body: White. Arm: Nickel.
7. Length of Item Closed (Inside Box):
  - a. Concealed Hinge (Inset): 11.26 inches (286 mm).
  - b. Concealed Hinge (Overlay): 11.16 inches (283.5 mm).
  - c. Piano/Butt Hinge (Inset): 10.75 inches (273 mm).
  - d. Piano/Butt Hinge (Overlay): 11.06 inches (281 mm).
8. Length or Depth of item Open (Body): 5.5 inches (139.5 mm).
9. Side Spacing of Body (Inside Cabinet): 0.85 inches (21.5 mm).
10. Fasteners: Included. Fastener Type: Screws.

QQ. Model HDS-20MR/Black. Heavy Duty Soft Down Stay (Right) by Sugatsune.

1. For Top-Opening Flap Door. Soft-Closing Function.
2. To be used with piano, butt or concealed hinges.
3. Used in pairs to hold door in fully opened position.
4. Torque Calculation to Determine Hinge Type:  $0.5 \times \text{Door Height} \times \text{Door Weight}$ .
  - a. M-Type, Medium Duty: 173 to 216 lbs.inch (200 to 250 kg.cm) per pair.
5. Material: Steel and Plastic. Weight: 10.23 oz (290 g).
6. Finish: Body: Black. Arm: Nickel.
7. Length of Item Closed (Inside Box):
  - a. Concealed Hinge (Inset): 11.26 inches (286 mm).
  - b. Concealed Hinge (Overlay): 11.16 inches (283.5 mm).
  - c. Piano/Butt Hinge (Inset): 10.75 inches (273 mm).
  - d. Piano/Butt Hinge (Overlay): 11.06 inches (281 mm).
8. Length or Depth of item Open (Body): 5.5 inches (139.5 mm).
9. Side Spacing of Body (Inside Cabinet): 0.85 inches (21.5 mm).
10. Fasteners: Included. Fastener Type: Screws.

RR. Model HDS-20MR/White. Heavy Duty Soft Down Stay (Right) by Sugatsune.

1. For Top-Opening Flap Door. Soft-Closing Function
2. To be used with piano, butt or concealed hinges.
3. Used in pairs to hold door in fully opened position.
4. Torque Calculation to Determine Hinge Type:  $0.5 \times \text{Door Height} \times \text{Door Weight}$ .
  - a. M-Type, Medium Duty: 173 to 216 lbs.inch (200 to 250 kg.cm) per pair.
5. Material: Steel and Plastic. Weight: 10.23 oz (290 g).

6. Finish: Body: Black. Arm: Nickel.
  7. Length of Item Closed (Inside Box):
    - a. Concealed Hinge (Inset): 11.26 inches (286 mm).
    - b. Concealed Hinge (Overlay): 11.16 inches (283.5 mm).
    - c. Piano/Butt Hinge (Inset): 10.75 inches (273 mm).
    - d. Piano/Butt Hinge (Overlay): 11.06 inches (281 mm).
  8. Length or Depth of item Open (Body): 5.5 inches (139.5 mm).
  9. Side Spacing of Body (Inside Cabinet): 0.85 inches (21.5 mm).
  10. Fasteners: Included. Fastener Type: Screws.
- SS. Model HDS-20S/HL-BL. Black Self-Opening Stay (Left) by Sugatsune.
1. For Top-Opening Flap Door. The lid will self-open past the free stop angle. Soft-Closing Function.
  2. To be used with piano, butt or concealed hinges.
  3. Used in pairs to hold door in fully opened position.
  4. Torque Calculation to Determine Hinge Type:  $0.5 \times \text{Door Height} \times \text{Door Weight}$ .
    - a. S-Type: 96 to 130 lbs.in (111 to 150 kg.cm) per pair.
  5. Material: Steel and Plastic. Weight: 10.58 oz (300 g).
  6. Finish: Body: Black. Arm: Nickel.
  7. Length of Item Closed (Inside Box):
    - a. Concealed Hinge (Inset): 11.26 inches (286 mm).
    - b. Concealed Hinge (Overlay): 11.16 inches (283.5 mm).
    - c. Piano/Butt Hinge (Inset): 10.75 inches (273 mm).
    - d. Piano/Butt Hinge (Overlay): 11.06 inches (281 mm).
  8. Length or Depth of item Open (Body): 5.5 inches (139.5 mm).
  9. Side Spacing of Body (Inside Cabinet): 0.85 inches (21.5 mm).
  10. Fasteners: Included. Fastener Type: Screws.
- TT. Model HDS-20S/HL-WT. White Self-Opening Stay (Left) by Sugatsune.
1. For Top-Opening Flap Door. The lid will self-open past the free stop angle. Soft-Closing Function.
  2. To be used with piano, butt or concealed hinges.
  3. Used in pairs to hold door in fully opened position.
  4. Torque Calculation to Determine Hinge Type:  $0.5 \times \text{Door Height} \times \text{Door Weight}$ .
    - a. S-Type: 96 to 130 lbs.in (111 to 150 kg.cm) per pair.
  5. Material: Steel and Plastic. Weight: 10.58 oz (300 g).
  6. Finish: Body: Black. Arm: Nickel.
  7. Length of Item Closed (Inside Box):
    - a. Concealed Hinge (Inset): 11.26 inches (286 mm).
    - b. Concealed Hinge (Overlay): 11.16 inches (283.5 mm).
    - c. Piano/Butt Hinge (Inset): 10.75 inches (273 mm).
    - d. Piano/Butt Hinge (Overlay): 11.06 inches (281 mm).
  8. Length or Depth of item Open (Body): 5.5 inches (139.5 mm).
  9. Side Spacing of Body (Inside Cabinet): 0.85 inches (21.5 mm).
  10. Fasteners: Included. Fastener Type: Screws.
- UU. Model HDS-20S/HR-BL. Black Self-Opening Stay (Left) by Sugatsune.
1. For Top-Opening Flap Door. The lid will self-open past the free stop angle. Soft-Closing Function.
  2. To be used with piano, butt or concealed hinges.
  3. Used in pairs to hold door in fully opened position.
  4. Torque Calculation to Determine Hinge Type:  $0.5 \times \text{Door Height} \times \text{Door Weight}$ .
    - a. H-Type: 61 to 95 lbs.in (70 to 110 kg.cm) per pair.
  5. Material: Steel and Plastic. Weight: 10.58 oz (300 g).
  6. Finish: Body: Black. Arm: Nickel.
  7. Length of Item Closed (Inside Box):

- a. Concealed Hinge (Inset): 11.26 inches (286 mm).
  - b. Concealed Hinge (Overlay): 11.16 inches (283.5 mm).
  - c. Piano/Butt Hinge (Inset): 10.75 inches (273 mm).
  - d. Piano/Butt Hinge (Overlay): 11.06 inches (281 mm).
  - 8. Length or Depth of item Open (Body): 5.5 inches (139.5 mm).
  - 9. Side Spacing of Body (Inside Cabinet): 0.85 inches (21.5 mm).
  - 10. Fasteners: Included. Fastener Type: Screws.
- VV. Model HDS-20S/HR-WT. White Self-Opening Stay (Right) by Sugatsune.
- 1. For Top-Opening Flap Door. The lid will self-open past the free stop angle. Soft-Closing Function.
  - 2. To be used with piano, butt or concealed hinges.
  - 3. Used in pairs to hold door in fully opened position.
  - 4. Torque Calculation to Determine Hinge Type:  $0.5 \times \text{Door Height} \times \text{Door Weight}$ .
    - a. H-Type: 61 to 95 lbs.in (70 to 110 kg.cm) per pair.
  - 5. Material: Steel and Plastic. Weight: 10.58 oz (300 g).
  - 6. Finish: Body: White. Arm: Nickel.
  - 7. Length of Item Closed (Inside Box):
    - a. Concealed Hinge (Inset): 11.26 inches (286 mm).
    - b. Concealed Hinge (Overlay): 11.16 inches (283.5 mm).
    - c. Piano/Butt Hinge (Inset): 10.75 inches (273 mm).
    - d. Piano/Butt Hinge (Overlay): 11.06 inches (281 mm).
  - 8. Length or Depth of item Open (Body): 5.5 inches (139.5 mm).
  - 9. Side Spacing of Body (Inside Cabinet): 0.85 inches (21.5 mm).
  - 10. Fasteners: Included. Fastener Type: Screws.
- WW. Model HDS-20S/SL-BL. Black Self-Opening Stay (Left) by Sugatsune.
- 1. For Top-Opening Flap Door. The lid will self-open past the free stop angle. Soft-Closing Function.
  - 2. To be used with piano, butt or concealed hinges.
  - 3. Used in pairs to hold door in fully opened position.
  - 4. Torque Calculation to Determine Hinge Type:  $0.5 \times \text{Door Height} \times \text{Door Weight}$ .
    - a. S-Type: 96 to 130 lbs.in (111 to 150 kg.cm) per pair.
  - 5. Material: Steel and Plastic. Weight: 10.58 oz (300 g).
  - 6. Finish: Body: Black. Arm: Nickel.
  - 7. Length of Item Closed (Inside Box):
    - a. Concealed Hinge (Inset): 11.26 inches (286 mm).
    - b. Concealed Hinge (Overlay): 11.16 inches (283.5 mm).
    - c. Piano/Butt Hinge (Inset): 10.75 inches (273 mm).
    - d. Piano/Butt Hinge (Overlay): 11.06 inches (281 mm).
  - 8. Length or Depth of item Open (Body): 5.5 inches (139.5 mm).
  - 9. Side Spacing of Body (Inside Cabinet): 0.85 inches (21.5 mm).
  - 10. Fasteners: Included. Fastener Type: Screws.
- XX. Model HDS-20S/SL-WT. White Self-Opening Stay (Left) by Sugatsune.
- 1. For Top-Opening Flap Door. The lid will self-open past the free stop angle. Soft-Closing Function.
  - 2. To be used with piano, butt or concealed hinges.
  - 3. Used in pairs to hold door in fully opened position.
  - 4. Torque Calculation to Determine Hinge Type:  $0.5 \times \text{Door Height} \times \text{Door Weight}$ .
    - a. S-Type: 96 to 130 lbs.in (111 to 150 kg.cm) per pair.
  - 5. Material: Steel and Plastic. Weight: 10.58 oz (300 g).
  - 6. Finish: Body: White. Arm: Nickel.
  - 7. Length of Item Closed (Inside Box):
    - a. Concealed Hinge (Inset): 11.26 inches (286 mm).
    - b. Concealed Hinge (Overlay): 11.16 inches (283.5 mm).

- c. Piano/Butt Hinge (Inset): 10.75 inches (273 mm).
  - d. Piano/Butt Hinge (Overlay): 11.06 inches (281 mm).
  - 8. Length or Depth of item Open (Body): 5.5 inches (139.5 mm).
  - 9. Side Spacing of Body (Inside Cabinet): 0.85 inches (21.5 mm).
  - 10. Fasteners: Included. Fastener Type: Screws.
- YY. Model HDS-20S/SR-BL. Black Self-Opening Stay (Right) by Sugatsune.
- 1. For Top-Opening Flap Door. The lid will self-open past the free stop angle. Soft-Closing Function.
  - 2. To be used with piano, butt or concealed hinges.
  - 3. Used in pairs to hold door in fully opened position.
  - 4. Torque Calculation to Determine Hinge Type: 0.5 x Door Height x Door Weight.
    - a. S-Type: 96 to 130 lbs.in (111 to 150 kg.cm) per pair.
  - 5. Material: Steel and Plastic. Weight: 10.58 oz (300 g).
  - 6. Finish: Body: Black. Arm: Nickel.
  - 7. Length of Item Closed (Inside Box):
    - a. Concealed Hinge (Inset): 11.26 inches (286 mm).
    - b. Concealed Hinge (Overlay): 11.16 inches (283.5 mm).
    - c. Piano/Butt Hinge (Inset): 10.75 inches (273 mm).
    - d. Piano/Butt Hinge (Overlay): 11.06 inches (281 mm).
  - 8. Length or Depth of item Open (Body): 5.5 inches (139.5 mm).
  - 9. Side Spacing of Body (Inside Cabinet): 0.85 inches (21.5 mm).
  - 10. Fasteners: Included. Fastener Type: Screws.
- ZZ. Model HDS-20S/SR-WT. White Self-Opening Stay (Right) by Sugatsune.
- 1. For Top-Opening Flap Door. The lid will self-open past the free stop angle. Soft-Closing Function.
  - 2. Used with piano, butt or concealed hinges.
  - 3. Used in pairs to hold door in fully opened position.
  - 4. Torque Calculation to Determine Hinge Type: 0.5 x Door Height x Door Weight.
    - a. S-Type: 96 to 130 lbs.in (111 to 150 kg.cm) per pair.
  - 5. Material: Steel and Plastic. Weight: 10.58 oz (300 g).
  - 6. Finish: Body: Black. Arm: Nickel.
  - 7. Length of Item Closed (Inside Box):
    - a. Concealed Hinge (Inset): 11.26 inches (286 mm).
    - b. Concealed Hinge (Overlay): 11.16 inches (283.5 mm).
    - c. Piano/Butt Hinge (Inset): 10.75 inches (273 mm).
    - d. Piano/Butt Hinge (Overlay): 11.06 inches (281 mm).
  - 8. Length or Depth of item Open (Body): 5.5 inches (139.5 mm).
  - 9. Side Spacing of Body (Inside Cabinet): 0.85 inches (21.5 mm).
  - 10. Fasteners: Included. Fastener Type: Screws.
- AAA. Model HDS-30HL/Black. Heavy Duty Soft Down Stay (Left) by Sugatsune.
- 1. For Top-Opening Flap Door. The lid will self-open past the free stop angle. Soft-Closing Function,
  - 2. Used with piano, butt or concealed hinges.
  - 3. Used in pairs to hold door in fully opened position.
  - 4. Torque Calculation to Determine Hinge Type: 0.5 x Door Height x Door Weight.
    - a. H-Type: 216 to 260 lbs.in (216 to 260 kg.cm) per pair,
  - 5. Material: Steel and Plastic. Weight: 10.58 oz (300 g).
  - 6. Finish: Body: Black. Arm: Nickel.
  - 7. Height of Item Closed (Inside Cabinet):
    - a. With a Piano/Butt Hinge: 11.71 inches (297.5 mm).
    - b. With a Concealed Hinge: 11.97 inches (304 mm).
  - 8. Height of item Open (Body): 5.5 inches (139.5 mm).
  - 9. Side Spacing of body (Inside Cabinet): 0.79 inches (20 mm).

10. Fasteners: Included. Fastener Type: Screws.
- BBB. Model HDS-30HL/White. Heavy Duty Soft Down Stay (Left) by Sugatsune.
1. For Upward-Opening Flap Door. Soft-Closing Function.
  2. To be used with piano, butt or concealed hinges.
  3. Used in pairs to securely latch a flap closed and hold it in the fully opened position.
  4. Torque Calculation to Determine Hinge Type:  $0.5 \times \text{Door Height} \times \text{Door Weight}$ .
    - a. H-Type, Heavy Duty: 216~260 lbs.inch (250~300 kg.cm) per pair.
  5. Material: Steel and Plastic. Weight: 10.58 oz (300 g).
  6. Finish: Body: White. Arm: Nickel.
  7. Height of Item Closed (Inside Cabinet):
    - a. With a Piano/Butt Hinge: 11.71 inches (297.5 mm).
    - b. With a Concealed Hinge: 11.97 inches (304 mm).
  8. Height of item Open (Body): 5.5 inches (139.5 mm).
  9. Side Spacing of body (Inside Cabinet): 0.79 inches (20 mm).
  10. Fasteners: Included. Fastener Type: Screws.
- CCC. Model HDS-30HL/WHT. Heavy Duty Soft Down Stay (Left) by Sugatsune.
1. For Upward-Opening Flap Door. Soft-Close Function.
  2. To be used with piano, butt or concealed hinges.
  3. Used in pairs to securely latch a flap closed and hold it in the fully opened position.
  4. Torque Calculation to Determine Hinge Type:  $0.5 \times \text{Door Height} \times \text{Door Weight}$ .
    - a. H-Type, Heavy Duty: 216~260 lbs.inch (250~300 kg.cm) per pair.
  5. Material: Steel and Plastic. Weight: 10.58 oz (300 g).
  6. Finish: Body: White. Arm: Nickel.
  7. Height of Item Closed (Inside Cabinet):
    - a. With a Piano/Butt Hinge: 11.71 inches (297.5 mm).
    - b. With a Concealed Hinge: 11.97 inches (304 mm).
  8. Height of item Open (Body): 5.5 inches (139.5 mm).
  9. Side Spacing of body (Inside Cabinet): 0.79 inches (20 mm).
  10. Fasteners: Included. Fastener Type: Screws.
- DDD. Model HDS-30HR/Black. Heavy Duty Soft Down Stay (Right) by Sugatsune.
1. For Upward-Opening Flap Door. Soft-Closing Function.
  2. To be used with piano, butt or concealed hinges.
  3. Used in pairs to securely latch a flap closed and hold it in the fully opened position.
  4. Torque Calculation to Determine Hinge Type:  $0.5 \times \text{Door Height} \times \text{Door Weight}$ .
    - a. H-Type, Heavy Duty: 216~260 lbs.inch (250~300 kg.cm) per pair.
  5. Material: Steel and Plastic. Weight: 10.58 oz (300 g).
  6. Finish: Body: Black. Arm: Nickel.
  7. Height of Item Closed (Inside Cabinet):
    - a. With a Piano/Butt Hinge: 11.71 inches (297.5 mm).
    - b. With a Concealed Hinge: 11.97 inches (304 mm).
  8. Height of item Open (Body): 5.5 inches (139.5 mm).
  9. Side Spacing of body (Inside Cabinet): 0.79 inches (20 mm).
  10. Fasteners: Included. Fastener Type: Screws.
- EEE. Model HDS-30HR/WHT. Heavy Duty Soft Down Stay (Right) by Sugatsune.
1. For Upward-Opening Flap Door. Soft Closing Function.
  2. Used with piano, butt or concealed hinges.
  3. Used in pairs to securely latch a flap closed and hold it in the fully opened position.
  4. Torque Calculation to Determine Hinge Type:  $0.5 \times \text{Door Height} \times \text{Door Weight}$ .
    - a. H-Type, Heavy Duty: 216~260 lbs.inch (250~300 kg.cm) per pair.
  5. Material: Steel and Plastic. Weight: 10.58 oz (300 g).
  6. Finish: Body: White. Arm: Nickel.
  7. Height of Item Closed (Inside Cabinet):



- a. With a Piano/Butt Hinge: 11.71 inches (297.5 mm).
- b. With a Concealed Hinge: 11.97 inches (304 mm).
- 8. Height of item Open (Body): 5.5 inches (139.5 mm).
- 9. Side Spacing of body (Inside Cabinet): 0.79 inches (20 mm).
- 10. Fasteners: Included. Fastener Type: Screws.

FFF. Model HDS-30KL/Black. Heavy Duty Soft Down Stay (Left) by Sugatsune.

- 1. For Upward-Opening Flap Door.
- 2. Used with piano, butt or concealed hinges.
- 3. Used in pairs to securely latch a flap closed and hold it in the fully opened position.
- 4. Torque Calculation to Determine Hinge Type: 0.5 x Door Height x Door Weight.
  - a. K-Type, Light Duty: 121 to 173 lbs.inch (140 to 200 kg.cm) per pair.
- 5. Material: Steel and Plastic. Weight: 9.52 oz (270 g).
- 6. Finish: Body: Black. Arm: Nickel.
- 7. Height of Item Closed (Inside Cabinet):
  - a. With a Piano/Butt Hinge: 11.71 inches (297.5 mm).
  - b. With a Concealed Hinge: 11.97 inches (304 mm).
- 8. Height of item Open (Body): 5.5 inches (139.5 mm).
- 9. Side Spacing of body (Inside Cabinet): 0.79 inches (20 mm).
- 10. Fasteners: Included. Fastener Type: Screws.

GGG. Model HDS-30KL/White. Heavy Duty Soft Down Stay (Left) by Sugatsune.

- 1. For Upward-Opening Flap Door Soft-Closing Function.
- 2. Used with piano, butt or concealed hinges.
- 3. Used in pairs to securely latch a flap closed and hold it in the fully opened position.
- 4. Torque Calculation to Determine Hinge Type: 0.5 x Door Height x Door Weight.
  - a. K-Type, Light Duty: 121~173 lbs.inch (140~200 kg.cm) per pair.
- 5. Material: Steel and Plastic. Weight: 9.52 oz (270 g).
- 6. Finish: Body: White. Arm: Nickel.
- 7. Height of Item Closed (Inside Cabinet):
  - a. With a Piano/Butt Hinge: 11.71 inches (297.5 mm).
  - b. With a Concealed Hinge: 11.97 inches (304 mm).
- 8. Height of item Open (Body): 5.5 inches (139.5 mm).
- 9. Side Spacing of body (Inside Cabinet): 0.79 inches (20 mm).
- 10. Fasteners: Included. Fastener Type: Screws.

HHH. Model HDS-30KR/Black. Heavy Duty Soft Down Stay (Right) by Sugatsune.

- 1. For Upward-Opening Flap Door. Soft Closing Function.
- 2. Used with piano, butt or concealed hinges.
- 3. Used in pairs to securely latch a flap closed and hold it in the fully opened position.
- 4. Torque Calculation to Determine Hinge Type: 0.5 x Door Height x Door Weight.
  - a. K-Type, Light Duty: 121~173 lbs.inch (140~200 kg.cm) per pair.
- 5. Material: Steel and Plastic. Weight: 9.52 oz (270 g).
- 6. Finish: Body: Black. Arm: Nickel.
- 7. Height of Item Closed (Inside Cabinet):
  - a. With a Piano/Butt Hinge: 11.71 inches (297.5 mm).
  - b. With a Concealed Hinge: 11.97 inches (304 mm).
- 8. Height of item Open (Body): 5.5 inches (139.5 mm).
- 9. Side Spacing of body (Inside Cabinet): 0.79 inches (20 mm).
- 10. Fasteners: Included. Fastener Type: Screws.

III. Model HDS-30KR/WHT. Heavy Duty Soft Down Stay (Right) by Sugatsune.

- 1. For Upward-Opening Flap Door. Soft Closing Function.
- 2. Used with piano, butt or concealed hinges.
- 3. Used in pairs to securely latch a flap closed and hold it in the fully opened position.
- 4. Torque Calculation to Determine Hinge Type: 0.5 x Door Height x Door Weight.

- a. K-Type, Light Duty: 121~173 lbs.inch (140~200 kg.cm) per pair.
  - 5. Material: Steel and Plastic. Weight: 9.52 oz (270 g).
  - 6. Finish: Body: White. Arm: Nickel.
  - 7. Height of Item Closed (Inside Cabinet):
    - a. With a Piano/Butt Hinge: 11.71 inches (297.5 mm).
    - b. With a Concealed Hinge: 11.97 inches (304 mm).
  - 8. Height of item Open (Body): 5.5 inches (139.5 mm).
  - 9. Side Spacing of body (Inside Cabinet): 0.79 inches (20 mm).
  - 10. Fasteners: Included. Fastener Type: Screws.
- JJJ. Model HDS-30ML/Black. Heavy Duty Soft Down Stay (Left) by Sugatsune.
- 1. For Upward-Opening Flap Door. Soft Closing Function.
  - 2. Used with piano, butt or concealed hinges.
  - 3. Used in pairs to securely latch a flap closed and hold it in the fully opened position.
  - 4. Torque Calculation to Determine Hinge Type: 0.5 x Door Height x Door Weight.
    - a. M-Type, Medium Duty: 173~216 lbs.inch (200~250 kg.cm) per pair.
  - 5. Material: Steel and Plastic. Weight: 10.23 oz (290 g).
  - 6. Finish: Body: Black. Arm: Nickel.
  - 7. Height of Item Closed (Inside Cabinet):
    - a. With a Piano/Butt Hinge: 11.71 inches (297.5 mm).
    - b. With a Concealed Hinge: 11.97 inches (304 mm).
  - 8. Height of item Open (Body): 5.5 inches (139.5 mm).
  - 9. Side Spacing of body (Inside Cabinet): 0.79 inches (20 mm).
  - 10. Fasteners: Included. Fastener Type: Screws.
- KKK. Model HDS-30ML/WHT. Heavy Duty Soft Down Stay (Left) by Sugatsune.
- 1. For Upward-Opening Flap Door. Soft Closing Function.
  - 2. Used with piano, butt or concealed hinges.
  - 3. Used in pairs to securely latch a flap closed and hold it in the fully opened position.
  - 4. Torque Calculation to Determine Hinge Type: 0.5 x Door Height x Door Weight.
    - a. M-Type, Medium Duty: 173 to 216 lbs.inch (200 to 250 kg.cm) per pair.
  - 5. Material: Steel and Plastic. Weight: 10.23 oz (290 g).
  - 6. Finish: Body: White. Arm: Nickel.
  - 7. Height of Item Closed (Inside Cabinet):
    - a. With a Piano/Butt Hinge: 11.71 inches (297.5 mm).
    - b. With a Concealed Hinge: 11.97 inches (304 mm).
  - 8. Height of item Open (Body): 5.5 inches (139.5 mm).
  - 9. Side Spacing of body (Inside Cabinet): 0.79 inches (20 mm).
  - 10. Fasteners: Included. Fastener Type: Screws.
- LLL. Model HDS-30MR/Black. Heavy Duty Soft Down Stay (Right) by Sugatsune.
- 1. For Upward-Opening Flap Door. Soft Closing Function.
  - 2. Used with piano, butt or concealed hinges.
  - 3. Used in pairs to securely latch a flap closed and hold it in the fully opened position.
  - 4. Torque Calculation to Determine Hinge Type: 0.5 x Door Height x Door Weight.
    - a. M-Type, Medium Duty: 173 to 216 lbs.inch (200 to 250 kg.cm) per pair.
  - 5. Material: Steel and Plastic. Weight: 10.23 oz (290 g).
  - 6. Finish: Body: Black. Arm: Nickel.
  - 7. Height of Item Closed (Inside Cabinet):
    - a. With a Piano/Butt Hinge: 11.71 inches (297.5 mm).
    - b. With a Concealed Hinge: 11.97 inches (304 mm).
  - 8. Height of item Open (Body): 5.5 inches (139.5 mm).
  - 9. Side Spacing of body (Inside Cabinet): 0.79 inches (20 mm).
  - 10. Fasteners: Included. Fastener Type: Screws.
- MMM. Model HDS-30MR/WHT. Heavy Duty Soft Down Stay (Right) by Sugatsune.

1. For Upward-Opening Flap Door. Soft Closing Function.
2. Used with piano, butt or concealed hinges.
3. Used in pairs to securely latch a flap closed and hold it in the fully opened position.
4. Torque Calculation to Determine Hinge Type:  $0.5 \times \text{Door Height} \times \text{Door Weight}$ .
  - a. M-Type, Medium Duty: 173 to 216 lbs.inch (200 to 250 kg.cm) per pair.
5. Material: Steel and Plastic. Weight: 10.23 oz (290 g).
6. Finish: Body: White. Arm: Nickel.
7. Height of Item Closed (Inside Cabinet):
  - a. With a Piano/Butt Hinge: 11.71 inches (297.5 mm).
  - b. With a Concealed Hinge: 11.97 inches (304 mm).
8. Height of item Open (Body): 5.5 inches (139.5 mm).
9. Side Spacing of body (Inside Cabinet): 0.79 inches (20 mm).
10. Fasteners: Included. Fastener Type: Screws.

NNN. Model IF-360S-14. Inset Receding Flipper Door Mechanism with Soft-Close by Sugatsune.

1. For upward-opening flap doors. Soft-close prevents slamming.
2. Soft-Closing Speed: Adjustable.
3. Flap door retracts inside cabinet, allowing other cabinets to be installed on top.
4. Cycles: 30,000 open/close for the NSDX soft-down stay.
5. Operating Temperature: 32 to 104 degrees F (0 to 40 degrees C).
6. Material: Steel, Zinc Alloy. Weight: 61.59 oz (1746 g).
7. Includes: NSDX-35 (L) Lid Stay, 2 360C-26/19T hinges, 2 360-P4W-32T mounting plates, 2 mounting brackets and 2 AL-78 Slides.
8. Slide Length or Depth of Item Closed: 14 inches (355.6 mm).
9. Slide Side Spacing: 0.37 inches (9.5 mm).
10. Torque Moment: 17 to 60 lbs.in (20 to 70 kg.cm).
11. Max Door Weight: 3.1 to 5.5 lbs (1.4 to 2.5 kg).
12. Max Door Width: 23.62 inches (600 mm).
13. Door Thickness: 0.59 to 0.79 inches (15 to 20 mm).
14. Fasteners: Included.
15. Fastener Type: Pan Head Screw With Captive Washer - M4 X 6 mm.
16. Fastener Type: Truss Head Screw - M4 X 5 mm.
17. Fastener Type: Bind Head Tapping Screw - M3.5 X 16 mm.
18. Fastener Type: Raised Countersunk Head Tapping Screw - M3.5 X 16 mm.

OOO. Model IF-360S-16. Inset Receding Flipper Door Mechanism with Soft-Close by Sugatsune.

1. For upward-opening flap doors. Soft-close prevents slamming.
2. Soft-Closing Speed: Adjustable.
3. Flap door retracts inside cabinet, allowing other cabinets to be installed on top.
4. Cycles: 30,000 open/close for the NSDX soft-down stay.
5. Operating Temperature: 32 to 104 degrees F (0 to 40 degrees C).
6. Material: Steel, Zinc Alloy. Weight: 63.99 oz (1814 g).
7. Includes: NSDX-35 (L) Lid Stay, 2 360C-26/19T hinges, 2 360-P4W-32T mounting plates, 2 mounting brackets and 2 AL-78 Slides.
8. Slide Length or Depth of Item Closed: 16 inches (406.4 mm).
9. Slide Side Spacing: 0.37 inches (9.5 mm).
10. Torque Moment: 17 to 60 lbs.in (20 to 70 kg.cm).
11. Max Door Weight: 3.1 to 5.5 lbs (1.4 to 2.5 kg).
12. Max Door Width: 23.62 inches (600 mm).
13. Door Thickness: 0.59 to 0.79 inches (15 to 20 mm).
14. Fasteners: Included.
15. Fastener Type: Pan Head Screw With Captive Washer - M4 X 6 mm.
16. Fastener Type: Truss Head Screw - M4 X 5 mm.
17. Fastener Type: Bind Head Tapping Screw - M3.5 X 16 mm.
18. Fastener Type: Raised Countersunk Head Tapping Screw - M3.5 X 16 mm.

PPP. Model IF-360S-19. Inset Receding Flipper Door Mechanism with Soft-Close by Sugatsune.

1. For upward-opening flap doors. Soft-close prevents slamming.
2. Soft-Closing Speed: Adjustable.
3. Flap door retracts inside cabinet, allowing other cabinets to be installed on top.
4. Cycles: 30,000 open/close for the NSDX soft-down stay.
5. Operating Temperature: 32 to 104 degrees F (0 to 40 degrees C).
6. Material: Steel, Zinc Alloy. Weight: 67.44 oz (1912 g).
7. Includes: NSDX-35 (L) Lid Stay, 2 360C-26/19T hinges, 2 360-P4W-32T mounting plates, 2 mounting brackets and 2 AL-78 Slides.
8. Slide Length or Depth of Item Closed: 19 inches (482.6 mm).
9. Slide Side Spacing: 0.37 inches (9.5 mm).
10. Torque Moment: 17 to 60 lbs.in (20 to 70 kg.cm).
11. Max Door Weight: 3.1 to 5.5 lbs (1.4 to 2.5 kg).
12. Max Door Width: 23.62 inches (600 mm).
13. Door Thickness: 0.59 to 0.79 inches (15 to 20 mm).
14. Fasteners: Included.
15. Fastener Type: Pan Head Screw With Captive Washer - M4 X 6 mm.
16. Fastener Type: Truss Head Screw - M4 X 5 mm.
17. Fastener Type: Bind Head Tapping Screw - M3.5 X 16 mm.
18. Fastener Type: Raised Countersunk Head Tapping Screw - M3.5 X 16 mm.

QQQ. Model IF-360S-24. Inset Receding Flipper Door Mechanism with Soft-Close by Sugatsune.

1. For upward-opening flap doors. Soft-close prevents slamming.
2. Soft-Closing Speed: Adjustable.
3. Flap door retracts inside cabinet, allowing other cabinets to be installed on top.
4. Cycles: 30,000 open/close for the NSDX soft-down stay.
5. Operating Temperature: 32 to 104 degrees F (0 to 40 degrees C).
6. Material: Steel, Zinc Alloy. Weight: 0 oz (0 g).
7. Includes: NSDX-35 (L) Lid Stay, 2 360C-26/19T hinges, 2 360-P4W-32T mounting plates, 2 mounting brackets and 2 AL-78 Slides.
8. Slide Length or Depth of Item Closed: 24 inches (609.6 mm).
9. Slide Side Spacing: 0.37 inches (9.5 mm).
10. Torque Moment: 17 to 60 lbs.in (20 to 70 kg.cm).
11. Max Door Weight: 3.1 to 5.5 lbs (1.4 to 2.5 kg).
12. Max Door Width: 23.62 inches (600 mm).
13. Door Thickness: 0.59 to 0.79 inches (15 to 20 mm).
14. Fasteners: Included.
15. Fastener Type: Pan Head Screw With Captive Washer - M4 X 6 mm.
16. Fastener Type: Truss Head Screw - M4 X 5 mm.
17. Fastener Type: Bind Head Tapping Screw - M3.5 X 16 mm.
18. Fastener Type: Raised Countersunk Head Tapping Screw - M3.5 X 16 mm.

RRR. Model IF-360W-14. Inset Receding Flipper Door Mechanism with Soft-Close by Sugatsune.

1. For upward-opening flap doors. Soft-close prevents slamming.
2. Soft-Closing Speed: Adjustable.
3. Flap door retracts inside cabinet, allowing other cabinets to be installed on top.
4. Cycles: 30,000 open/close for the NSDX soft-down stay.
5. Operating Temperature: 32 to 104 degrees F (0 to 40 degrees C).
6. Material: Steel, Zinc Alloy. Weight: 68.5 oz (1942 g).
7. Includes: 2 NSDX-35 (L&R) Lid Stay, 2 360C-26/19T hinges, 2 360-P4W-32T mounting plates, 2 mounting brackets and 2 AL-78 Slides.
8. Slide Length or Depth of Item Closed: 14 inches (355.6 mm).
9. Slide Side Spacing: 0.37 inches (9.5 mm).
10. Torque Moment: 34 to 121 lbs.in (40 to 140 kg.cm).
11. Max Door Weight: 5.9 to 11 lbs (2.7 to 5 kg).

12. Max Door Width: 47.24 inches (1200 mm).
  13. Door Thickness: 0.59 to 0.79 inches (15 to 20 mm).
  14. Fasteners: Included.
  15. Fastener Type: Pan Head Screw With Captive Washer - M4 X 6 mm.
  16. Fastener Type: Truss Head Screw - M4 X 5 mm.
  17. Fastener Type: Bind Head Tapping Screw - M3.5 X 16 mm.
  18. Fastener Type: Raised Countersunk Head Tapping Screw - M3.5 X 16 mm.
- SSS. Model IF-360W-16. Inset Receding Flipper Door Mechanism with Soft-Close by Sugatsune.
1. For upward-opening flap doors. Soft-close prevents slamming.
  2. Soft-Closing Speed: Adjustable.
  3. Flap door retracts inside cabinet, allowing other cabinets to be installed on top.
  4. Cycles: 30,000 open/close for the NSDX soft-down stay.
  5. Operating Temperature: 32 to 104 degrees F (0 to 40 degrees C).
  6. Material: Steel, Zinc Alloy. Weight: 70.9 oz (2010 g).
  7. Includes: 2 NSDX-35 (L&R) Lid Stay, 2 360C-26/19T hinges, 2 360-P4W-32T mounting plates, 2 mounting brackets and 2 AL-78 Slides.
  8. Slide Length or Depth of Item Closed: 16 inches (406.4 mm).
  9. Slide Side Spacing: 0.37 inches (9.5 mm).
  10. Torque Moment: 34 to 121 lbs.in (40 to 140 kg.cm).
  11. Max Door Weight: 5.9 to 11 lbs (2.7 to 5 kg).
  12. Max Door Width: 47.24 inches (1200 mm).
  13. Door Thickness: 0.59 to 0.79 inches (15 to 20 mm).
  14. Fasteners: Included.
  15. Fastener Type: Pan Head Screw With Captive Washer - M4 X 6 mm.
  16. Fastener Type: Truss Head Screw - M4 X 5 mm.
  17. Fastener Type: Bind Head Tapping Screw - M3.5 X 16 mm.
  18. Fastener Type: Raised Countersunk Head Tapping Screw - M3.5 X 16 mm.
- TTT. Model IF-360W-19. Inset Receding Flipper Door Mechanism with Soft-Close by Sugatsune.
1. For upward-opening flap doors. Soft-close prevents slamming.
  2. Soft-Closing Speed: Adjustable.
  3. Flap door retracts inside cabinet, allowing other cabinets to be installed on top.
  4. Cycles: 30,000 open/close for the NSDX soft-down stay.
  5. Operating Temperature: 32 to 104 degrees F (0 to 40 degrees C).
  6. Material: Steel, Zinc Alloy. Weight: 74.36 oz (2108 g).
  7. Includes: 2 NSDX-35 (L&R) Lid Stay, 2 360C-26/19T hinges, 2 360-P4W-32T mounting plates, 2 mounting brackets and 2 AL-78 Slides.
  8. Slide Length or Depth of Item Closed: 19 inches (482.6 mm).
  9. Slide Side Spacing: 0.37 inches (9.5 mm).
  10. Torque Moment: 34 to 121 lbs.in (40 to 140 kg.cm).
  11. Max Door Weight: 5.9 to 11 lbs (2.7 to 5 kg).
  12. Max Door Width: 47.24 inches (1200 mm).
  13. Door Thickness: 0.59 to 0.79 inches (15 to 20 mm).
  14. Fasteners: Included.
  15. Fastener Type: Pan Head Screw With Captive Washer - M4 X 6 mm.
  16. Fastener Type: Truss Head Screw - M4 X 5 mm.
  17. Fastener Type: Bind Head Tapping Screw - M3.5 X 16 mm.
  18. Fastener Type: Raised Countersunk Head Tapping Screw - M3.5 X 16 mm.
- UUU. Model IF-360W-24. Inset Receding Flipper Door Mechanism with Soft-Close by Sugatsune.
1. For upward-opening flap doors. Soft-close prevents slamming.
  2. Soft-Closing Speed: Adjustable.
  3. Flap door retracts inside cabinet, allowing other cabinets to be installed on top.
  4. Cycles: 30,000 open/close for the NSDX soft-down stay.
  5. Operating Temperature: 32 to 104 degrees F (0 to 40 degrees C).

6. Material: Steel, Zinc Alloy. Weight: 80.92 oz (2294 g).
7. Includes: 2 NSDX-35 (L&R) Lid Stay, 2 360C-26/19T hinges, 2 360-P4W-32T mounting plates, 2 mounting brackets and 2 AL-78 Slides.
8. Slide Length or Depth of Item Closed: 24 inches (609.6 mm).
9. Slide Side Spacing: 0.37 inches (9.5 mm).
10. Torque Moment: 34 to 121 lbs.in (40 to 140 kg.cm).
11. Max Door Weight: 5.9 to 11 lbs (2.7 to 5 kg).
12. Max Door Width: 47.24 inches (1200 mm).
13. Door Thickness: 0.59 to 0.79 inches (15 to 20 mm).
14. Fasteners: Included.
15. Fastener Type: Pan Head Screw With Captive Washer - M4 X 6 mm.
16. Fastener Type: Truss Head Screw - M4 X 5 mm.
17. Fastener Type: Bind Head Tapping Screw - M3.5 X 16 mm.
18. Fastener Type: Raised Countersunk Head Tapping Screw - M3.5 X 16 mm.

VVV. Model IF-H360S-14. Inset Receding Flipper Door Mechanism with Soft-Close for thick doors by Sugatsune.

1. For upward-opening flap doors. Soft-close prevents slamming.
2. Soft-Closing Speed: Adjustable.
3. Flap door retracts inside cabinet, allowing other cabinets to be installed on top.
4. Cycles: 30,000 open/close for the NSDX soft-down stay.
5. Operating Temperature: 32 to 104 degrees F (0 to 40 degrees C).
6. Material: Steel, Zinc Alloy. Weight: 67.73 oz (1920 g).
7. Includes: NSDX-35 (L) Lid Stay, 2 360C-26/19T hinges, 2 360-P4W-32T mounting plates, 2 mounting brackets and 2 AL-78 Slides.
8. Slide Length or Depth of Item Closed: 14 inches (355.6 mm).
9. Slide Side Spacing: 0.37 inches (9.5 mm).
10. Torque Moment: 17 to 60 lbs.in (20 to 70 kg.cm).
11. Max Door Weight: 3.1 to 5.5 lbs (1.4 to 2.5 kg).
12. Max Door Width: 23.62 inches (600 mm).
13. Door Thickness: 0.71 to 1.18 inches (18 to 30 mm).
14. Fasteners: Included.
15. Fastener Type: Pan Head Screw With Captive Washer - M4 X 6 mm.
16. Fastener Type: Truss Head Screw - M4 X 5 mm.
17. Fastener Type: Bind Head Tapping Screw - M3.5 X 16 mm.
18. Fastener Type: Raised Countersunk Head Tapping Screw - M3.5 X 16 mm.

WWW. Model IF-H360S-16. Inset Receding Flipper Door Mechanism with Soft-Close by Sugatsune.

1. For upward-opening flap doors. Soft-close prevents slamming.
2. Soft-Closing Speed: Adjustable.
3. Flap door retracts inside cabinet, allowing other cabinets to be installed on top.
4. Cycles: 30,000 open/close for the NSDX soft-down stay.
5. Operating Temperature: 32 to 104 degrees F (0 to 40 degrees C).
6. Material: Steel, Zinc Alloy. Weight: 70.2 oz (1990 g).
7. Includes: NSDX-35 (L) Lid Stay, 2 360C-26/19T hinges, 2 360-P4W-32T mounting plates, 2 mounting brackets and 2 AL-78 Slides.
8. Slide Length or Depth of Item Closed: 16 inches (406.4 mm).
9. Slide Side Spacing: 0.37 inches (9.5 mm).
10. Torque Moment: 17 to 60 lbs.in (20 to 70 kg.cm).
11. Max Door Weight: 3.1 to 5.5 lbs (1.4 to 2.5 kg).
12. Max Door Width: 23.62 inches (600 mm).
13. Door Thickness: 0.71 to 1.18 inches (18 to 30 mm).
14. Fasteners: Included.
15. Fastener Type: Pan Head Screw With Captive Washer - M4 X 6 mm.
16. Fastener Type: Truss Head Screw - M4 X 5 mm.

- 17. Fastener Type: Bind Head Tapping Screw - M3.5 X 16 mm.
  - 18. Fastener Type: Raised Countersunk Head Tapping Screw - M3.5 X 16 mm.
- XXX. Model IF-H360S-19. Inset Receding Flipper Door Mechanism with Soft-Close by Sugatsune.
- 1. For upward-opening flap doors. Soft-close prevents slamming.
  - 2. Soft-Closing Speed: Adjustable.
  - 3. Flap door retracts inside cabinet, allowing other cabinets to be installed on top.
  - 4. Cycles: 30,000 open/close for the NSDX soft-down stay.
  - 5. Operating Temperature: 32 to 104 degrees F (0 to 40 degrees C).
  - 6. Material: Steel, Zinc Alloy. Weight: 73.72 oz (2090 g).
  - 7. Includes: NSDX-35 (L) Lid Stay, 2 360C-26/19T hinges, 2 360-P4W-32T mounting plates, 2 mounting brackets and 2 AL-78 Slides.
  - 8. Slide Length or Depth of Item Closed: 19 inches (482.6 mm).
  - 9. Slide Side Spacing: 0.37 inches (9.5 mm).
  - 10. Torque Moment: 17 to 60 lbs.in (20 to 70 kg.cm).
  - 11. Max Door Weight: 3.1 to 5.5 lbs (1.4 to 2.5 kg).
  - 12. Max Door Width: 23.62 inches (600 mm).
  - 13. Door Thickness: 0.71 to 1.18 inches (18 to 30 mm).
  - 14. Fasteners: Included.
  - 15. Fastener Type: Pan Head Screw With Captive Washer - M4 X 6 mm.
  - 16. Fastener Type: Truss Head Screw - M4 X 5 mm.
  - 17. Fastener Type: Bind Head Tapping Screw - M3.5 X 16 mm.
  - 18. Fastener Type: Raised Countersunk Head Tapping Screw - M3.5 X 16 mm.
- YYY. Model IF-H360S-24. Inset Receding Flipper Door Mechanism with Soft-Close by Sugatsune.
- 1. For upward-opening flap doors. Soft-close prevents slamming.
  - 2. Soft-Closing Speed: Adjustable.
  - 3. Flap door retracts inside cabinet, allowing other cabinets to be installed on top.
  - 4. Cycles: 30,000 open/close for the NSDX soft-down stay.
  - 5. Operating Temperature: 32 to 104 degrees F (0 to 40 degrees C).
  - 6. Material: Steel, Zinc Alloy. Weight: 80.07 oz (2270 g).
  - 7. Includes: NSDX-35 (L) Lid Stay, 2 360C-26/19T hinges, 2 360-P4W-32T mounting plates, 2 mounting brackets and 2 AL-78 Slides.
  - 8. Slide Length or Depth of Item Closed: 24 inches (609.6 mm).
  - 9. Slide Side Spacing: 0.37 inches (9.5 mm).
  - 10. Torque Moment: 17 to 60 lbs.in (20 to 70 kg.cm).
  - 11. Max Door Weight: 3.1 to 5.5 lbs (1.4 to 2.5 kg).
  - 12. Max Door Width: 23.62 inches (600 mm).
  - 13. Door Thickness: 0.71 to 1.18 inches (18 to 30 mm).
  - 14. Fasteners: Included.
  - 15. Fastener Type: Pan Head Screw With Captive Washer - M4 X 6 mm.
  - 16. Fastener Type: Truss Head Screw - M4 X 5 mm.
  - 17. Fastener Type: Bind Head Tapping Screw - M3.5 X 16 mm.
  - 18. Fastener Type: Raised Countersunk Head Tapping Screw - M3.5 X 16 mm.
- ZZZ. Model IF-H360W-14. Inset Receding Flipper Door Mechanism with Soft-Close by Sugatsune.
- 1. For upward-opening flap doors. Soft-close prevents slamming.
  - 2. Soft-Closing Speed: Adjustable.
  - 3. Flap door retracts inside cabinet, allowing other cabinets to be installed on top.
  - 4. Cycles: 30,000 open/close for the NSDX soft-down stay.
  - 5. Operating Temperature: 32 to 104 degrees F (0 to 40 degrees C).
  - 6. Material: Steel, Zinc Alloy. Weight: 75.13 oz (2130 g).
  - 7. Includes: 2 NSDX-35 (L&R) Lid Stay, 2 360C-26/19T hinges, 2 360-P4W-32T mounting plates, 2 mounting brackets and 2 AL-78 Slides.
  - 8. Slide Length or Depth of Item Closed: 14 inches (355.6 mm).

9. Slide Side Spacing: 0.37 inches (9.5 mm).
10. Torque Moment: 34 to 121 lbs.in (40 to 140 kg.cm).
11. Max Door Weight: 5.9 to 11 lbs (2.7 to 5 kg).
12. Max Door Width: 47.24 inches (1200 mm).
13. Door Thickness: 0.71 to 1.18 inches (18 to 30 mm).
14. Fasteners: Included.
15. Fastener Type: Pan Head Screw With Captive Washer - M4 X 6 mm.
16. Fastener Type: Truss Head Screw - M4 X 5 mm.
17. Fastener Type: Bind Head Tapping Screw - M3.5 X 16 mm.
18. Fastener Type: Raised Countersunk Head Tapping Screw - M3.5 X 16 mm.

AAAA. Model IF-H360W-16. Patented Lapcon mechanism controls door opening and closing softly and smoothly by Sugatsune.

1. For upward-opening flap doors. Soft-close prevents slamming.
2. Soft-Closing Speed: Adjustable.
3. Flap door retracts inside cabinet, allowing other cabinets to be installed on top.
4. Cycles: 30,000 open/close for the NSDX soft-down stay.
5. Operating Temperature: 32 to 104 degrees F (0 to 40 degrees C).
6. Material: Steel, Zinc Alloy. Weight: 77.25 oz (2190 g).
7. Includes: 2 NSDX-35 (L&R) Lid Stay, 2 360C-26/19T hinges, 2 360-P4W-32T mounting plates, 2 mounting brackets and 2 AL-78 Slides.
8. Slide Length or Depth of Item Closed: 16 inches (406.4 mm).
9. Slide Side Spacing: 0.37 inches (9.5 mm).
10. Torque Moment: 34 to 121 lbs.in (40 to 140 kg.cm).
11. Max Door Weight: 5.9 to 11 lbs (2.7 to 5 kg).
12. Max Door Width: 47.24 inches (1200 mm).
13. Door Thickness: 0.71 to 1.18 inches (18 to 30 mm).
14. Fasteners: Included.
15. Fastener Type: Pan Head Screw With Captive Washer - M4 X 6 mm.
16. Fastener Type: Truss Head Screw - M4 X 5 mm.
17. Fastener Type: Bind Head Tapping Screw - M3.5 X 16 mm.
18. Fastener Type: Raised Countersunk Head Tapping Screw - M3.5 X 16 mm.

BBBB. Model IF-H360W-19. Inset Receding Flipper Door Mechanism with Soft-Close by Sugatsune.

1. For upward-opening flap doors. Soft-close prevents slamming.
2. Soft-Closing Speed: Adjustable.
3. Flap door retracts inside cabinet, allowing other cabinets to be installed on top.
4. Cycles: 30,000 open/close for the NSDX soft-down stay.
5. Operating Temperature: 32 to 104 degrees F (0 to 40 degrees C).
6. Material: Steel, Zinc Alloy. Weight: 80.42 oz (2280 g).
7. Includes: 2 NSDX-35 (L&R) Lid Stay, 2 360C-26/19T hinges, 2 360-P4W-32T mounting plates, 2 mounting brackets and 2 AL-78 Slides.
8. Slide Length or Depth of Item Closed: 19 inches (482.6 mm).
9. Slide Side Spacing: 0.37 inches (9.5 mm).
10. Torque Moment: 34 to 121 lbs.in (40 to 140 kg.cm).
11. Max Door Weight: 5.9 to 11 lbs (2.7 to 5 kg).
12. Max Door Width: 47.24 inches (1200 mm).
13. Door Thickness: 0.71 to 1.18 inches (18 to 30 mm).
14. Fasteners: Included.
15. Fastener Type: Pan Head Screw With Captive Washer - M4 X 6 mm.
16. Fastener Type: Truss Head Screw - M4 X 5 mm.
17. Fastener Type: Bind Head Tapping Screw - M3.5 X 16 mm.
18. Fastener Type: Raised Countersunk Head Tapping Screw - M3.5 X 16 mm.

CCCC. Model IF-H360W-24. Inset Receding Flipper Door Mechanism with Soft-Close by



Sugatsune.

1. For upward-opening flap doors. Soft-close prevents slamming.
2. Soft-Closing Speed: Adjustable.
3. Flap door retracts inside cabinet, allowing other cabinets to be installed on top.
4. Cycles: 30,000 open/close for the NSDX soft-down stay.
5. Operating Temperature: 32 to 104 degrees F (0 to 40 degrees C).
6. Material: Steel, Zinc Alloy. Weight: 87.13 oz (2470 g).
7. Includes: 2 NSDX-35 (L&R) Lid Stay, 2 360C-26/19T hinges, 2 360-P4W-32T mounting plates, 2 mounting brackets and 2 AL-78 Slides.
8. Slide Length or Depth of Item Closed: 24 inches (609.6 mm).
9. Slide Side Spacing: 0.37 inches (9.5 mm).
10. Torque Moment: 34 to 121 lbs.in (40 to 140 kg.cm).
11. Max Door Weight: 5.9 to 11 lbs (2.7 to 5 kg).
12. Max Door Width: 47.24 inches (1200 mm).
13. Door Thickness: 0.71 to 1.18 inches (18 to 30 mm).
14. Fasteners: Included.
15. Fastener Type: Pan Head Screw With Captive Washer - M4 X 6 mm.
16. Fastener Type: Truss Head Screw - M4 X 5 mm.
17. Fastener Type: Blind Head Tapping Screw - M3.5 X 16 mm.
18. Fastener Type: Raised Countersunk Head Tapping Screw - M3.5 X 16 mm.

DDDD. Model NSDX-10LK. Stay (Left) by Sugatsune.

1. For Downward-Opening Flap Door.
2. Use with a piano hinge (LSN, HG-MH) or drop hinges (SDH-001, SDH-P). An Adjustable Soft-Down Stay, NSDX-10, holds door in closed position.
3. Speed adjustment screw located on front of mechanism.
4. Torque Calculation:  $0.5 \times \text{Door Height} \times \text{Door Weight}$ .
  - a. Per Piece: 19 to 60 lbs.inch (20 to 70 kg.cm).
  - b. Per Pair: 38 to 120 lbs.inch (40 to 140 kg.cm).
5. Material: Steel and Zinc Alloy. Weight: 6.38 oz (181 g).
6. Mounting Plate (NSDX-SZ) for Wood included.
7. Mounting Plates for Sheet Metal or Glass Available (NSDX-AZ & NSDX-GZ).
8. Fasteners: Included. Fastener Type: Screws.

EEEE. Model NSDX-10RK. Stay (Right) by Sugatsune.

1. For Downward-Opening Flap Door.
2. Use with a piano hinge (LSN, HG-MH) or drop hinges (SDH-001, SDH-P). An Adjustable Soft-Down Stay, NSDX-10, holds door in closed position.
3. Speed adjustment screw located on front of mechanism.
4. Torque Calculation:  $0.5 \times \text{Door Height} \times \text{Door Weight}$ .
  - a. Per Piece: 19 to 60 lbs.inch (20 to 70 kg.cm).
  - b. Per Pair: 38 to 120 lbs.inch (40 to 140 kg.cm).
5. Material: Steel and Zinc Alloy. Weight: 6.38 oz (181 g).
6. Mounting Plate (NSDX-SZ) for Wood included.
7. Mounting Plates for Sheet Metal or Glass Available (NSDX-AZ & NSDX-GZ).
8. Fasteners: Included. Fastener Type: Screws.

FFFF. Model NSDX-20LK. Heavy Duty Soft Down Stay (Left) by Sugatsune.

1. For Top-Opening Flap Door.
2. Use with piano, butt or concealed hinges. Opening Angle: 70 or 105 degrees.
3. An Adjustable Soft-Down Stay, NSDX-20, holds door in fully opened position.
4. Speed adjustment screw located on front of mechanism.
5. Torque Calculation:  $0.5 \times \text{Door Height} \times \text{Door Weight}$ .
  - a. Per Piece: 19 to 60 lbs.inch (20 to 70 kg.cm).
  - b. Per Pair: 38 to 120 lbs.inch (40 to 140 kg.cm).
6. Material: Steel and Zinc Alloy. Weight: 6.38 oz (181 g).

7. Mounting Plate (NSDX-SZ) for Wood included.
8. Mounting Plates for Sheet Metal or Glass Available (NSDX-AZ & NSDX-GZ).
9. Fasteners: Included. Fastener Type: Screws.

GGGG. Model NSDX-20RK. Heavy Duty Soft Down Stay. (Right) by Sugatsune.

1. For Top-Opening Flap Door.
2. Used with piano, butt or concealed hinges. Opening Angle: 70 or 105 degrees.
3. An Adjustable Soft-Down Stay, NSDX-20, holds door in fully opened position.
4. Speed adjustment screw located on front of mechanism.
5. Torque Calculation:  $0.5 \times \text{Door Height} \times \text{Door Weight}$ .
  - a. Per Piece: 19 to 60 lbs.inch (20 to 70 kg.cm).
  - b. Per Pair: 38 to 120 lbs.inch (40 to 140 kg.cm).
6. Material: Steel and Zinc Alloy. Weight: 6.38 oz (181 g).
7. Mounting Plate (NSDX-SZ) for Wood included.
8. Mounting Plates for Sheet Metal or Glass Available (NSDX-AZ & NSDX-GZ).
9. Fasteners: Included. Fastener Type: Screws.

HHHH. Model NSDX-35LK. Stay (Left) by Sugatsune.

1. For Top-Opening Flap Door.
2. Used with piano, butt or concealed hinges.
3. Opening Angle: 80, 90, or 100 degrees.
4. Opening Angle: 65 and 90 degrees. Two Stop version.
5. An Adjustable Soft-Down Stay, NSDX-35, holds the door in fully opened position.
6. Speed adjustment screw located on front of mechanism.
7. Torque Calculation:  $0.5 \times \text{Door Height} \times \text{Door Weight}$ .
  - a. Per Piece: 19 to 60 lbs.inch (20 to 70 kg.cm).
  - b. Per Pair: 38 to 120 lbs.inch (40 to 140 kg.cm).
8. Material: Steel and Zinc Alloy. Weight: 6.38 oz (181 g).
9. Mounting Plate (NSDX-SZ) for Wood included.
10. Mounting Plates for Sheet Metal or Glass Available (NSDX-AZ & NSDX-GZ).
11. Fasteners: Included. Fastener Type: Screws.

IIII. Model NSDX-35RK. Stay (Right) by Sugatsune.

1. For Top-Opening Flap Door.
2. Used with piano, butt, or concealed hinges.
3. Opening Angle: 80, 90, or 100 degrees.
4. Opening Angle: 65 and 90 degrees. Two Stop version.
5. An Adjustable Soft-Down Stay, NSDX-35, holds the door in fully opened position.
6. Speed adjustment screw located on front of mechanism.
7. Torque Calculation:  $0.5 \times \text{Door Height} \times \text{Door Weight}$ .
  - a. Per Piece: 19 to 60 lbs.inch (20 to 70 kg.cm).
  - b. Per Pair: 38 to 120 lbs.inch (40 to 140 kg.cm).
8. Material: Steel and Zinc Alloy. Weight: 6.38 oz (181 g).
9. Mounting Plate (NSDX-SZ) for Wood included.
10. Mounting Plates for Sheet Metal or Glass Available (NSDX-AZ & NSDX-GZ).
11. Fasteners: Included. Fastener Type: Screws.

JJJJ. Model SDS-C100/BLK. Flap Stay Black with Catch by Sugatsune.

1. For Downward Opening Flap Door.
2. Use with a piano hinge (LSN, HG-MH) or drop hinges (SDH-001, SDH-P).
3. Holds door in closed position.
4. Torque Calculation:  $0.5 \times \text{Door Height} \times \text{Door Weight}$ .
  - a. Per Piece: 30 to 43 lbs.inch (35 to 50 kg.cm)
  - b. Per Pair: 60 to 86 lbs.inch (70 to 100 kg.cm).
5. Recommended Door Thickness: 3/4 inch (19 mm).
6. Short arm version for smaller door height available.

7. Material: Steel, Zinc Alloy and Plastic. Weight: 5.89 oz (167 g).
8. Side Spacing (Inside Cabinet): 0.77 inches (19.5 mm).
9. Height from Bottom when closed (Inside Cabinet): 8.58 inches (218 mm).
10. Fasteners: Included. Fastener Type: Self tapping screw.

KKKK. Model SDS-C100/WHT. Flap Stay White by Sugatsune.

1. For Downward Opening Flap Door.
2. Use with a piano hinge (LSN, HG-MH) or drop hinges (SDH-001, SDH-P).
3. Holds door in closed position.
4. Torque Calculation:  $0.5 \times \text{Door Height} \times \text{Door Weight}$ .
  - a. Per Piece: 30 to 43 lbs.inch (35 to 50 kg.cm)
  - b. Per Pair: 60 to 86 lbs.inch (70 to 100 kg.cm).
5. Recommended Door Thickness: 3/4 inch (19 mm).
6. Short arm version for smaller door height available.
7. Material: Steel, Zinc Alloy and Plastic. Weight: 5.89 oz (167 g).
8. Side Spacing (Inside Cabinet): 0.77 inches (19.5 mm).
9. Height from Bottom when closed (Inside Cabinet): 8.58 inches (218 mm).
10. Fasteners: Included. Fastener Type: Self tapping screw.

LLLL. Model SDS-C301N/Black. Flap Stay Black by Sugatsune.

1. Use for Upward Opening or Top Opening Flap Doors.
2. Use in overlay or inset applications.
3. Non handed.
4. Use with concealed , piano or butt hinges.
5. Holds door in closed and opened position.
6. Torque Calculation:  $0.5 \times \text{Door Height} \times \text{Door Weight}$ .
  - a. Per Piece: 35 to 60 lbs.inch (40 to 70 kg.cm).
  - b. Per Pair: 70 to 120 lbs.inch (80 to 140 kg.cm).
7. Recommended Door Thickness: 3/4 inch (19 mm).
8. Material: Steel, Zinc Alloy, Plastic. Weight: 5.82 oz (165 g).
9. Fasteners: Included. Fastener Type: Screws.

MMMM. Model SDS-C301N/WHT. Flap Stay White by Sugatsune.

1. Can be used for Upward Opening or Top Opening Flap Doors.
2. Can be used in overlay or inset applications.
3. Non handed.
4. Use with concealed , piano or butt hinges.
5. Holds door in closed and opened position.
6. Torque Calculation:  $0.5 \times \text{Door Height} \times \text{Door Weight}$ .
  - a. Per Piece: 35 to 60 lbs.inch (40 to 70 kg.cm).
  - b. Per Pair: 70 to 120 lbs.inch (80 to 140 kg.cm).
7. Recommended Door Thickness: 3/4 inches (19 mm).
8. Material: Steel, Zinc Alloy, Plastic. Weight: 5.82 oz (165 g).
9. Fasteners: Included. Fastener Type: Screws.

## PART 3 EXECUTION

### 3.1 EXAMINATION

- A. Do not begin installation until the substrates have been properly constructed and prepared.
- B. If substrate preparation is the responsibility of another installer, notify Architect in writing of unsatisfactory preparation before proceeding.

### 3.2 PREPARATION

- A. Clean surfaces thoroughly prior to installation.

- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

### 3.3 INSTALLATION

- A. Install in accordance with manufacturer's instructions, approved submittals, and in proper relationship with adjacent construction.

### 3.4 FIELD QUALITY CONTROL

- A. Field Inspection: Coordinate field inspection in accordance with appropriate sections in Division 01.

### 3.5 CLEANING AND PROTECTION

- A. Clean products in accordance with the manufacturers recommendations.
- B. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION