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Life Is On Schneider

## Stainless-Steel Industrial Boxes Introduction

> Simplicity, ergonomics and quality.





#### Selection

- 6 sizes
- 80 mm and 120 mm in depth.



#### Sturdy with Good Ingress Protection

- Thickness of 1.2 mm
- Mechanical protection rating up to IK10.
- Ingress protection rating up to IP66.



#### Added Value to your Work

- Quality and esthetics.
- Same dimensions as Steel boxes (SBM range).
- Mounting with versatile external brackets.
- Certification\*: UL, Veritas and BVM.



#### **Ergonomics**

■ Cover opening and accessory mounting with just a screwdriver.

\* Certifications pending

> Personalized cut-outs.





#### Save Time

• Enclosure delivered with cut-outs, so you can focus on your added-value work



#### Get a High Quality Cut-Out

 Cut-outs made with an industrial laser machine for a perfect result, burr-free, with high accuracy machining tolerances



#### Get the Best **Esthetic**

- Scotch-Brite® brushed.
- External surfaces with no scratches

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# Stainless-Steel Industrial Boxes Characteristics



| Characteristics                             | Spacial SBX Flat box  |
|---|---|
|   | Box with plain faces Single-piece body (rectangular structure). Front design incorporating folded gutters. Flat rear. 2 drilled profiles for installing mounting plates and DIN Rails, with mounting centers of 12.5 mm. Equipped with 4 half-turn thread screws to help ensure maximum watertightness. Polyurethane sealing gasket.                      |
|   | Protection of personnel  Earthing connection mandatory for all boxes: Spacial SBX Stainless-Steel boxes are equipped with an M6 x 10 earthing stud welded in the cover, to be linked with the body for equipotential connection. Earthing braid to be ordered separately (Ø 6.4 mm terminal).   |
| Material                                    | AISI 304L Stainless-Steel, thickness of 1.2 mm.   |
| Finish                                      | Scotch-Brite* brushed.  |
| Ingress protection rating                   | 1P66  |
| Mechanical protection rating                | IK10  |
| Standard compliance with enclosure standard | IEC 62208 and the RoHS directive.   |
| Certifications*                             | ■ UL, BV, BVM ■ Nema Type 4, 4X, 13 according to UL 508A standard ■ Fire class: M0  |
| Installation                                | Indoor installation Direct wall-mounting (4 x Ø 10 mm holes with sealing plugs to maintain the IP rating) or with the help of fixing lugs installed from the outside (to be ordered separately, see the specific accessory pages). Distance between mounting holes enables the installation of the box in the same locations as many existing enclosures. |
|   | Outdoor installation Compliant with IEC 62208 regarding type tests specified in §9.12 (resistance to ultra-violet (UV) radiation) and §9.13 (resistance to corrosion). It is always advisable to place the box under shelter to avoid water stagnation on the upper part of the enclosure.  |
| Maximum load capacity                       | On the body: 50 kg/m²   |
| Other characteristics                       | Vibration constraints Specific construction of the Spacial SBX - Single-piece body (rectangular structure). The rear is flat without added parts - this helps ensure compliance with certain vibration constraints. The tests were conducted according to the marine application by Bureau Veritas Marine*.   |

<sup>\*</sup> Certifications pending

# Stainless-Steel Industrial Boxes Selection Guide



| Dimensions  |               | Вох           | Mounting plate | DIN rail  | Fixing lugs    | Sealing kit  |          |
|-------------|---------------|---------------|----------------|-----------|----------------|--------------|----------|
| Height (mm) | Width<br>(mm) | Depth<br>(mm) | SBX            |           |                |              |          |
| 150         | 150           | 80            | NSYSBX15158    | NSYMM11SB | NSYAMRD15357SB | NSYAEFPFSBX* | NSYPPSB* |
|             | 300           | 80            | NSYSBX15308    | NSYMM13SB | NSYAMRD30357SB |              |          |
| 200         | 200           | 80            | NSYSBX20208    | NSYMM22SB | NSYAMRD20357SB |              |          |
|             | 300           | 80            | NSYSBX20308    | NSYMM23SB | NSYAMRD30357SB |              |          |
|             | 400           | 120           | NSYSBX204012   | NSYMM24SB | NSYAMRD40357SB |              |          |
| 300         | 300           | 120           | NSYSBX303012   | NSYMM33SB | NSYAMRD30357SB |              |          |
| Supply      |               |               |                |           |                |              |          |
|             |               |               | 1              | 1         | 10             | 4            | 1        |

<sup>\*</sup> Same reference for all dimensions.

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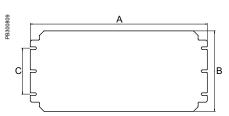
# Stainless-Steel Industrial Boxes Common Accessories



### **Mounting Plates**

- Material: galvanized steel.
- Installation: mounting by means of 2\* or 4 x Ø 5 mm self-tapping screws, Pozidriv head, ref. NSYAMFSB (1). Mounting plate installation points compatible with many other brands of accessories.
- Supply: 1 unit, supplied without screws.
- \* Only 2 screws for mounting plates with height of 150 mm.

| Dimensions   Mounting plate |       |           |        |     |           |            |
|-----------------------------|-------|-----------|--------|-----|-----------|------------|
| Height<br>(mm)              | Width | Dimension | s (mm) |     | Thickness | References |
|                             | (mm)  | Α         | В      | С   |           |            |
| 150                         | 150   | 135       | 135    | -   | 1.5       | NSYMM11SB  |
|                             | 300   | 135       | 285    | -   | 1.5       | NSYMM13SB  |
| 200                         | 200   | 185       | 185    | 100 | 1.5       | NSYMM22SB  |
|                             | 300   | 185       | 285    | 100 | 1.5       | NSYMM23SB  |
|                             | 400   | 185       | 385    | 100 | 2         | NSYMM24SB  |
| 300                         | 300   | 185       | 185    | 200 | 1.5       | NSYMM33SB  |





#### **DIN Rails**

- **Description:** symmetrical DIN rails, 35 x 7.5 mm.
- Installation: mounting by means of 2 x Ø 5 mm self-tapping screws,

Pozidriv head, ref. NSYAMFSB (1).

■ Supply: 10 rails, supplied without screws.

| Box        | DIN rail      | DIN rail       |  |  |  |  |  |  |
|------------|---------------|----------------|--|--|--|--|--|--|
| Width (mm) | Length A (mm) | References     |  |  |  |  |  |  |
| 150        | 135           | NSYAMRD15357SB |  |  |  |  |  |  |
| 200        | 185           | NSYAMRD20357SB |  |  |  |  |  |  |
| 300        | 285           | NSYAMRD30357SB |  |  |  |  |  |  |
| 400        | 385           | NSYAMRD40357SB |  |  |  |  |  |  |



## Stainless-Steel Industrial Boxes

## Common Accessories



### **Mounting Accessories**

#### **Self-Tapping Screws**

- Description: self-tapping screws with Pozidriv head for Ø 5 mm holes.
- Supply: 100 units.

Reference NSYAMFSB



#### Sealing Kit

- Description: the sealing kit enable to seal the opening of the box using sealing wire and lead seals.
- Color: green.
- Ingress protection rating: IP66.
- Installation: replaces the standard sealing washer on the box.
- Supply: 1 unit.

Reference NSYPPSB

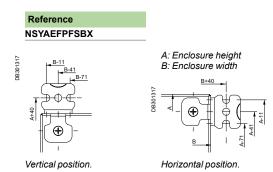


#### Fixing lugs

■ Description: fixing lugs to be mounted directly on the rear of the box, either in a horizontal or vertical position. Their versatile design complies with the mounting dimensions of many other enclosures.

#### ■ Installation:

- □ horizontal or vertical position,
- $\hfill \Box$  distance between wall and enclosure: 10 mm,
- □ only requires a screw-driver.
- Maximum load: 70 kg.
- Supply: 4 fixing lugs, screws and pre-mounted sealing gaskets.



# Stainless-Steel Industrial Boxes Common Accessories

### **Cable Entries Overview**











| Characteristics                                     | Simple-5                               | Synthetic snap-in cable gland   | Stainless-Steel cable gland with lamellar insert  Lamellar technology provides excellent resistance to traction as well as excellent torsional protection. For outdoor use, or for aggressive environments. |           |  |  |  |  |
|---|--|---|---|-----------|--|--|--|--|
|   | ISO cable gland.                       | Without thread.<br>Easy assembly and disassembly.<br>Suitable for walls from 0.5 to 4 mm thick. |   |           |  |  |  |  |
| Material  | PA6 Polyamide, neoprene gasket         | PA6 Polyamide, neoprene gasket PA6 Polyamide, neoprene gasket                                   |   |           |  |  |  |  |
| Color   | RAL 7035 gray                          | RAL 7035, RAL 7001, RAL 9005.<br>Other colors on demand   | -   |           |  |  |  |  |
| Cable entry material                                | Combined                               | Non armored   | Non armored   |           |  |  |  |  |
| Installation possibilities                          | •                                      |   |   |           |  |  |  |  |
| Flexibility of the installation                     | Low                                    |   |   |           |  |  |  |  |
| Reversibility                                       | Medium                                 |   |   |           |  |  |  |  |
| Ingress protection rating                           | IP68                                   | IP66  | IP68  |           |  |  |  |  |
| Cable retention                                     | High                                   | High  | High  |           |  |  |  |  |
| Cable diameter (mm)                                 | From 12 to 40                          | From 16 to 40   | From 12 to 40   |           |  |  |  |  |
| Cable installation time                             | Slow                                   | Slow  | Slow  |           |  |  |  |  |
| Quantity of cables to be fitted for a given surface | +                                      | +   | +   |           |  |  |  |  |
| Cable entries for cables with connectors            | No                                     | No  | No  |           |  |  |  |  |
| Thread type   | -                                      | Metric EN 60423 Other types are available on demand   |   |           |  |  |  |  |
| Cut-out dimensions (mm)                             | Various circular hole diameters accord | ling to cable diameter  | •   |           |  |  |  |  |
| External dimensions (mm)                            | From Ø 15 to 46                        | From Ø 22 to 46   | From Ø 14 to 43   |           |  |  |  |  |
| Certificates  | Glow wire resistance: 960°C            | UL 94 V-2 (except for the size M40)   | UL 94 V-2   |           |  |  |  |  |
| Standard  | Compliance with VDE, UL and CSA        | DIN EN 62444, UL 514B, UL 514B§8.26.7   | DIN EN 62444, U   | _514      |  |  |  |  |
| Flame resistance                                    | 750 °C                                 | -   | -   |           |  |  |  |  |
| Temperature range                                   | -                                      | -20°C to + 100°C  | -20°C to + 100°C  |           |  |  |  |  |
| References*   |  |   | AISI 304L   | AISI 316L |  |  |  |  |
|   | ISM71501                               | NSYCGSP16   | NSYCGX12  | NSYCGX12H |  |  |  |  |
|   | ISM71502                               | NSYCGSP20   | NSYCGX16  | NSYCGX16H |  |  |  |  |
|   | ISM71503                               | NSYCGSP25   | NSYCGX20  | NSYCGX20H |  |  |  |  |
|   | ISM71504                               | NSYCGSP32   | NSYCGX25  | NSYCGX25H |  |  |  |  |
|   | ISM71505                               | NSYCGSP40   | NSYCGX32  | NSYCGX32H |  |  |  |  |
|   | ISM71506                               |   | NSYCGX40  | NSYCGX40H |  |  |  |  |
|   | IMT36150                               |   | 1   |           |  |  |  |  |

<sup>\*</sup> For details, type the reference in the search engine at se.com/enclosures

# Stainless-Steel Industrial Boxes

## Common Accessories



For NSYEB2050D8.



For all other references

### **Earthing Accessories**

#### **Earthing Braids**

- Description: earthing connection braid for high frequencies. Helps protect against disturbing electric currents that are produced.
- Material: tinned copper.
- Supply: 10 earthing braids (nuts and washers not included).
- Reference by unit. Order by multiples of 10 (10, 20, 30...).

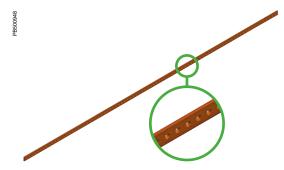
| Length (mm) | Width (mm) | Section (mm²) | Terminal Ø (mm) | References  |
|-------------|------------|---------------|-----------------|-------------|
| 150         | 12         | 6             | 6.5             | NSYEB156D6  |
|             | 17         | 10            | 6.5             | NSYEB1510D6 |



#### **Earthing Cables**

- **Description:** make it easier to install a good earthing connection, at an optimized length.
- Material: brass and copper alloy terminal, green and yellow PVC insulating sheath.
- Supply: 10 earthing cables (nuts and washers not included).
- Reference by unit. Order by multiples of 10 (10, 20, 30...).

| Length (mm) | Section (mm²) | Terminal Ø (mm) | References  |
|-------------|---------------|-----------------|-------------|
| 150         | 6             | 6.4             | NSYEL136D6  |
| 160         | 6             | 6.4             | NSYEL166D6  |
| 220         | 6             | 6.4             | NSYEL226D6  |
| 250         | 10            | 6.4             | NSYEL2510D6 |



#### **Earthing Strip**

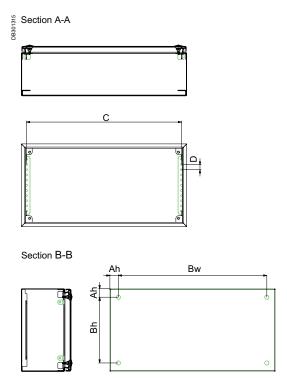
- Description: perforated brass bar, 15 x 3 mm. 1 m long. 87 connection points, M5 drill holes.
- Supply: 1 earthing strip and mounting elements.

Reference NSYECB1M153

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# Stainless-Steel Industrial Boxes Technical Information

|             |               |               | Sheet<br>thickness | Box ins    | tallation  | Mountii    | Mounting  |           |  |
|-------------|---------------|---------------|--------------------|------------|------------|------------|-----------|-----------|--|
| Height (mm) | Width<br>(mm) | Depth<br>(mm) | (mm)               | Ah<br>(mm) | Bh<br>(mm) | Bw<br>(mm) | C<br>(mm) | D<br>(mm) |  |
| 150         | 150           | 80            | 1.2                | 20.5 109   |            | 109        | 125       | 12.5      |  |
|             | 300           | 80            | 1.2                | 20.5       | 109        | 259        | 275       | 12.5      |  |
| 200         | 200           | 80            | 1.2                | 20.5       | 159        | 159        | 175       | 12.5      |  |
|             | 300           | 80            | 1.2                | 20.5       | 159        | 259        | 275       | 12.5      |  |
|             | 400           | 120           | 1.2                | 20.5       | 159        | 359        | 375       | 12.5      |  |
| 300         | 300           | 120           | 1.2                | 20.5       | 259        | 259        | 275       | 12.5      |  |

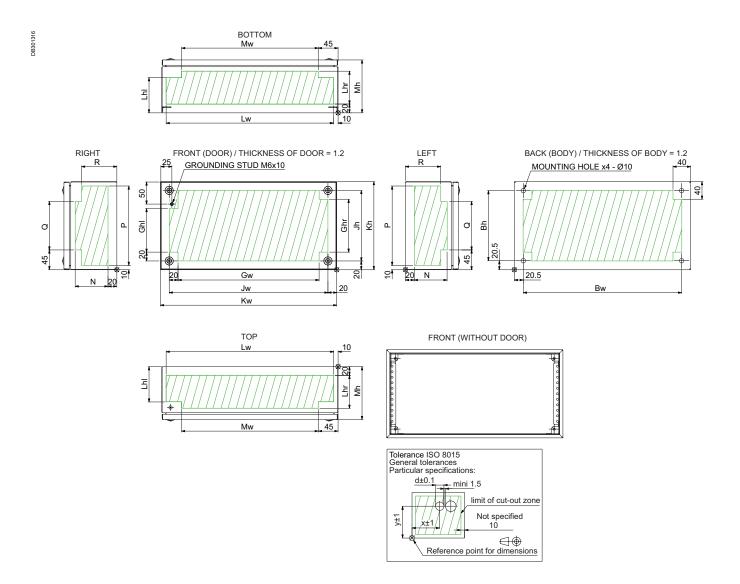


# Stainless-Steel Industrial Boxes

## **Technical Information**

#### **Limit of Cut-Out Zone**

| Dime           | nsion         | s             | References   | Dimensions for allowed zone for cut-out |            |             |             |            |     |     |     |     |             |             |            |            |     |           |           |     |           |
|----------------|---------------|---------------|--------------|---|------------|-------------|-------------|------------|-----|-----|-----|-----|-------------|-------------|------------|------------|-----|-----------|-----------|-----|-----------|
| Height<br>(mm) | Width<br>(mm) | Depth<br>(mm) |              | Bh<br>(mm)                              | Bw<br>(mm) | Ghr<br>(mm) | GhI<br>(mm) | Gw<br>(mm) |     |     |     |     | Lhl<br>(mm) | Lhr<br>(mm) | Lw<br>(mm) | Mh<br>(mm) |     | N<br>(mm) | P<br>(mm) | _   | R<br>(mm) |
| 150            | 150           | 80            | NSYSBX15158  | 109                                     | 109        | 70          | 49          | 70         | 110 | 110 | 150 | 150 | 40          | 34.5        | 130        | 80         | 60  | 34.5      | 130       | 60  | 40        |
|                | 300           | 80            | NSYSBX15308  | 109                                     | 259        | 70          | 49          | 220        | 110 | 260 | 150 | 300 | 40          | 34.5        | 280        | 80         | 210 | 34.5      | 130       | 60  | 40        |
| 200            | 200           | 80            | NSYSBX20208  | 159                                     | 159        | 120         | 99          | 120        | 160 | 160 | 200 | 200 | 40          | 34.5        | 180        | 80         | 110 | 34.5      | 180       | 110 | 40        |
|                | 300           | 80            | NSYSBX20308  | 159                                     | 259        | 120         | 99          | 220        | 160 | 260 | 200 | 300 | 40          | 34.5        | 280        | 80         | 210 | 34.5      | 180       | 110 | 40        |
|                | 400           | 120           | NSYSBX204012 | 159                                     | 359        | 120         | 99          | 320        | 160 | 360 | 200 | 400 | 80          | 74.5        | 380        | 120        | 310 | 74.5      | 180       | 110 | 80        |
| 300            | 300           | 120           | NSYSBX303012 | 259                                     | 259        | 220         | 199         | 220        | 260 | 260 | 300 | 300 | 80          | 74.5        | 280        | 120        | 210 | 74.5      | 280       | 210 | 80        |



Notes



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