

Rittal – HD Enclosures & Accessories



ENCLOSURES

POWER DISTRIBUTION

CLIMATE CONTROL

IT INFRASTRUCTURE

SOFTWARE & SERVICES



FRIEDHELM LOH GROUP

Meeting the challenges of sensitive environments.

Rittal's new Hygienic Design (HD) enclosures provide the ultimate solution where cleanliness and sanitation are paramount. Crafted of stainless steel, they feature a smooth surface grain, internal hinges, washable gaskets and latches, and no crevices to trap debris or contaminants.



Precisely engineered for your applications

The new HD enclosures are available with screw covers for smaller, integrated applications or hinged doors for larger installations. Both are created from 304 stainless steel with a 400 grain brushed surface. Wall and door surfaces are angled to prevent objects from adhering so water runs off easily.

Ready to adapt to on-site demands

HD enclosures can be mounted with rounded stand-off brackets on the back to improve the flow of water around the unit during wash-down procedures. And, using optional hardware, larger HD enclosures can be mounted on HD leveling feet and fitted with a wire shelf to assist with cable routing.

- All mounting threads are concealed to keep them free of debris and contaminants
- Optional stainless steel cable glands have smooth, solid exterior surfaces and are self-sealing to enable high-pressure washing

Tight seals every time

Continuous silicone seal door gaskets can be easily replaced as necessary—without special tools. The blue gaskets align with a specifically-engineered fitted channel for a tight seal without any adhesive. The distinctive color makes any particulate splashed on the seal stand out for easier recognition and removal.



Rittal's new HD enclosures provide design engineers with more options and added versatility.

Consider...

- *Shorter cleaning times while using less water and fewer chemicals*
- *Reduced downtime for cleaning/maintenance*
- *Significantly reduced risk of contamination*
- *Enhanced protection for customers/employees*
- *Built and tested to NEMA 4X specifications*
- *FDA approved gasket material*



HD Terminal Box



Metric measurements for this product are exact, imperial measurements are rounded to the nearest whole number

Material:

Enclosure and cover:
Type 304 stainless steel, 1.5 mm
Mounting bracket:
Sheet steel, zinc-plated, 2.0 mm
Quick-release locks:
Type 304 stainless steel
Gasket:
Conforms to FDA Guideline CFR
177.2600

Configuration:

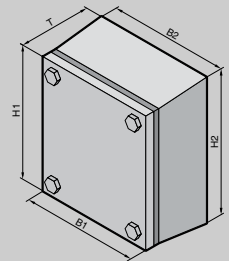
3° inclined surfaces on all sides,
10° chamfer on cover, replaceable
silicone gasket, HD quick release
locks, internal vertical mounting
rails.

Surface finish:

Enclosure and cover:
Brushed, grain 400,
 $R_A < 0.8 \mu\text{m}$
Seal: Blue, dyed (RAL 5010)

Protection category:

UL /cUL Type 4X
IP 66 to EN 60 529



Depth: 3 - 5" (80 - 120 mm), Height: 7 - 9" (172 - 227 mm)

| Height inches (mm) | front (H1) | PU | 6 (150) | 6 (150) | 8 (200) | 8 (200) | 8 (200) | 12 (300) | Page |
|-----------------------|------------|----|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------|
| | rear (H2) | | 7 (172) | 7 (177) | 9 (227) | 9 (227) | 9 (227) | 13 (327) | |
| Width inches (mm) | front (B1) | | 6 (150) | 6 (150) | 8 (200) | 12 (300) | 16 (400) | 16 (400) | |
| | rear (B2) | | 7 (172) | 7 (177) | 9 (227) | 13 (327) | 17 (427) | 17 (427) | |
| Depth (T) inches (mm) | | | 3 (80) | 5 (120) | 5 (120) | 5 (120) | 5 (120) | 5 (120) | |
| Part No. | 1 | | 1670.600 | 1671.600 | 1672.600 | 1674.600 | 1675.600 | 1676.600 | |
| Weight lb (kg) | | | 4 (1.8) | 5 (2.2) | 7 (3.0) | 9 (4.0) | 11 (5.0) | 13 (5.9) | |

Accessories

| Accessories | Quantity | Part No. | Weight lb (kg) | Part No. | Weight lb (kg) | Part No. | Weight lb (kg) | Part No. | Weight lb (kg) | Page | |
|---------------------|----------|----------|----------------|----------|----------------|----------|----------------|----------|----------------|----------|---|
| Wall spacer | 4 | | | 4000.100 | | | | | | 7 | |
| Mounting panel | 1 | | 1560.700 | | 1562.700 | | 1563.700 | | 1564.700 | 1568.700 | 6 |
| Support rail 35/7.5 | 10 | | 2314.000 | | 2315.000 | | 2316.000 | | 2317.000 | | 6 |

HD Compact Enclosure



Metric measurements for this product are exact, imperial measurements are rounded to the nearest whole number

Material:

Enclosure and door:
Type 316L Stainless steel
Mounting panel:
Sheet steel
Lock inserts HD:
Type 304 Stainless steel
Gasket:
Conforms to FDA Guideline CFR
177.2600

Configuration:

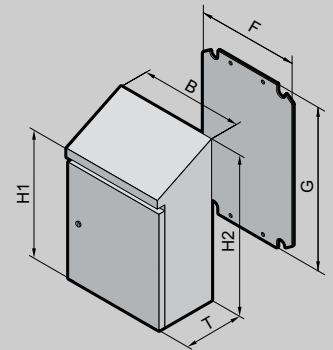
30° overhanging sloped roof,
chamfer on door fold, HD lock
inserts, replaceable silicone
gasket, internal hinges, provisions
for rail installation (body and door)

Protection category:

UL /cUL Type 4X
IP 66 to EN 60 529

Surface finish:

Enclosure and door:
Brushed, grain 400,
 $R_A < 0.8 \mu\text{m}$
Mounting panel: Zinc-plated



Depth: 6 - 12" (155 - 300 mm), Height: 14 - 56" (350 - 1421 mm)

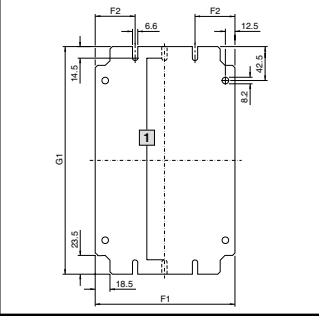
| Height | front (H1) | PU | | | | | | | | | Page |
|---------------------------|-------------|----|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------|
| | inches (mm) | | rear (H2) | 14 (350) | 17 (430) | 26 (650) | 22 (550) | 17 (430) | 26 (650) | 41 (1050) | |
| | | | 17 (437) | 22 (549) | 30 (769) | 26 (669) | 24 (601) | 30 (769) | 48 (1221) | 56 (1421) | |
| Width (B) | | | 9 (220) | 15 (390) | 15 (390) | 20 (510) | 24 (610) | 24 (610) | 32 (810) | 32 (810) | |
| Depth (T) | | | 6 (155) | 8 (210) | 8 (210) | 8 (210) | 12 (300) | 8 (210) | 12 (300) | 12 (300) | |
| Mounting plate height (G) | | | 11 (275) | 14 (355) | 22 (570) | 19 (470) | 14 (355) | 22 (570) | 38 (955) | 45 (1155) | |
| Mounting plate width (F) | | | 6 (162) | 13 (334) | 13 (334) | 18 (449) | 22 (549) | 22 (549) | 29 (739) | 29 (740) | |
| Part No. | 1 | | 1302.600 | 1306.600 | 1308.600 | 1307.600 | 1320.600 | 1310.600 | 1316.600 | 1317.600 | |
| Weight lb (kg) | | | 9 (4) | 33 (15) | 40 (18) | 44 (20) | 44 (20) | 60 (27) | 132 (60) | 157 (71) | |

Accessories

| | | | | | | | | | | | |
|--------------------------------|------------------------|----------|---|---|----------|---|---|----------|----------|----------|---|
| Wall spacer | 1 | 4000.100 | | | | | | | | 7 | |
| Rail for interior installation | for door ¹⁾ | 4 | - | - | - | - | - | - | 5001.052 | 5001.053 | 6 |
| | for body | 4 | - | - | 5001.050 | - | - | 5001.050 | 5001.052 | 5001.053 | 6 |

¹⁾ Only full length rail part numbers shown, see www.rittal.us for more options.

Accessories



Mounting panels

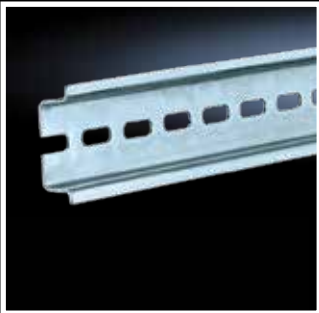
For component installation outside of the enclosure. Assembly hardware included as accessories with the enclosure.

Material:

Sheet steel, 14 ga (2.0 mm), zinc-plated, passivated

1 Panel 1560.700 notched only in the center (represented by the dashed lines).

| For Part No. | Dimensions inches (mm) | | | Part No. |
|-----------------------|------------------------|----------|--------|-----------------|
| | G1 | F1 | F2 | |
| 1670.600, 1671.600 | 5 (135) | 5 (125) | – | 1560.700 |
| 1672.600 | 7 (185) | 7 (175) | 2 (50) | 1562.700 |
| 1674.600 | 11 (285) | 7 (175) | 2 (50) | 1563.700 |
| 1675.600 | 15 (385) | 7 (175) | 2 (50) | 1564.700 |
| 1676.600 | 15 (385) | 11 (275) | 2 (50) | 1568.700 |



Support rails 35/7.5 to EN 60 715

Length sized to the enclosure width.

| For enclosure width inches (mm) | Support rails length inches (mm) | PU | Part No. |
|---------------------------------|----------------------------------|----|-----------------|
| 6 (150) | 5 (137) | 10 | 2314.000 |
| 8 (200) | 7 (187) | 10 | 2315.000 |
| 12 (300) | 11 (287) | 10 | 2316.000 |
| 16 (400) | 15 (387) | 10 | 2317.000 |



Rails for interior installation

For mounting on the existing threaded bolts. With system punchings on three sides.

Material:

Sheet steel, zinc-plated, passivated

Configuration:

Assembly parts

| Door Height inches (mm) | Body Height inches (mm) | PU | Part No. |
|-------------------------|-------------------------|----|-----------------|
| 41 (1050) 49 (1250) | 26 (650) | 4 | 5001.050 |
| 49 (1250) | – | 4 | 5001.051 |
| 41 (1050) | 41 (1050) | 4 | 5001.052 |
| 49 (1250) | 49 (1250) | 4 | 5001.053 |



Cam lock

Material:

Stainless steel 316L

Accessory:

HD enclosure key, part no. 2549.600

| PU | Part No. |
|----|-----------------|
| 10 | 2304.010 |

Accessories

Stainless steel cable gland and lock nut

Suitable for use in the following areas:

- Manufacturing and packaging of foodstuffs etc.
- Clean room technology (e.g. pharmaceuticals)
- Biotechnology
- Chemical industry

Benefits:

- Smooth, solid exterior surfaces effectively prevent the depositing of harmful micro-organisms. All threads are beneath the cap nut.
- Much easier, therefore cheaper, cleaning compared with conventional stainless steel cable glands.
- Reliable strain relief, thanks to duplicate cable attachment.
- Resistant to high-pressure cleaning (protection category IP 69K).

Material:

Cap nut and lock nut:

Stainless steel, 303

Seals: Conforms to FDA Guideline

21 CFR 177.2600

Protection category:

IP 68 (5 bar, 30 min.) to EN 60 529

IP 69K to DIN 40 050-9

Standard Version

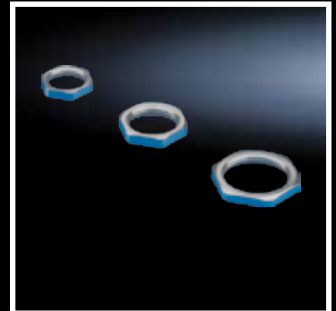
| Size | Cable diameter inches (mm) | PU | Part No. |
|-----------|----------------------------|----|-----------------|
| M12 x 1.5 | 0.12 - 0.26 (3 - 6.5) | 5 | 2410.000 |
| M16 x 1.5 | 0.20 - 0.39 (5 - 10) | 5 | 2410.010 |
| M20 x 1.5 | 0.24 - 0.47 (6 - 12) | 5 | 2410.020 |
| M25 x 1.5 | 0.47 - 0.67 (12 - 17) | 5 | 2410.030 |

EMC Version

| Size | Cable diameter inches (mm) | PU | Part No. |
|-----------|----------------------------|----|-----------------|
| M16 x 1.5 | 0.20 - 0.39 (5 - 10) | 5 | 2410.110 |
| M20 x 1.5 | 0.24 - 0.47 (6 - 12) | 5 | 2410.120 |
| M25 x 1.5 | 0.47 - 0.67 (12 - 17) | 5 | 2410.130 |

Lock Nut

| Size | PU | Part No. |
|-----------|----|-----------------|
| M12 x 1.5 | 10 | 2410.200 |
| M16 x 1.5 | 10 | 2410.210 |
| M20 x 1.5 | 10 | 2410.220 |
| M25 x 1.5 | 10 | 2410.230 |



Wall spacer bracket

Material:

Stainless steel tube, 304

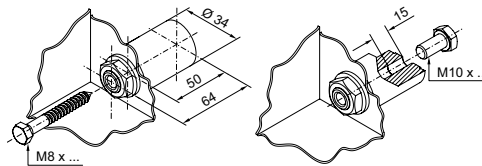
Supply includes:

Hardware and seals

Note:

Depending on weight and dimensions, one to four (or more) wall spacer brackets can be used on the rear of an enclosure. These brackets can also be mounted on the sides, rear or underside. Wall spacer brackets can also be used in customized designs or with an adaptor plate for mounting other components and as wire-mesh cable trays.

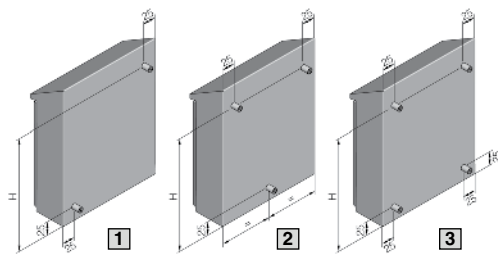
| Wall distance inches (mm) | PU | Part No. |
|---------------------------|----|-----------------|
| 2 (50) | 4 | 4000.100 |



Mounting methods

Attachment from inside

Attachment from outside



| Part No. | H inches (mm) |
|---------------|---------------|
| 1302.600/.500 | 13 (330) |

| Part No. | H inches (mm) |
|---------------|---------------|
| 1306.600/.500 | 16 (410) |
| 1320.600/.500 | |
| 1307.600/.500 | 21 (525) |
| 1308.600/.500 | 25 (625) |
| 1310.600/.500 | |

| Part No. | H inches (mm) |
|---------------|---------------|
| 1316.600/.500 | 40 (1010) |
| 1317.600/.500 | 48 (1210) |

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