# KDL/E cable entry system
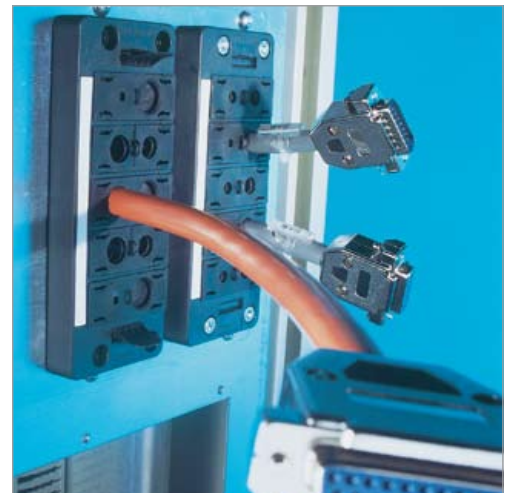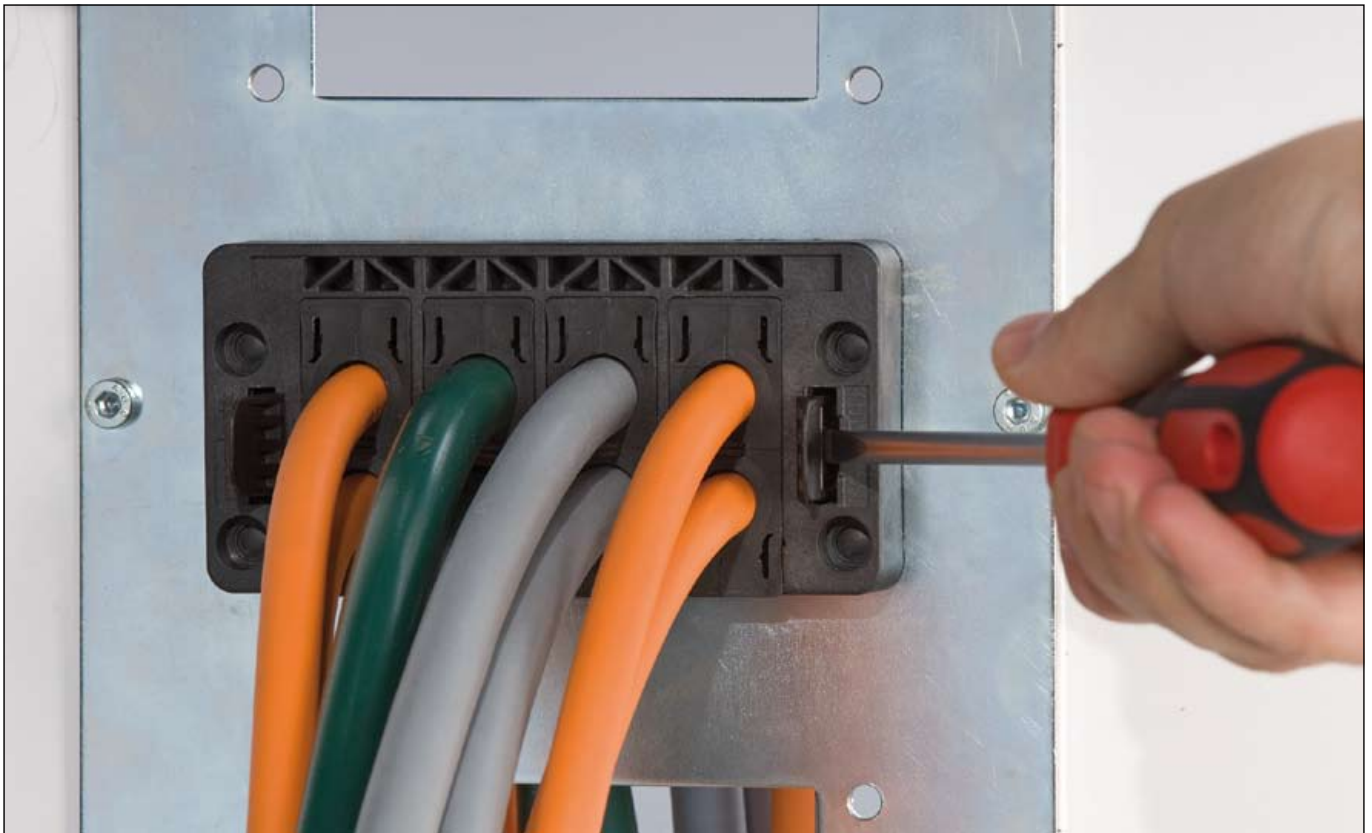




KDH

# We go at everything head first

Even faster and simpler assembly of pre-fabricated conduits.

The KDL/E replaces the well established KDL/N model.

The single-piece frame no longer needs to be joined together.

The provided catch hooks significantly speed up mounting of the entire plate, e.g. on the control cabinet.

Vario grommets reduce the need for grommets with different diameters.

This ultimately means significantly simpler and quicker assembly in general.
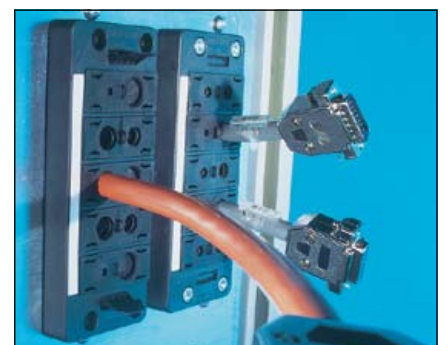


✔ Cable insertion without interruption

✔ Simple mounting

✔ Single-piece frame

✔ Snap-in from 1.5 – 4.1 mm

✔ No need to screw on

✔ Strain relief

✔ Protection class IP 54

# Overview

**Cable entry system, type KDL/E**

The KDL/E cable entry system represents further development of the third KDL generation. The advantage here is quicker assembly at double the capacity. Optionally, the KDL/E can additionally be snapped in. **Page 17**

**Cable entry grommets, type KDT/xE**

In conjunction with the KDL/E cable entry system, the KDT/xE cable entry grommet can be used to easily route pre-assembled cables e.g. in control cabinets.

**Page 18**

**Snap-on mounting**
**Screw-on mounting**

Detailed construction and assembly instructions for the snap-on/screw-on fittings.

**Page 20**

# KDL / E cable entry system

## Selection table (possible combinations of cable entry systems and grommets)
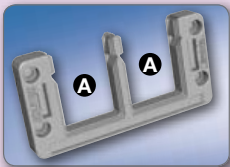
**Matching cable entry grommets:**
Typs • KDT/ZE • KDT/VE • ATG/E • SDT/ZE • BTK/E • BTG/E

| | Grommet, large Ⓐ | Grommet, small Ⓑ | |
|---|---|---|---|
| | for cables 16–31 mm in diameter | for cables 3–16 mm in diameter | |
| **KDL/E 16/2** Item no. 87121010 | 2 | 0 | |
| | 1 | 4 | **KDL/E 16/5** Item no. 87121012 |
| **KDL/E 16/8** Item no. 87121014 | 0 | 8 | |
| | 2 | 2 | **KDL/E 24/4** Item no. 87121016 |
| **KDL/E 24/7** Item no. 87121018 | 1 | 6 | |
| | 0 | 10 | **KDL/E 24/10** Item no. 87121020 |
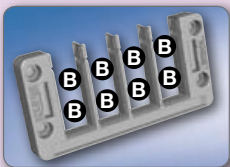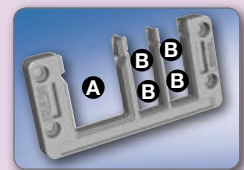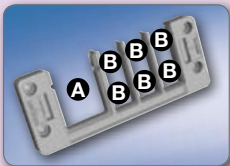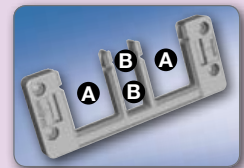
## Material data for the entire system (cable entry systems with grommets)

**Ⓗ Halogen-free**

**Ⓟ Phosphorous-free**

**Ⓒ Cadmium-free**

**Asbestos-free**

**Ⓟⓑ Lead-free**

**Silicone-free**

All components of the entire grommet-configured system KDL/E conform with ROHS and are characterised by the IP class 54 (except for double cable grommets).

Additionally all components are free of halogen, phosphorous, cadmium, asbestos, lead and silicone.

The entire system can be used within temperature range of -40°C to 80°C (transient to 100°C) and features the fire classification HB.

All system components feature an UR approval.

The cable entry systems type KDL/E are made of polyamide 6.6, the corresponding grommets care made of thermoplastic rubber.

# Cable entry system, type KDL / E

Made in Germany | RoHS compliant

**System**
-40 – 80 °C, transient 100 °C

Polyamide 6.6

V0

**IP 54**
(with suitable grommets and cables)

The KDL/E represents the 3rd generation of Murrplastik cable entry system.
- Even quicker mounting of pre-assembled cables
- Snap in, meaning screwing on is no longer absolutely necessary
- Catch hook for 1.5 – 2.0 mm plate thickness included with delivery, additional catch hooks for up to 4.1 mm plate thickness available.
- Fits standard cut-outs for connectors (e.g. Harting, Wieland and Rittal).
- Simple realization of EMC solution with discharge plate
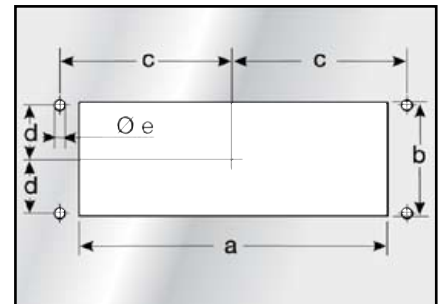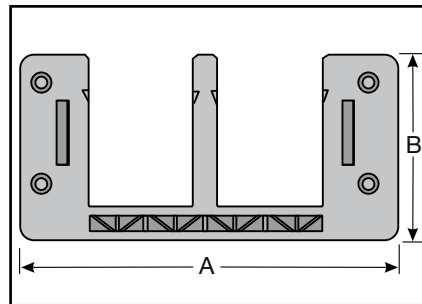
KDL/E...

| Type | Order no. | Colour | No. openings small / large | Installation height mm | For plate thickness mm | A mm | B mm | a mm | b mm | c mm | d mm | e mm | Pack qty. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **for standard cut-outs, size 16** | | | | | | | | | | | | | |
| KDL/E 16/2 | 87121010 | black | - / 2 | 15.5 | - | 116.0 | 58.0 | 86.0 | 36.0 | 51.5 | 16.0 | 5.5 | 1 |
| KDL/E 16/5 | 87121012 | black | 4 / 1 | 15.5 | - | 116.0 | 58.0 | 86.0 | 36.0 | 51.5 | 16.0 | 5.5 | 1 |
| KDL/E 16/8 | 87121014 | black | 8 / - | 15.5 | - | 116.0 | 58.0 | 86.0 | 36.0 | 51.5 | 16.0 | 5.5 | 1 |
| If catch hooks are used, then the width of the cut-out must be enlarged by 91 mm. | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| **for standard cut-outs, size 24** | | | | | | | | | | | | | |
| KDL/E 24/4 | 87121016 | black | 2 / 2 | 15.5 | - | 146.0 | 58.0 | 112.0 | 36.0 | 65.0 | 16.0 | 5.5 | 1 |
| KDL/E 24/7 | 87121018 | black | 6 / 1 | 15.5 | - | 146.0 | 58.0 | 112.0 | 36.0 | 65.0 | 16.0 | 5.5 | 1 |
| KDL/E 24/10 | 87121020 | black | 10 / - | 15.5 | - | 146.0 | 58.0 | 112.0 | 36.0 | 65.0 | 16.0 | 5.5 | 1 |
| Matching adapter plates or floor sheeting | | | | | | | | | | | | | |
| See chapter "Accessories for cable entry systems and plates" | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| **Replacement parts:** | | | | | | | | | | | | | |
| Catch hooks 1.5 – 2.0 mm | 8712102000 | black | - | | 1.5 – 2.0 | | | | | | | | 10 |
| Catch hooks 2.1 – 2.7 mm | 8712101800 | black | - | | 2.1 – 2.7 | | | | | | | | 10 |
| Catch hooks 2.8 – 3.4 mm | 8712101600 | black | - | | 2.8 – 3.4 | | | | | | | | 10 |
| Catch hooks 3.5 – 4.1 mm | 8712101400 | black | - | | 3.5 – 4.1 | | | | | | | | 10 |

Matching grommets KDT/ZE; KDT/VE; ATG/E; SDT/ZE; BTK/E; BTG/E

Matching EMC discharge plate, type KDL/N-AB... in chapter "Accessories for cables entry systems and plates"

Matching label plate, type KS KDL/E, see catalogue ACS.

The correct tool for completing the cutaway can be found in the chapter on "Punching tools".

## Cable entry grommets, type KDT/xE

-40 – 80 °C, transient 100 °C

Thermoplastic rubber

HB

IP 54
(with matching cables)

In conjunction with the KDL/E cable entry system, the KDT/xE cable entry grommet can be used to easily route pre-assembled cables e.g. in control cabinets. The grommet is 2-pce. and is positioned around the cable. The grommets are equipped with catch hooks that anchor themselves in the KDL/E when positioning. Strain relief for type KDT/ZE is achieved using a simple cable tie. Type KDT/VE is a vario grommet without strain relief which covers a larger clamping range.



**Standard grommets**
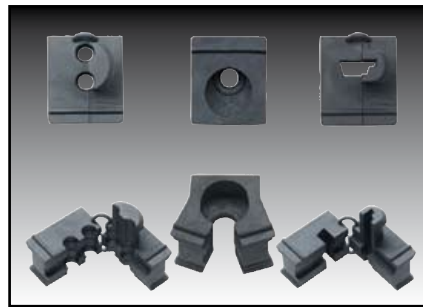


**Special grommets**



| Type | Order no. | Colour | For Ø mm | For entry small / large | No. Openings | Suitable for conduit | Pack qty. |
|---|---|---|---|---|---|---|---|
| **Grommet, small** | | | | | | | |
| KDT/ZE 03 | 87121210 | black | 3 – 4 | ● / - | 1 | | 10 |
| KDT/ZE 04 | 87121212 | black | 4 – 5 | ● / - | 1 | | 10 |
| KDT/ZE 05 | 87121214 | black | 5 – 6 | ● / - | 1 | | 10 |
| KDT/ZE 06 | 87121216 | black | 6 – 7 | ● / - | 1 | | 10 |
| KDT/ZE 07 | 87121218 | black | 7 – 8 | ● / - | 1 | | 10 |
| KDT/ZE 08 | 87121220 | black | 8 – 9 | ● / - | 1 | | 10 |
| KDT/ZE 09 | 87121222 | black | 9 – 10 | ● / - | 1 | | 10 |
| KDT/ZE 10 | 87121224 | black | 10 – 11 | ● / - | 1 | | 10 |
| KDT/ZE 11 | 87121226 | black | 11 – 12 | ● / - | 1 | | 10 |
| KDT/ZE 12 | 87121228 | black | 12 – 13 | ● / - | 1 | | 10 |
| KDT/ZE 13 | 87121230 | black | 13 – 14 | ● / - | 1 | | 10 |
| KDT/ZE 14 | 87121232 | black | 14 – 15 | ● / - | 1 | | 10 |
| KDT/ZE 15 | 87121234 | black | 15 – 16 | ● / - | 1 | | 10 |
| **Grommet, large** | | | | | | | |
| KDT/ZE 16 | 87121236 | black | 16 – 17 | - / ● | 1 | | 10 |
| KDT/ZE 17 | 87121238 | black | 17 – 18 | - / ● | 1 | | 10 |
| KDT/ZE 18 | 87121240 | black | 18 – 19 | - / ● | 1 | | 10 |
| KDT/ZE 19 | 87121242 | black | 19 – 20 | - / ● | 1 | | 10 |
| KDT/ZE 20 | 87121244 | black | 20 – 21 | - / ● | 1 | | 10 |
| KDT/ZE 21 | 87121246 | black | 21 – 22 | - / ● | 1 | | 10 |
| KDT/ZE 22 | 87121248 | black | 22 – 23 | - / ● | 1 | | 10 |
| KDT/ZE 23 | 87121250 | black | 23 – 24 | - / ● | 1 | | 10 |
| KDT/ZE 24 | 87121252 | black | 24 – 25 | - / ● | 1 | | 10 |
| KDT/ZE 25 | 87121254 | black | 25 – 26 | - / ● | 1 | | 10 |
| KDT/ZE 26 | 87121256 | black | 26 – 27 | - / ● | 1 | | 10 |
| KDT/ZE 27 | 87121258 | black | 27 – 28 | - / ● | 1 | | 10 |

# Cable entry grommets, type KDT/xE

Made in Germany | RoHS compliant

| Type | Order no. | Colour | For Ø mm | For entry small / large | No. Openings | Suitable for conduit | Pack qty. |
|------|-----------|--------|----------|-------------------------|--------------|----------------------|-----------|
| KDT/ZE 28 | 87121260 | black | 28 – 29 | - / ● | 1 | | 10 |
| KDT/ZE 29 | 87121262 | black | 29 – 30 | - / ● | 1 | | 10 |
| KDT/ZE 30 | 87121264 | black | 30 – 31 | - / ● | 1 | | 10 |
| Variable cable grommet (Protection class IP 42) | | | | | | | |
| KDT/VE 3-7 * | 87121272 | black | 3 – 7 | ● / - | 1 | | 10 |
| KDT/VE 7 – 10 * | 87121274 | black | 7 – 10 | ● / - | 1 | | 10 |
| Double cable grommet | | | | | | | |
| KDT/ZE 2x4 * | 87121284 | black | 4 – 4.5 | ● / - | 2 | | 10 |
| KDT/ZE 2x5 * | 87121286 | black | 5 – 5.5 | ● / - | 2 | | 10 |
| KDT/ZE 2x6 * | 87121288 | black | 6 – 6.5 | ● / - | 2 | | 10 |
| ASI grommet | | | | | | | |
| KDT/ZE 2xASI * | 87121280 | black | ASI cable | ● / - | 2 | | 10 |
| KDT/ZE ASI * | 87121282 | black | ASI cable | ● / - | 1 | | 10 |
| Adapter grommet | | | | | | | |
| ATG/E * | 87121268 | black | Adapter for small grommet | - / ● | 1 | | 10 |
| Conduit grommet | | | | | | | |
| SDT/ZE 07 * | 87174250 | black | | ● / - | 1 | EW-M10/P7 | 10 |
| SDT/ZE 09 * | 87174252 | black | | ● / - | 1 | EW-M12/P9 | 10 |
| SDT/ZE 11 * | 87174254 | black | | ● / - | 1 | EW-M16/P11 | 10 |
| SDT/ZE 16 * | 87174256 | black | | - / ● | 1 | EW-M20/P16 | 10 |
| SDT/ZE 21 * | 87174258 | black | | - / ● | 1 | EW-M25/P21 | 10 |
| | | | | | | xx = PA or PP | |
| Dummy grommet | | | | | | | |
| BTK/E * | 87121266 | black | Dummy grommet, small | ● / - | 0 | | 10 |
| BTG/E * | 87121270 | black | Dummy grommet, large | - / ● | 0 | | 10 |

 * no UR authorisation

Grommets match: KDL/E 16; KDL/E 24
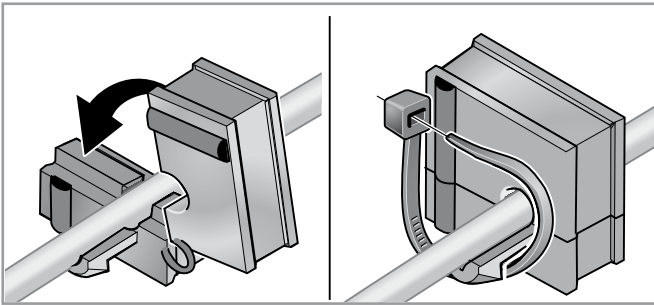
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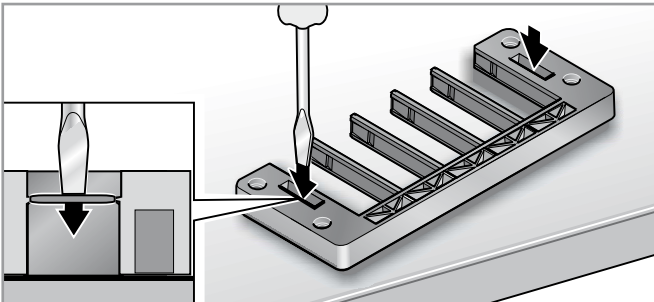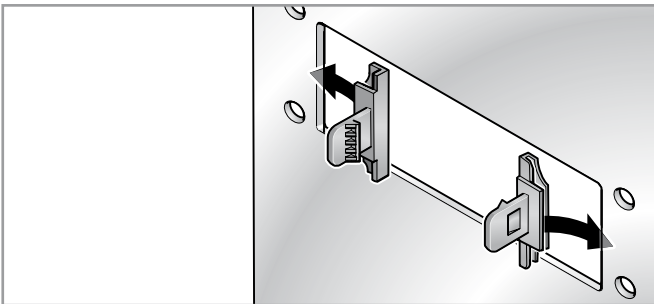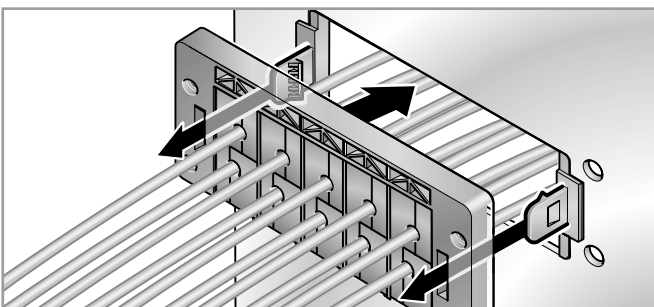CSA

## Snap-on mounting



Lay the cable into an appropriate grommet and provide strain relief where necessary using cable ties.
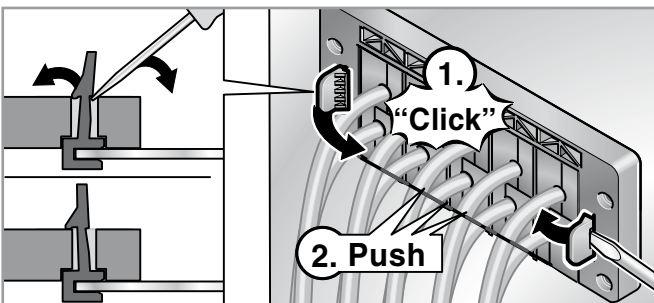


Use appropriate tool to punch through cover on base frame.



Set catch hooks into the sides of the cut-out.
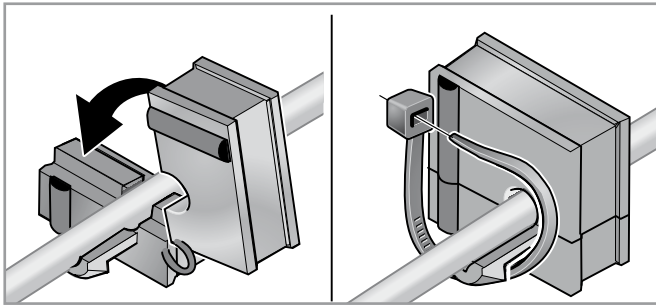Mind the plate thickness.



Insert rail completely. The grommet must produce a continuous seal on the back side. Set the rail onto the catch hooks and press on.
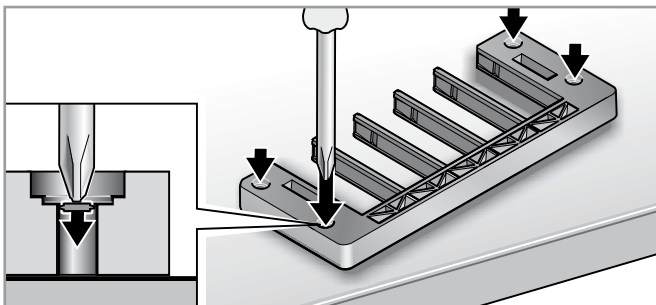


Lock the catch hooks with the rail.
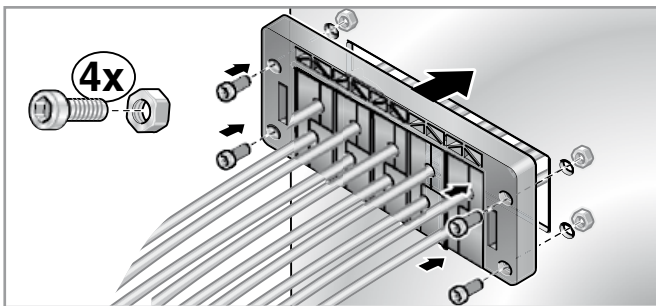Press gently on the grommets one more time.
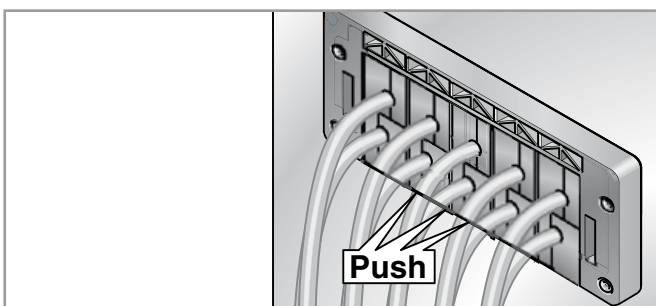
# Screw-on mounting

Lay the cable into an appropriate grommet and provide strain relief where necessary using cable ties.

Use appropriate tool to punch through cover on base frame.

**4x**

Insert rail completely. The grommet must produce a continuous seal on the back side. Fix rail with 4 screws. Do not exceed the maximum torque.

**Push**

Press gently on the grommets one more time.