

5 CONFiX™ Cable conduit system



The 90° angled conduit fitting CONFiX FWS is perfect for installation of parallel corrugated cable protection conduits, e.g. in machines, control panels or control cabinets. The liftable cover is tightly fixed by a hinge to the mounting box. Therefore, the system is very easy to handle.

Corrugated conduits CONFiX WS for cable routing are used where cables have to be protected from mechanical damage or certain weather conditions.

In addition, icotek offers split corrugated conduits CONFiX WST for routing pre-terminated cables and corresponding conduit clips CONFiX SH.

Advantages & benefits

1. Fast and easy assembly

The liftable cover of the bulkhead fitting CONFiX FWS is tightly fixed by a hinge to the mounting box. The system is therefore very easy to mount.

2. Easy to maintain

The split version of the corrugated conduits CONFiX WST offers the possibility of routing standard or pre-terminated cables in harsh environments.

3. Flexible

The corrugated conduits CONFiX WS can be used for various applications, depending on the material. UV resistant polyamide conduits for high mechanical requirements (indoor and outdoor use), polypropylene conduits with high resistance against acids / alkalis.

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CONFiX™ FWS Assembly

Installation of CONFiX FWS is quick and easy:

1. Use top screw(s) to mount the FWS
2. Insert conduit
3. Secure and complete installation with two side screws



Chapter content 5



Bulkhead fittings, split | IP54
for conduit screw connections /
direct conduit pickup

CONFIX FWS

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Corrugated conduits
NW 7,5 - NW 50

CONFIX WS

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Corrugated conduits, split
for cables with connectors
NW 10 - NW 70

CONFIX WST

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Conduit clips
for split corrugated conduits CONFIX WST

CONFIX SH

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CONFIX™ FWS-A

Bulkhead fittings for conduit screw connections



Metric internal thread for conduit screw connections

Product description

The 90° angled conduit fitting CONFiX FWS is for installation of parallel corrugated cable protection conduits, e.g. in machines, control panels or control cabinets.

The liftable cover is tightly fixed by a hinge. Therefore, the system is fast and easy to install.

CONFIX FWS is offered in the following versions:

CONFIX FWS-A with metric internal thread M16 to M50

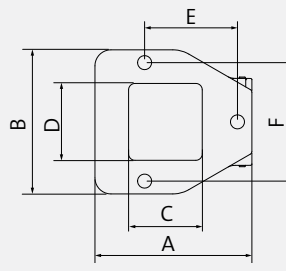
CONFIX FWS-B with a grooved conduit clip for types with sizes NW 13, 17, 23, 29, 37 and 50.

The available colours are grey (RAL 7011) and black (RAL 9005).

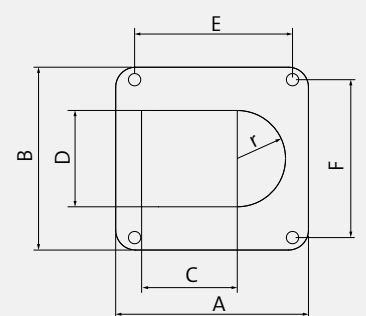
Accessories

CONFIX WS conduits 170 – 171

| Type | Internal Thread | Hole Ø [mm] | Size (A × B) [mm] | Cut-out (C × D) [mm] | Drill. Templ. (E × F) [mm] | Order No. | PU |
|-----------------|-----------------|-------------|-------------------|-------------------------|----------------------------|-----------|----|
| CONFIX FWS-A 16 | M16 × 1.5 | 3 × 4.3 | 49 × 45 | 22 × 22.6 | 29 × 37 | ■ 31381 | 10 |
| | | | | | | ■ 31380 | |
| CONFIX FWS-A 20 | M20 × 1.5 | 3 × 4.3 | 49 × 45 | 22 × 22.6 | 29 × 37 | ■ 31384 | 10 |
| | | | | | | ■ 31383 | |
| CONFIX FWS-A 25 | M25 × 1.5 | 3 × 6.6 | 67 × 63 | 37 × 28 | 41.5 × 51.5 | ■ 31387 | 10 |
| | | | | | | ■ 31386 | |
| CONFIX FWS-A 32 | M32 × 1.5 | 4 × 6.6 | 85.5 × 76 | 41.9 × 40 r = 20 | 64.5 × 64.5 | ■ 31390 | 10 |
| | | | | | | ■ 31389 | |
| CONFIX FWS-A 40 | M40 × 1.5 | 4 × 6.6 | 97 × 92 | 48.3 × 48.4 r = 24.2 | 79.5 × 79.5 | ■ 31393 | 5 |
| | | | | | | ■ 31392 | |
| CONFIX FWS-A 50 | M50 × 1.5 | 4 × 6.6 | 111.5 × 100.5 | 53 × 60.5 r = 30.25 | 87.5 × 87.5 | ■ 31396 | 5 |
| | | | | | | ■ 31395 | |



Size / Drilling template FWS-A 16 to 25



Size / Drilling template FWS-A 32 to 50

CONFIX™ FWS-B

Bulkhead fittings for direct conduit pickup



Grooved conduit clip



Fixed cover due to hinges

IP54



| Type | Dimension* | Hole Ø [mm] | Size (A × B) [mm] | Cut-out (C × D) [mm] | Drill. Templ. (E × F) [mm] | Order No. | PU |
|-----------------|------------|----------------|----------------------|-------------------------|-------------------------------|--------------------|----|
| CONFIX FWS-B 11 | NW 13 | 3 × 4.3 | 49 × 45 | 22 × 22.6 | 29 × 37 | ■ 31411 ■ 31410 | 10 |
| CONFIX FWS-B 16 | NW 17 | 3 × 4.3 | 49 × 45 | 22 × 22.6 | 29 × 37 | ■ 31414 ■ 31413 | 10 |
| CONFIX FWS-B 21 | NW 23 | 3 × 6.6 | 67 × 63 | 37 × 28 | 41.5 × 51.5 | ■ 31417 ■ 31416 | 10 |
| CONFIX FWS-B 29 | NW 29 | 4 × 6.6 | 85.5 × 76 | 41.9 × 40 r = 20 | 64.5 × 64.5 | ■ 31420 ■ 31419 | 10 |
| CONFIX FWS-B 36 | NW 37 | 4 × 6.6 | 97 × 92 | 48.3 × 48.4 r = 24.2 | 79.5 × 79.5 | ■ 31423 ■ 31422 | 5 |
| CONFIX FWS-B 48 | NW 50 | 4 × 6.6 | 111.5 × 100.5 | 53 × 60.5 r = 30.25 | 87.5 × 87.5 | ■ 31426 ■ 31425 | 5 |

Advantages & benefits

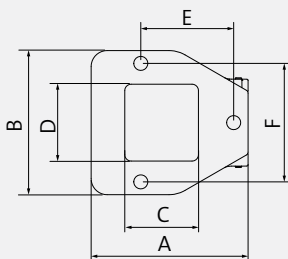
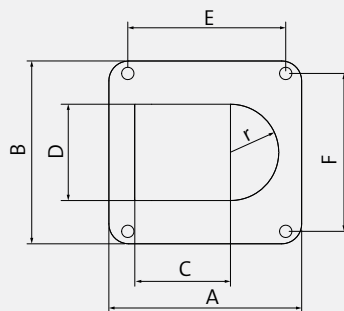
- Hinged cover
- Fast and easy installation
- Functional design
- Protection class IP54

Specifications

| | |
|-------------|---|
| Material | Polycarbonate (PC) |
| Colour | ■ grey (RAL 7011) ■ black (RAL 9005) |
| IP rating | IP54 |
| Flame class | UL94-Vo, self-extinguishing |
| Temperature | -30°C to +100°C (static) |
| Properties | Halogen free, silicone free |

Accessories

CONFIX WS conduits 170 – 171

Size / Drilling template
FWS-B 11 to 21Size / Drilling template
FWS-B 29 to 48

* For parallel corrugated cable protection conduit with dimension (NW)

CONFIX™ WS

Corrugated conduits



Compatible with CONFiX FWS-B

Product description

Parallel corrugated conduits for cable routing are used where cables have to be protected from mechanical damage or certain weather conditions.

icotek provides conduits in sizes NW 7.5, 8.5, 10, 13, 17, 23, 29, 37, and 50. Conduits from size NW 13 can be mounted with CONFiX FWS bulkhead fittings.

Parallel corrugated conduits are available in 3 different versions:

- **CONFIX WS-PA:** Polyamide conduit for high mechanical requirements (e.g. engine compartments, car bodies, construction machines, ship building, rail transportation technology, switch cabinets).
→ Suitable for ground installation
- **CONFIX WS-PAL (light):** Polyamide conduit for high mechanical requirements
→ Suitable for suspended installation
- **CONFIX WS-PP:** Polypropylene conduit for use in engine compartments, car bodies and for static installation at machinery and plant engineering.
→ Advantages: Cost-effective, flame class UL94-V2, temperature resistant, resistant to chemicals

| Type | External Ø | Internal Ø | Compatible with: | Order No. | PU (Length) |
|-----------------------|------------|------------|------------------|-----------|-------------|
| CONFIX WS-G-PA-NW 7.5 | Ø 10 mm | Ø 6.7 mm | - | ■ 31550 | 50 m |
| CONFIX WS-B-PA-NW 7.5 | Ø 10 mm | Ø 6.7 mm | - | ■ 31570 | 50 m |
| CONFIX WS-G-PA-NW 8.5 | Ø 11.7 mm | Ø 8.4 mm | - | ■ 31552 | 50 m |
| CONFIX WS-B-PA-NW 8.5 | Ø 11.7 mm | Ø 8.4 mm | - | ■ 31572 | 50 m |
| CONFIX WS-G-PA-NW 10 | Ø 13 mm | Ø 9.9 mm | - | ■ 31554 | 50 m |
| CONFIX WS-B-PA-NW 10 | Ø 13 mm | Ø 9.9 mm | - | ■ 31574 | 50 m |
| CONFIX WS-G-PA-NW 13 | Ø 15.8 mm | Ø 12.7 mm | CONFIX FWS-B 11 | ■ 31556 | 50 m |
| CONFIX WS-B-PA-NW 13 | Ø 15.8 mm | Ø 12.7 mm | CONFIX FWS-B 11 | ■ 31576 | 50 m |
| CONFIX WS-G-PA-NW 17 | Ø 21.2 mm | Ø 16.6 mm | CONFIX FWS-B 16 | ■ 31558 | 50 m |
| CONFIX WS-B-PA-NW 17 | Ø 21.2 mm | Ø 16.6 mm | CONFIX FWS-B 16 | ■ 31578 | 50 m |
| CONFIX WS-G-PA-NW 23 | Ø 28.3 mm | Ø 23.2 mm | CONFIX FWS-B 21 | ■ 31560 | 50 m |
| CONFIX WS-B-PA-NW 23 | Ø 28.3 mm | Ø 23.2 mm | CONFIX FWS-B 21 | ■ 31580 | 50 m |
| CONFIX WS-G-PA-NW 29 | Ø 34.5 mm | Ø 29 mm | CONFIX FWS-B 29 | ■ 31562 | 25 m |
| CONFIX WS-B-PA-NW 29 | Ø 34.5 mm | Ø 29 mm | CONFIX FWS-B 29 | ■ 31582 | 25 m |
| CONFIX WS-G-PA-NW 37 | Ø 42.4 mm | Ø 36 mm | CONFIX FWS-B 36 | ■ 31564 | 25 m |
| CONFIX WS-B-PA-NW 37 | Ø 42.4 mm | Ø 36 mm | CONFIX FWS-B 36 | ■ 31584 | 25 m |
| CONFIX WS-G-PA-NW 50 | Ø 54 mm | Ø 47.7 mm | CONFIX FWS-B 48 | ■ 31566 | 25 m |
| CONFIX WS-B-PA-NW 50 | Ø 54 mm | Ø 47.7 mm | CONFIX FWS-B 48 | ■ 31586 | 25 m |

CONFIX™ WS Corrugated conduits



| Type | External Ø | Internal Ø | Compatible with: | Order No. | PU (Length) |
|------------------------|------------|------------|------------------|-----------|-------------|
| CONFIX WS-B-PAL-NW 7.5 | Ø 10 mm | Ø 6.7 mm | - | ■ 31590 | 50 m |
| CONFIX WS-B-PAL-NW 8.5 | Ø 11.5 mm | Ø 8.5 mm | - | ■ 31592 | 50 m |
| CONFIX WS-B-PAL-NW 10 | Ø 13.2 mm | Ø 10.1 mm | - | ■ 31594 | 50 m |
| CONFIX WS-B-PAL-NW 13 | Ø 16 mm | Ø 13 mm | CONFIX FWS-B 11 | ■ 31596 | 50 m |
| CONFIX WS-B-PAL-NW 17 | Ø 21.2 mm | Ø 17.1 mm | CONFIX FWS-B 16 | ■ 31598 | 50 m |
| CONFIX WS-B-PAL-NW 23 | Ø 28.4 mm | Ø 23.5 mm | CONFIX FWS-B 21 | ■ 31600 | 50 m |
| CONFIX WS-B-PAL-NW 29 | Ø 34.5 mm | Ø 29.4 mm | CONFIX FWS-B 29 | ■ 31602 | 25 m |
| CONFIX WS-B-PAL-NW 37 | Ø 42.2 mm | Ø 36.7 mm | CONFIX FWS-B 36 | ■ 31604 | 25 m |
| CONFIX WS-B-PAL-NW 50 | Ø 54 mm | Ø 48.1 mm | CONFIX FWS-B 48 | ■ 31606 | 25 m |
| CONFIX WS-B-PP-NW 7.5 | Ø 9.9 mm | Ø 6.9 mm | - | ■ 31610 | 50 m |
| CONFIX WS-B-PP-NW 8.5 | Ø 11.6 mm | Ø 8.5 mm | - | ■ 31612 | 50 m |
| CONFIX WS-B-PP-NW 10 | Ø 12.7 mm | Ø 10.1 mm | - | ■ 31614 | 50 m |
| CONFIX WS-B-PP-NW 13 | Ø 15.8 mm | Ø 12.9 mm | CONFIX FWS-B 11 | ■ 31616 | 50 m |
| CONFIX WS-B-PP-NW 17 | Ø 21 mm | Ø 16.8 mm | CONFIX FWS-B 16 | ■ 31618 | 50 m |
| CONFIX WS-B-PP-NW 23 | Ø 28 mm | Ø 23.7 mm | CONFIX FWS-B 21 | ■ 31620 | 50 m |
| CONFIX WS-B-PP-NW 29 | Ø 33.9 mm | Ø 29.3 mm | CONFIX FWS-B 29 | ■ 31622 | 25 m |
| CONFIX WS-B-PP-NW 37 | Ø 42 mm | Ø 36.7 mm | CONFIX FWS-B 36 | ■ 31624 | 25 m |
| CONFIX WS-B-PP-NW 50 | Ø 53.6 mm | Ø 47.8 mm | CONFIX FWS-B 48 | ■ 31626 | 25 m |

* For parallel corrugated cable protection conduit with dimension (NW)

Specifications WS-PA

| | |
|-------------|---|
| Material | Polyamide (PA) |
| Colour | ■ black ■ grey |
| Flame class | UL94-HB |
| Temperature | -40°C to +120°C |
| Properties | Halogen free, UV resistant, according to EN ISO 8580 |

Specifications WS-PAL

| | |
|-------------|--|
| Material | Polyamide (PA) |
| Colour | ■ black |
| Flame class | UL94-HB |
| Temperature | -40°C to +120°C |
| Properties | Halogen free, UV resistant according to EN ISO 8580 |

Specifications WS-PP

| | |
|-------------|--|
| Material | Polypropylene (PP) |
| Colour | ■ black |
| Flame class | UL94-V2, self-extinguishing |
| Temperature | -40°C to +135°C |
| Properties | Halogen free, high resistance against acids / alkalis |

Compatible with

CONFIX FWS Bulkhead fitting 168 – 169

CONFIX™ WST

Split corrugated conduits



Individual lengths are possible!

Product description

The CONFiX WST is a two piece corrugated conduit. Perfect for routing cables with or without connectors in rough environments.

In conjunction with e.g. KVT-W90, a high degree of flexibility is achieved. Numerous conduit sizes can be used thanks to the wide variety of split grommets offered (see KT grommets on pages 44 - 46).

The length of the CONFiX WST split corrugated conduit can be customized to your application. All conduits are available by the meter (0.5 m steps).

Advantages & benefits

- Containing pre-terminated cables, warranty of cable remains
- Retrofitting and maintenance carried out easily and quickly

| Type | Order No. | Internal diameter | External diameter | Compatible grommets | Dimensions | Ring length* |
|------------------|-----------|-------------------|-------------------|---------------------|------------|--------------|
| CONFIX WST NW 10 | 31200 | 8.7 mm | 13.6 mm | KT 13 | NW 10 | 50 m* |
| CONFIX WST NW 14 | 31210 | 12.5 mm | 18.5 mm | KT 18 | NW 14 | 50 m* |
| CONFIX WST NW 20 | 31220 | 19.5 mm | 25.5 mm | KT 25 | NW 20 | 50 m* |
| CONFIX WST NW 23 | 31230 | 24.2 mm | 31 mm | KT 30 | NW 23 | 50 m* |
| CONFIX WST NW 29 | 31235 | 27.3 mm | 35.5 mm | KTMB-P | NW 29 | 25 m* |
| CONFIX WST NW 37 | 31240 | 31 mm | 41.4 mm | KTMB-P | NW 37 | 25 m* |
| CONFIX WST NW 45 | 31250 | 42.7 mm | 54 mm | KTMB-Q | NW 45 | 25 m* |
| CONFIX WST NW 70 | 31260 | 66.5 mm | 79.8 mm | KTMB-S | NW 70 | 10 m* |

*All conduits are also available by the metre (0.5 m steps).

Specifications

| | |
|-------------|----------------------|
| Material | Polypropylene, black |
| Flame class | UL94-HB |
| Temperature | - 40°C to + 105°C |
| Properties | UV resistant |

Compatible with

| | |
|---|----------|
| CONFIX SH Conduit clip | 173 |
| Cable entry systems for pre-terminated cables | 8 – 75 |
| Cable entry systems for standard cables | 78 – 107 |

CONFIX™ SH

Conduit clips for WST



| Type | Order No. | Suitable conduit | Fixing hole | Width [mm] | Height [mm] | PU |
|--------------|-----------|------------------|-------------|------------|-------------|----|
| CONFIX SH 10 | 31300 | NW 10 | M3 | 18.5 | 21 | 10 |
| CONFIX SH 14 | 31310 | NW 14 | M3 | 24 | 25.5 | 10 |
| CONFIX SH 20 | 31320 | NW 20 | M5 | 35 | 36 | 10 |
| CONFIX SH 23 | 31330 | NW 23 | M5 | 42 | 43.5 | 10 |
| CONFIX SH 29 | 31335 | NW 29 | M5 | 48 | 48.5 | 10 |
| CONFIX SH 37 | 31340 | NW 37 | M6 | 55 | 56.5 | 10 |
| CONFIX SH 45 | 31350 | NW 45 | M6 | 67 | 68 | 10 |
| CONFIX SH 70 | 31360 | NW 70 | M6 | 100 | 101 | 10 |

Product description

CONFIX SH Conduit clips are a one-piece clamping system to provide secure mounting points for corrugated conduit systems.

The clips are secured to their mounting position through a central mounting point with a hexagonal counter-bore.

Specifications

| | |
|-------------|-----------------------------|
| Material | Polyamide (PA), black |
| Flame class | UL94-V2, self-extinguishing |
| Temperature | - 40°C to + 140°C |
| Properties | Halogen free, silicone free |

Compatible with

CONFIX WST
Split corrugated conduit 172