

# 5

## CONFIX Conduit Entry System



### 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 and equip.

#### 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.

### At a Glance ...

The 90° angled conduit fitting CONFIX FWS is perfect for installation of parallel corrugated cable protection conduits, e.g. in machines, control panels or other electronic enclosures. 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.

### CONFIX FWS Assembly

Installation of CONFIX FWS is quite easy:

1. Fix FWS with screws
2. Insert conduit with cables
3. Lock FWS with screws



Fix



Insert



Lock

# Product Group 5

## CONFIX Conduit Entry System

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# CONFIX FWS-A

## Bulkhead Fittings for Conduit Screw Connections



IP54



Metric internal thread for  
conduit screwing

### 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 other electronic enclosures.

The liftable cover is tightly fixed by a hinge to the mounting box. Therefore, the system is very easy to handle.

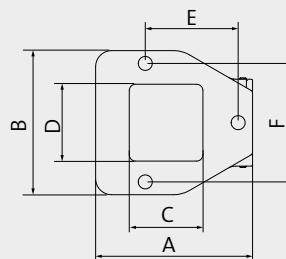
CONFIX FWS is offered in the following versions:

CONFIX FWS-A with metric internal thread M16 to M50

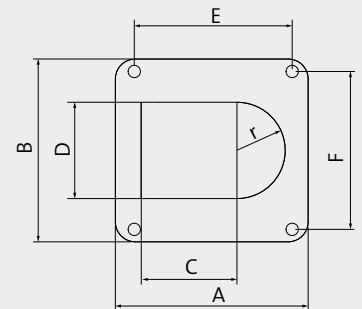
CONFIX FWS-B with a grooved conduit clip for types with sizes NW 13, 17, 23, 29, 37 and 50.

The available colors are gray (RAL 7011) and black (RAL 9005).

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	■ 31380 ■ 31381	10
CONFIX FWS-A 20	M20 × 1.5	3 × 4.3	49 × 45	22 × 22.6	29 × 37	■ 31383 ■ 31384	10
CONFIX FWS-A 25	M25 × 1.5	3 × 6.6	67 × 63	37 × 28	41.5 × 51.5	■ 31386 ■ 31387	10
CONFIX FWS-A 32	M32 × 1.5	4 × 6.6	85.5 × 76	41.9 × 40 r = 20	64.5 × 64.5	■ 31389 ■ 31390	10
CONFIX FWS-A 40	M40 × 1.5	4 × 6.6	97 × 92	48.3 × 48.4 r = 24.2	79.5 × 79.5	■ 31392 ■ 31393	5
CONFIX FWS-A 50	M50 × 1.5	4 × 6.6	111.5 × 100.5	53 × 60.5 r = 30.25	87.5 × 87.5	■ 31395 ■ 31396	5



Size / Drilling template  
FWS-A 16 to 25



Size / Drilling template  
FWS-A 32 to 50

### Accessories

CONFIX WS conduits Page 120 - 121

IP54



RoHS  
compliant

Made in  
Germany

## CONFIX FWS-B

Bulkhead Fittings  
for Direct Conduit Pickup



Grooved conduit clip



Fixed cover due to hinges



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	■ 31410 ■ 31411	10
CONFIX FWS-B 16	NW 17	3 × 4.3	49 × 45	22 × 22.6	29 × 37	■ 31413 ■ 31414	10
CONFIX FWS-B 21	NW 23	3 × 6.6	67 × 63	37 × 28	41.5 × 51.5	■ 31416 ■ 31417	10
CONFIX FWS-B 29	NW 29	4 × 6.6	85.5 × 76	41.9 × 40 r = 20	64.5 × 64.5	■ 31419 ■ 31420	10
CONFIX FWS-B 36	NW 37	4 × 6.6	97 × 92	48.3 × 48.4 r = 24.2	79.5 × 79.5	■ 31422 ■ 31423	5
CONFIX FWS-B 48	NW 50	4 × 6.6	111.5 × 100.5	53 × 60.5 r = 30.25	87.5 × 87.5	■ 31425 ■ 31426	5

### Advantages

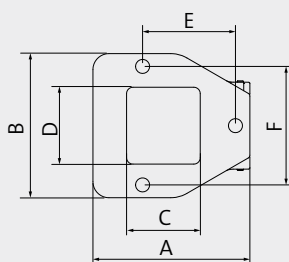
- Fixed cover
- Fast and easy installation
- Functional design
- Protection class IP54

### Specifications

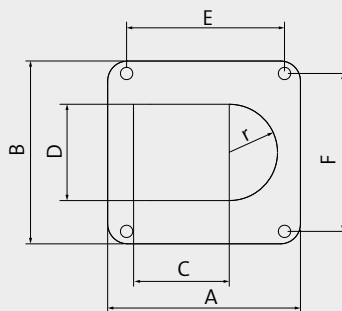
Material	Polycarbonate (PC)
Color	■ black (RAL 9005) ■ gray (RAL 7011)
Protection class	IP54
Flame class	UL94-V0, self-extinguishing
Temperature	-30°C to +100°C (static)
Properties	Halogen free, silicone free

### Accessories

CONFIX WS Conduits	Page 120 - 121
CONFIX WST Split conduits	Page 122



Size / Drilling template  
FWS-B 11 to 21



Size / Drilling template  
FWS-B 29 to 48

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

# CONFIX WS

## Corrugated Conduits



Fits 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, electronic enclosures).  
→ Perfect for ground installation
- **CONFIX WS-PAL (light):** Polyamide conduit for high mechanical requirements  
→ Perfect 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

### Fits with

CONFIX FWS Bulkhead fitting	Page 118 - 119
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Type	External Ø	Internal Ø	Fits 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	Fits 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-B48	■ 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
Color	■ black ■ gray
Flame class	UL94-HB
Temperature	-40°C to +120°C
Properties	Halogen free, UV resistant, according to DIN EN ISO 8580

### Specifications WS-PAL

Material	Polyamide
Color	■ black
Flame class	UL94-HB
Temperature	-40°C to +120°C
Properties	Halogen free, UV resistant according to DIN EN ISO 8580

### Specifications WS-PP

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

### Fits with

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# CONFIX WST

## Split Corrugated Conduits



Individual lengths are possible!

### Product Description

The CONFIX WST is a two piece corrugated conduit. Perfect for routing standard or pre-terminated cables in harsh 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 inserts offered (see KT inserts on pages 30 - 32).

**The length of the CONFIX WST split corrugated conduit is individually adjustable. All conduits are available by the meter (0.5 m steps).**

### Advantages

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

### Specifications

Material	Polypropylene, black
Flame class	UL94-V2
Temperature	- 40°C to + 105°C
Properties	Halogen free, UV resistant

### Fits with

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Type	Order No.	Internal diameter	External diameter	Fits with Insert	Fits with CONFIX FWS	Dimensions	Ring length*
CONFIX WST NW 10	31200	8.7 mm	13.6 mm	KT 13 KTRS 13	-	10 mm	50 m*
CONFIX WST NW 14	31210	12.5 mm	18.5 mm	KT 18	-	14 mm	50 m*
CONFIX WST NW 20	31220	19.5 mm	25.5 mm	KT 25	-	20 mm	50 m*
CONFIX WST NW 23	31230	24.2 mm	31 mm	KT 30	-	23 mm	50 m*
CONFIX WST NW 37	31240	31 mm	41.4 mm	KTMB-P	CONFIX FWS-B 36	37 mm	25 m*
CONFIX WST NW 45	31250	42.7 mm	54 mm	KTMB-Q	CONFIX FWS-B 48	45 mm	25 m*
CONFIX WST NW 70	31260	66.5 mm	79.8 mm	KTMB-S	-	70 mm	10 m*

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



## CONFIX SH

### Conduit Clips for WST



Type	Order No.	Suitable conduit	Fixing hole	Width [mm]	Height [mm]	PU
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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 37	31340	NW 37	M6	55	56.5	10
CONFIX SH 45	31350	NW 45	M6	67	68	10

### Product Description

CONFIX SH Conduit clips are a one-piece location 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
Temperature	- 40°C to + 140°C
Properties	Halogen free, silicone free

### Fits with

CONFIX WST  
Split corrugated conduit Page 122