



FXP SERIES

NEW POWER CONNECTOR

The Railway market's new focus on weight limitations, dimension restrictions and electrical increasing capacity is creating a strong but competitive environment. Therefore TE Connectivity is introducing the FXP - designed by DEUTSCH - Lighter, smaller and with more electrical capacity.

The FXP is the new connector for all power applications on rolling stock designed according the latest European standard: EN50467.

A specific partitioned version is also available: Permanent Magnet Motor (PMM) Connexion for the newest motors generation

- Permanent Magnet Motor Applications
 - Power Train Line Applications
 - Motors Traction Systems
 - Auxiliary Power Supply
- Underframe / Roof Applications
- Converters / Electrical box Outlets

Main Technical Characteristics:

Electrical

- Cross Section :
Crimp contact caliber 12mm: up to 400A
Screw Contact M10: up to 400A
- Service Voltage :
Up 3000V (OV2PD3 & OV3PD2 according to EN50124-1/A2)
Up 4000V (OV2PD2 according to EN50124-1/A2)
- Test voltage : >12000V

Environment

- Protection Index: IP68
- Service temperature: -40°C / +100°C
- Salt spray resistance: 500 hours
- Fluid resistance: gasoil, mineral oil, base and acid
- Durability: 500 mating cycles
- Keying system: 6 possibilities

Material

- Shell :
Aluminum with chemical oxidation plating & black varnish
- Insert:
Thermoplastic (Group I)
- Fire & Smoke, Compliant with:
 - EN45545 (HL3 R22-R23)
 - DIN 5510 (S4 / SR2 / ST2)
 - NFF16 101 - 16 102 (exigency 2)
 - UNI CEI 11170

Part Numbering:

Standard Version

Straight plug 3 outlets M32 for Male crimp contacts :

FXP1PS-3M32-P (order contacts separately)

Straight receptacle 3 outlets M32 for Female crimp contacts :

FXP1RS-3M32-S (order contacts separately)



Plug



Receptacle

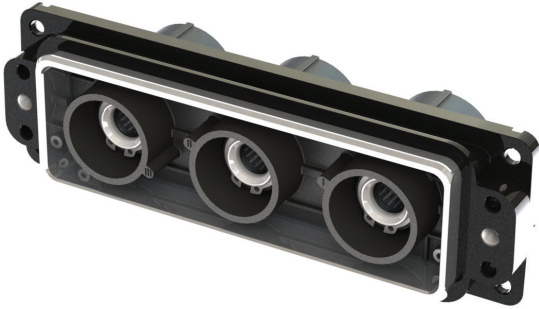
Panel Receptacle (to connect with Standard plug)

Panel receptacle 3 outlets for Female crimp contacts :

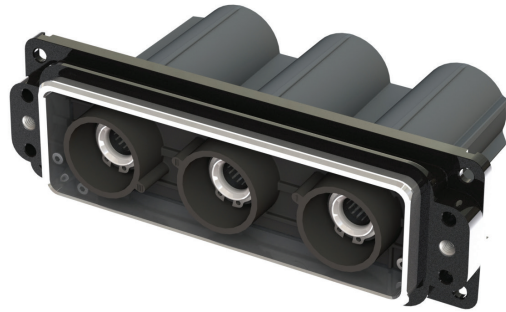
FXP1WC-3XXX-S (order contacts separately)

Panel receptacle 3 outlets for Female screw contacts :

FXP1WS-3XXX-S (order contacts separately)



Screw receptacle



Crimp receptacle

Partitioned Version (designed for Permanent Magnet Motor)

Partitioned plug 3 outlet M32 for male contact :

FXP1PP-3M32-P (order contacts separately)

Partitioned receptacle 3 outlets M32 for female contacts :

FXP1RP-3M32-S (order contacts separately)



Plug



Receptacle

Accessories and Toolings:

Male Crimp Contacts

DRAWING	PART NUMBER	CROSS SECTION (mm ²)	DIMENSIONS (mm)		WEIGHT (g)
			L1	D1	
	FXP-CS12-M50P	50	63.8	14	73
	FXP-CS12-M70P	70	63.8	16	76
	FXP-CS12-M95P	95	64.8	18.5	81
	FXP-CS12-M120P	120	68.3	21	93

Female Crimp Contacts

DRAWING	PART NUMBER	CROSS SECTION (mm ²)	DIMENSIONS (mm)		WEIGHT (g)
			L1	D1	
	FXP-CS12-M50S	50	49.4	14	53
	FXP-CS12-M70S	70	49.4	16	56
	FXP-CS12-M95S	95	50.4	18.5	62
	FXP-CS12-M120S	120	52.4	21	72

Female Screw Contact










DRAWING	PART NUMBER	THREAD	DIMENSIONS (mm)		WEIGHTS (g)
			L	D	
	FXP-CS12-LM10S	M10	49.8	21	99

Fixing plate for plug

DRAWING	PART NUMBER
	FXP-BS1*

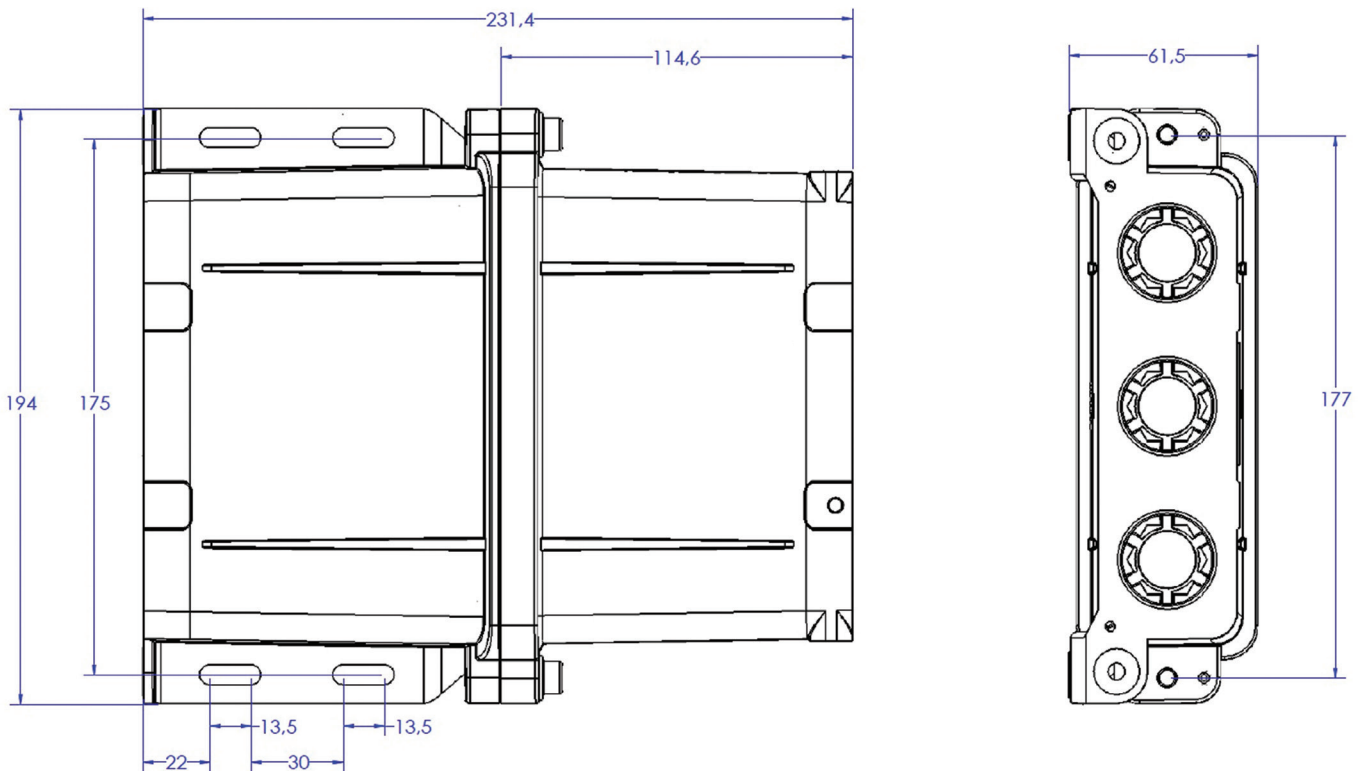
* This kit is composed of Left and right fixing plates and fastenings.

Toolings:

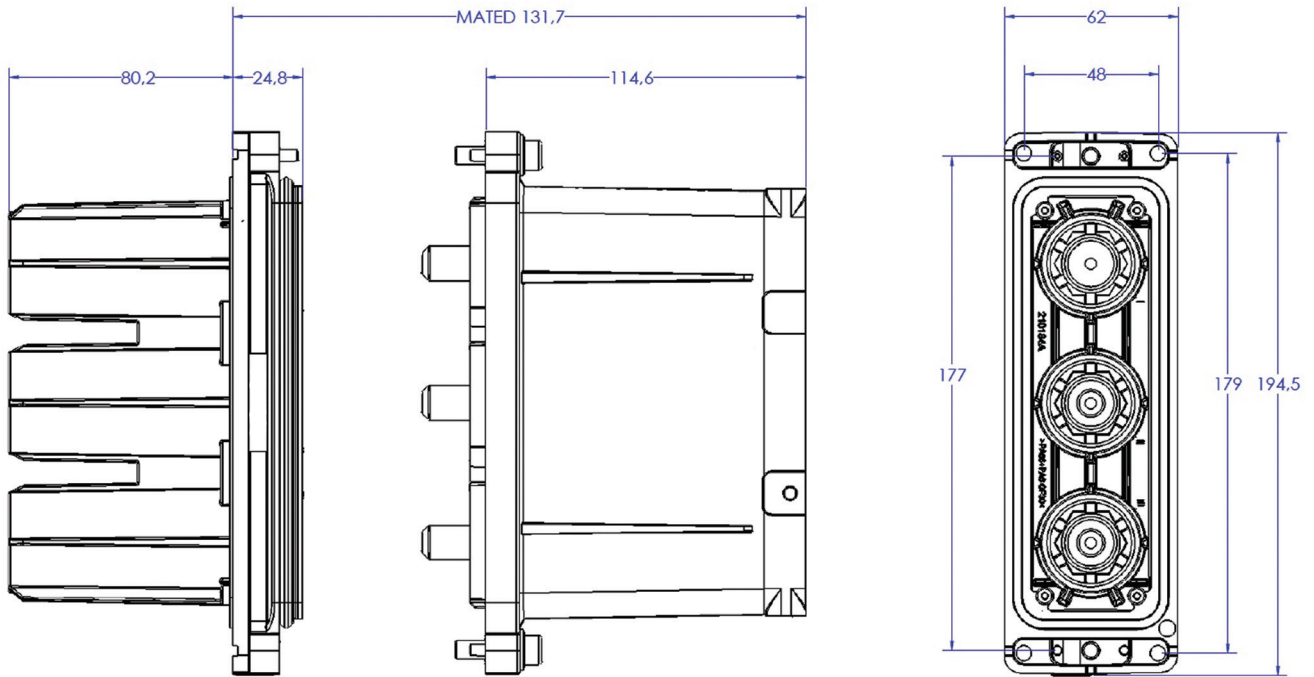
CROSS SECTION	Manual Pliers (Mecatraction)		Hydraulic Pliers (Mecatraction)			
	50 kN		13 Tons		20 Tons	
	Plier	Die	Plier	Die	Plier	Die
50mm ²	OUT0405-0314AS PMM1 	OUT0405-0137AS H1 16-50 F	OUT0405-0367AS Pump : PA133K 	OUT0405-0413AS TN50V13	OUT0405-0367AS Pump : PA133K 	OUT0405-0421AS TN50V20
70mm ²		OUT0405-0138AS H1 25-70 F	OUT0405-0360AS Flex hoses : F 4322 K (1,8m) F 4623 K (3m) 	OUT0405-0422AS TN70V13	OUT0405-0360AS Flex hoses : F 4322 K (1,8m) F 4623 K (3m) 	OUT0405-0380AS TN70V20
95mm ²			OUT0405-0441AS Jack : SU 130K (open) 	OUT0405-0423AS TN95V13 	OUT0405-0443AS Jack : SU 210K (open) 	OUT0405-0424AS TN95V20
120mm ²				OUT0405-0412AS TN120V13 	OUT0405-0425AS TN120V20	

Dimensions:

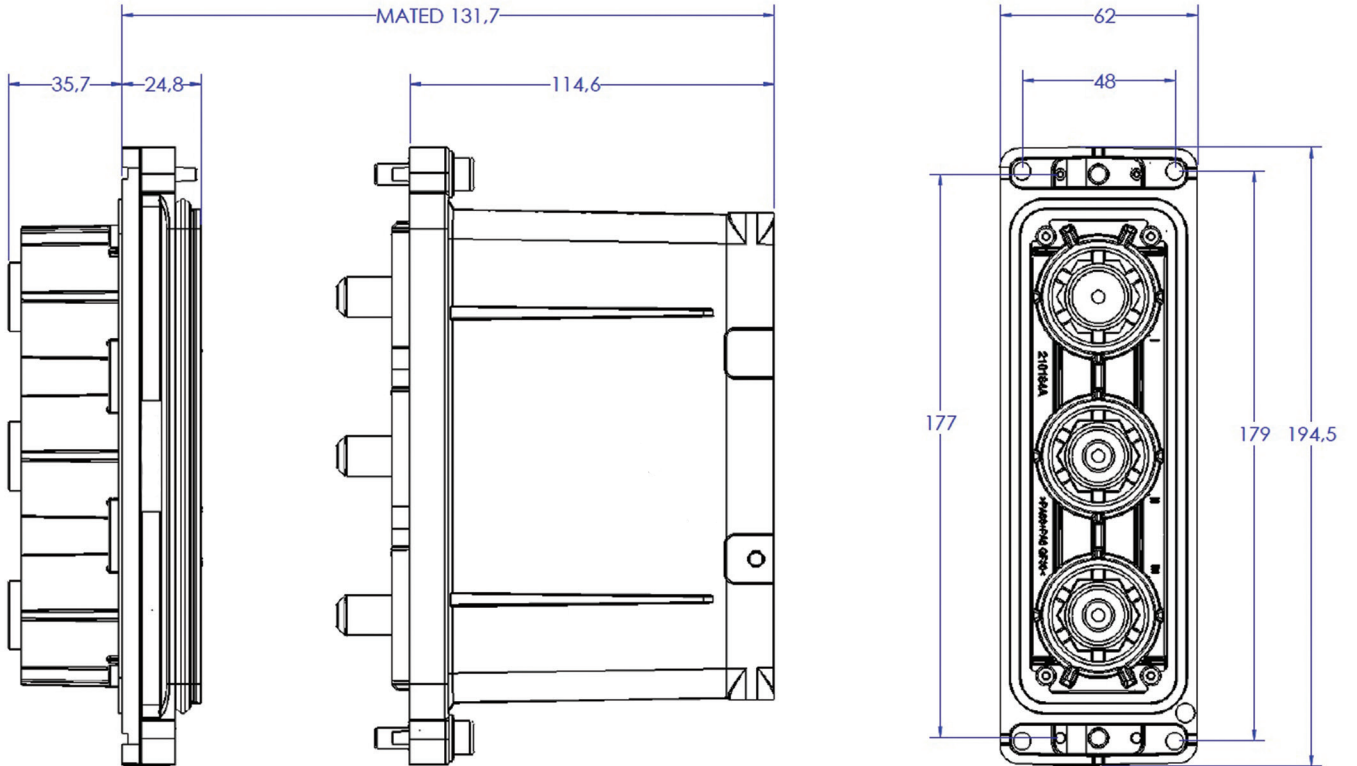
Straight standard and partitioned connector



Panel Crimped receptacle



Panel Screwed receptacle



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