



Long Life Reliability
does not cost the earth

Connection Systems



Rapid basket harness
replacement in 2 minutes.



Plane Power Crocodile Cable Carrier

Quickest method of connecting 400 Hz to aircraft

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Quick and easy to use

Lightweight single operator use

Low maintenance

Corrosion free Aluminum construction

Compact stowed
footprint

Unique in-basket harness release system, allows rapid change
of replacement harnesses

Easy basket replacement for quick maintenance

Accommodates uneven surfaces

Range of cable harness options available



Crocodile Cable Carrier is part of the
Plane Power aviation product range

TECHNICAL DETAILS

Unique articulating pivot joint integrated at intermediate joints & fixed end – allows carrier arms to move freely in response to uneven surfaces. Removes component stresses and reduces maintenance requirements.

Deployment Lengths	6m, 12m, 18m, 24m & 30m
Installation Handing	Left or right handed
Outputs	400 Hz; single & double (28V DC can also be supplied)
Beam Construction	Aluminium alloy with access covers for cable access
Knuckle Construction	Aluminium alloy with self-lubricating bushings
Knuckle Articulation	Unique articulating knuckle design accommodates uneven surfaces with a total of 6 degrees of articulation minimising component stress Change in height of +/-157mm over each 3m section
Cable Friendly Knuckle Design	Knuckle is designed around the natural bend radius of the cable and minimises flexing of the cable promoting long life
Basket Construction	Aluminium alloy with removable cable baskets
Basket Size	Single/Double -1.10m x 0.95m x 1.15m (L x W x H)
Basket Harness Length	Single or double available in 5m or 10m, other lengths available on request
Basket Harness Cable Type	4 x 70mm ² and controls
Basket Harness Release	Hard wired as standard Quick release bolted option available Connectorised harness release system, non-interlocked, power must be removed prior to removal
Basket Controls/Indicators	Per output; 400 Hz available LED indicator LED illuminated Start/On push button Stop push button Easy Access Emergency Stop (wired into control circuitry)

Wheel Type	Wheel body-polyamide 6 with two precision ball bearings Tyre-wrap-around elastic polyurethane with low rolling resistance profile Tested to ISO 2175
Wheel Diameter	150mm
Basket Brake System	2 x foot operated stamp jacks
Control Box Construction	Fixed end & basket end electrical enclosures manufactured from Aluminium alloy
Control Box Sealing	Fixed end & basket end sealed to IP66
Fixed End Stop Construction	Aluminum
Finish	Two tone grey RAL7035/ RAL7005 or bright yellow, other colours available
Cable Specification	Power cable 7 x 35mm ² twisted single core cable (1 off central neutral, 3 x 2 balanced phase conductors) – 450 Volt multi stranded cable to BS 638 Control cable 1.0mm ² 3GKW Earth cable, bond and PE 35mm – green/yellow stripe
Stowed Footprint	Single/Double; 6m – 3.3m [W] x 1.8m [D] 12m – 3.3m [W] x 2.2m [D] 18m – 3.3m [W] x 2.6m [D] 24m – 3.3m [W] x 3.0m [D] 30m – 3.3m [W] x 3.4m [D]
Applicable Standards	CE Marking, ISO 9001:2015, ISO/ EC 17050-1, BS EN 1915-1,2,3,4, BS EN 12312-20, ISO 6858

Part Number Configurator

6	6-meter-long cable carrier
12	12-meter-long cable carrier
18	18-meter-long cable carrier
24	24-meter-long cable carrier
30	30-meter-long cable carrier

1	P400 Socket on 5m Harness
2	P400 Socket on 10m Harness
3	PD400 Socket on 5m Harness
4	PD400 Socket on 10m Harness
5	P28 Socket on 5m Harness
6	P28 Socket on 10m Harness

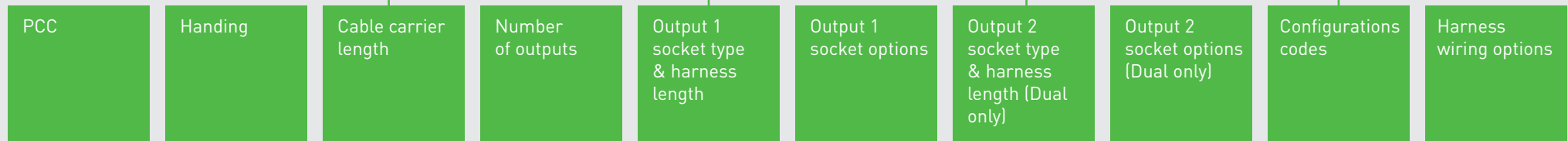
If option 5 or 6 are chosen, then the only output 1 socket option is 0

1	P400 Socket on 5m Harness
2	P400 Socket on 10m Harness
3	PD400 Socket on 5m Harness
4	PD400 Socket on 10m Harness
5	P28 Socket on 5m Harness
6	P28 Socket on 10m Harness

If option 5 or 6 are chosen, then the only output 2 socket option is 0

01	Stop Switch wired Normally Closed
02	Stop Switch wired Normally Open

Additional customer specific requirements can be accommodated



L	Left hand
R	Right hand

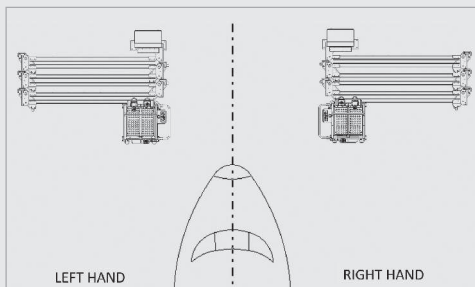
S	Single output
D	Dual output

	E & F Link	Neutral Rupture	90% Insertion Tube
0	×	×	×
1	✓	×	×
2	×	✓	×
3	✓	✓	×
4	×	×	✓
5	✓	×	✓
6	×	✓	✓
7	✓	✓	✓

× = Not required ✓ = Required

	E & F Link	Neutral Rupture	90% Insertion Tube
0	×	×	×
1	✓	×	×
2	×	✓	×
3	✓	✓	×
4	×	×	✓
5	✓	×	✓
6	×	✓	✓
7	✓	✓	✓

× = Not required ✓ = Required



Example codes:

PCCL24D153102F – cable carrier with 2 outputs

PCCL24S3101B – cable carrier with 1 output

PCCL12S5001F – cable carrier with a single 28V output

F	Hard Wired (Standard)
B	Quick Release Bolted Connector

PLANE POWER 400 HZ CONNECTORS

PD400 Connector (400 Hz)

The PD400 is supplied with a detachable nose and replaceable front contacts



Features

- Detachable nose, power & control contacts which can be replaced
- IP66/67 rated (no filler required)
- External components manufactured from impact, abrasion and chemically resistant thermally stable polymers
- Exterior replaceable handle/strain relief system

Technical information

- High conductivity silver-plated copper contacts
- Micro-switch (replaceable) located in F contact provides an indication once the connector has been 90% inserted into the mating receptacle (optional feature)
- Nominal voltage: 115/200 V, 400 Hz
- Current carrying capacity: 450 A (power), 35 A (control)
- Current overload: 1500 A for 1 min (power)
- High voltage test: 4000 V
- Operating temperature: -25°C to +90°C (includes temperature rise)
- Mating forces: As per ISO 461-1
- Weight: 2.30 kg
- Applicable standards: ISO 461-1, ISO 461-2, BS 4G 173-1, VG 96966-1, MIL-C-7974D
- Compatibility: Mates with ISO 461-2 and MS 90362 receptacles

P400 Connector (400 Hz)

The P400 connector comes with fixed electrical contacts, providing a cost-effective connection system to power aircraft



Features

- Low maintenance
- External components manufactured from impact, abrasion and chemically resistant thermally stable polymers
- Exterior replaceable handle/strain relief system
- IP66/67 rated (no filler required)

Technical information

- High conductivity silver-plated copper contacts
- Nominal voltage: 115/200 V, 400 Hz
- Current carrying capacity: 450 A (power), 35 A (control)
- Current overload: 1500 A for 1 min (power)
- High voltage test: 4000 V
- Operating temperature: -25°C to +90°C (includes temperature rise)
- Mating forces: As per ISO 461-1
- Weight: 2.45 kg
- Applicable standards: ISO 461-1, ISO 461-2, BS 4G 173-1, VG 96966-1, MIL-C-7974D
- Compatibility: Mates with ISO 461-2 and MS 90362 receptacles



LPA offer a range of cable assemblies and harnesses. Offering composite, 3 single core or 5 single core cable options.

For more information on our Plane Power connector range and cable harnesses refer to our aircraft ground power supply connector brochure.



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