cannon

Modular APD Interface

For management of APD connectors in cabin to chassis applications

ITT

We Connect

When it matters most

For more than a century, ITT has developed innovative interconnect solutions for the world's harshest environments. With facilities in the United States, Germany, Italy, Mexico, China and Japan, each with its unique strengths, we offer our customers interconnect solutions that are truly Engineered for Life.

In addition to this truly global footprint, we offer highly specialized, segmented industry expertise. We have a proven track record as an industry leader in harsh-environment applications. This has equipped us with the knowledge needed to continue to produce the most resilient, reliable connectors for our customers' most challenging conditions.

Global interconnect solutions for the harshest environments.

The ITT Cannon difference

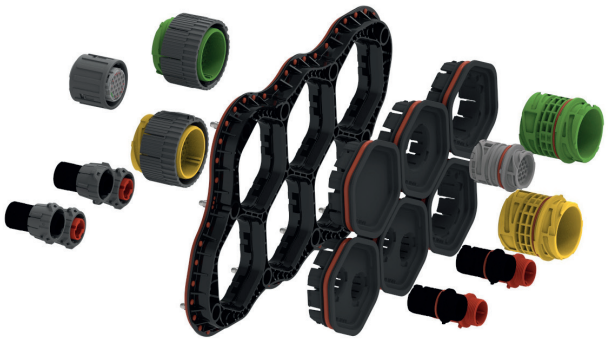
- Global capabilities & local support
- Proven application expertise
- A century of interconnect leadership
- A committed innovator & business partner

About ITT

ITT is a diversified leading manufacturer of highly engineered critical components and customized technology solutions for the energy, transportation and industrial markets. Building on its heritage of innovation, ITT partners with its customers to deliver enduring solutions to the key industries that underpin our modern way of life. Founded in 1920, ITT is headquartered in White Plains, N.Y., with employees in more than 35 countries and sales in a total of approximately 125 countries. For more information visit www.itt.com.

ITT Cannon Modular APD Interface

Enabling quick and simple management of APD connectors in cabin to chassis and centralized interconnect applications.



The Challenge

Mating, un-mating, reconfiguring or adding cabin to chassis and centralized interconnects on the production line can be a complex, time consuming and costly exercise. In some instances the cabin can be removed from the chassis several times during the assembly process.

Similarly, subsequent upgrades, services and refurbishments can very often necessitate additions or amendments to power and signal connectivity within the vehicle. Once again managing and working with these traditional interconnect configurations can be surprisingly complex.

The ITT Cannon Solution

In order to solve this issue ITT Cannon's engineers developed the innovative and patented Modular APD Interface that ensure installing, reconfiguring, mating and un-mating of Cannon's class leading APD interconnects is simple, fast and pain free.

The easy to install modular interface saves time, saves space and reduces complexity during initial assembly and subsequent service and upgrade activity. The system delivers exceptional flexibility to add or change connectors as additional vehicle services are developed and to implement standardized yet customizable connector systems for multiple applications.

Key Features

- Simple to install
- Flexible modular design providing
  - Ability to easily add and reconfigure connectors
  - Standardized solution for multiple applications
- Space saving
- Reduces assembly time and complexity
- For use with class leading APD interconnect range
- Fully customizable plate and modules

Modular APD Interface technical data	
Temperature Range:	-40°C to +85°C
Water tightness:	IP54 / IP6K5 depending on mounting position
Material:	Module: PBT GF10 Sealing of Module: HNBR Frame: PBT GF30 Frame Seal: TPE

Applications

CONSTRUCTION

OFF ROAD

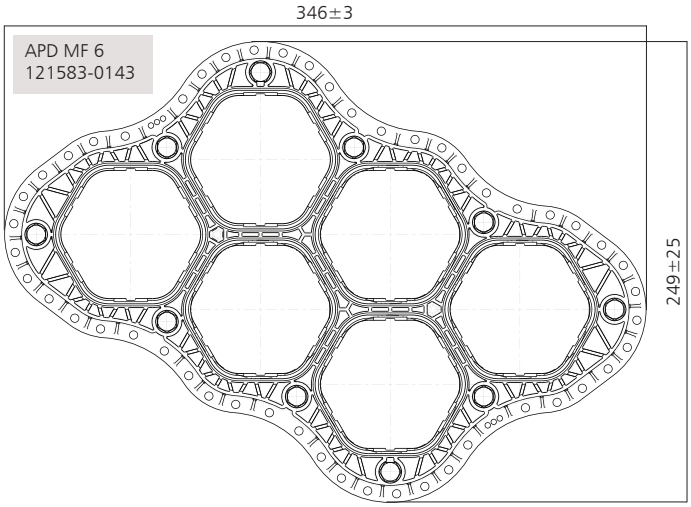
AGRICULTURE

TRUCK AND BUS

ITT Cannon Modular APD Interface

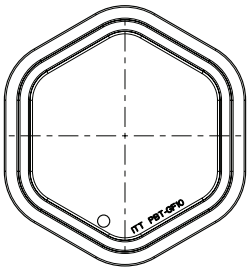
Representation of Modular APD Interface on a cabin.

Modular APD Plate dimension drawing



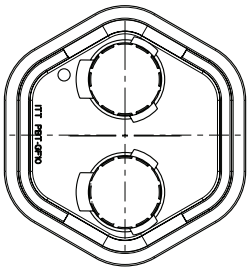
APD Modules dimension drawing

Blind Module



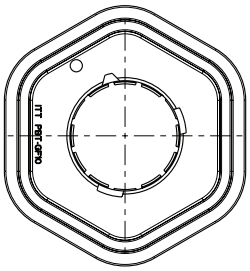
APD M00
121583-0139

APD 1 & 2 Way Module



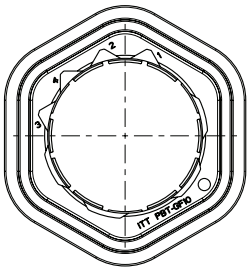
APD M 24
121583-0142

APD 19 Way Module



APD M 36
121583-0141

APD 51 Way Module



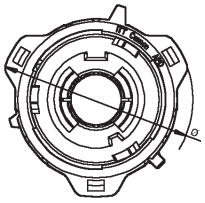
APD M 51
121583-0140

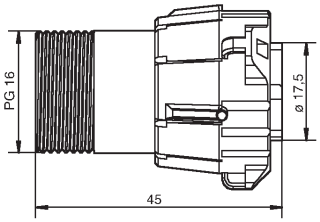
Key Features
ITT Cannon APD Interconnects

- Signal and power connectors in 1 to 51 way variants
- Extremely resistant to shock and vibration
- High performance thermoplastic polymer material
- Resistant to engine, transmission and brake fluids
- High Sealing grades up to IP69K
- Field repairable
- Wire sizes 0,5mm² to 50mm²
- Extensive range of application tooling and accessories

Cannon APD / ISO 15170 Connectors

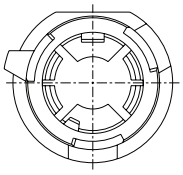
High Power Plug, APD 1-way

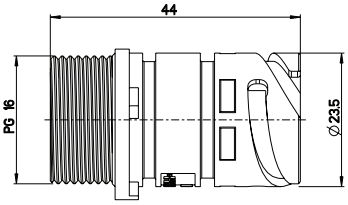




Order No.	Designation	Code	Color
121583-0012	APD-5BSH	5	blue (RAL 5012)
121583-0013	APD-6BSH	6	red (RAL 2002)
121583-0042	APD-7BSH	7	black (RAL 9005)

High Power Snap-in Receptacle, APD 1-way





Order No.	Designation	Code	Color
249-8619-005	APD-7SPH	7	black (RAL 9005)
249-8619-006	APD-6SPH	6	red (RAL 2002)
consult factory	APD-5SPH	5	blue (RAL 5012)

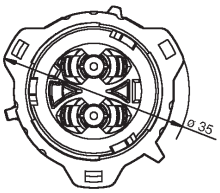
Machined Socket Crimp-Contacts, High Performance Copper, Silver plated for APD 1-way

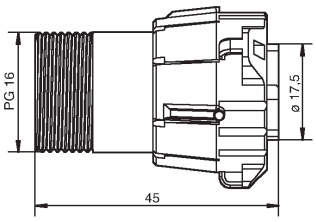
Order No.	AWG
031-8521-030 (16,00 mm²)	
031-8521-010 (25,00 mm²)	4
031-8521-020 (35,00 mm²)	2
031-8646-015 (50,00 mm²)	with bunch

Machined Pin Crimp Contacts, High Performance Copper, Silver plated for APD 1-way

Order No.	AWG
030-8614-030 (16,00 mm²)	
030-8614-010 (25,00 mm²)	4
030-8614-020 (35,00 mm²)	2
030-8581-029 (50,00 mm²)	with bunch

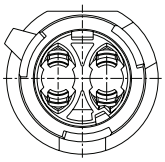
High Power Plug, APD 2-way

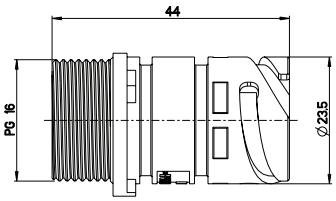




Order No.	Designation	Code	Color
121583-0083	APD-1BSH8-2-12	1	grey (RAL 7036)
121583-0025	APD-1BSH8-2	1	black (RAL 9005)
121583-0084	APD-1BSH8-2-14	1	blue (RAL 5012)

High Power Snap-In Receptacle, APD 2-way





Order No.	Designation	Code	Color
249-8619-007	APD-1SPH8-2	1	black RAL 9005
249-8619-013	APD-12SPH8-2	1	grey RAL 7036
249-8619-014	APD-14SPH8-2	1	blue RAL 5012

Machined Socket Crimp-Contacts, Standard Silver plated for APD 2-way

Order No.
031-8646-010 (6,00 mm²)*
031-8646-011 (10,00 mm²)
031-8646-002 (AWG 8)
031-8646-003 (AWG 6)
031-8646-001 (16,00 mm²)

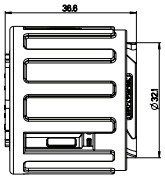
* use individual wire seal or grommet

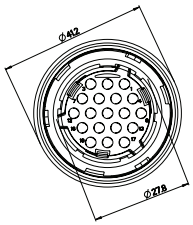
Machined Pin Crimp-Contacts, Standard Silver plated for APD 2-way

Order No.
430-8645-000 (6,00 mm²)*
430-8645-009 (10,00 mm²)
430-8645-003 (AWG 8)
430-8645-002 (AWG 6)
430-8645-007 (16,00 mm²)

* use individual wire seal or grommet

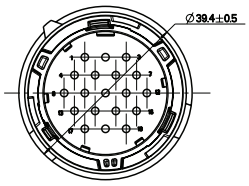
Plug, APD 19-way

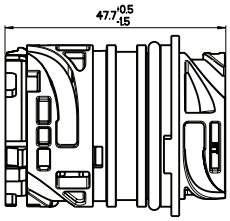




Order No.	Designation	Code	Color
121583-0119	APD-1BS19S	1	black (RAL 9005)
121583-0121	APD-2BS19S	2	grey (RAL 7036)
121583-0123	APD-3BS19S	3	green (RAL 6029)
121583-0125	APD-4BS19S	4	blue (RAL 5012)

Snap-In Receptacle APD 19-way

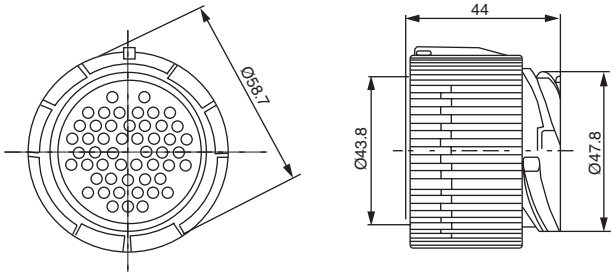




Order No.	Designation	Code	Color
121583-0148	APD-2SNP19S	2	grey (RAL 7036)
121583-0154	APD-1SNP19S	1	black (RAL 9005)
121583-0155	APD-3SNP19S	3	green (RAL 6029)
121583-0156	APD-4SNP19S	4	blue (RAL 5012)

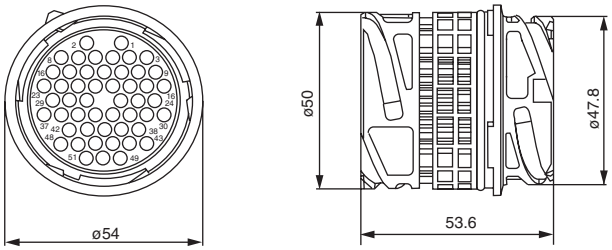
For APD accessories such as endbells, dust caps, flex tube adaptorsand tools please see the APD catalog.

Plug, APD 51-way, Secondary Lock Version



Order No.	Designation	Code	Color
121583-0187	APD-1BP51SN	1	green (RAL 6018)
121583-0188	APD-2BP51SN	2	yellow (RAL 1018)
121583-0189	APD-3BP51SN	3	brown (RAL 3009)
121583-0190	APD-4BP51SN	4	purple (RAL 4001)

Snap-In Receptacle, APD 51-way, Secondary Lock Version



Order No.	Designation	Code	Color
121583-0150	APD-1SNS51S	1	green (RAL 6018)
121583-0151	APD-2SNS51S	2	yellow (RAL 1018)
121583-0152	APD-3SNS51S	3	brown (RAL 3009)
121583-0153	APD-4SNS51S	4	purple (RAL 4001)

For APD 19-way and 51-way Secondary Lock Version

Contacts (stamped & formed)	Plating	Crimp Range	Reeled (5000 pcs)		Loose Piece (bags of 100)	
			Designation	Part number	Designation	Part number
Socket contacts	tin	0,35 - 0,75 mm²	APK-SA16A07-002	121668-0221	APK-SA16A07-002-B	121668-0274
		0,75 - 1,5 mm²	APK-SA16A15-002	121668-0202	APK-SA16A15-002-B	121668-0276
	gold (0,8 µm)	0,35 - 0,75 mm²	APK-SA16G07-002	121668-0270	APK-SA16G07-002-B	121668-0278
		0,75 - 1,5 mm²	APK-SA16G15-002	121668-0272	APK-SA16G15-002-B	121668-0280
Pin contacts	tin	0,35 - 0,75 mm²	APK-PA16A07-002	121668-0252	APK-PA16A07-002-B	121668-0275
		0,75 - 1,5 mm²	APK-PA16A15-002	121668-0253	APK-PA16A15-002-B	121668-0277
	gold (0,8 µm)	0,35 - 0,75 mm²	APK-PA16G07-002	121668-0269	APK-PA16G07-002-B	121668-0279
		0,75 - 1,5 mm²	APK-PA16G15-002	121668-0271	APK-PA16G15-002-B	121668-0281

Individual Wire Seals / Blind Seals

Description	Insulation Diameter	Color	Part Number
Single Wire Sealing	1,2 - 1,6 mm	Red	121667-0024
	1,4 - 2,0 mm	Grey	121667-0022
	1,9 - 2,1 mm	Yellow	121667-0023
Blind Seal	1,4 - 2,0 mm	White	121667-0025

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Connect with the experts

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