

Electrical Data

Operating Voltage	48 VDC*
Operating Current	see derating curve
Contact Resistance	2 m Ω max.
Voltage Proof	1000 VAC, 60 seconds
Insulation Resistance	10 M Ω min.

Mechanical Data

Durability	50 Mating Cycles
Coupling Torque	2 Nm max.
Static Load, free connector	350 N (ISO 15170-2, Sec. 4.6)

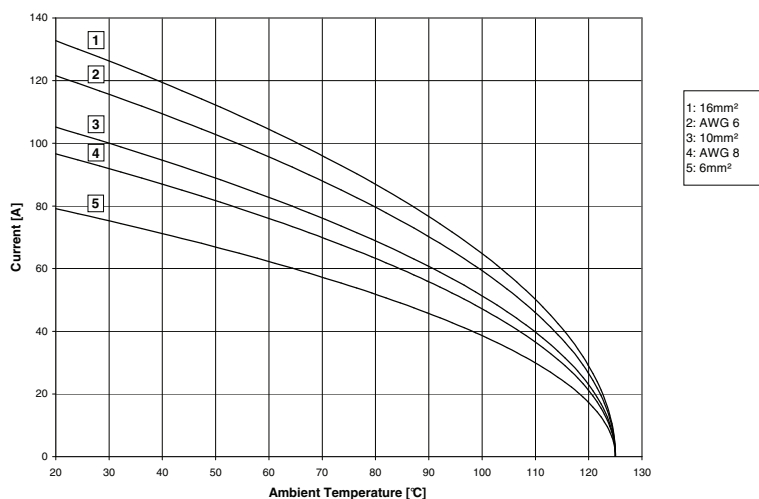
Environmental Data (acc. ISO 15170)

Temperature Range	-40 °C up to 125 °C (ISO 15170-2, Sec. 6.4)
Humidity Range	up to 95 % r.h. (ISO 15170-2, Sec. 6.4)
Sealing	IP 67 (DIN EN 60529)*
Salt Spray	96 h, 35 °C (ISO 15170-2, Sec. 6.2)
Industrial Climate	SO ₂ , 0,67 % (ISO 15170-2, Sec. 6.3)
Fluid Compatibility	Brakefluid, ATF, fuel, .. (ISO 15170-2, Sec. 6.6)*
Vibration Resistance	Sine, 100 m/s ² , 3 axis, 24h, RT (EN 60512)*

Materials List

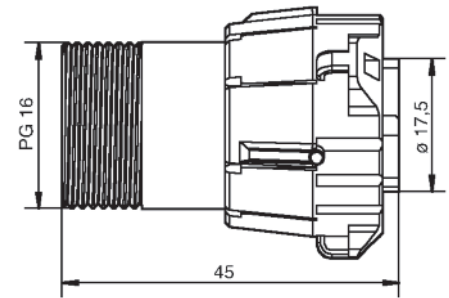
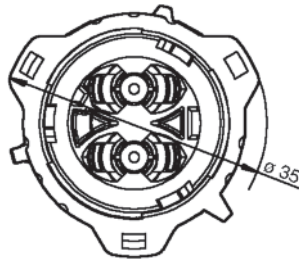
Housing Parts	PBT GF
Sealing Parts	HNBR (alternative FKM)
Coupling Nut	PA 66 GF
Contacts	Copper Alloy, Ag plated

Derating Curve



Further information available upon request.

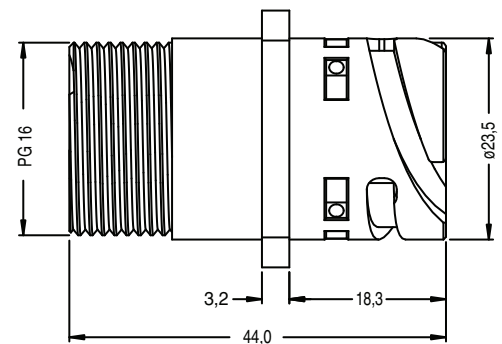
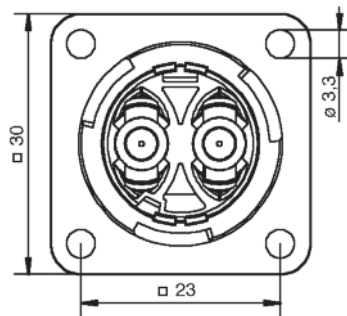
High Power Plug, 2-way



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)

Packaging unit 100 pcs.
 Socket Crimp contacts see page 22.
 Accessories, see pages 22 and 23.
 Note: Always use hex nut and cable seal.

High Power Flange Receptacle, 2-way

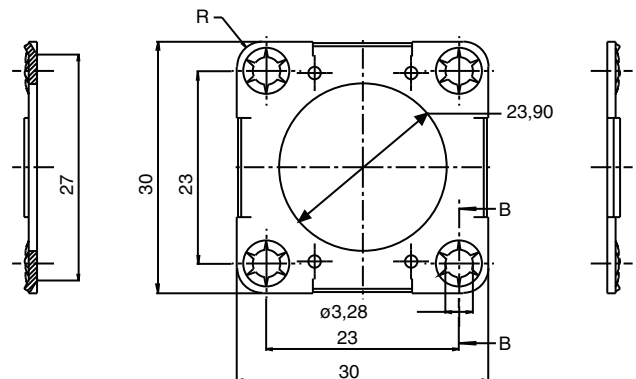
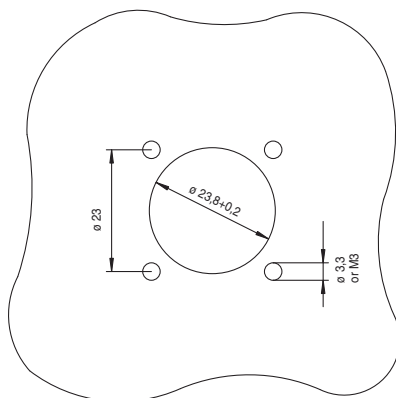


Order No.	Designation	Code	Color
121583-0026	APD-1APH8-2	1	black (RAL 9005)

Packaging unit 100 pcs.
 Pin crimp contacts see page 22.
 Accessories, see pages 22 and 23.
 Note: Always include hex nut and cable seal.

Panel Cut Out

Flange for all Flange Receptacles



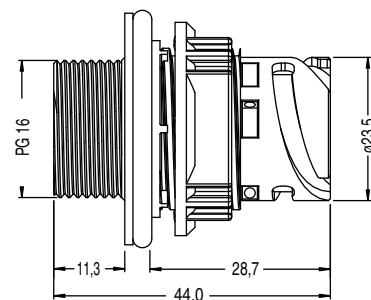
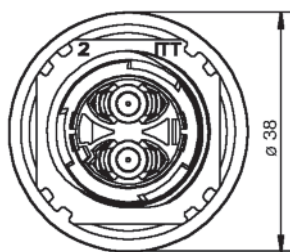
Order Number: 066-8516-005

Note: Metal mounting flange for wall mounting of flange receptacles.

Dimensions shown in mm
 Specifications and dimensions subject to change

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High Power Jam Nut Receptacle, 2-way



Order No.	Designation	Code	Color
121583-0085	APD-1CPH8-2-12	1	grey (RAL 7036)
121583-0027	APD-1CPH8-2	1	black (RAL 9005)
121583-0086	APD-1CPH8-2-14	1	blue (RAL 5012)

Packaging unit 100 pcs.

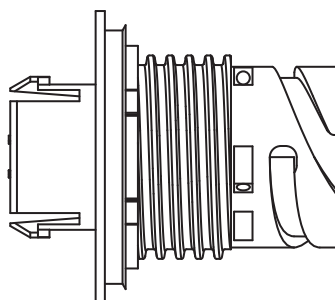
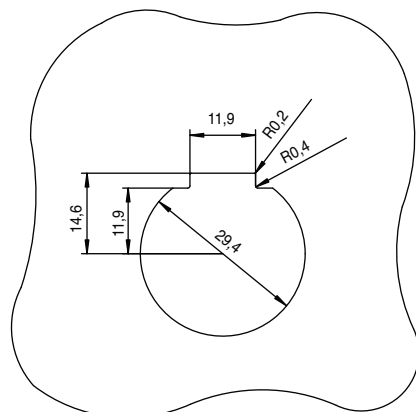
Pin crimp contacts see page 22.

Accessories, see pages 22 and 23.

Note: Includes jam nut for wall thickness 1..4 mm. Always use hex nut and cable seal.

Panel Cut Out

Flange for all Flange Receptacles



Housing



O-ring



Jam Nut

Wall Thickness:

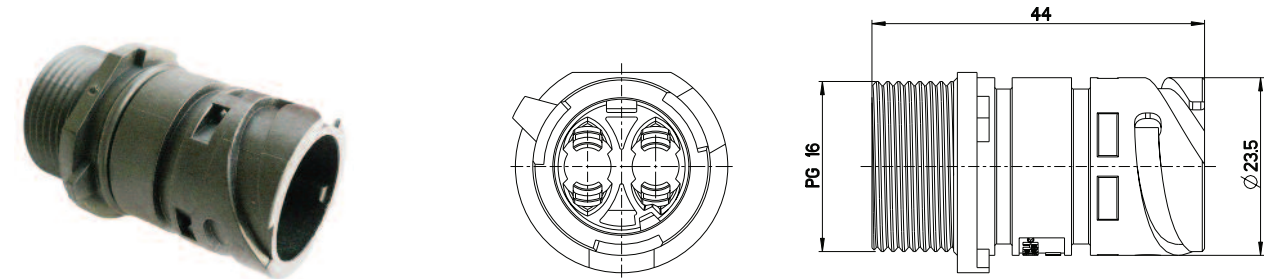
Standard Jam Nut: min. 1,0 / max. 4,0 mm

Special Jam Nut: min. 2,0 / max. 5,0 mm

Jam Nut, special

Designation	Order No.
for special wall thickness 2,0 - 5,0 mm	217-8516-001

High Power Snap-In Receptacle, 2-way



Order No.	Designation	Code	Color
249-8619-007	APD-15PH8-2	1	black (RAL 9005)

Packaging unit 100 pcs.

Pin crimp contacts see page 22.

Accessories, see pages 22 and 23.

Note: Always use hex nut and cable seal.

Panel Cut Out

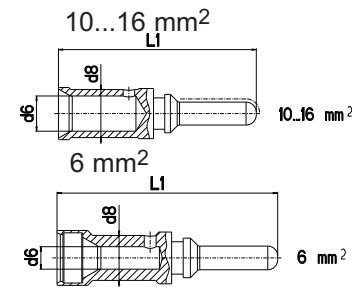
3D data for design of snap-in cut out available on request. Please consult factory.

Machined Pin Crimp Contacts, Standard Silver Plated

Order No.	d6	d8	L1
430-8645-000 (6,00 mm ²) *	3,4	6,8	33,4
430-8645-009 (10,00 mm ²)	4,3	6,8	30,9
430-8645-003 (AWG 8)	3,8	6,8	30,9
430-8645-002 (AWG 6)	5,3	6,8	30,9
430-8645-007 (16,00 mm ²)	5,5	7,5	30,9

Packaging unit 100 pcs.

* use individual wire seal or grommet

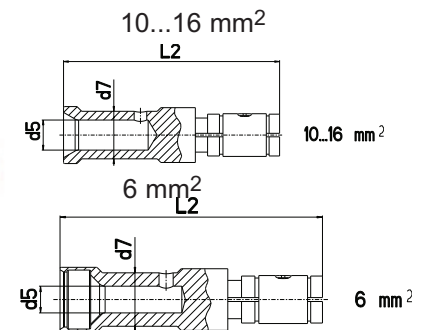


Machined Socket Crimp Contacts, Standard Silver Plated

Order No.	d5	d7	L2
031-8646-010 (6,00 mm ²) *	3,4	6,8	33,4
031-8646-011 (10,00 mm ²)	4,3	6,8	30,9
031-8646-002 (AWG 8)	3,8	6,8	30,9
031-8646-003 (AWG 6)	5,3	6,8	30,9
031-8646-001 (16,00 mm ²)	5,5	7,5	30,9

Packaging unit 100 pcs.

* use individual wire seal or grommet

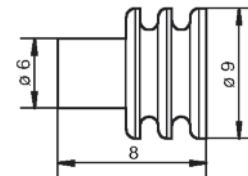


Individual Wire Seal

For High Power 2-way 6 mm² only

Designation	Order No.:
16GN5824	121668-0035

wire insulation ø 4,3 - 4,8 mm / green



Cable Sealing Set

For High Power 2-way

Set consists of:

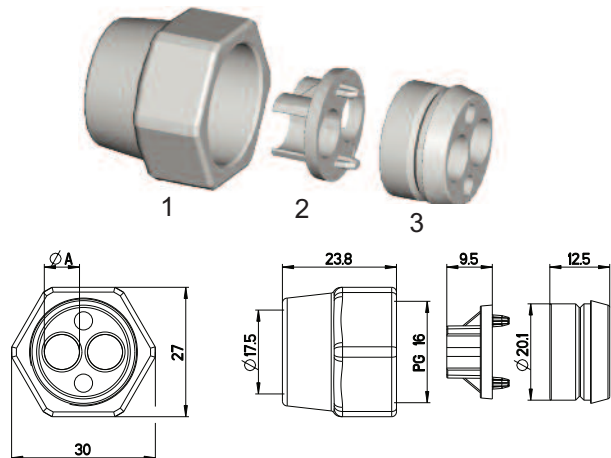
Hexagonal Nut (1)

Compression Support Plate for Cable Seal (2)

Cable Seal for Cable (3)

Order No.	Wire Insulation Ø	Ø A
121583-1000	4,2 - 5,8	3,8
121583-1001	5,7 - 7,3	5,3
121583-1002	7,4 - 8,3	7,3
121583-1003	6,8 - 8,3	6,5

Packaging unit 100 pcs.

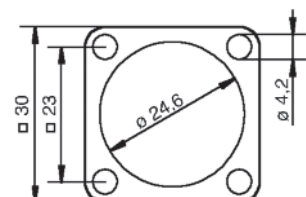


Flange Gasket

For Flange Receptacle, High Power 2-way

Order No.
075-8503-000 (-55/125°C)
075-8503-004 (-30/200°C)

Packaging unit 100 pcs.



Sealing Cap for Receptacle

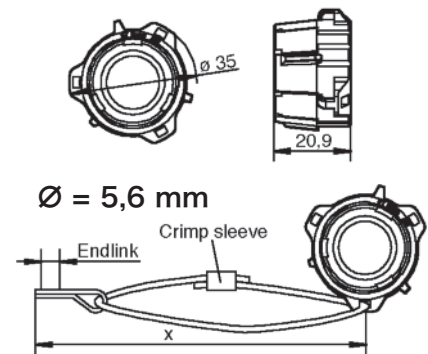
Designation	Order No.
APD-DP	121583-0021

Packaging unit 100 pcs.

APD-DP with rope, end link and eyelet
X = Total rope length upon request

Order number 120110-0026* X~9cm

* for other lengths please consult the factory



Adaptor for Flex Tube

For 2-way Plug and Receptacle

Order No. 980-8672-010 (ø 17 mm)

Packaging unit 100 pcs.
Nominal Width: 17



90° Endbell

For 2-way Plug and Receptacle

Order No.: 980-8672-004

Packaging unit 100 pcs.

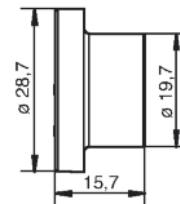


Ø max. = 17,4 mm
thread = PG 16

Dust Cap for Plug

Order No. 025-8636-005

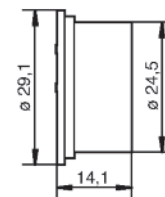
Packaging unit 100 pcs.



Dust Cap for Receptacle

Order No. 025-0480-000

Packaging unit 100 pcs.



Blind Socket for 1 / 2 / 4 / 6 / 7-way

Order No. 120110-0217

Packaging unit 100 pcs.

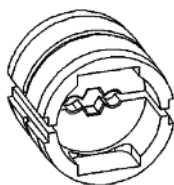
Note: All cavities closed, mates with 1-7-way APD versions.



Dimensions shown in mm
Specifications and dimensions subject to change

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Crimp Die Tooling for 2-way High Power Connectors

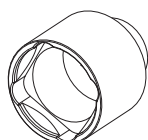


Contact / Socket	Designation	Order No.
031-8646-010 (6,00 mm ²)		
with individual wire seal	CT120090-165	120090-0165
031-8646-011 (10,00 mm ²)	CT120090-165	120090-0165
031-8646-002 (AWG 8)	CT120090-165	120090-0165
031-8646-003 (AWG 6)	CT120090-165	120090-0165
031-8646-001 (16,0 mm ²)	CT120090-171	120090-0171

Contact / Socket	Designation	Order No.
430-8645-000 (6,00 mm ²)		
with individual wire seal	CT120090-165	120090-0165
430-8645-009 (10,00 mm ²)	CT120090-165	120090-0165
430-8645-003 (AWG 8)	CT120090-165	120090-0165
430-8645-002 (AWG 6)	CT120090-165	120090-0165
430-8645-007 (16,0 mm ²)	CT120090-171	120090-0171

Assembly Tools Jam Nut Receptacle

Square box spanner for torque wrench to tighten the jam nut.

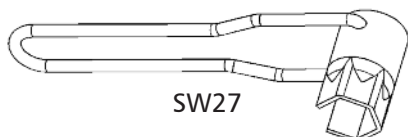


SW30

Order No. 317-8649-034

Assembly Tools Hexagonal Nut

To tighten the hexagonal fixing nut 217-8516-010.

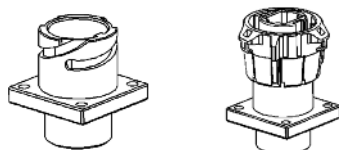


SW27

Designation Order No.
SS627G 980-8672-005

Torque 2,5 +/- 0,5 Nm

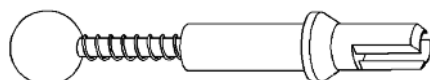
Assembly and Torque Wrench Adapter



Designation Order No.
MA-APD-1/2-P 248-8653-063
MA-APD-1/2-R 249-8619-010

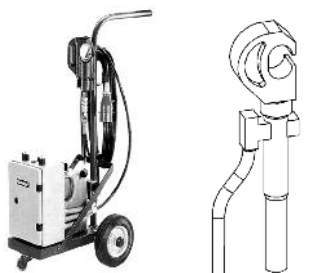
1/4" adaption

Contract Extraction Tool



Designation Order No.
CET- APD-2 121586-5149
for pin and socket contacts

Crimp Tool



Crimp Tool	Designation	Order No.
Hydraulic, hand operated:	HK120-25	121586-5077
Electro-hydraulic, 230 V AC operated	HK12-EL	121586-5075
Hand Crimp Tool 6 / 10 / 16 mm ²		121586-5244

