

APD / DIN 72585
C O N N E C T O R S



Connectors with Bayonet Coupling

Heavy duty environmental

- ❖ Cable connector
- ❖ Receptacle with flange for front and rear mounting
- ❖ Jam nut receptacle
- ❖ High Power connector (under preparation)
- ❖ Customer tailored versions (please consult factory)

Think of the harshest environment on a vehicle. One that is subject to contaminates, vibration and shock. That is where APD longs to be. This direct, in-line and bulkhead sensor connector is resistant to engine, transmission and brake fluid – plus just about everything else Mother Nature can toss its way. It also boasts very low contact resistance, so you can benefit from maximum signal integrity. APD is available in 2, 3 and 4 position versions and has been designed to meet all DIN 72585 requirements.

*) A 7 way versions is under preparation



Upon request we also develop and produce customer tailored APD versions.
Please consult factory.

Features

- ❖ Available with 2, 3 and 4 contacts, current rating 25 A max
- ❖ Low contact resistance
- ❖ High performance engineered materials for continuous operation at -40/140°C
- ❖ Environmental sealed to IP69K
- ❖ Individual wire seals
- ❖ „B“ crimp profile at pin and socket
- ❖ Hand insertable contacts
- ❖ Bayonet coupling
- ❖ Coding with housings in four colours
- ❖ Conduit flex tube termination with straight or 90° right angle endbells

Benefits

- ❖ Meets sensors and actuators requirements
- ❖ Signal integrity for low current applications
- ❖ Survives harshest vehicle environments
- ❖ Superior environmental sealing
- ❖ Easy contact assembly and installation into connector housing
- ❖ Enhanced durability during assembly
- ❖ Low installed cost
- ❖ Easy connector mating
- ❖ Coding possibilities avoid mismating during harness assembly
- ❖ Excellent engine steam cleaning protection

Applications

- Sensors
- Anti skid control
- ABS Brake control
- Magnetic vehicle control systems
- Valve control (water, oil, air pressure)

Electrical Data

Voltage	48 VDC max
Current	10 A max for wire size 1 (0,5 – 1,0 mm ²) at 25°C 25 A max for wire size 2 (1,5 – 2,5 mm ²) at 25°C 240 A max for wire size 500/0 (High Power contacts)
Voltage drop after 20 mating cycles / 100 mA	0,3 mV max
Contact resistance	3 mΩ max
Test voltage	1000 VDC (Ueff)
Insulation resistance	10 MΩ min

Mechanical Data

Sealing acc. to IEC 529 and DIN 400050Part 9	IP69K
Temperature	-40/140°C
Shock/Vibration	acc. to DIN 72585
Durability	50 Mating cycles

Materials

Housing with coupling nut	PA
O Ring	HNBR
Contacts	Copper alloy, stamped and formed,
Contact and crimp area	Tin

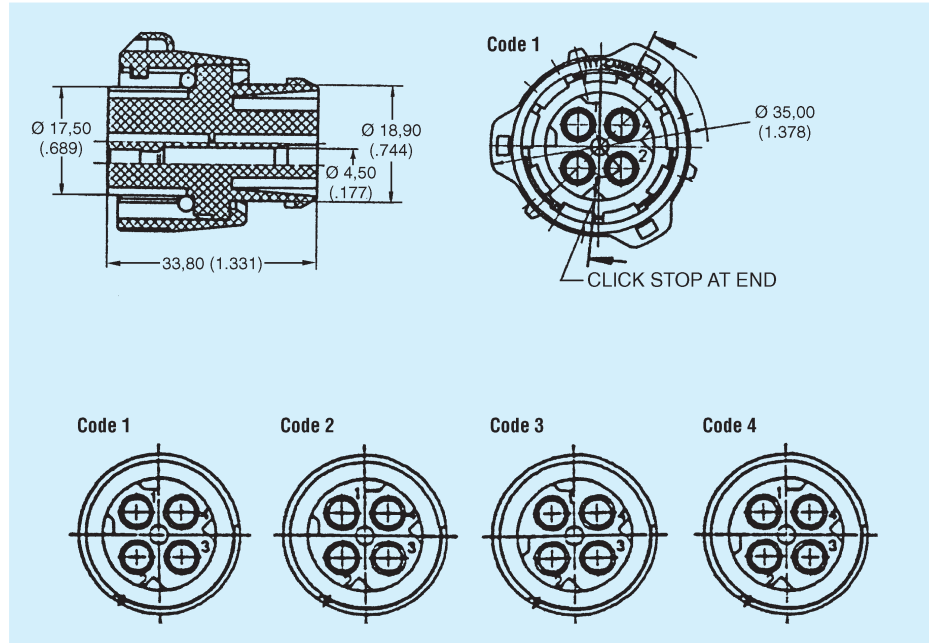
Applicable Specifications

DIN 40050 Part 9 and DIN IEC 68 Part 1 DIN 41640 Part 7, 8, 14, 15 and 21	Temperature, humidity, environmental sealing, resistant against lubricants Insulation resistance, dielectric withstanding voltage, mechanical shock, vibration and severity acceleration, durability
DIN 50021	Natrium spray test
DIN 51511	Lubricants such as engine oil, grease, etc.
DIN 51601	Diesel fuel, gasoline
DIN IEC 4925	Brake fluids, anti-freeze, coolants

Plug

Packaging unit 100 pcs.

Part No.	Designation	Code	Colour
121583-0000	APD-1BS-K2	1	black (RAL 9005)
121583-0001	APD-2BS-K2	2	grey (RAL 7036)
121583-0002	APD-3BS-K2	3	green (RAL 6029)
121583-0003	APD-4BS-K2	4	blue (RAL 5012)



Socket Contacts

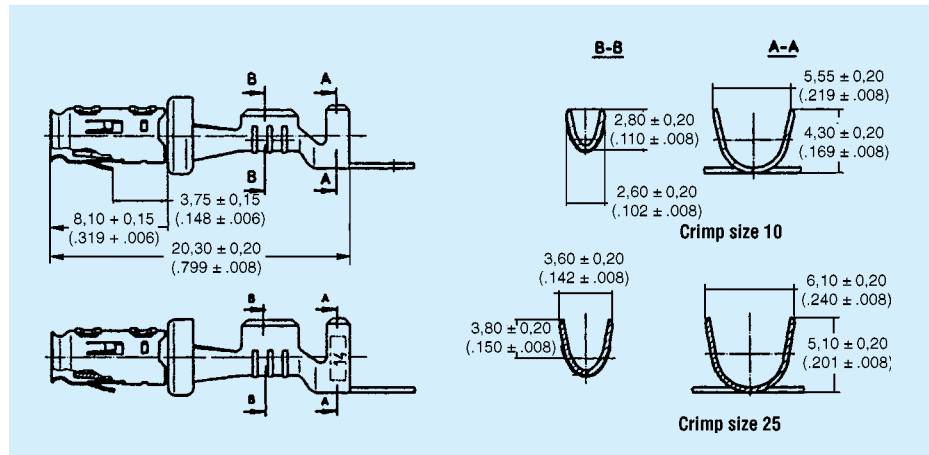
tinned 4 µm, crimp termination,
3.000 contacts per reel

Part No. APK-SB25A10-002

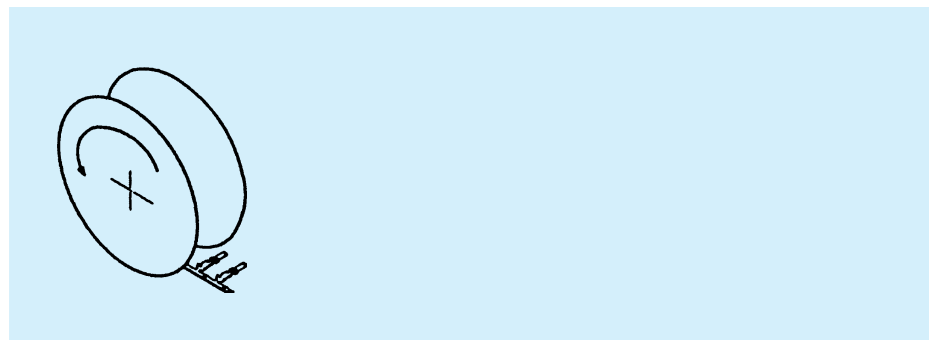
0,5 – 1,0 mm²

Part No. APK-SB25A25-002

1,5 – 2,5 mm²

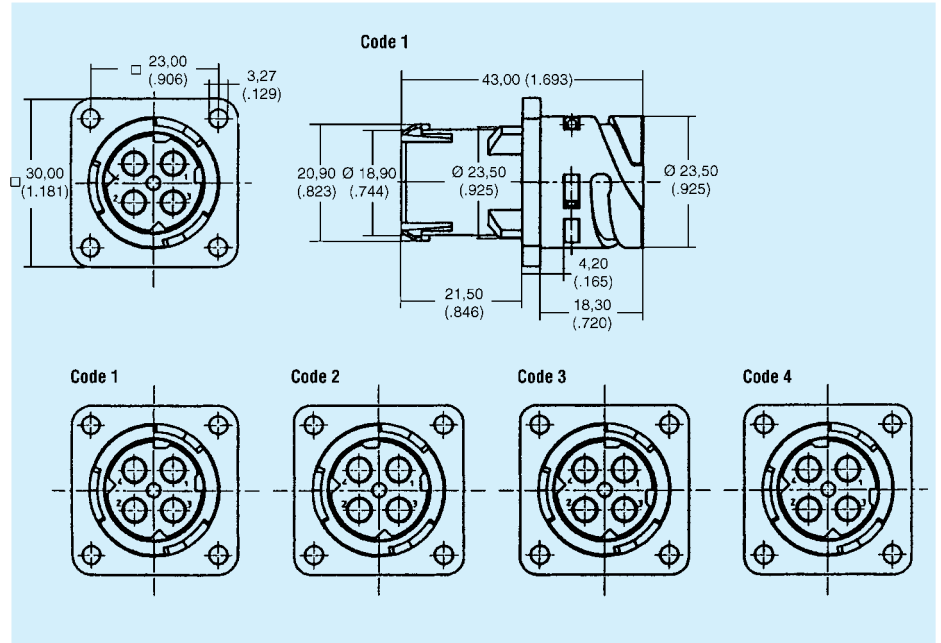


Contact Reel



Receptacle with flange
Packaging unit 100 pcs.

Part No.	Designation	Code	Colour
121583-0004	APD-1AP-K2	1	black (RAL 9005)
121583-0005	APD-2AP-K2	2	grey (RAL 7036)
121583-0006	APD-3AP-K2	3	green (RAL 6029)
121583-0007	APD-4AP-K2	4	blue (RAL 5012)

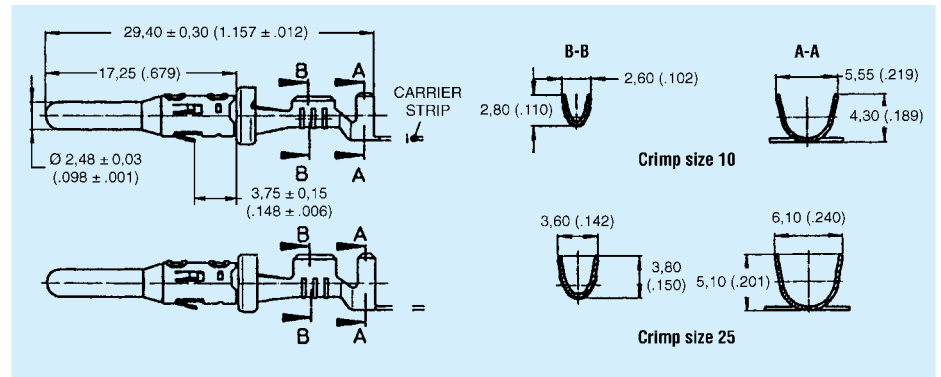


Pin Contacts

tinned 4 µm, crimp termination,
3.000 contacts per reel

Part No. APK-PB25A10-002
0,5 – 1,0 mm²

Part No. APK-PB25A25-002
1,5 – 2,5 mm²

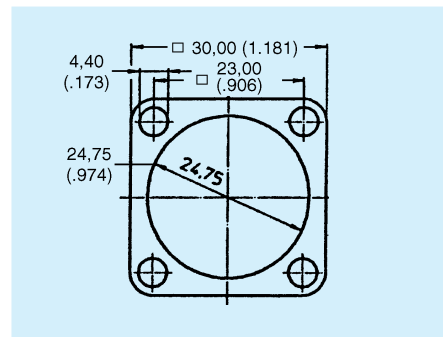


Flange Gasket

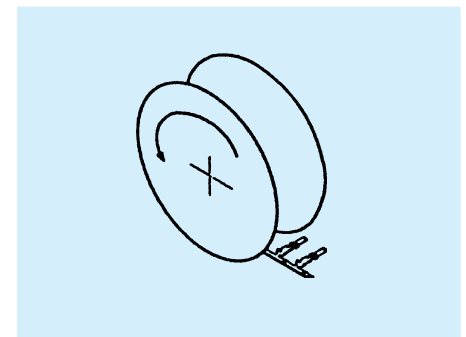
for front and rear panel mounting
Packaging unit 100 pcs

Part No. 075-8503-000
Operating temperature -55/125°C

Part No. 075-8503-004
Operating temperature -30/200°C

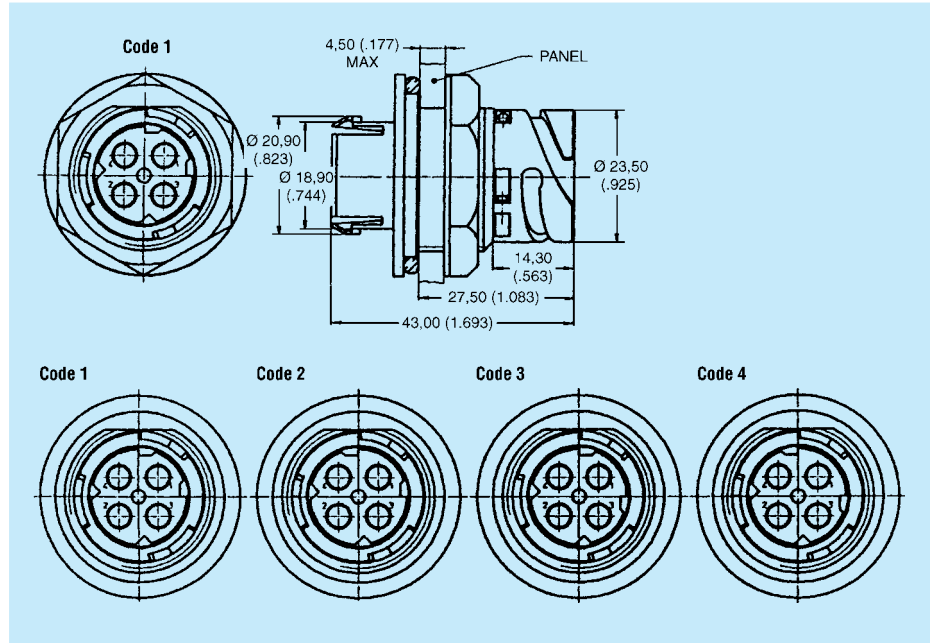


Contact Reel



Jam Nut Receptacle
Packaging unit 100 pcs.

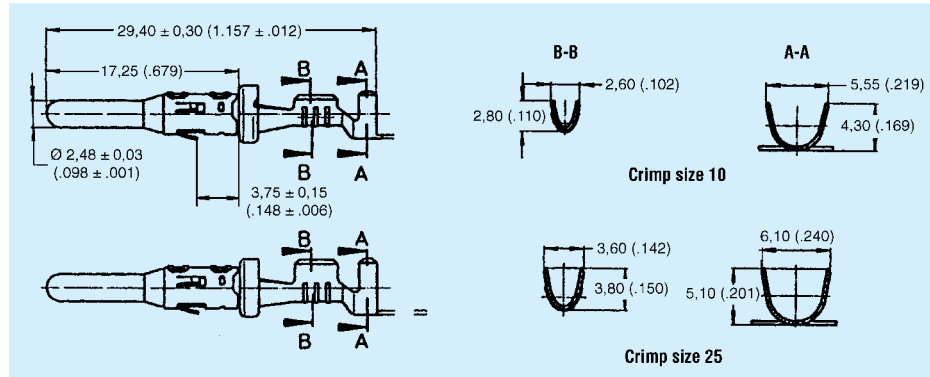
Part No.	Designation	Code	Colour
121583-0008	APD-1CP-K2	1	black (RAL 9005)
121583-0009	APD-2CP-K2	2	grey (RAL 7036)
121583-0010	APD-3CP-K2	3	green (RAL 6029)
121583-0011	APD-4CP-K2	4	blue (RAL 5012)



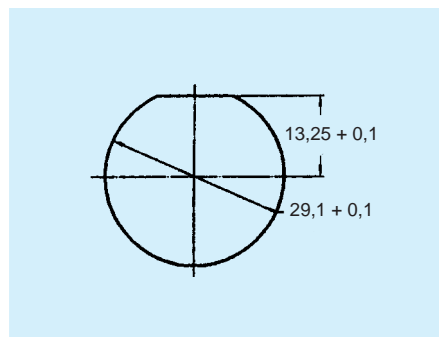
Pin Contacts
tinned 4 µm, crimp termination,
3.000 contacts per reel

Part No. APK-PB25A10-002
0,5 – 1,0 mm²

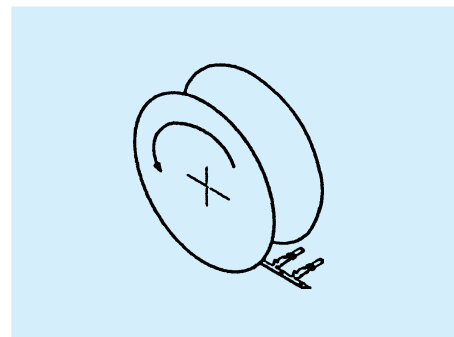
Part No. APK-PB25A25-002
1,5 – 2,5 mm²



Panel Cut-Out



Contact Reel

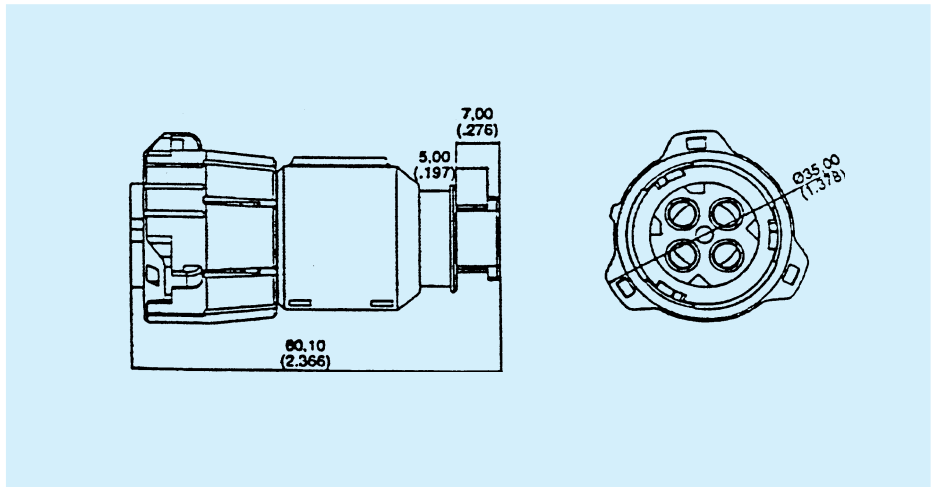


Straight Endbell

for flex tube \varnothing 8,5 mm:
Part No. 058-8578-100

for flex tube \varnothing 10,0 mm:
Part No. 058-8578-102

Packaging unit 100 pcs.

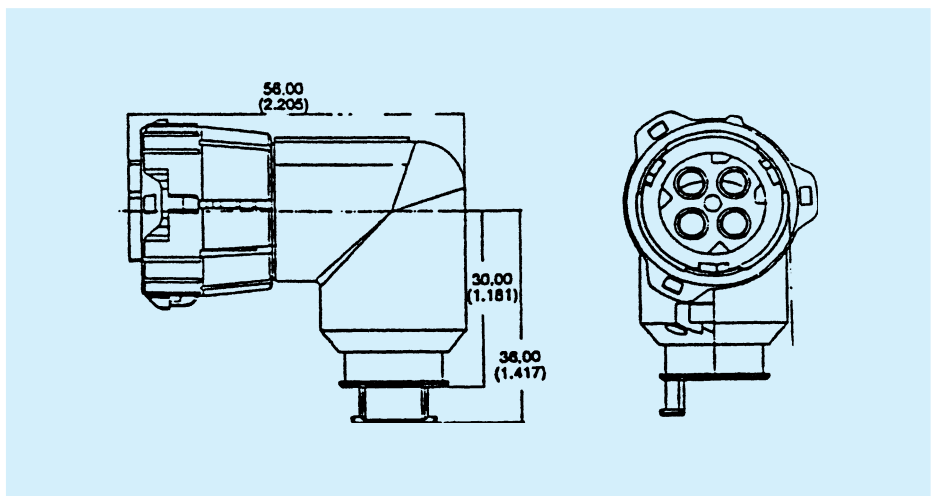


Right Angle Endbell

for flex tube \varnothing 8,5 mm:
Part No. 058-8578-101

for flex tube \varnothing 10,0 mm:
Part No. 058-8578-103

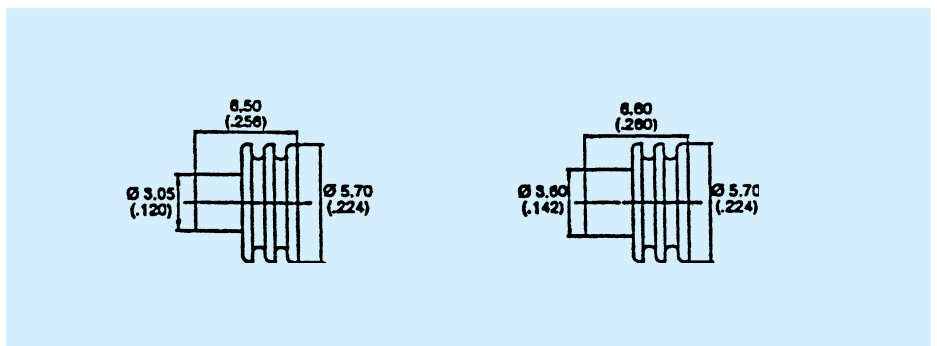
Packaging unit 100 pcs.



Individual Wire Seals

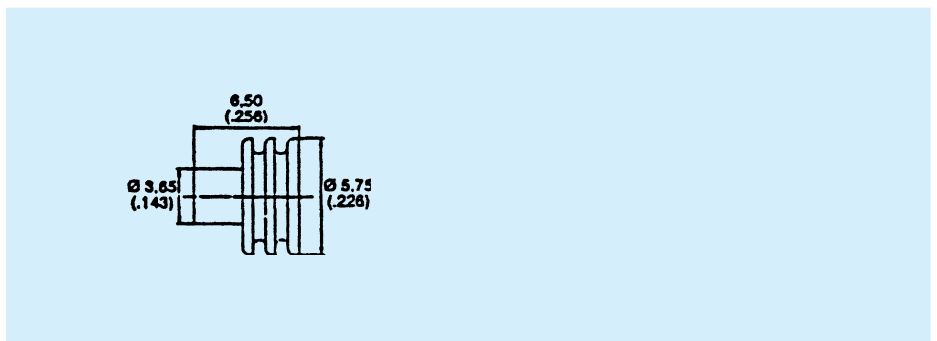
Insulation \varnothing 1,4 – 2,0 mm:
Part No. 10RD5821
Packaging unit 5.000 pcs/red

Insulation \varnothing 2,0 – 2,9 mm:
Part No. 15BL5822
Packaging unit 5.000 pcs/blue



Wire Filler

Part No. 15WH5823
Packaging unit 5.000 pcs/white



High Power Connector (under preparation)

Packaging unit 100 pcs.

Shell styles

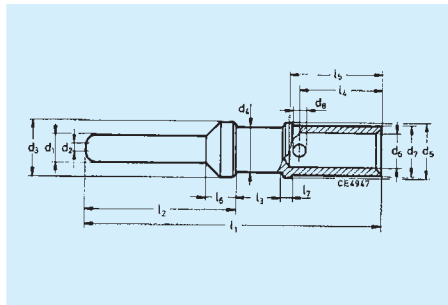
- Plug
- Flange receptacle
- Jam nut receptacle

Dimensions see page 9

Shell Style	Part No.	Designation	Code	Colour
Plug	121583-0012	APD-5BSH	5	Blue (RAL 5012)
	121583-0013	APD-6BSH	6	Red (RAL 2002)
Flange Receptacle	121583-0014	APD-5APH	5	Blue (RAL 5012)
	121583-0015	APD-6APH	6	Red (RAL 2002)
Jam Nut Receptacle	121583-0016	APD-5CPH	5	Blue (RAL 5012)
	121583-0017	APD-6CPH	6	Red (RAL 2002)

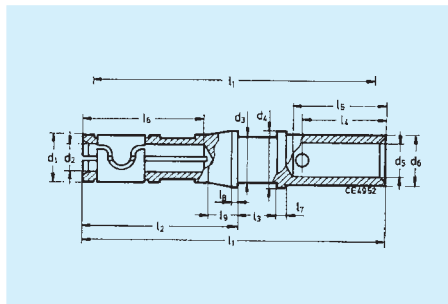


Pin contact



Contact Size	Wire Size mm ²	Wire Size AWG	Part No. with Finish Std.: A36 Silver plated	d1	d4	d6	d7	l1	l3
500/0	-	0	030-8614-000	9,10 (.358)	13,55 (.533)	11,50 (.453)	14,35 (.565)	41,00 (1.614)	6,35 (.250)
50,0	-		030-8592-000	9,10 (.358)	13,55 (.533)	10,70 (.421)	14,35 (.565)	41,00 (1.614)	6,35 (.250)
25,0	4		030-8614-010	9,10 (.358)	13,55 (.533)	7,60 (.299)	14,35 (.565)	41,00 (1.614)	6,35 (.250)
35,0	2		030-8614-020	9,10 (.358)	13,55 (.533)	9,10 (.358)	14,35 (.565)	41,00 (1.614)	6,35 (.250)
16,0	-		030-8614-030	9,10 (.358)	13,55 (.533)	6,20 (.244)	14,35 (.565)	41,00 (1.614)	6,35 (.250)

Socket contact

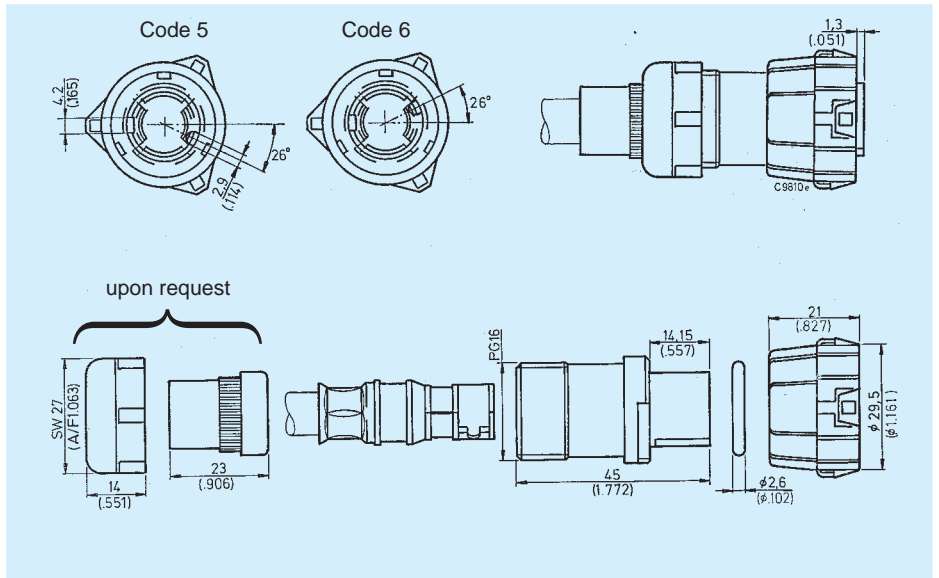


Contact Size	Wire Size mm ²	Wire Size AWG	Part No. with Finish Std.: A36 Silver plated	d1	d2	d3	d5	d6	l1	l3
500/0	-	0	031-8521-000	13,20 (.520)	9,15 (.360)	13,55 (.533)	11,50 (.453)	14,35 (.565)	41,60 (1.638)	6,35 (.250)
50,0	-		031-8561-000	13,20 (.520)	9,15 (.360)	13,55 (.533)	10,70 (.421)	14,35 (.565)	41,60 (1.638)	6,35 (.250)
25,0	4		031-8521-010	13,20 (.520)	9,15 (.360)	13,55 (.533)	7,60 (.299)	14,35 (.565)	41,60 (1.638)	6,35 (.250)
35,0	2		031-8521-020	13,20 (.520)	9,15 (.360)	13,55 (.533)	9,10 (.358)	14,35 (.565)	41,60 (1.638)	6,35 (.250)
16,0	-		031-8521-030	13,20 (.520)	9,15 (.360)	13,55 (.533)	6,20 (.244)	14,35 (.565)	41,60 (1.638)	6,35 (.250)

APD

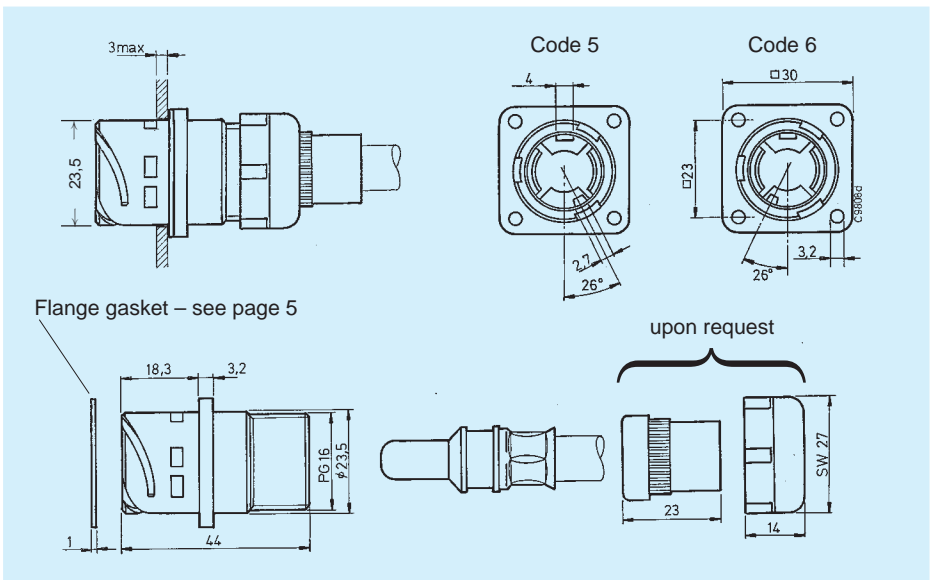
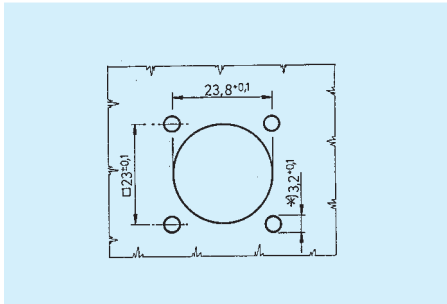
High Power Connector
(under preparation)

Plug
with socket contact



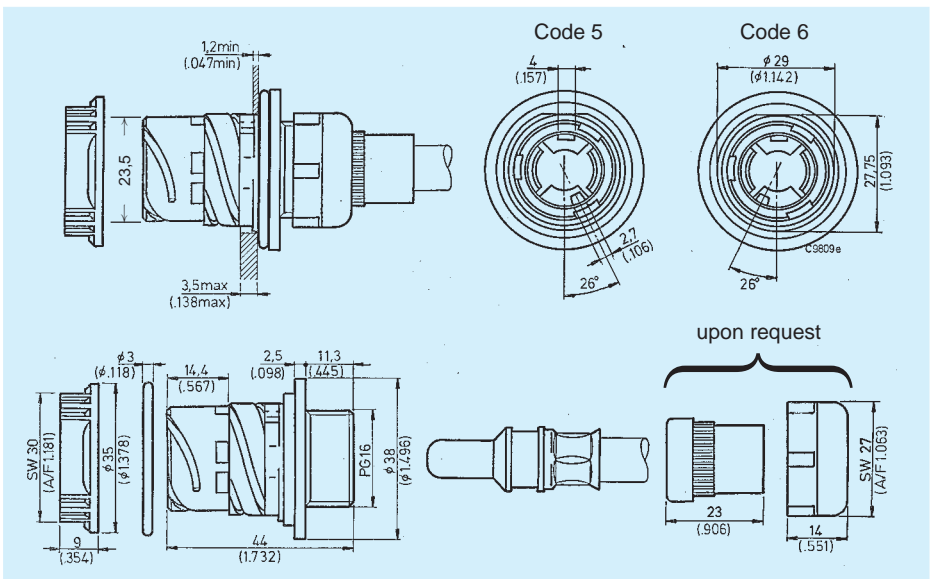
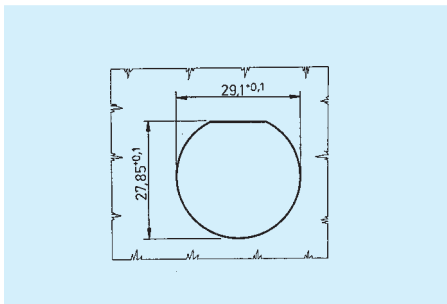
Flange receptacle
with pin contact

Mounting dimensions



Jam nut receptacle
with pin contact

Mounting dimensions



Tooling

for Signal Contacts

Contacts	Crimp tool / Order ref.	Positioner
APK-SB25A10-002	M22520-5-01 / 995-0001-761	CT121586-289
APK-SB25A25-002	M22520-5-01 / 995-0001-761	CT121586-290
APK-PB25A10-002	M22520-5-01 / 995-0001-761	CT121586-289
APK-PB25A25-002	M22520-5-01 / 995-0001-761	CT121586-290

Contact Extraction Tool CET-APK25
Order ref. 121086-3278

Basic Crimp Machine for high volume production EPS-2000
Order ref. 121586-5043

Quick Change Tool (Crimper)

Contacts	Crimper	Order ref.
APK-SB25A10-002	WW2-20.100-APK25-10-002	121586-5039
APK-PB25A10-002	WW2-20.100-APK25-10-002	121586-5039
APK-SB25A25-002	WW2-20.100-APK25-25-002	121586-5039
APK-PB25A25-002	WW2-20.100-APK25-25-002	121586-5039

Stripping length 6,5 mm

for High Power Contacts

Hydraulic Crimp Tool
Order Ref. 4601.00000.330

Foot Pedal
Order Ref. 4601.51000.330

Electric Pumps
Order Ref. 4608.00000.020
Order Ref. 4608.00000.00E
Order Ref. 4608.00000.00C

High Pressure Hose, 2m
Order Ref. 4604.00000.020

Crimp Head
Order Ref. 4632.00000.601

Bench Mounting for Crimp Head
Order Ref. CT 121086.3079

Positioner for Crimp Head
Order Ref. CT 121086.3080

Please ask for our detailed Wiring and Assembly Instructions for circular connectors