

APD is a direct, in-line and bulkhead sensor connector that is resistant to engine, transmission and brake fluid. It also boasts very low contact resistance, so you can benefit from maximum signal integrity. APD is available in 1-, 2-, 3-, 4-, 6- and 7 position versions and has been designed to meet all DIN 72585 requirements.

*Applications for the 4- and 7-way connector include:*

- Sensors
- Traction / Anti Skid Control
- Brake Control (ABS)
- Magnetic Switch Control Systems
- Valve Control (Water, Oil, Air, Pressure)
- Lightening systems on Trucks and Trailers



## Performance Specifications

Contact Resistance	≤ 5mΩ
Insulation Resistance	≤ 10MΩ
Current Rating	21 A max. for wire size 1,5 mm <sup>2</sup> / 25°C 29 A max. for wire size 2,5 mm <sup>2</sup> / 25°C 34 A max. for wire size 4,0 mm <sup>2</sup> / 25°C
Voltage	48 VDC max.
Test Voltage	1000 VAC (Ueff)
Operating Temperature	-40°C / 125°C
Sealing acc. to IEC 529 and DIN 40050, Part 9	Class K2: -40°C / 140°C contact temperature IP67 and IP69K
Shock / Vibration	30g acc. to DIN 72585
Durability	50 mating cycles

## Materials and Finishes

Connector Housing	PBT
O-ring	HNBR
Contacts	Copper alloy, tinned
Coupling Nut	PA

## Standards and Specifications (in accordance with DIN 72585) Environmental

DIN 40050, Part 9	Sealing
DIN 50016	Humidity
DIN 50021	Resistance against fluids, salt spray test
DIN 51512	Lubricants such as engine oil, grease, etc.
DIN EN 590	Diesel fuel, gasoline
DIN ISO 4925	Brake fluids, anti-freeze, coolants

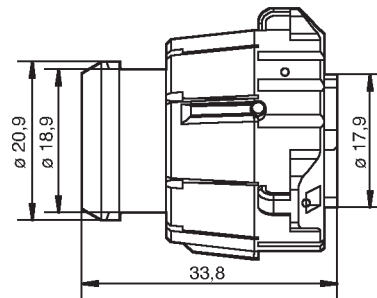
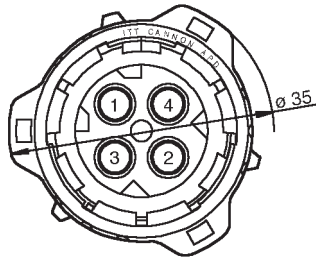
Dimensions shown in mm

Specifications and dimensions subject to change

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Plug, 4-way



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

Packaging unit 100 pcs.

Socket Crimp Contacts, Individual wire-seal, Wire filler, see page 9.  
Accessories, see page 41 and 42.

Coding, 4-way layouts

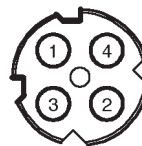
View on Mating Face



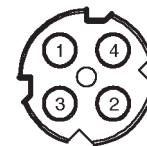
code 1  
black



code 2  
gray



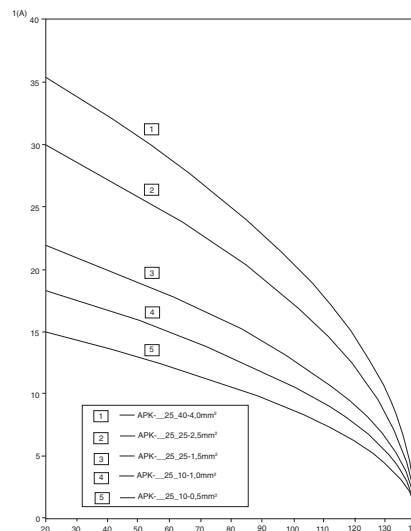
code 3  
green



code 4  
blue

Note: The connectors offer both mechanical keying and visual coding by different colors

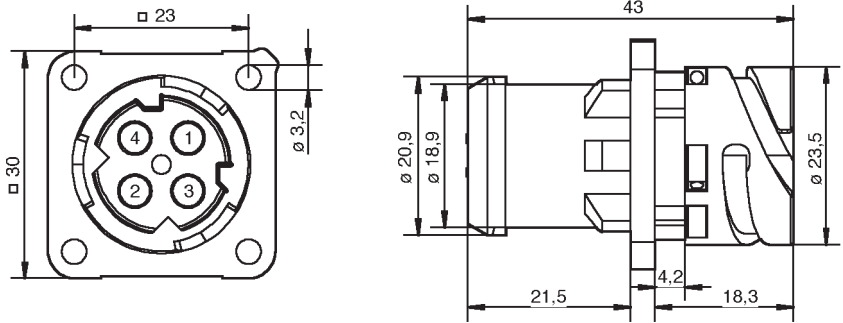
Derating Curve



Dimensions shown in mm  
Specifications and dimensions subject to change

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Flange Receptacle, 4-way



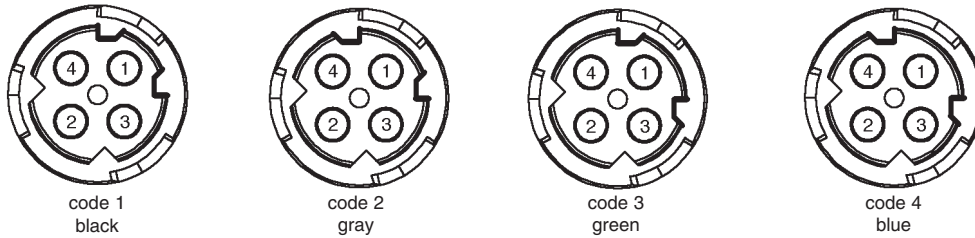
Order No.	Designation	Code	Color
121583-0004	APD-1AP-K2	1	black (RAL 9005)
121583-0005	APD-2AP-K2	2	gray (RAL 7036)
121583-0006	APD-3AP-K2	3	green (RAL 6029)
121583-0007	APD-4AP-K2	4	blue (RAL 5012)

Packaging unit 100 pcs.

Pin Crimp-Contacts, Individual wire-seal, Wire filler, Flange gasket, see page 9.  
Accessories, see page 41 and 42.

Coding, 4-way layouts

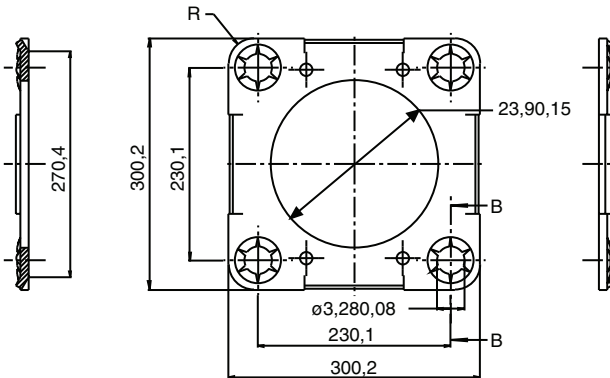
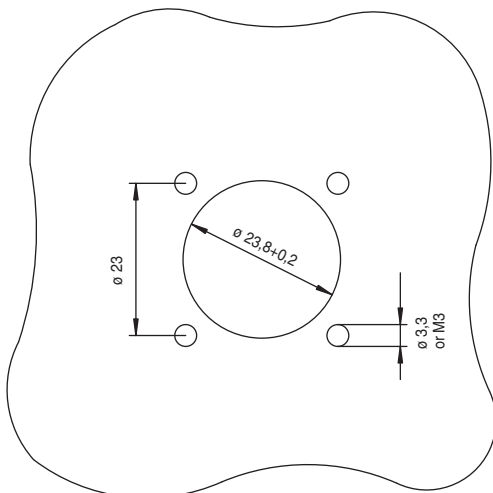
View on Mating Face



Note: The connectors offer both mechanical keying and visual coding by different colors

Panel Cut Out

Flange for all Flange Receptacles



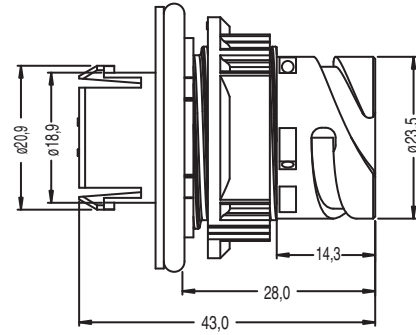
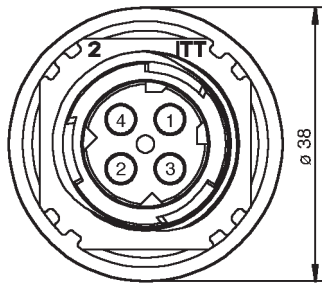
Order Number: 066-8516-005

Dimensions shown in mm  
Specifications and dimensions subject to change

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Jam Nut Receptacle, 4-way



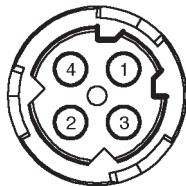
Order No.	Designation	Code	Color
121583-0008	APD-1CP-K2	1	black (RAL 9005)
121583-0009	APD-2CP-K2	2	gray (RAL 7036)
121583-0010	APD-3CP-K2	3	green (RAL 6029)
121583-0011	APD-4CP-K2	4	blue (RAL 5012)

Packaging unit 100 pcs.

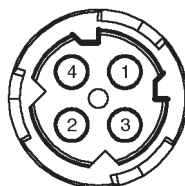
Pin Crimp-Contacts, Individual wire-seal, Wire filler, Flange gasket, see page 9.  
Accessories, see page 41 and 42.

Coding, 4-way layouts

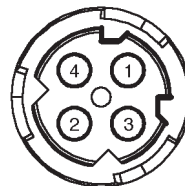
View on Mating Face



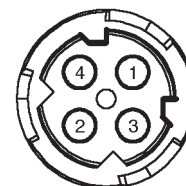
code 1  
black



code 2  
gray



code 3  
green

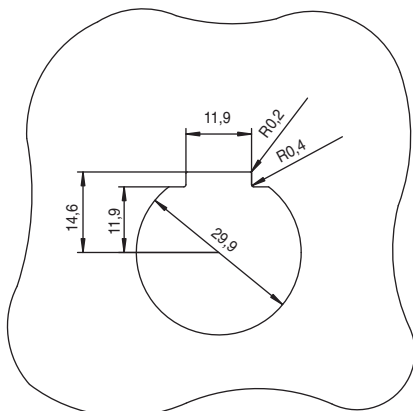


code 4  
blue

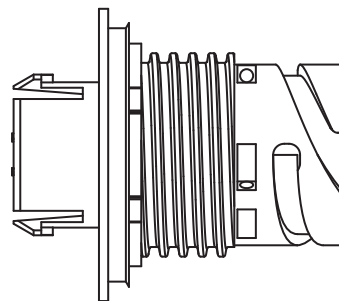
Note: The connectors offer both mechanical keying and visual coding by different colors

Panel Cut Out

Piece Parts / Assembly Instruction



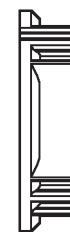
Thickness: Standard: min. 1,0 / max. 4,0 mm Special: min. 2,0 / max. 5,0 mm



Housing



O-ring



Jam Nut

Jam Nut, special

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



Dimensions shown in mm  
Specifications and dimensions subject to change

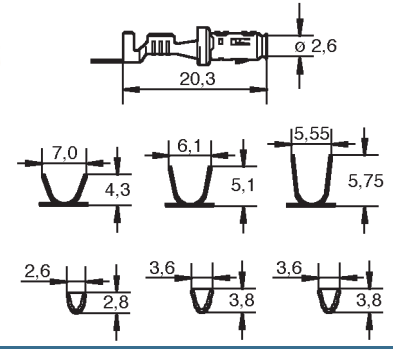
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**Socket Crimp-Contacts Standard Tinned, 3000 contacts per reel**

Designation - Standard	Order No.
APK-SB25A10-002 (0,5 - 1,5 mm <sup>2</sup> )	121668-0125
APK-SB25A25-002 (1,5 - 2,5 mm <sup>2</sup> )	121668-0126
APK-SB25A40-002 (2,5 - 4,0 mm <sup>2</sup> )	121668-0127

Optional with Au-flash	
* APK-SB25H10-002 (0,5 - 1,5 mm <sup>2</sup> )	121668-0022
* APK-SB25H25-002 (1,5 - 2,5 mm <sup>2</sup> )	121668-0128
* APK-SB25H40-002 (2,5 - 4,0 mm <sup>2</sup> )	121668-0124

\* Available only by request

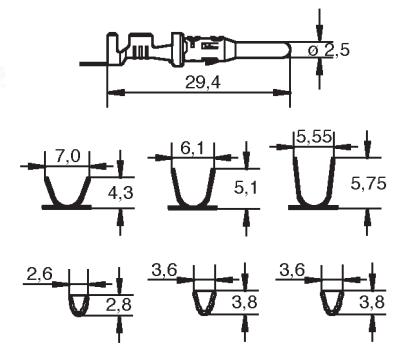


**Pin Crimp-Contacts Standard Tinned, 3000 contacts per reel**

Designation - Standard	Order No.
APK-PB25A10-002 (0,5 - 1,5 mm <sup>2</sup> )	121668-0026
APK-PB25A25-002 (1,5 - 2,5 mm <sup>2</sup> )	121668-0027
APK-PB25A40-002 (2,5 - 4,0 mm <sup>2</sup> )	121668-0020

Optional with Au-flash	
* APK-PB25H10-002 (0,5 - 1,5 mm <sup>2</sup> )	121668-0021
* APK-PB25H25-002 (1,5 - 2,5 mm <sup>2</sup> )	121668-0029
* APK-PB25H40-002 (2,5 - 4,0 mm <sup>2</sup> )	121668-0025

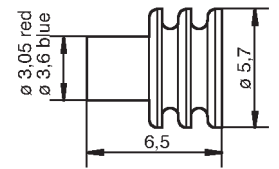
\* Available only by request



**Individual Wire Seals**

For all versions 4-way

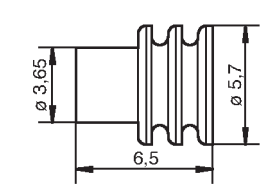
Designation	Order No.
10RD5821	121668-0032
Wire insulation $\varnothing$ 1,4 - 2,0 mm / red	
15BL5822	121668-0033
Wire insulation $\varnothing$ 2,0 - 2,9 mm / blue	



**Wire Filler**

For all versions 4-way

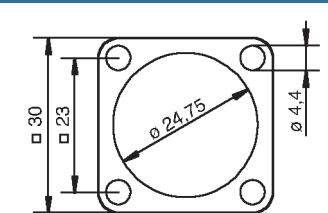
Designation	Order No.
15WH5823	121668-0034
white	



**Flange Gasket**

For Flange Receptacle, 4-way

Order No.
075-8503-000 (-55/125° C)
075-8503-004 (-30/200° C)
Packaging unit 100 pcs.



Dimensions shown in mm  
Specifications and dimensions subject to change

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## Crimp and Assembly Tools for APK 25 Contacts

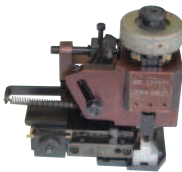
Contact / Socket	Hand Crimp Tool / Order No.	Crimp-Dies
APK-SB25A10-002 (0,5 - 1,0 mm <sup>2</sup> )	M22520-5-01 / 995-0001-761	CT121586-289
APK-SB25A25-002 (1,5 - 2,5 mm <sup>2</sup> )	M22520-5-01 / 995-0001-761	CT121586-290
APK-SB25A40-002 (2,5 - 4,0 mm <sup>2</sup> )	M22520-5-01 / 995-0001-761	CT121586-292
Contact / Pin	Hand Crimp Tool / Order No.	Crimp-Dies
APK-PB25A10-002 (0,5 - 1,0 mm <sup>2</sup> )	M22520-5-01 / 995-0001-761	CT121586-289
APK-PB25A25-002 (1,5 - 2,5 mm <sup>2</sup> )	M22520-5-01 / 995-0001-761	CT121586-290
APK-PB25A40-002 (2,5 - 4,0 mm <sup>2</sup> )	M22520-5-01 / 995-0001-761	CT121586-292
Hand-Tool	M22520-5-01	

## Crimp Machine for volume production



Designation	Order No.
EPS 2000	121586-5043

## Quick Change Tool for above Crimp Machine: (Mini Applicator)



Contact / Socket	Designation	Order No. (to be mentioned on order)
APK-SB25A10-002 (0,5 - 1,0 mm <sup>2</sup> )	WWZ.20-100-APK25-10-002	121586-5134
APK-SB25A25-002 (1,5 - 2,5 mm <sup>2</sup> )	WWZ.20-100-APK25-25-002	121586-5135
APK-SB25A40-002 (2,5 - 4,0 mm <sup>2</sup> )	WWZ.20-100-APK25-40-002	121586-5136
Contact / Pin	Designation	Order No. (to be mentioned on order)
APK-PB25A10-002 (0,5 - 1,0 mm <sup>2</sup> )	WWZ.20-100-APK25-10-002	121586-5134
APK-PB25A25-002 (1,5 - 2,5 mm <sup>2</sup> )	WWZ.20-100-APK25-25-002	121586-5135
APK-PB25A40-002 (2,5 - 4,0 mm <sup>2</sup> )	WWZ.20-100-APK25-40-002	121586-5136

## Contact Extraction Tool



Designation	Order No.
CET-APK25	192900-0176