



Truck Technology

HEAVY DUTY POWER SYSTEM



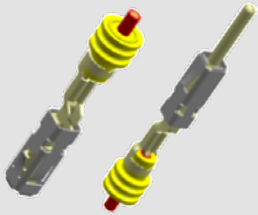
www.phuisen.de



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CONNECTS SINCE 1926

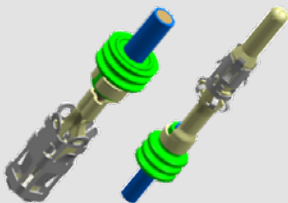
SUMMARY



HEAVY DUTY 
POWER SYSTEM

MKR PLUS
MKS PLUS

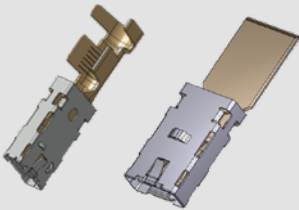
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HEAVY DUTY 
POWER SYSTEM

VKR PLUS
VKS PLUS

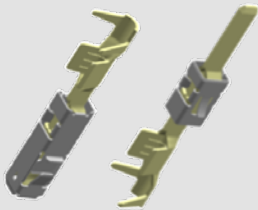
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High Current 
POWER SYSTEM

MAK 8/12
MAS 8/12

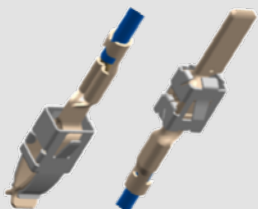
PAGE **34**



SYSTEM

MAK
AFS

PAGE **36**

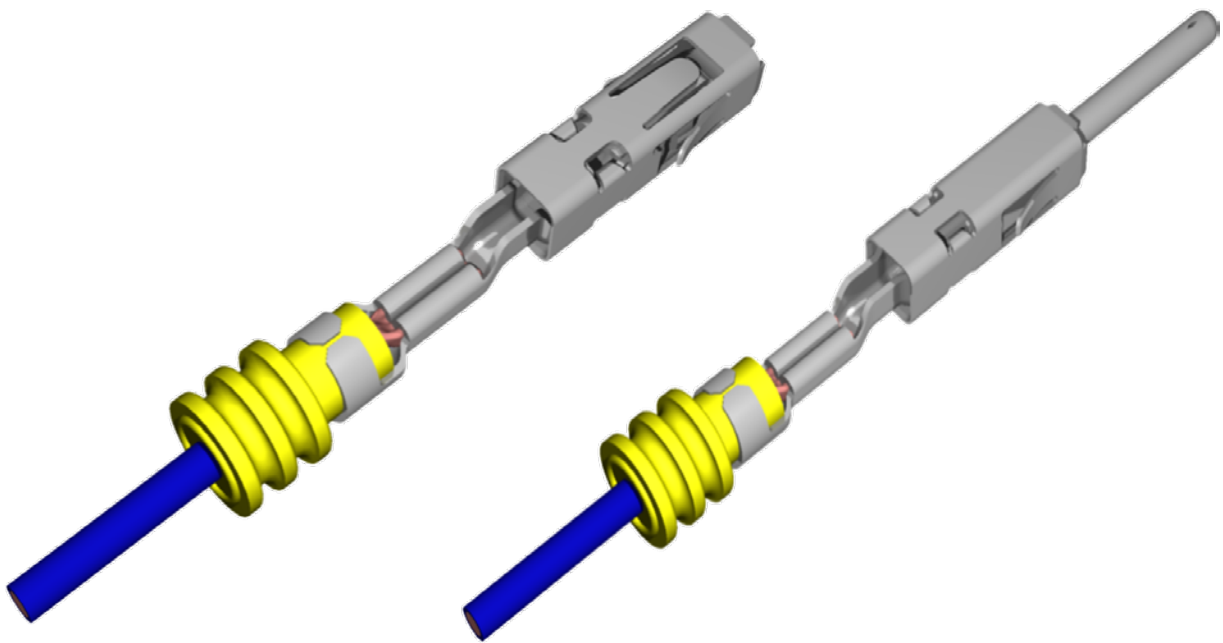


SYSTEM

AFK
AFS

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MKR PLUS MKS PLUS



HEAVY DUTY **////**
POWER SYSTEM

Connector systems 1.5 mm diameter with stainless steel spring for splash-proof applications

The **MKR PLUS/MKS PLUS** system is designed for the high vibration and splash-proof application. It transmits high as well as low currents, e.g. for control connections to alternators, motor fans and gear boxes.

Tab and receptacle have external steel springs. They guarantee the required contact force and secure fixing in the housing cavity. The insulation claw is designed for single wire seals. The steel spring and the seal together absorb vibrations.

Characteristics

- high contact back-out force via locking in housing with stainless steel spring
- high contact force
- high resistance to vibration

Use

- for high vibration resistance application
- for splash-proof applications
- for transmission of low and high currents
- as a combined connector system with VKR PLUS/VKS PLUS terminals (2.5 mm diameter).

Terminals

- two locking latches ensure secure locking in the cavity
- the insulation claw is designed for single wire seals

Housings

- splash-proof through single wire seals and housing seals
- cable entry straight and 90° angled
- with secondary locking

Delivery form

Terminals

- single form for hand crimping tools
- chain form for semi-automatic and fully-automatic machines

Housings

- loose in standard packs

Technical Data	
Terminals	
Wire cross section	0.5 – 2.5 qmm
Stainless steel spring	
Housings	
Number of poles	2, 3, 4, 5, 7, 12 2, 4, 7, 12
• MKR PLUS	
• MKS PLUS	
Variety of codings	
• depends on the number of poles	



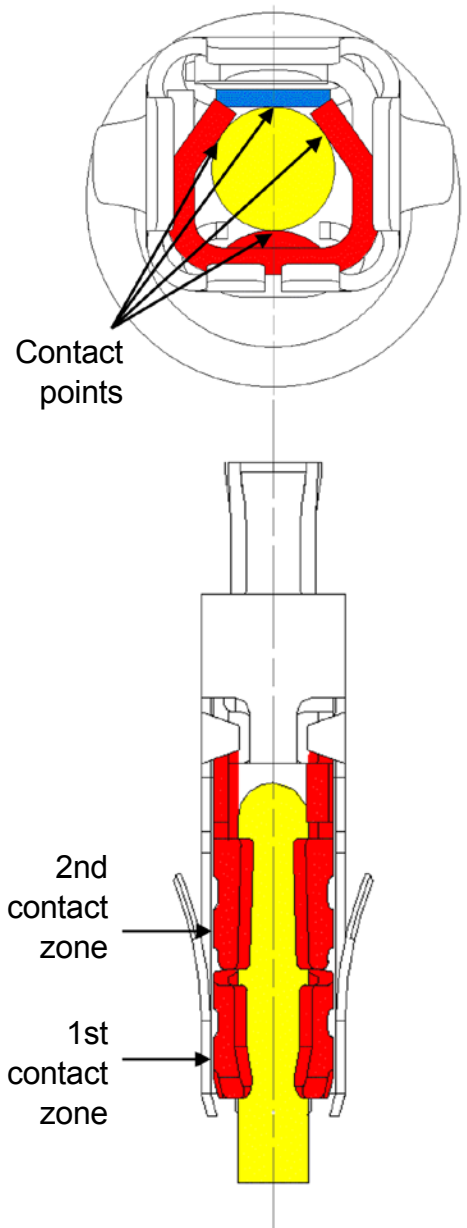
MKR PLUS

- Stainless steel cage
- Primary lock from stainless steel
- Stainless steel cage supports contact fingers

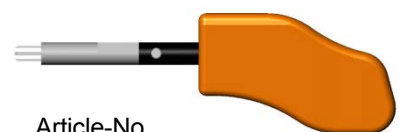
MKS PLUS

- Primary lock from stainless steel
- Stainless steel cage

Contact principle



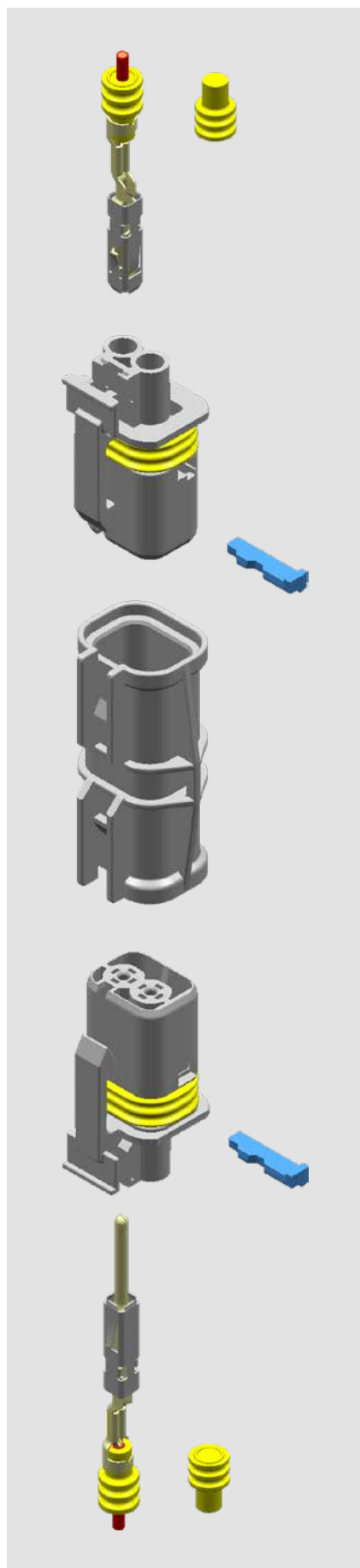
Extraction tool



Article-No.
50000 017 601

www.phuisen.de

2-way connectors with adapter



MKR Plus

Wire size [mm ²]	Form	Part no.	Material
0.35 – 0.5	Chain	28167.201.184	CuSn/Sn
	Single	48167.201.184	
0.75 – 1.5	Chain	26780.201.184	CuSn/Sn
	Single	46780.201.184	

Single wire seal

0.35 – 0.5		13085.627.642	VMQ/blue
0.75 – 1.0		14448.627.621	VMQ/red
1.5		14458.627.610	VMQ/yellow

Dummy seal

		14459.627.646	VMQ/green
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MKR Plus housing



Coding	A	B	C	D
Colour	grey	black	green	brown
Part no.	18169.000.002	18170.000.002	18171.000.002	18172.000.002

Secondary lock

Part no.	14816.660.636
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MKR Plus/MKS Plus adapter



Coding	A	B	C	D
Colour	grey	black	green	brown
Part no.	16883.592.661	14970.592.699		13186.592.684

MKS Plus housing



Coding	A	B	C	D
Colour	grey	black	green	brown
Part no.	18169.000.002	18170.000.002	18171.000.002	18172.000.002

Secondary lock

Part no.	14816.660.636
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MKS Plus

Wire size [mm ²]	Form	Part no.	Material
0.35 – 0.5	Chain	28155.201.184	CuSn/Sn
	Single	48155.201.184	
0.75 – 1.5	Chain	25701.201.184	CuSn/Sn
	Single	45701.201.184	

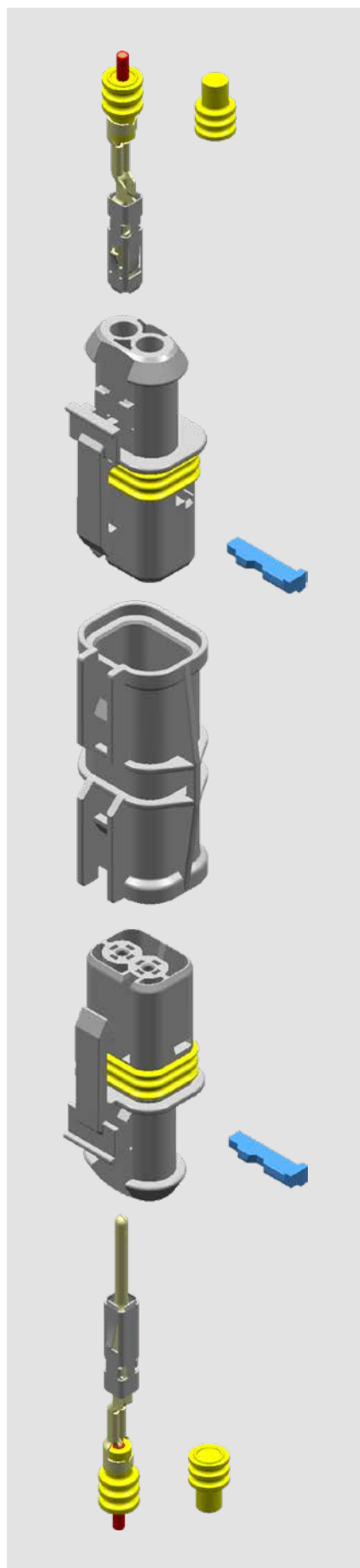
Single wire seal

0.35 – 0.5		13085.627.642	VMQ/blue
0.75 – 1.0		14448.627.621	VMQ/red
1.5		14458.627.610	VMQ/yellow

Dummy seal

		14459.627.646	VMQ/green
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2-way connectors with adapter



MKR Plus

Wire size [mm ²]	Form	Part no.	Material
0.35 – 0.5	Chain	28167.201.184	CuSn/Sn
	Single	48167.201.184	
0.75 – 1.5	Chain	26780.201.184	CuSn/Sn
	Single	46780.201.184	

Single wire seal

0.35 – 0.5		13085.627.642	VMQ/blue
0.75 – 1.0		14448.627.621	VMQ/red
1.5		14458.627.610	VMQ/yellow

Dummy seal

		14459.627.646	VMQ/green
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MKR Plus housing



Coding	A	B	C	D
Colour	grey	black	green	brown
Part no.	18385.000.002	18286.000.002	18612.000.002	18625.000.002

Secondary lock

Part no.	14816.660.636
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MKR Plus/MKS Plus adapter



Coding	A	B	C	D
Colour	grey	black	green	brown
Part no.	16883.592.661	14970.592.699		13186.592.684

MKS Plus housing



Coding	A	B	C	D
Colour	grey	black	green	brown
Part no.	18385.000.002	18286.000.002	18612.000.002	18625.000.002

Secondary lock

Part no.	14816.660.636
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MKS Plus

Wire size [mm ²]	Form	Part no.	Material
0.35 – 0.5	Chain	28155.201.184	CuSn/Sn
	Single	48155.201.184	
0.75 – 1.5	Chain	25701.201.184	CuSn/Sn
	Single	45701.201.184	

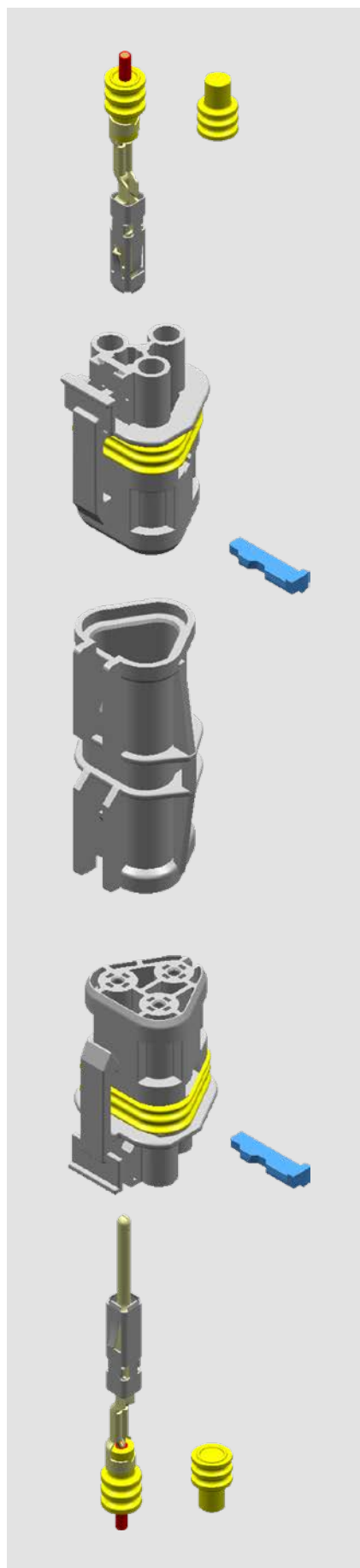
Single wire seal

0.35 – 0.5		13085.627.642	VMQ/blue
0.75 – 1.0		14448.627.621	VMQ/red
1.5		14458.627.610	VMQ/yellow

Dummy seal

		14459.627.646	VMQ/green
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3-way connectors with adapter



MKR Plus

Wire size [mm²]	Form	Part no.	Material
0.35 – 0.5	Chain	28167.201.184	CuSn/Sn
	Single	48167.201.184	
0.75 – 1.5	Chain	26780.201.184	CuSn/Sn
	Single	46780.201.184	

Single wire seal

0.35 – 0.5		13085.627.642	VMQ/blue
0.75 – 1.0		14448.627.621	VMQ/red
1.5		14458.627.610	VMQ/yellow

Dummy seal

		14459.627.646	VMQ/green
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MKR Plus housing



Coding	A	B
Colour	grey	black
Part no.	18167.000.001	18168.000.001

Secondary lock

Part no.	14817.660.636
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MKR Plus/MKS Plus adapter



Coding	A	B
Colour	grey	black
Part no.	14569.592.661	14165.592.699

MKS Plus housing



Coding	A	B
Colour	grey	black
Part no.	18167.000.001	18168.000.001

Secondary lock

Part no.	14817.660.636
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MKS Plus

Wire size [mm²]	Form	Part no.	Material
0.35 – 0.5	Chain	28155.201.184	CuSn/Sn
	Single	48155.201.184	
0.75 – 1.5	Chain	25701.201.184	CuSn/Sn
	Single	45701.201.184	

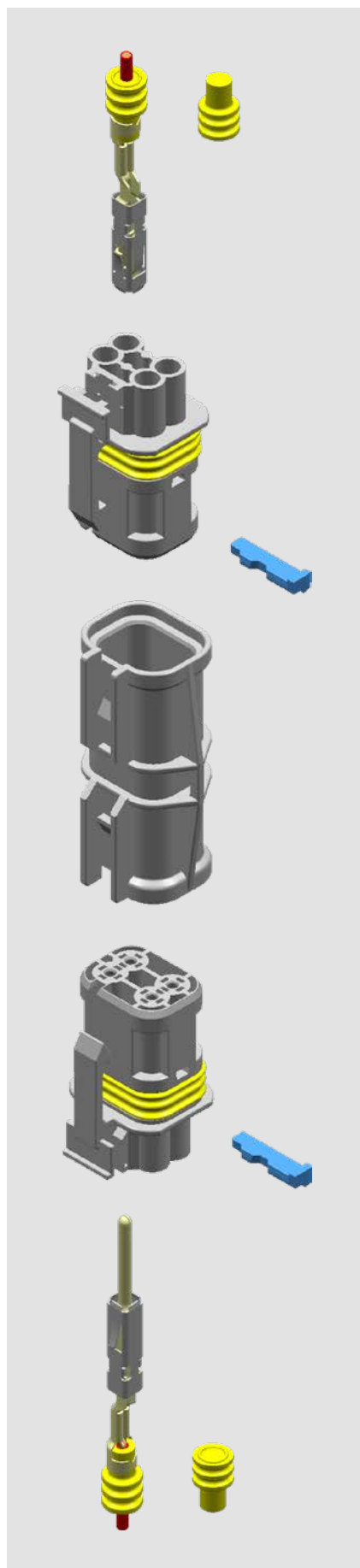
Single wire seal

0.35 – 0.5		13085.627.642	VMQ/blue
0.75 – 1.0		14448.627.621	VMQ/red
1.5		14458.627.610	VMQ/yellow

Dummy seal

		14459.627.646	VMQ/green
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4-way connectors with adapter



MKR Plus

Wire size [mm²]	Form	Part no.	Material
0.35 – 0.5	Chain	28167.201.184	CuSn/Sn
	Single	48167.201.184	
0.75 – 1.5	Chain	26780.201.184	CuSn/Sn
	Single	46780.201.184	

Single wire seal

0.35 – 0.5		13085.627.642	VMQ/blue
0.75 – 1.0		14448.627.621	VMQ/red
1.5		14458.627.610	VMQ/yellow

Dummy seal

		14459.627.646	VMQ/green
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MKR Plus housing



Coding	A	B	C	D	E
Colour	grey	black	green	brown	orange
Part no.	18164.000.002	18165.000.002	18166.000.002	18261.000.002	18262.000.002

Secondary lock

Part no.	14818.660.636
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MKR Plus/MKS Plus adapter



Coding	A	B	C	D	E
Colour	grey	black	green		orange
Part no.	16884.592.661	14971.592.699	13064.592.647		13065.592.620

MKS Plus housing



Coding	A	B	C	D	E
Colour	grey	black	green	brown	orange
Part no.	18164.000.002	18165.000.002	18166.000.002	18261.000.002	18262.000.002

Secondary lock

Part no.	14818.660.636
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MKS Plus

Wire size [mm²]	Form	Part no.	Material
0.35 – 0.5	Chain	28155.201.184	CuSn/Sn
	Single	48155.201.184	
0.75 – 1.5	Chain	25701.201.184	CuSn/Sn
	Single	45701.201.184	

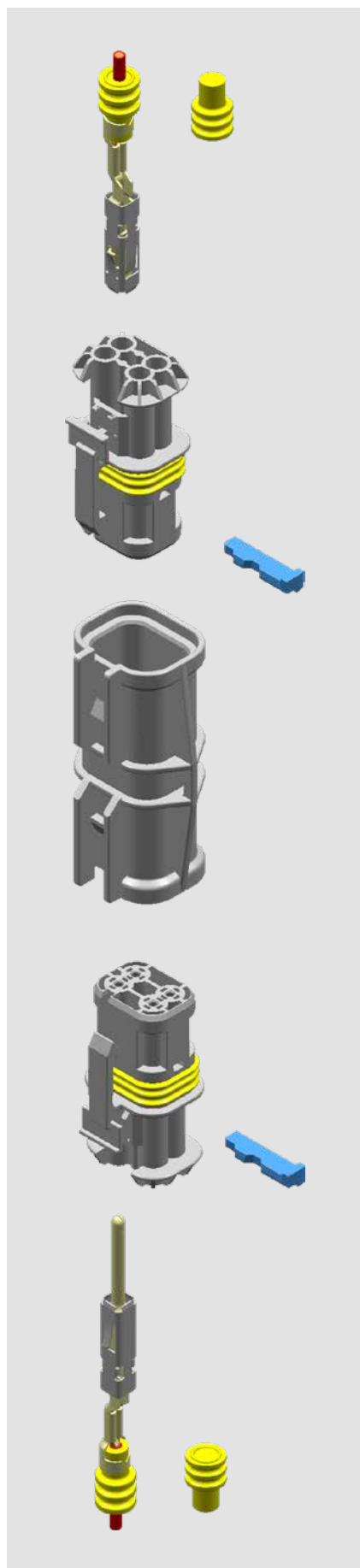
Single wire seal

0.35 – 0.5		13085.627.642	VMQ/blue
0.75 – 1.0		14448.627.621	VMQ/red
1.5		14458.627.610	VMQ/yellow

Dummy seal

		14459.627.646	VMQ/green
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4-way connectors with adapter



MKR Plus

Wire size [mm²]	Form	Part no.	Material
0.35 – 0.5	Chain	28167.201.184	CuSn/Sn
	Single	48167.201.184	
0.75 – 1.5	Chain	26780.201.184	CuSn/Sn
	Single	46780.201.184	

Single wire seal

0.35 – 0.5		13085.627.642	VMQ/blue
0.75 – 1.0		14448.627.621	VMQ/red
1.5		14458.627.610	VMQ/yellow

Dummy seal

		14459.627.646	VMQ/green
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MKR Plus housing



Coding	A	B	C	D	E
Colour	grey	black	green		orange
Part no.	18515.000.002	18284.000.002	18516.000.002		18514.000.002

Secondary lock

Part no.	14818.660.636
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MKR Plus/MKS Plus adapter



Coding	A	B	C	D	E
Colour	grey	black	green		orange
Part no.	16884.592.661	14971.592.699	13064.592.647		13065.592.620

MKS Plus housing



Coding	A	B	C	D	E
Colour	grey	black	green		orange
Part no.	18515.000.002	18284.000.002	18516.000.002		18514.000.002

Secondary lock

Part no.	14818.660.636
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MKS Plus

Wire size [mm²]	Form	Part no.	Material
0.35 – 0.5	Chain	28155.201.184	CuSn/Sn
	Single	48155.201.184	
0.75 – 1.5	Chain	25701.201.184	CuSn/Sn
	Single	45701.201.184	

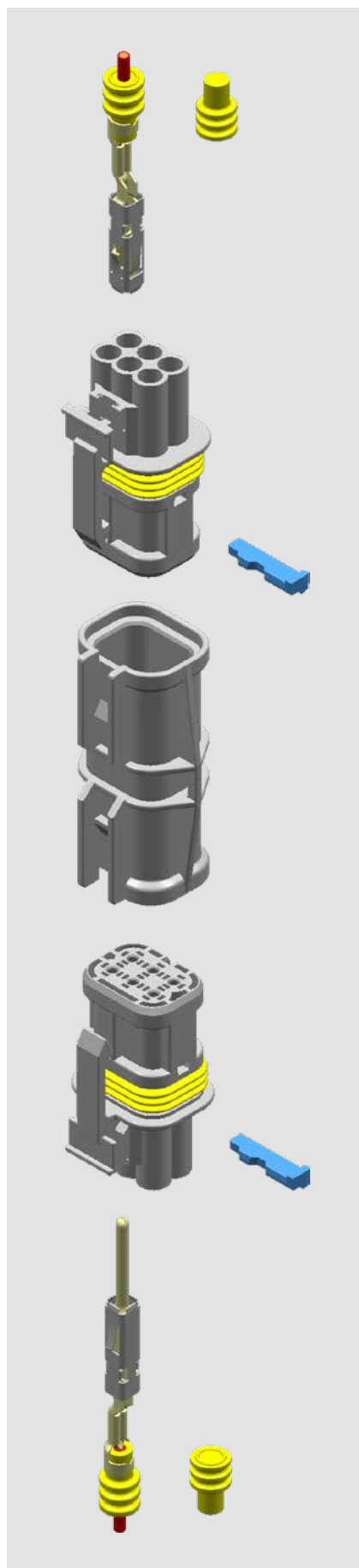
Single wire seal

0.35 – 0.5		13085.627.642	VMQ/blue
0.75 – 1.0		14448.627.621	VMQ/red
1.5		14458.627.610	VMQ/yellow

Dummy seal

		14459.627.646	VMQ/green
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6-way connectors with adapter



MKR Plus

Wire size [mm²]	Form	Part no.	Material
0.35 – 0.5	Chain	28167.201.184	CuSn/Sn
	Single	48167.201.184	
0.75 – 1.5	Chain	26780.201.184	CuSn/Sn
	Single	46780.201.184	

Single wire seal

0.35 – 0.5		13085.627.642	VMQ/blue
0.75 – 1.0		14448.627.621	VMQ/red
1.5		14458.627.610	VMQ/yellow

Dummy seal

		14459.627.646	VMQ/green
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MKR Plus housing



Coding	A	B	C	D	E
Colour	grey	black			yellow
Part no.	18733.000.001	18732.000.001			18651.000.001

Secondary lock

Part no.	14818.660.636
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MKR Plus/MKS Plus adapter



Coding	A	B	C	D	E
Colour	grey	black	green		orange
Part no.	16884.592.661	14971.592.699	13064.592.647		13065.592.620

MKS Plus housing



Coding	A	B	C	D	E
Colour	grey	black			yellow
Part no.	18733.000.001	18732.000.001			18651.000.001

Secondary lock

Part no.	14818.660.636
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MKS Plus

Wire size [mm²]	Form	Part no.	Material
0.35 – 0.5	Chain	28155.201.184	CuSn/Sn
	Single	48155.201.184	
0.75 – 1.5	Chain	25701.201.184	CuSn/Sn
	Single	45701.201.184	

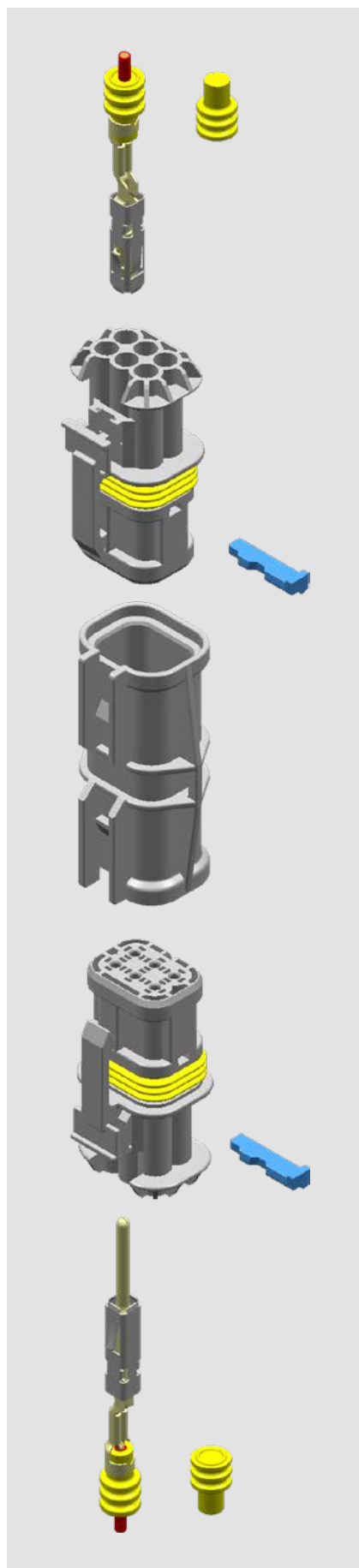
Single wire seal

0.35 – 0.5		13085.627.642	VMQ/blue
0.75 – 1.0		14448.627.621	VMQ/red
1.5		14458.627.610	VMQ/yellow

Dummy seal

		14459.627.646	VMQ/green
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6-way connectors with adapter



MKR Plus

Wire size [mm²]	Form	Part no.	Material
0.35 – 0.5	Chain	28167.201.184	CuSn/Sn
	Single	48167.201.184	
0.75 – 1.5	Chain	26780.201.184	CuSn/Sn
	Single	46780.201.184	

Single wire seal

0.35 – 0.5		13085.627.642	VMQ/blue
0.75 – 1.0		14448.627.621	VMQ/red
1.5		14458.627.610	VMQ/yellow

Dummy seal

		14459.627.646	VMQ/green
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MKR Plus housing



Coding	A	B	C	D	E
Colour	grey		green		yellow
Part no.	18421.000.000		18872.000.001		18650.000.001

Secondary lock

Part no.	14818.660.636
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MKR Plus/MKS Plus adapter



Coding	A	B	C	D	E
Colour	grey	black	green		orange
Part no.	16884.592.661	14971.592.699	13064.592.647		13065.592.620

MKS Plus housing



Coding	A	B	C	D	E
Colour	grey		green		yellow
Part no.	18421.000.000		18872.000.001		18650.000.001

Secondary lock

Part no.	14818.660.636
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MKS Plus

Wire size [mm²]	Form	Part no.	Material
0.35 – 0.5	Chain	28155.201.184	CuSn/Sn
	Single	48155.201.184	
0.75 – 1.5	Chain	25701.201.184	CuSn/Sn
	Single	45701.201.184	

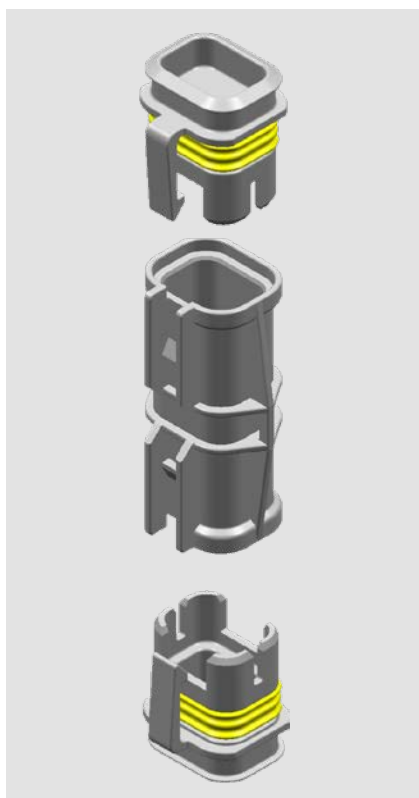
Single wire seal

0.35 – 0.5		13085.627.642	VMQ/blue
0.75 – 1.0		14448.627.621	VMQ/red
1.5		14458.627.610	VMQ/yellow

Dummy seal

		14459.627.646	VMQ/green
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Blanking cap for 2-way connectors



Blanking cap

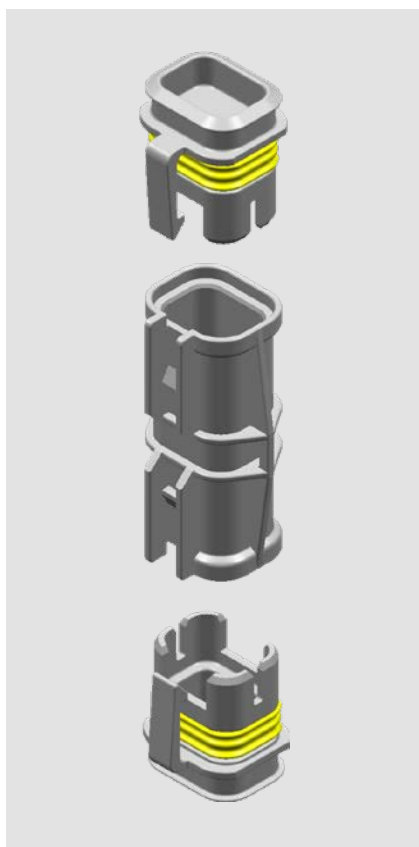
Part no.	18793.000.001
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MKR Plus/MKS Plus adapter



Coding	A	B	C	D
Colour	grey	black		brown
Part no.	16883.592.661	14970.592.699		13186.592.684

Blanking cap for 4- and 6-way connectors



Blanking cap

Part no.	18792.000.001
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MKR Plus/MKS Plus adapter



Coding	A	B	C	D	E
Colour	grey	black	green		orange
Part no.	16884.592.661	14971.592.699	13064.592.647		13065.592.620

MKR Plus

Wire size [mm ²]	Form	Part no.	Material
0.35 – 0.5	Chain	28167.201.184	CuSn/Sn
	Single	48167.201.184	
0.75 – 1.5	Chain	26780.201.184	CuSn/Sn
	Single	46780.201.184	

Single wire seal

0.35 – 0.5		13085.627.642	VMQ/blue
0.75 – 1.0		14448.627.621	VMQ/red
1.5		14458.627.610	VMQ/yellow

Dummy seal

		14459.627.646	VMQ/green
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MKR Plus housing



Coding	A	B	C	D	E
Colour	grey		green		yellow
Part no.	18421.000.000		18872.000.001		18650.000.001

Secondary lock

Part no.	14818.660.636
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Distributor socket 2 x 3-way



Circuit diagram					
Coding	A	B	C	D	E
Colour					yellow
Part no.					18409.000.000

5-way connectors

MKR Plus

Wire size [mm ²]	Form	Part no.	Material
0.35 – 0.5	Chain	28167.201.184	CuSn/Sn
	Single	48167.201.184	
0.75 – 1.5	Chain	26780.201.184	CuSn/Sn
	Single	46780.201.184	

Single wire seal

0.35 – 0.5		13085.627.642	VMQ/blue
0.75 – 1.0		14448.627.621	VMQ/red
1.5		14458.627.610	VMQ/yellow

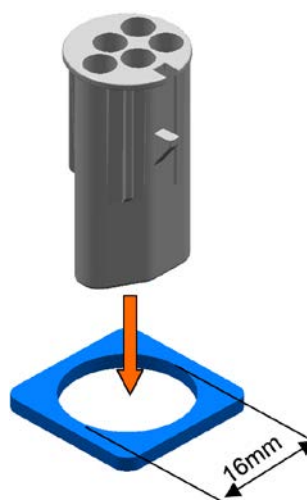
Dummy seal

		14459.627.646	VMQ/green
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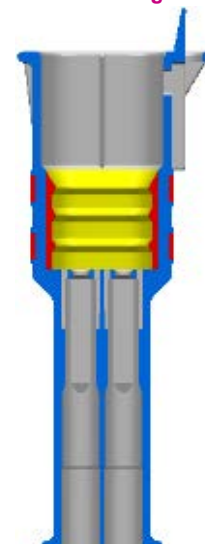
MKR Plus housing

Colour	black
Part no.	13236.568.699

hole size



inner sealing



MKS Plus housing

Colour	black	blue
Part no.	18654.000.001	18654.056.000

MKS Plus

Wire size [mm ²]	Form	Part no.	Material
0.35 – 0.5	Chain	28155.201.184	CuSn/Sn
	Single	48155.201.184	
0.75 – 1.5	Chain	25701.201.184	CuSn/Sn
	Single	45701.201.184	

Single wire seal

0.35 – 0.5		13085.627.642	VMQ/blue
0.75 – 1.0		14448.627.621	VMQ/red
1.5		14458.627.610	VMQ/yellow

Dummy seal

		14459.627.646	VMQ/green
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7-way connectors

Secondary lock

Part no.	16148.598.613
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MKR Plus

Wire size [mm ²]	Form	Part no.	Material
0.5 – 1.0	Chain	26806.201.184	CuSn/Sn
	Single	46806.201.184	
1.5 – 2.5	Chain	26807.201.184	CuSn/Sn
	Single	46807.201.184	

Single wire seal

0.5 – 1.0		16695.627.642	VMQ/blue
1.5 – 2.5		16694.627.626	VMQ/brown

Dummy seal

		16237.627.626	VMQ/brown
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MKR Plus housing



Coding	1B	1B	1B cavity 7 closed
Colour	grey	green	grey
Part no.	18369.062.000	18369.054.000	17019.062.000

MKS Plus housing



Coding	1B
Colour	grey
Part no.	16765.598.663

MKS Plus

Wire size [mm ²]	Form	Part no.	Material
0.5 – 1.0	Chain	25678.201.184	CuSn/Sn
	Single	45678.201.184	
1.5 – 2.5	Chain	25719.201.184	CuSn/Sn
	Single	45719.201.184	

Single wire seal

0.5 – 1.0		16695.627.642	VMQ/blue
1.5 – 2.5		16694.627.626	VMQ/brown

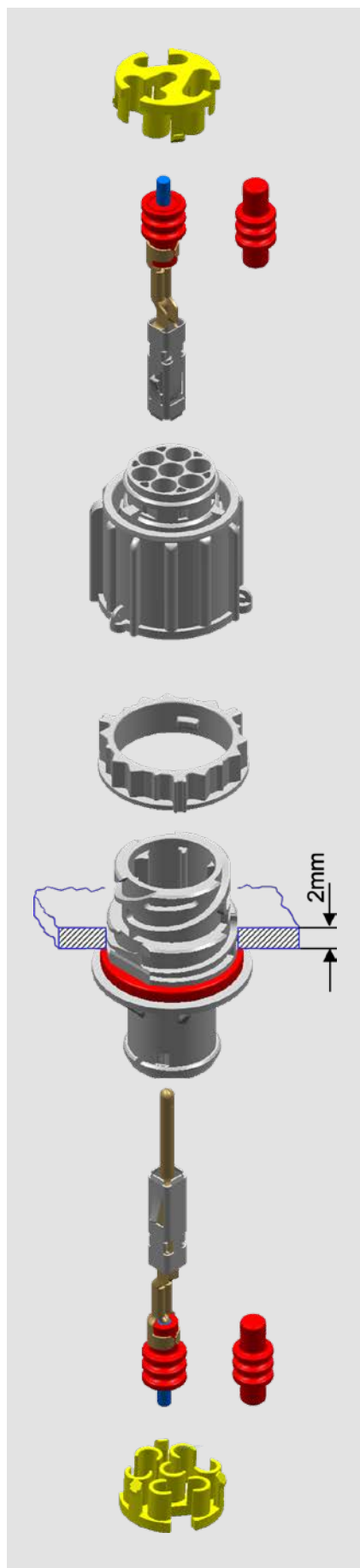
Dummy seal

		16237.627.626	VMQ/brown
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Secondary lock

Part no.	16148.598.613
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7-way connectors with flange



Secondary lock

Part no.	16148.598.613
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MKR Plus

Wire size [mm²]	Form	Part no.	Material
0.5 – 1.0	Chain	26806.201.184	CuSn/Sn
	Single	46806.201.184	
1.5 – 2.5	Chain	26807.201.184	CuSn/Sn
	Single	46807.201.184	

Single wire seal

0.5 – 1.0		16695.627.642	VMQ/blue
1.5 – 2.5		16694.627.626	VMQ/brown

Dummy seal

		16237.627.626	VMQ/brown
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MKR Plus housing

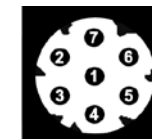


Coding	1B	1B	1B cavity 7 closed
Colour	grey	green	grey
Part no.	18369.062.000	18369.054.000	17019.062.000

Locking nut

Part no.	16115.598.699
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MKS Plus housing



Coding	1B	1B	1B
Colour	grey	green	grey
Seal	Flange seal	Flange seal	O-ring
Part no.	18343.062.000	18343.054.000	18520.062.000

MKS Plus

Wire size [mm²]	Form	Part no.	Material
0.5 – 1.0	Chain	25678.201.184	CuSn/Sn
	Single	45678.201.184	
1.5 – 2.5	Chain	25719.201.184	CuSn/Sn
	Single	45719.201.184	

Single wire seal

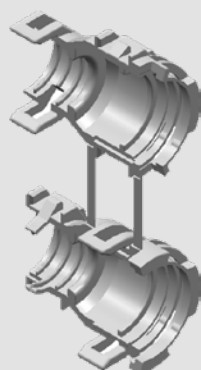
0.5 – 1.0		16695.627.642	VMQ/blue
1.5 – 2.5		16694.627.626	VMQ/brown

Dummy seal

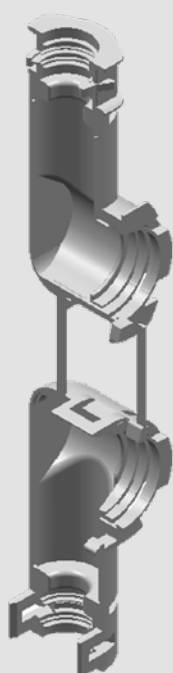
		16237.627.626	VMQ/brown
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Secondary lock

Part no.	16148.598.613
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Adapter for corrugated tube, 180°

	Fitting to connectors shown on previous pages (see pictures)		
	18369 17019	16765	18343 18520
			
Nominal size 7.5	13405.625.699		
Nominal size 8.5	13406.625.699		
Nominal size 10	13407.625.699		

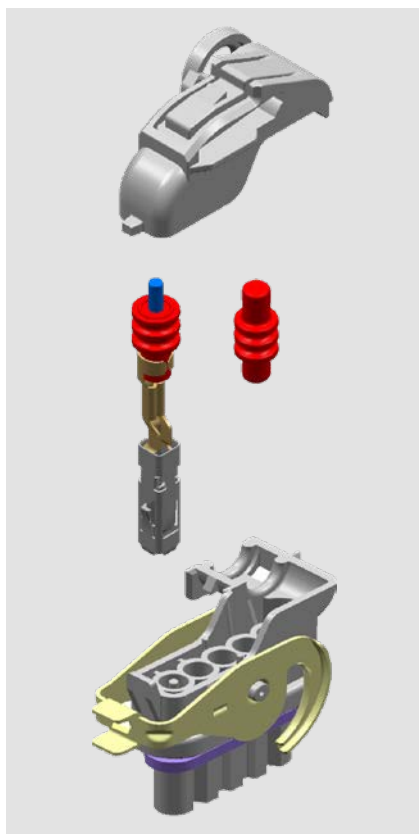

Adapter for corrugated tube, 90°

	Fitting to connectors shown on previous pages (see pictures)		
	18369 17019	16765	18343 18520
			
Nominal size 7.5	14829.625.699		
Nominal size 8,5	14873.625.699		
Nominal size 10	14828.625.699		
For multicore cable Ø 11 mm	14830.625.699		

Adapter for corrugated tube, 90°, with overwind protection

Nominal size 7.5	14930.625.699
Nominal size 8,5	14931.625.699
Nominal size 10	14932.625.699

4-way housing 90° for protective tube B8x0.2 DIN 40621



Cover

Part no.	13599.625.699
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MKR Plus

Wire size [mm²]	Form	Part no.	Material
0.5 – 1.0	Chain	26806.201.184	CuSn/Sn
	Single	46806.201.184	
1.5 – 2.5	Chain	26807.201.184	CuSn/Sn
	Single	46807.201.184	

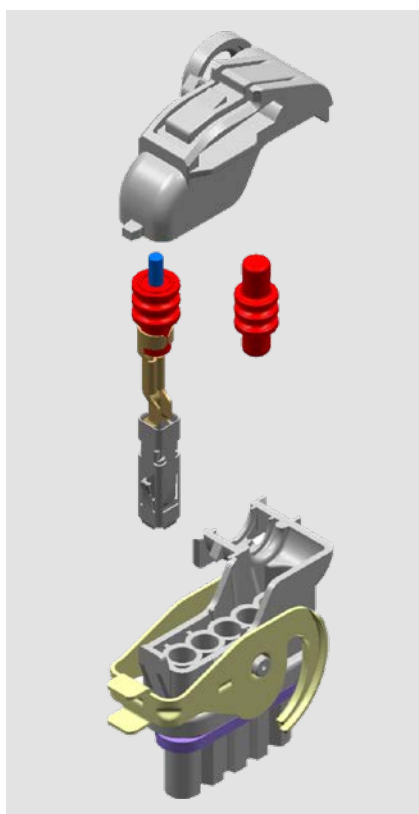
Single wire seal

0.5 – 1.0		16695.627.642	VMQ/blue
1.5 – 2.5		16694.627.626	VMQ/brown
Cavity plug		16237.627.626	VQM/brown

MKR Plus housing

Part no.	18767.000.000
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5-way housing 90° for protective tube B8x0.2 DIN 40621



Cover

Part no.	13599.625.699
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MKR Plus

Wire size [mm²]	Form	Part no.	Material
0.5 – 1.0	Chain	26806.201.184	CuSn/Sn
	Single	46806.201.184	
1.5 – 2.5	Chain	26807.201.184	CuSn/Sn
	Single	46807.201.184	

Single wire seal

0.5 – 1.0		16695.627.642	VMQ/blue
1.5 – 2.5		16694.627.626	VMQ/brown
Cavity plug		16237.627.626	VQM/brown

MKR Plus housing

Part no.	18920.000.000
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5-way housing 90° for corrugated tube NW 8.5

Cover

Part no.	14900.625.699
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MKR Plus

Wire size [mm ²]	Form	Part no.	Material
0.5 – 1.0	Chain	26806.201.184	CuSn/Sn
	Single	46806.201.184	
1.5 – 2.5	Chain	26807.201.184	CuSn/Sn
	Single	46807.201.184	

Single wire seal

0.5 – 1.0		16695.627.642	VMQ/blue
1.5 – 2.5		16694.627.626	VMQ/brown

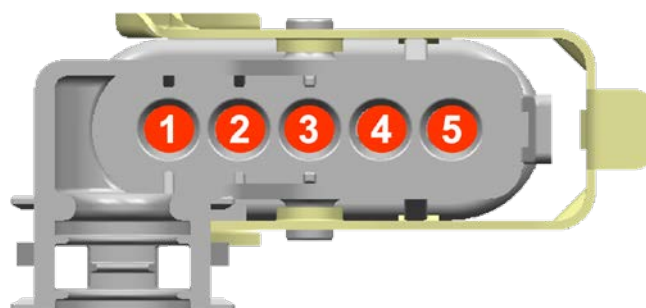
Cavity plug

Part no.		16237.627.626	VQM/brown
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MKR Plus housing

Part no.	18683.000.000
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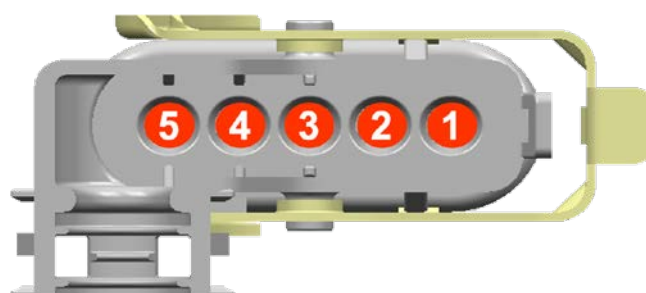
Cavity numbers



MKR Plus housing

Part no.	18242.000.000
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Cavity numbers



5-way housing 180° for corrugated tube NW10



Cover

Part no.	14899.625.699
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MKR Plus

Wire size [mm ²]	Form	Part no.	Material
0.5 – 1.0	Chain	26806.201.184	CuSn/Sn
	Single	46806.201.184	
1.5 – 2.5	Chain	26807.201.184	CuSn/Sn
	Single	46807.201.184	

Single wire seal

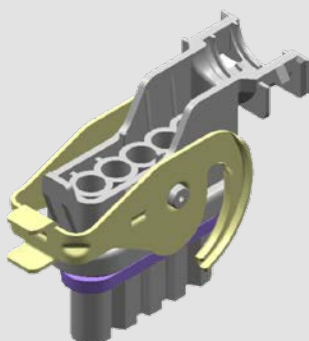
0.5 – 1.0		16695.627.642	VMQ/blue
1.5 – 2.5		16694.627.626	VMQ/brown

Cavity plug

Part no.		16237.627.626	VQM/brown
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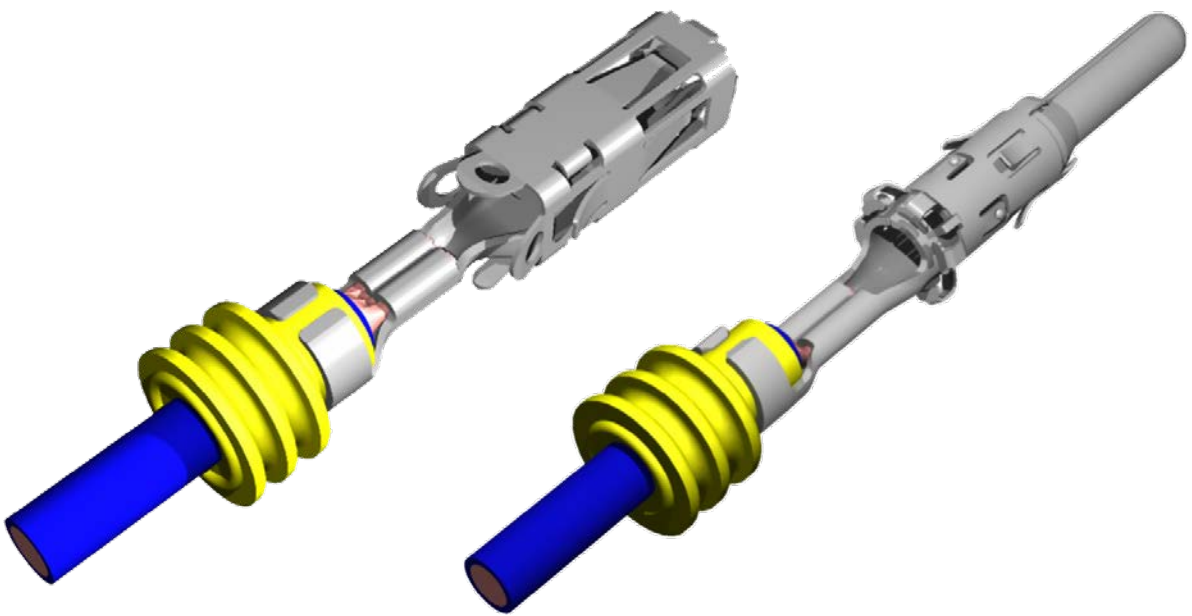
MKR Plus housing

Part no.	18241.000.000
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Pos.	Characteristic	Value/Remark
1	Electrical	
1.1	Voltage	Max. 48 V
1.2	Current capacity	3 mA at U > 5 V up to 7 A at 90 °C (CuSn/Sn) ambient temperature
1.3	Terminal resistance	< 10 mΩ at 1 A
1.4	Insulation resistance	≥ 10 mΩ
2	Thermal	
2.1	Temperature range	(depending on material/ finish of terminals) CuSn/Sn – 40 °C to + 130 °C
3	Mechanical	
3.1	No. of inserions	10
3.2	Retention force	> 80 N
4	Climatic	
4.1	Temperature humidity change	According to DIN 72585-2
4.2	Temperature change	According to DIN 72585-2
5	Chemical resistance	According to DIN 72585-2
6	Protection class	IPX9K DIN 40050-9
7	Vibration resistance	According to DIN 72585-2 K2

VKR PLUS VKS PLUS



HEAVY DUTY **///**
POWER SYSTEM

Connector systems 2.5 mm diameter with stainless steel spring for splash-proof applications

The **VKR PLUS/VKS PLUS** system is designed for splash-proof and high vibration resistance applications according to DIN 72585. Low and high current ratings are possible, so that the system can be used in many different places (e.g. sensors near commercial vehicle engines, solenoid valves).

The terminals have an external stainless steel spring. It guarantees the required high contact pressure and secure support in the housing cavity. The insulation claw is designed for single wire seals. Stainless steel spring and single wire seal absorb the vibrations in the housing. For this kind of application, housings with different coding variations are available.

The 4-way coupling is according to DIN 72585. It has either angled or straight wire entries designed for the connection of convoluted tube or multicore cable.

Characteristics

- external stainless steel spring of the VKR PLUS with 4-point contact for secure locking in the housing and absorption of vibrations.
- high contact back-out force through locking in housing with stainless steel spring
- high contact force

Use

- for high vibration resistance application
- for splash-proof application
- for transmission of low and high currents
- as a flying coupling and for contacting of sensors with a connection according to DIN 72585
- as a combined connector system with MKR PLUS/MKS PLUS terminals

Terminals

VKR PLUS

- two locking latches ensure secure locking in the cavity
- the insulation claw is designed for single wire seals

VKS PLUS

- four locking latches ensure secure locking in the cavity
- the insulation claw is designed for single wire seals

Housings

- splash-proof through single wire seals and housing seals
- cable entry straight and 90° angled

Delivery form

Terminals

- single form for hand crimping tools
- chain form for semi-automatic and fully-automatic Machines

Housings

- loose in standard packs

Technical Data	
Terminals	
Wire cross section	0.5 – 2.5 qmm
Material	CuSn
Surface	frSn, sel.Au
Stainless steel spring	
Current rating T(amb) 30 °C, (2.5 qmm)	25 A
VKR PLUS	
Contact back-out force (2.5 qmm) approx.	230 N
Housings	
Number of poles	4
Variety of coding depends on the housing geometry	
Cable entry 4way	
• straight/ 90° angled	
• designed for convoluted tube / multicore cable	
Terminal and housing according to DIN 72585 form B	
Load Category K2	



VKR PLUS

Stainless steel cage

Primary lock

Cage supporting
contact area

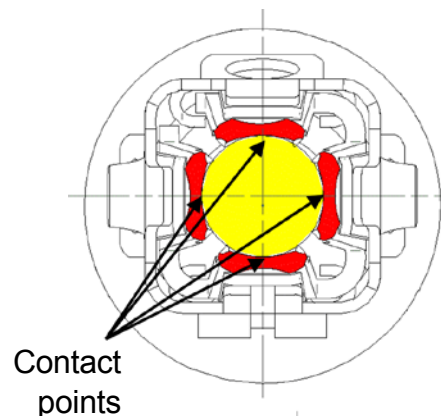


VKS PLUS

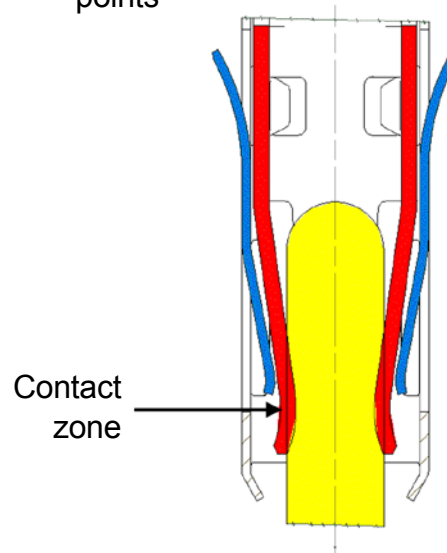
Four point
primary locking

Stainless steel cage

Contact principle



Contact
points



Contact
zone

Extraction tools



VKR Article-No.
50000.017.590



VKS Article-No.
50000.017.600



Spare part Article-No.
50000.038.567

www.phuisen.de

4-way

DIN 72585; vibration resistance: 20 g

Secondary lock

Part no.	16052.598.613
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VKR Plus

Wire size [mm ²]	Form	Part no.	Material
0.5 – 1.0	Chain	26570.201.184	CuSn/Sn
	Single	46570.201.184	
1.5 – 2.5	Chain	26571.201.184	CuSn/Sn
	Single	46571.201.184	

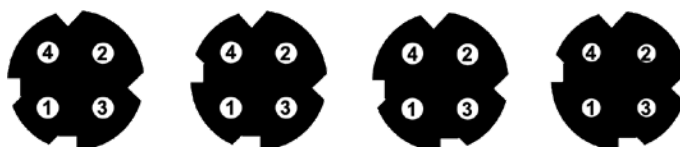
Single wire seal

0.5 – 1.0		14414.627.626	brown
1.5 – 2.5		14415.627.670	grey

Cavity plug

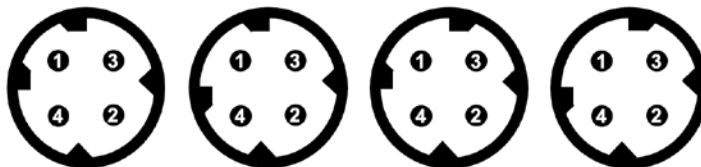
		16315.627.646	green
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VKR Plus housing – blue seal



Coding	B1	B2	B3	B4
Colour	black	grey	green	blue
Part no.	17984.000.002	17985.000.002	17986.000.002	17987.000.002

VKS Plus housing



Coding	B1	B2	B3	B4
Colour	black	grey	green	blue
Part no.	14730.598.696	14731.598.663		

VKS Plus

Wire size [mm ²]	Form	Part no.	Material
0.5 – 1.0	Chain	26634.201.184	CuSn/Sn
	Single	46634.201.184	
1.5 – 2.5	Chain	26633.201.184	CuSn/Sn
	Single	46633.201.184	

Single wire seal

0.5 – 1.0		14740.627.694	white
1.5 – 2.5		14739.627.619	orange

Cavity plug

		14741.627.610	yellow
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Secondary lock

Part no.	16052.598.613
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4-way

DIN 72585; vibration resistance: 30 g

Secondary lock

Part no.	16052.598.613
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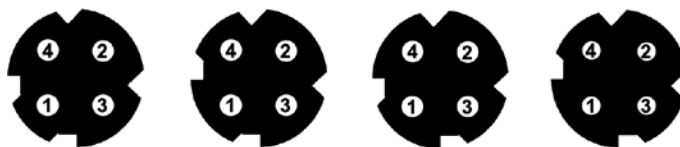
VKR Plus

Wire size [mm ²]	Form	Part no.	Material
0.5 – 1.0	Chain	26570.201.184	CuSn/Sn
	Single	46570.201.184	
1.5 – 2.5	Chain	26571.201.184	CuSn/Sn
	Single	46571.201.184	

Single wire seal

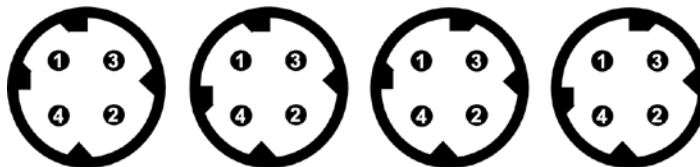
0.5 – 1.0		14414.627.626	brown
1.5 – 2.5		14415.627.670	grey
Cavity plug		16315.627.646	green

VKR Plus housing – red seal



Coding	B1	B2	B3	B4
Colour	black	grey	green	blue
Part no.	17984.000.001	17985.000.001	17986.000.001	17987.000.001

VKS Plus housing



Coding	B1	B2	B3	B4
Colour	black	grey	green	blue
Part no.	14730.598.696	14731.598.663		

VKS Plus

Wire size [mm ²]	Form	Part no.	Material
0.5 – 1.0	Chain	26634.201.184	CuSn/Sn
	Single	46634.201.184	
1.5 – 2.5	Chain	26633.201.184	CuSn/Sn
	Single	46633.201.184	

Single wire seal

0.5 – 1.0		14740.627.694	white
1.5 – 2.5		14739.627.619	orange
Cavity plug		14741.627.610	yellow

Secondary lock

Part no.	16052.598.613
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4-way

DIN 72585; vibration resistance: 20 g

Secondary lock

Part no.	16052.598.613
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VKR Plus

Wire size [mm ²]	Form	Part no.	Material
0.5 – 1.0	Chain	26570.201.184	CuSn/Sn
	Single	46570.201.184	
1.5 – 2.5	Chain	26571.201.184	CuSn/Sn
	Single	46571.201.184	

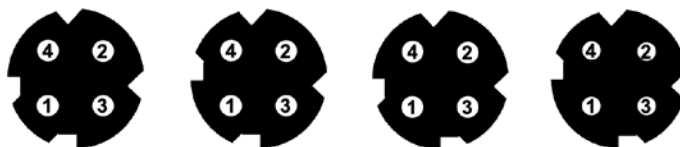
Single wire seal

0.5 – 1.0		14414.627.626	brown
1.5 – 2.5		14415.627.670	grey

Cavity plug

		16315.627.646	green
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VKR Plus housing – blue seal

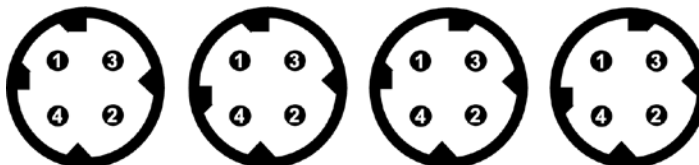


Coding	B1	B2	B3	B4
Colour	black	grey	green	blue
Part no.	17984.000.002	17985.000.002	17986.000.002	17987.000.002

Locking nut

Part no.	16115 598 699
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VKS Plus housing



Coding	B1	B2	B3	B4
Colour	black	grey	green	blue
Part no.	18337.000.000	18338.000.000	18339.000.000	18340.000.000

VKS Plus

Wire size [mm ²]	Form	Part no.	Material
0.5 – 1.0	Chain	26634.201.184	CuSn/Sn
	Single	46634.201.184	
1.5 – 2.5	Chain	26633.201.184	CuSn/Sn
	Single	46633.201.184	

Single wire seal

0.5 – 1.0		14740.627.619	white
1.5 – 2.5		14739.627.694	orange

Cavity plug

		14741.627.610	yellow
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Secondary lock

Part no.	16052.598.613
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4-way

DIN 72585; vibration resistance: 30 g

Secondary lock

Part no.	16052.598.613
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VKR Plus

Wire size [mm ²]	Form	Part no.	Material
0.5 – 1.0	Chain	26570.201.184	CuSn/Sn
	Single	46570.201.184	
1.5 – 2.5	Chain	26571.201.184	CuSn/Sn
	Single	46571.201.184	

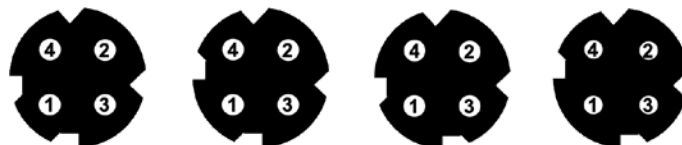
Single wire seal

0.5 – 1.0		14414.627.626	brown
1.5 – 2.5		14415.627.670	grey

Cavity plug

		16315.627.646	green
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VKR Plus housing – red seal

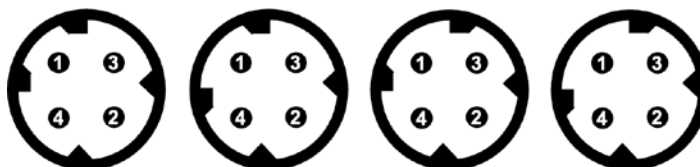


Coding	B1	B2	B3	B4
Colour	black	grey	green	blue
Part no.	17984.000.001	17985.000.001	17986.000.001	17987.000.001

Locking nut

Part no.	16115.568.699
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VKS Plus housing



Coding	B1	B2	B3	B4
Colour	black	grey	green	blue
Part no.	18337.000.000	18338.000.000	18339.000.000	18340.000.000

VKS Plus

Wire size [mm ²]	Form	Part no.	Material
0.5 – 1.0	Chain	26634.201.184	CuSn/Sn
	Single	46634.201.184	
1.5 – 2.5	Chain	26633.201.184	CuSn/Sn
	Single	46633.201.184	

Single wire seal

0.5 – 1.0		14740.627.619	white
1.5 – 2.5		14739.627.694	orange

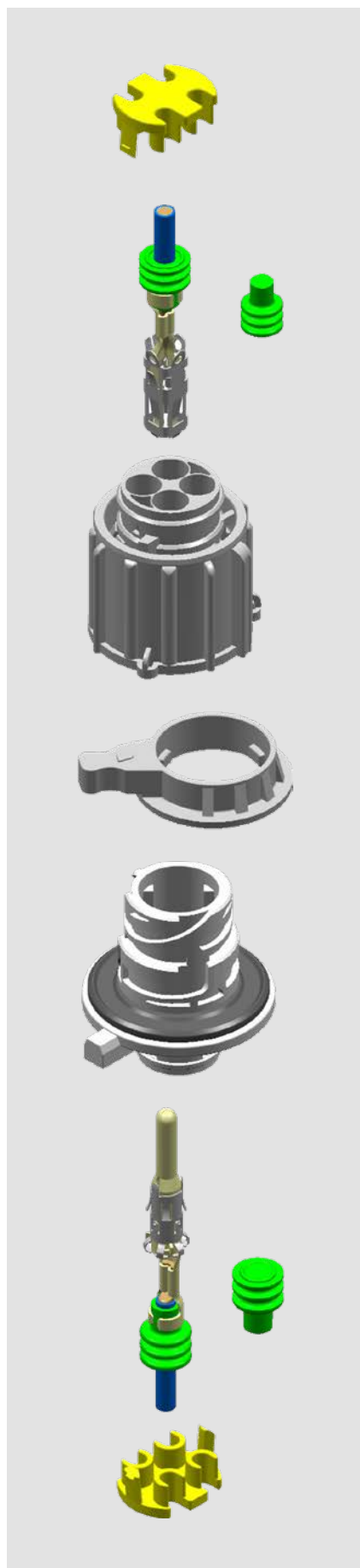
Cavity plug

		14741.627.610	yellow
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Secondary lock

Part no.	16052.598.613
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4-way Common rail application



Secondary lock

Part no.	16052.598.613
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VKR Plus

Wire size [mm²]	Form	Part no.	Material
0.5 – 1.0	Chain	26570.201.184	CuSn/Sn
	Single	46570.201.184	
1.5 – 2.5	Chain	26571.201.184	CuSn/Sn
	Single	46571.201.184	

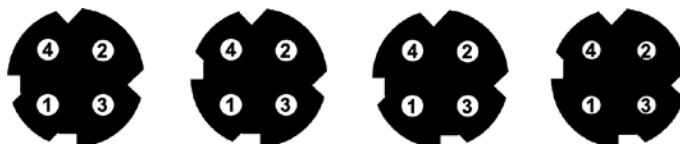
Single wire seal

0.5 – 1.0		14414.627.626	brown
1.5 – 2.5		14415.627.670	grey

Cavity plug

Part no.		16315.627.646	green
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VKR Plus housing – red seal



Coding	B1	B2	B3	B4
Colour	black	grey	green	blue
Part no.	17984.000.001	17985.000.001	17986.000.001	17987.000.001

Locking nut

Part no.	13054.598.699
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VKS Plus housing with flange



Coding	B1
Colour	black
Part no.	18386.000.001

VKS Plus

Wire size [mm²]	Form	Part no.	Material
0.5 – 1.0	Chain	26634.201.184	CuSn/Sn
	Single	46634.201.184	
1.5 – 2.5	Chain	26633.201.184	CuSn/Sn
	Single	46633.201.184	

Single wire seal

0.5 – 1.0		14740.627.619	white
1.5 – 2.5		14739.627.694	orange

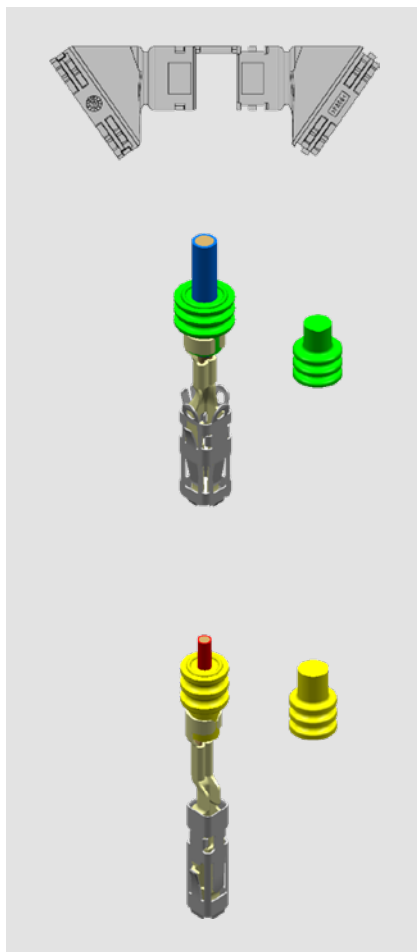
Cavity plug

Part no.		14741.627.610	yellow
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Secondary lock

Part no.		16052.598.613
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12-way connector



Adapter for corrugated tube

Nominal size 13	14284.000.000
Nominal size 17	14270.000.000

VKR Plus

Wire size [mm²]	Form	Part no.	Material
0.5 – 1.0	Chain	26570.201.184	CuSn/Sn
	Single	46570.201.184	
Single wire seal		14414.627.626	
1.5 – 2.5	Chain	26571.201.184	CuSn/Sn
	Single	46571.201.184	
Single wire seal		14415.627.670	
Cavity plug		16315.627.646	

MKR Plus

Wire size [mm²]	Form	Part no.	Material
0.5 – 1.0	Chain	26806.201.184	CuSn/Sn
	Single	46806.201.184	
Single wire seal		16695.627.642	
1.5 – 2.5	Chain	26807.201.184	CuSn/Sn
	Single	46807.201.184	
Single wire seal		16694.627.626	
Cavity plug		16237.627.626	

Secondary lock

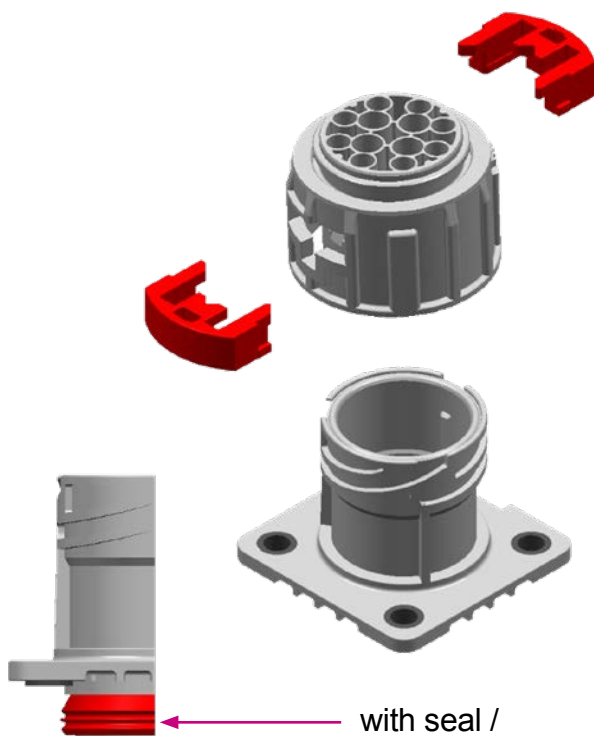
Part no.	14909.598.621	2 required
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VKR/MKR Plus housing

Part no.	18562.000.000	Customer specific
	18249.000.000	

VKS/MKS Plus housing

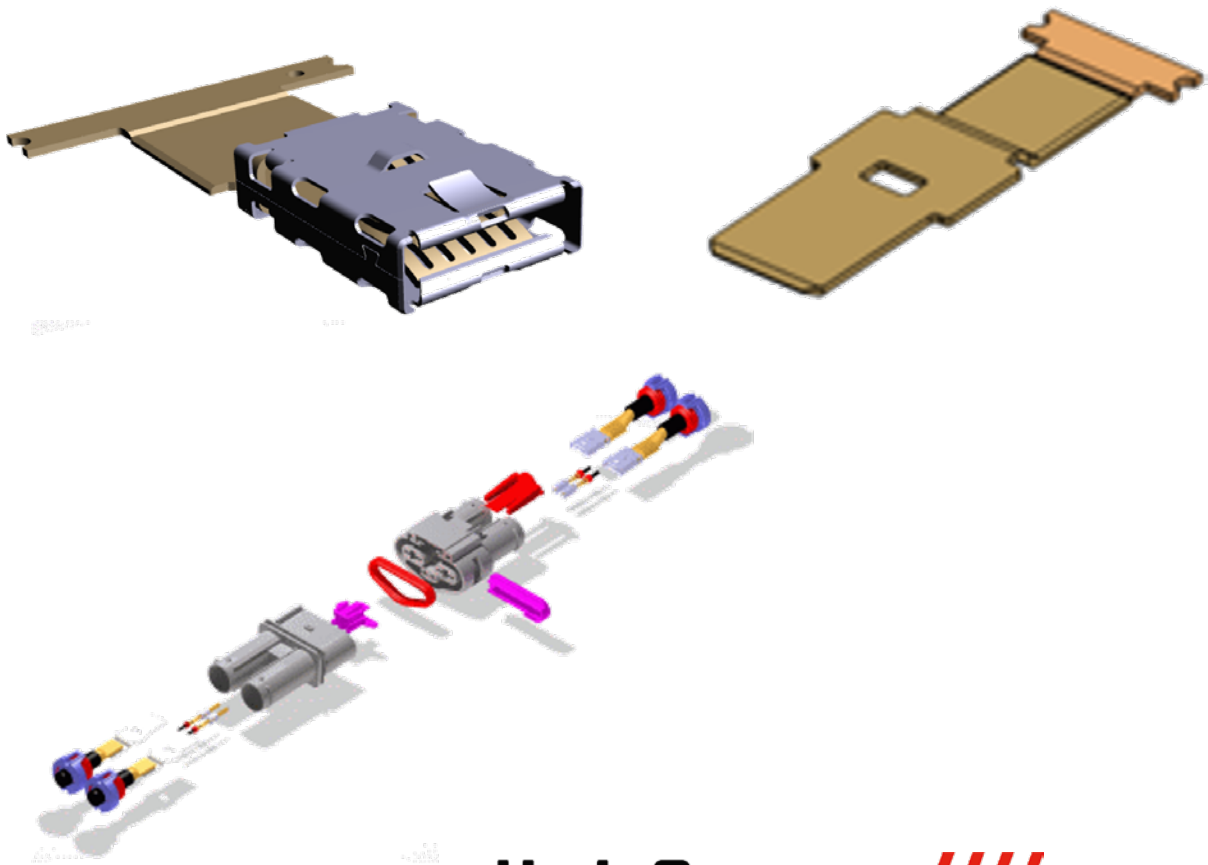
Part no.	18531.000.000
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with seal /
Common Rail application

MAK 8/12

MAS 8/12



High Current **////**
POWER SYSTEM

Power application systems 8.0 / 12.0 mm

Lamella terminal system with closed box 8.0 x 0.8 mm, 9.5 x 1.2 mm, 12.0 x 0.8 mm

The MAK power terminal series covers blade sizes 8.0 mm to 9.5 mm and 12.0 mm. They are designed for single and multi-pole connections. The terminals offer an excellent current rating for use on power demanding applications and the closed box design protects from environmental influences and damage.

The MAK power terminal series can be used on a wide array of applications, but its main usage is in the automotive and truck industry.

Characteristics

- secondary locking
- excellent current rating
- low mating and withdrawal forces
- internal lamella

Application

- on single and multipole connections
- for connection to junction boxes, main fuses and high power consumers
- for sealed applications

Terminals

MAK

- receptacles for blade sizes 8.0 mm to 9.5 mm and 12.0 mm
- for wires with reduced insulation thickness
- two locking arms to ensure retention in cavity
- secondary lock

MAK PLUS

- receptacles for blade sizes 8.0 mm to 9.5 mm and 12.0 mm
- for wires with reduced insulation thickness
- two locking arms to ensure retention in cavity
- secondary lock
- uses single wire seal

Housings

designed for applicable terminals. Additional design features depending on application:

- secondary lock
- mechanical and colour coding
- seals
- locking arm protection

Delivery form Terminal

- chain form for semi- and full-automatic crimping Machines

Housing

- loose in standard packs

Contact principle

Welding area/feasible for
copper and aluminum wires

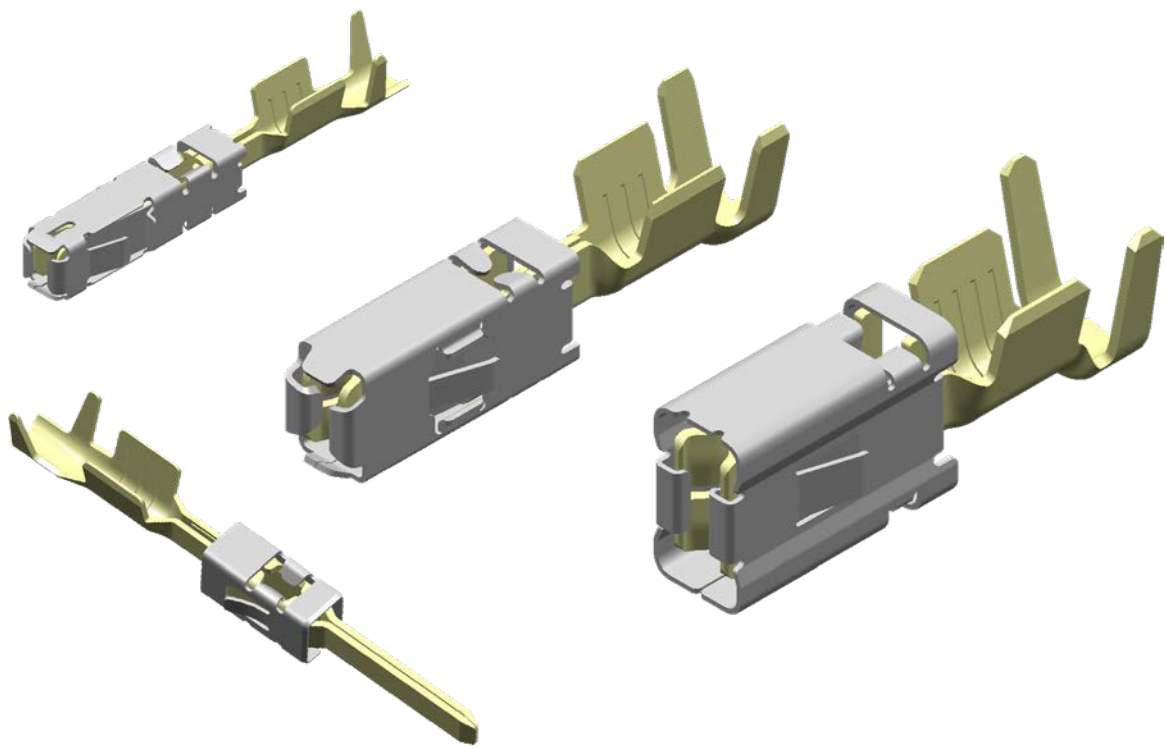
Welding area/feasible
for 90° and 180° outlet

Stainless steel cage

Primary lock made
from stainless steel

Contact zone with
special treatment for
reduced insertion force

MAK AFS



SYSTEM

Closed box contact systems 1.5 / 2.8 / 6.3 mm

Closed box contact systems with spring support 1.5 x 0.6 mm, 2.8 x 0.8 mm and 6.3 x 0.8 mm

The **MAK** series includes terminals for blade sizes 1.5 mm, 2.8 mm and 6.3 mm. They are designed for single and multipole connections. The terminals offer the engagement of a secondary lock on all four sides and the closed box design protects from environmental influences and damage.

The **MAK** terminal series can be used on a wide array of applications, but its main usage is in the automotive and truck industry.

Characteristics

- secondary locking on all four sides
- low mating and withdrawal forces even on multipole applications
- high terminal density
- spring support for longevity, high current rating and reliable electrical performance

Application

- on single and multipole connections
- for direct connection on sensors, motors and electronic devices
- for sealed applications
- for transmission of signals and power

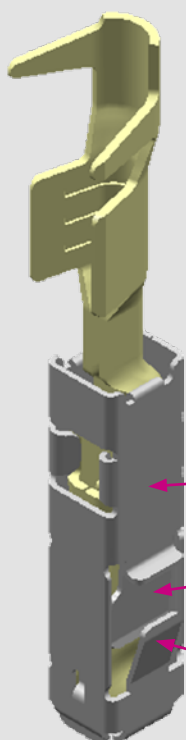
Terminals

MAK

- receptacles for blade sizes 1.5 mm, 2.8 mm and 4.8 mm to 6.3 mm for wires with reduced insulation thickness
- two locking arms to ensure retention in cavity
secondary lock can engage on all four sides

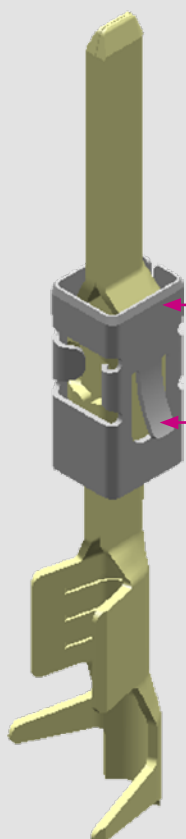
MAK PLUS

- receptacles for blade sizes 1.5 mm, 2.8 mm and 4.8 mm to 6.3 mm
- for wires with reduced insulation thickness
- two locking arms to ensure retention in cavity
- secondary lock can engage on all four sides
- uses single wire seals



MAK 1.5

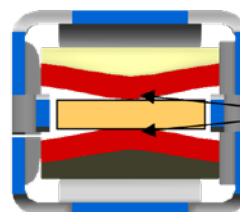
- Stainless steel cage
- Stainless steel cage supporting contact fingers
- Primary lock made from stainless steel



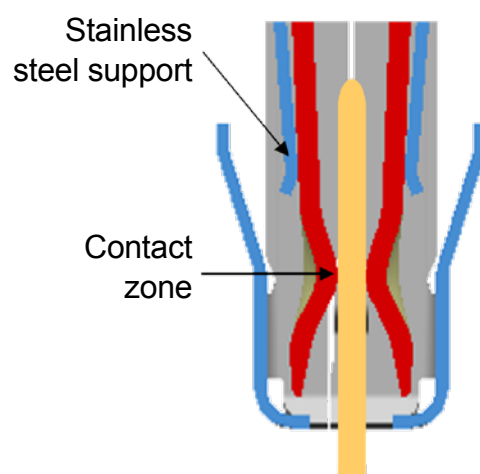
AFS 1.5

- Stainless steel cage
- Primary lock made from stainless steel

Contact principle



Contact zone



Stainless steel support

Contact zone

Extraction tools

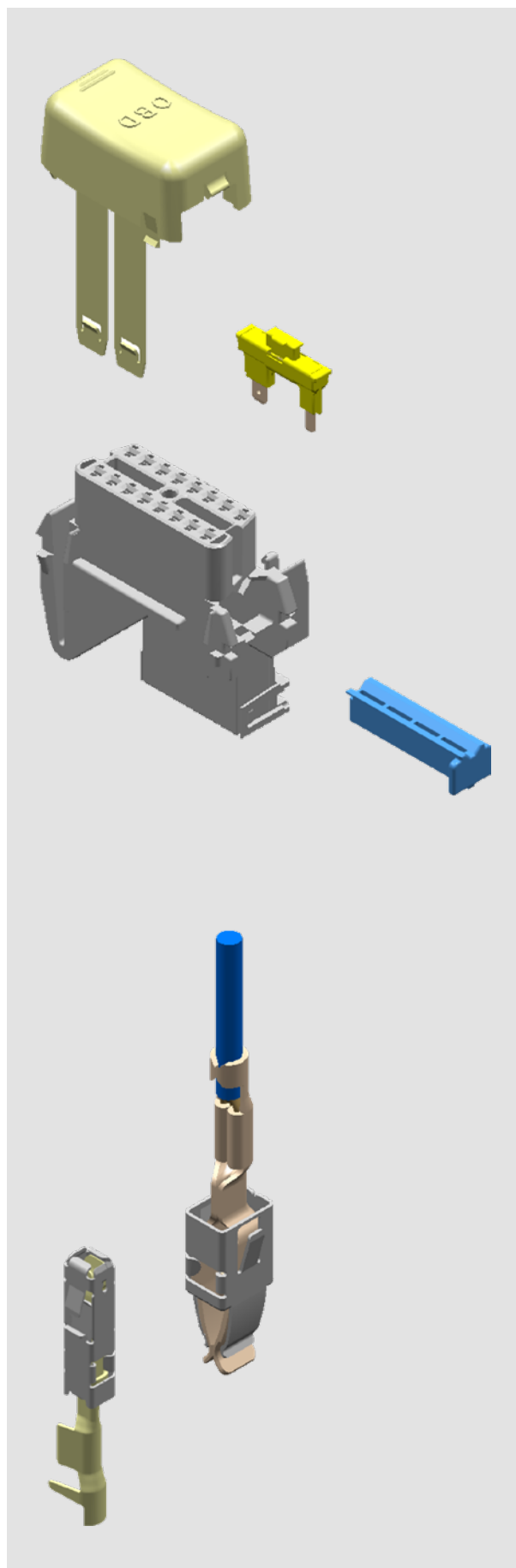
MAK15 Article-No.
50000.017.610



MAS15 Article-No.
50000.017.587



www.phuisen.de


Cap

Part no.	13616.505.600	dark grey
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Resistor 120 Ohm

Part no.	17909.050.000	black
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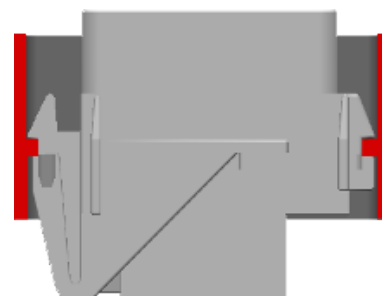
MAK 1.5 housing

Part no.	21354.000.001	blue
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Secondary Lock

Part no.	13563.592.613	yellow
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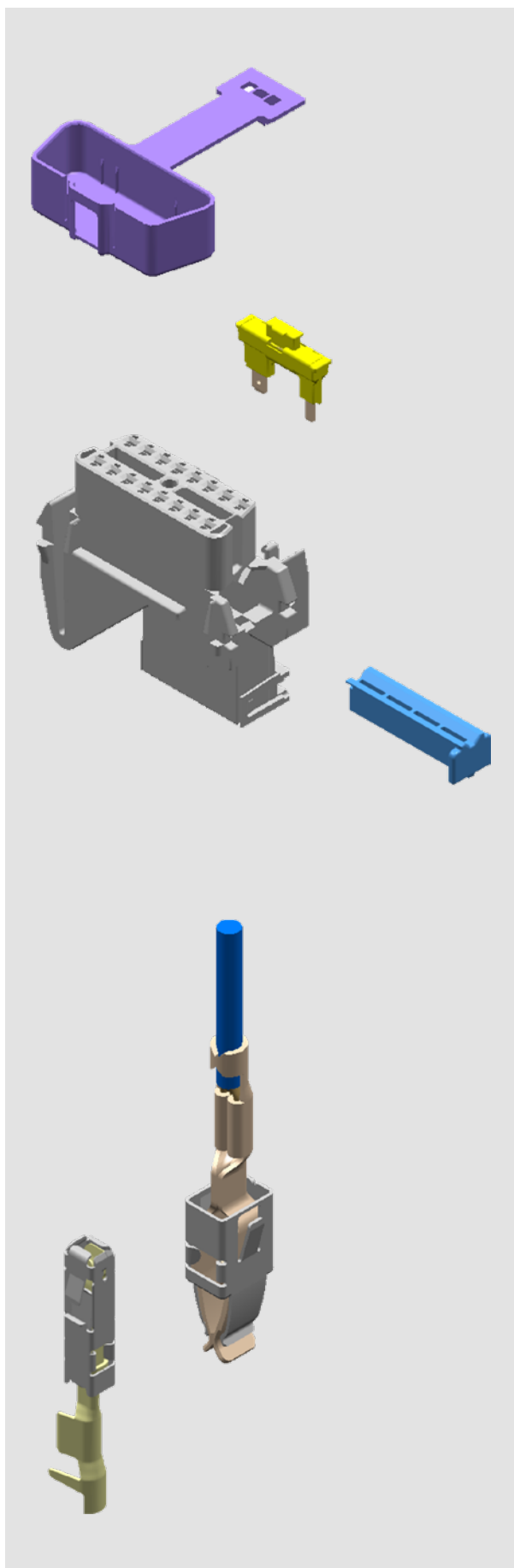
Panel thickness,
 $t = 2.4 \text{ mm}$


AFK 2.8 resistor terminal

Wire size in mm ²	Form	Part no.	Material
0.5 – 1.0	Chain	26701.201.185	CuSn/Sn

MAK 1.5

Wire size in mm ²	Form	Part no.	Material
0.5 – 1.0	Chain	28288.306.718	CuCrTiSi/Pd


Cap

Part no.	13615.587.637	blue
----------	---------------	------

Resistor 120 Ohm

Part no.	17909.050.000	black
----------	---------------	-------

MAK 1.5 housing

Part no.	21354.000.001	blue
----------	---------------	------

Secondary Lock

Part no.	13563.592.613	yellow
----------	---------------	--------

Panel thickness,
 $t = 2.0 \text{ mm}$

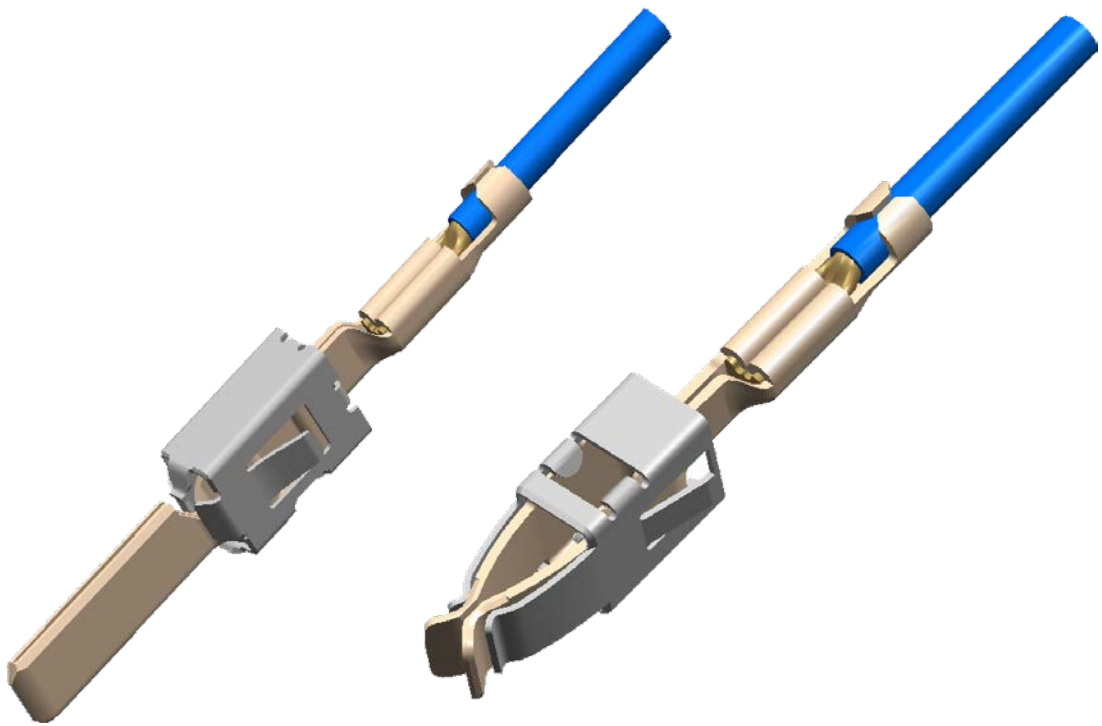

AFK 2.8 resistor terminal

Wire size in mm ²	Form	Part no.	Material
0.5 – 1.0	Chain	26701.201.185	CuSn/Sn

MAK 1.5

Wire size in mm ²	Form	Part no.	Material
0.5 – 1.0	Chain	28288.306.718	CuCrTiSi/Pd

AFK AFS



SYSTEM

Leaf spring connector systems

0.63 x 0.63 mm, 1.5 mm x 0.6 mm, 2.8 mm x 0.8 mm, 4.8 mm x 0.8 mm

The **AFK/AFS** systems comprise terminals for a pin 0.63mm x 0.63mm and terminals with tab width of 1.5 mm, 2.8 mm, and 4.8 mm with a straight wire connection area. They are designed for single and multipole connections. The design of the terminals makes a variety of secondary lockings possible.

The terminals are used together with **AFK/AFS** housings, but are also, according to size, cavity compatible with the housings of the LEAR systems MFK, MDK and DFK.

The main applications for the **AFK/AFS** systems are found in the automotive industry.

Characteristics

- universal secondary locking
- low insertion and withdrawal forces even with 4-way applications
- high terminal density
- high current carrying capacity and longevity through the use of stainless steel springs
- high contact security even in high ambient temperatures

Use

- for single and multipole couplings
- for transmission of control currents and power supply
- for connection to components
- for splash-proof applications

Terminals

MSK 0.63 mm

- for high quality applications e.g. where security is vital
- with twist-protection for correct positioning
- one locking latch for secure locking in the housing

AFK

- receptacles for tab width 1.5 mm; 2.8 mm; 4.8 mm
- for insulation reduced wires
- two locking latches ensure secure locking in the cavity

AFK PLUS

- receptacles for tab width 1.5 mm; 2.8 mm; 4.8 mm
- for insulation reduced wires
- two locking latches ensure secure locking in the cavity
- the insulation claw is designed for single wire seals

AFS

- tabs with tab width 1.5 mm; 2.8 mm; 4.8 mm
- for insulation reduced wires
- two locking latches ensure secure locking in the cavity

AFS PLUS

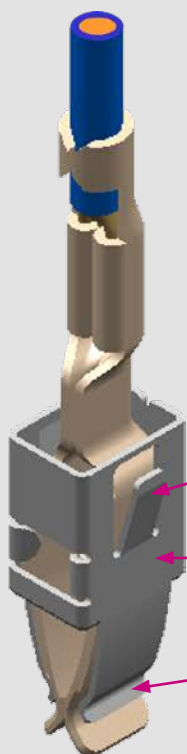
- tabs with tab width 1.5 mm; 2.8 mm; 4.8 mm
- for insulation reduced wires
- two locking latches ensure secure locking in the cavity
- the insulation claw is designed for single wire seals

Housings

- designed for corresponding terminals

Design details of the housings for a high operating safety:

- secondary locking
- keying
- hinged cover
- seals



AFK 2.8

Primary lock
from stainless steel

Stainless steel cage

Stainless steel cage
supports contact fingers

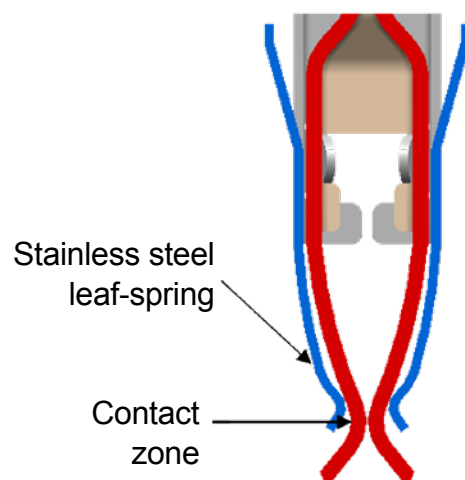
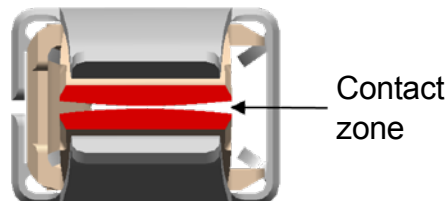


AFS 2.8

Stainless steel cage

Primary lock made
from stainless steel

Contact principle



Extraction tools

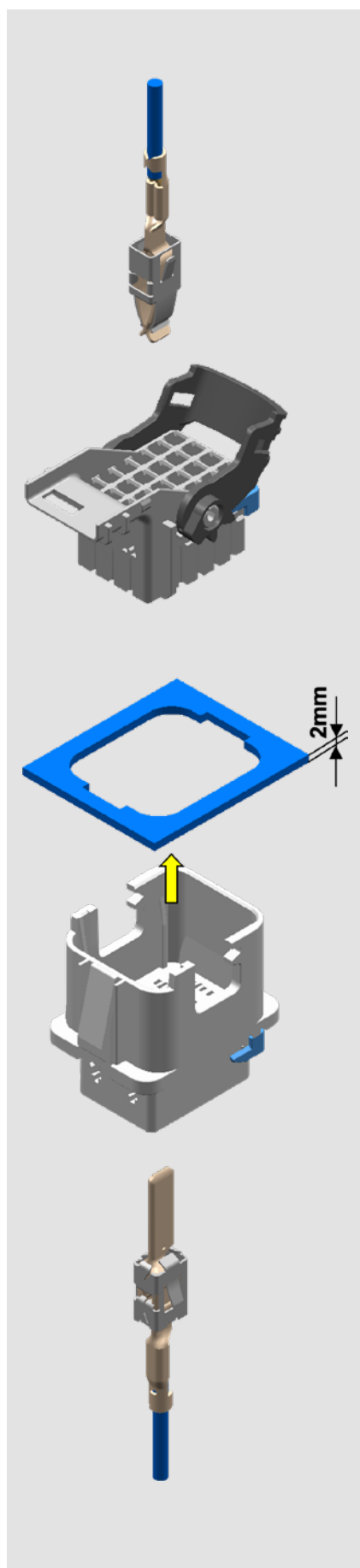
AFK 2.8 Article-No.
50000.017.586



AFS 2.8 Article-No.
50000.017.598



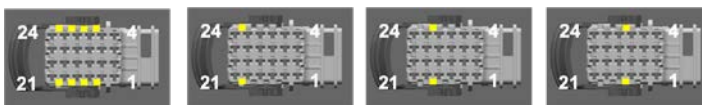
www.phuisen.de



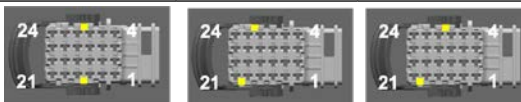
AFK 2.8

Wire size [mm²]	Form	Part no.	Material
0.5 – 1.0	Chain	26701.201.185	CuSn/Sn
	Single	46701.201.185	
1.5 – 2.5	Chain	26705.201.185	CuSn/Sn
	Single	46705.201.185	

AFK 2.8 housing



Coding	0	1	2	3
Colour	black	yellow	green	blue
Part no.	18821.000.000	18796.000.000	18797.000.000	18798.000.000

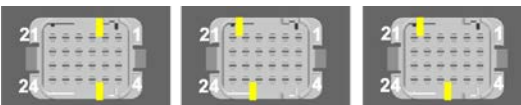


Coding	4	5	6
Colour	neutral	red	grey
Part no.	18799.000.000	18800.000.000	18801.000.000

AFS 2.8 housing



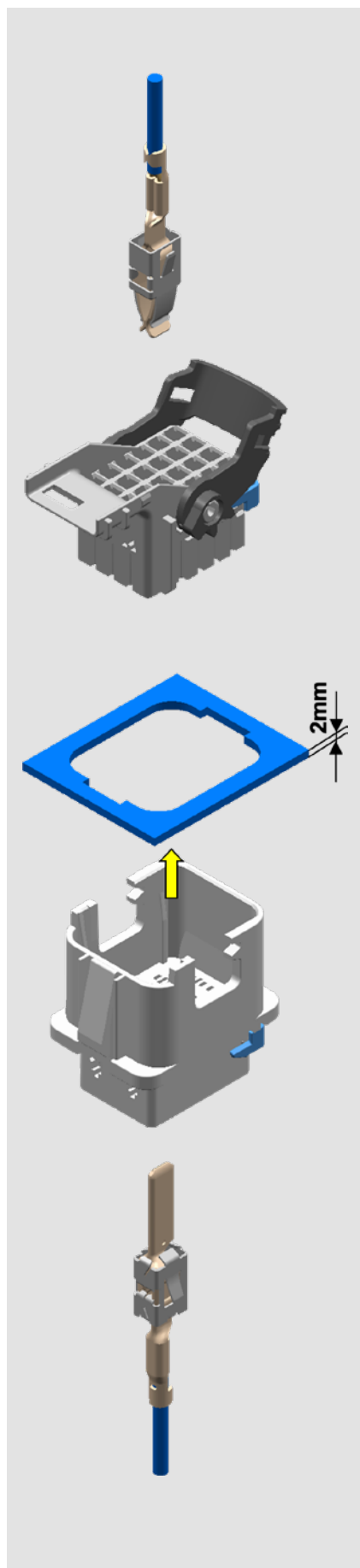
Coding	0	1	2	3
Colour	black	yellow	green	blue
Part no.	18823.000.000	18802.000.000	18803.000.000	18804.000.000



Coding	4	5	6
Colour	neutral	red	grey
Part no.	18805.000.000	18806.000.000	18807.000.000

AFS 2.8

Wire size [mm²]	Form	Part no.	Material
0.5 – 1.0	Chain	26659.330.185	CuSn/Sn
	Single	46659.330.185	
1.5 – 2.5	Chain	26657.330.185	CuSn/Sn
	Single	46657.330.185	

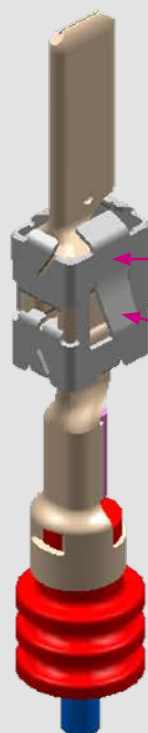


Pos.	Characteristic	Value / Remark
1	Electrical	
1.1	Voltage	Max. 48 V
1.2	Current capacity	4 A at 80 °C, 24 x 0.5 mm ² 9 A at 80 °C, 24 x 2.5 mm ²
1.3	Terminal resistance	< 10 mΩ at 1 A
1.4	Insulation resistance	≥ 10 mΩ
2	Thermal	
2.1	Temperature range	– 40 °C to + 85 °C ambient temperature
3	Mechanical	
3.1	No. of inserions	10
3.2	Assembly force	≤ 45 N, fully equipped
3.3	AFK to AFS housing Retention force	≥ 200 N
3.4	AFK to AFS housing Retention force	≥ 400 N
3.5	AFS to fire wall Coding and poka yoka safety	> 200 N poka yoka > 150 N coding
4	Chemical resistance	Diesel fuel Engine oil Brake fluid DOT 4 Cooling fluid and others
5	Vibration resistance	Acceleration level: 5 g



AFK 2.8 Plus

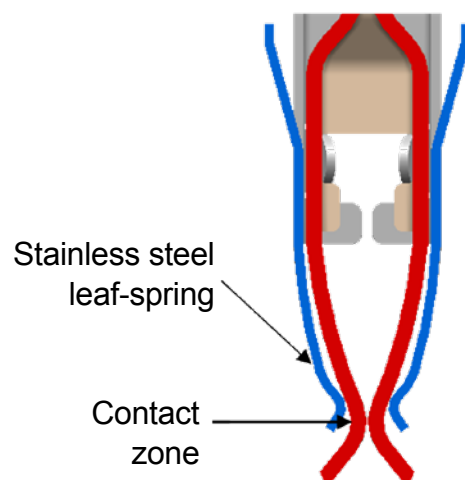
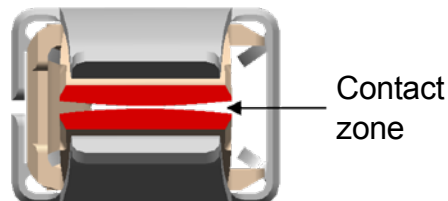
- Primary lock from stainless steel
- Stainless steel cage
- Stainless steel cage supports contact fingers



AFS 2.8 Plus

- Stainless steel cage
- Primary lock made from stainless steel

Contact principle



Extraction tools

AFK 2.8 Article-No.
50000.017.586



AFS 2.8 Article-No.
50000.017.598



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AFK 2.8 Plus

Wire size [mm²]	Form	Part no.	Material
0.5 – 1.0	Chain	26637.201.185	CuSn/Sn
	Single	46637.201.185	
1.5 – 2.5	Chain	26636.201.185	CuSn/Sn
	Single	46636.201.185	

Single wire seal

0.5 – 1.0		16695.627.642	blue
1.5 – 2.5		16694.627.626	brown

Cavity plug

16237.627.626	brown
---------------	-------

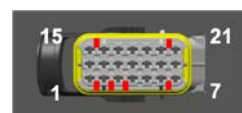
Adapter for corrugated tube NS 17

13370.577.699

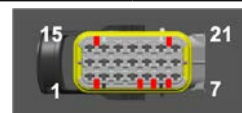
Cover

13369.577.699

AFK 2.8 Plus housing with adapter for corrugated tube

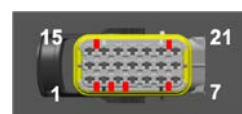


Coding	1			
Colour	grey	black	green	blue
Part no.	18756.062.000	18756.050.000	18756.054.000	18756.067.000



Coding	2			
Colour	grey	black	green	blue
Part no.	18757.062.000	18757.050.000	18757.054.000	18757.067.000

AFK 2.8 Plus housing without adapter



Coding	1			
Colour	black			
Part no.	18655.050.000			



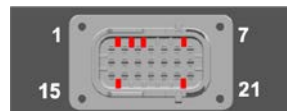
Coding	2			
Colour	black			
Part no.	18656.050.000			

Secondary lock

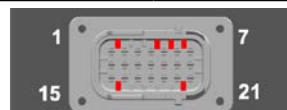
Part no.	13239.601.636
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21-way housing

AFS 2.8 Plus housing



Coding	1			
Colour	grey	black	green	blue
Part no.	13371.598.663	13371.598.699	13371.598.647	13371.598.636



Coding	2			
Colour	grey	black	green	blue
Part no.	13372.598.663	13372.598.699	13372.598.647	13372.598.636

Secondary lock

Part no.	18758.000.000
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AFS 2.8 Plus

Wire size [mm ²]	Form	Part no.	Material
0.5 – 1.0	Chain	26674.330.185	CuSn/Sn
	Single	46674.330.185	
1.5 – 2.5	Chain	26676.330.185	CuSn/Sn
	Single	46676.330.185	

Single wire seal

0.5 – 1.0		16695.627.642	blue
1.5 – 2.5		16694.627.626	brown

Cavity plug

16237.627.626	brown
---------------	-------

LEAR, a global automotive technology leader in Seating and E-Systems, enables superior in-vehicle experiences for consumers around the world. ***Making every drive better™*** by providing the technology for safer, smarter, and more comfortable journeys. Connection Systems delivers solutions to transfer & protect signal and power distribution throughout the vehicle. Autonomous driving, connectivity and electrification are only possible with connected systems.

Product Portfolio

Lear's Connection Systems portfolio provides a holistic suite of solutions for the entire vehicle architecture:

- Terminals & Connectors for Low Voltage and High Voltage Applications
- High Voltage Battery Connection Systems
- High Speed Data Solutions
- Power Distribution Boxes
- Engineered Metal & Plastic Components

Battery Plugboard



Fully configurable solution for a common electric vehicle battery interface. A single assembly that combines all connections to flow power in and out of the high voltage battery, designed for automated pack assembly.

Busbar Technology



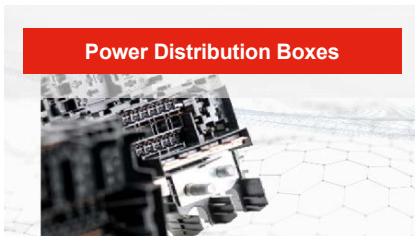
High-quality engineering stamped, overmolded, bent and extruded components from Lear Connection Systems. Providing a high-electrical performance with extended mechanical advantage. Lear's creative tooling and designs allow the manufacturing of complex shapes for various applications.

Intercell Connect Board



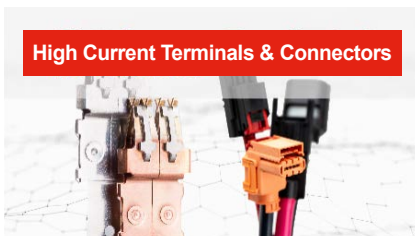
A highly advanced technology that electrically and mechanically integrates battery cells into modules that enables High Voltage power to the electric vehicle. Inhouse capabilities to support all cell types and battery architectures.

Power Distribution Boxes



Lear offers a wide range of Low-voltage PDB/JB/FB solutions to fulfil the varying customer requirements. Sealed and unsealed boxes and fuses, with pluggable or bolt-down interface. Over 30 years of experience in providing passive power distribution boxes to manage power distribution within a vehicle while providing performance, safety and reliability.

High Current Terminals & Connectors



Lear's High Current Connection Systems are developed to meet the demanding conditions of high-power automotive applications and enhance their performance. Mainly used in Electric Vehicles and 48volt systems. Our terminal and connector innovations combined with Lear's system-level expertise results in an uncompromised solution for high-power systems, delivered in the smallest packaged environment.

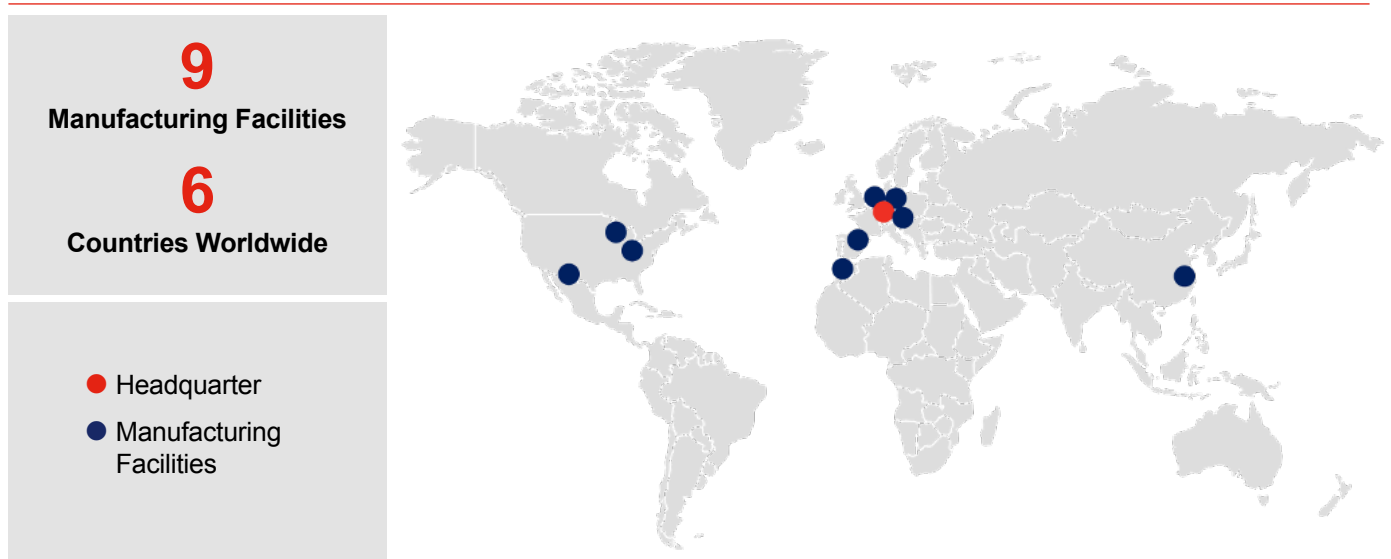
Customer Benefits

Lear's Connection Systems are integrated throughout the vehicle's electrical distribution system, reliably powering everything from in-vehicle connectivity to electric vehicle applications, allowing for faster charging, reduced weight and extended vehicle range:

- Production-proven products and development processes with global customers and manufacturing capabilities
- Engineering expertise for highly efficient solutions

Manufacturing Capabilities

Making every drive better™		
Injection	Assembly	Stamping
■ High-capacity Tools ■ Moldflow ■ Multi-cavity Molds ■ Overmolding Tools ■ Bi-component Molding ■ LSR Molding ■ Mucell ■ Foaming ■ Multi-cavity Injection ■ 2K Molding	■ 2K Process Capabilities ■ Toxing ■ Stitching ■ Overmolding ■ Full- and Semi-Automation	■ Standard Stamping ■ Laser Welding ■ Busbar Stamping ■ Fuse Stamping ■ Press-in Nuts ■ Deburring
Low & High Voltage Capabilities Tool-Shops Welding Testing Validation 		



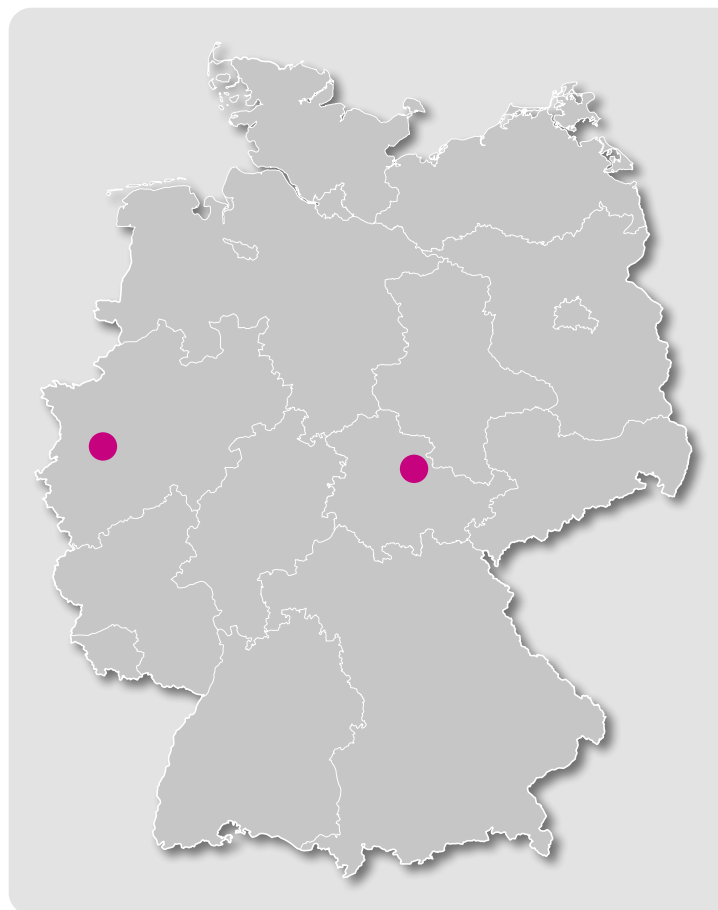
LEAR is leading the way with their state of the industry terminal and connector portfolio and PÜBLICHUISEN is its exclusive partner in getting them to you.

The PÜPLICHHUISEN company, founded in 1926, is a leading distribution company with a nationwide presence in the field of electrical connection and connection technology.

Advice at manufacturer level and our customer oriented service are ensured by the competence and logistics centers in Duisburg and Sömmerda.

Our sales engineers in your area will help you with your interface problems. Over 180 employees in sales, logistic and production are strived to fulfill the wishes of over 6.500 customers today.

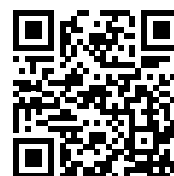
Our high quality thinking is supported by quality and environmental management in accordance with DIN EN ISO 9001/14001.



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Production site in Sömmerda



www.phuisen.de