



Member of the Phoenix Contact Group

## S M Series M40

Shielded Power Connectors M40

# Shielded Power Connectors M40 Series SM

## Technical Data



### Shell material

Machined components: Copper-Zinc alloy (CuZn)  
 die cast components: Zinc (GD-Zn)  
 Shell plating: Nickel (Ni) plated  
 Cable entry: max. 26.5 mm



### Insulator

Connector inserts: Polyamide (PA66) UL 94 V0

### Contacts

Contact material: Copper-Zinc alloy (CuZn)  
 Contact plating: Nickel (Ni) with gold (Au) passivated  
 Contact termination: crimp type

All connectors with different shielding material for different jacket and shield diameters.



### Sealing

Sealing rings: Fluor rubber FPM  
 Gaskets: Fluor rubber FPM

### Temperature

Temperature (long term) Celsius: - 20 °C up to + 125°C  
 Temperature (long term) Fahrenheit: - 4 °F up to + 257 °F



### Mating

Mating cycles: Standard min. 50  
 Female coupling nuts: M40 screw locking/Speedcon  
 Male receptacles: M40 screw locking/Speedcon

### Protection

Protection class : IP 67 (mated) depends on which cable gland is used



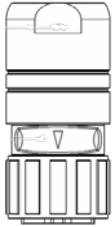
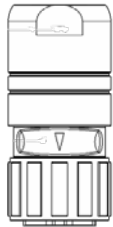
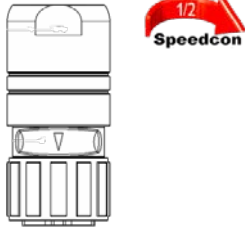

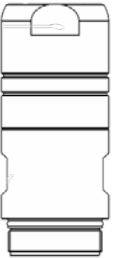
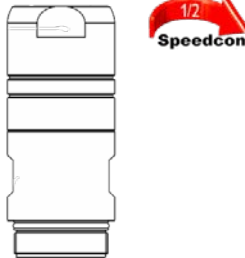
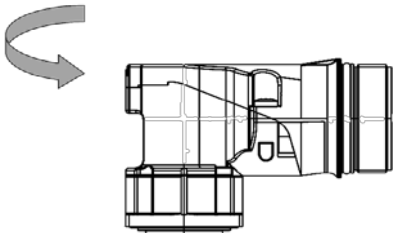
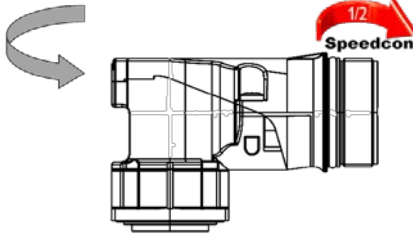
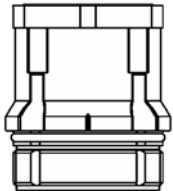
EMC shielding



Number of positions	6	8			
Number of contacts	2 + 3 + PE	4 + 3 + PE			
Contact dia. (mm Ø)	2 + 3.6 + 3.6	2 + 3.6 + 3.6			
Rated current at 25° (A)	9/65	9/65			
Rated voltage (V)	250/630	250/630			
Test voltage (V)	4,000/6,000	4,000/6,000			
Surge voltage category	III	III			
Installation altitude above sea level	3,000 m	3,000 m			
Wiring size AWG	26-12	26-12			
Wiring size AWG	18-8	18-8			

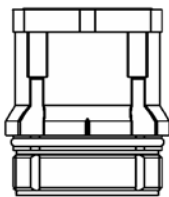

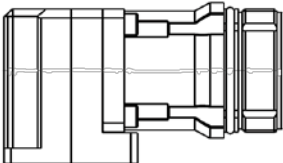
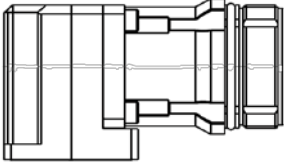





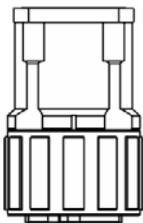
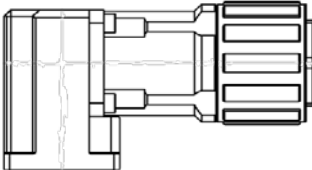
Shielded Power Connectors M40 Series SM  
 Shell styles 8, 8L, 8LS, 9, 9L, 9LS, AD, ADS, WA



SM-xxxxxxx8xxx page C-Q-05	SM-xxxxxxx8Lxx page C-Q-06	SM-xxxxxxx8LxxS page C-Q-06
Cable connector, straight with female coupling nut cable entry max. 25.5 mm universal shielding material	Cable connector, straight with female coupling nut cable entry max. 25.5 mm universal shielding material	Cable connector, straight with female coupling nut cable entry max. 26.5 mm universal shielding material
 <p style="text-align: center;">style 8</p>	 <p style="text-align: center;">style 8L</p>	 <p style="text-align: center;">style 8L/8S</p>
SM-xxxxxxx9xxx page C-Q-07	SM-xxxxxxx9Lxx page C-Q-08	SM-xxxxxxx9LxxS page C-Q-08
Cable connector, straight with male thread cable entry max. 25.5 mm universal shielding material	Cable connector, straight with male thread cable entry max. 25.5 mm universal shielding material	Cable connector, straight with male thread cable entry max. 26.5 mm universal shielding material
 <p style="text-align: center;">style 9</p>	 <p style="text-align: center;">style 9L</p>	 <p style="text-align: center;">style 9L/9S</p>
SM-xxxxxxxADxx page C-Q-09	SM-xxxxxxxADxxS page C-Q-09	SM-xxxxxxxWAx page C-Q-10
Panel connector, right angled square flange with 4 holes front mount, O-ring axial with male thread, rotatable	Panel connector, right angled square flange with 4 holes front mount, O-ring axial with male thread, rotatable	Panel connector, straight square flange with 4 holes front mount, O-ring axial with male thread
 <p style="text-align: center;">style AD</p>	 <p style="text-align: center;">style ADS</p>	 <p style="text-align: center;">style WA</p>

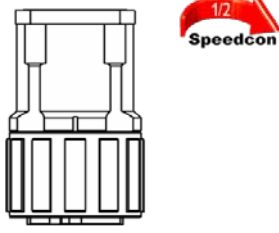
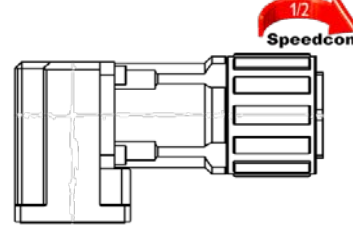
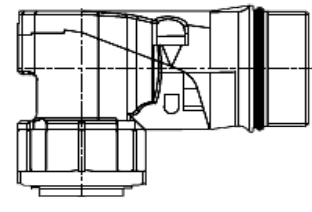
Shielded Power Connectors M40 Series SM  
 Shell styles WT, AF, A2, C0, CL, Q0, QL, Y0, YW



SM-xxxxxxxWTxx page C-Q-10	SM-xxxxxxxAFxx page C-Q-11	SM-xxxxxxxA2xx page C-Q-11
Panel connector, straight square flange with 4 holes front mount, O-ring axial with male thread	Panel connector, right angled square flange with 4 holes front mount, O-ring axial with male thread, fixed	Panel connector, right angled square flange with 4 holes front mount, O-ring axial with male thread, fixed
  style WT	 style AF	  style A2
SM-xxxxxxxC0xx page C-Q-12	SM-xxxxxxxCLxx page C-Q-12	SM-xxxxxxxQ0xx page C-Q-13
Cable connector, straight with male thread cable entry max. 25.5 mm with square flange, short body	Cable connector, straight with male thread cable entry max. 25.5 mm with square flange, long body	Cable connector, straight with male thread cable entry max. 25.5 mm round flange, short body
 style C0	 style CL	 style Q0
SM-xxxxxxxQLxx page C-Q-13	SM-xxxxxxxY0xx page C-Q-14	SM-xxxxxxxYWxx page C-Q-14
Cable connector, straight with male thread cable entry max. 25.5 mm round flange, long body	Panel connector, straight square flange with 4 holes front mount, O-ring axial with female coupling nut	Panel connector, right angled square flange with 4 holes front mount, O-ring axial with female coupling nut
 style QL	 style Y0	 style YW

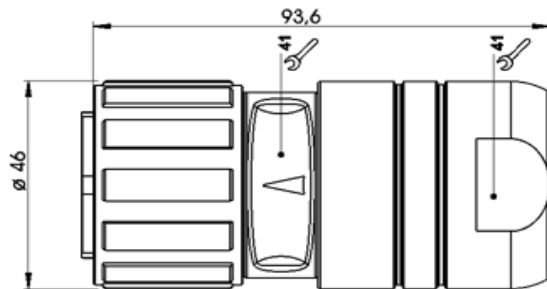
Shielded Power Connectors M40 Series SM  
 Shell styles Y0xxS, YWxxS, A700



SM-xxxxxxxY0xxS page C-Q-14	SM-xxxxxxxYWxxS page C-Q-14	SM-xxxxxxxA700 page C-Q-15
Panel connector, straight square flange with 4 holes front mount, O-ring axial with female coupling nut	Panel connector, right angled square flange with 4 holes front mount, O-ring axial with female coupling nut	Panel connector, right angled square flange with 4 holes front mount, O-ring axial with male thread
 <p style="text-align: center;">style Y0</p>	 <p style="text-align: center;">style YW</p>	 <p style="text-align: center;">rotatable style A700</p>





Shielded Power Connectors M40 Series SM  
 fits all SM Connectors with male thread  
 Shell style 8 short body



**Caps and accessories:** pages B-H-06...B-H-07  
**Mounting tools:** N/A  
**Assembly instructions:** page B-D-32  
**Crimp tools for contacts:** pages B-B-03...  
**Crimp contacts:** pages B-C-50...

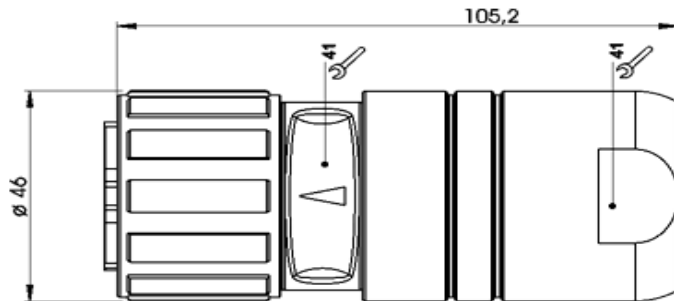
We also deliver as a connector set.  
 Connector with crimp insert - and  
 the contacts are separate included.  
 Please ask for P/N



Part Number	SM-	x	x	x	x	x	x	x	x	x	x	x
6 pos. (2+3+PE) female		5	E	S	1	N	8	A				
8 pos. (4+3+PE) female		7	E	S	1	N	8	A				
Please fill in the P/N of your desired connector crimp insert without contacts.												
Connectors with integrated strain relief, and....												
seal ring for cable diameters from 9.0 up to 12.5 mm									8	0	0	2
seal ring for cable diameters from 12.5 up to 17.0 mm									8	0	0	3
seal ring for cable diameters from 17.0 up to 21.0 mm									8	0	0	4
seal ring for cable diameters from 21.0 up to 25.5 mm									8	0	0	5



**Shielded Power Connectors M40 Series SM**  
 fits all SM Connectors with male thread  
 Shell style 8 long body



**Caps and accessories:** pages B-H-01...  
**Mounting tools:** N/A  
**Assembly instructions:** page B-D-32  
**Crimp tools for contacts:** pages B-B-03...  
**Crimp contacts:** pages B-C-50...

We also deliver as a connector set.  
 Connector with crimp insert - and  
 the contacts are separate included.  
 Please ask for P/N



Part Number	SM-	x	x	x	x	x	x	x	x	x	x	x	x
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6 pos. (2+3+PE) female		5	E	S	1	N	8	A					
8 pos. (4+3+PE) female		7	E	S	1	N	8	A					

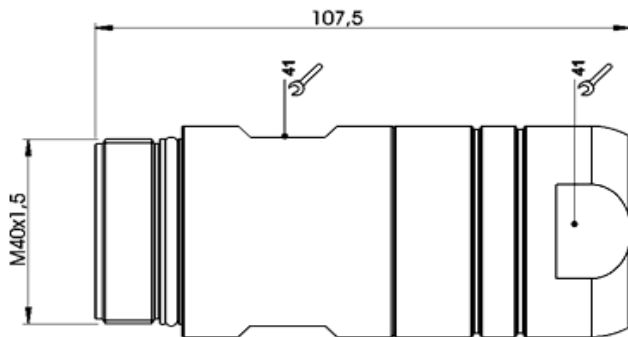
Please fill in the P/N of your desired connector crimp insert without contacts.

Connectors with integrated strain relief, and....													
seal ring for cable diameters from 9.0 up to 14.0 mm									8	S	2	2	
seal ring for cable diameters from 14.0 up to 20.5 mm									8	S	2	3	
seal ring for cable diameters from 20.5 up to 26.5 mm									8	S	2	4	
seal ring for cable diameters from 9.0 up to 14.0 mm								new	8	L	3	2	S
seal ring for cable diameters from 14.0 up to 20.5 mm								new	8	L	3	3	S
seal ring for cable diameters from 20.5 up to 26.5 mm								new	8	L	3	4	S







Shielded Power Connectors M40 Series SM  
 fits all SM Connectors with female coupling nut  
 Shell style 9 short body



**Caps and accessories:** pages B-H-01...  
**Mounting tools:** N/A  
**Assembly instructions:** page B-D-32  
**Crimp tools for contacts:** pages B-B-03...  
**Crimp contacts:** pages B-C-50...

We also deliver as a connector set.  
 Connector with crimp insert - and  
 the contacts are separate included.  
 Please ask for P/N

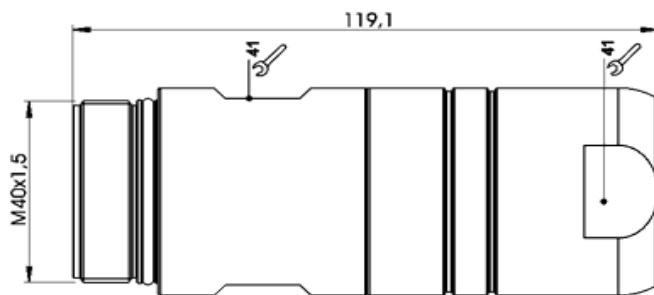


Part Number	SM-	x	x	x	x	x	x	x	x	x	x	x	
6 pos. (2+3+PE) male		5	E	P	1	N	8	A					
8 pos. (4+3+PE) male		7	E	P	1	N	8	A					
Please fill in the P/N of your desired connector crimp insert without contacts.													
Connectors with integrated strain relief, and....													
seal ring for cable diameters from 9.0 up to 12.5 mm										9	0	0	2
seal ring for cable diameters from 12.5 up to 17.0 mm										9	0	0	3
seal ring for cable diameters from 17.0 up to 21.0 mm										9	0	0	4
seal ring for cable diameters from 21.0 up to 25.5 mm										9	0	0	5





**Shielded Power Connectors M40 Series SM**  
 fits all SM Connectors with female coupling nut  
 Shell style 9 long body



**Caps and accessories:** pages B-H-01...  
**Mounting tools:** N/A  
**Assembly instructions:** page B-D-32  
**Crimp tools for contacts:** pages B-B-03...  
**Crimp contacts:** pages B-C-50...

We also deliver as a connector set.  
 Connector with crimp insert - and  
 the contacts are separate included.  
 Please ask for P/N



Part Number	SM-	x	x	x	x	x	x	x	x	x	x	x	x	x
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6 pos. (2+3+PE) male		5	E	P	1	N	8	A						
8 pos. (4+3+PE) male		7	E	P	1	N	8	A						

Please fill in the P/N of your desired connector crimp insert without contacts.

Connectors with integrated strain relief, and....

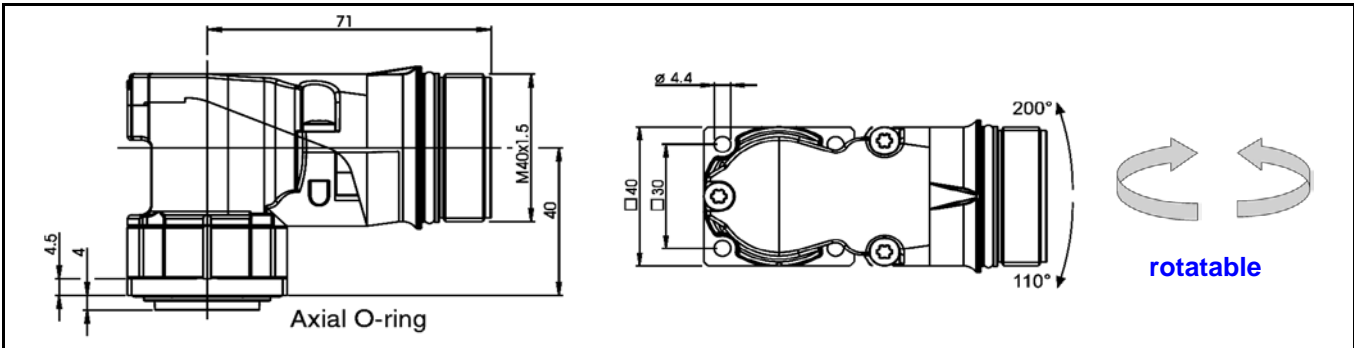
seal ring for cable diameters from 9.0 up to 12.5 mm		9	L	0	2									
seal ring for cable diameters from 12.5 up to 17.0 mm		9	L	0	3									
seal ring for cable diameters from 17.0 up to 21.0 mm		9	L	0	4									
seal ring for cable diameters from 21.0 up to 25.5 mm		9	L	0	5									
seal ring for cable diameters from 9.0 up to 14.0 mm	new	9	L	3	2	S								
seal ring for cable diameters from 14.0 up to 20.5 mm	new	9	L	3	3	S								
seal ring for cable diameters from 20.5 up to 26.5 mm	new	9	L	3	4	S								





Shielded Power Connectors M40 Series SM  
fits all SM Connectors with female coupling nut

Shell style AD • front mount •



**Caps and accessories:** pages B-H-06...B-H-07  
**Mounting tools:** N/A  
**Assembly instructions:** page B-D-33  
**Crimp tools for contacts:** pages B-B-03...  
**Crimp contacts:** pages B-C-50...

We also deliver as a connector set. Connector with crimp insert - and the contacts are separate included. Please ask for P/N

Part Number	SM-	x	x	x	x	x	x	x	x	x	x	x	x	x
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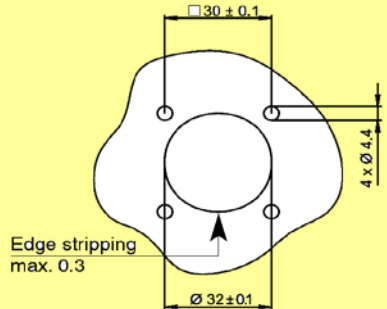
6 pos. (2+3+PE) male		5	E	P	W	N	8	A
8 pos. (4+3+PE) male		7	E	P	W	N	8	A

Please fill in the P/N of your desired connector crimp insert without contacts.



Panel connector, front mount right angled, with axial O-ring flange rotatable to be phased out A D 0 0

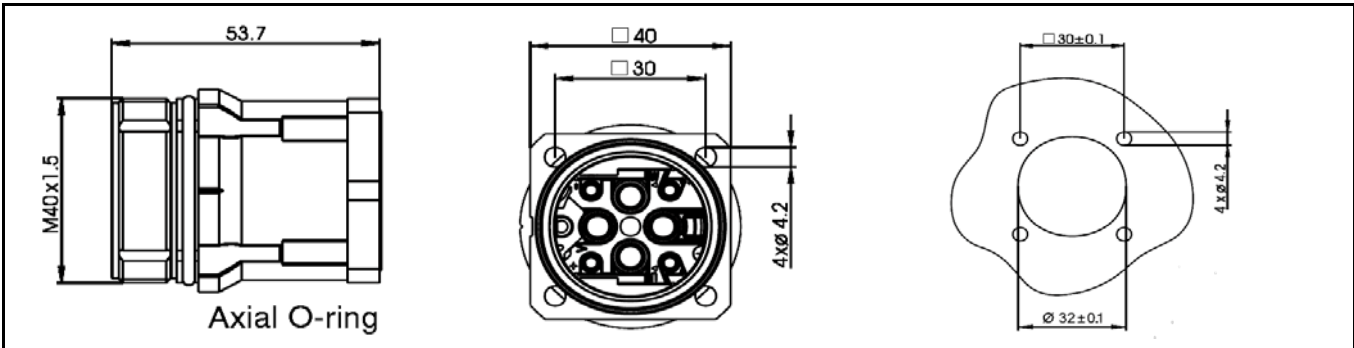
Panel connector, front mount right angled, with axial O-ring flange rotatable new version A D 0 0 S





Shielded Power Connectors M40 Series SM  
fits all SM Connectors with female coupling nut

Shell style WA/WT • front mount •



**Caps and accessories:** pages B-H-01...  
**Mounting tools:** N/A  
**Assembly instructions:** page B-D-35  
**Crimp tools for contacts:** pages B-B-03...  
**Crimp contacts:** pages B-C-50...

We also deliver as a connector set. Connector with crimp insert - and the contacts are separate included. Please ask for P/N

Part Number	SM-	x	x	x	x	x	x	x	x	x	x	x
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6 pos. (2+3+PE) male		5	E	P	W	N	8	A				
8 pos. (4+3+PE) male		7	E	P	W	N	8	A				

Please fill in the P/N of your desired connector crimp insert without contacts.



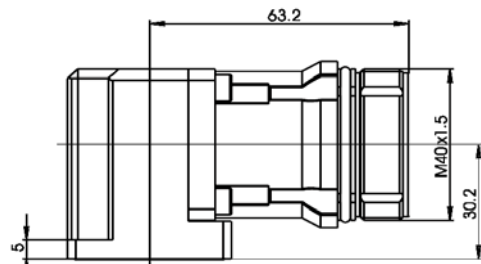
Panel connector, front mount straight, fixed, with axial O-ring square flange, 4 holes 4.2 mm Ø										to be phased out	W	A	0	0
Panel connector, front mount straight, fixed, with axial O-ring square flange, 4 holes 4.2 mm Ø Speedcon Version										new version	W	T	0	0



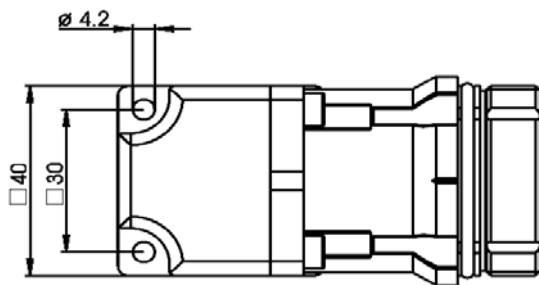


Shielded Power Connectors M40 Series SM  
fits all SM Connectors with female coupling nut

**Shell style AF/A2 • front mount •**



Axial O-ring



**Caps and accessories:** pages B-H-01...  
**Mounting tools:** N/A  
**Assembly instructions:** page B-D-33  
**Crimp tools for contacts:** pages B-B-03...  
**Crimp contacts:** pages B-C-50...

We also deliver as a connector set.  
 Connector with crimp insert - and  
 the contacts are separate included.  
 Please ask for P/N



Part Number	SM-	x	x	x	x	x	x	x	x	x	x	x
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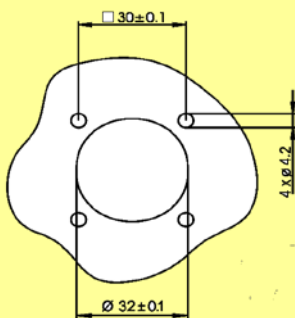
6 pos. (2+3+PE) male		5	E	P	W	N	8	A				
8 pos. (4+3+PE) male		7	E	P	W	N	8	A				

Please fill in the P/N of your desired connector crimp insert without contacts.



Panel connector, front mount angled, fixed, with axial O-ring square flange, 4 holes 4.2 mm Ø to be phased out A F 0 0

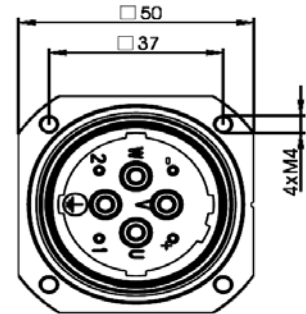
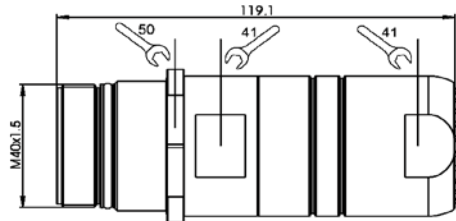
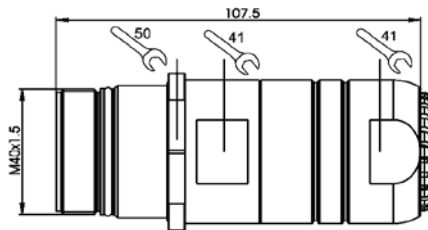
Panel connector, front mount angled, fixed, with axial O-ring square flange, 4 holes 4.2 mm Ø Speedcon Version new version A 2 0 0





Shielded Power Connectors M40 Series SM  
fits all SM Connectors with female coupling nut

Shell style C0, CL • rear mount •



**Caps and accessories:** pages B-H-01...  
**Mounting tools:** N/A  
**Assembly instructions:** page B-D-34  
**Crimp tools for contacts:** pages B-B-03...  
**Crimp contacts:** pages B-C-50...

We also deliver as a connector set.  
 Connector with crimp insert - and  
 the contacts are separate included.  
 Please ask for P/N



Part Number	SM-	x	x	x	x	x	x	x	x	x	x
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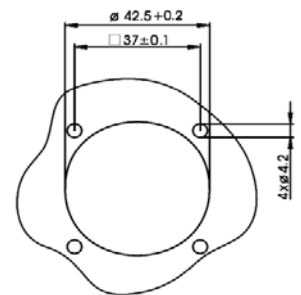
6 pos. (2+3+PE) male		5	E	P	1	N	8	A			
8 pos. (4+3+PE) male		7	E	P	1	N	8	A			

Please fill in the P/N of your desired connector crimp insert without contacts.



Connectors with integrated strain relief, and....

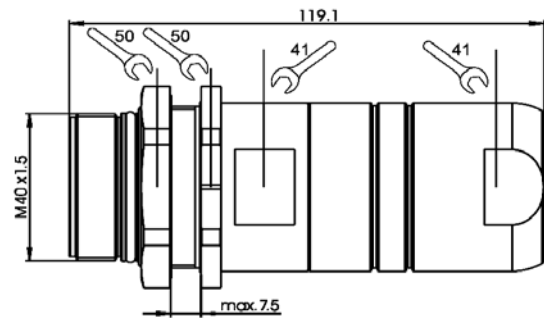
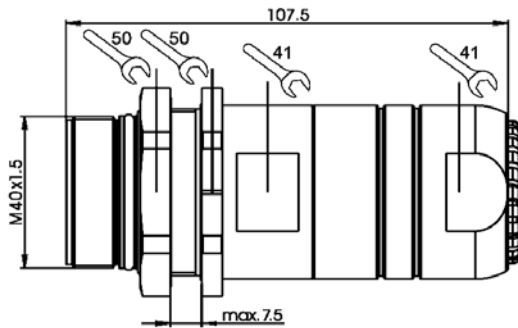
short body, seal ring for cable diameters from 9.0 up to 12.5 mm	C	0	0	2
short body, seal ring for cable diameters from 12.5 up to 17.0 mm	C	0	0	3
short body, seal ring for cable diameters from 17.0 up to 21.0 mm	C	0	0	4
short body, seal ring for cable diameters from 21.0 up to 25.5 mm	C	0	0	5
long body, seal ring for cable diameters from 9.0 up to 12.5 mm	C	L	0	2
long body, seal ring for cable diameters from 12.5 up to 17.0 mm	C	L	0	3
long body, seal ring for cable diameters from 17.0 up to 21.0 mm	C	L	0	4
long body, seal ring for cable diameters from 21.0 up to 25.5 mm	C	L	0	5





Shielded Power Connectors M40 Series SM  
fits all SM Connectors with female coupling nut

Shell style Q0, QL • rear mount •





**Caps and accessories:** pages B-H-01...  
**Mounting tools:** N/A  
**Assembly instructions:** page B-D-34  
**Crimp tools for contacts:** pages B-B-03...  
**Crimp contacts:** pages B-C-50...

We also deliver as a connector set.  
 Connector with crimp insert - and  
 the contacts are separate included.  
 Please ask for P/N



Part Number	SM-	x	x	x	x	x	x	x	x	x	x	x
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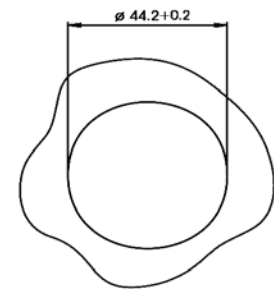
6 pos. (2+3+PE) male		5	E	P	1	N	8	A				
8 pos. (4+3+PE) male		7	E	P	1	N	8	A				

Please fill in the P/N of your desired connector crimp insert without contacts.



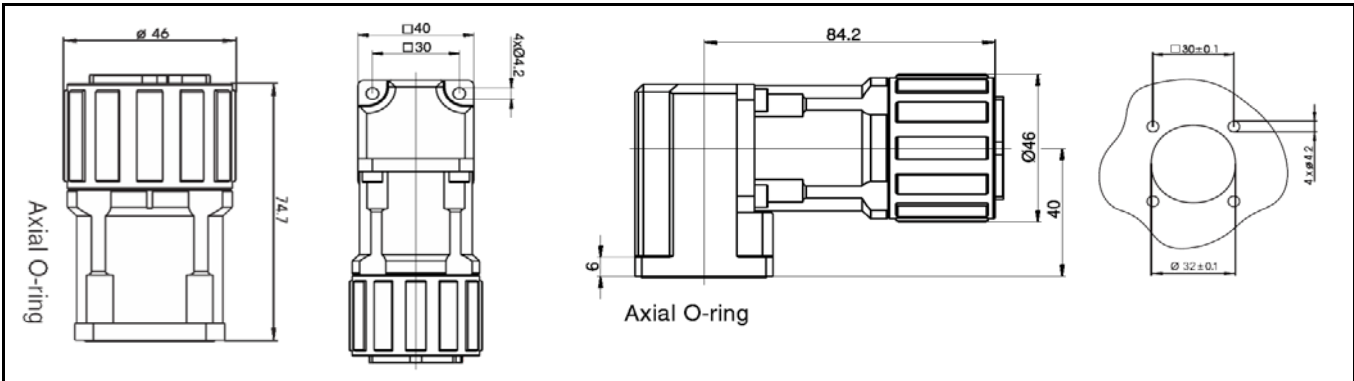
Connectors with integrated strain relief, and....

short body, seal ring for cable diameters from 9.0 up to 12.5 mm	Q	0	0	2
short body, seal ring for cable diameters from 12.5 up to 17.0 mm	Q	0	0	3
short body, seal ring for cable diameters from 17.0 up to 21.0 mm	Q	0	0	4
short body, seal ring for cable diameters from 21.0 up to 25.5 mm	Q	0	0	5
long body, seal ring for cable diameters from 9.0 up to 12.5 mm	Q	L	0	2
long body, seal ring for cable diameters from 12.5 up to 17.0 mm	Q	L	0	3
long body, seal ring for cable diameters from 17.0 up to 21.0 mm	Q	L	0	4
long body, seal ring for cable diameters from 21.0 up to 25.5 mm	Q	L	0	5





**Shielded Power Connectors M40 Series SM**  
 fits all SM Connectors with male thread  
 Shell style Y0, YW



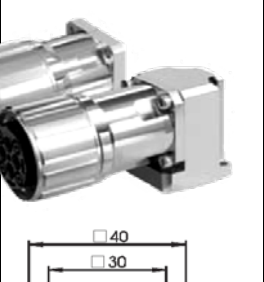
**Caps and accessories:** pages B-H-01...  
**Mounting tools:** N/A  
**Assembly instructions:** page B-D-29  
**Crimp tools for contacts:** pages B-B-03...  
**Crimp contacts:** pages B-C-50...

We also deliver as a connector set.  
 Connector with crimp insert - and the contacts are separate included.  
 Please ask for P/N

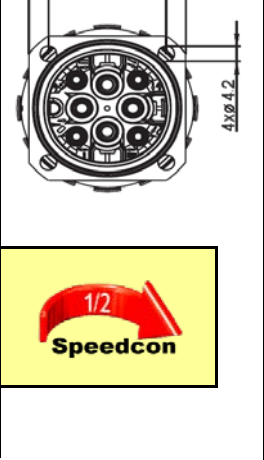
Part Number	SM-	x	x	x	x	x	x	x	x	x	x	x	x
-------------	-----	---	---	---	---	---	---	---	---	---	---	---	---

6 pos. (2+3+PE) female		5	E	S	1	N	8	A					
8 pos. (4+3+PE) female		7	E	S	1	N	8	A					

Please fill in the P/N of your desired connector crimp insert without contacts.

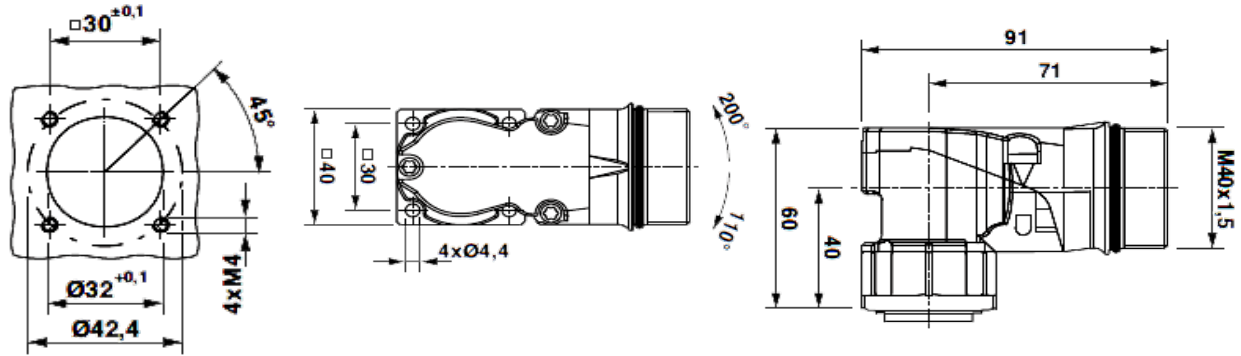


Panel connector, front mount, 4 holes 4.2 mm Ø straight body									Y	0	0	0	
Panel connector, front mount, 4 holes 4.2 mm Ø right angled body, fixed									Y	W	0	0	
Panel connector, front mount, 4 holes 4.2 mm Ø straight body									Y	0	0	0	S
Panel connector, front mount, 4 holes 4.2 mm Ø right angled body, fixed									Y	W	0	0	S





Shielded Power Connectors M40 Series SM  
 fits all SM Connectors with female coupling nut  
 Shell style A700



**Caps and accessories:** pages B-H-01...  
**Mounting tools:** N/A  
**Assembly instructions:** page B-D-33  
**Crimp tools for contacts:** pages B-B-03...  
**Crimp contacts:** pages B-C-50...

We also deliver as a connector set.  
 Connector with crimp insert - and  
 the contacts are separate included.  
 Please ask for P/N

Part Number	SM-	x	x	x	x	x	x	x	x	x	x	x
6 pos. (2+3+PE) female		5	E	S	1	N	8	A				
8 pos. (4+3+PE) female		7	E	S	1	N	8	A				
Please fill in the P/N of your desired connector crimp insert without contacts.												
Panel connector, front mount, 4 holes 4.2 mm Ø									A 7 0 0			
right angled body, rotatable												

