PHŒNIX CONTACT
INSPIRING INNOVATIONS

rde Connects

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

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

Contacts

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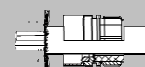
Sealing

Sealing rings:	Fluor rubber FPM
Gaskets:	Fluor rubber FPM

Temperature

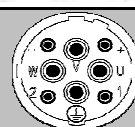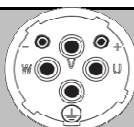|	
Temperature (long term) Celsius:	- 20 °C up to + 125°C
Temperature (long term) Fahrenheit:	- 4 °F up to + 257 °F

Mating

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

Protection

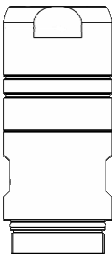|	
Protection class :	IP 67 (mated) depends on which cable gland is used

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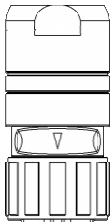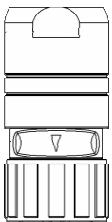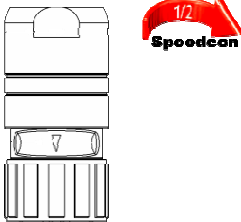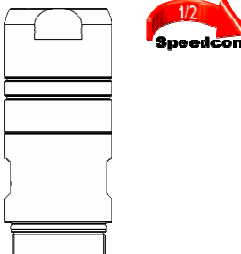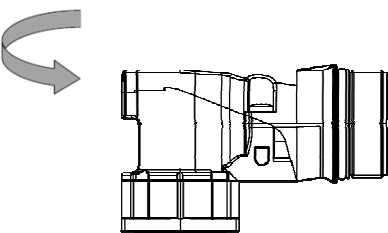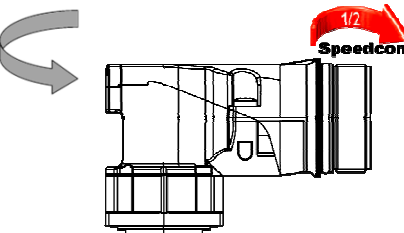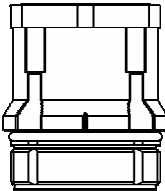
Number of positions		6		8				
Number of contacts		2 + 3 + PE		4+ 3 + PE				
Contact dia. (mm Ø)		2 + 3.6 + 3.6		2 + 3.6 + 3.6				
Rated current at 25° (A)		9/65		9/65				
Rated voltage (V)		250/630		250/630				
Test voltage (V)		4,000/6,000		4,000/6,000				
Surge voltage category		|||		|||				
Installation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

C-Q-01

Shielded Power Connectors M40   Series SM
Shell styles 8, 8L, 8LS, 9, 9L, 9LS, AD, ADS, WA
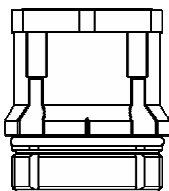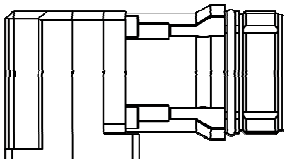
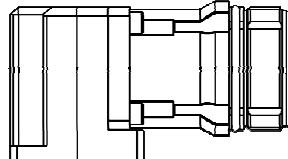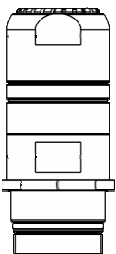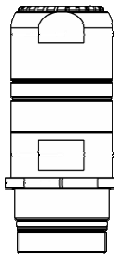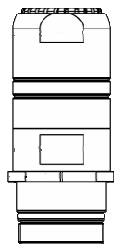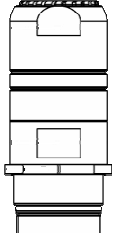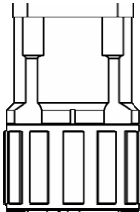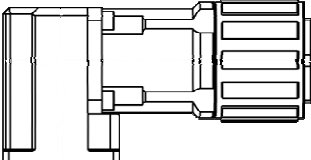| SM-xxxxxxx8xxx page C-Q-05	SM-xxxxxxx8Lxx page C-Q-06	SM-xxxxxxx8LxxS page C-Q-06
Cable connector, straight with female coupling nut cable entry max. 25.5 mm universal shielding material	Cable connector, straight with female coupling nut cable entry max. 25.5 mm universal shielding material	Cable connector, straight with female coupling nut cable entry max. 26.5 mm universal shielding material
style 8	**style 8L**	**style 8L/8S**
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
style 9	**style 9L**	**style 9L/9S**
SM-xxxxxxxADxx page C-Q-09	SM-xxxxxxxADxxS page C-Q-09	SM-xxxxxxxWAxx 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
style AD	**style ADS**	**style WA**
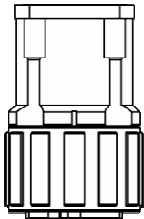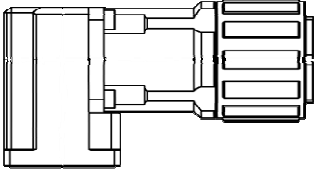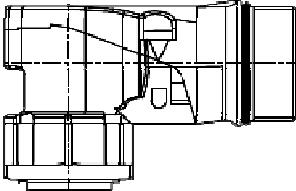
Shielded Power Connectors M40   Series SM
Shell styles WT, AF, A2, C0, CL, Q0, QL, Y0, YW

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 agled square flange with 4 holes front mount, O-ring axial with male thread
		rotatable
style Y0	**style YW**	**style A700**

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

105,2

⌀ 46

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.
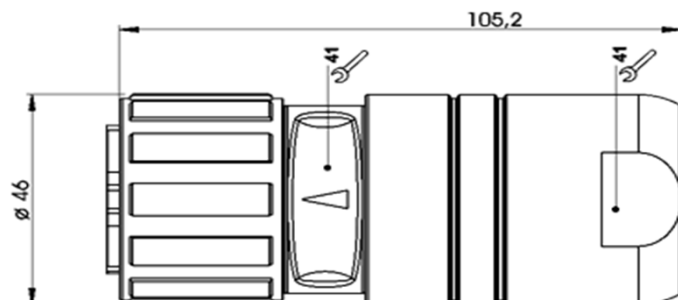Please ask for P/N

Part Number	SM-	X	X	X	X	X	X	X	X	X	X	X	X
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	

1/2 Speedcon

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

107,5

M40x1,5

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
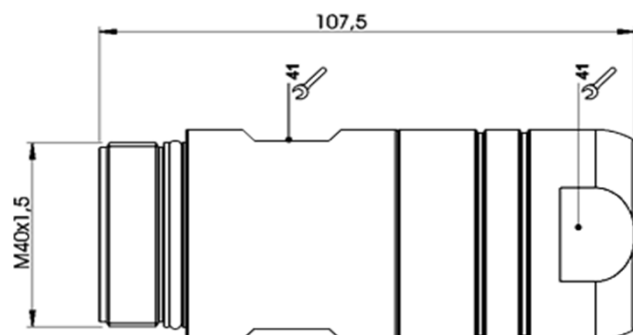the contacts are separate included.
Please ask for P/N

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
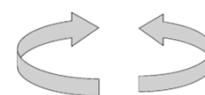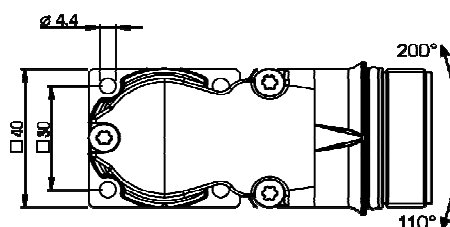the contacts are separate included.
Please ask for P/N

Part Number	SM-	X	X	X	X	X	X	X	X	X	X	X	X
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

Speedcon 1/2

Shielded Power Connectors M40 Series SM
fits all SM Connectors with female coupling nut
Shell style AD ● front mount ●

71

M40x1.5

40

4.5
4

Axial O-ring

Ø 4.4

□40 □30

200°

110°

rotatable

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
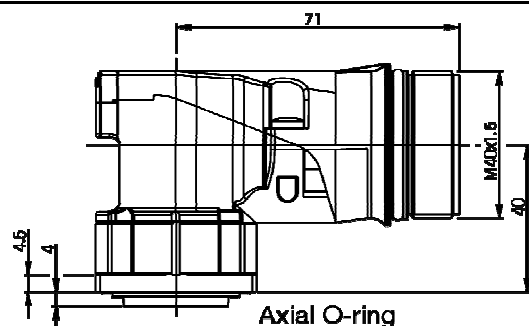the contacts are separate included.
Please ask for P/N

Part Number	SM-	X	X	X	X	X	X	X	X	X	X	X	X

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
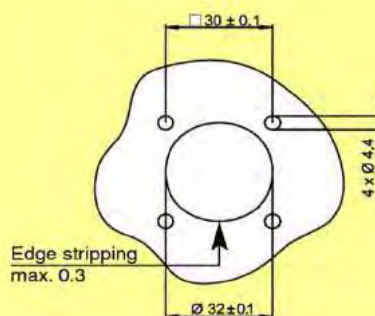flange rotatable

to be phased out   **A D 0 0**

Panel connector, front mount
right angled, with axial O-ring
flange rotatable
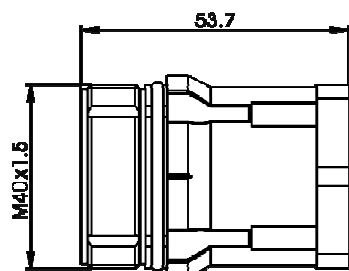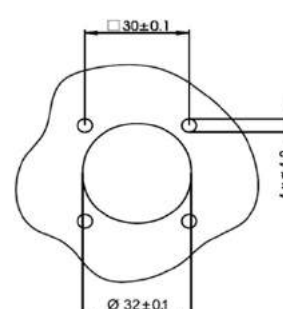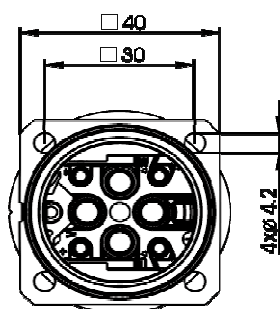Speedcon Version

new version   **A D 0 0 S**

1/2
Speedcon

□ 30 ± 0.1

4 x Ø 4.4

Edge stripping
max. 0.3

Ø 32±0.1

Shielded Power Connectors M40 Series SM
fits all SM Connectors with female coupling nut
Shell style WA/WT ● front mount ●

53.7

M40x1.5

Axial O-ring

□40
□30

4×ø 4.2

□30±0.1

4×ø4.2

Ø 32±0.1

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
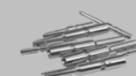
Part Number	SM-	X	X	X	X	X	X	X	X	X	X	X

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	to be phased out	W	A	0	0
straight, fixed, with axial O-ring					
square flange, 4 holes 4.2 mm Ø					

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

1/2
Speedcon

Shielded Power Connectors M40 Series SM
fits all SM Connectors with female coupling nut
Shell style AF/A2 ● front mount ●

Axial O-ring

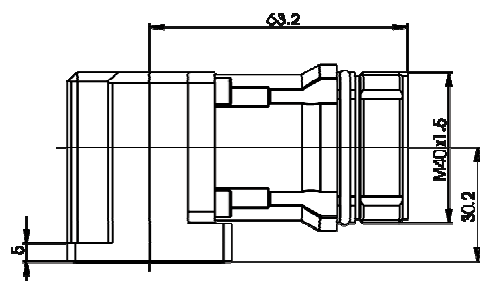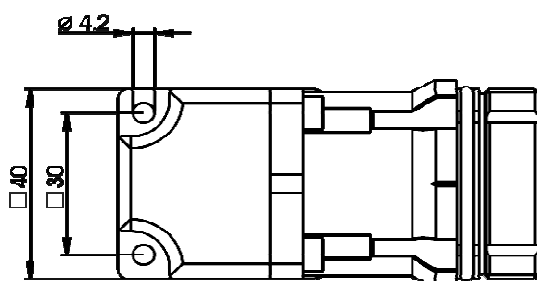| Caps and accessories:	pages B-H-01...
Mounting tools:	N/A
Assembly instructions:	page B-D-33
Crimp tools for contacts:	pages B-B-03...
Crimp contacts:	pages B-C-50...

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

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.

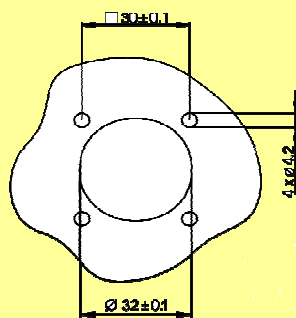| Panel connector, front mount angled, fixed, with axial O-ring square flange, 4 holes 4.2 mm Ø	to be phased out	A F 0 0

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

□30±0.1
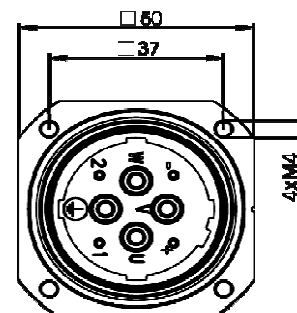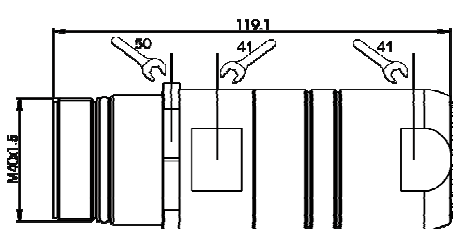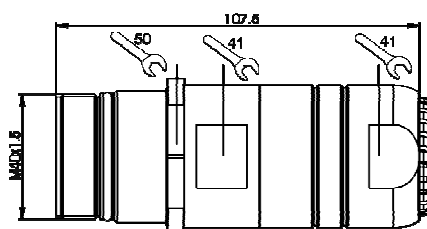
4 x Ø4.2

Ø 32±0.1

1/2 Speedcon

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	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….

	C	0	0	2
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 •

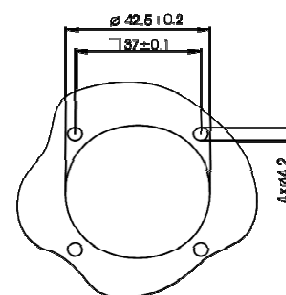| Caps and accessories: | pages B-H-01… |
Mounting tools:	N/A
Assembly instructions:	page B-D-34
Crimp tools for contacts:	pages B-B-03…
Crimp contacts:	pages B-C-50…

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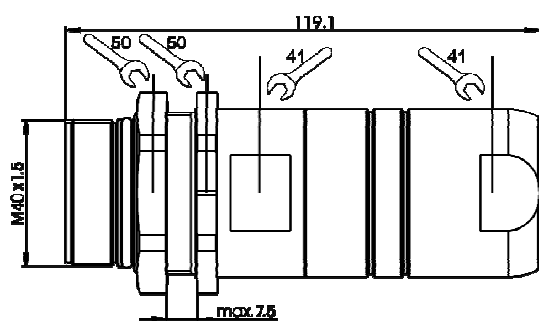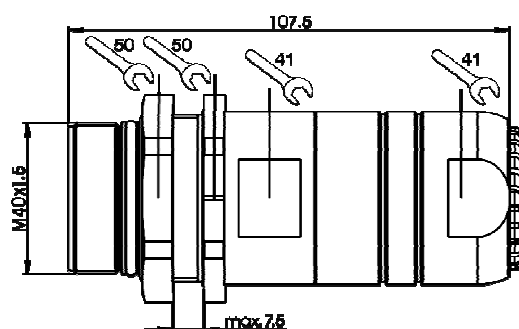the contacts are separate included.
Please ask for P/N

Part Number	SM-	X	X	X	X	X	X	X	X	X	X	X

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….

	Q	0	0	2
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

Axial O-ring

Axial O-ring

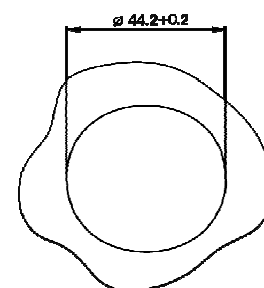| Caps and accessories:	pages B-H-01…
Mounting tools:	N/A
Assembly instructions:	page B-D-29
Crimp tools for contacts:	pages B-B-03…
Crimp contacts:	pages B-C-50…

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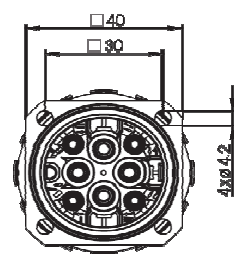Connector with crimp insert - and
the contacts are separate included.
Please ask for P/N

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

1/2
Speedcon

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 right angled body, rotatable	A 7 0 0