

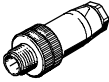
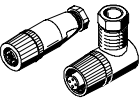

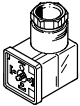
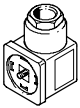


- Plug sockets
- Plug sockets with cable
- Connecting cables
- Designs with switching status display
- Weld field immune designs

# Plug sockets and plug sockets with cable

Product range overview




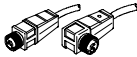

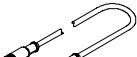
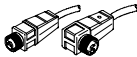
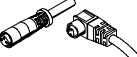
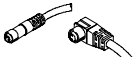

Function	Design	Type	Electrical connection	Connection direction		Switching status display with LED	→ Page
				In-line	Lateral		
Plug sockets	<b>for pressure sensors and inductive proximity sensors</b>						
		SEA	M8x1, 3-pin	■	-	-	4 / 5.1-146
			M12x1, 4-pin	■	-	-	4 / 5.1-148
			M12x1, 4-pin or 5-pin	■	-	-	4 / 5.1-150
		SIE	M12x1, 3-pin	■	■	_1)	4 / 8.3-4
	<b>for pressure switches PEV-1/4-A-SW27</b>						
		PEV-1/4-A-WD	For integral plugs, 4-pin	-	■	-	4 / 8.3-5
	<b>for pressure switches PEV-1/4-...-B-...</b>						
		PEV-1/4-WD-LED-24	For integral plugs, 4-pin	-	■	■	4 / 8.3-6
		PEV-1/4-WD-LED-230		-	■	■	
	MSSD-C-4P	For integral plugs, 4-pin	-	■	-	4 / 8.3-7	

1) Available as accessory for SIE-WD-TR

# Plug sockets and plug sockets with cable

Product range overview



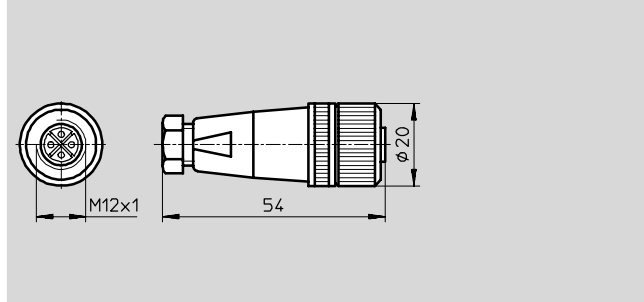
Function	Design	Type	Electrical connection	Cable length [m]	Connection direction		Switching status display with LED	→ Page	
					In-line	Lateral			
Plug sockets with cable	for plugs M8x1								
		SIM-M8	3-pin	2.5; 5; 10	■	■	-	4 / 8.3-9	
			3-pin	2.5; 5	■	■	■	4 / 8.3-10	
			4-pin	2.5; 5	■	■	-	4 / 8.3-11	
	for plugs M12x1								
		SIM-M12	3-pin	2.5; 5	■	■	-	4 / 8.3-12	
			3-pin	2.5; 5	-	■	■	4 / 8.3-13	
			4-pin	5	■	■	-	4 / 8.3-14	
			5-pin	2.5; 5	■	-	-	4 / 8.3-15	
			8-pin	2; 5	■	-	-	4 / 8.3-16	
		KM12	8-pin	2	■	-	-	4 / 8.3-17	
	Welding field immune								
		SIM-M12	3-pin	3	■	■	-	4 / 8.3-18	
	Snap-on, for plugs M8x1								
		SIM-K	3-pin	2.5; 5; 10	■	■	-	4 / 8.3-19	
		SIM-K-4	4-pin	2.5; 5	■	■	-	4 / 8.3-20	
	Clean Design								
		SIM-K-CDN	3-pin	2.5; 5	■	■	-	4 / 8.3-21	

# Plug sockets SIE

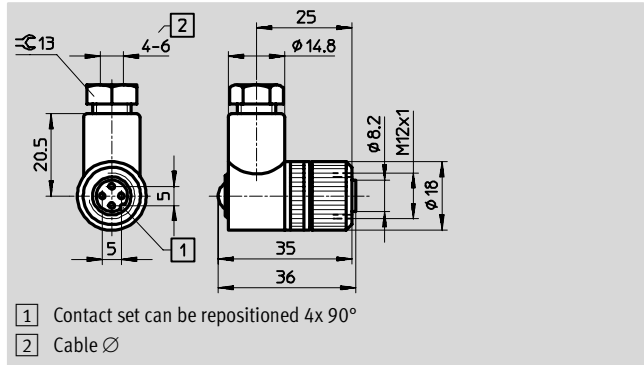
Technical data



## Sensor socket SIE-GD



## Angled plug socket SIE-WD-TR



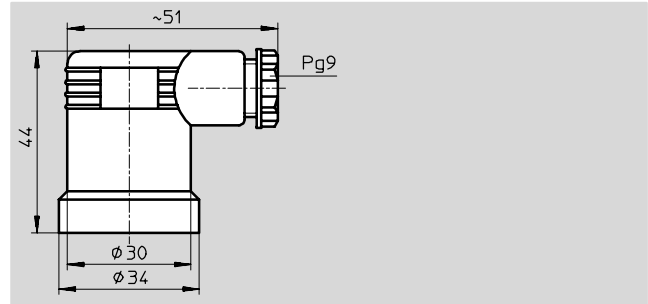
General technical data		
Connection direction	In-line	Lateral
Electrical data		
Electrical connection	Straight socket, M12x1, 4-pin	Angled socket, M12x1, 4-pin
Operating voltage range	AC [V]	≤125
	DC [V]	≤150
Current-carrying capacity	[A]	3
Cable connection	Screw terminal	
Perm. cable diameter	[mm]	4 ... 6
Max. wire cross section	[mm <sup>2</sup> ]	0.75
Ready status display	-	LED green (accessory)
Protection class to EN 60 529	IP67 (assembled)	
Ambient temperature	[°C]	-40 ... +85
Materials		
Housing	Polyamide	

Ordering data				
	Part No.	Type	Part No.	Type
Connection direction	In-line		Lateral	
Plug socket	18 494	SIE-GD	12 956	SIE-WD-TR
Ready status display	-		12 957	SIE-LP-LED-GR

# Plug sockets PEV

Technical data

## Angled plug socket PEV-1/4-A-WD



General technical data			
Electrical data			
Electrical connection		Angled socket, 4-pin	
Operating voltage range	AC	[V]	≤ 230
	DC	[V]	≤ 180
Cable connection		Screw terminal	
Perm. cable diameter	[mm]	4.5 ... 9	
Max. wire cross section	[mm <sup>2</sup> ]	1.5	
Protection class to EN 60 529		IP65 (assembled)	
Ambient temperature	[°C]	-40 ... +90	
Weight	[g]	55	
Materials			
Housing		Fibreglass reinforced polyamide	
Contacts		Nickel plated brass	

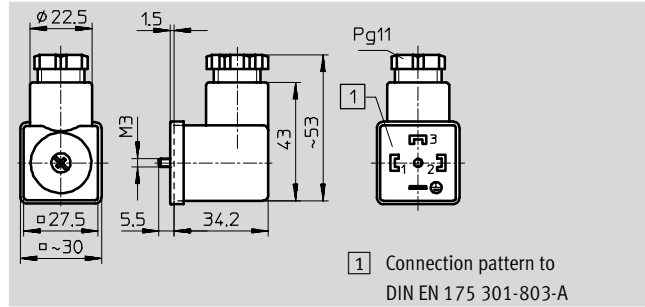
Ordering data			
For pressure switches	Operating voltage range		Part No. Type
	[V DC]	[V AC]	
PEV-1/4-A-SW27	≤ 180	≤ 230	161 209 PEV-1/4-A-WD

# Plug sockets PEV

Technical data – With switching status display



## Angled plug socket PEV-1/4-WD-LED-...



General technical data			PEV-1/4-WD-LED-24	PEV-1/4-WD-LED-230
<b>Electrical data</b>				
Electrical connection			Angled socket, 4-pin	
Operating voltage range	AC	[V]	–	$\leq 230$
	DC	[V]	15 ... 30	$\leq 180$
Current-carrying capacity		[A]	8	
Cable connection			Screw terminal	
Perm. cable diameter		[mm]	4.5 ... 11	
Max. wire cross section		[mm <sup>2</sup> ]	1.5	
Ready status display			LED green	
Switching status display			LED yellow	
Protection class to EN 60 529			IP65 (assembled)	
Ambient temperature		[°C]	–40 ... +90	
Weight		[g]	34	
<b>Materials</b>				
Housing			Fibreglass reinforced polyamide	
Contacts			Nickel plated brass	

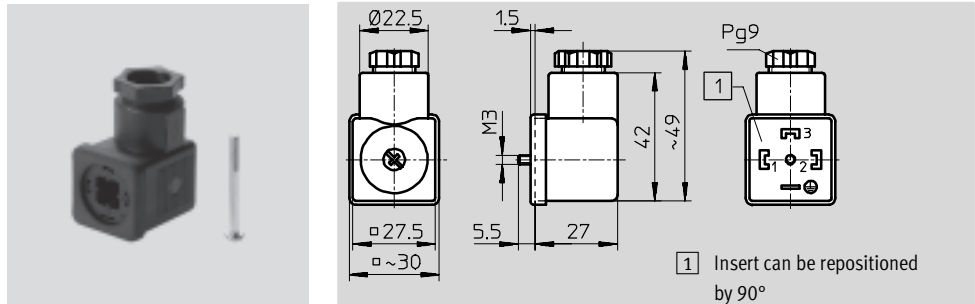
Ordering data				
For pressure switches	Operating voltage range		Part No.	Type
	[V DC]	[V AC]		
PEV-1/4-B-OD...,	15 ... 30	–	164 274	PEV-1/4-WD-LED-24
PEV-1/4-SC-OD	$\leq 180$	$\leq 230$	164 275	PEV-1/4-WD-LED-230

# Plug sockets MSSD

Technical data



## Plug socket MSSD-C-4P



General technical data			
Electrical data			
Electrical connection		Angled socket, 4-pin	
Operating voltage range	AC	[V]	250 ±10%
	DC	[V]	250 ±10%
Current-carrying capacity		[A]	10
Cable connection		Screw terminal	
Perm. cable diameter		[mm]	6 ... 8
Max. wire cross section		[mm <sup>2</sup> ]	1
Protection class to EN 60 529		IP65 (assembled)	
Ambient temperature		[°C]	-25 ... +80
Materials			
Housing		Fibreglass reinforced polyamide	
Contacts		Nickel plated brass	
Seal		Nitrile rubber	

Ordering data				
For pressure switches	Operating voltage range		Part No.	Type
	[V DC]	[V AC]		
PEV-1/4-...-OD	250 ±10%	250 ±10%	171 157	MSSD-C-4P

# Plug sockets with cable SIM

Type codes



8.3 Sensors and monitoring devices  
Accessories for sensors

SIM – M8 – 4 – WD – 2.5 – PU

Type	
SIM	Plug socket with cable for sensors

Electrical connection	
M8	Locknut M8x1
M12	Locknut M12x1
K	Snap-on plug

Welding field immunity	
	Basic type, no welding field immunity
RS	Welding field immune

Number of wires	
	3-wire
3	3-wire
4	4-wire
5	5-wire
8	8-wire

Connection direction	
GD	In-line
WD	Lateral

Cable length	
2	2 m
2.5	2.5 m
3	3 m
5	5 m
10	10 m

Switch output	
	PNP or NPN
PSL	PNP
NSL	NPN

Cable sheath material	
PU	Polyurethane
	Polyvinyl chloride

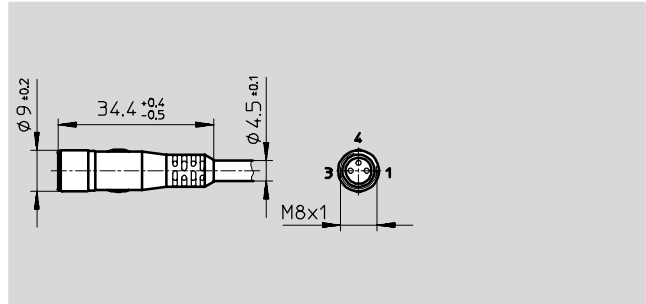
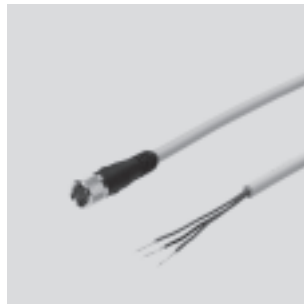
Ease of cleaning	
	Basic type
CDN	Clean Design, suitable for foodstuffs



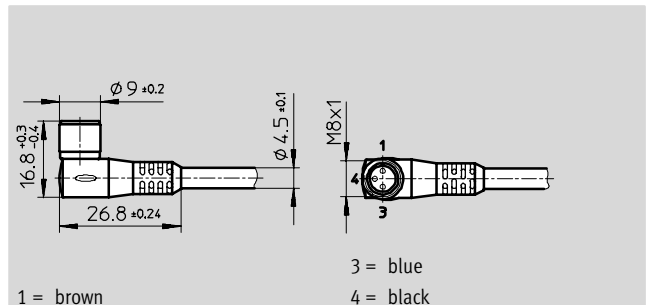
# Plug sockets with cable SIM

Technical data – M8x1, 3-pin

## SIM-M8-3GD-...-PU



## SIM-M8-3WD-...-PU



General technical data					
		SIM-M8-3...-2,5-PU	SIM-M8-3...-5-PU	SIM-M8-3...-10-PU	
<b>Electrical data</b>					
Electrical connection		Straight or angled socket, M8x1, 3-pin			
Current-carrying capacity		[A]	2.8		
Operating voltage range		AC	[V]	≤45	
		DC	[V]	≤70	
Protection class to EN 60 529		IP65/IP67			
<b>Design</b>					
Cable length		[m]	2.5	5	10
Cable composition		[mm <sup>2</sup> ]	3x 0.25		
Wire ends		Tin-coated			
<b>Ambient temperature</b>					
Fixed cable installation		[°C]	-40 ... +70		
Flexible cable installation		[°C]	-5 ... +70		
<b>Materials</b>					
Cable sheath		Polyurethane			

Ordering data					
		Part No.	Type	Part No.	Type
Connection direction		In-line		Lateral	
Cable length [m]	2.5	159 420	SIM-M8-3GD-2,5-PU	159 422	SIM-M8-3WD-2,5-PU
	5	159 421	SIM-M8-3GD-5-PU	159 423	SIM-M8-3WD-5-PU
	10	192 964	SIM-M8-3GD-10-PU	192 965	SIM-M8-3WD-10-PU

Core Range

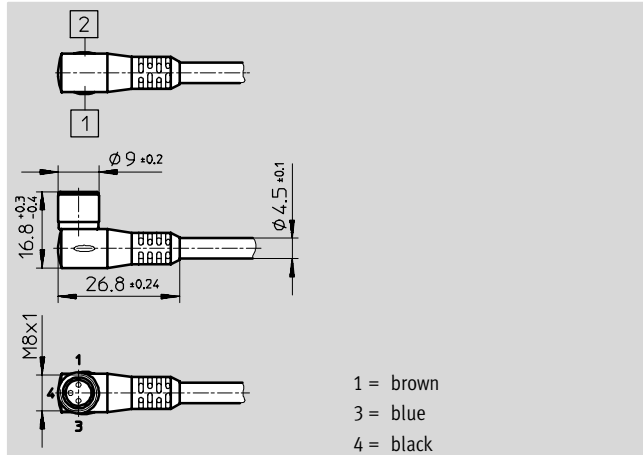
# Plug sockets with cable SIM

Technical data – M8x1, 3-pin with switching status display

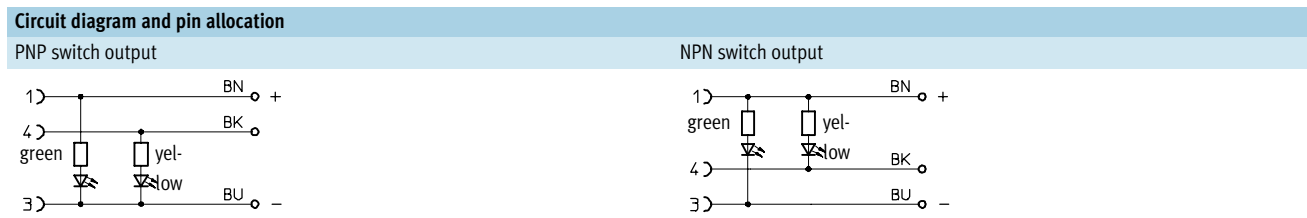


**SIM-M8-3WD-...-PSL-PU**  
**SIM-M8-3WD-...-NSL-PU**

- Ready status display and switching status display with LED



General technical data			SIM-M8-3WD-2,5-...-PU	SIM-M8-3WD-5-...-PU
<b>Electrical data</b>				
Switch output	PNP or NPN			
Electrical connection	Angled socket, M8x1, 3-pin			
Current-carrying capacity	[A]	2.8		
Operating voltage range	AC	[V]	≤45	
	DC	[V]	≤70	
Protection class to EN 60 529	IP65/IP67			
<b>Design</b>				
Cable length	[m]	2.5	5	
Cable composition	[mm <sup>2</sup> ]	3x 0.25		
Wire ends	Tin-coated			
Ready status display	LED green			
Switching status display	LED yellow			
<b>Ambient temperature</b>				
Fixed cable installation	[°C]	-40 ... +70		
Flexible cable installation	[°C]	-5 ... +70		
<b>Materials</b>				
Cable sheath	Polyurethane			

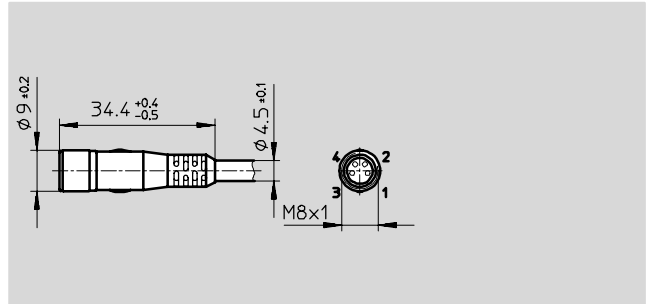
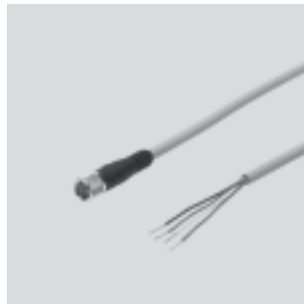


Ordering data					
		Part No.	Type	Part No.	Type
Switch output		PNP		NPN	
Cable length [m]	2.5	159 424	SIM-M8-3WD-2,5-PSL-PU	159 426	SIM-M8-3WD-2,5-NSL-PU
	5	159 425	SIM-M8-3WD-5-PSL-PU	159 427	SIM-M8-3WD-5-NSL-PU

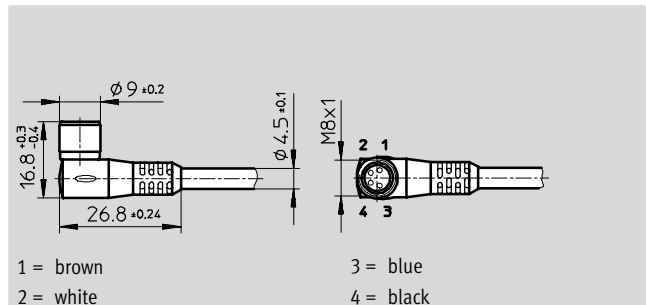
# Plug sockets with cable SIM

Technical data – M8x1, 4-pin

## SIM-M8-4GD-...-PU



## SIM-M8-4WD-...-PU



General technical data		SIM-M8-4...-2,5-PU	SIM-M8-4...-5-PU
Electrical data			
Electrical connection		Straight or angled socket, M8x1, 4-pin	
Current-carrying capacity	[A]	2.8	
Operating voltage range	AC [V]	$\leq 45$	
	DC [V]	$\leq 70$	
Protection class to EN 60 529		IP65/IP67	
Design			
Cable length	[m]	2.5	5
Cable composition	[mm <sup>2</sup> ]	4x 0.25	
Wire ends		Tin-coated	
Ambient temperature			
Fixed cable installation	[°C]	-40 ... +70	
Flexible cable installation	[°C]	-5 ... +70	
Materials			
Cable sheath		Polyurethane	

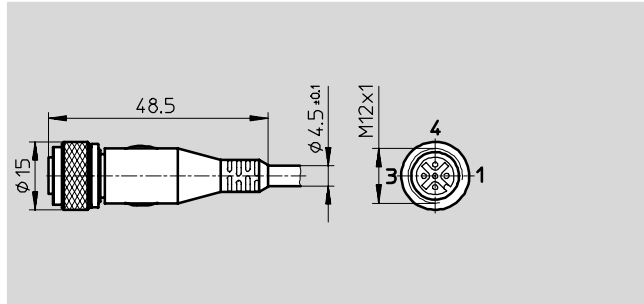
Ordering data		Part No.	Type	Part No.	Type
Connection direction		In-line		Lateral	
Cable length [m]	2.5	158 960	SIM-M8-4GD-2,5-PU	158 962	SIM-M8-4WD-2,5-PU
	5	158 961	SIM-M8-4GD-5-PU	158 963	SIM-M8-4WD-5-PU

# Plug sockets with cable SIM

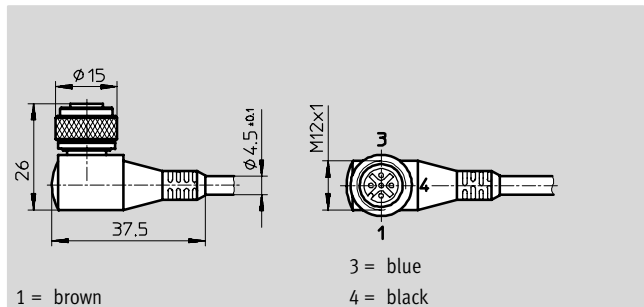
Technical data – M12x1, 3-pin



## SIM-M12-3GD-...-PU



## SIM-M12-3WD-...-PU



General technical data			SIM-M12-3...-2,5-PU	SIM-M12-3...-5-PU
<b>Electrical data</b>				
Electrical connection			Straight or angled socket, M12x1, 3-pin	
Current-carrying capacity			[A] 4	
Operating voltage range			AC [V] ≤250	
			DC [V] ≤300	
Protection class to EN 60 529			IP65/IP67	
<b>Design</b>				
Cable length			[m] 2.5	5
Cable composition			[mm <sup>2</sup> ] 3x 0.25	
Wire ends			Tin-coated	
<b>Ambient temperature</b>				
Fixed cable installation			[°C] -40 ... +70	
Flexible cable installation			[°C] -5 ... +70	
<b>Materials</b>				
Cable sheath			Polyurethane	

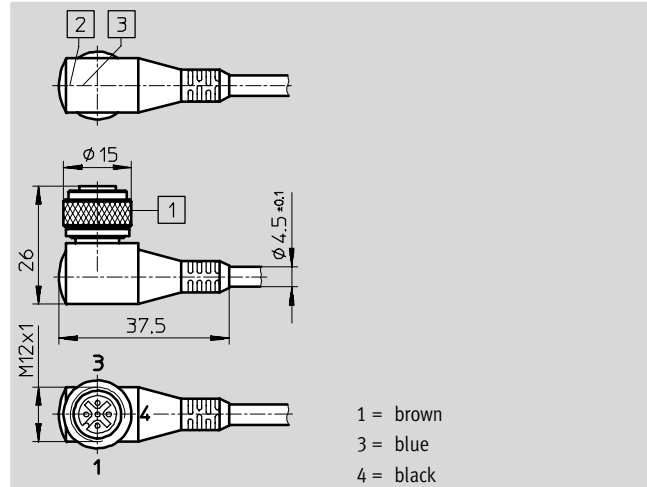
Ordering data					
		Part No.	Type	Part No.	Type
Connection direction		In-line		Lateral	
Cable length [m]	2.5	159 428	SIM-M12-3GD-2,5-PU	159 430	SIM-M12-3WD-2,5-PU
	5	159 429	SIM-M12-3GD-5-PU	159 431	SIM-M12-3WD-5-PU

# Plug sockets with cable SIM

Technical data – M12x1, 3-pin with switching status display

**SIM-M12-3WD-...-PSL-PU**  
**SIM-M12-3WD-...-NSL-PU**

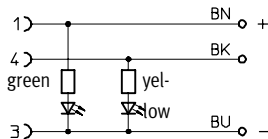
- Ready status display and switching status display with LED



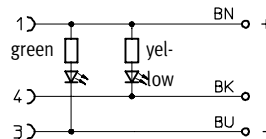
General technical data		SIM-M12-3WD-2,5-...-PU	SIM-M12-3WD-5-...-PU
<b>Electrical data</b>			
Switch output		PNP or NPN	
Electrical connection		Angled socket, M12x1, 3-pin	
Current-carrying capacity	[A]	4	
Operating voltage range	DC [V]	10 ... 30	
Protection class to EN 60 529		IP65/IP67	
<b>Design</b>			
Cable length	[m]	2.5	5
Cable composition	[mm <sup>2</sup> ]	3x 0.25	
Wire ends		Tin-coated	
Ready status display		LED green	
Switching status display		LED yellow	
<b>Ambient temperature</b>			
Fixed cable installation	[°C]	-40 ... +70	
Flexible cable installation	[°C]	-5 ... +70	
<b>Materials</b>			
Cable sheath		Polyurethane	

## Circuit diagram and pin allocation

PNP switch output



NPN switch output



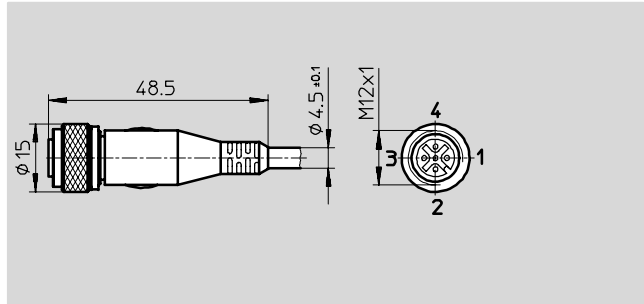
Ordering data		Part No.	Type	Part No.	Type
Switch output		PNP		NPN	
Cable length [m]	2.5	159 432	SIM-M12-3WD-2,5-PSL-PU	159 434	SIM-M12-3WD-2,5-NSL-PU
	5	159 433	SIM-M12-3WD-5-PSL-PU	159 435	SIM-M12-3WD-5-NSL-PU

# Plug sockets with cable SIM

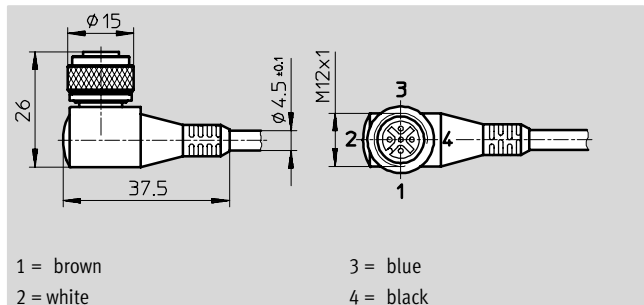
Technical data – M12x1, 4-pin



**SIM-M12-4GD-5-PU**



**SIM-M12-4WD-5-PU**



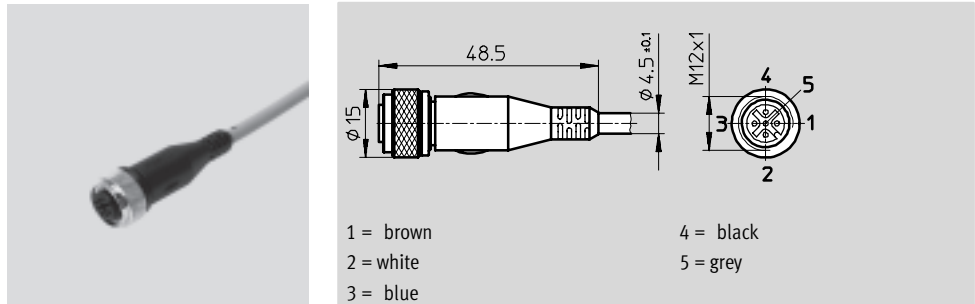
General technical data		
		SIM-M12-4...-5-PU
<b>Electrical data</b>		
Electrical connection		Straight or angled socket, M12x1, 4-pin
Current-carrying capacity	[A]	2.8
Operating voltage range	AC [V]	≤45
	DC [V]	≤70
Protection class to EN 60 529		IP65/IP67
<b>Design</b>		
Cable length	[m]	5
Cable composition	[mm <sup>2</sup> ]	4x 0.25
Wire ends		Tin-coated
<b>Ambient temperature</b>		
Fixed cable installation	[°C]	-40 ... +70
Flexible cable installation	[°C]	-5 ... +70
<b>Materials</b>		
Cable sheath		Polyurethane

Ordering data					
		Part No.	Type	Part No.	Type
Connection direction		In-line		Lateral	
Cable length [m]	5	164 259	SIM-M12-4GD-5-PU	164 258	SIM-M12-4WD-5-PU

# Plug sockets with cable SIM

Technical data – M12x1, 5-pin

## SIM-M12-5GD-...-PU



General technical data			
		SIM-M12-5GD-2,5-PU	SIM-M12-5GD-5-PU
<b>Electrical data</b>			
Electrical connection	Straight socket, M12x1, 5-pin		
Current-carrying capacity	[A]	4	
Operating voltage range	AC [V]	≤45	
	DC [V]	≤70	
Protection class to EN 60 529	IP65/IP67		
<b>Design</b>			
Cable length	[m]	2.5	5
Cable composition	[mm <sup>2</sup> ]	5x 0.25	
Wire ends	Tin-coated		
<b>Ambient temperature</b>			
Fixed cable installation	[°C]	-40 ... +70	
Flexible cable installation	[°C]	-5 ... +70	
<b>Materials</b>			
Cable sheath	Polyurethane		

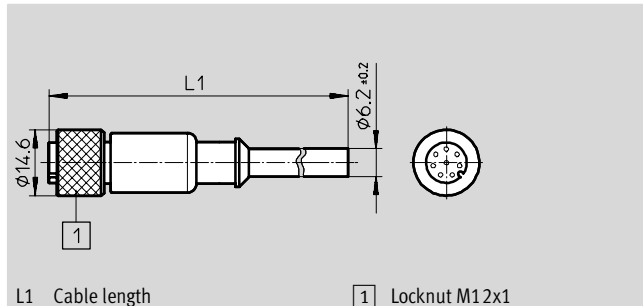
Ordering data			
		Part No.	Type
Cable length [m]	2.5	175 715	SIM-M12-5GD-2,5-PU
	5	175 716	SIM-M12-5GD-5-PU

# Plug sockets with cable SIM

Technical data – M12x1, 8-pin



## SIM-M12-8GD-...-PU



L1 Cable length

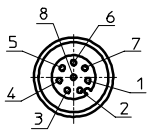
1 Locknut M12x1

### General technical data

		SIM-M12-8GD-2-PU	SIM-M12-8GD-5-PU
<b>Electrical data</b>			
Electrical connection		Straight socket, M12x1, 8-pin	
Current-carrying capacity	[A]	4	
Operating voltage range	AC [V]	≤45	
	DC [V]	≤70	
Protection class to EN 60 529		IP68	
<b>Design</b>			
Cable length	[m]	2	5
Cable composition	[mm <sup>2</sup> ]	8x 0.25	
Wire ends		Tin-coated	
<b>Ambient temperature</b>			
Fixed cable installation	[°C]	-25 ... +80	
<b>Materials</b>			
Cable sheath		Polyurethane	

### Pin allocation

M12 plug socket



- |                            |                        |
|----------------------------|------------------------|
| 1 24 V sensor (white, WH)  | 5 Coil 14 (grey, GY)   |
| 2 Sensor 2 (brown, BN)     | 6 Coil 12 (pink, PK)   |
| 3 Sensor 1 (green, GN)     | 7 Diagnosis (blue, BU) |
| 4 0 V sensors (yellow, YE) | 8 0 V coils (red, RD)  |

### Ordering data

		Part No.	Type
Cable length [m]	2	525 616	SIM-M12-8GD-2-PU
	5	525 618	SIM-M12-8GD-5-PU



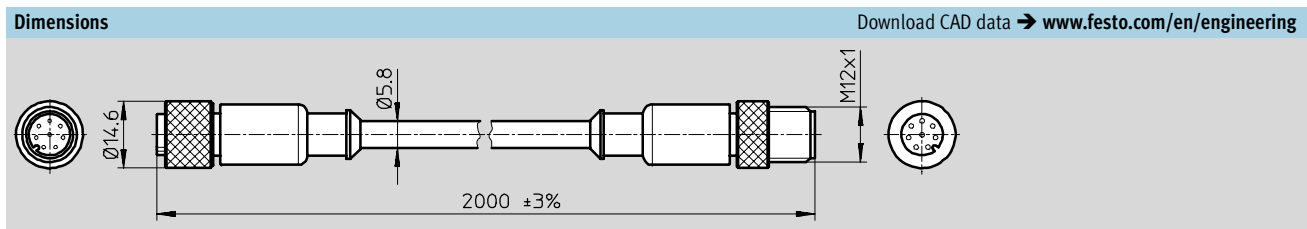
# Plug sockets with cable KM12

Technical data – Connecting cable M12x1, 8-pin

KM12-8GD8GS-2-PU



General technical data		
Electrical data		
Electrical connection	Straight plug/straight socket, M12x1, 8-pin	
Current-carrying capacity	[A]	4
Operating voltage range	AC [V]	≤45
	DC [V]	≤70
Protection class to EN 60 529	IP68	
Design		
Cable length	[m]	2
Cable composition	[mm <sup>2</sup> ]	8x 0.25
Ambient temperature		
Fixed cable installation	[°C]	-25 ... +80
Materials		
Cable sheath	Polyurethane	



Pin allocation										
M12 plug	M12 plug socket									
		<table border="0"> <tr> <td>1 24 V sensor (white, WH)</td> <td>5 Coil 14 (grey, GY)</td> </tr> <tr> <td>2 Sensor 2 (brown, BN)</td> <td>6 Coil 12 (pink, PK)</td> </tr> <tr> <td>3 Sensor 1 (green, GN)</td> <td>7 Diagnosis (blue, BU)</td> </tr> <tr> <td>4 0 V sensors (yellow, YE)</td> <td>8 0 V coils (red, RD)</td> </tr> </table>	1 24 V sensor (white, WH)	5 Coil 14 (grey, GY)	2 Sensor 2 (brown, BN)	6 Coil 12 (pink, PK)	3 Sensor 1 (green, GN)	7 Diagnosis (blue, BU)	4 0 V sensors (yellow, YE)	8 0 V coils (red, RD)
1 24 V sensor (white, WH)	5 Coil 14 (grey, GY)									
2 Sensor 2 (brown, BN)	6 Coil 12 (pink, PK)									
3 Sensor 1 (green, GN)	7 Diagnosis (blue, BU)									
4 0 V sensors (yellow, YE)	8 0 V coils (red, RD)									

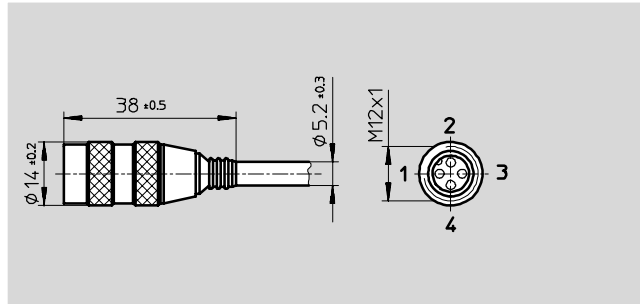
Ordering data		
	Part No.	Type
Cable length [m]	2	525 617 KM12-8GD8GS-2-PU

# Plug sockets with cable SIM

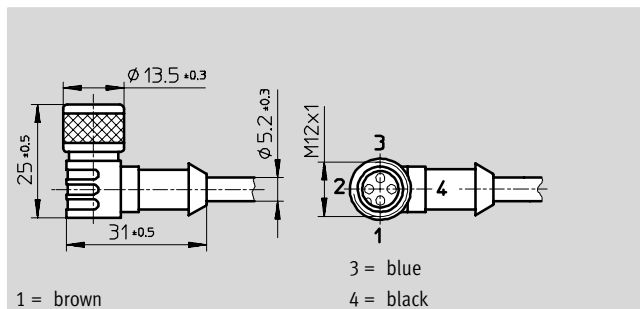
Technical data – M12x1, 3-pin, welding field immune



## SIM-M12-RS-3GD-3



## SIM-M12-RS-3WD-3



General technical data			
<b>Electrical data</b>			
Electrical connection	Straight or angled socket, M12x1, 3-pin		
Current-carrying capacity	[A]	4	
Operating voltage range	AC	[V]	≤45
	DC	[V]	≤70
Protection class to EN 60 529	IP65/IP67		
<b>Design</b>			
Cable length	[m]	3	
Cable composition	[mm <sup>2</sup> ]	3x 0.25	
Cable sheath colour	Orange		
Wire ends	Tin-coated		
<b>Ambient temperature</b>			
Fixed cable installation	[°C]	-25 ... +80	
Flexible cable installation	[°C]	-0 ... +80	
<b>Materials</b>			
Cable sheath	Polyvinyl chloride, screened		

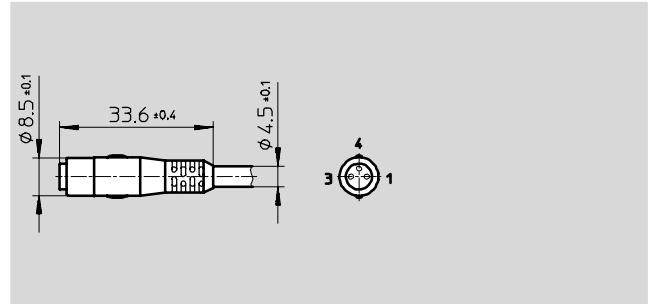
Ordering data					
		Part No.	Type	Part No.	Type
Connection direction		In-line		Lateral	
Cable length [m]	2.5	30 450	SIM-M12-RS-3GD-3	30 451	SIM-M12-RS-3WD-3

# Plug sockets with cable SIM-K

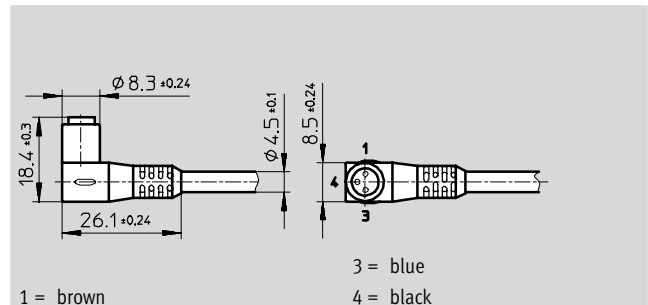
Technical data – Snap-on, 3-pin



## SIM-K-GD-...-PU



## SIM-K-WD-...-PU



General technical data			SIM-K-...-2,5-PU	SIM-K-...-5-PU	SIM-K-...-10-PU
Electrical data					
Electrical connection			Straight or angled socket, snap-on		
Current-carrying capacity		[A]	2.8		
Operating voltage range		AC [V]	≤45		
		DC [V]	≤70		
Protection class to EN 60 529			IP65/IP67		
Design					
Cable length		[m]	2.5	5	10
Cable composition		[mm <sup>2</sup> ]	3x 0.25		
Wire ends			Tin-coated		
Ambient temperature					
Fixed cable installation		[°C]	-40 ... +70		
Flexible cable installation		[°C]	-5 ... +70		
Materials					
Cable sheath			Polyurethane		

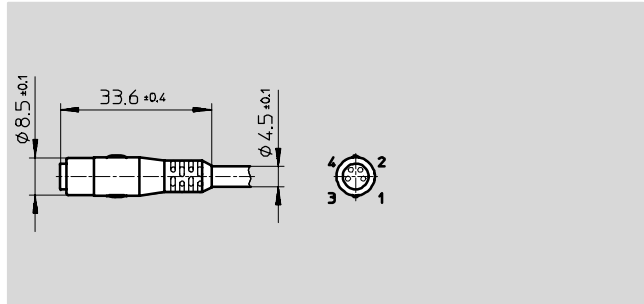
Ordering data					
Connection direction		Part No.	Type	Part No.	Type
Connection direction		In-line		Lateral	
Cable length [m]	2.5	164 257	SIM-K-GD-2,5-PU	164 255	SIM-K-WD-2,5-PU
	5	164 256	SIM-K-GD-5-PU	164 254	SIM-K-WD-5-PU
	10	192 962	SIM-K-GD-10-PU	192 963	SIM-K-WD-10-PU

# Plug sockets with cable SIM-K

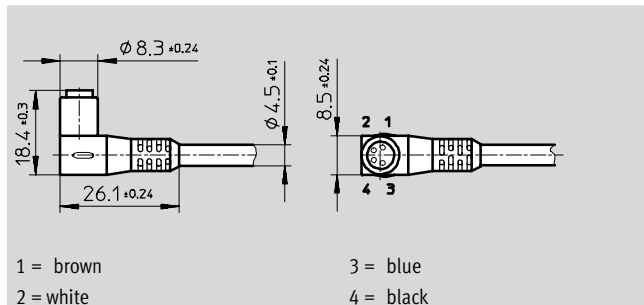
Technical data – Snap-on, 4-pin



**SIM-K-4-GD-...-PU**



**SIM-K-4-WD-...-PU**



General technical data			SIM-K-4-...-2,5-PU	SIM-K-4-...-5-PU
<b>Electrical data</b>				
Electrical connection			Straight or angled socket, snap-on	
Current-carrying capacity			[A] 2.8	
Operating voltage range			AC [V] ≤45	
			DC [V] ≤70	
Protection class to EN 60 529			IP65/IP67	
<b>Design</b>				
Cable length			[m] 2.5	5
Cable composition			[mm <sup>2</sup> ] 4x 0.25	
Wire ends			Tin-coated	
<b>Ambient temperature</b>				
Fixed cable installation			[°C] -40 ... +70	
Flexible cable installation			[°C] -5 ... +70	
<b>Materials</b>				
Cable sheath			Polyurethane	

Ordering data					
		Part No.	Type	Part No.	Type
Connection direction		In-line		Lateral	
Cable length	2.5 m	164 250	SIM-K-4-GD-2,5-PU	164 252	SIM-K-4-WD-2,5-PU
	5 m	164 251	SIM-K-4-GD-5-PU	164 253	SIM-K-4-WD-5-PU

