Plugs for self-assembly

Product range overview

Function Electrical connection		Туре	Cable connector	Design	→ Page/Internet			
Round plug	Plug							
ſ	M8, 3-pin	SEA-3GS-M8-S	PG7	StraightScrew terminal	2			
		SEA-GS-M8	PG7	StraightSolder lug	2			
	M12, 4-pin	SEA-GS-7	PG7	StraightScrew terminal	4			
		SEA-GS-9	PG9	StraightScrew terminal	4			
		SEA-GS-11-DUO	PG11	StraightScrew terminal	4			
		SEA-GS-HAR	PG9	 Straight Insulation displacement connector 	4			
		SEA-4GS-7-2.5	PG7	StraightScrew terminal	4			
	M12, 5-pin	SAE-M12-5GS	PG7	StraightScrew terminal	6			
		SEA-5GS-11-DUO	PG11	StraightScrew terminal	6			

Pre-assembled plugs, M8, 3-pin

Datasheet

Plug SEA-GS-M8

- Sensor plug for inputs/outputs
- Can be assembled with any cable lengths
- 3-pin
- With screw terminals or soldered connection



4 1 (+++) 3

ype		SEA-GS-M8	SEA-3GS-M8-S
Based on standard		EN 61076-2-101	_
		EN 61984	
Conforms to		_	EN 61076-2-104
		_	EN 619762-104
lectrical connection 2			
Connection type		Plug	Plug
Cable outlet		Straight	Straight
Design		-	Round
Connection technology		M8x1	M8x1 A-coded to EN 61076-2-104
lumber of pins/wires		3-pin	3
ype of mounting		-	Screw-type lock with hexagon A/F 9 mm and longitudinal knurl
lectrical connection 2			
unction		-	Controller side
Connection technology		Solder connection	Screw terminal
lumber of pins/wires		-	8
Cable connector		Pg7	Pg7
Cable diameter	[mm]	-	2.5 5
Approved cable diameter	[mm]	3.5 5	-
Iominal conductor cross section	[g]	-	0.14 0.5 mm2
Connection cross section	[mm ²]	0.25 mm2	-
ype of mounting		Via threaded sleeve	-
Nounting position		Any	Any
Degree of protection		IP67	IP65
Note on degree of protection		-	In mounted state
Product weight	[g]	9	6

Operating voltage range	[V DC]	≤60
	[V AC]	≤60
Surge resistance	[kV]	1.5
Acceptable current load at 40 °C	[A]	3
Pollution degree		3

Materials

materials			
Туре	SEA-GS-M8	SEA-3GS-M8-S	
Information on housing materials	PA		
Housing colour	Black		
Information on contact materials	Gold-plated brass		
Sealing material	-	NBR	
Material of screw-type lock	-	Nickel-plated die-cast zinc	
Union nut material	Nickel-plated brass	-	
Note on materials	RoHS-compliant		
LABS (PWIS) conformity	VDMA24364-B2-L	VDMA24364-B2-L	

Datasheet

Operating and environmental conditions

operating and contractions					
Туре	SEA-GS-M8	SEA-3GS-M8-S			
Ambient temperature [°C]	-40 +85	-40 +85			
Corrosion resistance class CRC ¹⁾	2	1			
CE marking (see declaration of conformity) ²⁾	To EU Low Voltage Directive	To EU Low Voltage Directive			
UKCA marking (see declaration of conformity) ²⁾	To UK regulations for electrical equipment	To UK regulations for electrical equipment			

1) Corrosion resistance class CRC 1 to Festo standard FN 940070

Low corrosion stress. Dry internal application or transport and storage protection. Also applies to parts behind covers, in the non-visible interior area, or parts that are covered in the application (e.g. drive trunnions). Corrosion resistance class CRC 2 to Festo standard FN 940070

Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements that are in direct contact with a normal industrial environment.

2) Additional information: www.festo.com/catalogue/... → Support/Downloads.



Pre-assembled plugs, M12, 4-pin

Datasheet

Plug SEA-GS SEA-GS-HAR SEA-4GS

- Sensor plug for inputs/outputs
- Can be assembled with any cable lengths
- 4-pin
- Wire cross section up to 0.75 \mbox{mm}^2



General technical data

General technical data						
Туре		SEA-GS-7	SEA-4GS-7-2.5	SEA-GS-9	SEA-GS-11-DUO	SEA-GS-HAR-4POL
Based on standard		EN 61076-2-101	EN 61076-2-101	EN 61076-2-101	EN 61076-2-101	EN 61076-2-101
		-	EN 61984	EN 61984	EN 61984	EN 61984
Type of mounting		Via threaded sleeve	Via threaded sleeve	Via threaded sleeve	Via threaded sleeve	Via thread
Mounting position		-	Any	Any	Any	Any
Product weight	[g]	17	18	18	24	11.5
Electrical connection 1						
Connection type		Plug	Plug	Plug	Plug	Plug
Cable outlet		Straight	Straight	Straight	Straight	Straight
Design		Round				
Connection technology		M12x1, A-coded, to	M12x1, type A	M12x1, type A	M12x1, type A	M12x1
		EN 61076-2-101	MIZXI, type A	MIZZI, type A	MIZAI, type A	W12X1
Number of pins/wires		4	4	4	4	4
Type of mounting		Screw-type lock with longitudinal knurl	-	-	-	-
Electrical connection 2						
Connection technology		Screw terminal	Screw terminal	Screw terminal	Screw terminal	Insulation displacement connector
Number of pins/wires		4	-	-	-	-
Permissible insulating sheath		-	-	-	-	PVC
Cable connector		Pg7	Pg7	Pg9	Pg11	Pg9
Cable diameter	[mm]	3.3 6	-	-	-	-
Approved cable diameter	[mm]	46	2.5 2.9	68	2 x 3 or 2 x 5	4 5.1
Nominal conductor cross section	[mm ²]	0.14 0.75	-	-	-	-
Connection cross section	[mm ²]	-	0.14 0.5	0.75	0.75	0.25 0.5
Wire diameter	[mm]	-	-	-	-	1.2 1.6
Individual wire diameter	[mm]	-	-	-	-	0.1
Technical data – Electrics		1	1	i	i.	1
Туре		SEA-GS-7	SEA-4GS-7-2.5	SEA-GS-9	SEA-GS-11-DUO	SEA-GS-HAR-4POL
Operating voltage range	[V DC]	0 250	<= 250	<= 250	<= 250	<= 32
	[V AC]	0 250	<= 250	<= 250	<= 250	<= 32
Surge resistance	[kV]	2.5	2.5	2.5	2.5	0.8
Acceptable current load at 40 °C	[A]	4	4	4	4	4
	-					
Materials Type		SEA-GS-7	SEA-4GS-7-2.5	SEA-GS-9	SEA-GS-11-DUO	SEA-GS-HAR-4POL
Housing		PBT	PA	PBT	PBT	Die-cast zinc
						Nickel-plated
Housing colour		Black	Black	Black	Black	-
Screw-type lock		PBT	-	-	-	
Union nut		-	PA	PBT	PBT	-
Seals		CR		-	-	
		FPM	-	_	_	-
Pin contacts		Brass	Brass	Brass	Brass	_
		Coated white bronze	Coated white bronze	Coated white bronze	Coated white bronze	_
Note on materials		RoHS-compliant	RoHS-compliant	RoHS-compliant	RoHS-compliant	RoHS-compliant
LABS (PWIS) conformity		VDMA24364-B2-L	VDMA24364-B2-L	VDMA24364-B2-L	VDMA24364-B2-L	

Datasheet

Operating and environmental conditions

Туре	SEA-GS-7	SEA-4GS-7-2.5	SEA-GS-9	SEA-GS-11-DUO	SEA-GS-HAR-4POL
Ambient temperature [°C]	-40 85	-40 85	-40 85	-40 85	-25 85
Corrosion resistance class CRC ¹⁾	2	2	2	2	2
CE marking (see declaration of conformity) ²⁾	To EU Low Voltage	-			
	Directive	Directive	Directive	Directive	
UKCA marking (see declaration of conformity) ²⁾	To UK regulations for	-			
	electrical equipment	electrical equipment	electrical equipment	electrical equipment	
Pollution degree	3	3	3	3	3
Degree of protection	IP67	IP65	IP67	IP67	IP67
Note on degree of protection	In mounted state	-	-	-	-

1) Corrosion resistance class CRC 2 to Festo standard FN 940070

Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements that are in direct contact with a normal industrial environment.

2) Additional information: www.festo.com/catalogue/... \rightarrow Support/Downloads.

Dimensions SEA-GS-7			Download CAD data → <u>www.festo.com</u>
Туре	D1	D2 Ø	L1
SEA-GS-7	M12x1	20	60

SEA-4GS-7-2.5





SEA-GS-9



SEA-GS-11-DUO



SEA-GS-HAR



Ordering data						
Electrical connection 1	Electrical connection 2	Cable connector	Permissible cable	Product weight	Part no.	Туре
			ø			
			[mm]	[g]		
Straight plug, M12x1	Screw terminal	Pg7	4 6	17	18666	SEA-GS-7
Straight plug, M12x1 4-pin	Screw terminal	Pg7	4 6 2.5 2.9	17 18	18666 192008	SEA-GS-7 SEA-4GS-7-2.5
	Screw terminal	Pg7 Pg9				

Pre-assembled plugs, M12, 5-pin

Datasheet

- Plug SEA-M12-5GS SEA-5GS
- Sensor plug for inputs/outputs
- Can be assembled with any cable lengths
- 5-pin
- Wire cross section up to 0.75 \mbox{mm}^2



General technical data

Type		SEA-M12-5GS-PG7	SEA-5GS-11-DUO
Electrical connection		Straight plug (type A), 5-pin	
		M12, screw terminal	
Type of mounting		Via threaded sleeve	
Max. tightening torque of screw-	[Nm]	0.5	
type lock			
Mounting position		Any	
Permissible cable Ø	[mm]	4 6	2 x 2.5 2.9 or 2 x 5
Connection cross section	[mm ²]	0.75	0.14 0.5
Acceptable current load at 40 °C	[A]	4	
Surge resistance	[kV]	1.5	
Operating voltage range	[V AC]	60	
	[V DC]	60	
Degree of protection to EN 60529		IP67 (assembled)	IP65 (assembled)
Based on standard		EN 61076-2-101, EN 61984	

Materials

Materials			
Туре	SEA-M12-5GS-PG7	SEA-5GS-11-DUO	
Housing colour	Black		
Housing	PBT	PA	
Contacts	Brass, coated with white bronze		
Union nut	Nickel-plated die-cast zinc	PA	
Note on materials	RoHS-compliant		
LABS (PWIS) conformity	VDMA24364-B2-L		

Operating and environmental conditions

Ambient temperature [°C]	-40 +85
Corrosion resistance class CRC ¹⁾	2
CE marking (see declaration of conformity) ²⁾	To EU Low Voltage Directive
UKCA marking (see declaration of conformity) ²⁾	To UK regulations for electrical equipment
Pollution degree	3

1) Corrosion resistance class CRC 2 to Festo standard FN 940070 Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements that are in direct contact with a normal industrial environment.

2) Additional information: www.festo.com/catalogue/... \rightarrow Support/Downloads.

Pre-assembled plugs, M12, 5-pin

Datasheet



- 1 cable binder

Ordering data

ordering data					
Electrical connection 1	Electrical connection 2	Cable connector	Product weight	Part no.	Туре
			[g]		
Straight plug (type A),	Screw terminal	Pg7	21.5	175487	SEA-M12-5GS-PG7
5-pin		Pg11	24	192010	SEA-5GS-11-DUO