Product range overview

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

Data sheet

Plug
SEA-GS-M8

- Sensor plug for inputs/outputs
- Can be assembled with any cable lengths
- 3-pin
- With screw terminals or soldered connection
- Wire cross section up to 0.5 mm^2

General technical data

Type		SEA-GS-M8	SEA-3GS-M8-S
Electrical connection		Straight plug, 3-pin, M8x1	
		Solder lug	Screw terminal
Type of mounting		Via threaded sleeve	
Mounting position		Any	
Max. tightening torque of interlock	[Nm]	0.3	
Permissible cable ⌀	[mm]	3.5 … 5	2.5 … 5
Connection cross section	[mm^2]	0.25	0.14 … 0.5
Current rating at 40°C	[A]	3	
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

Type		SEA-GS-M8	SEA-3GS-M8-S
Housing colour		Black	
Information on materials: Housing		PA	
Information on materials: Contacts		Gold-plated brass	
Information on materials: Union nut		Nickel-plated brass	Nickel-plated/chrome-plated brass
Note on materials		RoHS-compliant	
Max. tightening torque of interlock	[Nm]	0.3	

Operating and environmental conditions

Ambient temperature	[°C]	−40 … +85
Corrosion resistance class CRC[1]		2
CE marking (see declaration of conformity)		To EU Low Voltage Directive
Pollution degree		3

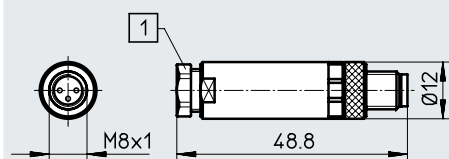1) Corrosion resistance class CRC 2 to Festo standard FN 940070
   Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.
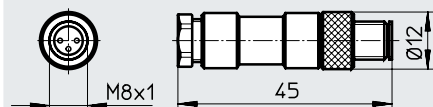
Data sheet

Dimensions Download CAD data ➜ www.festo.com

SEA-3GS-M8-S

[1]   Cable connector:
 – Black for cable 3.5 … 5 mm
 – Blue for cable 2.5 … 4 mm

SEA-GS-M8

Ordering data

Electrical connection	Cable connector	Product weight [g]	Part no.	Type
Straight plug, 3-pin Screw terminal	Pg7	11	**192009**	**SEA-3GS-M8-S**
Straight plug, 3-pin Solder lug	Pg7	9	**18696**	**SEA-GS-M8**

Data sheet

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 mm^2

General technical data

Type		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 type		Round	–	–	–	–
Connection technology		M12x1, A-coded, to EN 61076-2-101	M12x1, type A	M12x1, type A	M12x1, type A	M12x1
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	–	–	–	–
Permissible cable diameter	[mm]	4 … 6	2.5 … 2.9	6 … 8	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

Type		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
Current rating 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

Data sheet

Operating and environmental conditions

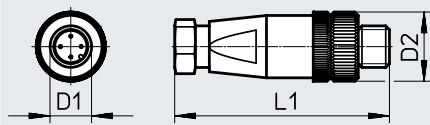| Type		SEA-GS-7	SEA-4GS-7-2.5	SEA-GS-9	SEA-GS-11-DUO	SEA-GS-HAR-4POL
Ambient temperature	[°C]	–40 … 85	–40 … 85	–40 … 85	–40 … 85	–25 … 85
Corrosion resistance class CRC[1]		2	2	2	2	2
CE marking (see declaration of conformity)		To EU Low Voltage Directive	To EU Low Voltage Directive	To EU Low Voltage Directive	To EU Low Voltage Directive	–
Pollution degree		3	3	3	3	3
Degree of protection		IP67	IP65	IP67	IP67	IP67
Note on degree of protection		In assembled 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 which are in direct contact with a normal industrial environment.
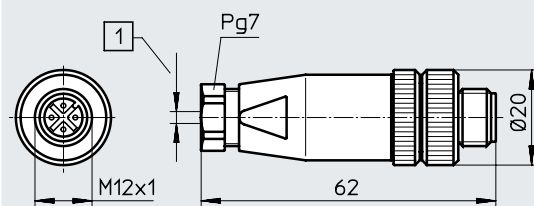
Dimensions   Download CAD data ➔ www.festo.com
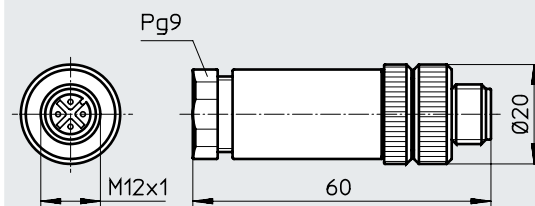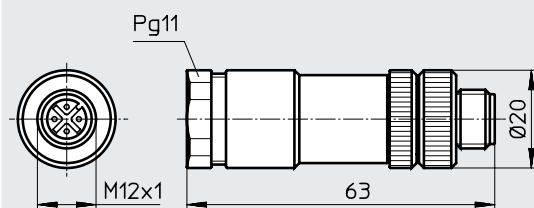
SEA-GS-7

Type	D1	D2 ∅	L1
SEA-GS-7	M12x1	20	60

SEA-4GS-7-2.5

[1]   2.5 … 2.9 mm
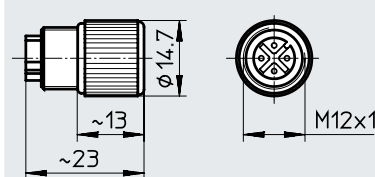
SEA-GS-9

SEA-GS-11-DUO

SEA-GS-HAR

Ordering data

Electrical connection 1	Electrical connection 2	Cable connector	Permissible cable ∅ [mm]	Product weight [g]	Part no.	Type
Plug Straight M12x1 4-pin,	Screw terminal	Pg7	4 … 6	17	18666	SEA-GS-7
			2.5 … 2.9	18	192008	SEA-4GS-7-2.5
		Pg9	6 … 8	18	18778	SEA-GS-9
		Pg11	2 x 3 or 2 x 5	24	18779	SEA-GS-11-DUO
	Insulation displacement connector	Pg9	4 … 5.1	11.5	525928	SEA-GS-HAR-4POL

Data sheet

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 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 interlock	[Nm]	0.5	
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
Current rating 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

Type	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	

Operating and environmental conditions

Ambient temperature	[°C]	−40 … +85
Corrosion resistance class CRC[1]		2
CE marking (see declaration of conformity)		To EU Low Voltage Directive
Pollution degree		3

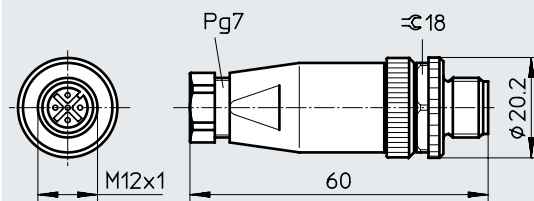1) Corrosion resistance class CRC 2 to Festo standard FN 940070
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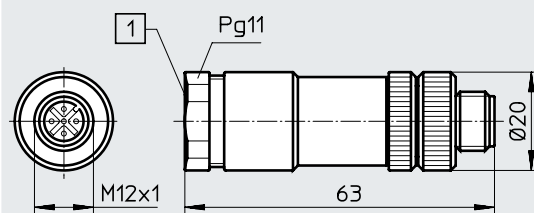
Data sheet

Dimensions

SEA-M12-5GS-PG7

Pg7   ⊏18

M12x1   60   Ø20.2

SEA-5GS-11-DUO

1   Pg11

M12x1   63   Ø20

[1] Included in the scope of
    delivery:
  – 1 seal insert for 2 cables with a
    diameter of 2.5 … 2.9 mm
  – 1 seal insert for 2 cables with a
    diameter of 5 mm
  – 1 cable binder

Ordering data

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