GTM12 - / GTB12 - series, for field assembling
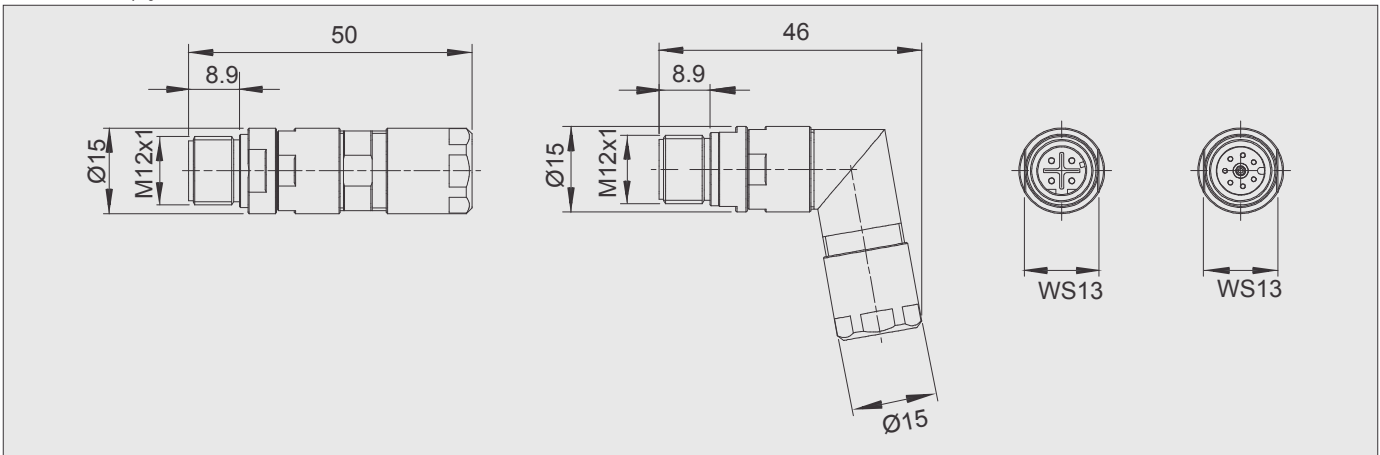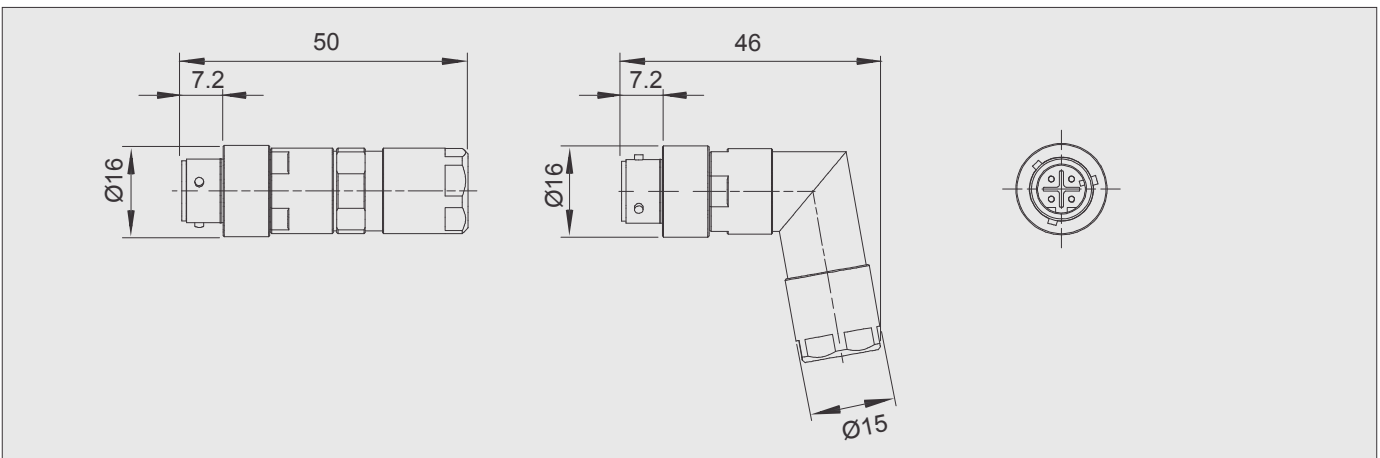
GTM12 Cable plug

M12 A/D coded, Cable plug

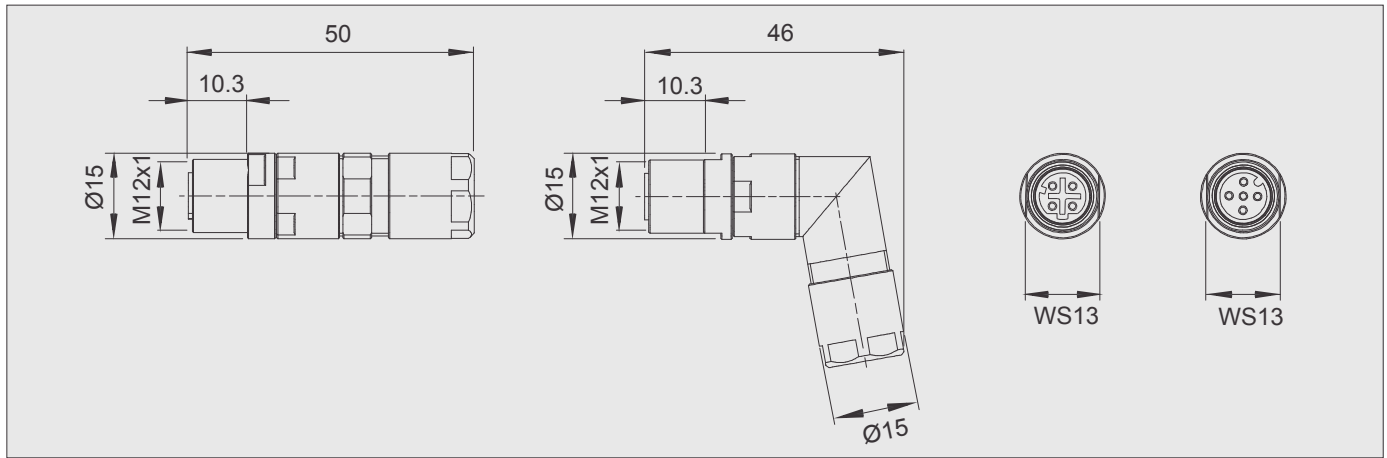### GTB12 Cable plug

B12 D coded, bajonet , Cable plug

GTM12 Cable receptacle

M12 D coded, Cable receptacle

50	46
10.3	10.3
Ø15 M12x1	Ø15 M12x1

Ø15

WS13   WS13

GTM12 / GTB12 B lkhead receptacle

M12 D coded, Bulkhead receptacle

B12 D coded, Bulkhead receptacle

50	50
5.5	
M16x1.5 M12x1	M16x1.5 M12x1
15.3	15.3
WS18	WS18
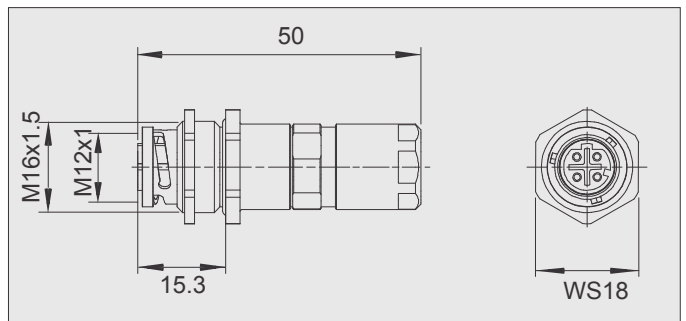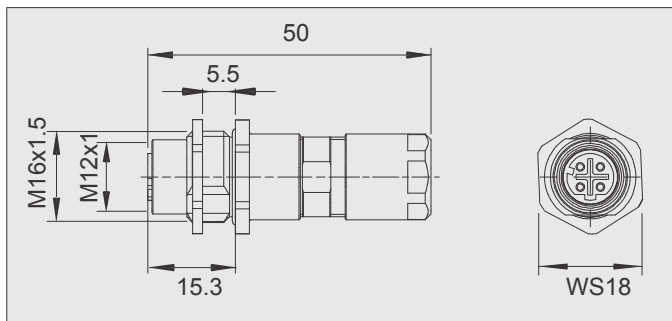
The GTB12 D Bulkhead receptacle has an M12-thread and a ba onet-ramp.
He can be used for GTM12-connectors as well as for GTB12- connectors

General technical data

Electrical properties

All electric data are valid on sea level with an environment temperature of 20 °C. The mentioned temperature values are considered as limit temperatures.

		A-coded 8 pole	D-coded
Service voltage	[V] DC	30	250
Operation current	[A]	2	4
Surge voltage	[kV]	0.8	2.5
Resistence	[mΩ]	< 10	< 10
Pollution degrée		3	3
Potential drop across contacts	[kV]	0.65	1.4
Potential drop between contacts and housing	[kV]	0.65	1.4
Data transfer speed	[Mbits/s]	(1000/Cat5e)	10/100

Requirements acc.: IEC 60512, Test 4a at standard climate and mated plugs
[1] Only if mated and tightened with counter-plug/-receptacle

Thermal properties

	Strain relieve [1] / Contact support [1] / Contact carrier [1]
Material	Latamid 6H-V0
Service temperature	-40°C to 85°C
Fire resistance class UL94	V0
Fire characteristic NF F 16-101/102	I2/F2
Fire characteristic DIN EN 45545-2	NLP; R22/R23: HL1/HL2/HL3
Fire characteristic DIN 5510	S4/SR2/ST2

[1]) non-halogen, flame retarded

Mechanical properties

		A-coded	D-coded
Number of contacts		8	4
Strand/wire adaptation		Crimp version	
Wire section	mm²	8 x 0.20 (AWG 24) - 8 x 0.34 (AWG 22)	4 x 0,34 (AWG 22) - 4 x 0.50 (AWG 20)
Connecting life cycle of contacts (gold) [1]	mating cycles	> 200	
Mating force [2]	[N]	max. 10	
Separating force [2]	[N]	max. 15	
Insulating resistance	[Ω]	$\geq 10^8$	
Contact material		0,5 μm Au over Cu-alloy	

[1] Requirements acc. IEC 60512, Test 9a
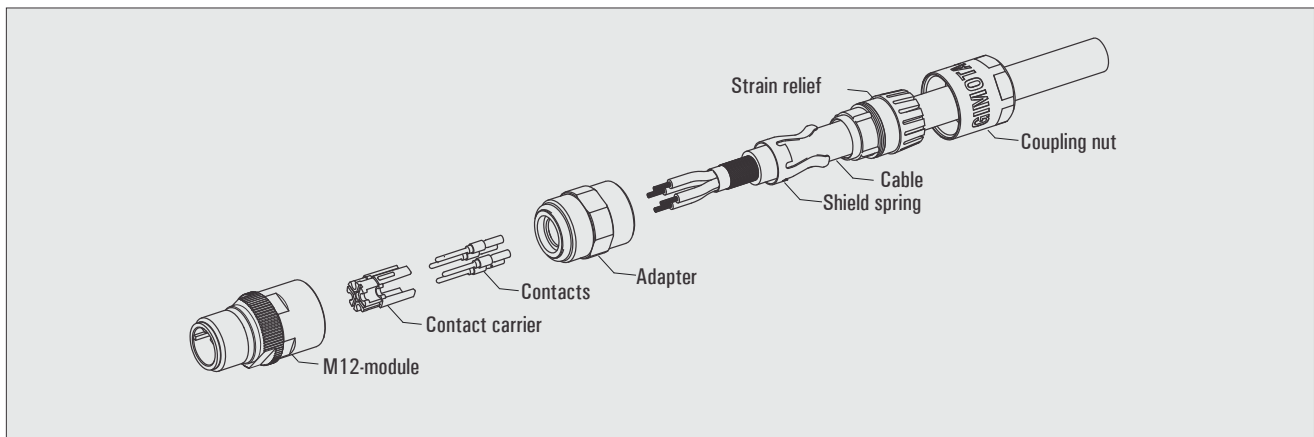[2] Requirements acc. IEC 60512, Test 13b

Mechanical properties - Housing
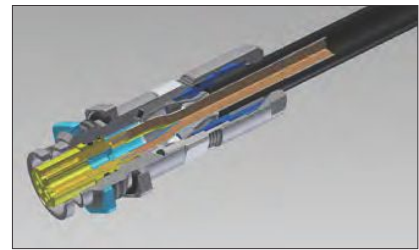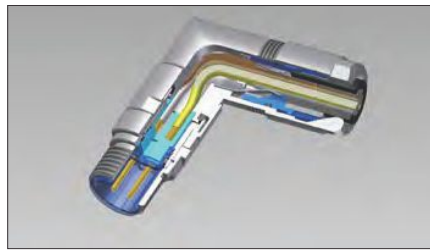
	A- / D-coded
Housing	brass, nickel plated
Cable strain relief	Cable gland
EMI screening at 360°	Shield spring
Cable diameter	5.0 - 9.0 mm
Ingress protection (IEC EN 60529) closed	up to IP67

| Item number	Connector type	Coding	no. poles	Contact type	Cable Ø mm	Wire section
GTM12-A-8-MP	Cable plug M12	A	8	Pin	5.0 - 9.0	0.20 (AWG 24) - 0.34 (AWG 22)
GTM12-A-8-MP-100	Cable plug M12, 100°	A	8	Pin	5.0 - 9.0	0.20 (AWG 24) - 0.34 (AWG 22)
GTM12-D-4-MP	Cable plug M12	D	4	Pin	5.0 - 9.0	0.34 (AWG22) *
GTM12-D-4-MP-100	Cable plug M12, 100°	D	4	Pin	5.0 - 9.0	0.34 (AWG22) *
GTM12-D-4-FS	Cable receptacle M12	D	4	Socket	5.0 - 9.0	0.34 (AWG22) *
GTM12-D-4-FS-100	Cable receptacle M12, 100°	D	4	Socket	5.0 - 9.0	0.34 (AWG22) *
GTM12-D-4-FS-BR	Bulkhead receptacle M12	D	4	Socket	5.0 - 9.0	0.34 (AWG22) *
GTB12-D-4-MP	Cable plug B12, bayonet	D	4	Pin	5.0 - 9.0	0.34 (AWG22) *
GTB12-D-4-MP-100	Cable plug B12, bayonet, 100°	D	4	Pin	5.0 - 9.0	0.34 (AWG22) *
GTB12-D-4-FS-BR	Bulkhead receptacle B12, bayonet	D	4	Socket	5.0 - 9.0	0.34 (AWG22) *

* other wire sections on request

GTM12 - / GTB12 - Connector

Construction GTM12 / GTB12

Strain relief · Coupling nut · Cable · Shield spring · Contacts · Adapter · Contact carrier · M12-module
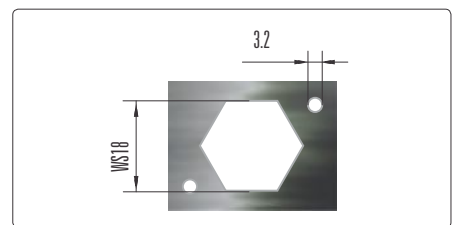
Panel cut-out for rear panel bulkhead receptacle

For round bore holes a guard plate like GTM12-VSB1-1 for positioning and fixation is required. This plate can selectively be screwed, riveted or glued to the panel.

16 · 15

Panel cut-out

3.2 · WS18
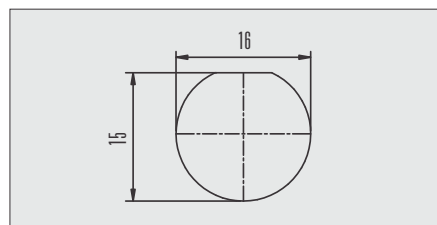
GTM12-VSB1-1

Accessories

Contacts- crimpable, machined pin and socket contacts

GTM12 series connectors are supplied with adequate contacts. Additional lose contacts are available as following:

Material: Cu-alloy
Surface: 0,5 µm gold

Item number	Contact type	for connector coding	Wire section [mm^2]	PU [pcs]
GTM12PC24AU.20	Pin	A	0.20 (AWG24)	20
GTM12PC24AU.100	Pin	A	0.20 (AWG24)	100
GTM12PC22AU.20	Pin	D	0.34 (AWG22)	20
GTM12PC22AU.100	Pin	D	0.34 (AWG22)	100
GTM12PC20AU.20	Pin	D	0.50 (AWG20)	20
GTM12PC20AU.100	Pin	D	0.50 (AWG20)	100
GTM12SC22AU.20	Socket	D	0.34 (AWG22)	20
GTM12SC22AU.100	Socket	D	0.34 (AWG22)	100
GTM12SC20AU.20	Socket	D	0.50 (AWG20)	20
GTM12SC20AU.100	Socket	D	0.50 (AWG20)	100

Bayonet shell

With the bayonet shell GTB12-FS-HO-S4 standard PCB M12 socket housing can be used and installed. Thereby it is important to comply with the panel thickness given by GIMOTA. From an order quantity of approximately 1000 pieces individual bayonet shells can be developed. For more information please contact GIMOTA.

At the moment HIRSCHMANN provides Switches with GTB-technology. The bayonet receptacle shell has an M12-thread and a bayonet-ramp, this means that conventional M12-connectors can be connected too.

Protection cap

pict. a   pict. b   pict. c

Item number	Connector type	pict.
GTM12-FS-CAP	Protection cap for receptacles	a
GTM12-MP-CAP	Protection cap for plugs	b
GTB12-FS-CAP	Protection cap for receptacles	c
GTB12-MP-CAP	Protection cap for plugs	