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catalogue
in revision

CONNECTORS



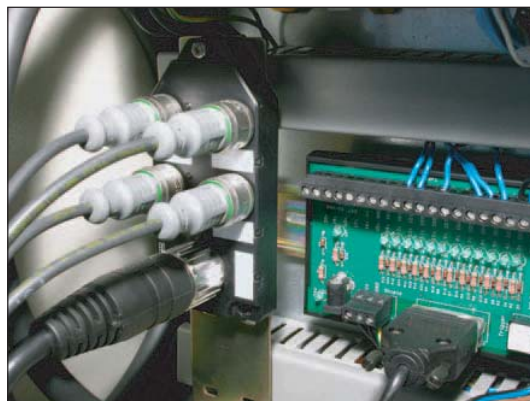
NOTES



SENSOR ACTUATOR INTERFACES

Today modern installation concepts must be designed so that they save from the outset material, money, time, space and weight. Products which allow such conception, are of existential meaning. And exactly here you can count on the quality, the experience and the innovation strength of Pulsotronic.

SAI interfaces of Pulsotronic are integrated by "direct assembly" into machines and arrangements. They summarize on spot the signals of the sensors and actuators. Installation and service costs can be reduced here easily, because it is worked with premanufactured cables and customary M5 / M8 / M12 plug connectors. On the other side of the interface only one assembly cable connects the control unit.



Another practical product detail: wide marking fields. This clear inscription makes easier the error search and servicing work. Dead times thereby decrease to a minimum.



FIXCON®:

Plug - click - ready - with these three words a assembly instruction for the newest innovation of the plug connectors is described. The new FIXCON®- connection system is so quick and safe, that it has already asserted itself in many areas of the modern manufacturing. FIXCON® needs no screwing, it's put on and protected by a snap locking. With this FIXCON® counts to the quickest connecting systems worldwide. This feature Pulsotronic offers in the SAI and also in the standard program proximity switches.

Quick connection technology IDC:

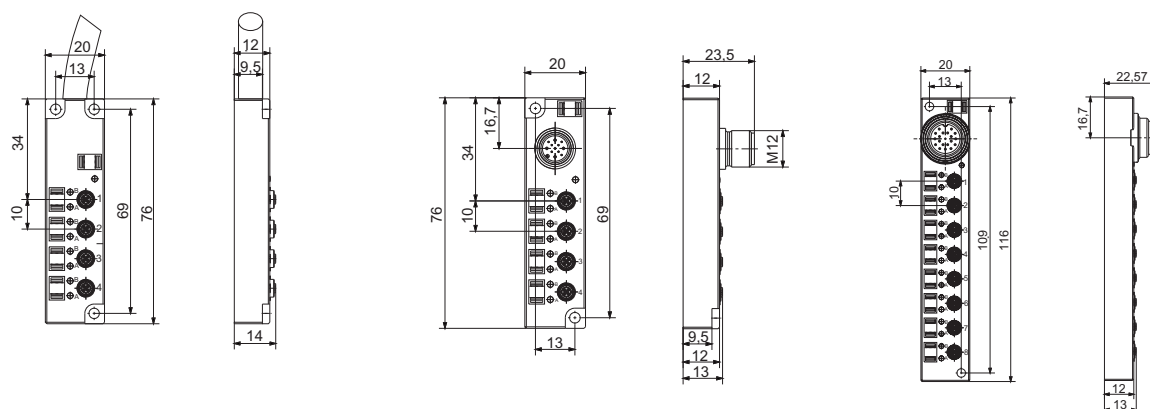
With priority in the special mechanical engineering with constantly varying applications the advantages of the IDC fast connection technology proves themselves. You assemble your connecting wires to 0.75 mm² with the quick connection technology yourselves. Only stripping off cable, core in the coding element and screw together - ready. No longer cost-intensive connecting cables and cable mounting centimeter-exactly: Use the advantages with the Pulsotronic IDC interfaces in the SAI and of course also in the sensor.





SENSOR ACTUATOR INTERFACES M5

DIMENSION DRAWING



Fix-cabel-version

M12-version

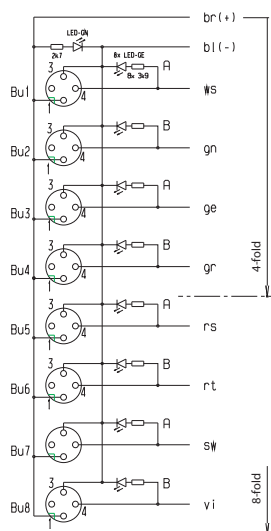
M16-version

SELECTION TABLE

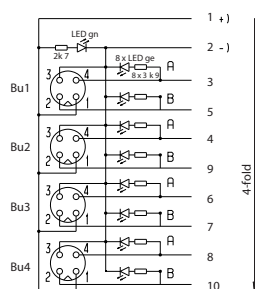
	Pins	Slots	Cable-length	Order number
SAI-4F-3P-M5-5m-PUR	3	4	5m	08341048000
SAI-4F-3P-M5-10m-PUR	3	4	10m	08341048010
SAI-8F-3P-M5-5m-PUR	3	8	5m	08341048100
SAI-8F-3P-M5-10m-PUR	3	8	10m	08341048110
SAI-4F-3P-M5-M16-12P	3	4	- with M16 output 12way	08341048200
SAI-8F-3P-M5-M16-12P	3	8	- with M16 output 12way	08341048300
SAI-4F-3P-M5-M12-12P	3	4	- with M12 output 12way	08341048500
SAI-8F-3P-M5-M12-12P	3	8	- with M12 output 12way	08341048400



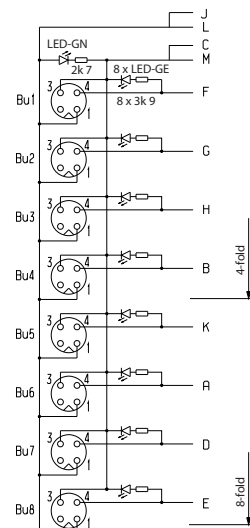
SENSOR ACTUATOR INTERFACES M5



Circuit diagram fix-cabel-version

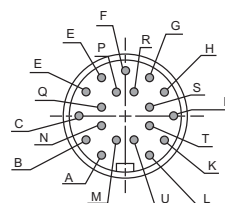
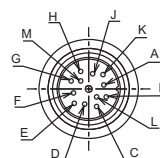
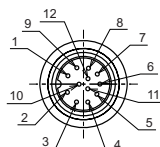


M12-version



M16-version, fourfold

M16-version, eightfold



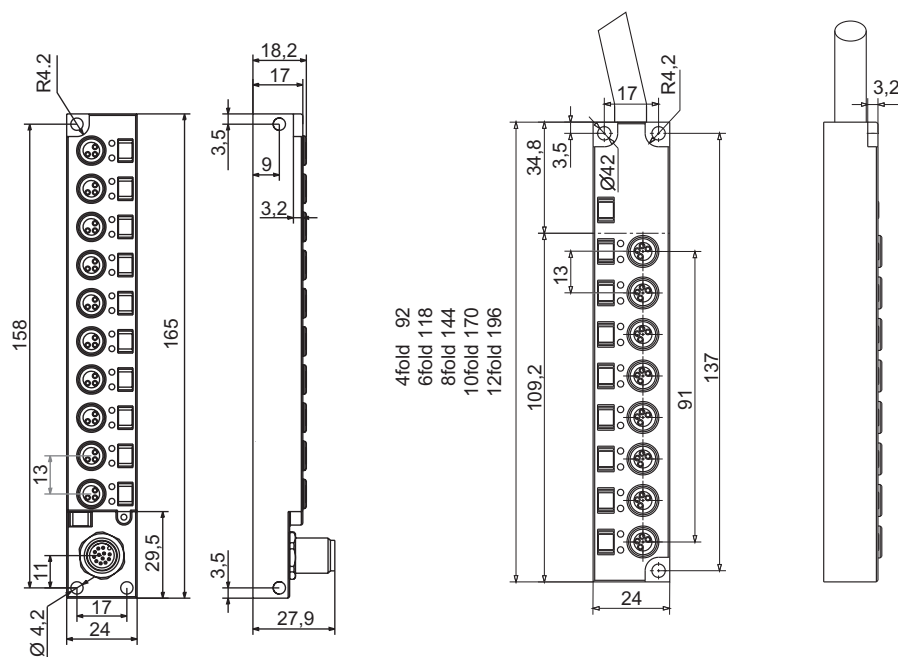
SPECIFICATIONS

Assessment voltage	24 V DC
Operating voltage	10 V DC ... 30 V DC
max. current per E/A Signal	1 A
max. total current	3 A
Soiling rate	3
Degree of protection	IP 67
Operating temperature	-25°C ... 80°C
Housing material	Pocan
Contact base	CuZn, nickel-plated
Contact material	Au (gold)
Thread	CuZn, nickel-plated
Housing colour	black
Combustibility rate UL94	V-0
Drag chain able	yes



SENSOR ACTUATOR INTERFACES M8

DIMENSION DRAWING

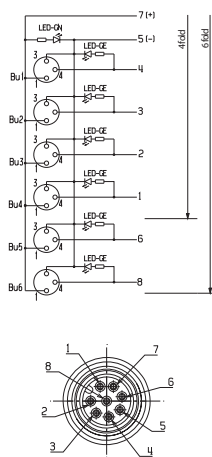


SELECTION TABLE

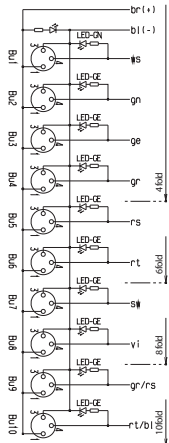
	Pins	Slots	Cable length	Order number
SAI-4F-3P-M8-L-5M-PUR	3	4	5m	08341046600
SAI-6F-3P-M8-L-5M-PUR	3	6	5m	08341046300
SAI-8F-3P-M8-L-5M-PUR	3	8	5m	08341046800
SAI-10F-3P-M8-L-5M-PUR	3	10	5m	08341046900
SAI-12F-3P-M8-L-5M-PUR	3	12	5m	08341046700
SAI-4F-3P-M8-L-10M-PUR	3	4	10m	08341046610
SAI-6F-3P-M8-L-10M-PUR	3	6	10m	08341046310
SAI-8F-3P-M8-L-10M-PUR	3	8	10m	08341046810
SAI-10F-3P-M8-L-10M-PUR	3	10	10m	08341046910
SAI-12F-3P-M8-L-10M-PUR	3	12	10m	08341046710
SAI-4F-4P-M8-L-5M-PUR	4	4	5m	08341047100
SAI-6F-4P-M8-L-5M-PUR	4	6	5m	08341047200
SAI-8F-4P-M8-L-5M-PUR	4	8	5m	08341047000
SAI-4F-4P-M8-L-10M-PUR	4	4	10m	08341047110
SAI-6F-4P-M8-L-10M-PUR	4	6	10m	08341047210
SAI-8F-4P-M8-L-10M-PUR	4	8	10m	08341047010
SAI-4F-3P-M8-L-M12-8P	3	4	- With M12 output	08341046100
SAI-6F-3P-M8-L-M12-8P	3	6	- With M12 output	08341046200



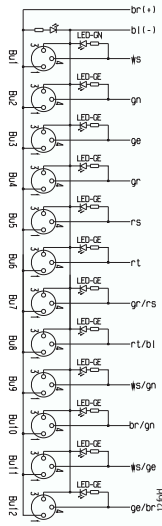
SENSOR ACTUATOR INTERFACES M8



Circuit diagram M12 output



Fix-cable-version



M8-12fold, Fix-cable-version

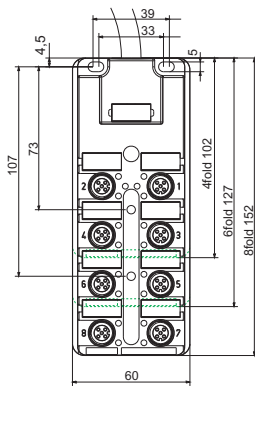
SPECIFICATIONS

Assessment voltage	32 V DC
Operating voltage	10 V DC ... 30 V DC
Max. current per E/A signal	1 A
Max. current per terminal	2 A
Max. total current	6 A
Degree of soiling	3
Degree of protection	IP 67
Operating temperature	-25°C ... 80°C
Housing material	Pocan
Contact base material	PBT (UL 94 V0)
Contact material	CuZn, nickel-plated and gilded
Thread sockets material	CuZn, nickel-plated
Housing colour	black
Combustibility rate UL94	V-0
Drag chain able	yes

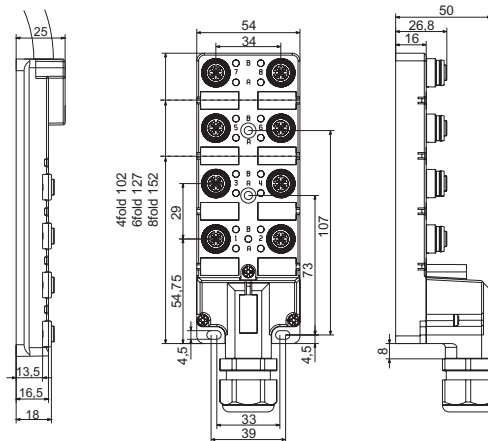


SENSOR ACTUATOR INTERFACES / M12

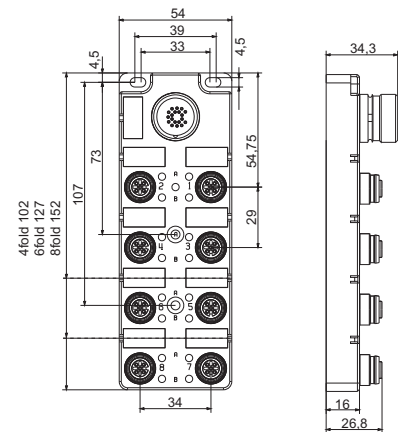
DIMENSION DRAWING



Cable-version



Hood-version



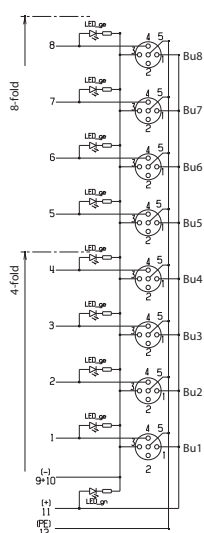
M23-version

SELECTION TABLE

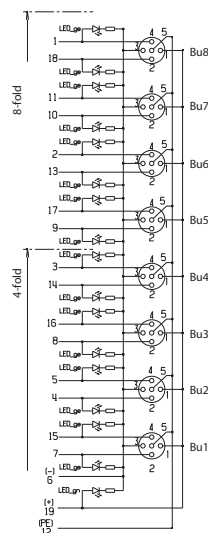
	Pins	Slots	Cable-length	Order number
SAI-4F-4P-FIXCON-5m-PUR	4	4	5m	08341042200
SAI-4F-4P-FIXCON-10m-PUR	4	4	10m	08341042210
SAI-8F-4P-FIXCON-5m-PUR	4	8	5m	08341042400
SAI-8F-4P-FIXCON-10m-PUR	4	8	10m	08341042410
SAI-4F-4P-FIXCON-M23-12P	4	4	- with M23 output 12way	08341046400
SAI-8F-4P-FIXCON-M23-12P	4	8	- with M23 output 12way	08341046500
SAI-4F-5P-FIXCON-5m-PUR	5	4	5m	08341042500
SAI-4F-5P-FIXCON-10m-PUR	5	4	10m	08341042600
SAI-8F-5P-FIXCON-5m-PUR	5	8	5m	08341042700
SAI-8F-5P-FIXCON-10m-PUR	5	8	10m	08341042710
SAI-4F-5P-FIXCON-M23-19P	5	4	- with M23 output 19way	08341041600
SAI-8F-5P-FIXCON-M23-19P	5	8	- with M23 output 19way	08341041700
SAI-8F-5P-FIXCON-H	5	8	- hood-version	08341042100
SAI-4F-5P-FIXCON-H	5	4	- hood-version	08341041800
SAI-4F-5P-M12-H	5	4	- hood-version M12 Stand.	08341041900
SAI-6F-5P-M12-H	5	6	- hood-version M12 Stand.	08341042000
SAI-8F-5P-M12-H	5	8	- hood-version M12 Stand.	08341042300



SENSOR ACTUATOR INTERFACES / M12



Circuit diagram 4-way



5-way

terminal	outlets M12	contact	colour	colour coding
1	1	4	white	WH
2	2	4	green	GN
3	3	4	yellow	YE
4	4	4	grey	GY
5	5	4	pink	PK
6	6	4	red	RD
7	7	4	black	BK
8	8	4	violet	VT
9	1	2	grey/pink	GYPK
10	2	2	red/blue	RDBU
11	3	2	white/green	WHGN
12	4	2	brown/green	BNGN
13	5	2	white/yellow	WHYE
14	6	2	yellow/brown	YEBN
15	7	2	white/grey	WHGY
16	8	2	grey/brown	GYBN
17	1-8	1	brown (+)	BN(+)
18	1-8	3	blue (-)	BU(-)
PE	1-8	5	green-yellow (PE)	GNYE



Interface FIXCON®, eightfold, fix-cable-version

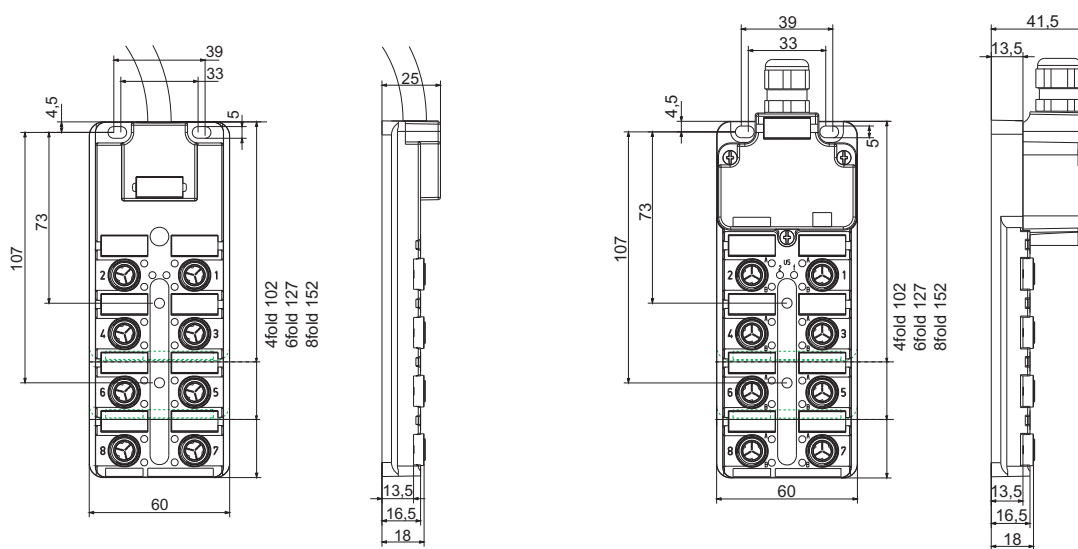
SPECIFICATIONS

Assessment voltage	32 V DC
Operating voltage	10 V DC ... 30 V DC
Max. current per E/A signal	2 A
Max. current per slot	4 A
Max. total current	9 A
Soiling rate	3
Degree of protection	IP 67
Operating temperature	-25°C ... 80°C
Housing material	PA 6 GF
Contact base	PBT (UL 94 V0)
Contact material	CuZn, nickel-plated and gilded
Thread	CuZn, nickel-plated
Housing colour	black
Combustibility rate UL94	V-0
Drag chain able	yes (cable-version)



SENSOR ACTUATOR INTERFACES IDC

DIMENSION DRAWING



Cable-version

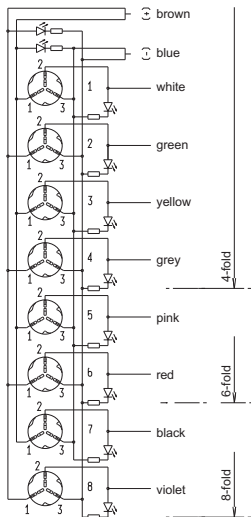
Hood-version

SELECTION TABLE

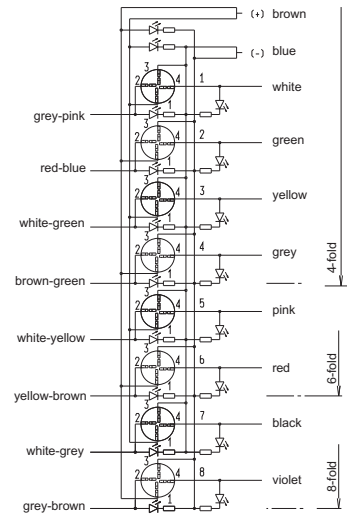
	Pins	Slots	Cable-length	Order number
SAI-4F-3P-IDC-5m-PUR	3	4	5m	08341043400
SAI-4F-3P-IDC-10m-PUR	3	4	10m	08341043500
SAI-8F-3P-IDC-5m-PUR	3	8	5m	08341043600
SAI-8F-3P-IDC-10m-PUR	3	8	10m	08341043200
SAI-4F-3P-IDC-H	3	4	- hood-version	08341042800
SAI-8F-3P-IDC-H	3	8	- hood-version	08341042900
SAI-4F-4P-IDC-5m-PUR	4	4	5m	08341043700
SAI-4F-4P-IDC-10m-PUR	4	4	10m	08341043800
SAI-8F-4P-IDC-5m-PUR	4	8	5m	08341043900
SAI-8F-4P-IDC-10m-PUR	4	8	10m	08341043000
SAI-4F-4P-IDC-H	4	4	- hood-version	08341043100
SAI-8F-4P-IDC-H	4	8	- hood-version	08341043300



SENSOR ACTUATOR INTERFACES IDC



Circuit diagram 3-way



4-way



Interface IDC 4-way, fix-cable-version

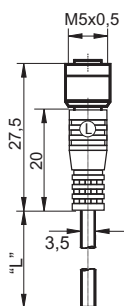
SPECIFICATIONS

Assessment voltage	32 V DC
Operating voltage	10 V DC ... 30 V DC
Max. current per E/A signal	2 A
Max. current per slot	3 A
Max. total current	9 A / hood-version: 10 A
Soiling rate	2
Degree of protection	IP 67
Operating temperature	-20°C ... 90°C
Housing material	Pocan
Contact base	PBT (UL 94 V0)
Contact material	CuZn, nickel-plated and gilded
Thread	CuZn, nickel-plated
Housing colour	black
Combustibility rate UL94	V-0
Drag chain able	yes

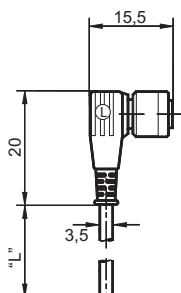


CABLE OUTLETS M5 / DIN 43651

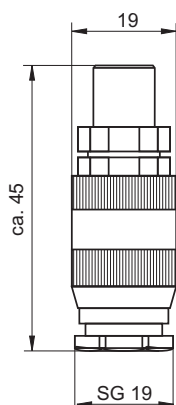
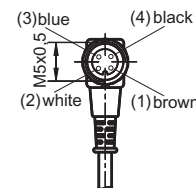
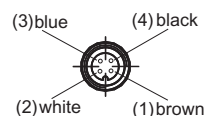
DIMENSION DRAWING



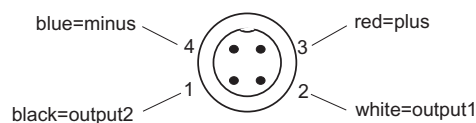
M5 straight 4-way



M5 angled 4-way



Plug DIN 43651



SELECTION TABLE

	Style	Wires	LED	Output	Assembling able	Order number
V3-4/P/2m	straight	4	no	-	-	44500001700
V3-4/W/P/2m	angled	4	no	-	-	44500001750
VE-5/PG9	straight		no	-	yes	44500840102
VE-5/2m	straight	5	no	-	-	44505120200



CABLE OUTLETS M5 / DIN 43651



Socket DIN 43651



Socket M5 straight



Socket M5 angular

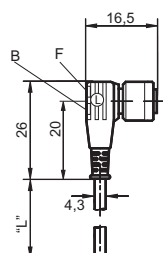
SPECIFICATIONS

Type	M5 (screw) socket	Plug DIN 43651
Operating voltage	max. 125 V	max. 50 V
Current capacity	< 1 A	< 6 A
Cross section	0,14 mm ²	0,14 mm ²
Resistor	< 3 mOhm	< 5 mOhm
Degree of protection	IP 67	IP 67
Soiling rate	3	3
Operating temperature	-25°C ... +80°C	-20°C ... +80°C
Test shock voltage	2,0 kV eff. / 60 s.	4,0 kV eff. / 60 s
Isolation resistor	> 10 ⁹ Ohm	> 10 ⁹ Ohm
Cable length	2m	2m
Cover material	PUR halogen-free	PVC (grey)
Sent material	PVC, colour-code VDE 0293-308	PVC, colourcode VDE 0293-308
Contact material	TPU (self-going out)	Housing material CuZn (chromed)
Base material	CuSn gilded	CuZn gilded
Locking device material	CuZn nickel-plated	Alu anodized

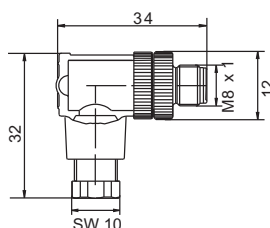


CABLE OUTLETS M8

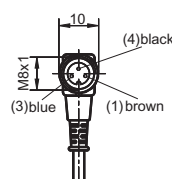
DIMENSION DRAWING



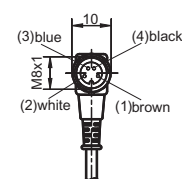
angled



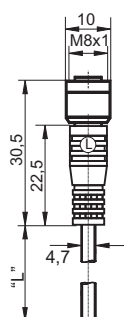
angled, for ready made



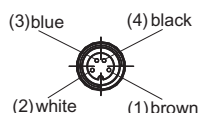
angled 3-way



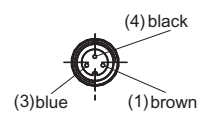
angled 4-way



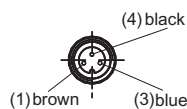
straight



socket, 4-way



socket, 3-way



plug, 3-way

SELECTION TABLE

	Type	Wires	LED	Output	For ready made	Order number
V1-3/W/P/PNP/2L/2m	angled	3	yes	PNP	-	44505125910
V1-3/W/P/NPN/2L/2m	angled	3	yes	NPN	-	44505126010
V1-3/W/P/2m	angled	3	no	-	-	44505125610
V1-3/P/2m	straight	3	no	-	-	44505123810
V1-4/P/2m	straight	4	no	-	-	44505170210
V1-4/W/P/2m	angled	4	no	-	-	44505170310
VS1-3/W/PG4	angled	4	no	-	yes	44505134200



CABLE OUTLETS M8



M8 straight



M8 angled



M8 angled, LED-version

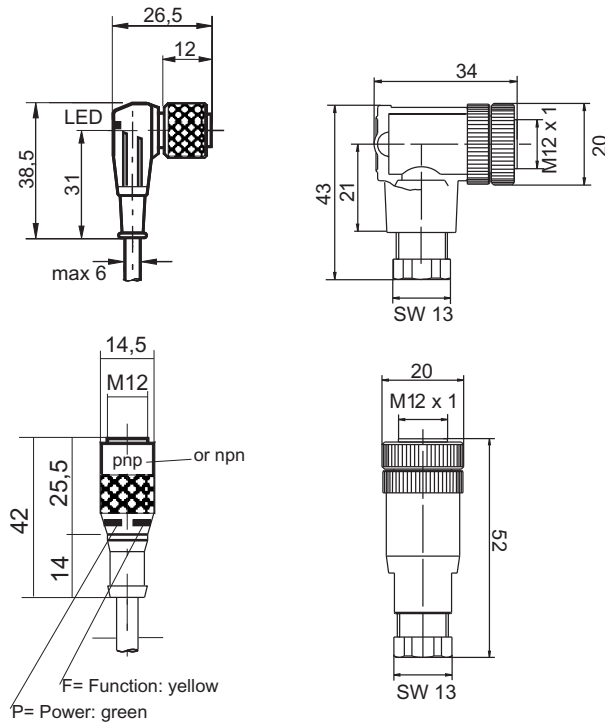
SPECIFICATIONS

Type	M8 (screw) socket
Operating voltage	250 V AC / 300 V DC
Current capacity	< 4 A
Core cross section	0,34 mm ²
Flow resistor	< 5 mOhm
Degree of protection	IP 68
Degree of pollution	3
Operating temperature	-25°C ... +80°C
High potential voltage	2,0 kV eff. / 60 s.
Isolation resistor	> 10 ⁹ Ohm
Cabel lenght	2m
Sheat material	PUR halogen-free
Core isolation material	PVC, colour-code VDE 0293-308
Handle material	TPU, self going out
Contact material	CuSn gilded
Locking device material	CuZn nickel-plated

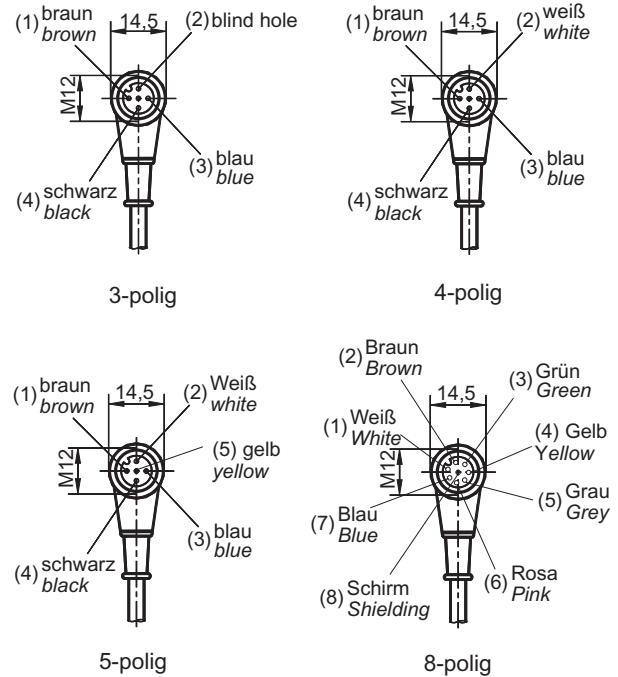


CABLE OUTLETS M12

DIMENSION DIAGRAM



TERMINATION



SELECTION TABLE

	Type	Wires	LED	Output	For ready made	Order number
V2-3/W/P/PNP/2L/2m	angled	3	yes	PNP	-	44505126310
V2-3/W/P/NPN/2L/2m	angled	3	yes	NPN	-	44505125810
V2-3/W/P/2m	angled	3	no	-	-	44505126510
V2-3/P/2m	straight	3	no	-	-	44505125210
V2-4/W/P/PNP/2L/2m	angled	4	yes	PNP	-	44505125410
V2-4/W/P/NPN/2L/2m	angled	4	yes	NPN	-	44505124010
V2-4/W/P/2m	angled	4	no	-	-	44505123910
V2-4/P/2m	straight	4	no	-	-	44505125310
VS2-4/W/PG7	angled	4	no	-	yes	44505133600
VS2-4/PG7	straight	4	no	-	yes	44505132600
V2-4/W/PNP/2L/PG7	angled	4	yes	PNP	yes	44505132000
V2-4/W/NPN/2L/PG7	angled	4	yes	NPN	yes	44505132100
V2-4/W/PG7	angled	4	no	-	yes	44505132500
V2-4/PG7	straight	4	no	-	yes	44505132800
V2-5/PG7	straight	5	no	-	yes	44505160900
V2-5/P/2m	straight	5	no	-	-	44505129000
V2-5/W/P/2m	angled	5	no	-	-	08369129100
V2-8/P/2m	straight	8	no	-	-	44500001910
V2-8/W/P/2m	angled	8	no	-	-	44500002010



CABLE OUTLETS M12



M12 straight



M12 angled

SPECIFICATIONS

Type	M12 (screw) socket	M12 socket assembling able
Operating Voltage	max. 250 V	max. 250 V
Current capacity	< 4 A	< 4 A
Core cross section	0,34 mm ²	0,34 mm ²
Flow resistor	< 5 mOhm	< 8 mOhm
Degree of protection	IP 67	IP 67
Degree of pollution	3/2	3
Operating temperature	-25°C ... +80°C	-40°C ... +80°C
High potential voltage	2,0 kV eff. / 60 s.	2,95 kV eff. / 60 s
Isolation resistor		
Cabel length	2m	-
Sheat material	PUR halogen-free	Socket contact CuZn
Core isolation material	PVC, colour-code VDE 0293-308	Socket body PA 66
Handle material	PUR	Housing material PBT
Contact material	CuZn gilded	Flange housing PA 66
Locking device material	GD-Zn nickel-plated	Thread ring PA 66



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