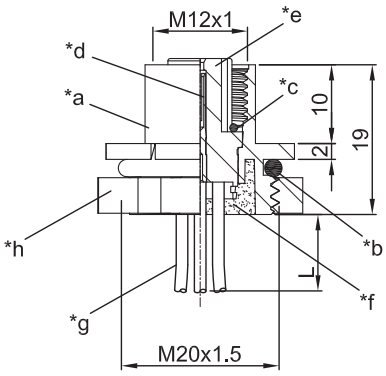
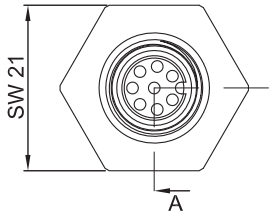
M12 1220 ... T20CW103 ...

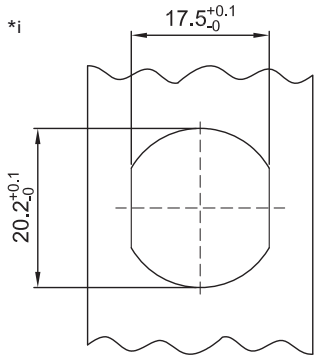
Panel Mount Connectors M12

M12 panel mount connector, female, A-coded, IP67, for front mounting, thread M20, with nut and stranded wires, with plastic housing, red

M12 1220 ... T20CW103 ...







Environmental conditions

Temperature range	-25 °C/+80 °C

Materials

Insulating body	PA
Contact bush	CuZn, pre-nickel and gold-plated
Housing	PA
Hexagonal nut	PA
Seal	NBR

Mechanical data

Mating cycles	≥ 100
Insertion force	≤ 10 N [1]
Withdrawal force	≤ 15 N [1]
Protection class	IP67 [2]

[1] measured with a proper counterpart

[2] according to IEC DIN EN 60529, only in locked condition with an appropriate counterpart

Electrical data (at T_{amb} 20 °C)

Contact resistance	≤ 5 mΩ
Rated current	4 A (3–5 poles) 2 A (8 poles) 1.5 A (12 poles) (T_{amb} 40 °C)
Rated voltage	250 V AC/DC (3–4 poles) 60 V AC/DC (5 poles) 30 V AC/DC (8–12 poles) [1]
Rated impulse voltage	2500 V (3–4 poles) 1500 V (5 poles) 800 V (8–12 poles) [1]
Material group	I (IEC)/0 (UL) (CTI ≥ 600) [2]
Overvoltage category	II [2]
Insulation resistance	> 100 MΩ

[1] acc. to IEC 60664/DIN EN 60664/CTI UL classification acc. to ANSI/UL 746A

[2] acc. to IEC 60664/DIN EN 60664/CTI UL classification acc. to ANSI/UL 746A

Associated products

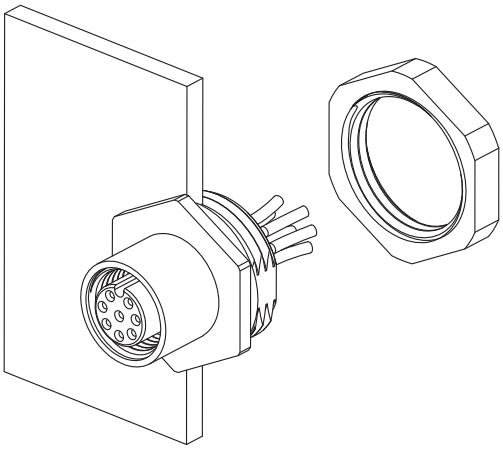
Counterparts

1210 ... 0...	1210 ... 3...	1210 0800 ... 3...
1210 0806 ... L1 3...	1210 1200 ... 0...	1210 1200 ... 3...
1210 1205 ... 3...	1210 1206 ... L1 0...	1210 1206 ... L1 3...
1210 1206 ... L2 0...	1210 1206 ... L2 3...	1250 ... T...CI
1250 ... T...CR	1255 ... T...CR	5512 02 MFF

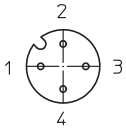
Accessories

9912 CPF0

M12 1220 ... T20CW103 ...

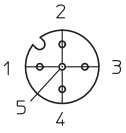


Pin assignment for female M12 connectors, A-coded, front view



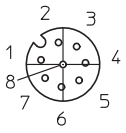
4 pole

1	brown
2	white
3	blue
4	black



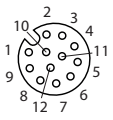
5 pole

1	brown
2	white
3	blue
4	black
5	gray



8 pole

1	white
2	brown
3	green
4	yellow
5	gray
6	pink
7	blue
8	red



12 pole

1	brown
2	blue
3	white
4	green
5	pink
6	yellow
7	black
8	gray
9	red
10	violet
11	gray/pink
12	red/blue

M12 1220 ... T20CW103 ...

*a housing
*b O-ring gasket
*c O-ring gasket
*d contact bush
*e insulating body
*f potting
*g standed wire
*h nut
*i port in mounting plate

M12 1220 ... T20CW103 ...

Designation	Pole Number	Connected Cable	PU (Pieces)	MDQ (Pieces)	Dimensions L (mm)
1220 04 T20CW103 0,5m	4	PVC, brown/white/blue/black, 4 x 0.34 mm² (AWG 22), UL-style 1007	10	10	500
1220 05 T20CW103 0,5m	5	PVC, brown/white/blue/black/gray, 5 x 0.34 mm² (AWG 22), UL-style 1007	10	10	500

Packaging:
in a plastic bag