

## **EXACT12, 8XM12, 5-POLE, MOULDED CABLE**

3.0m PUR 16x0,5+3x1,0, UL/CSA

8-way, 5-pole 3.0 m

Further cable lengths on request.

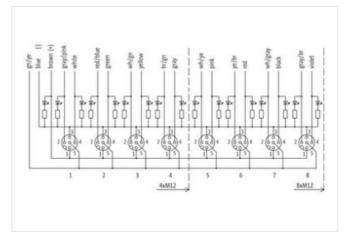
Plastic housings with good resistance against chemicals and oils.

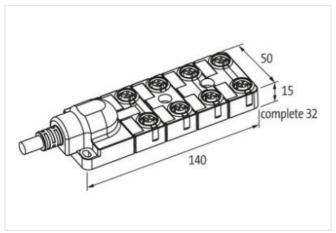
The resistance to aggressive media should be individually tested for your application. Further details on request.

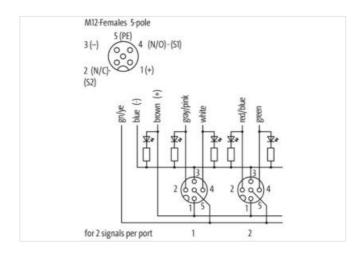
## **Link to Product**

## Illustration









Product may differ from Image









Commercial data		
ECLASS-6.0	27143423	
ECLASS-6.1	27279219	
ECLASS-7.0	27279219	
ECLASS-8.0	27279219	
ECLASS-9.0	27440108	



stay connected

ECLASS-10.1	27440108
ECLASS-11.1	27440108
ECLASS-12.0	27440108
ETIM-5.0	EC002585
customs tariff number	85444290
GTIN	4048879053990
Packaging unit	1
Electrical data   Supply	
Operating voltage DC	24 V
Current operating per contact max.	4 A
Installation   Connection	
Mounting set	M12 x 1
Device protection   Electrical	
Degree of protection (EN IEC 60529)	IP65, IP67
Device protection   Media	
Flame resistance	flame retardant
Mechanical data   Material data	
Material housing	Plastic
Mechanical data   Mounting data	
Mounting method	Schraubgewinde
Environmental characteristics   Climatic	
Operating temperature min.	-20 °C
Operating temperature max.	70 °C
Additional condition temperature range	depending on cable quality
Installation   Cable	
Cable identification	452
Jacket Color	gray
Type of Certificate	cURus
Amount stranding	1
Stranding	7 wires around Core filler twisted
Amount stranding (type 2)	1
Stranding (type 2)	12 wires counter-rotating twisted
Banding	Fleece
Filler	yes
wire arrangement	gray-pink, brown-green, yellow, green-white, green, red-blue, white, (brown-gray, black, gray-white, red, brown-yellow, pink, yellow-white, gray, blue, brown, green-yellow, violet)
Cable weigth	231 g/m
Material jacket	PUR
Shore hardness jacket	94 ± 5 Shore A
Freedom from ingredients (jacket)	lead-free, cadmium-free, CFC-free, halogen-free
Outer-diameter (jacket)	11,5 mm
Tolerance outer diameter (sheath)	±5%
Material wire insulation	TPE-E
Amount wires	16
Outer diameter insulation	1,6 mm
Outer diameter tolerance core insulation	±5%
Shore hardness wire insulation	55 ± 5 Shore D
Ingredient freeness wire insulation	lead-free, CFC-free, halogen-free, silicone-free, LABS-free
Traversing distance (C-track)	5 m @ 25 °C
	04
Amount strands (wire)	64



Material conductor wire         Stranded copper wire; bere           Conductor by (vire)         strand das 8           Matorial wire insulation (Data)         TPE €           Coulse diameter wire insulation (Data)         1.5 E.           Triberance outer diameter wire insulation (Data)         2.5 from 1.5 From 1	Conductor crosssection (wire)	0,5 mm <sup>2</sup>
Material wire insulation (Data)   TPE-E	Material conductor wire	Stranded copper wire, bare
Outer diameter wire insulation (Data)         2,1 mm           Toteranze outer diameter wire insulation (Data)         5 % Shore D           Shore hardness wire insulation (Data)         55 £ Shore D           Ingredient freeness wire insulation (Data)         128           Amount wires (Data)         128           Diameter of single wires (Data)         0,1 mm           Conductor crossection wire (Data)         1 mm²           Material conductor were (Data)         Shanded copper wire, bare           Wire conductor type (Data)         Shanded copper wire, bare           Mix. rated voltage (conductor - conductor)         300 V           Max. rated voltage (conductor - conductor)         300 V           Max. rated voltage (conductor - conductor)         300 V           Current load capacity min. Wire         5.9 A           Current load capacity min. Wire (Data)         15 A           Electrical resistance inits constant wire         39 Q Mm @ 20 °C           Electrical resistance coating wire (Data)         20 Q Mm @ 20 °C           Electrical resistance in constant wire         39 Q Mm @ 20 °C           AC withstant of voltage (wire - virial partial preparature (static)         40 °C           Min. operating temperature (flowed)         20 °C           Operating temperature min. (dynamic)         20 °C <tr< td=""><td>Conductor type (wire)</td><td>strand class 6</td></tr<>	Conductor type (wire)	strand class 6
Tolerance outer diameter wire insulation (data)	Material wire insulation (Data)	TPE-E
Shore hardness wire insulation (Data)   Ss ± 5 Shore D	Outer diameter wire insulation (Data)	2,1 mm
Ingredient freeness wire insulation (Data)   lead free, halogen-free, Silicone-free, LABS-free	Tolerance outer diameter wire insulation (data)	±5%
Amount wires (Data) 3 Amount strands wire (Data) 128 Diameter of single wires (Data) 0,1 mm Conductor cross section wire (Data) 1 mm² Material conductor type (Data) 1 mm² Material conductor type (Data) 1 mm² Max. rated voltage (conductor - conductor) 300 V  Current load capacity (standard) 100 NV E 0298-4  Current load capacity min. wire 5,9 A  Electrical resistance coaling wire (Data) 15 A  Electrical resistance coaling wire (Data) 20 Ωkm @ 20 °C  Electrical resistance coaling wire (Data) 20 Ωkm @ 20 °C  Electrical resistance to coaling wire (Data) 20 Ωkm @ 20 °C  Electrical resistance to coaling wire (Data) 4 α °C  Max. operating temperature (fixed) 90 °C  Operating temperature (fixed) 90 °C  Operating temperature mix. (dynamic) 90 °C	Shore hardness wire insulation (Data)	55 ± 5 Shore D
Amount strands wire (Data)   128   11mm   128   11mm   128   11mm   128   12	Ingredient freeness wire insulation (Data)	lead-free, halogen-free, silicone-free, LABS-free
Diameter of single wires (Data)   0.1 mm	Amount wires (Data)	3
Conductor crosssection wire (Data)   1 mm²   Stranded copper wire, bare	Amount strands wire (Data)	128
Material conductor wire (Data)         Stranded copper wire, bare           Wire conductor type (Data)         strand class 6           Max. rated voltage (conductor - conductor)         300 V           Max. rated voltage (conductor - ground)         300 V           Current load capacity (standard)         to DIN VDE 0298-4           Current load capacity min. Wire (Data)         15 A           Electrical resistance inc constant wire         39 Ωkm @ 20 °C           Electrical resistance inc constant wire         2 kV @ 60 s           Power frequency withstand voltage (wire - wire)         2 kV @ 60 s           Power frequency withstand voltage (wire - wire)         2 kV @ 60 s           Min. operating temperature (static)         -40 °C           Max. operating temperature min. (dynamic)         20 °C           Operating temperature max. (dynamic)         20 °C           Operating temperature max. (dynamic)         90 °C           Operating temperature max. (dynamic)         90 °C           Operating temperature max. (dynamic)         90 °C           Good, application-related testing         0ir esistance           Good, application-related testing         0ir esistance           Good, application-related testing         0ir esistance           Bending radius (fixed)         8 x Outer diameter	Diameter of single wires (Data)	0,1 mm
Wire conductor type (Data)         strand class 6           Max. rated voltage (conductor - conductor)         300 V           Max. rated voltage (conductor - ground)         300 V           Current load capacity (standard)         to DIN VDE 0299-4           Current load capacity min. wire         5.9 A           Current load capacity min. wire         5.9 A           Electrical resistance line constant wire         39 Ω/km @ 20 °C           Electrical resistance coating wire (Data)         20 Ω/km @ 20 °C           Electrical resistance todating wire (Data)         20 N/km @ 20 °C           Power frequency withstand voltage (wire wire) (acket)         2 kV @ 60 s           Power frequency withstand voltage (wire wire) (acket)         2 kV @ 60 s           Max. operating temperature (static)         40 °C           Max. operating temperature (static)         90 °C           Operating temperature min. (dynamic)         90 °C           Operating temperature min. (dynamic)         90 °C           Flame resistance         Good, application-related testing           Gasoline resistance         Good, application-related testing           Oil resistance         Good, application-related testing           Bending radius (installation)         x Outer diameter           Bending radius (fixed)         8 x Outer diameter	Conductor crosssection wire (Data)	1 mm²
Max. rated voltage (conductor - conductor)         300 V           Max. rated voltage (conductor - ground)         300 V           Current load capacity (standard)         to DIN VDE 0298-4           Current load capacity min. Wire (Data)         15 A           Current load capacity min. Wire (Data)         15 A           Electrical resistance coating wire (Data)         20 Ω/km @ 20 °C           AC withstand voltage (wire - wire)         2 kV @ 60 s           Power frequency withstand voltage (wire - iacket)         40 °C           Min. operating temperature (static)         40 °C           Max. operating temperature (fixed)         90 °C           Operating temperature min. (dynamic)         20 °C           Operating temperature min. (dynamic)         90 °C           Operating temperature max. (dynamic)         90 °C           Flame resistance         UL 1581 § 1100 FT2   IEC 60332-2-2   UL 1581 § 1090           Chemical resistance         Good, application-related testing           Gasoline resistance         Good, application-related testing           Oil resistance         Good, application-related testing   DIN EN 60811-404           Bending radius (fixed)         8 x Outer diameter           Bending radius (fixed)         8 x Outer diameter           Bending radius (maximic)         10 x Outer diameter	Material conductor wire (Data)	Stranded copper wire, bare
Max. rated voltage (conductor - ground)         300 V           Current load capacity (standard)         to DIN VDE 0298-4           Current load capacity min. Wire         5,9 A           Current load capacity min. Wire (Data)         15 A           Electrical resistance locostant wire         39 Ω/km @ 20 °C           Electrical resistance coating wire (Data)         20 Q/km @ 20 °C           AC withstand voltage (wire - wire)         2 kV @ 60 s           Power frequency withstand voltage (wire - jacket)         40 °C           Min. operating temperature (fixed)         90 °C           Operating temperature min. (dynamic)         -20 °C           Operating temperature max. (dynamic)         90 °C           Operating temperature max. (dynamic)         90 °C           Flame resistance         UL 1581 § 1100 FT2   IEC 60332-2-2   UL 1581 § 1090           chemical resistance         Good. application-related testing           Gil resistance         Good. application-related testing           Oil resistance         Good. application-related testing   DIN EN 60811-404           Bending radius (installation)         x Outer diameter           Bending radius (fixed)         8 x Outer diameter           Bending radius (fixed)         8 x Outer diameter           Travel speed (C-track)         5 Mio. @ 25 °C	Wire conductor type (Data)	strand class 6
Current load capacity (standard)         to DIN VDE 0298-4           Current load capacity min, wire         5,9 A           Current load capacity min, Wire (Data)         15 A           Electrical resistance line constant wire         39 Ω/km @ 20 °C           Electrical resistance coating wire (Data)         20 Ω/km @ 20 °C           AC withstand voltage (wire - wire)         2 kV @ 60 s           Power frequency withstand voltage (wire - ispacket)         2 kV @ 60 s           Min. operating temperature (static)         40 °C           Max. operating temperature (fixed)         90 °C           Operating temperature min. (dynamic)         -20 °C           Operating temperature max. (dynamic)         90 °C           Bending radius (fixed)         8 x Ou	Max. rated voltage (conductor - conductor)	300 V
Current load capacity min. wire 5.9 A Current load capacity min. Wire (Data) 15 A Electrical resistance line constant wire 39 \( \textit{\alpha} \alph	Max. rated voltage (conductor - ground)	300 V
Current load capacity min. Wire (Data)         15 A           Electrical resistance line constant wire         39 Ω/km @ 20 °C           Electrical resistance coating wire (Data)         20 Ω/km @ 20 °C           AC withstand voltage (wire - wire)         2 kV @ 60 s           Power frequency withstand voltage (wire - jacket)         2 kV @ 60 s           Min. operating temperature (fixed)         90 °C           Max. operating temperature min. (dynamic)         90 °C           Operating temperature max. (dynamic)         90 °C           Plame resistance         U. 1581 § 1100 FT2   IEC 60332-2 c   UL 1581 § 1090           chemical resistance         Good, application-related testing           Gasoline resistance         Good, application-related testing           Oil resistance         Good, application-related testing   DIN EN 60811-404           Bending radius (fixed)         8 x Outer diameter           Bending radius (fixed)         8 x Outer diameter           Bending radius (dynamic)         10 x Outer diameter           Family construction form         free cable end           No. of poles         19           Family construction form         free cable end           No. of poles         5           Filin 1         +           PIN 2         NC S 2           P	Current load capacity (standard)	to DIN VDE 0298-4
Electrical resistance Dine constant wire 39 Ω/km @ 20 °C Electrical resistance coating wire (Data) 20 Ω/km @ 20 °C AC withstand voltage (wire - wire) 2 kV @ 60 s Power frequency withstand voltage (wire - jacket) Min. operating temperature (static) -40 °C Max. operating temperature (fixed) 90 °C Operating temperature min. (dynamic) -20 °C Operating temperature min. (dynamic) -20 °C Operating temperature max. (dynamic) -20 °C Operating temperature dynamic) -20 °C Operating temperature dynamic -20 °C Operat	Current load capacity min. wire	5,9 A
Electrical resistance coating wire (Data) 20 Ω/km @ 20 °C AC withstand voltage (wire - wire) 2 kV @ 60 s  Power frequency withstand voltage (wire - jacket) 2 kV @ 60 s  Min. operating temperature (static) -40 °C  Max. operating temperature (fixed) 90 °C  Operating temperature min. (dynamic) -20 °C  Operating temperature mix. (dynamic) 90 °C  Flame resistance UL 1581 § 1100 FT2   IEC 60332-2-2   UL 1581 § 1090  Chemical resistance Good, application-related testing  Gasoline resistance Good, application-related testing  Gasoline resistance Good, application-related testing   DIN EN 60811-404  Bending radius (installation) x Outer diameter  Bending radius (fixed) 8 x Outer diameter  Bending radius (dynamic) 10 x Outer diameter  Bending radius (dynamic) 10 x Outer diameter  Fravel speed (C-track) 5 Mio. @ 25 °C  Connection type 2  Family construction form free cable end  No. of poles 19  Family construction form M12  Gender female  Coloir contact carrier black  Coding A  No. of poles 5  PIN 1 +  PIN 2 NC S 2  PIN 3 -  PIN 4 NO S 1	Current load capacity min. Wire (Data)	15 A
AC withstand voltage (wire - wire)   2 kV @ 60 s	Electrical resistance line constant wire	39 Ω/km @ 20 °C
Power frequency withstand voltage (wire - jacket)	Electrical resistance coating wire (Data)	20 Ω/km @ 20 °C
Jacket	AC withstand voltage (wire - wire)	2 kV @ 60 s
Max. operating temperature (fixed) 90 °C  Operating temperature min. (dynamic) -20 °C  Operating temperature max. (dynamic) 90 °C  Flame resistance UL 1581 § 1100 FT2   IEC 60332-2-2   UL 1581 § 1090  chemical resistance Good, application-related testing  Gasoline resistance Good, application-related testing  Oil resistance Good, application-related testing   DIN EN 60811-404  Bending radius (installation) x Outer diameter  Bending radius (fixed) 8 x Outer diameter  Bending radius (dynamic) 10 x Outer diameter  Travel speed (C-track) 5 Mio. @ 25 °C  Connection type 2  Family construction form free cable end  No. of poles 19  Family construction form M12  Gender female  Color contact carrier black  Coding A  No. of poles 5  PIN 1 +  PIN 2 NC S 2  PIN 3 -  PIN 4 NO S 1		2 kV @ 60 s
Operating temperature min. (dynamic) Operating temperature max. (dynamic) Operating temperature desting Operating temperatur	Min. operating temperature (static)	-40 °C
Operating temperature max. (dynamic)     90 °C       Flame resistance     UL 1581 § 1100 FT2   IEC 60332-2-2   UL 1581 § 1090       chemical resistance     Good, application-related testing       Gasoline resistance     Good, application-related testing   DIN EN 60811-404       Bending radius (installation)     x Outer diameter       Bending radius (fixed)     8 x Outer diameter       Bending radius (dynamic)     10 x Outer diameter       Travel speed (C-track)     5 Mio. @ 25 °C       Connection type 2       Family construction form     free cable end       No. of poles     19       Family construction form     M12       Gender     female       Color contact carrier     black       Coding     A       No. of poles     5       PIN 1     +       PIN 2     NC S 2       PIN 3     -       PIN 4     NO S 1	Max. operating temperature (fixed)	90 °C
Flame resistance UL 1581 § 1100 FT2   IEC 60332-2-2   UL 1581 § 1090  chemical resistance Good, application-related testing  Gasoline resistance Good, application-related testing  Oil resistance Good, application-related testing   DIN EN 60811-404  Bending radius (installation) x Outer diameter  Bending radius (fixed) 8 x Outer diameter  Bending radius (dynamic) 10 x Outer diameter  Travel speed (C-track) 5 Mio. @ 25 °C  Connection type 2  Family construction form free cable end  No. of poles 19  Family construction form M12  Gender female  Color contact carrier black  Coding A  No. of poles 5  PIN 1 +  PIN 2 NC S 2  PIN 3  -  PIN 4 NO S 1	Operating temperature min. (dynamic)	-20 °C
chemical resistance Good, application-related testing Gasoline resistance Good, application-related testing Oil resistance Good, application-related testing   DIN EN 60811-404  Bending radius (installation) x Outer diameter  Bending radius (fixed) 8 x Outer diameter  Bending radius (dynamic) 10 x Outer diameter  Travel speed (C-track) 5 Mio. @ 25 °C  Connection type 2  Family construction form free cable end No. of poles 19  Family construction form M12  Gender female  Color contact carrier black  Coding A  No. of poles 5  PIN 1 +  PIN 2 NC S 2  PIN 3 -  PIN 4 NO S 1	Operating temperature max. (dynamic)	90 °C
Gasoline resistance Good, application-related testing Oil resistance Good, application-related testing   DIN EN 60811-404  Bending radius (installation) x Outer diameter  Bending radius (fixed) 8 x Outer diameter  Bending radius (dynamic) 10 x Outer diameter  Travel speed (C-track) 5 Mio. @ 25 °C  Connection type 2  Family construction form free cable end No. of poles 19  Family construction form M12  Gender female  Color contact carrier black  Coding A  No. of poles 5  PIN 1 +  PIN 2 NC S 2  PIN 3  PIN 4 NO S 1	Flame resistance	UL 1581 § 1100 FT2   IEC 60332-2-2   UL 1581 § 1090
Oil resistance Good, application-related testing   DIN EN 60811-404  Bending radius (installation) x Outer diameter  Bending radius (fixed) 8 x Outer diameter  Bending radius (dynamic) 10 x Outer diameter  Travel speed (C-track) 5 Mio. @ 25 °C  Connection type 2  Family construction form free cable end  No. of poles 19  Family construction form M12  Gender female  Color contact carrier black  Coding A  No. of poles 5  PIN 1 +  PIN 2 NC S 2  PIN 3  PIN 4 NO S 1	chemical resistance	Good, application-related testing
Bending radius (installation) x Outer diameter  Bending radius (fixed) 8 x Outer diameter  Bending radius (dynamic) 10 x Outer diameter  Travel speed (C-track) 5 Mio. @ 25 °C  Connection type 2  Family construction form free cable end  No. of poles 19  Family construction form M12  Gender female  Color contact carrier black  Coding A  No. of poles 5  PIN 1 +  PIN 2 NC S 2  PIN 3 -  PIN 4 NO S 1	Gasoline resistance	Good, application-related testing
Bending radius (fixed) 8 x Outer diameter  Bending radius (dynamic) 10 x Outer diameter  Travel speed (C-track) 5 Mio. @ 25 °C  Connection type 2  Family construction form free cable end  No. of poles 19  Family construction form M12  Gender female  Color contact carrier black  Coding A  No. of poles 5  PIN 1 +  PIN 2 NC S 2  PIN 3 -  PIN 4 NO S 1	Oil resistance	Good, application-related testing   DIN EN 60811-404
Bending radius (dynamic)  Travel speed (C-track)  5 Mio. @ 25 °C  Connection type 2  Family construction form  free cable end  No. of poles  19  Family construction form  M12  Gender  female  Color contact carrier  black  Coding  A  No. of poles  5  PIN 1  +  PIN 2  NC S 2  PIN 3  -  PIN 4  NO S 1	Bending radius (installation)	x Outer diameter
Travel speed (C-track) 5 Mio. @ 25 °C  Connection type 2  Family construction form free cable end  No. of poles 19  Family construction form M12  Gender female  Color contact carrier black  Coding A  No. of poles 5  PIN 1 +  PIN 2 NC S 2  PIN 3 -  PIN 4 NO S 1	Bending radius (fixed)	8 x Outer diameter
Connection type 2           Family construction form         free cable end           No. of poles         19           Family construction form         M12           Gender         female           Color contact carrier         black           Coding         A           No. of poles         5           PIN 1         +           PIN 2         NC S 2           PIN 3         -           PIN 4         NO S 1	Bending radius (dynamic)	10 x Outer diameter
Family construction form         free cable end           No. of poles         19           Family construction form         M12           Gender         female           Color contact carrier         black           Coding         A           No. of poles         5           PIN 1         +           PIN 2         NC S 2           PIN 3         -           PIN 4         NO S 1	Travel speed (C-track)	5 Mio. @ 25 °C
No. of poles         19           Family construction form         M12           Gender         female           Color contact carrier         black           Coding         A           No. of poles         5           PIN 1         +           PIN 2         NC S 2           PIN 3         -           PIN 4         NO S 1	Connection type 2	
Family construction form         M12           Gender         female           Color contact carrier         black           Coding         A           No. of poles         5           PIN 1         +           PIN 2         NC S 2           PIN 3         -           PIN 4         NO S 1	Family construction form	free cable end
Gender         female           Color contact carrier         black           Coding         A           No. of poles         5           PIN 1         +           PIN 2         NC S 2           PIN 3         -           PIN 4         NO S 1	No. of poles	19
Color contact carrier         black           Coding         A           No. of poles         5           PIN 1         +           PIN 2         NC S 2           PIN 3         -           PIN 4         NO S 1	Family construction form	M12
Coding         A           No. of poles         5           PIN 1         +           PIN 2         NC S 2           PIN 3         -           PIN 4         NO S 1	Gender	female
No. of poles         5           PIN 1         +           PIN 2         NC S 2           PIN 3         -           PIN 4         NO S 1	Color contact carrier	black
PIN 1 + PIN 2 NC S 2 PIN 3 - PIN 4 NO S 1	Coding	A
PIN 2         NC S 2           PIN 3         -           PIN 4         NO S 1	No. of poles	5
PIN 3 - NO S 1	PIN 1	+
PIN 4 NO S 1	PIN 2	NC S 2
	PIN 3	-
PIN 5 PE	PIN 4	NO S 1
	PIN 5	PE