

stay connected

M12 male 0° D-cod. / RJ45 male 0° shielded

TPE 22AWG SF/UTP CAT5e gn UL/CSA. ITC/PLTC 3m

Art.No.: 7700-44711-S7V0300

Weight: 0.133 Country of origin: US

Model designation: MSRAL0-DA-TS7V 3.0-ZS

Ethernet CAT5

Plastic housings with good resistance against chemicals and oils.

Male straight - male straight

Transmission properties with channel transmission up to 100 m

M12 - RJ45, 4-pole

D-coded shielded USA

without cable sleeves

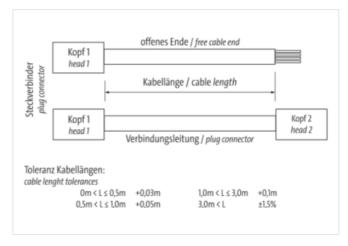
Protection cap

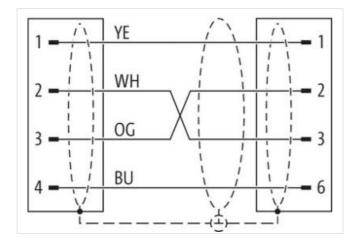
Further cable lengths on request.

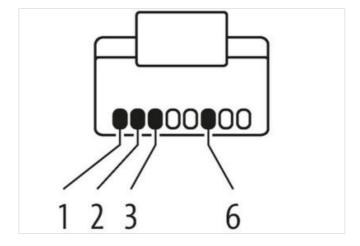
Link to Product

Illustration



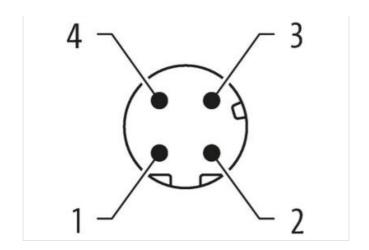


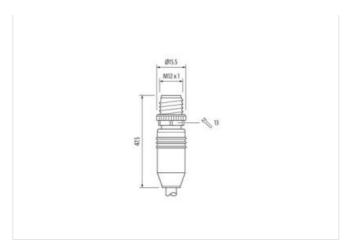


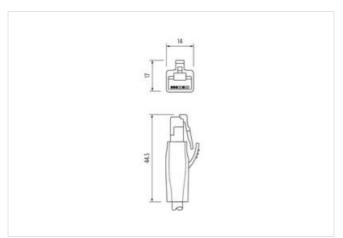




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Product may differ from Image













Cable length	3 m
Side 1	
Mounting method	inserted, screwed
Family construction form	M12
Thread	M12 x 1
Cable outlet	straight
Coding	D
No. of poles	4
Width across flats	SW13
Degree of protection (EN IEC 60529)	IP67
Side 2	
Mounting method	pluggable
Family construction form	RJ45
Cable outlet	straight
No. of poles	4
Degree of protection (EN IEC 60529)	IP20
Commercial data	



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ECLASS-6.0	27061801
	0700007
ECLASS-6.1	27060307
ECLASS-7.0	27060307
ECLASS-8.0	27060307
ECLASS-9.0	27060307
ECLASS-10.1	27060307
ECLASS-11.1	27060307
ECLASS-12.0	27060307
ETIM-5.0	EC002599
customs tariff number	85444290
customs tariff number	85444290
EAN	4048879668668
EAN	4048879668668
Packaging unit	1
Packaging unit	1
Electrical data Supply	
Operating voltage DC max.	60 V
Operating voltage DC (UL-listed)	30 V
Current operating per contact max.	1,5 A
Industrial communication	
	OATE OL - D (100/150 44004 0000) (EN 50470 4)
Transfer parameters	CAT5, Class D (ISO/IEC 11801:2002), (EN 50173-1)
Data transmission rate max.	100 MBit/s
Industrial communication Ethernet fund	ctionality
duplex	Full duplex
Device protection Electrical	
Pollution Degree	3
Rated surge voltage	1 kV
Material group (IEC 60664-1)	
Environmental characteristics Climatic	
Operating temperature min.	-25 °C
Operating temperature max.	85 °C
Additional condition temperature range	depending on cable quality
Important installation notes	
Note on strain relief	Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.
Note on bending radius	Attention: Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces.
Conformity	endangered by excessive bending forces.
Conformity Product standard	
Conformity	endangered by excessive bending forces.
Conformity Product standard	endangered by excessive bending forces.
Conformity Product standard Installation Cable	endangered by excessive bending forces. DIN EN 61076-2-101 (M12)
Conformity Product standard Installation Cable wire arrangement	endangered by excessive bending forces. DIN EN 61076-2-101 (M12) (white, blue), (orange, yellow)
Conformity Product standard Installation Cable wire arrangement Cable identification	endangered by excessive bending forces. DIN EN 61076-2-101 (M12) (white, blue), (orange, yellow) S7V
Conformity Product standard Installation Cable wire arrangement Cable identification Jacket Color	endangered by excessive bending forces. DIN EN 61076-2-101 (M12) (white, blue), (orange, yellow) S7V green
Conformity Product standard Installation Cable wire arrangement Cable identification Jacket Color Type of Certificate	endangered by excessive bending forces. DIN EN 61076-2-101 (M12) (white, blue), (orange, yellow) S7V green cURus
Conformity Product standard Installation Cable wire arrangement Cable identification Jacket Color Type of Certificate Amount stranding	endangered by excessive bending forces. DIN EN 61076-2-101 (M12) (white, blue), (orange, yellow) S7V green cURus 2
Conformity Product standard Installation Cable wire arrangement Cable identification Jacket Color Type of Certificate Amount stranding Stranding Amount stranding (type 2)	endangered by excessive bending forces. DIN EN 61076-2-101 (M12) (white, blue), (orange, yellow) S7V green cURus 2 2 wires twisted 1
Conformity Product standard Installation Cable wire arrangement Cable identification Jacket Color Type of Certificate Amount stranding Stranding Amount stranding (type 2) Stranding (type 2)	endangered by excessive bending forces. DIN EN 61076-2-101 (M12) (white, blue), (orange, yellow) S7V green cURus 2 2 wires twisted 1 2 Stranded joints twisted
Conformity Product standard Installation Cable wire arrangement Cable identification Jacket Color Type of Certificate Amount stranding Stranding Amount stranding (type 2) Stranding (type 2) Cable shielding (type)	endangered by excessive bending forces. DIN EN 61076-2-101 (M12) (white, blue), (orange, yellow) S7V green cURus 2 2 wires twisted 1 2 Stranded joints twisted copper braid, tinned
Conformity Product standard Installation Cable wire arrangement Cable identification Jacket Color Type of Certificate Amount stranding Stranding Amount stranding (type 2) Stranding (type 2)	endangered by excessive bending forces. DIN EN 61076-2-101 (M12) (white, blue), (orange, yellow) S7V green cURus 2 2 wires twisted 1 2 Stranded joints twisted

The information in this Product-PDF has been compiled with the utmost care. Liability for the correctness completeness and topicality of the information is restricted to gross negligence. Version: 2025-07-31

Torsion stress



TPE readom from ingracients (jacket) lead-free, CFC-free lead-free, CFC-free, lead-free, CFC-free, lead-free, CFC-free, lead-free, CFC-free, lead-free, CFC-free, lead-		
lead-free, CFC-free uter-diameter (jacket) 7,87 mm learance outer diameter (sheath) ± 5 % aterial wire insulation HDPE mount wires 4 uter diameter insulation 1,47 mm uter diameter rolerance core insulation lead-free, CFC-free mount swires 4 uter diameter tolerance core insulation lead-free, CFC-free mount swire insulation lead-free, CFC-free mount strands (wire) 19 lameter of single wires 22 AWG onductor crosssection (wire) 22 AWG onductor crosssection (wire) 22 AWG onductor diameter of single wires 000 V urrent load capacity (standard) to DIN VDE 0298-4 urrent load capacity min. wire 4,8 A lectrical resistance line constant wire 45,1 Ω/km in. operating temperature (static) -40 °C ax. operating temperature (fixed) berating temperature min. (dynamic) perating temperature min. 40 °C torage temperature max. 80 °C torage temperature max. 80 °C ame resistance EC 60332-2.2 UL 1581 § 1100 FT2 UL 1581 § 1090 Lending radius (dynamic) 8 × Outer diameter ending radius (dynamic) 8 × Outer diameter	Cable weigth	74,8 g/m
uter-diameter (jacket) 7,87 mm plerance outer diameter (sheath) ± 5 % aterial wire insulation HDPE mount wires 4 uter diameter insulation 1,47 mm uter diameter tolerance core insulation type diameter tolerance core insulation lead-free, CFC-free mount strands (wire) 19 siameter of single wires 22 AWG onductor crosssection (wire) 22 AWG aterial conductor wire copper stranded wire, tinned ominal voltage AC max. 600 V urrent load capacity (standard) to DIN VDE 0298-4 urrent load capacity (standard) to DIN VDE 0298-4 urrent load capacity min. wire 4,8 A lectrical resistance line constant wire in. operating temperature (static) -40 °C perating temperature min. (dynamic) sor C perating temperature max. 80 °C perating temperature max. 80 °C lorage temper	Material jacket	TPE
blerance outer diameter (sheath) ± 5 % aterial wire insulation HDPE mount wires 4 uter diameter insulation 1,47 mm uter diameter tolerance core insulation ± 5 % gredient freeness wire insulation lead-free, CFC-free mount strands (wire) 19 sameter of single wires 22 AWG onductor crosssection (wire) 22 AWG aterial conductor wire copper stranded wire, tinned ominal voltage AC max. 600 V urrent load capacity (standard) to DIN VDE 0298-4 urrent load capacity min. wire 4,8 A electrical resistance line constant wire 45,1 Ω/km in. operating temperature (static) 40 °C parating temperature (fixed) 80 °C perating temperature min. (dynamic) 40 °C torage temperature max. (dynamic) 80 °C torage temperature max. 80 °C ame resistance Good, application-related testing loin En 68011-404 ending radius (dynamic) 8 × Outer diameter ending radius (dynamic) 8 × Outer diameter ending radius (dynamic) 8 × Outer diameter	Freedom from ingredients (jacket)	lead-free, CFC-free
aterial wire insulation HDPE mount wires 4 uter diameter insulation 1,47 mm uter diameter folorance core insulation ± 5 % gredient freeness wire insulation lead-free, CFC-free mount strands (wire) 19 iameter of single wires 22 AWG onductor crosssection (wire) 22 AWG aterial conductor wire copper stranded wire, tinned ominal voltage AC max. 600 V urrent load capacity (standard) to DIN VDE 0298-4 urrent load capacity (standard) to DIN VDE 0298-4 urrent load capacity min. wire 4,8 A lead-free ax. operating temperature (static) -40 °C ax. operating temperature (fixed) 80 °C perating temperature min. (dynamic) 40 °C perating temperature max. (dynamic) 80 °C ame resistance IEC 60332-2-2 UL 1581 § 1100 FT2 UL 1581 § 1090 ending radius (dynamic) 8 × Outer diameter	Outer-diameter (jacket)	7,87 mm
wount wires 4 uter diameter insulation 1,47 mm uter diameter tolerance core insulation ± 5 % gredient freeness wire insulation lead-free, CFC-free mount strands (wire) 19 iameter of single wires 22 AWG onductor crosssection (wire) 22 AWG aterial conductor wire copper stranded wire, tinned ominal voltage AC max. 600 V urrent load capacity (standard) to DIN VDE 0298-4 urrent load capacity (standard) to DIN VDE 0298-4 urrent load capacity min. wire 4,8 A etertrical resistance line constant wire 45,1 Ω/km in. operating temperature (fixed) 80 °C perating temperature (fixed) 80 °C perating temperature max. (dynamic) 40 °C torage temperature max. (dynamic) 80 °C torage temperature max. 80 °C ame resistance IEC 60332-2-2 UL 1581 § 1100 FT2 UL 1581 § 1090 enemical resistance Good, application-related testing lonk En 60811-404 ending radius (dynamic) 8 x Outer diameter	Tolerance outer diameter (sheath)	±5%
uter diameter insulation 1,47 mm uter diameter tolerance core insulation ± 5 % gredient freeness wire insulation lead-free, CFC-free mount strands (wire) 19 sameter of single wires 22 AWG onductor crosssection (wire) 22 AWG anductor wire copper stranded wire, tinned ominal voltage AC max. 600 V urrent load capacity (standard) to DIN VDE 0298-4 urrent load capacity (standard) to DIN VDE 0298-4 urrent load capacity min. wire 4.8 A lectrical resistance line constant wire 45,1 Ω/km in. operating temperature (static) -40 °C ax. operating temperature (fixed) 80 °C perating temperature max. (dynamic) 80 °C perating temperature min40 °C lorage temperature min40 °C amer resistance IEC 60332-2-2 UL 1581 § 1100 FT2 UL 1581 § 1090 assistance Good, application-related testing DIN EN 60811-404 ending radius (dynamic) 8 x Outer diameter	Material wire insulation	HDPE
ter diameter tolerance core insulation gredient freeness wire insulation lead-free, CFC-free mount strands (wire) 19 simeter of single wires 22 AWG onductor crosssection (wire) 22 AWG aterial conductor wire copper stranded wire, tinned ominal voltage AC max. 600 V urrent load capacity (standard) to DIN VDE 0298-4 urrent load capacity min. wire 4,8 A setcrical resistance line constant wire 45,1 Ω/km in. operating temperature (static) 40 °C ax. operating temperature (fixed) 80 °C perating temperature max. (dynamic) 80 °C torage temperature max. (dynamic) 80 °C torage temperature max. 80 °C torage tem	Amount wires	4
gredient freeness wire insulation lead-free, CFC-free mount strands (wire) 19 iameter of single wires 22 AWG onductor crosssection (wire) 22 AWG aterial conductor wire copper stranded wire, tinned ominal voltage AC max. 600 V urrent load capacity (standard) to DIN VDE 0298-4 urrent load capacity (standard) to DIN VDE 0298-4 urrent load capacity min. wire 4,8 A lectrical resistance line constant wire 45,1 \(\Omega / \text{C} \) in. operating temperature (static) -40 °C ax. operating temperature (fixed) 80 °C perating temperature min. (dynamic) -40 °C torage temperature min40 °C torage temperature min40 °C ame resistance line constance line line line line line line line lin	Outer diameter insulation	1,47 mm
remount strands (wire) 19 riameter of single wires 22 AWG conductor crosssection (wire) 22 AWG atterial conductor wire copper stranded wire, tinned cominal voltage AC max. 600 V rurrent load capacity (standard) rurrent load capacity (standard) rurrent load capacity min. wire 4,8 A reterical resistance line constant wire 45,1 Ω/km rin. operating temperature (static) -40 °C ax. operating temperature (fixed) 80 °C perating temperature min. (dynamic) roage temperature max. (dynamic) roage temperature max. 80 °C rame resistance IEC 60332-2-2 UL 1581 § 1100 FT2 UL 1581 § 1090 remical resistance Good, application-related testing asoline resistance Good, application-related testing DIN EN 60811-404 ending radius (dynamic) 8 × Outer diameter	Outer diameter tolerance core insulation	±5%
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aterial conductor wire copper stranded wire, tinned cominal voltage AC max. 600 V current load capacity (standard) to DIN VDE 0298-4 current load capacity min. wire 4,8 A current load capacity min. wire 45,1 Ω/km current load capacity min. operating temperature (static) -40 °C current load capacity min. diversity current load capacity min. operating temperature fixed) 80 °C current load capacity min. (dynamic) 40 °C current load capacity max. (dynamic) 80 °C current load capacity min. 40 °C curr	Diameter of single wires	22 AWG
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turrent load capacity (standard) to DIN VDE 0298-4 urrent load capacity min. wire 4,8 A lectrical resistance line constant wire 45,1 Ω/km in. operating temperature (static) -40 °C ax. operating temperature (fixed) 80 °C perating temperature min. (dynamic) -40 °C perating temperature max. (dynamic) 80 °C torage temperature min40 °C torage temperature min40 °C torage temperature max. 80 °C ame resistance IEC 60332-2-2 UL 1581 § 1100 FT2 UL 1581 § 1090 memical resistance Good, application-related testing asoline resistance Good, application-related testing DIN EN 60811-404 ending radius (dynamic) 8 x Outer diameter	Material conductor wire	copper stranded wire, tinned
urrent load capacity min. wire 4,8 A lectrical resistance line constant wire 45,1 Ω/km in. operating temperature (static) -40 °C ax. operating temperature (fixed) 80 °C perating temperature min. (dynamic) -40 °C perating temperature max. (dynamic) 80 °C torage temperature min40 °C torage temperature max. 80 °C ame resistance IEC 60332-2-2 UL 1581 § 1100 FT2 UL 1581 § 1090 nemical resistance Good, application-related testing asoline resistance Good, application-related testing In En 60811-404 ending radius (dynamic) 8 x Outer diameter	Nominal voltage AC max.	600 V
lectrical resistance line constant wire 45,1 Ω/km in. operating temperature (static) -40 °C ax. operating temperature (fixed) 80 °C perating temperature min. (dynamic) -40 °C perating temperature max. (dynamic) 80 °C torage temperature min40 °C torage temperature max. 80 °C ame resistance IEC 60332-2-2 UL 1581 § 1100 FT2 UL 1581 § 1090 nemical resistance Good, application-related testing asoline resistance Good, application-related testing il resistance Good, application-related testing DIN EN 60811-404 ending radius (dynamic) 8 x Outer diameter	Current load capacity (standard)	to DIN VDE 0298-4
in. operating temperature (static) -40 °C ax. operating temperature (fixed) perating temperature min. (dynamic) -40 °C perating temperature max. (dynamic) 80 °C torage temperature min. -40 °C torage temperature max. 80 °C ame resistance IEC 60332-2-2 UL 1581 § 1100 FT2 UL 1581 § 1090 nemical resistance Good, application-related testing asoline resistance Good, application-related testing if resistance Good, application-related testing DIN EN 60811-404 ending radius (dynamic) 8 x Outer diameter	Current load capacity min. wire	4,8 A
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nemical resistance Good, application-related testing asoline resistance Good, application-related testing il resistance Good, application-related testing DIN EN 60811-404 ending radius (dynamic) 8 x Outer diameter	Storage temperature max.	80 °C
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il resistance Good, application-related testing DIN EN 60811-404 ending radius (dynamic) 8 x Outer diameter	chemical resistance	Good, application-related testing
ending radius (dynamic) 8 x Outer diameter	Gasoline resistance	Good, application-related testing
	Oil resistance	Good, application-related testing DIN EN 60811-404
o. of bending cycles (C-track) 35 Mio.	Bending radius (dynamic)	8 x Outer diameter
	No. of bending cycles (C-track)	35 Mio.
o. of torsion cycles 5 Mio.	No. of torsion cycles	5 Mio.

± 180 °/m