

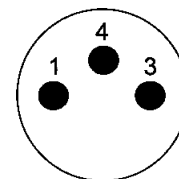
M8 HARAX[®] cable connector



Specifications IEC 60 352-4

Approval 

Mating face



A-coding
Mating face
acc. to IEC 61 076-2-101



Technical characteristics M8 HARAX[®]

Type M8	HARAX [®] M8-XS	HARAX [®] M8-S
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General data

Conductor cross section	0.1 - 0.14 mm ² AWG 27-26	0.14 - 0.34 mm ² AWG 26-22
Diameter of individual strands	≥ 0.05 mm	≥ 0.1 mm
Conductor insulation material	PVC / PP / TPE	PVC / PP / TPE
Conductor diameter	0.6 - 1.0 mm	1.0 - 1.6 mm
Cable diameter	1.9 - 2.5 mm 2.5 - 3.5 mm	2.5 - 5.1 mm
Temperature range	-40 °C ... +85 °C	-40 °C ... +85 °C
Temperature during connection	-5 °C ... +50 °C	-5 °C ... +50 °C
Degree of protection	IP67	IP67
Mating cycles	100	100
Recommended tightening torque / Hexagonal wrench	0.4 Nm / SW 9	0.4 Nm / SW 9

Electrical characteristics

Rated current	2 A	4 A
Rated voltage	32 V	32 V
Rated impulse voltage	1.5 kV	1.5 kV
Contact resistance	10 mΩ	10 mΩ
Insulation resistance	10 ⁸ Ω	10 ⁸ Ω
Pollution degree	3	3
Overvoltage category	3	3
Isolation group	1	1

Materials

Contact material	Copper alloy	Copper alloy
Contact plating	Gold	Gold
Contact carrier material	PA	PA
Housing material	PA, zinc die-cast	PA, zinc die-cast

Technical characteristics – System cables

M8 Circular connectors, without PE

Rated voltage	max. 60 V AC/DC
Rated current / contact	max. 4 A
Locking	Screw locking M8x1, self securing
Recommended torque	0.4 Nm
Temperature range	-25 °C ... +85 °C (dependant on connected conductor)
Degree of protection	IP67
Number of wires / wire gauge	3 x 0.25 mm ²
Conductor insulation	PP (bn, bu, bk)
Arrangement of insulated strands	32 x 0.1 mm
Sheath	PUR (UL, CSA)
Outer diameter	appr. 4.2 - 5.5 mm
Bending radius	10 x outer diameter
Temperature range (working and storage)	-5 °C ... + 80 °C

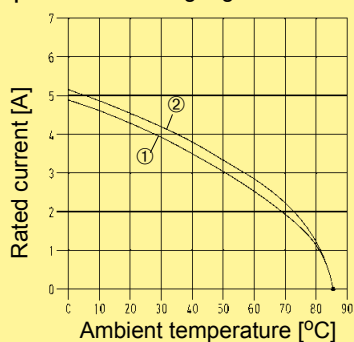
02

Technical characteristics M8

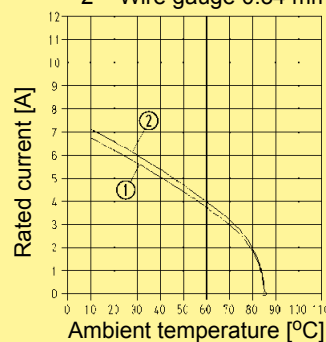
Current carrying capacity The current carrying capacity is limited by maximum temperature of materials for inserts and contacts including terminals. The current capacity-curve is valid for continuous, not interruptet current-loaded contacts of connectors when simultaneous power on all contacts is given, without exceeding the maximum temperature.

Control and test procedures according to DIN IEC 60 512-5.

M8-XS, 3 poles 1 = Wire gauge 0.1 mm²
M8-S, 3 poles 2 = Wire gauge 0.14 mm²

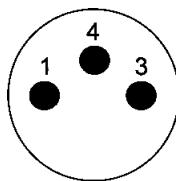


M8-S, 4 poles 1 = Wire gauge 0.25 mm²
2 = Wire gauge 0.34 mm²





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acc. to IEC 61076-2-101



02

Applications / Advantages

- Actor and sensor applications
- Unshielded versions
- HARAX® rapid termination
- Overmoulded system cables in various lengths
- Robust design, quick assembly

Identification

Part No.

Drawing

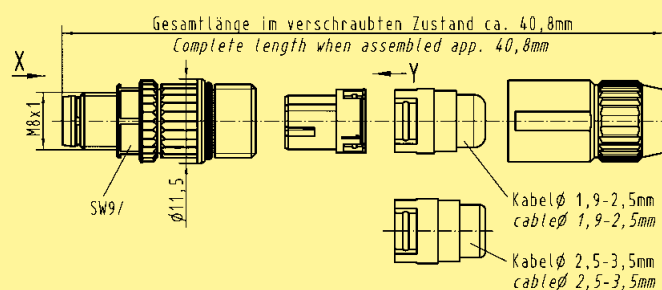
Dimensions in mm

HARAX® M8-XS



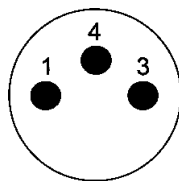
Male
straight version, 3 poles
for 0.1 - 0.14 mm²

21 02 159 1305





Mating face



A-coding
Mating face
acc. to IEC 61076-2-101



Identification

Part No.

Drawing

Dimensions in mm

HARAX® M8-S



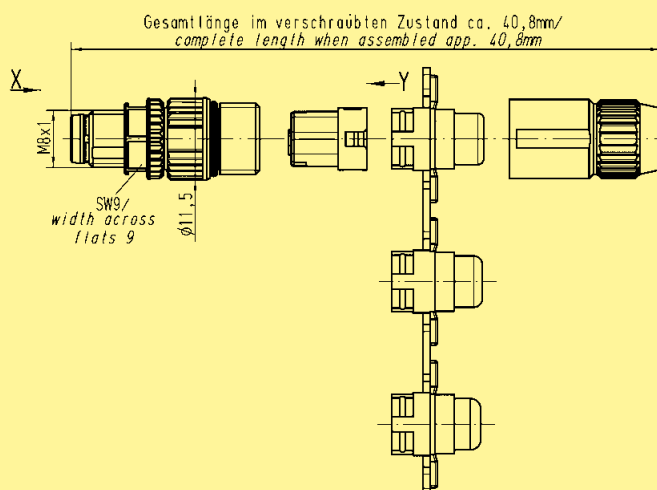
Male
straight version, 3 poles
for 0.14 - 0.34 mm²

21 02 151 1305



Male
straight version, 4 poles
for 0.14 - 0.34 mm²

21 02 151 1405



View mating side:
3 poles, male

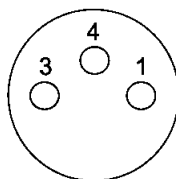


View mating side:
4 poles, male





Mating face



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Mating face
acc. to IEC 61076-2-101



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Identification

Part No.

Drawing

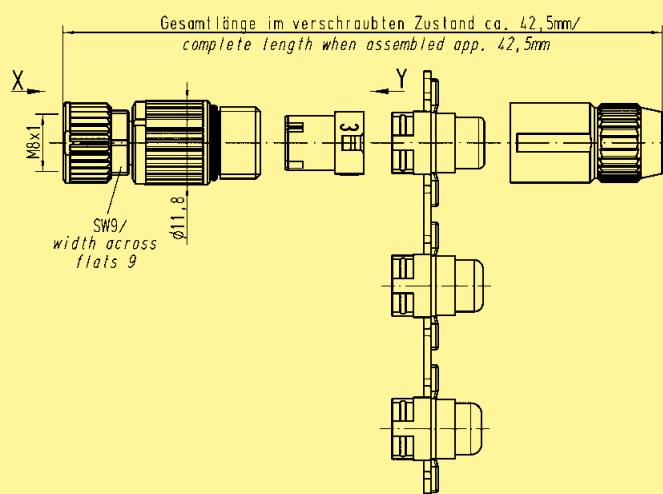
Dimensions in mm

HARAX® M8-S



Female
straight version, 3 poles
for 0.14 - 0.34 mm²

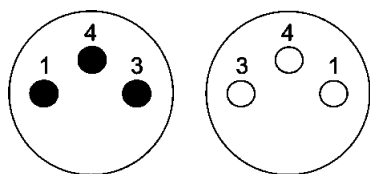
21 02 151 2305



Female
straight version, 4 poles
for 0.14 - 0.34 mm²

21 02 151 2405

Mating face



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Mating face
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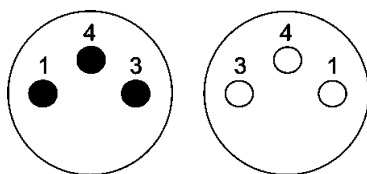
02

Technical characteristics

M8 Circular connector, without PE

Rated voltage	max. 60 V AC/DC
Rated current/contact	max. 4 A
Locking	Screw locking M8x1, self securing
Recommended torque	0.4 Nm
Temperature range (dependant on connected conductor)	-25 °C ... +85 °C
Degree of protection	IP67
Number of wires / wire gauge	3 x 0.25 mm ²
Conductor insulation	PP (br, bl, sw)
Arrangement of insulated strands	32 x 0.1 mm
Sheath	PUR (UL, CSA)
Outer diameter	appr. 4.2 - 5.5 mm
Bending radius	10 x outer diameter
Temperature range (working and storage)	-5 °C ... + 80 °C

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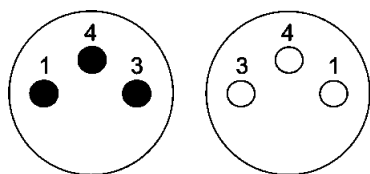
Overview system cables M8

Number of contacts		Male M8 straight		Female M8 angled	
		 Cable material PUR		 Cable material PUR	
Female M8 angled		0.3 m	21 02 454 5301	xxx	
		0.6 m	21 02 454 5302	xxx	
		1.0 m	21 02 454 5303	xxx	
		1.5 m	21 02 454 5304	xxx	
		2.0 m	21 02 454 5305	xxx	
		0.3 m	21 02 454 7301 with LED	xxx	
		0.6 m	21 02 454 7302 with LED	xxx	
		1.0 m	21 02 454 7303 with LED	xxx	
		1.5 m	21 02 454 7304 with LED	xxx	
		2.0 m	21 02 454 7305 with LED	xxx	
Open end		xxx		1.5 m	21 02 554 4301
		xxx		3.0 m	21 02 554 4302
		xxx		5.0 m	21 02 554 4303
		xxx		7.5 m	21 02 554 4304
		xxx		10.0 m	21 02 554 4305
		xxx		1.5 m	21 02 554 7301 with LED
		xxx		3.0 m	21 02 554 7302 with LED
		xxx		5.0 m	21 02 554 7303 with LED
		xxx		7.5 m	21 02 554 7304 with LED
		xxx		10.0 m	21 02 554 7305 with LED

M8 System cables



Mating face



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Part No.

Drawing

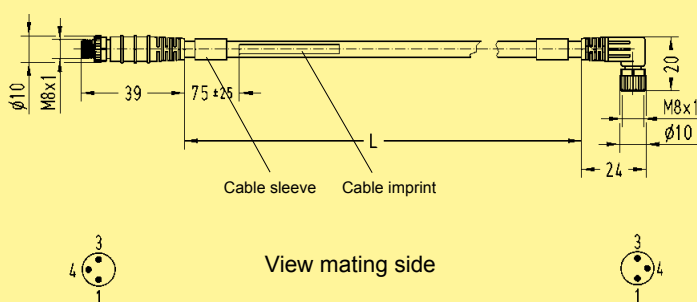
Dimensions in mm

M8 Circular connectors

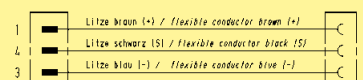
Female angled, male straight

Length: 0.3 m
0.6 m
1.0 m
1.5 m
2.0 m

21 02 454 5301
21 02 454 5302
21 02 454 5303
21 02 454 5304
21 02 454 5305



Schematic diagram

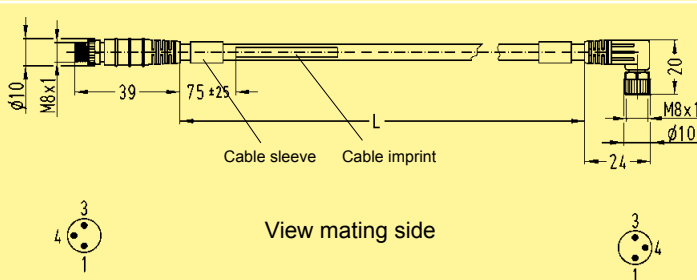


M8 Circular connectors

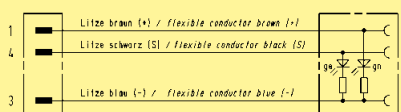
Female angled, with LED
Male straight

Length: 0.3 m
0.6 m
1.0 m
1.5 m
2.0 m

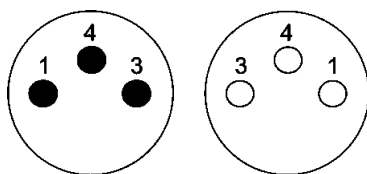
21 02 454 7301
21 02 454 7302
21 02 454 7303
21 02 454 7304
21 02 454 7305



Schematic diagram



Mating face



A-coding
Mating face
acc. to IEC 61076-2-101



02

Identification

Part No.

Drawing

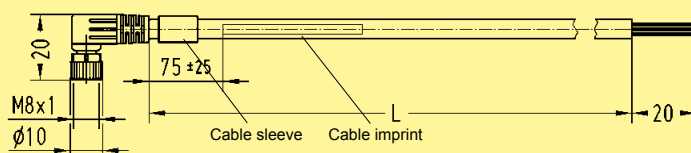
Dimensions in mm

M8 Circular connectors

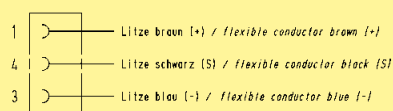
Female angled
pre-assembled on one end

Length: 1.5 m
3.0 m
5.0 m
7.5 m
10.0 m

21 02 554 4301
21 02 554 4302
21 02 554 4303
21 02 554 4304
21 02 554 4305



Schematic diagram



View mating side

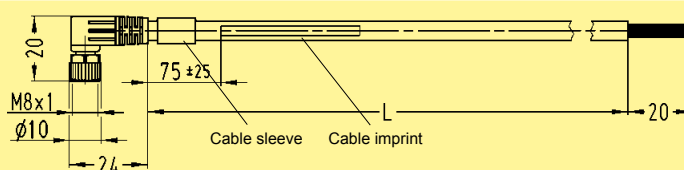


M8 Circular connectors

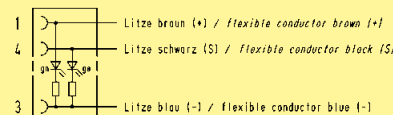
Female angled, with LED
pre-assembled on one end

Length: 1.5 m
3.0 m
5.0 m
7.5 m
10.0 m

21 02 554 7301
21 02 554 7302
21 02 554 7303
21 02 554 7304
21 02 554 7305



Schematic diagram



View mating side



Identification

Part No.

Drawing

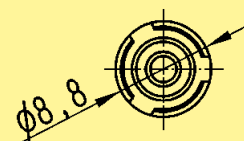
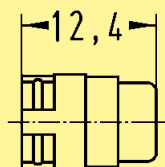
Dimensions in mm

Seal M8

for 1.9 - 2.5 mm cable Ø
for 2.5 - 3.5 mm cable Ø
for 4.2 - 5.4 mm cable Ø



21 01 010 2016
21 01 010 2008
21 01 010 2005

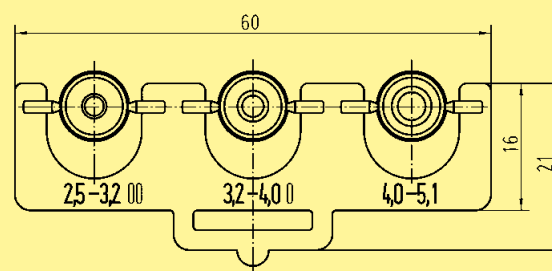


Set of seals for HARAX® M8-S

for 2.5 - 3.2 mm cable Ø
for 3.2 - 4.0 mm cable Ø
for 4.0 - 5.1 mm cable Ø



21 01 010 2013



M8 dynamometric screwdriver

Tightening torque 0.4 Nm

SW 9

09 99 000 0380

