



har-bus® HM power female connector



General information

Design	OBSAI system specification V1.1	
No. of contacts	up to 4	
Contact spacing	3,0mm	
Test voltage	1500V AC	
Contact resistance	max. 1mOhm	
Insulation resistance	min. 10 ¹⁰ Ohm	
Working current	max. 23A at 70°C (with OBSAI configuration)	max. 20A at 70°C (fully loaded with power contacts)
Temperature range	-55°C ... +125°C	
Termination technology	press-in	
Clearance & creepage distance	0,6 mm each for free connector	
Insertion and withdrawal force	insertion force per contact: 4 N max.	withdrawal force per contact: 0,5 N min.
Mating cycles	- PL2 acc. to IEC 61076-4-101 =>	250 mating cycles
UL file	E102079	
RoHS - compliant	Yes	
Leadfree	Yes	

Insulator material

Material	PBT (thermoplastics, glass fiber reinforcement 30%)
Colour	RAL 7032 (grey)
UL classification	UL 94-V0
Material group acc. to IEC 60664-1	IIIa (175 ≤ CTI < 400)
NFF classification	I3, F4

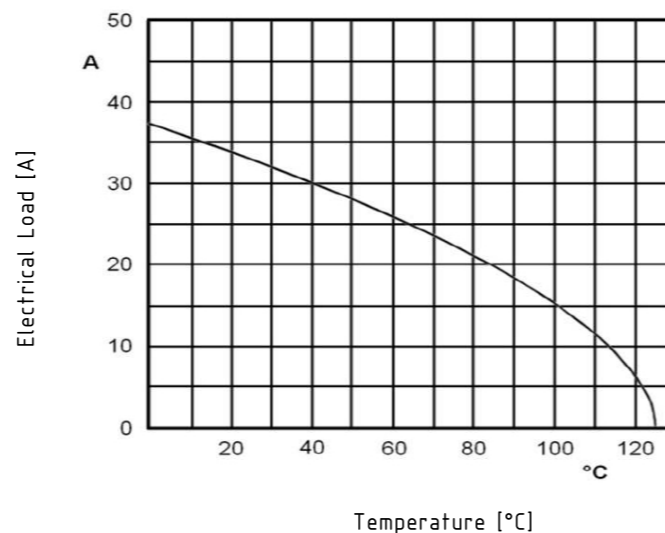
Contact material

Contact material	Copper alloy
Plating press-in zone	Ni
Plating contact zone	Au over Ni

Derating diagram acc. to IEC 60512-5 (Current carrying capacity)

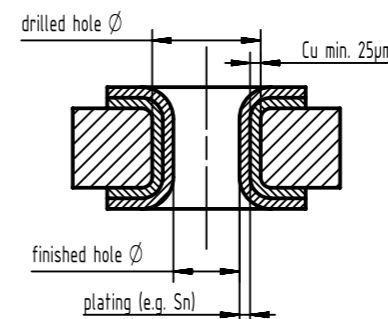
Loaded with four power contacts, each contact can carry up to 20A @ 70°C / 80% derating.

With a configuration of two power contacts, GND and ENA, the current carrying capacity is even up to 23A @ 70°C / 80% derating per contact.



Recommended configuration of plated through holes for press-in termination

In addition to the hot-air-level (HAL), other PCB surfaces are getting more important. Due to their different properties - such as mechanical strength and coefficient of friction - we recommend the following configuration of PCB through holes.



PCB Type	Plating	Drilled hole Ø	Plated hole Ø
Tin plated PCB (HAL) acc. to EN 60352-5	Sn	1,15±0,025 mm	max. 15 µm
			0,94 - 1,09 mm
Chemical tin plated PCB	Sn	1,15±0,025 mm	min. 0,8µm
			1,00 - 1,10 mm
Gold /Nickel plated PCB	Ni	1,15±0,025 mm	3 - 7 µm
	Au		0,05 - 0,12 µm
			1,00 - 1,10 mm
Silver plated PCB	Ag	1,15±0,025 mm	0,1 - 0,3 µm
			1,00 - 1,10 mm
Copper plated PCB (OSP)		1,15±0,025 mm	
			1,00 - 1,10 mm

Assembly instructions

To press in correctly, use a flat upper tool, e.g. HARTING-tool 07790000156. The lower tool can be a customer manufactured loadnest.

	All Dimensions in mm Original Size DIN A3	Scale 1:1	Free size tol.	Ref.
	All rights reserved Department EL PD	Created by STORCK	Inspected by LEHNERT	Standardisation HOFFMANN
	HARTING Electronics GmbH D-32339 Espelkamp	Title har-bus® HM power female connector		Date 2019-06-26
		Type DS	Number 17662100101	State Final Release
				Doc-Key / ECM-Nr. 100580931/UGD/000/C 500000154196
				Rev. C Page 1/1

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Hard Metric Connectors](#) category:

Click to view products by [HARTING](#) manufacturer:

Other Similar products are found below :

[6345127-1](#) [646916-9](#) [6469658-1](#) [973108](#) [1-2000713-0](#) [1-2000713-2](#) [1-2000713-3](#) [120646-1](#) [1645343-1](#) [1645456-1](#) [1645594-1](#) [1645595-1](#)
[1645601-1](#) [1934822-1](#) [278071110010833](#) [1645179-1](#) [1645245-1](#) [1645457-1](#) [1645525-1](#) [1645570-1](#) [1645596-1](#) [17041102202](#) [17-8072-125-](#)
[000-863+](#) [1857470-1](#) [1934275-1](#) [1934289-1](#) [1934759-1](#) [2000673-1](#) [2170292-2](#) [2-536642-6](#) [3-106015-1](#) [352188-1](#) [352629-1](#) [3-646529-0](#)
[5120823-1](#) [5120899-1](#) [3-100145-0](#) [3-100147-0](#) [3-100669-1](#) [3-106081-0](#) [HM2DK2368PLF](#) [5646530-1](#) [3-352049-0](#) [3-352069-0](#) [3-352115-0](#)
[3-352638-0](#) [352189-1](#) [3-646357-0](#) [3-646487-0](#) [3-646513-0](#)