



# har-flexicon 2.54 PCB male connector, horizontal



## General information

Design	PCB male connector, horizontal	
No. of contacts	2-12 pole	
Contact pitch	2,54 mm	
Test voltage	2,5 kV	
Rated voltage	160 V	overvoltage category III / pollution degree 2
Contact resistance	max. 20mOhm	
Insulation resistance	min. 10 <sup>9</sup> Ohm	
Working current	7.3 A at 70°C ( tested with AWG20, see derating diagram)	
Temperature range	-40°C ... +125°C	
Termination technology	SMT	
Reflow processing temperature	20s at 255°C	
Clearance & creepage distance	Clearance: 1,5 mm	Creepage: 1,6 mm
Insertion force	max. 5 N per contact	
Withdrawal force	min. 1 N per contact	
Mating cycles	10 cycles	
Hot plugging	No	
vibration	5-150Hz, 0,35mm, 5g, 2h each axis	
RoHS - compliant	Yes	
UL file	E 102079	

## Insulator material

Material	LCP (liquid crystalline polymer, glass fiber reinforcement 30%)
Color	black, white
UL classification	UL 94-V0
Material group acc. IEC 60664-1	IIIa (175 < CTI < 400)
NFF classification	-

## Contact material

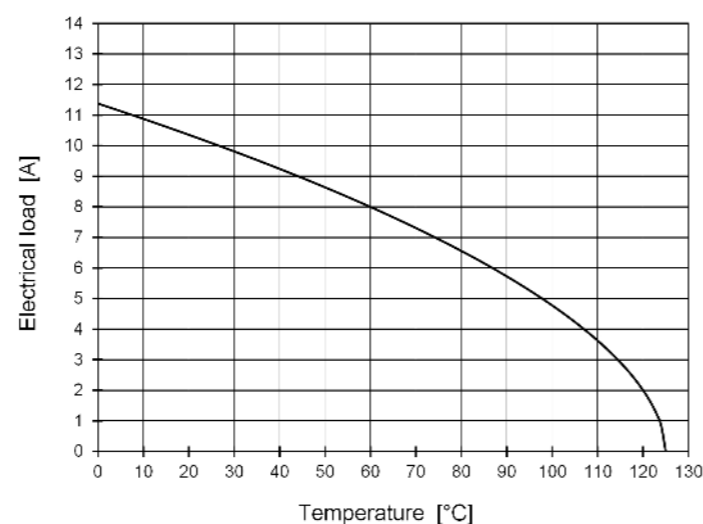
Contact material	Copper alloy
Plating termination zone	Sn over Ni
Plating contact zone	Sn over Ni

## Derating diagram acc. to IEC 60512-5-2 (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, non interrupted 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 60512-5-2

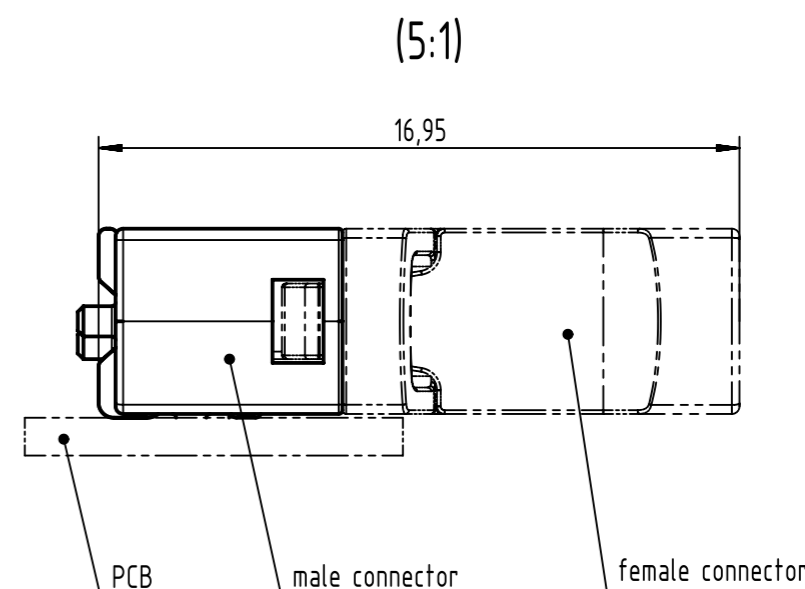


tested with AWG20

## Coplanarity of contacts

All connectors are tested for coplanarity of contacts and are in the range of 2-pole to 12-pole: 0,1mm max.

## Application information



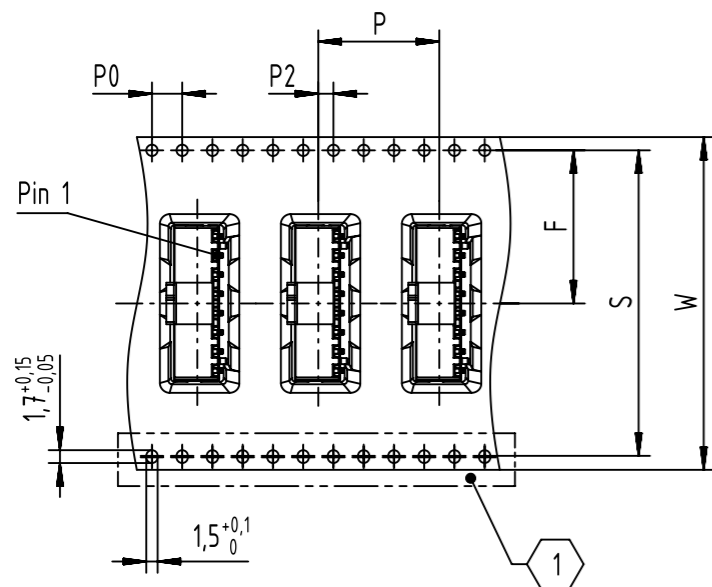
	All rights reserved	Created by	Inspected by	Standardisation	Date	State
	Department EC PD - CN	ZHUANGJ	LUOK	HOFFMANN	2018-05-17	Final Release
HARTING Electronics GmbH		Title				Doc-Key / ECM-Nr.
D-32339 Espelkamp		har-flexicon 2.54 male connector horizontal				100549863/UGD/001/F 500000135281
		Type	Number	Rev.	Page	
		DS	14111300301	F	1/2	



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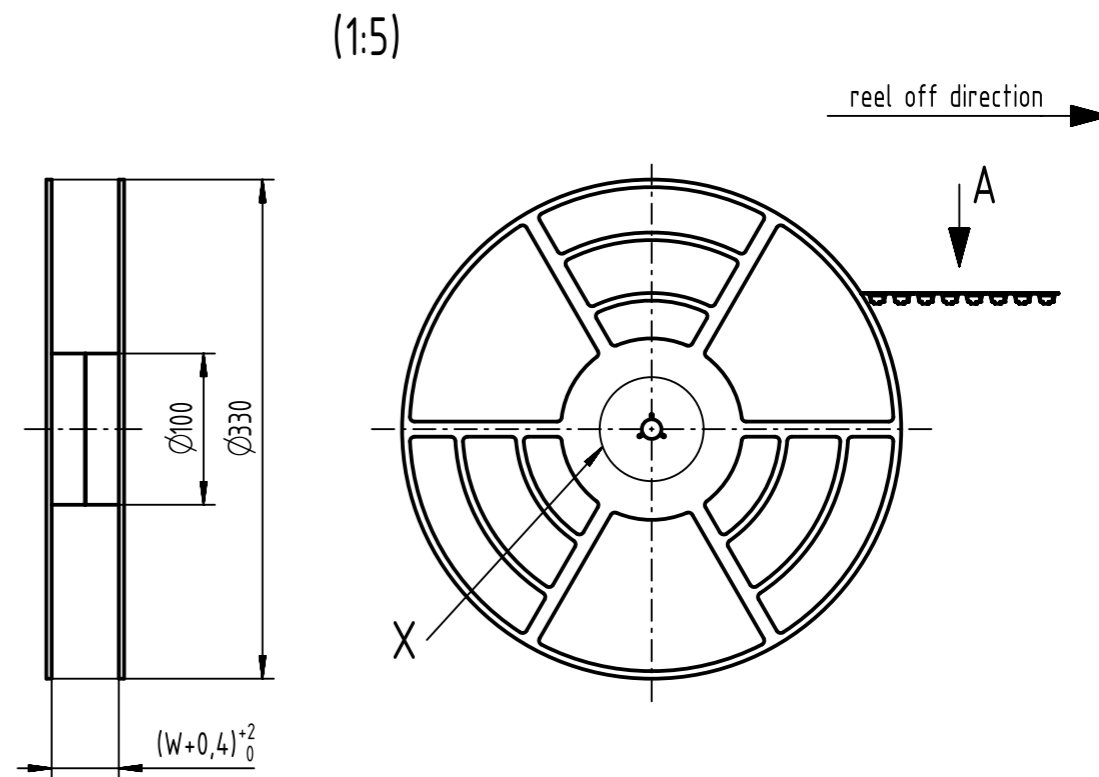
## Packaging & tape layout



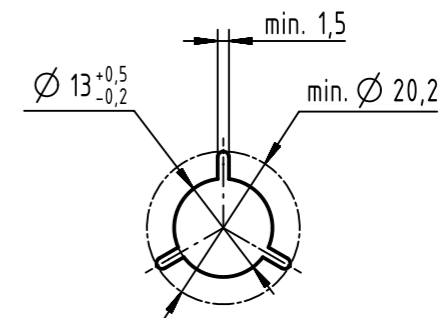
pole	W [mm]	F [mm]	S [mm]	P2 [mm]	P [mm]	P0 [mm]
2	24,0 <sup>+0,3</sup> / <sub>-0,1</sub>	11,5 ± 0,1		2,0 ± 0,1	16,0 ± 0,1	4,0 ± 0,1
3						
4	32,0 ± 0,3	14,2 ± 0,1	28,4 ± 0,1	2,0 ± 0,1	16,0 ± 0,1	4,0 ± 0,1
5						
6						
7						
8	44,0 ± 0,3	20,2 ± 0,1	40,4 ± 0,1	2,0 ± 0,15	16,0 ± 0,1	4,0 ± 0,1
9						
10						
11	56,0 ± 0,3	26,2 ± 0,1	52,4 ± 0,1	2,0 ± 0,15	16,0 ± 0,1	4,0 ± 0,1
12						

① no double sprocket holes for 2- and 3-pole numbers

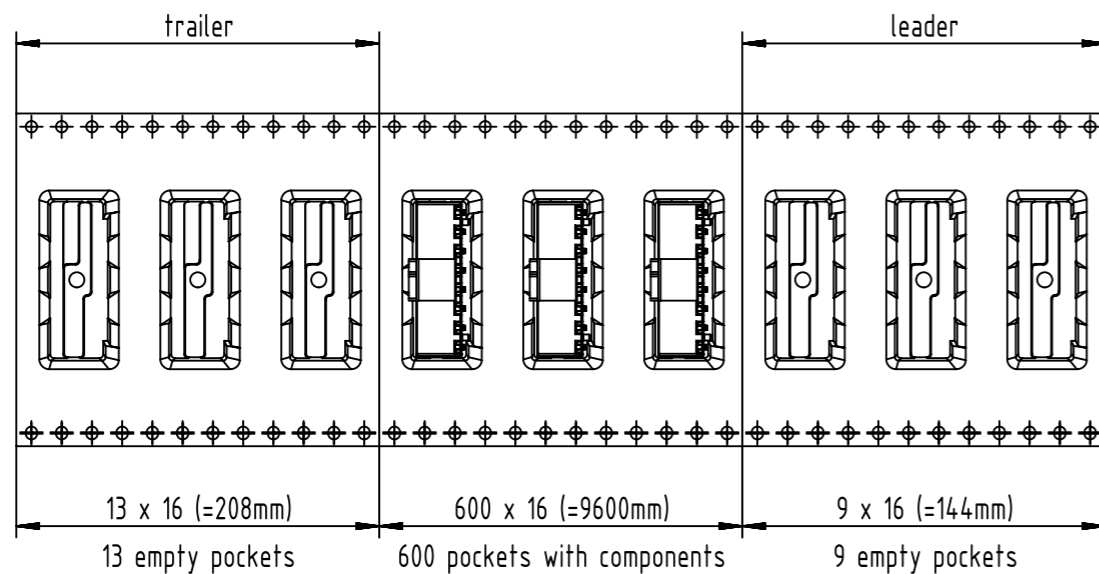
## Packaging & tape layout



X (1:1)



A



Packaging	Index	
	black	white
tape and reel with 600 pcs per reel	000	160
tape with 1 pcs	333	334

part-number 1411 XX 130 YY XXX

102 with guiding pins  
10 w/o guiding pins

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HARTING Electronics GmbH D-32339 Espelkamp		Type DS	Number 14111300301		Rev. F	Page 2/2