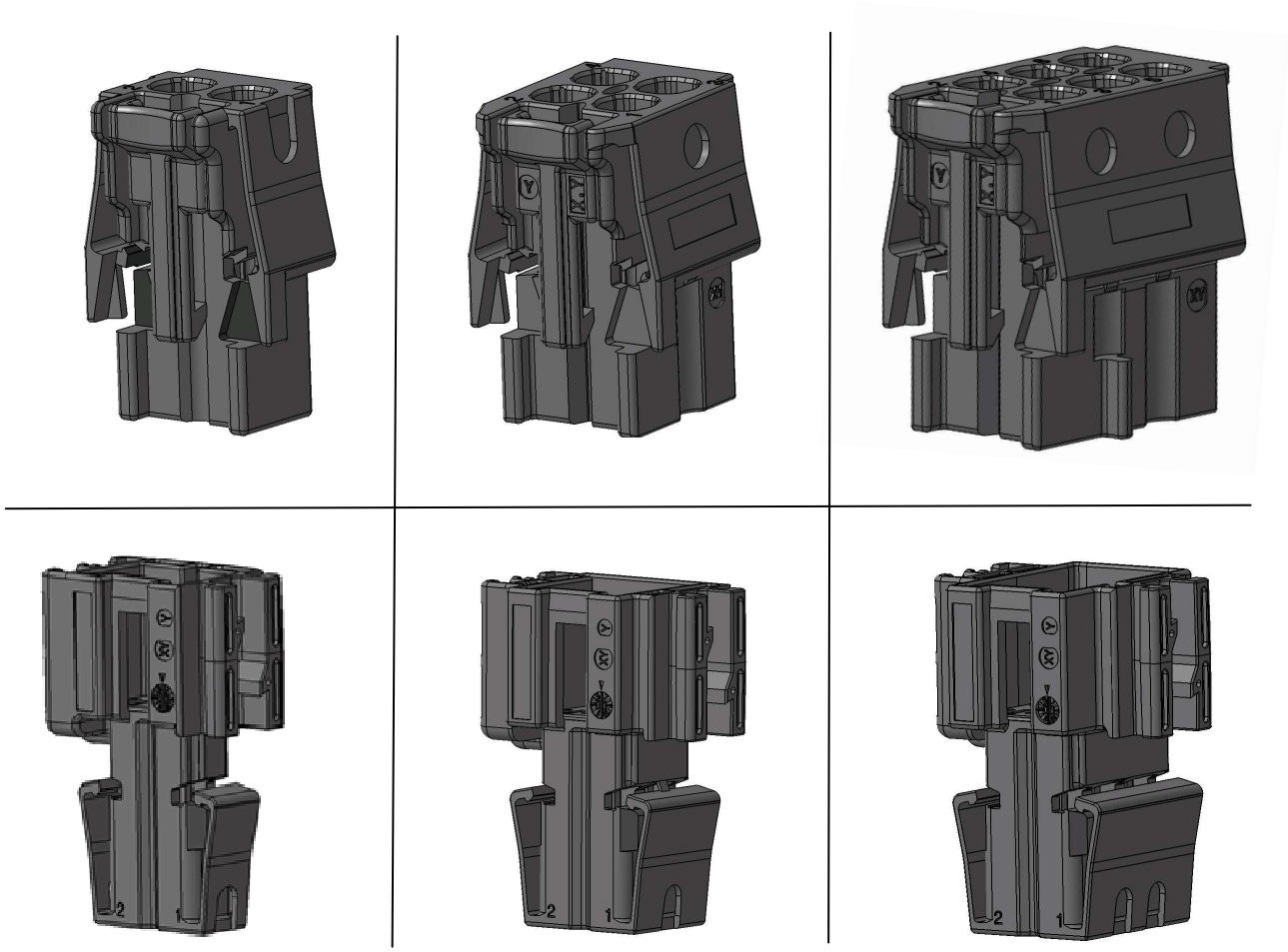
2way to 6way 2.8 EasyConn
F and M Connector



Index

1. General information

1.1 Introduction

This product specification is valid for 2way to 6way 2.8 EasyConn F and M Connectors and describes their properties, executed tests and requirements.

In case of doubt, this specification has priority over the following documents.

The documents named below, provided that reference is made to them, are part of this specification. In the event of a contradiction between this specification and the product drawing or a contradiction between this specification and the documents listed, this specification takes precedence. In the event of discrepancies, the German text applies.

In case of inappropriate use deviating from this specification and the applicable documents and resulting quality problems, the right of recourse will be rejected.
Detailed test reports are not published but can be inspected on site.

Product-specific deviations can be found in the respective DVP overview!

1.2 Applicable documents

a)	Processing specification EVS-100095-00	2way to 6way 2.8 EasyConn F and M Connectors
b)	Test specification EPH-100017-00	Company Hirschmann Test Specification Electrical Connector Systems
c)	Product specification 108-18513 / 108-18063	Company Tyco Electronics AMP MCP 2.8 Contact System / Flachstecker 2,8x0,8mm
d)	Processing specification 114-18148 / 114-18051	Company Tyco Electronics AMP MCP 2.8 Contact System / Flachstecker 2,8mm
e)	TB Terminal C-1355036	Company Tyco Electronics AMP MCP 2.8
f)	TB Flat plug terminal C-1355052	Company Tyco Electronics TAB 2.8x0.8mm
g)	Deutsche Norm DIN EN 60352-2	Solder free electrical connection part 2: crimp connection
h)	DIN EN 60512	Connectors for electronic equipment- Tests and measurements

2. Technical characteristic

2.1 Operating temperature

Temperature range.
For contacts, see product specification of contact systems

Permissible temperature range for the plastic used:
-40°C to +130°C over a period of 3000h

2.2 Retention force of the contact parts in the connector housing

The contact removal forces from the male / female housing are

$F_{primary}$	≥	80N
$F_{secondary}$	≥	80N

2.3 Mounting and demounting forces

Max. insertion force of the housing into unit connection / male connector

2way to 6way:	F	≤	75N

Max. withdrawal force of the housing from the connection / male connector

2way to 6way	F	≤	75N

Min. retention force of the housing out of unit connection / male connector (one sided locking mechanism):

2way:	F	≥	80N
4way to 6way:	F	≥	100N

2.4 Error-proof design of the connectors

Min. keying and polarizing efficiency (depending on the number of pins and keying) F > 80N

2.5 Characteristic of contact System

max. permitted conductor cross section:	$4,0mm^2$		
max. permitted conductor diameter:	see released contact drawing		
max. terminal insertion force:	F		≤30N

2.6 Material

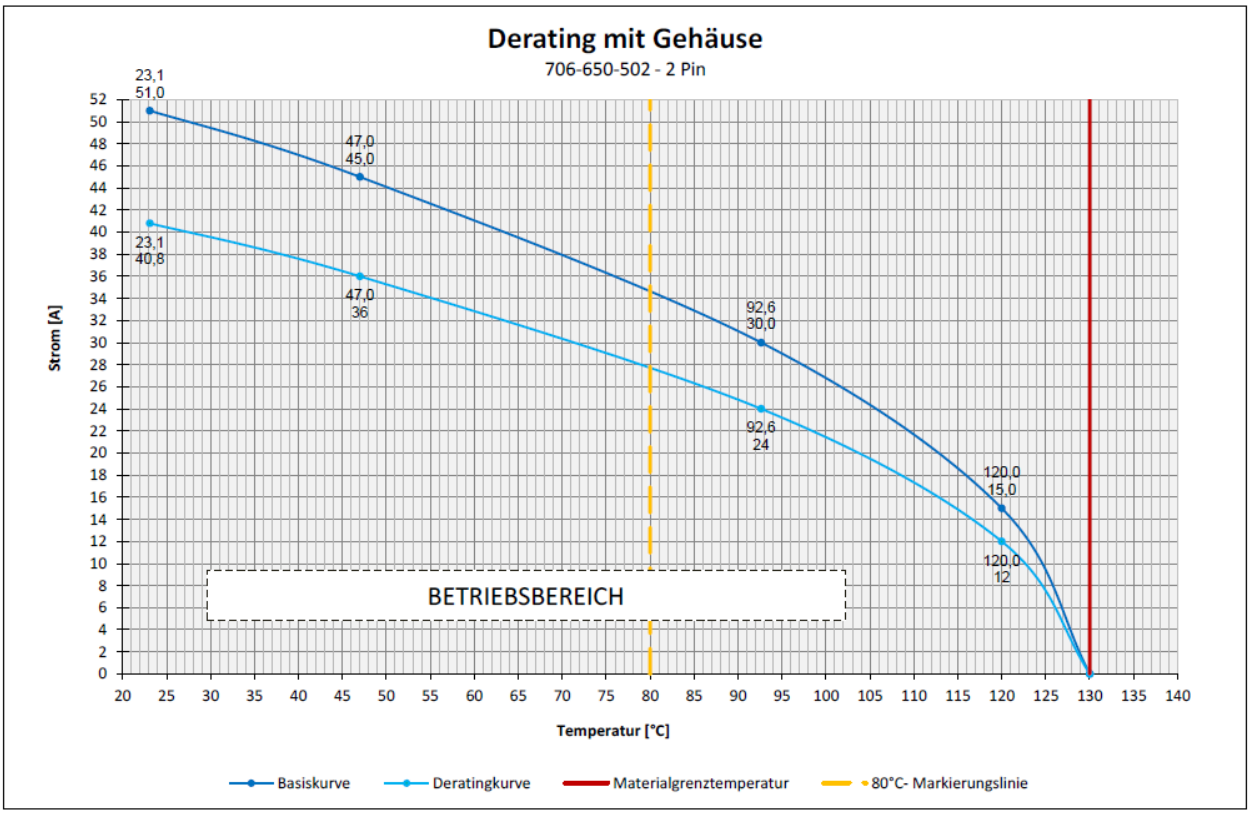
Information of this can be found on the customer drawings.

2.7 Electrical characteristic

Determination of the maximum housing influence from derating by simultaneous energization of all neighboring contacts.

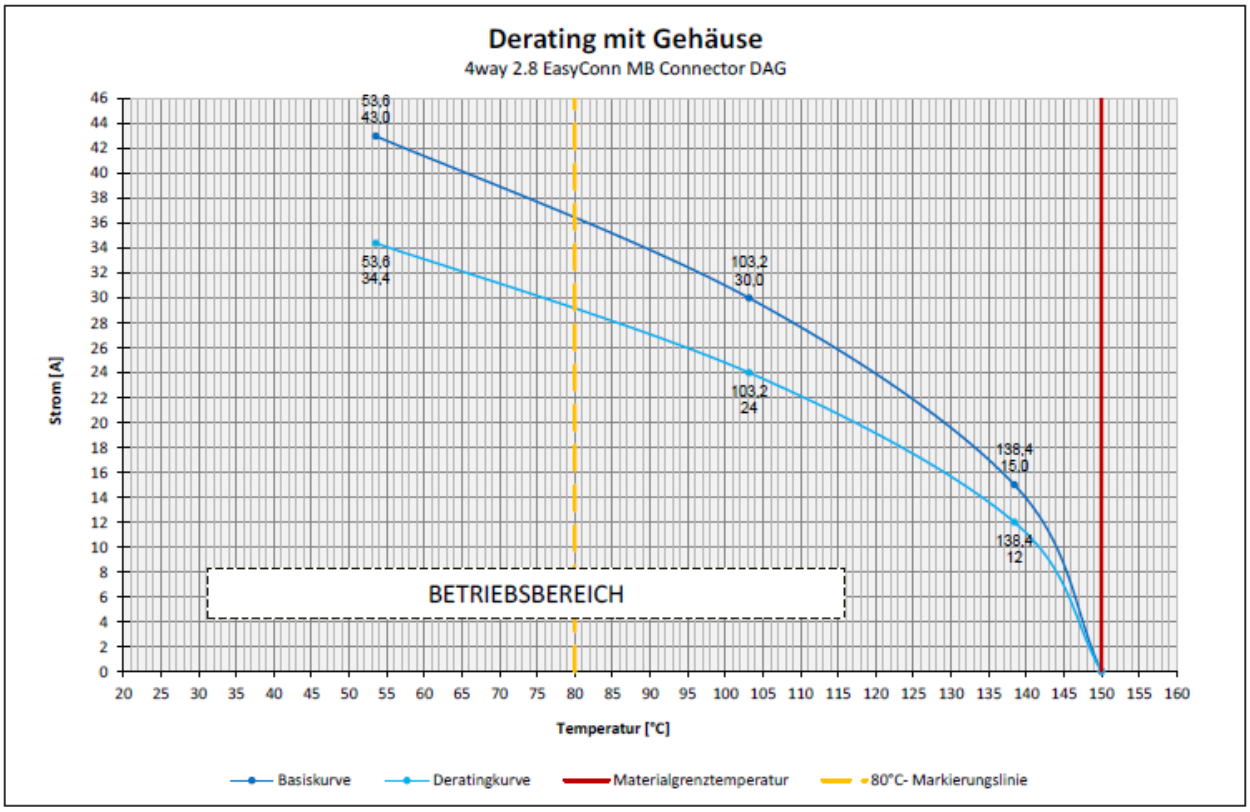
2.7.1 2way 2.8 EasyConn Female and Male Connector

Contact surface: Sn
Wire surface: 4,00 mm^2



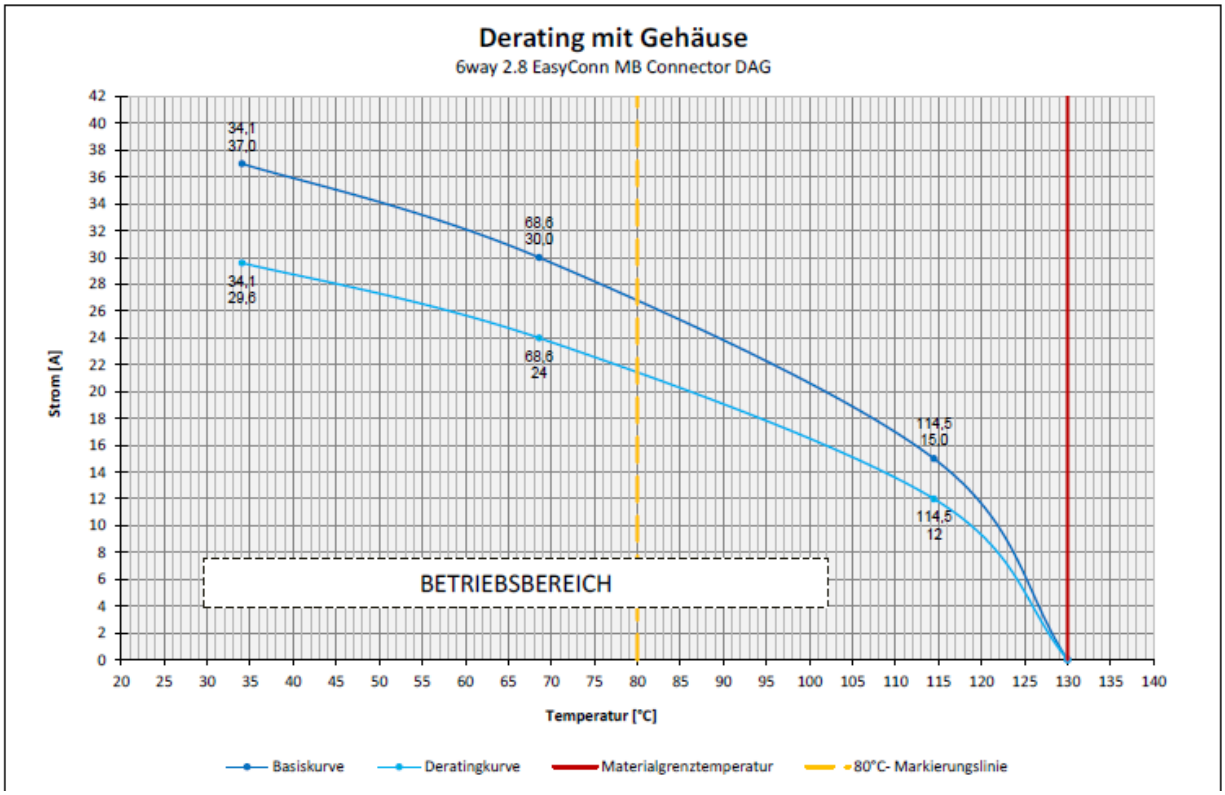
2.7.2 4way 2.8 EasyConn Female and Male Connector

Contact surface: Sn
Wire surface: 4,00 mm^2



2.7.3 6way 2.8 EasyConn Female and Male Connector

Contact surface: Sn
Wire surface: 4,00 mm^2



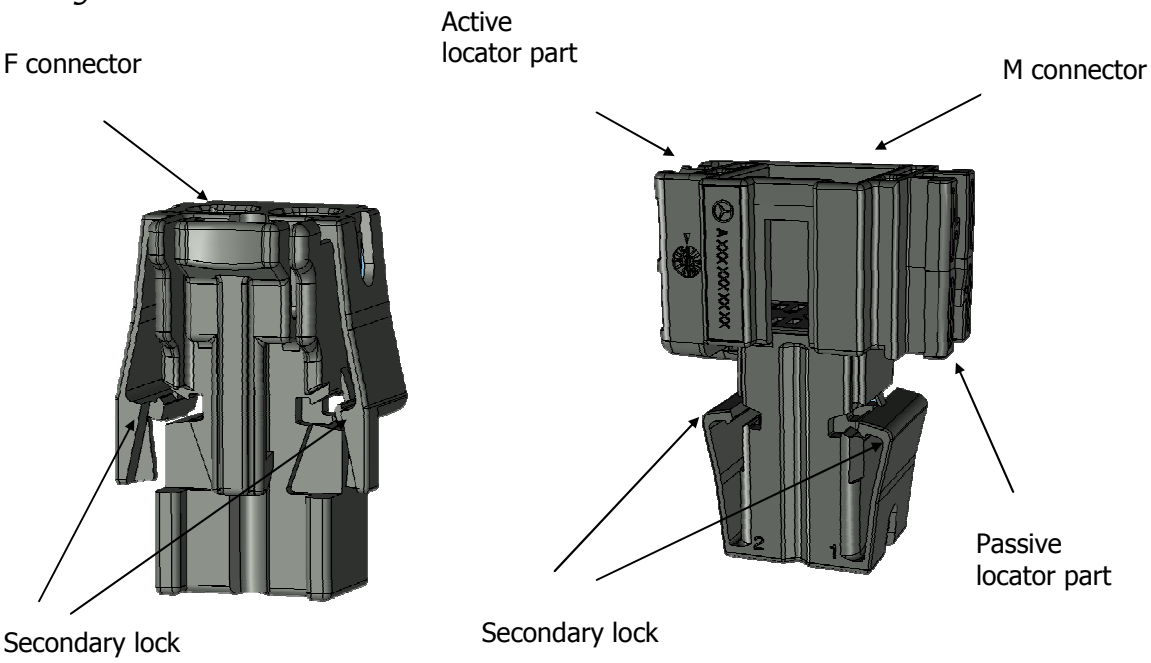
3. Delivery condition / product components

The female and male connectors consist of a housing with molded active secondary lock.

Both connectors are delivered with open secondary lock. In case the secondary lock has been partially or fully closed during transportation, it should be reopened before the contacts are inserted. How to open the secondary latch, see processing specification EVS-100095-00 section 4.2.

The male connectors optionally have active and / or passive connection elements. The variants available in each case can be found on the customer drawing.

symbol image



4. Performed test matrix

4.1 2.8 EasyConn Female Connector

Test		Number of poles		
		2	**4**	**6**
PG 0	Inspection of as-received condition	X	X	X
PG 1	Dimensional inspection	X	X	X
PG 3	Material- and surface analysis	X	X	X
PG 4	Contact engagement length	X		X
PG 6	Interation between contact and housing	X	X	X
PG 7	Handling and functional reliability of the housing	X	X	X
PG 8	Insert and retention forces of the contact parts in the housing	X	X	X
PG 9	Koshiri- Safety	X	X	X
PG13	Housing influence on the Derating	X		X
PG17	Vibration (Severity = S)	S1	S1	S1
PG20	Climate load of the housing	X	X	X
PG21	Long-term temperature aging	X	X	X
PG22 A	Chemical resistance	X	X	X
PG28	Locking noise	X	X	X

4.2 2.8 EasyConn Male Connector

Test		Number of poles		
		2	**4**	**6**
PG 0	Inspection of as-received condition	X	X	X
PG 1	Dimensional inspection	X	X	X
PG 3	Material- and surface analysis	X	X	X
PG 4	Contact engagement length	X		X
PG 6	Interation between contact and housing	X	X	X
PG 7	Handling and functional reliability of the housing	X	X	X
PG 8	Insert and retention forces of the contact parts in the housing	X	X	X
PG 9	Koshiri- Safety	X	X	X
PG13	Housing influence on the Derating	X	X	X
PG17	Vibration (Severity = S)	S1	S1	S1
PG20	Climate load of the housing	X	X	X
PG21	Long-term temperature aging	X	X	X
PG22 A	Chemical resistance	X	X	X
PG28	Locking noise	X	X	X

5. Revision table

Revision	Alteration	Editor
00	First edition	J. Neußl