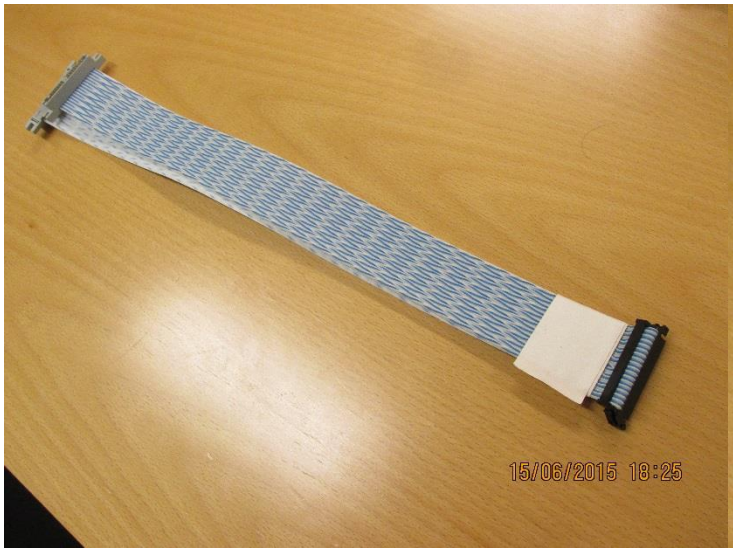
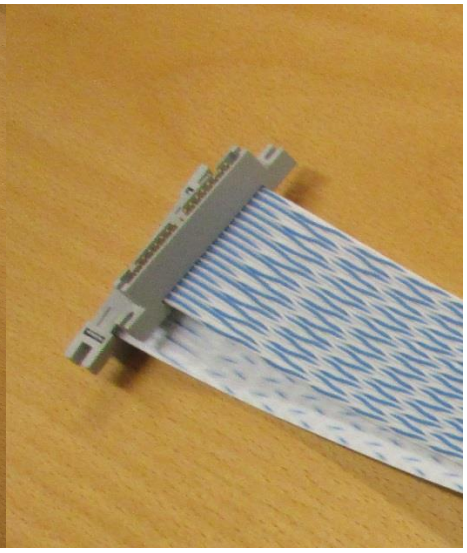
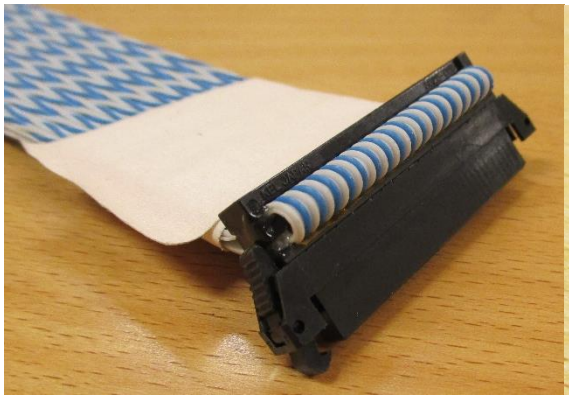
TDC cable adapter as made for the Cosmic stand in 904 QC3

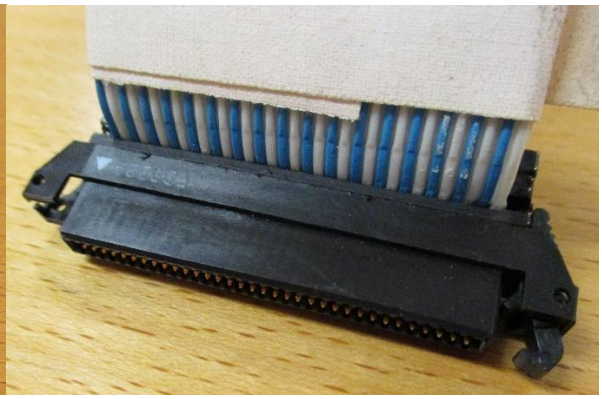
3M x2 IDC 34c male connectors, 1 continuous twitsed flat cable 3M & 1 68pin Robinsen Nugent (ref; P50E-068S).

Available from CAEN; http://www.caen.it/csite/CaenProd.jsp?parent=52&idmod=412

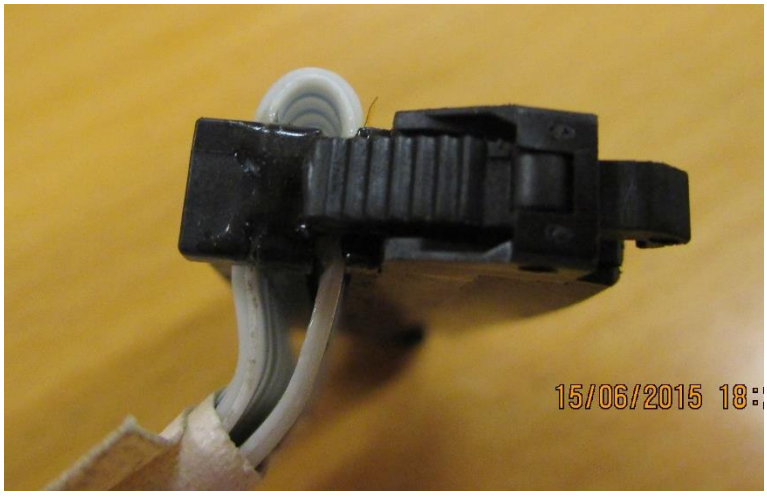


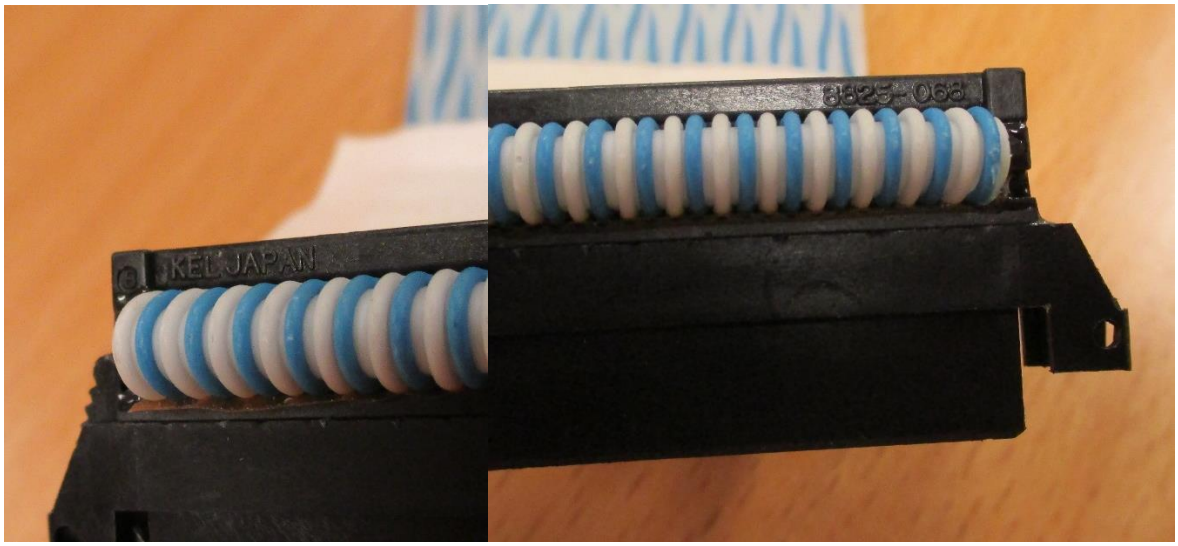






Continuous cable loop !





You can read “ KEL Japan” and “ 8825-068”

http://multimedia.3m.com/mws/media/441604O/3mtm-interconnect-mating-table.pdf

Page 41 of 45 or page 48 in pdf doc.

3M ref

P50E-068S-EA

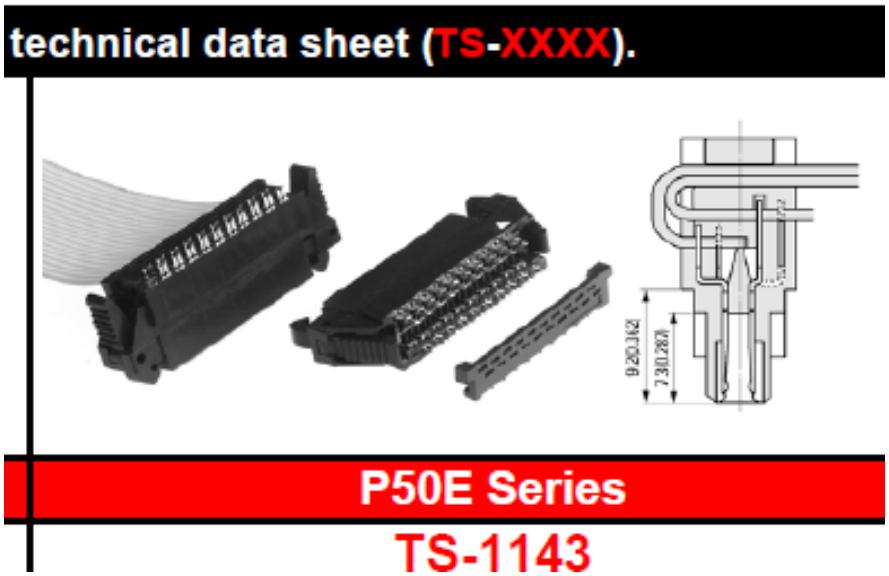
TS 1143

3M Part-Number was 80-0009-0484-9

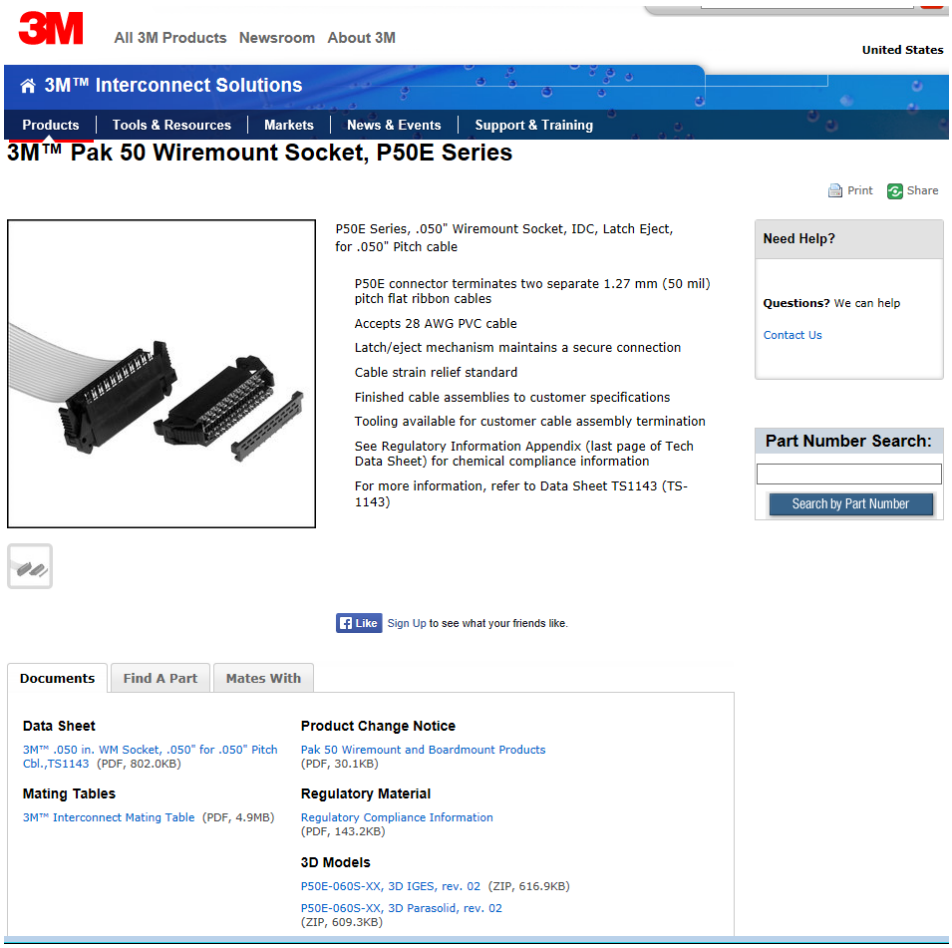
3M™ Pak 50 Wiremount-to-Boardmount Connectors

Note: All connector options and ordering information may be obtained from the technical data sheet (TS-XXXX).		
		
P50E Series	**P25E Series**	**P50E Series**
TS-1144	**TS-1141**	**TS-1143**
Vertical and Right Angle Boardmount Plug	**Mating Wiremount Socket**	
S1 = Straight, without Retention Clip **SR1 = Right Angle, without Retention Clip** **RR1 = Right Angle, with Rentention Clip**	**One single 30 AWG stranded cable is needed to terminate this connector.**	**Two 28 AWG stranded cables are needed to terminate this connector.**
(each version mates to both Socket Options)	**.025" Pitch Flat Cable**	**.050" Pitch Flat Cable**
P50E-020P1-S1-XXX P50E-020P1-SR1-XXX P50E-020P1-RR1-XXX	P25E-020S-XX	P50E-020S-XX
Positions: 20, 30, 32, 40, 50, 60, 68, 80, 100	**Positions:** 20, 30, 32, 40, 50, 60, 68, 80, 100	**Positions:** 20, 30, 32, 40, 50, 60, 68, 80, 100

This appears to be the wide version, is it the latest release that is easier to assemble. ?



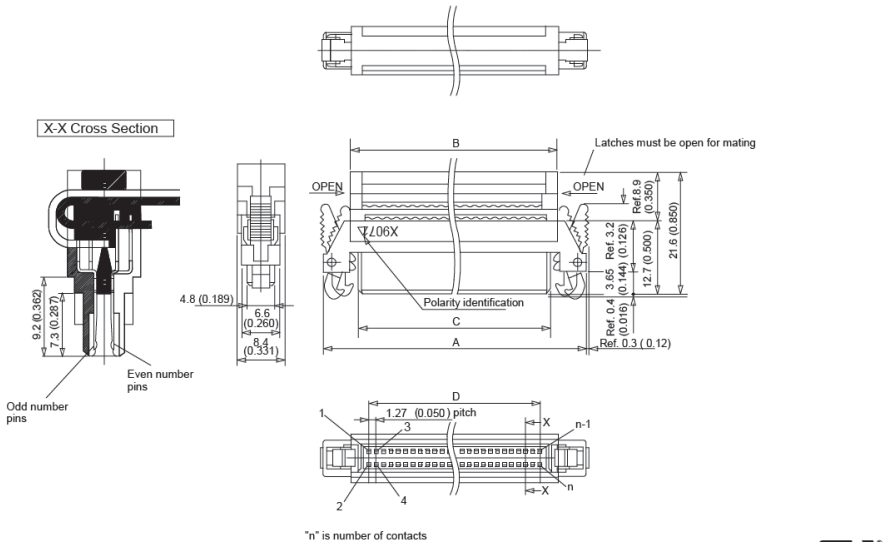
http://solutions.3m.com/wps/portal/3M/en_US/Interconnect/Home/Products/ProductCat?N=4890+3293471877&rt=rud



http://multimedia.3m.com/mws/media/218537O/3mtm-050-in-wm-socket-050-for-050-pitch-cbl-ts1143.pdf

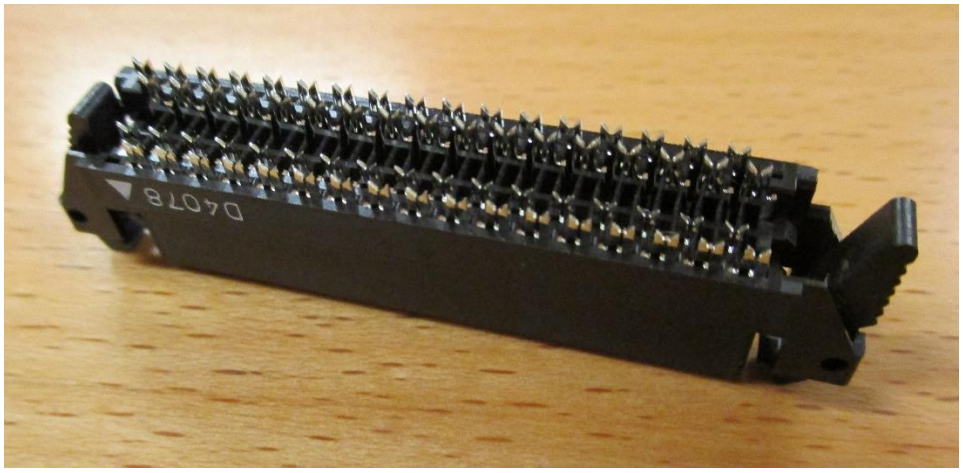
32	35.45 (1.396)	25.45 (1.002)	23.05 (0.907)	19.05 (0.750)
34	36.72 (1.446)	26.72 (1.052)	24.32 (0.957)	20.32 (0.800)
36	37.99 (1.496)	27.99 (1.102)	25.59 (1.007)	21.59 (0.850)
40	40.53 (1.596)	30.53 (1.202)	28.13 (1.107)	24.13 (0.950)

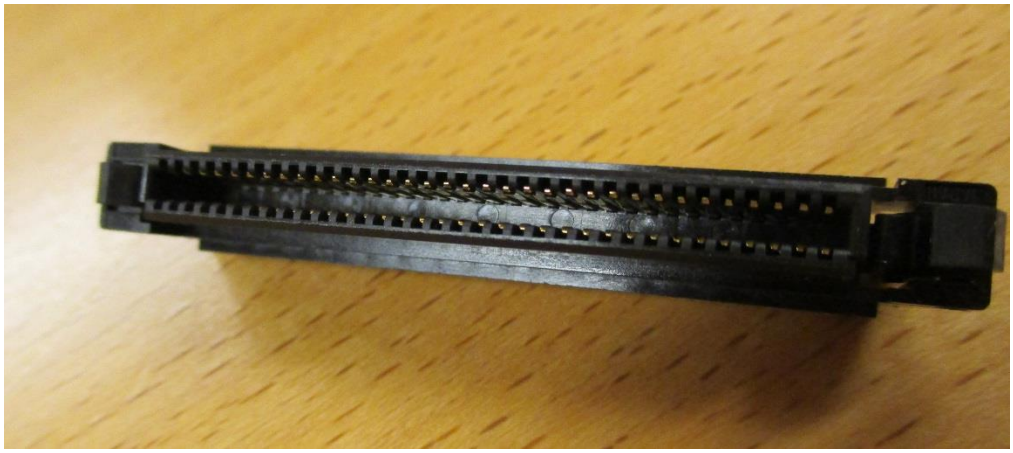
68	58.31 (2.296)	48.31 (1.902)	45.91 (1.807)	41.91 (1.650)
80	65.93 (2.596)	55.93 (2.202)	53.53 (2.107)	49.53 (1.950)
100	78.63 (3.096)	68.63 (2.702)	66.23 (2.607)	62.23 (2.450)

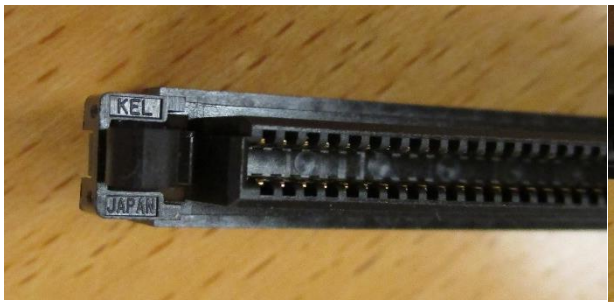


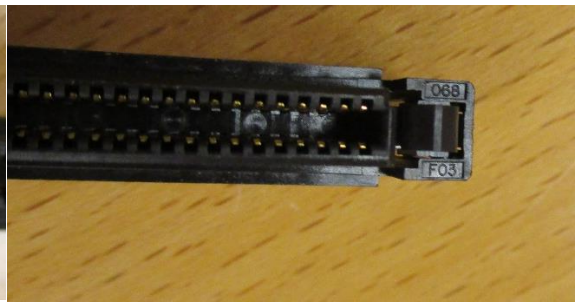
KEL Corporation supplies this;

Which is thicker than the one used in the cable above !

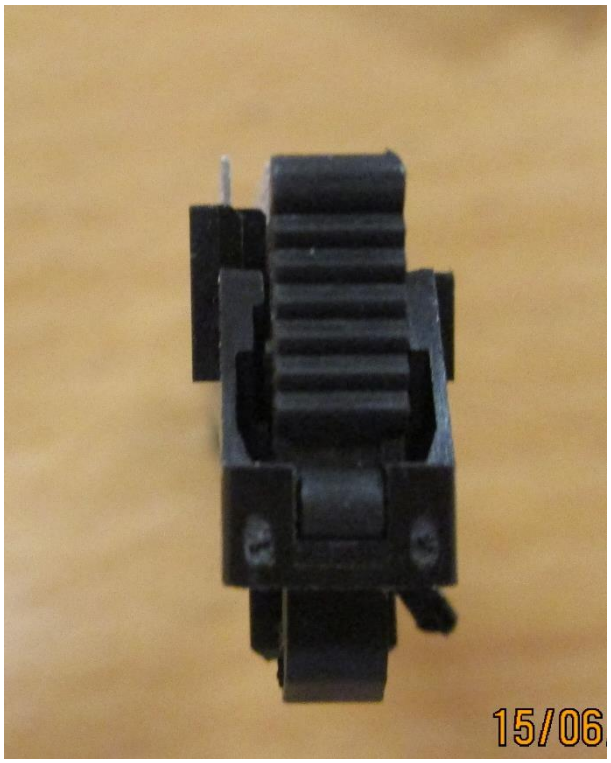








You can read “KEL Japan” and “068 F03”



CAEN Data Sheet

http://www.caen.it/csite/CaenProd.jsp?parent=52&idmod=412

C.A.E.N. S.p.A.
Head office and laboratories: Via Vetraia, 11 – I 55049 VIAREGGIO (ITALY)
Phone: +39-0584-388398 Fax: +39-0584-388959
E-mail: info.nuclear@caen.it URL: http://www.caen.it

DATA SHEET

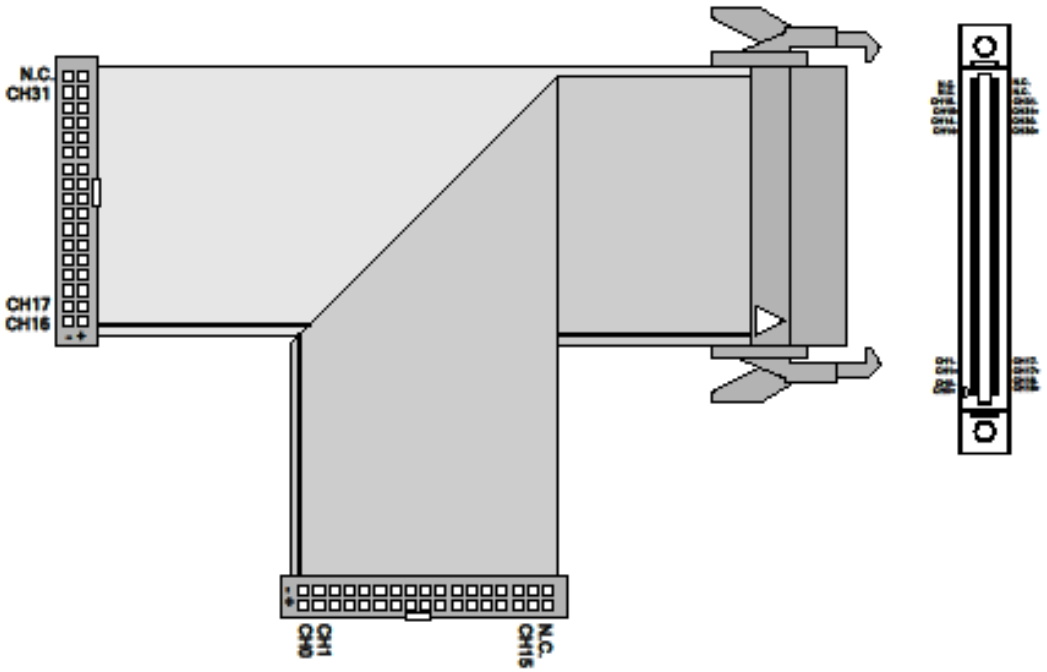
A967 Adapter for P50E – 068S 68 Pin Connectors

Overview

The Mod. A967 allows to adapt one 3M – P50E – 068S (Robinson Nugent 68pin type) high density flat connector (such as those used on V862, V767A, V767, V1190A/B, VX1190A/B, V1495 and others) into two 17+17-pin Header-type male connectors with locks through two 25 cm long flat cables.

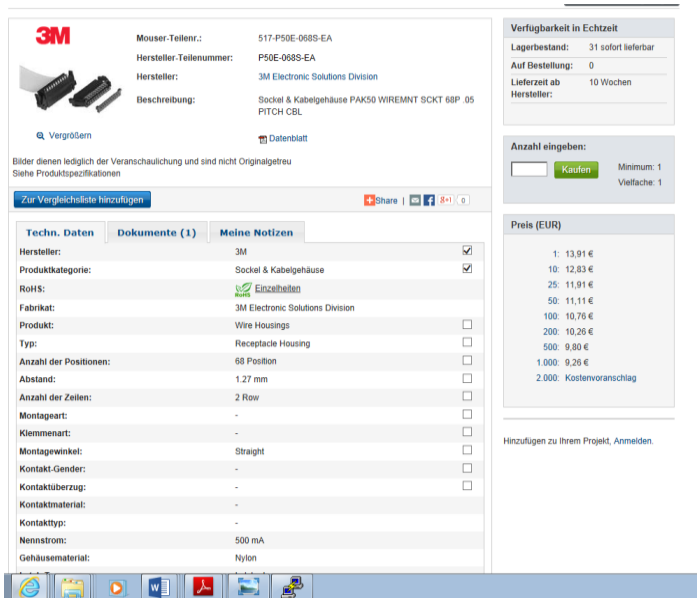
Code	Cable	From/To	To/From
WA967XAAAAAA	25 cm long flat, FILECA P34 QOHF 28-07	3M – P50E – 068S	3M 3431-5202 Header-type

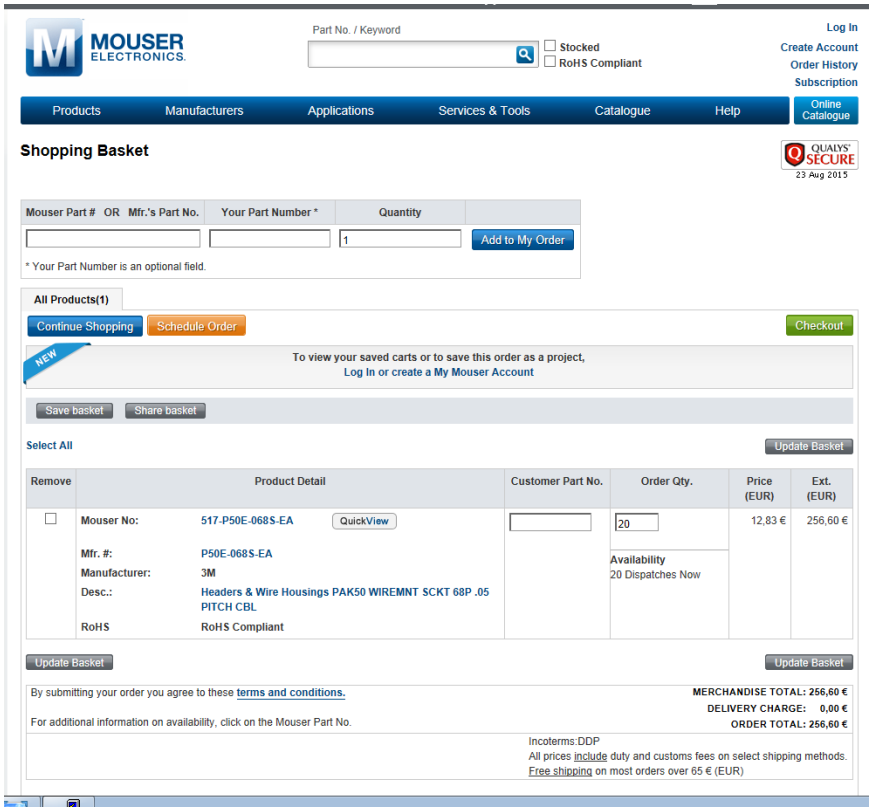
The following picture (example of V1190) shows the pin correspondence of the A967



DO NOT use the rigid thick twi sted pair cable from CERN stores (SCEM Xxxxxxxxx) as it is very difficult to work. Better to use the thinner cable from CERN stores (SCEMXXXXXXX) that is NOT twisted pair as shown in the CAEN document.

http://eu.mouser.com/search/ProductDetail.aspx?3M-Electronic-Solutions-Division%2fP50E-068S-EA%2f&qs=1Dv50y8t490WWWSxqFoGcQ%3d%3d



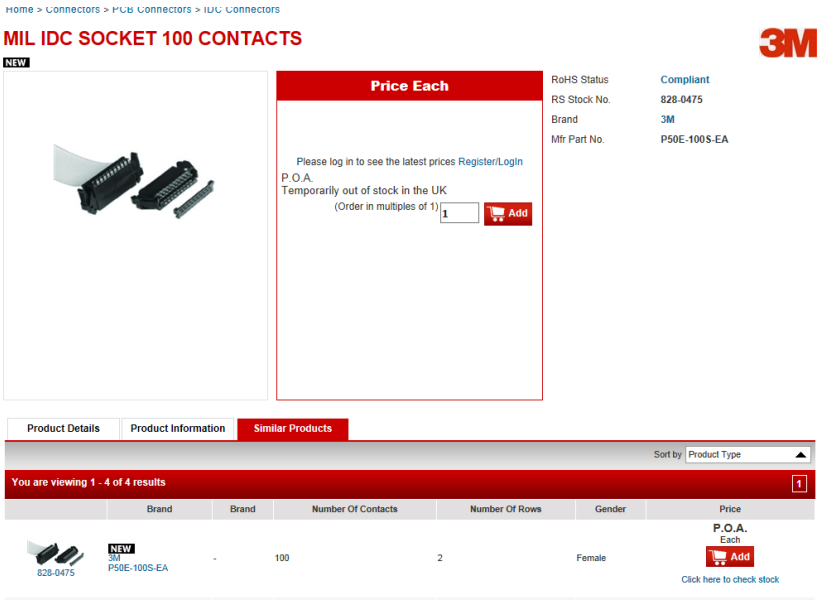


http://www.digikey.com/product-detail/en/P50E-068S-EA/P50E-068S-EA-ND/2340964

Similar products available from Radio Sapres

http://int.rsdelivers.com/product/3m/p50e-100s-ea/mil-idc-socket-100-contacts/8280475.aspx

But not 68 contacts !!



Ian Crotty

15 June 2015

Other photos here;

http://rpc-cms-re4-upscope.web.cern.ch/rpc-cms-re4-upscope/RPC/GIFPlusPlus/Services/SignalTDCAdaptor/PhotosTDCCableJune2015/

And this document here;

http://rpc-cms-re4-upscope.web.cern.ch/rpc-cms-re4-upscope/RPC/GIFPlusPlus/Services/SignalTDCAdaptor/TDC CableAdapter.pdf