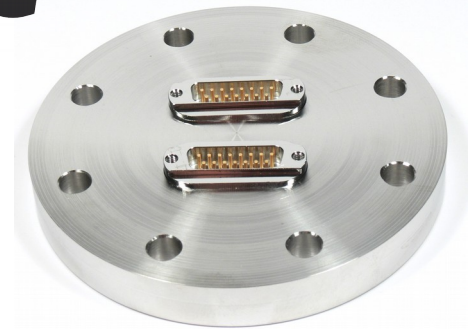


High Current Standard Sub-D Feedthroughs -210-Dxx-Cxx-HC and related products



A new pin technology allows now to use standard Sub-D feedthroughs for significant higher current ratings. The continuous current per pin is doubled: Up to 6A (all pins loaded) is now specified. For short periods, up to 10A per pin can be used.

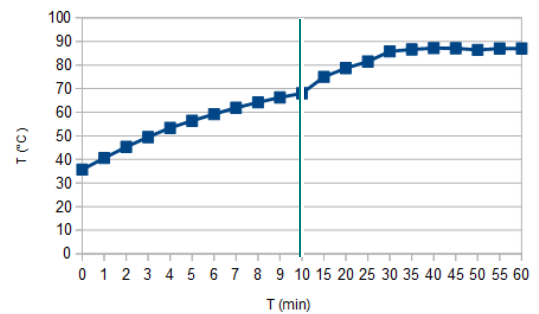
Special Crimp pins and a new, thicker in vacuum cable allow this new feature. So Allectra offers a full solution for multipin feedthroughs up to 6A /10A

Specifications Feedthroughs, connectors and cable

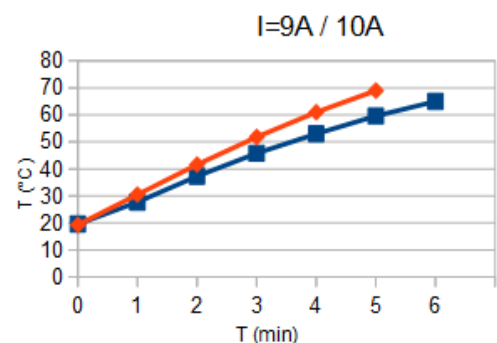
FEEDTHROUGHS	
Versions	Sub-D 9 / 15 /25 /37 50 pin according DIN41652, MIL-C-24308
Vacuum range	UHV, 10^{-10} mbar
Leak rate	5×10^{-10} mbar l/s He (individually tested)
Temp. range	-200°C ... 230°C
Test Voltage	500V DC (individually tested)
Current rating	6A continuous, up to 10A for 5 min. (with HC-Pins and 1.3mm ϕ cable)
CRIMP PINS	
Art. No.	212-PINF-25-HC (25 off female pins) 212-PINM-25-HC (25 off male pins) (packs with 10 / 15 / 25 pins are available)
Compatible	fit into all vacuum housings
Max. cable diameter	1.3 mm
Type	Crimp pin, solder possible
CABLE	
Art. No.	311-KAPM-130-RAD-10M (10m spool) other lengths on request
Conductor	1,3mm ϕ multi-strand wire (19x0.25mm) Silver plated copper, Kapton insulation
Radiation resistant	YES 10^9 rad
AIR SIDE CONNECTORS	
Rated up to 7.5 A	211-FSxx-AIR-HC (xx= 09/15/25/37/50)

2x High Current (HC) 15-pin Feedthroughs on a 63CF flange

With 30 pins, these feedthroughs can transport 180A continuously or up to 300A for a short time into the vacuum system



Temperature measured on a 25-pin Sub-D HC f/t at 7A (all pins loaded, so 175A in total). The max. reached temperature stays below 90°C.



Temperature versus time with 9 A (blue) and 10A (red) current per pin, all pins loaded.

All tests were done at room temperature of ~20°C

Cable and crimp pins can be used with standard feedthroughs as well without problem!

File: 210-Sub-D-HC Last revised 2019-06-26
All data given in this sheet are carefully checked but subject to change at any time.