

HiPeR Flexlinks

Flight proven, light-weight and flexible point-to-point heat conductors

Building on a well-established heritage in spacecraft thermal management systems, Airbus Defence and Space Netherlands (ADSN) has developed the HiPeR Flexlinks product: thermal straps that are optimized for space applications.

HiPeR Flexlinks can be used virtually on any type of missions. Our established industrial production makes this suitable for any size contracts, from one-offs to mega constellations.

A HiPeR Flexlinks consists of thin sheets of Pyrolytic Graphite (PG) that transfer heat in-plane efficiently without a significant out-of-plane heat loss. The stack of PG sheets is sandwiched between metal plates, which also act as thermal interface to the surrounding structure.

Because the PG material can release small particles, a sleeve made of a unique mesh material is wrapped around the stack to enclose the PG. This ensures no particle contamination, yet allows ventilation while maintaining the overall flexibility.

With HiPeR Flexlinks, a thermal conductive link between two interface points can be created, while keeping these interfaces mechanically decoupled. The flexibility of the link (stiffness <1,5 N/mm in all three axes) enables freedom in the spacecraft design, without compromising thermal and mechanical performance.



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Characteristics

- Conductivity up to 3.6 W/K
- Standard M4 connections
- 120 gr for typical 1 W/K thermal straps
- Suitable for clean environments

Standard Configuration Options

Note: refer to our excel configurator for full details different options. Other configurations are possible for a custom design of the thermal strap.

Length of Pyrolytic Graphite (PG) stack

60 / 80 / 100 / 120 / 140 / 160 mm

Three easy steps:

- 1. Select option from configurator
- 2. Talk to us and get your quote
- 3. Integrate & Fly

Click here to visit our website

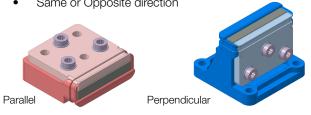
Interface Width and Length

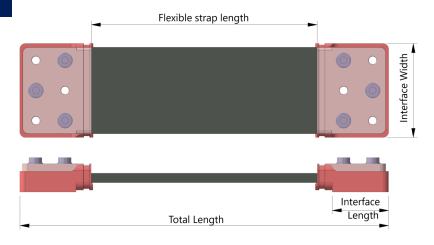
	End-fitting ID	Interface Width [mm]	Interface Length [mm]	
PAR	PAR-01	35	30	
	PAR-02	40	30	
	PAR-03	40	40	
	PAR-04	45	45	
	PAR-05		30	
	PAR-06	50	40	
	PAR-07		50	
	PAR-08	55	55	
	PAR-09		30	
	PAR-10	60	40	
	PAR-11		60	
PER	PER-01	35	35	
	PER-02	40	40	
	PER-03	45	45	
	PER-04	50	50	
	PER-05	55	55	
	PER-06	60	60	



PAR-PAR; PER-PER or PAR-PER







Thermal performance

Performance [W/K]		Flextible strap length [mm]						
		60	80	100	120	140	160	
End-fitting config.	PAR-PAR	1.5 - 3.6	1.3 - 3.3	1.2 - 3.0	1.1 - 2.8	1.0 - 2.5	0.9 - 2.4	
	PAR-PER	1.3 - 2.8	1.2 - 2.6	1.1 - 2.4	1.0 - 2.3	0.9 - 2.1	0.8 - 2.0	
	PER-PER	1.1 - 2.3	1.0 - 2.1	1.0 - 2.0	0.9 - 1.9	0.8 - 1.8	0.8 - 1.7	

For further information please contact Airbus Defence and Space Netherlands B.V.

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