

TILBEHØR



**VARMEBESKYTTELSE  
PRODUKTER**

# Hipro products engineering data

## Heat protection products

The right choice of heat protection materials is important for the functioning and durability of the equipment.

The heat protection materials of Anamet Europe B.V. can basically be divided into 3 groups:

1. Hipro-products, consisting of an E-glass fibre base, covered with iron-oxide silicon rubber.  
Temperature range: -55 °C till +260 °C continuous, +800 °C for approx. 20 minutes and +1640 °C for 15 - 30 seconds  
Flammability: UL-94 V1.
2. Thermo-products, consisting completely of E-glass fibre.  
Temperature range: -55 °C till +538 °C continuous.
3. Silica-products consisting of completely amorphous silica fibres. Temperature range: -55 °C till +1090 °C continuous. Each product groups are available in various grades and executions, like sleeving, tape, blankets and remountable wraps.

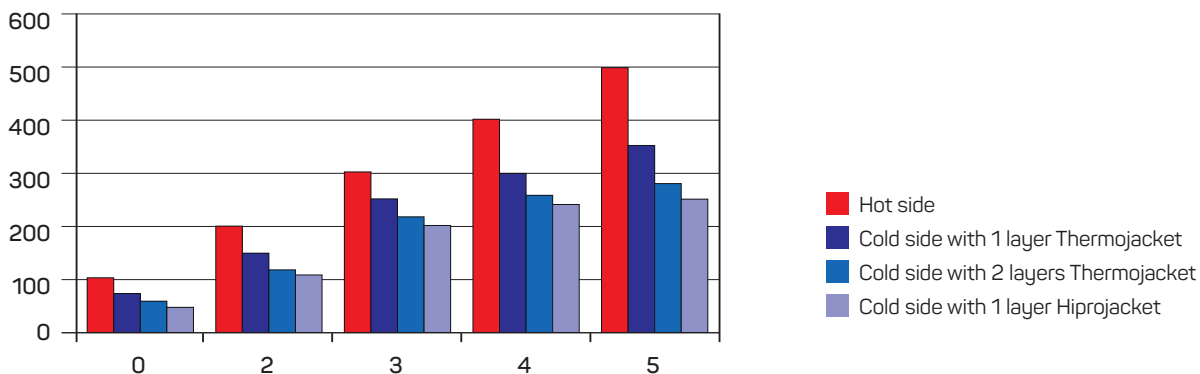
The choice of which product offers the best solution is strongly depending on the exact application.

Thermo- and Silica-products don't withstand open flame exposure and molten splash, like the Hipro-products do.

At the other hand Thermo-and Silica-products offer a good heat protection at higher continuous temperatures than are possible for Hipro-products.

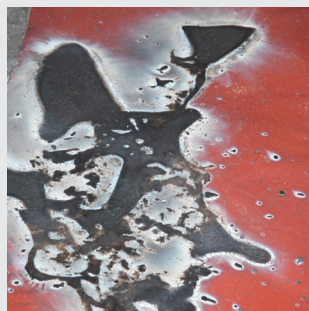
Next to the temperature resistance, there is also a difference in insulation characteristics for the Hipro- and Thermo-products, as shown in the graph below.

Thermal protection - hot side versus cold side (Temp. in °C)



Note: Above mentioned values are based on respectively Hiprojacket Aero and Thermo jacket S (saturated) with the heat source at the inside of the sleeving. For additional information on specific conditions, please contact your Anamet representative.

When Hipro products exposed to flame, the silicone rubber transforms into crust, creating a protective SiO<sub>2</sub> refractory layer. Hipro products withstands repeated exposures to molten steel, molten aluminum and molten glass up to +1650 °C.



The heavy coating of our proprietary iron oxide red silicone compound sheds molten metal splashes immediately, so very little heat transfer occurs.

The fibre glass will not burn, retains 75% of its tensile at 343 °C, softens at 732 °C till 877 °C and melts at 1121 °C till 1182 °C.

The theoretical dielectric strength of our Hipro products is 16.000 V per mm cover thickness, being the characteristic of Silicone rubber. However as the liquid process, to coat the sleeveings, tapes and blankets, allows for possible inclusions of tiny airbubbles or pinholes we cannot guarantee a minimum dielectric strength of the finished product.

# Hiprojacket Aero red



## BRAIDED SLEEVING, SOLID CONSTRUCTED ACC. SAE AS1072, SUPERIOR SHORT TERM FLAME PROTECTION

The ultimate heatprotection for cables and hoses. This solid braided glassfiber sleeving, with thick silicone cover, is constructed according to the Aerospace Standard SAE AS1072 and allows qualified hose assemblies to pass the AS1055 testing. This Hiprojacket offers superior short term flame protection and excellent temperature reduction. In the field of cable protection, a complete program of Hiprojacket fittings is available for easy installation. Resistant to hydraulic fluids, lubricating oils and fuels, Hiprojacket protects against molten splash, occasional flames, heat radiation, energy loss in piping and hoses; also protects employees from burns. Hiprojacket is typically used in the Aerospace-industry, steelworks, glass and ceramics industry, as well as in the machine- and apparatus-building.

### Material & Construction:

**Construction:** Braided sleeving from E-glass yarns, solid constructed according Aerospace Standard SAE AS1072 type 2.

**Cover specifications:** Iron-oxide silicon rubber. Excellent oil resistant, halogen free, superior short term flame protection, excellent temperature reduction and withstands molten splash.

### Special approvals:

- Highly flameretardant acc. DIN 5510-2: S4 / SR2 / ST2.
- Flameretardant acc. UNI CEI 11170-3.
- NF EN ISO 11925-2 (15 and 30 sec.).

- EN 45545-2; R22 and R23 HL1 / HL2 / HL3, (CIT<sub>nlp</sub> = 0,02 , D<sub>s</sub> max = 70 and LOI = 40,1).

- Allows qualified hose assemblies to pass the SAE AS1055 testing.

**Temperature:** -55 °C till +260 °C continuous.

- Under flame till +800 °C for approx. 20 minutes.
- Radiation heat till +800 °C for approx. 20 minutes.
- Molten metal splash till +1640 °C for 15 - 30 seconds.

**Colour:** Red, other colours available on demand.



HIPROJACKET AERO			DIAMETRE		STANDARD CARTON		SMALL CARTON*		RANDOM LENGTH		WEIGHT
Size (mm)	Size (inch)	Type	Inside (mm)	Outside (mm)	Metre	Article No. red	Metre	Article No. red	Metre	Article No. red	(kg/m)
6	1/4"	HJ-04	6	11	30	336.006.3	15	336.006.1	1	336.006.0	0,12
10	3/8"	HJ-06	10	15	30	336.010.3	15	336.010.1	1	336.010.0	0,16
13	1/2"	HJ-08	13	18	30	336.013.3	15	336.013.1	1	336.013.0	0,19
16	5/8"	HJ-10	16	22	30	336.016.3	15	336.016.1	1	336.016.0	0,21
19	3/4"	HJ-12	19	25	30	336.019.3	15	336.019.1	1	336.019.0	0,24
22	7/8"	HJ-14	22	28	30	336.022.3	15	336.022.1	1	336.022.0	0,28
25	1"	HJ-16	25	31	30	336.025.3	15	336.025.1	1	336.025.0	0,33
29	1.1/8"	HJ-18	29	35	30	336.029.3	15	336.029.1	1	336.029.0	0,35
32	1.1/4"	HJ-20	32	38	30	336.032.3	15	336.032.1	1	336.032.0	0,39
35	1.3/8"	HJ-22	35	41	30	336.035.3	15	336.035.1	1	336.035.0	0,45
38	1.1/2"	HJ-24	38	44	30	336.038.3	15	336.038.1	1	336.038.0	0,48
41	1.5/8"	HJ-26	41	47	30	336.041.3	15	336.041.1	1	336.041.0	0,52
44	1.3/4"	HJ-28	44	50	30	336.044.3	15	336.044.1	1	336.044.0	0,64
51	2"	HJ-32	51	57	30	336.051.3	15	336.051.1	1	336.051.0	0,67
57	2.1/4"	HJ-36	57	63	30	336.057.3	15	336.057.1	1	336.057.0	0,74
64	2.1/2"	HJ-40	64	70	30	336.064.3	15	336.064.1	1	336.064.0	0,75
70	2.3/4"	HJ-44	70	76	30	336.070.3	15	336.070.1	1	336.070.0	0,88
76	3"	HJ-48	76	82	30	336.076.3	15	336.076.1	1	336.076.0	1,03
83	3.1/4"	HJ-52	83	89	30	336.083.3	15	336.083.1	1	336.083.0	1,13
89	3.1/2"	HJ-56	89	95	30	336.089.3	15	336.089.1	1	336.089.0	1,18
95	3.3/4"	HJ-60	95	101	30	336.095.3	15	336.095.1	1	336.095.0	1,34
102	4"	HJ-64	102	108	30	336.102.3	15	336.102.1	1	336.102.0	1,41

\* In the 15 meter packaging it is possible that 2 lengths (totally 15 meter) are packed (minimum shortest length 4,5 meter).

## HIPROJACKET AERO



Braided sleeving, solid constructed acc. SAE AS1072,  
superior short term flame protection



HIPROJACKET AERO			DIAMETRE		STANDARD CARTON		SMALL CARTON		RANDOM LENGTH		WEIGHT
Size (mm)	Size (inch)	Type	Inside (mm)	Outside (mm)	Metre	Article No. black	Metre	Article No. black	Metre	Article No. black	(kg/m)
13	1/2"	HJ-08	13	18	30	346.913.3	-	-	-	-	0,19
16	5/8"	HJ-10	16	22	30	346.916.3	-	-	-	-	0,21
19	3/4"	HJ-12	19	25	30	346.919.3	-	-	-	-	0,24
29	1.1/8"	HJ-18	29	35	30	346.929.3	-	-	-	-	0,35
35	1.3/8"	HJ-22	35	41	30	346.935.3	-	-	-	-	0,45
38	1.1/2"	HJ-24	38	44	30	346.938.3	-	-	-	-	0,48
41	1.5/8"	HJ-26	41	47	30	346.941.3	-	-	-	-	0,52
51	2"	HJ-32	51	57	30	346.951.3	-	-	-	-	0,67

# Hiprojacket Industrial red



## KNITTED SLEEVING, GOOD SHORT TERM FLAME PROTECTION

The industrial alternative for less demanding situations. This Industrial Grade has a more open construction of glass fibre, but due to the thick silicon cover still offers good short term flame protection and temperature reduction. Resistant to hydraulic fluids, lubricating oils and fuels, Hiprojacket Industrial protects against molten splash, occasional flames, heat radiation, energy loss in piping and hoses; also protects employees from burns. Hiprojacket Industrial is frequently used to protect cables and industrial rubber or metal hoses in the glass, ceramics and steel industry, as well as in the machine- and apparatus-building.

### Material & Construction:

**Construction:** Knitted sleeving from E-glass yarns.

**Cover specifications:** Iron-oxide silicon rubber, excellent oil resistant, halogen free, good short term flame protection, good temperature reduction and withstands molten splash.

**Temperature:** -55 °C till +260 °C continuous.

- Under flame till +800 °C for approx. 20 minutes.

- Radiation heat till +800 °C for approx. 20 minutes.

- Molten metal splash till +1640 °C for 15 - 30 seconds.

**Colour:** Red, other colours available on demand.



HIPOJACKET INDUSTRIAL			DIAMETRE		STANDARD CARTON		SMALL CARTON		RANDOM LENGTH		WEIGHT
Size (mm)	Size (inch)	Type	Inside (mm)	Outside (mm)	Metre	Article No. red	Metre	Article No. red	Metre	Article No. red	(kg/m)
6	1/4"	HJ-I-04	6	11	30	336.806.3	-	-	-	-	0,11
10	3/8"	HJ-I-06	10	15	30	336.810.3	-	-	-	-	0,14
13	1/2"	HJ-I-08	13	18	30	336.813.3	-	-	-	-	0,17
16	5/8"	HJ-I-10	16	22	30	336.816.3	-	-	-	-	0,22
19	3/4"	HJ-I-12	19	25	30	336.819.3	-	-	-	-	0,25
22	7/8"	HJ-I-14	22	28	30	336.822.3	-	-	-	-	0,26
25	1"	HJ-I-16	25	31	30	336.825.3	-	-	-	-	0,3
29	1 1/8"	HJ-I-18	29	35	30	336.829.3	-	-	-	-	0,34
32	1 1/4"	HJ-I-20	32	38	30	336.832.3	-	-	-	-	0,36
35	1 3/8"	HJ-I-22	35	41	30	336.835.3	-	-	-	-	0,48
38	1 1/2"	HJ-I-24	38	44	30	336.838.3	-	-	-	-	0,53
41	1 5/8"	HJ-I-26	41	47	30	336.841.3	-	-	-	-	0,53
44	1 3/4"	HJ-I-28	44	50	30	336.844.3	-	-	-	-	0,55
51	2"	HJ-I-32	51	57	30	336.851.3	-	-	-	-	0,62
57	2 1/4"	HJ-I-36	57	63	30	336.857.3	-	-	-	-	0,71
64	2 1/2"	HJ-I-40	64	70	30	336.864.3	-	-	-	-	,73
70	2 3/4"	HJ-I-44	70	76	30	336.870.3	-	-	-	-	0,82
76	3"	HJ-I-48	76	82	30	336.876.3	-	-	-	-	0,93
83	3 1/4"	HJ-I-52	83	89	30	336.883.3	-	-	-	-	1,14
89	3 1/2"	HJ-I-56	89	95	30	336.889.3	-	-	-	-	1,15
95	3 3/4"	HJ-I-60	95	100	30	336.895.3	-	-	-	-	1,17
102	4"	HJ-I-64	102	108	30	336.897.3	-	-	-	-	1,22
114	4 1/2"	HJ-I-72	114	120	30	336.898.3	15	336.898.1	-	-	1,65
127	5"	HJ-I-80	127	133	30	336.899.3	15	336.899.1	-	-	1,71

## HIPROJACKET INDUSTRIAL VARIOUS COLOURS

ANAMET HIPROJACKET® INDUSTRIAL

Knitted sleeving, good short term flame protection



HIPROJACKET INDUSTRIAL			DIAMETRE		STANDARD CARTON		SMALL CARTON		RANDOM LENGTH		WEIGHT
Size (mm)	Size (inch)	Type	Inside (mm)	Outside (mm)	Metre	Article No. black	Metre	Article No. black	Metre	Article No. black	(kg/m)
13	1/2"	HJ-I-08	13	18	30	346.313.3	-	-	-	-	0,17
16	5/8"	HJ-I-10	16	22	30	346.316.3	-	-	-	-	0,22
19	3/4"	HJ-I-12	19	25	30	346.319.3	-	-	-	-	0,25
29	1.1/8"	HJ-I-18	29	35	30	346.329.3	-	-	-	-	0,34
35	1.3/8"	HJ-I-22	35	41	30	346.335.3	-	-	-	-	0,48
41	1.5/8"	HJ-I-26	41	47	30	346.341.3	-	-	-	-	0,53
51	2"	HJ-I-32	51	57	30	346.351.3	-	-	-	-	0,62

ANAMET HIPROJACKET® INDUSTRIAL



HIPROJACKET INDUSTRIAL			DIAMETRE		STANDARD CARTON		SMALL CARTON		RANDOM LENGTH		WEIGHT
Size (mm)	Size (inch)	Type	Inside (mm)	Outside (mm)	Metre	Article No. grey	Metre	Article No. grey	Metre	Article No. grey	(kg/m)
13	1/2"	HJ-I-08	13	18	30	346.013.3	-	-	-	-	0,17
16	5/8"	HJ-I-10	16	22	30	346.016.3	-	-	-	-	0,22
19	3/4"	HJ-I-12	19	25	30	346.019.3	-	-	-	-	0,25
29	1.1/8"	HJ-I-18	29	35	30	346.029.3	-	-	-	-	0,34
35	1.3/8"	HJ-I-22	35	41	30	346.035.3	-	-	-	-	0,48
41	1.5/8"	HJ-I-26	41	47	30	346.041.3	-	-	-	-	0,53
51	2"	HJ-I-32	51	57	30	346.051.3	-	-	-	-	0,62

ANAMET HIPROJACKET® INDUSTRIAL



HIPROJACKET INDUSTRIAL			DIAMETRE		STANDARD CARTON		SMALL CARTON		RANDOM LENGTH		WEIGHT
Size (mm)	Size (inch)	Type	Inside (mm)	Outside (mm)	Metre	Article No. blue	Metre	Article No. blue	Metre	Article No. blue	(kg/m)
13	1/2"	HJ-I-08	13	18	30	346.113.3	-	-	-	-	0,17
16	5/8"	HJ-I-10	16	22	30	346.116.3	-	-	-	-	0,22
19	3/4"	HJ-I-12	19	25	30	346.119.3	-	-	-	-	0,25
29	1.1/8"	HJ-I-18	29	35	30	346.129.3	-	-	-	-	0,34
35	1.3/8"	HJ-I-22	35	41	30	346.135.3	-	-	-	-	0,48
41	1.5/8"	HJ-I-26	41	47	30	346.141.3	-	-	-	-	0,53
51	2"	HJ-I-32	51	57	30	346.151.3	-	-	-	-	0,62

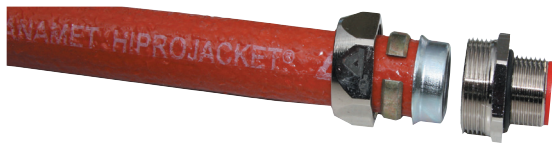
ANAMET HIPROJACKET® INDUSTRIAL



HIPROJACKET INDUSTRIAL			DIAMETRE		STANDARD CARTON		SMALL CARTON		RANDOM LENGTH		WEIGHT
Size (mm)	Size (inch)	Type	Inside (mm)	Outside (mm)	Metre	Article No. yellow	Metre	Article No. yellow	Metre	Article No. yellow	(kg/m)
13	1/2"	HJ-I-08	13	18	30	346.213.3	-	-	-	-	0,17
16	5/8"	HJ-I-10	16	22	30	346.216.3	-	-	-	-	0,22
19	3/4"	HJ-I-12	19	25	30	346.219.3	-	-	-	-	0,25
29	1.1/8"	HJ-I-18	29	35	30	346.229.3	-	-	-	-	0,34
35	1.3/8"	HJ-I-22	35	41	30	346.235.3	-	-	-	-	0,48
41	1.5/8"	HJ-I-26	41	47	30	346.241.3	-	-	-	-	0,53
51	2"	HJ-I-32	51	57	30	346.251.3	-	-	-	-	0,62



# Fittings for Hiprojacket, IP 67, nickel plated brass



## ANACONDA NICKEL PLATED BRASS FITTINGS FOR HIPOJACKET®

Anaconda standard fittings are made from nickel plated brass and also designed to be used in combination with Hiprojacket. These are basically the same fittings as for Anaconda Sealrite conduit. The difference is that the standard polyamide clamping rings are replaced by a special metal clamping ring.

### Material & Construction:

**Construction:** Nickel plated brass fitting, consisting of 4 parts (counter nut, clamping ring, ferrule and body).

**Material:** Counter nut, body, clamping ring and ferrule are nickel plated brass with exception of size 3/8" till 1" where the ferrule is from galvanised steel. Inserts are made from PA6 (red for ISO metric, blue for Pg and white for NPT).

**Temperature:** -45 °C till +105 °C continuous (cable-hose fittings till +300 °C on request).

**Protection class:** IP 54 (dust-protected, splash water-proof), additionally sealed with Hiprosiltape, IP 67 is possible.

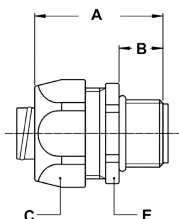
**Colour:** Metal.



Clamping ring, zinc plated brass, for combination with Hiprojacket



Size (mm)	HIPOJACKET TYPE		FITTING THREAD SIZE			STANDARD PACKAGE	ARTICLE NUMBER	WEIGHT (KG/100)
	Aero	Ind.	ISO	Pg	NPT			
13/10	HJ-08	HJ-I-06	M16 x 1,5	Pg 11	1/2" NPT	10	817.512.0	0,6
16/13	HJ-10	HJ-I-08	M20 x 1,5	Pg 16	1/2" NPT	10	817.516.0	0,6
22/19	HJ-14	HJ-I-12	M25 x 1,5	Pg 21	3/4" NPT	5	817.520.0	1
25	HJ-16	HJ-I-16	M32 x 1,5	Pg 29	1" NPT	5	817.526.0	1,2
35/32	HJ-22	HJ-I-20	M40 x 1,5	Pg 36	1.1/4" NPT	2	817.535.0	2
38	HJ-24	HJ-I-24	M50 x 1,5	Pg 42	1.1/2" NPT	2	817.540.0	4,2
51	HJ-32	HJ-I-32	M63 x 1,5	Pg 48	2" NPT	2	817.550.0	9



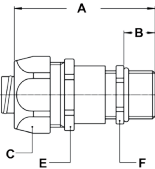
ISO straight fitting, male, nickel plated brass (without clamping ring)



THREAD ISO	HIPOJACKET TYPE		DIMENSIONS IN MM					STANDARD PACKAGE	ARTICLE NUMBER	WEIGHT (KG/100)
	Aero	Ind.	A	B	C	D	E			
M16 x 1,5	HJ-08	HJ-I-06	35	12	26	-	24	10	812.016.1	4,7
M20 x 1,5	HJ-10	HJ-I-08	37	13	29	-	27	10	812.020.1	5,1
M25 x 1,5	HJ-14	HJ-I-12	40	15	35	-	33	5	812.025.1	11,7
M32 x 1,5	HJ-16	HJ-I-16	46	15	45	-	43	5	812.032.1	19,7
M40 x 1,5	HJ-22	HJ-I-20	52	16	54	-	52	2	812.040.1	35
M50 x 1,5	HJ-24	HJ-I-24	56	18	63	-	60	2	812.050.1	42,2
M63 x 1,5	HJ-32	HJ-I-32	66	20	77	-	74	2	812.063.1	52,8

## FITTINGS FOR HIPOJACKET, IP 67

ISO cable-hose fitting, with extended clamping range, male, nickel plated brass (without clamping ring)



THREAD ISO	HIPOJACKET		CLAMPING RANGE (MM)	DIMENSIONS IN MM					STANDARD PACKAGE	ARTICLE NUMBER	WEIGHT (KG/100)
	Aero	Ind.		A	B	C	E	F			
M16 x 1,5	HJ-08	HJ-I-06	3 - 10,2	64	12	26	24	20	10	812.716.2	8,2
M20 x 1,5	HJ-10	HJ-I-08	7 - 13,9	64	12	29	27	24	10	812.720.2	10,2
M25 x 1,5	HJ-14	HJ-I-12	9 - 18,0	77	15	35	33	30	5	812.725.2	17
M32 x 1,5	HJ-16	HJ-I-16	13 - 23,8	88	15	45	43	40	5	812.732.2	31
M40 x 1,5	HJ-22	HJ-I-20	20 - 31,8	102	15	54	52	50	2	812.740.2	54,6
M50 x 1,5	HJ-24	HJ-I-24	21 - 36,8	106	18	63	60	58	2	812.750.2	76,6
M63 x 1,5	HJ-32	HJ-I-32	27 - 44,0	116	18	77	74	68	2	812.763.2	116,6



# Compact fittings for Hiprojacket, IP 66 / 67, nickel plated brass



## ANACONDA COMPACT NICKEL PLATED BRASS FITTINGS FOR HIPOJACKET®

Anaconda compact fittings are made from nickel plated brass and also designed to be used in combination with Hiprojacket. These are basically the same fittings as for Anaconda Sealtite conduit. The difference is that the standard polyamide clamping rings are replaced by a special metal clamping ring.

### Material & Construction:

**Construction:** Nickel plated brass fitting, consisting of 4 parts (counter nut, clamping ring, ferrule and body).

**Material:** Counter nut and body are nickel plated brass. Clamping ring is made from PA6 and the ferrule is made from galvanised steel. The O-rings are from NBR rubber (black for ISO and blue for Pg). The clamping rubbers of the cable-hose fittings are made from EPDM.

**Temperature:** -45 °C till +105 °C continuous.

**Protection class:** IP 66, IP 67, NEMA 4X.

Cable-hose fittings are IP 68 on the switchbox.

**Colour:** Metal coloured.

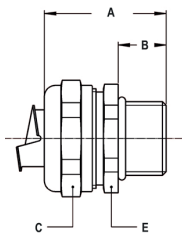
Clamping ring and ferrule, zinc plated brass, for combination of compact fittings with Hiprojacket



Size (mm)	HIPOJACKET TYPE		MIN. INTERNAL (MM)	FITTING THREAD SIZE			STANDARD PACKAGE	ARTICLE NUMBER	WEIGHT (KG/100)
	Aero	Ind.		ISO	Pg	NPT			
13/10	HJ-08	HJ-I-06	10,4	M16 x 1,5	Pg 11	1/2" NPT	10	817.512.6	1,6
16/13	HJ-10	HJ-I-08	13,4	M20 x 1,5	Pg 16	1/2" NPT	10	817.516.6	2,2
22/19	HJ-14	HJ-I-12	18,8	M25 x 1,5	Pg 21	3/4" NPT	5	817.520.6	3,1
25	HJ-16	HJ-I-16	24,8	M32 x 1,5	Pg 29	1" NPT	5	817.526.6	4,3
35/32	HJ-22	HJ-I-20	31	M40 x 1,5	Pg 36	1.1/4" NPT	2	817.535.6	9,0
38	HJ-24	HJ-I-24	35,8	M50 x 1,5	Pg 42	1.1/2" NPT	2	817.540.6	14,5
51	HJ-32	HJ-I-32	46,6	M63 x 1,5	Pg 48	2" NPT	2	817.550.6	24,5

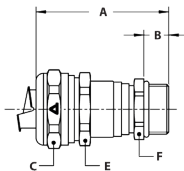
## COMPACT FITTINGS FOR HIPOJACKET, IP 66 / 67, NICKEL PLATED BRASS

ISO straight fitting, compact, male, nickel plated brass (without connection set)



THREAD ISO	HIPOJACKET		DIMENSIONS IN MM					STANDARD PACKAGE	ARTICLE NUMBER	WEIGHT (KG/100)
	Aero	Ind.	A	B	C	D	E			
M16 x 1,5	HJ-08	HJ-I-06	31	10	26	-	24	10	712.016.1	3,9
M20 x 1,5	HJ-08	HJ-I-06	31	10	26	-	24	10	712.017.1	4
M20 x 1,5	HJ-10	HJ-I-08	32	10	29	-	27	10	712.020.1	4,4
M25 x 1,5	HJ-14	HJ-I-12	33	10	35	-	33	5	712.025.1	6,6
M32 x 1,5	HJ-16	HJ-I-16	36	12	45	-	42	5	712.032.1	11,7
M40 x 1,5	HJ-22	HJ-I-20	40	13	53	-	50	2	712.040.1	16
M50 x 1,5	HJ-24	HJ-I-24	46	14	62	-	58	2	712.050.1	25,3
M63 x 1,5	HJ-32	HJ-I-32	52	16	76	-	72	2	712.063.1	38,6

ISO cable-hose fitting, compact, male, nickel plated brass, double EPDM seal according EN 45545-2, HL1 / HL2 / HL3, table R22 and R23 (without connection set)



THREAD ISO	HIPOJACKET		CLAMPING RANGE (MM)	DIMENSIONS IN MM					STANDARD PACKAGE	ARTICLE NUMBER	WEIGHT (KG/100)
	Aero	Ind.		A	B	C	E	F			
M16 x 1,5	HJ-08	HJ-I-06	4,0 - 9,5	50	10	26	24	18	10	712.716.1	4
M20 x 1,5	HJ-08	HJ-I-06	4,0 - 9,5	50	10	26	24	22	10	712.717.1	7,4
M20 x 1,5	HJ-10	HJ-I-08	6,0 - 13,0	53	10	29	27	22	10	712.720.1	7,6
M25 x 1,5	HJ-10	HJ-I-08	6,0 - 13,0	54	10	29	27	27	5	712.722.1	9
M25 x 1,5	HJ-14	HJ-I-12	11,0 - 18,0	56	10	35	33	27	5	712.725.1	11,7
M32 x 1,5	HJ-14	HJ-I-12	11,0 - 18,0	58	12	35	33	35	5	712.728.1	15
M32 x 1,5	HJ-16	HJ-I-16	16,0 - 24,8	61	12	45	42	35	5	712.732.1	20,3
M40 x 1,5	HJ-16	HJ-I-16	16,0 - 24,8	63	13	45	42	43	2	712.735.1	24,5
M40 x 1,5	HJ-22	HJ-I-20	22,0 - 31,0	69	13	53	50	43	2	712.740.1	28,6
M50 x 1,5	HJ-22	HJ-I-20	22,0 - 31,0	70	14	53	50	55	1	712.745.1	34,5
M50 x 1,5	HJ-24	HJ-I-24	30,0 - 35,8	78	14	62	58	55	1	712.750.1	46,0

# Hiprojacket Light red



## LIGHTWEIGHT SLEEVING, MODERATE THERMAL PROTECTION

The most economic alternative for less demanding situations. This Light Grade has a thinner construction of glass fibre and silicone rubber cover, but due to the thin silicon cover offers some short term flame protection and a small temperature reduction. Resistant to hydraulic fluids, lubricating oils and fuels, Hiprojacket Light offers limited protection against molten splash and occasional flames. Hiprojacket Light is frequently used to protect cables and wires in the machine- and apparatus-building.

### Material & Construction:

**Construction:** Knitted sleeving from E-glass yarns.

**Cover specifications:** Iron-oxide silicon rubber. Excellent oil resistant, halogen free, limited short term flame protection, limited temperature reduction.

**Temperature:** -55 °C till +260 °C continuous.

- Under flame till +538 °C for approx. 20 minutes.
- Radiation heat till +538 °C for approx. 20 minutes.
- Molten metal splash till +1200 °C for 15 - 30 seconds.

**Colour:** Red.



HIPOJACKET LIGHT			DIAMETRE		STANDARD CARTON		SMALL CARTON		RANDOM LENGTH		WEIGHT
Size (mm)	Size (inch)	Type	Inside (mm)	Outside (mm)	Metre	Article No. red	Metre	Article No. red	Metre	Article No. red	(kg/m)
4	5/32"	HJ-L-02	4	6	200	355.004.5	-	-	-	-	0,01
6	1/4"	HJ-L-04	6	8	100	355.006.5	-	-	-	-	0,02
8	5/16"	HJ-L-05	8	10	100	355.008.5	-	-	-	-	0,03
10	3/8"	HJ-L-06	10	12	100	355.010.5	-	-	-	-	0,03
12	1/2"	HJ-L-08	12	14	100	355.012.5	-	-	-	-	0,04
16	5/8"	HJ-L-10	16	18	100	355.016.5	-	-	-	-	0,06
20	3/4"	HJ-L-12	20	22	50	355.020.5	-	-	-	-	0,08

# Hiprosiltape red / black



## TAPE FROM SELF-FUSING SILICONE RUBBER

Hiprosiltape is specially formulated to adhere to itself and is used to seal the ends of Hiprojacket and Hiprotape. Neatly applied over the transition from the Hiprojacket / Hiprotape to the surface of the hose or conduit being protected, the self-fusing tape provides a cohesive moisture resistant barrier. Conforming smoothly when wrapped around even complex shapes, the tape bonds at room temperature into a single inseparable layer after 24 hours. The product remains non-tacky to touch and is inherently flame retardant, providing a superior alternative to the standard band clamp.

### Material & Construction:

**Construction:** Unsupported silicone rubber tape, self-fusing, ideal to seal-off.

**Cover specifications:** Self-fusing silicon rubber, excellent oil resistant, halogen free, inherently flame-retardant.

**Temperature:** -55 °C till +260 °C continuous.

**Colour:** Red & black, on request also available in other colours.



HIPROSILTAPE			DIAMETRE		STANDARD CARTON		SMALL CARTON		RANDOM LENGTH		WEIGHT
Size (mm)	Size (inch)	Type	Width (mm)	Thickness (mm)	Metre	Article No. red	Metre	Article No. red	Metre	Article No. red	(kg/m)
25	1"	HST-16	25	0,5	11	337.525.1	-	-	-	-	0,02
38	1.1/2"	HST-24	38	0,3	11	337.538.1	-	-	-	-	0,04



HIPROSILTAPE			DIAMETRE		STANDARD CARTON		SMALL CARTON		RANDOM LENGTH		WEIGHT
Size (mm)	Size (inch)	Type	Width (mm)	Thickness (mm)	Metre	Article No. black	Metre	Article No. black	Metre	Article No. black	(kg/m)
25	1"	HSTB-16	25	0,5	11	337.425.1	-	-	-	-	0,02
38	1.1/2"	HSTB-24	38	0,3	11	337.438.1	-	-	-	-	0,04

# Hiprotape red



## TAPE FROM WOVEN FIBERGLASS YARNS, WITH RED IRON-OXIDE SILICON RUBBER

Hiprotape provides the same heat protection as Hiprojacket Industrial Grade, in the form of a band which can be wrapped around already installed cables, hoses and valves. Resistant to hydraulic fluids, lubricating oils and fuels, Hiprotape protects against molten splash, occasional flames, energy loss in piping and hoses; also protects employees from burns; allows "bundling" of wires, hoses and cables. Hiprotape is applicable to larger diameters pipe and allows installation in situations where it is impractical or impossible to disassemble existing cable and hose assemblies. Typically used in the glass, ceramics and steel industry, as well as in the machine- and apparatus-building.

### Material & Construction:

**Construction:** Woven tape from E-glass yarns.

**Cover specifications:** Iron-oxide silicon rubber, excellent oil resistant, halogen free, good short term flame protection, good temperature reduction and withstands molten splash.

**Temperature:** -55 °C till +260 °C continuous.

- Under flame till +800 °C for approx. 20 minutes.
- Radiation heat till +800 °C for approx. 20 minutes.
- Molten metal splash till +1640 °C for 15 - 30 seconds.

**Colour:** Red.



HIPROTAPE			DIAMETRE		STANDARD CARTON		SMALL CARTON		RANDOM LENGTH		WEIGHT
Size (mm)	Size (inch)	Type	Width (mm)	Thickness (mm)	Metre	Article No. red	Metre	Article No. red	Metre	Article No. red	(kg/m)
25	1"	HT-1	25	3	30	337.025.3	15	337.025.1	-	-	0,07
51	2"	HT-2	51	3	30	337.050.3	15	337.050.1	-	-	0,18
76	3"	HT-3	76	3	30	337.076.3	15	337.076.1	-	-	0,26
102	4"	HT-4	102	3	30	337.100.3	15	337.100.1	-	-	0,4
127	5"	HT-5	127	3	30	337.127.3	15	337.127.1	-	-	0,47

# Hiprotape light grey



## TAPE FROM WOVEN FIBERGLASS YARNS, WITH THIN DOUBLE LAYER OF SILICON RUBBER

Hiprotape Light is the economical version of Hiprotape for less demanding applications. This tape can be wrapped around already installed cables, hoses and valves. Resistant to hydraulic fluids, lubricating oils and fuels, Hiprotape Light provides limited protection against molten splash and occasional flames. Typically used in machine- and apparatus-building.

### Material & Construction:

**Construction:** Woven tape from E-glass yarns.

**Cover specifications:** Silicon rubber, double-sided, excellent oil resistant, halogen free, limited short term flame protection, limited temperature reduction, withstands small particles of molten splash.

**Temperature:** -55 °C till +260 °C continuous.

- Under flame till +538 °C for approx. 20 minutes.
- Radiation heat till +538 °C for approx. 20 minutes.
- Molten metal splash till +1200 °C for 15 - 30 seconds.

**Colour:** Grey.



HIPROTAPE LIGHT			DIAMETRE		STANDARD CARTON		SMALL CARTON		RANDOM LENGTH		WEIGHT
Size (mm)	Size (inch)	Type	Width (mm)	Thickness (mm)	Metre	Article No. grey	Metre	Article No. grey	Metre	Article No. grey	(kg/m)
25	1"	HT-L-1	25	1	15	337.625.1	-	-	30	337.625.3	0,028
51	2"	HT-L-2	51	1	15	337.650.1	-	-	30	337.650.3	0,056
76	3"	HT-L-3	76	1	15	337.676.1	-	-	30	337.676.3	0,12
102	4"	HT-L-4	102	1	15	337.699.1	-	-	30	337.699.3	0,14

# Hiproblanket Wrap Heavy red



## BLANKET FROM WOVEN GLASS FIBRE YARNS, WITH RED IRON-OXIDE SILICON RUBBER AND HOOK & LOOP CLOSURE

The heatprotection of Hiproblanket in a split retro-fit form for quick installation on existing cables and hoses. Resistant to hydraulic fluids, lubricating oils and fuels, Hiproblanket Wrap protects against molten splash, occasional flames, energy loss in piping and hoses; also protects employees from burns; allows "bundling" of wires, hoses and cables. Hiproblanket Wrap is standard available up to 95 mm in diameter and allows quick installation on site without the need to dismantle and reconnect fittings. Also repair of existing installations can be performed with a minimum of labor and downtime. Typically used in the basic glass, ceramics and steel industry.

### Material & Construction:

**Construction:** Remountable sleeve from woven E-glass blanket, with polyester hook & loop closure.

**Cover specifications:** Iron-oxide silicon rubber, excellent oil resistant, halogen free, good short term flame protection, good temperature reduction, withstands molten splash.

**Weight material:** 3,26 kg/m<sup>2</sup>

**Temperature:** -55 °C till +260 °C continuous.

- Under flame till +800 °C for approx. 20 minutes.

- Radiation heat till +800 °C for approx. 20 minutes.

- Molten metal splash till +1640 °C for 15 - 30 seconds.

**Temperature Wrap closure:** +110 °C continuous. For higher temperatures additional securing with hiprosiltape is recommended.

**Colour:** Red.



HIPOBLANKET WRAP H			DIAMETRE		RANDOM LENGTH		SMALL CARTON		REELS		WEIGHT
Size (mm)	Size (inch)	Type	Inside (mm)	Outside (mm)	Metre	Article No. red	Metre	Article No. red	Metre	Article No. red	(kg/m)
25	1"	HBW-H-16	25	32	1	336.525.0	15	336.525.1	45	336.525.6	0,41
32	1.1/4"	HBW-H-20	32	39	1	336.532.0	15	336.532.1	45	336.532.6	0,48
38	1.1/2"	HBW-H-24	38	45	1	336.538.0	15	336.538.1	45	336.538.6	0,54
44	1.3/4"	HBW-H-28	44	51	1	336.544.0	15	336.544.1	45	336.544.6	0,6
51	2"	HBW-H-32	51	58	1	336.551.0	15	336.551.1	45	336.551.6	0,66
57	2.1/4"	HBW-H-36	57	64	1	336.557.0	15	336.557.1	45	336.557.6	0,73
64	2.1/2"	HBW-H-40	64	71	1	336.564.0	15	336.564.1	45	336.564.6	0,8
70	2.3/4"	HBW-H-44	70	77	1	336.570.0	15	336.570.1	45	336.570.6	0,86
76	3"	HBW-H-48	76	83	1	336.576.0	15	336.576.1	45	336.576.6	0,93
83	3.1/4"	HBW-H-52	83	90	1	336.583.0	15	336.583.1	45	336.583.6	1
89	3.1/2"	HBW-H-56	89	96	1	336.589.0	15	336.589.1	45	336.589.6	1,06
95	3.3/4"	HBW-H-60	95	102	1	336.595.0	15	336.595.1	45	336.595.6	1,12



# Hiproblanket Wrap Heavy red with turnbuckles



## BLANKET FROM WOVEN GLASS FIBRE YARNS, WITH RED IRON-OXIDE SILICON RUBBER, HOOK & LOOP CLOSURE AND TURNBUCKLES

The heatprotection of Hiproblanket in a split retro-fit form for quick installation on existing cables and hoses. Resistant to hydraulic fluids, lubricating oils and fuels, Hiproblanket Wrap with turnbuckles protects against molten splash, occasional flames, energy loss in piping and hoses; also protects employees from burns; allows "bundling" of wires, hoses and cables. Hiproblanket Wrap with turnbuckles is standard available up to 305 mm in diameter and allows quick installation on site without the need to dismantle and reconnect fittings. Also repair of existing installations can be performed with a minimum of labor and downtime. Typically used in the basic glass, ceramics and steel industry.

### Material & Construction:

**Construction:** Remountable sleeve from woven E-glass blanket, with polyester hook & loop closure and with at every 30 cm an additional nickel plated brass turnbuckle.

**Cover specifications:** Iron-oxide silicon rubber, excellent oil resistant, halogen free, good short term flame protection, good temperature reduction, withstands molten splash.

**Weight material:** 3,26 kg/m<sup>2</sup>

**Temperature:** -55 °C till +260 °C continuous.

- Under flame till +800 °C for approx. 20 minutes.
- Radiation heat till +800 °C for approx. 20 minutes.
- Molten metal splash till +1640 °C for 15 - 30 seconds.

**Temperature Wrap closure:** +110 °C continuous.

For higher temperatures additional securing with hiprosiltape is recommended.

**Colour:** Red.



HIPOBLANKET WRAP H - TB			DIAMETRE		RANDOM LENGTH		SMALL CARTON		REELS		WEIGHT
Size (mm)	Size (inch)	Type	Inside (mm)	Outside (mm)	Metre	Article No. red	Metre	Article No. red	Metre	Article No. red	(kg/m)
102	4"	HBW-HTB-64	102	109	1	336.940.0	15	336.940.1	45	336.940.6	1,29
114	4.1/2"	HBW-HTB-72	114	121	1	336.945.0	15	336.945.1	45	336.945.6	1,41
127	5"	HBW-HTB-80	127	134	1	336.950.0	15	336.950.1	45	336.950.6	1,55
140	5.1/2"	HBW-HTB-88	140	147	1	336.955.0	15	336.955.1	45	336.955.6	1,68
152	6"	HBW-HTB-96	152	159	1	336.960.0	15	336.960.1	45	336.960.6	1,8
165	6.1/2"	HBW-HTB-104	165	172	1	336.965.0	15	336.965.1	45	336.965.6	1,93
178	7"	HBW-HTB-112	178	185	1	336.970.0	15	336.970.1	45	336.970.6	2,07
191	7.1/2"	HBW-HTB-120	191	198	1	336.975.0	15	336.975.1	45	336.975.6	2,2
203	8"	HBW-HTB-128	203	210	1	336.980.0	15	336.980.1	45	336.980.6	2,32
216	8.1/2"	HBW-HTB-136	216	223	1	336.985.0	15	336.985.1	45	336.985.6	2,45
229	9"	HBW-HTB-144	229	236	1	336.990.0	15	336.990.1	45	336.990.6	2,59
241	9.1/2"	HBW-HTB-152	241	248	1	336.991.0	15	336.991.1	45	336.991.6	2,71
254	10"	HBW-HTB-160	254	261	1	336.992.0	15	336.992.1	45	336.992.6	2,84
267	10.1/2"	HBW-HTB-168	267	274	1	336.994.0	15	336.994.1	45	336.994.6	2,98
279	11"	HBW-HTB-176	279	286	1	336.996.0	15	336.996.1	45	336.996.6	3,1
292	11.1/2"	HBW-HTB-184	292	299	1	336.998.0	15	336.998.1	45	336.998.6	3,24
305	12"	HBW-HTB-192	305	312	1	336.999.0	15	336.999.1	45	336.999.6	3,37

# Hiproblanket Wrap Medium red



## BLANKET FROM WOVEN GLASS FIBRE YARNS, WITH RED IRON-OXIDE SILICON RUBBER AND METAL HOOK & LOOP CLOSURE

The Hiproblanket Medium in a split retro-fit form is an economical solution for quick installation on existing cables and hoses. Resistant to hydraulic fluids, lubricating oils and fuels, Hiproblanket Medium Wrap provides protection against molten splash, occasional flames; allows "bundling" of wires, hoses and cables. Due to the strong design of Hiproblanket Wrap Medium with a metal hook and aramid fleece allows quick installation on site without the need to dismantle and reconnect fittings. Also repair of existing installations can be performed with a minimum of labour and downtime. Typically used in the basic industry.

### Material & Construction:

**Construction:** Remountable sleeve from glass fibre yarns.

**Cover specifications:** Silicon rubber, single-sided, excellent oil resistant, halogen free, limited short term flame protection, good temperature reduction, withstands small particles of molten splash. The hook is made from stainless steel and the loop is from aramid fleece material.

**Weight material:** 2,00 kg/m<sup>2</sup>.

**Temperature:** -55 °C till +230 °C continuous.

- Under flame till +800 °C for approx. 20 minutes.
- Radiation heat till +800 °C for approx. 20 minutes.
- Molten metal splash till +1640 °C for 15 - 30 seconds.

**Temperature hook and loop:** -55 °C till +300 °C continuous. Radiation heat till +500 °C for approx. 20 minutes.

**Colour:** Red.



HIPOBLANKET WRAP M			DIAMETRE		RANDOM LENGTH		SMALL CARTON		REELS		WEIGHT
Size (mm)	Size (inch)	Type	Inside (mm)	Outside (mm)	Metre	Article No. red	Metre	Article No. red	Metre	Article No. red	(kg/m)
32	1 1/4"	HBW-MM-20	32	39	-	-	15	356.732.3	-	-	0,48
38	1 1/2"	HBW-MM-24	38	40	-	-	15	356.738.3	-	-	0,54
51	2"	HBW-MM-32	51	53	-	-	15	356.751.3	-	-	0,66
76	3"	HBW-MM-48	76	78	-	-	15	356.776.3	-	-	0,93
102	4"	HBW-MM-64	102	104	-	-	15	356.799.3	-	-	1,12

# Hiproblanket Wrap Light grey



## BLANKET FROM WOVEN GLASS FIBRE YARNS, WITH THIN DOUBLE LAYER OF SILICON RUBBER AND HOOK & LOOP CLOSURE

The Hiproblanket Light in a split retro-fit form is an economical solution for quick installation on existing cables and hoses. Resistant to hydraulic fluids, lubricating oils and fuels, Hiproblanket Wrap Light provides limited protection against molten splash, occasional flames; allows "bundling" of wires, hoses and cables. Hiproblanket Wrap Light allows quick installation on site without the need to dismantle and reconnect fittings. Also repair of existing installations can be performed with a minimum of labor and downtime. Typically used in the basic industry.

### Material & Construction:

**Construction:** Remountable sleeve from glass fibre yarns.

**Cover specifications:** Silicon rubber, double-sided, excellent oil resistant, halogen free, limited short term flame protection, limited temperature reduction, withstands small particles of molten splash.

**Weight material:** 1,1 kg/m<sup>2</sup>.

**Temperature:** -55 °C till +260 °C continuous.

- Under flame till +538 °C for approx. 20 minutes.

- Radiation heat till +538 °C for approx. 20 minutes.

- Molten metal splash till +1200 °C for 15 - 30 seconds.

**Temperature Wrap closure:** +110 °C continuous. For higher temperatures additional securing with hiprosiltape is recommended.

**Colour:** Grey.



HIPOBLANKET WRAP L			DIAMETRE		RANDOM LENGTH		SMALL CARTON		REELS		WEIGHT
Size (mm)	Size (inch)	Type	Inside (mm)	Outside (mm)	Metre	Article No. grey	Metre	Article No. grey	Metre	Article No. grey	(kg/m)
25	1"	HBW-L-16	25	27	1	337.725.0	7,5	337.725.1	15	337.725.3	0,02
38	1.1/2"	HBW-L-24	38	40	1	337.738.0	7,5	337.738.1	15	337.738.3	0,04
51	2"	HBW-L-32	51	53	1	337.751.0	7,5	337.751.1	15	337.751.3	0,08
64	2.1/2"	HBW-L-40	64	66	1	337.764.0	7,5	337.764.1	15	337.764.3	0,15
76	3"	HBW-L-48	76	78	1	337.776.0	7,5	337.776.1	15	337.776.3	0,2
89	3.1/2"	HBW-L-56	89	91	1	337.789.0	7,5	337.789.1	15	337.789.3	0,3
102	4"	HBW-L-64	102	104	1	337.799.0	7,5	337.799.1	15	337.799.3	0,4

# Thermojacket S



## BRAIDED SLEEVING FROM E-GLASS, WITH AN ACRYLIC SATURANT COATING

The braided glass fibre sleeving is coated with an acrylic saturant coating, which adds rigidity and abrasive strength to the hose or cable and the large braid angle allows for significant expansion of the sleeve if necessary (for instance with in-line couplings or bigger cable-splices). The material resists most acids and alkalis; is unaffected by most bleaches and solvents. In the field of cable protection, a complete program of Thermojacket fittings is available for easy installation. Thermojacket S doesnot withstand molten splash like Hiprojacket does, but offers good heatprotection at higher continuous temperatures than are possible for Hiprojacket. Applications include thermal insulation and protecting of cables and hoses in the glass, ceramics and steel industry as well as in the apparatus- and machine-building industry.

### Material & Construction:

**Construction:** Braided E-glass sleeving, with acrylic saturant coating; high continuous temperature, halogen free, good thermal insulation, abrasion resistant, no end-fray, easy installation for long lengths.

**Temperature:** -55 °C till +538 °C continuous.

**Colour:** Gold.



THERMOJACKET S			DIAMETRE		STANDARD CARTON		SMALL CARTON		REELS		WEIGHT
Size (mm)	Size (inch)	Type	Inside (mm)	Outside (mm)	Metre	Article No. gold	Metre	Article No. gold	Metre	Article No. gold	(kg/m)
4	1/4"	TJ-04	5 - 10	7 - 12	30	336.604.3	15	336.604.1	180	336.604.8	0,02
6	3/8"	TJ-06	8 - 15	10 - 17	30	336.606.3	15	336.606.1	120	336.606.8	0,04
10	5/8"	TJ-10	12 - 30	14 - 32	30	336.610.3	15	336.610.1	75	336.610.8	0,08
14	7/8"	TJ-14	20 - 50	22 - 52	30	336.614.3	15	336.614.1	60	336.614.8	0,15
22	1.3/8"	TJ-22	30 - 65	32 - 67	30	336.622.3	15	336.622.1	45	336.622.8	0,2
44	2.3/4"	TJ-44	50 - 125	52 - 127	30	336.644.3	15	336.644.1	-	-	0,3

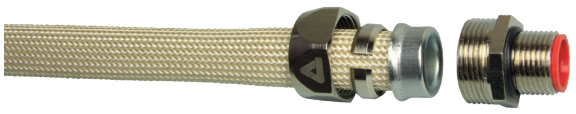
### Special remarks:

Thermojacket S is a woven sleeve and for this reason very flexible. Due to its flexibility it can be expanded, so different sizes can be covered with one and the same type of Thermojacket S.

Please notice that when the sleeve is expanded, more meters are necessary to cover the same length, as indicated in the table below.

- TJ-04 on 6 mm core: 1,00 metre TJ is needed to cover 1,00 metre core.
- TJ-06 on 10 mm core: 1,00 metre TJ is needed to cover 1,00 metre core.
- TJ-06 on 13 mm core: 1,25 metre TJ is needed to cover 1,00 metre core.
- TJ-10 on 16 mm core: 1,00 metre TJ is needed to cover 1,00 metre core.
- TJ-10 on 19 mm core: 1,15 metre TJ is needed to cover 1,00 metre core.
- TJ-14 on 25 mm core: 1,02 metre TJ is needed to cover 1,00 metre core.
- TJ-14 on 32 mm core: 1,08 metre TJ is needed to cover 1,00 metre core.
- TJ-22 on 38 mm core: 1,06 metre TJ is needed to cover 1,00 metre core.
- TJ-22 on 52 mm core: 1,17 metre TJ is needed to cover 1,00 metre core.
- TJ-44 on 76 mm core: 1,16 metre TJ is needed to cover 1,00 metre core.
- TJ-44 on 102 mm core: 1,51 metre TJ is needed to cover 1,00 metre core.

# Fittings for Thermo jacket IP 40, nickel plated brass



## ANACONDA NICKEL PLATED BRASS FITTINGS FOR ANAMET THERMOJACKET S

To fit the Thermo jacket S you can use the standard Anaconda fittings (which are being used for Sealtite), if you replace their standard polyamide clamping rings with the special metal clamping rings mentioned here under. The fittings are also available in 45° - 90° and in stainless steel.

### Material & Construction:

**Construction:** Nickel plated brass fitting, consisting of 4 parts (counter nut, clamping ring, ferrule and body).  
**Material:** Counter nut, body, clamping ring and ferrule are nickel plated brass with exception of size 3/8" till 1" where the ferrule is from galvanised steel. Inserts are made from PA6 (red for ISO metric, blue for Pg and white for NPT).

**Temperature:** -45 °C till +105 °C continuous (cable-hose fittings till +300 °C on request).  
**Protection class:** IP 40.  
**Colour:** Metal.

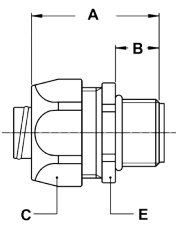
Clamping ring, nickel plated brass, for combination with Thermo jacket S



Size (mm)	THERMOJACKET TYPE		FITTING THREAD SIZE			STANDARD PACKAGE	ARTICLE NUMBER	WEIGHT (KG/100)
	Aero	ISO	Pg	NPT				
6	TJ-06	-	M16 x 1,5	Pg 11	1/2" NPT	50	817.612.0*	0,6
10	TJ-10	-	M20 x 1,5	Pg 16	1/2" NPT	50	817.616.0	0,6
10	TJ-10	-	M25 x 1,5	Pg 21	3/4" NPT	25	817.620.0	1
14	TJ-14	-	M32 x 1,5	Pg 29	1" NPT	10	817.626.0	1,2
14	TJ-14	-	M40 x 1,5	Pg 36	1.1/4" NPT	5	817.635.0*	2
22	TJ-22	-	M50 x 1,5	Pg 42	1.1/2" NPT	5	817.640.0*	4,2
22	TJ-22	-	M63 x 1,5	Pg 48	2" NPT	4	817.650.0*	9

\* Please note that for the marked sizes a double layer of teflon tape or Hiprosiltape is recommended around the ferrule. This to guarantee the right pull-out strength.

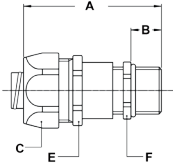
ISO straight fitting, male, nickel plated brass (without clamping ring)



THREAD ISO	HIPOJACKET		DIMENSIONS IN MM					STANDARD PACKAGE	ARTICLE NUMBER	WEIGHT (KG/100)
	Type	Int. Diam.	A	B	C	D	E			
M16 x 1,5	TJ-06	10,2	12	26	24	-	50	50	812.016.1	4,7
M20 x 1,5	TJ-10	13,9	13	29	27	-	50	50	812.020.1	5,1
M25 x 1,5	TJ-10	18,5	15	35	33	-	25	25	812.025.1	11,7
M32 x 1,5	TJ-14	23,8	15	45	43	-	10	10	812.032.1	19,7
M40 x 1,5	TJ-14	31,8	16	54	52	-	5	5	812.040.1	35
M50 x 1,5	TJ-22	36,8	18	63	60	-	5	5	812.050.1	42,2
M63 x 1,5	TJ-22	47,8	20	77	74	-	4	4	812.063.1	52,8

## FITTINGS FOR THERMOJACKET IP 40

ISO cable-hose fitting, with extended clamping range, male, nickel plated brass (without clamping ring)



THREAD ISO	THERMOJACKET	CLAMPING RANGE (MM)	DIMENSIONS IN MM					STANDARD PACKAGE	ARTICLE NUMBER	WEIGHT (KG/100)
	Type		A	B	C	E	F			
M16 x 1,5	TJ-06	3 - 10,2	64	12	26	24	20	10	812.716.2	8,2
M20 x 1,5	TJ-10	7 - 13,9	64	12	29	27	24	10	812.720.2	10,2
M25 x 1,5	TJ-10	9 - 18,0	77	15	35	33	30	5	812.725.2	17,0
M32 x 1,5	TJ-14	13 - 23,8	88	15	45	43	40	5	812.732.2	31,0
M40 x 1,5	TJ-14	20 - 31,8	102	15	54	52	50	2	812.740.2	54,6
M50 x 1,5	TJ-22	21 - 36,8	106	18	63	60	58	2	812.750.2	76,6
M63 x 1,5	TJ-22	27 - 44,0	116	18	77	74	68	2	812.763.2	116,6

# Thermojacket L

ANAMET THERMOJACKET L

## BRAIDED SLEEVING FROM TYPE E-GLASS, NON-TREATED

The most economic solution for less demanding situations. Compared to the standard Thermojacket, this Grade L is not heat treated, which makes it limited abrasion resistant. The material resists most acids and alkalis; is unaffected by most bleaches and solvents. Thermojacket Grade L is especially used in static applications with moderate heat radiation, and where limited thermal insulation of cables and hoses is needed. Typical field of application is in the apparatus- and machine-building industry (for example on motors, heaters, ovens, etc.).

### Material & Construction:

**Construction:** Braided E-glass sleeving; high continuous temperature, halogen free, moderate thermal insulation, soft-flexible, light weight.

**Temperature:** -55 °C till +538 °C continuous.

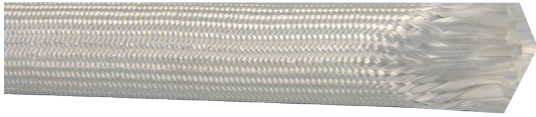
**Colour:** White.



THERMOJACKET L			DIAMETRE		STANDARD CARTON		SMALL CARTON		REELS		WEIGHT
Size (mm)	Size (inch)	Type	Inside (mm)	Outside (mm)	Metre	Article No. white	Metre	Article No. white	Metre	Article No. white	(kg/m)
2	5/32"	TJ-L-02	4	5	500	357.102.8	-	-	-	-	0,01
4	1/4"	TJ-L-04	6	7	300	357.104.8	-	-	-	-	0,01
5	5/16"	TJ-L-05	8	9	300	357.105.8	-	-	-	-	0,01
6	3/8"	TJ-L-06	10	11	300	357.106.8	-	-	-	-	0,02
8	1/2"	TJ-L-08	12	13	200	357.108.8	-	-	-	-	0,02
10	5/8"	TJ-L-10	15	16	200	357.110.8	-	-	-	-	0,02
12	3/4"	TJ-L-12	20	21	100	357.112.8	-	-	-	-	0,03
16	1"	TJ-L-16	25	26	100	357.116.8	-	-	-	-	0,03
18	1 1/8"	TJ-L-18	30	31	100	357.118.8	-	-	-	-	0,04
22	1 3/8"	TJ-L-22	34	35	50	357.122.8	-	-	-	-	0,06



# Silicajacket



## BRAIDED SLEEVING FORM SILICA FIBRES

In cases of higher temperatures than the standard Thermo jacket, Silicajacket is the solution as heat protection for cables and hoses. Thanks to the natural rigidity the Silicajacket is easy to apply over long lengths of hose or cable and the large braid angle allows for significant expansion of the sleeve if necessary (for instance with in-line couplings or bigger cable-splices). The material resists most acids and alkalis; is unaffected by most bleaches and solvents. Silicajacket does not withstand molten splash like Hipro jacket does, but offers good heat protection at higher continuous temperatures than are possible for Hipro jacket and Thermo jacket. Applications include thermal insulation and protecting of cables and hoses in the glass, ceramics and steel industry as well as in the apparatus- and machine-building industry. In case a higher abrasion is needed it is possible to supply Silicajacket with a Vermiculite coating. Also available completely made from ceramic fibres for temperatures up to +1260 °C continuous.

### Material & Construction:

**Construction:** Braided sleeving from amorphous silica fibres, high continuous temperature, halogen free, good thermal insulation, easy installation for long lengths. The resistance to acids is fair and to most alkalis is good. Silicajacket has a high resistance against bleaches and solvents.

**Temperature:** -55 °C till +980 °C continuous.

**Colour:** White.



SILICAJACKET			DIAMETRE		STANDARD CARTON		SMALL CARTON		REELS		WEIGHT
Size (mm)	Size (inch)	Type	Inside (mm)	Outside (mm)	Metre	Article No. white	Metre	Article No. white	Metre	Article No. white	(kg/m)
16	1"	SJ-16	25	27	15	347.016.1	-	-	-	-	0,008
24	1.1/2"	SJ-24	38	40	15	347.024.1	-	-	-	-	0,015
32	2"	SJ-32	50	52	15	347.032.1	-	-	-	-	0,02
48	3"	SJ-48	75	77	15	347.048.1	-	-	-	-	0,03
64	4"	SJ-64	100	102	15	347.064.1	-	-	-	-	0,04

# Basaltjacket



## KNITTED SLEEVING FROM BASALT YARN

This high temperature knitted sleeve is constructed of 100% basalt yarn, which provides excellent thermal protection and will withstand continuous exposure to temperatures of up to +750 °C. When installed on vehicle exhaust tubes and pipes, the sleeve facilitates retention of high temperatures as gases flow through the exhaust system.

The durable, knitted design is very flexible, which enables ease of assembly over tubes and pipes with bends and flanges. The dense single wall construction provides optimal coverage. The heavy duty construction, which is more than 15% denser than market average and minimizes snagging and tearing of the sleeve during assembly. The sleeves are available in precut lengths or continuous lengths of up to 150 meter (depending on size), which permits the user to cut the sleeves to exact lengths to adapt to specific requirements. Typical applications include automotive, heavy-duty truck, and bus exhaust tubes and pipes and high temperature industrial applications to protect hoses and cables.

### Material & Construction:

**Construction:** Knitted basalt yarn.

**Chemical resistance:** Resists most acids and alkalis and is unaffected by most bleaches and solvents.

**Operating temperature:** -260 °C till +750 °C continuous, +980°C short term.

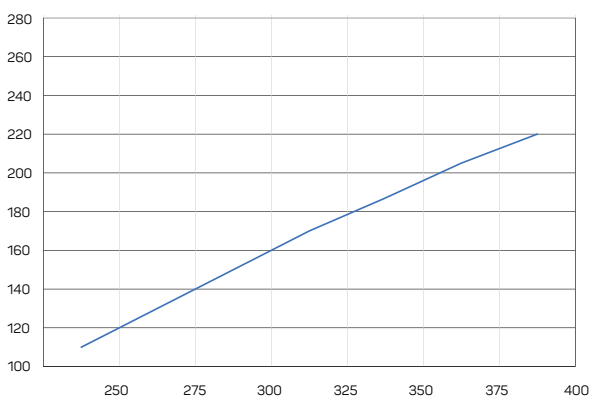
**Colour:** Gold.



BASALTJACKET			DIAMETRE		STANDARD CARTON		SMALL CARTON		REELS		WEIGHT
Size (mm)	Size (inch)	Type	Inside (mm)	Outside (mm)	Metre	Article No. gold	Metre	Article No. gold	Metre	Article No. gold	(kg/m)
25	1"	BJ-16	25	30	152	347.625.6	30	347.625.3	-	-	-
38	1 1/2"	BJ-24	38	43	91	347.638.6	30	347.638.3	-	-	-
51	2"	BJ-32	51	56	76	347.651.6	30	347.651.3	-	-	-
64	2 1/2"	BJ-40	64	69	68	347.664.6	30	347.664.3	305	347.664.8	-
76	3"	BJ-48	76	81	61	347.676.6	30	347.676.3	259	347.676.8	-
89	3 1/2"	BJ-56	89	94	53	347.689.6	30	347.689.3	228	347.689.8	-
102	4"	BJ-64	102	107	50	347.695.6	30	347.695.3	198	347.695.8	-
127	5"	BJ-80	127	132	38	347.698.6	30	347.698.3	152	347.698.8	-

### Wire heat protection test

Wire temperature at 76 mm from a 4" exhaust tube



### Exhaust tube temperature °C

The information contained herein is believed to be reliable. Users should make their own evaluations on products and materials to determine the suitability for the application.

# Hiproblanket Heavy red



## BLANKET FROM WOVEN GLASS FIBRE YARNS, WITH THICK LAYER OF RED IRON-OXIDE SILICON RUBBER

A woven blanket of glass fibre, backed with an excellent oil resistant silicone rubber cover, provides an effective method to shield employees and equipment from intense heat radiation and the hazards of molten splash. Supplied as a blanket from 1 meter wide by up to 45 meter long, Hiproblanket Heavy can be figured to provide protection for almost any shape. Joined to curtains, by sewing with glass fibre yarn or by connecting with stainless steel turn-buckles, Hiproblanket Heavy covers are able to shield furnace control panels, cable ladders and fettling plants. Typically used in the basic glass, ceramics and steel industry. On demand also available made from silica with a red iron oxide silicone cover.

### Material & Construction:

**Construction:** Woven blanket from E-glass yarns. **Temperature:** -55 °C till +260 °C continuous.

**Cover specifications:** Iron-oxide silicon rubber.

Excellent oil resistant, halogen free, good short term flame protection, good temperature reduction, withstands molten splash.

**Weight material:** 3,26 kg/m<sup>2</sup>.

- Under flame till +800 °C for approx. 30 minutes.
- Radiation heat till +800 °C for approx. 20 minutes.
- Molten metal splash till +1640 °C for 15 - 30 seconds.

**Colour:** Red.



HIPOBLANKET HEAVY			DIMENSIONS		RANDOM LENGTH		SMALL CARTON		REELS		WEIGHT
Size (mm)	Size (inch)	Type	Width (mm)	Thickness (mm)	Metre	Article No. red	Metre	Article No. red	Metre	Article No. red	(kg/m)
1016	40"	HB-H-3250S	1016	3	1	336.440.0	15	336.440.1	45	336.440.5	3,26

# Hiproblanket Medium red



## BLANKET FROM WOVEN GLASS FIBRE YARNS, WITH THICK LAYER OF RED IRON-OXIDE SILICON RUBBER

A woven blanket of glass fibre, backed with an excellent oil resistant silicone rubber cover, provides an effective method to shield employees and equipment from intense heat radiation and the hazards of molten splash. Supplied as a blanket from 1 meter wide by up to 50 meter long, Hiproblanket Heavy can be figured to provide protection for almost any shape. Joined to curtains, by sewing with glass fibre yarn or by connecting with stainless steel turn-buckles, Hiproblanket Heavy covers are able to shield furnace control panels, cable ladders and fettling plants. Typically used in the basic glass, ceramics and steel industry.

### Material & Construction:

**Construction:** Woven blanket from E-glass yarns.

**Temperature:** -55 °C till +260 °C continuous.

**Cover specifications:** Iron-oxide silicon rubber.

Excellent oil resistant, halogen free, good short term flame protection, good temperature reduction, withstands molten splash.

- Under flame till +800 °C for approx. 30 minutes.
- Radiation heat till +800 °C for approx. 20 minutes.
- Molten metal splash till +1640 °C for 15 - 30 seconds.

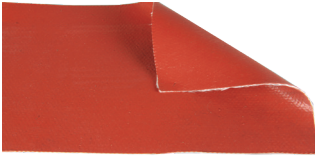
**Weight material:** 2,00 kg/m<sup>2</sup>.

**Colour:** Red.



HIPOBLANKET MEDIUM			DIMENSIONS		RANDOM LENGTH		SMALL CARTON		REELS		WEIGHT
Size (mm)	Size (inch)	Type	Width (mm)	Thickness (mm)	Metre	Article No. red	Metre	Article No. red	Metre	Article No. red	(kg/m)
1000	~40"	HB-M-2000-S	1000	1,6	1	336.340.0	25	336.340.1	50	336.340.5	2

# Hiproblanket Medium red 2 sides



## BLANKET FROM WOVEN GLASS FIBRE YARNS, WITH DOUBLE SIDED A THICK LAYER OF RED IRON-OXIDE SILICON RUBBER

A woven blanket of glass fibre, with double sided an excellent oil resistant silicone rubber cover, provides an effective method to shield employees and equipment from heat radiation and particles of molten splash. Supplied as a blanket from 1,0 meter wide by up to 50 meter long, Hiproblanket Medium can be figured to provide protection for almost any shape. Especially used where lower weight is required. Hiproblanket Medium covers are able to shield hydraulic hoses and piping. Typically used in general industrial applications.

### Material & Construction:

**Construction:** Woven blanket from E-glass yarns.

**Cover specifications:** Silicon rubber, double-sided, excellent oil resistant, halogen free, limited short term flame protection, good temperature reduction, withstands particles of molten splash.

**Weight material:** 2,6 kg/m<sup>2</sup>.

**Temperature:** -55 °C till +260 °C continuous.

- Under flame till +800 °C for approx. 20 minutes.
- Radiation heat till +800 °C for approx. 20 minutes.
- Limited molten metal splash till +1640 °C for 15 - 30 seconds.

**Colour:** Red.



HIPOBLANKET MEDIUM 2 SIDES			DIMENSIONS		RANDOM LENGTH		SMALL CARTON		REELS		WEIGHT
Size (mm)	Size (inch)	Type	Width (mm)	Thickness (mm)	Metre	Article No. red	Metre	Article No. red	Metre	Article No. red	(kg/m)
1000	40"	HB-M-2600-D	1000	2	1	336.350.0	10	336.350.1	50	336.350.5	2,6

# Hiproblanket Medium aluminum 1 side



## BLANKET FROM WOVEN GLASS FIBRE YARNS, WITH SINGLE SIDED AN ALUMINUM FOIL

A woven blanket of glass fibre, backed on one sides, with an aluminum cover, provides an effective method to shield employees and equipment from limited heat radiation. Supplied as a blanket from 1 meter wide by up to 50 meter long, Hiproblanket Medium Aluminum can be figured to provide protection for almost any shape. Especially used where low weight is required. Hiproblanket Medium Aluminum has limited flame properties.

### Material & Construction:

**Construction:** Woven blanket from heat treated E-glass yarns.

**Cover specifications:** Aluminum foil, single-sided, halogen free, The cover will decompose above 200 °C, limited temperature reduction, high heat radiation.

**Weight material:** 1,10 kg/m<sup>2</sup>.

**Temperature:** -55 °C till +200 °C continuous.

Radiation heat till +600 °C for approx. 20 minutes.

**Colour:** Silver.



HIPOBLANKET MEDIUM ALUMINUM			DIMENSIONS		RANDOM LENGTH		SMALL CARTON		REELS		WEIGHT
Size (mm)	Size (inch)	Type	Width (mm)	Thickness (mm)	Metre	Article No. silver	Metre	Article No. silver	Metre	Article No. silver	(kg/m)
1000	40"	HB-AS-1100	1000	1,6	1	336.470.0	25	336.470.1	50	336.470.3	1,1

# Hiproblanket Light grey



## BLANKET FROM WOVEN GLASS FIBRE YARNS, WITH THIN DOUBLE LAYER OF SILICON RUBBER

A woven blanket of glass fibre, backed on both sides, with an excellent oil resistant silicone rubber cover, provides an effective method to shield employees and equipment from limited heat radiation and small particles of molten splash. Supplied as a blanket from 1,5 meter wide by up to 45 meter long, Hiproblanket Light can be figured to provide protection for almost any shape. Especially used where low weight is required. Hiproblanket Light covers are able to shield hydraulic hoses and piping. Typically used in general industrial applications.

### Material & Construction:

**Construction:** Woven blanket from E-glass yarns.

**Cover specifications:** Silicon rubber, double-sided, excellent oil resistant, halogen free, limited short term flame protection, limited temperature reduction, withstands small particles of molten splash.

**Weight material:** 0,85 or 1,1 kg/m<sup>2</sup>.

**Temperature:** -55 °C till +260 °C continuous.

- Under flame till +538 °C for approx. 30 minutes.
- Radiation heat till +538 °C for approx. 20 minutes.
- Small molten metal splash till +1200 °C for 15 - 30 seconds.

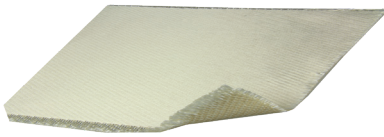
**Colour:** Grey.



HIPOBLANKET LIGHT			DIMENSIONS		RANDOM LENGTH		SMALL CARTON		REELS		WEIGHT
Size (mm)	Size (inch)	Type	Width (mm)	Thickness (mm)	Metre	Article No. grey	Metre	Article No. grey	Metre	Article No. grey	(kg/m)
1524	60"	HB-L-1100-D	1524	1	1	336.420.0	15	336.420.1	45	336.420.5	1,1



# Silicablanket



## BLANKET FROM WOVEN SILICA YARNS

A woven blanket of silica fibre provides an effective method to shield employees and equipment from intense heat radiation. Supplied as a blanket from 0,9 metre wide by up to 50 meter long, Silicablanket can be figured to provide protection for almost any shape. The material resists most acids and alkalis; is unaffected by most bleaches and solvents. Silicablanket doesnot withstand molten splash like Hiproblanket does, but offers good heatprotection at higher continuous temperatures than are possible for Hiproblanket or Thermoblanket. Applications include thermal insulation and protection of all kinds of large surfaces and irregular shapes, in the glass, ceramics and steel industry as well as in the apparatus- and machine-building industry. Type SB1200VM has a Vermiculite coating for higher abrasion and excelent flame properties.

### Material & Construction:

**Construction:** Woven blanket from amorpheus silica yarns. High continuous temperature, halogen free, good thermal insulation.

**Weight material:** 1,35, 1,10 or 0,60 kg/m<sup>2</sup>.

**Temperature:** -55 °C till +1090 °C continuous.

**Colour:** White.



SILICABLANKET			DIMENSIONS		RANDOM LENGTH		SMALL CARTON		REELS		WEIGHT
Size (mm)	Size (inch)	Type	Width (mm)	Thickness (mm)	Metre	Article No. white	Metre	Article No. white	Metre	Article No. white	(kg/m)
880	34"	SB-600	880	0,65	1	347.430.0	-	-	50	347.430.5	0,6
930	37"	SB-1200-VM	930	1,2	1	347.420.0	-	-	50	347.420.5	1,1

# Competence in making special assemblies

The Hipro Blanket is specifically suitable to be used for heat protective assemblies.

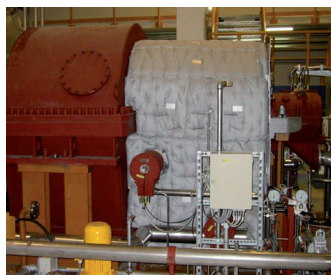
**Curtains:** by adding rings or rails we are able to make curtains that protects areas against heat.

**Covers:** by using buckles or turn buckles we are able to construct covers for machinery or other equipment.

**Wraps:** by using hook and loops, sometimes additional enforced by turn buckles we are able to make wraps in various shapes and sizes.

**Insulation Wrap:** by using additional insulation material we are able to create insulation and heat protective wraps.

Next we are able to construct special assemblies based on specification or drawing.



# Hipro Insulation Wrap

## ASSEMBLY FROM HIPROBLANKET AND THERMOBLANKET WITH NEEDED E-GLASS FILLING

The Hipro Insulation Wrap is a combination of our Hipro and Thermo products with the aim to achieve a high level of thermal insulation in combination with short term flame protection. The outer layer of Hiproblanket Light insulation material is resistant to hydraulic fluids, lubricating oils and fuels, it protects against small particals of molten splash, occasional flames, energy loss in piping and hoses; also protects employees from burns. The main characteristic however is that Hipro Insulation Wrap has an effective high insulation  $\lambda$ -Factor in saving energy losses from piping etc.. Hipro Insulation Wrap is a custom made product and can be made in diameters up to 302 mm. It allows quick installation in-situ without the need to dismantle and reconnect fittings. Also repair of existing installations can be performed with a minimum of labor and downtime. Typically used in the basic glass, ceramics and steel industry. On demand also available with ceramic filling.

### Material & Construction:

**Construction:** Remountable sleeve from woven E-glass blanket as innerlayer, filling of needled E-glass and silicone coated E-glass blanket outside; with polyester hook & loop closure and with at every 10 cm an additional nickel plated brass turnbuckle.

**Cover specifications:** Silicon rubber, excellent oil resistant, halogen free, limited short term flame protection, good temperature reduction,

withstands small particals of molten splash.

**Temperature:** -55 °C till +260 °C continuous.

- Under flame till +538 °C for approx. 20 minutes.
- Radiation heat till +538 °C for approx. 20 minutes.
- Small molten metal splash till +1200 °C for 15 - 30 seconds.

**Colour:** Grey.

Hipro Insulation Wrap comes in 2 types of needled fillings with different thermal insulation characteristics:

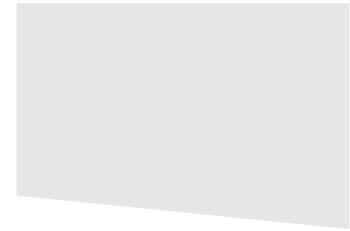
Thermal conductivity data ( $\lambda$ )



	TYPE 1	TYPE 2
<b>TEMPERATURE / FILLING</b>	Filling 96-112 kg/m <sup>3</sup>	Filling 144-176 kg/m <sup>3</sup>
<b>AT 150 C°</b>	0,04 W / mK	0,05 W / mK
<b>AT 260 C°</b>	0,05 W / mK	0,07 W / mK
<b>AT 370 C°</b>	0,065 W / mK	0,09 W / mK



# MSDS for Hipro-, Thermo and Silicajacket



## HIPRO- THERMO- AND SILICA INSTRUCTION:

The heatprotection products of Anamet Europe BV can be easily cut with a pair of scissors or a craft knife. Please note however the under mentioned safety regulations.

## SAFETY AND HEALTH PRECAUTIONS FOR HANDELING HIPRO- AND THERMO PRODUCTS

For the Hipro products there are no additional safety pre-cautions needed in addition to the Thermo products. The difference between these product groups is the silicone cover. Silicone can be classified as not dangerous. In case of E-Glass fibre, precautions under certain circumstances might be needed.

### Personal safety:

**Breath safety:** In situations where large quantities of fibre dust occur, it is advised to wear at least an European commission approved FP1 or FP2 dusk mask. We recommend using types like 3M8710 or 33M9900 or similar, being approved by the American National Institute for Occupational Safety and Health (NIOSH).

**Eye protection:** Safety glasses or mask.

**Hand protection:** Safety hand gloves.

**Body protection:** Using long sleeved clothes (shirt and trousers) in order to avoid irritation. Persons with a sensible skin are recommended to protect free falling skin areas with a protective crème.

**Instruction for labour hygiene:** The regulation as stated in TRGS 521 - glass fibre dust – as published on November 1997, Nr. 5, general statement, for fibres with a diameter larger than 3 µm which will occur during handling or machining a product, should be followed up accordingly.

### Toxicologic instructions:

**Local effects:** Short term itch possible. The itch is from mechanical art and short term, they can be applicable for skin, eyes and the upper respiration. The influence will however decrease by leaving the production area. Classification according Norm 67 / 548 / EEC is not needed as glass filaments are according Norm 97 / 69 / EC not classified as being itchy (Class Xi).

**Irritation:** Very seldom allergic reactions. The statement of allergies is given in general. In order to avoid any risk we advise to handle the products in a moist environment.

**Risk of cancer:** The high quality E-glassfibers used in the Hipro- and Thermo-products are having a diameter of more than 3 micron (typical diameter of 9 micron average) and are therefore classified as non-respirable!! This means that these fibers do not penetrate in the lower lungs. Respirable fibers are defined as "... fibers with a length of more than 5 micron, with a diameter smaller than 3 micron and a length / diameter ratio of more than 3/1 ..." (definition according to the World Health Organization).

**Details towards risk of cancer:** The fact that E-Glass fibres are a non-cancer risk are, independently from each other, stated by various official authorities. The WHO (World Health Organisation) has, through its International Cancer Investigation Centre (CIRC), in addition to the congress in June 1987, checked all relevant laboratory tests on animals with reflection to glass fibres analysis. The results are that Glass fibres are judged as a non-risk in relation to cancer. They belong to the group MMF (Man made Mineral Fibres). The European commission has, in Norm 97 / 69 / EC, included that Glass fibres are a non-risk element and for this reason do not need any classification or labelling.

### Risk Substances:

**E-Glass fibre:** CAS-Nr.: 65977-17-3, R-Type not applicable, mass quantity 98,5 - 99 %.

**Coating:** Non-subscribed, R-Type not applicable, mass quantity 1,5 - 1,0 %.

### First aid method:

**Description first aid method:** Cleaning activities in order to remove fibres from respiration, skin and mucous membrane.

**After inhalation:** Forcing coughing by using slime developing or stimulating damp (like water damp inhalation).

**After skin contact:** Cleaning the skin by using water and soap.

**After eye contact:** Large fibres by mechanical cleaning. Small fibres by flushing water from the nose to the eye corner.

**After eating:** Meaningless.

**Instruction for first aid or medical assistance:** No specific medical treatment is needed.

**Instructions for fire fighting:** The burning gasses from glass fibres are in basic; Carbon Dioxide and water damp. It is however possible that small amounts of Carbon Monoxide and other substances will occur. In case of large fires the use of protection equipment is needed.



**ELVARME**

## **VORES PRODUKTSORTIMENT INKLUDERER:**



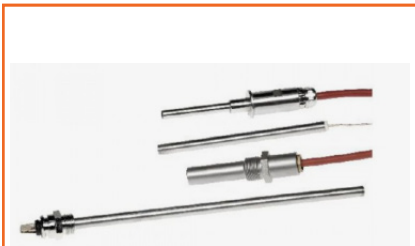
**NIKKELLIDSE**



**INTEMP +1250C**



**GENNEMSTRØM KUNDEDESIGN**



**VARMEPATRONER**



**QUARTZ TUNGSTEN**

## **VI FØRER PRODUKTER INDENFOR KATEGORIERNE:**



**AUTOMATIK**



**HVAC & BYGNINGS-  
AUTOMATIK**



**KØLEPROFILER**

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