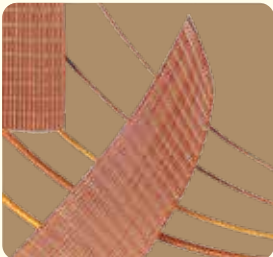


Vacuum Accessories

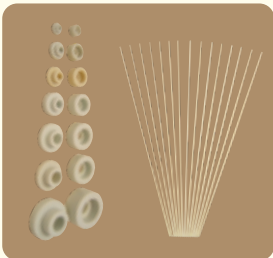
In Vacuum Wires, Cables & Accessories



Designed for use in high and ultrahigh vacuum systems, our Teflon® and Kapton® insulated wires provide a solution to many in-vacuum wiring requirements. Kapton® insulating film and Kapton® insulating adhesive tapes and various connectors and wiring accessories are also available.



Ceramic Bushes, Tubes, Stand-Offs & Spacers



We provide a range of standard in-vacuum ceramic insulator bushes and tubes. A bespoke manufacturing service for ceramics is also available, please contact our sales office for further details.



Lubricants, Sealants & Glues



A variety of in-vacuum lubricants is available to suit many applications from high to ultrahigh vacuum environments.

Air service anti seize thread lubricant is also available and highly recommended to protect threads on all flange mounting bolts.

We also offer a range of electrically isolating and electrically conducting in-vacuum glues.



All dimensions are nominal in millimetres unless otherwise specified



Vented Screws

A broad range of sizes and styles of vented screws are available as standard products, with additional sizes and bespoke requirements catered for on request.



Over Pressure Burst Discs

Over pressure burst discs are employed as a system safety device to protect against over pressure damage that can be caused by back filling.



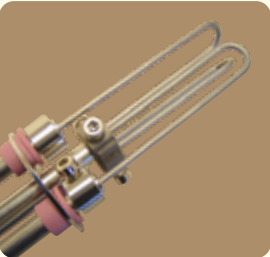
Foreline Traps

Used to capture vapours and gasses to prevent backstreaming of into pumps



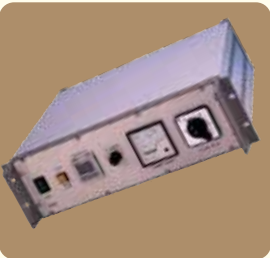
PVC Hoses

PVC hoses are ideally suited for use as backing lines or exhaust lines within your system.

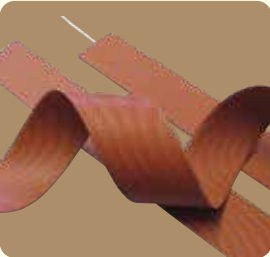


Titanium Sublimation Pump & Controller

We offer a complete titanium sublimation pump package, including the pump head, controller, cabling and spare parts.



All dimensions are nominal in millimetres unless otherwise specified



Heater Tapes

Flexible heater tapes are an ideal method by which localised heating can be applied to specific areas of a chamber or an accessory such as a gate valve or magnetic transporter.



Temperature Controller

A versatile PID controller for bakeout temperature management.



Vacuum Exsiccator

A compact and rigid vacuum exsiccator box to store samples under vacuum or in a controlled atmosphere.

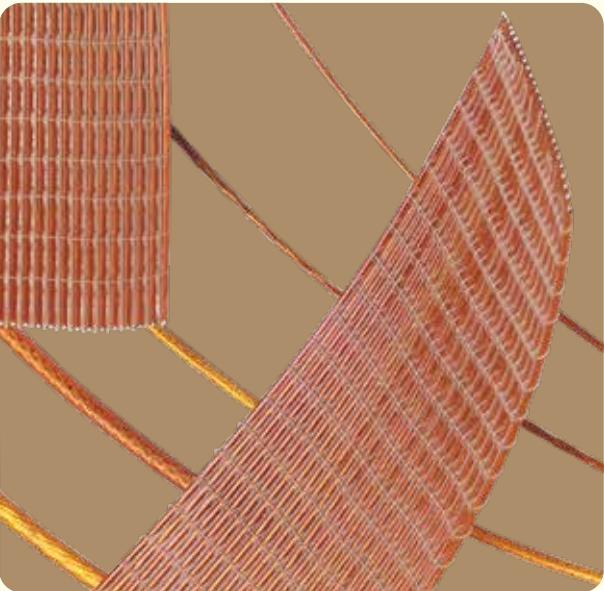


In Vacuum Micro Switch

An accurate, reproducible and compact electrical switch for use in UHV and or radiation environment applications.

All dimensions are nominal in millimetres unless otherwise specified

UHV Kapton® Insulated Wires & Ribbon Cables



Features:

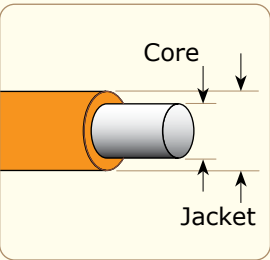
- UHV compatible construction.
- High temperature rated to 250°C.
- Kapton® type F insulating film.
- Silver plated copper conductors.
- Single, multi-strand and coaxial wires.
- Ribbon cables.
- Type K thermocouple wire.
- RoHS & REACH compliant

Specifications:

Voltage	See tables
Current	See tables
Material	
Conductor	Silver plated copper, St.St.
Insulation	Kapton® type F film
Kapton® Properties	
Dielectric constant	2.9
Dielectric strength	80kV/mm
Dissipation factor,1MHz	0.002
Initial tear	13.4kg/mm
Moisture absorbtion	0.4% @ 50% RH
Temperature Range	-75°C to 250°C

LewVac Kapton® insulated in-vacuum wiring is designed for high and ultrahigh vacuum environments and is bakeable to 250°C. All conductors and braided coaxial shields are constructed with silver plated copper wire. (Except thermocouple pair). Insulation is a high mechanical strength Kapton® type F film that is applied and heat treated to minimise trapped gasses. Multiconductor cables are available in either flat ribbon or circular configuration with an outer PEEK (polyetheretherketone) monofilament weave. Circular cable conductors are colour coded for ease of wiring. For non coded wires LewVac offers coloured glass identification beads in six easy to distinguish colours, see later in this catalogue section for details.

Single Core Wire - 450VAC, 1.5kVDC



Current Rating	Core Dia. (AWG)	Jacket Dia.	Resistance @ 20°C	Length (m)	Part Code	Price £	Price €
0.25A	1 x 0.16 (34)	0.17	N/A	10	KAPW1X015	£25	€29

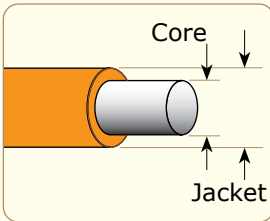
Single Core Wire - 600VAC, 2kVDC

Current Rating	Core Dia. (AWG)	Jacket Dia.	Resistance @ 20°C	Length (m)	Part Code	Price £	Price €
2A	1 x 0.25 (30)	0.55	377Ω/km	10	KAPW1X025	£37	€43
2A	1 x 0.32 (28)	0.56	229Ω/km	10	KAPW1X032	£30	€35
3A	1 x 0.40 (26)	0.64	146Ω/km	10	KAPW1X040	£25	€29
4A	1 x 0.50 (24)	0.76	88.3Ω/km	10	KAPW1X050	£26	€30
7A	1 x 0.60 (22)	0.90	64.3Ω/km	10	KAPW1X061	£47	€55
11A	1 x 0.81 (20)	1.04	43.6Ω/km	10	KAPW1X0813	£47	€55
14A	1 x 1.02 (18)	1.57	21.6Ω/km	5	KAPW1X1024	£91	€105

Single Core Wire - 1kVAC, 5kVDC

Current Rating	Core Dia. (AWG)	Jacket Dia.	Resistance @ 20°C	Length (m)	Part Code	Price £	Price €
13A	1 x 0.94 (19)	1.48	25.8Ω/km	10	KAPW1X942	£47	€55

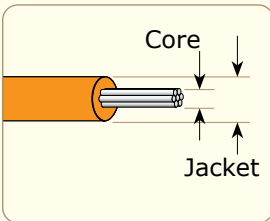
Cryogenic Single St.St. Core Wire - 1kVAC, 3kVDC



Current Rating	Core Dia. (AWG)	Jacket Dia.	Resistance @ 20°C	Length (m)	Part Code	Price £	Price €
1A	1 x 0.50 (24)	1.57	3.5kΩ/km	5	KAPW1X050C	£66	€76

Suitable for liquid Nitrogen service down to -273°C

7 Stranded Core Wire - 600VAC, 2kVDC



Current Rating	Core Dia. (AWG)	Jacket Dia.	Resistance @ 20°C	Length (m)	Part Code	Price £	Price €
1.5A	7 x 0.08 (32)	0.54	558Ω/km	10	KAPW7X008	£47	€55
2A	7 x 0.10 (30)	0.60	353Ω/km	10	KAPW7X010	£38	€44
2A	7 x 0.12 (28)	0.66	244Ω/km	10	KAPW7X0127	£29	€34
3A	7 x 0.15 (26)	0.75	159Ω/km	10	KAPW7X0152	£33	€38
4A	7 x 0.20 (24)	0.90	88.3Ω/km	10	KAPW7X0203	£32	€37

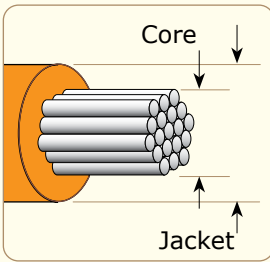
7 Stranded Core Wire - 3kVAC, 10kVDC

Current Rating	Core Dia. (AWG)	Jacket Dia.	Resistance @ 20°C	Length (m)	Part Code	Price £	Price €
4A	7 x 0.15 (26)	1.60	159Ω/km	10	KAPW7X015	£88	€102

7 Stranded Core Wire - 10kVAC, 30kVDC

Current Rating	Core Dia. (AWG)	Jacket Dia.	Resistance @ 20°C	Length (m)	Part Code	Price £	Price €
11A	7 x 0.317 (20)	2.286	32.18Ω/km	5	KAPW7X031	£104	€120

19 Stranded Core Wire - 600VAC, 2kVDC

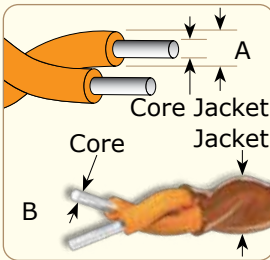


Current Rating	Core Dia. (AWG)	Jacket Dia.	Resistance @ 20°C	Length (m)	Part Code	Price £	Price €
6A	19 x 0.15 (22)	1.05	58.6Ω/km	10	KAPW19X0127	£32	€37
8A	19 x 0.2 (20)	1.30	32.5Ω/km	10	KAPW19X0178	£38	€44
11A	19 x 0.25 (18)	1.55	20.6Ω/km	10	KAPW19X0229	£180	€207
14A	19 x 0.3 (16)	1.80	14.3Ω/km	10	KAPW19X0254	£201	€232
16A	19 x 0.34 (14)	1.98	11.4Ω/km	10	KAPW19X0279	£221	€255
25A	19 x 0.45 (12)	2.55	6.29Ω/km	10	KAPW19X0381	£271	€312

19 Stranded Core Wire - 250VAC, 1kVDC

Current Rating	Core Dia. (AWG)	Jacket Dia.	Resistance @ 20°C	Length (m)	Part Code	Price £	Price €
2.5A	19 x 0.10 (26)	0.67	119Ω/km	10	KAPW19X010	£32	€37

Type K Thermocouple Pair Cable



Current Rating	Core Dia.	Fig.	Jacket Dia.	Length (m)	Part Code	Price £	Price €
Signal	(2x)1x0.20	A	0.39	2	KAPWTK1X020*	£32	€37
Signal	(2x)1x0.254	B	1.01	0.48	KAPWTK1X025-0.48**	£21	€25
Signal	(2x)1x0.254	B	1.01	0.99	KAPWTK1X025-0.99**	£42	€49
Signal	(2x)1x0.254	B	1.01	2.4	KAPWTK1X025-2.4**	£104	€120
Signal	(2x)1x0.254	B	1.01	10	KAPWTK1X025**	£420	€483

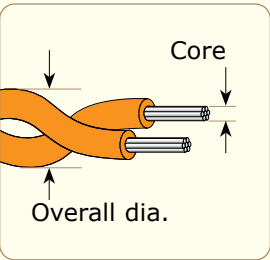
* - Compensating grade where +ve = 90% Ni, 10% Cr / -ve = 95% Ni, 5% Cr, traces of Mn & Al, which can't form a true TC junction
** - Wire ends can be welded to form a thermocouple junction. Call sales office for details.

All dimensions are nominal in millimetres unless otherwise specified

All dimensions are nominal in millimetres unless otherwise specified

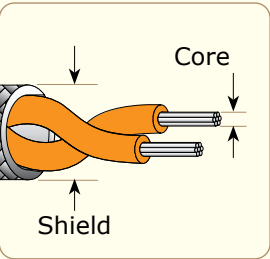
UHV Kapton® Insulated Wires & Ribbon Cables

Twisted Pair - 600VAC, 2kVDC



Current Rating	Core Dia. (AWG)	Overall Dia.	Length (m)	Part Code	Price £	Price €
2A	(2x) 7 x 0.12 (28)	1.02	2	KAPWTP7X0127	£44	€51
3A	(2x) 7 x 0.15 (26)	1.27	2	KAPWTP7X0150	£49	€57
4A	(2x) 7 x 0.20 (24)	1.52	2	KAPWTP7X0203	£49	€57
6A	(2x) 19x 0.12 (22)	1.78	2	KAPWTP19X0127	£61	€71
11A	(2x) 19 x 0.20 (20)	2.29	2	KAPWTP19X0200	£85	€98
11A	(2x) 19 x 0.25 (18)	2.54	2	KAPWTP19X0229	£90	€104

1 Twisted Pair Screened- 600VAC, 2kVDC



Current Rating	Core Dia. (AWG)	Shield Dia.	Resistance @ 20°C	Length (m)	Part Code	Price £	Price €
2 x 2A	(2x) 7 x 0.127 (28)	1.52	244Ω/km	10	KAPWTPS7X0127	£327	€377
2 x 25A	(2x) 19 x 0.36 (12)	5.08	6.2Ω/km	2	KAPWTPS19X0361	£134	€155

2 Twisted Pairs Screened- 600VAC, 2kVDC

Current Rating	Core Dia. (AWG)	Shield Dia.	Resistance @ 20°C	Length (m)	Part Code	Price £	Price €
4 x 2A	(4x) 7 x 0.127 (28)	2.54	244Ω/km	0.5	KAPW2TPS7X0127-500	£56	€65
4 x 2A	(4x) 7 x 0.127 (28)	2.54	244Ω/km	1.0	KAPW2TPS7X0127-1M	£91	€105
4 x 2A	(4x) 7 x 0.127 (28)	2.54	244Ω/km	2.5	KAPW2TPS7X0127-2.5M	£242	€279

4 Twisted Pairs Screened- 600VAC, 2kVDC

Current Rating	Core Dia. (AWG)	Shield Dia.	Resistance @ 20°C	Length (m)	Part Code	Price £	Price €
8 x 2A	(8x) 7 x 0.127 (28)	2.79	244Ω/km	0.5	KAPW4TPS7X0127-500	£77	€89
8 x 2A	(8x) 7 x 0.127 (28)	2.79	244Ω/km	1.0	KAPW4TPS7X0127-1M	£131	€151
8 x 2A	(8x) 7 x 0.127 (28)	2.79	244Ω/km	2.5	KAPW4TPS7X0127-2.5M	£273	€314

6 Twisted Pairs Screened- 600VAC, 2kVDC

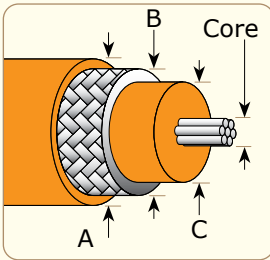
Current Rating	Core Dia. (AWG)	Shield Dia.	Resistance @ 20°C	Length (m)	Part Code	Price £	Price €
12 x 2A	(12x) 7 x 0.127 (28)	3.81	244Ω/km	0.5	KAPW6TPS7X0127-500	£98	€113
12 x 2A	(12x) 7 x 0.127 (28)	3.81	244Ω/km	1.0	KAPW6TPS7X0127-1M	£174	€201
12 x 2A	(12x) 7 x 0.127 (28)	3.81	244Ω/km	2.5	KAPW6TPS7X0127-2.5M	£379	€436

12 Twisted Pairs Screened- 600VAC, 2kVDC

Current Rating	Core Dia. (AWG)	Shield Dia.	Resistance @ 20°C	Length (m)	Part Code	Price £	Price €
24 x 2A	(24x) 7 x 0.127 (28)	4.67	244Ω/km	0.5	KAPW12TPS7X0127-500	£162	€187
24 x 2A	(24x) 7 x 0.127 (28)	4.67	244Ω/km	1.0	KAPW12TPS7X0127-1M	£305	€351
24 x 2A	(24x) 7 x 0.127 (28)	4.67	244Ω/km	2.5	KAPW12TPS7X0127-2.5M	£698	€803

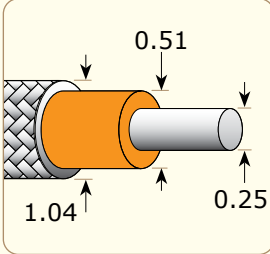
For radiation resistant cables, please call sales office

Stranded Core Coaxial Cable 50Ω - 2-30kVDC



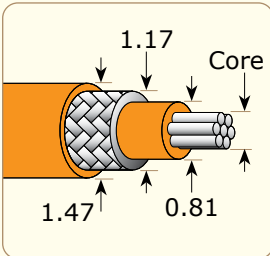
Voltage / Current Rating	Core Dia. (AWG)	A	B	C	Imp.	Length (m)	Part Code	Price £	Price €
2kV / 0.5A	7 x 0.038 (32)	1.27	1.04	0.74	50Ω	5	KAPWC7X0038	£105	€121
2kV / 1.5A	7 x 0.1 (30)	1.70	1.47	1.19	50Ω	5	KAPWC7X010	£116	€134
30kV / 9A	7 x 0.317 (20)	3.18	2.79	2.29	50Ω	5	KAPWC7X0317	£216	€249
10kV / 3A	7 x 0.15 (26)	2.27	1.99	1.53	50Ω	5	KAPW50OHM	£82	€95

Single Core Coaxial Cable - 600VAC, 2kVDC



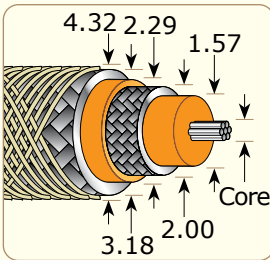
Current Rating	Core Dia. (AWG)	Wire Dia.	Impedance	Length (m)	Part Code	Price £	Price €
2A	1 x 0.25 (30)	1.04	32Ω	10	KAPWC1X025	£57	€66

Stranded Core Coaxial Cable - 600VAC, 2kVDC



Current Rating	Core Dia. (AWG)	Jacket Dia.	Impedance	Length (m)	Part Code	Price £	Price €
6A	7 x 0.20 (24)	1.47	18Ω	10	KAPWC7X020	£82	€95

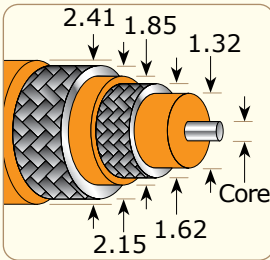
Stranded Core Triaxial Cable - 600VAC, 2kVDC



Current Rating	Core Dia. (AWG)	Length (m)	Part Code	Price £	Price €
3A	7 x 0.15 (26)	0.5	KAPWT7X015-500	£44	€51
3A	7 x 0.15 (26)	1	KAPWT7X015-1M	£83	€96

This cable has PEEK outer braid

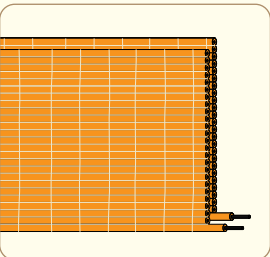
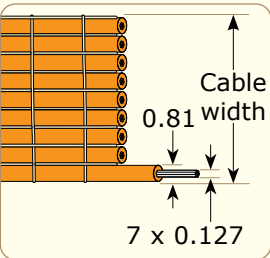
Single Core Triaxial Cable - 600VAC, 2kVDC



Current Rating	Core Dia. (AWG)	Length (m)	Part Code	Price £	Price €
2.5A	1 x 0.3175 (28)	5	KAPWT1X0317	£226	€260

UHV Kapton® Insulated Wires & Ribbon Cables

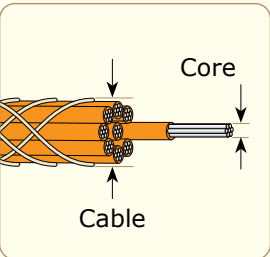
Multiconductor Ribbon Cable - 600VAC, 2kVDC, 2 Amp, 28AWG



No. Of Wires	Core Dia.	Cable Width	Resistance @ 20°C	Length (m)	Part Code	Price £	Price €
9	7 x 0.127	10.4	244Ω/km	0.5	KAPR9-500	£48	€56
9	7 x 0.127	10.4	244Ω/km	1.0	KAPR9-1000	£97	€112
9	7 x 0.127	10.4	244Ω/km	2.5	KAPR9-2500	£240	€276
15	7 x 0.127	18.8	244Ω/km	0.5	KAPR15-500	£61	€71
15	7 x 0.127	18.8	244Ω/km	1.0	KAPR15-1000	£124	€143
15	7 x 0.127	18.8	244Ω/km	2.5	KAPR15-2500	£305	€351
19	7 x 0.127	23.6	244Ω/km	0.5	KAPR19-500	£69	€80
19	7 x 0.127	23.6	244Ω/km	1.0	KAPR19-1000	£141	€163
19	7 x 0.127	23.6	244Ω/km	2.5	KAPR19-2500	£347	€400
25	7 x 0.127	31.0	244Ω/km	0.5	KAPR25-500	£81	€94
25	7 x 0.127	31.0	244Ω/km	1.0	KAPR25-1000	£166	€191
25	7 x 0.127	31.0	244Ω/km	2.5	KAPR25-2500	£341	€393

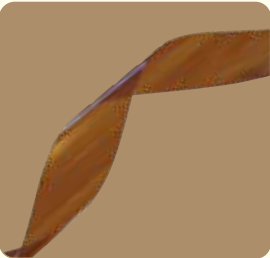
For 50 way applications use 2 x 25 way cables.
Wire pitch ~ 1.2mm

Multiconductor Round Cable - 600VAC, 2kVDC, 2Amp, 28AWG



No. Of Wires	Core Dia.	Cable Dia.	Resistance @ 20°C	Length (m)	Part Code	Price £	Price €
9	7 x 0.127	3.56	244Ω/km	0.5	CCAB9-500	£33	€38
9	7 x 0.127	3.56	244Ω/km	1.0	CCAB9-1000	£65	€75
9	7 x 0.127	3.56	244Ω/km	2.5	CCAB9-2500	£161	€186

Kapton® Film



LewVac Kapton® film is ideally suited for electrically insulating small parts within your vacuum system. Sold in strips (or larger pieces if required) it can be used in many applications to create an insulating barrier between different parts.

Features:

- UHV compatible.
- High temperature rated to 250°C.
- Kapton® type HN insulating film.

Specifications:

Dielectric constant @ 1MHz	3.4
Dielectric strength @ 25µm	300kV/mm
Dissipation factor @ 1MHz	0.0018
Volume resistivity	10 ¹⁸ Ω.cm
Initial tear	20g/µm
Moisture absorbtion	2.8% @ 50% RH
Radiation resistance	Good

Temperature Range -270°C to 250°C

Larger sizes and alternative grades of Kapton® are available on request, please contact our sales office for further details.

Type	Thickness	Size	Part Code	Price £	Price €
HN	0.125	300 x 25	A-KAPFILM	£11	€13

All dimensions are nominal in millimetres unless otherwise specified

Polyimide Tubing



LewVac polyimide tubing provides a clean, flexible electrical insulation with low outgassing characteristics similar to Kapton®. It is suitable for vacuum levels of 1 x 10⁻¹⁰ Torr and temperatures up to 250°C

Features:

- UHV compatible.
- Temperature rated to 250°C.
- Sold in 300mm lengths

ID	OD	Part Code	Price £	Price €
1.02	1.07	A-PIT-1.01-300	£19	€22
1.30	1.35	A-PIT-1.29-300	£19	€22
1.45	1.52	A-PIT-1.44-300	£19	€22
1.83	1.91	A-PIT-1.83-300	£19	€22
2.06	2.11	A-PIT-2.06-300	£19	€22
2.24	2.36	A-PIT-2.24-300	£24	€28
2.67	2.79	A-PIT-2.67-300	£24	€28
4.06	4.22	A-PIT-4.06-300	£40	€46

Kapton® Tape



Specifications:

Dielectric strength 7.5kV/mm

Tensile strength 0.54kg/mm width

Temperature Range

Acrylic -30°C to 175°C

Silicone -75°C to 260°C*

* - With minimal outgassing above 120°C

LewVac Kapton® tape provides a clean, flexible electrical insulation with low outgassing characteristics.

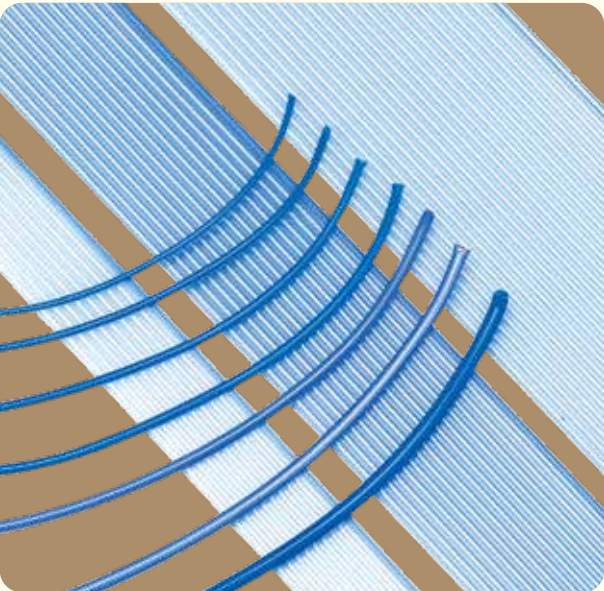
Kapton® tape with acrylic adhesive is suitable for use in high vacuum applications (to 1x10⁻⁸Torr) and tape with silicone adhesive is suitable for ultrahigh vacuum applications (to 1x10⁻¹⁰ Torr)

Roll length = 32m

Width	Thickness	Adhesive	Part Code	Price £	Price €
6.35	0.0635	Acrylic	A-KTA-6.35	£40	€46
9.53	0.0635	Acrylic	A-KTA-9.53	£52	€60
12.7	0.0635	Acrylic	A-KTA-12.7	£61	€71
19.05	0.0635	Acrylic	A-KTA-19.05	£83	€96
25.4	0.0635	Acrylic	A-KTA-25.4	£107	€124
50.8	0.0635	Acrylic	A-KTA-50.8	£205	€236
6.35	0.0889	Silicone	A-KTS-6.35	£52	€60
9.53	0.0889	Silicone	A-KTS-9.53	£62	€72
12.7	0.0889	Silicone	A-KTS-12.7	£81	€94
19.05	0.0889	Silicone	A-KTS-19.05	£114	€132
25.4	0.0889	Silicone	A-KTS-25.4	£148	€171
50.8	0.0889	Silicone	A-KTS-50.8	£295	€340
101.6	0.0889	Silicone	A-KTS-101.6	£582	€670
152.4	0.0889	Silicone	A-KTS-152.4	£842	€969
Double sided tape					
6.35	0.101	Silicone	A-KTS-DS-6.35	£58	€67
12.7	0.101	Silicone	A-KTS-DS-12.7	£102	€118
19.05	0.101	Silicone	A-KTS-DS-19.05	£158	€182
25.4	0.101	Silicone	A-KTS-DS-25.4	£178	€205

All dimensions are nominal in millimetres unless otherwise specified

HV Teflon® Insulated Wires & Ribbon Cables



Features:

- HV compatible construction.
- Temperature rated to 200°C.
- Fluoropolymer extruded Teflon® insulating film.
- Silver plated copper conductors.
- Single wires & ribbon cables.

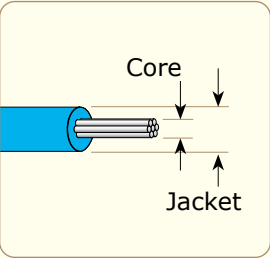
Specifications:

Voltage	600VAC, 2kVDC
Current	See tables
Material	
Conductor	Silver plated copper
Insulation	FEP extruded Teflon®

Teflon® Properties

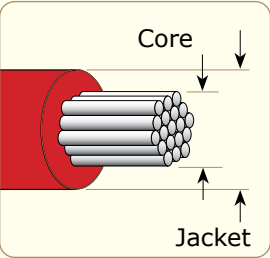
Dielectric constant	2.1
Dielectric strength	23kV/mm
Dissipation factor	0.0003 - 0.0007
Tensile strength	320.68MPa
Elongation	300%
Moisture absorbtion	0.01% @ 50% RH
Radiation resistance	5 x 10 ⁵ Rads

Temperature Range -65°C to 200°C



Current Rating	Core Dia. (AWG)	Jacket Dia.	Length (m)	Part Code	Price £	Price €
1.5A	7 x 0.101 (30)	0.71	10	TEFW7X0101	£31	€36
2A	7 x 0.127 (28)	0.91	10	TEFW7X0127	£31	€36
3A	7 x 0.152 (26)	1.02	10	TEFW7X0152	£35	€41
4A	7 x 0.178 (24)	1.12	10	TEFW7X0178	£37	€43
6A	19 x 0.152 (22)	1.29	10	TEFW19X0152	£45	€52
8A	19 x 0.178 (20)	1.50	10	TEFW19X0178	£53	€61
11A	19 x 0.254 (18)	1.78	5	TEFW19X0254	£69	€80
14A	19 x 0.279 (16)	1.96	5	TEFW19X0279	£81	€94

Silicone Insulated Cable - 30kVDC

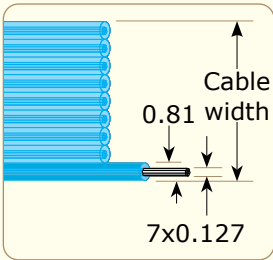


High voltage halogen free silicone insulated wire with dielectric strength of 30kVDC. This high voltage wire is suitable for high vacuum applications. Maximum temperature 250°C.

Current Rating	Core Dia. (AWG)	Jacket Dia.	Length (m)	Part Code	Price £	Price €
20A	651 x 0.17 (12)	9.01	5	SILW651X0177	£213	€245

All dimensions are nominal in millimetres unless otherwise specified

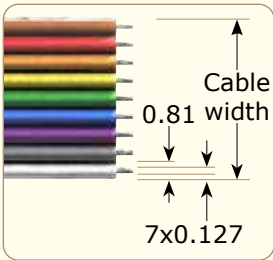
Multiconductor Ribbon Cable - 600VAC, 2kVDC, 2 Amp, 28AWG



No. Of Wires	Core Dia.	Cable Width	Length (m)	Part Code	Price £	Price €
9	7 x 0.127	11.4	0.5	TEFR9-500	£24	€28
9	7 x 0.127	11.4	1.0	TEFR9-1000	£48	€56
9	7 x 0.127	11.4	2.5	TEFR9-2500	£120	€138
15	7 x 0.127	19.1	0.5	TEFR15-500	£33	€38
15	7 x 0.127	19.1	1.0	TEFR15-1000	£67	€78
15	7 x 0.127	19.1	2.5	TEFR15-2500	£169	€195
25	7 x 0.127	31.8	0.5	TEFR25-500	£51	€59
25	7 x 0.127	31.8	1.0	TEFR25-1000	£105	€121
25	7 x 0.127	31.8	2.5	TEFR25-2500	£263	€303
50	7 x 0.127	2x31.8	0.5	TEFR50-500	£101	€117
50	7 x 0.127	2x31.8	1.0	TEFR50-1000	£210	€242
50	7 x 0.127	2x31.8	2.5	TEFR50-2500	£526	€605

50 way applications use 2 x 25 way cables for all above wire types. Wire pitch ~1.3mm

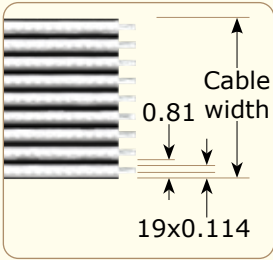
Multiconductor Rainbow Ribbon Cable - 600VAC, 2kVDC, 2 Amp, 28AWG



No. Of Wires	Core Dia.	Cable Width	Length (m)	Part Code	Price £	Price €
9	7 x 0.127	11.4	0.5	TEFR9R-500	£33	€38
9	7 x 0.127	11.4	1.0	TEFR9R-1000	£56	€65
9	7 x 0.127	11.4	2.5	TEFR9R-2500	£133	€153
15	7 x 0.127	19.1	0.5	TEFR15R-500	£33	€38
15	7 x 0.127	19.1	1.0	TEFR15R-1000	£65	€75
15	7 x 0.127	19.1	2.5	TEFR15R-2500	£167	€193
25	7 x 0.127	31.8	0.5	TEFR25R-500	£51	€59
25	7 x 0.127	31.8	1.0	TEFR25R-1000	£101	€117
25	7 x 0.127	31.8	2.5	TEFR25R-2500	£261	€301
50	7 x 0.127	2x31.8	0.5	TEFR50R-500	£101	€117
50	7 x 0.127	2x31.8	1.0	TEFR50R-1000	£203	€234
50	7 x 0.127	2x31.8	2.5	TEFR50R-2500	£522	€601

50 way applications use 2 x 25 way cables for all above wire types. Wire pitch ~1.3mm

High Flex Multiconductor Ribbon Cable - 600VAC, 2kVDC, 4 Amp,

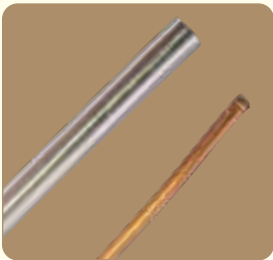


No. Of Wires	Core Dia.	Cable Width	Length (m)	Part Code	Price £	Price €
9	19 x 0.114	11.4	0.5	TEFR9F-500	£26	€30
9	19 x 0.114	11.4	1.0	TEFR9F-1000	£51	€59
9	19 x 0.114	11.4	2.5	TEFR9F-2500	£134	€155
15	19 x 0.114	19.1	0.5	TEFR15F-500	£33	€38
15	19 x 0.114	19.1	1.0	TEFR15F-1000	£65	€75
15	19 x 0.114	19.1	2.5	TEFR15F-2500	£168	€194

All dimensions are nominal in millimetres unless otherwise specified

UHV Wires, Rods, Braided Shield & Copper Plate

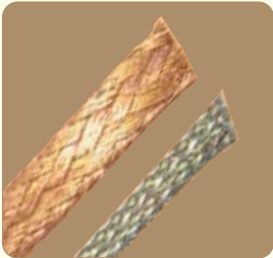
Standard Wires & Rods



Please Note:
When ordering lengths >300mm, please contact sales office as additional shipping charges may apply

Material	Diameter	Length	Part Code	Price £	Price €
St.St.	0.40	300	WI-SS0.40	£5	€6
St.St.	0.50	300	WI-SS0.50	£5	€6
St.St.	0.81	300	WI-SS0.8	£7	€9
St.St.	1.01	300	WI-SS1.01	£7	€9
St.St.	1.27	300	WI-SS1.2	£7	€9
St.St.	1.62	300	WI-SS1.62	£7	€9
St.St.	3.18	304.8	A-ROD-SS3.18	£6	€7
St.St.	6.35	304.8	A-ROD-SS6.35	£8	€10
St.St.	9.53	304.8	A-ROD-SS9.53	£17	€20
St.St.	12.7	304.8	A-ROD-SS12.7	£19	€22
St.St.	19.05	304.8	A-ROD-SS19.1	£26	€30
St.St.	25.4	304.8	A-ROD-SS25.4	£44	€51
Cu	0.15	300	WI-C0.15	£5	€6
Cu	0.20	300	WI-C0.20	£7	€9
Cu	0.25	300	WI-C0.25	£7	€9
Cu	0.33	300	WI-C0.33	£7	€9
Cu	0.40	300	WI-C0.40	£7	€9
Cu	0.50	300	WI-C0.50	£7	€9
Cu	0.60	300	WI-C0.64	£7	€9
Cu	0.81	300	WI-C0.8	£8	€10
Cu	1.01	300	WI-C1.01	£8	€10
Cu	1.27	300	WI-C1.2	£9	€11
Cu	1.62	300	WI-C1.62	£9	€11
Cu	2.39	300	WI-C2.3	£11	€13
Cu	3.18	304.8	A-ROD-C3.2	£12	€14
Cu	6.35	304.8	A-ROD-C6.3	£18	€21
Cu	9.53	304.8	A-ROD-C9.5	£32	€37
Cu	12.7	304.8	A-ROD-C12.7	£39	€45
Cu	19.05	304.8	A-ROD-C19.0	£42	€49
Cu	25.4	304.8	A-ROD-C25.4	£90	€104

Braided Shield



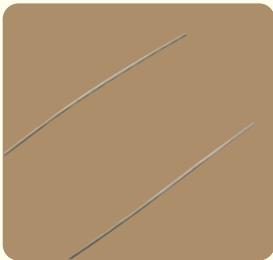
Material	Diameter	Length	Part Code	Price £	Price €
St.St.	3.2	300	BS-SS3.2	£4	€5
St.St.	3.2	1500	BS-SS3.2L	£24	€28
St.St.	3.2	4500	BS-SS3.2L4.5	£67	€78
St.St.	3.2	7600	BS-SS3.2L7.6	£111	€128
St.St.	6.4	300	BS-SS6.4	£4	€5
St.St.	6.4	1500	BS-SS6.4L	£29	€34
St.St.	6.4	4500	BS-SS6.4L4.5	£87	€101
St.St.	6.4	7600	BS-SS6.4L7.6	£144	€166
Cu	6.0	1000	WCUBRAID6	£4	€5
Ag plated Cu	3.2	4500	BS-SPC3.2-4.5	£54	€63
Ag plated Cu	3.2	7600	BS-SPC3.2-7.6	£87	€101
Ag plated Cu	6.4	4500	BS-SPC6.4-4.5	£67	€78
Ag plated Cu	6.4	7600	BS-SPC6.4-7.6	£111	€128

For longer lengths, please contact sales office.

All dimensions are nominal in millimetres unless otherwise specified

UHV Wires, Rods, Braided Shield & Copper Plate

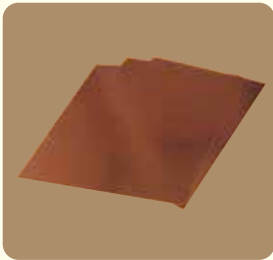
Thermocouple Wire Pairs



PLEASE NOTE :
Types C wire pairs are supplied as standard as compensating extension grades only. This limits their performance. Max. temperature is 870°C. true thermocouple pairs are available on request. Please contact sales office for further information.

For use with TC type	Material	Diameter	Length	Part Code	Price £	Price €
C	ALLOY 405® + ALLOY 426® -	0.25	300	WTCC250	£3	€4
C		0.51	300	WTCC510	£3	€4
E	CHROMEL® + CONSTANTAN® -	0.25	300	WTCE250	£3	€4
E		0.51	300	WTCE510	£3	€4
E		0.81	300	WTCE815	£3	€4
J	IRON + CONSTANTAN® -	0.25	300	WTCJ250	£3	€4
J		0.51	300	WTCJ510	£3	€4
J		0.81	300	WTCJ815	£3	€4
K	CHROMEL® + ALUMEL® -	0.25	300	WTCK250	£3	€4
K		0.51	300	WTCK510	£3	€4
K		0.81	300	WTCK815	£4	€5
T	COPPER + CONSTANTAN® -	0.25	300	WTCT250	£3	€4
T		0.51	300	WTCT510	£3	€4
T		0.81	300	WTCT815	£3	€4

Copper / Stainless Steel Bar & Sheet



Description	Part Code	Price £	Price €
OFE copper bar, 1.626 x 25.4 x304.8mm	A-CBOFE-1.63-25.4-304.8	£18	€21
OFE copper bar, 1.626 x 0.8 x 304.8mm	A-CBOFE-1.63-50.8-304.8	£34	€40
OFE copper bar, 3.175 x 25.4 x 304.8mm	A-CBOFE-3.18-25.4-304.8	£30	€35
OFE copper bar, 3.175 x 50.8 x 304.8mm	A-CBOFE-3.18-50.8-304.8	£53	€61
OFE copper bar, 6.35 x 25.4 x 304.8mm	A-CBOFE-6.35-25.4-304.8	£54	€63
OFE copper bar, 6.35 x 50.8 x 304.8mm	A-CBOFE-6.35-50.8-304.8	£98	€113
OFE copper bar, 9.525 x 25.4 x 304.8mm	A-CBOFE-9.53-25.4-304.8	£75	€87
OFE copper bar, 9.525 x 50.8 x 304.8mm	A-CBOFE-9.53-50.8-304.8	£160	€184
OFE copper sheet, 0.813 x 125.4 x 125.4mm	A-CSOFE-0.81-125.4SQ	£37	€43
OFE copper sheet, 1.626 x 125.4 x 125.4mm	A-CSOFE-1.63-125.4SQ	£64	€74
OFE copper sheet, 2.362 x 125.4 x 125.4mm	A-CSOFE-2.36-125.4SQ	£76	€88
OFE copper sheet, 3.175 x 125.4 x 125.4mm	A-CSOFE-3.18-125.4SQ	£103	€119
OFE copper sheet, 6.35 x 125.4 x 125.4mm	A-CSOFE-6.35-125.4SQ	£186	€214
OFE copper sheet, 9.525 x 125.4 x 125.4mm	A-CSOFE-9.53-125.4SQ	£243	€280
OFHC copper sheet, 2 x 100 x 100mm	OFHCSHEET	£174	€201
Stainless steel (304) bar, 3.175 x 25.4 x 304.8mm	A-SSB-3.18-25.4-304.8	£11	€13
Stainless steel (304) bar, 3.175 x 50.8 x 304.8mm	A-SSB-3.18-50.8-304.8	£21	€25
Stainless steel (304) bar, 6.35 x 25.4 x 304.8mm	A-SSB-6.35-25.4-304.8	£21	€25
Stainless steel (304) bar 6.35 x 50.8 x 304.8mm	A-SSB-6.35-50.8-304.8	£31	€36
Stainless steel (304) bar 9.53 x 25.4 x 304.8mm	A-SSB-9.53-25.4-304.8	£25	€29
Stainless steel (304) bar, 9.53 x 50.8 x 304.8mm	A-SSB-9.53-50.8-304.8	£42	€49
Stainless steel (304) sheet, 0.914 x 125.4 x 125.4mm	A-SSS-0.91-125.4SQ	£23	€27
Stainless steel (304) sheet, 1.219 x 125.4 x 125.4mm	A-SSS-1.22-125.4SQ	£30	€35
Stainless steel (304) sheet, 1.524 x 125.4 x 125.4mm	A-SSS-1.52-125.4SQ	£34	€40
Stainless steel (304) sheet, 2.667 x 125.4 x 125.4mm	A-SSS-2.67-125.4SQ	£42	€49
Stainless steel (304) sheet, 3.048 x 125.4 x 125.4mm	A-SSS-3.05-125.4SQ	£53	€61

All dimensions are nominal in millimetres unless otherwise specified

In-Vacuum Coaxial Cables

Grounded Shield BNC / MHV / SHV5



Description	Part Code	Price £	Price €
50 Ohm Kapton® gnd shd coax UHV cable AF500 - N/C L=500mm (BNC only)	CC-50GS-AF500-500	£169	€195
50 Ohm Kapton® gnd shd coax UHV cable AF500 - N/C L=1000mm (BNC only)	CC-50GS-AF500-1000	£178	€205
50 Ohm Kapton® gnd shd coax UHV cable AF500 - N/C L=500mm (MHV/SHV5)	CC-50GS-AF500S-500	£168	€194
50 Ohm Kapton® gnd shd coax UHV cable AF500 - N/C L=1000mm (MHV/SHV5)	CC-50GS-AF500S-1000	£178	€205

Fig. 1 below

Floating Shield BNC / MHV / SHV-5



Description	Part Code	Price £	Price €
50 Ohm Kapton® floating shd coax UHV cable AF875 - N/C L=500mm (BNC only)	CC-50FS-AF875-500	£169	€195
50 Ohm Kapton® floating shd coax UHV cable AF875 - N/C L=1000mm (BNC only)	CC-50FS-AF875-1000	£178	€205
50 Ohm Kapton® floating shield coax UHV cable AF875S - N/C L=500mm (MHV/SHV5)	CC-50FS-AF875S-500	£168	€194
50 Ohm Kapton® floating shield coax UHV cable AF875S - N/C L=1000mm (MHV/SHV5)	CC-50FS-AF875S-1000	£178	€205

Fig. 2 below

BNC



Description	Part Code	Price £	Price €
50 Ohm Kapton® coax UHV cable BNC - N/C L=500mm	CC-50-BNC-500	£91	€105
50 Ohm Kapton® coax UHV cable BNC - N/C L=1000mm	CC-50-BNC-1000	£101	€117

MHV



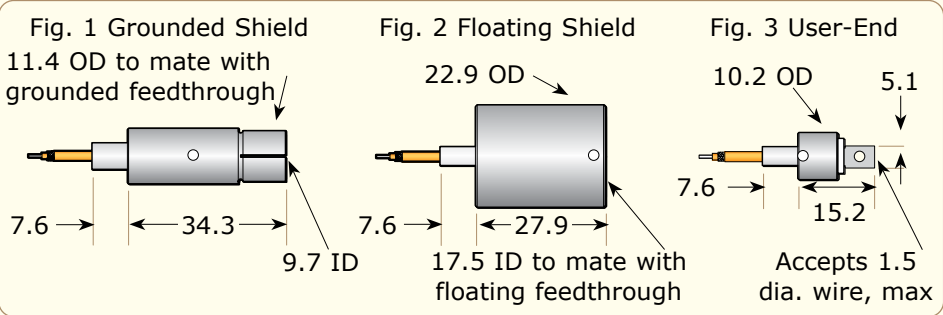
Description	Part Code	Price £	Price €
50 Ohm Kapton® coax UHV cable MHV - N/C L=500mm	CC-50-MHV-500	£101	€117
50 Ohm Kapton® coax UHV cable MHV - N/C L=1000mm	CC-50-MHV-1000	£111	€128

Grounded Shield SMA



Description	Part Code	Price £	Price €
50 Ohm Kapton® gnd shd coax UHV cable AF375 - N/C L=500mm	CC-50GS-AF375-500	£168	€194
50 Ohm Kapton® gnd shd coax UHV cable AF375 - N/C L=1000mm	CC-50GS-AF375-1000	£178	€205

Fig. 1 below



In-Vacuum Coaxial Cables

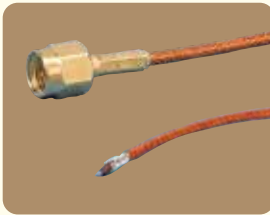
Floating Shield SMA



Description	Part Code	Price £	Price €
50 Ohm Kapton® floating shd coax UHV cable AF620 - N/C L=500mm	CC-50FS-AF620-500	£168	€194
50 Ohm Kapton® floating shd coax UHV cable AF620 - N/C L=1000mm	CC-50FS-AF620-1000	£178	€205

Fig. 2 below

SMA



Description	Part Code	Price £	Price €
50 Ohm Kapton® coax UHV cable SMA - N/C L=500mm	CC-50-SMA-500	£91	€105
50 Ohm Kapton® coax UHV cable SMA - N/C L=1000mm	CC-50-SMA-1000	£101	€117

Microdot® S-50

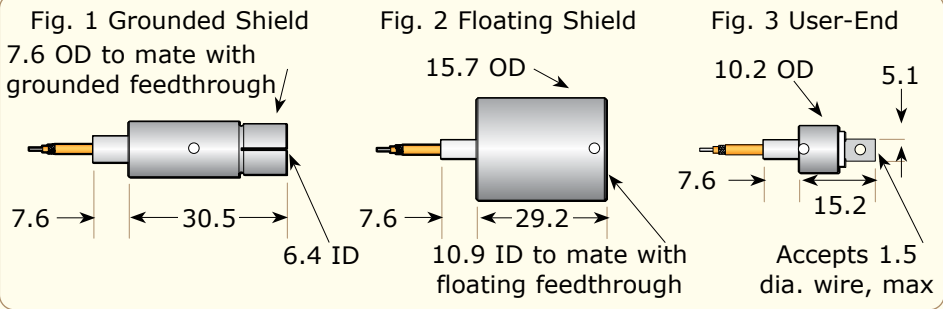


Description	Part Code	Price £	Price €
Coax UHV cable microdot® S-50 male - N/C L=480mm	CC-MIC50M-480	£120	€138
Coax UHV cable microdot® S-50 male - N/C L=990mm	CC-MIC50M-990	£129	€149
Coax UHV cable microdot® S-50 female - N/C L=480mm	CC-MIC50F-480	£120	€138
Coax UHV cable microdot® S-50 female - N/C L=990mm	CC-MIC50F-990	£129	€149

User Specified End Options



Description	Part Code	Price £	Price €
User end female (see fig. 3.)	add UEF	£163	€188
SMA male	add SMA	£87	€101
SMA female	add SMAF	£87	€101
BNC male	add BNC	£87	€101
MHV male	add MHV	£91	€105
SMB male	add SMBM	£91	€105
Microdot® S-50 male	add MIC50M	£111	€128
Microdot® S-50 female	add MIC50M	£111	€128
Microdot® S-70 male	add MIC70M	£111	€128
Microdot® S-93 male	add MIC93M	£111	€128



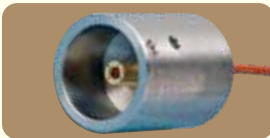
In-Vacuum Coaxial Connectors etc.

Grounded Shield BNC / MHV / SHV-5 Connector



Description	Part Code	Price £	Price €
Accufast™ 500 connector (BNC only)	A-ACCU-500	£148	€171
Accufast™ 500 connector (MHV/SHV5)	A-ACCU-500S	£158	€182

Floating Shield BNC / MHV / SHV-5 Connector



Description	Part Code	Price £	Price €
Accufast™ 875 connector	A-ACCU-875	£148	€171
Accufast™ 875 connector for KAPWC7X020 cable	A-ACCU-875-C7020	POA	POA

Grounded Shield SMA Connector



Description	Part Code	Price £	Price €
Accufast™ 375 connector	A-ACCU-375	£149	€172

Floating Shield SMA Connector



Description	Part Code	Price £	Price €
Accufast™ 620 connector	A-ACCU-620	£149	€172

User End Connector



Description	Part Code	Price £	Price €
User end connector	A-USEREND	£139	€160

BNC Connector



Description	Part Code	Price £	Price €
BNC male connector UHV (for use with KAPW500HM cable)	A-BNC-M-UHV	£77	€89
BNC male connector UHV (for use with KAPWC7X010 30AWG cable)	A-BNC-M-UHV-S30	£77	€89
BNC male connector UHV (use KAPWC7X0038 32 AWG cable)	A-BNC-M-UHV-S32	POA	POA

SMA Connector



Description	Part Code	Price £	Price €
SMA male connector UHV (use KAPW500HM cable)	A-SMA-M-UHV	£77	€89
SMA male connector UHV (use KAPWC7X0038 32 AWG cable)	A-SMA-M-UHV-S32	£77	€89
SMA male connector UHV (use KAPWC7X010 30 AWG cable)	A-SMA-M-UHV-S30	£81	€94
SMA female connector UHV	A-SMA-F-UHV	£77	€89

MHV Connector



Description	Part Code	Price £	Price €
MHV male connector UHV	A-MHV-M-UHV	£87	€101

All dimensions are nominal in millimetres unless otherwise specified

In-Vacuum Coaxial Connectors etc.

Crimp Tool And Accessories

Description	Part Code	Price £	Price €
BNC female to BNC female adapter (gender changer)	A-BNC/BNC-UHV	£77	€89
SMA male to SMA male connector (Au plated brass)	A-SMA-M-SMA-M	POA	POA
SMA female to SMA female connector (Au plated brass)	A-SMA-F-SMA-F	POA	POA
Crimp tool required for Accufast® & user end connectors etc	A-HEXCRIMP	£163	€188

Air Coaxial Cables etc.

Air Service BNC, MHV & SMA Cables & Connectors etc.



Description	Part Code	Price £	Price €
Air service RG174/U coax cable BNC - BNC L=1219mm	ACC-2BNC-1219	£29	€34
Air service RG59B/U coax cable MHV - MHV L=1219mm	ACC-2MHV-1219	£57	€66
Air service RG59B/U coax cable SHV5 - SHV5 L=1219mm	ACC-2SHV5-1219	£75	€87
Air service RG174/U coax cable SMA - SMA L=1219mm	ACC-2SMA-1219	£37	€43
Air service BNC connector	A-BNC-AIR	£10	€12
Air service MHV connector	A-MHV-AIR	£29	€34
Air service SHV5 connector	A-SHV5-AIR	£34	€40
Air service SMA connector	A-SMA-AIR	£17	€20
Air service adapter BNC male to SMA male	A-BNCM/SMAM	£17	€20
Air service adapter BNC female to SMA male	A-BNCF/SMAM	£17	€20
Air service adapter BNC female to SMA female	A-BNCF/SMAF	£17	€20
Air service adapter BNC female to F male	A-BNCF/FM	£6	€7
Air service adapter BNC female to F female	A-BNCF/FF	£6	€7
Air service adapter BNC female to N male	A-BNCF/NM	£17	€20
Air service adapter BNC female to N female	A-BNCF/NF	£17	€20
Air service adapter BNC female to BNC female	A-BNCF/BNCF	£6	€7

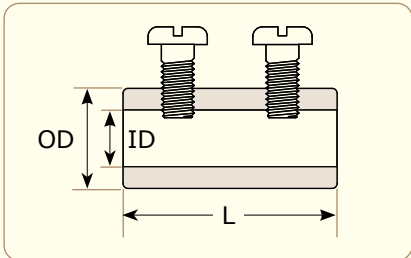
All dimensions are nominal in millimetres unless otherwise specified

Connectors & Terminals

In-Line Connectors



BeCu with stainless steel screws.

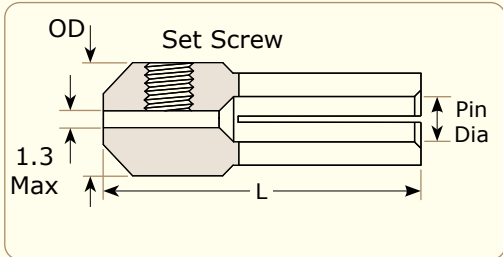


Max OD	ID	L	Pack Qty	Part Code	Price £	Price €
4.7	1.5	12.7	10	FHP-BECU-1.5IL-CON	£44	€51
4.7	1.8	12.7	10	FHP-BECU-1.8IL-CON	£44	€51
6.4	3.0	14.2	10	FHP-BECU-3IL-CON	£44	€51
6.4	3.4	16.0	10	FHP-BECU-3.4IL-CON	£68	€79
8.9	4.1	14.2	10	FHP-BECU-4.1IL-CON	£82	€95
12.7	6.6	25.4	10	FHP-BECU-6.6IL-CON	£122	€141

Push-on Connectors

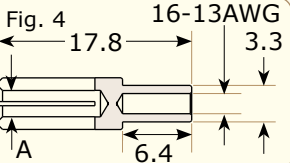
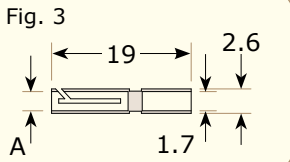
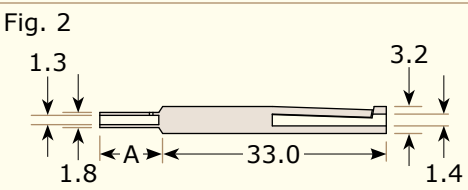
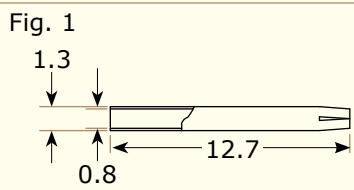


BeCu with stainless steel set screws. Supplied with appropriate hex key for set screws.



Accepts Pin Dia.	Max OD	L	Pack Qty	Part Code	Price £	Price €
1.0	6.4	17.5	10	FHP-BECU-1-CON	£61	€71
1.3	6.4	17.5	10	FHP-BECU-1.3-CON	£41	€48
1.5	6.4	17.5	10	FHP-BECU-1.5-CON	£41	€48
2.4	6.4	17.5	10	FHP-BECU-2.4-CON	£41	€48
6.4	12.7	25.4	2	FHP-BECU-6.4-CON	£50	€58

Crimp Connectors - Power & Thermocouple



Material	A	Fig.	Pack Qty	Part Code	Price £	Price €
BeCu	-	1	10	FHP-BECU-0.8-CON	£52	€60
BeCu	1.27	3	10	FHP-BECU-1.27-CON	£41	€48
BeCu	1.42	3	10	FHP-BECU-1.42-CON	£41	€48
BeCu	1.57	3	10	FHP-BECU-1.57-CON	£41	€48
BeCu + AG plate	2.4	4	1	FHP-BECU/AG-2.4C-CON	£72	€83
Chromel®	7.0	2	5	FHTC-CHR-CON	£64	€74
Alumel®	7.0	2	5	FHTC-AL-CON	£64	€74
Iron	7.6	2	5	FHTC-IRN-CON	£77	€89
Constantan® - J	7.6	2	5	FHTC-CJ-CON	£77	€89
Constantan® - E - T	8.3	2	5	FHTC-CET-CON	£77	€89
Nickel	8.3	2	5	FHTC-N-CON	£47	€55

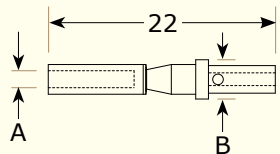
Paired Crimp Connectors



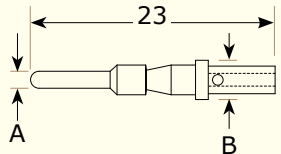
Gold & silver plated copper alloy.

Operating temperature -55 - 155°C

Socket



Plug



Plug / Socket	Voltage	Max Current	A	B	C	Pack Qty	Part Code	Price £	Price €
Socket	1.5kV	5A	1.0	2.6	1.2	25	A-CC1.2S	£40	€46
Socket	1.5kV	15A	1.6	3.7	1.7	25	A-CC1.7S	£120	€138
Socket	1.5kV	24A	2.4	5.1	2.5	10	A-CC2.5S	£93	€107
Plug	1.5kV	5A	1.0	2.6	1.2	25	A-CC1.2P	£49	€57
Plug	1.5kV	15A	1.6	3.7	1.7	25	A-CC1.7P	£31	€36
Plug	1.5kV	24A	2.4	5.1	2.5	10	A-CC2.5P	£21	€25
Crimp tool for A-CC##P/S pins & sockets (buy insert separately)							A-CRIMPTOOL	£490	€564
Insert for A-CRIMPTOOL for A-CC##P/S PINS & SOCKETS (buy A-CRIMPTOOL separately)							A-INS-CCP/S	£217	€250

Crimp Ring, Butt & Spade Connectors

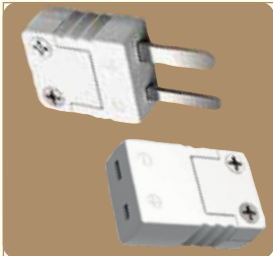


Max Temp - 480°C

Material	Part Code	Price £	Price €
Ring terminals for 18-22AWG gold plated 10/PK	A-RT18-22	£24	€28
Ring terminals for 14-16AWG gold plated 10/PK	A-RT14-16	£24	€28
Ring terminals for 10-12AWG gold plated 10/PK	A-RT10-12	£24	€28
Butt terminals for 18-22AWG gold plated 10/PK	A-BT18-22	£24	€28
Butt terminals for 14-16AWG gold plated 10/PK	A-BT14-16	£24	€28
Butt terminals for 10-12AWG gold plated 10/PK	A-BT10-12	£24	€28
Spade terminals for 18-22AWG gold plated 10/PK	A-ST18-22	£24	€28
Spade terminals for 14-16AWG gold plated 10/PK	A-ST14-16	£24	€28
Spade terminals for 10-12AWG gold plated 10/PK	A-ST10-12	£24	€28
Terminal crimp plier	A-TCP-1	£79	€91

Gold plated steel / nickel alloy. Minimum gold thickness is 0.00127mm
Ring terminals have Ø3.76mm hole.
Butt terminals are 13.97mm long.
Spade terminals have 5.08mm cut-out.

Ceramic Thermocouple Connectors



Material	Part Code	Price £	Price €
Thermocouple K-type female connector vac/air service to 650°C unglazed ceramic	FHC-KTYPE-CONHT-U	£35	€41
Thermocouple K-type male connector vac/air service to 650°C unglazed ceramic	FHC-KTYPE-MCONHT-U	£35	€41

All dimensions are nominal in millimetres unless otherwise specified

Ceramic Terminal Blocks & Connectors

Ceramic & PEEK Terminal Blocks



PEEK :
- 10A/pole
- 1x10⁻¹⁰ Torr
- 250°C

Ceramic :
- 30A
- 1x10⁻¹⁰ Torr
- 500°C

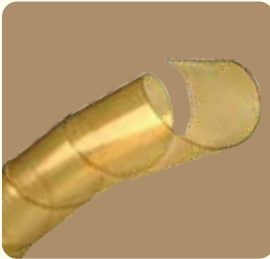
No Contacts	Material	Part Code	Price £	Price €
2	St.St./Ceramic	A-CTB2	£29	€34
3	St.St./Ceramic	A-CTB3	£38	€44
1	BeCu/St.St./PEEK	A-PTB1	£43	€50
2	BeCu/St.St./PEEK	A-PTB2	£57	€66
4	BeCu/St.St./PEEK	A-PTB4	£74	€86
8	BeCu/St.St./PEEK	A-PTB8	£144	€166

Ceramic Wire Nuts



Description	Part Code	Price £	Price €
Ceramic wire nut to suit 12-18AWG pack of 10	A-CWN12-18	£26	€30
Ceramic wire nut to suit 16-20AWG pack of 10	A-CWN16-20	£24	€28

Spiral Cut Cable Wrap, Monofilament & PEEK Braid



Wall Thickness
PEEK = 0.25mm
Teflon = 0.76mm

Description	Part Code	Price £	Price €
Spiral cut cable wrap PEEK start diameter 15.75mm L=480mm	A-SCW-PEEK48	£38	€44
Spiral cut cable wrap PEEK start diameter 15.75mm L=990mm	A-SCW-PEEK99	£72	€83
Spiral cut cable wrap Teflon® start diameter = 6.35mm L=480mm	A-SCW6.35-TEF48	£9	€11
Spiral cut cable wrap Teflon® start diameter = 6.35mm L=990mm	A-SCW6.35-TEF99	£17	€20
Spiral cut cable wrap Teflon® start diameter = 12.7mm L=480mm	A-SCW12.7-TEF48	£12	€14
Spiral cut cable wrap Teflon® start diameter = 12.7mm L=990mm	A-SCW12.7-TEF99	£28	€33
Spiral cut cable wrap Teflon® start diameter = 15.7mm L=480mm	A-SCW-TEF48	£17	€20
Spiral cut cable wrap Teflon® start diameter = 15.7mm L=990mm	A-SCW-TEF99	£34	€40
PEEK monofilament 0.2mm OD L=30m	A-PMONO	£20	€23
PEEK monofilament 0.2mm OD L=150m	A-PMONO-150M	£71	€82
PEEK braided shield 4.7mm ID L=1.5m	BS-PEEK4.7	£29	€34
PEEK braided shield 6.4mm ID L=1.5m	BS-PEEK6.4	£34	€40

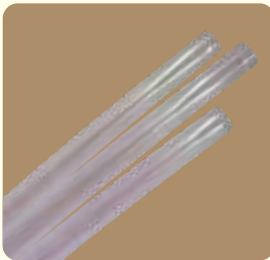
UHV Cable Ties



Description	Part Code	Price £	Price €
PEEK cable ties L=99mm max bundle dia 22mm 10/PK	A-PCT99	£41	€48
PEEK cable ties L=147mm max bundle dia 35mm 10/PK	A-PCT147	£44	€51
PEEK cable ties L=188mm max bundle dia 48mm 10/PK	A-PCT188	£47	€55
Stainless steel cable ties L=127mm max bundle dia 25mm 10/PK	A-SCT127	£38	€44
Stainless steel cable ties L=201mm max bundle dia 51mm 10/PK	A-SCT201	£41	€48
Stainless steel cable ties L=259mm max bundle dia 69mm 10/PK	A-SCT259	£44	€51
PEEK cable tie mount M4 mounting hole 5/PK	A-PCTM	£31	€36
PEEK cable tie spacer 5/PK	A-PCTS	£37	€43
Stainless steel cable tie mount 2-way 5/PK	A-SCTM-2W	£51	€59
Stainless steel cable tie mount folded 5/PK	A-SCTM-F	£24	€28
Installation tool for PEEK cable ties	A-PCT-TOOL	£469	€540
Installation tool for stainless steel cable ties	A-SCT-TOOL	£1341	€1543

All dimensions are nominal in millimetres unless otherwise specified

Heat Shrink Tubing - PEEK & FEP



Tube Material	Shrink Temp.	Operating Temp. (Max.)
PEEK	340-385°C	250°C
PTFE	343°C	200°C
FEP	210°C	200°C

Description	Part Code	Price £	Price €
PEEK heat shrink tube 1.68 - 2.36mm ID L=152mm 1/PK	A-PHST-2.36	£24	€28
PEEK heat shrink tube 3.98 - 4.77mm ID L=152mm 1/PK	A-PHST-4.77	£24	€28
PEEK heat shrink tube 4.83 - 6.55mm ID L=152mm 1/PK	A-PHST-6.55	£26	€30
PTFE heat shrink tube 0.68 - 1.27mm ID L=152mm 6/PK	A-PTFE-1.27	£17	€20
PTFE heat shrink tube 0.81 - 1.39mm ID L=152mm 6/PK	A-PTFE-1.39	£17	€20
FEP heat shrink tube 1.42 - 2.39mm ID L=152mm 6/PK	A-FEPT-2.39	£38	€44
FEP heat shrink tube 1.9 - 3.17mm ID L=152mm 6/PK	A-FEPT-3.17	£38	€44
FEP heat shrink tube 2.92 - 4.77mm ID L=152mm 6/PK	A-FEPT-4.77	£38	€44
FEP heat shrink tube 3.81 - 6.35mm ID L=152mm 6/PK	A-FEPT-6.35	£38	€44
FEP heat shrink tube 5.71 - 9.52mm ID L=152mm 3/PK	A-FEPT-9.52	£34	€40
FEP heat shrink tube 7.62 - 12.7mm ID L=152mm 3/PK	A-FEPT-12.70	£38	€44
FEP heat shrink tube 11.43 - 19.05mm ID L=152mm 3/PK	A-FEPT-19.05	£71	€82
FEP heat shrink tube 15.24 - 25.4mm ID L=152mm 2/PK	A-FEPT-25.40	£82	€95
FEP heat shrink tube 22.86 - 38.1mm ID L=152mm 2/PK	A-FEPT-38.10	£97	€112
FEP heat shrink tube 30.48 - 50.8mm ID L=152mm 2/PK	A-FEPT-50.80	£106	€122

Wire Identification Beads



Description	Part Code	Price £	Price €
UHV compatible wire ID beads 50 each six colours 1mm ID	WIDBEADS	£41	€48
UHV compatible wire ID beads 50 each six colours 2mm ID	WIDBEADS2	£44	€51
UHV compatible wire ID beads 50 each six colours 3mm ID	WIDBEADS3	£56	€65
UHV compatible wire ID beads 50 each six colours 5mm ID	WIDBEADS5	£67	€78

Operating temperature range -200°C - 200°C

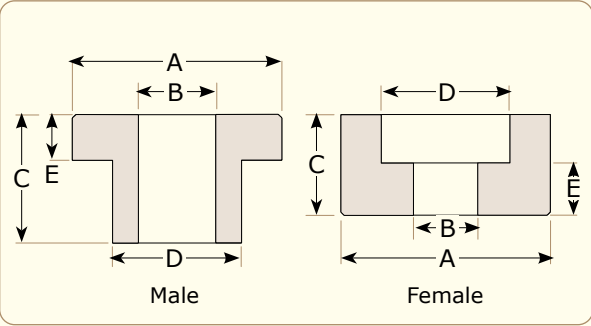
Wiring Tools etc.



Description	Part Code	Price £	Price €
Wire stripper 0.12 - 0.4mm dia wires (26-36AWG)	WSTRIP1	£75	€87
Wire stripper 0.25 - 0.8mm dia wires (20-30AWG)	WSTRIP2	£65	€75
Wire stripper 10-22AWG plier action	WSTRIP-10-22	£191	€220
Wire stripper 16-26AWG plier action	WSTRIP-16-26	£199	€229
Wire stripper 24-30AWG plier action	WSTRIP-24-30	£432	€497
Crimp tool for D / C pins - UHV	DCT1	£1109	€1276
Crimp tool for D pins - HV	DCT1-P	£11090	€12754
Pin insert / extract tool for HV pins	DPIE-HV	£63	€73
Crimp tool for C19 UHV skts (20-24AWG & 26-30AWG)	DCT2	£1109	€1276
Crimp tool for D type power pins	DCT3	£1048	€1206
Extraction tool for coax & power pins	CX-EXT	£212	€244
Crimp tool for coax sockets outer shell	DCT4	£1358	€1562
Crimp tool for C3 & C6 UHV/air skts & C19 air skts	DCT5	£1194	€1374
Insert to convert DCT1 to DCT2 crimp tool	DCT-INS-1/2	£167	€193
Pin extraction tool for C3/C6 air side pins	PET3/6	£84	€97
Pin insert tool for C3/C6 air side pins	PIT3/6	£126	€145
Crimp tool for SHV connectors. (Requires separate crimp die)	SHVCT	£77	€89
Crimp die for SHVCT to suit SHV5/10 connectors	SHV5/10DIE	£52	€60
Crimp die for SHVCT to suit SHV20 connectors	SHV20DIE	£52	€60
D/C F/T connector screwdriver kit, flat, philips & hex drivers	SCDRVKIT	£46	€53

All dimensions are nominal in millimetres unless otherwise specified

Ceramic Bushes



Ceramic Split Bushes

Type	A	B	C	D	E	Pack Qty	Part Code	Price £	Price €
Male	8.0	2.8	4.8	5.3	2.3	10	A-CSB-2.5M	£12	€14
Female	8.0	2.8	5.5	5.7	2.8	10	A-CSB-2.5F	£12	€14
Male	12.0	3.8	6.4	7.5	3.4	10	A-CSB-3.5M	£12	€14
Female	12.0	3.8	6.4	8.0	2.4	10	A-CSB-3.5F	£12	€14
Male	13.6	4.1	7.2	7.9	3.1	10	A-CSB-4.0M	£12	€14
Female	13.6	4.1	7.8	8.3	3.3	10	A-CSB-4.0F	£12	€14
Male	16.0	5.2	9.5	8.7	5.4	10	A-CSB-5.0M	£13	€15
Female	16.0	5.2	9.0	9.4	3.5	10	A-CSB-5.0F	£13	€15
Male	20.0	7.0	9.0	11.0	4.0	10	A-CSB-1/4M	£13	€15
Female	20.0	7.0	9.0	11.5	3.0	10	A-CSB-1/4F	£13	€15
Male	22.0	8.0	10.0	13.0	4.0	10	A-CSB-5/16M	£14	€17
Female	22.0	8.0	9.0	13.5	3.0	10	A-CSB-5/16F	£14	€17
Male	29.0	10.0	15.0	18.0	7.0	10	A-CSB-3/8M	£15	€18
Female	29.0	10.0	15.0	18.5	7.0	10	A-CSB-3/8F	£15	€18

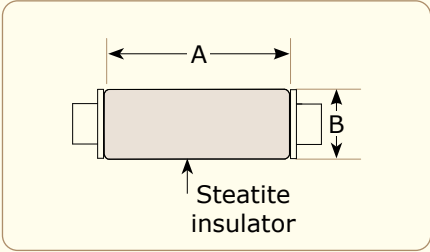
Features:

- Low loss steatite.
- UHV compatible.
- High temperature rated to above 900°C.

Specifications:

Material	Low loss steatite
Properties	
Colour	Off white
Density	2.9 g/cm ³
Porosity	Nil
Permittivity	6
Power factor @ 1KHz	7
Resistivity @ 20°C	>10 ¹⁴ Ω/cm ³
Dielectric strength @20°C	25kV/mm
Thermal conductivity @375-1000°C	1.91 W/m/K
Hardness	7-8 MOHS

Ceramic Standoffs



Features:

- Steatite.
- UHV compatible.
- High temperature rated to 400°C.
- Vented cap head Screws included.

Specifications:

Material	Low loss steatite
Properties	
Colour	Off white
Density	2.9 g/cm ³
Porosity	Nil
Permittivity	6
Power factor @ 1KHz	7
Resistivity @ 20°C	>10 ¹⁴ Ω/cm ³
Dielectric strength @20°C	25kV/mm
Thermal conductivity @375-1000°C	1.91 W/m/K
Hardness	7-8 MOHS

Ceramic Stand-offs - Vented Screws

Voltage, DC In Vacuum	Voltage, DC In Air	Thread Size	A	B	Part Code	Price £	Price €
10kV	4kV	6-32	12.7	9.5	A-CSO12-VS	£31	€36
12kV	5kV	6-32	19.1	9.5	A-CSO13-VS	£34	€40
20kV	8kV	6-32	25.4	9.5	A-CSO14-VS	£35	€41
25kV	10kV	6-32	31.8	9.5	A-CSO15-VS	£37	€43
30kV	12kV	6-32	38.1	9.5	A-CSO16-VS	£37	€43
35kV	14kV	6-32	50.8	9.5	A-CSO17-VS	£37	€43
25kV	10kV	¼-20	31.8	25.4	A-CSO18-VS	£44	€51
30kV	12kV	¼-20	38.1	25.4	A-CSO19-VS	£54	€63
35kV	14kV	¼-20	50.8	25.4	A-CSO20-VS	£57	€66

Ceramic Beads



Features:

- Steatite ceramic.
- UHV compatible.
- High temperature rated up to 1100°C.

Properties

Colour	Off white/cream
Density	2.6 - 2.9 g/cm ³
Porosity	Nil
Resistivity @ 20°C	>10 ¹⁴ Ω/cm ³
Dielectric strength @20°C	24kV/mm
Hardness	7-8 MOHS

Steatite Ceramic Beads

These beads are supplied in packs of approx 100 pieces.

OD	ID	L	Part Code	Price £	Price €
4.0	1.5	4.0	CBI-ST-1.5-4	£6	€7
4.0	2.0	4.0	CBI-ST-2-4	£6	€7
5.0	2.5	5.0	CBI-ST-2.5-5	£6	€7
6.0	2.0	6.0	CBI-ST-2-6	£6	€7
6.0	2.7	6.5	CBI-ST-2.7-6.5	£6	€7
7.0	3.5	7.0	CBI-ST-3.5-7	£6	€7
8.0	4.0	8.0	CBI-ST-4-8	£7	€9
9.0	4.5	8.5	CBI-ST-4.5-8.5	£8	€10
9.5	5.2	8.0	CBI-ST-5.2-8	£8	€10
10.5	5.5	9.0	CBI-ST-5.5-9	£11	€13
13	7.5	9.0	CBI-ST-7.5-9	£17	€20
16.5	8.5	10.0	CBI-ST-8.5-10	£32	€37

All dimensions are nominal in millimetres unless otherwise specified

Ceramic Beads



Features:

- High purity alumina ceramic, 95% Al₂O₃.
- UHV compatible.
- High temperature rated up to 1700°C.

Specifications:

Material	95% Al ₂ O ₃
Properties	
Colour	Off white
Density	3.8 - 3.93 g/cm ³
Porosity	Nil
Resistivity @ 20°C	>10 ¹⁴ Ω/cm ³
Dielectric strength @20°C	17kV/mm
Hardness	9 MOHS

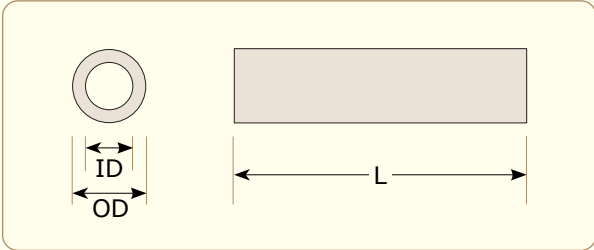
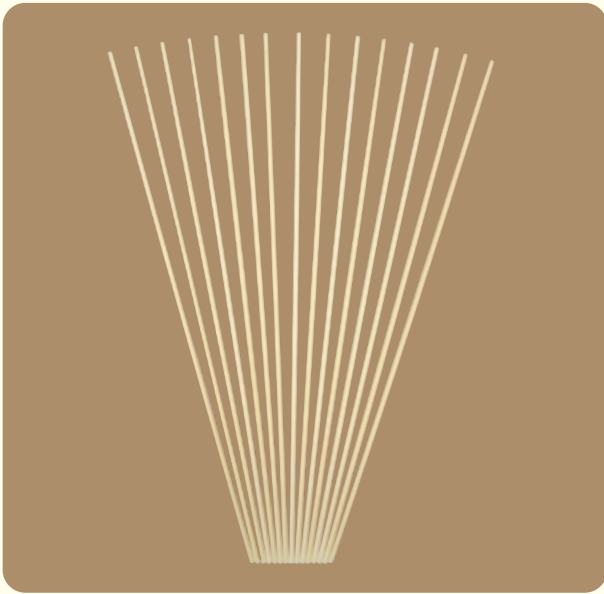
Alumina Ceramic Beads

These beads are supplied in packs containing sufficient beads to form a continuous length of approx 300mm.

OD	ID	L	Approx Qty	Part Code	Price £	Price €
2.8	1.3	2.8	107	CB-AL1.3	£42	€49
4.0	1.7	4.3	69	CB-AL1.7	£42	€49
4.6	2.2	4.7	63	CB-AL2.2	£42	€49
6.1	2.7	6.6	45	CB-AL2.7	£42	€49
6.1	3.6	6.6	45	CB-AL3.6	£42	€49
9.3	3.7	10.2	29	CB-AL3.7	£42	€49

All dimensions are nominal in millimetres unless otherwise specified

Ceramic Tubes



Features:

- High purity alumina ceramic as standard.
- UHV compatible.
- High temperature rated up to 1700°C.
- Dimensions to DIN40680 (m)

Specifications:

Material	99.7% Al ₂ O ₃
Properties	
Colour	Off white
Density	3.8 - 3.93 g/cm ³
Porosity	Nil
Resistivity @ 20°C	>10 ¹⁴ Ω/cm ³
Dielectric strength @20°C	17kV/mm
Thermal conductivity @20-100°C	26 W/m/K
Hardness	9 MOHS

Ceramic Tubes

OD	ID	L	No. Holes	Pack Qty	Part Code	Price £	Price €
1.0	0.5	50.0	1	10	A-CT1/05-1-50	POA	POA
2.0	1.0	50.0	1	10	A-CT2/1-1-50	POA	POA
2.0	1.0	300.0	1	10	A-CT2/1-1-300	POA	POA
3.0	2.0	50.0	1	14	A-CT3/2-1-50	POA	POA
4.0	2.0	300.0	1	10	A-CT4/2-1-300	POA	POA
5.0	3.0	300.0	1	3	A-CT5/3-1-300	POA	POA
6.0	4.0	50.0	1	10	A-CT6/4-1-50	POA	POA
10.0	7.0	300.0	1	3	A-CT10/7-1-300	POA	POA
3.0	0.8	50.0	2	9	A-CT3/08-2-50	POA	POA
3.0	0.8	300.0	2	3	A-CT3/08-2-300	POA	POA
2.7	0.8	50.0	4	10	A-CT2.7/08-4-50	POA	POA
2.7	0.8	300.0	4	3	A-CT2.7/08-4-300	POA	POA
4.5	1.0	50.0	4	10	A-CT4.5/10-4-50	POA	POA
4.5	1.0	300.0	4	3	A-CT4.5/10-4-300	POA	POA

Other sizes and materials available on request.

All dimensions are nominal in millimetres unless otherwise specified

Ceramic Spacers



Features:

- High purity alumina ceramic, 95% Al₂O₃.
- UHV compatible.
- High temperature rated up to 1700°C.

Specifications:

Material	95% Al ₂ O ₃
Properties	
Colour	Off white
Density	3.8 - 3.93 g/cm ³
Porosity	Nil
Resistivity @ 20°C	>10 ¹⁴ Ω/cm ³
Dielectric strength @20°C	17kV/mm
Hardness	9 MOHS

Ceramic Spacers

No. of holes / pins	Hole ID	OD	Thickness	Part Code	Price £	Price €
4	1.5	15.7	1.0	CS-AL4	£13	€15
6	1.5	15.7	1.0	CS-AL6	£13	€15
10	1.5	15.7	1.0	CS-AL10	£13	€15
20	1.5	31.8	1.0	CS-AL20	POA	POA
20	1.8	31.8	1.0	CS-AL20-L	POA	POA0
35	1.5	42.9	3.2	CS-AL35	£26	€30

All dimensions are nominal in millimetres unless otherwise specified

Macor® Ceramic / PEEK Stock



Macor® machinable glass ceramic can be easily worked using standard machining techniques, using tungsten carbide cutting tools.

Macor® can be used continually at 800°C and has a maximum bakeout temperature of 1000°C. Its coefficient of thermal expansion matches many metals and sealing glasses. It is non-wetting, exhibits zero porosity, and will not deform. It is an excellent insulator at high voltages, various frequencies and high temperatures. When properly baked out, Macor® does not outgas.

PEEK provides a clean, flexible electrical insulation with low outgassing characteristics. It is suitable for use to vacuum levels of 1x10⁻¹⁰ Torr.

PEEK is a high performance thermoplastic that is super-tough, super abrasion resistant, chemical and oil resistant, with very low liquid and moisture absorbtion. The working temperature range is -72°C to 250°C.

Macor® Cylindrical Rod

Description	Part Code	Price £	Price €
Macor® rod 10mm DIA L=300mm	A-MR-10-300	£98	€113
Macor® rod 15mm DIA L=300mm	A-MR-15-300	£106	€122
Macor® rod 16mm DIA L=305mm	A-MR-16-305	£114	€132
Macor® rod 17mm DIA L=305mm	A-MR-17-305	£129	€149
Macor® rod 25mm DIA L=300mm	A-MR-25-300	£218	€251
Macor® rod 51mm DIA L=300mm	A-MR-51-300	£669	€770

PEEK Cylindrical Rod

Description	Part Code	Price £	Price €
PEEK rod dia 6.4mm X 152.4mm long	A-PR-6.4X152.4	£9	€11
PEEK rod dia 9.5mm X 152.4mm long	A-PR-9.5X152.4	£17	€20
PEEK rod dia 12.7mm X 152.4mm long	A-PR-12.7X152.4	£31	€36
PEEK Rrod dia 15.9mm X 152.4mm long	A-PR-15.9X152.4	£56	€65
PEEK rod dia 19.1mm X 152.4mm long	A-PR-19.1X152.4	£60	€69
PEEK rod dia 25.4mm X 152.4mm long	A-PR-25.4X152.4	£98	€113
PEEK rod dia 38.1mm X 152.4mm long	A-PR-38.1X152.4	£185	€213
PEEK rod dia 50.8mm X 152.4mm long	A-PR-50.8X152.4	£300	€345
PEEK rod dia 63.5mm X 152.4mm long	A-PR-63.5X152.4	£395	€455
PEEK rod dia 76.2mm X 152.4mm long	A-PR-76.2X152.4	£525	€604
PEEK rod dia 101.6mm X 152.4mm long	A-PR-101.6X152.4	£1004	€1155

All dimensions are nominal in millimetres unless otherwise specified

Macor® Ceramic / PEEK Stock

Macor® Rectangular Bar

Description	Part Code	Price £	Price €
Macor® bar 12.7 X 12.7mm X 50.8mm long	A-MB-12.7X12.7-50.8	£41	€48
Macor® bar 12.7 X 12.7mm X 76.2mm long	A-MB-12.7X12.7-76.2	£61	€71
Macor® bar 12.7 X 12.7mm X 152.4mm long	A-MB-12.7X12.7-152.4	£123	€142
Macor® bar 12.7 X 12.7mm X 300.0mm long	A-MB-12.7X12.7-300	£156	€180

PEEK Rectangular bar

Description	Part Code	Price £	Price €
PEEK bar 6.4 X 25.4mm X 304.8mm long	A-PB-6.4X25.4	£88	€102
PEEK bar 6.4 X 50.8mm X 304.8mm long	A-PB-6.4X50.8	£161	€186
PEEK bar 9.5 X 25.4mm X 304.8mm long	A-PB-9.5X25.4	£184	€212
PEEK bar 9.5 X 50.8mm X 304.8mm long	A-PB-9.5X50.8	£352	€405
PEEK bar 12.7 X 25.4mm X 304.8mm long	A-PB-12.7X25.4	£226	€260
PEEK bar 12.7 X 50.8mm X 304.8mm long	A-PB-12.7X50.8	£430	€495
PEEK bar 19.1 X 25.4mm X 304.8mm long	A-PB-19.1X25.4	£260	€299
PEEK bar 19.1 X 50.8mm X 304.8mm long	A-PB-19.1X50.8	£506	€582
PEEK bar 25.4 X 25.4mm X 304.8mm long	A-PB-25.4X25.4	£287	€331
PEEK bar 25.4 X 50.8mm X 304.8mm long	A-PB-25.4X50.8	£556	€640

Macor® Sheet

Description	Part Code	Price £	Price €
Macor® sheet 6.35mm thick, 50.8 X 50.8mm	A-MS-6.35X50.8SQ	£117	€135
Macor® sheet 6.35mm thick, 101.6 X 101.6mm	A-MS-6.35X101.6SQ	£321	€370

PEEK Film / Sheet

Description	Part Code	Price £	Price €
PEEK film 0.076mm thick, 152.4 X 152.4mm	A-PF-0.076X152.4SQ	£24	€28
PEEK film 0.076mm thick, 304.8 X 304.8mm	A-PF-0.076X304.8SQ	£79	€91
PEEK film 0.127mm thick, 152.4 X 152.4mm	A-PF-0.127X152.4SQ	£39	€45
PEEK film 0.127mm thick, 304.8 X 304.8mm	A-PF-0.127X304.8SQ	£123	€142
PEEK film 0.254mm thick, 152.4 X 152.4mm	A-PF-0.254X152.4SQ	£72	€83
PEEK film 0.254mm thick, 304.8 X 304.8mm	A-PF-0.254X304.8SQ	£223	€257
PEEK sheet 6.4mm thick, 152.4 X 152.4mm	A-PS-6.4X152.2SQ	£242	€279
PEEK sheet 9.5mm thick, 152.4 X 152.4mm	A-PS-9.5X152.2SQ	£527	€607
PEEK sheet 12.7mm thick, 152.4 X 152.4mm	A-PS-12.76.4X152.2SQ	£645	€742
PEEK sheet 19.1mm thick, 152.4 X 152.4mm	A-PS-19.1X152.2SQ	£759	€873
PEEK sheet 25.4mm thick, 152.4 X 152.4mm	A-PS-25.44X152.2SQ	£844	€971

PEEK Tubing

Description	Part Code	Price £	Price €
PEEK TUBE ID =0.254mm, wall = 0.66mm, L = 304.8mm 2/PK	A-PT-0.254-300	£17	€20
PEEK TUBE ID = 0.508mm, wall = 0.53mm, L = 304.8mm 2/PK	A-PT-0.508-300	£17	€20
PEEK TUBE ID = 0.762mm, wall = 0.45mm, L = 304.8mm 2/PK	A-PT-0.762-300	£17	€20
PEEK TUBE ID = 1.016mm, wall = 0.28mm, L = 304.8mm 2/PK	A-PT-1.016-300	£17	€20
PEEK TUBE ID = 1.574mm, wall = 0.81mm, L = 304.8mm 2/PK	A-PT-1.574-300	£39	€45
PEEK TUBE ID = 2.362mm, wall = 0.66mm, L = 304.8mm 2/PK	A-PT-2.362-300	£42	€49

All dimensions are nominal in millimetres unless otherwise specified

Lubricants

Dupont® Molykote HV Grease



Working Vacuum	Temp Range °C	Tube Size	Part Code	Price £	Price €
HV	-40 to 200	50g	A-GREASE-DC50	£14	€17
HV	-40 to 200	5kg tub	A-GREASE-DC5KG	£702	€808

Molybdenum Disulphide Dry Lubricant



Working Vacuum	Temp Range °C	Bottle Size	Part Code	Price £	Price €
UHV	-185 to 450	50g	A-MOS2	£25	€29

Apiezon® Vacuum Greases



Type	Vapour Pressure, Torr @ 20°C	Temp Range °C	Tube Size	Part Code	Price £	Price €
H	1.7x10 ⁻⁹	-10 to 240	25g	A-APG-TYPEH	£175	€202
L	7.0x10 ⁻¹¹	10 to 30	50g	A-APG-TYPEL-50	£170	€196
M	1.7x10 ⁻⁹	10 to 30	25g	A-APG-TYPEM	£83	€96
M	1.7x10 ⁻⁹	10 to 30	100g	A-APG-TYPEM-100	£145	€167
N	6.0x10 ⁻¹⁰	-269 to 30	25g	A-APG-TYPEN	£205	€236
T	4.6x10 ⁻⁹	10 to 120	25g	A-APG-TYPET	£172	€198
AP100	7.0x10 ⁻¹¹	10 to 30	50g	A-AP100	£179	€206
AP101	1.0x10 ⁻⁵	-40 to 180	50g	A-AP101	£87	€101

Krytox® Vacuum Grease



Vapour Pressure, Torr @ 20°C	Temp Range °C	Tube Size	Part Code	Price £	Price €
1.7x10 ⁻¹³	-15 to 300	56g	A-KRYTOX	£151	€174
1.7x10 ⁻¹³	-15 to 300	224g	A-KRYTOX-224	£562	€647

Air Service Thread Lubricating Grease



Description	Part Code	Price £	Price €
Thread lubricating grease 454g tub with brush	A-8009	£38	€44

All dimensions are nominal in millimetres unless otherwise specified

UHV Solder, Leak Sealant & Glues

UHV Solder & Flux



Working Vacuum	Temp Range °C	Size	Part Code	Price £	Price €
UHV	Up to 250	0.5mm Dia / L= 25.4mm	A-UHV-SOLDER	£37	€43
UHV	Up to 250	14ml	A-UHV-SFLUX	£43	€50

Leak Sealant



Type	Working Vacuum	Temp Range °C	Tube Size	Part Code	Price £	Price €
Epoxi-Patch®	HV	-45 to 120	95g	A-EP	£22	€26
Torr-Seal®	HV	-45 to 120	118g	A-TORR-SEAL	£80	€92

Apiezon® Q Compound



Working Vacuum	Temp Range °C	Tin Size	Part Code	Price £	Price €
HV	-10 to 30	1kg	A-APQ	£168	€194

Electrically Conducting Glue



Working Vacuum	Temp Range °C	Bottle Size	Part Code	Price £	Price €
UHV	-55 to 250	28g	A-H21D	POA	POA
UHV	-55 to 225	28g	A-H27D	POA	POA

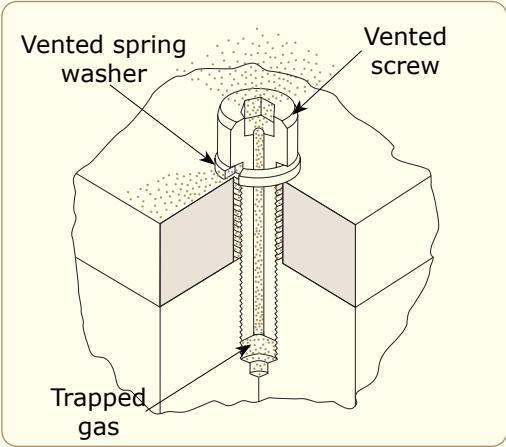
Electrically Insulating Glue



Working Vacuum	Temp Range °C	Bottle Size	Part Code	Price £	Price €
UHV	-55 to 250	85g	A-H77	POA	POA

All dimensions are nominal in millimetres unless otherwise specified

Vented Screws & Washers

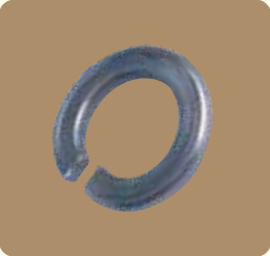


When a screw is inserted into a blind tapped hole, a small pocket of gas will be trapped below the screw, this pocket of gas will give rise to a 'virtual' leak within your system. The use of vented screws will allow the pocket of gas to escape thus avoiding 'virtual' leaks. LewVac offer a broad range of vented screws in many different styles and sizes. Just a small selection are listed here. If the style of screw or size that you require is not listed, please contact our sales office.

Features:

- Supplied in packs of ten pieces.
- 304 stainless steel as standard.
- 316 stainless steel available on request.
- UHV compatible.
- Molybdenum disulphide (MoS_2), tungsten disulphide (WS_2), nickel (Ni) and silver (Ag) plating available on request.
- Additional screw types and sizes available on request.

Vented Spring Washers



Features:

- Supplied in packs of ten pieces.
- 304 stainless steel as standard.
- 316 stainless steel available on request.
- UHV compatible.
- Molybdenum disulphide (MoS_2), tungsten disulphide (WS_2), nickel (Ni) and silver (Ag) plating available on request.
- Additional sizes available on request.

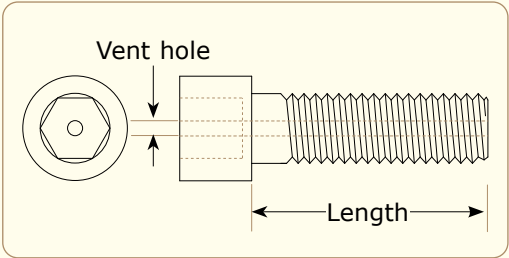
Thread Size	Part Code	Price £	Price €
2-56	A-VSW-2	POA	POA
4-40	A-VSW-4	POA	POA
6-32	A-VSW-6	POA	POA
8-32	A-VSW-8	POA	POA
10-32	A-VSW-10	POA	POA

Thread Size	Part Code	Price £	Price €
M2	A-VSW-M2	£5	€6
M2.5	A-VSW-M2.5	£4	€5
M3	A-VSW-M3	£4	€5
M4	A-VSW-M4	£4	€5
M5	A-VSW-M5	£4	€5
M6	A-VSW-M6	£5	€6

All dimensions are nominal in millimetres unless otherwise specified

Vented Screws

Vented Cap Head Screws - Metric



Thread Size	Length mm	Part Code	Price £	Price €
M2	4	A-VS-M2X4	£14	€17
M2	5	A-VS-M2X5	£14	€17
M2	6	A-VS-M2X6	£21	€25
M2	8	A-VS-M2X8	£21	€25
M2	10	A-VS-M2X10	£23	€27
M2.5	4	A-VS-M2.5X4	£14	€17
M2.5	5	A-VS-M2.5X5	£15	€18
M2.5	6	A-VS-M2.5X6	£17	€20
M2.5	8	A-VS-M2.5X8	£19	€22
M2.5	10	A-VS-M2.5X10	£24	€28
M3	5	A-VS-M3X5	£12	€14
M3	6	A-VS-M3X6	£14	€17
M3	8	A-VS-M3X8	£17	€20
M3	10	A-VS-M3X10	£21	€25
M3	12	A-VS-M3X12	£24	€28
M4	6	A-VS-M4X6	£17	€20
M4	8	A-VS-M4X8	£21	€25
M4	10	A-VS-M4X10	£23	€27
M4	12	A-VS-M4X12	£25	€29
M4	14	A-VS-M4-14	£34	€40
M4	16	A-VS-M4X16	£36	€42
M4	20	A-VS-M4X20	£44	€51
M4	25	A-VS-M4X25	£65	€75
M5	6	A-VS-M5X6	£23	€27
M5	8	A-VS-M5X8	£17	€20
M5	10	A-VS-M5X10	£16	€19
M5	12	A-VS-M5X12	£19	€22
M5	16	A-VS-M5X16	£25	€29
M5	20	A-VS-M5X20	£31	€36
M5	25	A-VS-M5X25	£46	€53
M6	8	A-VS-M6X8	£20	€23
M6	10	A-VS-M6X10	£17	€20
M6	12	A-VS-M6X12	£20	€23
M6	16	A-VS-M6X16	£25	€29
M6	20	A-VS-M6X20	£31	€36
M6	25	A-VS-M6X25	£49	€57
M6	30	A-VS-M6X30	£70	€81

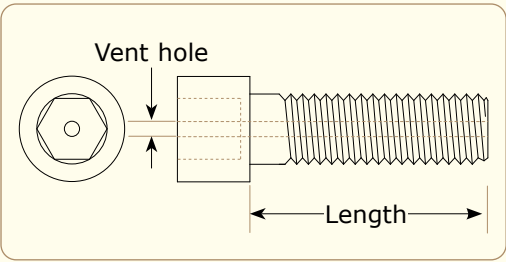
Features:

- Supplied in packs of ten pieces, unless 1pk, 2pk or 5pk shown above.
- 304 stainless steel as standard.
- 316 stainless steel available on request.
- UHV compatible.
- Molybdenum disulphide (MoS_2), tungsten disulphide (WS_2), nickel (Ni) and silver (Ag) plating available on request.
- Additional screw types and sizes available on request.

All dimensions are nominal in millimetres unless otherwise specified

Vented Screws

Vented Cap Head Screws - Imperial

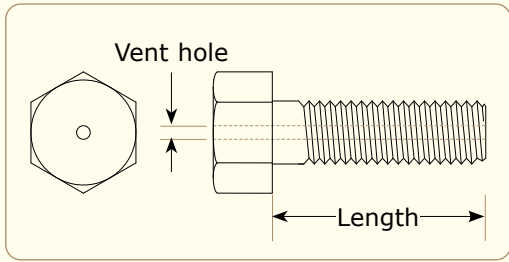


Thread Size	Length Inches	Part Code	Price £	Price €
2-56	1/8	A-VS-2-56-1/8	£15	€18
2-56	3/16	A-VS-2-56-3/16	£15	€18
2-56	1/4	A-VS-2-56-1/4	£12	€14
2-56	5/16	A-VS-2-56-5/16	£17	€20
2-56	3/8	A-VS-2-56-3/8	£20	€23
2-56	7/16	A-VS-2-56-7/16	£24	€28
2-56	1/2	A-VS-2-56-1/2 (5pk)	£17	€20
2-56	5/8	A-VS-2-56-5/8 (2pk)	£11	€13
2-56	3/4	A-VS-2-56-3/4 (2/pk)	£19	€22
4-40	1/8	A-VS-4-40-1/8	£15	€18
4-40	3/16	A-VS-4-40-3/16	£15	€18
4-40	1/4	A-VS-4-40-1/4	£12	€14
4-40	5/16	A-VS-4-40-5/16	£15	€18
4-40	3/8	A-VS-4-40-3/8	£15	€18
4-40	7/16	A-VS-4-40-7/16	£20	€23
4-40	1/2	A-VS-4-40-1/2	£23	€27
4-40	9/16	A-VS-4-40-9/16 (5/pk)	£17	€20
4-40	5/8	A-VS-4-40-5/8 (5pk)	£20	€23
4-40	3/4	A-VS-4-40-5/8 (5/pk)	£25	€29
4-40	7/8	A-VS-4-40-3/4 (2/pk)	£17	€20
4-40	1	A-VS-4-40-7/8 (2/pk)	£17	€20
5-40	1/4	A-VS-5-40-1/4	£15	€18
5-40	5/16	A-VS-5-40-5/16	£16	€19
5-40	3/8	A-VS-5-40-3/8	£17	€20
5-40	1/2	A-VS-5-40-1/2	£27	€32
5-40	5/8	A-VS-5-40-5/8 (5pk)	£21	€25
5-40	3/4	A-VS-5-40-3/4 (2pk)	£12	€14
5-40	7/8	A-VS-5-40-7/8 (2pk)	£15	€18
5-40	1	A-VS-5-40-1 (2pk)	£19	€22
6-32	1/8	A-VS-6-32-1/8	£12	€14
6-32	3/16	A-VS-6-32-3/16	£10	€12
6-32	1/4	A-VS-6-32-1/4	£10	€12
6-32	5/16	A-VS-6-32-5/16	£13	€15
6-32	3/8	A-VS-6-32-3/8	£13	€15
6-32	7/16	A-VS-6-32-7/16	£15	€18
6-32	1/2	A-VS-6-32-1/2	£17	€20
6-32	9/16	A-VS-6-32-9/16 (5pk)	£11	€13
6-32	5/8	A-VS-6-32-5/8 (5pk)	£11	€13
6-32	3/4	A-VS-6-32-3/4 (5pk)	£15	€18
6-32	7/8	A-VS-6-32-7/8 (2pk)	£8	€10
632	1	A-VS-6-32-1 (2pk)	£11	€13
6-32	1,1/8	A-VS-6-32-1-1/8 (2pk)	£15	€18
6-32	1,1/4	A-VS-6-32-1-1/4 (2/pk)	£16	€19
8-32	3/16	A-VS-8-32-3/16	£12	€14
8-32	1/4	A-VS-8-32-1/4	£10	€12
8-32	5/16	A-VS-8-32-5/16	£14	€17
8-32	3/8	A-VS-8-32-3/8	£14	€17

Thread Size	Length inches	Part Code	Price £	Price €
8-32	7/16	A-VS-8-32-7/16	£19	€22
8-32	1/2"	A-VS-8-32-1/2	£17	€20
8-32	9/16"	A-VS-8-32-9/16	£24	€28
8-32	5/8"	A-VS-8-32-5/8 (5pk)	£15	€18
8-32	3/4	A-VS-8-32-3/4 (5pk)	£14	€17
8-32	7/8	A-VS-8-32-7/8 (5pk)	£17	€20
8-32	1	A-VS-8-32-1 (5pk)	£25	€29
8-32	1,1/8	A-VS-8-32-1-1/8 (2pk)	£13	€15
8-32	1,1/4	A-VS-8-32-1-1/4 (2pk)	£17	€20
8-32	1,1/2	A-VS-8-32-1-1/2 (2pk)	£20	€23
8-32	2	A-VS-8-32-2 (1pk)	£24	€28
10-24	1/4	A-VS-10-24-1/4	£15	€18
10-24	3/8	A-VS-10-24-3/8	£15	€18
10-24	1/2	A-VS-10-24-1/2	£15	€18
10-24	5/8	A-VS-10-24-5/8	£17	€20
10-24	3/4	A-VS-10-24-3/4	£20	€23
10-24	7/8	A-VS-10-24-7/8 (5pk)	£17	€20
10-24	1	A-VS-10-24-1 (5pk)	£17	€20
10-32	3/16	A-VS-10-32-3/16	£15	€18
10-32	1/4	A-VS-10-32-1/4	£10	€12
10-32	5/16	A-VS-10-32-5/16	£11	€13
10-32	3/8	A-VS-10-32-3/8	£11	€13
10-32	7/16	A-VS-10-32-7/16	£15	€18
10-32	1/2	A-VS-10-32-1/2	£15	€18
10-32	9/16	A-VS-10-32-9/16	£20	€23
10-32	5/8	A-VS-10-32-5/8	£21	€25
10-32	11/16	A-VS-10-32-11/16	£21	€25
10-32	3/4	A-VS-10-32-3/4	£20	€23
10-32	7/8	A-VS-10-32-7/8 (5pk)	£15	€18
10-32	1	A-VS-10-32-1 (5pk)	£23	€27
10-32	1,1/8	A-VS-10-32-1-1/8 (5pk)	£23	€27
10-32	1,1/4	A-VS-10-32-1-1/4 (5pk)	£27	€32
10-32	1,3/8	A-VS-10-32-1-3/8 (2pk)	£12	€14
10-32	1,1/2	A-VS-10-32-1-1/2 (2pk)	£14	€17
10-32	1,5/8	A-VS-10-32-1-5/8 (2pk)	£20	€23
10-32	1,3/4	A-VS-10-32-1-3/4 (2pk)	£21	€25
10-32	2	A-VS-10-32-2 (1pk)	£17	€20
1/4-24	1//4	A-VS-1/4-20-1/4	£17	€20
1/4-24	5/16	A-VS-1/4-20-5/16	£17	€20
1/4-24	3/8	A-VS-1/4-20-3/8	£13	€15
1/4-24	1/2	A-VS-1/4-20-1/2	£14	€17
1/4-24	5/8	A-VS-1/4-20-5/8	£19	€22
1/4-24	3/4	A-VS-1/4-20-3/4	£19	€22
1/4-24	7/8	A-VS-1/4-20-7/8 (5pk)	£27	€32
1/4-24	1	A-VS-1/4-20-1 (5pk)	£17	€20
1/4-24	1,1/8	A-VS-1/4-20-1-1/8 (5pk)	£24	€28
1/4-24	1,1/4	A-VS-1/4-20-1-1/4 (5pk)	£27	€32
1/4-24	1,3/8	A-VS-1/4-20-1-3/8 (5pk)	£33	€38
1/4-24	1,1/2	A-VS-1/4-20-1-1/2 (2pk)	£12	€14
1/4-24	1,5/8	A-VS-1/4-20-1-5/8 (2pk)	£17	€20
1/4-24	1,3/4	A-VS-1/4-20-1-3/4 (2pk)	£19	€22
1/4-24	2	A-VS-1/4-20-2 (1pk)	£15	€18
1/4-24	2,1/2	A-VS-1/4-20-2-1/2 (1pk)	£27	€32

All dimensions are nominal in millimetres unless otherwise specified

Vented Hex Head Screws



Thread Size	Length Inches	Part Code	Price £	Price €
4-40	1/4	A-VS-4-40-1/4H	POA	POA
4-40	3/8	A-VS-4-40-3/8H	POA	POA
4-40	1/2	A-VS-4-40-1/2H	POA	POA
4-40	3/4	A-VS-4-40-3/4H (2pk)	POA	POA
6-32	1/4	A-VS-6-32-1/4H	POA	POA
6-32	3/8	A-VS-6-32-3/8H	POA	POA
6-32	1/2	A-VS-6-32-1/2H	POA	POA
6-32	3/4	A-VS-6-32-3/4H (5pk)	POA	POA
6-32	3/4	A-VS-6-32-1H (2pk)	POA	POA
8-32	1/4	A-VS-8-32-1/4H	POA	POA
8-32	3/8	A-VS-8-32-3/8H	POA	POA
8-32	1/2	A-VS-8-32-1/2H	POA	POA
8-32	5/8	A-VS-8-32-3/4H	POA	POA
8-32	3/4	A-VS-8-32-1H (2pk)	POA	POA
10-32	1/4	A-VS-10-32-1/4H	POA	POA
10-32	3/8	A-VS-10-32-3/8H	POA	POA
10-32	1/2	A-VS-10-32-1/2H	POA	POA
10-32	3/4	A-VS-10-32-3/4H	POA	POA
10-32	1	A-VS-10-32-1H (5pk)	POA	POA
10-32	1,1/4	A-VS-10-32-1,1/4H (2pk)	POA	POA
1/4-20	3/8	A-VS-1/4-20-3/8H	POA	POA
1/4-20	1/2	A-VS-1/4-20-1/2H	POA	POA
1/4-20	5/8	A-VS-1/4-20-5/8H	POA	POA
1/4-20	3/4	A-VS-1/4-20-3/4H	POA	POA
1/4-20	1	A-VS-1/4-20-1H (5pk)	POA	POA
1/4-20	1,1/4	A-VS-1/4-20-1,1/4H (2pk)	POA	POA
5/16-24	1/2	A-VS-5/16-24-1/2H	POA	POA
5/16-24	5/8	A-VS-5/16-24-5/8H	POA	POA
5/16-24	3/4	A-VS-5/16-24-3/4H (5pk)	POA	POA
5/16-24	1	A-VS-5/16-24-1H (2pk)	POA	POA
5/16-24	1,1/4	A-VS-5/16-24-1,1/4H (2pk)	POA	POA
5/16-24	1,1/2	A-VS-5/16-24-1,1/2H (2pk)	POA	POA

Thread Size	Length	Part Code	Price £	Price €
M3	5	A-VS-M3X5H	£55	€64A
M3	6	A-VS-M3X6H	£15	€18
M3	8	A-VS-M3X8H	£19	€22
M3	10	A-VS-M3X10H	£23	€27
M3	12	A-VS-M3X12H	£45	€52
M4	6	A-VS-M4X6H	£17	€20
M4	8	A-VS-M4X8H	£22	€26
M4	10	A-VS-M4X10H	£23	€27
M4	12	A-VS-M4X12H	£23	€27
M4	16	A-VS-M4X16H	£34	€40
M4	20	A-VS-M4X20H	£41	€48
M4	25	A-VS-M4X25H	£78	€90
M5	6	A-VS-M5X6H	POA	POA
M5	8	A-VS-M5X8H	£15	€18
M5	10	A-VS-M5X10H	£16	€19
M5	12	A-VS-M5X12H	£17	€20
M5	16	A-VS-M5X16H	£24	€28
M5	20	A-VS-M5X20H	£28	€33
M5	25	A-VS-M5X25H	£42	€49
M6	8	A-VS-M6X8H	£17	€20
M6	10	A-VS-M6X10H	£17	€20
M6	12	A-VS-M6X12H	£17	€20
M6	16	A-VS-M6X16H	£23	€27
M6	20	A-VS-M6X20H	£31	€36
M6	25	A-VS-M6X25H	£50	€58

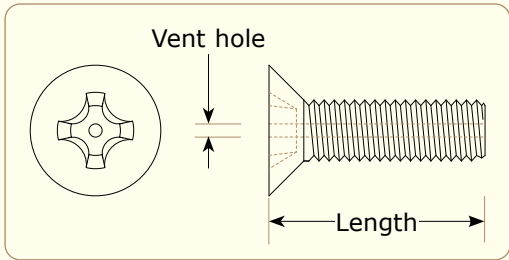
Features:

- Supplied in packs of ten pieces, unless 1pk, 2pk or 5pk shown above.
- 304 stainless steel as standard.
- 316 stainless steel available on request.
- UHV compatible.
- Molybdenum disulphide (MoS₂), tungsten disulphide (WS₂), nickel (Ni) and silver (Ag) plating available on request.
- Additional screw types and sizes available on request.

All dimensions are nominal in millimetres unless otherwise specified

Vented Screws

Vented Phillips Countersunk Head Screws



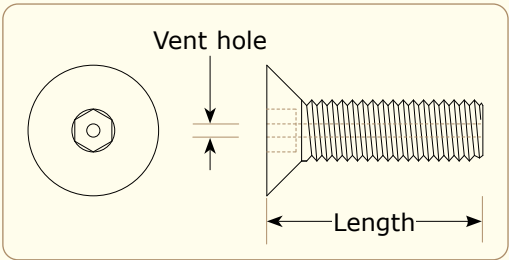
Thread Size	Length Inches	Part Code	Price £	Price €
2-56	1/8"	A-VS-2-56-1/8CSPH	POA	POA
2-56	3/16"	A-VS-2-56-3/16CSPH	POA	POA
2-56	1/4"	A-VS-2-56-1/4CSPH	POA	POA
2-56	3/8	A-VS-2-56-3/8CSPH	POA	POA
2-56	1/2"	A-VS-2-56-1/2CSPH	POA	POA
2-56	3/4"	A-VS-2-56-3/4CSPH (2pk)	POA	POA
4-40	1/8"	A-VS-4-40-1/8CSPH	POA	POA
4-40	1/4"	A-VS-4-40-1/4CSPH	POA	POA
4-40	3/8"	A-VS-4-40-3/8CSPH	POA	POA
4-40	1/2"	A-VS-4-40-1/2CSPH	POA	POA
4-40	3/4"	A-VS-4-40-3/4CSPH (2pk)	POA	POA
6-32	1/4"	A-VS-6-32-1/4CSPH	POA	POA
6-32	3/8"	A-VS-6-32-3/8CSPH	POA	POA
6-32	1/2"	A-VS-6-32-1/2CSPH	POA	POA
6-32	5/8"	A-VS-6-32-5/8CSPH	POA	POA
6-32	3/4"	A-VS-6-32-3/4CSPH	POA	POA
6-32	1	A-VS-6-32-1CSPH (2pk)	POA	POA
8-32	1/4"	A-VS-8-32-1/4CSPH	POA	POA
8-32	3/8"	A-VS-8-32-3/8CSPH	POA	POA
8-32	1/2"	A-VS-8-32-1/2CSPH	POA	POA
8-32	3/4	A-VS-8-32-3/4CSPH	POA	POA
8-32	1"	A-VS-8-32-1CSPH (2pk)	POA	POA
10-32	1/4"	A-VS-10-32-1/4CSPH	POA	POA
10-32	3/8"	A-VS-10-32-3/8CSPH	POA	POA
10-32	1/2"	A-VS-10-32-1/2CSPH	POA	POA
10-32	3/4"	A-VS-10-32-3/4CSPH	POA	POA
10-32	1"	A-VS-10-32-1CSPH (5pk)	POA	POA
10-32	1,1/4"	A-VS-10-32-1,1/4CSPH (2pk)	POA	POA
1/4-20	1/2"	A-VS-1/4-20-1/2CSPH	POA	POA
1/4-20	3/4"	A-VS-1/4-20-3/4CSPH	POA	POA
1/4-20	1"	A-VS-1/4-20-1CSPH	POA	POA
1/4-20	1,1/4"	A-VS-1/4-20-1,1/4CSPH (2pk)	POA	POA

Features:

- Supplied in packs of ten pieces, unless 1pk, 2pk or 5pk shown above.
- 304 stainless steel as standard.
- 316 stainless steel available on request.
- UHV compatible.
- Molybdenum disulphide (MoS₂), tungsten disulphide (WS₂), nickel (Ni) and silver (Ag) plating available on request.
- Additional screw types and sizes available on request.

All dimensions are nominal in millimetres unless otherwise specified

Vented Socket Countersunk Head Screws



Thread Size	Length	Part Code	Price £	€ Price €
2-56	1/8"	A-VS-2-56-1/8CSS	POA	POA
2-56	1/4"	A-VS-2-56-1/4CSS	POA	POA
2-56	3/8"	A-VS-2-56-3/8CSS	POA	POA
2-56	1/2"	A-VS-2-56-1/2CSS	POA	POA
2-56	5/8"	A-VS-2-56-5/8CSS	POA	POA
4-40	1/4"	A-VS-4-40-1/4CSS	POA	POA
4-40	3/8"	A-VS-4-40-3/8CSS	POA	POA
4-40	1/2"	A-VS-4-40-1/2CSS	POA	POA
4-40	5/8"	A-VS-4-40-5/8CSS	POA	POA
6-32	1/4"	A-VS-6-32-1/4CSS	POA	POA
6-32	3/8"	A-VS-6-32-3/8CSS	POA	POA
6-32	1/2"	A-VS-6-32-1/2CSS	POA	POA
6-32	5/8"	A-VS-6-32-5/8CSS	POA	POA
6-32	3/4"	A-VS-6-32-3/4CSS	POA	POA
8-32	1/4"	A-VS-8-32-1/4CSS	POA	POA
8-32	3/8"	A-VS-8-32-3/8CSS	POA	POA
8-32	1/2"	A-VS-8-32-1/2CSS	POA	POA
8-32	5/8"	A-VS-8-32-5/8CSS	POA	POA
8-32	3/4"	A-VS-8-32-3/4CSS	POA	POA
10-32	1/4"	A-VS-10-32-1/4CSS	POA	POA
10-32	3/8"	A-VS-10-32-3/8CSS	POA	POA
10-32	1/2"	A-VS-10-32-1/2CSS	POA	POA
10-32	5/8"	A-VS-10-32-5/8CSS	POA	POA
10-32	3/4"	A-VS-10-32-3/4CSS	POA	POA

Features:

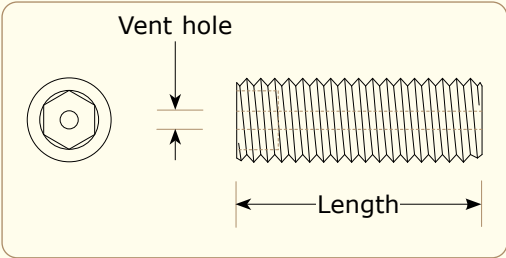
- Supplied in packs of ten pieces, unless 1pk, 2pk or 5pk shown above.
- 304 stainless steel as standard.
- 316 stainless steel available on request.
- UHV compatible.
- Molybdenum disulphide (MoS₂), tungsten disulphide (WS₂), nickel (Ni) and silver (Ag) plating available on request.
- Additional screw types and sizes available on request.

All dimensions are nominal in millimetres unless otherwise specified

Thread Size	Length	Part Code	Price £	Price €
M2.5	4	A-VS-M2.5X4CSS	£21	€25
M2.5	5	A-VS-M2.5X5CSS	£22	€26
M2.5	6	A-VS-M2.5X6CSS	£22	€26
M2.5	8	A-VS-M2.5X8CSS	£23	€27
M2.5	10	A-VS-M2.5X10CSS	£26	€30
M3	5	A-VS-M3X5CSS	£24	€28
M3	6	A-VS-M3X6CSS	£13	€15
M3	8	A-VS-M3X8CSS	£19	€22
M3	10	A-VS-M3X10CSS	£19	€22
M3	12	A-VS-M3X12CSS	£32	€37
M3	16	A-VS-M3X16CSS	£54	€63
M3	20	A-VS-M3X20CSS	POA	POA
M3	25	A-VS-M3X25CSS	POA	POA
M4	6	A-VS-M4X6CSS	£16	€19
M4	7	A-VS-M4X7CSS	POA	POA
M4	8	A-VS-M4X8CSS	£17	€20
M4	10	A-VS-M4X10CSS	£19	€22
M4	12	A-VS-M4X12CSS	£23	€27
M4	16	A-VS-M4X16CSS	£38	€44
M4	20	A-VS-M4X20CSS	£38	€44
M4	25	A-VS-M4X25CSS	£63	€73
M4	30	A-VS-M4X30CSS	POA	POA
M4	35	A-VS-M4X35CSS	POA	POA
M5	8	A-VS-M5X8CSS	£14	€17
M5	10	A-VS-M5X10CSS	£14	€17
M5	12	A-VS-M5X12CSS	£16	€19
M5	16	A-VS-M5X16CSS	£24	€28
M5	20	A-VS-M5X20CSS	£41	€48
M5	25	A-VS-M5X25CSS	£63	€73
M5	30	A-VS-M5X30CSS	£70	€81
M6	8	A-VS-M6X8CSS	POA	POA
M6	10	A-VS-M6X10CSS	£21	€25
M6	12	A-VS-M6X12CSS	£23	€27
M6	16	A-VS-M6X16CSS	£30	€35
M6	20	A-VS-M6X20CSS	£33	€38
M6	25	A-VS-M6X25CSS	£51	€59
M6	30	A-VS-M6X30CSS	POA	POA
M6	35	A-VS-M6X35CSS	POA	POA

Vented Screws

Vented Socket Set Screws



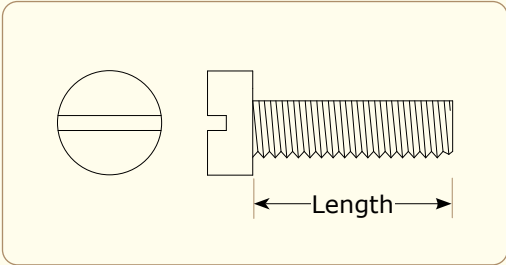
Thread Size	Length	Part Code	Price £	Price €
2-56	1/8"	A-VS-2-56-1/8SET	POA	POA
2-56	1/4"	A-VS-2-56-1/4SET	POA	POA
2-56	3/8"	A-VS-2-56-3/8SET	POA	POA
2-56	1/2"	A-VS-2-56-1/2SET	POA	POA
2-56	3/4"	A-VS-2-56-3/4SET (2pk)	POA	POA
4-40	1/8"	A-VS-4-40-1/8SET	POA	POA
4-40	1/4"	A-VS-4-40-1/4SET	POA	POA
4-40	3/8"	A-VS-4-40-3/8SET	POA	POA
4-40	1/2"	A-VS-4-40-1/2SET	POA	POA
4-40	3/4"	A-VS-4-40-3/4SET (2pk)	POA	POA
6-32	1/4"	A-VS-6-32-1/4SET	POA	POA
6-32	3/8"	A-VS-6-32-3/8SET	POA	POA
6-32	1/2"	A-VS-6-32-1/2SET	POA	POA
6-32	3/4"	A-VS-6-32-3/4SET	POA	POA
6-32	1"	A-VS-6-32-1SET (2pk)	POA	POA
8-32	1/4"	A-VS-8-32-1/4SET	POA	POA
8-32	3/8"	A-VS-8-32-3/8SET	POA	POA
8-32	1/2"	A-VS-8-32-1/2SET	POA	POA
8-32	3/4"	A-VS-8-32-3/4SET	POA	POA
8-32	1"	A-VS-8-32-1SET (2pk)	POA	POA
10-32	1/4"	A-VS-10-32-1/4SET	POA	POA
10-32	3/8"	A-VS-10-32-3/8SET	POA	POA
10-32	1/2"	A-VS-10-32-1/2SET	POA	POA
10-32	3/4"	A-VS-10-32-3/4SET	POA	POA
10-32	1"	A-VS-10-32-1SET (5pk)	POA	POA
10-32	1,1/4"	A-VS-10-32-1,1/4SET (2pk)	POA	POA
1/4-20	1/4"	A-VS-1/4-20-1/4SET	POA	POA
1/4-20	3/8"	A-VS-1/4-20-3/8SET	POA	POA
1/4-20	1/2"	A-VS-1/4-20-1/2SET	POA	POA
1/4-20	5/8"	A-VS-1/4-20-5/8SET	POA	POA
1/4-20	3/4"	A-VS-1/4-20-3/4SET	POA	POA

- Supplied in packs of ten pieces, unless 1pk, 2pk or 5pk shown above.
- 304 stainless steel as standard.
- 316 stainless steel available on request.
- UHV compatible.
- Molybdenum disulphide (MoS₂), tungsten disulphide (WS₂), nickel (Ni) and silver (Ag) plating available on request.
- Additional screw types and sizes available on request.

Thread Size	Length	Part Code	Price £	Price €
M2.5	4	A-VS-M2.5X4SET	£23	€27
M2.5	5	A-VS-M2.5X5SET	£23	€27
M2.5	6	A-VS-M2.5X6SET	£29	€34
M2.5	8	A-VS-M2.5X8SET	£28	€33
M2.5	10	A-VS-M2.5X10SET	£27	€32
M3	4	A-VS-M3X4SET	£13	€15
M3	5	A-VS-M3X5SET	£12	€14
M3	6	A-VS-M3X6SET	£13	€15
M3	8	A-VS-M3X8SET	£19	€22
M3	10	A-VS-M3X10SET	£21	€25
M3	12	A-VS-M3X12SET	£30	€35
M3	16	A-VS-M3X16SET	£59	€68
M4	5	A-VS-M4X5SET	POA	POA
M4	6	A-VS-M4X6SET	£16	€19
M4	8	A-VS-M4X8SET	£17	€20
M4	10	A-VS-M4X10SET	£22	€26
M4	12	A-VS-M4X12SET	£23	€27
M4	16	A-VS-M4X16SET	£35	€41
M4	20	A-VS-M4X20SET	£53	€61
M4	25	A-VS-M4X25SET	£72	€83
M4	30	A-VS-M4X30SET	POA	POA
M5	6	A-VS-M5X6SET	POA	POA
M5	8	A-VS-M5X8SET	£16	€19
M5	10	A-VS-M5X10SET	£18	€21
M5	12	A-VS-M5X12SET	£22	€26
M5	16	A-VS-M5X16SET	£26	€30
M5	20	A-VS-M5X20SET	£36	€42
M5	25	A-VS-M5X25SET	£56	€65
M6	8	A-VS-M6X8SET	POA	POA
M6	10	A-VS-M6X10SET	£20	€23
M6	12	A-VS-M6X12SET	£17	€20
M6	16	A-VS-M6X16SET	£24	€28
M6	20	A-VS-M6X20SET	£30	€35
M6	25	A-VS-M6X25SET	£53	€61

All dimensions are nominal in millimetres unless otherwise specified

Vented Molybdenum & Tantalum Screws



Molybdenum Slotted Head & Hex Head Screws

Description	Part Code	Price £	Price €
Molybdenum screw vented M2 X 6mm 10/PK	A-MOVS-M2X6	POA	POA
Molybdenum screw vented M2 X 8mm 10/PK	A-MOVS-M2X8	POA	POA
Molybdenum screw vented M2X 10mm 10/PK	A-MOVS-M2X10	POA	POA
Molybdenum screw vented M3 X 6mm 10/PK	A-MOVS-M3X6	POA	POA
Molybdenum screw vented M3 X 8mm 10/PK	A-MOVS-M3X8	POA	POA
Molybdenum screw vented M3X 10mm 10/PK	A-MOVS-M3X10	POA	POA

Molybdenum Nuts

Description	Part Code	Price £	Price €
Molybdenum nut M2 10/PK	A-MON-M2	POA	POA
Molybdenum nut M3 10/PK	A-MON-M3	POA	POA

Tantalum Slotted Head Screws

Description	Part Code	Price £	Price €
Tantalum screw vented M2 X 5mm each	A-TAVS-M2X5	POA	POA
Tantalum screw vented M3 X 10mm each	A-TAVS-M3X10	POA	POA

All dimensions are nominal in millimetres unless otherwise specified

Over Pressure Burst Discs



Over Pressure Burst Discs are designed as a safety device to help protect vacuum systems against accidental over pressure. This can occur when internal gas or cryogenic liquid lines fail causing a rapid over pressure which could break view ports or damage delicate test equipment.

Over pressure causes the thin foil diaphragm to come into contact with the ten sharp edges of the housing and ruptures the foil diaphragm. This relieves the pressure in the system. Once the foil diaphragm has been ruptured, the unit must be replaced.

The disc is designed to burst with an over pressure of either 15-25psi or between 9-11.5psi.

Pressure relief valves are also available, see page 5.41 of this catalogue.

CF Flanged

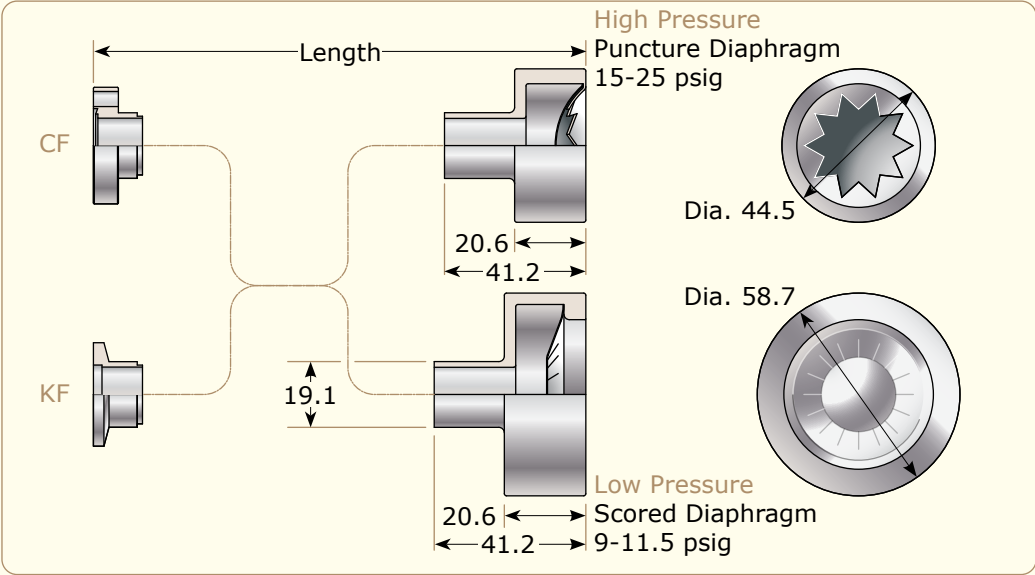


Description	Length	Part Code	Price £	Price €
Over pressure burst disc (15-25psi) on DN16CF	53.9	A-PBD-16CF	£252	€290
Over pressure burst disc (9-11.5psi) on DN16CF	56.1	A-PBD11.5-16CF	£598	€688
Over pressure burst disc (15-25psi) on DN40CF	42.4	A-PBD-40CF	£272	€313
Over pressure burst disc (9-11.5psi) on DN40CF	73.4	A-PBD11.5-40CF	£613	€705

KF Flanged



Description	Length	Part Code	Price £	Price €
Over pressure burst disc (15-25psi) on DN16KF	53.6	A-PBD-16KF	£2524	€2903
Over pressure burst disc (11.5psi) on DN16KF	55.1	A-PBD11.5-16KF	£598	€688
Over pressure burst disc (15-25psi) on DN40KF	40.9	A-PBD-40KF	£272	€313
Over pressure burst disc (11.5psi) on DN40KF	44.5	A-PBD11.5-40KF	£613	€705



Sealed Coaxial Traps



Features:

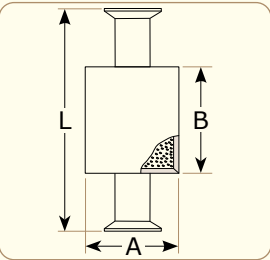
- Copper or stainless steel trapping media.
- low cost system protection from pump oil backstreaming.
- 2-stage trapping system.
- Simple, one-piece body design.

Specifications:

Material

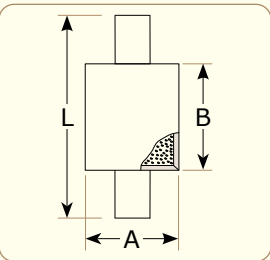
Body	304 St.St.
Trapping Media	Cu or St.St.

Sealed Coaxial Traps - KF Flanges



Flange Size	Body OD, A	Body Height, B	L	Trapping Media	Part Code	Price £	Price €
DN16KF	63.5	77.5	160.0	Copper	A-FLT-C-S-16KF	POA	POA
DN16KF	63.5	77.5	160.0	St.St.	A-FLT-S-S-16KF	POA	POA
DN25KF	63.5	77.5	160.0	Copper	A-FLT-C-S-25F	POA	POA
DN25KF	63.5	77.5	160.0	St.St.	A-FLT-S-S-25KF	POA	POA
DN16KF	101.6	115.6	223.5	Copper	A-FLT-C-16KF	POA	POA
DN16KF	101.6	115.6	223.5	St.St.	A-FLT-S-16KF	POA	POA
DN25KF	101.6	115.6	223.5	Copper	A-FLT-C-25KF	POA	POA
DN25KF	101.6	115.6	223.5	St.St.	A-FLT-S-25KF	POA	POA
DN40KF	101.6	115.6	223.5	Copper	A-FLT-C-40KF	POA	POA
DN40KF	101.6	115.6	223.5	St.St.	A-FLT-S-40KF	POA	POA
DN50KF	101.6	115.6	223.5	Copper	A-FLT-C-50KF	POA	POA
DN50KF	101.6	115.6	223.5	St.St.	A-FLT-S-50KF	POA	POA

Sealed Coaxial Traps - Weldable



Tube OD inch/mm	Body OD, A	Body Height, B	L	Trapping Media	Part Code	Price £	Price €
0.75 / 19.1	63.5	77.5	153.7	Copper	A-FLT-C-19S-W	POA	POA
0.75 / 19.1	63.5	77.5	153.7	St.St.	A-FLT-S-19S-W	POA	POA
1.0 / 25.4	63.5	77.5	153.7	Copper	A-FLT-C-25S-W	POA	POA
1.0 / 25.4	63.5	77.5	153.7	St.St.	A-FLT-S-25S-W	POA	POA
0.75 / 19.1	101.6	115.6	217.2	Copper	A-FLT-C-19-W	POA	POA
0.75 / 19.1	101.6	115.6	217.2	St.St.	A-FLT-S-19-W	POA	POA
1.0 / 25.4	101.6	115.6	217.2	Copper	A-FLT-C-25-W	POA	POA
1.0 / 25.4	101.6	115.6	217.2	St.St.	A-FLT-S-25-W	POA	POA
1.5 / 38.1	101.6	115.6	217.2	Copper	A-FLT-C-38-W	POA	POA
1.5 / 38.1	101.6	115.6	217.2	St.St.	A-FLT-S-38-W	POA	POA
2.0 / 50.8	101.6	115.6	217.2	Copper	A-FLT-C-51-W	POA	POA
2.0 / 50.8	101.6	115.6	217.2	St.St.	A-FLT-S-51-W	POA	POA

All dimensions are nominal in millimetres unless otherwise specified

Rechargeable Coaxial Traps



Features:

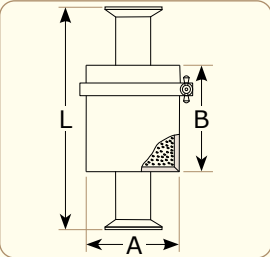
- Copper, stainless steel, activated alumina or activated charcoal trapping media.
- System protection from pump oil backstreaming, water, particulates, organic condensibles and acids.
- 2-stage trapping system.
- Simple, clamped two-piece body design.

Specifications:

Material

Body	304 St.St.
Seal	Buna-N
Trapping Media	Cu, St.St., activated alumina, activated charcoal

Rechargeable Traps - Copper Media - KF Flanges



Flange Size	Body OD, A	Body Height, B	L	Trapping Media	Part Code	Price £	Price €
DN16KF	50.8	96.5	149.9	Copper	A-FLTRC-50-16KF	POA	POA
DN16KF	63.5	96.5	149.9	Copper	A-FLTRC-63-16KF	POA	POA
DN25KF	63.5	96.5	149.9	Copper	A-FLTRC-63-25KF	POA	POA
DN25KF	76.2	121.9	175.3	Copper	A-FLTRC-76-25KF	POA	POA
DN40KF	76.2	121.9	175.3	Copper	A-FLTRC-76-40KF	POA	POA
DN16KF	101.6	127.0	177.8	Copper	A-FLTRC-101-16KF	POA	POA
DN25KF	101.6	127.0	177.8	Copper	A-FLTRC-101-25KF	POA	POA
DN40KF	101.6	127.0	177.8	Copper	A-FLTRC-101-40KF	POA	POA
DN50KF	101.6	127.0	203.2	Copper	A-FLTRC-101-50KF	POA	POA
DN40KF	152.4	185.4	238.8	Copper	A-FLTRC-152-40KF	POA	POA
DN50KF	152.4	185.4	264.2	Copper	A-FLTRC-152-50KF	POA	POA
DN63LF	152.4	185.4	264.2	Copper	A-FLTRC-152-63LF	POA	POA
DN80LF	152.4	185.4	264.2	Copper	A-FLTRC-152-80LF	POA	POA
DN63LF	203.2	185.4	264.2	Copper	A-FLTRC-203-63LF	POA	POA
DN80LF	203.2	185.4	264.2	Copper	A-FLTRC-203-80LF	POA	POA
DN100LF	203.2	185.4	264.2	Copper	A-FLTRC-203-100LF	POA	POA

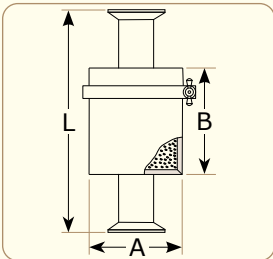
Replacement media - Copper

Description	Part Code	Price £	Price €
Replacement copper media for 50.8mm body trap	A-FLTRM-C-50	POA	POA
Replacement copper media for 63.5mm body trap	A-FLTRM-C-63	POA	POA
Replacement copper media for 76.2mm body trap	A-FLTRM-C-76	POA	POA
Replacement copper media for 101.6mm body trap	A-FLTRM-C-101	POA	POA
Replacement copper media for 152.4mm body trap	A-FLTRM-C-152	POA	POA
Replacement copper media for 203.2mm body trap	A-FLTRM-C-203	POA	POA

All dimensions are nominal in millimetres unless otherwise specified

Rechargeable Coaxial Traps

Rechargeable Traps - Activated Alumina Media - KF Flanges

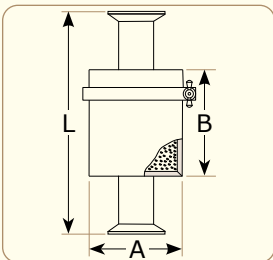


Flange Size	Body OD, A	Body Height, B	L	Trapping Media	Part Code	Price £	Price €
DN16KF	50.8	96.5	149.9	Alumina	A-FLTRAA-50-16KF	POA	POA
DN16KF	63.5	96.5	149.9	Alumina	A-FLTRAA-63-16KF	POA	POA
DN25KF	63.5	96.5	149.9	Alumina	A-FLTRAA-63-25KF	POA	POA
DN25KF	76.2	121.9	175.3	Alumina	A-FLTRAA-76-25KF	POA	POA
DN40KF	76.2	121.9	175.3	Alumina	A-FLTRAA-76-40KF	POA	POA
DN16KF	101.6	127.0	177.8	Alumina	A-FLTRAA-101-16KF	POA	POA
DN25KF	101.6	127.0	177.8	Alumina	A-FLTRAA-101-25KF	POA	POA
DN40KF	101.6	127.0	177.8	Alumina	A-FLTRAA-101-40KF	POA	POA
DN50KF	101.6	127.0	203.2	Alumina	A-FLTRAA-101-50KF	POA	POA
DN40KF	152.4	185.4	238.8	Alumina	A-FLTRAA-152-40KF	POA	POA
DN50KF	152.4	185.4	264.2	Alumina	A-FLTRAA-152-50KF	POA	POA
DN63LF	152.4	185.4	264.2	Alumina	A-FLTRAA-152-63LF	POA	POA
DN80LF	152.4	185.4	264.2	Alumina	A-FLTRAA-152-80LF	POA	POA
DN63LF	203.2	185.4	264.2	Alumina	A-FLTRAA-203-63LF	POA	POA
DN80LF	203.2	185.4	264.2	Alumina	A-FLTRAA-203-80LF	POA	POA
DN100LF	203.2	185.4	264.2	Alumina	A-FLTRAA-203-100LF	POA	POA

Replacement media - Activated Alumina

Description	Part Code	Price £	Price €
Replacement activated alumina media for 50.8mm body trap	A-FLTRM-AA-50	POA	POA
Replacement activated alumina media for 63.5mm body trap	A-FLTRM-AA-63	POA	POA
Replacement activated alumina media for 76.2mm body trap	A-FLTRM-AA-76	POA	POA
Replacement activated alumina media for 101.6 mm body trap	A-FLTRM-AA-101	POA	POA
Replacement activated alumina media for 152.4mm body trap	A-FLTRM-AA-152	POA	POA
Replacement activated alumina media for 203.2mm body trap	A-FLTRM-AA-203	POA	POA

Rechargeable Traps - Stainless Steel - KF Flanges



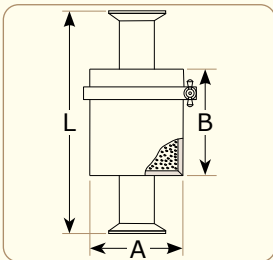
Flange Size	Body OD, A	Body Height, B	L	Trapping Media	Part Code	Price £	Price €
DN16KF	50.8	96.5	149.9	St.St.	A-FLTRSS-50-16KF	POA	POA
DN16KF	63.5	96.5	149.9	St.St.	A-FLTRSS-63-16KF	POA	POA
DN25KF	63.5	96.5	149.9	St.St.	A-FLTRSS-63-25KF	POA	POA
DN25KF	76.2	121.9	175.3	St.St.	A-FLTRSS-76-25KF	POA	POA
DN40KF	76.2	121.9	175.3	St.St.	A-FLTRS-76-40KF	POA	POA
DN16KF	101.6	127.0	177.8	St.St.	A-FLTRSS-101-16KF	POA	POA
DN25KF	101.6	127.0	177.8	St.St.	A-FLTRSS-101-25KF	POA	POA
DN40KF	101.6	127.0	177.8	St.St.	A-FLTRSS-101-40KF	POA	POA
DN50KF	101.6	127.0	203.2	St.St.	A-FLTRSS-101-50KF	POA	POA
DN40KF	152.4	185.4	238.8	St.St.	A-FLTRSS-152-40KF	POA	POA
DN50KF	152.4	185.4	264.2	St.St.	A-FLTRSS-152-50KF	POA	POA
DN63LF	152.4	185.4	264.2	St.St.	A-FLTRSS-152-63LF	POA	POA
DN80LF	152.4	185.4	264.2	St.St.	A-FLTRSS-152-80LF	POA	POA
DN63LF	203.2	185.4	264.2	St.St.	A-FLTRSS-203-63LF	POA	POA
DN80LF	203.2	185.4	264.2	St.St.	A-FLTRSS-203-80LF	POA	POA
DN100LF	203.2	185.4	264.2	St.St.	A-FLTRSS-203-100LF	POA	POA

All dimensions are nominal in millimetres unless otherwise specified

Replacement media - Stainless Steel

Description	Part Code	Price £	Price €
Replacement stainless steel media for 50.8mm body trap	A-FLTRM-SS-50	POA	POA
Replacement stainless steel media for 63.5mm body trap	A-FLTRM-SS-63	POA	POA
Replacement stainless steel media for 76.2mm body trap	A-FLTRM-SS-76	POA	POA
Replacement stainless steel media for 101.6 mm body trap	A-FLTRM-SS-101	POA	POA
Replacement stainless steel media for 152.4mm body trap	A-FLTRM-SS-152	POA	POA
Replacement stainless steel media for 203.2mm body trap	A-FLTRM-SS-203	POA	POA

Rechargeable Traps - Activated Charcoal Media - KF Flanges



Flange Size	Body OD, A	Body Height, B	L	Trapping Media	Part Code	Price £	Price €
DN16KF	50.8	96.5	149.9	Charcoal	A-FLTRAC-50-16KF	POA	POA
DN16KF	63.5	96.5	149.9	Charcoal	A-FLTRAC-63-16KF	POA	POA
DN25KF	63.5	96.5	149.9	Charcoal	A-FLTRAC-63-25KF	POA	POA
DN25KF	76.2	121.9	175.3	Charcoal	A-FLTRAC-76-25KF	POA	POA
DN40KF	76.2	121.9	175.3	Charcoal	A-FLTRAC-76-40KF	POA	POA
DN16KF	101.6	127.0	177.8	Charcoal	A-FLTRAC-101-16KF	POA	POA
DN25KF	101.6	127.0	177.8	Charcoal	A-FLTRAC-101-25KF	POA	POA
DN40KF	101.6	127.0	177.8	Charcoal	A-FLTRAC-101-40KF	POA	POA
DN50KF	101.6	127.0	203.2	Charcoal	A-FLTRAC-101-50KF	POA	POA
DN40KF	152.4	185.4	238.8	Charcoal	A-FLTRAC-152-40KF	POA	POA
DN50KF	152.4	185.4	264.2	Charcoal	A-FLTRAC-152-50KF	POA	POA
DN63LF	152.4	185.4	264.2	Charcoal	A-FLTRAC-152-63LF	POA	POA
DN80LF	152.4	185.4	264.2	Charcoal	A-FLTRAC-152-80LF	POA	POA
DN63LF	203.2	185.4	264.2	Charcoal	A-FLTRAC-203-63LF	POA	POA
DN80LF	203.2	185.4	264.2	Charcoal	A-FLTRAC-203-80LF	POA	POA
DN100LF	203.2	185.4	264.2	Charcoal	A-FLTRAC-203-100LF	POA	POA

Replacement media - Activated Charcoal

Description	Part Code	Price £	Price €
Replacement activated charcoal media for 50.8mm body trap	A-FLTRM-AC-50	POA	POA
Replacement activated charcoal media for 63.5mm body trap	A-FLTRM-AC-63	POA	POA
Replacement activated charcoal media for 76.2mm body trap	A-FLTRM-AC-76	POA	POA
Replacement activated charcoal media for 101.6 mm body trap	A-FLTRM-AC-101	POA	POA
Replacement activated charcoal media for 152.4mm body trap	A-FLTRM-AC-152	POA	POA
Replacement activated charcoal media for 203.2mm body trap	A-FLTRM-AC-203	POA	POA

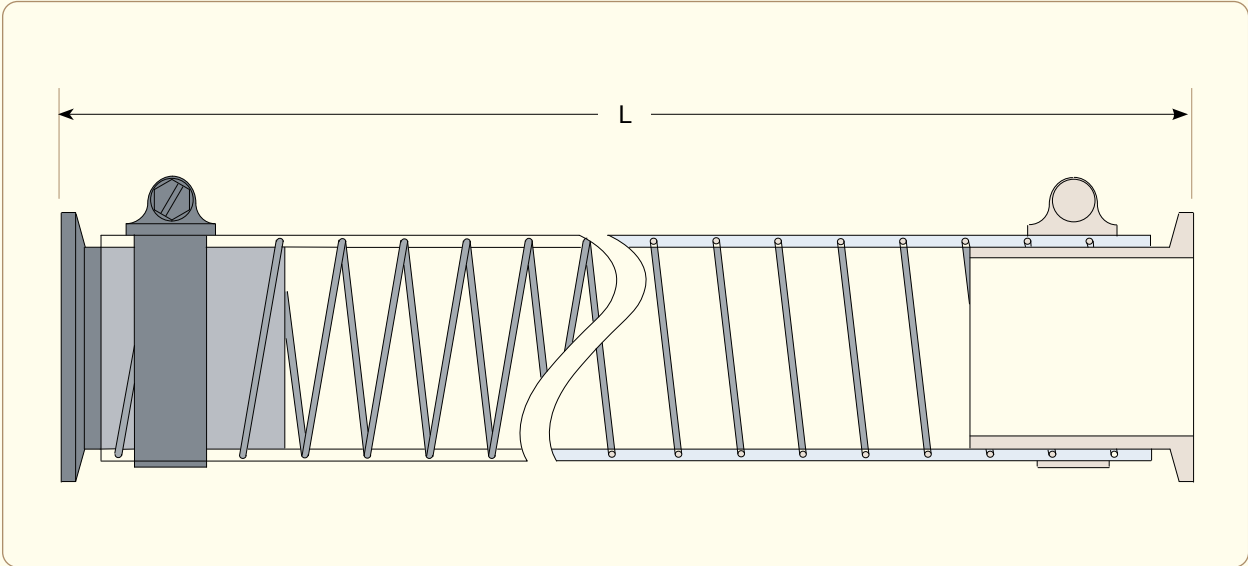
All dimensions are nominal in millimetres unless otherwise specified

PVC Hose



Features:

- Temperature range -5 - 65°C.
- Custom lengths available.



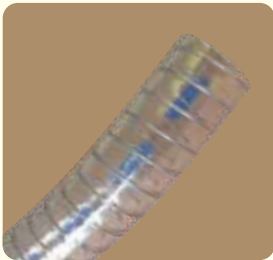
All dimensions are nominal in millimetres unless otherwise specified

KF Flanged PVC Hose



Description	Part Code	Price £	Price €
DN10KF reinforced PVC hose L=500mm	A-PVCK10-500	£49	€57
DN10KF reinforced PVC hose L=1000mm	A-PVCK10-1000	£53	€61
DN16KF reinforced PVC hose L=500mm	A-PVCK16-500	£47	€55
DN16KF reinforced PVC hose L=1000mm	A-PVCK16-1000	£51	€59
DN25KF reinforced PVC hose L=500mm	A-PVCK25-500	£52	€60
DN25KF reinforced PVC hose L=1000mm	A-PVCK25-1000	£57	€66
DN40KF reinforced PVC hose L=500mm	A-PVCK40-500	£60	€69
DN40KF reinforced PVC hose L=1000mm	A-PVCK40-1000	£68	€79
DN50KF reinforced PVC hose L=500mm	A-PVCK50-500	£90	€104
DN50KF reinforced PVC hose L=1000mm	A-PVCK50-1000	£103	€119

Unflanged PVC Hose



Description	Part Code	Price £	Price €
Reinforced PVC vacuum hose ID=12mm L=1m	A-PVC10	£8	€10
Reinforced PVC vacuum hose ID=20mm L=1m	A-PVC16	£8	€10
Reinforced PVC vacuum hose ID=25mm L=1m	A-PVC25	£10	€12
Reinforced PVC vacuum hose ID=38mm L=1m	A-PVC40	£17	€20
Reinforced PVC vacuum hose ID=50mm L=1m	A-PVC50	£26	€30
Reinforced PVC vacuum hose ID=100mm L=1m	A-PVC100	POA	POA

Hose Clips



Description	Part Code	Price £	Price €
Hose clamp to suit 12mm ID hose	A-HC10	£4	€5
Hose clamp to suit 20mm ID hose	A-HC16	£3	€4
Hose clamp to suit 25mm ID hose	A-HC25	£4	€5
Hose clamp to suit 38mm ID hose	A-HC40	£4	€5
Hose clamp to suit 50mm ID hose	A-HC50	£9	€11
Hose clamp to suit 100mm ID hose	A-HC100	£9	€11

Half nipples & hose adapters are available separately, for use with PVC hose, please see section 3.2 & 3.3.

All dimensions are nominal in millimetres unless otherwise specified

SECTION 9.8 TITANIUM SUBLIMATION PUMP

Titanium Sublimation Pump & Filaments



Features:

- Three filaments.
- Standard length 203mm.
- Custom lengths available on request.
- Bakeable to 350°C.

Specifications:

Maximum Current (Degas) 52A

Material

Feedthrough Stainless steel
Insulation Alumina ceramic
Filaments TiMo alloy

Operating Pressure 10⁻¹ to 10⁻¹¹ mbar

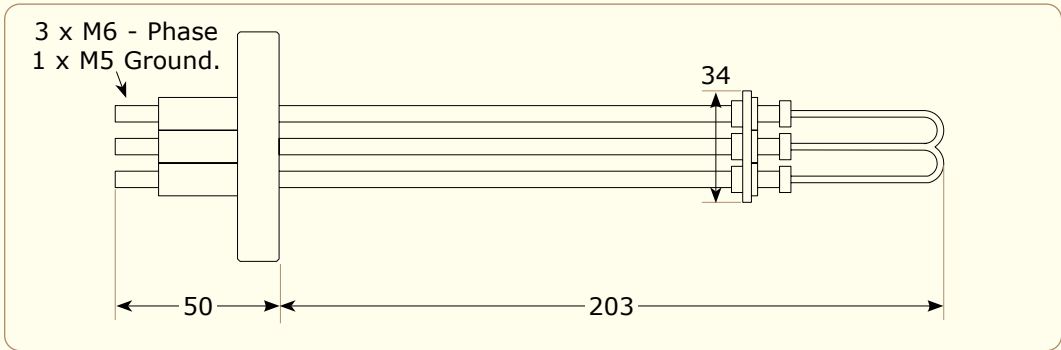
Operating Temperature -196 to 250°C

Bakeout Temperature 350°C

Mounting Flange DN40CF

Max Evaporation Rate 10mg per minute

Usable Ti 0.6g per filament



Titanium Sublimation Pump And Spare Parts

Description	Part Code	Price £	Price €
Titanium sublimation pump	A-TSP	£1254	€1443
Replacement filaments for A-TSP 3/pk	A-TSP-FIL3	POA	POA
Replacement filaments for A-TSP 30/pk	A-TSP-FIL	POA	POA
Replacement filament clamp set for A-TSP	A-TSP-CLAMP	POA	POA
Replacement screw set for A-TSP-CLAMP filament clamps	A-TSP-SCREW	POA	POA
Replacement insulator bush set for A-TSP	A-TSP-BUSH	POA	POA

All dimensions are nominal in millimetres unless otherwise specified

SECTION 9.8 TITANIUM SUBLIMATION PUMP

Titanium Sublimation Pump Controller & Cables



Specifications:

Supply Voltage

A-TSP-C220 220/230VAC 50 or 60Hz
A-TSP-C110 110/110VAC 50 or 60Hz

Power Consumption

Normal load conditions :- 400V A Maximum
Phase angle controlled :- 360V A Maximum, 60A at 6V
Soft start :- ~3 seconds from 0% to 100%

Dimensions:

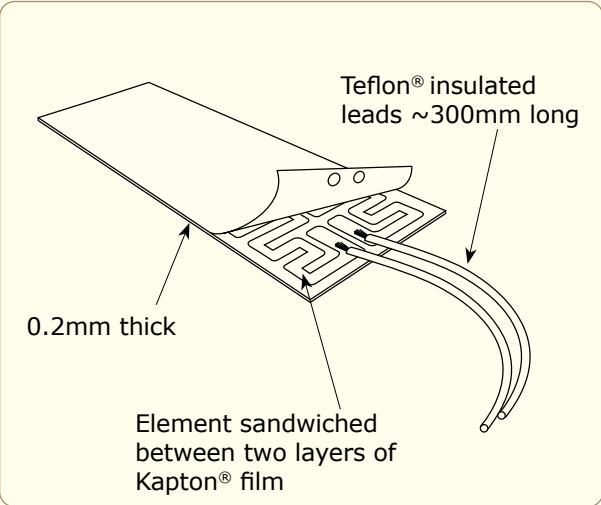
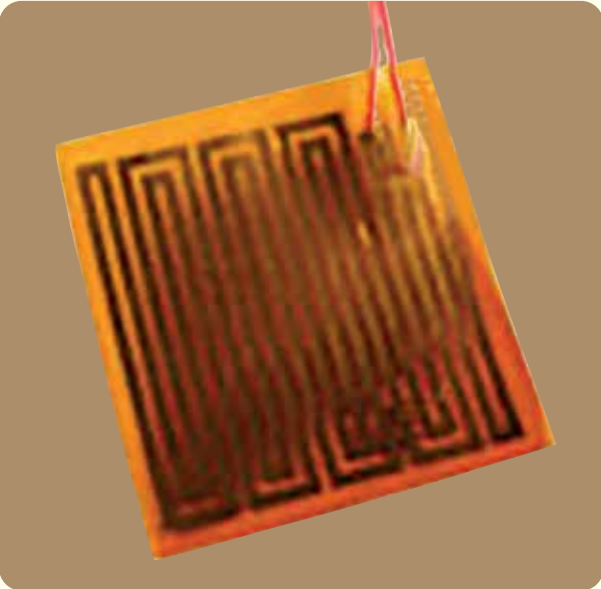
- 19" rack, 483 x 3U x 370mm.
- 10kg net

Titanium Sublimation Pump Controller & Cables

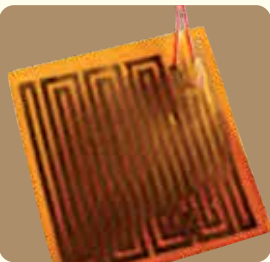
Description	Part Code	Price £	Price €
Titanium sublimation pump controller 60A 220VAC	A-TSP-C220	POA	POA
Titanium sublimation pump controller 60A 110VAC	A-TSP-C110	POA	POA
5M non-bakeable TSP lead assembly	A-TSPL-NB5	POA	POA
1.5M bakeable TSP lead and interface box	A-TSPL-B1.5I	POA	POA

All dimensions are nominal in millimetres unless otherwise specified

Kapton Heaters - For Use In Vacuum



Silicone Heater Tapes



Description	Part Code	Price £	Price €
Kapton® heater 25.4mm X 25.4mm 28VAC, 10 W, rated for 1X10 ⁻⁸ Torr	A-KH-25X25-10-28VAC	£74	€86
Kapton® heater 50.8mm X 50.8mm 28VAC, 40 W, rated for 1X10 ⁻⁸ Torr	A-KH-51X51-40-28VAC	£83	€96
Kapton® heater 25.4mm X 76.2mm 28VAC, 30 W, rated for 1X10 ⁻⁸ Torr	A-KH-25X76-30-28VAC	£102	€118
Kapton® heater 25.4mm X 25.4mm 28VAC, 10 W, rated for 1X10 ⁻⁸ Torr with acrylic adhesive backing	A-KH-25X25-10-28VAC-A	£83	€96
Kapton® heater 50.8mm X 50.8mm 28VAC, 40 W, rated for 1X10 ⁻⁸ Torr with acrylic adhesive backing	A-KH-51X51-40-28VAC-A	£86	€99
Kapton® heater 25.4mm X 76.2mm 28VAC, 30 W, rated for 1X10 ⁻⁸ Torr with acrylic adhesive backing	A-KH-25X76-30-28VAC-A	£113	€130

INTRODUCTION.

Kapton® film heaters provide a means of heating sample trays, cuvettes, reagent bottles, etc., inside a vacuum. Constructed with two sheets of Kapton® film that is resistant to chemicals, oils and radiation, and have a total thickness of only 0.2mm. Maximum heat output is 150°C. FEP adhesive used internally. Lead wires are Teflon® insulated with a length of 304mm. Heater outputs 10 watts/inch² for rapid warm up. Vacuum rated for 1x10⁻⁸ Torr and 200°C maximum exposure temperature. Available with or without acrylic adhesive.

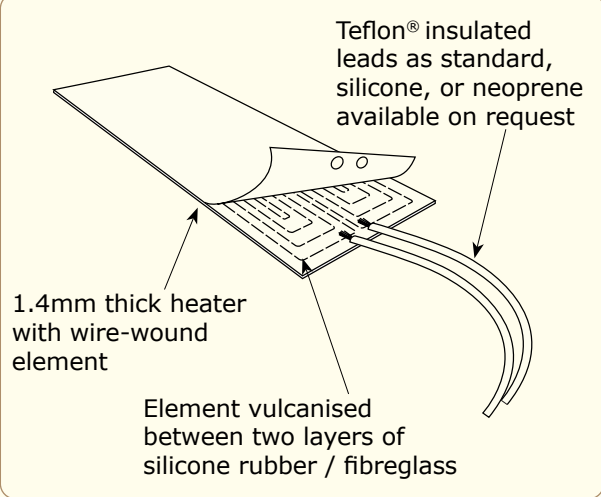
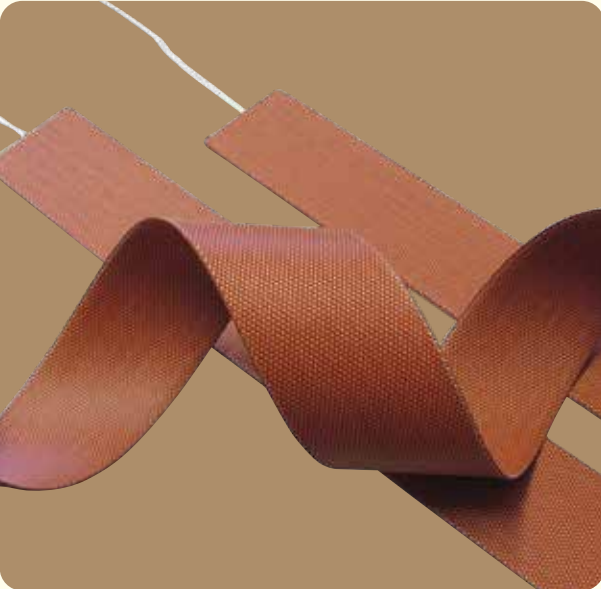
SPECIFICATIONS

Thickness (standard):	0.2mm
Weight (standard):	
Wire wound	0.24g/cm ²
Etched foil	0.09g/cm ²
Min. Operating temperature	-40°
Maximum heat temperature	150°C
Maximum Bake temperature	200°C
Maximum voltage:	28VAC
Maximum wattage:	See table below

APPLICATIONS

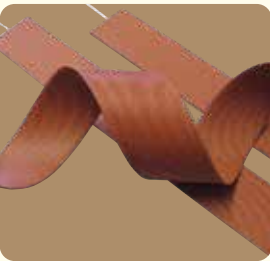
- In vacuum heating / bakeout.

Silicone Heater Tapes - For Use In Atmosphere



Our standard heater tapes are wire wound. Etched foil heaters available upon request. Please contact our sales office to discuss your requirements for heater tapes, as we can provide tapes in many different sizes shapes and configurations.

Silicone Heater Tapes



Description	Part Code	Price £	Price €
Heater tape 230-240V, 400W, 1000mm X 50mm with 1000mm teflon® leads	A-HT1000-50	£145	€167
Heater tape 230-240V, 200W, 1000mm X 25mm with 200mm teflon® leads	A-HT1000-25	£110	€127
Heater tape 230-240V, 400W, 2000mm X 25mm with 300mm teflon® leads	A-HT2000-25	£194	€224
Heater tape 230-240V, 600W, 3000mm X 25mm with 300mm teflon® leads	A-HT3000-25	£312	€359
Heater tape 230-240V, 300W, 254mm X 76.2mm with 300mm teflon® leads	A-HT254-76	POA	POA

INTRODUCTION.

Silicone heater tapes are rugged, yet lightweight and flexible. With these heaters, you can put the heat where it is needed and, in the process, improve heat transfer, speed warm-ups and decrease wattage requirements. Fibreglass reinforced silicone rubber gives you the heater dimensional stability without sacrificing flexibility. Because very little material separates the element from the part to be heated, heat transfer is rapid and efficient.

PERFORMANCE CAPABILITIES

- Operating temperatures to 260°C.
- Watt densities to 12.5 W/cm².
- 1.4mm thick with a wire wound element, 0.5mm thick with an etched foil element.

SPECIFICATIONS

Maximum width x Maximum length:	
Wire wound	915 x 3050mm
Etched foil	510 x 760mm
Thickness (standard):	
Wire wound	1.4mm
Etched foil	0.5mm
Weight (standard):	
Wire wound	0.24g/cm ²
Etched foil	0.09g/cm ²
Maximum operating temperature:	260°C
Minimum ambient temperature:	-62°C
Maximum voltage:	240VAC
Maximum wattage:	Contact sales office

APPLICATIONS

- Vacuum system bakeout.

Temperature Controller



INTRODUCTION.

The A-TEMPCONT-LEG series panel mount controller is an industry leading PID controller that allows optimal performance utilizing simple control and menu functionality without complex features. It is ideally suited for basic applications and usage levels. The LEGACY includes one universal input and an option for up to two outputs and is available in 1/32, and 1/16 DIN panel mount packages. It can be ordered as a PID process controller or as a dedicated over and under-temperature limit controller.

Features:

Simplified menu

- Fits basic applications with a user-friendly interface supported by two menus and a streamlined list of parameters
- Eliminates user complexity often experienced with more advanced controllers and unnecessary features
- Reduces user training costs and user programming errors

PID auto-tune

- Provides auto-tune for fast, efficient start-up

Standard bus communications

- Allows easy product configuration via PC communications
- protocol and free software
- Saves time, simplifies programming process and improves reliability of controller setup

Factory Mutual (FM) approved over and under limit with auxiliary outputs

- Increases user and equipment safety for over and under-temperature conditions

Function key

- Enables simple, one-touch operation of user-defined, repetitive activities

Touch-safe package

- Increases installer and operator safety
- Complies with IP2X requirements

EZ-LINK™ mobile application for iPhone® and Android™

- Expedites controller setup with intuitive navigation
- Simplifies setting parameters with plain text names and descriptions
- Connects quickly and easily via Bluetooth® wireless communications

SMOOTH TOUCH™ keypad

- Eliminates contamination points on the front of the controller
- Prevents premature failure of mechanical components
- Creates a better seal on front panel
- Ensures an easy to clean surface

Agency approvals: UL® listed, CSA, CE, RoHS, W.E.E.E., FM, SEMI F47-0200, Class 1, Div. 2 rating on selected models

- Assures prompt product acceptance
- Reduces end product documentation costs

P3T armor sealing system

- Compiles to NEMA 4X, IP66 and IP67 specifications
- Allows controller to be cleaned and washed
- Certified UL® 50 independent to NEMA 4X specification

Consistent Termination Labeling (CTL) connection system

- Simplifies switching between products
- Speeds up user's system documentation

Three-year warranty

- Demonstrates Watlow's reliability and product support

High-amperage power control output (1/16 DIN only)

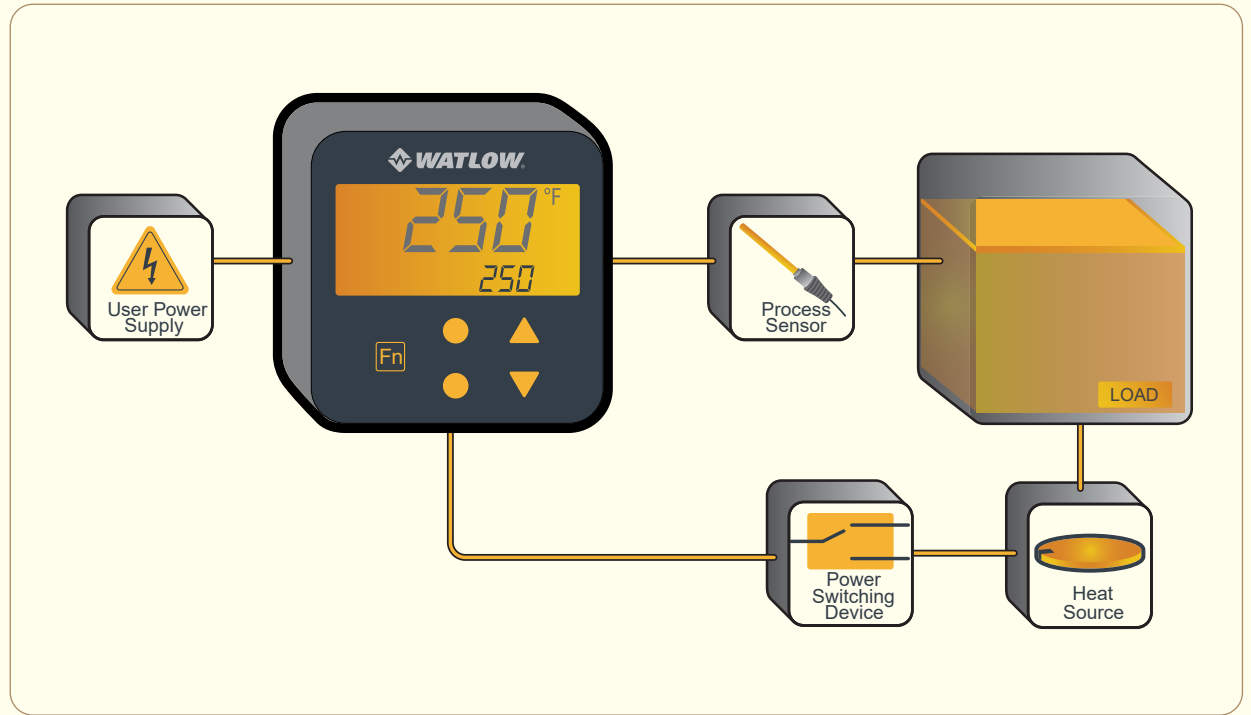
- Drives 15 ampere resistive loads direct
- Reduces component count
- Saves panel space and simplifies wiring
- Reduces cost of ownership

All dimensions are nominal in millimetres unless otherwise specified

Temperature Controller



Description	Part Code	Price £	Price €
Temperature controller legacy - single zone	A-TEMPCONT-LEG	£372	€428
DIN mount solid state relay 40A, 48-660VAC, SCR with snubber, trigger 3-32VDC, LED, built in safety cover	A-TEMP-SSR-660V	POA	POA
Type K T/C 13x16mm brass shim	A-TEMP-KTCKS	POA	POA



All dimensions are nominal in millimetres unless otherwise specified

Vacuum Exsiccator



INTRODUCTION.

Compact and rigid vacuum exsiccator box made from polished transparent PMMA GS, to store samples under vacuum or in a controlled atmosphere. Pump and vent connection via valve with 6mm Serto tube fittings. The exsiccator is equipped with removeable shelves, offering a clear view and the possibility of placing boxes neatly ordered. After pumpdown using a membrane pump for instance, the exsiccator holds a base pressure of approximately 25mbar for a period of several months. A pressure gauge indicates the vacuum level. The box can be filled with dry nitrogen or argon if desired. An overpressure valve which opens at 200mbar overpressure is provided for safety reasons.
Original Design by Paul Scherrer Institute, Switzerland

Vacuum Exsiccator



External dimensions inc valves etc = W x H x D	Internal dimensions = W x H x D	Number of shelves	Wall thickness	Pump & vent connections	Weight, kg	Part Code	Price £	Price €
498 x 294 x 302	350 x 225 x 240	2	24	2	19.0	A-EXSICA3S	POA	POA
683x 322 x 337	495x 225 x 260	1	35	2	28.0	A-EXSICA2S	POA	POA
265 x 206 x 212	200 x 120x 105	2	20	1	3.9	A-EXSICA3P	POA	POA

A-EXSICA3S

- Pump and vent connections : 2 angle valves with metric 6mm Serto tube fittings
- Security valve : opens at 200mbar overpressure
- Pressure gauge : -1 to +0.6 bar
- Door : O-Ring seal, twin latches (lockable)

A-EXSICA2S

- Pump and vent connections : 2 angle valves with metric 6mm Serto tube fittings
- Security valve : opens at 200mbar overpressure
- Pressure gauge : -1 to +0.6 bar
- Door : O-Ring seal, 2 clip catch

A-EXSICA3P

- Pump and vent connection : 1 straight valve with quick connector for metric 6mm Serto tube fitting
- Security valve : opens at 200mbar overpressure
- Pressure gauge : -1 to +0.6 bar
- Door : O-Ring seal, 1 clip catch
- Storage : including 3 storage containers, each with 10 compartments

Membrane Pumps For Use With Vacuum Exsiccators

Description	Part Code	Price £	Price €
Storage box suitable for A-EXSICA3S	A-SBEXSICAS	POA	POA

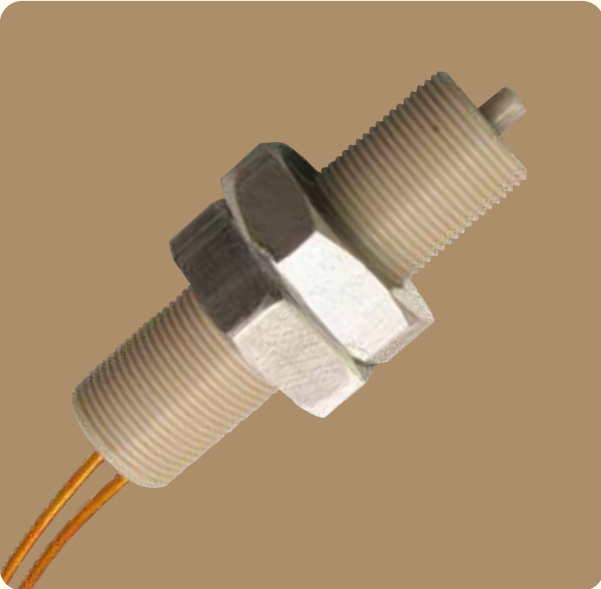
Membrane Pumps For Use With Vacuum Exsiccators

Membrane pumps suited for use with Exsiccators are available, please contact sales office for further details.

Description	Part Code	Price £	Price €
Diaphragm vacuum pump 13l/min	A-PUM013	POA	POA
Diaphragm vacuum pump 60l/min	A-PUM060	POA	POA

All dimensions are nominal in millimetres unless otherwise specified

In Vacuum Micro Switch



INTRODUCTION.

This accurate, reproducible and compact electrical switch is manufactured for use in UHV and or radiation environment applications.

Electrical Specifications:

Contact Nature	Floating
Contact Type	Normally Closed
Contact Material	Gold Plated
Switching Current	50mA
Switching Voltage	30VDC
Conductor Material	Ag plated OFHC Copper
Sheath Material	Kapton®
Electrical Interface	
Connector	Free Ended Cable
Wire Length	1.5m
Conductor Diameter	0.6mm
Sheath Diameter	0.81 - 0.87mm

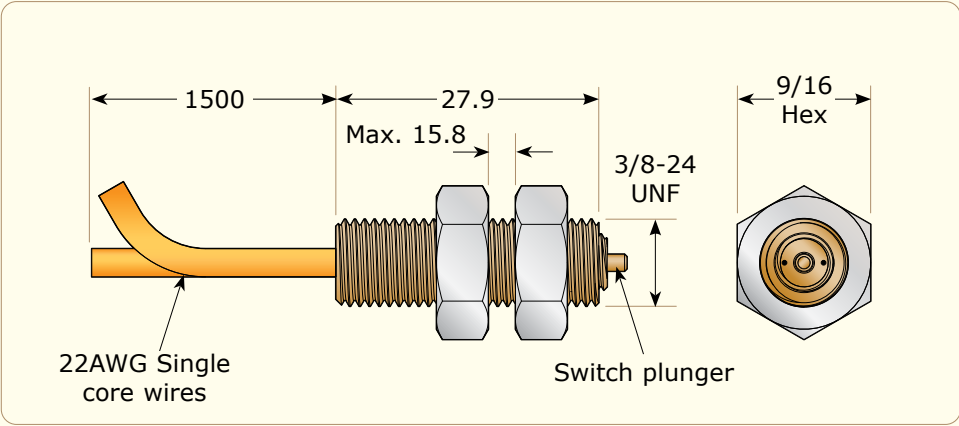
General Specifications:

Material	
Housing	PEEK®
Nuts	Stainless steel
Vacuum Compatibility	10 ⁻¹⁰ mbar
Radiation compatibility	Yes
Temperature Range	-5°C to 200°C
Mounting	3/8-24 with two nuts
Installation Position	Any
Reproducibility	3µm
Dead Stroke	~0.1mm
Over-stroke	Max. 2.8mm

In Vacuum Micro Switch



Description	Part Code	Price £	Price €
UHV precision switch 50mA 30VDC PEEK housing	A-LS-PEEK	£263	€303



All dimensions are nominal in millimetres unless otherwise specified

