

MICRO CABLES & THEIR TERMINATIONS

Micro Cables

These very fine stainless steel micro cables have many uses. They will form virtually invisible suspension wires which are ideal for display or theatre use. They make excellent small control wires for animatronics and special effects. The wires are made from two grades of stainless steel. The smaller wires are made from the stronger 304 grade. The 1 mm wire is made from the more corrosion resistant 316 grade. Two of the wires that Flints stocks have a fine transparent nylon coating which is almost invisible but provides a very smooth finish and holds the strands neatly together when the wire is being cut. Certification is not issued with Stainless Steel Micro cables. We would recommend that you carry out your own tests to establish a minimum breaking load of the finished assembly and then apply a safety factor of at least times five. To terminate these micro cables we recommend using the Nicopress® system. Flints has had special ferrules developed by Nicopress® to solve the old problem of making secure terminations in these very small wires [see below]. We also supply small brass ferrules [not Nicopress®]. When using ferrules any nylon covering should be stripped back and the ferrule should be chosen to suit the actual wire diameter.



Bare Stainless Steel

code	Grade	Const.	diameter	min BL	finish Ø	per 100 m drum
WIRO47D	304	1 x 3	0.26mm	6.8kg		£52.00
WIRO48D	304	1 x 7	0.51mm	34kg		£59.95
WIRO49D	316	7 x 7	1mm	61kg		£35.00

Nylon Covered Stainless Steel

code	Grade	Const.	diameter	min BL	finish Ø	per 100 m drum
WIRO48ND	304	1 x 7	0.51mm	34kg	0.75mm	£82.80
WIRO49ND	304	1 x 7	0.87mm	90kg	1.05mm	£136.25

BRASS MICRO FERRULES

Brass Ferrules

These ferrules are too small for conventional crimpers. A substitute crimper can be made by drilling downwards through the jaws of a pair of pliers and using a vice to apply pressure. Flints' trials have found a good termination can be made using the Nicopress® 17BA tool. These brass ferrules are not Nicopress® ferrules. Not suitable for lifting purposes.



code	description	pack size	wire rope Ø	per 100
WIR112	[see above for Nicopress® Tool and rotate 90° and repeat]	100pcs	0.26mm	£10.07
WIR113	[see above for Nicopress® Tool use groove A]	100pcs	0.51mm	£13.55
WIR114	[see above for Nicopress® Tool use groove B]	100pcs	1mm	£20.04

Micro Cable Cutter & Crimper 0.27-1.5 mm

Crimps AND cuts wire ropes from 0.27 to 1.5 mm. We found that customers often improvise the crimping of ferrules around micro cables because of the prohibitive cost of the Nicopress tools. Now, if you need to reliably crimp many wires and that is regular part of your job, the Nicopress tools are an investment worth making. If however, you need a cheaper solution for occasional use you might want to try this serviceable Japanese made Crimper. Also features cross cutting jaws on the side so no need for an extra tool.



code	price
TOPBWC180	£35.00

Nicopress® Micro and Small Wire Tools

Effectively terminating our very small Micro Cables used to be a problem. Flints has worked with Nicopress® to develop a range of Micro Ferrules and Stops with special hand tools which completely solve this dilemma. They are simple to use and are supplied complete with instructions. We have also found them suitable for crimping the brass ferrules listed. The 17-BA size can be hired [page 405].

SPECIFICATION: Length: 210 mm. Weight: 0.3 kg.



	No. of grooves	Wire Ø	Suits ferrule	Suits stop
Micro Wires Tool	2 [A, B] A	0.26mm	NIC161A, WIR112*	NIC87132B
		0.51mm	NIC162A, WIR113*	
		0.75mm	NIC171B	
		0.87mm	NIC171B	
		1.0mm	WIR114*	
Small Wires Tool	2 [B, B4] B	0.75mm	NIC171B	NIC87132B
		0.87mm	NIC171B	
		1.0mm	WIR114*	
		1.0mm	NIC42815VB4	NIC87112B4
		1.2mm	NIC42815VB4	

*Not Nicopress®

code	description	Type	price	5+
NIC17BA	Micro Wires Tool	17-BA	£79.00	£71.00
NIC17B4B	Small Wires Tool	17-B4B	£105.00	£94.50

NICOPRESS MICRO FERRULES

Nicopress® Micro Ferrules

These small ferrules have been developed by Nicopress® for Flints to provide an effective means of securing a loop in our micro cables. They are made from solid copper. They can be easily compressed by using the tools above. The combination of these economical tools and the micro ferrules solves the old problem concerning the termination of very small cables. Tests show that these terminations exceed the strength of the wire. They are ideal for invisible control and display wires. For the nylon-covered wires use a ferrule to suit the actual wire diameter. The nylon cover should be stripped back before compressing the ferrule. For non-lifting applications it is possible to make a termination with the nylon coating in place. Using ferrule NIC42815VB4 on the 1.05 mm nylon-covered wire with the nylon cover still in place we achieved results of around 20 kg before the wire slid out through the nylon coating. Although less strong with the nylon in place, they do make extremely smooth and neat assemblies which would be suitable for lightweight lanyards.



	Tool	Finish	Presses	Sleeve Shape	Sleeve Length Before / After
NIC161A	A	Copper	3	Round	10 / 12mm
NIC162A	A	Copper	3	Round	10 / 11mm
NIC171B	A, B	Copper	2	Oval	6 / 8mm
NIC42815VB4	C, D	Tin-plated	3	Oval	9 / 11mm

code	Const.	suits wire Ø min	price	100+	1,000+
NIC161A	1 x 3	0.26mm	£0.10	£0.09	£0.08
NIC162A	1 x 7	0.51mm	£0.12	£0.11	£0.10
NIC171B	1 x 7	0.75-0.9mm	£0.17	£0.14	£0.11
NIC42815VB4	1 x 7	1 & 1.2mm	£0.33	£0.29	£0.27