

# 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.

The 1 mm 7 x 7 construction wire rope will be supplied with a Certificate of Thorough Examination and complies with BS EN 12385 2002. The smaller cables are not issued with certification. 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 📏]. 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.

# NICOPRESS®



Really versatile tools!

**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 📏.

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

The 17-BA size can be hired [page 359].

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Nicopress® Tools		code	price	Tradeline 5+				
Micro wires tool A	17-BA 2 [A,B]	no of grooves	suits wire Ø	suits ferrule	suits stop			
			0.26 mm	NIC161A, WIR112*		NIC17BA	£58.30	£52.15
			0.51 mm	NIC162A, WIR113*				
			0.75 mm	NIC171B	NIC87132B			
			0.87 mm	NIC171B				
Small wires tool B	17-B4B 2 [B,B4]		1.0 mm	WIR114*				
			0.75 mm	NIC171B	NIC87132B	NIC17B4B	£65.00	£58.40
			0.87 mm	NIC171B				
			1.0 mm	WIR114*				
			1.0 mm	NIC42815VB4	NIC87112B4			
		1.2 mm	NIC42815VB4	NIC87112B4				

\*Not Nicopress®

Micro Cables - Bare Stainless Steel				code	100 m
wire Ø mm	grade	construction	Min BL		per drum
0.26	304	1 x 3	6.8 kg	WIR047D	£31.50
0.51	304	1 x 7	34 kg	WIR048D	£34.98
1.0	316	7 x 7	61 kg	WIR049D	£35.00

Micro Cables - Nylon Covered Stainless Steel					code	100 m
wire Ø mm	finish Ø	grade	construction	Min BL		per drum
0.51	0.75	304	1 x 7	34 kg	WIR048ND	£55.48
0.87	1.05	304	1 x 7	90 kg	WIR049ND	£98.00

## 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.

Brass Ferrules for Micro Cables		code	price
wire Ø mm			per 100
0.26	[see 📏 for Nicopress® Tool use groove A and rotate 90° and repeat]	WIR112	£7.54
0.51	[see 📏 for Nicopress® Tool use groove A]	WIR113	£10.15
1.0	[see 📏 for Nicopress® Tool use groove B]	WIR114	£12.93

## 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.

Nicopress® Micro Ferrules		code	price	100+1,000+
suits wire Ø mm	constr. finish presses	sleeve lengths before/after/shape		
0.26	1 x 3 3 copper	10 / 12 mm / round	A	NIC161A £0.08 £0.07 £0.06
0.51	1 x 7 3 copper	10 / 11 mm / round	A	NIC162A £0.08 £0.07 £0.06
0.75-0.9	1/32" 1 x 7 2 copper	6 / 8 mm / oval	A,B	NIC171B £0.15 £0.12 £0.09
1 & 1.2	3/64" 1 x 7 3 tin-plated	9 / 11 mm / oval	B,D	NIC42815VB4 £0.27 £0.22 £0.20

Have a look at our Nicopress videos on YouTube under FlintsTheatre channel.