Wire wrap terminals

This technique permits high wiring density and takes over where other techniques would take up too much real estate. As a result of this process, there is a great time saving factor and cost per connection is relatively low when large numbers of connections are to be made.

When wires are correctly wrapped onto a precision manufactured rectangular post produced to the recommended specifications, one can state the following:

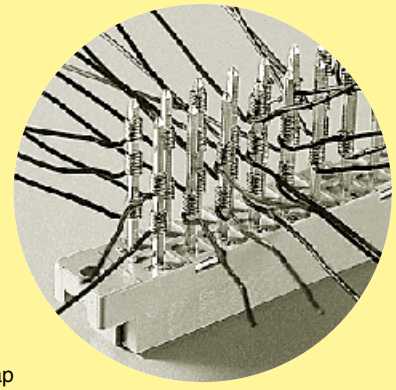
A low resistance, mechanically strong and highly reliable connection is made which is unaffected by normal climatic or temperature changes.

Production of wrapped connections and associated material are defined in DIN EN 60 352-1.

Wrapping techniques

Standard wrap
Only the non-insulated part of the wire is wrapped around the post. This means that the size of the wrapped connection is kept to the very minimum.

Modified wrap
The top part of the wrapped connection is made using the cable conductor as stated above but an extra turn is made at the bottom. For this turn insulation is also wrapped around the post to give a great mechanical strength to the joint and also to provide insulation between adjacent posts.



Standard wrap

		Wire diameter [mm]						
		0.25	0.32	0.4	0.5	0.65	0.8	1.0
		max. allowed wire Ø incl. wire insulation [mm]						
		0.7	0.9	1.17	1.27	1.32	1.5	1.78
Valid for standard wrap		min. necessary turns per wrap connection (for non-insulated wire)						
		7	7	6	5	4	4	4
Dimension of wire wrap post [mm]	Length of wire wrap post [mm]	possible wrap connections per wrap post						
0.6 x 0.6	13	6	5	4	4	4	3	2
0.6 x 0.6	17	8	6	6	5	5	4	3
1 x 1	20	10	7	7	6	6	5	4
1 x 1	22	11	8	7	7	6	5	4

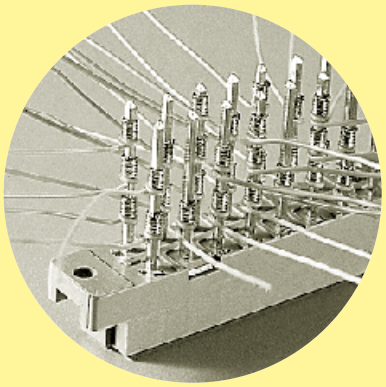
Table 00.05

Wrapping tools

To produce quality wrapped connections one must use a special wrapping tool, which can be pneumatic, electric or hand operated. Such tools have interchangeable wrapping heads and sleeves to suit the particular size of the wrap post being used.

The choice of accessories for these wrapping tools depends from the wrapping technique, the size of the wrap post itself and the conductor and insulation diameters of the wire.

The adjacent tables show the maximum amount of wrapped connections that can be placed on the wire wrap post (in acc. to IEC 60352-1).



Modified wrap

		Wire diameter [mm]						
		0.25	0.32	0.4	0.5	0.65	0.8	1,0
		max. allowed wire Ø incl. wire insulation [mm]						
		0.7	0.9	1.17	1.27	1.32	1.5	1.78
Valid for modified wrap		min. necessary turns per wrap connection (for non-insulated wire)						
		7	7	6	5	4	4	4
Dimension of wire wrap post [mm]	Length of wire wrap post [mm]	possible wrap connections per wrap post						
0.6 x 0.6	13	4	3	2	2	2	2	1
0.6 x 0.6	17	5	4	3	3	3	2	2
1 x 1	20	6	4	4	3	3	3	2
1 x 1	22	6	5	4	4	4	3	2

Table 00.06