Thin Wall. (with thoughts of 6V)

It has become 'trendy' to use thin wall cable but what and WHY is this cable?
To explain it properly we need to understand some of the basics around electrical cable that we use regularly in the first place. The vast majority of our older British Motorcycles (and cars for that matter) use a 'standard' cable rated at 8.75Amps and sized at 14/0.030 1mm^2 this means that it is a 14 strand wire of 0.030mm dia with a total surface area of 1mm^2 with a current carrying capacity of 8.75Amps.
So how do we specify this 8.75? It is the 'allowable' temperature rise for the cable's PVC covering at said current. (It would be specified at an 'ambient' temperature but of course in a vehicle situation this would change!) So if you used any of this cable and abused it with higher current it would 'carry' the current but eventually get very hot and cause you grief.
SO Thin Wall-the PVC covering is made from a 'thinner higher temperature' tolerant PVC. So for the same size cable (1mm^2) the thin wall is now quoted as being for 16.5Amps (we assume for the same working temperature) BUT there is a few other points to bear in mind if you must use this 'upgrade'. If you want to keep with the 8.75A capacity, then you could use an 11 Amp capacity cable, (0.5mm^2) your final loom size could now be less than half that with 1mm^2 and would tend to run higher in temperature.
BUT another point will rear its head if you are watching, resistance ie volts drop. (ignoring at this point the resistance from bad joints, bad connectors, badly fitted, British Weather tarnishing, rotting away at your wires and connectors etc) If you reduce the cable size as above ie 1mm^2 becomes 0.5mm^2 then the effective resistance doubles so the actual voltage drop will double!
And another thing-yes the thin cable/size can take the current but can it take the vibration? Can it take the wobbling about offered by engine vibration and the owner?
It turns out that the original (nearly) 9A cabling is up to what the bike can throw at it but would some of your 'skinny' thin wall cable?
AND another thing, a lot of the thinner cables have more thinner strands, (14/0.030 becomes 32.020) added flexibility. BUT again beware how you crimp this within the uninsulated crimp connectors, part of the crimp process is down on the insulation (which is now thinner) so you have to crimp with care.
One of the things that comes to mind with all this, if you must try to improve/upgrade fit modern bits/pieces to your bike, are you sure it is going to work? Do you trust the supplier?
Some recommendations, for the normal British motor cycle. If you are rewiring (with standard 9A cable) then any cable that does more than 1 job ie the main battery feeds and main feed through the bike would benefit from an up size to 2mm^2 (28/0.030).
6V, if you want to keep the 'originality' of such a system but 'cheat', then up grading to Thin Wall would improve the workings. Choosing the right size cable could be the way to go. But care has to be exercised at every connection and switch, and of course the earth return (run a fresh earth for every thing that needs it (most items do) BUT the headlamp shell does NOT need an earth. But it is very useful to be used as a common earth for all the bits inside and the indicators at the front.