

| WINDING WIRE | | SOLDERABLE | | | | | | HIGH FLEXIBLE | | | |
|----------------------------------|------|---|---|---|---|--|--|--|---|---|--------------------------------|
| PRODUCT NAME | unit | BEMSOL-F | BEMSOL-N / SL | | BEMSOL-H | BEMSOL-H.N | BEMTERM-SOL | BEMTERM-SOL.N | BEMFORM | BEMSTER-EX / SL | |
| STANDARD | | | | | | | | | | | |
| IEC | | 60317-20 | 60317-21 | | 60317-51 | | 60317-23 | | 60317-12 | 60317-13 | |
| DIN | | EN 60317-20 | EN 60317-21 | | EN 60317-51 | | EN 60317-23 | | EN 60317-12 | EN 60317-13 | |
| NEMA | | MW 79 C | MW 80 C | | MW 82 C | MW 83 C | MW 77 C | MW 78 C | MW 15 C | MW 35 C / MW 73 C | |
| INSULATION TYPE | | | | | | | | | | | |
| BASECOAT | | Modified Polyurethane | Modified Polyurethane | | Modified Polyurethane | Modified Polyurethane | Polyesterimide (Solderable) | Polyesterimide (Solderable) | Polyvinylacetal | THEIC Polyester | |
| OVERCOAT | | | Polyamide | Polyamide with Self Lub. | | | | Polyamide | | Polyamide-imide | Polyamide-imide with Self Lub. |
| BONDING LAYER | | | | | | | | | | | |
| LUBRICANT | | Available | Available | | Available | Available | Available | Available | Available | Available | Available |
| TECHNICAL CHARACTERISTICS | | | | | | | | | | | |
| THERMAL | | | | | | | | | | | |
| Thermal Index | | 155 | 155 | | 180 | 180 | 180 | 180 | 120 | 210 | |
| Heat Shock | °C | > 175 | > 175 | | > 200 | > 200 | > 200 | > 200 | > 155 | > 220 | |
| Cut-through Temperature | °C | > 220 | > 220 | | > 250 | > 250 | > 265 | > 265 | > 250 | > 350 | |
| ELECTRICAL | | | | | | | | | | | |
| Breakdown Voltage | V | > 2 x IEC Value | > 2 x IEC Value | | > 2 x IEC Value | > 2 x IEC Value | > 2 x IEC Value | > 2 x IEC Value | > 2 x IEC Value | > 2 x IEC Value | |
| CHEMICAL | | | | | | | | | | | |
| Solderability | °C | 375 °C ; 1-2 s | 375 °C ; 1-2 s | | 375 °C ; 1-2 s | 375 °C ; 1-2 s | 470 °C ; 3 s | 470 °C ; 3 s | | | |
| Resistance to Solvent | H | 4 H | 4 H | | 4 H | 4 H | 4 H | 4 H | 5 H | 5-6 H | |
| Resistance to Refrigerants | | | | | | | | | Good | Very Good | |
| Resistance to Transformer Oil | | | | | | | | | Very Good | Very Good | |
| MECHANICAL | | | | | | | | | | | |
| Bonding Temperature | °C | | | | | | | | | | |
| Resoftening Temperature | °C | | | | | | | | | | |
| PROPERTIES | | | | | | | | | | | |
| | | <ul style="list-style-type: none"> Suitable for use in high speed winding machines Low frictional coefficient Smooth surface and winding | <ul style="list-style-type: none"> This product covers all the properties of BEMSOL-N with no any residue and odour of lubricant | <ul style="list-style-type: none"> High thermal resistance | <ul style="list-style-type: none"> High thermal resistance Smooth windability at high speed winding | <ul style="list-style-type: none"> High thermal resistance with solderability | <ul style="list-style-type: none"> High thermal resistance with solderability Smooth windability at high speed winding | <ul style="list-style-type: none"> High flexibility High chemical resistance Excellent windability for hard turns High resistance to abrasion Excellent adherence | <ul style="list-style-type: none"> Re-shape property for flattening of round wire at high mechanical pressure Suitable for high speed winding | <ul style="list-style-type: none"> This product covers all the properties of BEMSTER-EX with better surface lubricant. | |
| APPLICATIONS | | | | | | | | | | | |
| Motor/Generator | | √ (small) | √ (small) | | √ (small) | √ (small) | √ (small) | √ (small) | | √ | |
| Relay | | √ | √ | | √ | √ | | | | | |
| Solenoid | | √ | √ | | √ | √ | | | | | |
| Transformer | | √ (small) | √ (small) | | √ (small) | √ (small) | √ (small) | √ (small) | √ (oil immersed) | √ | |
| Alternator | | | | | | | | | | √ | |
| Automotive Component | | √ | √ | | √ | √ | | | | √ | |
| Telecommunication | | √ | √ | | | | | | | | |
| TV & Electronic Component | | √ | √ | | √ | √ | √ (small) | √ (small) | | | |

| HIGH TEMPERATURE | | | | | | | BONDABLE | | | | | FLAT WIRE | | ALUMINIUM WIRE | | WINDING WIRE | | | |
|--------------------------------------|--------------------------------------|--|--|---|--------------------------------------|--------------------------------------|---|---|------------------------|-----------------------------|------------------------|------------------------|-----------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|-------------------------------|------|
| BEMTERM | BEMTERM-N / SL | | BEMTERM-EX / SL | | BEMTIMID | BEMID | BEMCOR | BEMCOR - EX | BEMPLAS-F | BEMPLAS-SOL | BEMPLAS-H | BEMPLAS-C.AL | BEMPLAS-C.AR | BEMFLAT-TERM | BEMFLAT-TERMEX | BEMAL-TERM | BEMAL-TERMEX | PRODUCT NAME | unit |
| STANDARD | | | | | | | | | | | | | | | | | | | |
| 60317-8 | 60317-22 | | 60317-13 | | 60317-26 | 60317-46 | 60317-8 | 60317-13 | 60317-35 | 60317-36 | 60317-37 | 60317-38 | 60317-38 | 60317-28 | 60317-29 | 60317-15 | 60317-25 | IEC | |
| EN 60317-8 | EN 60317-22 | | EN 60317-13 | | EN 60317-26 | EN 60317-46 | EN 60317-8 | EN 60317-13 | EN 60317-35 | EN 60317-36 | EN 60317-37 | EN 60317-38 | EN 60317-38 | EN 60317-28 | EN 60317-29 | EN 60317-15 | EN 60317-25 | DIN | |
| MW30CMW74 C | MW 76 C | | MW 35 C / MW 73 C | | MW 81 C | MW 16 C | MW30CMW74 C | MW35CMW73 C | | | | | MW 102 C | MW 102 C | | | | NEMA | |
| INSULATION TYPE | | | | | | | | | | | | | | | | | | | |
| THEIC Polyesterimide | THEIC Polyesterimide | | THEIC Polyesterimide | | Polyamide-imide | Polyimide | THEIC Polyesterimide | THEIC Polyesterimide | Modified Polyurethane | Polyesterimide (Solderable) | THEIC Polyesterimide | THEIC Polyesterimide | THEIC Polyesterimide | THEIC Polyesterimide | THEIC Polyesterimide | THEIC Polyesterimide | THEIC Polyesterimide | BASECOAT | |
| | Polyamide | Polyamide with Self Lub. | Polyamide-imide | Polyamide-imide with Self Lub. | | | | Polyamide-imide | | | | Polyamide-imide | Polyamide-imide | | Polyamide-imide | | Polyamide-imide | OVERCOAT | |
| | | | | | | | | | Polyamide SB Aliphatic | Polyamide SB Aliphatic | Polyamide SB Aliphatic | Polyamide SB Aliphatic | Polyamide SB Aromatic | | | | | BONDING LAYER | |
| Available | Available | | Available | Available | Available | Available | Available | Available | Available | Available | Available | Available | Available | | | Available | Available | LUBRICANT | |
| TECHNICAL CHARACTERISTICS | | | | | | | | | | | | | | | | | | | |
| THERMAL | | | | | | | | | | | | | | | | | | | |
| 180 | 180 | | 210 | | 220 | 240 | 200 | 200 | 155 | 175 | 180 | 210 | 210 | 180 | 200 | 180 | 200 | Thermal Index | |
| > 200 | > 200 | | > 220 | | > 240 | > 260 | > 220 | > 240 | > 175 | > 200 | > 200 | > 220 | > 220 | > 200 | > 220 | > 200 | > 220 | Heat Shock | °C |
| > 320 | > 320 | | > 340 | | > 400 | > 500 | > 400 | > 400 | > 250 | > 270 | > 300 | > 350 | > 350 | | | > 300 | > 320 | Cut-through Temperature | °C |
| ELECTRICAL | | | | | | | | | | | | | | | | | | | |
| > 2 x IEC Value | > 2 x IEC Value | | > 2 x IEC Value | | > 2 x IEC Value | > 2 x IEC Value | > 2 x IEC Value | > 2 x IEC Value | > 2 x IEC Value | > 2 x IEC Value | > 2 x IEC Value | > 2 x IEC Value | > 2 x IEC Value | > 2 x IEC Value | > 2 x IEC Value | > 2 x IEC Value | > 2 x IEC Value | Breakdown Voltage | V |
| CHEMICAL | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | 390 °C; 1-4 s | 475 °C; 1-4 s | | | | | 3 H | 5 H | Solderability | °C | |
| 5 H | 4 H | | 6 H | | 7 H | 7 H | 7-8 H | 7-8 H | 3-4 H | 4 H | 4 H | 5 H | 5 H | | Good | Good | Resistance to Solvent | H | |
| Very Good | | | Very Good | | Very Good | Very Good | Very Good | Very Good | | | | | | Good | Very Good | Good | Very Good | Resistance to Refrigerants | |
| Good | | | Very Good | | Very Good | Very Good | Very Good | Very Good | | | | | | | | | | Resistance to Transformer Oil | |
| MECHANICAL | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | 180 | 180 | 180 | 170 | 210 | | | | | Bonding Temperature | °C |
| | | | | | | | | | 160 | 160 | 160 | 160 | 200 | | | | | Resoftening Temperature | °C |
| PROPERTIES | | | | | | | | | | | | | | | | | | | |
| High thermal resistance up to 200 °C | High thermal resistance up to 200 °C | This product covers all the properties of BEMTERM-N with no any residue and odour of lubricant | High thermal, mechanical and chemical properties | This product covers all the properties of BEMTERM-EX with no any residue and odour of lubricant | High thermal and chemical properties | High thermal and chemical properties | Life time under inverter duty (corona resistance 16kHz 2,4kV 155 °C) is greater than 1,000 h. | Life time under inverter duty (corona resistance 16kHz 2,4kV 155 °C) is greater than 600 h. | Bondability | Bondability | Bondability | Bondability | Bondability | High thermal resistance up to 200 °C | High thermal resistance up to 200 °C | High thermal resistance up to 200 °C | High thermal and chemical properties | | |
| | | | | | | | | | | | | | | High space saving factor | High thermal resistance up to 200 °C | High thermal resistance up to 200 °C | Suitable for high speed winding | Light weight | |
| APPLICATIONS | | | | | | | | | | | | | | | | | | | |
| √ | √ | | √ | | √ (special) | √ (special) | √ (inverter driven type) | √ (inverter driven type) | √ | √ | √ | √ | √ | √ | √ | √ | √ | Motor/Generator | |
| | | | | | | | | | √ | | | | | | | | | Relay | |
| | | | | | | | | | √ | | | | | | | | | Solenoid | |
| √ (dry type) | | | √ (oil immersed) | | √ (special) | √ (special) | | | | | | | | √ | √ | √ | √ | Transformer | |
| √ | √ | | √ | | | | | | | | | | | √ | √ | √ | √ | Alternator | |
| √ | √ | | | | | | | | √ | √ | √ | | √ | √ | √ | √ | √ | Automotive Component | |
| | | | | | | | | | | | | | | | | | | Telecommunication | |
| | | | | | | | | | √ (deflection coil) | √ (deflection coil) | √ (deflection coil) | | | | | √ | √ | TV & Electronic Component | |