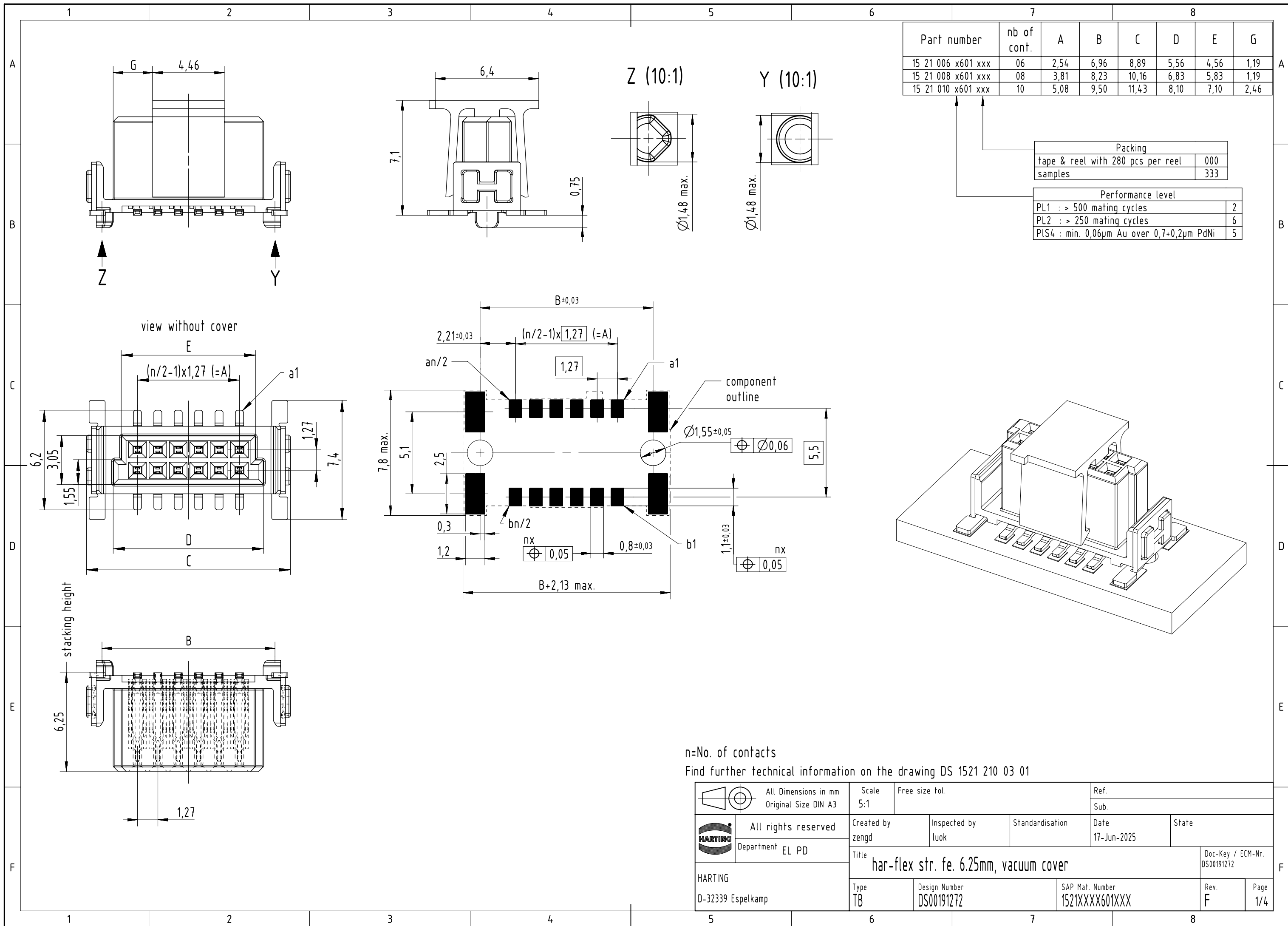
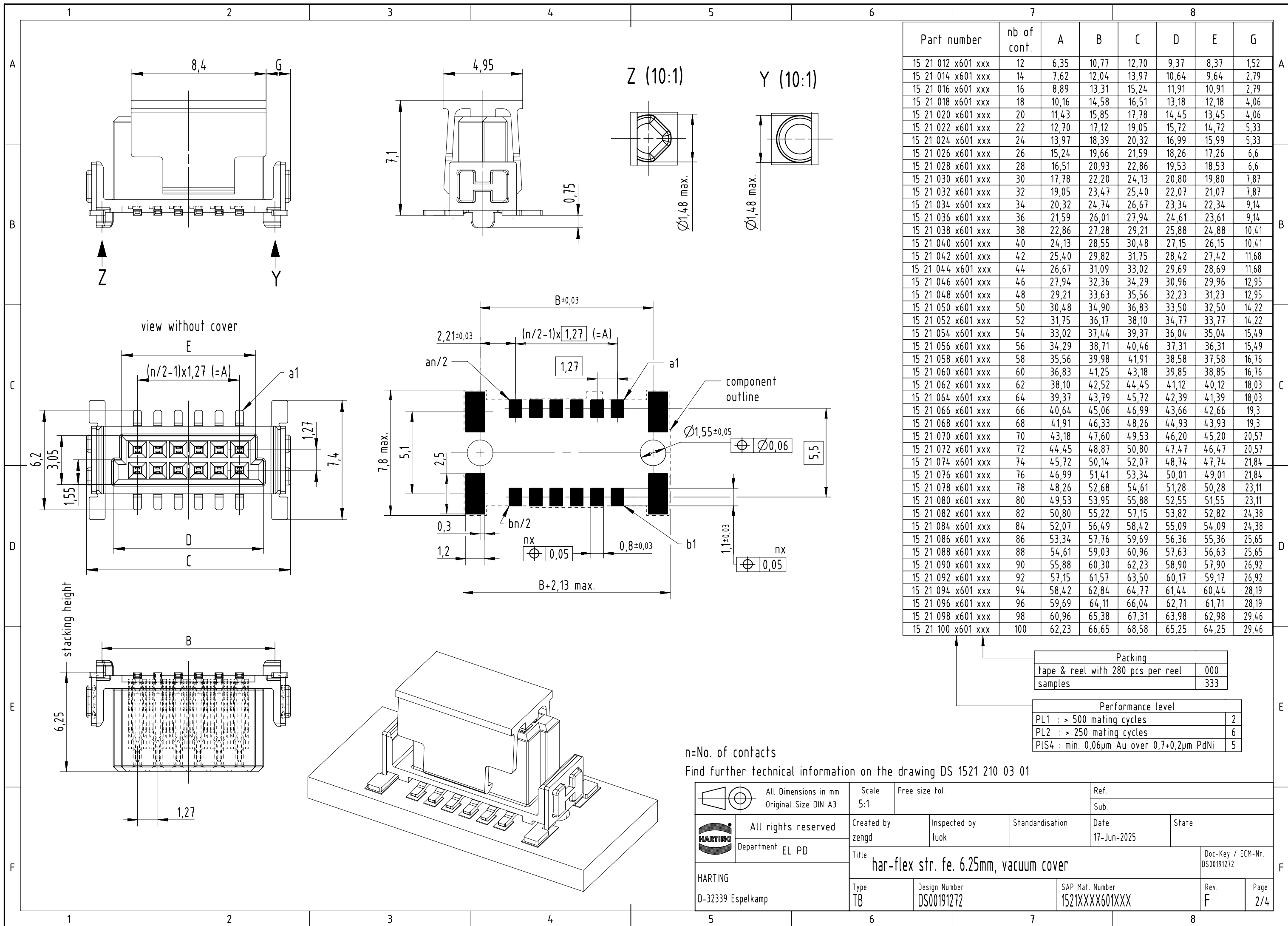
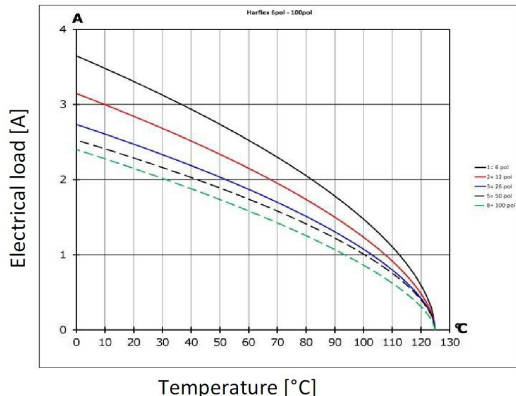






| 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                    | 2                              |                                | 3 |  | 4 |  | 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                    | 6               |                                 | 7            |      | 8                  |           |                       |            |                                                          |                      |                           |                  |                                |                                |                                                                              |                                       |                               |            |                                                 |                            |                                                  |                            |               |                                                    |                  |     |                   |              |                                        |                                                  |                      |               |                                     |               |                                        |              |                                         |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                  |       |       |                   |         |                                 |                        |                  |              |                          |    |                              |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  |  |  |  |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|--------------------------------|---|--|---|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|-----------------|---------------------------------|--------------|------|--------------------|-----------|-----------------------|------------|----------------------------------------------------------|----------------------|---------------------------|------------------|--------------------------------|--------------------------------|------------------------------------------------------------------------------|---------------------------------------|-------------------------------|------------|-------------------------------------------------|----------------------------|--------------------------------------------------|----------------------------|---------------|----------------------------------------------------|------------------|-----|-------------------|--------------|----------------------------------------|--------------------------------------------------|----------------------|---------------|-------------------------------------|---------------|----------------------------------------|--------------|-----------------------------------------|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|-------|-------|-------------------|---------|---------------------------------|------------------------|------------------|--------------|--------------------------|----|------------------------------|------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|
| <div><div><div><div><div><div></div><div></div></div><div><div></div><div></div></div></div><div><div><div></div><div></div></div><div><div></div><div></div></div></div><div><div><div></div><div></div></div><div><div></div><div></div></div></div></div><div><div><div>har-flex®</div><div>straight female connector</div></div><div><div><div><div><div></div><div></div></div><div><div></div><div></div></div></div><div><div><div></div><div></div></div><div><div></div><div></div></div></div></div><div><div><div>RoHS</div><div>compliant</div></div><div><div></div><div></div></div></div></div></div></div></div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                    |                                |                                |   |  |   |  | <div>RECOMMENDATION FOR SOLDER PROCESSING</div> <div>Solder paste recommendation</div> <div>The har-flex connectors are solderable with established lead-free SAC / SnNi solder but also leaded solder e.g. SnPb40</div> <div>PCB pad plating</div> <div>The har-flex connectors are solderable on lead-free pad surfaces like HAL, NiAu, Immersion Sn.</div> <div>Stencil recommendation</div> <div>The solder deposition has to be placed on the pad area of the contact solder tines.<br/>Ideally, the solder deposition has the same length-to-width ratio and center point like the PCB pads.<br/>The size of the solder stencil apertures is depending on the thickness of the stencil.<br/>In general, the thinner stencils will need larger apertures to result in the required volume of solder paste.<br/>The minimum required solder paste volume for the signal pins is 0,094mm³, for the hold down it is 0,33mm³.<br/>For example, this can be achieved with the following stencil data :</div> <table><tr><th colspan="4">Signal pins</th></tr><tr><th>Stencil thickness</th><th>PCB pad size</th><th>proposal stencil aperture size</th><th>calculated solder paste volume</th></tr><tr><td>120 µm</td><td>1,1 x 0,8 mm</td><td>1,05,x 0,75 mm</td><td>0,095 mm³</td></tr><tr><td>150 µm</td><td>1,1 x 0,8 mm</td><td>0,99 x 0,72 mm</td><td>0,107 mm³</td></tr></table> <table><tr><th colspan="4">Hold-downs</th></tr><tr><th>Stencil thickness</th><th>PCB pad size</th><th>proposal stencil aperture size</th><th>calculated solder paste volume</th></tr><tr><td>120 µm</td><td>2,5 x 1,2 mm</td><td>2,45 x 1,15 mm</td><td>0,338 mm³</td></tr><tr><td>150 µm</td><td>2,5 x 1,2 mm</td><td>2,25 x 1,08 mm</td><td>0,365 mm³</td></tr></table> <div>If a stencil with lower thickness shall be used, please insure the minimum required solder paste volume by enlarging the stencil aperture. Depending on the PCB design, the solder depostion may protrude the PCB pads. But to achieve a good sealing during solder paste printing and to reduce the cleaning interval of the stencil, the aperture should be smaller than the PCB pad about 10% or 25µm encircliing.</div> <div>Coplanarity of contacts</div> <div>All connectors are tested for coplanarity of contacts and are in the range of</div> <div>6 pin to 50 pin: ≤ 0,1mm<br/>52 pin to 68 pin: ≤ 0,12mm<br/>70 pin to 80 pin: ≤ 0,13mm<br/>82 pin to 100 pin: ≤ 0,15mm</div> |                                                                                                                                    |                 |                                 |              |      |                    |           | Signal pins           |            |                                                          |                      | Stencil thickness         | PCB pad size     | proposal stencil aperture size | calculated solder paste volume | 120 µm                                                                       | 1,1 x 0,8 mm                          | 1,05,x 0,75 mm                | 0,095 mm³  | 150 µm                                          | 1,1 x 0,8 mm               | 0,99 x 0,72 mm                                   | 0,107 mm³                  | Hold-downs    |                                                    |                  |     | Stencil thickness | PCB pad size | proposal stencil aperture size         | calculated solder paste volume                   | 120 µm               | 2,5 x 1,2 mm  | 2,45 x 1,15 mm                      | 0,338 mm³     | 150 µm                                 | 2,5 x 1,2 mm | 2,25 x 1,08 mm                          | 0,365 mm³ | <div>Performance level</div> <div>Performance level 1 (recommended for majority of applications)<br/>Initial 250 mating cycles, 10 days gas test (25°C / 75% r.h.) using H2S 10 ppb, NO2 200 ppb, CL2 10 ppb, SO2 200 ppb.<br/>Measurement of contact resistance. The remaining 250 mating cycles are subject to measurement of contact resistance and visual inspection.<br/>Visual inspection. No abrasion of the contact finish through to the base material. No functional impairment.<br/>Part number definition : 15 .. ... 2 ... ..</div> <div>Performance level 2</div> <div>Initial 125 mating cycles, 4 days gas test (25°C / 75% r.h.) using H2S 10 ppb, NO2 200 ppb, CL2 10 ppb, SO2 200 ppb.<br/>Measurement of contact resistance. The remaining 125 mating cycles are subject to measurement of contact resistance and visual inspection.<br/>Visual inspection. No abrasion of the contact finish through to the base material. No functional impairment.<br/>Part number definition : 15 .. ... 6 ... ..</div> <div>Performance level S4</div> <div>Defined contact surface of min. 0,06 µm Au over 0,7+0,2µm PdNi<br/>Part number definition : 15 .. ... 5 ... ..</div> |                                  |       |       |                   |         |                                 |                        |                  |              |                          |    |                              |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  |  |  |  |  |
| Signal pins                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                    |                                |                                |   |  |   |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                    |                 |                                 |              |      |                    |           |                       |            |                                                          |                      |                           |                  |                                |                                |                                                                              |                                       |                               |            |                                                 |                            |                                                  |                            |               |                                                    |                  |     |                   |              |                                        |                                                  |                      |               |                                     |               |                                        |              |                                         |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                  |       |       |                   |         |                                 |                        |                  |              |                          |    |                              |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  |  |  |  |  |
| Stencil thickness                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | PCB pad size                                                                                                                       | proposal stencil aperture size | calculated solder paste volume |   |  |   |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                    |                 |                                 |              |      |                    |           |                       |            |                                                          |                      |                           |                  |                                |                                |                                                                              |                                       |                               |            |                                                 |                            |                                                  |                            |               |                                                    |                  |     |                   |              |                                        |                                                  |                      |               |                                     |               |                                        |              |                                         |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                  |       |       |                   |         |                                 |                        |                  |              |                          |    |                              |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  |  |  |  |  |
| 120 µm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 1,1 x 0,8 mm                                                                                                                       | 1,05,x 0,75 mm                 | 0,095 mm³                      |   |  |   |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                    |                 |                                 |              |      |                    |           |                       |            |                                                          |                      |                           |                  |                                |                                |                                                                              |                                       |                               |            |                                                 |                            |                                                  |                            |               |                                                    |                  |     |                   |              |                                        |                                                  |                      |               |                                     |               |                                        |              |                                         |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                  |       |       |                   |         |                                 |                        |                  |              |                          |    |                              |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  |  |  |  |  |
| 150 µm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 1,1 x 0,8 mm                                                                                                                       | 0,99 x 0,72 mm                 | 0,107 mm³                      |   |  |   |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                    |                 |                                 |              |      |                    |           |                       |            |                                                          |                      |                           |                  |                                |                                |                                                                              |                                       |                               |            |                                                 |                            |                                                  |                            |               |                                                    |                  |     |                   |              |                                        |                                                  |                      |               |                                     |               |                                        |              |                                         |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                  |       |       |                   |         |                                 |                        |                  |              |                          |    |                              |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  |  |  |  |  |
| Hold-downs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                    |                                |                                |   |  |   |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                    |                 |                                 |              |      |                    |           |                       |            |                                                          |                      |                           |                  |                                |                                |                                                                              |                                       |                               |            |                                                 |                            |                                                  |                            |               |                                                    |                  |     |                   |              |                                        |                                                  |                      |               |                                     |               |                                        |              |                                         |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                  |       |       |                   |         |                                 |                        |                  |              |                          |    |                              |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  |  |  |  |  |
| Stencil thickness                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | PCB pad size                                                                                                                       | proposal stencil aperture size | calculated solder paste volume |   |  |   |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                    |                 |                                 |              |      |                    |           |                       |            |                                                          |                      |                           |                  |                                |                                |                                                                              |                                       |                               |            |                                                 |                            |                                                  |                            |               |                                                    |                  |     |                   |              |                                        |                                                  |                      |               |                                     |               |                                        |              |                                         |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                  |       |       |                   |         |                                 |                        |                  |              |                          |    |                              |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  |  |  |  |  |
| 120 µm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 2,5 x 1,2 mm                                                                                                                       | 2,45 x 1,15 mm                 | 0,338 mm³                      |   |  |   |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                    |                 |                                 |              |      |                    |           |                       |            |                                                          |                      |                           |                  |                                |                                |                                                                              |                                       |                               |            |                                                 |                            |                                                  |                            |               |                                                    |                  |     |                   |              |                                        |                                                  |                      |               |                                     |               |                                        |              |                                         |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                  |       |       |                   |         |                                 |                        |                  |              |                          |    |                              |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  |  |  |  |  |
| 150 µm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 2,5 x 1,2 mm                                                                                                                       | 2,25 x 1,08 mm                 | 0,365 mm³                      |   |  |   |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                    |                 |                                 |              |      |                    |           |                       |            |                                                          |                      |                           |                  |                                |                                |                                                                              |                                       |                               |            |                                                 |                            |                                                  |                            |               |                                                    |                  |     |                   |              |                                        |                                                  |                      |               |                                     |               |                                        |              |                                         |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                  |       |       |                   |         |                                 |                        |                  |              |                          |    |                              |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  |  |  |  |  |
| <div>GENERAL INFORMATION</div> <table><tr><td>No. of contacts</td><td>stacking height 6,25mm, 9,05mm from 6 to 100poles, all even numbers<br/>stacking height 13,65mm from 6 to 80poles, all even numbers</td></tr><tr><td>Contact spacing</td><td>1,27mm x 1,27mm [0,050"x0,050"]</td></tr><tr><td>Test Voltage</td><td>500V</td></tr><tr><td>Contact resistance</td><td>&lt; 25 mOhm</td></tr><tr><td>Insulation resistance</td><td>≥ 10x10^9Ω</td></tr><tr><td>Working current acc. to IEC 60512, at 70°C, 80% derating</td><td>see derating diagram</td></tr><tr><td>Working temperature range</td><td>-55°C ... +125°C</td></tr><tr><td>Termination technology</td><td>SMT</td></tr><tr><td>Reflow processing temperature (acc. to ECA/IPC/JEDEC J-STD-075 Level PSL R0)</td><td>min. 150s &gt; 217°C<br/>min. 30s &gt; 240°C</td></tr><tr><td>Clearance &amp; creepage distance</td><td>0,4mm min.</td></tr><tr><td>Insertion force (depending on mating connector)</td><td>approximately 0,5N/contact</td></tr><tr><td>Withdrawal force (depending on mating connector)</td><td>approximately 0,5N/contact</td></tr><tr><td>Mating cycles</td><td>PL1 : 500 mating cycles<br/>PL2 : 250 mating cycles</td></tr><tr><td>RoHS - compliant</td><td>Yes</td></tr><tr><td>Leadfree</td><td>Yes</td></tr><tr><td>Working voltage acc. to to IEC 60664-1</td><td>100V / 150V (depending on installation category)</td></tr><tr><td>UL file acc. UL 1977</td><td>ECBT2.E102079</td></tr><tr><td>UL file acc. CSA-C22.2 (for Canada)</td><td>ECBT8.E102079</td></tr><tr><td>PSL level acc. ECA/IPC/JEDEC J-STD-075</td><td>PSL R0</td></tr><tr><td>MSL level acc. ECA/IPC/JEDEC J-STD-020D</td><td>MSL 1</td></tr></table> <div>INSULATOR MATERIAL</div> <table><tr><td>Material</td><td>LCP (liquid crystalline polymer)</td></tr><tr><td>Color</td><td>Black</td></tr><tr><td>UL classification</td><td>UL94-V0</td></tr><tr><td>Material group acc. IEC 60664-1</td><td>IIIa (175 ≤ CTI &lt; 400)</td></tr></table> <div>CONTACT MATERIAL</div> <table><tr><td>Contact material</td><td>Copper alloy</td></tr><tr><td>Plating termination zone</td><td>Sn</td></tr><tr><td>Plating contact sliding side</td><td>Au over PdNi (acc. to Performance level)</td></tr></table> |                                                                                                                                    |                                |                                |   |  |   |  | No. of contacts                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | stacking height 6,25mm, 9,05mm from 6 to 100poles, all even numbers<br>stacking height 13,65mm from 6 to 80poles, all even numbers | Contact spacing | 1,27mm x 1,27mm [0,050"x0,050"] | Test Voltage | 500V | Contact resistance | < 25 mOhm | Insulation resistance | ≥ 10x10^9Ω | Working current acc. to IEC 60512, at 70°C, 80% derating | see derating diagram | Working temperature range | -55°C ... +125°C | Termination technology         | SMT                            | Reflow processing temperature (acc. to ECA/IPC/JEDEC J-STD-075 Level PSL R0) | min. 150s > 217°C<br>min. 30s > 240°C | Clearance & creepage distance | 0,4mm min. | Insertion force (depending on mating connector) | approximately 0,5N/contact | Withdrawal force (depending on mating connector) | approximately 0,5N/contact | Mating cycles | PL1 : 500 mating cycles<br>PL2 : 250 mating cycles | RoHS - compliant | Yes | Leadfree          | Yes          | Working voltage acc. to to IEC 60664-1 | 100V / 150V (depending on installation category) | UL file acc. UL 1977 | ECBT2.E102079 | UL file acc. CSA-C22.2 (for Canada) | ECBT8.E102079 | PSL level acc. ECA/IPC/JEDEC J-STD-075 | PSL R0       | MSL level acc. ECA/IPC/JEDEC J-STD-020D | MSL 1     | Material                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | LCP (liquid crystalline polymer) | Color | Black | UL classification | UL94-V0 | Material group acc. IEC 60664-1 | IIIa (175 ≤ CTI < 400) | Contact material | Copper alloy | Plating termination zone | Sn | Plating contact sliding side | Au over PdNi (acc. to Performance level) | <div>DERATING DIAGRAM acc. to IEC 60512-5 (Current carrying capacity)</div> <div>The current carrying capacity is limited by maximum temperature of materials for inserts and contacts including terminals.<br/>The current capacity curve is valid for continuous, non interrupted current loaded contacts of connectors when simultaneous power on all contacts is given, without exceeding the maximum temperature.</div> <div>Control and test procedures according to DIN IEC 60512-5</div> <div>derating curve at I<sub>max</sub>*0,8 (IEC 60512-5-2)</div> <div></div> |  |  |  |  |  |  |  |
| No. of contacts                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | stacking height 6,25mm, 9,05mm from 6 to 100poles, all even numbers<br>stacking height 13,65mm from 6 to 80poles, all even numbers |                                |                                |   |  |   |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                    |                 |                                 |              |      |                    |           |                       |            |                                                          |                      |                           |                  |                                |                                |                                                                              |                                       |                               |            |                                                 |                            |                                                  |                            |               |                                                    |                  |     |                   |              |                                        |                                                  |                      |               |                                     |               |                                        |              |                                         |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                  |       |       |                   |         |                                 |                        |                  |              |                          |    |                              |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  |  |  |  |  |
| Contact spacing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 1,27mm x 1,27mm [0,050"x0,050"]                                                                                                    |                                |                                |   |  |   |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                    |                 |                                 |              |      |                    |           |                       |            |                                                          |                      |                           |                  |                                |                                |                                                                              |                                       |                               |            |                                                 |                            |                                                  |                            |               |                                                    |                  |     |                   |              |                                        |                                                  |                      |               |                                     |               |                                        |              |                                         |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                  |       |       |                   |         |                                 |                        |                  |              |                          |    |                              |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  |  |  |  |  |
| Test Voltage                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 500V                                                                                                                               |                                |                                |   |  |   |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                    |                 |                                 |              |      |                    |           |                       |            |                                                          |                      |                           |                  |                                |                                |                                                                              |                                       |                               |            |                                                 |                            |                                                  |                            |               |                                                    |                  |     |                   |              |                                        |                                                  |                      |               |                                     |               |                                        |              |                                         |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                  |       |       |                   |         |                                 |                        |                  |              |                          |    |                              |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  |  |  |  |  |
| Contact resistance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | < 25 mOhm                                                                                                                          |                                |                                |   |  |   |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                    |                 |                                 |              |      |                    |           |                       |            |                                                          |                      |                           |                  |                                |                                |                                                                              |                                       |                               |            |                                                 |                            |                                                  |                            |               |                                                    |                  |     |                   |              |                                        |                                                  |                      |               |                                     |               |                                        |              |                                         |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                  |       |       |                   |         |                                 |                        |                  |              |                          |    |                              |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  |  |  |  |  |
| Insulation resistance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | ≥ 10x10^9Ω                                                                                                                         |                                |                                |   |  |   |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                    |                 |                                 |              |      |                    |           |                       |            |                                                          |                      |                           |                  |                                |                                |                                                                              |                                       |                               |            |                                                 |                            |                                                  |                            |               |                                                    |                  |     |                   |              |                                        |                                                  |                      |               |                                     |               |                                        |              |                                         |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                  |       |       |                   |         |                                 |                        |                  |              |                          |    |                              |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  |  |  |  |  |
| Working current acc. to IEC 60512, at 70°C, 80% derating                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | see derating diagram                                                                                                               |                                |                                |   |  |   |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                    |                 |                                 |              |      |                    |           |                       |            |                                                          |                      |                           |                  |                                |                                |                                                                              |                                       |                               |            |                                                 |                            |                                                  |                            |               |                                                    |                  |     |                   |              |                                        |                                                  |                      |               |                                     |               |                                        |              |                                         |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                  |       |       |                   |         |                                 |                        |                  |              |                          |    |                              |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  |  |  |  |  |
| Working temperature range                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | -55°C ... +125°C                                                                                                                   |                                |                                |   |  |   |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                    |                 |                                 |              |      |                    |           |                       |            |                                                          |                      |                           |                  |                                |                                |                                                                              |                                       |                               |            |                                                 |                            |                                                  |                            |               |                                                    |                  |     |                   |              |                                        |                                                  |                      |               |                                     |               |                                        |              |                                         |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                  |       |       |                   |         |                                 |                        |                  |              |                          |    |                              |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  |  |  |  |  |
| Termination technology                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | SMT                                                                                                                                |                                |                                |   |  |   |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                    |                 |                                 |              |      |                    |           |                       |            |                                                          |                      |                           |                  |                                |                                |                                                                              |                                       |                               |            |                                                 |                            |                                                  |                            |               |                                                    |                  |     |                   |              |                                        |                                                  |                      |               |                                     |               |                                        |              |                                         |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                  |       |       |                   |         |                                 |                        |                  |              |                          |    |                              |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  |  |  |  |  |
| Reflow processing temperature (acc. to ECA/IPC/JEDEC J-STD-075 Level PSL R0)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | min. 150s > 217°C<br>min. 30s > 240°C                                                                                              |                                |                                |   |  |   |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                    |                 |                                 |              |      |                    |           |                       |            |                                                          |                      |                           |                  |                                |                                |                                                                              |                                       |                               |            |                                                 |                            |                                                  |                            |               |                                                    |                  |     |                   |              |                                        |                                                  |                      |               |                                     |               |                                        |              |                                         |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                  |       |       |                   |         |                                 |                        |                  |              |                          |    |                              |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  |  |  |  |  |
| Clearance & creepage distance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 0,4mm min.                                                                                                                         |                                |                                |   |  |   |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                    |                 |                                 |              |      |                    |           |                       |            |                                                          |                      |                           |                  |                                |                                |                                                                              |                                       |                               |            |                                                 |                            |                                                  |                            |               |                                                    |                  |     |                   |              |                                        |                                                  |                      |               |                                     |               |                                        |              |                                         |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                  |       |       |                   |         |                                 |                        |                  |              |                          |    |                              |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  |  |  |  |  |
| Insertion force (depending on mating connector)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | approximately 0,5N/contact                                                                                                         |                                |                                |   |  |   |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                    |                 |                                 |              |      |                    |           |                       |            |                                                          |                      |                           |                  |                                |                                |                                                                              |                                       |                               |            |                                                 |                            |                                                  |                            |               |                                                    |                  |     |                   |              |                                        |                                                  |                      |               |                                     |               |                                        |              |                                         |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                  |       |       |                   |         |                                 |                        |                  |              |                          |    |                              |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  |  |  |  |  |
| Withdrawal force (depending on mating connector)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | approximately 0,5N/contact                                                                                                         |                                |                                |   |  |   |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                    |                 |                                 |              |      |                    |           |                       |            |                                                          |                      |                           |                  |                                |                                |                                                                              |                                       |                               |            |                                                 |                            |                                                  |                            |               |                                                    |                  |     |                   |              |                                        |                                                  |                      |               |                                     |               |                                        |              |                                         |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                  |       |       |                   |         |                                 |                        |                  |              |                          |    |                              |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  |  |  |  |  |
| Mating cycles                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | PL1 : 500 mating cycles<br>PL2 : 250 mating cycles                                                                                 |                                |                                |   |  |   |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                    |                 |                                 |              |      |                    |           |                       |            |                                                          |                      |                           |                  |                                |                                |                                                                              |                                       |                               |            |                                                 |                            |                                                  |                            |               |                                                    |                  |     |                   |              |                                        |                                                  |                      |               |                                     |               |                                        |              |                                         |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                  |       |       |                   |         |                                 |                        |                  |              |                          |    |                              |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  |  |  |  |  |
| RoHS - compliant                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Yes                                                                                                                                |                                |                                |   |  |   |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                    |                 |                                 |              |      |                    |           |                       |            |                                                          |                      |                           |                  |                                |                                |                                                                              |                                       |                               |            |                                                 |                            |                                                  |                            |               |                                                    |                  |     |                   |              |                                        |                                                  |                      |               |                                     |               |                                        |              |                                         |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                  |       |       |                   |         |                                 |                        |                  |              |                          |    |                              |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  |  |  |  |  |
| Leadfree                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Yes                                                                                                                                |                                |                                |   |  |   |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                    |                 |                                 |              |      |                    |           |                       |            |                                                          |                      |                           |                  |                                |                                |                                                                              |                                       |                               |            |                                                 |                            |                                                  |                            |               |                                                    |                  |     |                   |              |                                        |                                                  |                      |               |                                     |               |                                        |              |                                         |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                  |       |       |                   |         |                                 |                        |                  |              |                          |    |                              |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  |  |  |  |  |
| Working voltage acc. to to IEC 60664-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 100V / 150V (depending on installation category)                                                                                   |                                |                                |   |  |   |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                    |                 |                                 |              |      |                    |           |                       |            |                                                          |                      |                           |                  |                                |                                |                                                                              |                                       |                               |            |                                                 |                            |                                                  |                            |               |                                                    |                  |     |                   |              |                                        |                                                  |                      |               |                                     |               |                                        |              |                                         |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                  |       |       |                   |         |                                 |                        |                  |              |                          |    |                              |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  |  |  |  |  |
| UL file acc. UL 1977                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | ECBT2.E102079                                                                                                                      |                                |                                |   |  |   |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                    |                 |                                 |              |      |                    |           |                       |            |                                                          |                      |                           |                  |                                |                                |                                                                              |                                       |                               |            |                                                 |                            |                                                  |                            |               |                                                    |                  |     |                   |              |                                        |                                                  |                      |               |                                     |               |                                        |              |                                         |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                  |       |       |                   |         |                                 |                        |                  |              |                          |    |                              |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  |  |  |  |  |
| UL file acc. CSA-C22.2 (for Canada)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | ECBT8.E102079                                                                                                                      |                                |                                |   |  |   |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                    |                 |                                 |              |      |                    |           |                       |            |                                                          |                      |                           |                  |                                |                                |                                                                              |                                       |                               |            |                                                 |                            |                                                  |                            |               |                                                    |                  |     |                   |              |                                        |                                                  |                      |               |                                     |               |                                        |              |                                         |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                  |       |       |                   |         |                                 |                        |                  |              |                          |    |                              |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  |  |  |  |  |
| PSL level acc. ECA/IPC/JEDEC J-STD-075                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | PSL R0                                                                                                                             |                                |                                |   |  |   |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                    |                 |                                 |              |      |                    |           |                       |            |                                                          |                      |                           |                  |                                |                                |                                                                              |                                       |                               |            |                                                 |                            |                                                  |                            |               |                                                    |                  |     |                   |              |                                        |                                                  |                      |               |                                     |               |                                        |              |                                         |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                  |       |       |                   |         |                                 |                        |                  |              |                          |    |                              |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  |  |  |  |  |
| MSL level acc. ECA/IPC/JEDEC J-STD-020D                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | MSL 1                                                                                                                              |                                |                                |   |  |   |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                    |                 |                                 |              |      |                    |           |                       |            |                                                          |                      |                           |                  |                                |                                |                                                                              |                                       |                               |            |                                                 |                            |                                                  |                            |               |                                                    |                  |     |                   |              |                                        |                                                  |                      |               |                                     |               |                                        |              |                                         |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                  |       |       |                   |         |                                 |                        |                  |              |                          |    |                              |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  |  |  |  |  |
| Material                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | LCP (liquid crystalline polymer)                                                                                                   |                                |                                |   |  |   |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                    |                 |                                 |              |      |                    |           |                       |            |                                                          |                      |                           |                  |                                |                                |                                                                              |                                       |                               |            |                                                 |                            |                                                  |                            |               |                                                    |                  |     |                   |              |                                        |                                                  |                      |               |                                     |               |                                        |              |                                         |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                  |       |       |                   |         |                                 |                        |                  |              |                          |    |                              |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  |  |  |  |  |
| Color                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Black                                                                                                                              |                                |                                |   |  |   |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                    |                 |                                 |              |      |                    |           |                       |            |                                                          |                      |                           |                  |                                |                                |                                                                              |                                       |                               |            |                                                 |                            |                                                  |                            |               |                                                    |                  |     |                   |              |                                        |                                                  |                      |               |                                     |               |                                        |              |                                         |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                  |       |       |                   |         |                                 |                        |                  |              |                          |    |                              |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  |  |  |  |  |
| UL classification                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | UL94-V0                                                                                                                            |                                |                                |   |  |   |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                    |                 |                                 |              |      |                    |           |                       |            |                                                          |                      |                           |                  |                                |                                |                                                                              |                                       |                               |            |                                                 |                            |                                                  |                            |               |                                                    |                  |     |                   |              |                                        |                                                  |                      |               |                                     |               |                                        |              |                                         |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                  |       |       |                   |         |                                 |                        |                  |              |                          |    |                              |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  |  |  |  |  |
| Material group acc. IEC 60664-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | IIIa (175 ≤ CTI < 400)                                                                                                             |                                |                                |   |  |   |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                    |                 |                                 |              |      |                    |           |                       |            |                                                          |                      |                           |                  |                                |                                |                                                                              |                                       |                               |            |                                                 |                            |                                                  |                            |               |                                                    |                  |     |                   |              |                                        |                                                  |                      |               |                                     |               |                                        |              |                                         |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                  |       |       |                   |         |                                 |                        |                  |              |                          |    |                              |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  |  |  |  |  |
| Contact material                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Copper alloy                                                                                                                       |                                |                                |   |  |   |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                    |                 |                                 |              |      |                    |           |                       |            |                                                          |                      |                           |                  |                                |                                |                                                                              |                                       |                               |            |                                                 |                            |                                                  |                            |               |                                                    |                  |     |                   |              |                                        |                                                  |                      |               |                                     |               |                                        |              |                                         |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                  |       |       |                   |         |                                 |                        |                  |              |                          |    |                              |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  |  |  |  |  |
| Plating termination zone                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Sn                                                                                                                                 |                                |                                |   |  |   |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                    |                 |                                 |              |      |                    |           |                       |            |                                                          |                      |                           |                  |                                |                                |                                                                              |                                       |                               |            |                                                 |                            |                                                  |                            |               |                                                    |                  |     |                   |              |                                        |                                                  |                      |               |                                     |               |                                        |              |                                         |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                  |       |       |                   |         |                                 |                        |                  |              |                          |    |                              |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  |  |  |  |  |
| Plating contact sliding side                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Au over PdNi (acc. to Performance level)                                                                                           |                                |                                |   |  |   |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                    |                 |                                 |              |      |                    |           |                       |            |                                                          |                      |                           |                  |                                |                                |                                                                              |                                       |                               |            |                                                 |                            |                                                  |                            |               |                                                    |                  |     |                   |              |                                        |                                                  |                      |               |                                     |               |                                        |              |                                         |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                  |       |       |                   |         |                                 |                        |                  |              |                          |    |                              |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  |  |  |  |  |
| 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                    | 2                              |                                | 3 |  | 4 |  | 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                    | 6               |                                 | 7            |      | 8                  |           |                       |            |                                                          |                      |                           |                  |                                |                                |                                                                              |                                       |                               |            |                                                 |                            |                                                  |                            |               |                                                    |                  |     |                   |              |                                        |                                                  |                      |               |                                     |               |                                        |              |                                         |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                  |       |       |                   |         |                                 |                        |                  |              |                          |    |                              |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  |  |  |  |  |



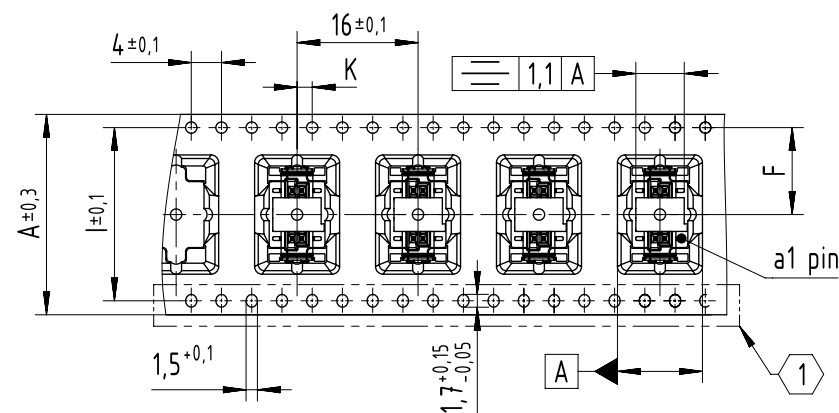
# har-flex® straight female connector



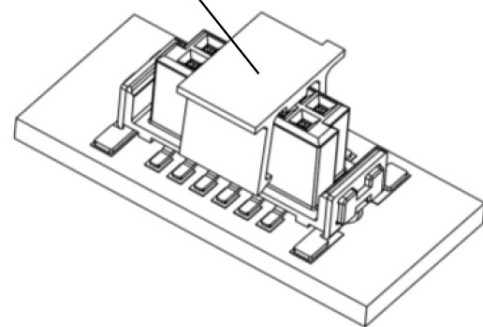
## TAPE LAYOUT & PACKAGING

Tape acc. to IEC 60286-3

reel off direction



Pick & place pad  $6,4 \pm 0,1 \times 4,5 \pm 0,1$



| Tape dimensions: | A    | F         | I    | K      |
|------------------|------|-----------|------|--------|
| poles 06 to 12   | 24,0 | 11,5±0,1  | -    | 2±0,1  |
| poles 14 to 20   | 32,0 | 14,2±0,1  | 28,4 | 2±0,1  |
| poles 22 to 40   | 44,0 | 20,2±0,15 | 40,4 | 2±0,15 |
| poles 42 to 56   | 56,0 | 26,2±0,15 | 52,4 | 2±0,15 |
| poles 58 to 80   | 72,0 | 34,2±0,3  | 68,4 | 2±0,2  |
| poles 82 to 100  | 88,0 | 42,2±0,3  | 84,4 | 2±0,2  |

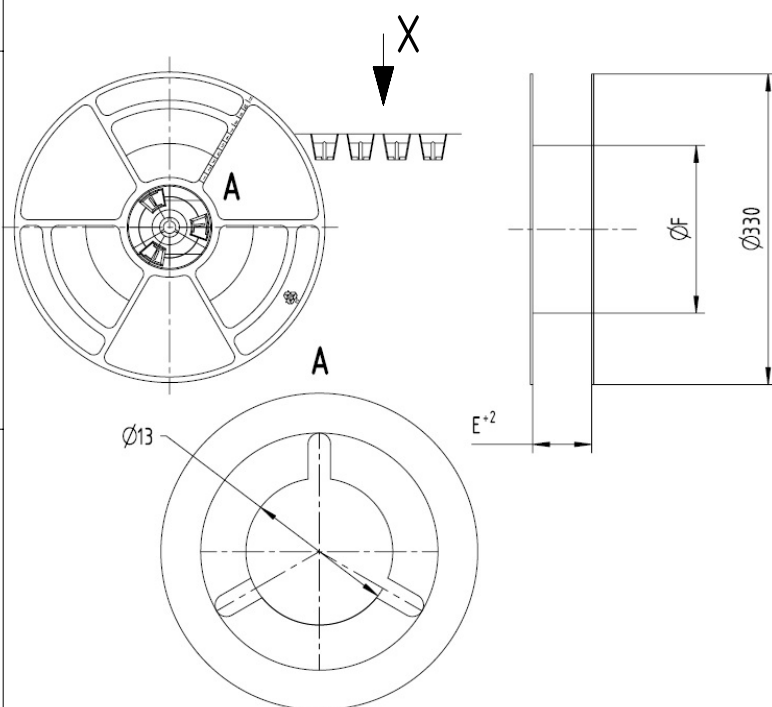
- 1 NO DOUBLE SPROCKET HOLES FOR 06, 08, 10 AND 12 POLE NUMBERS (TAPE SIZE 24)
- 2 Not available for stacking height 13,65mm

Packaging indices ("XXX" in part number)

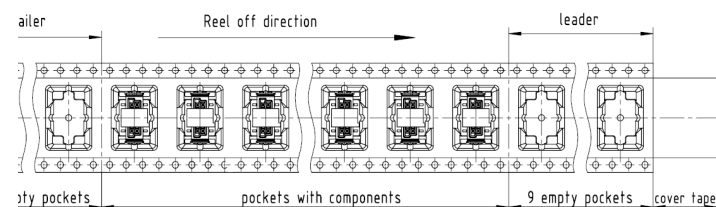
| Index | Stacking height | Packaging unit | Packaging   |
|-------|-----------------|----------------|-------------|
| 000   | 13,65mm         | 170            | Tape & reel |
|       | 6,25mm & 9,05mm | 280            |             |
| 333   | All             | 1              | Tape        |

## REEL DIMENSIONS

reel off direction



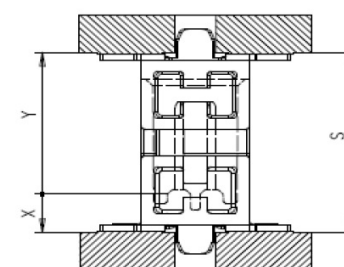
| Reel dimensions: | E    | F                                         |
|------------------|------|-------------------------------------------|
| Poles 06 to 12   | 24,4 | 178mm for stacking height 6,25mm & 9,05mm |
| Poles 14 to 20   | 32,4 |                                           |
| Poles 22 to 40   | 44,4 |                                           |
| Poles 42 to 56   | 56,4 | 100mm for stacking height 13,65mm         |
| Poles 58 to 80   | 72,4 |                                           |
| Poles 82 to 100  | 88,4 |                                           |



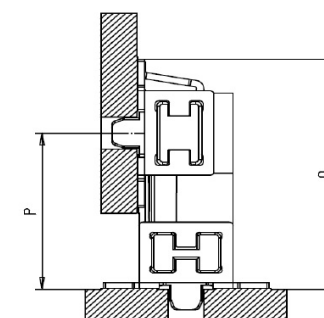
## APPLICATION INFORMATION

| S                | X&Y | 20mm                      | 19mm                      | 18mm                      | 17mm                      | 16mm                      | 15mm                      | 14mm                       | 13mm                       | 12mm                       | 11mm | 10mm | 9mm | 8mm |
|------------------|-----|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|----------------------------|----------------------------|----------------------------|------|------|-----|-----|
|                  |     |                           |                           |                           |                           |                           |                           |                            |                            |                            |      |      |     |     |
| stacking heights |     | male 1.75mm female 6.25mm | male 3.25mm female 6.25mm | male 4.85mm female 6.25mm | male 1.75mm female 9.05mm | male 3.25mm female 9.05mm | male 4.85mm female 9.05mm | male 1.75mm female 13.65mm | male 3.25mm female 13.65mm | male 4.85mm female 13.65mm |      |      |     |     |
| PCB distance     |     | 8mm-9.5mm                 | 9.5mm-11mm                | 11.1mm-12.6mm             | 10.8mm-12.3mm             | 12.3mm-13.8mm             | 13.9mm-15.4mm             | 15.4mm-16.9mm              | 16.9mm-18.4mm              | 18.5mm-20mm                |      |      |     |     |
| part numbers     |     | 1511... 1521...           | 1512... 1521...           | 1513... 1521...           | 1511... 1522...           | 1512... 1522...           | 1513... 1522...           | 1511... 1523...            | 1512... 1523...            | 1513... 1523...            |      |      |     |     |

straight female



angled male

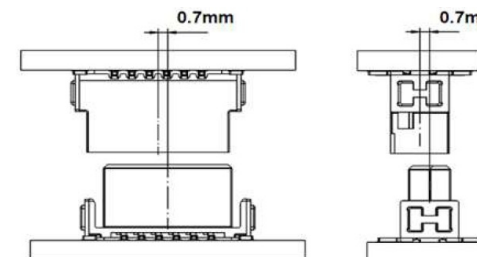


straight male

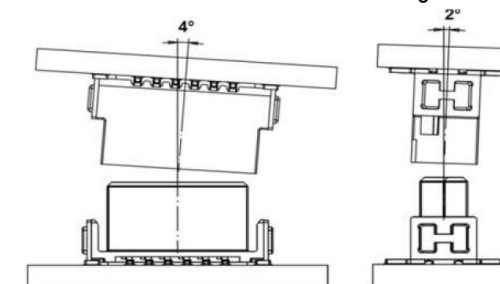
| 4,85 | 13,65 | 18,5 | 20     |
|------|-------|------|--------|
| 3,25 | 13,65 | 16,9 | 18,4   |
| 1,75 | 13,65 | 15,4 | 16,9   |
| 4,85 | 9,05  | 13,9 | 15,4   |
| 3,25 | 9,05  | 12,3 | 13,8   |
| 1,75 | 9,05  | 10,8 | 12,3   |
| 4,85 | 6,25  | 11,1 | 12,6   |
| 3,25 | 6,25  | 9,5  | 11     |
| 1,75 | 6,25  | 8    | 9,5    |
| X    | Y     | Smin | * Smax |

\*Smax = Smin +1.5 wiping length with additional contact overlap security

Admissible inclination



Admissible mismatching



|                              |                                              |                                              |                   |                                          |                  |                              |          |  |
|------------------------------|----------------------------------------------|----------------------------------------------|-------------------|------------------------------------------|------------------|------------------------------|----------|--|
| Coating                      | A = 0 mm <sup>2</sup>                        | V = 0 mm <sup>3</sup>                        | m = 0.0000 kg     | Mat. <input checked="" type="checkbox"/> |                  |                              |          |  |
|                              | All Dimensions in mm<br>Original Size DIN A3 | Scale 1:1                                    | Free size tol.    |                                          | Ref.             |                              |          |  |
|                              |                                              |                                              | Tolerancing       |                                          | Sub.             |                              |          |  |
|                              | All rights reserved<br>Department EL PD      | Created by zengd                             | Inspected by luok | Standardisation                          | Date 17-Jun-2025 | State                        |          |  |
|                              |                                              | Title har-flex str. fe. 6.25mm, vacuum cover |                   |                                          |                  | Doc-Key / ECM-Nr. DS00191272 |          |  |
| HARTING<br>D-32339 Espelkamp | Type TB                                      | Design Number DS00191272                     |                   | SAP Mat. Number 1521XXXX601XXX           |                  | Rev. F                       | Page 4/4 |  |