



HelaGuard Application Overview

| Page Number | Conduit System | IP rating available | Compression strength kg/100 mm, 20 mm Ø | Pull-off strength kg, 20 mm Ø | Minimum bend radius 20 mm Ø |
|-------------|--|----------------------------|--|----------------------------------|--------------------------------|
| 317 | HG-SW PA6 corrugated, standard weight | IP66, IP67, IP68, IP69k | 75 | 40 | 45 |
| 318 | HG-LW PA6 corrugated, light weight | IP66, IP67, IP68, IP69k | 60 | 30 | 40 |
| 319 | HG-HW PA6 corrugated, heavy weight | IP66, IP67, IP68, IP69k | 120 | 70 | 55 |
| 320 | HG-FR Flame retardant PA6 corrugated, standard weight | IP66, IP67, IP68, IP69k | 75 | 40 | 45 |
| 321 | HG-HI PA12 corrugated, standard weight | IP66, IP67, IP68, IP69k | 45 | 30 | 35 |
| 322 | HG-DC PA6 double slit corrugated | IP40 | 60 | 15 | 90 |
| 323 | HG-PP PP corrugated | IP40, IP66 IP67, IP68 | 35 | 25 | 40 |
| 349 | SC galvanised steel | IP40 | 350 | 120 | 45 |
| 350 | SSC stainless steel | IP40 | 400 | 170 | 45 |
| 354 | PCS galvanised steel, PVC coated | IP54, IP65 | 350 | 120 | 45 |
| 355 | NCS galvanised steel, PA6 coated | IP54, IP65 | 350 | 120 | 45 |
| 356 | LFHCS galvanised steel, LFH coated | IP54, IP65 | 350 | 120 | 45 |
| 362 | LTS galvanised steel, PVC coated, liquid-tight | IP68 | 400 | 130 | 65 |
| 363 | LTSH galvanised steel, thermoplastic rubber, liquid-tight | IP68 | 400 | 130 | 65 |
| 364 | LTSUL galvanised steel, PVC coated, liquid-tight, UL-listed | IP68 | 500 | 160 | 90 |
| 369 | PCSB galvanised steel, PVC coated, galvanised steel overbraid | IP54, IP65 | 350 | 120, 300 | 45 |
| 373 | SCSB galvanised steel, galvanised steel overbraid | IP40 | 350 | 120 | 45 |



| High fatigue life | Temperature range | Flexible | Halogen free | Self-extinguishing | High abrasion resistance | High UV resistance (black) |
|-------------------|--------------------|----------|--------------|--------------------|--------------------------|----------------------------|
| yes | -40 °C to +120 °C | yes | yes | yes | yes | yes |
| yes | -40 °C to +120 °C | yes | yes | yes | | |
| | -40 °C to +120 °C | yes | yes | yes | yes | yes |
| | -40 °C to +120 °C | yes | yes | yes | yes | yes |
| yes | -50 °C to +110 °C | yes | yes | yes | | yes |
| | -40 °C to +120 °C | | yes | yes | yes | |
| | +20 °C to +90 °C | yes | | yes | | |
| | -100 °C to +300 °C | yes | yes | yes | yes | |
| | -100 °C to +400 °C | yes | yes | yes | yes | yes |
| yes | -15 °C to +70 °C | yes | | yes | | |
| | -40 °C to +120 °C | yes | yes | yes | yes | |
| | -25 °C to +90 °C | yes | yes | yes | | |
| | -20 °C to +105 °C | yes | | yes | | yes |
| | -45 °C to +135 °C | yes | yes | yes | | yes |
| | -15 °C to +75 °C | yes | | yes | | yes |
| | -15 °C to +70°C | yes | | yes | yes | |
| | -100 °C to +300°C | yes | yes | yes | | |



IEC 61386 Classification for HelaGuard Flexible Conduits

| | Compression Resistance (N) | Impact Resistance (J) | Minimum Temperature (°C) | Maximum Temperature (°C) | Bend Resistance | Electrical Properties |
|--|-----------------------------------|------------------------------|---------------------------------|---------------------------------|-----------------------------|------------------------------|
| Non-Metallic Conduits based on nominal conduit size 21 mm | | | | | | |
| HG-SW PA6 corrugated, standard weight (with HG fittings) | 2 | 4 | 2 | 4 | 4 | 0 |
| HG-LW PA6 corrugated, light weight (with HG fittings) | 2 | 4 | 2 | 4 | 4 | 0 |
| HG-HW PA6 corrugated, heavy weight (with HGL fittings) | 2 | 4 | 2 | 4 | 4 | 0 |
| HG-FR Flame retardant corrugated, standard weight (with HGL fittings) | 2 | 4 | 2 | 4 | 4 | 0 |
| HG-HI PA12 corrugated, standard weight (with HG fittings) | 1 | 3 | 5 | 4 | 4 | 0 |
| HG-DC PA6 double slit corrugated | 2 | 4 | 2 | 4 | 4 | 0 |
| Metallic Conduits based on nominal conduit size 20 mm | | | | | | |
| SC galvanised steel | 4 | 4 | 5 | 6 | 4 | 0 |
| SSC stainless steel | 4 | 4 | 5 | 6 | 4 | 0 |
| PCS galvanised steel, PVC coated (with compression fittings) | 4 | 4 | 3 | 1 | 4 | 0 |
| NCS galvanised steel, PA6 coated | 4 | 4 | 4 | 4 | 4 | 0 |
| LFHCS galvanised steel, LFH coated | 4 | 4 | 3 | 1 | 4 | 0 |
| LTS galvanised steel, PVC coated, liquid-tight (with compression fittings) | 4 | 4 | 3 | 3 | 4 | 0 |
| LTSH galvanised steel, PVC coated, liquid-tight (with compression fittings) | 4 | 4 | 5 | 4 | 4 | 0 |
| LTSUL galvanised steel, PVC coated, liquid-tight, UL-listed | 4 | 4 | 3 | 3 | 4 | 0 |
| PCSB galvanised steel, PVC coated, galvanised steel overbraid | 4 | 4 | 3 | 1 | 4 | 0 |
| SCSB galvanised steel, galvanised steel overbraid | 4 | 4 | 5 | 6 | 4 | 0 |
| FlexiGuard and FlexiGuard Plus Conduits | | | | | | |
| FG PVC-Conduit with spring steel wire | 2 | 2 | 2 | 1 | 4 | 2 |
| FGP PVR-Conduit with spring steel wire | 2 | 2 | 3 | 2 | 4 | 2 |
| IEC 61386 Classification Key | Compression Resistance (N) | Impact Resistance (J) | Minimum Temperature (°C) | Maximum Temperature (°C) | Bend Resistance | Electrical Properties |
| 0 | - | - | - | - | - | non-declared |
| 1 | 125 | 0,5 | +5 | +60 | rigid | conducting |
| 2 | 320 | 1 | -5 | +90 | pliable | insulating |
| 3 | 750 | 2 | -15 | +105 | pliable, self-recovering | conducting / insulating |
| 4 | 1250 | 6 | -25 | +120 | flexible | - |
| 5 | 4000 | 20 | -45 | +150 | - | - |
| 6 | - | - | - | +250 | - | - |
| 7 | - | - | - | +400 | - | - |



| IP Rating against solid objects | IP Rating against water | Corrosion Resistance | Tensile strength | Resistance to Flame Propagation | Suspended Load Capacity (N) |
|---------------------------------|-------------------------|-----------------------------|------------------|---------------------------------|-----------------------------|
| 6 | 6 | - | 2 | 1 | 0 |
| 6 | 6 | - | 1 | 1 | 0 |
| 6 | 8 | - | 3 | 1 | 0 |
| 6 | 8 | - | 2 | 1 | 0 |
| 6 | 6 | - | 1 | 1 | 0 |
| 4 | 0 | - | 2 | 1 | 0 |
| 4 | 0 | 1 | 4 | 1 | 0 |
| 4 | 0 | 4 | 4 | 1 | 0 |
| 6 | 5 | 2 | 4 | 1 | 0 |
| 6 | 4 | 2 | 4 | 1 | 0 |
| 6 | 5 | 2 | 4 | 1 | 0 |
| 6 | 8 | 4 | 4 | 1 | 0 |
| 6 | 8 | 4 | 4 | 1 | 0 |
| 6 | 8 | 4 | 4 | 1 | 0 |
| 5 | 4 | 2 | 4 | 1 | 0 |
| 4 | 0 | 1 | 4 | 1 | 0 |
| 3 | 0 | 4 | 1 | 1 | 1 |
| 3 | 0 | 4 | 1 | 1 | 1 |
| IP Rating against solid objects | IP Rating against water | Corrosion Resistance | Tensile Strength | Resistance to Flame Propagation | Suspended Load Capacity (N) |
| - | 0 | - | - | - | non-declared |
| - | 1 | low inside and outside | 100 | not flame-propagating | 20 |
| - | 2 | medium inside and outside | 250 | flame-propagating | 30 |
| 3 | 3 | medium inside, high outside | 500 | - | 150 |
| 4 | 4 | high inside and outside | 1000 | - | 450 |
| 5 | 5 | - | 2500 | - | 850 |
| 6 | 6 | - | - | - | - |
| 7 | 7 | - | - | - | - |