



WK 903 HOSECLAMPS – WORM DRIVE (INTEGRAL SPRING)

1. SCOPE:

This specification covers the dimensions, material and performance of worm drive hoseclamps.

NOTE: The torques specified are test requirements and are not recommended tightening torques for assembly purposes.

2. GENERAL:

Alternative screw and thread sizes and means of screw retention are permissible provided all other requirements of this specification are met.

The worm drive slots on the band must be formed and not pierced and the forming shall not protrude radially within the band diameter.

NOTE: Although the screw thread may vary, the screw head must remain in accordance with Figure 1 and Table 1.

3. DIMENSIONS:

The dimensions of worm drive hoseclamps shall be as specified in Figure 1 and Table 1.

Parts shall be supplied at diameter B +2/-0.

4. MATERIAL:

The material for the band, screw and screw housing shall be Stainless Steel to ASTM A 240, UNS S43000, or BS 1449 Part 2 430S17 Rm 450 - 600 MN/m² or X6Cr17 DIN 17440 Rm 450 - 600 MN/m². The screw component and/or housing may be lubricated to assist in meeting the clamp performance requirements. The lubricant shall be contained within the housing such that there is no contamination of hose or degradation of the hose performance. The choice of lubrication (for example tin plating) is at the discretion of the manufacturer providing all requirements of the Restricted Substance Management Standard, WSS-M99P9999-A1, are met.

The material for the spring components of the Hose Clamps Worm Drive with spring element shall be from Stainless Steel to ASTM A 240, UNS S 30100, or BS 1449 Part 2 301S23 Spring Bridge 1100-1300 MN/m² Rm, spring 1700-1900 MN/m² or X10Cr Ni 18-8 or DIN 17440 1100-1300 Rm respectively 1700-1900 MN/m²



5. PERFORMANCE:

The free running torque through the diameter range shall not exceed 0.7 Nm for clamps with a 9 mm bandwidth and 1 Nm for clamps with a 12 mm bandwidth.

The spring performance shall be tested according to ASTM B 117/DIN 50021 SS (salt-spray) for 144 hours. The clamps should be mounted on a mandrel and torqued to 3.7 Nm for clamps with a 9 mm bandwidth and 5.4 Nm for clamps with 12 mm bandwidth. No spring degradation should occur during the salt-spray test cycle. There shall be no degradation of the mechanical performance of the clamp.

Hoseclamps shall be permanently marked with the manufactures name or trademark and the appropriate size designation. The marking shall not have a negative impact on the performance of the clamp.