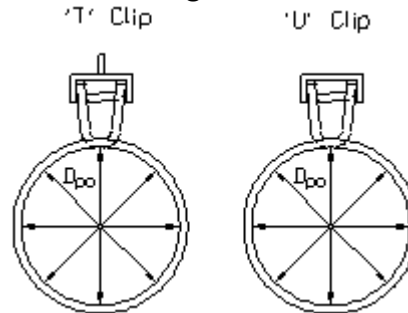


DIMENSIONS, MATERIAL AND HEAT TREATMENT, AND PERFORMANCE OF HEAVY DUTY SPRING BAND HOSECLAMPS

1. SCOPE

This appendix covers the performance and part numbers of heavy duty spring band hoseclamps in a range of nominal sizes between 13 mm and 61 mm inclusive, for application within a temperature range from -40 °C to +150 °C.

Figure 2



T and U clip clamps are shown for reference only.
These clamps are not to be used for new designs.

2.4.1 CLIP

The design of the clip used for pre-opened clamps shall be such that it retains the clamp open to a diameter of $D_{PO \min}$. The clip shall stay in place during normal handling and storage. The clip shall be removable during assembly using a suitable simple tool (e.g. pliers, flat blade screwdriver or clip release tool) recommended by the clamp manufacturer and approved by Ford. Note: **THESE LOOSE CLIP CLAMPS ARE NOT TO BE USED FOR NEW DESIGN.**

CLAMPING FORCE VALUES

Heavy duty spring band hoseclamps shall meet the clamping force values specified in (Table 4 for PO and POPP). The clamping force will be measured for a nominal diameter D_n using a four-channel measurement device (four-segment load cell) which acts evenly in four directions. The four transducers must ensure a line-shaped practically frictionless contact to the spring band hoseclamp. The measured values of channels $F_{x1}+F_{x2}$ as well as $F_{y1}+F_{y2}$ are to be added up. The four individual force values must be evaluated independently of each other.

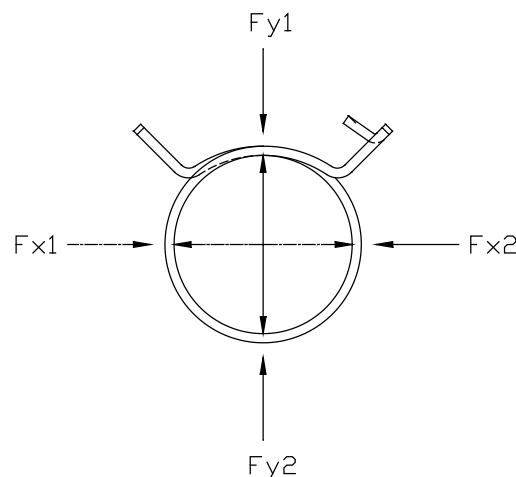


Table 4 - Minimum effective clamping forces at D_n for Pre-Opened or Pre-Opened/Pre-Positioned clamps

D_n	Clamping Force 12mm Bands			Clamping Force 15mm Bands		
	F_{xmin} [N]	F_{ymin} [N]	$\Delta F = F_x - F_y$ [N] Ref.	F_{xmin} [N]	F_{ymin} [N]	$\Delta F = F_x - F_y$ [N] Ref.
13	176	136	-10 – 140	195	150	10 – 120
14	176	136	-10 – 140	195	150	10 – 120
15	176	136	-10 – 140	195	150	10 – 120
16	176	136	-10 - 140	195	150	10 - 120
17	176	136	-10 – 140	195	150	10 – 120
18	280	224	-10 – 180	310	245	10 - 160
19	280	224	-10 – 180	310	245	10 - 160
20	280	224	-10 – 180	310	245	10 - 160
22	280	224	-10 – 180	310	245	10 - 160
23	280	224	-10 – 180	388	338	20 - 200
24	280	224	-10 – 180	388	338	20 - 200
25	352	312	0 – 220	390	345	20 - 200
26	352	312	0 – 220	390	345	20 - 200
27	352	312	0 – 220	390	345	20 - 200
28	352	312	0 - 220	390	345	20 - 200
29	352	312	0 – 220	390	345	20 - 200
30	352	312	0 – 220	390	345	20 - 200
32	352	312	0 – 220	390	345	20 - 200
34	352	312	0 – 220	390	345	20 - 200
35	352	312	0 – 220	390	345	20 - 200
36	352	312	0 – 220	390	345	20 - 200
38	352	312	0 – 220	390	345	20 - 200
39	352	312	0 – 220	390	345	20 – 200
40	352	312	0 – 220	390	345	20 – 200
41	480	400	0 - 240	530	440	20 – 240
42	480	400	0 – 240	530	440	20 – 240
43	480	400	0 – 240	530	440	20 – 240
44	480	400	0 – 240	530	440	20 – 240
46	480	400	0 – 240	530	440	20 – 240
47	480	400	0 – 240	530	440	20 – 240
49	480	400	0 – 240	530	440	20 – 240
50	480	400	0 – 240	530	440	20 – 240
51	480	400	0 – 240	530	440	20 – 240
53	480	400	0 – 240	530	440	20 – 240
54	480	400	0 – 240	530	440	20 – 240
55	480	400	0 – 240	530	440	20 – 240
58	480	400	0 – 240	530	440	20 – 240
61	480	400	0 – 240	530	440	20 – 240