



# COMPANY STANDARDS

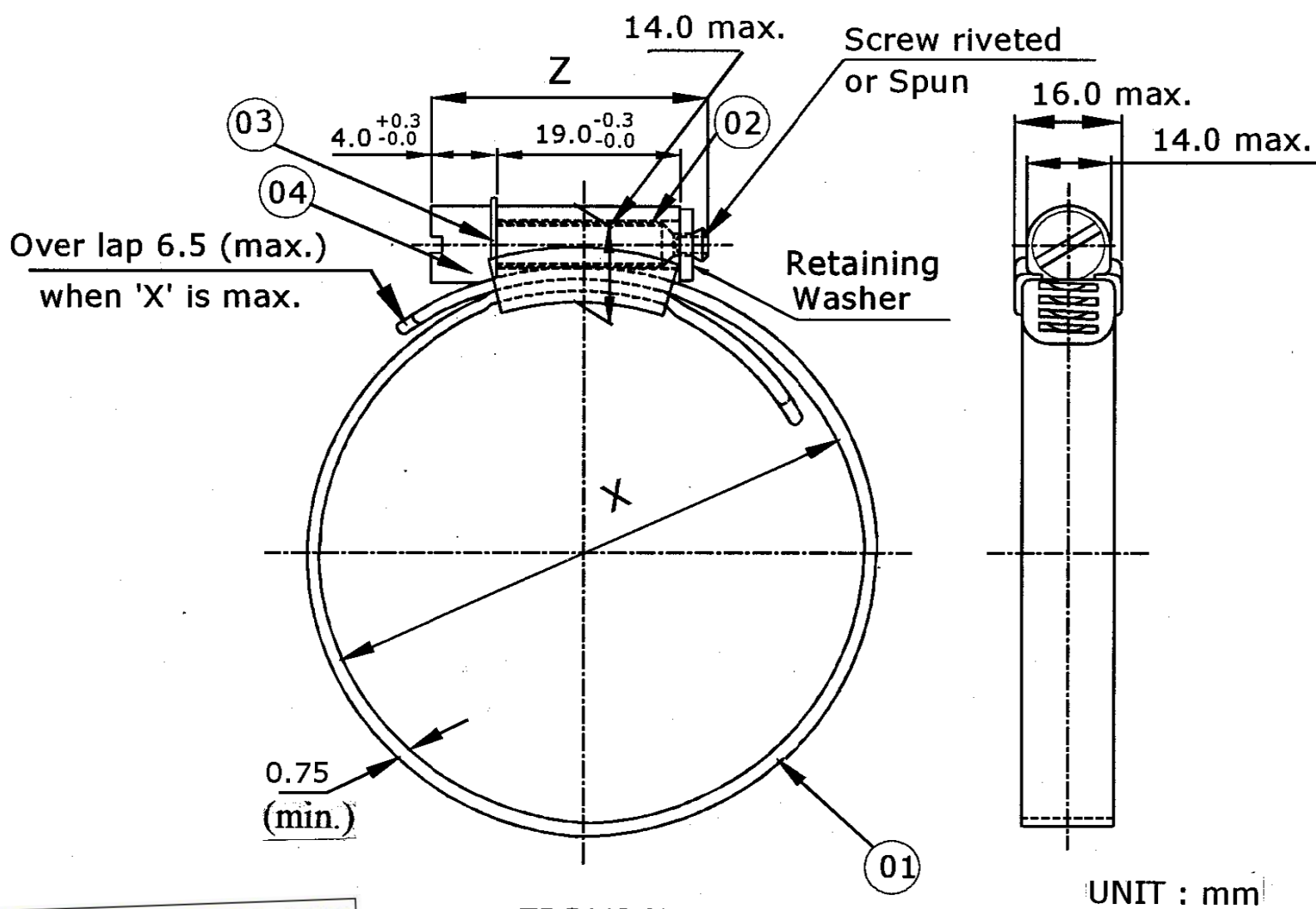
CCC01

TITLE :

WORM DRIVE  
HOSE CLIP – BAND TYPE

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FIGURE-1

TABLE – 1 – PART MATERIALS

SL NO	PART DESCRIPTION	MATERIAL	SURFACE TREATMENT
01	BAND	AISI 201 / AISI 202	---
02	HOUSING	35C8 of IS: 5517 - latest issuance	Zinc plating as per Co. Std. PR1033-C / IS: 1573 latest issuance
		AISI 201, AISI 202, AISI 304	---
03	WASHER	35C8 of IS: 5517 - latest issuance	Zinc plating as per Co. Std. PR1033-C / IS: 1573 latest issuance
		C1006-03	
04	SCREW	Class 8.8 of IS: 1367- Part-3- latest issuance.	IS: 1573 latest issuance
		SAE1541 / SAE4140 Q & T 26~30 HRC	

NOTE : The material used in manufacture of worm drive clips shall be as per the standard. However the manufacturer shall use his discretion in selection of the material provided that the finished clamps shall meet the test requirements specified under clause – 7.

PREPARED BY: CSD/ CFWC- 'PARTS'.	ISSUE NO: 01	REPLACEMENT FOR: ---	REF: IS : 4762
APPROVED BY:	V.S. Bhargava G 04.12.14	D.S. Bhargava D(G)	D(P)

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## WORM DRIVE HOSE CLIP – BAND TYPE

TABLE – 2 – DIMENSIONS

Unit : mm

SL NO	BAND I.D (X)		DIFFE- RENCE	HOUSING LENGTH (Z)	INSTALLATION TORQUE - Nm	SIZE CODE	QTY PER BAG (Nos.)
	Max.	Min.					
01	12	09	03	28	4.5	01203	50
02	16	12	04			01604	
03	20	14	06			02006	
04	22	16				02206	
05	25	18	07			02507	
06	30	22	08	30		03008	
07	35	25	10			03510	
08	40	30				04010	
09	45	32	13	34	5.8	04513	70
10	50	38	12			05012	
11	60	45	15			06015	
12	70	50	20			07020	
13	80	60				08020	
14	90	70		6.8	09020	15	
15	100	80			10020		
16	115	95			11520		
17	130	110			13020	10	
18	145	125			14520		
19	160	140		16020			
20	180	160		18020			
21	200	180		20020			
22	220	200		22020			
23	245	220		25	24525		
24	275	245	30	27530			

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### 1. MATERIAL AND SURFACE TREATMENT :

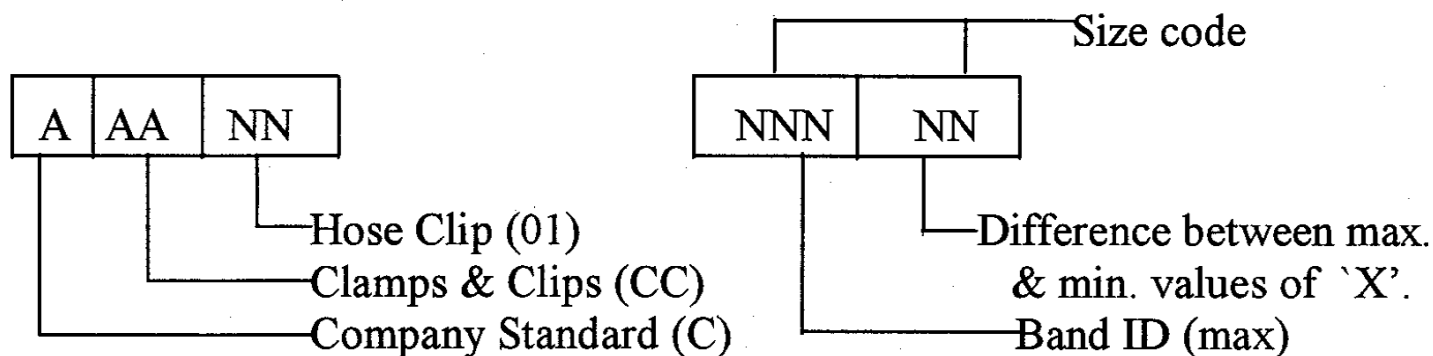
Material and surface treatment shall be in accordance with Table-1.

### 2. DIMENSIONS :

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The dimensions of the hose clip shall be in accordance with Figure-1 & Table-2.

### 3. DESIGNATION :





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Hose clips are designated by a 10 digit code. The first five digits appear on the document. 6<sup>th</sup> to 8<sup>th</sup> digits indicates maximum internal diameter of the band and 9<sup>th</sup> to 10<sup>th</sup> digits indicates the difference between max. and min. values of dimension 'X'. The last 5 digits signify the size code.

EXAMPLE: A worm drive hose clip of ID (max)) 50mm and the difference between max. & min. value of X = 12 mm shall be designated as CCC01005012.

## 4. GENERAL REQUIREMENTS :

The clamps shall remain positively secured when tightened on the hose without the need for any additional locking device.

## 5. FINISH :

All component parts of the clamp shall be smooth and free from burrs, sharp edges, seams, loose scale and other defects that might affect the performance.

## 6. BAND DETAILS :

The band shall have transverse serrations centrally disposed. The serrations shall commence at the free end and extends for a length 'L' (depending upon the size of the clip) sufficient to enable the clip to be tightened on the smallest diameter of the hose for which it is designed. (see Figure -2).

This end to be formed to provide easy engagement

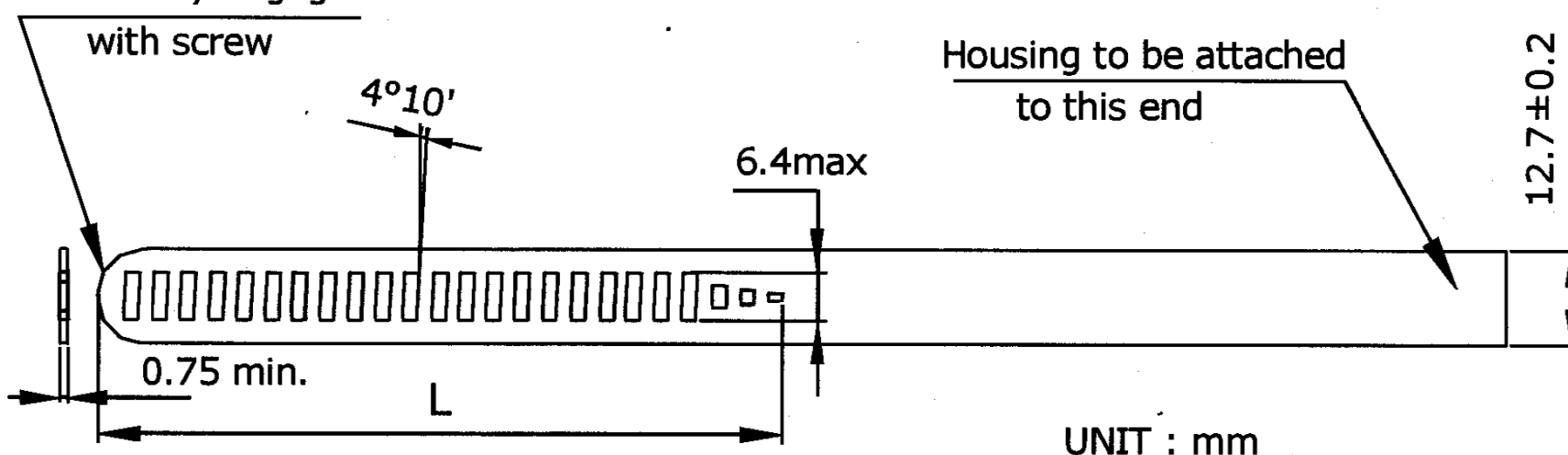


FIGURE-2

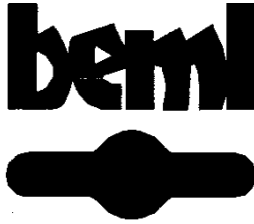
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## 6.1 SERRATED BANDS :

The serration shall be either rolled or milled. They shall neither penetrate through the band nor shall they be longer than half the width of the band. The form and dimensions of serration and band shall be as shown in Fig.-2.

## 7. TESTS :

Hose clips shall be tested for fatigue torque load and hydraulic pressure. These tests shall be in accordance with clause-10 of IS: 4762 latest issuance – “Worm drive hose clips for general purpose”.

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8. SAMPLING AND ACCEPTANCE CRITERIA :

8.1 In any consignment, all the hose clips of the same size and type manufactured under essentially similar conditions shall be grouped together to constitute a lot.

Hose clips shall be selected and examined for each lot separately for ascertaining their conformity to the requirement of this standard.

8.2 Number of hose clips to be selected shall depend on the size of the lot and shall be in accordance with column-1 and column-2 of Table-3. These shall be selected at random.

8.3 Hose clips selected according to 8.2 shall be examined for material and dimensions. If the number of hose clips failing to meet the requirements for any of the above characteristics is less than or equal to the acceptance number given in column-3 of Table-3, the lot shall be considered as conforming to the requirements of these characteristics.

**TABLE -3 – SAMPLE SIZE AND CRITERIA FOR CONFORMITY**

LOT SIZE (1)	SAMPLE SIZE (2)	ACCEPTANCE No. (3)	SUB-SAMPLE SIZE (4)
Up to 100	5	0	2
101 to 150	8	0	2
151 to 300	13	1	3
301 to 500	20	1	5
501 to 1000	32	2	8
1001 and above	50	3	13

8.4 In case of those lots which have been found satisfactory according to 8.3, the number of hose clips each equivalent to the sub sample size indicated in column-4 of Table -3 shall be chosen and subjected to torque tests and hydraulic pressure test (as per IS: 4762 – latest issuance). The lot shall be considered as conforming to the requirements of the characteristics if none of the hose clips subjected to either of the tests, fails to meet the specified requirements.

8.5 The lot shall be declared as conforming to the requirements of this standard if the conditions given in 8.3 and 8.4 are satisfied.

9. PACKING AND MARKING :

Hose clips shall be packed first in high density polyethylene bags (quantity as specified in Table -2). These polyethylene bags containing the hose clips shall in turn be packed in cartons / boxes.

Hose clips shall be permanently marked with the manufacturer's name or trade mark and size.

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