

Contents

1 - Principles

2 - Definitions of identification characteristics for UIC parts.

1 - Principles

The lists of identification characteristics and corresponding tables constitute user-friendly document systems, usable not only for purely manual processing but also for the most modern data processing.

Identification characteristics (individual characteristics), such as height, width, length, material, etc, are the specific properties of given articles that represent their distinctive features independent of their environment (origin, use, etc.)

Identification characteristic lists consist of a record of identification characteristic data for a group of articles. The lists are based on the tables of identification characteristics listing characteristics for the group of articles and can thus be used to group together, demarcate and select similar items.

The number of identification characteristics to be selected should be kept within reasonable limits so that identification characteristic lists can be quickly and easily used. They must however be sufficiently large to allow an individual article to be satisfactorily defined in relation to others.

Tables of identification characteristics should always include the 9 internationally-defined code letters A to J, even if the description of a particular article requires fewer identification characteristics in a given case. If necessary, it is also possible to place several identification characteristics under one letter, distinguishing among them by means of index numbers, e.g. B₁ and B₂. The number of printing characters for identification characteristic data relating to all 9 code letters has been set at 70. One position should be counted for each unused code letter. To make identification easier, further characteristics may be indicated in addition to the code letters (A... J) already defined. If this is done, arabic figures should be used to qualify the code letter shown in the series of identification characteristics.

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Tables of identification characteristics contain one line of code letters, another with identification characteristic descriptions, and a third giving the units.

The simplest possible diagrammatic representations should be provided with the identification characteristic tables. The relevant code letters shall be entered on these diagrams, and the diagrams themselves numbered numerically for each table.

The structures adopted for the identification characteristic tables shall be such that the greatest possible number of similar articles (groups of articles) can be grouped together on the basis of uniform identification characteristics, thus allowing the user to compare them in terms of appearance and mechanical characteristics within the given limits. This type of common identification characteristic table can be used, for example, to group together all the major identification characteristics of the groups of articles such as "cap screws and bolts".

For certain individual standards or leaflets - e.g. for self-tapping screws not all the identification characteristics defined in the tables of identification characteristics for "cap screws and bolts" are necessary for clear identification. The identification characteristic descriptions not required remain open in the detailed table of identification characteristics.

The tables of identification characteristics for parts already included in UIC leaflets are shown in Section 2 of this leaflet with the corresponding diagrammatic representations.

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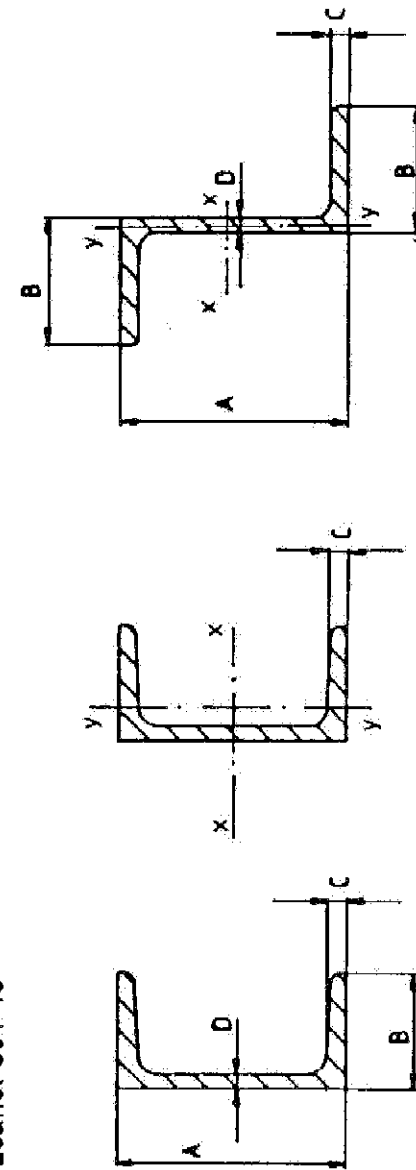


Figure 1

Figure 2

2 - Definitions of characteristics for UIC parts

U-sections - Z-sections

Leaflet 801-19

Code letter	A	B	C	D	E	F	G	H	J
Characteristic descriptor	height	Arm width	Arm thickness	Web thickness			Section Modulus W_x, W_y	Material	
Unit	mm	mm	mm	mm			cm ³	-	

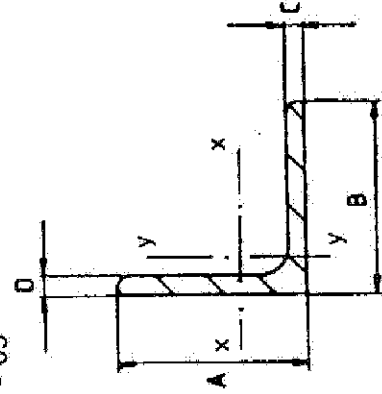


Figure 1

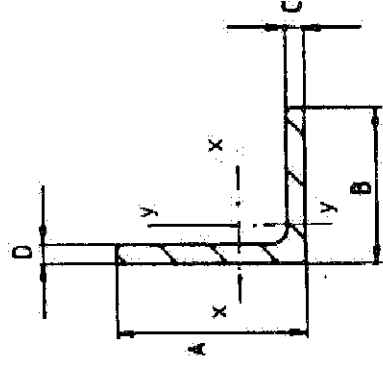


Figure 2

Code letter	A	B	C	D	E	F	G	H	J
Characteristic description	Arm length	Arm length	Arm thickness	Arm thickness			Section Modulus W_x, W_y	Material	
Unit	mm.	mm.	mm.	mm.			cm ³	-	

Round steels and square steels



Figure 1

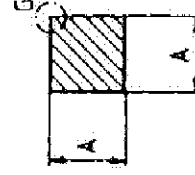


Figure 2

Code letter	A	B	C	D	E	F	G	H	J
Characteristic description	Lateral length or diameter	Size tolerance for A					Type of corner	Material	Surface protection/treatment
Unit	mm.	mm.					-	-	-

Flats

800-09
O

Leaflet 801-16

Leaflet 801-18

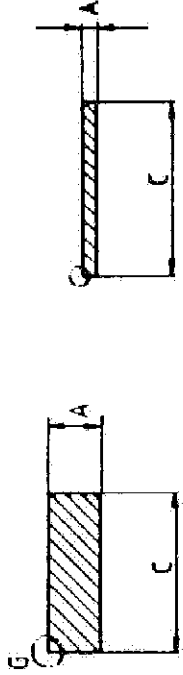


Figure 1

Code letter	A	B	C	D	E	F	G	H	J
Characteristic description	Overall thickness	Size tolerance for A	Width	Size tolerance for C			Type of corner	Material	Surface protection/treatment
Unit	mm	mm	mm	mm			-	-	-

Figure 2

- 10 -

Bulb steels

Leaflet 801-17

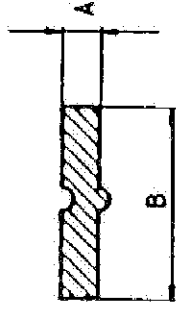


Figure 1

Code letter	A	B	C	D	E	F	G	H	J
Characteristic description	Thickness	Width						Material	Surface protection/treatment
Unit	mm	mm						-	-

- 11 -

800-09
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Cap screws and bolts

800-09

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Leaflet 802-01

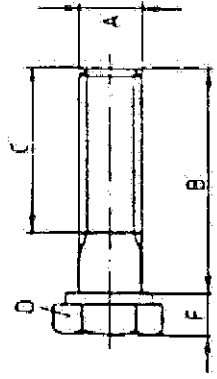


Figure 1

Leaflet 802-05

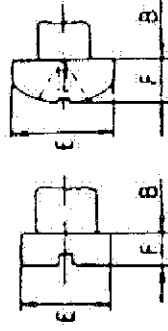


Figure 2

Leaflet 802-06

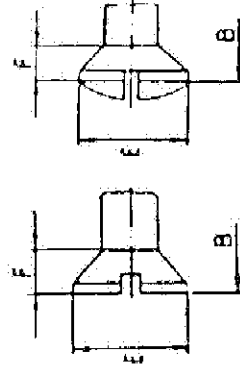


Figure 4

Figure 5

Leaflet 802-06

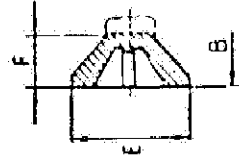


Figure 6

Leaflet 802-12

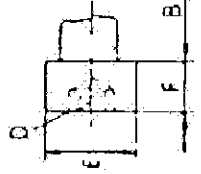


Figure 8

Leaflet 802-02

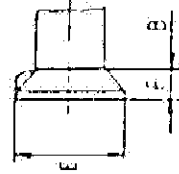


Figure 9

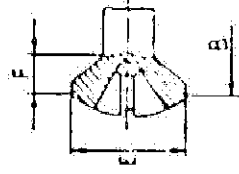


Figure 7

Cap screws and bolts

800-09

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Leaflet 802-04

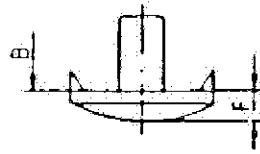


Figure 10

Leaflet 802-03

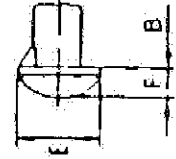


Figure 11

Leaflet 802-15

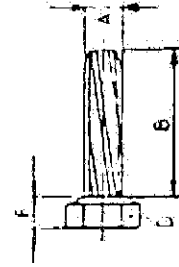


Figure 12

Leaflet 802-16

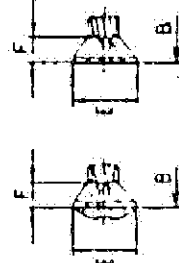


Figure 13

Leaflet 802-15

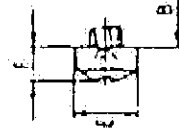


Figure 14

Leaflet 802-16

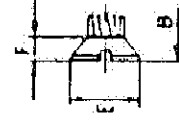


Figure 15

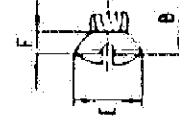


Figure 16

O

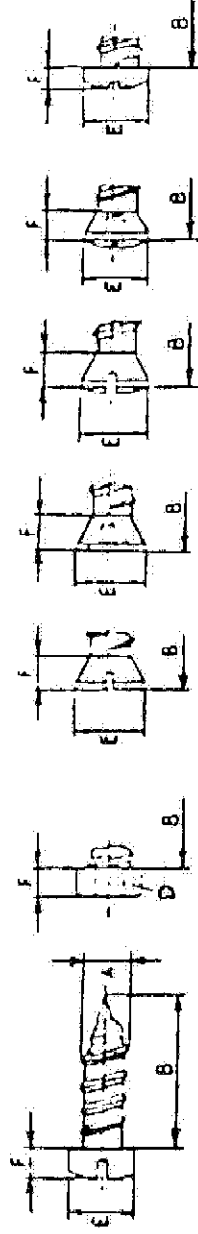


Figure 19 Figure 20 Figure 21 Figure 22 Figure 23 Figure 24 Figure 25

Leaflet 802-11 Leaflet 802-08 Leaflet 802-10 Leaflet 802-09

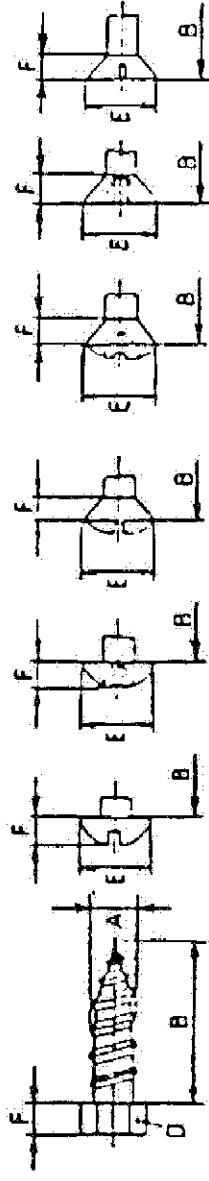


Figure 26 Figure 27 Figure 28 Figure 29 Figure 30 Figure 31 Figure 32

Code letter	A	B	C	D	E	F	G	H	J
Characteristic description	Thread or nominal ϕ	Nominal length	Threaded length	Width across flats	Head ϕ or width E_1, E_2	Head height		Material	Surface protection/treatment
Unit	mm	mm	mm	mm	mm	mm	-	-	-

Nuts

Leaflet 802-07

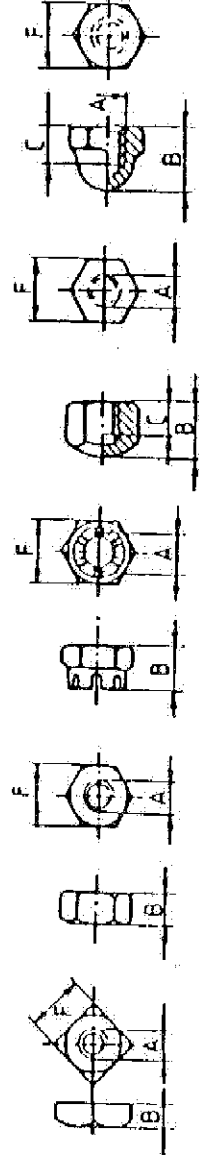


Figure 1 Figure 2 Figure 3 Figure 4 Figure 5

Code letter	A	B	C	D	E	F	G	H	J
Characteristic description	Thread	Nut thickness	Threaded length			width across flats		Material	Surface protection/treatment
Unit	mm	mm	mm			mm		-	-

Washers

Leaflet 802-45 Leaflet 802-46

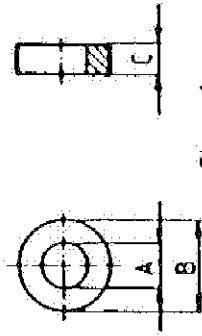


Figure 1

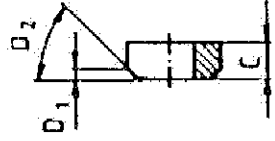


Figure 2

Code letter	A	B	C	D	E	F	G	H	J
Characteristic description	Inside diameter	Outside diameter	Thickness	Chamfer height and/or chamfer angle				Material	Surface protection/treatment
Unit	mm	mm	mm	mm				-	-



Split pins

Leaflet 802-40

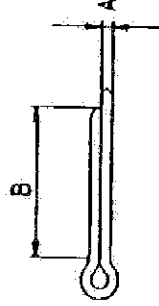


Figure 1

Code letter	A	B	C	D	E	F	G	H	J
Characteristic description	Nominal diameter	Nominal length						Material	Surface protection/treatment
Unit	mm	mm						-	-

Rivets

800-09

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Leaflets 802-21

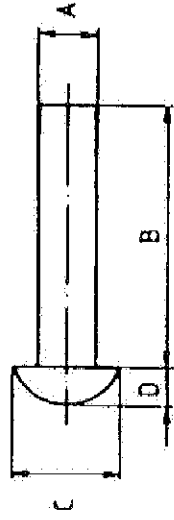


Figure 1

Leaflet 802-22

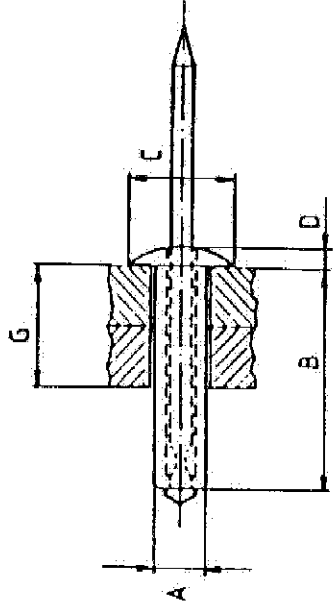


Figure 2

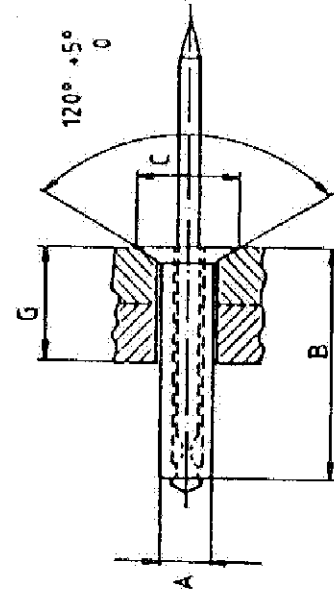


Figure 3

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- 19 -

800-09

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Code letter	A	B	C	D	E	F	G	H	J
Characteristic description	Diameter	Length	Head \varnothing	Head thickness			Range of grip lengths	Material	
Unit	mm	mm	mm	mm			mm		

Cylindrical pins

800-09

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Leaflet 802-41

Leaflet 802-44

Leaflet 802-42

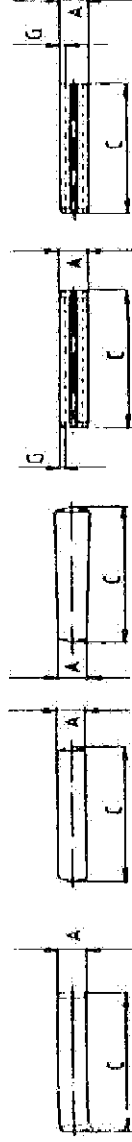


Figure 1

Figure 2

Figure 3

Figure 4

Figure 5

Code letter	A	B	C	D	E	F	G	H	J
Characteristic description	Diameter	Size tolerance or tolerance zone for A	Length				Thickness	Material	Surface protection/treatment
Unit	mm	mm	mm				mm	-	-

Tubes

Leaflets 803-10, 803-11, 803-12, 803-13, 803-14, 803-15

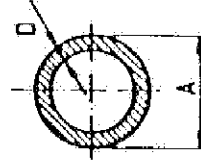


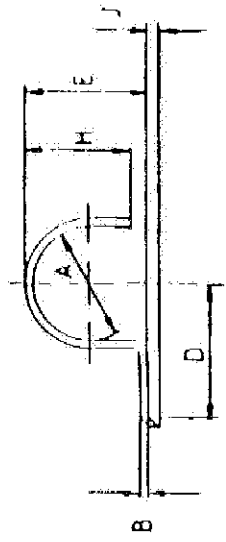
Figure 7

Code letter	A	B	C	D	E	F	G	H	J
Characteristic description	Outside diameter	Size tolerance for A		Wall thickness	Size tolerance for D	Nominal pressure		Material	Surface protection/treatment
Unit	mm	mm		mm	mm or %	bar		-	-

800-09

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Pipes clips
Leaflet 803-30



Leaflet 803-31

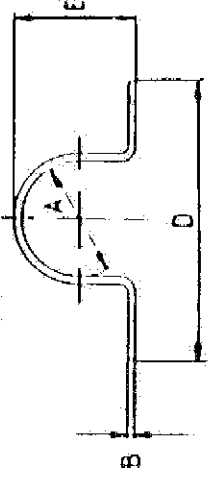
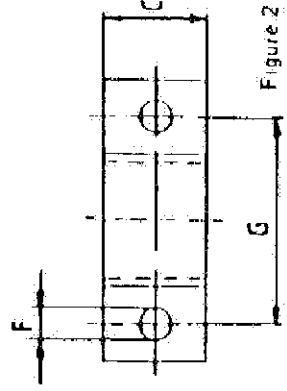


Figure 1

Code letter	A	B	C	D	E	F	G	H	J
Characteristic description	Diameter	Thickness	Width	Length	Height	Hole diameter	Distance between hole diameters	Height	Play
Unit	mm	mm	mm	mm	mm	mm	mm	mm	mm

Figure 2



Lubricators

Leaflet 805-01

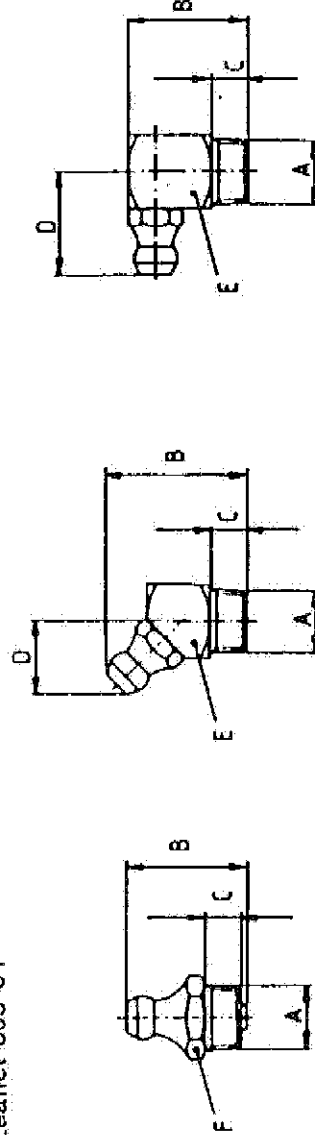


Figure 1

Code letter	A	B	C	D	E	F	G	H	J
Characteristic description	Thread	Height	Threaded length	Play	Width across flats Square	Width across flats Hexagon		Material	Surface protection/treatment
Unit	mm	mm	mm	mm	mm	mm			

Figure 2

Figure 3

Rigid pipe connections for copper pipes

Leaflet 803-34

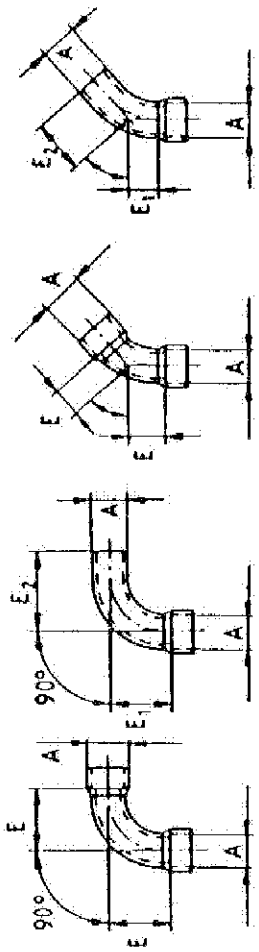


Figure 4

Figure 3

Figure 2

Figure 1

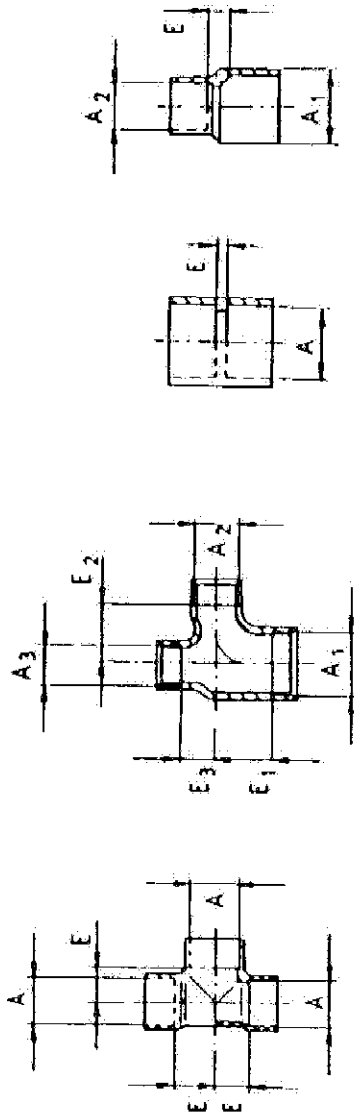


Figure 8

Figure 7

Figure 6

Figure 5



Figure 9

Code letter	A	B	C	D	E	F	G	H	J
Characteristic description	Connecting \varnothing A_1, A_2, A_3				Overall length/ Branch lengths E_1, E_2, E_3				
Unit	mm				mm				

Pipe connections

800-09
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Leaflet 803-35

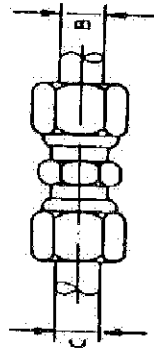


Figure 1

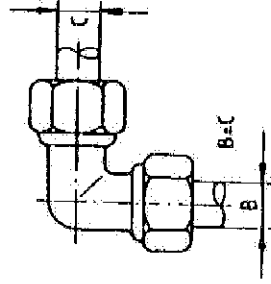


Figure 2

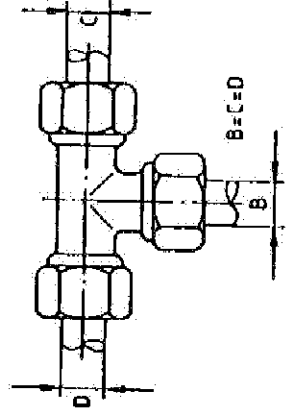


Figure 3

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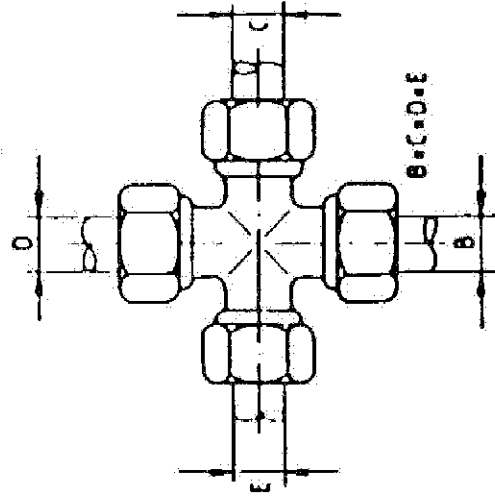


Figure 4

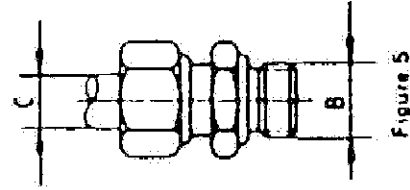


Figure 5

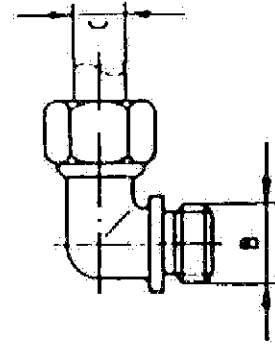


Figure 6

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800-09
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Leaflet 803-35

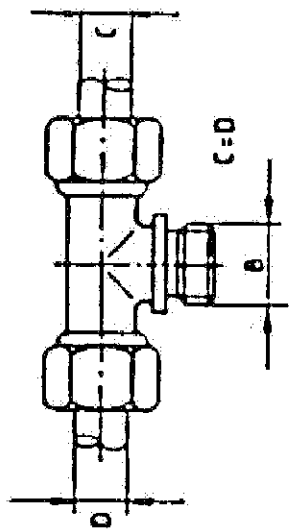


Figure 7

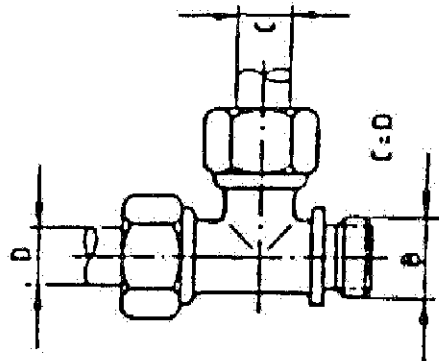


Figure 8

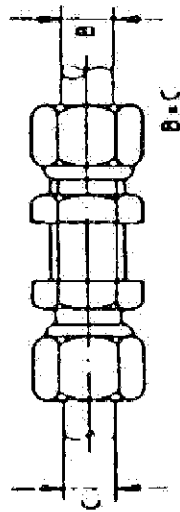


Figure 9

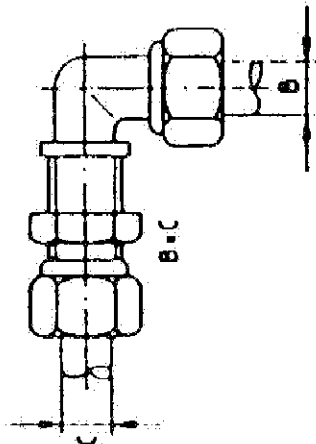


Figure 10

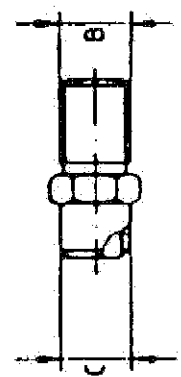


Figure 11

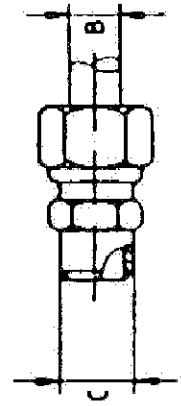


Figure 12

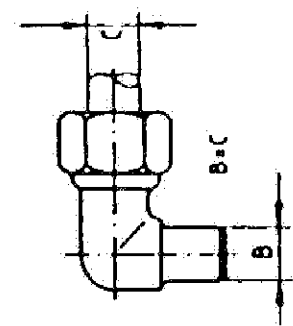


Figure 13

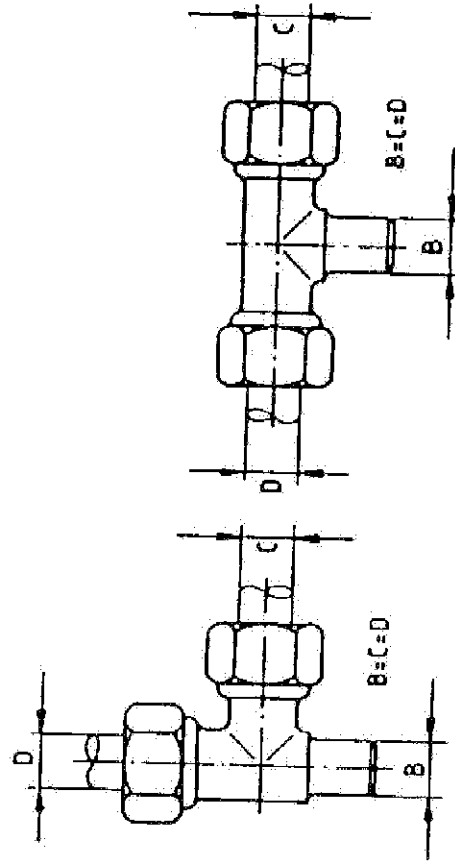


Figure 14

Figure 15

Code letter	A	B	C	D	E	F	G	H	J
Characteristic description		Thread gauge/ Collar Ø/ Coupling Ø	Connecting diameter/ Coupling Ø	Connecting diameter Coupling Ø					
Unit		mm	mm	mm					

Application

As from 1 July 1990.

All UIC railways.

Record references

Heading under which the question has been dealt with:

- Question 5 SB 12 - Creation of selective list of assembly and manufacturing components.

(Sub-Committee for "Dimensional Standardisation": Paris, January 1990).