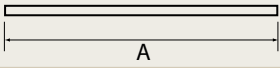
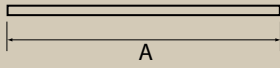


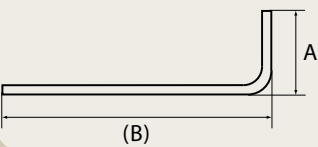
Shape Codes BC8666:2005

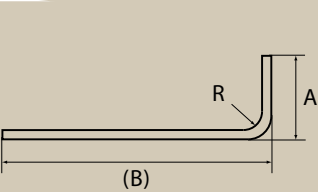
**Total length of bar (L)
measured along centre line**

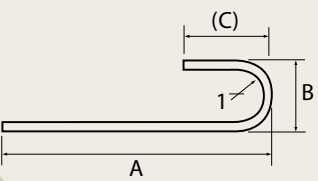
**Total length of bar (L)
measured along centre line**

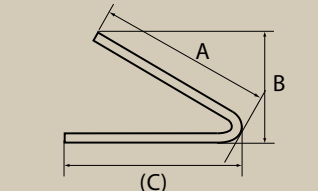
01  A

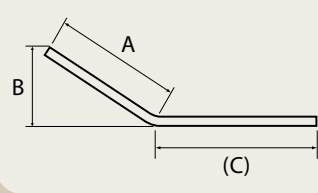
01  A
Stock bars are supplied in 12 metre notional lengths in diameters of 12mm and above in original manufacturers bundles. Tolerances for stock lengths shall be subject to BS4449:2005

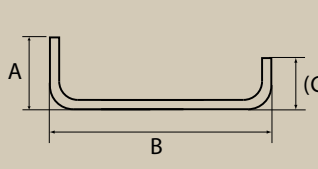
11  A + (B) - 0.5r - d
Neither A nor B shall be less than P in Table 2

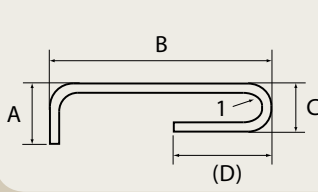
12  A + (B) \bar{n} 0.43R \bar{n} 1.2d
Neither A nor B shall be less than P in Table 2 nor less than (R + 6d)

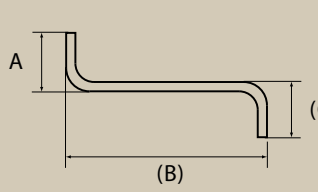
13  A + 0.57B + (C) \bar{n} 1.6d
B shall not be less than 2(r + d). Neither A nor C shall be less than P in Table 2 nor less than (B/2 + 5d). See Note 3. Key: 1 - Semi-circular

14  A + (C) \bar{n} 4d
Neither A nor (C) shall be less than P in Table 2. See note 1.

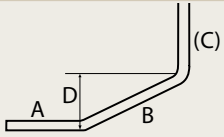
15  A + (C)
Neither A nor (C) shall be less than P in Table 2. See note 1.

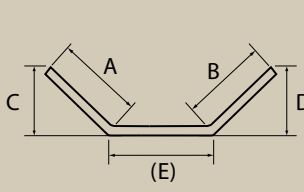
21  A + B + (C) \bar{n} r \bar{n} 2d
Neither A nor (C) shall be less than P in Table 2

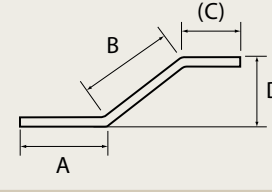
22  A + B + C + (D) - 1.5r - 3d
C shall not be less than 2(r + d). Neither A nor (D) shall be less than P in Table 2. (D) shall not be less than (C/2 + 5d). Key: 1 - Semi-Circular

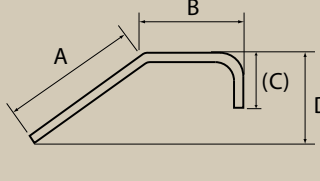
23  A + B + (C) \bar{n} r \bar{n} 2d
Neither A nor (C) shall be less than P in Table 2

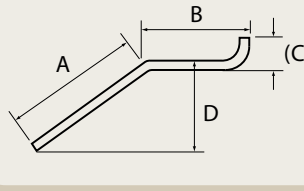
Shape Code

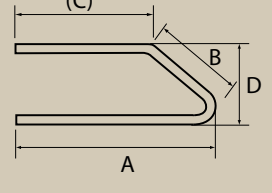
24  A + B + (C)
A and (C) are at 90° to one another

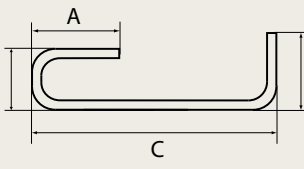
25  A + B + (E)
Neither A nor B shall be less than P in Table 2. If E is the critical dimension, schedule a 99 and specify A or B as the free dimension. See note 1.

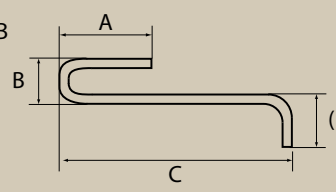
26  A + B + (C)
Neither A nor (C) shall be less than P in Table 2. See note 1.

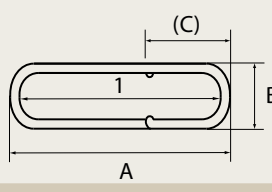
27  A + B + (C) \bar{n} 0.5r \bar{n} d
Neither A nor (C) shall be less than P in Table 2. See note 1.

28  A + B + (C) \bar{n} 0.5r \bar{n} d
Neither A nor (C) shall be less than P in Table 2. See note 1.

29  A + B + (C) \bar{n} r \bar{n} 2d
Neither A nor (C) shall be less than P in Table 2. See note 1.

31  A + B + C + (D) \bar{n} 1.5r \bar{n} 3d
Neither A nor (D) shall be less than P in Table 2

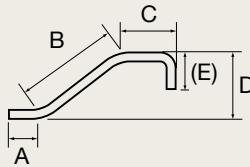
32  A + B + C + (D) \bar{n} 1.5r \bar{n} 3d
Neither A nor (D) shall be less than P in Table 2. See note 1.

33  2A + 1.7B + 2(C) - 4d
A shall not be less than 12d + 30mm. B shall not be less than 2(r + d). (C) shall not be less than P in Table 2, nor less than (B/2 + 5d). See Note 3. Key: 1 - Semi-circular

Shape Codes BC8666:2005

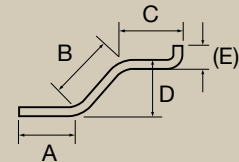
**Total length of bar (L)
measured along centre line**

34



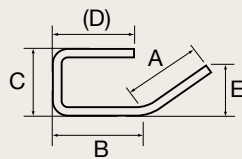
$A + B + C + (E) \bar{n} 0.5r - d$
Neither A nor (E) shall be less than P in Table 2. See note 1.

35



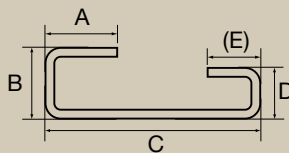
$A + B + C + (E) \bar{n} 0.5r \bar{n} d$
Neither A nor (E) shall be less than P in Table 2. See note 1.

36



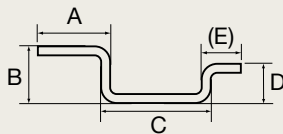
$A + B + C + (D) \bar{n} r \bar{n} 2d$
Neither A nor (D) shall be less than P in Table 2. See note 1.

41



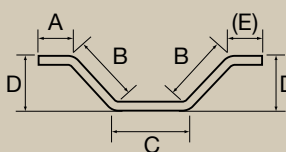
$A + B + C + D + (E) - 2r - 4d$
Neither A nor (E) shall be less than P in Table 2.

44



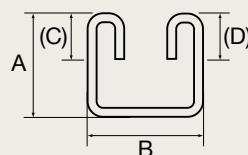
$A + B + C + D + (E) - 2r - 4d$
Neither A nor (E) shall be less than P in Table 2. See note 1.

46



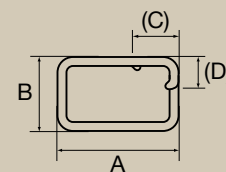
$A + 2B + C + (E)$
Neither A nor (E) shall be less than P in Table 2. See note 1.

47



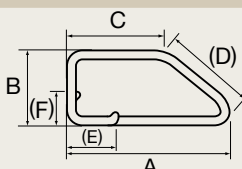
$2A + B + 2C + 1.5r - 3d$
(C) and (D) shall be equal and not more than A nor less than P in Table 2. Where (C) and (D) are to be minimized the following formula may be used:
 $L = 2A + B + \max(21d, 240)$

51



$2(A + B + (C)) - 2.5r - 5d$
(C) and (D) shall be equal and not more than A or B nor less than P in Table 2. Where (C) and (D) are to be minimized the following formula may be used: $L = 2A + 2B + \max(16d, 160)$

56

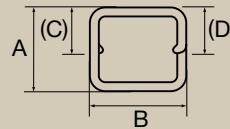


$A + B + C + (D) + 2(E) \bar{n} 2.5r \bar{n} 5d$
(E) & (F) shall be equal and not more than B or C, nor less than P in Table 2

**Total length of bar (L)
measured along centre line**

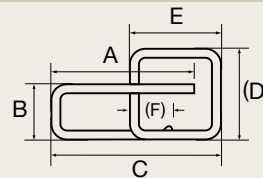
Shape Code

63



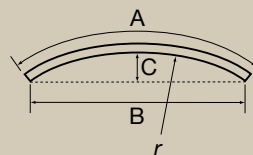
$2A + 3B + 2(C) - 3r - 6d$
(C) and (D) shall be equal and not more than A or B nor less than P in Table 2. Where (C) and (D) are to be minimized the following formula may be used: $L = 2A + 3B + \max(14d, 150)$

64



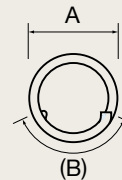
$A + B + C + 2D + E + (F) - 3r - 6d$
Neither A nor (F) shall be less than P in Table 2. See note 2.

67



A
See Clause 10

75



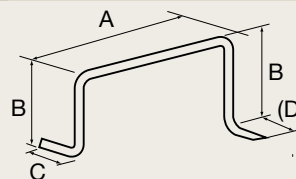
$\pi(A-d) + B$
Where B is the overlap

77



$C\pi(A-d)$
Where B is greater than $A/5$ this equation no longer applies, in which case the following formula may be used:
 $L = C((\pi(A-d))^2 + B^2)^{0.5}$
C = Number of turns

98



$A + 2B + C + (D) - 2r - 4d$
Isometric sketch.
Neither C nor (D) shall be less than P in Table 2

99

All other shapes where standard shapes cannot be used.

No other shape code number, form of designation or abbreviation shall be used in scheduling.

A dimensional sketch shall be drawn over the dimension columns A to E. Every dimension shall be specified and the dimension that is to allow for permissible deviations shall be indicated in parenthesis, otherwise the fabricator is free to choose which dimensions shall allow for tolerance.

To be calculated

See Note 2.

The values for minimum radius and end projection, r and P respectively, as specified in Table 2, shall apply to all shape codes (see 7.6).

The dimensions in parenthesis are the free dimensions. If a shape given in this table is required but a different dimension is to allow for the possible deviations, the shape shall be drawn out and given the shape code 99 and the free dimension shall be indicated in parenthesis.

The length of straight between two bends shall be at least 4d, see figure 6.

Figures 4, 5 and 6 should be used in the interpretation of bending dimensions.

NOTE 1 The length equations for shape codes 14, 15, 25, 26, 27, 28, 29, 34, 35, 36 and 46 are approximate and where the bend angle is greater than 45°, the length should be calculated more accurately allowing for the difference between the specified overall dimensions and the true length measured along the central axis of the bar. When the bending angles approach 90°, it is preferable to specify shape code 99 with a fully dimensional sketch.

NOTE 2 Five bends or more might be impractical within permitted tolerances.

NOTE 3 For shapes with straight and curved lengths (e.g. shape codes 12, 13, 22, 33 and 47) the largest practical mandrel size for the production of a continuous curve is 400mm. See also Clause 10.