

# 30° straight branch pieces, 2 and 3 mm.

Revised: 16.06.2020

Diameter for 2 mm:  $\phi 100 - \phi 1000$  mm.  
Diameter for 3 mm:  $\phi 150 - \phi 1000$  mm.

Straight branch pieces are welded and made of 2 and 3 mm sheet metal (s). Straight branch pieces with  $A = C \leq 350$  mm are supplied for assembly with pull rings [f.b] and for  $A = C \geq 400$  mm with flanges [m.fl].

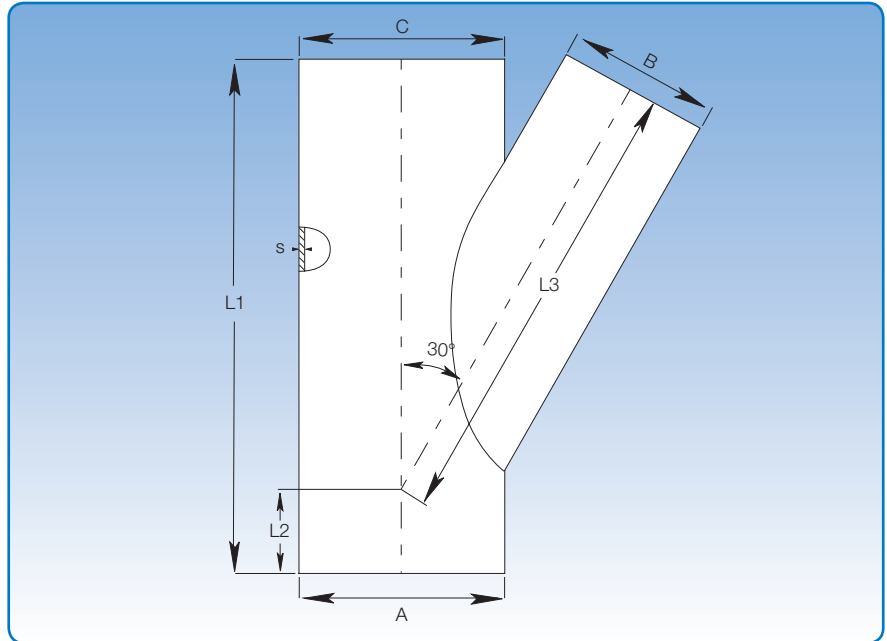
When assembled with loose flanges, [f.b.m.fl], and flanges [m.fl] L1 is extended by  $2 \times 50$  mm.

State A-, B- and C dimensions when ordering. Options are limited by  $A = C$ , and  $A \geq B$ .

The branch determines the length of L1. Branch pieces are always straight with the branch centrally located.

L1, L2 and L3 can be calculated using the stated formulas.

For double branch pieces, the highest value of dim. B determines L1 on the common branch. L2 and L3 can then be calculated for both branches. Normally, the branches are opposite each other.



**Calculating L2 and L3:**

L1 = see table

$$L2 = \frac{L1}{2} - \left( \frac{A}{2 \times \tan 30^\circ} \right)$$

$$L3 = \frac{L1 - L2}{\cos 30^\circ} - \left( \frac{B}{2} \times \tan 30^\circ \right)$$

**Example:**

A = B = C = 450

L1 = 1250 mm

$$L2 = \frac{1250}{2} - \left( \frac{450}{\tan 30^\circ} \right) = 625 - 389,71$$

L2 = 235,29 ~ 235 mm

$$L3 = \frac{1250 - 235}{\cos 30^\circ} - \left( \frac{450}{2} \times \tan 30^\circ \right) = 1172,06 - 129,92$$

L3 = 1042,14 ~ 1042 mm

Dimensions				
A = C mm	B mm	L1 mm	L2 mm	L3 mm
Select (100 - 1000)	80	350	Calculate	Calculate
	100	350		
	120	350		
	125	400		
	140	450		
	150	450		
	160	450		
	180	550		
	200	550		
	225	600		
	250	750		
	275	750		
	300	750		
	315	850		
	350	950		
	400	1050		
	450	1250		
	500	1250		
	550	1450		
	600	1450		
650	1650			
700	1650			
750	1850			
800	1850			
850	2050			
900	2050			