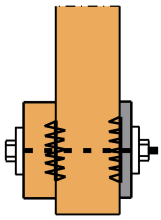
Technical Sheet

C11
Unilateral gear GEKA C11

Along with the dowel serves to link two timber elements.





Features

Material

- **Galvanized**

Benefits

- **When connected using pins and dowels do not come into contact two bonded materials.**

Applications

Applicatons

wood

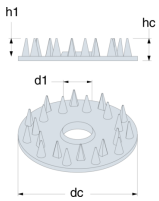
Scope

- **With the dowel serves to link two timber elements.**

Technical Sheet

C11
Unilateral gear GEKA C11

Technical Data



Product Dimensions

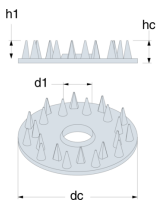
Reference	Connector Dimensions[mm]								
	Product Dimensions[mm]								Other
	t[mm]	a1[mm]	a2[mm]	Ø (2)			Height		Weight[kg]
				External	Center hole	Side holes	Teeth	Total	
				dc[mm]	d_1[mm]	d2[mm]	h_1[mm]	hc[mm]	
C11-65M16-B	3	-	-	65	16.5	-	12	15	0.09
C11-80M20-B	3	-	-	80	20.5	-	12	15	0.13
C11-95M24-B	3	-	-	95	24.5	-	12	15	0.17
C11-115M24-B	3	-	-	115	24.5	-	12	15	0.25

Capacities

Reference	Shear connectors capacity
	Characteristic Capacities[kN]
	Characteristic value of the load-bearing capacity parallel to the fiber (α=0)
C11-65M16-B	13.1
C11-80M20-B	17.9
C11-95M24-B	23.1
C11-115M24-B	30.8

For the load capacity of the anchor plate, the values summed.

Must be a minimum distance drive dowels see EN1995-1-1



Dimensions - Round single sided C11

Reference	Connector Dimensions[mm]					
	Other	Product Dimensions[mm]				
	Type	t[mm]	Ø (2)		Height	
			External	Center hole	Teeth	Total
			dc[mm]	d_1[mm]	h_1[mm]	hc[mm]
C11-65M16-B	C11	3	65	16.5	12	15
C11-80M20-B	C11	3	80	20.5	12	15
C11-95M24-B	C11	3	95	24.5	12	15
C11-115M24-B	C11	3	115	24.5	12	15

Technical Sheet

C11
Unilateral gear GEKA C11

Minimum distances and characteristic values

Reference	Connector Dimensions[mm]		Shear connectors capacity								
	Other	Product Dimensions[mm]	Chosen timber thickness[mm]		Minimum distances[mm]						Characteristic shear resistance (bolt resistance not included) [kN]
	Type	db[mm]	t_1[mm]	t_2[mm]	Spacing perpendicular to grain a_2[mm]	from loaded end $a_{3.t}$[mm]	from unloaded end $a_{3.c}$ $\alpha=90°$ [mm]	from loaded edge $a_{4.t}$ $\alpha=90°$ [mm]	from unloaded edge $a_{4.c}$[mm]	Spacing parallel to grain a_1 $\alpha=0°$ [mm]	$R_{v.k}$[kN]
C11-65M16-B	C11	16	36	60	78	130	98	52	52	130	13.1
C11-80M20-B	C11	20	36	60	96	160	120	64	64	160	17.8
C11-95M24-B	C11	24	36	60	114	190	143	76	76	190	23.1
C11-115M24-B	C11	24	36	60	138	230	173	92	92	230	30.8

The given characteristic shear resistance per connector $R_{v.k}$ is calculated according to the minimum distances given in this table and for wood grade C24. This capacity can be increased with a higher $a_{3.t}$ or a higher wood grade (see k_2 and k_3 factor according to EN1995). For lower t_1 or t_2, please refer to EN1995. The characteristic bolt shear resistance is not included and should be added.

Installation

Installation

- The installation is made with a hydrolic press or with a wood block and a sledgehammer.
- The bolt installation always requires two washers. See recommandations on thickness and distances for t_1 and t_2

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