

POS. 151: DIN E12.4 TAB 12/9

general statements

results acc. to DIN EN 1995:2010, Deutschland, $\gamma_1 = 1.30$, $\gamma_2 = 1.30$
single shear plane connection, exact verification acc. to DIN EN 1995, 8.2.2
 $F_{v,Rd}$ calculated with γ - exact verification acc. to DIN EN 1995, 8.2.2
duration of load: medium-term

outer timber member 1

service class 1, solid coniferous timber, C24 (S10), $\rho_k = 350 \text{ kg/m}^3$, $t = 200.0 \text{ mm}$, $k_{mod} = 0.80$

outer timber member 2

service class 1, solid coniferous timber, C24 (S10), $\rho_k = 350 \text{ kg/m}^3$, $t = 200.0 \text{ mm}$, $k_{mod} = 0.80$

fastener

threaded rod, d variable, FK 4.6, washer d = 72 mm
 $F_{v,Rk}$ increased acc. to DIN EN 1995, 8.2.2(2)

$F_{v,Rd}$ [kN]

$\Sigma\alpha/\varnothing, \varnothing_u$ °/mm	10	12	16	20	24	30
0°	3.855	5.294	8.887	12.955	17.527	25.297
15°	3.838	5.270	8.841	12.883	17.419	25.123
30°	3.790	5.200	8.712	12.676	17.116	24.634
45°	3.717	5.095	8.517	12.367	16.664	23.910
60°	3.628	4.967	8.282	11.997	16.126	23.057
75°	3.532	4.829	8.032	11.604	15.560	22.170
90°	3.438	4.693	7.787	11.223	15.015	21.323
105°	3.350	4.568	7.563	10.878	14.523	20.566
120°	3.274	4.461	7.370	10.582	14.106	19.929
135°	3.213	4.374	7.217	10.347	13.775	19.427
150°	3.168	4.311	7.105	10.177	13.536	19.066
165°	3.141	4.272	7.037	10.075	13.393	18.850
180°	3.132	4.259	7.015	10.040	13.344	18.777

all values per shear plane
 \varnothing_u = diameter of washer