Heavy-duty HVP 88425

Product Specifications

Dimensions w × h × d	120 x 250 x 20
Number of screws	20
Screw size	ø 8 x 100 – 200
Minimum timber section with screw ø 8 × 160 (mm) header	160 x 270
Joist	140 x 270
Characteristic load capacity* ø 8 × 160	75.43
ø 8 x 200	93.31
Carton quantity	4
CE	*

* F2,Rk (kN) for GL24h with fully threaded screws: ø 8 x 160 with effective thread length of 150 mm and ø 8 x 200 with effective thread length of 190 mm. For other screws and thread lengths or wood based materials: cf. design manual.

Application

Heavy-duty concealed beam connector for wood-wood connections.

Product Description

Main and secondary beam connection wood to wood

Main and secondary beam connection wood to wood with PITZL HVP 88425.1000 according to ETA-15/0187. The connection to secondary beam with 10 SFS HT (Heco) screws with a diameter of 8.0 mm and a length of 160/180/200 mm. Connection to main beam with 10 SFS HT (Heco) screws with a diameter of 8.0 mm and a length of 160/180/200 mm. The lift-off protection with 2 pcs. SFS HT cylinder head screws with a diameter of 6.0 mm and a length of 20 mm is required. A transverse tension lock is/is not to be provided in the area of the main/secondary beam. The main beam is/is not torsional fixed or sufficiently held. The serviceability has to be proven by the stiffness characteristics. A fire resistance time of 60 minutes is to be solved by appropriate design measures.

The characteristic load bearing capacity according to timber strength class C24 are:
$F_{1,Rk}$ = 48.32 / 50.00 / 50.00 kN – Force acting in direction of the secondary beam
$F_{2,Rk}$ = 69.89 / 78.23 / 86.46 kN – Force acting in direction of insertion
$F_{3,Rk}$ = 32.27 kN – Force acting against direction of insertion
$F_{4,Rk}$ = 32.27 kN – Force acting perpendicular to direction of insertion
$M_{tor,J,Rk}$ = 1029.44 kN – Rotation moment in the axis of the secondary beam

The characteristic load bearing capacity according to timber strength class GL24h are:
$F_{1,Rk}$ = 50.00 / 50.00 / 50.00 kN – Force acting in direction of the secondary beam
$F_{2,Rk}$ = 75.43 / 84.43 / 93.31 kN – Force acting in direction of insertion
$F_{3,Rk}$ = 38.85 kN – Force acting against direction of insertion
$F_{4,Rk}$ = 38.85 kN – Force acting perpendicular to direction of insertion
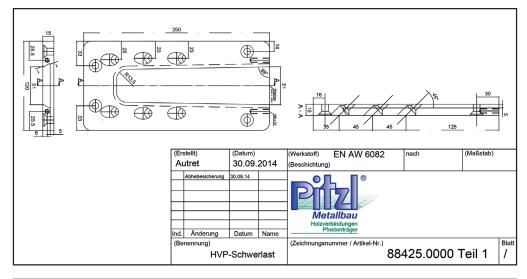$M_{tor,J,Rk}$ = 1079.69 kN – Rotation moment in the axis of the secondary beam

The number and arrangement of the connectors as well as the installation and assembly must be taken from the specifications in accordance with ETA-15/0187. Basically, the requirements of DIN EN 1995 must be fulfilled.
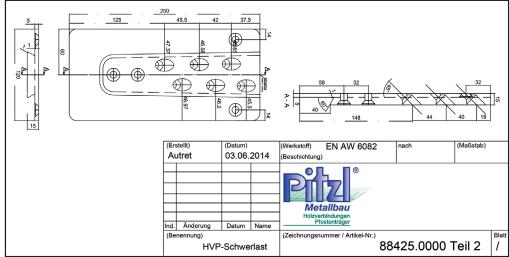
Pitzl®

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Static Values

Effective thread length (ℓ_{ef})		Minimal section (mm)		Characteristic load capacity R_K (KN)							
				Solid wood C24 ($\rho_k = 350$ kg/m³)				Glued-laminated timber GL24h ($\rho_k = 385$ kg/m³)			
Screws	ℓ_{ef} (mm)	H	J	$F_{2,RK}$	$F_{3,RK}$	$F_{4,RK}$	$F_{1,RK}$	$F_{2,RK}$	$F_{3,RK}$	$F_{4,RK}$	$F_{1,RK}$
ø 8 x 160	150	160 x 270	140 x 270	69.89	32.27	32.27	48.32	74.65	33.63	33.63	50.00
ø 8 x 180	170	180 x 300	140 x 300	78.23			50.00	83.55			50.00
ø 8 x 200	190	200 x 330	140 x 330	86.46			50.00	92.34			50.00

(Erstellt) Autret	(Datum) 30.09.2014	(Werkstoff) EN AW 6082 (Beschichtung)	nach	(Maßstab)
Abhebesicherung	30.09.14			
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Ind.	Änderung	Datum	Name
(Benennung) HVP-Schwerlast		(Zeichnungsnummer / Artikel-Nr.) 88425.0000 Teil 2		Blatt /

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