

Hollow-ceiling anchor FHY

Permissible loads¹⁾ of a single anchor in pre-stressed hollow-core concrete slabs of strength class $\geq$ C45/55.

For the design the complete general construction technique permit Z-21.1-1711 from 05.12.2022 has to be considered.

Type	Material/ surface	Screw material ²⁾	Bottom flange thickness d_b [mm]	Installation torque T_{inst} [Nm]	Required edge distance (with one edge) for max. load c_{cr} [mm]	Pre-stressed hollow-core concrete slabs		
						Permissible load (F_{perm}); minimum spacing (s_{min}) and edge distances (c_{min}) with reduced loads		
						$F_{perm}^{3)}$ [kN]	$s_{min}^{4)}$ [mm]	$c_{min}^{4)}$ [mm]
FHY M6	gvz	8.8	25 - 29	8	150	0.7	70	100
	gvz	8.8	30 - 39	8	150	0.9	80	100
	gvz	8.8	≥ 40	8	150	2.0	100	100
	R	A4 - 70	25 - 29	15	150	0.7	70	100
	R	A4 - 70	30 - 39	15	150	0.9	80	100
	R	A4 - 70	≥ 40	15	150	2.0	100	100
FHY M8	gvz	4.6	25 - 29	10	150	0.7	70	100
	gvz	4.6	30 - 39	10	150	0.9	80	100
	gvz	4.6	≥ 40	10	150	2.0	100	100
	R	A4 - 70	25 - 29	20	150	0.7	70	100
	R	A4 - 70	30 - 39	20	150	0.9	80	100
	R	A4 - 70	≥ 40	20	150	2.0	100	100
FHY M10	gvz	4.6	30 - 39	20	150	1.2	80	100
	gvz	4.6	≥ 40	20	150	3.0	100	100
	R	A4 - 70	30 - 39	40	150	1.2	80	100
	R	A4 - 70	≥ 40	40	150	3.0	100	100

¹⁾ The partial safety factors for material resistance as regulated in the ETA as well as a partial safety factor for load actions of $\gamma_L = 1.4$ are considered.

²⁾ Further steel grades, versions and technical data see approval.

³⁾ Maximum load for char. spacing and edge distances. Valid for tensile load, shear load and oblique load under any angle. In the case of shear loads with lever arm (bending) as well as reduced/minimum spacing or edge distances (anchor groups), the design must be carried out in accordance with the provisions of the complete technical permit.

⁴⁾ Minimum possible axial spacings resp. edge distance while reducing the permissible load.