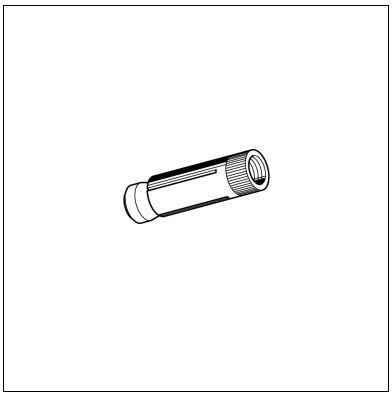


Hollow Core Anchor AN Easy

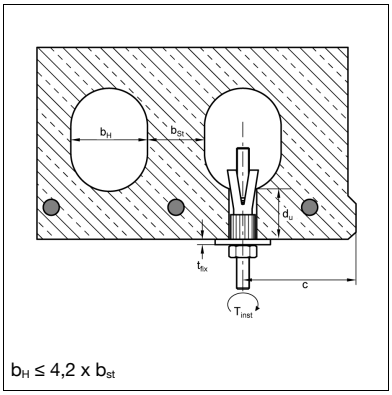
Group: 1412

Application

Internal thread anchor to be used in pre-stressed hollow concrete slabs. Suitable for suspension of pipe lines, channels, etc. considering the approval regulations for the use with threaded rods or screw. Only to be used with construction components under dry indoor conditions. The general technical approval allows the anchor to be installed even if the drill hole does not hit the cavity.

Installation

Tightening the screw or nut pulls the expansion cone inside the anchor sleeve which keys into the cavity. The anchor spreads Y-shaped inside the hollow space and using the specified torque gives secure form closure.

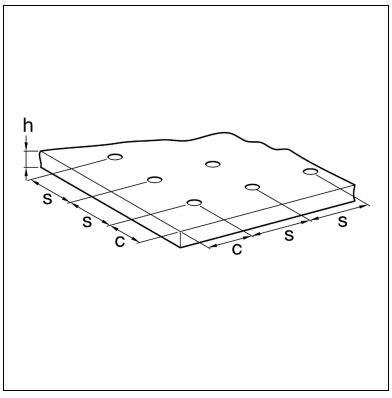


$b_H \leq 4{,}2 \times b_{st}$

Technical Data

General installation parameters:

Anchor size	M8	M10	M12
Drill hole dia. d_0 = [mm]	12	16	18
Depth of drill hole h_0 = [mm]	55	60	70
Clearance hole in the fixture $d_f \leq$ [mm]	9	12	14
Minimum length of screw min l_s [3)] [mm]	47	55	61
Minimum lenght of stud min l_s [3)] [mm]	53	63	71
Installation torque T_{inst} = [Nm]	20	30	40
Minimum strength of screw/stud	5.8	5.8	5.8
Character. centre distance s_{cr} [mm]	300	300	300
Character. edge distance c_{cr} [mm]	150	150	150
Minimum edge distance c_{min} [mm]	100	100	100



Admission requirement for single anchor used in pre-stressed hollow concrete slabs ≥ C45/55:

Anchor size Web thickness $d_u \geq$ [mm]	M8 25	M8 30	M8 40	M8 50	M10 25	M10 30	M10 40	M10 50
Perm. load [1)] at $c \geq c_{cr}$ [kN]	0.7	0.9	2.0	3.6	0.9	1.2	3.0	3.6
Perm. load [1)] at c_{min} [kN]	0.35	0.8	1.8	3.0	0.8	1.0	2.7	3.0
Loads under fire exposure								
Perm. load R 30 perm. F [kN]		0.9	0.9	0.9		1.2	1.5	1.5
Perm. load R 60 perm. F [kN]		0.9	0.9	0.9		1.2	1.5	1.5
Perm. load R 90 perm. F [kN]		0.7	0.7	0.7		1.2	1.2	1.2
Perm. load R 120 perm. F [kN]		0.4	0.4	0.4		1.0	1.0	1.0

Anchor size Web thickness $d_u \geq$ [mm]	M12 25	M12 30	M12 40	M12 50
Perm. load [1)] at $c \geq c_{cr}$ [kN]	1.0	1.2	3.0	4.3
Perm. load [1)] at c_{min} [kN]	0.8	1.0	2.7	3.6
Loads under fire exposure				
Perm. load R 30 perm. F [kN]		1.2	1.5	1.5
Perm. load R 60 perm. F [kN]		1.2	1.5	1.5
Perm. load R 90 perm. F [kN]		1.2	1.5	1.5
Perm. load R 120 perm. F [kN]		1.2	1.2	1.2

Admission requirement pair of anchors [4)] pre-stressed hollow concrete slabs ≥ C45/55:

Anchor size Web thickness $d_u \geq$ [mm]	M8 25	M8 30	M8 40	M8 50	M10 25	M10 30	M10 40	M10 50
Perm. load [1] at $c \geq c_{cr}$ [kN]	0.7	1.4	2.6	4.8	1.1	2.0	4.8	4.8
Perm. load [1] at c_{min} [kN]	0.35	1.25	2.35	4.0	0.9	1.8	4.3	4.3
Minimum centre distance s_{min} [mm]	70	80	100	100	70	80	100	100
Perm. bending moments (Steel 5.8)[2] $M_{adm.}$ [Nm]	10.7	10.7	10.7	10.7	21.4	21.4	21.4	21.4
Perm. bending moments (Steel 8.8) M_{adm} [Nm]	17.1	17.1	17.1	17.1	34.2	34.2	34.2	34.2
Loads under fire exposure								
Perm. load R 30 perm. F [kN]		1.25	1.25	1.25		1.8	3.0	3.0
Perm. load R 60 perm. F [kN]		1.25	1.25	1.25		1.8	3.0	3.0
Perm. load R 90 perm. F [kN]		1.25	1.25	1.25		1.8	2.4	2.4
Perm. load R 120 perm. F [kN]		0.8	0.8	0.8		1.8	2.0	2.0

Anchor size Web thickness $d_u \geq$ [mm]	M12 25	M12 30	M12 40	M12 50
Perm. load [1] at $c \geq c_{cr}$ [kN]	1.2	2.0	4.8	5.7
Perm. load [1] at c_{min} [kN]	1.0	1.8	4.3	4.8
Minimum centre distance s_{min} [mm]	70	80	100	100
Perm. bending moments (Steel 5.8)[2] $M_{adm.}$ [Nm]	37.4	37.4	37.4	37.4
Perm. bending moments (Steel 8.8) $M_{adm.}$ [Nm]	59.8	59.8	59.8	59.8
Loads under fire exposure				
Perm. load R 30 perm. F [kN]		1.8	3.0	3.0
Perm. load R 60 perm. F [kN]		1.8	3.0	3.0
Perm. load R 90 perm. F [kN]		1.8	3.0	3.0
Perm. load R 120 perm. F [kN]		1.8	2.4	2.4

[1] For edge distances $c_{min} < c \leq c_{cr}$ the recommended loads can be determined by linear interpolation.

[2] Using lower strength classes, the value is to be reduced accordingly.

[3] The required screw length is determined by the minimum length of screw + the thickness of the fixture t_{fix} (total length = $l_s + t_{fix}$)

[4] Approved load F_{max} / Anchor ≤ F_{max} single anchor. On double anchorage with spacing $s_{min} < s \leq s_{cr}$ the recommended load may be determined by linear interpolation, assuming the limiting value $s = s_{cr}$ for the double anchorage exposed to tension is twice the recommended load of a single anchor.

Material: Steel, zinc-plated

Approvals / Conformity
Approval: Z-21.1-1785, Fire Protection Eximantion, VdS-Approval

[1] Liefertermin auf Anfrage – Ware wird auftragsbezogen beschafft.

Type	Total length [mm]	Hülsen-länge [mm]	W [kg]	Quantity [pack]	Part number
AN Easy M8 [1]	45	35	0.01	50	**110463**
AN Easy M10	53	40	0.03	50	**110465**
AN Easy M12 [1]	58	45	0.04	25	**110466**

07/2024