EASYMIX

Hybrid anchor, with vinylester resin
for fixing in concrete and hollow and solid masonries

T_inst

t_fix

h_0

L_s

d_nom

d   L_f   L

T25

PRE-DOSED SYSTEM : VINYLESTER RESIN*
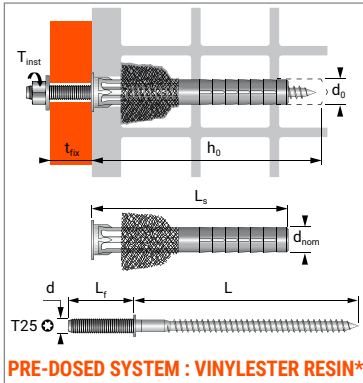
*Shelf life : 18 months

TECHNICAL DATA

RANGE	EASYMIX		Male stud			Drilling Ø	Drilling depth	Max. thick. part to be fixed	Max. tighten torque		Code	
	External Ø	Total length	Thread Ø	Total length	Thread length				Masonry	Concrete		
	(mm) d_{nom}	(mm) L_S	(mm) d	(mm) L	(mm) L_f	(mm) d_O	(mm) h_O	(mm) t_{fix}	(Nm) T_{inst}	(Nm) T_{inst}	Blister x4	Box x12
M8X140-Ø16	16	135	8	180	40	16	150	30	3	10	060230	060228
M10X140-Ø16			10								060231	060229
M10X140-Ø16 EXT*			10								060232	-

* OUTDOOR version, supplied with zinc flake coating (5µm) male studs for external application

SETTING TIME

TEMPERATURE	CURING TIME
5°C	90 min.
15°C	60 min.
25°C	45 min.
35°C	30 min.

CHARACTERISTICS

Zn ZINC COATED STEEL

MASONRIES

CHARATERISTIC & MINIMUM DISTANCES FOR SPACING, EDGE

SIZE			M8/M10
NON-CRACKED CONCRETE	$C_{min} = C_{cr}$	[mm]	80
	$S_{min} = S_{cr}$	[mm]	160
HOLLOW CLAY BRICK	$C_{min} = C_{cr}$	[mm]	100
	$S_{min} = S_{cr}$	[mm]	200
HOLLOW CONCRETE BLOCK	$C_{min} = C_{cr}$	[mm]	100
	$S_{min} = S_{cr}$	[mm]	200

APPLICATION

M8X140-Ø16
- Wall-mounted boiler
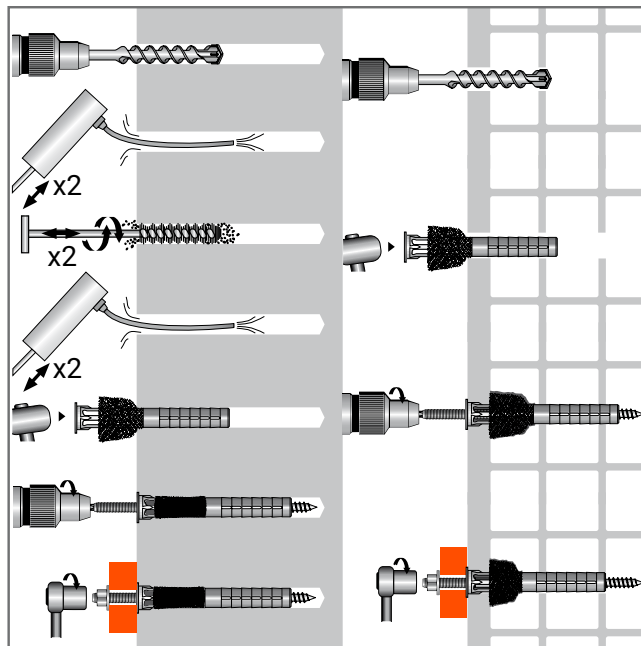- Hand rails
- Bracketing

M10X140-Ø16
- Water heaters
- Electrical switchboards
- Sink

M10X140-Ø16 EXT.
- Air conditioning brackets
- Facade lighting
- Signs

INSTALLATION

x2
x2
x2

CHARACTERISTIC RESISTANCES [kN]

Characteristic resistances are shown as informative, and have to be used by application of safety factors.

TENSILE	
NON-CRACKED CONCRETE – C20/25	
SIZE	M8/M10
N_{Rk} [kN]	10,0
MASONRIES	
SIZE	M8/M10
Hollow concrete block B40 (fb ≥ 6,0 N/mm²)	
N_{Rk} [kN]	2,6
Hollow clay brick Optibric PV 3+ (fb ≥ 9,0 N/mm²)	
N_{Rk} [kN]	1,6
Hollow clay brick Porotherm GF R20 Th+ (fb ≥ 10,0 N/mm²)	
N_{Rk} [kN]	1,6
Hollow clay brick Porotherm GF R37 Th+ (fb ≥ 8,0 N/mm²)	
N_{Rk} [kN]	1,6

SHEAR	
NON-CRACKED CONCRETE – C20/25 to C50/60	
SIZE	M8/M10
V_{Rk} [kN]	10,0
MASONRIES	
SIZE	M8/M10
Hollow concrete block B40 (fb ≥ 6,0 N/mm²)	
V_{Rk} [kN]	7,2
Hollow clay brick Optibric PV 3+ (fb ≥ 9,0 N/mm²)	
V_{Rk} [kN]	5,2
Hollow clay brick Porotherm GF R20 Th+ (fb ≥ 10,0 N/mm²)	
V_{Rk} [kN]	5,2
Hollow clay brick Porotherm GF R37 Th+ (fb ≥ 8,0 N/mm²)	
V_{Rk} [kN]	5,2

RECOMMENDED LOADS OF ONE ANCHOR WITHOUT INFLUENCE OF SPACING & CONCRETE EDGE [kN]

Recommended values are given for spacing ≥ S_{cr} and edge distance ≥ C_{cr}.

TENSILE	
NON-CRACKED CONCRETE – C20/25	
SIZE	M8/M10
N_{Rec} [kN]	2,5
MASONRIES	
SIZE	M8/M10
Hollow concrete block B40 (fb ≥ 6,0 N/mm²)	
N_{Rec} [kN]	0,65
Hollow clay brick Optibric PV 3+ (fb ≥ 9,0 N/mm²)	
N_{Rec} [kN]	0,40
Hollow clay brick Porotherm GF R20 Th+ (fb ≥ 10,0 N/mm²)	
N_{Rec} [kN]	0,40
Hollow clay brick Porotherm GF R37 Th+ (fb ≥ 8,0 N/mm²)	
N_{Rec} [kN]	0,40

$N_{Rec} = N_{Rd} / \gamma_F$; $\gamma_F = 1,4$

SHEAR	
NON-CRACKED CONCRETE – C20/25 to C50/60	
SIZE	M8/M10
V_{Rec} [kN]	2,5
MASONRIES	
SIZE	M8/M10
Hollow concrete block B40 (fb ≥ 6,0 N/mm²)	
V_{Rec} [kN]	1,80
Hollow clay brick Optibric PV 3+ (fb ≥ 9,0 N/mm²)	
V_{Rec} [kN]	1,30
Hollow clay brick Porotherm GF R20 Th+ (fb ≥ 10,0 N/mm²)	
V_{Rec} [kN]	1,30
Hollow clay brick Porotherm GF R37 Th+ (fb ≥ 8,0 N/mm²)	
V_{Rec} [kN]	1,30

$V_{Rec} = V_{Rd} / \gamma_F$; $\gamma_F = 1,4$

EASYMIX

Design resistances for static loads are given for spacing ≥ S_{cr} and edge distance ≥ C_{cr}.
For project with reduced spacing and edge distance, we recommend to use SPIT i-Expert software to design your project.

DESIGN RESISTANCE FOR STATIC LOADS IN NON-CRACKED CONCRETE [kN]

TENSILE			SHEAR		
SIZE		M8/M10	SIZE		M8/M10
N_{Rd} [kN] C20/25		3,3	V_{Rd} [kN] ≥ C20/25		3,3

Distances S_{cr} and C_{cr} must be fulfilled

$N_{Rd} = N_{Rk,p} / \gamma_{Mc}$

$\gamma_{Mc} = 2,1$

$V_{Rd} = V_{Rk} / \gamma_{Mc}$

$\gamma_{Mc} = 2,1$

DESIGN RESISTANCE FOR STATIC LOADS IN MASONRIES [kN]

TENSILE			SHEAR		
SIZE		M8/M10	SIZE		M8/M10
Hollow concrete block B40 (fb ≥ 6,0 N/mm²)			**Hollow concrete block B40 (fb ≥ 6,0 N/mm²)**		
N_{Rd} [kN]		0,9	V_{Rd} [kN]		2,4
Hollow clay brick Optibric PV 3+ (fb ≥ 9,0 N/mm²)			**Hollow clay brick Optibric PV 3+ (fb ≥ 9,0 N/mm²)**		
N_{Rd} [kN]		0,5	V_{Rd} [kN]		1,7
Hollow clay brick Porotherm GF R20 Th+ (fb ≥ 10,0 N/mm²)			**Hollow clay brick Porotherm GF R20 Th+ (fb ≥ 10,0 N/mm²)**		
N_{Rd} [kN]		0,5	V_{Rd} [kN]		1,7
Hollow clay brick Porotherm GF R37 Th+ (fb ≥ 8,0 N/mm²)			**Hollow clay brick Porotherm GF R37 Th+ (fb ≥ 8,0 N/mm²)**		
N_{Rd} [kN]		0,5	V_{Rd} [kN]		1,7

Distances S_{cr} and C_{cr} must be fulfilled

$N_{Rd} = N_{Rk,p} / \gamma_{Mc}$

$\gamma_{Mc} = 2,1$

$V_{Rd} = V_{Rk} / \gamma_{Mc}$

$\gamma_{Mc} = 2,1$