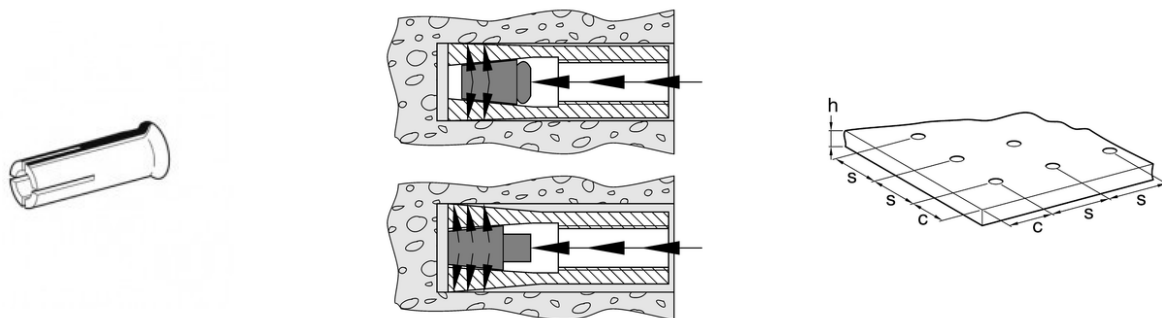


# DROP-IN ANCHOR AN ES



## APPLICATION

Drop-in Anchor for non-cracked concrete and multiple use in cracked concrete.

Suitable for fixing pipelines, channels, etc. meeting the respective approval requirements - for damp locations and outdoor constructions the stainless steel version is required.

- No special drill required
- Setting tool for distance-controlled forced expansion
- Suitable for push-through mounting

## INSTALLATION

As expansion tool use the respective expansion cone for Drop-In Anchor.

The "intelligent" expansion cone facilitates the mounting with bore dia. tolerances or varying concrete quality. By the controlled deformation of the cone during installation, the needed edge and centre distances are decreasing considerably.

### PROSYSTEM ITALIA SRL

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## TECHNICAL DATA

General loads and performance data:

Anchor size	M8x30	M8x40	M10x30	M10x40	M12	M16
Nominal drill hole diameter $d_0$ = [mm]	10	10	12	12	15	20
Depth of drill hole $h_0$ = [mm]	30	40	30	40	50	65
Installation torque $T_{inst}$ = [Nm]	8	8	15	15	35	60
Diameter of clearance hole in the connecting element $d_f \leq$ [mm]	9	9	12	12	14	18
Maximum screwing depth $L_{th}$ [mm]	13	20	12	15	18	23
Minimum screwing depth $L_{smin}$ [mm]	9	9	10	11	13	18
Minimum thickness of concrete slab $h_{min}$ [mm]	100	100	120	120	130	160
Minimum centre distance $s_{min}$ [mm]	60	80	100	100	120	150
Minimum edge distance $c_{min}$ [mm]	95	95	135	135	165	200

Anchor size	M8x30	M8x40	M10x30	M10x40	M12	M16
Approved loads for C20/25-C50/60 [kN]	1.7	2.0	2.0	2.0	2.4	6.3
Approved bending moments (Steel 4.6) $M_{perm}$ [Nm]	6.4	6.4	12.8	12.8	22.2	56.9
Approved bending moments (Steel 8.8) $M_{perm}$ [Nm]	17.1	17.1	34.3	34.3	60.0	152.0
Characteristic centre distance $s_{cr}$ [mm]	180	210	230	170	170	400
Characteristic edge distance $c_{cr}$ [mm]	90	105	115	85	85	200
Loads under fire exposure Steel 4.6						
Approved loads R30 perm. F [kN]	0.4	0.4	0.9	0.9	1.5	3.1
Approved loads R60 perm. F [kN]	0.3	0.3	0.8	0.8	1.3	2.4
Approved loads R90 perm. F [kN]	0.3	0.3	0.6	0.6	1.1	2.0

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Anchor size	M8x30	M8x40	M10x30	M10x40	M12	M16
Approved loads R120 perm. F [kN]	0.2	0.2	0.5	0.5	0.8	1.6
Loads under fire exposure Steel $\geq$ 5.6						
Approved loads R30 perm. F [kN]	0.9	0.9	1.5	1.5	1.5	4.0
Approved loads R60 perm. F [kN]	0.9	0.9	1.5	1.5	1.5	4.0
Approved loads R90 perm. F [kN]	0.9	0.9	1.5	1.5	1.5	3.7
Approved loads R120 perm. F [kN]	0.4	0.4	1.0	1.0	1.2	2.4

Anchor size	M8x30	M8x40	M10x30	M10x40	M12	M16
Approved tensile load C20/25 (Stahl 4.6 to 8.8) [kN]	2.8	3.6	4.0	5.1	7.1	10.5
Oblique (Steel 4.6) perm. V $\geq$ C20/25 [kN]	3.1	3.1	3.7	4.1	7.2	13.4
Oblique (Steel 8.8) perm. V $\geq$ C20/25 [kN]	3.9	3.9	3.7	4.1	12.0	18.0
Bending moments (Screw 4.6) perm. M [Nm]	6.4	6.4	12.8	12.8	22.2	56.8
Bending moments (Screw 8.8) perm. M [Nm]	17.1	17.1	34.3	34.3	60.0	152.0

## APPROVALS

For multiple use for nonstructural applications Approval ETA-10/0258 (M8 - M12), for anchorage in non-cracked concrete Approval ETA-10/0257, Fire protection examination, VdS-conform, FM-Approval  $\geq$  M10.



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Codice	Nome	Peso	Numero di pezzi
110467	AN ES M 8×30	0.01	100
110506	AN ES M10×30	0.02	50
110469	AN ES M10×40	0.02	50
110470	AN ES M12×50	0.04	50
110471	AN ES M16×65	0.1	-

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