

METAL INSULATION PLUG



Type SMMIP



This fixing has been designed for fixing insulation materials to concrete and masonry where fire resistance is needed.

Dimensions

8x90 – 8x110 – 8x140 – 8x170 – 8x200 – 8x250 – 8x300

Material

Zinc plated spring steel.

Base materials



Concrete



Light concrete



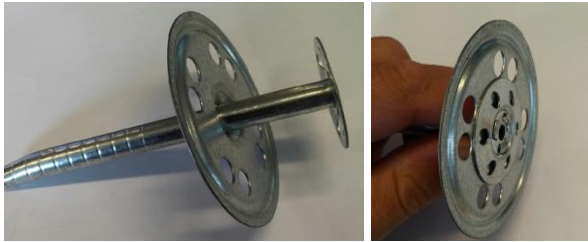
Solid masonry

Installation procedure

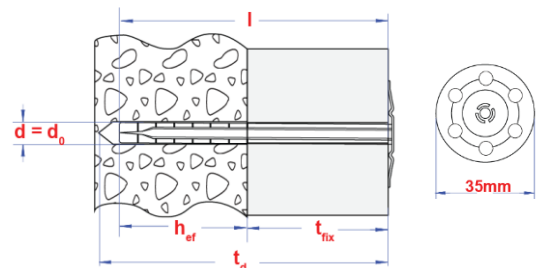


Typical use



Auxiliary product
Metal insulation washer SMOLP 9x70

Technical info

d [mm]	l [mm]	d ₀ [mm]	h _{ef} ¹ [mm]	t _{fix} [mm]	t _d [mm]
8	90	8	35	55	100
8	110	8	35	75	120
8	140	8	35	105	150
8	170	8	35	135	180
8	200	8	35	165	210
8	250	8	35	215	260
8	300	8	35	265	310



d = anchor diameter
 l = anchor length
 d₀ = drill diameter
 h_{ef} = min embedment depth
 t_{fix} = max fixture thickness
 t_d = total drilling depth

Performances ²			Ø 8
Min thickness of the base material	h _{min}	[mm]	80
Min spacing	s _{min}	[mm]	105
Min edge distance	c _{min}	[mm]	53
Characteristic tensile load C20/25 ÷ C50/60	N _{Rk}	[kN]	0,85
Partial safety factor	γ _{Mc}	[-]	2,52
Characteristic shear load C20/25 ÷ C50/60	V _{Rk}	[kN]	0,85
Partial safety factor	γ _{Mc}	[-]	1,25
Characteristic resistance in concrete under fire exposure (TR020)			
Fire resistance R30	F _{Rk,fi}	[kN]	0,21
Fire resistance R60	F _{Rk,fi}	[kN]	0,21
Fire resistance R90	F _{Rk,fi}	[kN]	0,21
Fire resistance R120	F _{Rk,fi}	[kN]	0,17
Critical spacing	s _{cr,fi}	[mm]	140
Critical edge distance	c _{cr,fi}	[mm]	70
<i>In case of a fire attack from more than one side, the edge distance should be ≥ 300 mm. In absence of other national regulations the partial safety factor for resistance under fire exposure γ_{M,fi} = 1,0 is recommended.</i>			

¹ In base materials other than concrete, h_{ef} must be min 50mm

² SMMIP – test report LZK00-06026/18/R42NZK