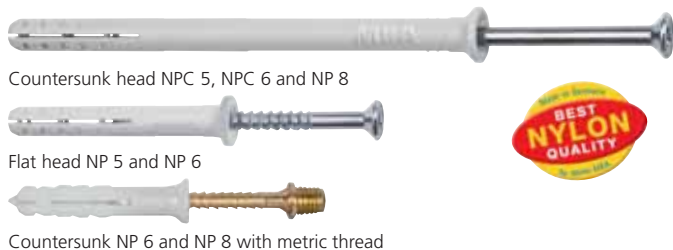


Frame fixings

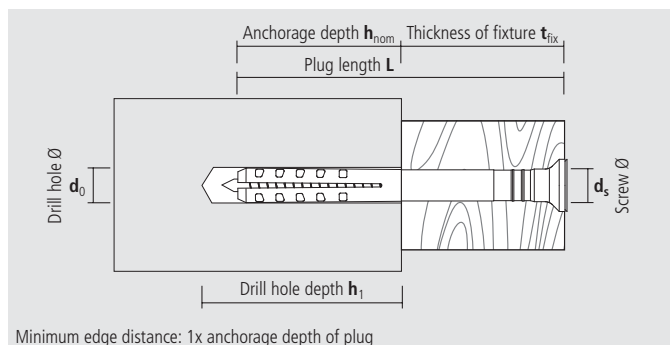


Nail plug NP



Advantages

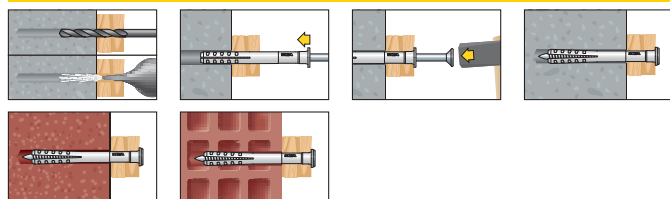
- For the quick fixing of frames, slats, channels, foils, electric clamps, etc.
- An accurate tuning between plug and nailscrew results in optimal expansion and thus high pull out values
- Integral closure prevents premature expansion
- Reinforced plug head prevents whole nail
- All nailscrews with Pozidriv recess, so screwing in and out is also possible



Suitable building materials

- ✓ Concrete
- ✓ Solid brick
- ✓ Solid sand-lime brick
- ✓ Lightweight solid concrete blocks
- ✓ Natural stone
- ✓ Hollow brick HLZ
- ✓ Hollow sand-lime brick KLS

Mounting



NPC and NP, zinc plated pre-assembled, countersunk head								Price	Packing	
Type	Art-No		d ₀ [mm]	h ₁ ≥ [mm]	h _{nom} ≥ [mm]	L [mm]	t _{fix} ≤ [mm]	€/100 pcs	[pcs]	[pcs]
	new	old								
NPC 5-35	9535NPC	–	5	35	25	35	10		100	1800
NPC 5-50	9550NPC	–	5	35	25	50	25		100	1800
NPC 6-35	9635NPC	–	6	40	30	35	5		100	1800
NPC 6-40	9640NPC	–	6	40	30	40	10		100	1800
NPC 6-50	9650NPC	–	6	40	30	50	20		50	900
NPC 6-60	9660NPC	–	6	40	30	60	30		50	900
NPC 6-80	9680NPC	–	6	40	30	80	50		50	900
NP 8-60	9860NP	501509	8	50	40	60	20		50	600
NP 8-80	9880NP	501511	8	50	40	80	40		50	600
NP 8-100	98100NP	501513	8	50	40	100	60		50	600
NP 8-120	98120NP	501515	8	50	40	120	80		50	400
NP 8-135	98135NP	501517	8	50	40	135	95		50	400

Frame fixings



Nail plug NP



NP, zinc plated pre-assembled, flat head								Price	Packing	
Type	Art-No		d ₀ [mm]	h ₁ ≥ [mm]	h _{nom} ≥ [mm]	L [mm]	t _{fix} ≤ [mm]	€/100 pcs	[pcs]	[pcs]
	neu	alt								
NP 5-25	9525NP	–	5	25	23	25	2		200	3600
NP 5-35	9535NP	501501	5	35	25	35	10		100	1800
NP 5-50	9550NP	501503	5	35	25	50	25		100	1800
NP 6-35	9635NP	501504	6	40	30	35	5		100	1800
NP 6-40	9640NP	501505	6	40	30	40	10		100	1800
NP 6-50	9650NP	501502	6	40	30	50	20		50	900
NP 6-60	9660NP	501507	6	40	30	60	30		50	900
NP 6-70	9670NP	501508	6	40	30	70	40		50	600
NP 6-80	9680NP	501506	6	40	30	80	50		50	900



NP, stainless steel A2 pre-assembled, countersunk head								Price	Packing	
Type	Art-No		d ₀ [mm]	h ₁ ≥ [mm]	h _{nom} ≥ [mm]	L [mm]	t _{fix} ≤ [mm]	€/100 pcs	[pcs]	[pcs]
	new	old								
NP 8-60 A2	9X860NP	501660	8	50	40	60	20		50	600
NP 8-80 A2	9X880NP	501670	8	50	40	80	40		50	600



NP, stainless steel A2 pre-assembled, flat head								Price	Packing	
Type	Art-No		d ₀ [mm]	h ₁ ≥ [mm]	h _{nom} ≥ [mm]	L [mm]	t _{fix} ≤ [mm]	€/100 pcs	[pcs]	[pcs]
	new	old								
NP 5-35 A2	9X535NP	501610	5	35	25	35	10		100	1800
NP 5-50 A2	9X550NP	501620	5	35	25	50	25		100	1800
NP 6-40 A2	9X640NP	501630	6	40	30	40	10		100	1800
NP 6-60 A2	9X660NP	501640	6	40	30	60	30		50	900
NP 6-80 A2	9X680NP	501650	6	40	30	80	50		50	900



NP, zinc plated pre-assembled, countersunk head, nail screw with metric thread								Price	Packing	
Type	Art-No		d ₀ [mm]	h ₁ ≥ [mm]	h _{nom} ≥ [mm]	L [mm]	t _{fix} ≤ [mm]	€/100 pcs	[pcs]	[pcs]
	new	old								
NP 6-40 M6*	9640NPM6	–	6	40	30	40	10		100	1800
NP 8-45 M8*	9845NPM8	–	8	50	40	45	5		50	900

*thread length of M6 and M8: 5 mm

Loads F _{rec} and F _{eff}										
Type	Concrete C20/25		Solid sand-lime brick KS 12		Aerated concrete P2		Aerated concrete P4		Hollow brick HLz 12	
	F _{rec} [kN]	F _{eff} [kN]	F _{rec} [kN]	F _{eff} [kN]	F _{rec} [kN]	F _{eff} [kN]	F _{rec} [kN]	F _{eff} [kN]	F _{rec} [kN]	F _{eff} [kN]
NP 5	0,20	1,40	0,17	1,20	0,05	0,35	0,09	0,63	0,08	0,56
NP 6	0,21	1,50	0,19	1,33	0,06	0,42	0,10	0,70	0,09	0,63
NP 8	0,29	2,00	0,26	1,80	0,09	0,63	0,13	0,91	0,10	0,70

F_{rec}: Recommended loads incl. safety factor (μ = 7)
F_{eff}: Effective pull out values excl. safety factor

Frame fixings



Nail plug NPZ

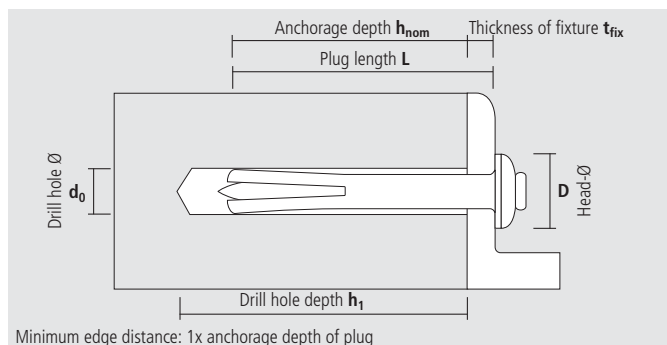


Advantages

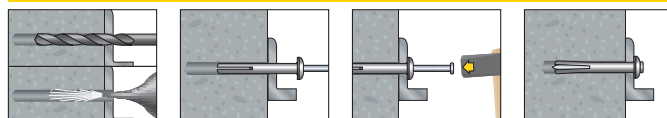
- Metal nail plug for the fixing of rails, clamps, sheet metal, signs, etc.
- Nail made of hardened steel, zinc coated; plug made of zinc die casting
- Not removable due to flat nail head (theft protection)

Suitable building materials

- ✓ Concrete
- ✓ Solid sand-lime brick
- ✓ Natural stone
- ✓ Lightweight solid concrete blocks
- ✓ Solid brick



Mounting



NPZ									Price	Packing	
Type	Art-No		d ₀ [mm]	h ₁ ≥ [mm]	h _{nom} ≥ [mm]	L [mm]	t _{fix} ≤ [mm]	D [mm]	€/100 pcs	[pcs]	[pcs]
	new	old									
NPZ 5-22	9522NPZ	–	5	22	15	22	7	10,5		100	4800
NPZ 5-40	9540NPZ	–	5	25	20	40	20	10,5		100	3000
NPZ 6-40	9640NPZ	–	6	25	20	40	20	12,6		100	2000

Loads F_{rec}

Type	Concrete C20/25 F _{rec} [kN]
NPZ 5-22	0,70
NPZ 5-40	0,75
NPZ 6-40	1,00

F_{rec}: Recommended loads incl. safety factor (μ = 3)