

The duo of power and intelligence



Wall cabinets



TV-brackets

BUILDING MATERIALS

- Concrete
- Solid brick
- Solid sand-lime brick
- Aerated concrete
- Vertically perforated brick
- Perforated sand-lime brick
- Plasterboard
- Gypsum plasterboard and gypsum fibreboards
- Hollow blocks made from lightweight concrete
- Cavity floor slabs made from bricks and concrete or similar
- Natural stone
- Chipboard
- Solid panel made from gypsum
- Solid brick made from lightweight concrete

CHARACTERISTICS



ADVANTAGES

- Two component materials for top load values and intelligent functioning depending on the substrate.
- Great feedback (feel-good factor) of the plug. You can feel exactly when the plug is installed perfectly.
- The short plug length ensures fast fixing without deep drilling.
- The narrow plug rim prevents slipping into the drill hole.
- The serrated anti-rotation feature prevents rotation in the drill hole during installation.
- The greater anchorage depth of the DUOPOWER 6 x 50, 8 x 65 and 10 x 80 means that the plug is especially suited to fixings in hollow building materials, aerated concrete and to bridge plaster.

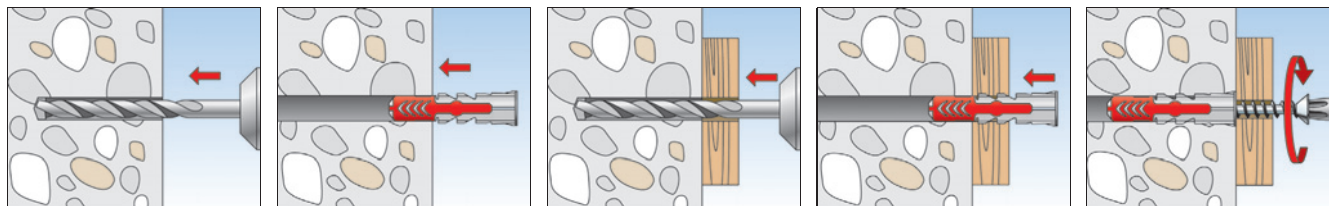
APPLICATIONS

- TV consoles
- Lighting
- Shelves
- Mirror cabinets
- Letter boxes
- Pictures
- Fixing blinds
- Curtain rails
- Wash basin fixings
- Plumbing and heating fixings
- Bath and toilet installations
- Wall cabinets
- Range hood

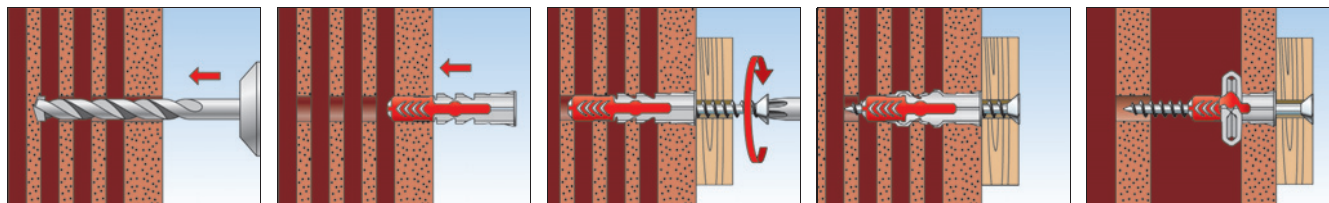
FUNCTIONING

- The DUOPOWER is suitable for pre-positioned and push-through installation.
- The duo of two different materials and its multiple functional abilities (expanding, folding, and knotting) extend the range of applications to additional materials with top loads.
- The required screw length is given by the plug length + fixture thickness + 1 x the screw diameter.
- Suitable for wood and chipboard screws, as well as stud screws.
- In the case of fixing boards, the threadless part of the screw must not be longer than the fixture.

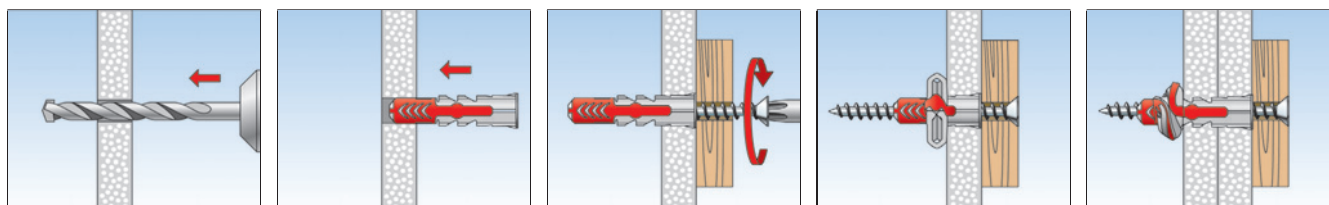
INSTALLATION IN SOLID BUILDING MATERIALS



INSTALLATION IN HOLLOW BUILDING MATERIALS



INSTALLATION IN PANEL BUILDING MATERIALS



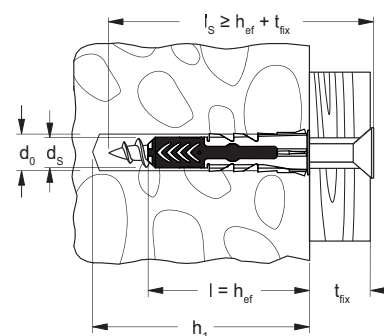
TECHNICAL DATA



DUOPOWER



DUOPOWER with greater anchorage depth



			Drill hole diameter	Min. drill hole depth	Min. panel thickness	Min. bolt penetration	Anchor length	Wood and chipboard screws	Drive	Max. fixture thickness	Sales unit
	Art.-No.	Art.-No.	d_0 [mm]	h_1 [mm]	d_p [mm]	$l_{E,min}$ [mm]	l [mm]	$d_s / d_s \times l_s$ [mm]		t_{fix} [mm]	[pcs]
Item	without screw	with screw									
DUOPOWER 5 x 25	555005	—	5	35	12,5	28	25	3 - 4	—	—	100
DUOPOWER 6 x 30	555006	—	6	40	12,5	34	30	4 - 5	—	—	100
DUOPOWER 8 x 40	555008	—	8	50	12,5	45	40	4,5 - 6	—	—	100
DUOPOWER 10 x 50	555010	—	10	60	—	56	50	6 - 8	—	—	50
DUOPOWER 5 x 25 S	—	555105	5	35	12,5	29	25	4 x 35	PZ2	6	50
DUOPOWER 6 x 30 S	—	555106	6	40	12,5	35	30	4,5 x 40	PZ2	5	50
DUOPOWER 8 x 40 S	—	555108	8	60	12,5	45	40	5 x 60	PZ2	15	50
DUOPOWER 10 x 50 S	—	555110	10	70	—	57	50	7 x 70	SW 13 / TX 40	13	25
DUOPOWER 6 x 50	538240	—	6	60	12,5	55	50	4 - 5	—	—	100
DUOPOWER 8 x 65	538241	—	8	75	2 x 12,5	70	65	4,5 - 6	—	—	50
DUOPOWER 10 x 80	538242	—	10	90	—	87	80	6 - 8	—	—	25
DUOPOWER 12 x 60	538243	—	12	70	—	68	60	8 - 10	—	—	25
DUOPOWER 14 x 70	538244	—	14	80	—	80	70	10 - 12	—	—	20
DUOPOWER 6 x 50 S	—	538245	6	75	12,5	55	50	4,5 x 70	PZ2	15	50
DUOPOWER 8 x 65 S	—	538246	8	85	2 x 12,5	70	65	5 x 80	PZ2	10	25
DUOPOWER 10 x 80 S	—	538247	10	112	—	87	80	7 x 107	SW 13	20	10
DUOPOWER 12 x 60 S	—	538248	12	85	—	68	60	8 x 80	SW 13	12	10

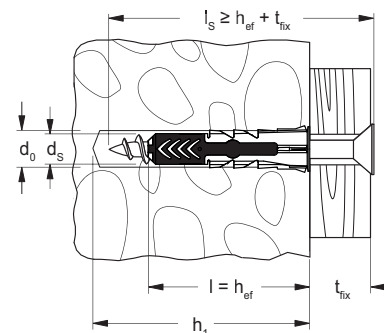
TECHNICAL DATA



DUOPOWER



DUOPOWER with greater anchorage depth



	Art.-No. without screw	Art.-No. with screw	Drill hole diameter d_0 [mm]	Min. drill hole depth h_1 [mm]	Min. panel thickness d_p [mm]	Min. bolt penetration $l_{E,min}$ [mm]	Anchor length l [mm]	Wood and chipboard screws $d_s / d_s \times l_s$ [mm]	Drive	Max. fixture thickness t_{fix} [mm]	Sales unit [pcs]
Item											
DUOPOWER 14 x 70 S	—	538249	14	100	—	80	70	10 x 95	SW 17	15	8

LOADS

DUOPOWER

Highest recommended loads¹⁾ for a single anchor.
The given loads are valid for screws with the specified diameter.

Type		DUOPOWER									
			5 x 25	6 x 30	6 x 50	8 x 40	8 x 65	10 x 50	10 x 80	12 x 60	14 x 70
Screw diameter ³⁾	$\emptyset$ [mm]		4	5	5	6	6	8	8	10	12
Min. edge distance in concrete	c_{min} [mm]		30	35	35	50	50	65	65	80	100
Recommended loads in the respective base material F_{rec}²⁾											
Concrete	$\geq C20/25$	[kN]	0,40	0,95	1,65	1,10	2,30	2,15	4,20	3,30	5,30
Solid brick	$\geq Mz 12$	[kN]	0,30	0,50	0,55	0,62	0,69	1,20	1,45	1,30	1,35
Solid sand-lime brick	$\geq KS 12$	[kN]	0,50	1,00	1,60	1,25	2,25	2,20	3,85	2,80	4,50
Aerated concrete	$\geq PB2, PP2 (G2)$	[kN]	0,05	0,10	0,15	0,10	0,16	0,20	0,30	0,24	0,35
Aerated concrete	$\geq PB4, PP4 (G4)$	[kN]	0,25	0,38	0,55	0,42	0,60	0,60	1,10	1,00	1,45
Perforated brick	$\geq Hlz 12 (\rho \geq 0,9 \text{ kg/dm}^3)$	[kN]	0,13	0,15	0,17	0,25	0,40	0,25	0,40	0,35	0,40
Sand-lime hollow block	$\geq KSL 12 (\rho \geq 1,6 \text{ kg/dm}^3)$	[kN]	0,40	0,60	0,60	0,70	1,00	0,70	2,00	0,75	1,50
Plasterboards	$\rho \geq 0,9 \text{ kg/dm}^3$	[kN]	0,10	0,18	0,37	0,25	0,50	0,35	0,65	0,50	0,50
Gypsum fibreboard	12,5 mm	[kN]	0,24	0,33	0,35	0,35	-	0,50	-	-	-
Gypsum plasterboard	12,5 mm	[kN]	0,12	0,15	0,15	0,15	-	0,15	-	-	-
Gypsum plasterboard	2 x 12,5 mm	[kN]	0,13	0,15	0,24	0,20	0,32	0,30	-	-	-
Mattone Forato Typ F8		[kN]	0,30	0,30	-	0,25	-	0,25	-	-	-
Tramezza Doppio UNI 19		[kN]	0,15	0,15	0,23	0,15	0,30	0,20	0,52	0,35	0,35
Sepa Parpaing		[kN]	0,30	0,45	0,25 ⁴⁾	0,45	0,45 ⁴⁾	0,45	0,45 ⁴⁾	0,60 ⁴⁾	0,60 ⁴⁾

¹⁾ Required safety factors are considered.

²⁾ The load data are valid for tension, shear and combined tension and shear load.

³⁾ Wood screw

⁴⁾ Load determination on plastered wall.

Also for standard metric threads

Recommended loads for a single anchor*									
Type			DuoPower 5x25	DuoPower 5x25	DuoPower 6x30	DuoPower 8x40	DuoPower 10x50	DuoPower 12x60	DuoPower 14x70
Screw diameter	[mm]		M3	M4	M4	M5	M6	M8	M10
Min. edge distance in concrete	c_{min} [mm]		30	30	35	50	65	80	100
Recommended loads in the respective base material F_{rec}									
Concrete	$\geq C20/25$	[kN]	0,09	0,13	0,28	0,37	0,43	0,86	1,40
Solid brick	$\geq MZ 12$	[kN]	0,09	0,20	0,25	0,25	0,50	1,05	1,40
Aerated concrete	$\geq PB2, PP2 (G2)$	[kN]	0,04	0,06	0,07	0,12	0,12	0,23	0,35
Vertically perforated brick	$\geq Hlz 12 (\rho \geq 0,9 \text{ kg/dm}^3)$	[kN]	0,12	0,15	0,18	0,22	0,50	0,50	0,60
Gypsum plasterboard -- 12,5 mm		[kN]	0,04	0,06	0,10	0,12	0,15		