

## 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.

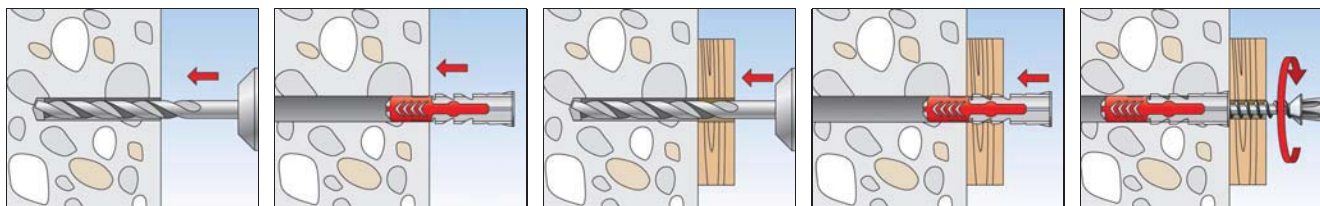
### APPLICATIONS

- 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

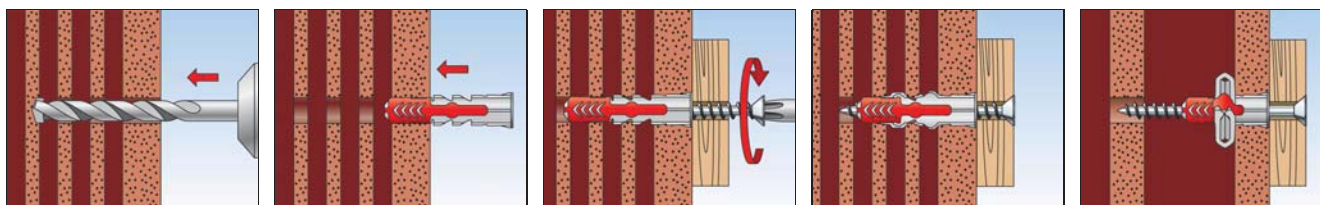
### FUNCTIONING

- 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 + 1x 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.

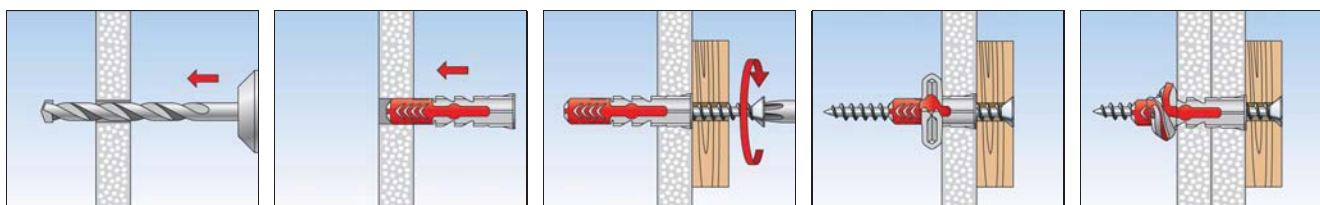
## INSTALLATION IN SOLID BUILDING MATERIALS



## INSTALLATION IN HOLLOW BUILDING MATERIALS



## INSTALLATION IN PANEL BUILDING MATERIALS



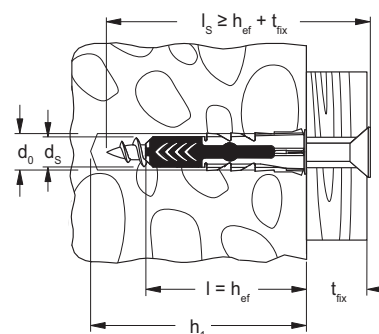
## TECHNICAL DATA



DUOPOWER



DUOPOWER with greater anchorage depth



Item	Art.-No. without screw	Art.-No. with screw	Drill hole diameter	Min. drill hole depth	Min. panel thickness	Min. bolt penetration	Anchor length	Wood and chipboard screws d <sub>s</sub> / d <sub>s</sub> x l <sub>s</sub>	Drive	Max. fixture thickness	Sales unit
			d <sub>0</sub> [mm]	h <sub>1</sub> [mm]	d <sub>p</sub> [mm]	l <sub>E,min</sub> [mm]	l [mm]	d <sub>s</sub> / d <sub>s</sub> x l <sub>s</sub> [mm]	t <sub>fix</sub> [mm]	[pcs]	
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

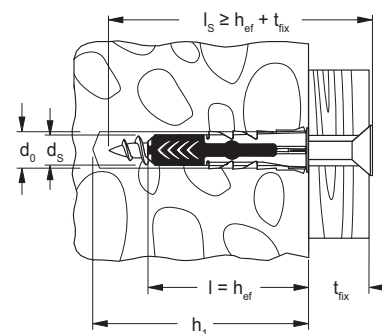
## TECHNICAL DATA



DUOPOWER



DUOPOWER with greater anchorage depth



	Art.-No. without screw	Art.-No. with screw	Drill hole diameter d <sub>0</sub> [mm]	Min. drill hole depth h <sub>1</sub> [mm]	Min. panel thickness d <sub>p</sub> [mm]	Min. bolt penetration l <sub>E,min</sub> [mm]	Anchor length l [mm]	Wood and chipboard screws d <sub>s</sub> / d <sub>s</sub> x l <sub>s</sub> [mm]	Drive	Max. fixture thickness t <sub>fix</sub> [mm]	Sales unit [pcs]
Item											
<b>DUOPOWER 14 x 70 S</b>	—	<b>538249</b>	14	100	—	80	70	10 x 95	SW 17	15	8

## LOADS

### DUOPOWER

Highest recommended loads<sup>1)</sup> 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 <sup>3)</sup>	∅ [mm]	4	5	5	6	6	8	8	10	12	
Min. edge distance in concrete	c <sub>min</sub> [mm]	30	35	35	50	50	65	65	80	100	
<b>Recommended loads in the respective base material F<sub>rec</sub><sup>2)</sup></b>											
Concrete	≥ C20/25 [kN]	0,40	0,95	1,65	1,10	2,30	2,15	4,20	3,30	5,30	
Solid brick	≥ 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	≥ KS 12 [kN]	0,50	1,00	1,60	1,25	2,25	2,20	3,85	2,80	4,50	
Aerated concrete	≥ PB2, PP2 (G2) [kN]	0,05	0,10	0,15	0,10	0,16	0,20	0,30	0,24	0,35	
Aerated concrete	≥ PB4, PP4 (G4) [kN]	0,25	0,38	0,55	0,42	0,60	0,60	1,10	1,00	1,45	
Perforated brick	≥ Hlz 12 (ρ ≥ 0,9 kg/dm <sup>3</sup> ) [kN]	0,13	0,15	0,17	0,25	0,40	0,25	0,40	0,35	0,40	
Sand-lime hollow block	≥ KSL 12 (ρ ≥ 1,6 kg/dm <sup>3</sup> ) [kN]	0,40	0,60	0,60	0,70	1,00	0,70	2,00	0,75	1,50	
Plasterboards	ρ ≥ 0,9 kg/dm <sup>3</sup> [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 <sup>4)</sup>	0,45	0,45 <sup>4)</sup>	0,45	0,45 <sup>4)</sup>	0,60 <sup>4)</sup>	0,60 <sup>4)</sup>	

<sup>1)</sup> Required safety factors are considered.

<sup>2)</sup> The load data are valid for tension, shear and combined tension and shear load.

<sup>3)</sup> Wood screw

<sup>4)</sup> Load determination on plastered wall.