

	Hilti M8 x 30	Raumer Fix ETD III Ø8x55mm	Raumer FIX ETD III (Ø8x67mm)	Raumer Fix SITA GBK CE7 Ø8x75 mm	Raumer HANG FIX inox M8C (ØM8x60)	Raumer HANG FIX inox M8L (ØM8x78)	Raumer HANG FIX inox M8XL (ØM8x100)	HANG FIX inox M10C (Ø10x66mm)	HANG FIX inox M10AL (Ø10x86mm)	Spit Fix3 M8 70mm	Mason Mate M8	Petzel Coeur Bolt Steel 10mm	Petzel Coeur Bolt Stainless 10mm
Drill Diameter/mm	10	8	8	8	8	8	8	10	10	8	8	10	10
Drill Depth/mm	33	55	67	75	60	78	100	66	86	70	100	85	70
Expansion Depth	30	39	51	59	44	62	84	50	70	54	84	69	54
Reference	<a href="#">Link</a>	<a href="#">Link</a>	<a href="#">Link</a>	<a href="#">Link</a>	<a href="#">Link</a>	<a href="#">Link</a>	<a href="#">Link</a>	<a href="#">Link</a>	<a href="#">Link</a>	<a href="#">Link</a>	<a href="#">Link</a>	<a href="#">Link</a>	<a href="#">Link</a>
Drilled Volume/cc	2.6	2.8	3.4	3.8	3.0	3.9	5.0	5.2	6.8	3.5	5.0	6.7	5.5
Drilled Volume/Hilti Volum	100%	107%	130%	145%	116%	151%	194%	200%	261%	136%	194%	258%	212%
Material	Steel	Galvanised	Galvanised S	Galvanised S	Stainless	Stainless	Stainless	Stainless	Stainless	Galvanised	Galvanised	Galvanised	Stainless
Intended Medium	Concrete	Limestone	Limestone	Limestone	Limestone	Limestone	Limestone	Limestone	Limestone	Concrete	Concrete	?	?
Intended for STICK-IP aid climbing	FALSE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	FALSE	FALSE	TRUE	TRUE
Intended for Caving and Rescue	FALSE	FALSE	FALSE	FALSE	TRUE	TRUE	TRUE	TRUE	TRUE	FALSE	FALSE	TRUE	TRUE
Meets EN 959 Rock Anchor	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	TRUE	TRUE	FALSE	FALSE	FALSE	TRUE
Characteristic Resistance Tension	8.3				17	20	20	21	21		8.4	15	15
Characteristic Resistance Shear	7				18	20	20	26	26		8	23	25
Recommended Tension	3.3	10	10	9						3.57	2.8		
Recommended Shear	3.9	10	10	9						5.71	3.2		
Current failure Rate	~1%												
Can be removed if not set	TRUE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
Requires hangers with non 8mm holes	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	TRUE	TRUE	FALSE	FALSE	FALSE	FALSE
Estimated Usable Life / years	15	6	6	6	100	100	100	100	100	6	6	6	100
Approx Unit Cost Euro	0.40 €	1.50 €	1.29 €	1.50 €	2.00 €	2.72 €	2.99 €	2.20 €	2.30 €	0.30 €	0.45 €	2.23 €	5.85 €
Approx cost per expo per year	4.00 €	15.00 €	12.90 €	15.00 €	20.00 €	27.20 €	29.90 €	22.00 €	23.00 €	3.00 €	4.50 €	22.30 €	58.50 €
Includes hanger	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	TRUE	TRUE
Single Handed Placement	FALSE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE
Scores													
Intended for caving/Due diligence	0%	0%	0%	0%	70%	70%	70%	100%	100%	0%	0%	70%	100%
Longevity/Conservation	50%	0%	0%	0%	100%	100%	100%	100%	100%	0%	0%	0%	100%
Cheapness	87%	50%	57%	50%	33%	9%	0%	27%	23%	90%	85%	25%	15%
Expansion Depth/Mitigate Bad Rock	36%	46%	61%	70%	52%	74%	100%	60%	83%	64%	100%	82%	64%
Strength	40%	40%	40%	40%	80%	100%	100%	100%	100%	40%	40%	100%	100%
Battery Life	100%	96%	81%	72%	90%	68%	42%	38%	0%	78%	42%	2%	30%
Known/Likely failures	50%	100%	100%	100%	100%	100%	100%	50%	50%	100%	100%	100%	100%
Single Handed Use	0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
<b>Average Score</b>	<b>45%</b>	<b>54%</b>	<b>55%</b>	<b>54%</b>	<b>78%</b>	<b>78%</b>	<b>76%</b>	<b>72%</b>	<b>70%</b>	<b>59%</b>	<b>58%</b>	<b>60%</b>	<b>76%</b>