

FIXING TECHNOLOGY



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Gas Technology - How it works

With its unique fuel injection system, TRAKFAST 800 gas-actuated fastening systems fasten cable management, wiring accessories and drywall track up to 6 times faster than traditional explosive powder actuated tool system.

When used with PULSA 800 fuel cells and Ramset approved fasteners, European Safety Standard EN 792-13 can be met to ensure operators safety.



How to select a Ramset™ Gas Technology Fixing to directly fasten an object for permanent installation

Fixing to concrete

As the fixing enters the concrete, extreme pressure and heat are created. This creates a bond that provides high loading strength in concrete.

Edge distance

Do not fix closer than 75mm from the edge of concrete. If the concrete cracks, the fixing may not hold.

Recommended minimum fixing spacing

Setting fixings too close together can cause the concrete to crack. The recommended minimum distance between fixings is 50mm. Never attempt a fixing application too close to another fixing as this could affect the previously inserted fixing's embedment.

Concrete thickness

It is important that the concrete be at least three times as thick as the fixing penetration. If the concrete is too thin, the compressive forces forming at the fixing's point can cause the free face of the concrete to break away. This creates a dangerous condition from flying concrete and / or the fixing and also results in a reduction of fastener holding power.

Fixing to steel

The resilience of steel provides a clamping effect to the fixing. This combined with the tremendous heat that is created, provides a welding and clamping effect to give maximum holding power.

Edge distance

The recommended edge distance for a fixing to the edge of steel is 13mm. Never fire the tool within 13mm of the edge of a steel base material because the steel may bend or break off, allowing the fixing to ricochet.

Recommended minimum fastener spacing

The recommended minimum distance between fixings is 25mm. Never attempt a fixing application too close to another fixing as this could affect the previously installed fixing's embedment.

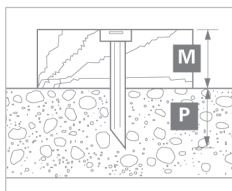
Steel thickness

Do not fasten into steel base material thinner than the fastener shank diameter. Holding power may be reduced and the fastener may be overdriven.

As a guide when:

- Fixing into steel - min. steel thickness = 3mm

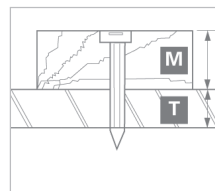
Minimum Shank Length



Minimum Shank Length

Thickness of material (M) + Required penetration (P)

Minimum Shank Length



Minimum Shank Length

Thickness of material (M) + Thickness of steel (T) + 5mm point allowance

TRAKFAST™ 800



Description

The Ramset™ TrakFast™800 is the most technologically advanced gas tool on the market. The new TrakFast™800 offers a number of innovative features allowing quicker, safer installation of partition track, pest control mesh and formwork systems. With the 50-pin magazine and extra power, the speed at which TrakFast™800 is able to perform installations provides tremendous savings in total installed cost.

Specifications

Weight	3.8kg
Height	309mm
Length	396mm
Magazine Capacity	20 (+3) pin magazine, 50 (+3) pin magazine
Impact Force	100J
Actuation Pressure	5kg
Overdrive	4mm
Intermittent Operation	2 pins per second
Fuel Cell Life	600 pins (approx)
Battery Charge Capacity	3,000 pins (approx)
Battery Voltage	3.7V Lithium-ion
Battery Charge Time	90mins (25mins for 500 fixings)
Power Regulation	Automatic
Operating Temperature Range	-5°C to 49°C
Substrates	Concrete, Composite Steel Decking, Solid Brick, Precast Concrete, Steel Pre-stressed concrete, Hollow Block Wall, Reinforced Concrete, Reinforced Prefabricated Concrete, Steel Beams

Features & Benefits

- Massive 100J power – Consistent fixings even in extreme applications.
- Compact design with 20-pin magazine – Allows the tool to fit in tight spaces.
- Optional 50-pin magazine reduces downtime in loading the magazine.
- Battery Gauge – Helps avoid running out of battery power.
- Fuel Cell Gauge – Always know when to change fuel cells.
- Lithium Battery – Fast Charge, Long Life.
- Tool-less Depth of Drive Adjustment.
- Power Saving Technology – isolates battery when tool is not in use for more than one minute.
- Easily removable fastener guide and magazine.
- Greater tool clearance – Allows the tool to fit in close to edge applications.
- Greater track clearance – Allows the tool to fit in deep track, up to 57mm.
- Removable Support Leg – Ensures tool is at 90° to work surface for optimum fixings.
- Electronically controlled fuel injection – Ensures consistent power in a wide temperature range.
- Low maintenance. Designed to work in all conditions.

Trades & Applications

	Ceiling and Partitioning Contractor	Door & Window Contractor	Wet Trade Contractor	Pest Control Contractor
Track to concrete	✓			
Track to steel	✓			
Plywood to steel			✓	
Sacrificial steel formwork to steel			✓	
Pest control mesh to concrete				✓
Wall-tie / bonding bar		✓	✓	

TrakFast™800

Part No	Description	Order Qty
9A-TRAK-FAST	TrakFast™Pulsa™ Gas Tool + 2 x Lithium-Ion Batteries	1

Kit includes: TrakFast™800 Tool, 20-pin magazine, high impact carry case, 2 batteries, battery charger, safety glasses and instruction manual.



Accessories

Part No	Description	Order Qty
9A-TRAK-20MG *	Pulsa 800 20 Pin Magazine (a)	1
9A-TRAK-50MG *	Pulsa 800 50 Pin Magazine (b)	1
9A-TRAK-BATT	Pulsa 800 Lithium-ion Battery (c)	1
9A-TRAK-CHAR	Pulsa 800 Lithium-ion Battery Charger (d)	1
9A-TRAK-MAGH *	Pulsa 800 Magnetic Washer Adaptor (e)	1
9A-TRAK-CMFG *	CableMaster™800 Fastener Guide	1
9A-TRAK-TFFG *	TrakFast™800 Fastener Guide	1
9A-TRAK-DLUB *	Gas Tool Degreaser and Lubricant	1

Heavy Duty Pin Range for Steel and Hard Concrete Fixing

The Ramset™ range of Premium Drive Pins has been designed for steel and hard concrete applications.

Specifications

Raw Material	Carbon Steel
Corrosion Protection	Zinc Mechanically Plated (Min. coating 10µm)
Nominal Head Diameter	6.4mm
Nominal Shank Diameter	3.0 / 2.7mm
Shear Strength	1200N/mm ²
Tensile Strength	1950N/mm ²
Hardness	53-56HR _c



Part No	Description	Length	Order Qty
9A-TRAK-HC15 *	Premium Steel Pin	15mm	500
9A-TRAK-HC17 *	Premium Hard Concrete/Steel	17mm	500
9A-TRAK-HC22	Premium Hard Concrete/Steel	22mm	500
9A-TRAK-HC27*	Premium Hard Concrete/Steel	27mm	500
9A-TRAK-HC32*	Premium Hard Concrete/Steel	32mm	500

10 strip collation (suitable for use in 20 and 50-pin magazines) + 1 x Pulsa 800 Fuel Cell

* Non stock item

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Stainless Steel Pin for Special Applications

The Ramset™ SS6 Stainless Steel Pins has been designed for special applications such as fixing wall tie and bonding bar systems to precast and reinforced concrete columns or walls, that meets HDB requirements.

Specifications

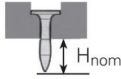


Raw Material	Stainless Steel Grade 304
Nominal Head Diameter	6.4mm
Nominal Shank Diameter	2.6mm
Pull-out Strength	Exceeds 1kN (in concrete)



Part No	Description	Length	Order Qty
9A-19SS-PINS	Stainless Steel Pins	19mm	500

10 strip collation (suitable for use in 20 and 50-pin magazines) + 1 x Pulsa 800 Fuel Cell

Recommended Loading

HC6 Pins		Characteristic Resistance		Recommended Load*	
		Tension N_{rk} (kN)	Shear N_{rk} (kN)	Tension N_{rk} (kN)	Shear N_{rk} (kN)
 C20/25 to C60/70	$H_{nom} = 10\text{mm}$	0.34	0.75	0.10	0.25
	$H_{nom} = 15\text{mm}$	0.87		0.30	
	$H_{nom} = 18\text{mm}$	1.19		0.40	
	$H_{nom} = 20\text{mm}$	1.41		0.47	
 Steel = 410-450 N/mm ² Steel = 500-550 N/mm ²	$H_{nom} = 6.5\text{mm}$	5.0	3.6	1.5	1.2

* The above information is for reference only. On-site testing is recommended.