

# **EDD TECHNOLOGY** GOING BEYOND HYDRAULICS



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EDD TECHNOLOGY OVERVIEW

# **EDD TECHNOLOGY** GOING BEYOND HYDRAULICS. ELECTRONIC DIRECT DRIVE.



RELIABLE 

Robust components such as a gearbox and screw spindle offer increased reliability & durability.



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No hydraulic reservoir or pump, for smaller tools and freedom to work from all angles.

A NEW ERA STARTS FOR RESCUE EXTRICATION EQUIPMENT. For the first time ever, the need for hydraulics is completely eliminated in a complete line of extrication equipment. No need for a hydraulic pump, fluid, piston, valves or seals. Electronic Direct Drive (EDD) directly converts battery power – from a compact, powerful and efficient motor – to output force.

#### EDD TECHNOLOGY OVERVIEW





#### **TWO-WAY POWER**

Proven screw spindle technology delivers full power – both ways.



#### EFFICIENT

Eliminating hydraulics means more overall efficiency and long battery runtimes.





#### EDD TECHNOLOGY FUNDAMENTALS

HYDRAULIC BATTERY TOOLS



valves

gearbox



# **EDD FUNDAMENTALS**

Fewer steps means greater efficiency. High-energy consuming components (a hydraulic pump, fluid, valves, seals & tubing) all reduce the battery's runtime, as they use precious battery energy. Eliminating these steps greatly boosts the system's efficiency.

UNIQUE MOTOR TECHNOLOGY Motor technology is what makes EDD possible. Running close to 90% efficiency, it produces more than a staggering 1.4 kW, which is similar to small gasoline engines currently used in hydraulic pumps.

## **SCREW SPINDLE TECHNOLOGY**

Screw spindle technology, proven in many other mechanical & industrial applications, is using a highly efficient spindle to transfer power by a rotating movement.

#### EDD TECHNOLOGY SCREW SPINDLE TECHNOLOGY

#### **VARIABLE SPEED & IMMEDIATE RESPONSE**

Get immediate reaction. Without pressure, the screw spindle and gearbox allow the control handle to work like an accelerator. Turn it up and straight to work.

#### **CONTAMINATION-FREE**

No matter the circumstances - EDD is usable in any environment. No more exposure to fluids or toxic exhaust gasses and the chance of hydraulic injection. Just pure mechanics.

#### LOW MAINTENANCE

Without fluids, leakages are a thing of the past. EDD simply requires less maintenance.



MORE SILENT THAN EVER No pump. Less noise. Less stress for the victim.



**CENTRAL CONTROL HANDLE** For direct access, from all sides



**ALL WEATHER PROOF** 

Rain, storm or thunder – with the IP67 connector, even the heaviest of storms is bearable

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FULL VARIABLE SPEED Variable speed & immediate response

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**LATEST LI-ION** TECHNOLOGY EDD tools are powered by the latest lithium-ion technology. The batteries conform to the IEC 62133 safety standards and the UN 38.3 shipping requirements for lithium batteries.

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For quick & easy battery handling



UPGRADED 360° CARRYING HANDLE With improved balance & operation



# **X-SERIES** SMALL SIZE, GREAT PERFORMANCE

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Freedom to move, that's what the compact X2 EDD provides. It is exactly what you want from a battery tool – the perfect combination between size and power, to ensure optimal control.





#### **EWO TECHNOLOGY**

Focus on the job, not the tool handling. Simple ergonomic features such as improved tool balance and the new 360 degree carrying handle, for ease and comfort. And with a control handle that allows full control from any position, EWO helps getting the job done.

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#### Nominal input Dimensions (L x W x H) Operational weight incl. Power Pack 1 Weight excl. battery Max. spreading opening Spreading force at base of arm teeth<sup>1</sup> Max. pulling opening Pulling force Squeezing force at base of arm teeth<sup>1</sup> EN 13204 NFPA 1936

#### **X2 EDD SPREADER**

43.2 VDC 823 x 273 x 235 mm (±10 mm) 20.5 kg (±0.2 kg) 19.5 kg (±0.2 kg) 607 mm 105 - 342 kN / 10.7 - 34.9 ton 426 mm 426 mm 45.9 - 91.2 kN / 4.7 - 9.3 ton 66.3 - 120.9 kN / 6.7 - 12.3 ton Compliant



# **VITAL TODAY, READY FOR TOMORROW**

Rams. A vital tool in today's rescue world, where cross ramming has become fundamental for extrication. By being compatible with Profix Max, and without a pump and hose, the EDD V-series' possibilities are endless. Ready for any scenario, today or tomorrow – all with one ram.



#### **FULLY INTEGRATED**

W. Street House

Customize your ram to the situation at hand, by combining Profix Max attachments to your V4 EDD. To use it in the smallest of spaces, or to cover even the most extreme distances.

#### Nominal input Dimensions incl. detachable rear jaw (L x W x H) Max. extended length Max. stroke Operational weight incl. Power Pack 1 Weight excl. battery

Spreading / pushing force

#### V4 EDD RAM

43.2 VDC 636 x 133 x 355 mm 936 mm 300 mm 16.4 kg (±0.2 kg) 15.4 kg (±0.2 kg) 58.8 kN / 6.0 ton



# **G-SERIES** SAFE. SMOOTH. CONFIDENT.

Smooth and safe. No hydraulics means no more contamination and a steady cut. EDD provides safety and confidence. The confidence to do your job.



#### **IMPROVED 360° DESIGN**

The 360° carrying handle was already a feature unique to Resqtec extrication equipment. With the new 360° handle, the design got even better: still 360° for optimal control, but with improved shape and size.



#### Nominal input Dimensions (L x W x H) Operational weight incl. Power Pack 1 Weight excl. battery Max. cutting opening Max. cutting force<sup>1</sup> Round bar capability EN 13204 NFPA 1936

#### **G4W EDD CUTTER**

43.2 VDC 759 x 236 x 228 mm 15.9 kg (±0.2 kg) 14.9 kg (±0.2 kg) 156 mm 554 kN / 56.5 ton 30 mm Compliant Compliant

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Nominal input Dimensions (L x W x H) Operational weight incl. Power Pack 1 Weight excl. battery Max. cutting opening Max. cutting force<sup>1</sup> Round bar capability EN 13204 NFPA 1936

#### **G6W EDD CUTTER**

43.2 VDC 854 x 268 x 235 mm 19.9 kg (±0.2) 18.9 kg (±0.2) 185 mm 1052 kN / 107.2 ton 34 mm Compliant Compliant

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Nominal input Dimensions (L x W x H) Operational weight incl. Power Pack 1 Weight excl. battery Max. cutting opening Max. cutting force<sup>1</sup> Round bar capability EN 13204 NFPA 1936

#### **G6C EDD CUTTER**

43.2 VDC 855 x 268 x 235 mm 20.3 kg (±0.2 kg) 19.3 kg (±0.2 kg) 203 mm 1102 kN / 112.3 ton 34 mm Compliant Compliant



# **FX-SERIES** PERFORMANCE UNLIKE ANY OTHER

Two-way power. Impossible for hydraulics, exemplary for EDD. By providing equivalent power on both the return stroke and the outward stroke, the Fx-series are built to maximize their cutting and spreading performance. A revolution for combitools – one that only EDD can offer.



#### **TRUE COMBITOOLS**

EDD makes up for what hydraulics lack. Hydraulic battery tools cannot provide high power on the return stroke, as the piston's usable surface in the backward direction is limited. EDD has no hydraulics: a screw spindle is all that moves back and forth. Meaning more available power in both directions, and true combitools at your disposal.

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Nominal Input Dimensions (L x W x H) Operational weight (incl. Power Pack 1) Weight (excl. Power Pack 1) Max. cutting opening Max. cutting force<sup>1</sup> Max. spreading opening Spreading force at base of blade (last tooth)<sup>1</sup> Max. pulling opening Pulling force Round bar capability EN 13204 NFPA 1936

#### **FX4 EDD CUTTER**

43.2 VDC 856 x 236 x 228 mm 17.0 kg (±0.2) 16.0 kg (±0.2) 283 mm 283 mm 103 - 1080 kN / 73.4 ton 350 mm 103 - 1080 kN / 10.5 - 110.1 ton 272 mm 52.9 - 62.9 kN / 5.4 - 6.4 ton 33 mm Compliant

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#### **FX6 EDD CUTTER**

Nominal input	43.2 VDC	
Dimensions (L x W x H)	950 x 268 x 235 mm (±10mm)	
Operational weight (incl. Power Pack 1)	21.4 kg (±0.2)	
Weight (excl. Power Pack 1)	20.4 kg (±0.2)	
Max. cutting opening	349 mm	
Max. cutting force <sup>1</sup>	1107 kN / 112.8 ton	
Max. spreading opening	429 mm	
Spreading force at base of blade (last tooth) <sup>1</sup>	107 - 1357 kN / 10.9 -138.3 ton	
Max. pulling opening	328 mm	
Pulling force	65.9 - 82 kN / 6.7 – 8.4 ton	
Round bar capability	38 mm	
EN 13204	Compliant	
NFPA 1936	Compliant	



The P4 is already a trusted tool for many special teams such as the military, USAR teams and fire brigades. It brings battery-powered rescue tools to a whole new level. Power and versatility – all in one tool.

The P4 utilizes aerospace technology, developed for military fighter jets, in combination with the latest electric motor and Lithium-Ion battery innovations. Without hydraulics, the P4 requires little to no maintenance and offers extremely long battery runtimes.



It takes you into places and completes jobs no other rescue tools can.



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The P4 control handle comes in different flavors. Having the option for a short control handle downsizes the P4 even further, making it ideal for confined space rescue operations.



	SPREADER P4X
Nominal input	43.2 VDC
Dimensions (L x W x H)	711 x 271 x 274 mm (±10 mm)
Rear 360° carry handle	Optional (Art. Nr. 4250.1065)
Operational weight incl. Power Pack 1	20.0 kg (±0.2 kg)
Weight excl. Power Pack 1	19.0 kg (±0.2 kg)
Rotating head angle	61°
Max. spreading opening	401 mm
Spreading force at base of arm teeth <sup>1</sup>	89.6 - 3739 kN / 9.1 - 381 ton
EN 13204	Compliant
NFPA 1936	Compliant



CUTTER P4W
43.2 VDC
705 x 271 x 274 mm (±10 mm)
Optional
20.6 kg (±0.2 kg)
19.6 kg (±0.2 kg)
61°
153 mm
543 kN / 55.4 ton
Compliant
Compliant



The vehicle charger charges your batteries on board of any rescue vehicle, by simply connecting it to any in-vehicle power source - whether it is 110/220V, or with the special converter to 12/24V.





#### SPECIFIC EDD RAM ACCESSORIES





	FRONTLINER P4FX
Nominal input	43.2 VDC
Dimensions (L x W x H)	765 x 271 x 274 mm (±10 mm)
Rear 360° carry handle	Optional
Operational weight incl. Power Pack 1	21.8 kg (±0.2 kg)
Weight excl. Power Pack 1	20.8 kg (±0.2 kg)
Rotating head angle	61°
Max. spreading opening	319 mm
Spreading force at base of jaw	58.1 - 106.6 kN / 5.9 - 10.9 ton
Max. cutting opening	236 mm
Max. cutting force <sup>1</sup>	321 kN / 32.7 ton
EN 13204	Compliant
NFPA 1936	Compliant
Round bar capability (S235 acc. to EN 13204)	29mm

#### EDD EQUIPMENT P4 ACCESSORIES





AIRCRAFT JAW SET

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#### ACCESSORIES OVERVIEW

**MAINS POWER ADAPTER** 

A mains power adapter allows you to work without batteries. Connected to 110 or 220V, the mains power adapter enables any EDD tool to operate continuously. Without interruption.











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