



POWERMASTER

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AMERICA

PNEUMATIC AND ELECTRIC TORQUE WRENCH

Tools for every conceivable need.....

www.powermasteramerica.com

PRODUCT PROFILE

PNEUMATIC AND ELECTRIC TORQUE WRENCH

The improved and newly launched range of pneumatic and electric torque wrenches by Powermaster America have found worldwide acceptance due to their rugged design, broad range and superior performance.

Welcome to **POWERMASTER AMERICA LLC**. We are the leading manufacturer of extreme torque equipment, which includes Pneumatic, Electric, and Battery powered Torque Wrenches. We don't just give you a great tool; we ensure its quality from conception through to production and even years after its initial use. The POWERMASTER AMERICA philosophy has proven to be successful all over the world in such industries as oil and gas, petrochemical, mining, aerospace, power generation and manufacturing.

We continue to invest in and employ the latest technology to achieve the highest level of innovation, quality, and performance which ensure maximum flexibility and responsiveness enabling quick deliveries and customer satisfaction.

**Distribution available
in over 110 countries
worldwide.**



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PAGE OF CONTENTS

PNEUMATIC AND ELECTRIC TORQUE WRENCHES

6 ■ **VEGA SERIES** - Pneumatic Torque Wrench

8 ■ **FRL UNIT**

10 ■ **ELECTRO ETWC SERIES** (with Control Panel)

12 ■ **ELECTRO ETW SERIES** (On Drive)

14 ■ **DYNAMO SERIES BATTERY TORQUE WRENCH** (Analogue Type)

16 ■ **ACCESSORIES**

17 ■ **REACTION ARMS**

PNEUMATIC AND ELECTRIC TORQUE WRENCHES

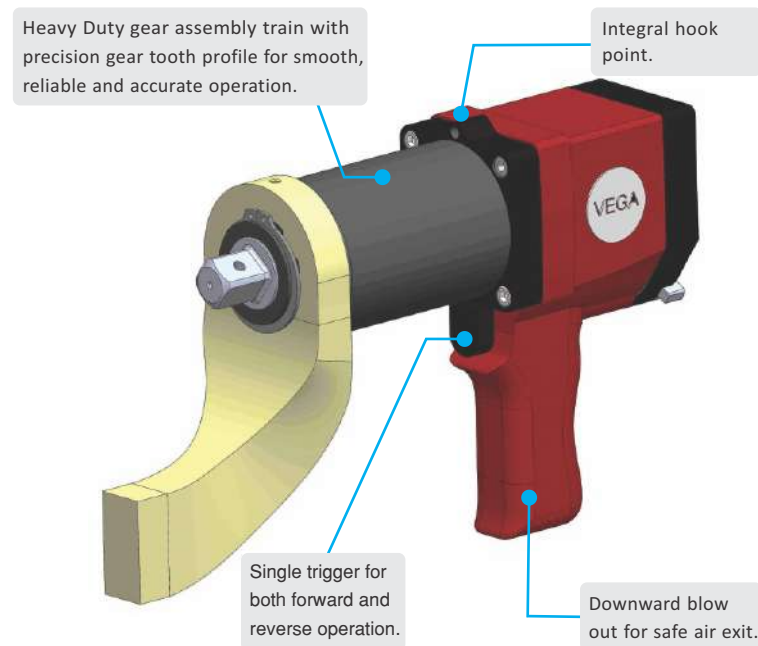
The Pneumatic and Electric operated torque wrenches are the preferred torquing method to achieve productivity with less manpower. POWERMASTER AMERICA Torque Wrenches offer a reliable solution for torquing and de-torquing of heavy duty bolts and nuts for various industries in where speed, power, accuracy and safety are required.

VEGA SERIES

PNEUMATIC TORQUE WRENCHES

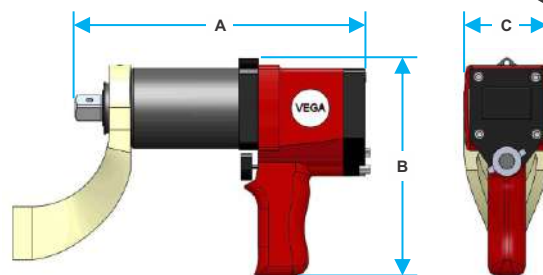
Torque Range 45 Nm to 9600 Nm (30 Lb.ft - 7102 Lb.ft)

A Pneumatic Torque Wrench is an air motor driven planetary gearbox with a very high reduction ratio. The gearbox is provisioned with a reaction arm to absorb the torque reaction. Unlike the impact wrench, a pneumatic torque wrench is driven by continuous gearing and hence has no noisy and hazardous hammering. This is why a pneumatic torque wrench has excellent accuracy and repeatability.



Technical Specification

Model No.	Min. Torque		Max. Torque		Free Speed rpm	Square Drive inch	Weight with Reaction Arm Kg.
	Lb.ft	Nm	Lb.ft	Nm			
VEGA - 15	30	45	130	180	42	1/2 / 3/4	6.5
VEGA - 50	125	170	500	680	25	3/4	7.5
VEGA - 75	185	250	750	1020	15	3/4 / 1	7.5
VEGA - 100	250	340	1040	1400	9	3/4 / 1	7.8
VEGA - 200	560	750	2200	3000	6	1 / 1.1/2	10.5
VEGA - 300	750	1010	3000	4050	3	1 / 1.1/2	13.5
VEGA - 400	1000	1350	4000	5400	2.5	1.1/2	16.0
VEGA - 500	1200	1650	4800	6500	2	1.1/2	17.0
VEGA - 600	1630	2200	6000	8100	1.5	1.1/2	17.0
VEGA - 900	1420	1950	7102	9600	1	1.1/2	19.8



Model No.	A (mm)	B (mm)	C (mm)
VEGA - 15	260	205	85
VEGA - 50	260	205	85
VEGA - 75	260	205	85
VEGA - 100	270	205	85
VEGA - 200	320	240	102
VEGA - 300	340	240	102
VEGA - 400	350	240	109
VEGA - 500	350	240	125
VEGA - 600	350	240	125
VEGA - 900	360	240	127

Features

- 1 LIGHT AND COMPACT** - Light and compact tool design, suitable for a variety of applications.
- 2 HEAVY DUTY GEARBOX** - Heavy duty gearbox with thrust bearing for low friction and longer operational life.
- 3 SINGLE TRIGGER** - Single trigger for both forward and reverse operations.
- 4 INTEGRAL HOOK POINT** - Integral hook to hook up a tool balancer or any other suspension method.
- 5 LOW NOISE LEVEL** - Low noise level with no vibration.
- 6 HIGH ACCURACY** - VEGA has an accuracy of more than $\pm 5\%$ with repeatability within a 2% variation.
- 7 CUSTOMISED REACTION ARM** - A wide range of standard and customized reaction arms are available as per the customer's requirement.
- 8 WHEEL EXTENSION** - A variety of wheel extensions are available for deep reach, where the tool clearance is a problem.
- 9 ACCESSORIES** - Accessories like universal sockets, universal joints and thin wall sockets are available.



Significant Advantages

- A Pneumatic motors offers a cleaner and tidier work environment.
- The Combination of Air motor and the planetary gear guarantees, a much faster, safer, and more economical operation.

▼ VEGA-50 is used where speed, power, accuracy are required.



FRL UNIT

AIR OPERATED FRL UNIT

Pressure Range 0 psi to 150 psi

The FRL Unit is used to regulate the air pressure and properly lubricate the air motor for a longer life of the tool. The Regulator regulates the inlet air pressure and controls the output torque of the pneumatic torque wrench.

All pneumatic tools must be used with an FRL Unit.

It is strongly advised not to exceed the maximum operating pressure as specified in the individual tool certificate.

A Pressure Regulating Knob is provided with a safety lock to easily set the pressure.



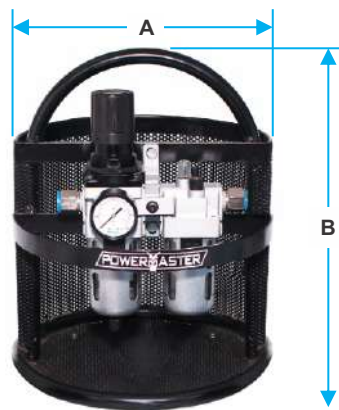
Calibrated 0 - 150 psi pressure gauge for perfect torque output.

Easy push type manual drain to clear the water dispenser.

Strong Handy Metallic Cage.

Technical Specification

FRL UNIT	
Adaptor Size	1/2" BSP
Element	Sinter, Bronze (25 micron)
Bowl Capacity	150 ml
Bowl Guard	Steel
Pressure Gauge	0 - 150 psi
Diaphragms and Seals	Nitrile
Recommended Oil	ISO VG 32
Media (inlet air)	Compressed Air
Hose	3 mtrs.
Adaptor Size	1/2" BSP
Metallic Handy and Portable	Wt. 6 Kg. of Complete Assembly.



Model No.	A (mm)	B (mm)
FRL Unit	304	432

Features

- METALLIC CAGE** - The Filter, Regulator, Lubricator, and Hose are mounted on a strong handy metallic cage.
- CALIBRATED PRESSURE GAUGE** - Calibrated 0 - 150 psi pressure gauge for perfect torque output.
- REGULATOR KNOB** - A Smooth operating regulator knob is provided with a safety lock for an easy pressure setting.
- FINE ADJUSTMENT KNOB** - You can adjust the lubrication of the tool through the adjustment knob on the FRL.
- MANUAL DRAIN** - Easy push type manual drain to clear the water dispenser.
- SAFETY BOWL GUARD** - Steel bowl guard for double safety in case the glass bowl breaks.
- EASY DETACHABLE BOWL** - Easily detachable bowl for replenishing the oil / cleaning.
- QUICK CONNECT ADAPTORS** - FRL comes fitted with quick connect adaptors for easy connection to Tool.



Pre-Usage Checks

- The air supply hose connection must be of a minimum 1/2" to allow adequate air flow to the tool.
- Air supply must be 90psi @ 30cfm minimum.
- On receipt / before usage: Inspect that all the FRL components are intact.
- Check whether all the air connections are intact and leak proof.
- Check oil level in lubricator reservoir. The reservoir should be filled to 2/3 of its maximum level.
- Drain the Filter reservoir before use.
- Drain the water from the filter reservoir daily depending upon the moisture content in your air line.

▼ FRL UNIT is used for precisely regulating air pressure.



ELECTRO ETWC SERIES

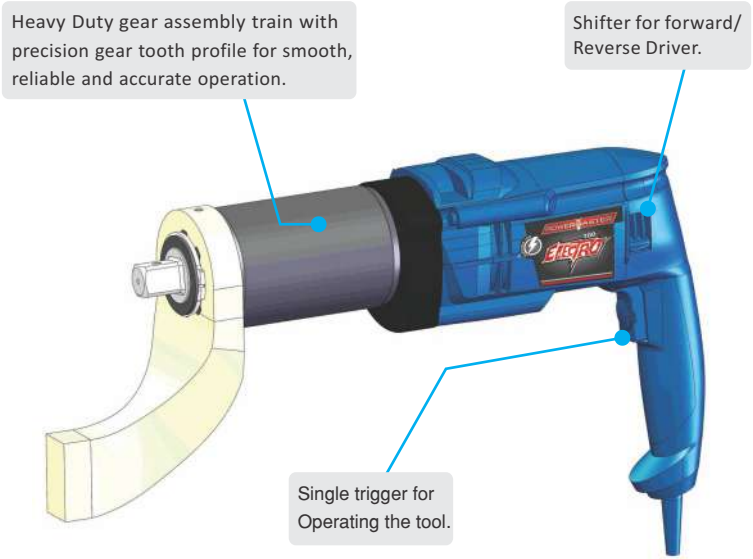
ELECTRIC TORQUE WRENCHES (WITH CONTROL PANEL)

Torque Range 150 Nm to 4200 Nm (110 Lb.ft - 3097 Lb.ft)

The **ETWC Series Torque Wrench** is a hand held, non-impacting electrically driven power tool designed to apply higher torque values. The tool is designed to deliver a preset torque load. Efficient, safe, and fast operation makes it suitable for heavy duty bolting applications.

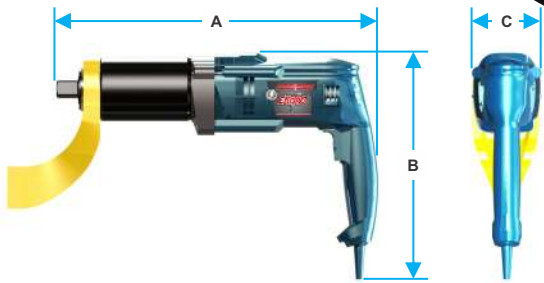
The **Control Panel** is an integral part of the ETWC model and is used to set / adjust the torque values as per requirement.

The drive is connected to the control panel. As per the model and the application, the user can set the torque values in the increment of one. Only once the torque is confirmed by the user, the drive receives a signal to apply the set torque with the user pressing the trigger. The box contains a power cable, a socket to connect the drive, and a switch to shut off the power supply in an emergency.



Technical Specification

Model No.	Min. Torque		Max. Torque		Free Speed	Square Size	Weight with Reaction Arm
	Lb.ft	Nm	Lb.ft	Nm	rpm	inch	Kg.
ETWC - 50	110	150	479	650	25	3/4	6.8
ETWC - 100	221	300	1106	1500	9	1	7.3
ETWC - 200	553	750	2212	3000	4.5	1	9.8
ETWC - 300	811	1100	3097	4200	1.7	1.1/2	12.6



Model No.	A (mm)	B (mm)	C (mm)
ETWC- 15	377	205	85
ETWC - 100	394	205	85
ETWC - 200	445	215	90
ETWC - 300	465	215	90

Pre-Usage Checks

- The ETWC Controller requires single phase 230V AC ~.
- The single phase line must be electrically symmetrical with respect to Earth Ground.
- Extension cord quality and condition is important to ensure personal safety and ETWC performance.

Features

- 1 EASE OF OPERATION** - The wrench stops after the set torque values are achieved.
- 2 SMOOTH OPERATION** - The wrench is designed for smooth running without any impact.
- 3 WIDE RANGE** - Wide range of torque power from 150 Nm. to 4200 Nm. covered in four models.
- 4 ACCURATE AND CONVENIENT** - Light weight, ergonomically designed tool and electronically controlled cut-off system ensure repeatability of torque value.
- 5 HIGH PERFORMANCE GEARBOX** - High performance alloy steel gears with impact free loading ensure long life and high accuracy performance.
- 6 SINGLE PHASE SUPPLY** - Power required for the tool is readily available, single phase 230V - 50Hz.



Control Panel



Sr. No.	Part Description
A	7 Segment Display
B	Set Button
C	OK / RUN Button
D	Torque Unit Led (Nm)
E	Trip Led
F	Torque Increase Button
G	Torque Decrease Button



▼ ETWC-50 is a safe and accurate torquing application.



Salient Features

- 7 Segment display for ease of read.
- Heavy duty power cable.

ELECTRO ETW SERIES

ELECTRIC TORQUE WRENCHES (ON DRIVE)

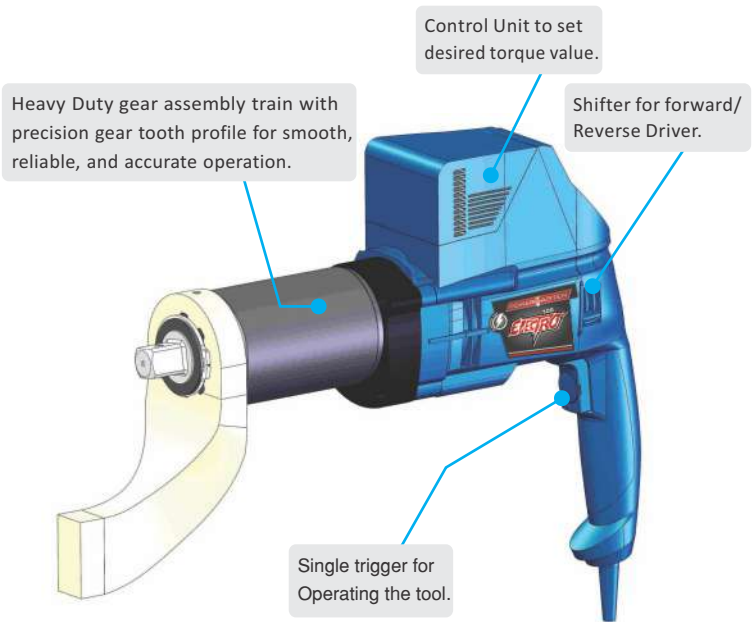
Torque Range 150 Nm to 4200 Nm (110 Lb.ft - 3097 Lb.ft)

The **ETW Electric Torque Wrench** is a hand held, non-impacting electrically driven power tool designed to apply controlled torque. The new POWERMASTER AMERICA electric series torque wrenches come with simple buttons to increase or decrease the value. The set torque value is displayed on the LCD display.

- Now with the digital torque settings, you can increase and decrease the value.
- Torque ranges up to 4200 Nm.
- The tool is designed to deliver a numerical preset Torque.

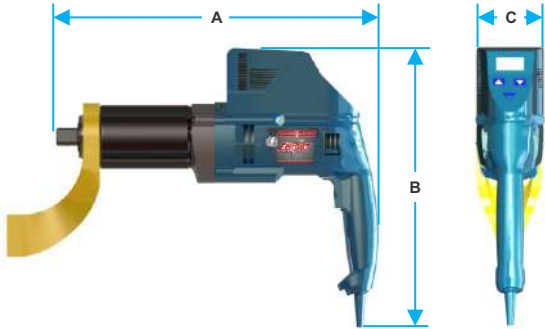
The **Control Unit** is an integral part of the ETW model and is used to set / adjust the torque values as per requirement.

The control unit is mounted on the drive. As per the model and the application, the user can set the torque values in the increment of one. Only once the torque is confirmed by the user, the drive receives a signal to apply the set torque with the user pressing the trigger.



Technical Specification

Model No.	Min. Torque		Max. Torque		Free Speed	Square Size		Weight with Reaction Arm
	Lb.ft	Nm	Lb.ft	Nm		inch	Kg.	
ETW - 50	110	150	479	650	25	3/4	7.2	
ETW - 100	221	300	1106	1500	4	1	7.6	
ETW - 200	553	750	2212	3000	2.3	1	10.0	
ETW - 300	811	1100	3097	4200	1.6	1.1/2	13.0	



Model No.	A (mm)	B (mm)	C (mm)
ETW - 15	377	270	85
ETW - 100	394	270	85
ETW - 200	445	270	90
ETW - 300	465	270	90

Pre-Usage Checks

- The ETW Controller requires a single phase 230V AC ~.
- The single phase line must be electrically symmetrical with respect to Earth Ground.
- Extension cord quality and condition is important to ensure personal safety and ETW performance.

Features

- 1 The wrench has a soft start for smooth running without jerk to the operator.
- 2 The wrench stops after getting torque values.
- 3 SET and RUN modes avoid accidental start of the wrench.
- 4 Now with digital torque settings, you can increase and decrease the value.
- 5 Torque ranges up to 4200 Nm.
- 6 The tool is designed to deliver a numerical preset Torque.



Sr. No.	Part Description
A	LCD Display
B	Set / Run Button
C	Set Mode Led
D	Run Mode Led
E	Trip Led
F	Torque Increase Button
G	Torque Decrease Button



Salient Features

- LCD display for ease of read.
- Robust design for user.

▼ ETW-100 is used to deliver a numerical preset torque.



DYNAMO SERIES

Li-ion BATTERY TORQUE WRENCHES (ANALOGUE TYPE)

Torque Range 150 Nm to 4400 Nm (110 Lb.ft - 3245 Lb.ft)

The **Cordless Wrench Dynamo Series** is a compact design for working in limited spaces or without a power supply. It has 20 torque values to choose from. Battery driven 2 speed torque multiplier from 150nm. (110 ft.lbs) to 4,400 nm. (3,245 ft.lbs). Engineered to master any application effortlessly, the ability to torque industrial fasteners is a simple and quick charge away. The dynamo's lithium power will provide you with the capability to torque hundreds of fastenings with no hoses or cords to limit your reach. Within the dynamo is a digital motor vectoring system that provides accurate and repeatable torque throughout each model's full range.

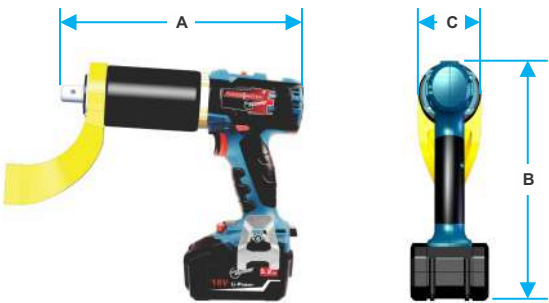
The **Li-ion Battery Pack** supplies power to the tool; for the tool to perform best, ensure the battery is fully charged and in good condition before use. In optimal conditions, the battery should be capable of approximately 100 torque cycles at 50% of the maximum torque.

Note: the application torque, joint hardness, battery condition, age, and operating temperature will affect the actual number of torque cycles per charge.



Technical Specification

Model No.	Min. Torque		Max. Torque		Free Speed	Square Size	Weight with Reaction Arm
	Lb.ft	Nm	Lb.ft	Nm	rpm	inch	Kg.
DYNAMO-100	110	150	664	900	25	3/4	6.6
DYNAMO-200	221	300	1990	2700	4	1	7.0
DYNAMO-300	295	400	2580	3500	2.3	1	9.5
DYNAMO-400	330	450	3245	4400	1.6	1.1/2	12.5



Model No.	A (mm)	B (mm)	C (mm)
DYNAMO - 100	260	260	75
DYNAMO - 200	300	275	90
DYNAMO - 300	300	275	90
DYNAMO - 400	320	275	90

Caution

- Only use the li-ion battery pack with the tool system. Using third-party batteries may damage the tool system.
- Keep the li-ion battery pack away from any metal objects. If the battery terminals are connected by a metal object, the battery will short and cause damage to the battery and injury to the operator.

Features

- 1 Hardened alloy steel for durability and long cycle life.
- 2 Multi-stage planetary gear systems with optimized tooth design.
- 3 Smooth ball bearing rotation of the gearbox housing independent from the motor handle.
- 4 High-Efficiency Brushless Motor.
- 5 Ergonomic glass-filled Nylon handle with a durable slip-resistant over mold.
- 6 18V 5.2 Ah LiHD Battery that provides extended run-time.
- 7 Thumbwheel for setting Torque.
- 8 Thrust bearing between stages isolate the motor when used in all orientations.
- 9 Gears run on low friction, high strength bearing sleeves.



Li-ion Battery with Charger



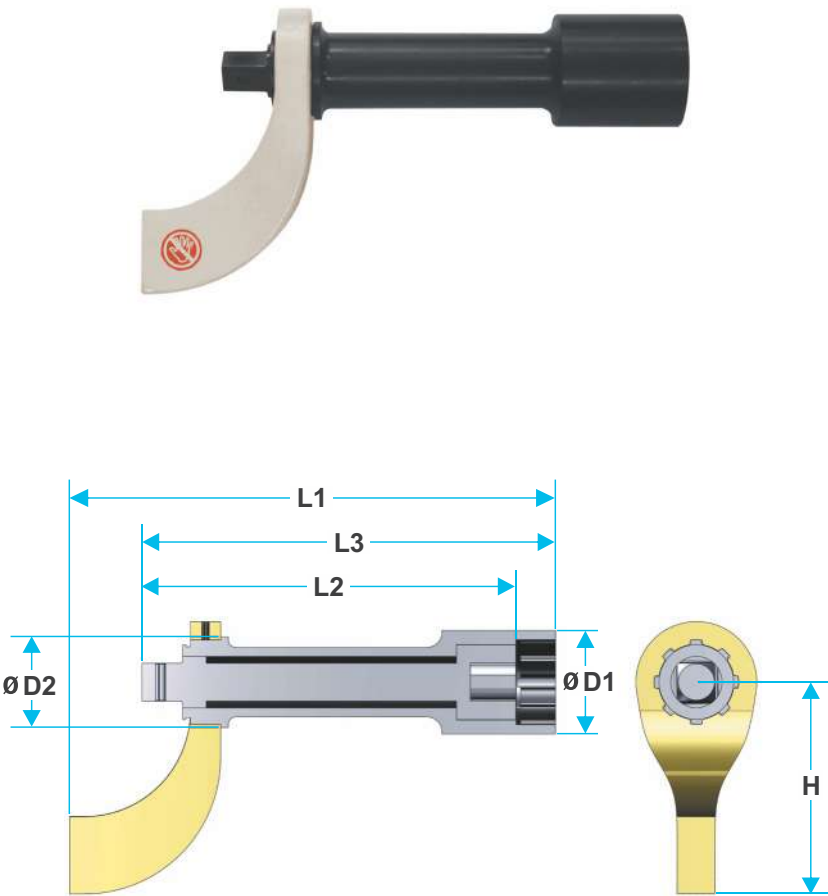
▼ **DYNAMO-100** is used where access is limited.



ACCESSORIES

WHEEL EXTENSION

Wheel extensions are used to reach the wheel hub bolts and nuts, where fitment of the tool is not feasible. POWERMASTER has a complete range of wheel extensions as referred below:



Technical Specification

Model No.	Sq. Drive	L1	L2	L3	D1	D2	H
	inch	mm	mm	mm	mm	mm	mm
PE 1206	3/4	210	150	185	70	45	142
PE 1208	3/4	260	200	235	70	45	142
PE 1210	3/4	310	250	285	70	45	142
PE 1608	1	265	200	235	70	52	142
PE 1610	1	315	250	285	70	52	142
PE 1608H	1	265	200	235	90	60	168

REACTION ARM

Different types of reaction arms are available for a variety of applications. Customized reaction arms are available on request.



Blank Reaction



Double End Blank



Standard Reaction



Deep Reaction



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