

▼ Shown from left to right: E291, E393, E494



- High-efficiency planetary gear sets achieve high output torque from low input torque
- Most models operator protected by anti-backlash device
- Multiplier output accuracy $\pm 5\%$ of input torque
- Reversible, tighten or loosen bolts
- Reaction bar or reaction plate type
- Angle-of-turn protractor standard on E300 models
- Reaction plate models offer increased versatility with reaction point locations
- E300 and E400 series replaceable shear drives provide overload protection of internal power train (one replacement shear drive is included).



◀ Enerpac Reaction Bar Torque Multiplier E393 used to manually torque bolts up to 4300 Nm.

Accurate, Efficient Torque Multiplication

When accurate make-up or break-out of stubborn fasteners requires high torque



Typical Torque Multiplier Applications

- Locomotives
- Power plants
- Pulp and paper mills
- Refineries
- Chemical plants
- Mining and construction
- Off-road equipment
- Shipyards
- Cranes.



Heavy Duty Sockets

Use only Heavy Duty Impact Sockets for power driven torquing equipment, according to ISO2725 and ISO1174; DIN3129 and DIN3121 or ASME-B107.2/1995.

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▼ SELECTION CHART

Torque Multiplier Type	Output Torque Capacity		Model Number
	(Nm)	(Ft.lbs)	
Reaction Bar Multiplier	1015	750	E290PLUS
	1355	1000	E291
	1625	1200	E391
	2980	2200	E392
	4340	3200	E393
Reaction Plate Multiplier	2980	2200	E492
	4340	3200	E493
	6780	5000	E494
	10.845	8000	E495

Manual Torque Multipliers



Manual Torque Multipliers

Enerpac manual torque multipliers provide efficient torque multiplication in wide clearance applications and when external power sources are not available.

Manual torque multipliers are used in most industrial, construction, and equipment maintenance applications. Hydraulic torque wrenches are better suited for tight tolerance, flange and repetitious bolting applications.

Use Reaction Bar Models:

- where space is limited
- where multiple reaction points are available
- when portability is desirable.

Use Reaction Plate Models:

- above 3.200 Nm output torque
- on flanges and applications where neighboring bolt or nut is available to react against
- when extreme reaction forces are generated.

E Series



Maximum Output Torque:

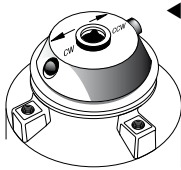
1015 - 10.845 Nm

Torque Ratio:

3:1 - 52:1

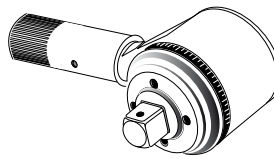
Multiplier Output Ratio Accuracy:

± 5 %



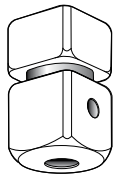
Selector Pawl

Models with anti-backlash protection have directional selector pawls. Set the pawl for clockwise or counter-clockwise rotation.



Angle-of-Turn Protractor

E391, E392 and E393 models include an angle-of-turn protractor (scale) to tighten fasteners using a "torque turn" method. Allows accurate measuring of a specific number of degrees of rotation.



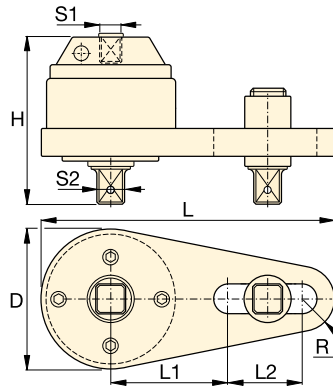
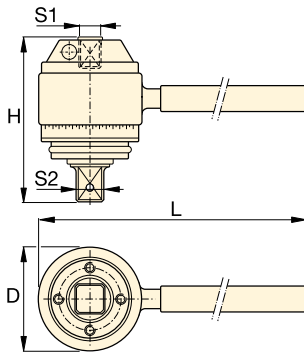
Shearable Square Drive

Provides overload protection on E300- and E400-series multiplier's power train by shearing at 103-110% of rated capacity. Internal shear pin prevents tool from falling off bolt.



CAUTION!

Never use impact type air tools for power driving torque multipliers. Torque multiplier drive train damage will occur.



Reaction Bar Type ¹⁾

Reaction Plate Type ¹⁾



Hydraulic Torque Wrenches

Enerpac offers a complete range of square drive and hexagon cassette torque wrenches.

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Input Torque		Torque Ratio	Input Female Square Drive S1 (inch)	Input Male Square Drive S2 (inch)	Output Male Square Drive Replaceable Shear Drive Model No.	Over-load Protection	Anti-Back-lash	Dimensions (mm)						Weight (kg)	Model Number
(Nm)	(Ft.lbs)							D	H	L	L1	L2	R		
338	250	3 : 1	1/2	3/4	-	No	No	71	84	218	-	-	-	1,8	E290PLUS
451	333	3 : 1	1/2	3/4	-	No	No	71	84	442	-	-	-	2,5	E291
271	200	6 : 1	1/2	3/4	E391SDK	Yes	No	100	102	498	-	-	-	4,1	E391
220	162	13,6 : 1	1/2	1	E392SDK	Yes	Yes	103	146	498	-	-	-	6,9	E392
235	173	18,5 : 1	1/2	1	E393SDK	Yes	Yes	103	165	498	-	-	-	8,3	E393
220	162	13,6 : 1	1/2	1	E392SDK	Yes	Yes	124	140	356	140	124	32	7,8	E492
235	173	18,5 : 1	1/2	1	E393SDK	Yes	Yes	124	163	356	140	124	32	8,9	E493
256	189	26,5 : 1	1/2	1 1/2	E494SDK	Yes	Yes	143	222	378	178	89	41	15,4	E494
209	154	52 : 1	1/2	1 1/2	E495SDK	Yes	Yes	148	293	387	178	89	48	22,8	E495

¹⁾ E200 and E400-series do not have an Angle-of-Turn Protractor (scale).

User must verify manual torque wrench accuracy prior to use to ensure accurate final output torque.