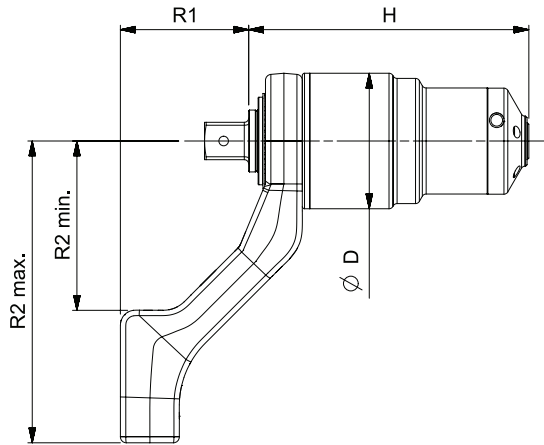


Torque Multipliers Reaction Arm Style



Sockets not included

- Compact dimensions allow excellent access to applications and easy, safe handling
- Lightweight for torque capacity
- Supplied as standard with an aluminium reaction arm (steel reactions for HT-52). Other options are available on request, including customised reactions
- Torque multiplication accuracy $\pm 4\%$
- Robust, 48 tooth Anti Wind-Up Ratchet (AWUR) contains the forces generated during tightening for safe and easy operation
- Each multiplier is supplied with its own unique calibration certificate allowing the accurate calculation of input torque for critical applications



4	COMPACT SERIES
180200	HT-52/4.7 1,000 N·m ½" in ¾" out
180201	HT-52/22.2 1,000 N·m ⅜" in ¾" out
180202	HT-52/22.2 1,000 N·m ½" in ¾" out
180203	HT-52/22.2 1,000 N·m ⅜" in ¾" out AWUR
180204	HT-52/22.2 1,000 N·m ½" in ¾" out AWUR
180205	HT-52/22.2 1,000 N·m ¾" in 1" out AWUR
180206	HT-52/22.2 1,000 N·m ½" in 1" out AWUR
180208	HT-72/5.2 1,500 N·m ½" in 1" out
180209	HT-72/5.2 1,000 N·m ¾" in ¾" out
180210	HT-72/5.2 2,000 N·m ¾" in 1" out
180212	HT-72/27 2,000 N·m ½" in 1" out
180214	HT-72/27 2,000 N·m ½" in 1" out AWUR
180215	HT-92/25 4,000 N·m ½" in 1" out AWUR
180216	HT-119/25.5 7,000 N·m ½" in 1½" out AWUR



11	NOSE EXTENSIONS FOR 72 SERIES
18349.006	6" long, SPM/SPF
18349.009	9" long, SPM/SPF
18349.012	12" long, SPM/SPF
18349.015	15" long, SPM/SPF
18349.018	18" long, SPM/SPF
18330.50	Telescopic Nose Assembly

Note: Square drive fitted from existing tool. SPM = Spline Male. SPF = Spline Female.

Model	HT-52/4.7	HT-52/22.2	HT52/22.2 AWUR	HT-72/5.2	HT-72/5.2	HT-72/27	HT-72/27 AWUR	HT-92/25 AWUR	HT-119/25.5 AWUR
Part Number	180200	180201 180202	180203 180204 180205 180206	180208 180209	180210	180212	180214	180215	180216
Multiplication Ratio	4.7:1	22.2:1	22.2:1	5.2:1	5.2:1	27:1	27:1	25:1	25.5:1
Dimensions (mm)	ØD	52	52	52	72	72	72	92	119
	H	91	116	130	140	135	137	154	212
	R1	58	58	58	67	72	72	87	117
	R2 min.	71	71	71	91	91	91	115	151
	R2 max.	131	131	131	166	166	166	205	199
Tool Weight (kg)	1.0	1.3	1.4	2.7	2.7	2.7	3.2	5.4	9.3
Reaction Weight (kg)	0.9	0.9	0.9	0.7	0.7	0.7	0.7	1.4	2.1

Manual Torque Multipliers E-Series

ENERPAC 

▼ 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 series 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)

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

▼ SELECTION CHART

Torque Multiplier Type	Output Torque Capacity		Model Number
	(Ft.lbs)	(Nm)	
Reaction Bar Multiplier	750	1015	E290PLUS
	1000	1355	E291
	1200	1625	E391
	2200	2980	E392
	3200	4340	E393
Reaction Plate Multiplier	2200	2980	E492
	3200	4340	E493
	5000	6780	E494
	8000	10845	E495

Manual Torque Multipliers

E-Series

ENERPAC 



Manual Torque Multipliers

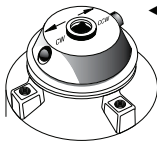
Enerpac manual torque multipliers provide efficient torque multiplication in wide clearance applications and when external power sources are not available. Manual torque multipliers are used in most industrial, construction, and equipment maintenance applications. Hydraulic torque wrenches are better 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

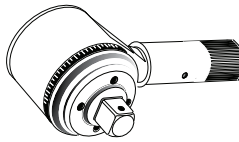
Use Reaction Plate Models:

- above 3200 Ft.-lbs. output torque
- on flanges and applications where neighboring bolt or nut is available to react against
- when extreme reaction forces are generated



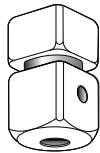
Selector Pawl

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



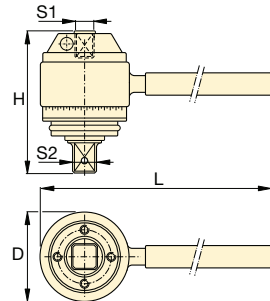
Angle-of-Turn Protractor

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

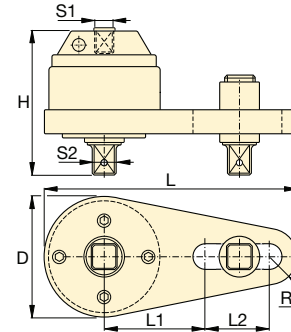


Shearable Square Drive

Designed to provide overload protection on E300- and E400-series multiplier power train by shearing when excess input torque is applied. Internal shear pin prevents tool from falling off bolt.



Reaction Bar Type ¹⁾



Reaction Plate Type ¹⁾

E Series



Nominal Output Torque:
750-8000 Ft.lbs

Torque Ratio:
3:1-52:1

Multiplier Output Ratio Accuracy:
± 5 %



CAUTION!

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



Hydraulic Torque Wrenches

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



BSH-Series Sockets

Heavy-Duty Impact Sockets for power driven torquing equipment.

Input Torque		Torque Ratio	Input Female Square Drive	Output Male Square Drive		Over-load Protection	Anti-Back-lash	Dimensions (in)						Wt.	Model Number
					Replaceable Shear Drive Model No.			D	H	L	L1	L2	R		
(Ft.lbs)	(Nm)		S1 (in)	S2 (in)									(lbs)		
250	338	3 : 1	½	¾	—	No	No	2.8	3.3	8.6	—	—	—	4.0	E290PLUS
333	451	3 : 1	½	¾	—	No	No	2.8	3.3	17.4	—	—	—	5.5	E291
200	271	6 : 1	½	¾	E391SDK	Yes	No	3.9	4.0	19.6	—	—	—	13.8	E391
162	219	13.6 : 1	½	1	E392SDK	Yes	Yes	4.1	5.7	19.6	—	—	—	18.3	E392
173	234	18.5 : 1	½	1	E393SDK	Yes	Yes	4.1	6.5	19.6	—	—	—	15.2	E393
162	219	13.6 : 1	½	1	E392SDK	Yes	Yes	4.9	5.5	14.0	5.5	4.9	1.3	17.2	E492
173	234	18.5 : 1	½	1	E393SDK	Yes	Yes	4.9	6.4	14.0	5.5	4.9	1.3	23.4	E493
189	256	26.5 : 1	½	1½	E494SDK	Yes	Yes	5.6	8.7	14.9	7.0	3.5	1.7	34.0	E494
154	208	52 : 1	½	1½	E495SDK	Yes	Yes	5.8	10.7	15.2	7.0	3.5	1.9	50.3	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.