

Based on the original PneuTorque®, the ‘Standard Series’ range is a direct result of over 50 years of refinement and development necessary to keep pace with the requirements of industry today.

In use in many thousands of applications worldwide PneuTorque® wrenches continue to represent the foundation of Norbar’s powered tool range. Two speed models offer all the advantages of single speed versions but with the additional benefit of a run-down speed five times greater than the high torque speed setting.



- Models available for almost every bolting and torque application, up to 300,000 Nm
- Forward and reverse operation
- Quiet, non-impacting or pulsing operation - low operator fatigue
- Stall control gives repeatability of ±5% on a given joint
- Other reaction styles can be designed to suit specific applications
- Electronic torque transducers can be fitted for precise torque monitoring

P/N	Standard Series – Single Speed
16031	PT 1 ¾" sq. dr., 160 - 680 Nm, 120 - 500 lbf.ft
16011	PT 1 1" sq. dr., 160 - 680 Nm, 120 - 500 lbf.ft
16098	PT 1A 1" sq. dr., 270 - 1200 Nm, 200 - 900 lbf.ft
16097	PT 1A 1" sq. dr., 270 - 1200 Nm, 200 - 900 lbf.ft
16013	PT 2 1" sq. dr., 515 - 1700 Nm, 380 - 1250 lbf.ft
16015	PT 5 1" sq. dr., 880 - 3400 Nm, 650 - 2500 lbf.ft
16017	PT 6 1½" sq. dr., 880 - 3,400 Nm, 650 - 2500 lbf.ft
16066	PT 7 1½" sq. dr., 1762 - 6000 Nm, 1300 - 4500 lbf.ft
16072	PT 9 1½" sq. dr., 2710 - 9500 Nm, 2000 - 7000 lbf.ft
16046	PT 11 2½" sq. dr., 4400 - 20000 Nm, 3250 - 14700 lbf.ft
18086	PT 12 2½" sq. dr., 9500 - 34,000 Nm, 7000 - 25000 lbf.ft
16052	PT 13 2½" sq. dr., 13550 - 47000 Nm, 10000 - 35000 lbf.ft
16045	PT 14 3½" sq. dr., 22375 - 100000 Nm, 16500 - 73500 lbf.ft



MTS = Manual Two Speed. Auto 2SP = Automatic Two Speed.
 Angle Encoders are available for Standard Series PTs please contact VASI for further details.

NB: PneuTorque® PT 11 - PT 18 are supplied with a Lubro Control Unit as standard equipment. PneuTorques PT 12, 13 and 14 are also supplied with a weld prepared reaction ring as standard. PTs 13 and 14 are also supplied with a transporting trolley. PT 15 - 18 do not include output drive or reaction. These components will be engineered uniquely for each application. Remote PT part numbers are designated with an .X
 e.g. PT 1 Remote is 16031.X
 e.g. PT 1 Remote Auto is 16031.XAUT

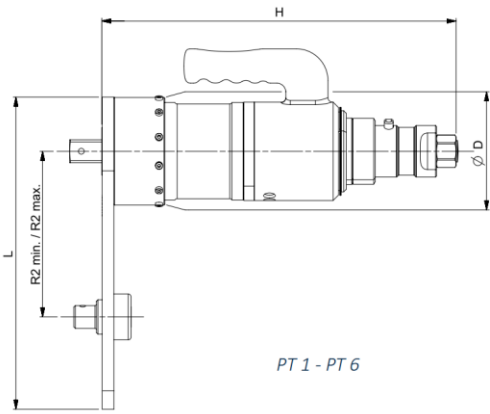
P/N	Standard Series – Manual Two-Speed
16031.MTS	PT 1 ¾" sq. dr., 160 - 680 Nm, 120 - 500 lbf.ft
16011.MTS	PT 1 1" sq. dr., 160 - 680 Nm, 120 - 500 lbf.ft
16098.MTS	PT 1A " sq. dr., 270 - 1200 Nm, 200 - 900 lbf.ft
16097.MTS	PT 1A 1" sq. dr., 270 - 1200 Nm, 200 - 900 lbf.ft
16013.MTS	PT 2 1" sq. dr., 515 - 1700 Nm, 380 - 1250 lbf.ft
16015.MTS	PT 5 1" sq. dr., 880 - 3400 Nm, 650 - 2500 lbf.ft
16017.MTS	PT 6 1½" sq. dr., 880 - 3,400 Nm, 650 - 2500 lbf.ft
16066.MTS	PT 7 1½" sq. dr., 1762 - 6000 Nm, 1300 - 4500 lbf.ft
16072.MTS	PT 9 1½" sq. dr., 2710 - 9500 Nm, 2000 - 7000 lbf.ft
16046.MTS	PT 11 2½" sq. dr., 4400 - 20000 Nm, 3250 - 14700 lbf.ft
18086.MTS	PT 12 2½" sq. dr., 9500 - 34,000 Nm, 7000 - 25000 lbf.ft
16052.MTS	PT 13 2½" sq. dr., 13550 - 47000 Nm, 10000 - 35000 lbf.ft
16045.MTS	PT 14 3½" sq. dr., 22375 - 100000 Nm, 16500 - 73500 lbf.ft
18089.MTS	PT 15 MTS 40000 - 150000 Nm, 29500 - 110500 lbf.ft
18090.MTS	PT 16 MTS 55000 - 200000 Nm, 40500 - 147500 lbf.ft
18088.MTS	PT 17 MTS 70000 - 250000 Nm, 51500 - 184500 lbf.ft
16054.MTS	PT 18 MTS 85000 - 300000 Nm, 62500 - 221500 lbf.ft
16490	Lifting Bracket for Standard Series (up to PT7)



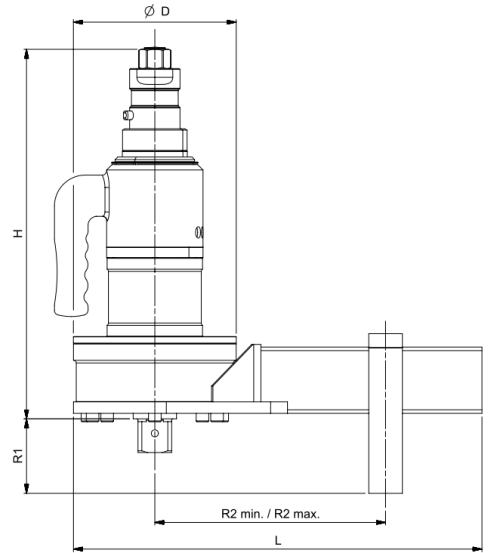
P/N	Standard Series – Automatic Two-Speed
16031.AUT	PT 1 ¾" sq. dr., 160 - 680 Nm, 120 - 500 lbf.ft
16011.AUT	PT 1 1" sq. dr., 160 - 680 Nm, 120 - 500 lbf.ft
16098.AUT	PT 1A " sq. dr., 270 - 1200 Nm, 200 - 900 lbf.ft
16097.AUT	PT 1A 1" sq. dr., 270 - 1200 Nm, 200 - 900 lbf.ft
16013.AUT	PT 2 1" sq. dr., 515 - 1700 Nm, 380 - 1250 lbf.ft
16015.AUT	PT 5 1" sq. dr., 880 - 3400 Nm, 650 - 2500 lbf.ft
16017.AUT	PT 6 1½" sq. dr., 880 - 3,400 Nm, 650 - 2500 lbf.ft
16066.AUT	PT 7 1½" sq. dr., 1762 - 6000 Nm, 1300 - 4500 lbf.ft
16072.AUT	PT 9 1½" sq. dr., 2710 - 9500 Nm, 2000 - 7000 lbf.ft



The tools are also available for remote control. Please contact us for a complete setup specified for your request.



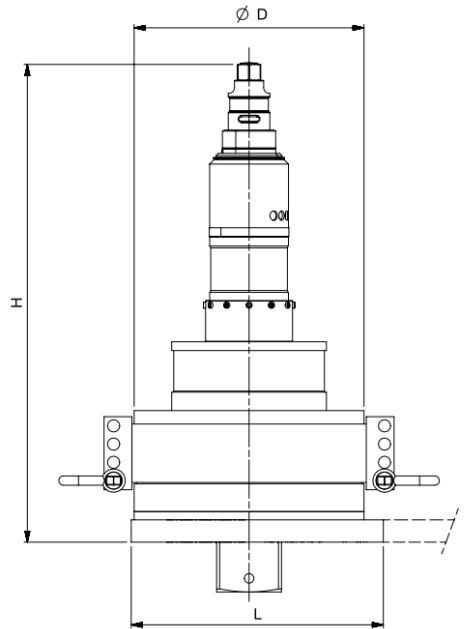
PT 1 - PT 6



PT 7 - PT 11

PneuTorque® Standard Series Automatic Two-Speed

Model	PT 1	PT1A	PT2	PT 5	PT 6	PT 7	PT 9	
Part Number	16031.AUT 16011.AUT	16098.AUT 16097.AUT	16013.AUT	16015.AUT	16017.AUT	16066.AUT	16072.AUT	
Output Speed (rpm)	150	75	45	25	25	12.5	9	
Dimensions (mm)	ØD	108	108	108	119	119	144	184
	H	419	419	419	462	464	492	487
	L	303	303	303	355	355	423	448
	R1	N/A	N/A	N/A	N/A	N/A	84	84
	R2 min. / R2 max.	83 / 216	83 / 216	83 / 216	86 / 263	86 / 263	150 / 331	175 / 351
Tool Weight (kg)	14.1	14.6	14.6	17.5	17.5	23.2	27.9	
Reaction Weight (kg)	2.2	2.2	2.2	2.5	2.5	6.3	8.3	



PT 12 - PT 14

PneuTorque® Standard Series Single Speed

Model	PT 1	PT 1A	PT 2	PT 5	PT 6	PT 7	PT 9	PT 11	PT 12	PT 13	PT 14	
Part Number	16031 16011	16098 16097	16013	16015	16017	16066	16072	16046	18086	16052	16045	
Output Speed (rpm)	30	15	9	5	5	2.5	1.8	1.2	0.5	0.3	0.2	
Dimensions (mm)	ØD	108	108	108	119	119	144	184	212	248	315	315
	H	350	350	350	393	395	423	418	495	536	578	643
	L	303	303	303	355	355	423	448	609	325	341	341
	R1	N/A	N/A	N/A	N/A	N/A	84	84	N/A	N/A	N/A	N/A
	R2 min. / R2 max.	83 / 216	83 / 216	83 / 216	86 / 263	86 / 263	150 / 331	175 / 351	320 / 500	N/A / N/A	N/A / N/A	N/A / N/A
Tool Weight (kg)	10.6	11.1	11.1	14.0	14.0	19.7	24.4	38.6	49.8	102.2	119.4	
Reaction Weight (kg)	2.2	2.2	2.2	2.5	2.5	6.3	8.3	13.3	6.5	6.9	10.4	

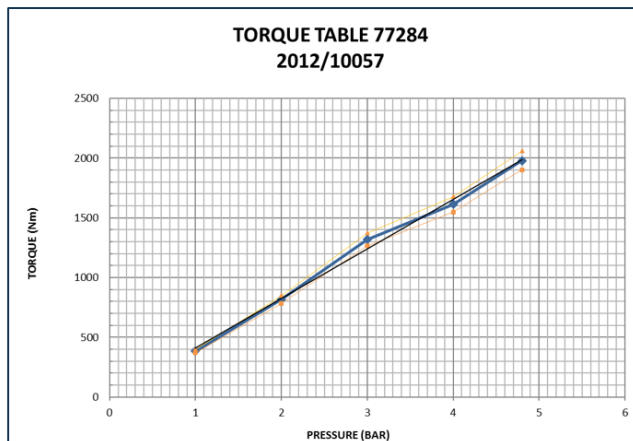
PneuTorque® Standard Series Manual Two-Speed

* Available on request

Model	PT 1	PT 1A	PT 2	PT 5	PT 6	PT 7	PT 9	PT 11	PT 12	PT 13	PT 14	PT 15	PT 16	PT 17	PT 18	
Part Number	16031.MTS 16011.MTS	16098.MTS 16097.MTS	16013.MTS	16015.MTS	16017.MTS	16066.MTS	16072.MTS	16046.MTS	18086.MTS	16052.MTS	16045.MTS	18089.MTS	18090.MTS	18088.MTS	16054.MTS	
Output Speed (rpm)	150	75	45	25	25	12.5	9	6	2.5	1.5	1	0.5	0.4	0.35	0.3	
Dimensions (mm)	ØD	108	108	108	119	119	144	184	212	248	315	315	*	410	410	520
	H	436	436	436	479	481	509	504	581	622	664	729	*	866	939	936
	L	303	303	303	355	355	423	448	609	325	341	341	*	N/A	N/A	N/A
	R1	N/A	N/A	N/A	N/A	N/A	84	84	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	R2 min. / R2 max.	83 / 216	83 / 216	83 / 216	86 / 263	86 / 263	150 / 331	175 / 351	320 / 500	N/A / N/A	N/A / N/A	N/A / N/A	N/A / N/A	N/A / N/A	N/A / N/A	N/A / N/A
Tool Weight (kg)	14.1	14.6	14.6	17.5	17.5	23.2	27.9	42.1	53.3	105.7	122.9	*	270.0	285.0	380.0	
Reaction Weight (kg)	2.2	2.2	2.2	2.5	2.5	6.3	8.3	13.3	6.5	6.9	10.4	N/A	N/A	N/A	N/A	

What is a PneuTorque® Pneumatic Torque Tool?

The PneuTorque® consists of a robust air motor driving a Norbar multiplier with three or more stages of epicyclic gearing. Torque control is achieved through adjustment of the air pressure. An air pressure versus torque graph and a calibration certificate is supplied with each tool and allows specific torque values to be set. For more critical applications, PneuTorques can be fitted with a torque transducer and the precise torque output displayed. The tool can then be shut off at the desired torque either manually or automatically using suitable control circuitry



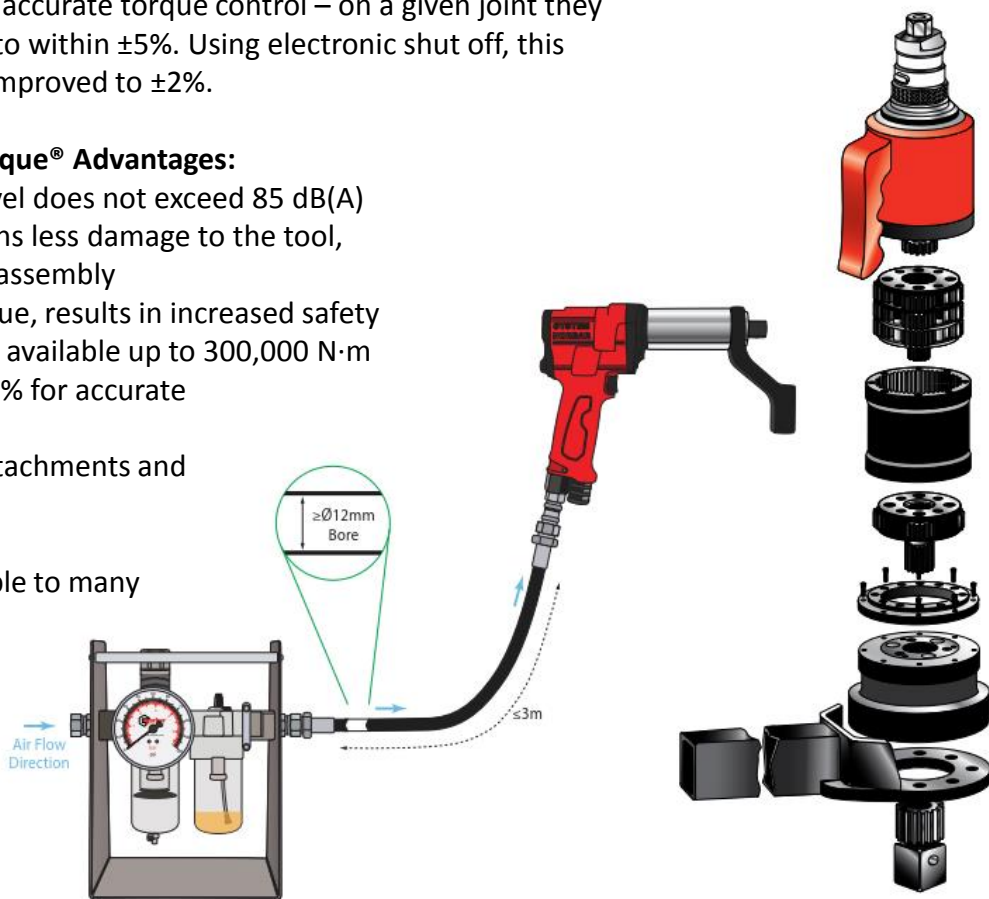
Why use PneuTorque® Pneumatic Torque Tools?

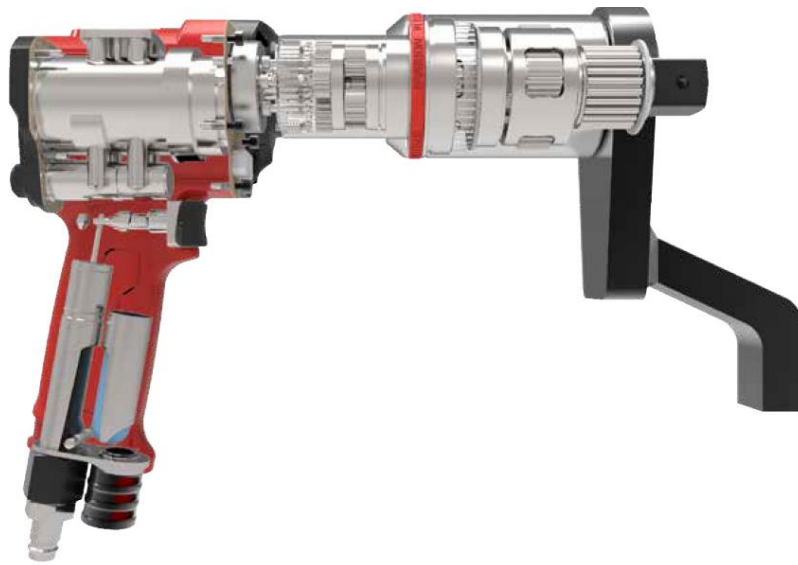
Hand operated torque multipliers are ideal for low volume or intermittent use or when there is no power source available. However, for production lines or whenever a large number of bolts is involved, a powered multiplier will save a considerable amount of time. PneuTorque® operation is quiet – less than 85 dB(A) with absolutely no impacting. These two factors make PneuTorques comfortable for the operator to use, reducing fatigue and consequently increasing safety. PneuTorques provide accurate torque control – on a given joint they will stall repeatably to within $\pm 5\%$. Using electronic shut off, this repeatability can be improved to $\pm 2\%$.

Summary of PneuTorque® Advantages:

- Sound pressure level does not exceed 85 dB(A)
- No impacting means less damage to the tool, socket and bolted assembly
- Less operator fatigue, results in increased safety
- Powerful – models available up to 300,000 N·m
- Repeatability of $\pm 5\%$ for accurate torque control
- A wide range of attachments and accessories make

PneuTorques adaptable to many applications





PneuTorque® Applications

The smooth and continuous torque output of the PneuTorque® makes these tools suitable for a wide range of bolting and non-bolting applications.

Bolting

PneuTorques are ideally suited to tightening and untightening bolts of up to 150 mm diameter. The following is just a small selection of applications:

- Wheel nuts on trucks, buses and large machinery
- Structural steelwork
- High pressure joints e.g. Pipelines, boiler feed pumps and pressure vessels
- Engine head bolts
- Injector heads on plastic injection moulding machines
- Heat exchangers
- Heavy vehicle production eg. chassis and suspension bolts



Non-bolting

Whenever a high continuous torque is needed, PneuTorques can be used as the power source. Typical applications include:

- Ball valve operation
- Powering wagons and gantries
- Barring of large diesel engines (turning the crankshaft) during build
- Weld testing by applying test torques
- Roller adjustment in steel mills and paper mills
- Valving of gas bottles

