

Atlas Copco Tensor DS

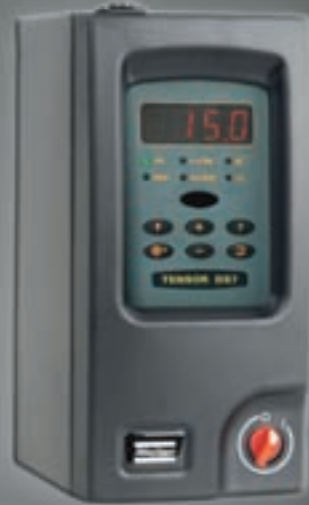
Intelligence in a box



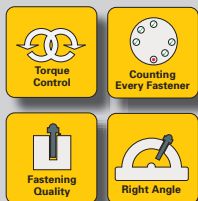
Atlas Copco

Choose your own level of functionality

The tool does the work, but the box provides the intelligence



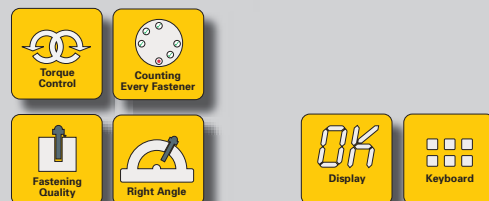
BOX



Simple, smart and effective

If you are unsure of tightening quality with your existing air tools, then Tensor DS Box is a cost effective first step into the world of controlled tightening. DS Box lets you control speed and tightening strategy to ensure that the tool does the job right independently of operator influence. The angle monitoring and bolt counting capabilities further help you to immediately detect common assembly errors and your operators are advised if any problem occur. Using the Box is quick and easy too. If the tool lights indicate "OK," then the tightening has been checked and the next operation can be performed. There's no need to refer to any additional readouts or data.

BASIC



Extra security with the information you need

The Tensor DS Basic drive offers extra security by enabling the operator to see the precise torque value displayed on the controller – instead of just the light on the tool. This feature can help you to be sure that the right tightening program has been used and that the joint is tightened according to specification. The keypad and display easily allow for new input of tightening parameters if the application or production demands change. Programming can also quickly be accomplished by through connecting a laptop computer using the ToolsTalk software.



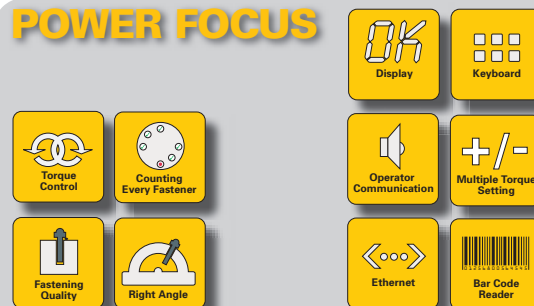
ADVANCED



Optimal quality control with multiple options

With the Advanced solution Tensor DS demonstrates its full range of capabilities. In addition to controlled tightening you can add error-proofing modules such as stack lights or alarms for increased audio-visual feedback to the operator. Unlike the single program Box or Basic solutions, Tensor DS Advanced allows up to 10 different programs for a single tool. This means a potential that up to 10 conventional air tools can be replaced with a single Tensor DS unit. These capabilities, in combination with easy-to-add accessories, means a top-of-the-line quality control workstation can be easily created in a cost-effective way.

POWER FOCUS



A common solution for any level of complexity

By adding the specific software key, Tensor DS is ready to go with functionality normally seen only in more expensive systems, thus providing a common platform for use throughout any assembly plant. The ability to receive and transmit signals and sequentially link programs can further reduce cost and complexity by eliminating the need for additional PLC's which was common in the past. Power Focus also offers the capacity to select specific programs based on bar code scanning and to store tightening status of each and every fastener. Combined with a user friendly colour screen and easy-to-access USB connection, these capabilities make Power Focus the outstanding solution to ensure versatility, quality and process security for the integrated workstation.

Choose the right accessories

Atlas Copco offers a wide range of accessories for your Tensor DS system. The right accessories help you improve safety

and ergonomics for your operators as well as offer you better feedback and error-proofing capabilities for your production.



Safety and Ergonomics



Suspension yoke



Cover for standard socket



Safety lever



Supported extensions



Tool extension



Reaction bars



Error proofing



Stacklight



Operator Panel



Socket selectors



I/O Expansion box



RE-alarm

Tensor – the operators' choice

The Tensor range of electric assembly tools covers all station and assembly line requirements for safety critical and quality critical fastening applications. At Atlas Copco we have a proud legacy of putting the operator first and we continuously improve the ergonomic features on each new generation of Tensor tools. Tensor is also one of the most advanced tool ranges on the market in terms of high power-to-weight ratios and operator guidance in the form of clear result feedback via LED's or audio signals.

Productivity gains

Atlas Copco's unique Tensor motors give the Tensor range outstanding spindle speeds and, thus, help you achieve lower cycle times in your operation. Exceptional ergonomics in terms of balance, grip and low weight make the tools a favorite of the operators and increase individual productivity.

Operator feedback

All Tensor tools are equipped with LED's that will indicate the tightening result, green light for tightening OK and red light for NOK. Tensor ST and STR have configurable LED's and an integrated speaker for indicating results via audio signals.

Lowest cost of operation

At Atlas Copco we believe that quality is the road to lowest cost of operation over time. A maintained Tensor tool produces the same performance year after year at minimum and predictable costs while ensuring highest possible uptime.

Tensor DL: quality critical

The Tensor DL range is used for quality critical screws. Optimized for small screw assembly, the DL is the electric choice in the low torque segment.

Tensor SL: low torque safety critical, configurable tool functions

The Tensor SL range is optimized for safety critical small screw assembly. It offers compact screwdriver ergonomics, combined with traceability and error proofing capabilities.

Tensor DS: quality critical

Tensor DS is used for quality critical applications not requiring traceable measured torque value. DS offers major productivity and quality gains compared with conventional tooling.

Tensor S: safety critical

Tensor S is the well proven range for safety critical applications where traceability and error proofing capability is required.

Tensor ST: safety critical, configurable tool functions

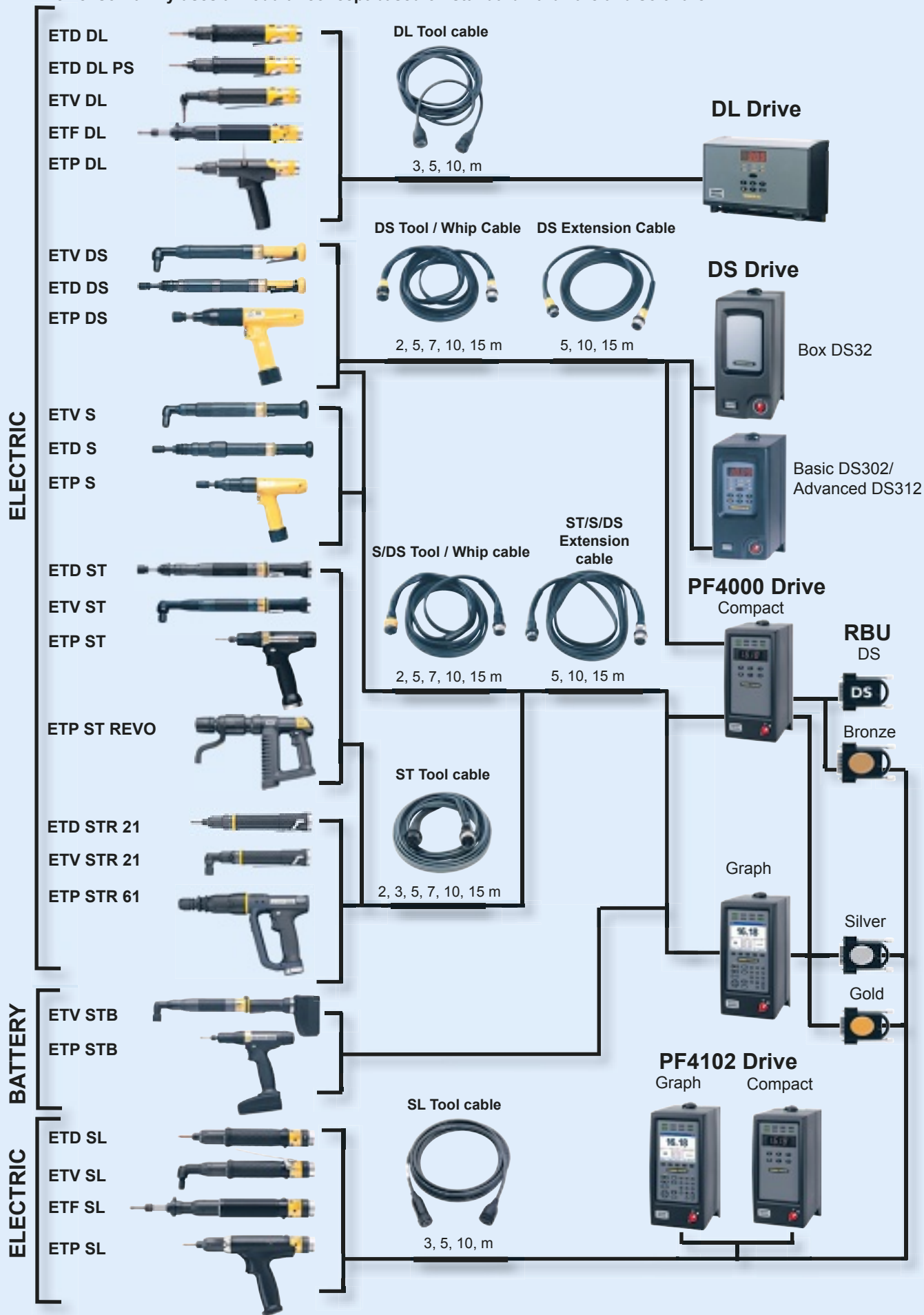
The second generation of Tensor tools was developed with low weight and productivity in mind. Tensor ST has an internal bus connection for intelligent accessories such as a barcode reader and torque selector switch.

Tensor STR: safety critical, configurable tool functions

The latest generation of Tensor tools where ergonomics and productivity are taken to a new level.



The Tensor family uses a modular concept based on standard hardware and software.



ETV DS

Tensor DS non-transducerized angle tool is equipped with spiral gears in the angle heads with improved contact ratio: This allows for smoother tightening and improved accuracy throughout the service life of the tool. The new molded ergonomic motor sleeve improves grip and comfort for the operator.



ETV DS

- Angle tools are ideal for hand-held operations.
- Torque range from 2 to 4000 Nm.
- Flush Socket and Hold & Drive tools.
- Ball retainer models for easy socket changes.

Model	Square drive in	Torque				Speed r/min	Weight		Length mm	CS distance mm	Ordering No.
		Nm		ft lb			kg	lb			
ETV DS42											
ETV DS42-05-06	1/4	1.5 -	6	1.1 -	4.4	1488	1.2	2.6	381	11	8433 1705 31
ETV DS42-05-10	3/8	1.5 -	6	1.1 -	4.4	1488	1.2	2.6	381	13.5	8433 1705 49
ETV DS42-08-06	1/4	2 -	8	1.5 -	5.9	1105	1.2	2.6	381	11	8433 1706 10
ETV DS42-10-06	1/4	3 -	12	2.2 -	8.8	762	1.3	2.9	381	11	8433 1706 14
ETV DS42-10-10	3/8	3 -	12	2.2 -	8.8	762	1.3	2.9	381	13.5	8433 1706 21
ETV DS42-20-10	3/8	5 -	20	3.7 -	14	401	1.3	2.9	381	13.5	8433 1706 49
ETV DS42 Ball retainer											
ETV DS42-10-B10	3/8	3 -	12	2.2 -	8.8	762	1.3	2.9	381	13.5	8433 1706 31
ETV DS42-20-B10	3/8	5 -	20	3.7 -	14	401	1.3	2.9	381	13.5	8433 1706 51
ETV DS72											
ETV DS72-15-10	3/8	4.5 -	17	3.3 -	12	1525	1.4	3.1	412	13.5	8433 1720 10
ETV DS72-28-10	3/8	7 -	28	5.1 -	20	1171	1.4	3.1	412	13.5	8433 1720 28
ETV DS72-30-10	3/8	9 -	35	6.6 -	25	800	1.4	3.1	412	13.5	8433 1721 42
ETV DS72-40-10	3/8	10 -	40	7.4 -	29	800	1.6	3.5	434	18	8433 1721 94
ETV DS72-50-10	3/8	14 -	55	11 -	40	480	1.6	3.5	434	18	8433 1722 58
ETV DS72-70-13	1/2	20 -	80	15 -	59	348	2.1	4.6	461	20	8433 1723 16
ETV DS72-100-13	1/2	28 -	110	21 -	81	229	2.3	5.1	482	20	8433 1723 70
ETV DS72-160-13	1/2	40 -	160	30 -	118	152	2.8	6.2	525	25.5	8433 1723 98
ETV DS72-180-13	1/2	45 -	180	34 -	133	123	2.8	6.2	525	25.5	8433 1724 15
ETV DS72-200-20	3/4	53 -	210	39 -	155	123	3.0	6.6	525	27	8433 1724 40
ETV DS72 Flush Socket											
ETV DS72-30-FS	-	9 -	35	6.6 -	25	800	1.4	3.1	412	13.5	8433 1721 65
ETV DS72-50-FS	-	14 -	55	11 -	40	480	1.6	3.5	434	18	8433 1722 75
ETV DS72-70-FS	-	20 -	80	15 -	59	345	2.1	4.6	461	20	8433 1723 26
ETV DS72-160-FS	-										8433 1724 00
ETV DS72-200-FS	-	50 -	200	37 -	147	137	3.5	7.7	527	28	8433 1725 05
ETV DS72 Hold & Drive											
ETV DS72-50-HAD	-	14 -	55	11 -	40	480	3.0	6.6	504	26	8433 1722 60
ETV DS72-70-HAD	-	20 -	80	15 -	59	348	3.1	6.8	479	26	8433 1723 30
ETV DS72-100-HAD	-	28 -	110	21 -	81	229	3.2	7.1	525	26	8433 1723 73
ETV DS72-160-HAD	-	40 -	160	30 -	118	152	3.3	7.3	525	26	8433 1724 02
ETV DS72-200-HAD	-	50 -	200	37 -	148	123	3.5	7.7	525	26	8433 1724 45
ETV DS72 Ball retainer											
ETV DS72-15-B10	3/8	5 -	17	3.7 -	12	1525	1.4	3.1	412	13.5	8433 1720 20
ETV DS72-30-B10	3/8	9 -	35	6.7 -	25	800	1.4	3.1	412	13.5	8433 1721 54
ETV DS72-40-B10	3/8	10 -	40	7.4 -	29	800	1.6	3.5	434	18	8433 1721 99
ETV DS72-50-B10	3/8	14 -	55	11 -	40	480	1.6	3.5	434	18	8433 1722 63
ETV DS72-70-B13	1/2	20 -	80	15 -	59	348	2.1	4.6	461	20	8433 1723 21
ETV DS72-100-B13	1/2	28 -	110	21 -	81	240	2.3	5.1	482	20	8433 1723 68
ETV DS72-160-B13	1/2	40 -	160	36 -	118	152	2.8	6.2	525	25.5	8433 1724 12
ETV DS72-180-B13	1/2	45 -	180	34 -	133	123	2.8	6.2	525	25.5	8433 1724 20
ETV DS92											
ETV DS92-100-13	1/2	25 -	100	19 -	74	642	3.3	7.3	534	20	8433 1750 21
ETV DS92-180-13	1/2	45 -	180	34 -	113	395	3.8	8.4	578	25.5	8433 1750 68
ETV DS92-270-20	3/4	70 -	270	52 -	199	240	7.0	15.4	661	33.5	8433 1751 38
ETV DS92-370-20	3/4	95 -	370	70 -	273	152	7.1	15.7	661	33.5	8433 1751 86
ETV DS92-450-20	3/4	115 -	450	85 -	333	131	11.6	25.6	702	54	8433 1752 04
ETV DS92-600-25	1	150 -	600	111 -	444	112	11.6	25.6	702	54	8433 1752 63
ETV DS92-600-20TM	3/4	150 -	600	111 -	444	97	9.7	21.4	603	26.3	8433 1752 40
ETV DS92-1000-25TM	1 1/2	250 -	1000	185 -	740	60	12.0	26.5	666	32	8433 1752 90
ETV DS92-2000-38TM	1 1/2	500 -	2000	370 -	1480	30	17.0	37.5	706	63.5	8433 1752 96
ETV DS92-4000-38TM	1 1/2	1000 -	4000	740 -	2960	14	21.0	46.3	615	71	8433 1753 25
ETV DS92 Flush Socket											
ETV DS92-270-FS	-	68 -	270	51 -	199	235	7.0	15.4	661	34	8433 1751 46
ETV DS92-600-FS	-	150 -	600	111 -	442	124	10	22	701	54	8433 1752 70
ETV DS92 Hold & Drive											
ETV DS92-370-HAD	-	95 -	370	70 -	273	170	8.3	18.3	661	35	8433 1751 95

ETD DS

- ETD DS inline non-transducerized tools. The low torque series is ideal for hand-held bench assembly. The high torque tools are well suited for fixtured applications.
- Torque range from 1 to 4000 Nm.
- Telescopic spindles for fixtured applications.
- Female hex drives for bits.
- Swivelling front parts for easy positioning of reaction force.



ETD DS

Model	Square drive in	Torque				Speed r/min	Weight		Length mm	CS distance mm	Spline/ Mounting	Ordering No.
		Nm	ft lb				kg	lb				
ETD DS4												
ETD DS4-05-10S	3/8	2 -	5	1.5 -	3.6	1315	1.1	2.5	380	28	- / 1	8433 0710 29
ETD DS4-10-10S	3/8	4 -	14	3 -	10	620	1.1	2.5	380	28	- / 1	8433 0710 52
ETD DS42-20-10	3/8	5 -	20	3.7 -	15	390	1.1	2.5	380	28	- / 1	8433 1711 16
ETD DS4 Telescopic												
ETD DS4-05-10ST	3/8	2 -	5	1.5 -	3.6	1315	1.3	2.9	418	28	2 / 2	8433 0710 37
ETD DS4-10-10ST	3/8	4 -	14	3 -	10	620	1.3	2.9	418	28	2 / 2	8433 0710 73
ETD DS4 Female Hex												
ETD DS4-02-I06S	1/4	1 -	2.5	0.7 -	1.8	2942	1.1	2.5	371	28	- / 1	8433 0710 22
ETD DS4-05-I06S	1/4	2 -	5	1.5 -	3.6	1310	1.1	2.5	371	28	- / 1	8433 0710 26
ETD DS4-10-I06S	1/4	4 -	14	3 -	10	620	1.1	2.5	371	28	- / 1	8433 0710 46
ETD DS7												
ETD DS7-20-10S	3/8	6 -	20	4.4 -	14.5	1240	1.4	3.1	411	28	- / 1	8433 0730 23
ETD DS72-30-10S	3/8	10 -	35	7.3 -	25	745	1.4	3.1	411	28	- / 1	8433 1730 88
ETD DS72-50-13S	1/2	17 -	55	12 -	40	540	1.9	4.2	456	28	2 / 2	8433 1731 12
ETD DS7-70-13S	1/2	21 -	70	15 -	51	370	2.2	4.9	477	28	2 / 2	8433 0731 31
ETD DS7-90-13S	1/2	28 -	95	21 -	69	275	2.2	4.9	477	28	2 / 2	8433 0731 45
ETD DS7-120-13S	1/2	38 -	125	28 -	91	225	2.2	4.9	477	28	2 / 2	8433 0731 84
ETD DS7 Telescopic												
ETD DS7-20-10ST	3/8	6 -	20	4.4 -	14.5	1240	1.5	3.3	449	28	2 / 2	8433 0730 44
ETD DS7-30-10ST	3/8	10 -	35	7.3 -	25	745	1.5	3.3	449	28	2 / 2	8433 0731 05
ETD DS7-30-10ST50	3/8	10 -	35	7.3 -	25	745	1.6	3.5	500	28	2 / 2	8433 0730 93
ETD DS7-50-13ST	1/2	17 -	55	12 -	40	540	2.1	4.7	483	28	3 / 5	8433 0731 24
ETD DS7-50-13ST50	1/2	17 -	55	12 -	40	540	2.2	4.8	540	28	3 / 5	8433 0731 22
ETD DS7-70-13ST	1/2	21 -	70	15 -	51	370	2.4	5.4	504	29.5	3 / 5	8433 0731 40
ETD DS7-70-13ST50	1/2	21 -	70	15 -	51	370	2.5	5.5	562	29.5	3 / 5	8433 0731 38
ETD DS72-70-13ST75	1/2	21 -	70	15 -	51	370	2.5	5.5		29.5	3 / 5	8433 1731 39
ETD DS7-90-13ST	1/2	28 -	95	21 -	69	275	2.9	6.5	504	29.5	3 / 5	8433 0731 52
ETD DS7-90-13ST50	1/2	28 -	95	21 -	69	275	3.0	6.6	562	29.5	3 / 5	8433 0731 64
ETD DS7-120-13ST	1/2	38 -	125	28 -	91	225	3.0	6.6	504	29.5	3 / 5	8433 0731 96
ETD DS7-120-13ST50	1/2	38 -	125	28 -	91	225	3.1	6.8	562	29.5	3 / 5	8433 0731 99
ETD DS7-200-13ST	1/2											8433 0732 10
ETD DS7 Ball Retainer												
ETD DS7-50-B13S	1/2	17 -	55	12 -	40	540	1.9	4.2	456	28	2 / 2	8433 0731 20
ETD DS7-90-B13S	1/2	28 -	95	21 -	69	275	2.2	4.9	477	28	2 / 2	8433 0731 48
ETD DS9												
ETD DS9-100-13S	1/2	40 -	100	29 -	73	715	3.0	6.7	529	32	2 / 2	8433 0756 42
ETD DS9-150-13S	1/2	60 -	150	44 -	110	455	3.2	7.1	544	32	2 / 2	8433 0757 54
ETD DS9-200-13S	1/2	80 -	200	58 -	146	340	3.2	7.1	544	32	2 / 2	8433 0758 71
ETD DS9-270-20S	3/4	68	270	50	199	220	6.2	14	603	36	6 / 8	8433 0760 53
ETD DS9-450-20S	3/4	115 -	450	85 -	328	125	7.4	16	639	40.5	6 / 8	8433 0760 71
ETD DS92-600-20S	3/4		600									8433 1761 29
ETD DS9-1000-25S	1	250 -	1000	184 -	730	68	12.3	27	769	47	7 / 11	8433 0763 60
ETD DS9-1200-25S	1	300 -	1200	220 -	880	55	12.3	27	769	47	7 / 11	8433 0763 80
ETD DS9-1500-38S	1 1/2	375 -	1500	280 -	1100	42	16.8	37	725	68	8 / 12	8433 0763 91
ETD DS9-2000-38S	1 1/2	600 -	2000	440 -	1475	34	20.5	45	725	68	8 / 12	8433 0764 05
ETD DS9-3000-38S	1 1/2	750 -	3000	550 -	2200	21	21.7	47.8	809	68	8 / 12	8433 0764 23
ETD DS92-4000-38S	1 1/2	1000 -	4000	730 -	2950	17	21.7	48	809	68	8 / 12	8433 1764 37

Continued....

Model	Square drive in	Torque		Speed r/min	Weight		Length mm	CS distance mm	Spline/ Mounting	Ordering No.	
		Nm	ft lb		kg	lb					
ETD DS9 Telescopic											
ETD DS9-100-13ST	1/2	40- 100	29 - 73	715	3.2	7.1	557	32	3 / 5	8433 0756 92	
ETD DS9-150-13ST	1/2	60- 150	44 - 110	455	3.4	7.6	572	32	3 / 5	8433 0758 03	
ETD DS9-200-13ST	1/2	80- 200	58 - 146	340	3.4	7.6	572	32	3 / 5	8433 0759 11	
ETD DS9-270-20ST	3/4	108- 270	79 - 197	225	6.0	13	653	36	6 / 8	8433 0760 55	
ETD DS9-450-20ST	3/4	115- 450	85 - 328	125	7.6	17	689	40.5	6 / 8	8433 0760 88	
ETD DS9-600-20ST	3/4	150- 600	110 - 438	110	7.6	17	689	40.5	6 / 8	8433 0761 35	
ETD DS9-1000-25ST	1	250-1000	184 - 730	68	12.5	28	824	47	7 / 11	8433 0763 63	
ETD DS9-1200-25ST	1	300-1200	220 - 880	55	12.5	28	824	47	7 / 11	8433 0763 83	
ETD DS9-1500-38ST	1 1/2	375-1500	280 - 1100	42	17	37.5	824	68	8 / 12	8433 0763 93	
ETD DS9-2000-38ST	1 1/2	600-2000	440 - 1475	34	21	47	824	68	8 / 12	8433 0764 20	
ETD DS92-3000-38ST	1 1/2	750-3000	550 - 2200	21	21.9	48.3	904	68	8 / 12	8433 1764 25	
ETD DS9-4000-38ST	1 1/2	1000-4000	730 - 2950	17	21.9	48	904	68	8 / 12	8433 0764 40	
ETD DS9 Swivelling											
ETD DS92-750-25SSW	1	188- 750	138 - 552	84	5.5	12.1	579	47	5	8433 0761 75	
ETD DS92-1000-25SSW	1	250-1000	185 - 737	68	12.3	27	769	47	7/11	8433 0763 70	
ETD DS92-1200-25SSW	1	300-1200	220 - 884	55	12.3	27	769	47	7/11	8433 0763 85	
ETD DS92-2000-25SSW	1 1/2	500-2000	370 - 1480	34	20.5	45	725	68	8/12	8433 0764 10	
ETD DS92-4000-25SSW	1 1/2	1000-4000	740 - 2960	17	21.7	48	809	68	8/12	8433 0764 45	

ETP DS

- ETP DS pistol grip tool for both hand-held and fixtured applications.
- Torque range from 2 to 4000 Nm.
- Telescopic spindles for fixtured applications.
- Swivelling front parts for easy positioning of reaction force.
- Female hex drives for bits.
- Swivelling tools are equipped with non-reversible start button, for operator safety.

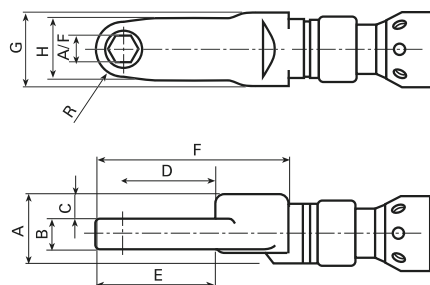


Model	Square drive in	Torque				Speed r/min	Weight		Length mm	CS distance mm	Spline/ Mounting	Ordering No.
		Nm		ft lb			kg	lb				
ETP DS4												
ETP DS4-05-06S	1/4	2 -	5	1.5 -	3.6	1310	1.1	2.5	193	21.5	- / -	8433 0708 76
ETP DS4-10-06S	1/4	3.5 -	12	2.5 -	8.8	660	1.1	2.5	193	21.5	- / -	8433 0708 92
ETP DS42-10-10S	3/8	3.5 -	12	2.5 -	8.8	905	1.0	2.2	188	21.3	- / -	8433 0709 11
ETP DS4 Female Hex												
ETP DS42-02-106	1/4	1.0 -	2.5	0.7 -	1.8	2950	0.9	2.0	188	21.3	- / -	8433 0708 40
ETP DS42-05-106	1/4	2 -	5	1.5 -	3.6	1770	0.9	2.0	188	21.3	- / -	8433 0708 69
ETP DS4-07-106S	1/4	2.1 -	7	1.5 -	5.1	905	1.1	2.5	201	21.5	- / -	8433 0708 80
ETP DS42-10-106	1/4	3.5 -	12	2.5 -	8.8	905	1.0	2.2	188	21.3	- / -	8433 0708 87
ETP DS42-20-106	1/4	6	20	4.4	14.5	471	1.0	2.2	188	21.3	- / -	8433 0709 34
ETP DS7												
ETP DS7-20-10S	3/8	6 -	20	4.4 -	14.5	1240	1.6	3.6	273	21.5	- / 1	8433 0726 36
ETP DS7-30-10S	3/8	10 -	35	7.3 -	25	750	1.6	3.6	273	21.5	- / 1	8433 0726 53
ETP DS7-50-13S	1/2	17 -	55	12 -	40	540	1.9	4.2	318	21.5	2 / 2	8433 0726 87
ETP DS7-70-13S	1/2	21 -	70	15 -	51	370	2.1	4.7	340	21.5	2 / 2	8433 0727 01
ETP DS7-90-13S	1/2	28 -	95	21 -	69	275	2.1	4.7	340	21.5	2 / 2	8433 0727 19
ETP DS7-120-13S	1/2	38 -	125	28 -	91	220	2.1	4.7	340	21.5	2 / 2	8433 0727 47
ETP DS7 Telescopic												
ETP DS7-30-10ST	3/8	10 -	35	7.3 -	25	750	1.7	3.7	313	21.5	2 / 2	8433 0726 55
ETP DS7-50-13ST	1/2	17 -	55	12 -	40	540	2.1	4.6	350	21.5	2 / 2	8433 0726 92
ETP DS7-70-13ST	1/2	21 -	70	15 -	51	370	2.2	4.9	367	22.5	3 / 5	8433 0727 05
ETP DS7 Female Hex												
ETP DS7-20-106	1/4	6 -	20	4.4	14.5	1240	1.6	3.6	273	21.5	- / 1	8433 0726 38
ETP DS7 Swivelling ^a												
ETP DS7-50-13SSW												8433 0726 95
ETP DS7-70-13SSW	1/2	21 -	70	15 -	51	370	2.2	4.9	339	29.5	2 / 4	8433 0727 09
ETP DS7-90-13SSW	1/2	28 -	95	21 -	69	275	2.2	4.9	339	29.5	2 / 4	8433 0727 28
ETP DS7-120-13SSW	1/2	38 -	125	28 -	91	220	2.2	4.9	339	29.5	2 / 4	8433 0727 84
ETP DS9												
ETP DS9-100-13S	1/2	40 -	100	29 -	73	790	3.8	8.5	378	32	2 / 2	8433 0765 39
ETP DS9-150-13S	1/2	60 -	150	44 -	110	510	3.8	8.5	392	32	2 / 2	8433 0765 58
ETP DS9-200-13S	1/2	80 -	200	58 -	146	375	3.8	8.5	392	32	2 / 2	8433 0766 05
ETP DS9-270-20S	3/4	108 -	270	79 -	197	250	5.8	12.9	451	36	6 / 8	8433 0766 49
ETP DS9-450-20S	3/4	115 -	450	85 -	328	140	7.4	16.5	487	40.5	6 / 8	8433 0767 52
ETP DS9-600-20S	3/4	150 -	600	110 -	438	120	7.4	16.5	487	40.5	6 / 8	8433 0768 08
ETP DS9-1000-25S	1	250 -	1000	184 -	730	68	12.1	26.7	620	47	7 / 11	8433 0768 66
ETP DS9-1200-25S	1	300 -	1200	220 -	880	55	12.1	26.7	620	47	7 / 11	8433 0768 83
ETP DS9-2000-38S	1 1/2	500 -	2000	440 -	1475	34	16.8	37	574	68	8 / 12	8433 0769 10
ETP DS9-3000-38S	1 1/2	750 -	3000	550 -	2200	21	21.7	47.8	654	68	8 / 12	8433 0769 30
ETP DS9-4000-38S	1 1/2	1000 -	4000	730 -	2950	17	21.7	47.8	654	68	8 / 12	8433 0769 50
ETP DS9 Telescopic												
ETP DS9-1000-25ST	1	250 -	1000	184 -	730	68	12.3	27.1	672	47	7 / 11	8433 0768 79
ETP DS9-2000-38ST	1 1/2	500 -	2000	440 -	1475	34	17	37.5	672	68	8 / 12	8433 0769 20
ETP DS9-3000-38ST	1 1/2	750 -	3000	550 -	2200	21	21.9	48.3	753	68	8 / 12	8433 0769 33
ETP DS9-4000-38ST	1 1/2	1000 -	4000	730 -	2950	17	21.9	48.3	753	68	8 / 12	8433 0769 60
ETP DS9 Swivelling ^a												
ETP DS9-150-13SSW	1/2	60 -	150	44 -	110	510	3.9	8.7	394	32	2 / 4	8433 0765 69
ETP DS9-200-13SSW	1/2	80 -	200	58 -	146	375	3.9	8.7	394	32	2 / 4	8433 0766 12
ETP DS9-350-20SSW	3/4	100 -	370	75 -	270	180	5.2	11.5	387	35	4	8433 0766 56
ETP DS9-500-20SSW	3/4	140 -	530	105 -	390	125	5.2	11.5	387	35	4	8433 0767 71
ETP DS9-750-25SSW	1	220 -	750	162 -	553	84	5.5	12.1	428	47	5	8433 0768 24
ETP DS9-1000-25SSW	1	250 -	1000	184 -	730	68	12.1	26.7	620	47	7 / 11	8433 0768 76
ETP DS9-1500-25SSW	1	375 -	1500	280 -	1100	45	8.5	18.8	450	46	9	8433 0768 99
ETP DS9-2000-38SSW	1 1/2	500 -	2000	440 -	1475	34	16.8	37	574	68	8 / 12	8433 0769 15

^a Non-reversible start button as standard.

In-Line crowfoot tools

Dimensions

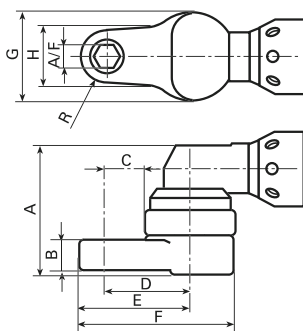


ETC DS

Model	Torque		Speed r/min	Weight		Length mm	A/F mm	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	R mm	Ordering No.
	Nm	ft lb		kg	lb												
ETC DS72																	
ETC DS72-25-13-LI3	6- 28	4.4- 20.7	622	1.9	4.2	507	13	34	15	13	46	71	94	35	30	13	8433 1701 90

Offset crowfoot tools

Dimensions

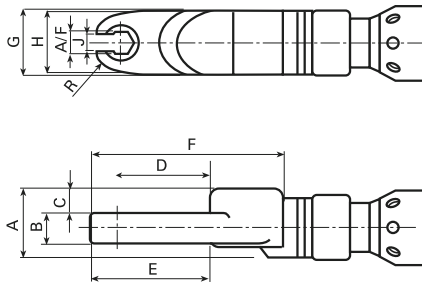


ETC DS

Model	Torque			Speed r/min	Weight		Length mm	A/F mm	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	R mm	Ordering No.	
	Nm		ft lb		kg	lb													
ETC DS42																			
ETC DS42-12-8-LO3	4.8-	12	2.8-	8.9	401	1.55	3.4	411	1256.15	10	12.4	32.8	42.8	57.8	36.5	22	10	8433 1704 00	
ETC DS72																			
ETC DS72-15-10-LO5	3.5-	18	2.6-	13	1164	1.7	3.7	474	10	60	15	48	66	76	91	37	22	10	8433 1701 12
ETC DS72-25-13-LO5	5.6-	28	4.2-	21	796	2.0	4.4	514	13	68	15	62	84	97	118	44	30	13	8433 1701 29
ETC DS72-40-13-LO3	8.8-	44	6.5-	33	478	2.2	4.8	478	13	68	18	25	47	62	82	44	31	14.5	8433 1701 34
ETC DS72-40-13-LO5	8.8-	44	6.5-	33	478	2.2	4.8	425	13	69	18	72	94	108	129	44	31	14.5	8433 1701 38
ETC DS72-50-19-LO5	17-	56	12.5-	43	348	3.5	7.7	581	19	94	28	54	123	140	166	63	36	18	8433 1701 49
ETC DS72-60-17-LO3	13-	65	9.6-	48	346	2.7	5.9	507	17	77	24	29	51	66	89	48	30	15	8433 1701 46
ETC DS72-80-21-LO3	18-	90	13.3-	67	236	3.3	7.3	585	21	90	20	35	66	86	112	63	40	20	8433 1701 60
ETC DS72-80-21-LO5	18-	90	13.3-	67	236	4.1	9.0	651	21	92	20	101	132	152	178	63	40	20	8433 1701 65
ETC DS72-90-18-LO6	32-	90	24-	66	152	4.5	9.7	684	18	93	20	24	165	185	216	58	40	20	8433 1701 67
ETC DS72-90-21-LO5	23-	77	17-	57	229	3.6	7.9	619	21	81	20	24	132	152	178	63	40	20	8433 1710 65
ETC DS72-100-17-LO5	42-	100	31-	74	123	4.7	10	728	17	99	24	116	209	229	254	58	40	20	8433 1701 69
ETC DS72 Extra heavy duty																			
ETC DS72-40-13-AO3	8-	40	6-	29	480	2.3	5.0	486	13	60	19	33	53	69	86	40	17	16	8433 1702 15
ETC DS72-70-17-AO3	14-	70	11-	51	345	2.9	6.4	528	17	67	19	45	68	87	107	45	21	20	8433 1702 32
ETC DS92																			
ETC DS92-140-18-LO7	65-	145	47-	107	240	10	22	864	18	156	43	149	185	204	221	77	37	19	8433 1703 95
ETC DS92-140-21-LO3	58-	144	43-	106	395	5	11	636	21	100	33	35	66	86	112	63	40	20	8433 1701 75
ETC DS92-200-21-LO3	43-	215	23-	160	174	10	22	718	21	146	40	33	70	91	125	77	42	21	8433 1701 80
ETC DS92-215-19-LO3	86-	215	63-	158	240	9	20	718	19	150	40	25	70	91	125	77	42	26	8433 0214 09

In-Line tube nut tools

Dimensions

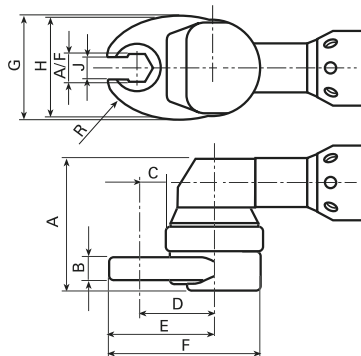


ETO DS

Model	Torque		Speed r/min	Weight		Length mm	A/F mm	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	J mm	R mm	Ordering No.
	Nm	ft lb		kg	lb													
ETO DS72																		
ETO DS72-15-10-LI3	3 - 15	2.2 - 11	1046	1.7	3.7	483	10	32	12	11	39	26	68	34	32	8	14	8433 1703 10
ETO DS72-18-13-LI3	3.6 - 18	2.7 - 13	743	1.7	3.7	499	13	34	11	15	49	32	84	35	38	8	16	8433 1703 15
ETO DS72-30-13-LI3	6.6 - 33	4.7 - 24	453	2.4	5.2	525	13	43	18	14	47	31	83	38	40	10	25	8433 1703 21
ETO DS72-30-19-LI4	10 - 35	7 - 26	556	2.5	5.5	560	19	46	11	21	69	47	114	55	49	12	32	8433 1703 30
ETO DS72-35-13-LI3	7 - 35	5.2 - 26	438	2.6	5.7	569	13	46	11	21	70	48	113	45	55	12	32	8433 1703 25
ETO DS72-50-17-LI3	11 - 55	8.2 - 41	290	3.0	6.6	628	17	46	12	20	81	39	124	45	59	16	32	8433 1703 35
ETO DS72-50-17-LI4	17 - 56	13 - 41	539	4	8.8	595	17	46	18	17	41	38	99	50	47	12	31	8433 1213 94
ETO DS72-80-19-LI3	16 - 80	12 - 60	226	3.5	7.7	629	19	46	18	17	74	52	137	64	59	17	32	8433 1703 40

Offset tube nut tools

Dimensions



ETO DS

Model	Torque		Speed r/min	Weight		Length mm	A/F mm	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	J mm	R mm	Ordering No.
	Nm	ft lb		kg	lb													
ETO DS42																		
ETO DS42-08-8-LO3	1.7 - 8.5	1.3 -6.3	584	1.5	3.3	397	8	59	11	4	22	30	45	37	29	6	10	8433 1703 50
ETO DS72																		
ETO DS72-10-10-LO3	2.4- 12	1.8 -8.9	1164	1.6	3.5	434	10	59	10	7	25	35	50	37	31	7	12	8433 1703 60
ETO DS72-18-13-LO3	3.6- 18	2.7 - 13	796	1.8	3.9	441	13	61	11	8	30	42	63	44	38	8	15	8433 1703 68
ETO DS72-25-13-LO3	5.6- 28	4.2 - 21	796	1.9	4.2	469	13	65	11	13	37	52	75	48	50	11	31	8433 1703 75
ETO DS72-35-19-LO5	11- 36	8 - 27	480	2.6	5.7	542	19	67	11	37	107	124	150	63	55	13	32	8433 1703 78
ETO DS72-50-17-LO3	11- 55	8.2 - 41	346	2.8	6.2	510	17	76	12	18	49	69	97	63	59	16	32	8433 1703 80
ETO DS72-80-22-LO3	25- 83	18 - 61	229	3.2	7	610	22	82	18	19	122	143	170	63	59	17	32	8433 1703 85
ETO DS72-100-24-LO3	22- 110	16 - 81	198	4.3	9.5	584	24	92	20	23	60	85	119	74	77	21	33	8433 1703 90