



Air screwdrivers & nutrunners



CSE...D...RA air screwdrivers

New!

- **Torque control system:**
Delta, with differential incremental torque and immediate automatic air shut-off
- **Tightening torque:**
from 0.8 to 5 Nm
- **Type of grip:**
straight and pistol models



FIAM

INDUSTRIAL AIR TOOLS

CSE...D...RA air screwdrivers

New!

The new range of Delta air screwdrivers


has been specially designed and manufactured by **Fiam** to solve fastening problems when using self-threading, self-tapping, self-shaping and self-drilling screws in situations **where the final tightening torque is lower than the initial one of threading or tapping.**

On the opposite page you will find an illustration of such a situation that is common when, for example, joining sheet metal.


Until now, slip clutch screwdrivers have mostly been used for this type of assembly, and although they are suitable for the initial threading or tapping phase, they do not satisfy ergonomic needs due to the high level of noise and vibrations, nor the final quality of the product due to the risk of spoiling the surface of the assembly pieces. Air screwdrivers with immediate automatic air shut-off, although resolving the above ergonomic problems of noise and vibrations, still do not represent the ideal solution because:


1) if the screwdriver (that is its clutch) has been calibrated according to the final torque value, it will stop during the initial threading/tapping phase because in this phase the torque is higher than in the final stage (see phase table opposite);
2) if the screwdriver (that is its clutch) has been calibrated according to the torque required in the initial phase of threading/tapping, it may cause unthreading of the joint or may damage the surface of the work piece.
All these problems are easily


overcome by the **brand new Delta models** thanks to their new patented device for differential incremental torque and automatic immediate air shut-off. The **Delta screwdriver** automatically supplies both the greater torque necessary in the threading/tapping phase, and immediate automatic air shut-off when reaching the preset torque. The greatest respect is paid to **maximum comfort** for the operator, with very low vibrations ($<1\text{m/sec}^2$) and noise levels. With regard to safety, **Delta screwdrivers**, unlike other products on the market, stop automatically when the operator does not apply totally the push effort necessary to make the fastening operation; this precaution avoids any possible harm to the operator's wrist.

 **Grip:** straight and pistol models

 **Idle speed:** from 1000 to 1500 r.p.m.

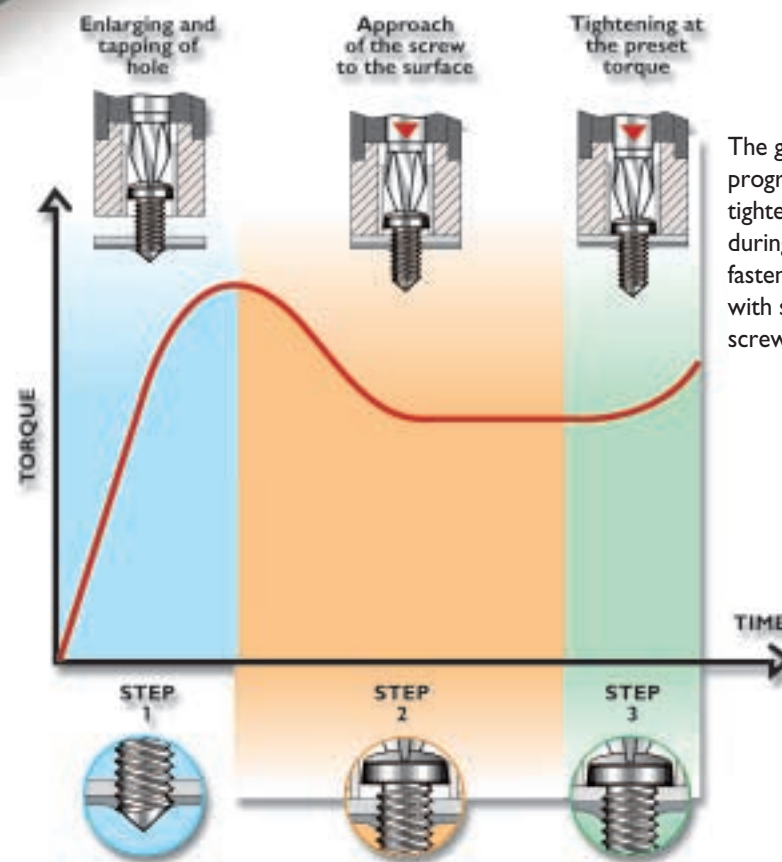
 **Starting system:** lever, push button

 **Reversibility:** for all models

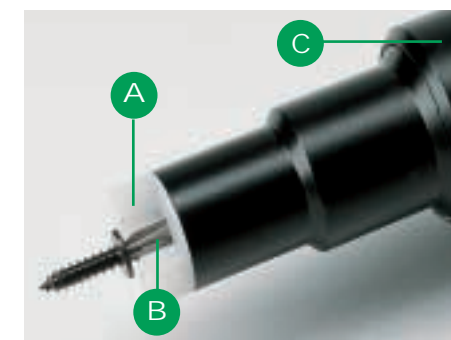
 Fiam screwdrivers are designed for use with either lubricated and unlubricated compressed air.



Suitable even in situations where thrust is required along the tightening axis (especially with self-drilling screws)



- 1 Step 1: enlarging and tapping of hole. During this phase, the screwdriver exercises the maximum torque necessary for threading or tapping.
- 2 Step 2: the necessary torque is transmitted to the screw to bring its underhead into contact with the surface of the work piece.
- 3 Step 3: the underhead of the screw comes into contact with the surface of the work piece: the Delta clutch is then engaged to stop the screwdriver automatically and immediately at the preset torque value.




A Customized **bushing** personalised according to the dimensions and type of screw being used. Its special form makes visual control easy for the operator during assembly operations. Manufactured in a special resistant plastic material, it is wear-proof and does not damage the surface of the piece to be tightened.

B Magnetised **bit**, customized according to the shape of the screw head: the screw can be positioned easily and safely (while the screwdriver is turned off).

C **Ring nut** for axis adjustment used to position the bush correctly with respect to the underhead of the screw.

CSE...D...RA air screwdrivers

TYPE OF SCREWDRIVER		GRIP	MAX. TORQUE (supplied by the screwdriver)			TIGHTENING TORQUE (final)	IDLE SPEED	STARTING SYSTEM		REVERSIBILITY	WEIGHT	DIMENSIONS (mm)	AIR CONSUMPTION	ACCESSORIES (Bit)	SOUND PRESSURE LEVEL	VIBRATIONS LEVEL
Model	Code		Nm	Nm	Nm			r.p.m.	Type							
CSE8D2LRA	114817120	↓	9	1,5±2,1	0,8±1,9	1000	↕	↻	1	40x309	8	⬡ F 1/4"	77	< 1		
CSE8D5LRA	114817130	↓	9	2±5	1,9±4,8	1000	↕	↻	1	40x309	8	⬡ F 1/4"	77	< 1		
CSE5D2LRA	114817170	↓	5,5	1,5±2,1	1,1±1,9	1500	↕	↻	1	40x309	8	⬡ F 1/4"	77	< 1		
CSE5D5LRA	114817180	↓	5,5	2,5±5	1,9±5	1500	↕	↻	1	40x309	8	⬡ F 1/4"	77	< 1		
CSE8D2PRA	114817100	↙	9	1,5±2,1	0,8±1,9	1000	↙	↻	1,2	38x297X155	8	⬡ F 1/4"	77	< 1		
CSE8D5PRA	114817110	↙	9	2±5	1,9±4,8	1000	↙	↻	1,2	38x297X155	8	⬡ F 1/4"	77	< 1		
CSE5D2PRA	114817150	↙	5,5	1,5±2,1	1,1±1,9	1500	↙	↻	1,2	38x297X155	8	⬡ F 1/4"	77	< 1		
CSE5D5PRA	114817160	↙	5,5	2,5±5	1,9±5	1500	↙	↻	1,2	38x297X155	8	⬡ F 1/4"	77	< 1		

 **REVERSIBILITY:** All models are suitable for tightening and untightening operation

 **LEVER**  **PUSH BUTTON**

The value indicated is the maximum generated by the tool in order to overcome the enlarging and threading/tapping phase. The torque required in this phase depends on the screw used and the type of joint; therefore the screwdriver may give lower torque values than the maximum shown in the table.

- The figures shown are measured at a pressure of 6,3 bar (ISO 2787), the recommended operating pressure.
- The tightening torque values have been measured in accordance with ISO 5393 standard.
- Sound pressure level has been measured in accordance with ISO 3744 and PN8NTC1.2 standards.
- Accessory drive: 1/4", 6,35 mm female hexagonal drive (ISO 1173).
- Vibrations level has been measured in accordance with ISO 8662 standard.
- The code number must be used when ordering.

All models are available upon request.

The data given in the table are indicative and can be changed without prior notice. The torque values are purely indicative and may be influenced by the softness of the type of joint, by the type and length of the screw, by the pressure and quantity of air supply, and by the type of accessory used. The values indicated for sound pressure and vibration levels were obtained in the laboratory, performing tests that comply with the standards stated, but alone are not sufficient for calculating risks. Values measured in the single work places may be higher than those stated. The values of actual exposure and consequent risks are specific and depend on the operator's method of work, the type of work piece and the work place, as well as the operator's time of exposure and his physical conditions. Fiam cannot be held responsible for any consequences deriving from the use of the information in the table when evaluating risks in the work place over which Fiam has no control. For all further details, please apply to the **Fiam Technical Assistance Service**.

How to order a CSE...D...RA screwdriver

- CSE...D...RA screwdrivers must necessarily be provided with the customized bushing and the magnetised bit (to be used only with magnetizable screws).
- The tables below are a guide to the choice of the bushing and the bit for the most commonly used Phillips and Pozidrive slotted head screws. When screws with different head diameters and slots are to be used, please contact **Fiam Technical Assistance Service**.

EXAMPLE Screw used: self-threading with 8.5 mm head diameter, Phillips 2 cross slot
 Joint: on shett metal
 Final tightening torque required: 3 Nm
 Type of screwdriver: with pistol grip

You should order:

Screwdriver CSE8D5PRA + Bushing + Bit + Magnet
 code 114817110 code 601850025 code 605051102 code 611109125

- To make it easy for the customer, the screwdriver will be supplied complete with the bushing, bit and magnet already assembled on the tool.

Ø Screw head	Bush code	Type of bit	Code	Magnet	Code
Ø 8 mm	601850020	PHILLIPS 1	605051101	For Phillips 1 and Pozidrive 1 bits	611109130
Ø 8,5 mm	601850025	PHILLIPS 2	605051102		
Ø 9 mm	601850030	POZIDRIVE 1	605061001	For Phillips 2 and Pozidrive 2 bits	611109125
Ø 9,5 mm	601850035	POZIDRIVE 2	605061002		
Ø 10 mm	601850040				
Ø 10,5 mm	601850045				

The codes highlighted in green are usually available from stock.

Other technical features

Air inlet	Recommended hose bore
1/4" gas	Ø 8 mm

Standard equipment (supplied with the tool)

- Clutch adjustment key
- Hanging ring
- Use and maintenance manual
- Eco-friendly packaging

Accessories available upon request:

- Balancers, conveyors and accessories for compressed air (see Accessories Catalogue)
- Customized bushing
- Customized magnetizable bits
- Magnet

Fiam

INDUSTRIAL AIR TOOLS

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Quality Certification
 UNI EN ISO 9001 / ICIM 0250

Environmental Management System Certificate
 UNI EN ISO 14001 / ICIM 0002A/0

