

Air tappers

Fiam tappers: quickness and efficacy in every work situation

Air tappers are the best solution for manual machine tapping, being fast to use and easy to handle, even when high quality standards are required.

Fiam tappers **combine an excellent power to weight ratio** with tremendous **ease of handling** and **versatility**, making them the **perfect answer to every work situation**; they are also ideal when **threaded inserts or stud bolts are used in assembly** (for example in the furniture industry or the automotive sector generally).

Fiam's range offers a choice of tappers all of which are reversible and available with straight or pistol grip.

MAS8



MASE8P



MAO16P



Be demanding

Reliability

Long lifetime of the components thanks to careful design and quality of the production on process which results in less maintenance and repair costs

The internal gears guarantee **constant performances** and **long lifetime of the tool**

The air motors employed ensure **long lifetime, high power and maximum output**

Tools are manufactured with high quality materials that guarantee **greater resistance to wear**



Don't be satisfied with the maximum

Productivity

Great use effectiveness thanks to innovative design systems

All tappers (except MAO... models) are provided with **an easy to use automatic inversion device with increased reverse speed** for rapid extraction of the tap with a considerable reduction of assembly times. To **extract the tap** from the hole one needs simply to pull on the tool, which will then automatically invert the direction of rotation and simultaneously double its speed. MAO tappers are reversed by operating the special control lever

All tappers are fitted with a **quick-change chuck** which makes it easy to change the holders, stud bolts and inserts turning bushes according to the dimensions of the tap and of the thread of the stud bolts and inserts to be used

Fiam tappers guarantee a **great versatility of use**, making them the perfect answer to every work situation

Fiam tappers are ideal when **threaded inserts or stud bolts are used in assembly** (for example in the furniture industry or the automotive sector generally). Insertion of the stud bolts or threaded inserts is effortless and quick, with a considerable reduction of assembly times

Two versions are available:

- **with chuck for tap holder**

These tappers are fitted with a quick-change chuck which makes it easy to change tap holders. The taps allowing a **limited clearance between tap and chuck, support manual applications** where the operator considers it wise that the tap is self-centered on the hole to be tapped

- **with chuck for high-precision tap holder** (identity code ...B)

These tappers are fitted with a quick-change chuck which makes it easy to change the holder. At the same time the high-precision tap holders are fitted with a chuck for quick replacement of tap in case of breakage and wear

In case of particular situations of manual tapping and tapping machines applications, Fiam designs and manufactures **special tappers** with control top for remote control, with clutch for dead holes, with smooth or flanged body, in a very wide range of speeds



MAS8B



Perfection is
in your hands

Ergonomics

Optimization of the tool performances in regard to ergonomics and operator safety

The grip design and use of special light alloys make these tools **lighter and more handy**

They guarantee maximum handiness, thanks to the **good power/weight ratio**, reducing operator's fatigue

They are started using the related **lever** (straight models) or **push button** (pistol models) in a comfortable position for operator

Tappers can be started at **slow speed** to facilitate initial insertion of the tap in the workpiece

These tools are equipped with **built-in silencing system**, plus control of the exhaust air, to reduce the noise levels guaranteeing operator's safety

In order to contrast any eventual torque reaction on the operator's wrist, all tappers are equipped with an **auxiliary grip** (standard EN792). MAO... tappers are fitted with **twin grips**, given that they are mainly used for more heavy operations

Pistol models are equipped with **hanging ring** for easier and more versatile use of the tool

ERGOTECH Ergotech project
Having full knowledge of the ergonomics and safety needs of the operator, Fiam optimizes the performances of its tools and offers support and qualified training for the correct use of the tools



MAY10P

MAO16P



Naturally
innovative

Ecology

Innovative systems designed paying even more attention with respect to environment and of its safeguard

The advanced design technology of the air motors ensures **a reduction of compressed air**, without compromising tool performances

The design of the inner kinematic motions optimizes the output of the available power, which is being transmitted with **minimum dispersions**

All the components are easy to dispose of because they are built **using recyclable materials**; therefore they don't represent a pollution risk or a danger for personal safety

All Fiam products are supplied with **eco-friendly packaging**

Fiam tappers work at maximum efficiency without need of lubrication guaranteeing in such the **absence of oil exhaust** into the working environment



MAS... and MAY... straight air tappers

**Straight
air tappers**

IDLE SPEED:

forward:
from 220 to 1000 r.p.m.

back:
from 470 to 1700 r.p.m.

APPLICATION

FIELD:

used in manual tapping for dia-
meters of 6-12 mm; ideal for
vertical tapping operations



MAS8



MAY10



MAY10B



MAS8B

Type of taper		Grip	Tap capacity	Idle speed r.p.m.	Starting system	Reversibility	Weight	Dimensions (mm)	Compressed air consumption	Noise level	Vibrations level	
Model	Code	Type	Ø mm	Forward	Back	Type	Type	Kg	Ø x L	l/s	dBA	m/s ²
MAS6	134610106		6	1000	1700			0,980	40x240	9	74	< 2,5
MAS6B	134612106		6	1000	1700			0,980	40x240	9	74	< 2,5
MAS8	134610108		8	500	800			0,980	40x240	9	74	< 2,5
MAS8B	134612108		8	500	800			0,980	40x240	9	74	< 2,5
MAY10	136309028		10	450	930			1,820	46x335	11	78	< 2,5
MAY10B	136309026		10	450	930			1,870	46x330	11	78	< 2,5
MAY12	136309016		12	220	470			1,820	46x335	11	78	< 2,5
MAY12B	136309031		12	220	470			1,870	46x330	11	78	< 2,5

Legend

MAS..., MAY... = models with chuck for tap holder • MAS...B, MAY...B = models with chuck for high-precision tap holder
(To choose the right taper see p. 3)

Legend



Reversibility:
All models can invert rotation simply by pulling on the tool.



Starting system lever + push

- The capacity indicated in the chart is referred to the maximum diameter of threading on steel (for other materials see chart on page 3).
- The figures shown are measured at a pressure of 6,3 bar (ISO 2787), the recommended operating pressure.
- Noise level has been measured in accordance with ISO 3744 and ISO 15744.
- Vibrations level has been measured in accordance with ISO 8662 standard.
- The code number must be used when ordering.

The data given in the table are indicative and can be changed without prior notice. The values indicated for noise 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 Consultancy Service.

The models highlighted in black are usually available from stock

Standard equipment (supplied with the tool)

- For MAS...: chuck code 659411001, drive J1
- For MAS...B: chuck code 659411002, drive J1
- For MAY...: chuck code 659611001, drive J2
- For MAY...B: chuck code 659511002, drive J2
- Hanging ring
- Auxiliary grip (standard prEN792-1-12)
- Eco-friendly packaging
- Use and maintenance manual

Accessories available upon request

- See p. 10

Other technical features

Models	Air inlet	Recommended hose bore	Supply hoses recommended*	
			Rubber	Spiral
MAS...	1/4" gas	Ø 8 mm	693511022	693011020
MAY...	1/4" gas	Ø 8 mm	693511022	693011020

* For features of hoses see p. 12-13

MASE...P, MAY...P and MAO...P pistol air tappers

**Pistol
air tappers**

IDLE SPEED:

forward:
from 140 to 1000 r.p.m.

back:
from 140 to 1700 r.p.m.

APPLICATION

FIELD:

ideal for horizontal tapping
operations, particularly when
one is tapping holes of above
6-8 mm

MASE8P



MAO16P



MAY10P



MAY10PB



MASE8PB



Type of taper		Grip	Tap capacity		Starting system	Reversibility	Weight	Dimensions (mm)	Compressed air consumption	Noise level	Vibrations level	
Model	Code		Type	Ø mm								Forward
MASE6P	134610516		6	1000	1700			1,000	38x230x155	9	78	< 2,5
MASE6PB	134612516		6	1000	1700			1,000	38x230x155	9	78	< 2,5
MASE8P	134610518		8	500	800			1,000	38x230x155	9	78	< 2,5
MASE8PB	134612518		8	500	800			1,000	38x230x155	9	78	< 2,5
MAY10P	136310510		10	450	930			2,080	46x289x147	11	78	< 2,5
MAY10PB	136312510		10	450	930			2,130	46x289x147	11	78	< 2,5
MAY12P	136310512		12	220	470			2,080	46x289x147	11	78	< 2,5
MAY12PB	136312512		12	220	470			2,130	46x289x147	11	78	< 2,5
MAO16P	137210116		16	470	470			4,000	65x305x360	14	91	< 2,5
MAO18P	137210118		18	140	140			4,580	65x335x360	14	91	< 2,5

Legend

MASE...P, MAY...P, MAO...P = models with chuck for tap holder • MASE...PB, MAY...PB = models with chuck for high-precision tap holder
(To choose the right taper see p. 3)

Legend

Reversibility: MASE... and MAY... models can invert rotation by simply pulling on the tool.
* MAO... models invert rotation by using the appropriate lever.

- The capacity indicated in the chart is referred to the maximum diameter of threading on steel for other materials see chart on page 3).
- The figures shown are measured at a pressure of 6,3 bar (ISO 2787), the recommended operating pressure.
- Noise level has been measured in accordance with ISO 3744 and ISO 15744.
- Vibrations level has been measured in accordance with ISO 8662 standard.
- The code number must be used when ordering.

The data given in the table are indicative and can be changed without prior notice. The values indicated for noise 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 Consultancy Service.

Push button + push to start

Push button

The models highlighted in black are usually available from stock

Standard equipment (supplied with the tool)

- For MAY...P: chuck code 659611001, drive J2
- For MAY...PB: chuck code 659511002, drive J2
- Hanging ring (except MAO...)
- Auxiliary grip (standard prEN792)
- For MAO...: chuck, wedge, pin, o-ring, expulsion wedge
- Eco-friendly packaging
- Use and maintenance manual

Accessories available upon request

- See p. 10

Other technical features

Models	Air inlet	Recommended hose bore	Supply hoses recommended*	
			Rubber	Spiral
MASE...P	1/4" gas	Ø 8 mm	693511022	693011020
MAY...P	1/4" gas	Ø 8 mm	693511022	693011020
MAO...P	3/8" gas	Ø 13 mm	693511023	-

* For features of hoses see p. 12-13

Chucks

Chuck for tap holders



For tappers series	Code
MAS..., MASE...P	659411001
MAY..., MAY...P	659611001
MAO...P	659911001

Chuck for precision type and clutch type tap holder



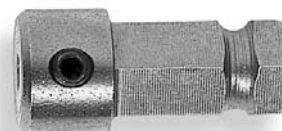
For tappers series	Code
MAS...B, MASE..PB	659411002
MAY...B, MAY...PB	659511002

Tap holders

Tap holders

They permit to work rapidly with different size taps. Each tap size requires a specific tap holder (see page 3).

These tap holders have to be used with:
 MAS..., MASE...P (chuck code 659411001),
 MAY..., MAY...P (chuck code 659611001),
 MAO...P (chuck code 659911001).



Dimensions of the tap		
Shank \varnothing mm	\square drive mm	Code
2,8	2,1	655211028
3	2,4	655241030
3,5	2,7	655271035
4	3	655301040
4,5	3,4	655341045
5	3,8	655381050
6	4,9	655491060
6,3	5	655501062
6,5	4,9	655491065
7	5,5	655551070
7,3	5,5	655551073

Dimensions of the tap		
Shank \varnothing mm	\square drive mm	Code
8	6,2	655621080
8,5	7	655701085
9	7	655701090
9,4	7	655701094
10	8	655801101
11	9	655901110
12,1	9,1	655911121
14,1	11,1	655111141
16,2	12,3	655010160
18,2	14,8	655900182

Precision tap holders

These tap holders permit to work rapidly and with high precision with different tap sizes. Each tap size requires the corresponding high precision tap holder (see page 3).

They have to be used with:

MAS...B, MASE...B (chuck code 659411002),

MAY...B, MAY...PB (chuck code 659511002).



For MAS...B, MASE...PB tappers

Dimensions of the tap		
Shank ø mm	drive mm	Code
2,5	2,1	655212025
2,8	2,1	655212028
3,15	2,5	655252031
3,5	2,7	655272035
4	3	655302040
4,5	3,4	655342045
5	4	655402050
6	4,9	655492060
6,3	5	655502063
7	5,5	655552070
8	6,3	655632080

For MAY...B, MAY...PB tappers

Dimensions of the tap		
Shank ø mm	drive mm	Code
2,8	2,1	655213028
3,15	2,5	655253031
3,5	2,7	655273035
4	3	655303040
4,5	3,4	655343045
5	4	655403050
6	4,9	655493060
6,3	5	655503063
7	5,5	655553070
8	6,3	655633080
9	7,1	655713090
10	8	655813100
11	9	655903110

Precision tap holders with integral clutch

These tap holders are used for high precision tappings in dead holes to avoid the tap breakage. They permit to work rapidly also with different size taps. Each tap requires a specific tap holder. These tap holders have to be used with: MAS...B, MASE...PB (chuck code 659411002), MAY...B, MAY...PB (chuck code 659511002).



For MAS...B, MASE...PB tappers

Dimensions of the tap		
Shank ø mm	drive mm	Code
2,5	2,1	655214025
2,8	2,1	655214028
3,15	2,5	655254031
3,5	2,7	655274035
4	3	655304040
4,5	3,4	655344045
5	4	655404050
6	4,9	655494060
6,3	5	655504063
7	5,5	655554070
8	6,3	655634080

For MAY...B, MAY...PB tappers

Dimensions of the tap		
Shank ø mm	drive mm	Code
2,8	2,1	655215028
3,15	2,5	655255031
3,5	2,7	655275035
4	3	655305040
4,5	3,4	655345045
5	4	655405050
6	4,9	655495060
6,3	5	655505063
7	5,5	655555070
8	6,3	655635080
9	7,1	655715090
10	8	655815100
11	9	655905110

Stud bolt holder

Stud bolt Ø mm	M3	M4	M5	M6	M8	M10	M12
Code 656031...	...030	...040	...050	...060	...080	...100	...120

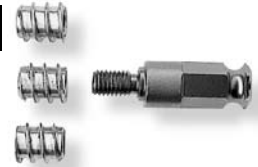
Stud bolts are not supplied.



Insert holder

Insert Ø mm	M4	M5	M6	M8	M10	M12	5/16x14	7/16x14
Code 657031...	...040	...050	...060	...080	...100	...120	657070516	657071716

Inserts are not supplied.



FRL Group - Filter, pressure regulator, lubricator

The FRL group is **recommended for filtering, regulating and lubricating the compressed air supply** for air tools. This system **eliminates solids and humidity** while supplying a precise air flow and suitable lubrication. Where necessary, it is **indicated for obtaining the required torque values by adjusting the pressure of the air supply.**



Threaded attack	Flow rate	Complete assembly	Reduction compl. of gauge	Lubricator
	l/s	Code	Code	Code
1/4" gas	1,7 ÷ 16	697331020	697331025	697281020
3/8" gas	4,2 ÷ 20	697351020	697351025	697291020
1/2" gas	8 ÷ 43	697371020	697371025	697301020

Spiral supply hoses - with couplings

Polyurethane spiral supply hoses with a maximum extended length of 8 m. Extremely flexible and resistant, they take up less space thanks to their reduced external diameters.

To choose the most suitable supply hose, refer to the recommended hose bore given on page 7 and 9.

Ø internal = recommended hose bore



Polyurethane hose (green) Ø internal x Ø external mm	Length mm	Swivelling male coupling	Fixed female coupling	Code
8x12	1140 ÷ 8000	1/4" gas	1/4" gas	693011020