Quickness and efficacy: the perfect solution, in every work situation

Air tappers

- Tapping capacity: from Ø 6 to 18 mm (on mild steel)
- Type of grip: straight and pistol models

FIAM®
PEOPLE AND SOLUTIONS

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

Choosing the right tapper

The main technical parameters to consider **are the diameter of the tap being used and the material on which one is working**. The table shows the maximum capacities of the different Fiam models available in relation to the material concerned.

Model	Material being tapped		
	Compound steel	Cast iron and mild steel	Alluminium - Bronze-Brass
	Ø max thread mm	Ø max thread mm	Ø max thread mm
MAS6...	4	6	10
MAS8...	6	8	12
MAY10...	8	10	13
MAY12...	10	12	14
MAO16...	-	16	20
MAO18...	-	18	22

According to the different work situations one can choose one of the solutions described below; these tools are fitted with a **quick-change chuck** which makes it easy to change the holder.
Every tap size required should be used with the corresponding tap holder, keeping in mind the size of the shank of the tap and the square drive (see page 10).

- **Tappers with chuck for tap holder**

Models: MAS..., MASE...P, MAY..., MAY...P, MAO...P
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.

- **Tappers with chuck for high-precision tap holder**

Models: MAS...B, MASE...PB, MAY...B, MAY...PB
The high-precision tap holders used in these tappers assure that the tap turns perfectly centered in relation to the tool: a solution which should therefore be chosen when very high tapping quality is required and when the tapper is mounted in a tapping machine or pantograph arms. When **tapping dead holes** it is advisable to use a tapper with a high-precision **tap-holder** and integral clutch. When the tap reaches the bottom of the dead hole the clutch slips, stopping the tap from rotating and thereby avoiding breakages.

Efficient answers to all job requirements

It is advisable to use Fiam air tappers

- with **straight grip** for vertical tapping operations
- with **pistol grip** when working in horizontal position, particularly when one is tapping holes of above 6-8 mm, since they are better suited to contrast the torque reaction on the hand; in these situations it is advisable to use the auxiliary side grip which permits a reduction of the **torque reaction dividing work load on both hands** (ISO 11148-3 standard).

For ergonomic tightening operations it is advisable to use balancing, cartesian and telescopic arms to reduce any fatigue in operator's hands and arms (see nr. 79 'Accessories for ergonomic workplaces' catalogue.)

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.
Consult the Fiam Technical Consultancy Service to find the best solution.

Be demanding

Don't be satisfied with the maximum

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**

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 ISO 11148-3). 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

The grips of MASE pistol models , are manufactured with an ergonomic sheath made of no slip material making them easier to hold the tool, increasing the hand grip, improving **the handling, the thermal isolation and operator's comfort**

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

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

MAY10P

MAO16P

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 diameters of 6-12 mm; ideal for vertical tapping operations

MAS8

MAY10

MAY10B

MAS8B

Type of tapper		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/s²**
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 tapper 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 20643 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.**

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 ISO 11148-3)
- Eco-friendly packaging
- Use and maintenance manual

Accessories available upon request

- See p. 10

Other technical features

			*Supply hoses recommended**	
Models	**Air inlet**	**Recommended hose bore**	**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

MAO16P

MASE8P

MAY10P

MAY10PB

MASE8PB

Type of tapper		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 X H**	**l/s**	**dBA**	**m/s²**
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 tapper 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.

Push button + push to start

Push button

- 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 20643 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.**

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 ISO 11148-3)
- 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

			*Supply hoses recommended**	
Models	**Air inlet**	**Recommended hose bore**	**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

Supplied with the tool

Chuck for precision type and clutch type tap holder

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

Supplied with the tool

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 ø mm	☒ 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 ø mm	☒ 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 esternal mm	Length mm	Swivelling male coupling	Fixed female coupling	Code
8x12	1140 ÷ 8000	1/4" gas	1/4" gas	693011020

Rubber supply hoses - with couplings

Rubber supply hoses for models MAO...P.
Rubber supply hoses with coupling made with inner duct in synthetic rubber and high resistance reinforced textile chase.
They can be used with compressed air, water, cutting oil and antifreeze liquids. They are extremely flexible and versatile and above all safe and resistant in time.
Upon request, hoses of other dimensions are available: please apply to the Fiam Technical Consultancy Service.

To choose the most suitable supply hose see pages 7 and 9.

Hose mm Ø internal x Ø external	Length mm	Swivelling male coupling	Fixed female coupling	Code
9,5x15,9	3000	1/4" gas M	1/4" gas F	693511022
9,5x15,9	3000	3/8" gas M	3/8" gas F	693511023

Quick couplings and nipples

To choose the most suitable quick coupling, refer to the air inlet and the recommended hose bore in the Catalogue.

male

female

Recommended hose bore	Air inlet threading	Male quick coupling	Female quick coupling
		Code	Code
Ø 8 ÷ 10 mm	1/4" gas	695411114	695431114
Ø 13 mm	3/8" gas	695411138	695431138

To choose the most suitable quick nipples, refer to the air inlet and the recommended hose bore in the Catalogue.

male

female

Recommended hose bore	Air inlet threading	Male quick coupling	Female quick coupling
		Code	Code
Ø 8 ÷ 10 mm	1/4" gas	695311114	695331114
Ø 13 mm	3/8" gas	695311138	695331138

Flexible coupling

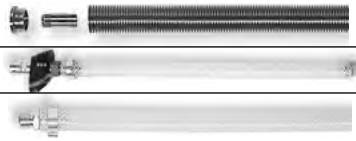
These light and compact couplings improve the operators' working conditions; they prevent twisting of supply hoses and reduce vibrations.

Model	Coupling F/M	Code
RS 25 FM	1/4"	695091015
RS 30 FM	3/8"	695091020

Exhaust air hose conveyors

Used to drive away the tool exhaust air from the operator and therefore making the workplace more ergonomical.

For air tappers series	Code
MAS..., MAS...B	693751006
MASE...P, MASE...PB	693751009
MAY..., MAY...B, MAY...P, MAY...PB	693751003



Auxiliary grip

The use of the auxiliary grip is recommended to permit a considerable reduction of the fatigue to the operator.
For more information please contact **Fiam Technical Consultancy Service.**

ø internal (mm)	For series	Code
40	MAS..., MAS...B	681041230
36	MASE...P, MASE...PB	681041200
46	MAY..., MAY...P, MAY...B, MAY...PB	681041002

Lubricating oil for air tools

Used to lubricate the internal components of the motor group.

Code
699011008

1 lit. bottle

Balancer

The use of the balancer allows the operator to work in safety and without effort, at the same time guaranteeing the maximum care of the tool.

Capacity min - max	Cable length mm	Code
0,4 ÷ 1	1600	690011160
1 ÷ 2	1600	690021160
2 ÷ 4	2000	690041200
4 ÷ 6	2000	690061200
6 ÷ 8	2000	690081200
8 ÷ 10	2500	690101250

Balancer with built-in supply hose

Particularly indicated to support and to feed at the same time straight air tools. The balancer is provided with a hose that can be connected directly to the main air feed so that the tool is supplied directly.

Capacity min - max	Length mm	Male coupling	Code
1,2 ÷ 2,5	1350	1/4" gas	691021202

BC/BCA Cartesian Arms

The new Fiam Cartesian arms represent fundamental solutions for ergonomics workplace.
They are completely **designed and manufactured by Fiam** and can be used with any type of tool with a diameter up to 50 mm and weight up to 11 kg. A universal clamp is supplied but, upon request, numerous accessories are available for correctly fitting different Fiam tools to ensure maximum safety and functionality.
Available in 2 versions:

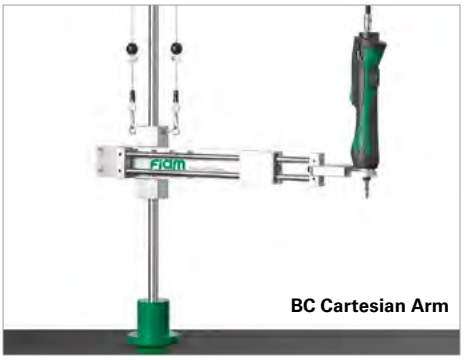
- **Cartesian arms**
- **Articulated Cartesian arms**

All models are also **available with a position monitoring device for processing the angular and linear displacement of the tool on the work point**.

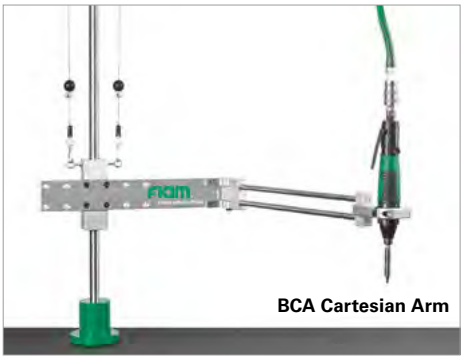
Thanks to these arms, all work operations take place without any oscillation and their movements are **extremely fluid and flowing** and this translates into a significant increase in work precision, the consequent quality of the production process as well as ergonomics for the operator.

For more information, contact the Fiam Technical Service.

Description	Code	Max torque Nm	Max torque in lb	Max load kg	Max tool diameter mm
Cartesian Arm BC5	692031030	5	44,25	2	32 ÷ 50
Cartesian Arm BC12	692031031	12	106,2	2	32 ÷ 50
Cartesian Arm BC25	692031032	25	221,25	2	32 ÷ 50
Cartesian Arm BC40	692031033	40	354	2	32 ÷ 50
Articulated Cartesian Arm BCA5	692031034	5	44,25	2	32 ÷ 50
Articulated Cartesian Arm BCA12	692031035	12	106,2	2	32 ÷ 50
Articulated Cartesian Arm BCA25	692031036	25	221,25	2	32 ÷ 50
Articulated Cartesian Arm BCA40	692031037	40	354	2	32 ÷ 50



BC Cartesian Arm



BCA Cartesian Arm

BT-MG Magnesium Telescopic Arms

This solution for ergonomic workplace eliminate torque reaction on operator's wrist.
They guarantee reliability and long life span thanks to accurate manufacturing process and innovative, high quality materials used.

- Thanks to the telescopic elements (3 for all models and 2 for BT-MG 10...) and different reachable lengths, they adapt themselves to working areas according to productive needs
- Double final junction allows maximum freedom of action, great handiness, **even when tightening with the tool bent**
- To be used with any type of tools
- Laboratory tests have demonstrated that Fiam BT **arms bear 30%** higher torque generated by the tool in respect to **competitors arms**
- They can be **easily installed** on existing workplaces on ceiling or wall using a simple plate with reduced dimensions.

Model	Code	Max torque (Nm)	Max torque in lb	Max work range (mm)	Min work range (mm)	Ø max tool (mm)
BT-MG 10 800	692071420	10	88.50	660	480	26.5-50
BT-MG 10 1000	692071421	10	88.50	800	550	26.5-50
BT-MG 15 800	692071409	15	132.70	860	505	26.5-46
BT-MG 15 1000	692071401	15	132.70	1070	575	26.5-46
BT-MG 15 1500	692071404	15	132.70	1580	745	26.5-46

Standard equipment (supplied with arm)

- 2 kits of screws with different lengths to install tools with different diameter from 26.5 up to 50 mm
- Tool holder accessory
- Use and maintenance manual
- Eco-friendly packaging

BA50 balancing arm - up to 50 Nm

To avoid undesirable effects on the operator's wrist, arm or shoulder movements and for minimum fatigue during manual operations, Fiam has designed the BA50 balancing arm to complete the range of other models with different capacities. This balancing arm can be used with air and electric tools (screwdrivers, drills, tapping machines, nutrunner motors) for **weight from 0.7 to 2 kg**.
If it is necessary to fit a heavier tool, weighing up to a maximum of 4 kg., special reinforced springs are available upon request. This system guarantees **extreme working precision because the tool is kept perfectly perpendicular to the piece** being machined thanks to the specific adjustable adapter.
Furthermore it is simple to use and ensures excellent manoeuvrability.
The stand is supplied complete with a fixing plate.

Max. work range	1000 mm
Min. work range	630 mm
Max. torque	50 Nm
Max. load (with standard springs)	2 kg
Max. load (with reinforced springs)	4 kg
Max. rotation angle	360°
Ø max. tool	50 mm

Model	Code
BA50	692031008

Standard equipment (supplied with balancing arm)

- Adjustable adapter
- Bench base plate
- Eco-friendly packaging

Accessories available upon request

- To support tools of up to 4 kg max. it is necessary to order 2 reinforced springs (code 692059022)

For balancing arm that must support weights of more than 4 kg., please contact Fiam Technical Assistance Service.

BA20 balancing arm - up to 20 Nm

This balancing arm can be used with air and electric screwdrivers, drills, tappers, riveting machines, etc. with **diameters varying from 25 to 50 mm** and with a **maximum of 20 Nm tightening torque**.
The BA20 balancing arm ensures **very high precision** work since the tool is kept perfectly perpendicular to the piece being assembled: therefore it avoids any accidental **damages** to the materials for a **higher quality of the finished product**.
Work can also be carried out horizontally or on two axes at the same time, simply by choosing the specific adapter.

The arm with standard springs can **support up to 2 kg. weight**; to support a weight up to 2.5 kg., the standard springs must be replaced with the reinforced ones (upon request).

Max work range	850 mm
Min. work range	520 mm
Max. torque	20 Nm
Max. load (with standard springs)	2 kg
Max. load (with reinforced springs)	2,5 kg
Max. rotation angle	360°
Ø max. tool	from 25 to 50 mm

Model	Code
BA20 balancing arm	692031009

Standard equipment

- To support tools of up to 2,5 Kg. max. it is necessary to order the reinforced springs cod. 692059010
- Bench base plate
- Eco-friendly packaging

Adapters for BA20 available upon request (to be ordered separately)

• Adapters to work on the vertical axis

Adapter	Code	Ø internal adjustable mm
AD 25/40	692059008	25÷40
AD 40/50	692059009	40÷50

• Adapter to work on the horizontal axis

Adapter	Code	Ø mm
AD 36	692059014	36

• Adapter to work on two axis

Adapter	Code	Ø max mm
AD 36/2AX	692059015	36

For adapters with different diameter, please contact Fiam Technical Consultancy Service.

fiam PEOPLE AND SOLUTIONS

Fiam Utensili Pneumatici Spa
Viale Crispi 123
36100 Vicenza - Italy
Tel. +39.0444.385000
Fax +39.0444.385002

Fiam France Succursale
73, cours Albert Thomas
69003 Lyon - France
Tel. +33 (0)9 70 40 73 85

Fiam España Sucursal
Travessera de Gràcia, 11, 5ª planta
08021 Barcelona, España
Tel. +34.636808112