A concentrate of power for any application.

Air motors

Reversible models - Power: from 0,20kW up to 0,65kW
Free speed: from 40 up to 16.500 rpm

Non-reversible models - Power: from 0,15kW up to 0,80kW
Free speed: from 50 up to 20.000 rpm

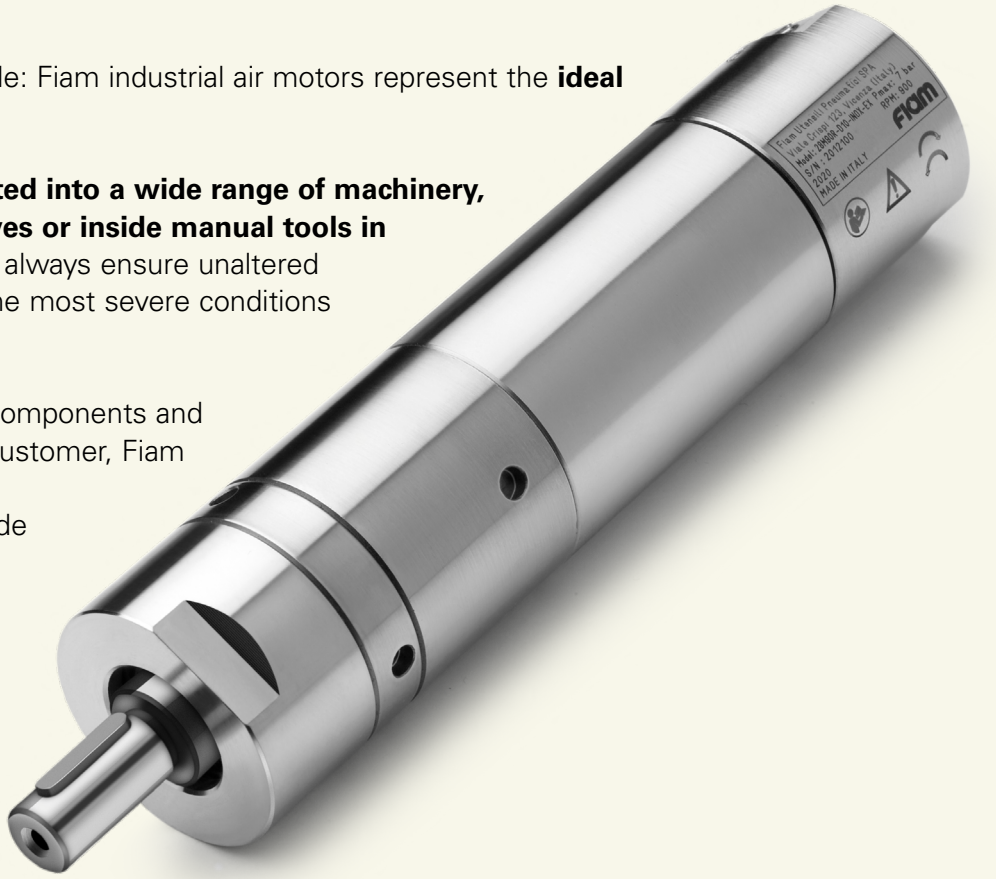
FIAM®
PEOPLE AND SOLUTIONS

Index

An incomparable range

- Over 1000 off-the-shelf catalogue items to choose from
- One million machines built and operating around the globe, and more than 70 years' experience
- 100% designed and „Made in Italy"
- Solutions tested and inspected by our in-house certified laboratories
- Use of environmentally compatible packaging, with specific packaging made to order

Fiam air motors: high-performance for every need.



Compact, performing, light, reliable: Fiam industrial air motors represent the **ideal solution for many applications**.

They were created **to be integrated into a wide range of machinery, in feed devices, mechanical drives or inside manual tools in various production sectors**, and always ensure unaltered performance over time, even in the most severe conditions of use.

Because of their small size, few components and thorough design jointly with the customer, Fiam motors can become **high-performance drives** in a wide range of pneumatic tools.

Available in **non-reversible or reversible** version, they can advantageously be used for mixing liquid substances, moving, drilling, milling, grinding, sawing and so on.

They are are **extremely sturdy** and they guarantee constant performances also in difficult working conditions. **Compact and light**, they are easy to use in every situation; moreover, thanks to their extremely **reduced dimensions**, they are a quarter of the equivalent electric motor.

The range also includes numerous ATEX certified stainless steel models.

Why choose them.

The motor Fiams last a life

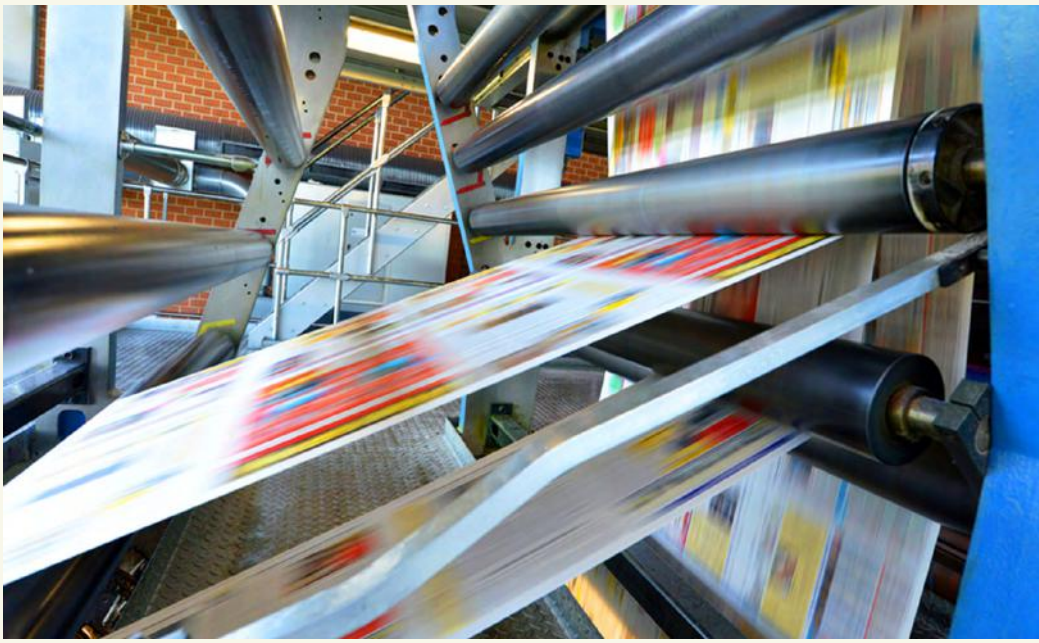
The design consolidated experience, the accuracy in the workmanships, the continuous investments in machineries to the state-of-the-art one **assure nonstop operations for thousand and thousand of cycles**. The pneumatic motors Fiam are assembled and coupled with tolerances in the order of the thousandth one of millimeter and this involves the **maximum optimization of the outputs**: there is no dispersion of compressed air and therefore consumptions of air extremely meeting places. For smaller costs of maintenance and reparation and functional and **highly and profitable investments**.

An organised structure at your side

A dedicated Production Manager is available as the sole reference through which you can interface with our design engineers, laboratory technicians, sales engineers and industrialisation and prototyping managers. This means you can count on **quick and certain answers about every stage of progress of the order** entrusted to Fiam.
A professional who can understand every technical need when implementing custom solutions.

Completely Made in Italy

Everything has been conceived, designed and produced in Fiam, which has **an area dedicated** solely to **producing** custom motors, including **small runs and prototypes**.
The benefit? An ability to handle small lots and fast delivery times. Our lean and highly flexible organisational structure can **calibrate deliveries** to meet customer schedules, and provide customised **eco-packaging**, **installations** and scheduled **maintenance plans**.



Co-engineering

Customer support can begin from the product design stage right up to industrialisation. **In-house prototyping** ensures that Fiam can simulate integration of the motor in the final machine/ application and test the solution before production at no extra cost.

An appropriate service available worldwide

The motors are **completely modular** for faster maintenance and replacement of the spare parts in case of wear. The use of many common components **favours the supplying and the management of the spare parts**. Our worldwide distributors take care of maintenance and provide original spare parts **quickly at controlled prices**.

Naturally innovative

All the components are **easy to dispose of** because they are built using recyclable materials; therefore they do not represent any danger for environmental pollution. The use of oil separator filters for conveying the air exhaust guarantees the **absence of oil fog into the working environment**.

All the technical benefits.

Easy to set and to control

- The main parameters as torque, speed and sense of rotation can be **modified and simply checked without the control unity**, as in case of the electric motor.
- Instant inversion of rotation.
- They run only when activated, assuring the **energy saving**.

Simple methods to set the performances

- The performances of pneumatic motor depend on the dynamic air pressure measured at the air inlet of the motor. Therefore with a simple regulation of the air pressure and flow, there will be obtained **proportional torque and speed variation**.
- With the pressure regulator installed at the air inlet, there can be **controlled the stalling torque**.
- With the air flow regulator installed at the air discharge, there can **be hold the static torque and set the motor's speed**.

Running always guaranteed

- High torque is available immediately at start, with fast acceleration and no wearing out.
- Immediate **start** is **guaranteed also at low air pressure**.
- High resistance materials ensure reliability also on **applications with high radial and axial loads**.
- Unlike the electric motors, they perform normally in environments with electric or magnetic interferences, **without of course affecting the nearby equipment**.

Extremely safe

- Compared to the electric motors with equal power, they perform in a **heavy working conditions** and support continuous starts and stops. When stalling, they will **not overheat: pneumatic motor actually cools off when running, thus preventing any risk of short circuit**.
- The constructive features of the motor prevent the explosive gases to reach the rotating parts - ATEX versions are available for particularly dangerous environments.

Ideal for sterilized environments

- Working at **high temperatures and humidity**, they fit sterilized environments such as those in the food sector where there are frequent cleaning and sterilization processes.
- Reliable even when **immersed in liquids**: actually, they work in water or any other fluid including the corrosive ones. It will be necessary to use suitable constituent materials in order to prevent corrosions.

Low consumptions

- Consumption is critical when the electric motors are used continuously and with frequent start-and-stop. An **electric motor in fact**, consumes **3 times more energy than a pneumatic** one when it stops and starts often during a shift.

The right choice for machines builders

- Their **size is one fourth of an equivalent electric motor**. This is a huge plus for engineers and designers who can benefit of great speed performances in less space.

Endless applications.

These motors are very versatile; they can be **customized for particular applications** requiring specific motor design and construction. Fiam is able to develop these solutions with customized motors to satisfy customer's specific needs: a great competitive advantage, especially when the motor has to be integrated within a certain type of equipment or within a particular type of tool.

FOOD SECTOR

Air motors are used for **mixing liquids, driving, closing, covering therefore can be installed within food treatment machineries**, bottling, food packing and wrapping, but also meat processing as for example **clipping** or sausage filler machines.
Oil-free versions, food-grade materials and plastics and resistance to damp environments make them suitable for this sector.

PACKAGING INDUSTRY

Doing several **handling jobs**, they can be used for driving, lifting, dragging or in air tools like **strapping tools or others for the packing industry**.

CHEMICAL AND PHARMACEUTICAL INDUSTRY

They can also be used as **mixers, paint stirrers** on chemical processing machines or on fluid pumps. Thanks to such customizations, they can be also used in explosive rate or radioactive environments.

AGRICULTURAL AND ZOOTECHNICAL INDUSTRY

They are in the agricultural industry where they can be used within **air tools for the leather manufacturing, sheep shear or general machines maintenance**.

OTHER INDUSTRIAL SECTORS

There are plenty of applications for pneumatic motors, either in the manufacturing and industrial maintenance. They are used in the bookbinding industry, in the woodworking and window construction industries, in plastic processing, assembly and sheet metal working.
Some example? **Mandrel machines, brushing machines, sanding machines, welding gun cleaner, special grinders, cutters, extruders, polishing machines, high-pressure cleaner**.

Customisations.

Fiam can offer **numerous customisations designed and made to measure, even with small production runs.**
A **wide range of accessories** is also available for all motors.

Very low rpm and guaranteed start, even at lower pressures of feeding

With different performance characteristics: torque, rpm and power

With various materials and/or coatings

With different degrees of IP Protection

For humid environments and in the presence of liquids

Oil free

Waterproof

With certification ATEX in compliance with the European standards

With different output shafts (example: tapered, morse taper, diameters, with gear)

With custom dimensions

Tested to radioactive environments

With customized mounting devices

For the use with not lubricated air

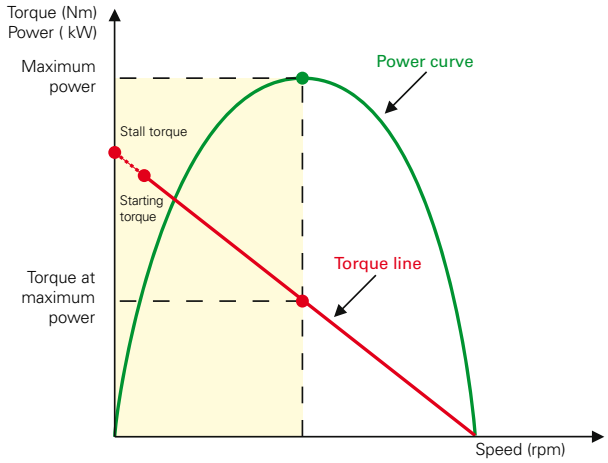
Features and performances of Fiam air motors

Performances of an air motor depend on the dynamic air inlet pressure measured at the intake of air motor; therefore by simply adjusting the air supply, using the techniques of throttling or pressure regulation, we can obtain the characteristic linear output torque/speed relationship. The performance data of the motors is valid for an air supply pressure of 6,3 bar (ISO 2787).

The main features of an air motor are:

- **Power** in Watt
- **Speed at point of maximum power**, rpm
- **Torque at maximum power**, Nm
- **Starting torque**, Nm
- **Free speed**, rpm
- **Air consumption at maximum power**, l/s

Chart A



The power

The power in Watt that an air motor produces is simply the product of torque and speed. Every motor produces a characteristic power curve, with maximum power occurring at around 50% of the idle speed. The torque produced at this point is referred to as torque at **maximum power.**

The power of an air motor is obtained with the following formula:

$$P = (\pi \times M \times n)/30$$

Legend

P = Power in Watt

M = Torque in Nm

n = Speed (rpm)

The speed

Every air motor has an idle speed which is obtained by inserting one or more reduction gears - depending on the reduction ratio - between the driving unit and the output shaft.
At the maximum speed ("idle speed") the torque (turning moment) as taken at the output shaft, is nil, while, as load is applied, the speed will decrease inversely proportional to the torque (see chart A).

Torque at maximum power, starting torque and stall torque

The **torque at maximum power** is obtained at around 50% of idle speed that corresponds to maximum power of the motor (see chart A).

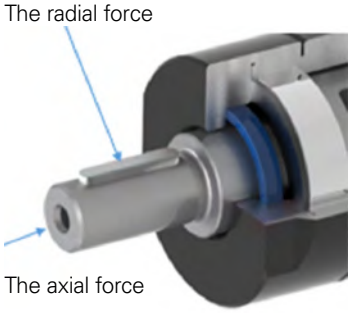
The **starting torque** is the torque that the motor gives to the output shaft under load and when you feed full air pressure into it (see chart A).

The **stall torque** is the torque that the motor gives at the output shaft when it is blocked during its rotation.

The stall torque is approximately double respect to the torque at maximum power.

Load on the output shaft

The radial force

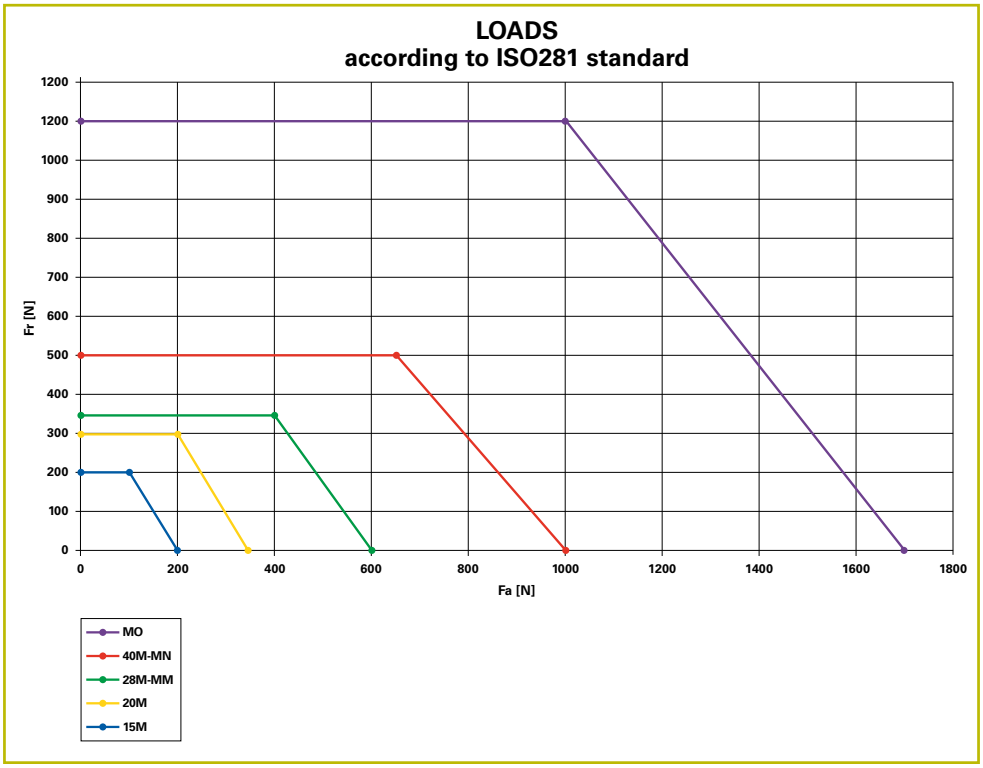


The axial force

The motor output shaft is in contact with the device to be moved, and is subjected to two forces:

- **The radial force**
- **The axial force**

These forces act on the bearings inside the motor and affect their service life. The maximum radial load depends on the axial load, and vice versa.



How to choose an air motor

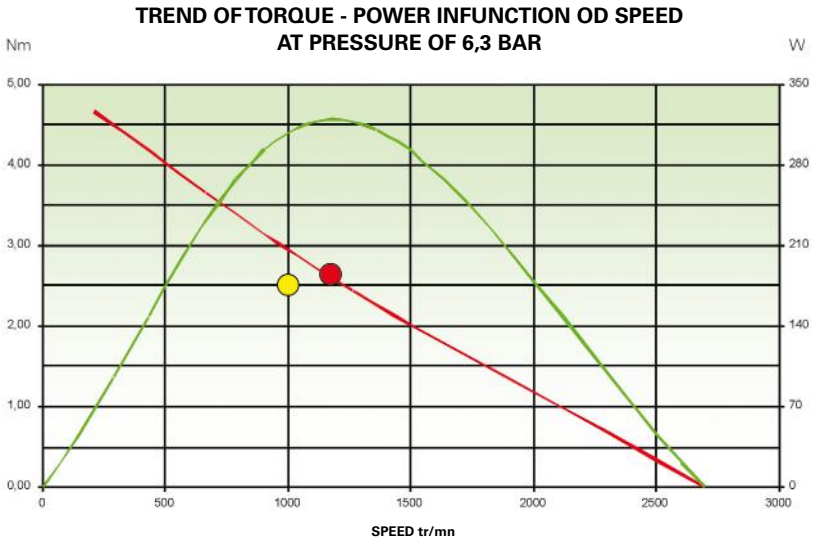
When selecting a motor, it is important to identify the **'working point'** appropriate for your application.
This 'working point' is given by under load operating speed required by motor and by torque necessary at that speed.

FOR EXAMPLE
A non-reversible solution to operate at 1000 r.p.m. and at 2,5 Nm is required.

It is necessary to **consider the performance curves of every model** and to identify the **'working point'** that for this example corresponds to the yellow coupon in the chart here beside.
The choice of the motor will be the one where the 'working point' is the nearest to the torque at the maximum power (indicated by the red coupon on the chart).

The motor to be chosen is therefore model: **28M265D-D10.**

If necessary, one of the methods to reach your 'working point' **is to act on the feed pressure** by applying the coefficients of variation of the performances paramaters of the motor (see chart 1 on the page here beside).



Regulation of the performances features of the motor

The performances features can be modified with continuity by means of a pressure or throttling regulator that reduces or increases the air quantity in the motor.
Consequently there is a decrease or an increase of the power, torque and speed values.
To calculate them the coefficients in chart 1 must be used.

There are **two methods to adjust** motor's performances:
- With an **air flow governor** installed before the air inlet coupling the **control of the stall torque is obtained**
- With an **air flow governor** installed on the air exhaust coupling the **stating torque is maintained and the motor's speed is adjusted;**

Chart 1

Pressure (bar)	Power	Torque	Speed	Consumption
7	1,21	1,17	1,03	1,15
6	1,00	1,00	1,00	1,00
5	0,77	0,83	0,95	0,82
4	0,55	0,67	0,87	0,65
3	0,37	0,50	0,74	0,47

Coefficients of variation of the performances parameters of an air motor in function of the feed pressure

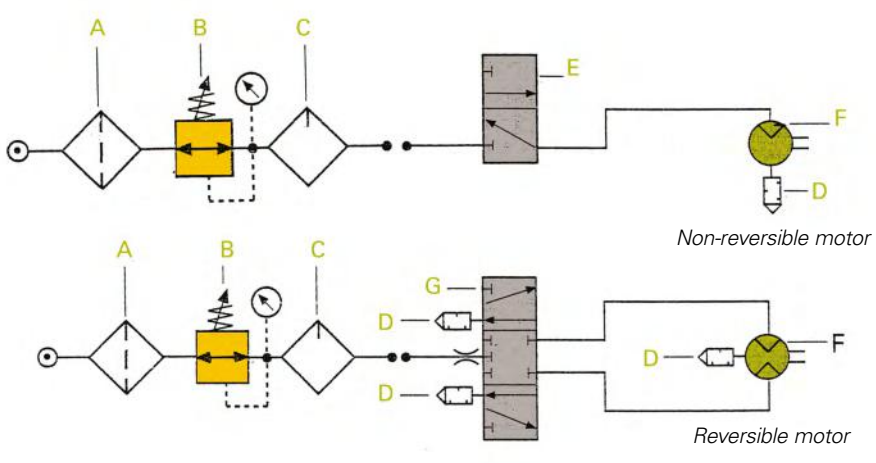
Air feed and its consumption

The air consumption of the air motor **is at maximum** when the motor turns **at free speed.**
To obtain the performances on catalogue it is necessary **to guarantee a correct air feeding** and air exhaust and to **follow these indications:**

- Respect always **recommended air hose bore** for air feed and exhaust hoses
- It is always advisable to **use a FRL group** (filter, pressure regulator, lubricator) appropriate to motor consumption
- It is advisable to connect the exhaust hoses to **oil separator filter with built-in silencing system** that reduces the noise level and **lubricates the motor** without the emission of air exhaust in working environments and permits the oil to be collected and reused.

- It is advisable that the **diameter of the exhaust hose** is greater than the air supply hose. In the case of reversible motor, two inlets have to permit alternatively the entrance and the exhaust of the air i.e. that the inlet which is not used is left free so that the exhaust air can flow.
- **Avoid joints and quick couplings;** they reduce the air flow.

Pneumatic circuit scheme (feed control of the motor)



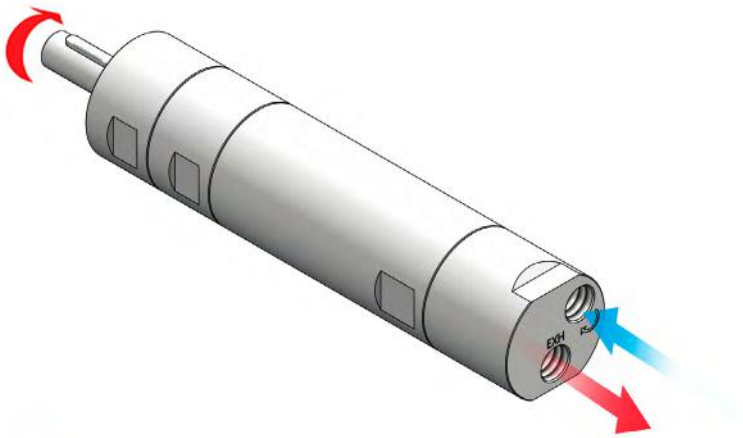
A= Filter
B = Pressure regulator
C = Lubricator
D = Silencer
E = Valve 3/2
F = Air motor
G = Valve 5/3

Figure 1

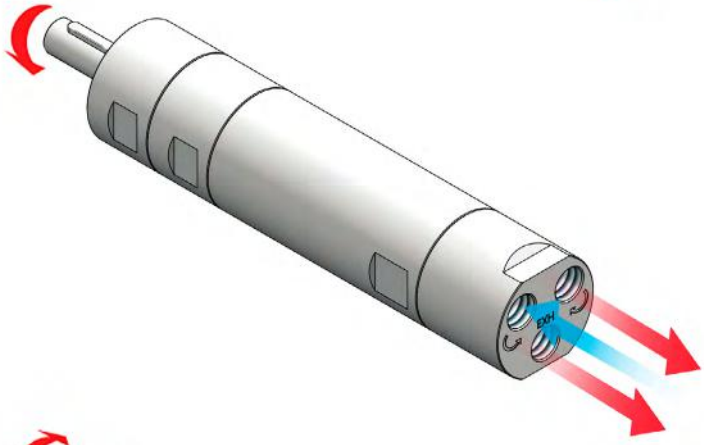
Reversibility

It is important to remember to choose the reversibility of the motor by observing the rotational movement from the rear, that is from the side of supply air inlet.

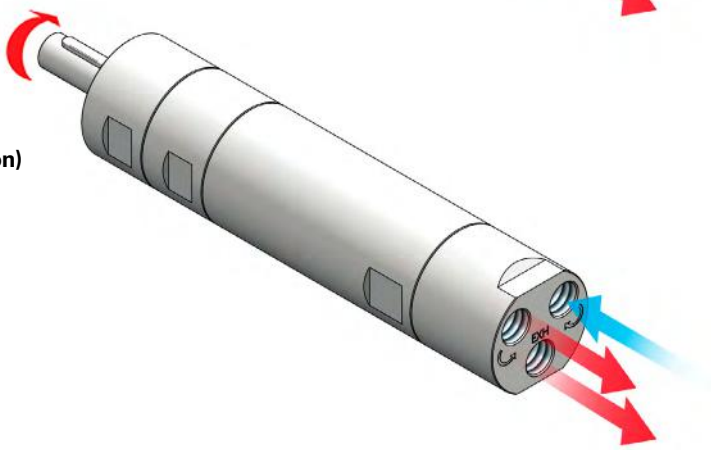
Non-reversible
(clockwise rotation)



Reversible
(when in left rotation)



Reversible
(when in clockwise rotation)



Attention! In the case of reversible motor, two inlets have to permit alternatively the entrance and the exhaust of the air i.e. that the inlet which is not used is left free so that the exhaust air can flow.

Stainless steel air motors: resistant to corrosion, water and humidity.

All Fiam air motors are available with numerous customisations on request, including **stainless steel versions or with IP67 certification**. The most popular ranges, the 20M, 28M and 40M air motors, are available with these features in the Fiam catalogue. These motors are **resistant to water and corrosive materials or atmospheres**, and work safely in **very high-temperature environments**. Their specific build characteristics satisfy the requirements of many production sectors such as food and chemicals.

Entirely designed and manufactured by Fiam, they offer many benefits:

- **specific galvanic treatments** applied not only to the internal mechanisms, but also to exterior surfaces for high corrosion resistance
- **made from high-quality steels** that meet ISO standards
- gears **lubricated** with food-grade grease, **making them suitable** for use on food processing machinery
- **surfaces with 40% less roughness** that, together with the absence of corners or cavities, reduces dirt and dust adhesion
- easy to **clean and sterilise**: they are highly resistant to aggressive detergents
- **internal linings with special treatments to reduce** vane friction and increase motor service life with little or no lubrication.

IP67 protection

The sealants and gaskets used in 20M and 28M (and 15M on request) stainless steel motors **are also IP67 certified**: an important condition that not only prevents liquids from entering the motors and allows them to be submersed briefly to a depth of 1 meter, but also makes them completely hermetic to the ingress of dust and fumes.

ATEX air motors: certified safety.

ATEX certified 20M, 28M and 40M air motors are available in the Fiam catalogue in accordance with the European Union directives on equipment for potentially explosive atmospheres.
Made from stainless steel, they are corrosion-free and can be used safely in working environments containing **flammable** or **explosive substances** or where there are **high temperatures**.
Each motor is tested separately to ensure that it meets the following classifications:
- Ex II 2G Ex h IIC T5 Gb
- Ex II 2D Ex h IIIC T5 Db.

ATEX certification is also available on request for the 15M motor range: contact the Fiam Technical Service Department.

ATEX Certification

The ATEX version models comply with all relevant provisions contained in Directive 2006/42/ EC and Directive 2014/34/EU.
Can be installed in equipment of group II (surface industries) category 2 (can be used in zones 1/21 and 2/22). Zone 1 and zone 21 are areas where the explosive atmosphere is likely to occur, but not continuously or for long periods. The temperature class is T5 and the gas group is IIC.
All ATEX version models are equipped with a hole for housing the grounding cable (cable not included).

IP67 protection

All ATEX air motors are made of stainless steel and the sealants and gaskets used ensure that they are **also IP67 certified**: an important condition that means they can be used where they need to be hermetic to the ingress of dust and fumes.

GENERAL TECHNICAL INFORMATION

How to read model names

- **15/20/28M...** = Power of the motor in Watt/10
- **M** = Air motor
- **1700** = Revolutions/10
- **D** = Right (non-reversible)
- **R** = reversible
- **D10** = Smooth output shaft ø 10 mm with key UNI 6604 form A
- **D6** = Smooth output shaft ø 6 mm with key UNI 6604 form A
- **3/8" x 24UNF** = Threaded output shaft 3/8" x 24UNF
- **5/16"x 24UNF** = Threaded output shaft 5/16" x 24UNF
- **ER16** = Collet shaft ER16
- **ER11** = Collet shaft ER11
- **FL** = with Integrated lozenge fixing flange

Legend
↻ reversibility: right and left
↻ reversibility: right (clockwise)

the direction in which the output shaft turns in considered to be in function of the delivery air input

Other technical features

Model	Air inlet	Recommended hose bore
MM	1/4'' gas	Ø 6 mm
MN - 40M...D/R	1/4'' gas	Ø 8 mm
MO	3/8'' gas	Ø 13 mm
28M...D/R	1/8'' gas	Ø 6 mm
20M...D/R	1/8'' gas	Ø 6 mm
15M...D/R	1/8'' gas	Ø 6 mm

- The figures shown are measured at a pressure of 6,3 bar (ISO 2787), the recommended operating pressure
- Working air pressure: max 7 bar.
- The code number must be used when ordering.

The above figures should be used as a guide only and could be changed without notice. For all further details, please apply to the Fiam Technical Consultancy Service.

N.B. The noise level in the motors is generated by the air exhaust. The level increases as the speed increases and it is at the maximum when the motor rotates at idle speed. All the motors are supplied with a threaded connection which is needed to connect, with a suitable coupling, a hose conveyor in order to take the exhaust air away from the working environment. Fiam recommends to convey the exhaust air to an oil separator filter with built-in silencing system which also permits to give an adequate lubrication to the motors without polluting the working environment.

*** The maximum torque permitted, for continuous use, is 8 Nm for 28M, from 4 to 5 Nm for 20M and 4 Nm for 15M.**

Stainless steel models

All Fiam motors are available in stainless steel.
For models 20M, 28M and 40M see the pages dedicated to the corresponding models while for other models contact Fiam Technical Service.

ATEX certified models

ATEX certified versions of all 15M, 20M, 28M and 40M models are available.
For ATEX certified stainless steel 20M and 28M see the pages dedicated to the corresponding models or contact the Fiam Technical Assistance Service for other models.

Models available upon request

- Models with different output shafts: tapered, morse taper, with gear, shafts with different diameter
- Models with only anti clockwise rotation
- Models with flanged sleeves
- Special models customised for client
- Models with housing and output shaft made of different materials (e.g.: stainless steel, plastic...)
- Models with lozenge fixing flange allowing easy interchangeability with current solutions

** The use of these motors is particular. They must not be used according to torque range, otherwise on stall they could reach very high torques and compromise the inner kinematic gears of the motor. Therefore the load must be regulated in such way that the torque does not exceed the 4-5 Nm for 20M, 8Nm for 28M.

15M Models

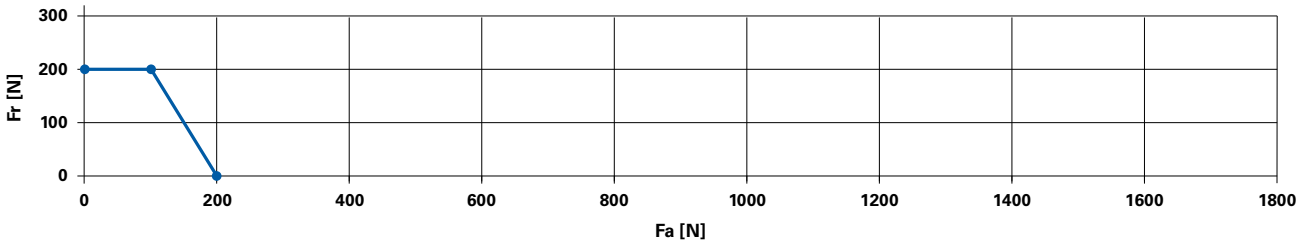
- with smooth output shaft:
  with key UNI 6604 form A: Ø6 - h6 mm
- with threaded output shaft:
  5/16"x24UNF

From 0,12 kW to 0,15 kW
From 0,16 hp to 0,20 hp

Model	Code	Output shaft Type	Reversibility Type	Power kW	Power hp	Speed at the max power rpm	Torque at the max power Nm	Torque at the max power in lb	Starting torque Nm	Starting torque in lb	Free speed rpm	Air consumption at the max power l/s	Air consumption at the max power in cfm	Weight Kg	Weight lb
Non-reversible models															
15M1900D-D6	182711100	smooth	↻	0,15	0,20	9000	0,15	1.33	0,30	2.66	19000	4,4	9,32	0,32	0.71
15M550D-D6	182711500	smooth	↻	0,15	0,20	2500	0,60	5.31	0,95	8.41	5500	4,4	9,32	0,32	0.71
15M375D-D6	182711300	smooth	↻	0,15	0,20	1650	0,80	7.08	1,20	10.62	3750	4,4	9,32	0,32	0.71
15M260D-D6	182711200	smooth	↻	0,15	0,20	1250	1,10	9.74	1,60	14.16	2600	4,4	9,32	0,32	0.71
15M140D-D6	182712100	smooth	↻	0,15	0,20	600	2,20	19.47	2,90	25.67	1400	4,4	9,32	0,43	0.95
15M95D-D6	182712900	smooth	↻	0,15	0,20	500	2,60	23.01	4,00	35.40	950	4,4	9,32	0,43	0.95
15M70D-D6	182712700	smooth	↻	0,15	0,20	350	4,20*	37.17*	6,50*	57.53*	700	4,4	9,32	0,43	0.95
15M1900D-5/16 x 24UNF	182741100	threaded	↻	0,15	0,20	9000	0,15	1.33	0,30	2.66	19000	4,4	9,32	0,32	0.71
15M550D-5/16 x 24UNF	182741500	threaded	↻	0,15	0,20	2500	0,60	5.31	0,95	8.41	5500	4,4	9,32	0,32	0.71
15M375D-5/16 x 24UNF	182741300	threaded	↻	0,15	0,20	1650	0,80	7.08	1,20	10.62	3750	4,4	9,32	0,32	0.71
15M260D-5/16 x 24UNF	182741200	threaded	↻	0,15	0,20	1250	1,10	9.74	1,60	14.16	2600	4,4	9,32	0,32	0.71
15M140D-5/16 x 24UNF	182742100	threaded	↻	0,15	0,20	600	2,20	19.47	2,90	25.67	1400	4,4	9,32	0,43	0.95
15M95D-5/16 x 24UNF	182742900	threaded	↻	0,15	0,20	500	2,60	23.01	4,00	35.40	950	4,4	9,32	0,43	0.95
15M70D-5/16 x 24UNF	182742700	threaded	↻	0,15	0,20	350	4,20*	37.17*	6,50*	57.53*	700	4,4	9,32	0,43	0.95
Reversible models															
15M1600R-D6	182911100	smooth	↻	0,12	0,16	8300	0,15	1.33	0,20	1.77	16000	4,3	9,11	0,32	0.71
15M440R-D6	182911400	smooth	↻	0,12	0,16	2200	0,60	5.31	0,80	7.08	4400	4,3	9,11	0,32	0.71
15M300R-D6	182911300	smooth	↻	0,12	0,16	1490	0,75	6.64	1,00	8,85	3000	4,3	9,11	0,32	0.71
15M220R-D6	182911200	smooth	↻	0,12	0,16	1100	1,05	9.29	1,50	13.28	2200	4,3	9,11	0,32	0.71
15M120R-D6	182912100	smooth	↻	0,12	0,16	590	1,90	16.82	2,60	23.01	1200	4,3	9,11	0,43	0.95
15M80R-D6	182912800	smooth	↻	0,12	0,16	410	2,50	22.13	3,60	31.86	800	4,3	9,11	0,43	0.95
15M58R-D6	182912500	smooth	↻	0,12	0,16	300	4,00*	35.40*	5,50*	48.68*	580	4,3	9,11	0,43	0.95

*** The maximum torque permitted, for continuous use, is 4 Nm**

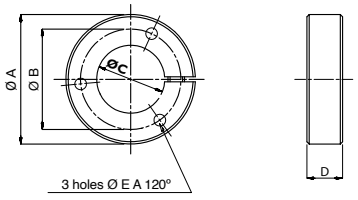
LOADS
according to ISO281 (L10)



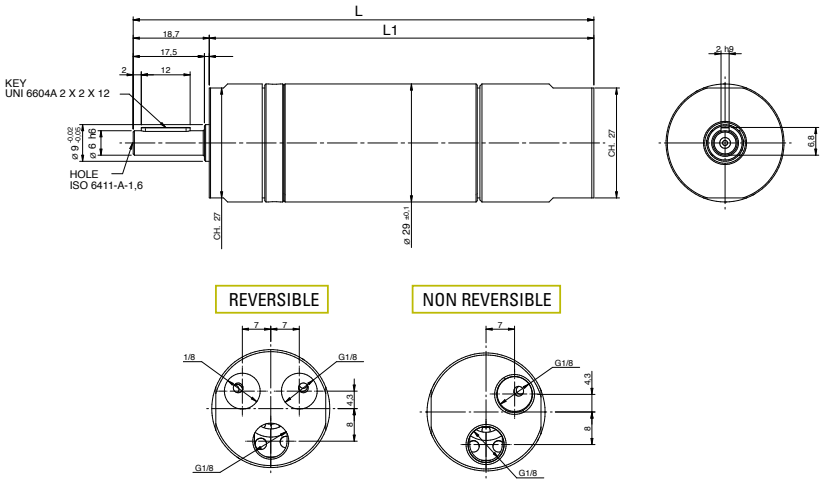
• Flange bracket

Recommended to fix the motors onto machines/units

Code	Motor power	A mm	B mm	C mm	D mm	E mm
684011009	15M...	64,5	50	29	18	5,25



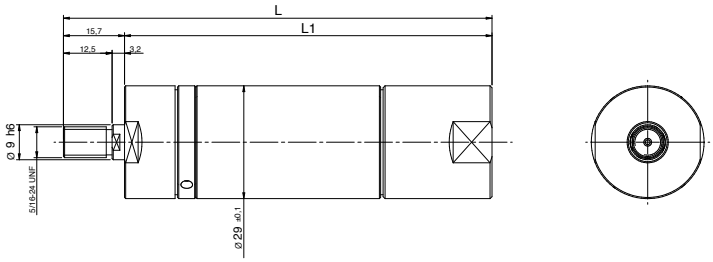
Models with smooth output shaft



Dimensions (mm)

MODEL	L	L1
15M1900D-D6	113,2	94,5
15M550D-D6	113,2	94,5
15M375D-D6	113,2	94,5
15M260D-D6	113,2	94,5
15M140D-D6	139,7	121
15M95D-D6	139,7	121
15M70D-D6	139,7	121
15M1600R-D6	113,2	94,5
15M440R-D6	113,2	94,5
15M300R-D6	113,2	94,5
15M220R-D6	113,2	94,5
15M120R-D6	139,7	121
15M80R-D6	139,7	121
15M58R-D6	139,7	121

Models with threaded output shaft



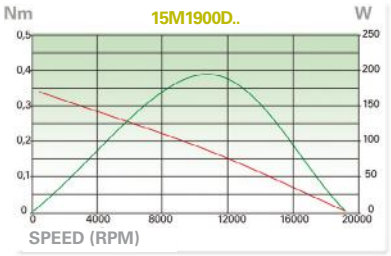
Dimensions (mm)

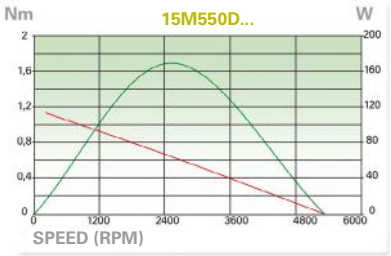
MODEL	L	L1
15M1900D-5/16x24UNF	110,2	94,5
15M550D-5/16x24UNF	110,2	94,5
15M375D-5/16x24UNF	110,2	94,5
15M260D-5/16x24UNF	110,2	94,5
15M140D-5/16x24UNF	136,7	121
15M95D-5/16x24UNF	136,7	121
15M75D-5/16x24UNF	136,7	121

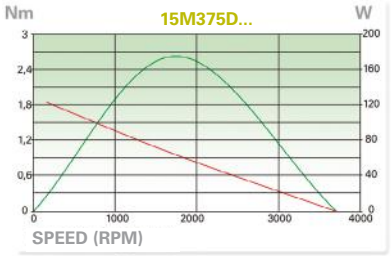
Performances diagrams of torque, power and speed

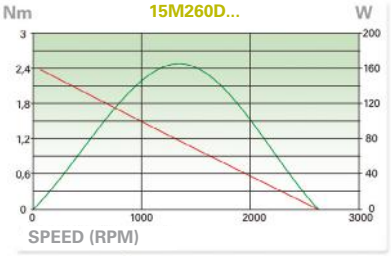
The diagrams show the curves for torque and power in function of number of revolutions: torque _____ power _____
Trend of torque - power in function of speed (at a pressure of 6,3 bar)

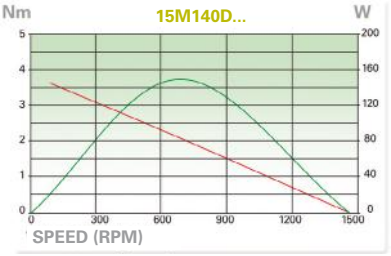
Non-reversible models

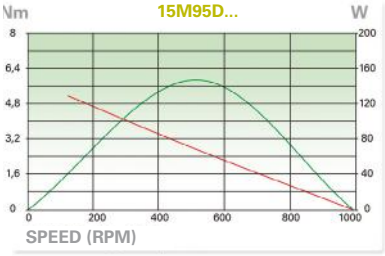


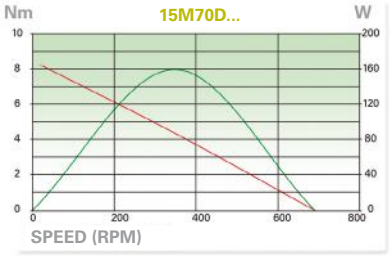




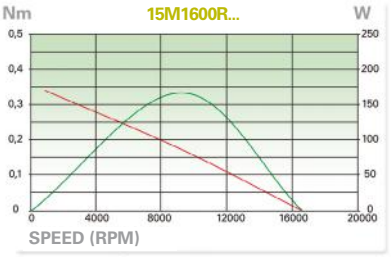


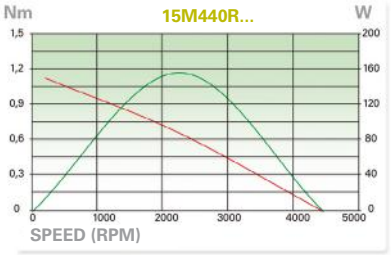


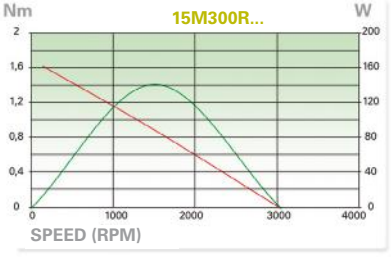


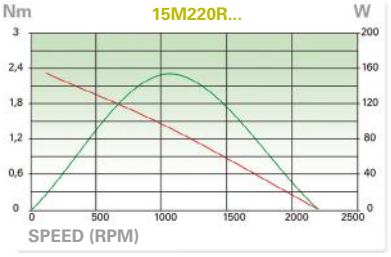


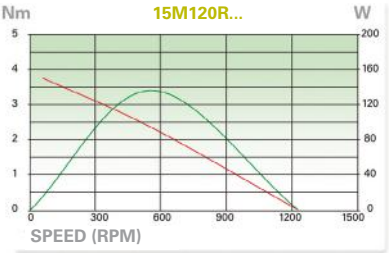
Reversible models

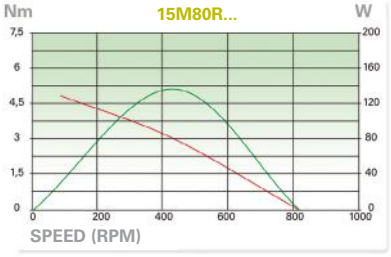


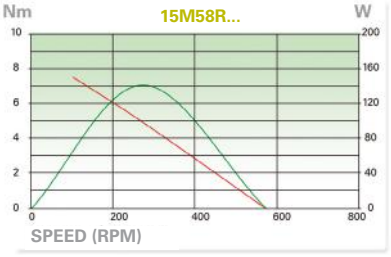












20M Models

- with smooth output shaft:
  with key UNI 6604 form A: Ø10 - h6 mm
- with threaded output shaft: 3/8"x24UNF
- with collet shaft: ER11
- with low rotations with smooth output shaft:
  shaft: with key UNI 6604 form A: Ø10 mm
  h6 mm - maximum torque permitted: 4-5 Nm

From 0,16 kW to 0,20 kW
From 0,21 hp to 0,27 hp

	Model	Code	Output shaft	Reversibility	Power		Speed at the max power	Torque at the max power		Starting torque		Free speed	Air consumption at the max power		Weight	
			Type	Type	kW	hp	rpm	Nm	in lb	Nm	in lb	rpm	l/s	in cfm	Kg	lb
	Non-reversible models															
STANDARD STEEL (ATEX ON DEMAND)	20M2000D-D10	183311200	smooth	↻	0,20	0,27	11000	0,20	1.77	0,30	2.66	20000	5,3	11,23	0,40	0.88
	20M430D-D10	183311400	smooth	↻	0,20	0,27	2030	0,80	7.08	1,35	11.95	4300	5,3	11,23	0,40	0.88
	20M260D-D10	183311210	smooth	↻	0,20	0,27	1350	1,25	11.06	2,10	18.59	2600	5,3	11,23	0,40	0.88
	20M105D-D10	183312100	smooth	↻	0,20	0,27	530	3,10	27.44	5,40	47.79	1050	5,3	11,23	0,54	1.19
	20M60D-D10	183312600	smooth	↻	0,20	0,27	305	5,30*	46.91*	8,80*	77.88*	600	5,3	11,23	0,54	1.19
	20M35D-D10	183312300	low rotations - smooth	↻	0,20	0,27	**	**	**	**	**	350	5,3	11,23	0,54	1.19
	20M14D-D10	183313100	low rotations - smooth	↻	0,20	0,27	**	**	**	**	**	140	5,3	11,23	0,70	1.54
	20M8D-D10	183313800	low rotations - smooth	↻	0,20	0,27	**	**	**	**	**	80	5,3	11,23	0,70	1.54
	20M5D-D10	183313500	low rotations - smooth	↻	0,20	0,27	**	**	**	**	**	50	5,3	11,23	0,70	1.54
	20M2000D-3/8 x 24UNF	183341200	threaded	↻	0,20	0,27	11000	0,20	1.77	0,30	2.66	20000	5,3	11,23	0,40	0.88
	20M430D-3/8 x 24UNF	183341400	threaded	↻	0,20	0,27	2030	0,80	7.08	1,35	11.95	4300	5,3	11,23	0,40	0.88
	20M260D-3/8 x 24UNF	183341210	threaded	↻	0,20	0,27	1350	1,25	11.06	2,10	18.59	2600	5,3	11,23	0,40	0.88
	20M105D-3/8 x 24UNF	183342100	threaded	↻	0,20	0,27	530	3,10	27.44	5,40	47.79	1050	5,3	11,23	0,54	1.19
	20M60D-3/8 x 24UNF	183342600	threaded	↻	0,20	0,27	305	5,30*	46.91*	8,80*	77.88*	600	5,3	11,23	0,54	1.19
	20M2000D-ER11	183331200	collet chuck	↻	0,20	0,27	11000	0,20	1.77	0,30	2.66	20000	5,3	11,23	0,40	0.88
	20M430D-ER11	183331400	collet chuck	↻	0,20	0,27	2030	0,80	7.08	1,35	11.95	4300	5,3	11,23	0,40	0.88
	20M260D-ER11	183331210	collet chuck	↻	0,20	0,27	1350	1,25	11.06	2,10	18.59	2600	5,3	11,23	0,40	0.88
	20M105D-ER11	183332100	collet chuck	↻	0,20	0,27	530	3,10	27.44	5,40	47.79	1050	5,3	11,23	0,54	1.19
	20M60D-ER11	183332600	collet chuck	↻	0,20	0,27	305	5,30*	46.91*	8,80*	77.88*	600	5,3	11,23	0,54	1.19
STAINLESS STEEL / IP67	20M2000D-D10-AI	183309094	smooth	↻	0,20	0,27	11000	0,20	1.77	0,30	2.66	20000	5,3	11,23	0,40	0.88
	20M430D-D10-AI	183309096	smooth	↻	0,20	0,27	2030	0,80	7.08	1,35	11.95	4300	5,3	11,23	0,40	0.88
	20M260D-D10-AI	183309095	smooth	↻	0,20	0,27	1350	1,25	11.06	2,10	18.59	2600	5,3	11,23	0,40	0.88
	20M105D-D10-AI	183309097	smooth	↻	0,20	0,27	530	3,10	27.44	5,40	47.79	1050	5,3	11,23	0,54	1.19
	20M60D-D10-AI	183309098	smooth	↻	0,20	0,27	305	5,30*	46.91*	8,80*	77.88*	600	5,3	11,23	0,54	1.19
	20M35D-D10-AI	183309099	low rotations - smooth	↻	0,20	0,27	**	**	**	**	**	350	5,3	11,23	0,54	1.19
	20M14D-D10-AI	183309100	low rotations - smooth	↻	0,20	0,27	**	**	**	**	**	140	5,3	11,23	0,70	1.54
	20M8D-D10-AI	183309102	low rotations - smooth	↻	0,20	0,27	**	**	**	**	**	80	5,3	11,23	0,70	1.54
	20M5D-D10-AI	183309101	low rotations - smooth	↻	0,20	0,27	**	**	**	**	**	50	5,3	11,23	0,70	1.54
	20M2000D-3/8X24UNF-AI	183309103	threaded	↻	0,20	0,27	11000	0,20	1.77	0,30	2.66	20000	5,3	11,23	0,40	0.88
	20M430D-3/8X24UNF-AI	183309105	threaded	↻	0,20	0,27	2030	0,80	7.08	1,35	11.95	4300	5,3	11,23	0,40	0.88
	20M260D-3/8X24UNF-AI	183309104	threaded	↻	0,20	0,27	1350	1,25	11.06	2,10	18.59	2600	5,3	11,23	0,40	0.88
	20M105D-3/8X24UNF-AI	183309106	threaded	↻	0,20	0,27	530	3,10	27.44	5,40	47.79	1050	5,3	11,23	0,54	1.19
	20M60D-3/8X24UNF-AI	183309107	threaded	↻	0,20	0,27	305	5,30*	46.91*	8,80*	77.88*	600	5,3	11,23	0,54	1.19
	20M2000D-ER11-AI	183309108	collet chuck	↻	0,20	0,27	11000	0,20	1.77	0,30	2.66	20000	5,3	11,23	0,40	0.88
	20M430D-ER11-AI	183309110	collet chuck	↻	0,20	0,27	2030	0,80	7.08	1,35	11.95	4300	5,3	11,23	0,40	0.88
	20M260D-ER11-AI	183309109	collet chuck	↻	0,20	0,27	1350	1,25	11.06	2,10	18.59	2600	5,3	11,23	0,40	0.88
	20M105D-ER11-AI	183309111	collet chuck	↻	0,20	0,27	530	3,10	27.44	5,40	47.79	1050	5,3	11,23	0,54	1.19
	20M60D-ER11-AI	183309112	collet chuck	↻	0,20	0,27	305	5,30*	46.91*	8,80*	77.88*	600	5,3	11,23	0,54	1.19
ATEX - INOX	20M2000D-D10-AI-EX	183309075	smooth	↻	0,20	0,27	11000	0,20	1.77	0,30	2.66	20000	5,3	11,23	0,40	0.88
	20M430D-D10-AI-EX	183309077	smooth	↻	0,20	0,27	2030	0,80	7.08	1,35	11.95	4300	5,3	11,23	0,40	0.88
	20M260D-D10-AI-EX	183309076	smooth	↻	0,20	0,27	1350	1,25	11.06	2,10	18.59	2600	5,3	11,23	0,40	0.88
	20M105D-D10-AI-EX	183309078	smooth	↻	0,20	0,27	530	3,10	27.44	5,40	47.79	1050	5,3	11,23	0,54	1.19
	20M60D-D10-AI-EX	183309079	smooth	↻	0,20	0,27	305	5,30*	46.91*	8,80*	77.88*	600	5,3	11,23	0,54	1.19
	20M35D-D10-AI-EX	183309080	low rotations - smooth	↻	0,20	0,27	**	**	**	**	**	350	5,3	11,23	0,54	1.19
	20M14D-D10-AI-EX	183309081	low rotations - smooth	↻	0,20	0,27	**	**	**	**	**	140	5,3	11,23	0,70	1.54
	20M8D-D10-AI-EX	183309083	low rotations - smooth	↻	0,20	0,27	**	**	**	**	**	80	5,3	11,23	0,70	1.54
	20M5D-D10-AI-EX	183309082	low rotations - smooth	↻	0,20	0,27	**	**	**	**	**	50	5,3	11,23	0,70	1.54

* The maximum torque permitted, for continuous use, is from 4 Nm to 5 Nm

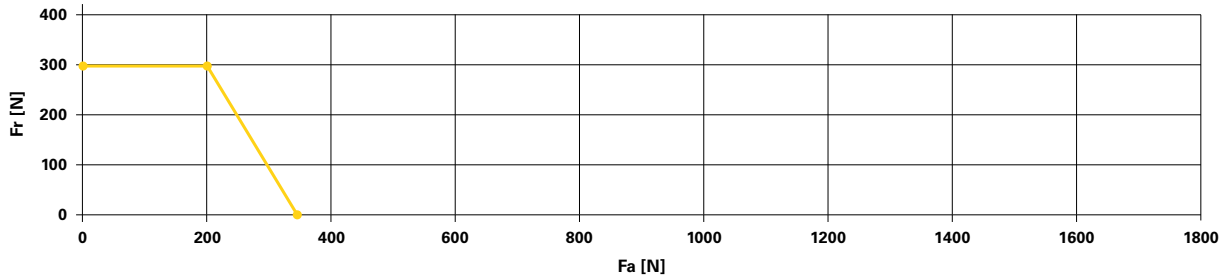
** The use of these motors is particular: **they must not be used according to torque range,** otherwise on stall they could reach very high torques and compromise the inner kinematic gears of the motor. Therefore the load must be regulated in such way that the torque does not exceed the 4-5 Nm.

	Model	Code	Output shaft Type	Reversibility Type	Power kW	Power hp	Speed at the max power rpm	Torque at the max power Nm	Torque at the max power in lb	Starting torque Nm	Starting torque in lb	Free speed rpm	Air consumption at the max power l/s	Air consumption at the max power in cfm	Weight Kg	Weight lb
	Non-reversible models															
ATEX - INOX	20M2000D-3/8X24UNF-AI-EX	183309084	threaded		0,20	0,27	11000	0,20	1.77	0,30	2.66	20000	5,3	11,23	0,40	0.88
	20M430D-3/8X24UNF-AI-EX	183309086	threaded		0,20	0,27	2030	0,80	7.08	1,35	11.95	4300	5,3	11,23	0,40	0.88
	20M260D-3/8X24UNF-AI-EX	183309085	threaded		0,20	0,27	1350	1,25	11.06	2,10	18.59	2600	5,3	11,23	0,40	0.88
	20M105D-3/8X24UNF-AI-EX	183309087	threaded		0,20	0,27	530	3,10	27.44	5,40	47.79	1050	5,3	11,23	0,54	1.19
	20M60D-3/8X24UNF-AI-EX	183309088	threaded		0,20	0,27	305	5,30*	46.91*	8,80*	77.88*	600	5,3	11,23	0,54	1.19
	20M2000D-ER11-AI-EX	183309089	collet chuck		0,20	0,27	11000	0,20	1.77	0,30	2.66	20000	5,3	11,23	0,40	0.88
	20M430D-ER11-AI-EX	183309091	collet chuck		0,20	0,27	2030	0,80	7.08	1,35	11.95	4300	5,3	11,23	0,40	0.88
	20M260D-ER11-AI-EX	183309090	collet chuck		0,20	0,27	1350	1,25	11.06	2,10	18.59	2600	5,3	11,23	0,40	0.88
	20M105D-ER11-AI-EX	183309092	collet chuck		0,20	0,27	530	3,10	27.44	5,40	47.79	1050	5,3	11,23	0,54	1.19
	20M60D-ER11-AI-EX	183309093	collet chuck		0,20	0,27	305	5,30*	46.91*	8,80*	77.88*	600	5,3	11,23	0,54	1.19
	Reversible models															
STANDARD STEEL (ATEX SOB DEMAND)	20M1650R-D10	183511100	smooth		0,16	0,21	9000	0,15	1.33	0,25	2.21	16500	5,0	10,60	0,40	0.88
	20M400R-D10	183511300	smooth		0,16	0,21	1950	0,80	7.08	1,20	10.62	4000	5,0	10,60	0,40	0.88
	20M250R-D10	183511200	smooth		0,16	0,21	1330	1,40	12.39	2,20	19.47	2500	5,0	10,60	0,40	0.88
	20M100R-D10	183512900	smooth		0,16	0,21	550	3,05	26.99	4,80	42.48	1000	5,0	10,60	0,54	1.19
	20M58R-D10	183512500	smooth		0,16	0,21	300	5,70*	50.45*	7,50*	66.38*	580	5,0	10,60	0,54	1.19
	20M30R-D10	183512300	low rotations - smooth		0,16	0,21	**	**	**	**	**	300	5,0	10,60	0,54	1.19
	20M13R-D10	183513100	low rotations - smooth		0,16	0,21	**	**	**	**	**	130	5,0	10,60	0,70	1.54
	20M7R-D10	183513800	low rotations - smooth		0,16	0,21	**	**	**	**	**	70	5,0	10,60	0,70	1.54
	20M4R-D10	183513500	low rotations - smooth		0,16	0,21	**	**	**	**	**	40	5,0	10,60	0,70	1.54
STAINLESS STEEL / IP67	20M1650R-D10-AI	183509060	smooth		0,16	0,21	9000	0,15	1.33	0,25	2.21	16500	5,0	10,60	0,40	0.88
	20M400R-D10-AI	183509062	smooth		0,16	0,21	1950	0,80	7.08	1,20	10.62	4000	5,0	10,60	0,40	0.88
	20M250R-D10-AI	183509061	smooth		0,16	0,21	1330	1,40	12.39	2,20	19.47	2500	5,0	10,60	0,40	0.88
	20M100R-D10-AI	183509063	smooth		0,16	0,21	550	3,05	26.99	4,80	42.48	1000	5,0	10,60	0,54	1.19
	20M58R-D10-AI	183509064	smooth		0,16	0,21	300	5,70*	50.45*	7,50*	66.38*	580	5,0	10,60	0,54	1.19
	20M30R-D10-AI	183509065	low rotations - smooth		0,16	0,21	**	**	**	**	**	300	5,0	10,60	0,54	1.19
	20M13R-D10-AI	183509066	low rotations - smooth		0,16	0,21	**	**	**	**	**	130	5,0	10,60	0,70	1.54
	20M7R-D10-AI	183509068	low rotations - smooth		0,16	0,21	**	**	**	**	**	70	5,0	10,60	0,70	1.54
	20M4R-D10-AI	183509067	low rotations - smooth		0,16	0,21	**	**	**	**	**	40	5,0	10,60	0,70	1.54
ATEX - INOX	20M1650R-D10-AI-EX	183509051	smooth		0,16	0,21	9000	0,15	1.33	0,25	2.21	16500	5,0	10,60	0,40	0.88
	20M400R-D10-AI-EX	183509053	smooth		0,16	0,21	1950	0,80	7.08	1,20	10.62	4000	5,0	10,60	0,40	0.88
	20M250R-D10-AI-EX	183509052	smooth		0,16	0,21	1330	1,40	12.39	2,20	19.47	2500	5,0	10,60	0,40	0.88
	20M100R-D10-AI-EX	183509054	smooth		0,16	0,21	550	3,05	26.99	4,80	42.48	1000	5,0	10,60	0,54	1.19
	20M58R-D10-AI-EX	183509055	smooth		0,16	0,21	300	5,70*	50.45*	7,50*	66.38*	580	5,0	10,60	0,54	1.19
	20M30R-D10-AI-EX	183509056	low rotations - smooth		0,16	0,21	**	**	**	**	**	300	5,0	10,60	0,54	1.19
	20M13R-D10-AI-EX	183509057	low rotations - smooth		0,16	0,21	**	**	**	**	**	130	5,0	10,60	0,70	1.54
	20M7R-D10-AI-EX	183509059	low rotations - smooth		0,16	0,21	**	**	**	**	**	70	5,0	10,60	0,70	1.54
	20M4R-D10-AI-EX	183509058	low rotations - smooth		0,16	0,21	**	**	**	**	**	40	5,0	10,60	0,70	1.54

* The maximum torque permitted, for continuous use, is from 4 Nm to 5 Nm

** The use of these motors is particular: **they must not be used according to torque range,** otherwise on stall they could reach very high torques and compromise the inner kinematic gears of the motor. Therefore the load must be regulated in such way that the torque does not exceed the 4-5 Nm.

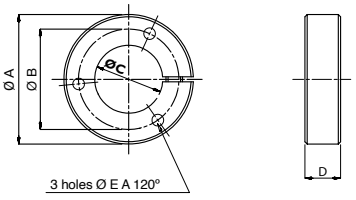
LOADS
according to ISO281 (L10)



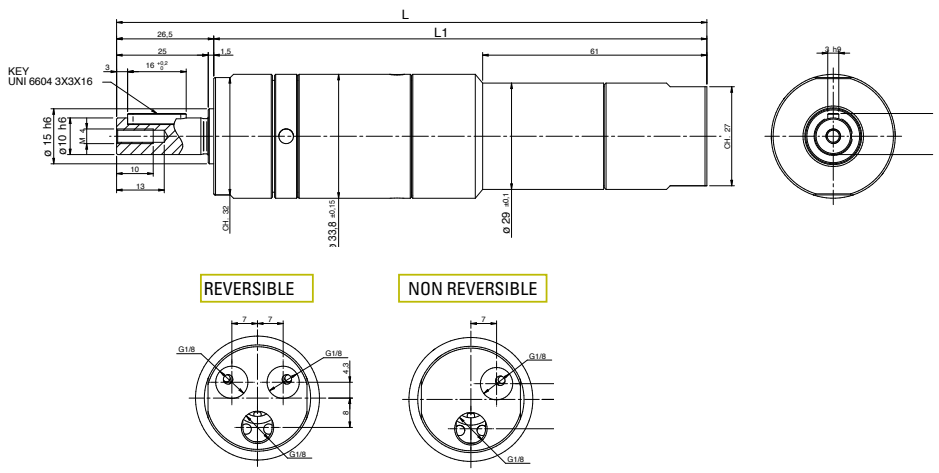
• Flange bracket

Recommended to fix the motors onto machines/units

Code	Motor power	A mm	B mm	C mm	D mm	E mm
684011001	20M...	64,5	50	33,8	18	5,25



Models with smooth output shaft

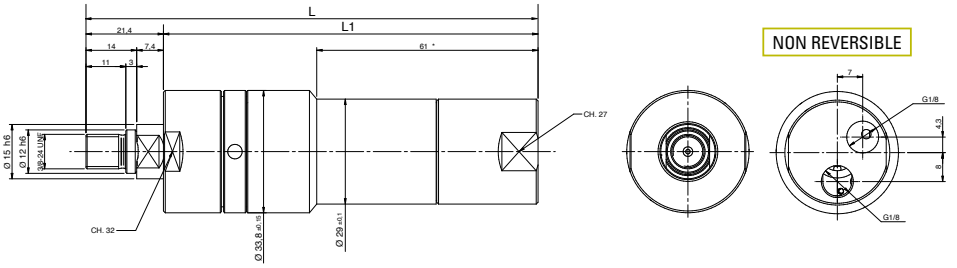


Dimensions (mm)

MODEL	L*	L1*
20M2000D - D10	130	103,5
20M430D - D10	130	103,5
20M260D - D10	130	103,5
20M105D - D10	161	134,5
20M60D - D10	161	134,5
20M1650R - D10	130	103,5
20M400R - D10	130	103,5
20M250R - D10	130	103,5
20M100R - D10	161	134,5
20M58R - D10	161	134,5

* +4 mm for models in stainless steel/IP67 and stainless steel/ATEX/IP67 versions.

Models with threaded output shaft

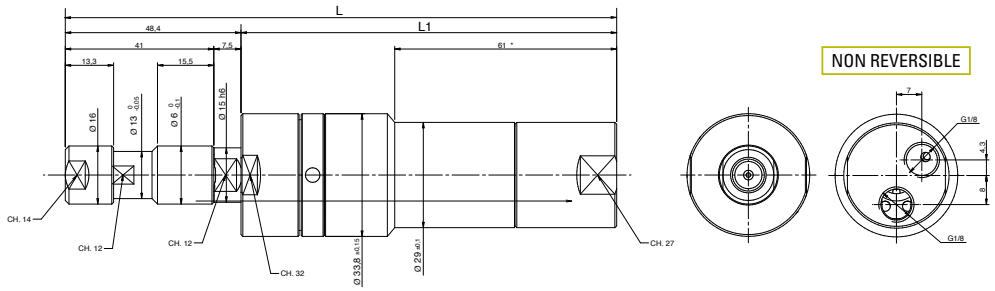


Dimensions (mm)

MODEL	L*	L1*
20M2000D-3/8x24UNF	124,9	103,5
20M430D-3/8x24UNF	124,9	103,5
20M260D-3/8x24UNF	124,9	103,5
20M105D-3/8x24UNF	155,9	134,5
20M60D-3/8x24UNF	155,9	134,5

* +4 mm for models in stainless steel/IP67 and stainless steel/ATEX/IP67 versions.

Models with collet shaft

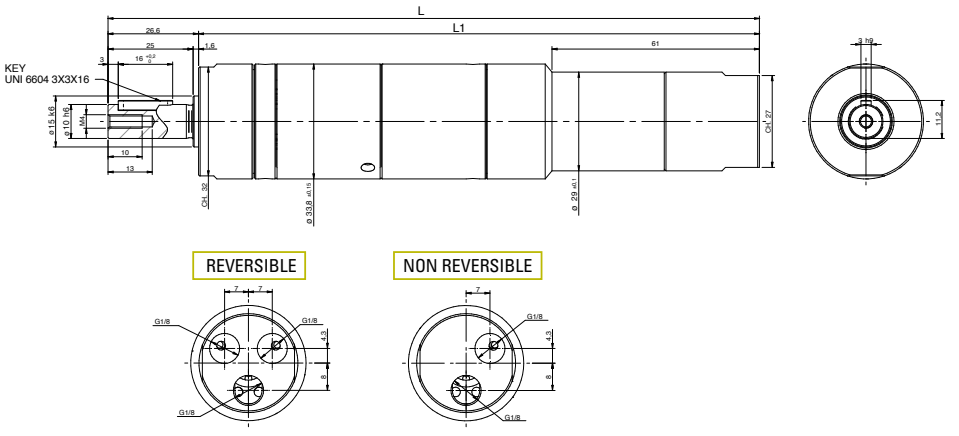


Dimensions (mm)

MODEL	L*	L1*
20M2000D-ER11	151,9	103,5
20M430D-ER11	151,9	103,5
20M260D-ER11	151,9	103,5
20M105D-ER11	182,4	134
20M60D-ER11	182,4	134

* +4 mm for models in stainless steel/IP67 and stainless steel/ATEX/IP67 versions.

Models with low rotations with smooth output shaft



Dimensions (mm)

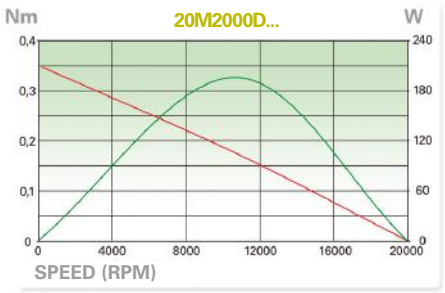
MODEL	L*	L1*
20M35D-D10	161	134,5
20M14D-D10	191,6	165
20M8D-D10	191,6	165
20M5D-D10	191,6	165
20M30R-D10	161	134,5
20M13R-D10	191,6	165
20M7R-D10	191,6	165
20M4R-D10	191,6	165

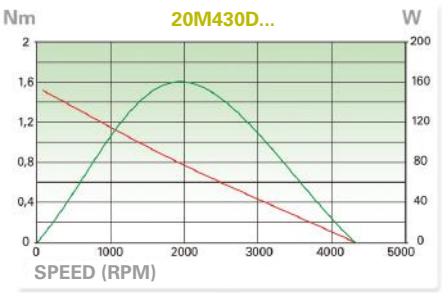
* +4 mm for models in stainless steel/IP67 and stainless steel/ATEX/IP67 versions.

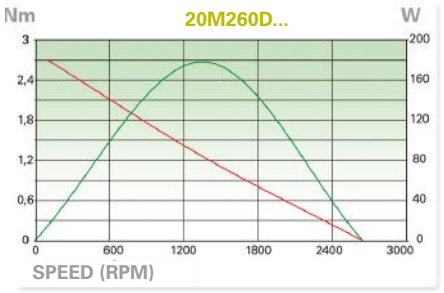
Performances diagrams of torque, power and speed

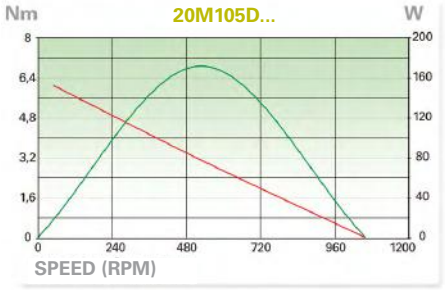
The diagrams show the curves for torque and power in function of number of revolutions: torque ——— power ———
Trend of torque - power in function of speed (at a pressure of 6,3 bar)

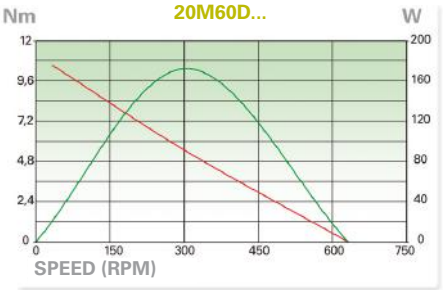
Non-reversible models



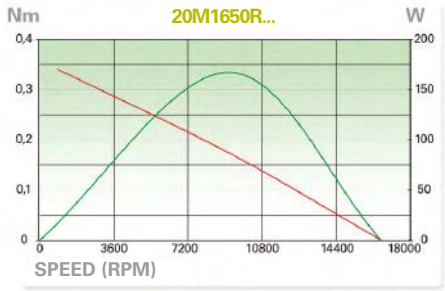


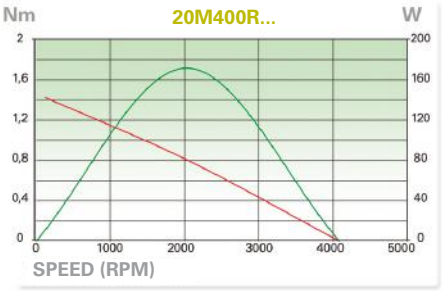


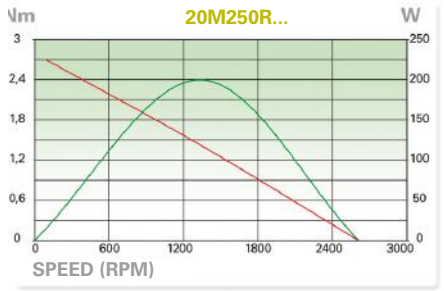


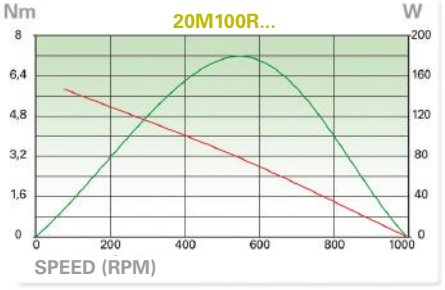


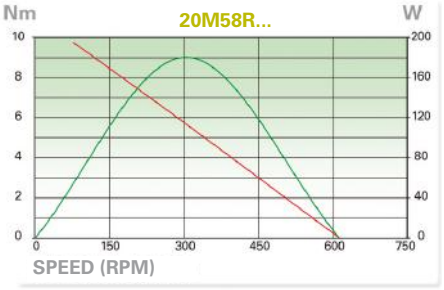
Reversible models











28M Models

- with smooth output shaft:
  with key UNI 6604 form A: Ø10 - h7 mm
- with threaded output shaft: 3/8"x24UNF
- with collet shaft: ER16
- with low rotations with smooth output shaft:
  with key UNI 6604 form A: Ø10 mm - h7 mm
  maximum torque permitted: 8 Nm

From 0,21 kW to 0,28 kW
From 0,28 hp to 0,38 hp

	Model	Code	Output shaft Type	Reversibility Type	Power kW	Power hp	Speed at the max power rpm	Torque at the max power Nm	Torque at the max power in lb	Starting torque Nm	Starting torque in lb	Free speed rpm	Air consumption at the max power l/s	Air consumption at the max power in cfm	Weight Kg	Weight lb
	Non-reversible models															
STANDARD STEEL (ATEX ON DEMAND)	28M1700D-D10	185611100	smooth	↻	0,28	0,38	8390	0,31	2.74	0,46	4.07	17000	6,3	13,35	0,58	1.28
	28M600D-D10	185611600	smooth	↻↺	0,28	0,38	2900	1,00	8.85	1,50	13.28	6000	6,3	13,35	0,58	1.28
	28M480D-D10	185611400	smooth	↻↺	0,28	0,38	2040	1,31	11.59	2,00	17.70	4800	6,3	13,35	0,58	1.28
	28M330D-D10	185611300	smooth	↻↺	0,28	0,38	1510	2,00	17.70	2,90	25.67	3300	6,3	13,35	0,58	1.28
	28M265D-D10	185611200	smooth	↻↺	0,28	0,38	1180	2,50	22.13	3,60	31.86	2650	6,3	13,35	0,58	1.28
	28M155D-D10	185612100	smooth	↻↺	0,28	0,38	750	4,15	36.73	6,00	53.10	1550	6,3	13,35	0,78	1.72
	28M120D-D10	185612110	smooth	↻↺	0,28	0,38	535	4,80	42.48	7,90	69.92	1200	6,3	13,35	0,78	1.72
	28M100D-D10	185612120	smooth	↻↺	0,28	0,38	425	6,30	55.76	9,00	79.65	1000	6,3	13,35	0,78	1.72
	28M55D-D10	185612500	smooth	↻↺	0,28	0,38	255	11,70*	103.55*	17,50*	154.88*	560	6,3	13,35	0,78	1.72
	28M20D-D10	185613200	low rotations - smooth	↻↺	0,28	0,38	**	**	**	**	**	215	6,0	12,71	0,97	2.14
	28M10D-D10	185613100	low rotations - smooth	↻↺	0,28	0,38	**	**	**	**	**	100	6,0	12,71	0,97	2.14
	28M1700D-3/8 x 24UNF	185609001	threaded	↻↺	0,28	0,38	8390	0,31	2.74	0,46	4.07	17000	6,3	13,35	0,58	1.28
	28M600D-3/8 x 24UNF	185609002	threaded	↻↺	0,28	0,38	2900	1,00	8.85	1,50	13.28	6000	6,3	13,35	0,58	1.28
	28M480D-3/8 x 24UNF	185609003	threaded	↻↺	0,28	0,38	2040	1,31	11.59	2,00	17.70	4800	6,3	13,35	0,58	1.28
	28M330D-3/8 x 24UNF	185609004	threaded	↻↺	0,28	0,38	1510	2,00	17.70	2,90	25.67	3300	6,3	13,35	0,58	1.28
	28M265D-3/8 x 24UNF	185609005	threaded	↻↺	0,28	0,38	1180	2,50	22.13	3,60	31.86	2650	6,3	13,35	0,58	1.28
	28M155D-3/8 x 24UNF	185609006	threaded	↻↺	0,28	0,38	750	4,15	36.73	6,00	53.10	1550	6,3	13,35	0,78	1.72
	28M120D-3/8 x 24UNF	185609007	threaded	↻↺	0,28	0,38	535	4,80	42.48	7,90	69.92	1200	6,3	13,35	0,78	1.72
	28M100D-3/8 x 24UNF	185609008	threaded	↻↺	0,28	0,38	425	6,30	55.76	9,00	79.65	1000	6,3	13,35	0,78	1.72
	28M55D-3/8 x 24UNF	185609009	threaded	↻↺	0,28	0,38	255	11,70*	103.55*	17,50*	154.88*	560	6,3	13,35	0,78	1.72
	28M1700D-ER16	185609012	collet chuck	↻↺	0,28	0,38	8390	0,31	2.74	0,46	4.07	17000	6,3	13,35	0,67	1.48
	28M600D-ER16	185609013	collet chuck	↻↺	0,28	0,38	2900	1,00	8.85	1,50	13.28	6000	6,3	13,35	0,67	1.48
	28M480D-ER16	185609014	collet chuck	↻↺	0,28	0,38	2040	1,31	11.59	2,00	17.70	4800	6,3	13,35	0,67	1.48
	28M330D-ER16	185609015	collet chuck	↻↺	0,28	0,38	1510	2,00	17.70	2,90	25.67	3300	6,3	13,35	0,67	1.48
	28M265D-ER16	185609016	collet chuck	↻↺	0,28	0,38	1180	2,50	22.13	3,60	31.86	2650	6,3	13,35	0,67	1.48
	28M155D-ER16	185609017	collet chuck	↻↺	0,28	0,38	750	4,15	36.73	6,00	53.10	1550	6,3	13,35	0,87	1.92
	28M120D-ER16	185609018	collet chuck	↻↺	0,28	0,38	535	4,80	42.48	7,90	69.92	1200	6,3	13,35	0,87	1.92
	28M100D-ER16	185609019	collet chuck	↻↺	0,28	0,38	425	6,30	55.76	9,00	79.65	1000	6,3	13,35	0,87	1.92
	28M55D-ER16	185609020	collet chuck	↻	0,28	0,38	255	11,70*	103.55*	17,50*	154.88*	560	6,3	13,35	0,87	1.92

* The maximum torque permitted, for continuous use, is 8 Nm

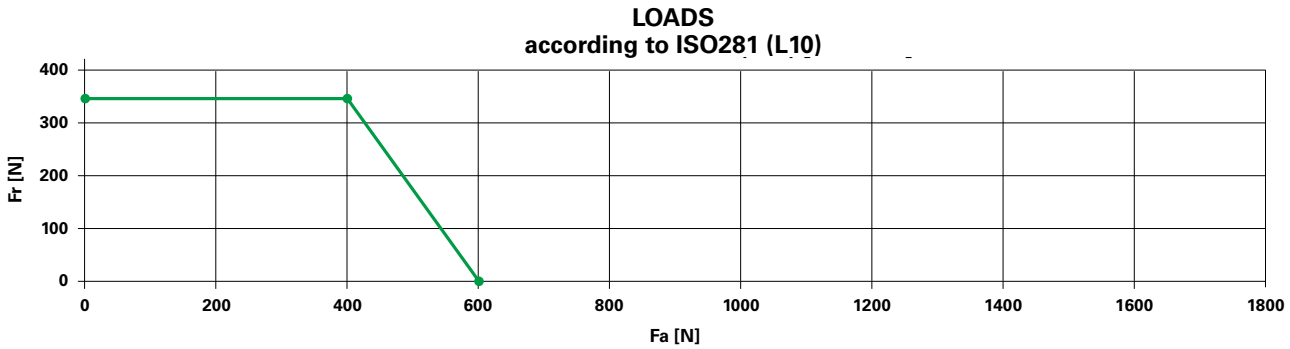
** The use of these motors is particular: **they must not be used according to torque range,** otherwise on stall they could reach very high torques and compromise the inner kinematic gears of the motor. Therefore the load must be regulated in such way that the torque does not exceed the 8Nm for 28M.

	Model	Code	Output shaft Type	Reversibility Type	Power kW	Power hp	Speed at the max power rpm	Torque at the max power Nm	Torque at the max power in lb	Starting torque Nm	Starting torque in lb	Free speed rpm	Air consumption at the max power l/s	Air consumption at the max power in cfm	Weight Kg	Weight lb
	Non-reversible models															
STAINLESS STEEL / IP67	28M1700D-D10-AI	185609105	smooth		0,28	0,38	8390	0,31	2.74	0,46	4.07	17000	6,3	13,35	0,58	1.28
	28M600D-D10-AI	185609106	smooth		0,28	0,38	2900	1,00	8.85	1,50	13.28	6000	6,3	13,35	0,58	1.28
	28M480D-D10-AI	185609107	smooth		0,28	0,38	2040	1,31	11.59	2,00	17.70	4800	6,3	13,35	0,58	1.28
	28M330D-D10-AI	185609108	smooth		0,28	0,38	1510	2,00	17.70	2,90	25.67	3300	6,3	13,35	0,58	1.28
	28M265D-D10-AI	185609109	smooth		0,28	0,38	1180	2,50	22.13	3,60	31.86	2650	6,3	13,35	0,58	1.28
	28M155D-D10-AI	185609110	smooth		0,28	0,38	750	4,15	36.73	6,00	53.10	1550	6,3	13,35	0,78	1.72
	28M120D-D10-AI	185609111	smooth		0,28	0,38	535	4,80	42.48	7,90	69.92	1200	6,3	13,35	0,78	1.72
	28M100D-D10-AI	185609112	smooth		0,28	0,38	425	6,30	55.76	9,00	79.65	1000	6,3	13,35	0,78	1.72
	28M55D-D10-AI	185609113	smooth		0,28	0,38	255	11,70*	103.55*	17,50*	154.88*	560	6,3	13,35	0,78	1.72
	28M20D-D10-AI	185609114	low rotations - smooth		0,28	0,38	**	**	**	**	**	215	6,0	12,71	0,97	2.14
	28M10D-D10-AI	185609115	low rotations - smooth		0,28	0,38	**	**	**	**	**	100	6,0	12,71	0,97	2.14
	28M1700D-3/8X24UNF-AI	185609116	threaded		0,28	0,38	8390	0,31	2.74	0,46	4.07	17000	6,3	13,35	0,58	1.28
	28M600D-3/8X24UNF-AI	185609117	threaded		0,28	0,38	2900	1,00	8.85	1,50	13.28	6000	6,3	13,35	0,58	1.28
	28M480D-3/8X24UNF-AI	185609118	threaded		0,28	0,38	2040	1,31	11.59	2,00	17.70	4800	6,3	13,35	0,58	1.28
	28M330D-3/8X24UNF-AI	185609119	threaded		0,28	0,38	1510	2,00	17.70	2,90	25.67	3300	6,3	13,35	0,58	1.28
	28M265D-3/8X24UNF-AI	185609120	threaded		0,28	0,38	1180	2,50	22.13	3,60	31.86	2650	6,3	13,35	0,58	1.28
	28M155D-3/8X24UNF-AI	185609121	threaded		0,28	0,38	750	4,15	36.73	6,00	53.10	1550	6,3	13,35	0,78	1.72
	28M120D-3/8X24UNF-AI	185609122	threaded		0,28	0,38	535	4,80	42.48	7,90	69.92	1200	6,3	13,35	0,78	1.72
	28M100D-3/8X24UNF-AI	185609123	threaded		0,28	0,38	425	6,30	55.76	9,00	79.65	1000	6,3	13,35	0,78	1.72
	28M55D-3/8X24UNF-AI	185609124	threaded		0,28	0,38	255	11,70*	103.55*	17,50*	154.88*	560	6,3	13,35	0,78	1.72
	28M1700D-ER16-AI	185609125	collet chuck		0,28	0,38	8390	0,31	2.74	0,46	4.07	17000	6,3	13,35	0,67	1.48
	28M600D-ER16-AI	185609126	collet chuck		0,28	0,38	2900	1,00	8.85	1,50	13.28	6000	6,3	13,35	0,67	1.48
	28M480D-ER16-AI	185609127	collet chuck		0,28	0,38	2040	1,31	11.59	2,00	17.70	4800	6,3	13,35	0,67	1.48
	28M330D-ER16-AI	185609128	collet chuck		0,28	0,38	1510	2,00	17.70	2,90	25.67	3300	6,3	13,35	0,67	1.48
	28M265D-ER16-AI	185609129	collet chuck		0,28	0,38	1180	2,50	22.13	3,60	31.86	2650	6,3	13,35	0,67	1.48
	28M155D-ER16-AI	185609130	collet chuck		0,28	0,38	750	4,15	36.73	6,00	53.10	1550	6,3	13,35	0,87	1.92
	28M120D-ER16-AI	185609131	collet chuck		0,28	0,38	535	4,80	42.48	7,90	69.92	1200	6,3	13,35	0,87	1.92
	28M100D-ER16-AI	185609132	collet chuck		0,28	0,38	425	6,30	55.76	9,00	79.65	1000	6,3	13,35	0,87	1.92
	28M55D-ER16-AI	185609133	collet chuck		0,28	0,38	255	11,70*	103.55*	17,50*	154.88*	560	6,3	13,35	0,87	1.92
ATEX - INOX	28M1700D-D10-AI-EX	185609075	smooth		0,28	0,38	8390	0,31	2.74	0,46	4.07	17000	6,3	13,35	0,58	1.28
	28M600D-D10-AI-EX	185609076	smooth		0,28	0,38	2900	1,00	8.85	1,50	13.28	6000	6,3	13,35	0,58	1.28
	28M480D-D10-AI-EX	185609077	smooth		0,28	0,38	2040	1,31	11.59	2,00	17.70	4800	6,3	13,35	0,58	1.28
	28M330D-D10-AI-EX	185609078	smooth		0,28	0,38	1510	2,00	17.70	2,90	25.67	3300	6,3	13,35	0,58	1.28
	28M265D-D10-AI-EX	185609079	smooth		0,28	0,38	1180	2,50	22.13	3,60	31.86	2650	6,3	13,35	0,58	1.28
	28M155D-D10-AI-EX	185609080	smooth		0,28	0,38	750	4,15	36.73	6,00	53.10	1550	6,3	13,35	0,78	1.72
	28M120D-D10-AI-EX	185609081	smooth		0,28	0,38	535	4,80	42.48	7,90	69.92	1200	6,3	13,35	0,78	1.72
	28M100D-D10-AI-EX	185609082	smooth		0,28	0,38	425	6,30	55.76	9,00	79.65	1000	6,3	13,35	0,78	1.72
	28M55D-D10-AI-EX	185609083	smooth		0,28	0,38	255	11,70*	103.55*	17,50*	154.88*	560	6,3	13,35	0,78	1.72
	28M20D-D10-AI-EX	185609084	low rotations - smooth		0,28	0,38	**	**	**	**	**	215	6,0	12,71	0,97	2.14
	28M10D-D10-AI-EX	185609085	low rotations - smooth		0,28	0,38	**	**	**	**	**	100	6,0	12,71	0,97	2.14
	28M1700D-3/8X24UNF-AI-EX	185609086	threaded		0,28	0,38	8390	0,31	2.74	0,46	4.07	17000	6,3	13,35	0,58	1.28
	28M600D-3/8X24UNF-AI-EX	185609087	threaded		0,28	0,38	2900	1,00	8.85	1,50	13.28	6000	6,3	13,35	0,58	1.28
	28M480D-3/8X24UNF-AI-EX	185609088	threaded		0,28	0,38	2040	1,31	11.59	2,00	17.70	4800	6,3	13,35	0,58	1.28
	28M330D-3/8X24UNF-AI-EX	185609089	threaded		0,28	0,38	1510	2,00	17.70	2,90	25.67	3300	6,3	13,35	0,58	1.28
	28M265D-3/8X24UNF-AI-EX	185609090	threaded		0,28	0,38	1180	2,50	22.13	3,60	31.86	2650	6,3	13,35	0,58	1.28
	28M155D-3/8X24UNF-AI-EX	185609091	threaded		0,28	0,38	750	4,15	36.73	6,00	53.10	1550	6,3	13,35	0,78	1.72
	28M120D-3/8X24UNF-AI-EX	185609092	threaded		0,28	0,38	535	4,80	42.48	7,90	69.92	1200	6,3	13,35	0,78	1.72
	28M100D-3/8X24UNF-AI-EX	185609093	threaded		0,28	0,38	425	6,30	55.76	9,00	79.65	1000	6,3	13,35	0,78	1.72
	28M55D-3/8X24UNF-AI-EX	185609094	threaded		0,28	0,38	255	11,70*	103.55*	17,50*	154.88*	560	6,3	13,35	0,78	1.72
	28M1700D-ER16-AI-EX	185609095	collet chuck		0,28	0,38	8390	0,31	2.74	0,46	4.07	17000	6,3	13,35	0,67	1.48
	28M600D-ER16-AI-EX	185609096	collet chuck		0,28	0,38	2900	1,00	8.85	1,50	13.28	6000	6,3	13,35	0,67	1.48
	28M480D-ER16-AI-EX	185609097	collet chuck		0,28	0,38	2040	1,31	11.59	2,00	17.70	4800	6,3	13,35	0,67	1.48
	28M330D-ER16-AI-EX	185609098	collet chuck		0,28	0,38	1510	2,00	17.70	2,90	25.67	3300	6,3	13,35	0,67	1.48
	28M265D-ER16-AI-EX	185609099	collet chuck		0,28	0,38	1180	2,50	22.13	3,60	31.86	2650	6,3	13,35	0,67	1.48
	28M155D-ER16-AI-EX	185609100	collet chuck		0,28	0,38	750	4,15	36.73	6,00	53.10	1550	6,3	13,35	0,87	1.92
	28M120D-ER16-AI-EX	185609101	collet chuck		0,28	0,38	535	4,80	42.48	7,90	69.92	1200	6,3	13,35	0,87	1.92
	28M100D-ER16-AI-EX	185609102	collet chuck		0,28	0,38	425	6,30	55.76	9,00	79.65	1000	6,3	13,35	0,87	1.92
	28M55D-ER16-AI-EX	185609103	collet chuck		0,28	0,38	255	11,70*	103.55*	17,50*	154.88*	560	6,3	13,35	0,87	1.92

	Model	Code	Output shaft Type	Reversibility Type	Power kW	Power hp	Speed at the max power rpm	Torque at the max power Nm	Torque at the max power in lb	Starting torque Nm	Starting torque in lb	Free speed rpm	Air consumption at the max power l/s	Air consumption at the max power in cfm	Weight Kg	Weight lb
	Reversible models															
STANDARD STEEL (ATEX ON DEMAND)	28M1300R-D10	185811100	smooth		0,21	0,28	6200	0,27	2.39	0,45	3.98	13000	5,8	12,29	0,58	1.28
	28M415R-D10	185811400	smooth		0,21	0,28	2075	0,85	7.52	1,20	10.62	4150	5,8	12,29	0,58	1.28
	28M345R-D10	185811300	smooth		0,21	0,28	1675	1,25	11.06	1,65	14.60	3450	5,8	12,29	0,58	1.28
	28M235R-D10	185811200	smooth		0,21	0,28	1230	1,80	15.93	2,40	21.24	2350	5,8	12,29	0,58	1.28
	28M190R-D10	185811110	smooth		0,21	0,28	855	2,30	20.36	2,90	25.67	1850	5,8	12,29	0,58	1.28
	28M110R-D10	185812100	smooth		0,21	0,28	500	3,90	34.52	5,10	45.14	1100	5,8	12,29	0,78	1.72
	28M90R-D10	185812900	smooth		0,21	0,28	410	4,70	41.60	6,80	60.18	900	5,8	12,29	0,78	1.72
	28M70R-D10	185812700	smooth		0,21	0,28	330	6,20	54.87	8,00	70.80	700	5,8	12,29	0,78	1.72
	28M40R-D10	185812400	smooth		0,21	0,28	190	11,50*	101.78*	15,50*	137.18*	395	5,8	12,29	0,78	1.72
	28M15R-D10	185813100	low rotations - smooth		0,21	0,28	**	**	**	**	**	150	5,8	12,29	0,97	2.14
	28M8R-D10	185813800	low rotations - smooth		0,21	0,28	**	**	**	**	**	75	5,8	12,29	0,97	2.14
STAINLESS STEEL / IP67	28M1300R-D10-AI	185809064	smooth		0,21	0,28	6200	0,27	2.39	0,45	3.98	13000	5,8	12,29	0,58	1.28
	28M415R-D10-AI	185809065	smooth		0,21	0,28	2075	0,85	7.52	1,20	10.62	4150	5,8	12,29	0,58	1.28
	28M345R-D10-AI	185809066	smooth		0,21	0,28	1675	1,25	11.06	1,65	14.60	3450	5,8	12,29	0,58	1.28
	28M235R-D10-AI	185809067	smooth		0,21	0,28	1230	1,80	15.93	2,40	21.24	2350	5,8	12,29	0,58	1.28
	28M190R-D10-AI	185809068	smooth		0,21	0,28	855	2,30	20.36	2,90	25.67	1850	5,8	12,29	0,58	1.28
	28M110R-D10-AI	185809069	smooth		0,21	0,28	500	3,90	34.52	5,10	45.14	1100	5,8	12,29	0,78	1.72
	28M90R-D10-AI	185809070	smooth		0,21	0,28	410	4,70	41.60	6,80	60.18	900	5,8	12,29	0,78	1.72
	28M70R-D10-AI	185809071	smooth		0,21	0,28	330	6,20	54.87	8,00	70.80	700	5,8	12,29	0,78	1.72
	28M40R-D10-AI	185809072	smooth		0,21	0,28	190	11,50*	101.78*	15,50*	137.18*	395	5,8	12,29	0,78	1.72
	28M15R-D10-AI	185809073	low rotations - smooth		0,21	0,28	**	**	**	**	**	150	5,8	12,29	0,97	2.14
	28M8R-D10-AI	185809074	low rotations - smooth		0,21	0,28	**	**	**	**	**	75	5,8	12,29	0,97	2.14
ATEX - INOX	28M1300R-D10-AI-EX	185809052	smooth		0,21	0,28	6200	0,27	2.39	0,45	3.98	13000	5,8	12,29	0,58	1.28
	28M415R-D10-AI-EX	185809053	smooth		0,21	0,28	2075	0,85	7.52	1,20	10.62	4150	5,8	12,29	0,58	1.28
	28M345R-D10-AI-EX	185809054	smooth		0,21	0,28	1675	1,25	11.06	1,65	14.60	3450	5,8	12,29	0,58	1.28
	28M235R-D10-AI-EX	185809055	smooth		0,21	0,28	1230	1,80	15.93	2,40	21.24	2350	5,8	12,29	0,58	1.28
	28M190R-D10-AI-EX	185809056	smooth		0,21	0,28	855	2,30	20.36	2,90	25.67	1850	5,8	12,29	0,58	1.28
	28M110R-D10-AI-EX	185809057	smooth		0,21	0,28	500	3,90	34.52	5,10	45.14	1100	5,8	12,29	0,78	1.72
	28M90R-D10-AI-EX	185809058	smooth		0,21	0,28	410	4,70	41.60	6,80	60.18	900	5,8	12,29	0,78	1.72
	28M70R-D10-AI-EX	185809059	smooth		0,21	0,28	330	6,20	54.87	8,00	70.80	700	5,8	12,29	0,78	1.72
	28M40R-D10-AI-EX	185809060	smooth		0,21	0,28	190	11,50*	101.78*	15,50*	137.18*	395	5,8	12,29	0,78	1.72
	28M15R-D10-AI-EX	185809061	low rotations - smooth		0,21	0,28	**	**	**	**	**	150	5,8	12,29	0,97	2.14
	28M8R-D10-AI-EX	185809062	low rotations - smooth		0,21	0,28	**	**	**	**	**	75	5,8	12,29	0,97	2.14

* The maximum torque permitted, for continuous use, is 8 Nm

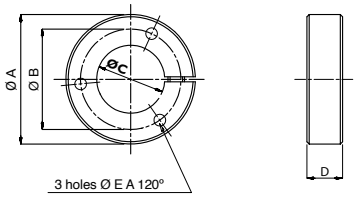
** The use of these motors is particular: **they must not be used according to torque range,** otherwise on stall they could reach very high torques and compromise the inner kinematic gears of the motor. Therefore the load must be regulated in such way that the torque does not exceed the 8Nm for 28M.



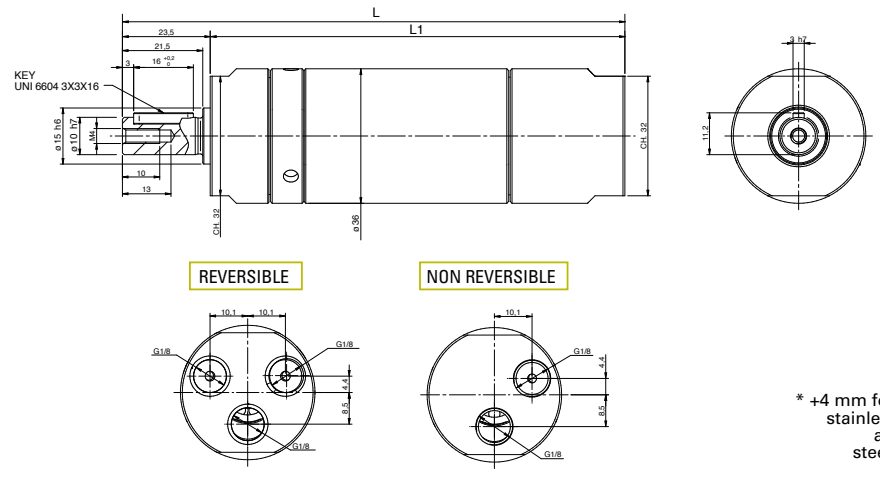
• Flange bracket

Recommended to fix the motors onto machines/units

Code	Motor power	A mm	B mm	C mm	D mm	E mm
684011007	28M...	69,5	57	36	18	6,25



Models with smooth output shaft

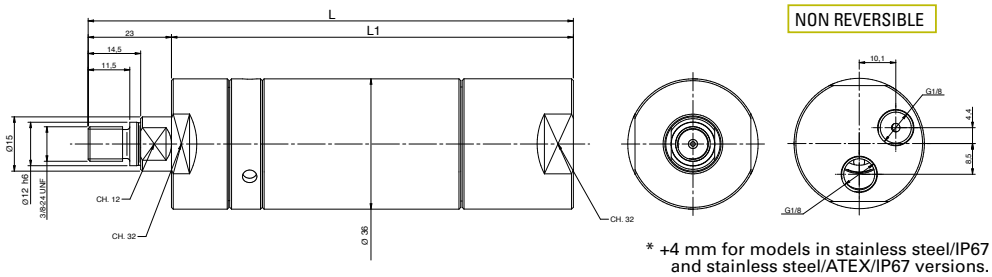


Dimensions (mm)

MODEL	L	L1
28M1700D-D10	134	111
28M600D-D10	134	111
28M480D-D10	134	111
28M330D-D10	134	111
28M265D-D10	134	111
28M155D-D10	165,5	142
28M120D-D10	165,5	142
28M100D-D10	165,5	142
28M55D-D10	165,5	142
28M1300R-D10	134	111
28M415R-D10	134	111
28M345R-D10	134	111
28M235R-D10	134	111
28M190R-D10	134	111
28M110R-D10	165,5	142
28M90R-D10	165,5	142
28M70R-D10	165,5	142
28M40R-D10	165,5	142

* +4 mm for models in stainless steel/IP67 and stainless steel/ATEX/IP67 versions.

Models with threaded output shaft

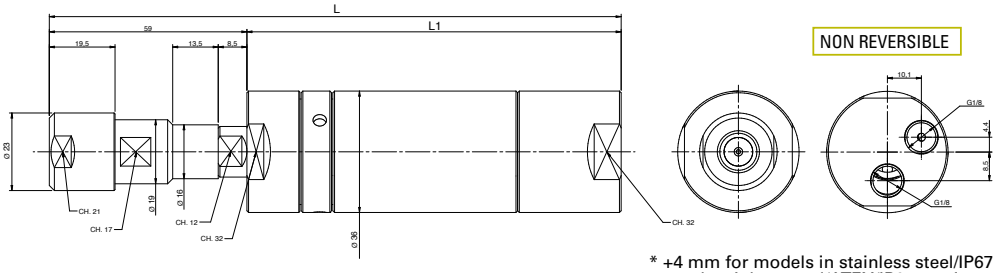


Dimensions (mm)

MODEL	L	L1
28M1700D - 3/8x24UNF	134	111
28M600D - 3/8x24UNF	134	111
28M480D - 3/8x24UNF	134	111
28M330D - 3/8x24UNF	134	111
28M265D - 3/8x24UNF	134	111
28M155D - 3/8x24UNF	165	142
28M120D - 3/8x24UNF	165	142
28M100D - 3/8x24UNF	165	142
28M55D - 3/8x24UNF	165	142

* +4 mm for models in stainless steel/IP67 and stainless steel/ATEX/IP67 versions.

Models with collet shaft

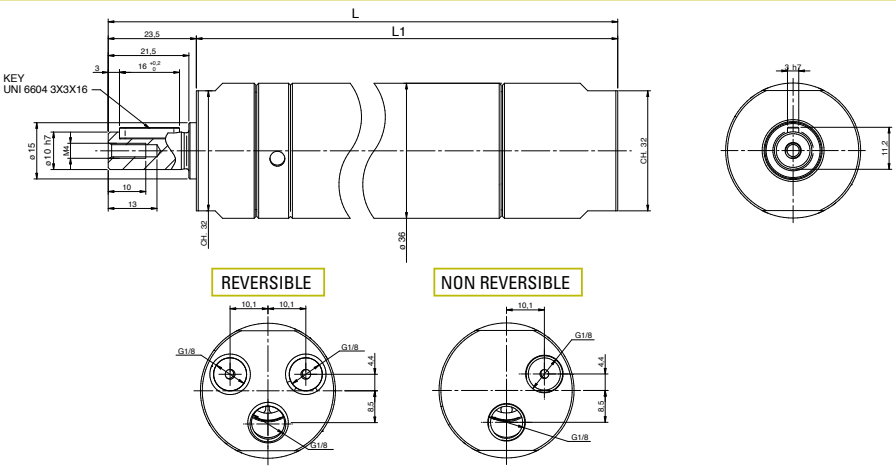


Dimensions (mm)

MODEL	L	L1
28M1700D - ER16	170	111
28M600D - ER16	170	111
28M480D - ER16	170	111
28M330D - ER16	170	111
28M265D - ER16	170	111
28M155D - ER16	201	142
28M120D - ER16	201	142
28M100D - ER16	201	142
28M55D - ER16	201	142

* +4 mm for models in stainless steel/IP67 and stainless steel/ATEX/IP67 versions.

Models with low rotations with smooth output shaft



Dimensions (mm)

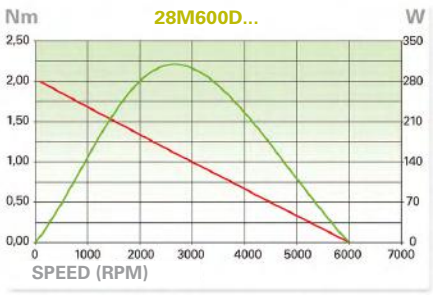
MODEL	L	L1
28M20D-D10	196,5	173
28M10D-D10	196,5	173
28M15R-D10	196,5	173
28M8R-D10	196,5	173

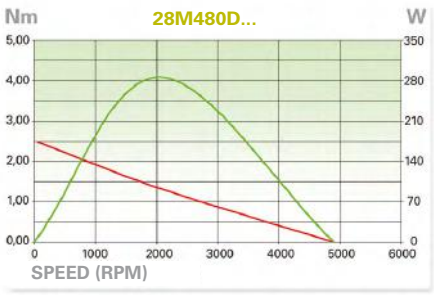
* +4 mm for models in stainless steel/IP67 and stainless steel/ATEX/IP67 versions.

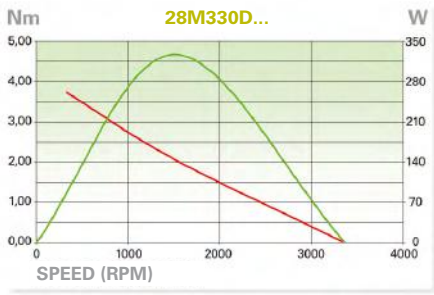
Performances diagrams of torque, power and speed

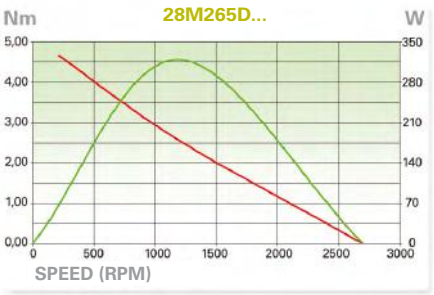
The diagrams show the curves for torque and power in function of number of revolutions: torque ——— power ———
Trend of torque - power in function of speed (at a pressure of 6,3 bar)

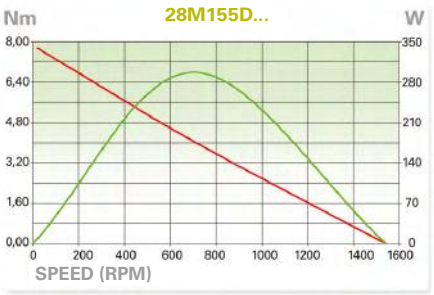
Non-reversible models

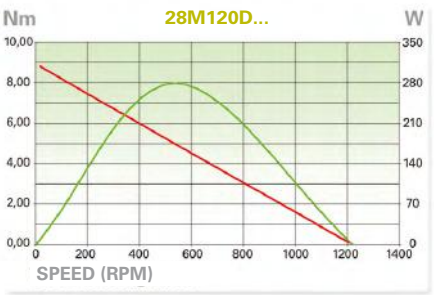


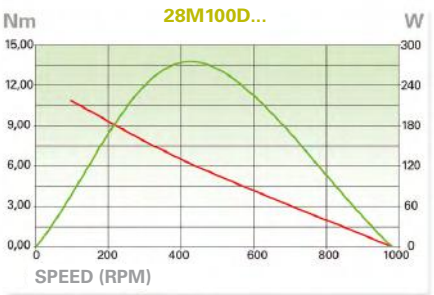


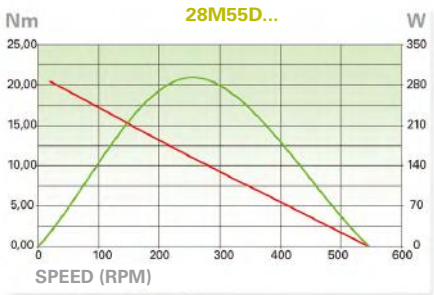




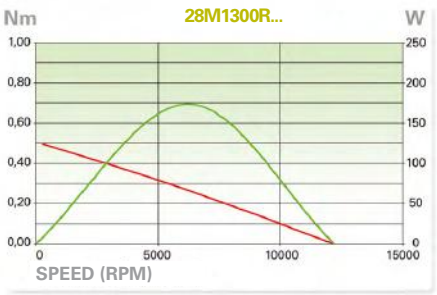


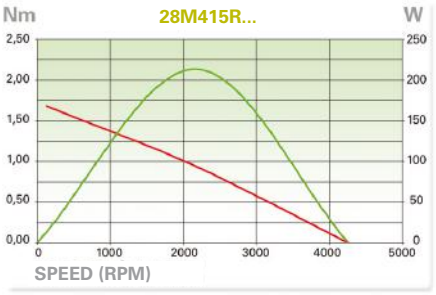


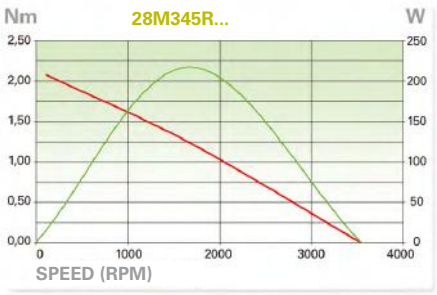


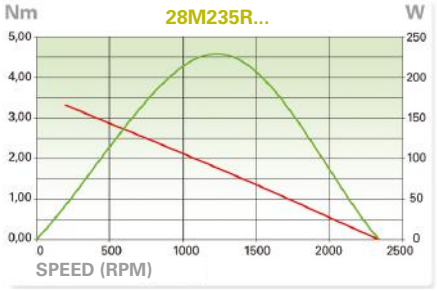


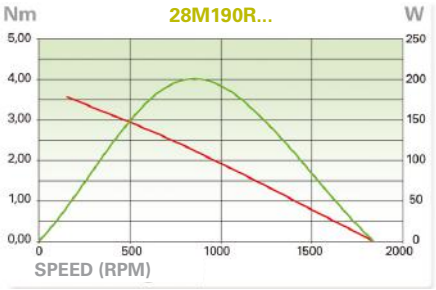
Reversible models

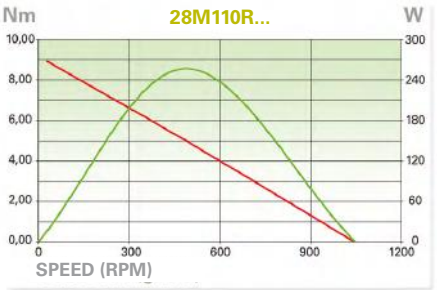


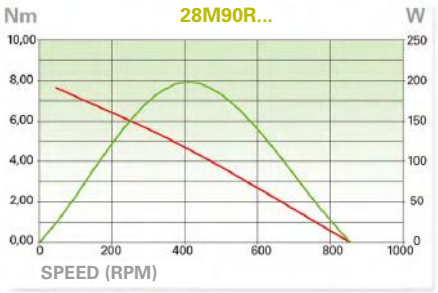


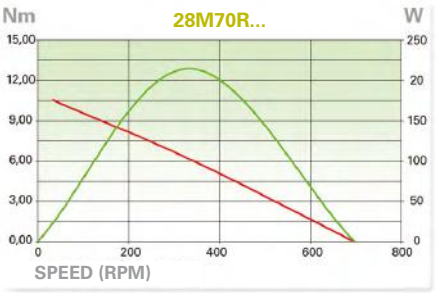


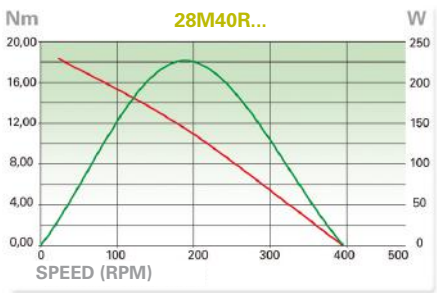












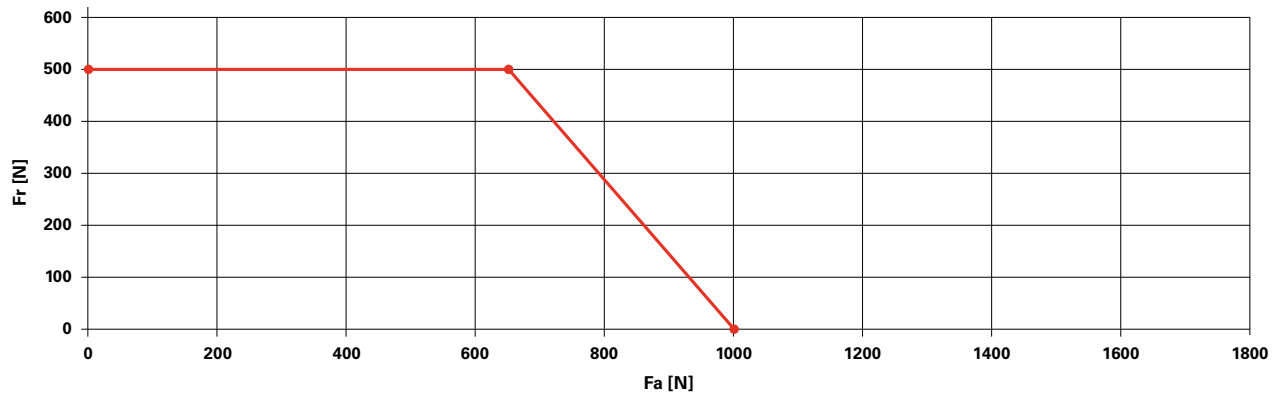
40M Models

- with smooth output shaft:
  with key UNI 6604 form A: Ø12 - h6 mm
- with threaded output shaft: 3/8"x24UNF
  From 0,35 kW to 0,40 kW
  From 0,47 hp to 0,54 hp
- with Integrated lozenge fixing flange

Type of motor		Output shaft	Reversibility	Power		Speed at the max power	Torque at the max power		Starting torque		Free speed	Air consumption at the max power		Weight	
Model	Code	Type	Type	kW	hp	rpm	Nm	in lb	Nm	in lb	rpm	l/s	in cfm	Kg	lb
Non-reversible models															
40M1900D-D12	186600000	smooth	↻	0,40	0,54	11000	0,4	3.5	0,7	6.2	18900	10	21,19	0,88	1.94
40M460D-D12	186600001	smooth	↻	0,40	0,54	2300	1,4	12.4	2	17.7	4600	10	21,19	0,88	1.94
40M350D-D12	186600002	smooth	↻	0,40	0,54	2000	2	17.7	2,8	24.8	3500	10	21,19	0,88	1.94
40M280D-D12	186600003	smooth	↻	0,40	0,54	1300	3	26.6	4	35.4	2800	10	21,19	0,88	1.94
40M120D-D12	186600004	smooth	↻	0,40	0,54	660	6	53.1	8,5	75.2	1200	10	21,19	1,10	2.42
40M80D-D12	186600005	smooth	↻	0,40	0,54	440	9,5	84.1	15	132.8	780	10	21,19	1,10	2.42
40M70D-D12	186600006	smooth	↻	0,40	0,54	350	11,5	101.8	17	150.5	650	10	21,19	1,10	2.42
40M50D-D12	186600007	smooth	↻	0,40	0,54	250	15	132.8	23	203.6	500	10	21,19	1,10	2.42
40M40D-D12	186600008	smooth	↻	0,40	0,54	230	19	168.2	27	239	450	10	21,19	1,10	2.42
40M20D-D12	186600009	smooth	↻	0,40	0,54	100	35	309.8	40	354	200	10	21,19	1,30	2.86
40M1900D-3/8X24UNF	186640000	threaded	↻	0,40	0,54	11000	0,4	3.5	0,7	6.2	18900	10	21,19	0,88	1.94
40M460D-3/8X24UNF	186640001	threaded	↻	0,40	0,54	2300	1,4	12.4	2	17.7	4600	10	21,19	0,88	1.94
40M350D-3/8X24UNF	186640002	threaded	↻	0,40	0,54	2000	2	17.7	2,8	24.8	3500	10	21,19	0,88	1.94
40M280D-3/8X24UNF	186640003	threaded	↻	0,40	0,54	1300	3	26.6	4	35.4	2800	10	21,19	0,88	1.94
40M120D-3/8X24UNF	186640004	threaded	↻	0,40	0,54	660	6	53.1	8,5	75.2	1200	10	21,19	1,10	2.42
40M80D-3/8X24UNF	186640005	threaded	↻	0,40	0,54	440	9,5	84.1	15	132.8	780	10	21,19	1,10	2.42
40M70D-3/8X24UNF	186640006	threaded	↻	0,40	0,54	350	11,5	101.8	17	150.5	650	10	21,19	1,10	2.42
40M50D-3/8X24UNF	186640007	threaded	↻	0,40	0,54	250	15	132.8	23	203.6	500	10	21,19	1,10	2.42
40M40D-3/8X24UNF	186640008	threaded	↻	0,40	0,54	230	19	168.2	27	239	450	10	21,19	1,10	2.42
40M20D-3/8X24UNF	186640009	threaded	↻	0,40	0,54	100	35	309.8	40	354	200	10	21,19	1,30	2.86

STANADARD STEEL (ATEX ON DEMAND)

LOADS
according to ISO281 (L10)



- **Flange bracket**

Recommended for fixing motors on machines, in the case of 40 M Models it is available only ON REQUEST for all models not already equipped with built-in lozenge fixing flange.

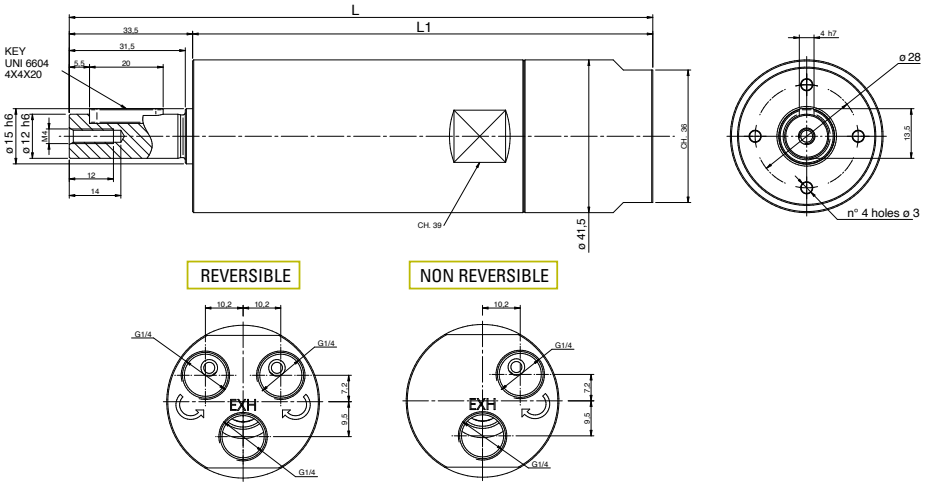
* Models with a -FL abbreviation are already equipped with built-in lozenge fixing flange.

	Model	Code	Output shaft Type	Reversibility Type	Power kW	Power hp	Speed at the max power rpm	Torque at the max power Nm	Torque at the max power in lb	Starting torque Nm	Starting torque in lb	Free speed rpm	Air consumption at the max power l/s	Air consumption at the max power in cfm	Weight Kg	Weight lb
	Non-reversible models															
WITH INTEGRATED LOZENGE FIXING FLANGE	40M1900D-D12-FL	186600020	smooth	↻↺	0,40	0,54	11000	0,4	3.5	0,7	6.2	18900	10	21,19	0,88	1.94
	40M460D-D12-FL	186600021	smooth	↻↺	0,40	0,54	2300	1,4	12.4	2	17.7	4600	10	21,19	0,88	1.94
	40M350D-D12-FL	186600022	smooth	↻↺	0,40	0,54	2000	2	17.7	2,8	24.8	3500	10	21,19	0,88	1.94
	40M280D-D12-FL	186600023	smooth	↻↺	0,40	0,54	1300	3	26.6	4	35.4	2800	10	21,19	0,88	1.94
	40M120D-D12-FL	186600024	smooth	↻↺	0,40	0,54	660	6	53.1	8,5	75.2	1200	10	21,19	1,10	2.42
	40M80D-D12-FL	186600025	smooth	↻↺	0,40	0,54	440	9,5	84.1	15	132.8	780	10	21,19	1,10	2.42
	40M70D-D12-FL	186600026	smooth	↻↺	0,40	0,54	350	11,5	101.8	17	150.5	650	10	21,19	1,10	2.42
	40M50D-D12-FL	186600027	smooth	↻↺	0,40	0,54	250	15	132.8	23	203.6	500	10	21,19	1,10	2.42
	40M40D-D12-FL	186600028	smooth	↻↺	0,40	0,54	230	19	168.2	27	239	450	10	21,19	1,10	2.42
	40M20D-D12-FL	186600029	smooth	↻↺	0,40	0,54	100	35	309.8	40	354	200	10	21,19	1,30	2.86
	40M1900D-3/8X24UNF-FL	186640020	threaded	↻↺	0,40	0,54	11000	0,4	3.5	0,7	6.2	18900	10	21,19	0,88	1.94
	40M460D-3/8X24UNF-FL	186640021	threaded	↻↺	0,40	0,54	2300	1,4	12.4	2	17.7	4600	10	21,19	0,88	1.94
	40M350D-3/8X24UNF-FL	186640022	threaded	↻↺	0,40	0,54	2000	2	17.7	2,8	24.8	3500	10	21,19	0,88	1.94
	40M280D-3/8X24UNF-FL	186640023	threaded	↻↺	0,40	0,54	1300	3	26.6	4	35.4	2800	10	21,19	0,88	1.94
	40M120D-3/8X24UNF-FL	186640024	threaded	↻↺	0,40	0,54	660	6	53.1	8,5	75.2	1200	10	21,19	1,10	2.42
	40M80D-3/8X24UNF-FL	186640025	threaded	↻↺	0,40	0,54	440	9,5	84.1	15	132.8	780	10	21,19	1,10	2.42
	40M70D-3/8X24UNF-FL	186640026	threaded	↻↺	0,40	0,54	350	11,5	101.8	17	150.5	650	10	21,19	1,10	2.42
	40M50D-3/8X24UNF-FL	186640027	threaded	↻↺	0,40	0,54	250	15	132.8	23	203.6	500	10	21,19	1,10	2.42
	40M40D-3/8X24UNF-FL	186640028	threaded	↻↺	0,40	0,54	230	19	168.2	27	239	450	10	21,19	1,10	2.42
	40M20D-3/8X24UNF-FL	186640029	threaded	↻↺	0,40	0,54	100	35	309.8	40	354	200	10	21,19	1,30	2.86
STAINLESS STEEL / IP67	40M1900D-D12-AI	186600040	smooth	↻↺	0,40	0,54	11000	0,4	3.5	0,7	6.2	18900	10	21,19	0,88	1.94
	40M460D-D12-AI	186600041	smooth	↻↺	0,40	0,54	2300	1,4	12.4	2	17.7	4600	10	21,19	0,88	1.94
	40M350D-D12-AI	186600042	smooth	↻↺	0,40	0,54	2000	2	17.7	2,8	24.8	3500	10	21,19	0,88	1.94
	40M280D-D12-AI	186600043	smooth	↻↺	0,40	0,54	1300	3	26.6	4	35.4	2800	10	21,19	0,88	1.94
	40M120D-D12-AI	186600044	smooth	↻↺	0,40	0,54	660	6	53.1	8,5	75.2	1200	10	21,19	1,10	2.42
	40M80D-D12-AI	186600045	smooth	↻↺	0,40	0,54	440	9,5	84.1	15	132.8	780	10	21,19	1,10	2.42
	40M70D-D12-AI	186600046	smooth	↻↺	0,40	0,54	350	11,5	101.8	17	150.5	650	10	21,19	1,10	2.42
	40M50D-D12-AI	186600047	smooth	↻↺	0,40	0,54	250	15	132.8	23	203.6	500	10	21,19	1,10	2.42
	40M40D-D12-AI	186600048	smooth	↻↺	0,40	0,54	230	19	168.2	27	239	450	10	21,19	1,10	2.42
	40M20D-D12-AI	186600049	smooth	↻↺	0,40	0,54	100	35	309.8	40	354	200	10	21,19	1,30	2.86
	40M1900D-3/8X24UNF-AI	186640040	threaded	↻↺	0,40	0,54	11000	0,4	3.5	0,7	6.2	18900	10	21,19	0,88	1.94
	40M460D-3/8X24UNF-AI	186640041	threaded	↻↺	0,40	0,54	2300	1,4	12.4	2	17.7	4600	10	21,19	0,88	1.94
	40M350D-3/8X24UNF-AI	186640042	threaded	↻↺	0,40	0,54	2000	2	17.7	2,8	24.8	3500	10	21,19	0,88	1.94
	40M280D-3/8X24UNF-AI	186640043	threaded	↻↺	0,40	0,54	1300	3	26.6	4	35.4	2800	10	21,19	0,88	1.94
	40M120D-3/8X24UNF-AI	186640044	threaded	↻↺	0,40	0,54	660	6	53.1	8,5	75.2	1200	10	21,19	1,10	2.42
	40M80D-3/8X24UNF-AI	186640045	threaded	↻↺	0,40	0,54	440	9,5	84.1	15	132.8	780	10	21,19	1,10	2.42
	40M70D-3/8X24UNF-AI	186640046	threaded	↻↺	0,40	0,54	350	11,5	101.8	17	150.5	650	10	21,19	1,10	2.42
	40M50D-3/8X24UNF-AI	186640047	threaded	↻↺	0,40	0,54	250	15	132.8	23	203.6	500	10	21,19	1,10	2.42
	40M40D-3/8X24UNF-AI	186640048	threaded	↻↺	0,40	0,54	230	19	168.2	27	239	450	10	21,19	1,10	2.42
	40M20D-3/8X24UNF-AI	186640049	threaded	↻↺	0,40	0,54	100	35	309.8	40	354	200	10	21,19	1,30	2.86
ATEX	40M1900D-D12-EX	186600060	smooth	↻↺	0,40	0,54	11000	0,4	3.5	0,7	6.2	18900	10	21,19	0,88	1.94
	40M460D-D12-EX	186600061	smooth	↻↺	0,40	0,54	2300	1,4	12.4	2	17.7	4600	10	21,19	0,88	1.94
	40M350D-D12-EX	186600062	smooth	↻↺	0,40	0,54	2000	2	17.7	2,8	24.8	3500	10	21,19	0,88	1.94
	40M280D-D12-EX	186600063	smooth	↻↺	0,40	0,54	1300	3	26.6	4	35.4	2800	10	21,19	0,88	1.94
	40M120D-D12-EX	186600064	smooth	↻↺	0,40	0,54	660	6	53.1	8,5	75.2	1200	10	21,19	1,10	2.42
	40M80D-D12-EX	186600065	smooth	↻↺	0,40	0,54	440	9,5	84.1	15	132.8	780	10	21,19	1,10	2.42
	40M70D-D12-EX	186600066	smooth	↻↺	0,40	0,54	350	11,5	101.8	17	150.5	650	10	21,19	1,10	2.42
	40M50D-D12-EX	186600067	smooth	↻↺	0,40	0,54	250	15	132.8	23	203.6	500	10	21,19	1,10	2.42
	40M40D-D12-EX	186600068	smooth	↻↺	0,40	0,54	230	19	168.2	27	239	450	10	21,19	1,10	2.42
	40M20D-D12-EX	186600069	smooth	↻↺	0,40	0,54	100	35	309.8	40	354	200	10	21,19	1,30	2.86
	40M1900D-3/8X24UNF-EX	186640060	threaded	↻↺	0,40	0,54	11000	0,4	3.5	0,7	6.2	18900	10	21,19	0,88	1.94
	40M460D-3/8X24UNF-EX	186640061	threaded	↻↺	0,40	0,54	2300	1,4	12.4	2	17.7	4600	10	21,19	0,88	1.94
	40M350D-3/8X24UNF-EX	186640062	threaded	↻↺	0,40	0,54	2000	2	17.7	2,8	24.8	3500	10	21,19	0,88	1.94
	40M280D-3/8X24UNF-EX	186640063	threaded	↻↺	0,40	0,54	1300	3	26.6	4	35.4	2800	10	21,19	0,88	1.94
	40M120D-3/8X24UNF-EX	186640064	threaded	↻↺	0,40	0,54	660	6	53.1	8,5	75.2	1200	10	21,19	1,10	2.42
	40M80D-3/8X24UNF-EX	186640065	threaded	↻↺	0,40	0,54	440	9,5	84.1	15	132.8	780	10	21,19	1,10	2.42
	40M70D-3/8X24UNF-EX	186640066	threaded	↻↺	0,40	0,54	350	11,5	101.8	17	150.5	650	10	21,19	1,10	2.42
	40M50D-3/8X24UNF-EX	186640067	threaded	↻↺	0,40	0,54	250	15	132.8	23	203.6	500	10	21,19	1,10	2.42
	40M40D-3/8X24UNF-EX	186640068	threaded	↻↺	0,40	0,54	230	19	168.2	27	239	450	10	21,19	1,10	2.42
	40M20D-3/8X24UNF-EX	186640069	threaded	↻↺	0,40	0,54	100	35	309.8	40	354	200	10	21,19	1,30	2.86

		Model	Code	Output shaft Type	Reversibility Type	Power kW	Power hp	Speed at the max power rpm	Torque at the max power Nm	Torque at the max power in lb	Starting torque Nm	Starting torque in lb	Free speed rpm	Air consumption at the max power l/s	Air consumption at the max power in cfm	Weight Kg	Weight lb
Non-reversible models																	
WITH INTEGRATED LOZENGE FIXING FLANGE	STAINLESS STEEL / IP67	40M1900D-D12-FL-AI	186600100	smooth	↻	0,40	0,54	11000	0,4	3.5	0,7	6.2	18900	10	21,19	0,88	1.94
		40M460D-D12-FL-AI	186600101	smooth	↻	0,40	0,54	2300	1,4	12.4	2	17.7	4600	10	21,19	0,88	1.94
		40M350D-D12-FL-AI	186600102	smooth	↻	0,40	0,54	2000	2	17.7	2,8	24.8	3500	10	21,19	0,88	1.94
		40M280D-D12-FL-AI	186600103	smooth	↻	0,40	0,54	1300	3	26.6	4	35.4	2800	10	21,19	0,88	1.94
		40M120D-D12-FL-AI	186600104	smooth	↻	0,40	0,54	660	6	53.1	8,5	75.2	1200	10	21,19	1,10	2.42
		40M80D-D12-FL-AI	186600105	smooth	↻	0,40	0,54	440	9,5	84.1	15	132.8	780	10	21,19	1,10	2.42
		40M70D-D12-FL-AI	186600106	smooth	↻	0,40	0,54	350	11,5	101.8	17	150.5	650	10	21,19	1,10	2.42
		40M50D-D12-FL-AI	186600107	smooth	↻	0,40	0,54	250	15	132.8	23	203.6	500	10	21,19	1,10	2.42
		40M40D-D12-FL-AI	186600108	smooth	↻	0,40	0,54	230	19	168.2	27	239	450	10	21,19	1,10	2.42
		40M20D-D12-FL-AI	186600109	smooth	↻	0,40	0,54	100	35	309.8	40	354	200	10	21,19	1,30	2.86
	STAINLESS STEEL / IP67	40M1900D-3/8X24UNF-FL-AI	186640100	threaded	↻	0,40	0,54	11000	0,4	3.5	0,7	6.2	18900	10	21,19	0,88	1.94
		40M460D-3/8X24UNF-FL-AI	186640101	threaded	↻	0,40	0,54	2300	1,4	12.4	2	17.7	4600	10	21,19	0,88	1.94
		40M350D-3/8X24UNF-FL-AI	186640102	threaded	↻	0,40	0,54	2000	2	17.7	2,8	24.8	3500	10	21,19	0,88	1.94
		40M280D-3/8X24UNF-FL-AI	186640103	threaded	↻	0,40	0,54	1300	3	26.6	4	35.4	2800	10	21,19	0,88	1.94
		40M120D-3/8X24UNF-FL-AI	186640104	threaded	↻	0,40	0,54	660	6	53.1	8,5	75.2	1200	10	21,19	1,10	2.42
		40M80D-3/8X24UNF-FL-AI	186640105	threaded	↻	0,40	0,54	440	9,5	84.1	15	132.8	780	10	21,19	1,10	2.42
		40M70D-3/8X24UNF-FL-AI	186640106	threaded	↻	0,40	0,54	350	11,5	101.8	17	150.5	650	10	21,19	1,10	2.42
		40M50D-3/8X24UNF-FL-AI	186640107	threaded	↻	0,40	0,54	250	15	132.8	23	203.6	500	10	21,19	1,10	2.42
		40M40D-3/8X24UNF-FL-AI	186640108	threaded	↻	0,40	0,54	230	19	168.2	27	239	450	10	21,19	1,10	2.42
		40M20D-3/8X24UNF-FL-AI	186640109	threaded	↻	0,40	0,54	100	35	309.8	40	354	200	10	21,19	1,30	2.86
	ATEX	40M1900D-D12-FL-EX	186600120	smooth	↻	0,40	0,54	11000	0,4	3.5	0,7	6.2	18900	10	21,19	0,88	1.94
		40M460D-D12-FL-EX	186600121	smooth	↻	0,40	0,54	2300	1,4	12.4	2	17.7	4600	10	21,19	0,88	1.94
		40M350D-D12-FL-EX	186600122	smooth	↻	0,40	0,54	2000	2	17.7	2,8	24.8	3500	10	21,19	0,88	1.94
		40M280D-D12-FL-EX	186600123	smooth	↻	0,40	0,54	1300	3	26.6	4	35.4	2800	10	21,19	0,88	1.94
		40M120D-D12-FL-EX	186600124	smooth	↻	0,40	0,54	660	6	53.1	8,5	75.2	1200	10	21,19	1,10	2.42
		40M80D-D12-FL-EX	186600125	smooth	↻	0,40	0,54	440	9,5	84.1	15	132.8	780	10	21,19	1,10	2.42
		40M70D-D12-FL-EX	186600126	smooth	↻	0,40	0,54	350	11,5	101.8	17	150.5	650	10	21,19	1,10	2.42
		40M50D-D12-FL-EX	186600127	smooth	↻	0,40	0,54	250	15	132.8	23	203.6	500	10	21,19	1,10	2.42
		40M40D-D12-FL-EX	186600128	smooth	↻	0,40	0,54	230	19	168.2	27	239	450	10	21,19	1,10	2.42
		40M20D-D12-FL-EX	186600129	smooth	↻	0,40	0,54	100	35	309.8	40	354	200	10	21,19	1,30	2.86
	ATEX	40M1900D-3/8X24UNF-FL-EX	186640120	threaded	↻	0,40	0,54	11000	0,4	3.5	0,7	6.2	18900	10	21,19	0,88	1.94
		40M460D-3/8X24UNF-FL-EX	186640121	threaded	↻	0,40	0,54	2300	1,4	12.4	2	17.7	4600	10	21,19	0,88	1.94
		40M350D-3/8X24UNF-FL-EX	186640122	threaded	↻	0,40	0,54	2000	2	17.7	2,8	24.8	3500	10	21,19	0,88	1.94
		40M280D-3/8X24UNF-FL-EX	186640123	threaded	↻	0,40	0,54	1300	3	26.6	4	35.4	2800	10	21,19	0,88	1.94
		40M120D-3/8X24UNF-FL-EX	186640124	threaded	↻	0,40	0,54	660	6	53.1	8,5	75.2	1200	10	21,19	1,10	2.42
		40M80D-3/8X24UNF-FL-EX	186640125	threaded	↻	0,40	0,54	440	9,5	84.1	15	132.8	780	10	21,19	1,10	2.42
		40M70D-3/8X24UNF-FL-EX	186640126	threaded	↻	0,40	0,54	350	11,5	101.8	17	150.5	650	10	21,19	1,10	2.42
		40M50D-3/8X24UNF-FL-EX	186640127	threaded	↻	0,40	0,54	250	15	132.8	23	203.6	500	10	21,19	1,10	2.42
		40M40D-3/8X24UNF-FL-EX	186640128	threaded	↻	0,40	0,54	230	19	168.2	27	239	450	10	21,19	1,10	2.42
		40M20D-3/8X24UNF-FL-EX	186640129	threaded	↻	0,40	0,54	100	35	309.8	40	354	200	10	21,19	1,30	2.86

	Model	Code	Output shaft	Reversibility	Power		Speed at the max power	Torque at the max power		Starting torque		Free speed	Air consumption at the max power		Weight	
			Type	Type	kW	hp	rpm	Nm	in lb	Nm	in lb	rpm	l/s	in cfm	Kg	lb
	Reversible models															
STANADARD STEEL (ATEX ON DEMAND)	40M1335R-D12	186800000	smooth		0,35	0,47	6900	0,35	3.1	0,45	4.0	13300	9	19,07	0,88	1.94
	40M345R-D12	186800001	smooth		0,35	0,47	1700	1,3	11.5	1,8	15.9	3400	9	19,07	0,88	1.94
	40M285R-D12	186800002	smooth		0,35	0,47	1400	1,8	15.9	2,6	23.0	2800	9	19,07	0,88	1.94
	40M195R-D12	186800003	smooth		0,35	0,47	990	2,8	24.8	3,9	34.5	2000	9	19,07	0,88	1.94
	40M95R-D12	186800004	smooth		0,35	0,47	460	5,6	49.6	8	70.8	950	9	19,07	1,10	2.42
	40M65R-D12	186800005	smooth		0,35	0,47	290	9	79.7	13	115.1	580	9	19,07	1,10	2.42
	40M55R-D12	186800006	smooth		0,35	0,47	240	11	97.4	15	132.8	500	9	19,07	1,10	2.42
	40M45R-D12	186800007	smooth		0,35	0,47	240	14	123.9	21	185.9	470	9	19,07	1,10	2.42
	40M35R-D12	186800008	smooth		0,35	0,47	190	18	159.3	26	230.1	400	9	19,07	1,10	2.42
	40M15R-D12	186800009	smooth		0,35	0,47	80	33	292.1	38	336.3	180	9	19,07	1,30	2.86
WITH INTEGRATED LOZENGE FIXING FLANGE	40M1335R-D12-FL	186800020	smooth		0,35	0,47	6900	0,35	3.1	0,45	4.0	13300	9	19,07	0,88	1.94
	40M345R-D12-FL	186800021	smooth		0,35	0,47	1700	1,3	11.5	1,8	15.9	3400	9	19,07	0,88	1.94
	40M285R-D12-FL	186800022	smooth		0,35	0,47	1400	1,8	15.9	2,6	23.0	2800	9	19,07	0,88	1.94
	40M195R-D12-FL	186800023	smooth		0,35	0,47	990	2,8	24.8	3,9	34.5	2000	9	19,07	0,88	1.94
	40M95R-D12-FL	186800024	smooth		0,35	0,47	460	5,6	49.6	8	70.8	950	9	19,07	1,10	2.42
	40M65R-D12-FL	186800025	smooth		0,35	0,47	290	9	79.7	13	115.1	580	9	19,07	1,10	2.42
	40M55R-D12-FL	186800026	smooth		0,35	0,47	240	11	97.4	15	132.8	500	9	19,07	1,10	2.42
	40M45R-D12-FL	186800027	smooth		0,35	0,47	240	14	123.9	21	185.9	470	9	19,07	1,10	2.42
	40M35R-D12-FL	186800028	smooth		0,35	0,47	190	18	159.3	26	230.1	400	9	19,07	1,10	2.42
	40M15R-D12-FL	186800029	smooth		0,35	0,47	80	33	292.1	38	336.3	180	9	19,07	1,30	2.86
STAINLESS STEEL / IP67	40M1335R-D12-AI	186800040	smooth		0,35	0,47	6900	0,35	3.1	0,45	4.0	13300	9	19,07	0,88	1.94
	40M345R-D12-AI	186800041	smooth		0,35	0,47	1700	1,3	11.5	1,8	15.9	3400	9	19,07	0,88	1.94
	40M285R-D12-AI	186800042	smooth		0,35	0,47	1400	1,8	15.9	2,6	23.0	2800	9	19,07	0,88	1.94
	40M195R-D12-AI	186800043	smooth		0,35	0,47	990	2,8	24.8	3,9	34.5	2000	9	19,07	0,88	1.94
	40M95R-D12-AI	186800044	smooth		0,35	0,47	460	5,6	49.6	8	70.8	950	9	19,07	1,10	2.42
	40M65R-D12-AI	186800045	smooth		0,35	0,47	290	9	79.7	13	115.1	580	9	19,07	1,10	2.42
	40M55R-D12-AI	186800046	smooth		0,35	0,47	240	11	97.4	15	132.8	500	9	19,07	1,10	2.42
	40M45R-D12-AI	186800047	smooth		0,35	0,47	240	14	123.9	21	185.9	470	9	19,07	1,10	2.42
	40M35R-D12-AI	186800048	smooth		0,35	0,47	190	18	159.3	26	230.1	400	9	19,07	1,10	2.42
	40M15R-D12-AI	186800049	smooth		0,35	0,47	80	33	292.1	38	336.3	180	9	19,07	1,30	2.86
ATEX	40M1335R-D12-EX	186800060	smooth		0,35	0,47	6900	0,35	3.1	0,45	4.0	13300	9	19,07	0,88	1.94
	40M345R-D12-EX	186800061	smooth		0,35	0,47	1700	1,3	11.5	1,8	15.9	3400	9	19,07	0,88	1.94
	40M285R-D12-EX	186800062	smooth		0,35	0,47	1400	1,8	15.9	2,6	23.0	2800	9	19,07	0,88	1.94
	40M195R-D12-EX	186800063	smooth		0,35	0,47	990	2,8	24.8	3,9	34.5	2000	9	19,07	0,88	1.94
	40M95R-D12-EX	186800064	smooth		0,35	0,47	460	5,6	49.6	8	70.8	950	9	19,07	1,10	2.42
	40M65R-D12-EX	186800065	smooth		0,35	0,47	290	9	79.7	13	115.1	580	9	19,07	1,10	2.42
	40M55R-D12-EX	186800066	smooth		0,35	0,47	240	11	97.4	15	132.8	500	9	19,07	1,10	2.42
	40M45R-D12-EX	186800067	smooth		0,35	0,47	240	14	123.9	21	185.9	470	9	19,07	1,10	2.42
	40M35R-D12-EX	186800068	smooth		0,35	0,47	190	18	159.3	26	230.1	400	9	19,07	1,10	2.42
	40M15R-D12-EX	186800069	smooth		0,35	0,47	80	33	292.1	38	336.3	180	9	19,07	1,30	2.86
WITH INTEGRATED LOZENGE FIXING FLANGE — STAINLESS STEEL / IP67	40M1335R-D12-FL-AI	186800100	smooth		0,35	0,47	6900	0,35	3.1	0,45	4.0	13300	9	19,07	0,88	1.94
	40M345R-D12-FL-AI	186800101	smooth		0,35	0,47	1700	1,3	11.5	1,8	15.9	3400	9	19,07	0,88	1.94
	40M285R-D12-FL-AI	186800102	smooth		0,35	0,47	1400	1,8	15.9	2,6	23.0	2800	9	19,07	0,88	1.94
	40M195R-D12-FL-AI	186800103	smooth		0,35	0,47	990	2,8	24.8	3,9	34.5	2000	9	19,07	0,88	1.94
	40M95R-D12-FL-AI	186800104	smooth		0,35	0,47	460	5,6	49.6	8	70.8	950	9	19,07	1,10	2.42
	40M65R-D12-FL-AI	186800105	smooth		0,35	0,47	290	9	79.7	13	115.1	580	9	19,07	1,10	2.42
	40M55R-D12-FL-AI	186800106	smooth		0,35	0,47	240	11	97.4	15	132.8	500	9	19,07	1,10	2.42
	40M45R-D12-FL-AI	186800107	smooth		0,35	0,47	240	14	123.9	21	185.9	470	9	19,07	1,10	2.42
	40M35R-D12-FL-AI	186800108	smooth		0,35	0,47	190	18	159.3	26	230.1	400	9	19,07	1,10	2.42
	40M15R-D12-FL-AI	186800109	smooth		0,35	0,47	80	33	292.1	38	336.3	180	9	19,07	1,30	2.86
WITH INTEGRATED LOZENGE FIXING FLANGE — ATEX	40M1335R-D12-FL-EX	186800120	smooth		0,35	0,47	6900	0,35	3.1	0,45	4.0	13300	9	19,07	0,88	1.94
	40M345R-D12-FL-EX	186800121	smooth		0,35	0,47	1700	1,3	11.5	1,8	15.9	3400	9	19,07	0,88	1.94
	40M285R-D12-FL-EX	186800122	smooth		0,35	0,47	1400	1,8	15.9	2,6	23.0	2800	9	19,07	0,88	1.94
	40M195R-D12-FL-EX	186800123	smooth		0,35	0,47	990	2,8	24.8	3,9	34.5	2000	9	19,07	0,88	1.94
	40M95R-D12-FL-EX	186800124	smooth		0,35	0,47	460	5,6	49.6	8	70.8	950	9	19,07	1,10	2.42
	40M65R-D12-FL-EX	186800125	smooth		0,35	0,47	290	9	79.7	13	115.1	580	9	19,07	1,10	2.42
	40M55R-D12-FL-EX	186800126	smooth		0,35	0,47	240	11	97.4	15	132.8	500	9	19,07	1,10	2.42
	40M45R-D12-FL-EX	186800127	smooth		0,35	0,47	240	14	123.9	21	185.9	470	9	19,07	1,10	2.42
	40M35R-D12-FL-EX	186800128	smooth		0,35	0,47	190	18	159.3	26	230.1	400	9	19,07	1,10	2.42
	40M15R-D12-FL-EX	186800129	smooth		0,35	0,47	80	33	292.1	38	336.3	180	9	19,07	1,30	2.86

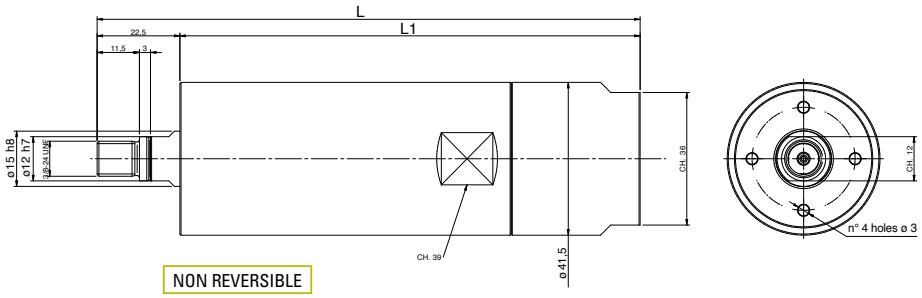
Models with smooth output shaft

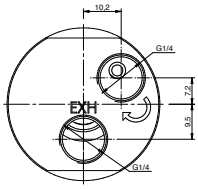


Dimensions (mm)

MODEL	L	L1
40M1900D-D12	158,5	125
40M460D-D12	158,5	125
40M350D-D12	158,5	125
40M280D-D12	158,5	125
40M120D-D12	184,5	151
40M80D-D12	184,5	151
40M70D-D12	184,5	151
40M50D-D12	184,5	151
40M40D-D12	184,5	151
40M20D-D12	210,5	177
40M1335R-D12	158,5	125
40M345R-D12	158,5	125
40M285R-D12	158,5	125
40M195R-D12	158,5	125
40M95R-D12	184,5	151
40M65R-D12	184,5	151
40M55R-D12	184,5	151
40M45R-D12	184,5	151
40M35R-D12	184,5	151
40M15R-D12	210,5	177

Models with threaded output shaft

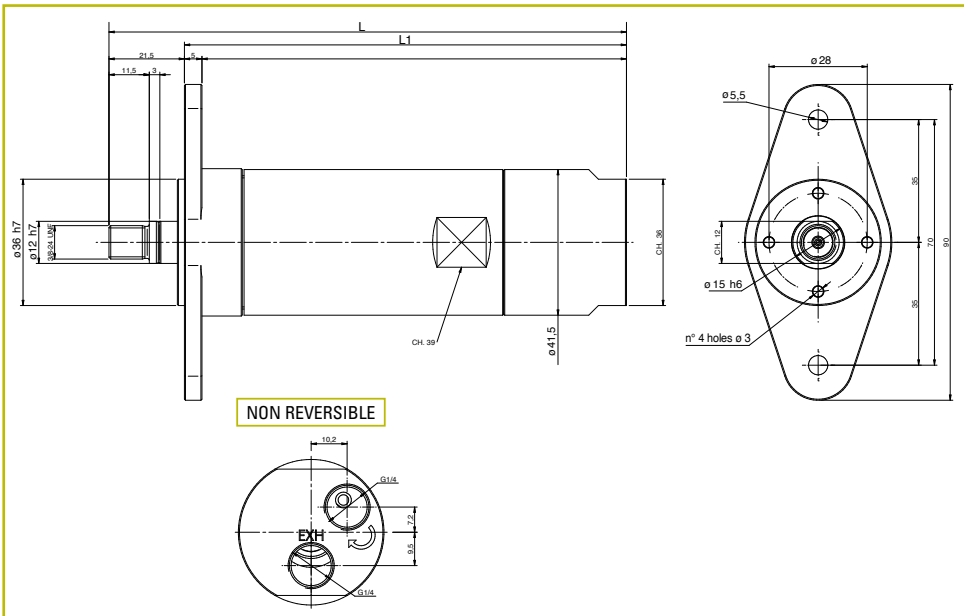




Dimensions (mm)

MODEL	L	L1
40M1900D-3/8X24UNF	147,5	125
40M460D-3/8X24UNF	147,5	125
40M350D-3/8X24UNF	147,5	125
40M280D-3/8X24UNF	147,5	125
40M120D-3/8X24UNF	173,5	151
40M80D-3/8X24UNF	173,5	151
40M70D-3/8X24UNF	173,5	151
40M50D-3/8X24UNF	173,5	151
40M40D-3/8X24UNF	173,5	151
40M20D-3/8X24UNF	199,5	177

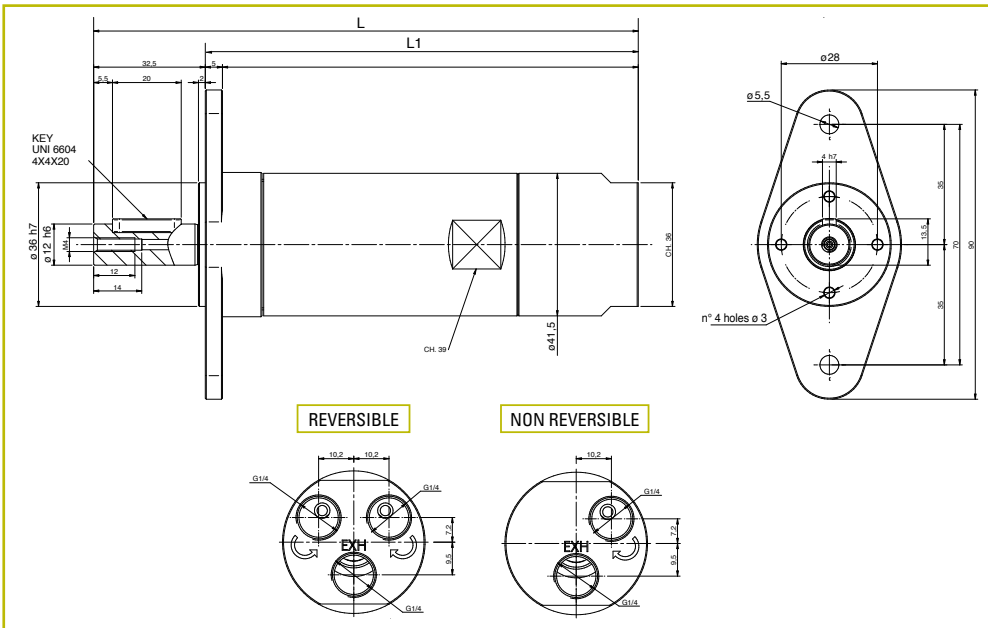
Models with threaded output shaft with integrated lozenge fixing flange



Dimensions (mm)

MODEL	L	L1
40M1900D-3/8X24UNF-FL	147,5	126
40M460D-3/8X24UNF-FL	147,5	126
40M350D-3/8X24UNF-FL	147,5	126
40M280D-3/8X24UNF-FL	147,5	126
40M120D-3/8X24UNF-FL	173,5	152
40M80D-3/8X24UNF-FL	173,5	152
40M70D-3/8X24UNF-FL	173,5	152
40M50D-3/8X24UNF-FL	173,5	152
40M40D-3/8X24UNF-FL	173,5	152
40M20D-3/8X24UNF-FL	199,5	178

Models with smooth output shaft with integrated lozenge fixing flange

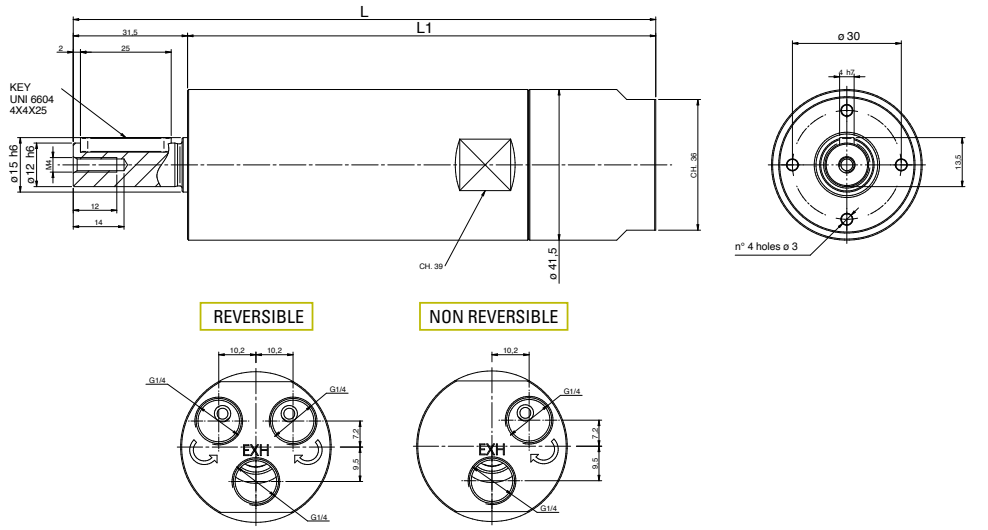


Dimensions (mm)

MODEL	L	L1
40M1900D-D12-FL	158,5	126
40M460D-D12-FL	158,5	126
40M350D-D12-FL	158,5	126
40M280D-D12-FL	158,5	126
40M120D-D12-FL	184,5	152
40M80D-D12-FL	184,5	152
40M70D-D12-FL	184,5	152
40M50D-D12-FL	184,5	152
40M40D-D12-FL	184,5	152
40M20D-D12-FL	210,5	178
40M1335R-D12-FL	158,5	126
40M345R-D12-FL	158,5	126
40M285R-D12-FL	158,5	126
40M195R-D12-FL	158,5	126
40M95R-D12-FL	184,5	152
40M65R-D12-FL	184,5	152
40M55R-D12-FL	184,5	152
40M45R-D12-FL	184,5	152
40M35R-D12-FL	184,5	152
40M15R-D12-FL	210,5	178

Stainless steel models

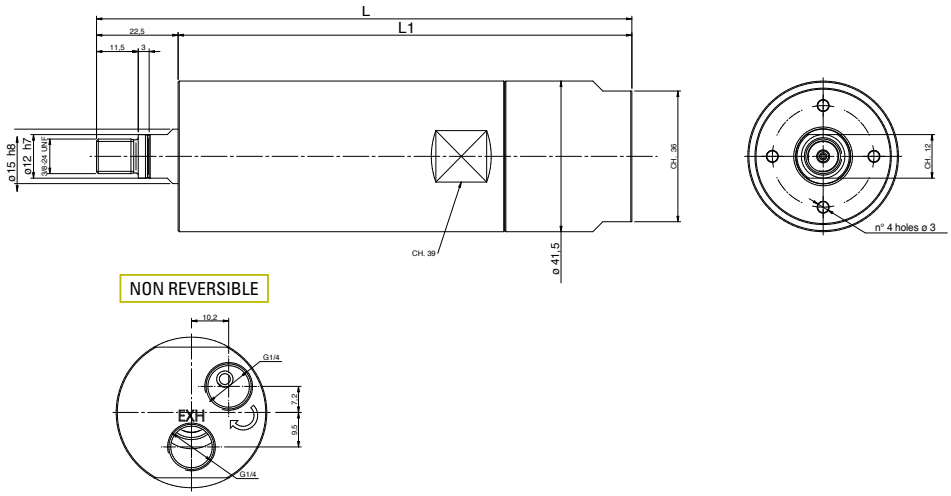
Models with smooth output shaft



Dimensions (mm)

MODEL	L	L1
40M1900D-D12-AI	160,5	129
40M460D-D12-AI	160,5	129
40M350D-D12-AI	160,5	129
40M280D-D12-AI	160,5	129
40M120D-D12-AI	186,5	155
40M80D-D12-AI	186,5	155
40M70D-D12-AI	186,5	155
40M50D-D12-AI	186,5	155
40M40D-D12-AI	186,5	155
40M20D-D12-AI	212,5	181
40M1335R-D12-AI	160,5	129
40M345R-D12-AI	160,5	129
40M285R-D12-AI	160,5	129
40M195R-D12-AI	160,5	129
40M95R-D12-AI	186,5	155
40M65R-D12-AI	186,5	155
40M55R-D12-AI	186,5	155
40M45R-D12-AI	186,5	155
40M35R-D12-AI	186,5	155
40M15R-D12-AI	212,5	181

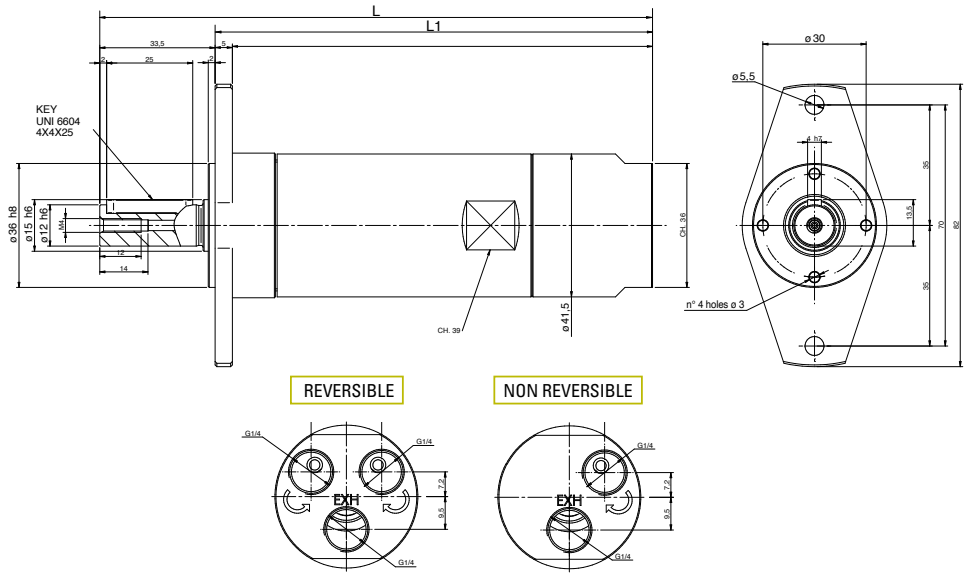
Models with threaded output shaft



Dimensions (mm)

MODEL	L	L1
40M1900D-3/8X24UNF-AI	151,5	129
40M460D-3/8X24UNF-AI	151,5	129
40M350D-3/8X24UNF-AI	151,5	129
40M280D-3/8X24UNF-AI	151,5	129
40M120D-3/8X24UNF-AI	177,5	155
40M80D-3/8X24UNF-AI	177,5	155
40M70D-3/8X24UNF-AI	177,5	155
40M50D-3/8X24UNF-AI	177,5	155
40M40D-3/8X24UNF-AI	177,5	155
40M20D-3/8X24UNF-AI	203,5	181

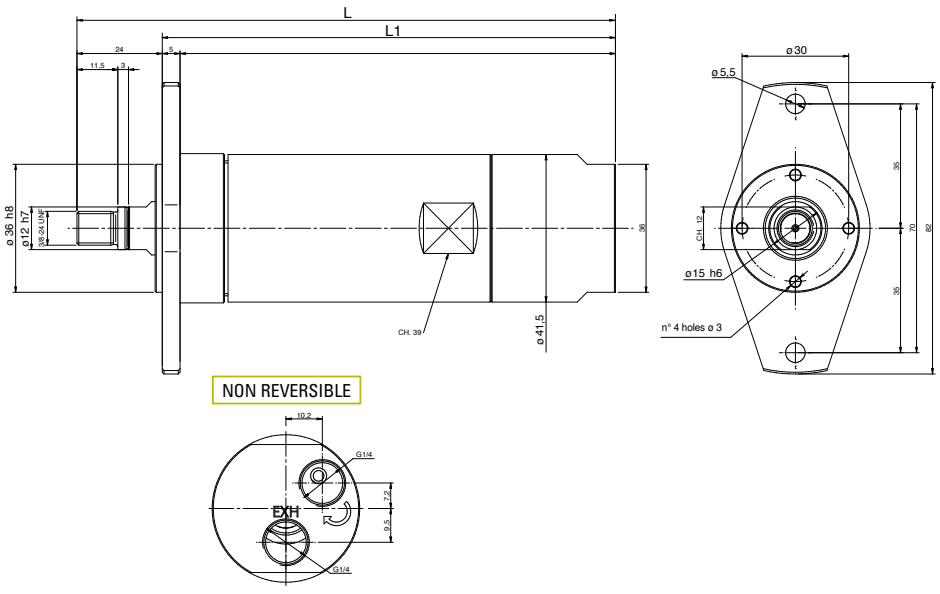
Models with smooth output shaft with integrated lozenge fixing flange



Dimensions (mm)

MODEL	L	L1
40M1900D-D12-FL-Al	160,5	127
40M460D-D12-FL-Al	160,5	127
40M350D-D12-FL-Al	160,5	127
40M280D-D12-FL-Al	160,5	127
40M120D-D12-FL-Al	186,5	153
40M80D-D12-FL-Al	186,5	153
40M70D-D12-FL-Al	186,5	153
40M50D-D12-FL-Al	186,5	153
40M40D-D12-FL-Al	186,5	153
40M20D-D12-FL-Al	212,5	179
40M1335R-D12-FL-Al	160,5	127
40M345R-D12-FL-Al	160,5	127
40M285R-D12-FL-Al	160,5	127
40M195R-D12-FL-Al	160,5	127
40M95R-D12-FL-Al	186,5	153
40M65R-D12-FL-Al	186,5	153
40M55R-D12-FL-Al	186,5	153
40M45R-D12-FL-Al	186,5	153
40M35R-D12-FL-Al	186,5	153
40M15R-D12-FL-Al	212,5	179

Models with threaded output shaft with integrated lozenge fixing flange



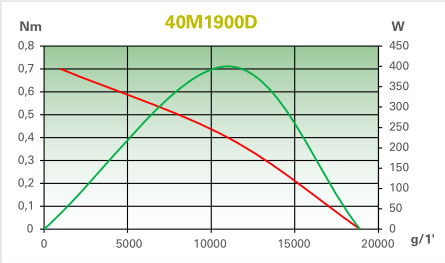
Dimensions (mm)

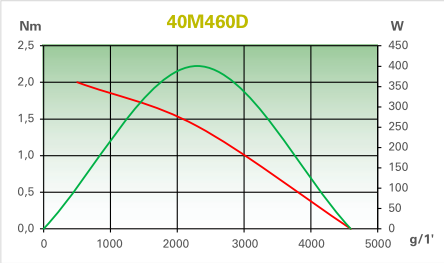
MODEL	L	L1
40M1900D-3/8X24UNF-FL-Al	151,5	127,5
40M460D-3/8X24UNF-FL-Al	151,5	127,5
40M350D-3/8X24UNF-FL-Al	151,5	127,5
40M280D-3/8X24UNF-FL-Al	151,5	127,5
40M120D-3/8X24UNF-FL-Al	177,5	153
40M80D-3/8X24UNF-FL-Al	177,5	153
40M70D-3/8X24UNF-FL-Al	177,5	153
40M50D-3/8X24UNF-FL-Al	177,5	153
40M40D-3/8X24UNF-FL-Al	177,5	153
40M20D-3/8X24UNF-FL-Al	203,5	179

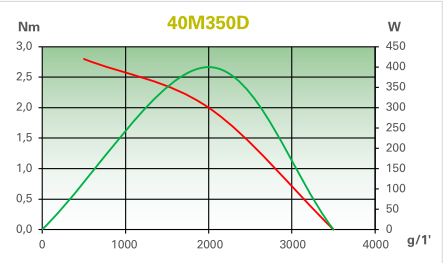
Performances diagrams of torque, power and speed

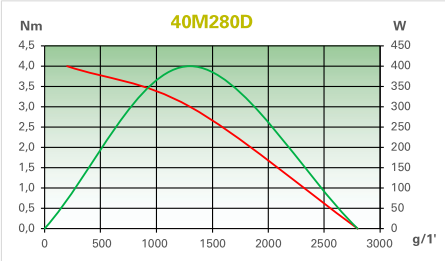
The diagrams show the curves for torque and power in function of number of revolutions: torque _____ power _____
Trend of torque - power in function of speed (at a pressure of 6,3 bar)

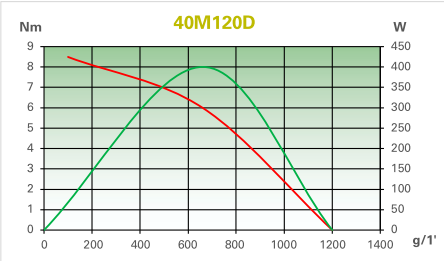
Non-reversible models

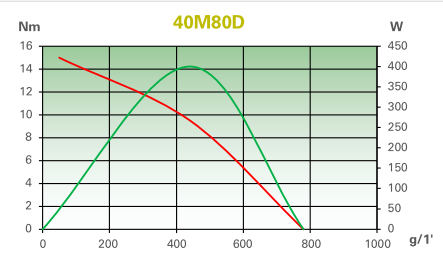


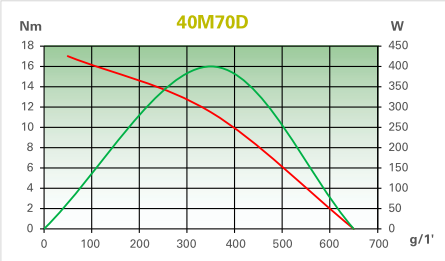


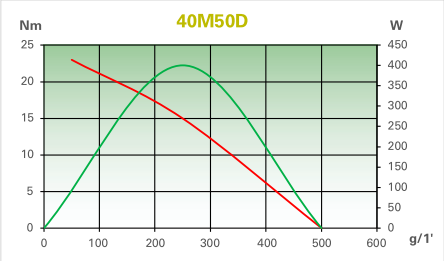


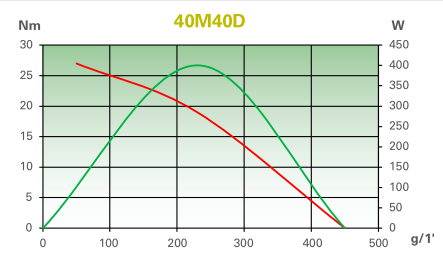


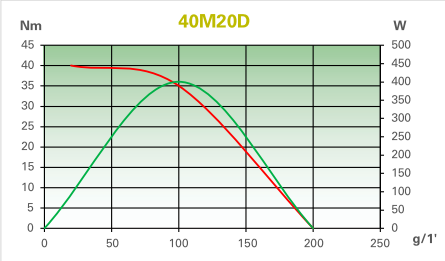




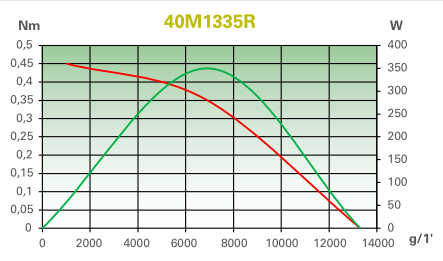


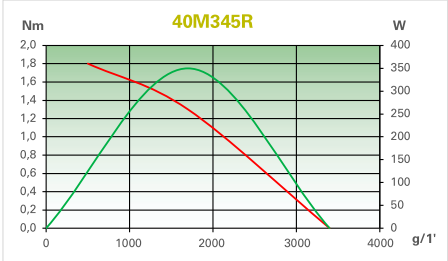


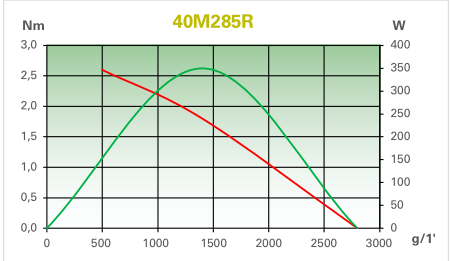


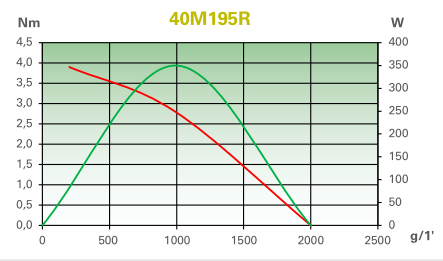


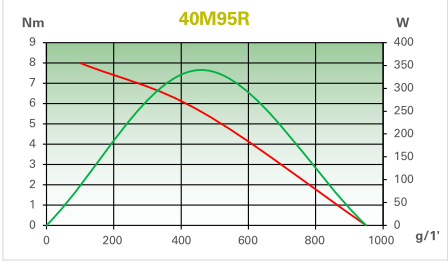
Reversible models

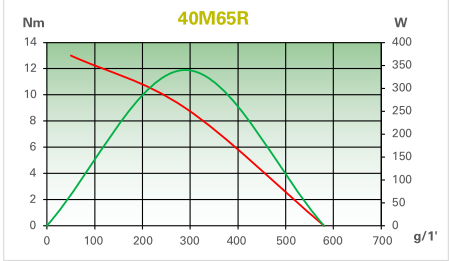


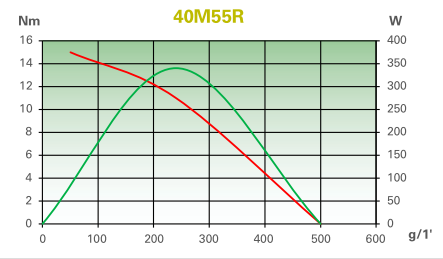


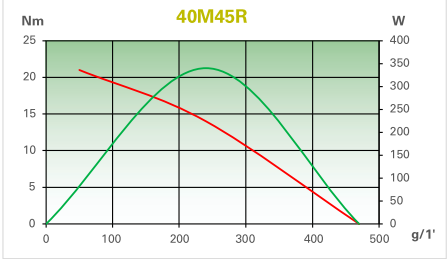


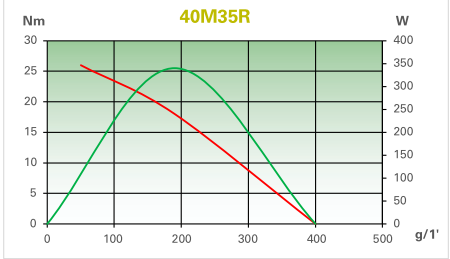


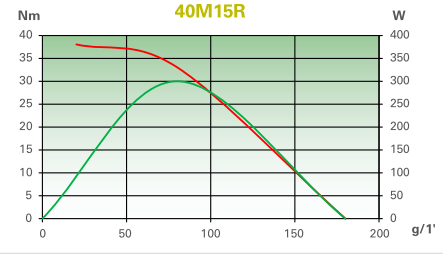












MM Models

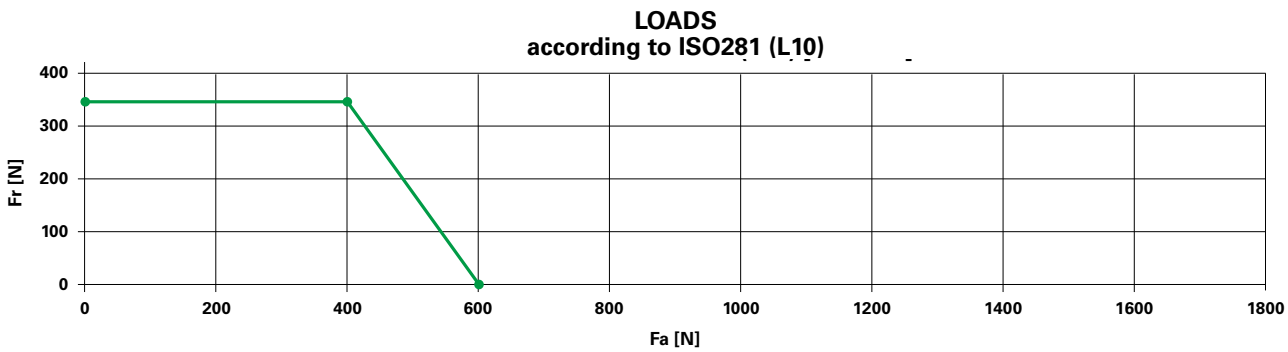
- with smooth output shaft:
  with key UNI 6604 form A: Ø13 - h6 mm

From 0,24 kW to 0,26 kW
From 0,32 hp to 0,35 hp

STANDARD STEEL

Model	Code	Output shaft	Reversibility	Power		Speed at the max power	Torque at the max power		Starting torque		Free speed	Air consumption at the max power		Weight	
		Type	Type	kW	hp	rpm	Nm	in lb	Nm	in lb	rpm	l/s	in cfm	Kg	lb
Non-reversible models															
MM45	185012401	smooth	↻	0,26	0,35	220	11,10	98.24	22,20	196.47	440	7	14,83	1,20	2.65
MM32	185012301	smooth	↻	0,26	0,35	150	16,30	144.26	32,60	288.51	300	7	14,83	1,20	2.65
MM25	185012201	smooth	↻	0,26	0,35	110	22,20	196.47	44,40	392.94	220	7	14,83	1,20	2.65
MM13	185013101	smooth	↻	0,26	0,35	65	37,40	330.99	45,00③	398.25③	130	7	14,83	1,48	3.26
MM9	185013901	smooth	↻	0,26	0,35	35	45,00③	398.25③	45,00③	398.25③	70	7	14,83	1,48	3.26
MM5	185013501	smooth	↻	0,26	0,35	25	45,00③	398.25③	45,00③	398.25③	50	7	14,83	1,48	3.26
Reversible models															
MM45R/2 E	185212401	smooth	↻	0,24	0,32	210	10,50	92.93	21,00	185.85	420	7	14,83	1,22	2.69
MM32R/2 E	185212301	smooth	↻	0,24	0,32	145	15,20	134.52	30,40	269.04	290	7	14,83	1,22	2.69
MM25R/2 E	185212201	smooth	↻	0,24	0,32	105	20,90	184.97	41,80	369.93	210	7	14,83	1,22	2.69
MM13R/2 E	185213101	smooth	↻	0,24	0,32	60	36,30	321.26	45,00③	398.25③	120	7	14,83	1,50	3.31
MM9R/2 E	185213901	smooth	↻	0,24	0,32	32	45,00③	398.25③	45,00③	398.25③	64	7	14,83	1,50	3.31
MM5R/2 E	185213501	smooth	↻	0,24	0,32	22	45,00③	398.25③	45,00③	398.25③	44	7	14,83	1,50	3.31

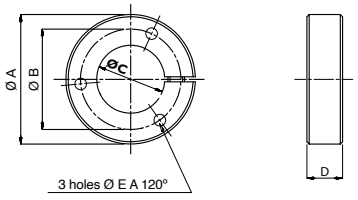
③ The torque indicated is the maximum at which the motor can be used in order to guarantee the life endurance of the internal gears



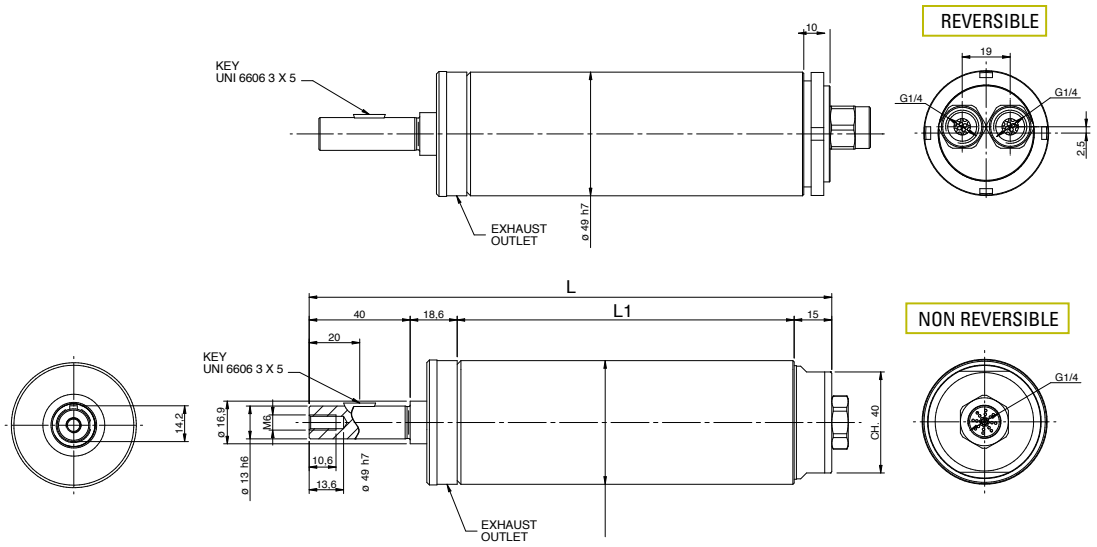
- **Flange bracket**

Recommended to fix the motors onto machines/units

Code	Motor power	A mm	B mm	C mm	D mm	E mm
684011002	MM...	79,5	64	49	18	6,2



Models with smooth output shaft



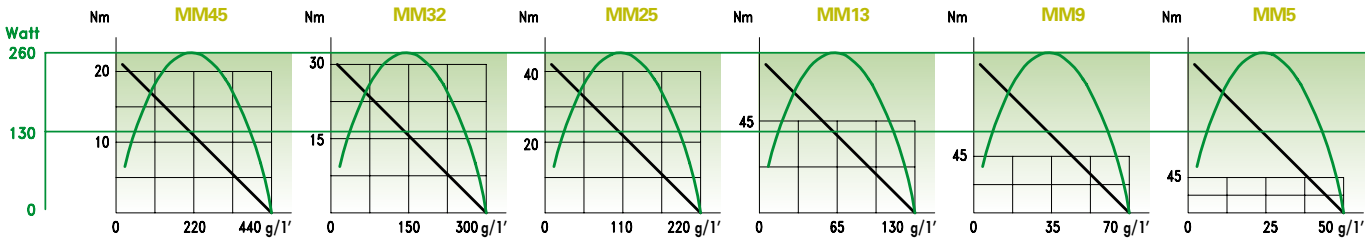
Dimensions (mm)

MODEL	L	L1	MODEL	L	L1
MM45	207,1	133,5	MM45R/2E	202,1	133,5
MM32	207,1	133,5	MM32R/2E	202,1	133,5
MM25	207,1	133,5	MM25R/2E	202,1	133,5
MM13	241,1	167,5	MM13R/2E	236,1	167,5
MM9	241,1	167,5	MM9R/2E	236,1	167,5
MM5	241,1	167,5	MM5R/2E	236,1	167,5

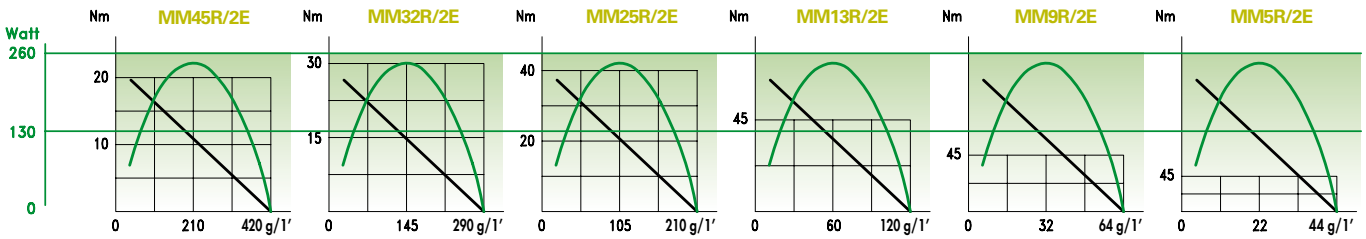
Performances diagrams of torque, power and speed

The diagrams show the curves for torque and power in function of number of revolutions: torque _____ power _____
Trend of torque - power in function of speed (at a pressure of 6,3 bar)

Non-reversible models



Reversible models



MN Models

- with smooth output shaft:
  with key UNI 6604 form A: Ø14 - h7 mm

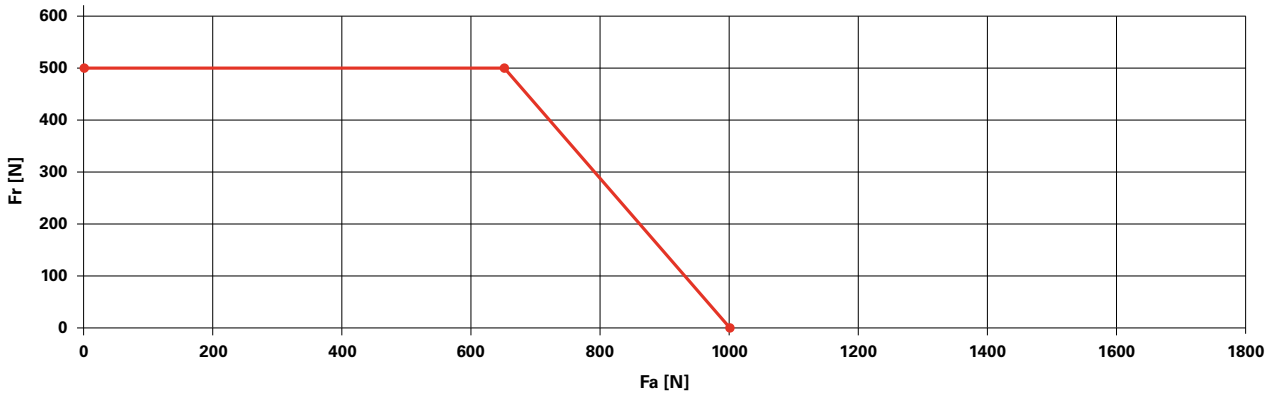
0,38 kW
0,50 hp

STANDARD STEEL

Model	Code	Output shaft Type	Reversibility Type	Power kW	Power hp	Speed at the max power rpm	Torque at the max power Nm	Torque at the max power in lb	Starting torque Nm	Starting torque in lb	Free speed rpm	Air consumption at the max power l/s	Air consumption at the max power in cfm	Weight Kg	Weight lb
Non-reversible models															
MN1600	186010112	smooth	↻	0,38	0,50	8000	0,50	4.43	0,90	7.97	16000	10	21,19	1,45	3.20
MN480	186011412	smooth	↻	0,38	0,50	2400	1,60	14.16	3,10	27.44	4800	10	21,19	1,45	3.20
MN270	186011212	smooth	↻	0,38	0,50	1350	2,80	24.78	5,70	50.45	2700	10	21,19	1,45	3.20
MN190	186011112	smooth	↻	0,38	0,50	950	3,80	33.63	7,50	66.38	1900	10	21,19	1,45	3.20
MN140	186012112	smooth	↻	0,38	0,50	700	5,00	44.25	10,00	88.50	1400	10	21,19	1,85	4.08
MN85	186012812	smooth	↻	0,38	0,50	425	8,80	77.88	17,50	154.88	850	10	21,19	1,85	4.08
MN45	186012412	smooth	↻	0,38	0,50	225	17,30	153.11	34,50	305.33	450	10	21,19	1,85	4.08
MN32	186012313	smooth	↻	0,38	0,50	160	22,00	194.70	44,50	393.83	320	10	21,19	1,85	4.08
MN22	186012212	smooth	↻	0,38	0,50	110	29,00	256.65	45,00③	398.25③	220	10	21,19	1,85	4.08
Reversible models															
MN1500R	186210112	smooth	↻↺	0,38	0,50	7500	0,50	4.43	0,90	7.97	15000	10	21,19	1,45	3.20
MN450R	186211412	smooth	↻↺	0,38	0,50	2250	1,60	14.16	3,10	27.44	4500	10	21,19	1,45	3.20
MN250R	186211212	smooth	↻↺	0,38	0,50	1250	2,80	24.78	5,70	50.45	2500	10	21,19	1,45	3.20
MN170R	186211112	smooth	↻↺	0,38	0,50	850	3,80	33.63	7,50	66.38	1700	10	21,19	1,45	3.20
MN130R	186212112	smooth	↻↺	0,38	0,50	650	5,00	44.25	10,00	88.50	1300	10	21,19	1,85	4.08
MN80R	186212812	smooth	↻↺	0,38	0,50	400	8,50	75.23	17,00	150.45	800	10	21,19	1,85	4.08
MN40R	186212412	smooth	↻↺	0,38	0,50	200	16,00	141.60	32,00	283.20	400	10	21,19	1,85	4.08
MN28R	186212313	smooth	↻↺	0,38	0,50	140	21,00	185.85	42,00	371.70	280	10	21,19	1,85	4.08
MN20R	186212212	smooth	↻↺	0,38	0,50	100	28,00	247.80	45,00③	398.25③	200	10	21,19	1,85	4.08

③ The torque indicated is the maximum at which the motor can be used in order to guarantee the life endurance of the internal gears

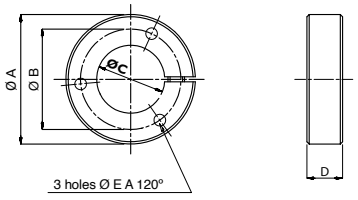
LOADS
according to ISO281 (L10)



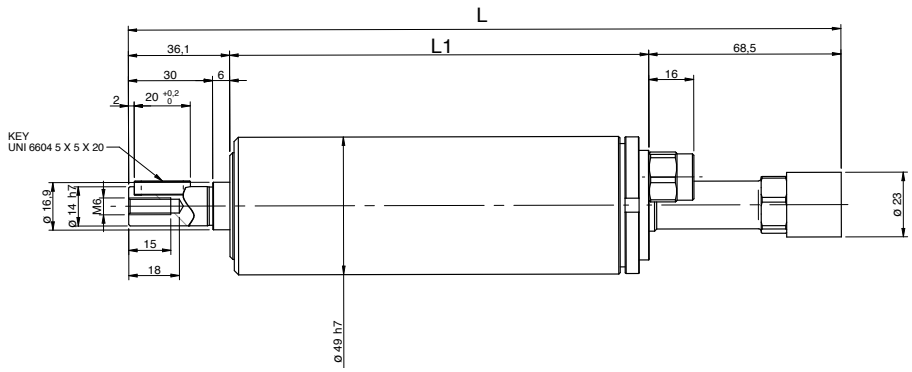
- **Flange bracket**

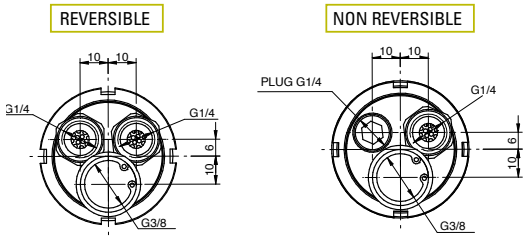
Recommended to fix the motors onto machines/units

Code	Motor power	A mm	B mm	C mm	D mm	E mm
684011002	MN...	79,5	64	49	18	6,2



Models with smooth output shaft





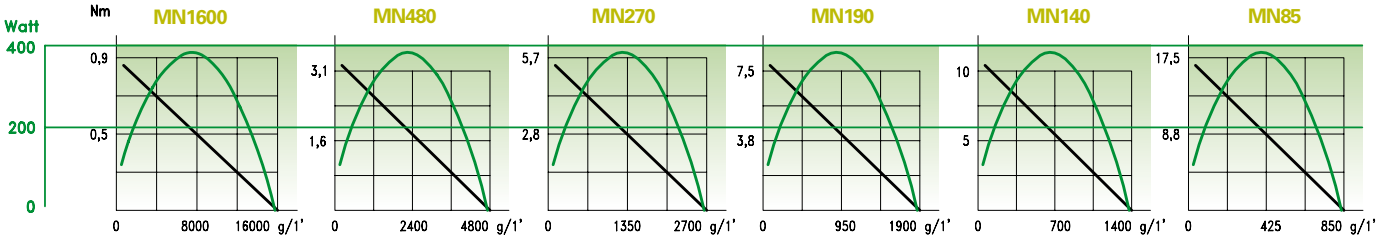
Dimensions (mm)

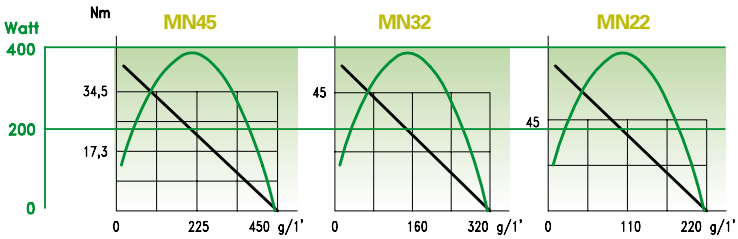
MODEL	L	L1
MN1600 - MN1500R	253,5	149
MN480 - MN450R	253,5	149
MN270 . MN250R	253,5	149
MN190 - MN170R	253,5	149
MN140 - MN130R	287,5	183
MN85 - MN80R	287,5	183
MN45 - MN40R	287,5	183
MN32 - MN28R	287,5	183
MN22 - MN20R	287,5	183

Performances diagrams of torque, power and speed

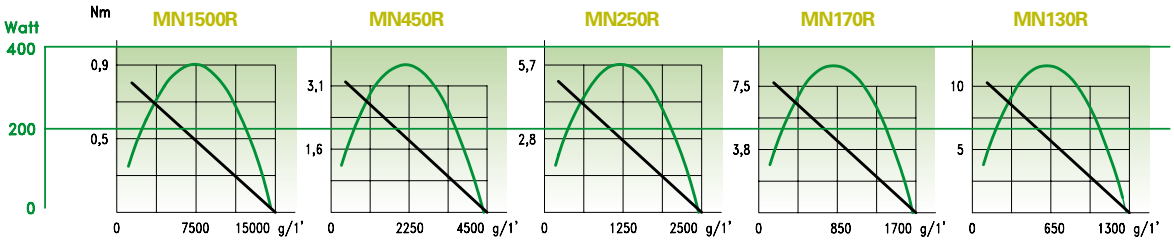
The diagrams show the curves for torque and power in function of number of revolutions: torque _____ power _____
Trend of torque - power in function of speed (at a pressure of 6,3 bar)

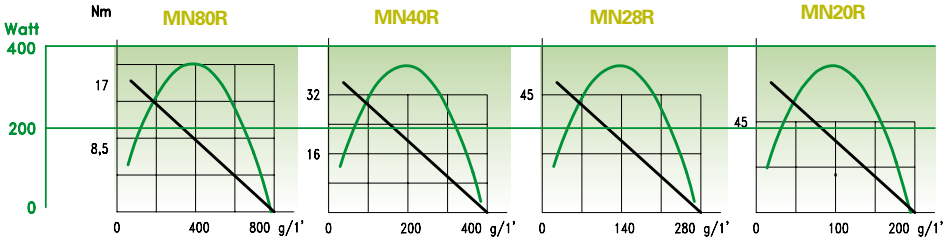
Non-reversible models





Reversible models





MO Models

- with smooth output shaft:
  with key UNI 6604 form A: Ø24 - h7 mm

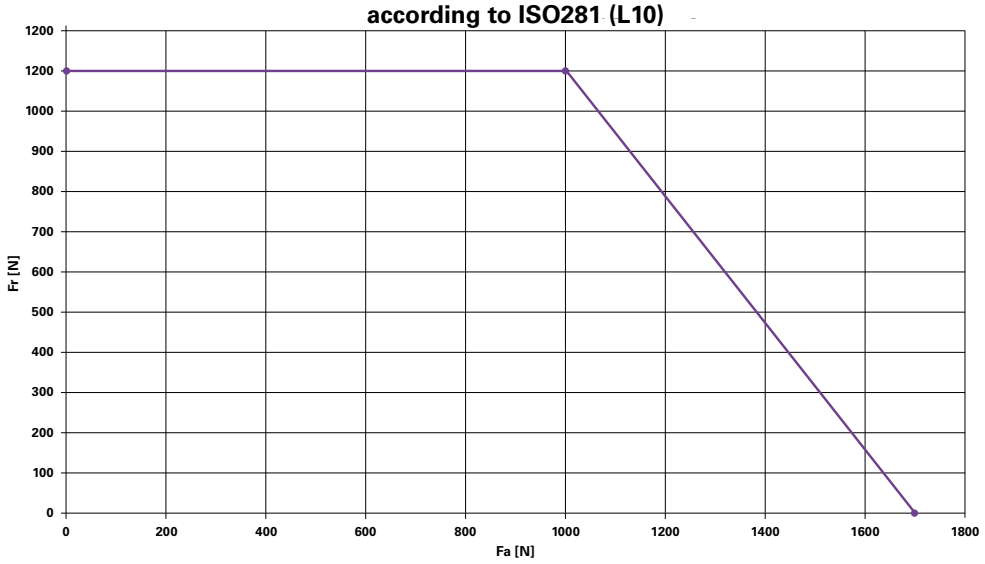
From 0,65 kW to 0,80 kW
From 0,86 hp to 1,07 hp

STANDARD STEEL

Model	Code	Type of motor	Output shaft	Reversibility	Power		Speed at the max power	Torque at the max power		Starting torque		Free speed	Air consumption at the max power		Weight	
			Type		kW	hp	rpm	Nm	in lb	Nm	in lb	rpm	l/s	in cfm	Kg	lb
Non-reversible models																
MO1550	187010102		smooth	↻	0,80	1,07	7750	1,60	14.16	3,00	26.55	15500	18	38,14	3,30	7.28
MO450	187011402		smooth	↻	0,80	1,07	2250	5,20	46.02	10,00	88.50	4500	18	38,14	3,40	7.50
MO280	187011202		smooth	↻	0,80	1,07	1400	9,30	82.31	18,00	159.30	2800	18	38,14	3,40	7.50
MO130	187012102		smooth	↻	0,80	1,07	650	16,00	141.60	31,00	274.35	1300	18	38,14	4,10	9.04
MO85	187012802		smooth	↻	0,80	1,07	425	26,50	234.53	52,00	460.20	850	18	38,14	4,10	9.04
MO40	187013402		smooth	↻	0,80	1,07	200	50,00	442.50	90,00③	796.50③	400	18	38,14	4,80	10.58
MO25	187013202		smooth	↻	0,80	1,07	125	80,00	708.00	90,00③	796.50③	250	18	38,14	4,80	10.58
Reversible models																
MO1200R	187210102		smooth	↻↺	0,65	0,86	6000	1,30	11.51	2,50	22.13	12000	18	38,14	3,30	7.28
MO360R	187211302		smooth	↻↺	0,65	0,86	1800	4,20	37.17	8,00	70.80	3600	18	38,14	3,40	7.50
MO220R	187211202		smooth	↻↺	0,65	0,86	1100	7,70	68.15	15,00	132.75	2200	18	38,14	3,40	7.50
MO110R	187212102		smooth	↻↺	0,65	0,86	550	14,30	126.56	28,00	247.80	1100	18	38,14	4,10	9.04
MO70R	187212702		smooth	↻↺	0,65	0,86	350	25,00	221.25	49,00	433.65	700	18	38,14	4,10	9.04
MO32R	187213302		smooth	↻↺	0,65	0,86	160	48,00	424.80	90,00③	796.50③	320	18	38,14	4,80	10.58
MO20R	187213202		smooth	↻↺	0,65	0,86	100	77,00	681.45	90,00③	796.50③	200	18	38,14	4,80	10.58

③ The torque indicated is the maximum at which the motor can be used in order to guarantee the life endurance of the internal gears.

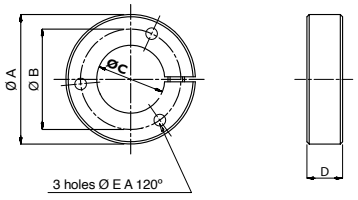
LOADS
according to ISO281 (L10)



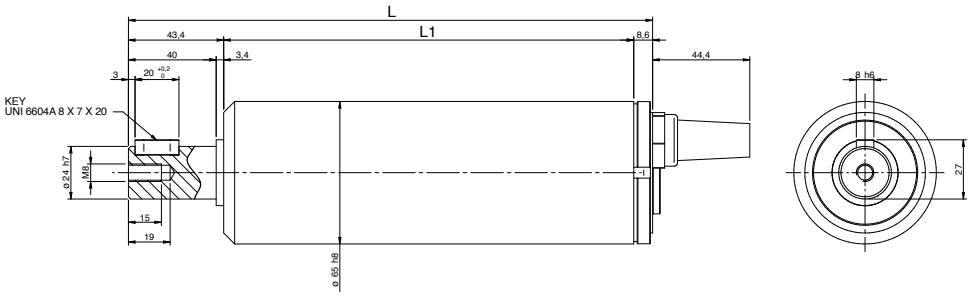
• Flange bracket

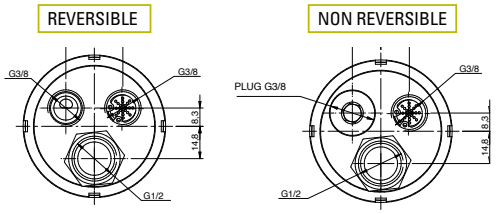
Recommended to fix the motors onto machines/units

Code	Motor power	A mm	B mm	C mm	D mm	E mm
684011005	MO...	129	105	65	35	10,2



Models with smooth output shaft





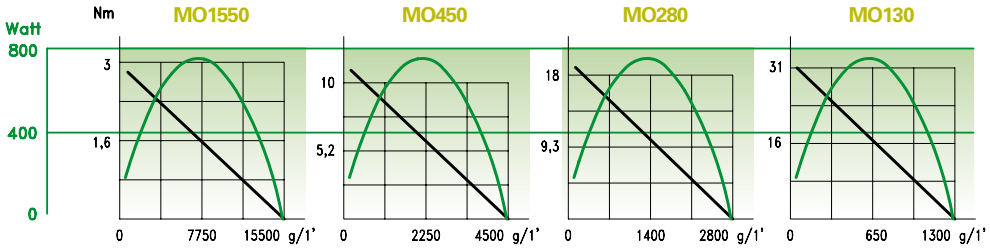
Dimensions (mm)

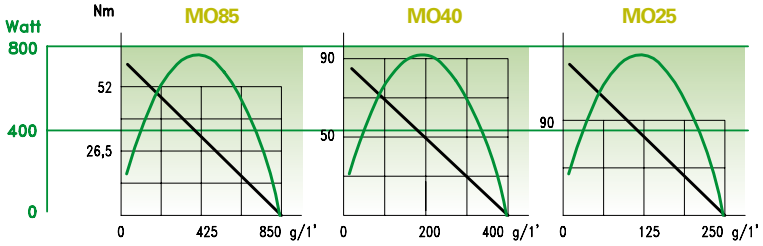
MODEL	L	L1
MO1550 - MO1200R	228,5	177,5
MO450 - MO360R	239	187
MO280 - MO220R	239	187
MO130 - MO110R	273,6	222
MO85 - MO70R	273,6	222
MO40 - MO32R	309,2	257
MO25 - MO20R	309,2	257

Performances diagrams of torque, power and speed

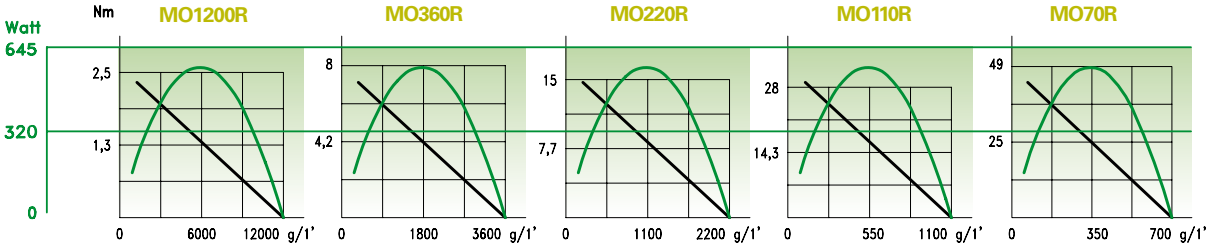
The diagrams show the curves for torque and power in function of number of revolutions: torque _____ power _____
Trend of torque - power in function of speed (at a pressure of 6,3 bar)

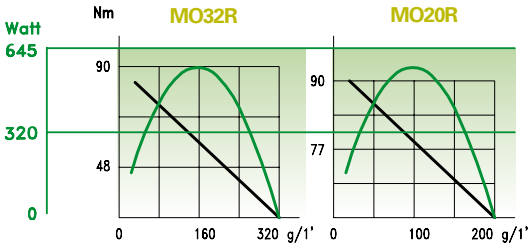
Non-reversible models





Reversible models





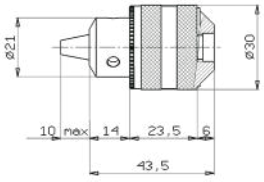
ACCESSORIES FOR THE USE OF AIR MOTORS IN DRILLING OPERATIONS

- To use Fiam motors in drilling, burring, etc. operations it is necessary to order a motor with threaded output shaft 3/8"x24UNF (available only for motor with right hand rotation).

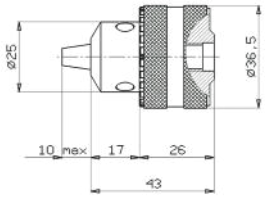
KEYED CHUCKS

Sturdy chucks equipped with locking key to block the bit of the drill.
The dimensions are expressed in millimeters (mm).

Chuck capacity (mm)	Drive type	Code
0 ÷ 6	3/8 x 24 UNF	650381006
0 ÷ 8	3/8 x 24 UNF	650381008



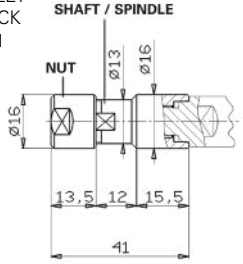
Chuck capacity (mm))	Drive type	Code
1 ÷ 10	3/8 x 24 UNF	650381010



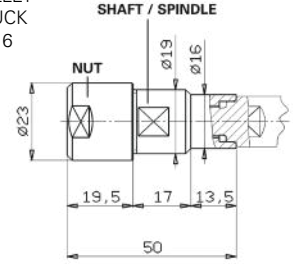
COLLET CHUCKS

The use of collets on motors with collet chuck permits to reduce the dimensions of encumbrance of the head of the drilling unit and to obtain the better accuracy in drilling.

COLLET CHUCK ER 11



COLLET CHUCK ER 16



Collet chuck	Drive type	Code
ER 11	3/8x24 UNF	660449011
ER 16	3/8x24 UNF	660449010

COLLETS

They are to be chosen according to the diameter of the bit.

** The locking capacity of the collet is referred o the diameter of the male shank of the bit.*

ER 11

ER 16

Collets ER 11

Capacity ø (mm)*	Code
1	660431010
1,5	660431015
2	660431020
2,5-3/32"	660431025
3	660431030
3,5-1/8"	660431035
4	660431040
4,5	660431045
5-3/16"	660431050
5,5	660431055
6	660431060
6,5-1/4"	660431065
7	660431070

Locking capacity of the collects
0,5 mm

Collets ER 16

Capacity ø (mm)*	Code
1	660441010
1,5	660441015
2	660441020
2,5-3/32"	660441025
3	660441030
4-1/8"	660441040
5-3/16"	660441050
6	660441060
7-1/4"	660441070
8-5/16"	660441080
9	660441090
10	660441100

Locking capacity of the collects
da 1 a 3 mm = 0,5 mm oltre 3 mm = 1 mm

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 and filter	Lubricator
mm	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

RUBBER SUPPLY HOSES – with couplings

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.**

To choose the most suitable supply hose, refer to the recommended hose bore given in the Catalogue. Upon request, hoses of other dimensions are available: please apply to the Fiam Technical Consultancy Service.

The recommended dynamic air pressure is 6,3 bar. Thus is necessary to select adequate hoses for air flow in order to properly feed power tools.

Hose	Length	Male coupling	Male coupling	
Ø internal x Ø external mm	mm			Code
4,8 x 9,4	3000	1/8″ gas	1/4″ gas	693511020
6,3 x 12,7	3000	1/4″ gas	1/4″ gas	693511021
9,5 x 15,9	3000	1/4″ gas	1/4″ gas	693511022
9,5 x 15,9	3000	3/8″ gas	3/8″ gas	693511023
12,7 x 19,8	3000	1/2″ gas	1/2″ gas	693511024

Ø internal = recommended hose bore

ACCESSORIES

AIR FLOW GOVERNORS

- With 6 positions scaled control
- With micrometer screw control

Indicated for obtaining the required torque values by adjusting the air supply. Strongly recommended for use with screwdrivers without clutch. The less air is supplied = the less torque is yielded

Governor with scaled control

Capacity max	Coupling M/F	Code
6 l/s	1/4" gas	697451000

Governor with micrometer screw control

Capacity max	Coupling M/F	Code
20 l/s	1/4" gas	697431000

QUICK COUPLING

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
mm		Code	Code
Ø 5 mm	1/8" gas	695411018	695431018
Ø 6 mm	1/4" gas	695411014	695431014
Ø 8÷10 mm	1/4" gas	695411114	695431114
Ø 13 mm	3/8" gas	695411138	695431138
Ø 16 mm	1/2" gas	695411212	695431212

QUICK NIPPLES

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

Male

Female

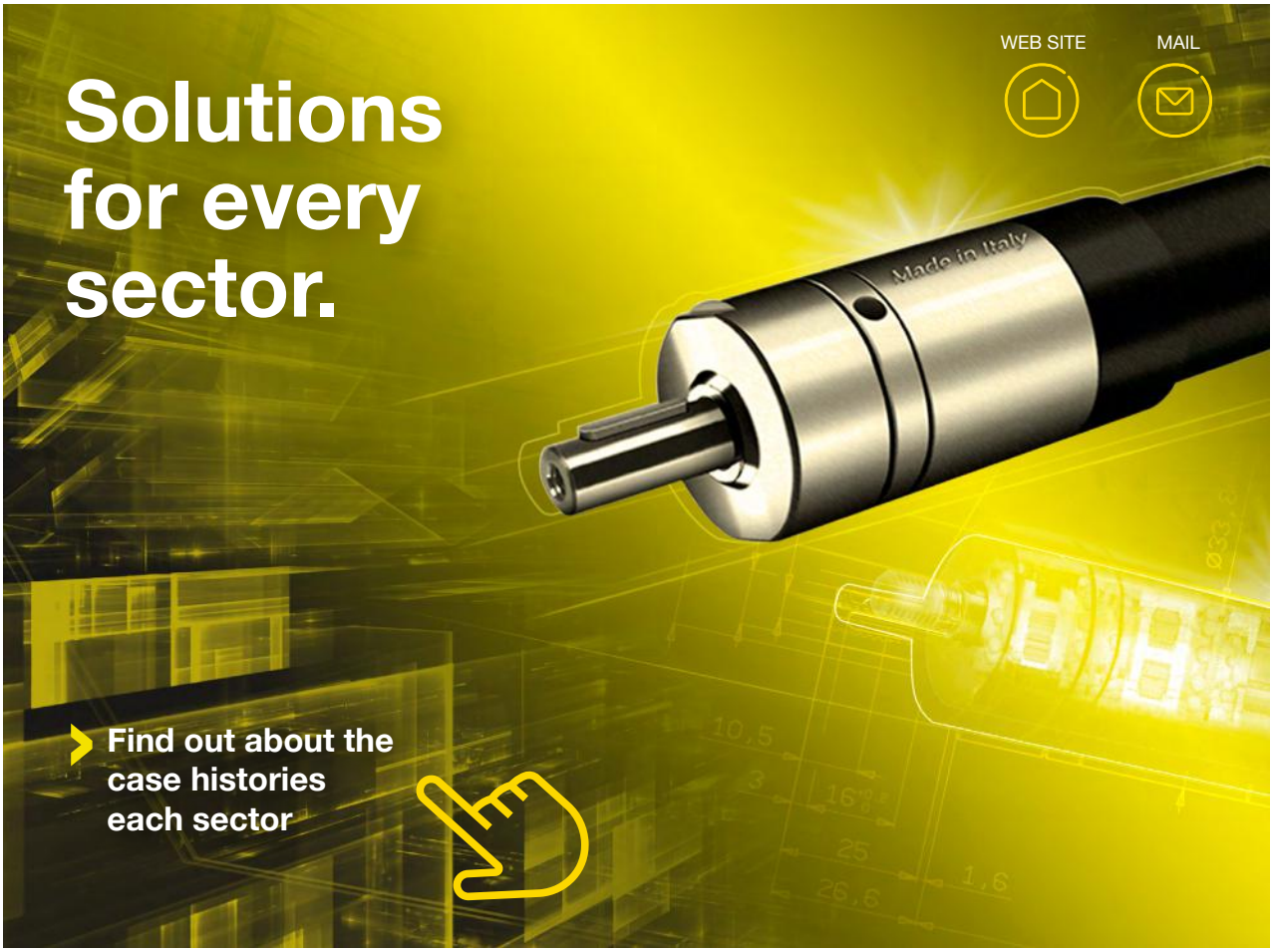
Recommended hose bore	Air inlet threading	Male quick nipple	Female quick nipple
mm		**Code**	**Code**
Ø 5 mm	1/8" gas	695311018	695331018
Ø 6 mm	1/4" gas	695311014	695331014
Ø 8÷10 mm	1/4" gas	695311114	695331114
Ø 13 mm	3/8" gas	695311138	695331138
Ø 16 mm	1/2" gas	695311212	695331212

LUBRICATING OIL FOR AIR TOOLS

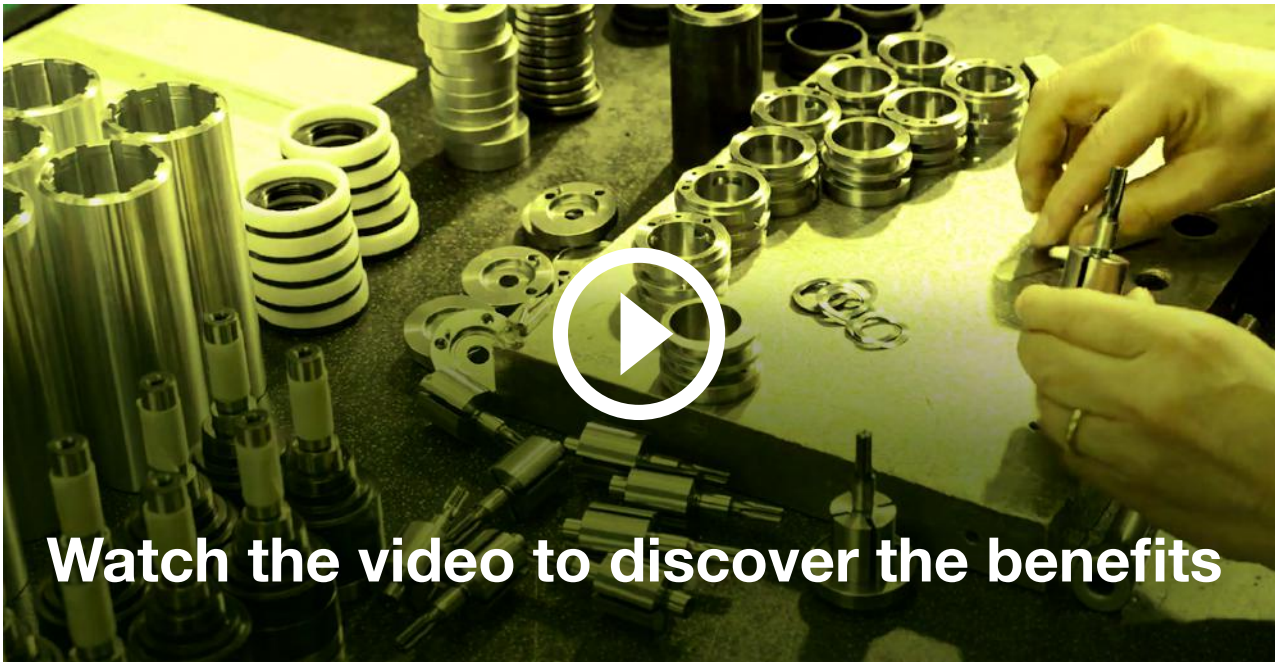
Used to correctly lubricate the motor group internal components of air tools.

1 Lit. bottle

Code
699011008



Check out the playlist dedicated to Air Motors on our YouTube Channel



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