

# AIR MOTORS CATALOGUE



 **modec**  
moteurs & solutions pneumatiques

# EDITO



Welcome to the modec world

modec vane air motors have been used for more than 30 years as an alternative to traditional electric motors for many heavy duty applications, particularly in chemical, petrochemical and automotive industries.

Our team's technical expertise and business flexibility enable us to develop and provide innovative, robust and powerful air motors as well as specific solutions such as portable valve actuators, tapping machines and nut runners in a short and reliable lead time.

Carefully assembled by our experienced fitters in our factory based in Valence, France, made of parts designed by our engineers and manufactured by thoroughly selected French and European suppliers, our products offer the highest quality standards.

Our technical team is at your disposal for any definition, design and realization of pneumatic solution that will meet your specific needs and requirements.

Welcome to a world of INNOVATION, EXPERTISE and FLEXIBILITY.  
Welcome to the modec world !



Ex II 2 G D  
Ex h IIC T6...T4 Gb  
Ex h IIIC T80°C...T135 Db



# CONTENTS

## 1.

### GENERAL INFORMATION

- [WHY CHOOSE AN AIR MOTOR?](#)
- [WHICH APPLICATIONS ?](#)
- [HOW DOES IT WORK ?](#)
- [HOW TO CHOOSE THE RIGHT MOTOR ?](#)
- [COMMISSIONING](#)
- [MAINTENANCE](#)
- [CERTIFICATIONS](#)
- [ENERGY EFFICIENCY](#)

## 2.

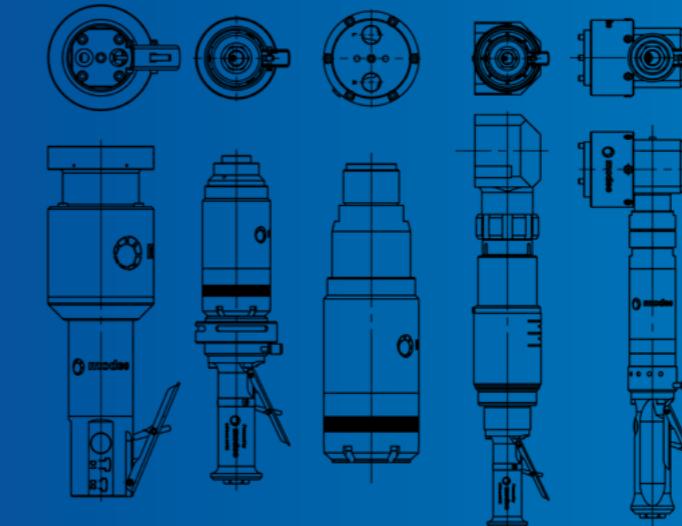
### PRODUCT DATA SHEETS

- [INTRODUCTION TO THE PRODUCT DATA SHEETS](#)
- [REFERENCES DESCRIPTION](#)
- [AIR MOTORS](#)
- [FLANGES & SHAFTS](#)
- [OPTIONS & ACCESSORIES](#)
- [SPECIAL PRODUCTS & TOOLS](#)



# PART 1

# GENERAL INFORMATION



## 1 | WHY CHOOSE AN AIR MOTOR ?



### FLEXIBILITY

The Power / Weight output of an air motor is 5 to 6 times higher than that of an electric motor. This makes it ideal for portable applications and / or in cases of space constraints.

Air motors deliver a wide speed span that automatically adapts to the required load.

Rotation direction, speed and torque are easy to control and adjust, even while motor is running.

Remote control is easy to implement.

Air motors work in any position.

Operating temperature range: -30°C → +150°C



### SAFETY

No spark, no hot spot, hence no risk of fire or explosion in sensitive environments.

All our motors can be ATEX certified on request.

No electromagnetic compatibility (EMC) issue.



### RELIABILITY

When starting or reaching the stall torque, air motors neither heat up nor deteriorate, even with a high frequency cycle.

Air motors can be used in almost any condition and environment, even the most demanding.

Air motors are continuously cooled by air expansion. This avoids overheating even at high speed.



### PRODUCTIVITY

Low installation costs. No sophisticated protection and control system (switchgears, contactors, variable speed drives ...). A simple air pressure & flow regulator is required.

Low maintenance costs. Robust design, available parts, no specific skill and certification required for staff.

Easy recycling.

## 2 | WHICH APPLICATIONS ?



ATEX compliant, compact and withstand dusty atmosphere, modec air motors meet the TEXTILE INDUSTRY requirements.



modec air motors find numerous applications in the FOOD & BEVERAGE INDUSTRY, from harvesting (robustness, resistance to wet and dusty atmosphere) to processing (easy to clean, compact) and packaging (stall resistant).



Reliable, powerful, compact and resistant to many chemicals, modec air motors are widely used in the PRINTING INDUSTRY.



Reliable, able to run without lubrication and non-sensitive to electromagnetic fields and radiations, modec motors are much appreciated in the NUCLEAR INDUSTRY.

Compact, wet-air resistant, powerful and easy to maintain, modec motors easily adapt to the MARINE & SHIPYARD INDUSTRY constraints.



Easy to clean and sterilize, resistant to high temperature and to many chemical products, modec motors are perfect for PHARMACEUTICAL & CHEMICAL INDUSTRIES. They can be stainless steel on request.

ATEX, robust, and easy to maintain, modec motors fit perfectly in the OIL & GAS INDUSTRY explosive environment.





## RELIABILITY



## PRODUCTIVITY



## FLEXIBILITY

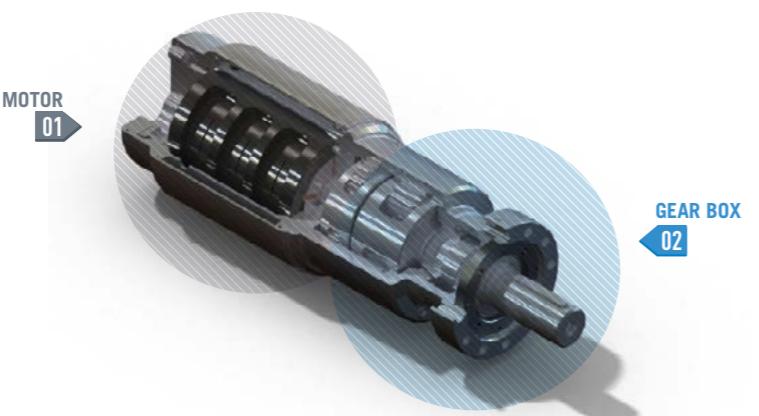


## SAFETY



## 3 | HOW DOES IT WORK ?

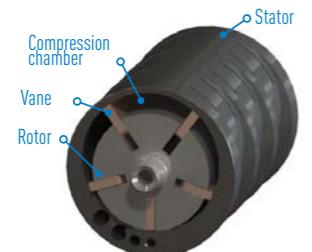
An air motor gets its mechanical power from a gas expansion (usually compressed air). Its main characteristics are safety, reliability & compactness. It is easy to use, transport and store.  
Modec geared air motors are made of a vane air motor and a planetary gear box



### 01 VANE AIR MOTOR

It consists of a cylinder called stator containing an off-center rotor and closed with two flanges at both ends. The space created between the stator and the rotor has a crescent shape. The rotor has notches in which vanes can move freely.

When the rotor is rotating, the centrifugal force drives the vanes that stick to the inner wall of the stator, dividing the space into compression chambers with different volumes.



Pressurized air (4 to 6 bars) is injected into the multi-vane air motor through the injection point (I). It gets into the first compression chamber (C1) which is thus put under pressure. This pressure applies on each side of the chamber a force which will be proportional to its surface.

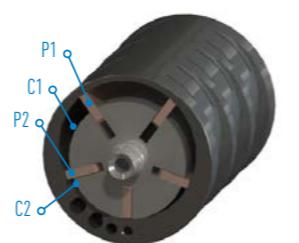


This rotation motion then brings the chamber (C1) into exhaust position, releasing the air outside of the motor.



Since the two sides of the chamber made of the two vanes (P1) and (P2) have different surfaces, the force applied onto each of them is different and a rotation motion is generated on the rotor.

The volume of the chamber (C1) increases and the air inside expands. The chamber (C2) is now put under pressure and the same phenomenon starts again, keeping the rotation constant.



Changing the injection point will make the rotor turn the other way around. Thus, changing rotation from clockwise to counterclockwise is possible by simply changing the injection point on the motor.

The rotation direction of the modec air vane motor output shaft is defined when looking at it from the back (air inlet side).



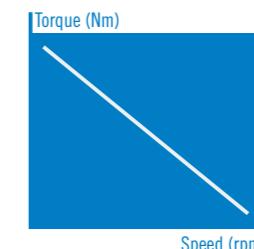
### 02 PLANETARY GEARED REDUCTION

Under a 6 bars pressure, the rotor rotates at 10000 to 20000 rpm speed depending on the motor. A planetary geared reduction is used to adjust the motion to the required application.

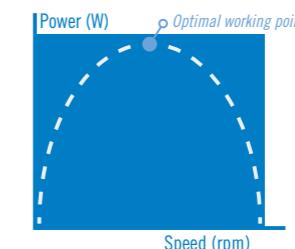
These reductions allow to reduce speed and to increase output torque. Thanks to different sizes of planetary gears and different combinations, modec vane air motors can offer a wide range of speeds and torques.



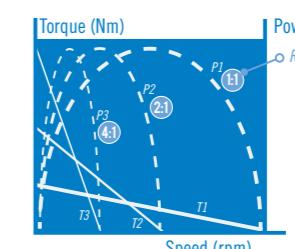
## HOW DOES IT WORK ?



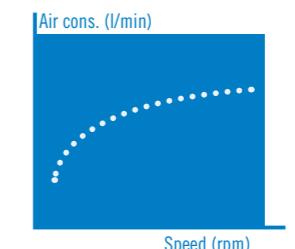
Air motor power first depends on the air (or any other inert gas) supply pressure and flow. For a given supply, there is an inverse relation between speed and torque.



Air motor power (in Watt) is equal to the speed (in revolutions per minute) multiplied by the torque (in Newton Meters) divided by a constant (9.55). The maximum power is reached for a speed roughly equal to half the free speed (speed without any load on the motor). That combination is called the "optimum working point".

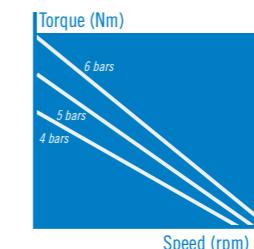


The use of planetary gear enables to change speed and torque for a given power, in order to get the required characteristics.



The air consumption depends on the motor speed.

## CONTROL OF AN AIR MOTOR

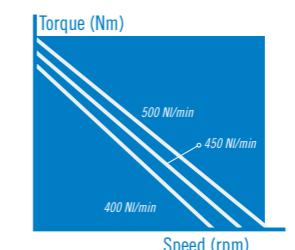


Controlling an air motor consists in adjusting its rotation direction, torque and speed. This can be done through air pressure and flow control, using pressure and flow regulators.

For a reversible motor, changing rotation direction is simply done by switching air supply from one inlet to the other thanks to a 5/3 valve. Make sure you use a pneumatic valve that is able to deliver and exhaust enough air flow for a correct motor functioning.

For a given motor and gear ratio, one can change speed and/or torque by simply modifying the air supply.

Changing air pressure impacts mainly the torque. Changing air flow impacts mainly the speed.



All data (max power, free speed, speed @ Pmax, torque @ Pmax, stall torque, starting torque, air consumption @ Pmax) are indicated for each of our motors in the product data sheet.

## 4 | HOW TO CHOOSE THE RIGHT MOTOR ?

Why do you need a motor ?

How will you use it ?

A common mistake when choosing an air motor is to focus on its main performances only, without considering the application requirements and the type of work expected from the motor.

For example, it is not correct to primarily consider the air motor power when only speed or only torque is important for a given application. Similarly, choosing the motor because of its torque at maximum power is not relevant if the application requires a specific starting torque.

The starting point of the decision process should always be "What should that motor do ?" and from there, define and adjust the technical selection criteria.

### 4.1.1 | SPEED, TORQUE, POWER

Speed (S), Torque (T) and Power (P) are related through the following equation :

$$P = (S \times T) / 9.55$$

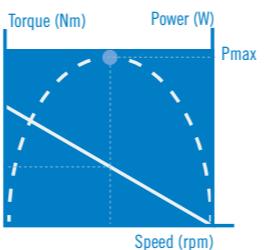
$P$  = Power (in Watt)  
 $S$  = Speed (in rpm)  
 $T$  = Torque (in Newton.meter)

Power is maximal when speed is equal to approx. half the free speed.

When the torque applied is equal to zero (no load), the speed is maximal (free speed) but the power is equal to zero.

When the load applied increases, torque increases and speed reduces. Power increases up to a maximum called the optimal working point and starts decreasing.

When the load applied reaches the maximum torque that can be delivered by the motor, it stalls, speed is equal to zero and so is the power. That specific torque is called the stall torque.



## A COMPLETE RANGE OF MOTORS

### AIR MOTORS FAMILIES

Our air motors come in three families: Easy Duty, Standard Duty and Heavy Duty – adapted to different needs

#### Easy Duty

Compact and lightweight, these motors do not have integrated gearbox and deliver high speed / low torque output.

#### Standard Duty

Well balanced between speed and torque, these motors are versatile and can be used in a wide range of applications thanks to the many flanges and shafts available.

#### Heavy Duty

For applications with high torque and requiring exceptional mechanical robustness in difficult conditions, the Heavy Duty family dedicates power to torque in a minimum volume.

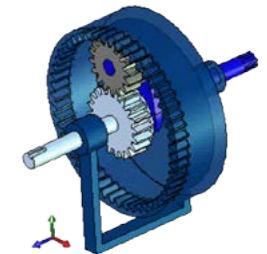
### 4.1.2 | A TOUCH OF MAGIC IN A BOX

1 Thanks to the integrated gearbox, modec geared air motors deliver speed and torque ranges which are appropriate to different applications' requirements. And this while keeping a maximum compactness and a close to 100% efficiency.

2 A planetary gearbox is a quite simple mechanism: One or more satellites orbit around the rotor output pinion and drive the output shaft. This leads to a speed reduction and torque increase. Piling up several planetary gears will give the required speed and torque.

3 Without gearbox, an air motor will deliver a very high speed and very minimal torque. By applying a 2:1 reduction ratio, the speed will be divided by 2 and the torque will double. By applying a 4:1 reduction ratio, the speed will be divided by 4 and the torque will be multiplied by 4, and so on.

When selecting your motor, you need to choose a gearbox that will deliver the appropriate speed and torque for your application.



### 4.1.3 | AIR FLOW AND PRESSURE

Speed and torque can also be controlled by adjusting air flow and/or pressure.

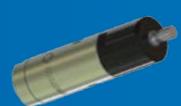
Reducing air flow will mainly reduce output speed. It can be done by restraining air supply or (preferably) air exhaust. Plugging a progressive control handle or an air flow limiter to the air motor inlet port or pipe will slightly reduce the minimum starting torque and may create air turbulences that will make speed less stable, especially with low pressures. Plugging the air flow limiter to the exhaust port or pipe will keep a better stability.

Reducing the air supply pressure reduces the maximum torque that the motor can provide. To reduce the air pressure, simply use the pressure regulator on the FRL unit of the motor. Modec motors are designed to operate at a maximum air pressure of 6.2 bar (90 psi).

## CONCLUSION

Having a clear idea of what your air motor needs to do will help you understand the speed and torque requirements. That way, you can be sure that you are selecting a motor with the right power, speed and torque range, and the right features for the job you expect it to do.

## TYPES OF AIR MOTORS



**STRAIGHT MOTORS** are the lightest and most compact. Easy to integrate into a machine, they can be controlled remotely.



**RIGHT ANGLE HEAD MOTORS**, equipped with a 90° head, have a double advantage: they can sometimes be even more compact than straight motors (integration in mechanical systems), and they can have an even higher torque thanks to the additional reduction included in the right angle head.



**MOTORS EQUIPPED WITH HANDLES** can be easily and manually operated, just like portable tools. The type of handle depends on the application requirement:

- Safety handle
- Progressive control handle

These two handles can be assembled together on the motor.

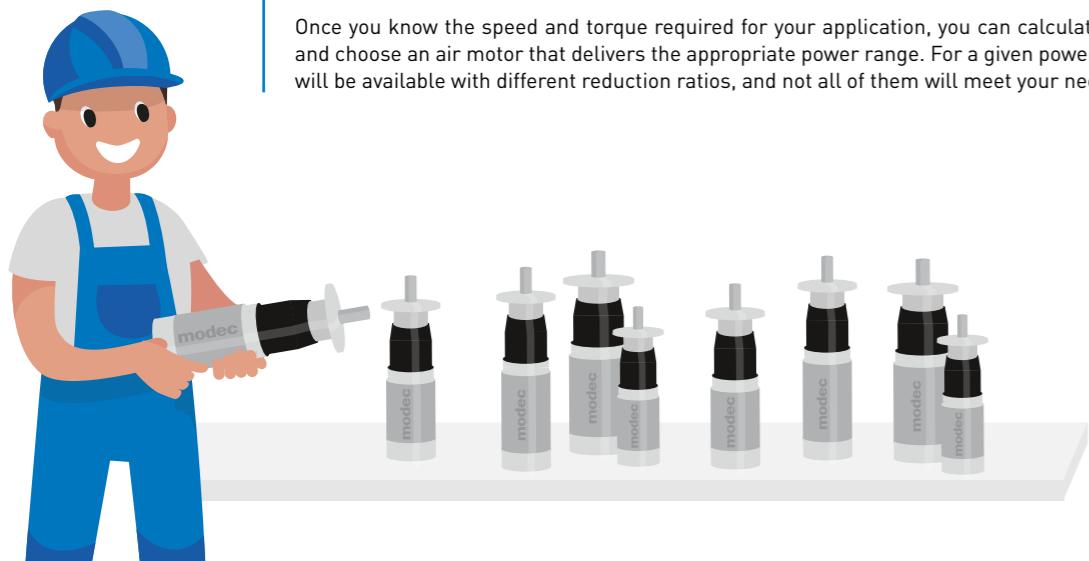
## OPTIONS AND ACCESSORIES

Our motors can also be equipped with options and accessories that improve their performance in certain environments and create better working conditions.

## READY TO CHOOSE THE RIGHT MOTOR ?

### CHOICE OF THE POWER RANGE

Once you know the speed and torque required for your application, you can calculate the power required and choose an air motor that delivers the appropriate power range. For a given power range, many motors will be available with different reduction ratios, and not all of them will meet your needs.

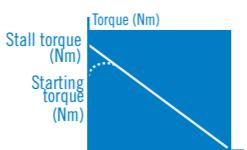


### WHAT OTHER FACTORS MIGHT INFLUENCE YOUR CHOICE?

You have identified a motor - or most likely a list of motors - capable of performing the required function in terms of the power/torque/speed equation.

Now you need to consider other factors that could influence actual performance. The saying goes: «the devil is in the details», so do it right and you will be ready for a happy and lasting relationship with your air motor!

### STARTING TORQUE



The starting torque of a motor is the maximum level of torque that can be applied to the motor at the time of starting. Above this torque, the motor will not start. This can be critical in lifting applications, for example, when the motor has to start to lift a load. This torque is often less than the stall torque. The starting torque indicated for a motor is the minimum measured torque. It can sometimes be higher.

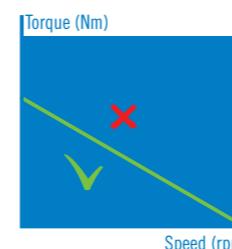
### ENERGY EFFICIENCY

If you want to optimize the energy efficiency of your operations, you want your motor to run at maximum power. In this case, you need a motor with an optimum working point as close as possible to your application working point. Working at maximum power also allows you to choose the smallest motor capable of performing the required job, which can be advantageous when working in a small space and to limit costs.

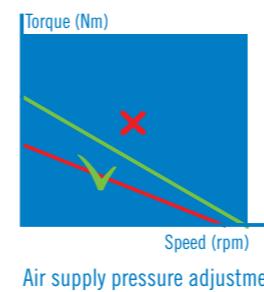
### STALL TORQUE

**Stall torque is the level of torque at which the motor stops, or stalls.** It is important to know the stall torque to be certain that the motor will be able to handle the highest torque required by the application. Conversely, it may be important that your motor stops before it reaches a certain torque level to protect your machinery. In this case you can ensure that you have a motor with a stall torque that does not exceed this value. A torque limiter can also be used in this case.

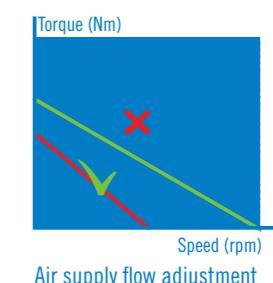
### GET THE RIGHT WORKING RANGE



To be sure that the motor is adequate, you need not only the right power, but also the right reduction ratio. Simply plot the working point of the application (speed and torque) on the torque/speed curve of each selected motor as shown. If this point is below the torque/speed curve, the motor will be able to do the job. But if the point is above the curve, the motor will not fit your needs.



Once you have chosen a motor with the right power range and gear ratio, you can operate the motor at a specific working point by adjusting the air flow or pressure, as shown in the graph. If the torque is less critical, adjust the air pressure to obtain the correct operating point. If speed is less critical to your operation, adjust the airflow to reduce speed.



Air supply flow adjustment

### POWER RESERVE

For some applications, it is important to have a power reserve in case the required torque increases or changes during operation. In such cases, a motor should be selected whose optimum working point (maximum power) is on the left of the application's working point. When the load (the torque required) increases, there will be no risk of immediate stalling, on the contrary, the power delivered will increase.

### AIR CONSUMPTION REDUCTION

Under certain circumstances, the air supply flow and/or pressure may be limited. In such cases, a motor should be selected with the optimum working point on the right of the application's working point so that the rotor speed (and thus consumption) is as limited as possible.

### OTHER CRITERIA AND POSSIBLE ADAPTATIONS

#### TEMPERATURE

Our air motors can operate at temperatures as low as -30°C and as high as +150°C. However, at very low temperatures, attention must be paid to condensation or even small ice crystals caused by the additional cooling of the air in a cold environment.

#### SPECIFIC ATMOSPHERES

Whatever the working environment - dusty, radioactive, damp or explosive - our motors (which can be ATEX certified on request) operate safely. As long as you always use clean, dry and lubricated air, you won't have any problems.

#### CLEAN ENVIRONMENTS

Motors used in industries where a clean environment is required (e.g. pharmaceutical or nuclear industries) should be equipped with an integrated air exhaust collector to ensure that the air exhausted from the motor does not contaminate the laboratory or factory atmosphere.

#### SEALED MOTORS

We can make waterproof sealed motors, capable of operating several meters underwater.

### CONCLUSION

In short, if you want to choose the right air motor that gives you the best performance, safety and return on investment, start by analyzing what you want the motor to do and proceed from there. Keep in mind that we're always available if you need a little help!

# 5 | READY TO CHOOSE THE RIGHT MOTOR ?

You're almost there! Before you start your work, there are just a few steps left.

## SAFETY FIRST !

Here are some safety rules to follow before using your air motor :



### Adequate hearing protection

Air motors can be noisy when running and require adequate hearing protection (motor silencer, earplugs or earmuffs).



### Adequate masks and goggles

Excessive lubrication can cause oil to be splashed into the atmosphere around the motor. Operators must wear suitable protective masks and goggles.



### Use a SAT BOX !

In order to protect people and equipment, modec recommends the use of a SAT BOX which, in addition to filtering, regulating and lubricating the air supply, has several important safety functions:

- An **emergency stop button that instantly stops the motor** as it cuts the upstream supply circuit and purges the downstream air network. Thus, there is no risk of residual energy causing the motor to start unexpectedly.
- A **safety key lock on the emergency stop button** so that the operator cannot restart without prior agreement following such a stop.
- An **automatic shutdown system** when the circuit pressure drops below 2 bars to prevent an unexpected restart.

Pictograms and precise instructions can be found in the user manual supplied with the motor. Compliance with these instructions is mandatory for all use of our air motors.

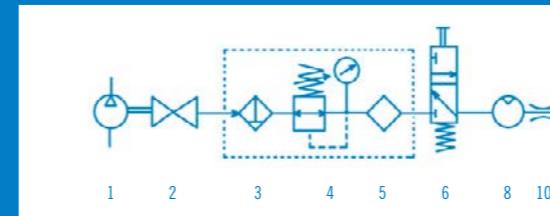
## MOTOR COMMISSIONING

### PRELIMINARY CHECKS

- ✓ The air pressure must not exceed the motor's maximum operating pressure (6.2 bar).
- ✓ The air flow rate must be sufficient for the motor.
- ✓ The temperature should be between -30 and +150°C.
- ✓ A pneumatic safety switch must be installed to isolate the motor from the air supply. We recommend to use a SAT Box for that.
- ✓ Each hose connected to the motor must be equipped with an anti-whiplash safety cable to prevent any whiplash that could be caused by a broken or loose hose.
- ✓ Hoses should not be damaged or worn. Check them carefully before use: a broken hose can cause serious damage.
- ✓ The air supply hose must be oil and abrasion resistant and suitable for the required air pressure.
- ✓ The length of the tubes should not be excessive (pressure drop). We recommend to limit the hose length to 3m or to increase their diameter.
- ✓ For reversible motors, the port opposite to the air inlet must be connected to exhaust.
- ✓ Compressed air should have a dew point temperature of 10°C maximum.
- ✓ A filtration, regulation and lubrication unit (FRL) must be installed upstream from the motor. Filtration must be 40 microns maximum and lubrication must be compatible with the motor requirement. FRL units ensure that the air is clean, properly pressurized and lubricated.

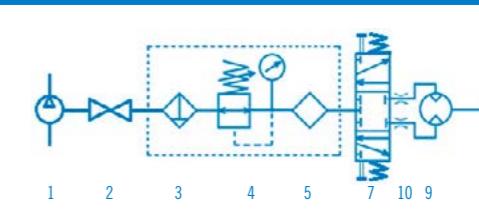
## AIR MOTORS CONNECTION

Non reversible motor



1. Compressor
2. Isolation valve
3. Filter 40µm
4. Pressure regulator
5. Lubrication system
6. 3/2 way valve
7. 5/3 way valve
8. Non reversible motor
9. Reversible motor
10. Exhaust regulator

Reversible motor



### SUPPLY & EXHAUST CONNECTION

When air supply is connected to the right (RT) port:  
The output shaft will rotate clockwise when looking from the back of the motor.

Exhaust goes through the exhaust port (EXH) and through the left (LT) inlet port.

Both orifices should be free.



When air supply is connected to the left (LT) port:  
The output shaft will rotate counter-clockwise when looking from the back of the motor.

Exhaust goes through the exhaust port (EXH) and through the right (RT) inlet port.

Both orifices should be free.



## AIR MOTORS LUBRICATION

Insufficient lubrication will result in reduced motor performance and vane service life. To maximize the durability of your motors and guarantee their full power in operation, they should be lubricated with 50 mm<sup>3</sup> of oil per m<sup>3</sup> of air (1 drop = 15 mm<sup>3</sup>), that is to say 3.4 drops per Nm<sup>3</sup>.

Example : One "07" series air motor consumes 700 NL/min at 6.2 bars. The required lubrication for optimal performances and maximum vanes service life is:  $700 / 1000 \times 3.4 = 2.4$  drops per minutes.

The pneumatic oil used must have a viscosity of 22 to 46 cSt depending on the ambient temperature (for example, at 40 °C, the viscosity of the oil should be between 22 and 30 cSt).

### LUBRICATION FREE AIR MOTORS

For specific applications where oil is forbidden (clean rooms), we propose "lubrication free" air motors as an option for all our air motors. These motors have specific parts (stators, bearings...) designed for this type of use. Lubrication free air motors' speed is usually 5 to 15% less than for the same but lubricated air motor. In addition, the following precautions must be taken :

- ✓ Maintenance should be more frequent (see table below)
- ✓ In case a lubrication free air motor is used with oil, it will always require lubrication afterwards except if it is dismantled and completely cleaned up before re-use.
- ✓ Lubrication free air motors are particularly sensitive to dust and impurities in air supply. Make sure you use a clean and dry air.
- ✓ These motors should not be used unloaded and at full speed.

	Standard motors	« Lube free » motors
Lubrication 3.4 drops / Nm <sup>3</sup>	Speed : 100% Maintenance every 1000 to 3000 h	Speed : 100% Maintenance every 1000 to 3000 h
No Lubrication	Speed < 50% Maintenance every 30 to 50 h	Speed : 85% Maintenance every 500 to 1000 h

## 6 | AIR MOTORS STORAGE AND MAINTENANCE

Modec air motors must be stored in a dry environment to avoid any corrosion of mechanical parts. Before storing a motor, introduce 10 drops of modec oil into the supply port and run the motor for a few seconds. Before restarting the motor after a long storage period or before using it for the first time, introduce 10 drops of modec oil into the inlet port.

Maintenance must be carried out by skilled technicians trained by modec, in compliance with the instructions given in the user's manual. Make sure that your working environment is clean and appropriate (particularly check that no external parts could come inside the motor). Modec can supply maintenance kits for the regular maintenance of your motors.

All modec air motors parts are recyclable, easily identifiable and do not represent any danger to humans or environment. It is therefore easy to dismantle, sort and recycle a motor at the end of its life.

## 7 | CERTIFICATION



### CE CERTIFICATION

All our products are compliant with the CE Standards (Directive 2006/42/CE of the European Parliament and of the Council of 17 May 2006). However, they should not be used before the final equipment in which they are supposed to be used is certified compliant with the Directive 2006/42/CE of the European Parliament and of the Council of 17 May 2006 or any other applicable rule.



### ATEX

All modec air motors can be ATEX certified on request, with the following characteristics :

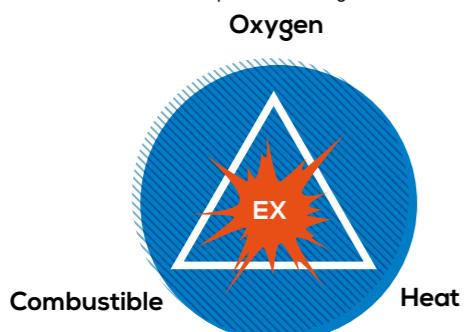
Ex II 2 G D  
Ex h IIC T6...T4 (\*) Gb  
Ex h IIIC T80°C...T135 (\*) Db

(\*) See table

Series	Ambient temperature	Temperature Class Gas	Dust temperature
«05», «07», «08», «10»	-20°C < Tamb < +40°C	T6	T80°C
	-20°C < Tamb < +55°C	T6	T80°C
	-20°C < Tamb < +80°C	T5	T95°C
«20», «25», «30»	-20°C < Tamb < +40°C	T6	T80°C
	-20°C < Tamb < +55°C	T5	T95°C
	-20°C < Tamb < +80°C	T4	T135°C

Their explosion-proof nature has been certified by LCIE Bureau Veritas. An EXplosive ATmosphere (ATEX) is a mixture of air and flammable substances that can explode if a heat source is applied.

This is called the «explosion triangle»:



Modec air motors make it possible to eliminate the source of heat and therefore break this triangle, thus ensuring people and material safety.

### INGRESS PROTECTION INDEX (IP)

With a collected exhaust, our motors can be considered equivalent to IP52.



## 8 | TO GO FURTHER IN EFFICIENCY

Several methods exist to maximize the efficiency of pneumatic solutions and some industries achieve spectacular results by recycling compressed air. In this way, most of the energy used to produce compressed air can be recovered.



Air compression generates heat. Some industries use this warm air for heating purposes. They recover an important part of the energy used by the compressor.

When the compressed air expands inside the air motor, it cools down. This cooling is used to prevent the gears inside the gearbox from heating up. This ensures optimum operation and a long service life for the motor.

You can also use this cold air for other purposes in your process.



Some processes require large quantity of air at very high pressure. Even after use, the pressure of the exhaust air remains above atmospheric pressure. It is easy and advisable to use this compressed air with air motors to produce electricity for example.

More generally, you can recover and store any residual energy, whether mechanical or otherwise, in the form of compressed air. Compressed air is a safe, easy and efficient way to store energy everywhere.

*You are now ready to use your air motor in a safe and efficient way.*





## PART 2

# PRODUCTS DATA SHEETS

Product data sheets provide all technical and performance information. We sorted them from the smallest to the highest power range. For each range, you will find first straight motors without and with handle, then right angle drive motors without or with handle.

All information included in these data sheets comes from tests performed in our labs. These tests were carried out in very precise conditions and environment, with air pressure, flow, quality and lubrication consistent with our recommendations, and without any option or accessory.

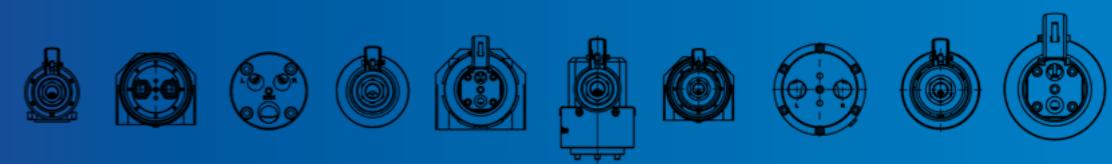
However, given the nature of pneumatics and air motors, a +/-5% accuracy must be considered.

It is also important to keep in mind that an air motor reaches its full performances after approx. 15 minutes loaded running in period only.

When using some options (collected exhaust, lubrication free, kit start, speed control...) performances are slightly reduced. The "left/Right trigger" option will give to the motor the same performances than for its "N" version (with handle). For example, a MTS10RV with the "Left/Right trigger" option will deliver the same performances than a NTS10RV.

Similarly, the use of accessories such as silencers or air flow limiters may result in performance reduction. It is important to choose the right accessory for a given motor. You will find on each air motor range introduction page a table indicating the available accessories as well as connection and lubrication instructions (air flow, fittings and hoses dimension, oil quantity). For additional information, refer to information provided in the first part of the present catalogue.

Each motor refers to a "Group" of flanges and shafts. Once you have selected the right motor for your application, report to the indicated pages and choose the appropriate flange and shaft.



# Contents

## 1

### Introduction

Introduction to the Products data sheets	20
Reference description	24

## 2

### Products data sheets

<b>« 05 » serie (300 W)</b>	<b>26</b>
Straight motors (MT)	
Easy duty .....	28
Standard duty .....	30
Heavy duty .....	32
Right angle motors (MR)	
Heavy duty .....	34
Super Heavy duty .....	36
<b>« 07 » serie (480 W)</b>	<b>38</b>
Straight motors (MT)	
Easy duty .....	40
Standard duty .....	42
Heavy duty .....	44
Right angle motors (MR)	
Heavy duty .....	46
Super heavy duty .....	48
<b>« 08 » serie (700 W)</b>	<b>50</b>
Straight motors (MT/NT)	
Easy duty .....	52
Standard duty .....	54
Heavy duty / Super heavy duty	58
Right angle motors (MR/NR)	
Standard duty .....	62
Heavy duty / Super heavy duty	66
Tapping machine TRS 08	70

## 3

### Flanges & Shafts

<b>« 10 » serie (1300 W)</b>	<b>72</b>
Straight motors (MT/NT)	
Easy duty .....	74
Standard duty .....	76
Heavy duty .....	80
Super Heavy duty.....	84
<b>« 20 » serie (1900 W)</b>	<b>100</b>
Straight motors (MT/NT)	
Easy duty .....	102
Standard duty .....	104
Heavy duty .....	108
<b>« 25 » serie (2700 W)</b>	<b>124</b>
Straight motors (MT/NT)	
Easy duty .....	126
Standard duty .....	128
Super heavy duty .....	132
<b>« 30 » serie (3200 W)</b>	<b>144</b>
Straight motors (MT/NT)	
Easy duty .....	146
Standard duty .....	148
Right angle motors (MR/NR)	
Standard duty .....	152
FRL units (Filtration, pressure Regulation, Lubrication)	
Safety Air Treatment Boxes (SAT Box)	
Pneumatic oil Modec Co-16	
Motor control handles	
Filters & silencers	
Air flow (speed) controllers	
Maintenance kits	
<b>Group I</b> (MTE05 – MTS05)	156
<b>Group II</b> (MTE07 – MTS07)	157
<b>Group III</b> (XTE08 – XTE10 – XTE20 – XTE25)	159
<b>Group IV</b> (XTS08 – XTH08 – XTS10 XTH10 – XTS20 – XTS25)	160
<b>Group V</b> (XTE30)	166
<b>Group VI</b> (XTZ08 – XTZ10 – XTZ20 XTZ25 – XTS30)	167
<b>Group VII</b> (XRH05 – XRH07 – XRS08 XRS10 – XRS20 – XRS25)	169
<b>Group VIII</b> (XRZ05 – XRZ07 – XRH08 XRH10 – XRH20 – XRH25)	172
<b>Group IX</b> (XRZ08 – XRZ10 – XRZ20 XRZ25 – XRS30)	174

## 4

### Options & Accessories

<b>Options</b>	
Exhaust collectors	176
ATEX Certification	176
Left / Right trigger	177
Lubrication free	177
Kit start	177
Integrated speed controller	177
Stainless steel	177
<b>Accessories</b>	
FRL units (Filtration, pressure Regulation, Lubrication)	177
Safety Air Treatment Box (SAT Box)	178
Pneumatic oil Modec Co-16	178
Motor control handles	179
Filters & silencers	179
Air flow (speed) controllers	181
Maintenance kits	181
<b>Special products &amp; tools</b>	
Nut runners	182
Tapping machines	182
Other special motors	182

# modec MOTORS REFERENCES

Proven air motors offer for **over 30 years**



**POWER :**  
**300 to 3200 W**

**TORQUE :**  
**0 to 1000 Nm**

**More than 12000 references**  
to match your need whatever your application

**Super short lead times**

In addition to our standard references, we can design and manufacture special motors on request.

## TYPE OF MOTOR

MT	Straight motor
MR	Right angled motor
NT	Straight motor with handle
NR	Right angled motor with handle

**THE MOTOR COMMERCIAL REFERENCE GIVES YOU AN INSIGHT OF ITS MAIN CHARACTERISTICS**

## PRODUCT FAMILY

E	Easy Duty
S	Standard Duty
H	Heavy Duty
Z	Super Heavy Duty

## REDUCTION RATIO

(3 digits)

M | T | E | 0 | 5 | X | X | X | X | X | X | X | X | X | - | X | X

## MAX POWER (6 BARS)

« 05 » serie	300 W
« 07 » serie	480 W
« 08 » serie	700 W
« 10 » serie	1300 W
« 20 » serie	1900 W
« 25 » serie	2700 W
« 30 » serie	3200 W

## ROTATION\*

RT	Right (clockwise)
LT	Left (counterclockwise)
RV	Reversible

\*Rotation direction is defined when looking from the back of the motor

## FLANGE

(1 to 2 digits)

## SHAFT

(1 to 3 digits)

# 05 SERIE



"05" series air motors are **the lightest and most compact**.

With a 300W power in a 113 x 36,5 mm cylinder weighting half a kilogram only, **these motors fit easily in a machine**.

Like any of our motors, power and torque are easily controllable by simply adjusting air supply pressure, which allows to use them "at stall" without any additional precaution.

This makes them an ideal tool for cap screwing on bottling lines for example.

+ ACCESSORIES FOR THIS MOTOR		Reference	Information
Filtration, pressure Regulation and Lubrication unit (FRL)		AC106	Page 177
Safety Air Treatment Box (SAT Box)		AC118	Page 178
With Pedal remote control		AC119	Page 178
With handle remote control		AC120	Page 178
With remote emergency kill switch		AC125	Page 178
With remote E-Stop and pedal remote control		AC121	Page 178
With remote E-Stop and handle remote control		AC122	Page 178
Maintenance kits			
Maintenance kit for "05" series		AC300	Page 181
Maintenance kit for lube free "05" series		AC310	Page 181
Maintenance kit for kit start "05" series		AC320	Page 181
modec Oil Co-16		AC149	Page 178
Filters and silencers			
Mini metallic silencer		AC169	Page 179
Metallic standard exhaust silencer		AC168	Page 179
Plastic standard exhaust silencer		AC166	Page 180
Heavy duty exhaust silencer		AC167	Page 180
Speed control muffler		AC170	Page 181
High flow air muffler		AC158	Page 180
Exhaust silencer filter		AC165	Page 180

## CONNECTION AND LUBRICATION

	Min. fittings Ø		Min. pipe Ø		Lubrification (6,2 bars)
	In	Out	In	Out	
	5 mm / 0,2 in	5 mm / 0,2 in	6 mm / 0,2 in	6 mm / 0,2 in	2 drops / minute

## CONVERSION TABLE

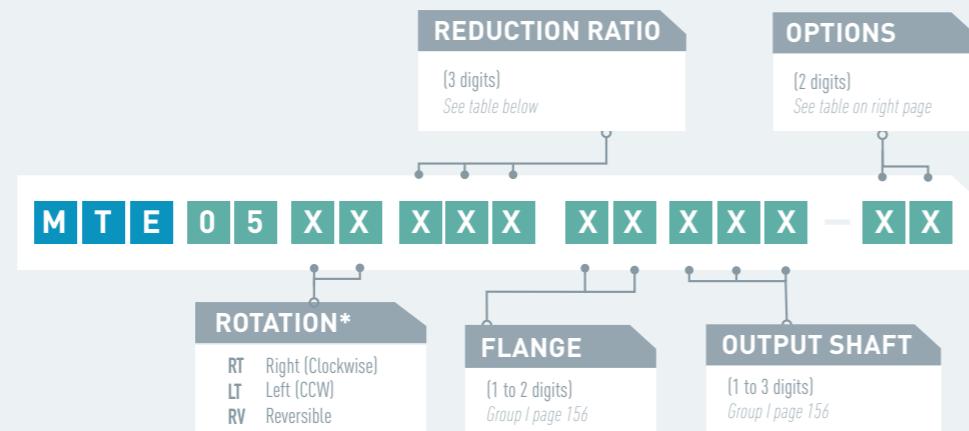
Watt ➡ Horse power	Newton meter ➡ Pound feet	Millimeter ➡ Inch
Watt x 0,001341 = hp	Nm x 0,7376 = lb.ft	mm x 0,03937 = in
Bar ➡ Pound per square Inch	Normo Liter / minute ➡ Standard cubic feet per minute	Kilogram ➡ Pound
Bar x 14,5 = psi	NL / min x 0,03531 = scfm	Kg x 2,205 = lb



# MOTOR MTE 05 POWER 300 W



MTE 05



\* rotation direction is defined when looking from the back of the motor

## PERFORMANCES

MTE 05 XT	Reduction ratio	Air supply pressure	Speed [rpm]		Torque [N.m]			Max Power (W)	Air cons (NL/min)	Dimensions		
			@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)
Air motor reference												
MTE 05 XT 001	1	6,2 bars	10000	20000	0,28	0,56	0,49	300	500	113	36,5	0,5
		5 bars	9400	18800	0,24	0,44	0,39	230	400			
		4 bars	8400	16800	0,20	0,33	0,29	180	300			

MTE 05 RV	Reduction ratio	Air supply pressure	Speed [rpm]		Torque [N.m]			Max Power (W)	Air cons (NL/min)	Dimensions		
			@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)
Air motor reference												
MTE 05 RV 001	1	6,2 bars	11400	22800	0,24	0,44	0,28	300	500	113	36,5	0,5
		5 bars	10400	20800	0,20	0,33	0,21	220	400			
		4 bars	9500	19000	0,17	0,29	0,14	170	300			

For connection and lubrication, see page 27

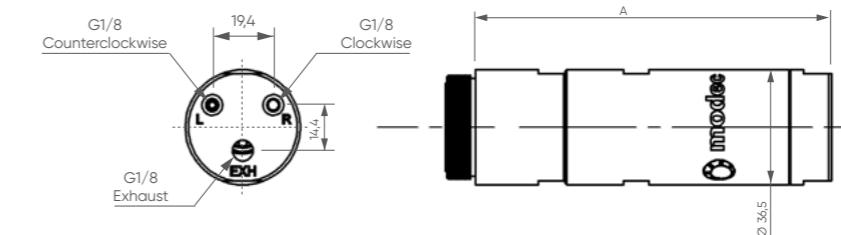
Data indicated in this table have an accuracy of  $\pm 5\%$ .

**OPTIONS AVAILABLE** FOR THIS MOTOR

\* Exhaust is always collected on "05" series air motors

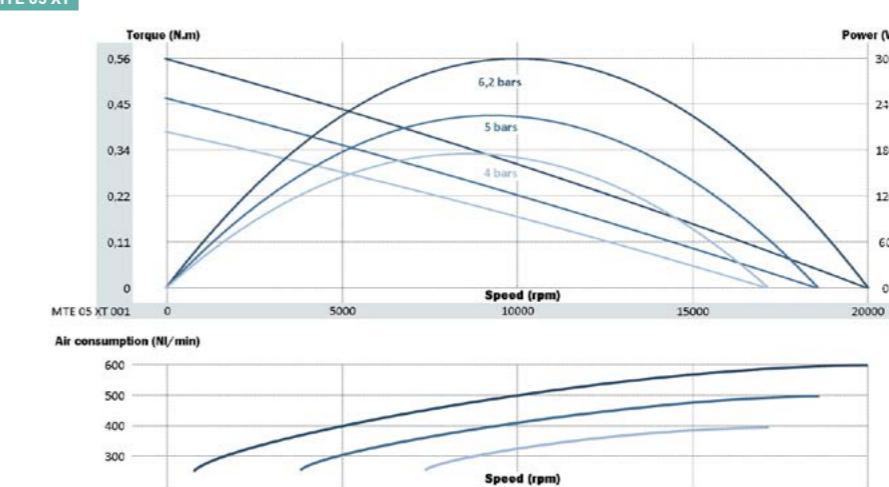
## LAYOUT

MTE 05

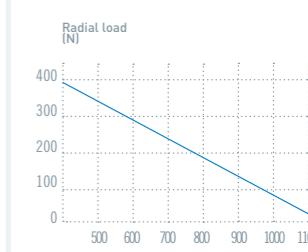


#### POWER SPEED TORQUE AND AIR CONSUMPTION GRAPHS

MTE 05 YT

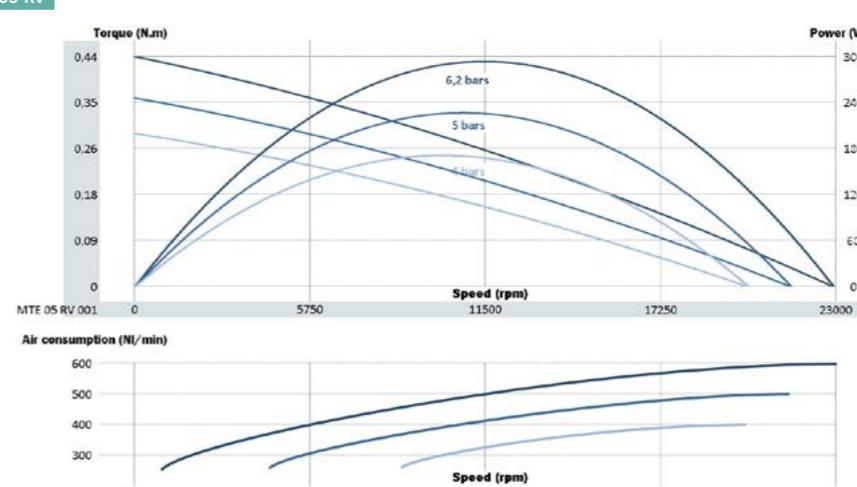


#### MAXIMUM RADIAL & AXIAL LOAD



for 100 millions revolutions

MTE 05 PV





**MOTOR POWER** MTH 05  
270 W



**REDUCTION RATIO**

(3 digits)  
See table below

**OPTIONS**

(2 digits)  
See table on right page

M | T | H   0 | 5   X | X   X | X | X   X | X   X | X | X → X | X

**ROTATION\***

RT Right (Clockwise)  
LT Left (CCW)  
RV Reversible

**FLANGE**

(1 to 2 digits)  
Group IV pages 160 to 162

**OUTPUT SHAFT**

(1 to 3 digits)  
Group IV pages 163 to 165

\* rotation direction is defined when looking from the back of the motor

## PERFORMANCES

MTH 05 XT		Air supply pressure	Speed (rpm)		Torque (N.m)			Max Power (W)	Air cons (NL/min)	Dimensions		
Air motor reference	Reduction ratio		@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)
MTH 05 XT 085	85	6,2 bars	121	245	21	40	35	271	500	206,3	58	2,0
		5 bars	115	232	18	32	28	217	400			
		4 bars	108	219	16	26	23	177	300			
MTH 05 XT 101	101	6,2 bars	101	205	26	48	42	271	500	206,3	58	2,0
		5 bars	96	194	22	39	34	217	400			
		4 bars	90	183	19	31	28	177	300			
MTH 05 XT 129	129	6,2 bars	79	161	33	61	54	271	500	206,3	58	2,0
		5 bars	75	152	28	49	43	217	400			
		4 bars	71	144	24	40	35	177	300			
MTH 05 XT 181	181	6,2 bars	57	115	46	86	76	271	500	206,3	58	2,0
		5 bars	53	108	39	69	61	217	400			
		4 bars	50	102	34	56	50	177	300			
MTH 05 XT 217	217	6,2 bars	47	96	55	103	91	271	500	206,3	58	2,0
		5 bars	45	91	46	83	73	217	400			
		4 bars	42	85	40	67	59	177	300			
MTH 05 XT 277	277	6,2 bars	37	75	70	131	115	271	500	206,3	58	2,0
		5 bars	35	71	59	106	93	217	400			
		4 bars	33	67	51	86	76	177	300			
MTH 05 RV		Air supply pressure	Speed (rpm)		Torque (N.m)			Max Power (W)	Air cons (NL/min)	Dimensions		
Air motor reference	Reduction ratio		@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)
MTH 05 RV 085	85	6,2 bars	115	226	22	38	24	268	500	206,3	58	2,0
		5 bars	108	216	19	30	19	214	400			
		4 bars	105	208	16	25	15	174	300			
MTH 05 RV 101	101	6,2 bars	96	188	27	46	28	268	500	206,3	58	2,0
		5 bars	90	180	23	36	23	214	400			
		4 bars	87	173	19	30	18	174	300			
MTH 05 RV 129	129	6,2 bars	75	148	34	58	36	268	500	206,3	58	2,0
		5 bars	71	141	29	46	29	214	400			
		4 bars	69	136	24	38	23	174	300			
MTH 05 RV 181	181	6,2 bars	53	105	48	82	51	268	500	206,3	58	2,0
		5 bars	50	101	41	65	40	214	400			
		4 bars	49	97	34	53	33	174	300			
MTH 05 RV 217	217	6,2 bars	45	88	57	98	61	268	500	206,3	58	2,0
		5 bars	42	84	49	78	48	214	400			
		4 bars	41	81	41	63	39	174	300			
MTH 05 RV 277	277	6,2 bars	35	69	73	125	77	268	500	206,3	58	2,0
		5 bars	33	66	62	99	62	214	400			
		4 bars	32	64	52	81	50	174	300			

**For connection and lubrication, see page 27**

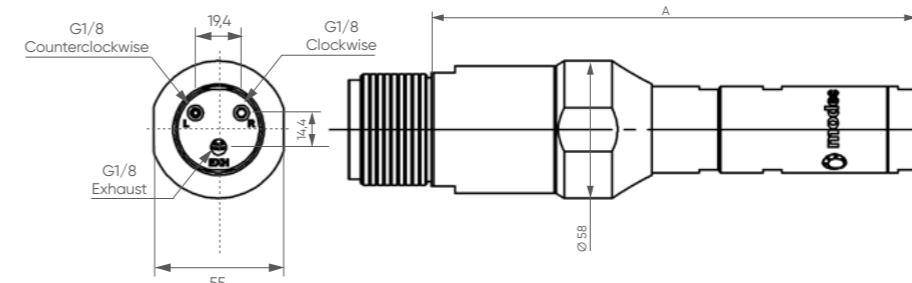
Data indicated in this table have an accuracy of +/- 5%

OPTIONS AVAILABLE FOR THIS MOTOR						
Collected exhaust*	►	►	►	►	►	►
ATEX certification		►			►	►
Lubrication free			►		►	
Kit start				►		►
Code	01	07	09	10	21	22

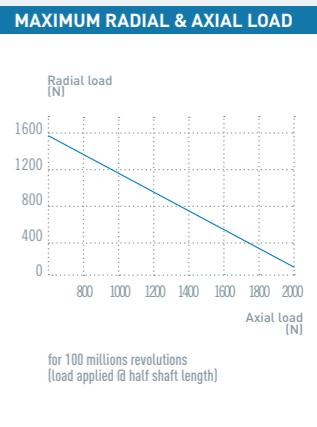
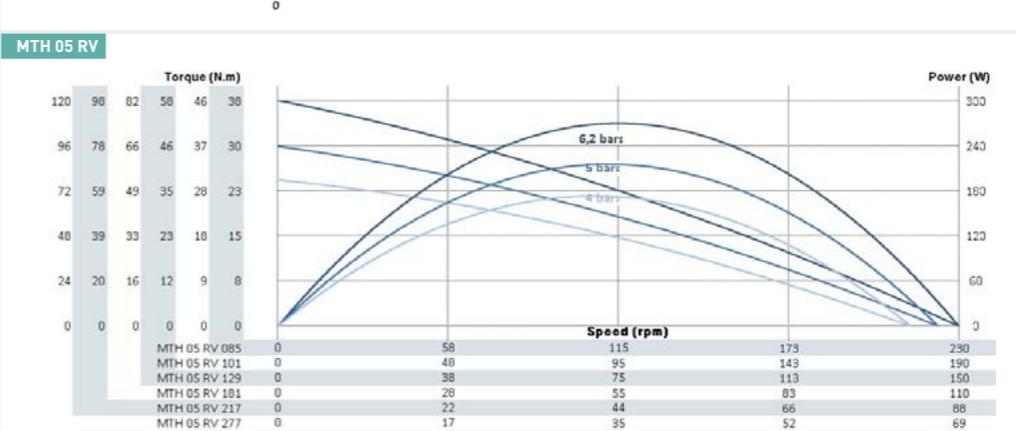
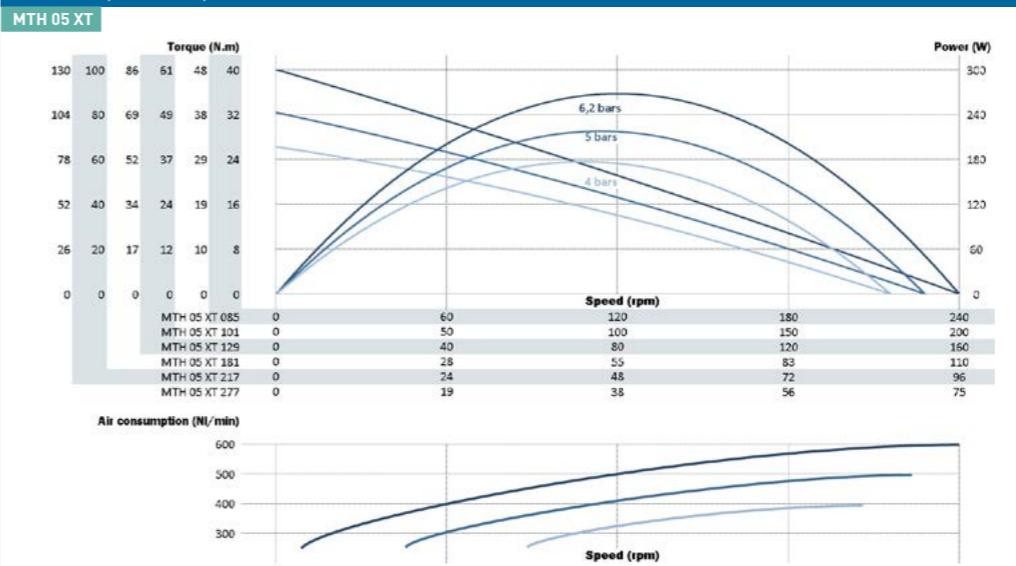
\* Exhaust is always collected on "05" series air motors

## LAYOUT

MTH 05



## POWER, SPEED, TORQUE AND AIR CONSUMPTION GRAPHS



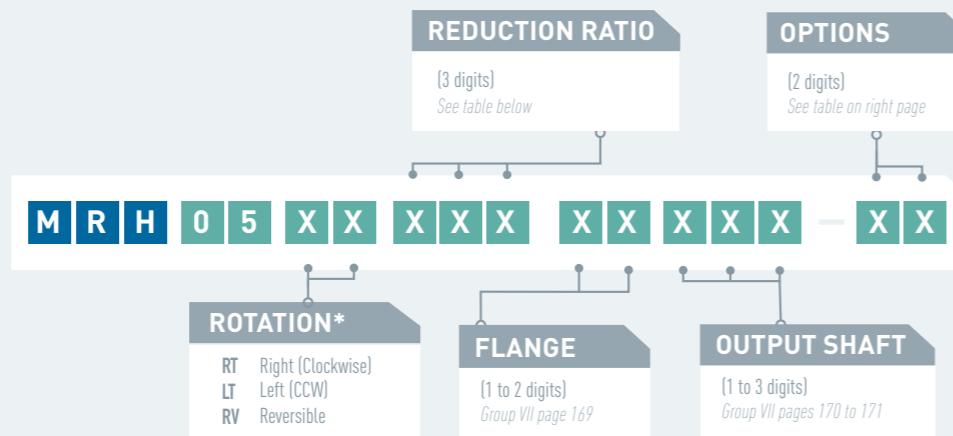
NOTES

# MOTOR MRH 05

POWER 270 W



MRH 05



\* rotation direction is defined when looking from the back of the motor

## PERFORMANCES

MRH 05 XT	Reduction ratio	Air supply pressure	Speed (rpm)		Torque (N.m)			Max Power (W)	Air cons (NI/min)	Dimensions		
			@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)
MRH 05 XT 108	108	6,2 bars	95	193	27	51	45	271	500	271,3	58	2,6
		5 bars	90	183	23	41	36	217	400			
		4 bars	85	172	20	33	29	177	300			
MRH 05 XT 135	135	6,2 bars	76	154	34	64	56	271	500	295,3	58	2,9
		5 bars	72	146	29	52	45	217	400			
		4 bars	68	138	25	42	37	177	300			
MRH 05 XT 172	172	6,2 bars	60	121	43	81	72	271	500	295,3	58	2,9
		5 bars	56	114	37	66	58	217	400			
		4 bars	53	108	32	53	47	177	300			
MRH 05 XT 241	241	6,2 bars	42	86	61	114	100	271	500	295,3	58	2,9
		5 bars	40	82	52	92	81	217	400			
		4 bars	38	77	45	75	66	177	300			
MRH 05 XT 289	289	6,2 bars	35	72	73	137	120	271	500	295,3	58	2,9
		5 bars	34	68	62	111	97	217	400			
		4 bars	32	64	54	90	79	177	300			
MRH 05 RV	Reduction ratio	Air supply pressure	Speed (rpm)		Torque (N.m)			Max Power (W)	Air cons (NI/min)	Dimensions		
Air motor reference	Reduction ratio	Air supply pressure	@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)
MRH 05 RV 108	108	6,2 bars	90	177	28	48	30	268	500	271,3	58	2,6
		5 bars	85	170	24	39	24	214	400			
		4 bars	82	163	20	31	19	174	300			
MRH 05 RV 135	135	6,2 bars	72	142	36	61	38	268	500	295,3	58	2,9
		5 bars	68	136	30	48	30	214	400			
		4 bars	66	130	25	39	24	174	300			
MRH 05 RV 172	172	6,2 bars	56	111	45	77	48	268	500	295,3	58	2,9
		5 bars	53	106	38	62	38	214	400			
		4 bars	52	102	32	50	31	174	300			
MRH 05 RV 241	241	6,2 bars	40	79	64	109	67	268	500	295,3	58	2,9
		5 bars	38	76	54	86	54	214	400			
		4 bars	37	73	45	70	44	174	300			
MRH 05 RV 289	289	6,2 bars	34	66	76	130	81	268	500	295,3	58	2,9
		5 bars	32	63	65	104	64	214	400			
		4 bars	31	61	54	84	52	174	300			

For connection and lubrication, see page 27

Data indicated in this table have an accuracy of +/- 5%

## OPTIONS AVAILABLE FOR THIS MOTOR

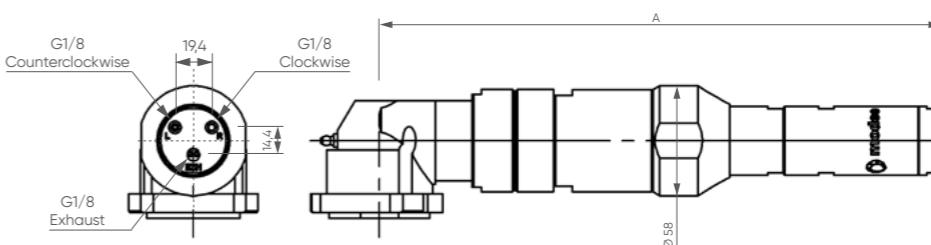
Collected exhaust*	■	■	■	■	■	■
ATEX certification	■	■	■	■	■	■
Lubrication free			■	■	■	■
Kit start				■	■	■
Code	01	07	09	10	21	22

\* Exhaust is always collected on "05" series air motors

+ List of available accessories for this motor page 27

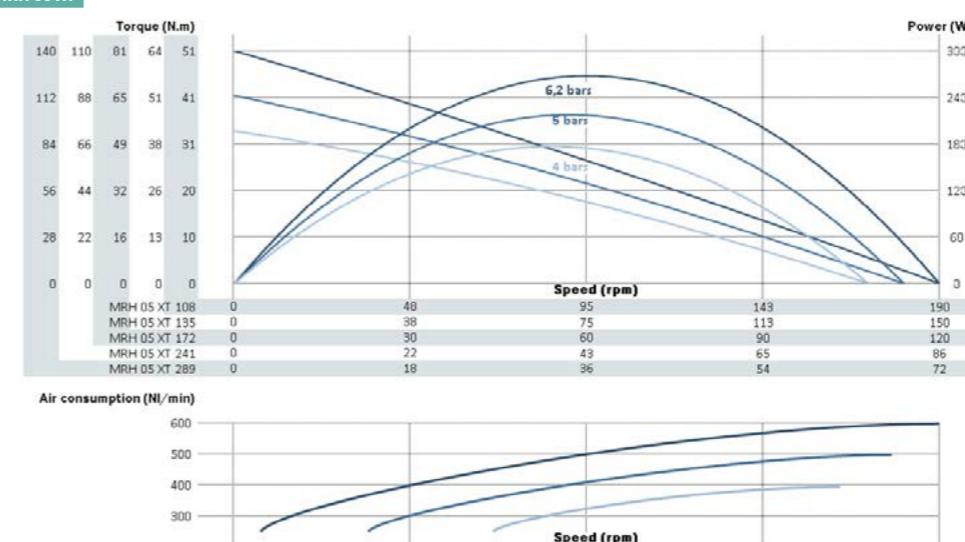
## LAYOUT

MRH 05

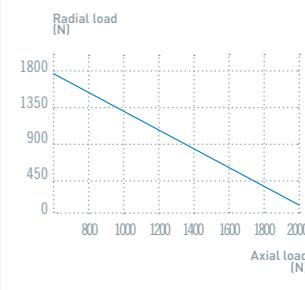


## POWER, SPEED, TORQUE AND AIR CONSUMPTION GRAPHS

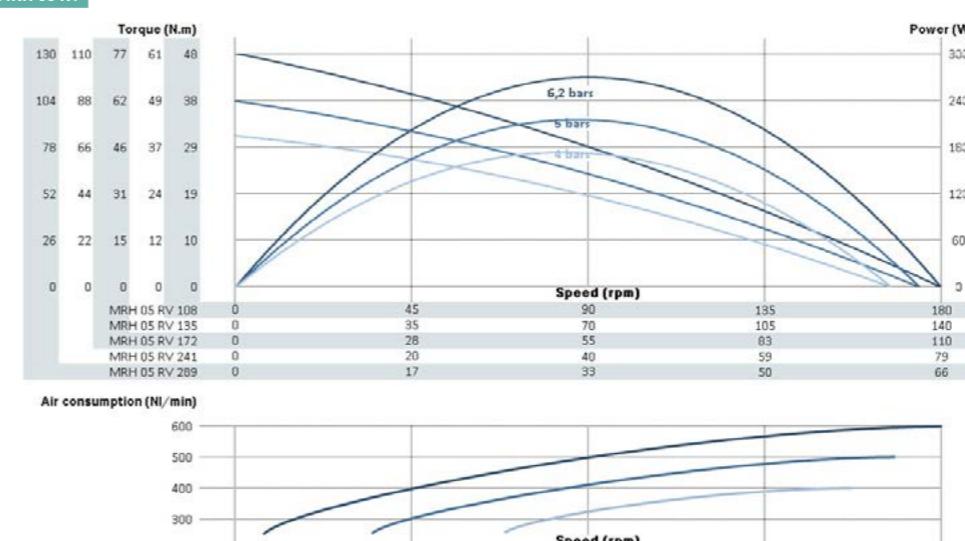
MRH 05 XT



## MAXIMUM RADIAL &amp; AXIAL LOAD



MRH 05 RV



## NOTES

**MOTOR POWER** **MRZ 05**  
**270 W**



**REDUCTION RATIO**  
 [3 digits]  
 See table below

**OPTIONS**  
 [2 digits]  
 See table on right page

**M | R | Z**   **0 | 5**   **X | X**   **X | X | X**   **X | X**   **X | X | X** - **X | X**

**ROTATION\***

- RT Right (Clockwise)
- LT Left (CCW)
- RV Reversible

**FLANGE**  
 [1 to 2 digits]  
*Group VIII page 172*

**OUTPUT SHAFT**  
 [1 to 3 digits]  
*Group VIII page 173*

\* rotation direction is defined when looking from the back of the motor

## PERFORMANCES

PERFORMANCES		MRZ 05 XT	Reduction ratio	Air supply pressure	Speed (rpm)		Torque (N.m)			Max Power (W)	Air cons (Nm/min)	Dimensions		
Air motor reference	@ max Power	Free			@ max Power	Max (stall)	Starting torque	A (mm)	Ø (mm)			Weight (kg)		
MRZ 05 XT 369	369	6,2 bars	28	56	93	174	153	271	500	271,3	58	4,4		
		5 bars	26	53	79	141	123	217	400					
		4 bars	25	50	68	114	101	177	300					
MRZ 05 XT 421	421	6,2 bars	24	49	106	199	175	271	500	295,3	58	4,4		
		5 bars	23	47	90	161	141	217	400					
		4 bars	22	44	78	131	115	177	300					
MRZ 05 XT 505	505	6,2 bars	20	41	127	239	210	271	500	295,3	58	4,4		
		5 bars	19	39	108	193	169	217	400					
		4 bars	18	37	93	157	138	177	300					
MRZ 05 XT 643	643	6,2 bars	16	32	162	304	268	271	500	295,3	58	4,4		
		5 bars	15	31	137	246	215	217	400					
		4 bars	14	29	119	200	176	177	300					
MRZ 05 XT 790	790	6,2 bars	13	26	199	374	329	271	500	271,3	58	4,4		
		5 bars	12	25	169	302	265	217	400					
		4 bars	12	24	146	245	216	177	300					
MRZ 05 RV		Reduction ratio	Air supply pressure	Speed (rpm)		Torque (N.m)			Max Power (W)	Air cons (Nm/min)	Dimensions			
Air motor reference	@ max Power			Free	@ max Power	Max (stall)	Starting torque	A (mm)			Ø (mm)	Weight (kg)		
MRZ 05 RV 369	369	6,2 bars	26	52	97	166	103	268	500	271,3	58	4,4		
		5 bars	25	50	82	132	82	214	400					
		4 bars	24	48	69	107	67	174	300					
MRZ 05 RV 421	421	6,2 bars	23	45	111	190	118	268	500	295,3	58	4,4		
		5 bars	22	43	94	151	94	214	400					
		4 bars	21	42	79	123	76	174	300					
MRZ 05 RV 505	505	6,2 bars	19	38	133	227	141	268	500	295,3	58	4,4		
		5 bars	18	36	113	181	112	214	400					
		4 bars	18	35	95	147	91	174	300					
MRZ 05 RV 643	643	6,2 bars	15	30	169	290	180	268	500	295,3	58	4,4		
		5 bars	14	28	144	230	143	214	400					
		4 bars	14	27	121	187	116	174	300					
MRZ 05 RV 790	790	6,2 bars	12	24	208	355	220	268	500	271,3	58	4,4		
		5 bars	12	23	177	283	175	214	400					
		4 bars	11	22	148	230	143	174	300					

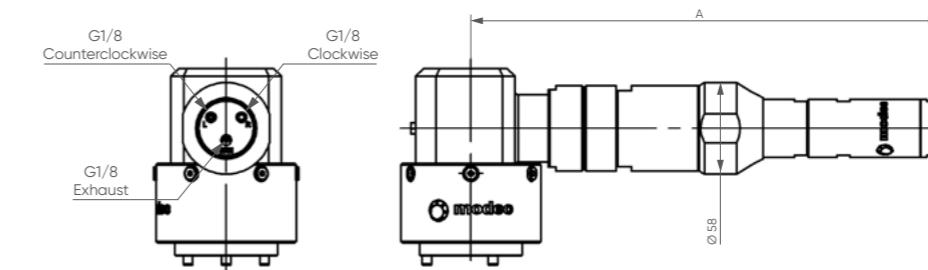
For connection and lubrication, see page 27

Data indicated in this table have an accuracy of +/- 5%

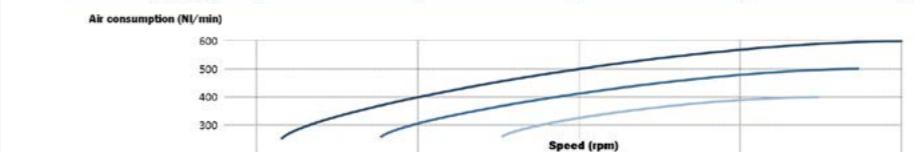
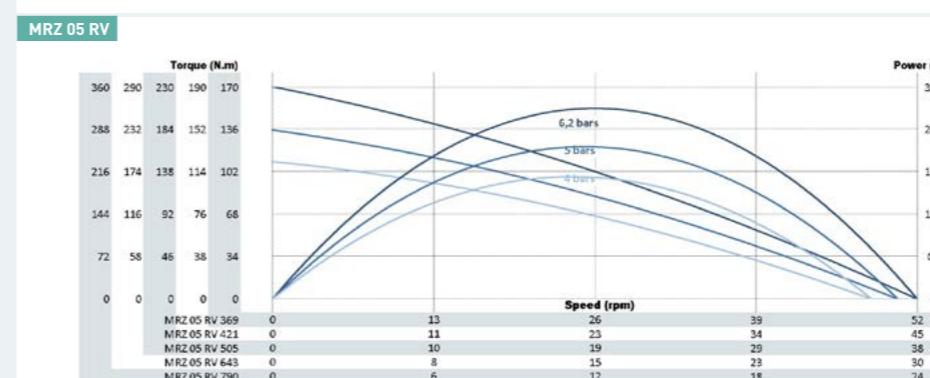
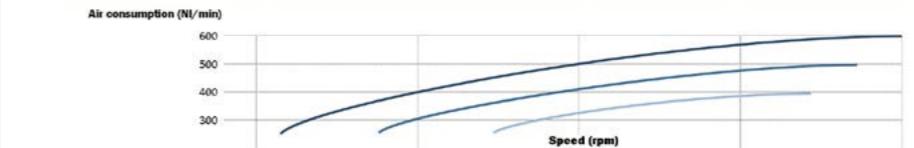
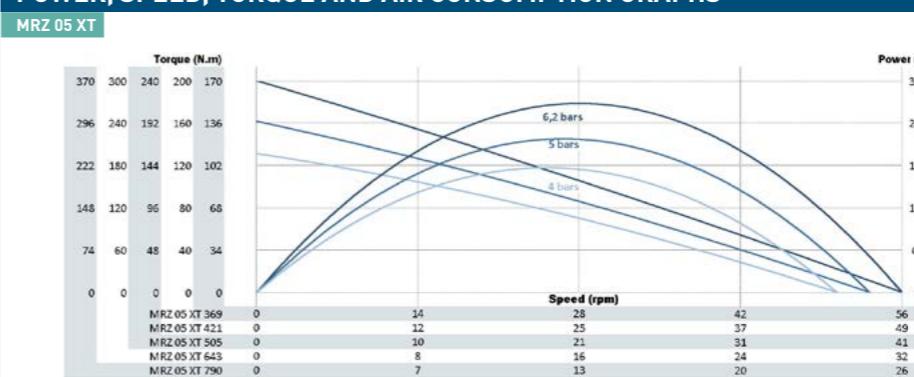
OPTIONS AVAILABLE FOR THIS MOTOR						
Collected exhaust*	►	►	►	►	►	►
ATEX certification		►			►	►
Lubrication free			►		►	
Kit start				►		►
Code	01	07	09	10	21	22

\* Exhaust is always collected on "05" series air motors

LAYOUT  
MRZ 05



#### POWER, SPEED, TORQUE AND AIR CONSUMPTION GRAPHS



**MAXIMUM RADIAL & AXIAL LOAD**

Axial load (N)	Radial load (N)
0	1800
500	1600
1000	1400
1500	1100
2000	0

for 100 millions revolutions  
(load applied @ half shaft length)

NOTES



MAX POWER  
**480 W**  
MAX TORQUE  
**640 Nm**

"07" series air motors are **much appreciated in pharmacy, chemistry and food processing industries**. Sealed and made of stainless steel, they are **waterproof, resistant to corrosive products** and their exhaust is collected so that there is **no risk of pollution**.

Like any of our air motors, "07" series air motors **can be used without lubrication** on demand in order to reduce even more any risk of oil exhaust.

Although they have a minimal size and weight, they **can develop up to 480W**.

<b>ACCESSORIES FOR THIS MOTOR</b>		Reference	Information
Filtration, pressure Regulation and Lubrication unit (FRL)		AC106	Page 177
Safety Air Treatment Box (SAT Box)		AC118	Page 178
With Pedal remote control		AC119	Page 178
With handle remote control		AC120	Page 178
With remote emergency kill switch		AC125	Page 178
With remote E-Stop and pedal remote control		AC121	Page 178
With remote E-Stop and handle remote control		AC122	Page 178
Maintenance kits			
Maintenance kit for "07" series		AC301	Page 181
Maintenance kit for lube free "07" series		AC311	Page 181
Maintenance kit for kit start "07" series		AC321	Page 181
modec Oil Co-16		AC149	Page 178
Filters and silencers			
Metallic standard exhaust silencer		AC168	Page 179
Metallic standard inlet silencer		AC180	Page 179
Plastic standard exhaust silencer		AC166	Page 180
Plastic standard inlet silencer		AC150	Page 180
Heavy duty exhaust silencer		AC167	Page 180
Heavy duty inlet silencer		AC154	Page 180
Speed control muffler		AC171	Page 181
High flow air muffler		AC158	Page 180
Exhaust silencer filter		AC165	Page 180

#### CONNECTION AND LUBRICATION

	Min. fittings Ø		Min. pipe Ø		Lubrification (6,2 bars)
	In	Out	In	Out	
	5 mm / 0,2 In	7 mm / 0,3 In	6 mm / 0,2 In	9 mm / 0,4 In	3 drops / minute

#### CONVERSION TABLE

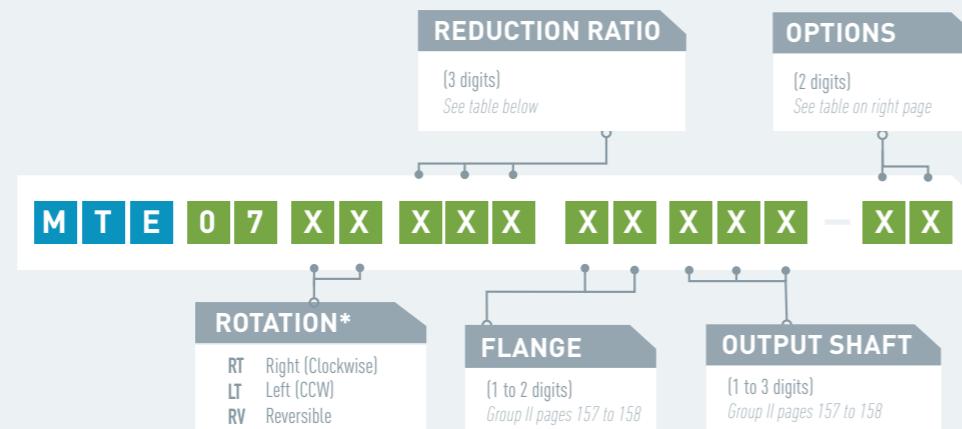
Watt ➡ Horse power	Newton meter ➡ Pound feet	Millimeter ➡ Inch
Watt x 0,001341 = hp	Nm x 0,7376 = lb.ft	mm x 0,03937 = in
Bar ➡ Pound per square Inch	Normo Liter / minute ➡ Standard cubic feet per minute	Kilogram ➡ Pound
Bar x 14,5 = psi	NL / min x 0,03531 = scfm	Kg x 2,205 = lb



# MOTOR MTE 07 POWER 380-480 W



MTE 07



\* rotation direction is defined when looking from the back of the motor

PERFORMANCES	MTE 07 XT	Reduction ratio	Air supply pressure	Speed (rpm)		Torque (N.m)			Max Power (W)	Air cons (NL/min)	Dimensions					
	Air motor reference			@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)			
	MTE 07 XT 001			6,2 bars	8100	16200	0,56	1,0	0,92	480	700	132	45	1,4		
MTE 07 RV 001	1			5 bars	7400	14800	0,48	0,88	0,77	380	600					
				4 bars	6800	13600	0,41	0,70	0,62	290	500					
				6,2 bars	6900	13800	0,53	0,92	0,81	380	700					
MTE 07 RV 001	1			5 bars	6200	12400	0,45	0,75	0,66	290	600					
				4 bars	5800	11600	0,36	0,61	0,54	220	500					

For connection and lubrication, see page 39

*Data indicated in this table have an accuracy of +/- 5%*

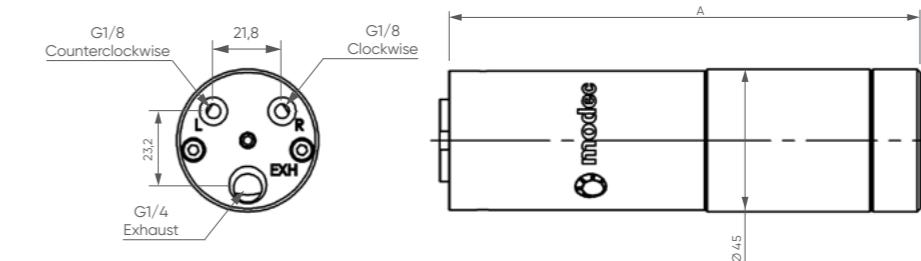
**OPTIONS AVAILABLE FOR THIS MOTOR**

Collected exhaust*	►	►	►	►	►	►
ATEX certification		►			►	►
Lubrication free			►		►	
Kit start				►		►
Stainless steel	►	►	►	►	►	►
Code	11	23	27	28	36	37

 List of available accessories for this motor page 39

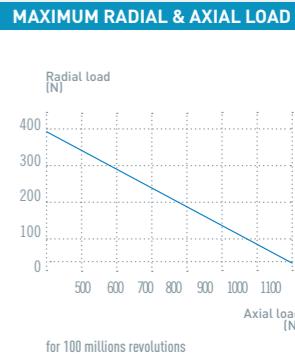
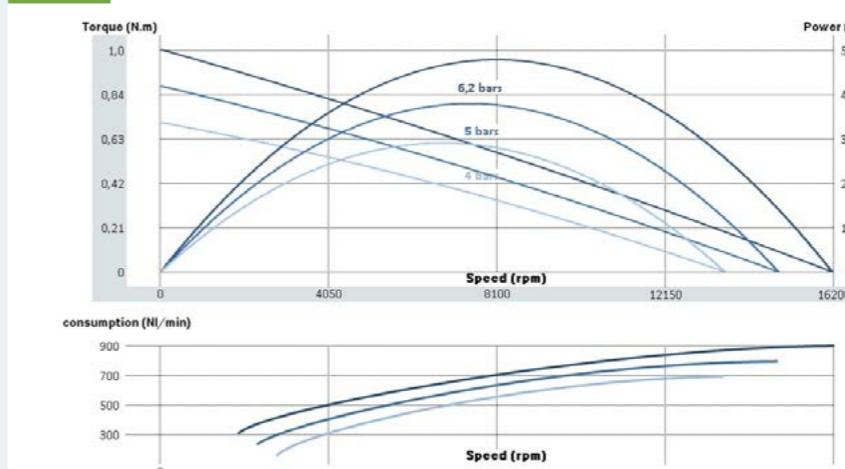
LAYOUT

MTE 07

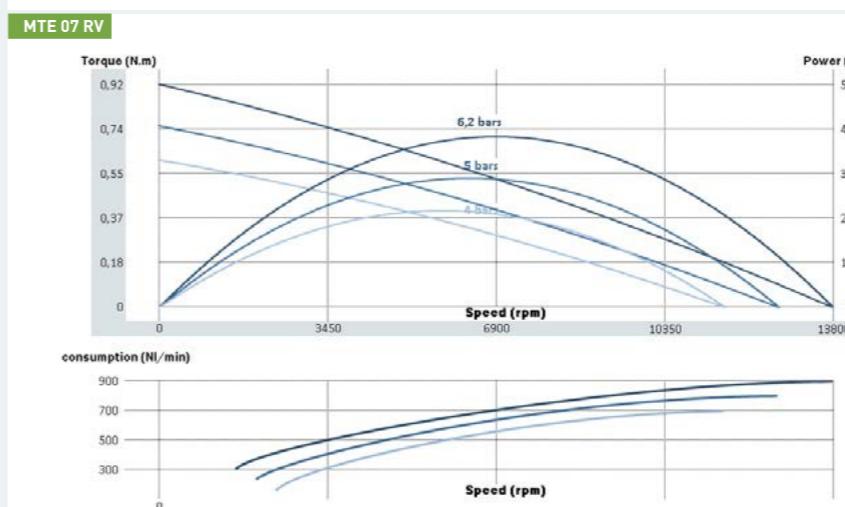


#### POWER, SPEED, TORQUE AND AIR CONSUMPTION GRAPHS

MTF 07 XT



## NOTES



# MOTOR MTS 07

## POWER 380-480 W



## PERFORMANCES

MTS 07 XT	Air motor reference	Reduction ratio	Air supply pressure	Speed [rpm]		Torque [N.m]			Max Power (W)	Air cons (NL/min)	Dimensions		
				@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)
MTS 07 XT 003		3	6,2 bars	2453	4907	1,9	3,5	3,0	477	700	132	45	1,4
			5 bars	2259	4519	1,6	2,9	2,5	378	600			
			4 bars	2075	4150	1,3	2,3	2,0	291	500			
MTS 07 XT 005		5	6,2 bars	1799	3598	2,5	4,7	4,1	477	700	132	45	1,4
			5 bars	1657	3314	2,2	3,9	3,5	378	600			
			4 bars	1522	3044	1,8	3,2	2,8	291	500			
MTS 07 XT 008		8	6,2 bars	1012	2024	4,5	8,4	7,4	477	700	132	45	1,4
			5 bars	932	1864	3,9	7,0	6,2	378	600			
			4 bars	856	1712	3,3	5,6	5,0	291	500			
MTS 07 XT 011		11	6,2 bars	743	1487	6,1	11	10	477	700	149,7	45	1,6
			5 bars	685	1369	5,3	9,5	8,4	378	600			
			4 bars	629	1258	4,4	7,7	6,7	291	500			
MTS 07 XT 015		15	6,2 bars	545	1090	8,4	16	14	477	700	149,7	45	1,6
			5 bars	502	1004	7,2	13	11	378	600			
			4 bars	461	922	6,0	10	9,2	291	500			
MTS 07 XT 020		20	6,2 bars	400	800	11	21	19	477	700	149,7	45	1,6
			5 bars	368	736	9,8	18	16	378	600			
			4 bars	338	676	8,2	14	13	291	500			
MTS 07 XT 026		26	6,2 bars	307	613	15	28	24	477	700	149,7	45	1,6
			5 bars	282	565	13	23	20	378	600			
			4 bars	259	519	11	19	16	291	500			
MTS 07 XT 036		36	6,2 bars	225	450	20	38	33	477	700	149,7	45	1,6
			5 bars	207	414	17	32	28	378	600			
			4 bars	190	380	15	25	22	291	500			
MTS 07 XT 049		49	6,2 bars	165	330	28	51	45	477	700	170,7	45	1,7
			5 bars	152	304	24	43	38	378	600			
			4 bars	140	279	20	34	30	291	500			
MTS 07 XT 064		64	6,2 bars	127	253	36	67	59	477	700	149,7	45	1,6
			5 bars	117	233	31	56	49	378	600			
			4 bars	107	214	26	45	40	291	500			
MTS 07 RV	Air motor reference	Reduction ratio	Air supply pressure	Speed [rpm]		Torque [N.m]			Max Power (W)	Air cons (NL/min)	Dimensions		
				@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)
MTS 07 RV 003		3	6,2 bars	2085	4170	1,8	3,0	2,7	383	700	132	45	1,4
			5 bars	1920	3840	1,5	2,5	2,2	295	600			
			4 bars	1765	3530	1,2	2,0	1,8	219	500			
MTS 07 RV 005		5	6,2 bars	1529	3058	2,4	4,1	3,7	383	700	132	45	1,4
			5 bars	1408	2816	2,0	3,4	3,0	295	600			
			4 bars	1294	2588	1,6	2,7	2,4	219	500			
MTS 07 RV 008		8	6,2 bars	860	1720	4,3	7,4	6,5	383	700	132	45	1,4
			5 bars	792	1584	3,6	6,0	5,3	295	600			
			4 bars	728	1456	2,9	4,9	4,3	219	500			
MTS 07 RV 011		11	6,2 bars	632	1264	5,8	10	8,8	383	700	149,7	45	1,6
			5 bars	582	1164	4,8	8,2	7,2	295	600			
			4 bars	535	1070	3,9	6,6	5,8	219	500			
MTS 07 RV 015		15	6,2 bars	463	927	7,9	14	12	383	700	149,7	45	1,6
			5 bars	427	853	6,6	11	9,8	295	600			
			4 bars	392	784	5,3	9,0	8,0	219	500			
MTS 07 RV 020		20	6,2 bars	340	680	11	19	16	383	700	149,7	45	1,6
			5 bars	313	626	9,0	15	13	295	600			
			4 bars	288	575	7,3	12	11	219	500			
MTS 07 RV 026		26	6,2 bars	261	521	14	24	21					

# MOTOR MTH 07

POWER 380-470 W

MTH 07



## REDUCTION RATIO

[3 digits]  
See table below

M | T | H | 0 | 7 | X | X | X | X | X | X | X | X | X | - | X | X

## ROTATION\*

- RT Right (Clockwise)
- LT Left (CCW)
- RV Reversible

## FLANGE

[1 to 2 digits]  
Group IV pages 160 to 162

## OUTPUT SHAFT

[1 to 3 digits]  
Group IV pages 163 to 165

\* rotation direction is defined when looking from the back of the motor

## OPTIONS

[2 digits]  
See table on right page

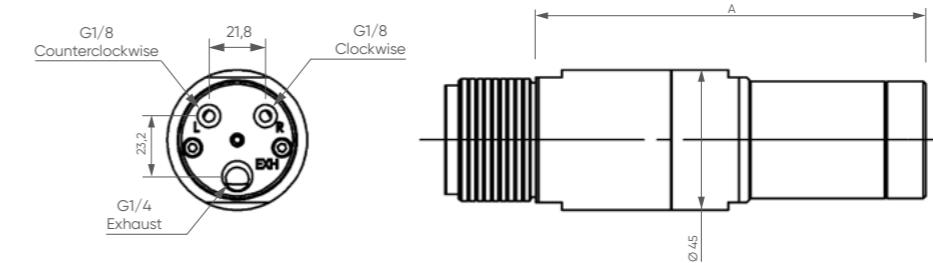
## OPTIONS AVAILABLE FOR THIS MOTOR

Collected exhaust	<input checked="" type="checkbox"/>					
ATEX certification	<input checked="" type="checkbox"/>					
Lubrication free	<input checked="" type="checkbox"/>					
Kit start	<input checked="" type="checkbox"/>					
Code	01	07	09	10	21	22

+ List of available accessories for this motor page 39

## LAYOUT

MTH 07



## PERFORMANCES

MTH 07 XT	Reduction ratio	Air supply pressure	Speed [rpm]		Torque [N.m]			Max Power (W)	Air cons (NL/min)	Dimensions		
			@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)
MTH 07 XT 111	111	6,2 bars	73	147	61	98	87	469	700	174,5	54	2,2
		5 bars	66	133	53	83	73	369	600			
		4 bars	59	119	46	66	58	284	500			
MTH 07 XT 132	132	6,2 bars	61	123	73	118	104	469	700	174,5	54	2,2
		5 bars	55	111	64	99	87	369	600			
		4 bars	49	99	55	79	70	284	500			
MTH 07 XT 159	159	6,2 bars	51	102	87	141	124	469	700	174,5	54	2,2
		5 bars	46	93	76	118	104	369	600			
		4 bars	41	83	66	95	84	284	500			
MTH 07 XT 169	169	6,2 bars	48	96	93	150	132	469	700	174,5	54	2,2
		5 bars	44	87	81	126	111	369	600			
		4 bars	39	78	70	101	89	284	500			

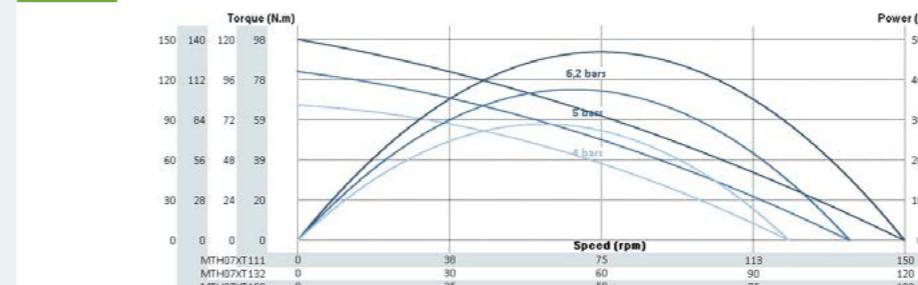
MTH 07 RV	Reduction ratio	Air supply pressure	Speed [rpm]		Torque [N.m]			Max Power (W)	Air cons (NL/min)	Dimensions		
			@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)
MTH 07 RV 111	111	6,2 bars	62	125	58	87	76	379	700	174,5	54	2,2
		5 bars	57	113	49	71	63	289	600			
		4 bars	50	101	41	57	51	216	500			
MTH 07 RV 132	132	6,2 bars	52	104	69	104	91	379	700	174,5	54	2,2
		5 bars	47	95	58	85	75	289	600			
		4 bars	42	84	49	69	61	216	500			
MTH 07 RV 159	159	6,2 bars	44	87	83	124	109	379	700	174,5	54	2,2
		5 bars	40	79	70	102	90	289	600			
		4 bars	35	70	59	83	73	216	500			
MTH 07 RV 169	169	6,2 bars	41	82	88	132	117	379	700	174,5	54	2,2
		5 bars	37	74	74	109	95	289	600			
		4 bars	33	66	63	88	77	216	500			
MTH 07 RV 202	202	6,2 bars	34	68	106	159	140	379	700	174,5	54	2,2
		5 bars	31	62	89	130	114	289	600			
		4 bars	28	55	75	105	93	216	500			

For connection and lubrication, see page 39

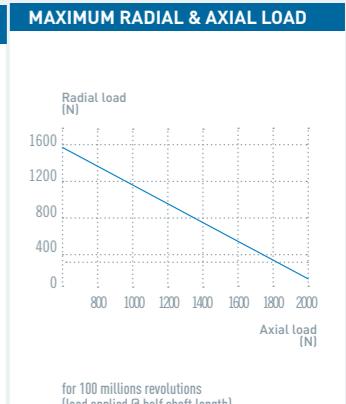
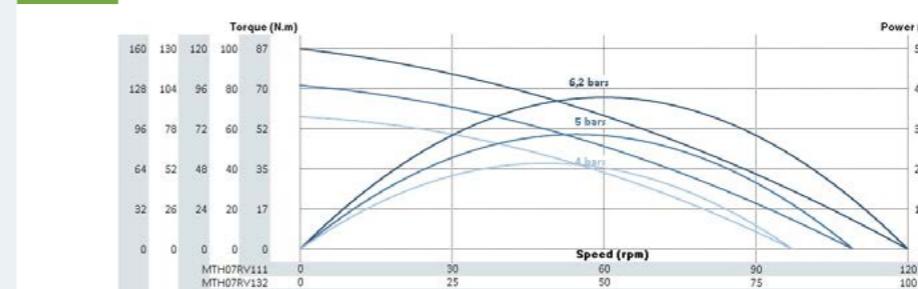
Data indicated in this table have an accuracy of +/- 5%

## POWER, SPEED, TORQUE AND AIR CONSUMPTION GRAPHS

MTH 07 XT



MTH 07 RV



## NOTES

# MOTOR MRH 07

POWER 360-440 W

MRH 07



## REDUCTION RATIO

 [3 digits]  
See table below

**M | R | H | 0 | 7 | X | X | X | X | X | X | X | X | X | - | X | X**

## ROTATION\*

- RT Right (Clockwise)
- 
- LT Left (CCW)
- 
- RV Reversible

## FLANGE

 [1 to 2 digits]  
Group VII page 169

## OPTIONS

 [2 digits]  
See table on right page

## OUTPUT SHAFT

 [1 to 3 digits]  
Group VII pages 170 to 171

\* rotation direction is defined when looking from the back of the motor

## PERFORMANCES

MRH 07 XT	Reduction ratio	Air supply pressure	Speed [rpm]		Torque (N.m)			Max Power (W)	Air cons (NL/min)	Dimensions		
			@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)
MRH 07 XT 47	47	6,2 bars	165	331	25	40	35	441	700	242,5	54	3,1
		5 bars	149	299	22	33	29	338	600			
		4 bars	133	267	18	27	24	258	500			
MRH 07 XT 56	56	6,2 bars	138	276	30	48	42	441	700	242,5	54	3,1
		5 bars	125	249	26	40	35	338	600			
		4 bars	111	223	22	32	28	258	500			
MRH 07 XT 67	67	6,2 bars	116	231	36	57	50	441	700	242,5	54	3,1
		5 bars	104	208	31	48	42	338	600			
		4 bars	93	186	26	39	34	258	500			
MRH 07 XT 80	80	6,2 bars	96	193	44	68	60	441	700	242,5	54	3,1
		5 bars	87	174	37	57	50	338	600			
		4 bars	78	156	32	46	41	258	500			
MRH 07 XT 102	102	6,2 bars	76	151	56	87	77	441	700	242,5	54	3,1
		5 bars	68	137	47	73	64	338	600			
		4 bars	61	122	40	59	52	258	500			
MRH 07 XT 147	147	6,2 bars	53	105	80	125	110	441	700	266,5	54	3,4
		5 bars	48	95	68	105	92	338	600			
		4 bars	42	85	58	85	74	258	500			
MRH 07 XT 176	176	6,2 bars	44	88	96	150	132	441	700	266,5	54	3,4
		5 bars	40	79	81	126	111	338	600			
		4 bars	35	71	69	101	89	258	500			



For connection and lubrication, see page 39

Data indicated in this table have an accuracy of +/- 5%

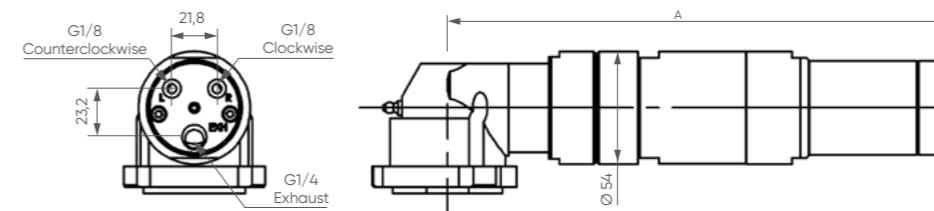
## OPTIONS AVAILABLE FOR THIS MOTOR

Collected exhaust	■	■	■	■	■	■
ATEX certification	■					
Lubrication free		■				
Kit start		■				
Code	01	07	09	10	21	22

+ List of available accessories for this motor page 39

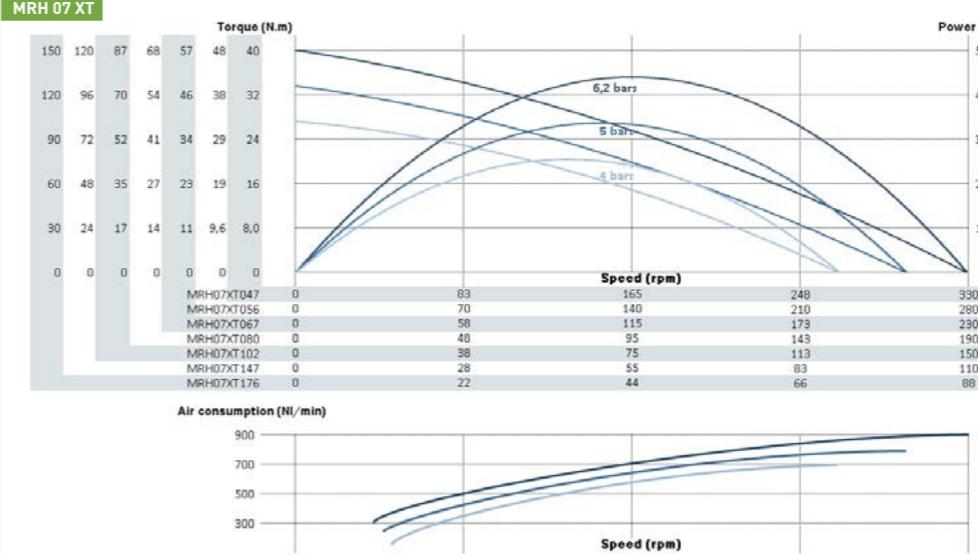
## LAYOUT

MRH 07

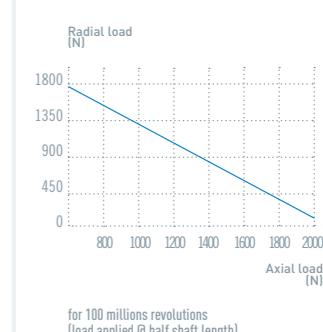


## POWER, SPEED, TORQUE AND AIR CONSUMPTION GRAPHS

MRH 07 XT

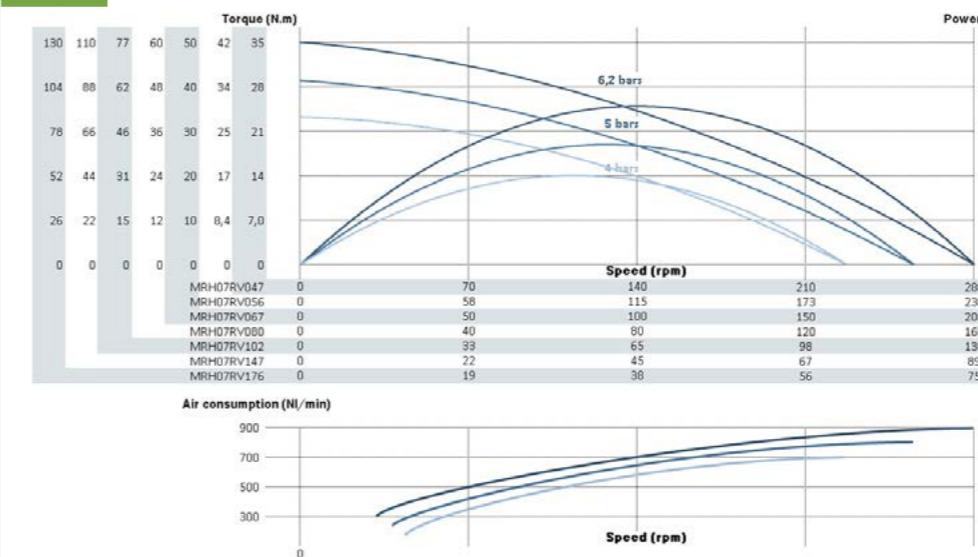


## MAXIMUM RADIAL &amp; AXIAL LOAD



## NOTES

MRH 07 RV



# MOTOR MRZ 07

POWER 360-440 W

MRZ 07



## REDUCTION RATIO

 [3 digits]  
See table below

**MRZ 07 XX XXX XX X - XX**

## ROTATION\*

- RT Right (Clockwise)
- LT Left (CCW)
- RV Reversible

## FLANGE

 [1 to 2 digits]  
Group VIII page 172

## OPTIONS

 [2 digits]  
See table on right page

## OUTPUT SHAFT

 [1 to 3 digits]  
Group VIII page 173

\* rotation direction is defined when looking from the back of the motor

## PERFORMANCES

MRZ 07 XT	Reduction ratio	Air supply pressure	Speed (rpm)		Torque (N.m)			Max Power (W)	Air cons (NL/min)	Dimensions		
			@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)
MRZ 07 XT 225	225	6,2 bars	34	69	122	192	169	441	700	266,5	54	4,9
		5 bars	31	62	104	160	141	338	600			
		4 bars	28	56	89	129	114	258	500			
MRZ 07 XT 269	269	6,2 bars	29	58	146	230	202	441	700	266,5	54	4,9
		5 bars	26	52	124	192	169	338	600			
		4 bars	23	46	106	155	136	258	500			
MRZ 07 XT 322	322	6,2 bars	24	48	175	275	242	441	700	266,5	54	4,9
		5 bars	22	43	149	230	202	338	600			
		4 bars	19	39	127	185	163	258	500			
MRZ 07 XT 411	411	6,2 bars	19	38	223	350	308	441	700	266,5	54	4,9
		5 bars	17	34	190	293	258	338	600			
		4 bars	15	30	162	236	208	258	500			
MRZ 07 XT 524	524	6,2 bars	15	30	285	447	393	441	700	266,5	54	4,9
		5 bars	13	27	242	374	329	338	600			
		4 bars	12	24	207	301	265	258	500			
MRZ 07 XT 589	589	6,2 bars	13	26	320	502	442	441	700	266,5	54	4,9
		5 bars	12	24	272	420	370	338	600			
		4 bars	11	21	232	338	298	258	500			
MRZ 07 XT 750	750	6,2 bars	10	21	408	640	563	441	700	266,5	54	4,9
		5 bars	9,3	19	347	536	471	338	600			
		4 bars	8,3	17	296	431	380	258	500			
MRZ 07 RV	Reduction ratio	Air supply pressure	Speed (rpm)		Torque (N.m)			Max Power (W)	Air cons (NL/min)	Dimensions		
Air motor reference	Reduction ratio	Air supply pressure	@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)
MRZ 07 RV 225	225	6,2 bars	29	59	116	169	148	356	700	266,5	54	4,9
		5 bars	27	53	98	139	122	271	600			
		4 bars	24	47	82	112	98	202	500			
MRZ 07 RV 269	269	6,2 bars	24	49	139	202	178	356	700	266,5	54	4,9
		5 bars	22	44	117	166	146	271	600			
		4 bars	20	39	98	134	118	202	500			
MRZ 07 RV 322	322	6,2 bars	20	41	167	242	213	356	700	266,5	54	4,9
		5 bars	18	37	140	199	175	271	600			
		4 bars	16	33	117	161	141	202	500			
MRZ 07 RV 411	411	6,2 bars	16	32	212	309	272	356	700	266,5	54	4,9
		5 bars	14	29	179	254	224	271	600			
		4 bars	13	26	149	205	180	202	500			
MRZ 07 RV 524	524	6,2 bars	13	25	271	393	346	356	700	266,5	54	4,9
		5 bars	11	23	228	324	285	271	600			
		4 bars	10	20	191	261	230	202	500			
MRZ 07 RV 589	589	6,2 bars	11	22	304	442	389	356	700	266,5	54	4,9
		5 bars	10	20	256	364	320	271	600			
		4 bars	9,0	18	214	293	258	202	500			
MRZ 07 RV 750	750	6,2 bars	8,8	18	388	564	496	356	700	266,5	54	4,9
		5 bars	7,9	16	326	464	409	271	600			
		4 bars	7,1	14	273	374	329	202	500			

For connection and lubrication, see page 39

Data indicated in this table have an accuracy of +/- 5%

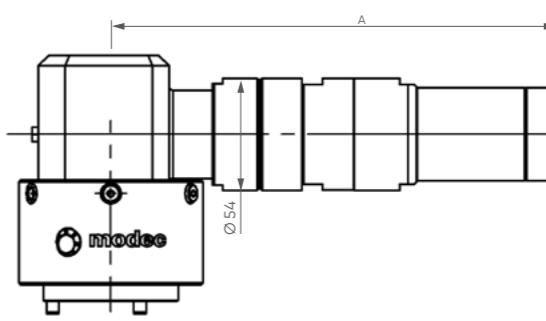
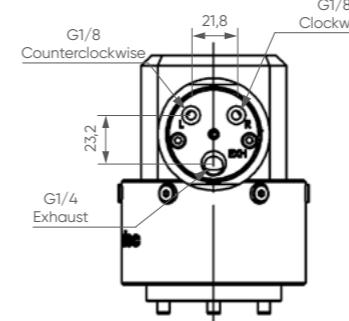
## OPTIONS AVAILABLE FOR THIS MOTOR

Collected exhaust	■	■	■	■	■	■
ATEX certification	■	■	■	■	■	■
Lubrication free	■	■	■	■	■	■
Kit start	■	■	■	■	■	■
Code	01	07	09	10	21	22

+ List of available accessories for this motor page 39

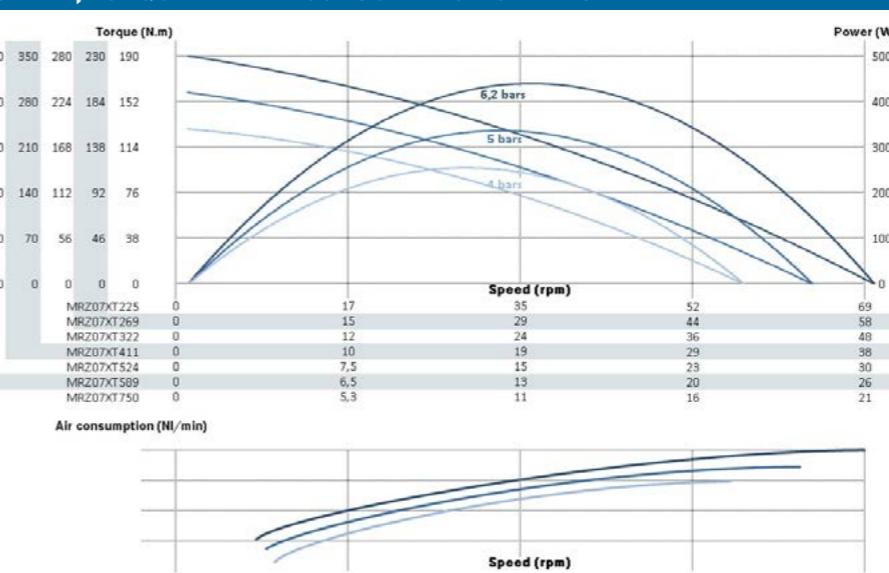
## LAYOUT

MRZ 07

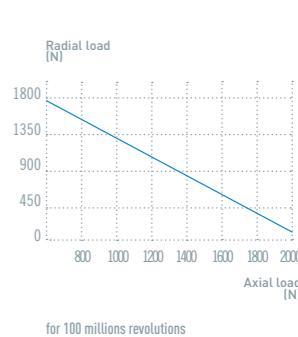


## POWER, SPEED, TORQUE AND AIR CONSUMPTION GRAPHS

MRZ 07 XT

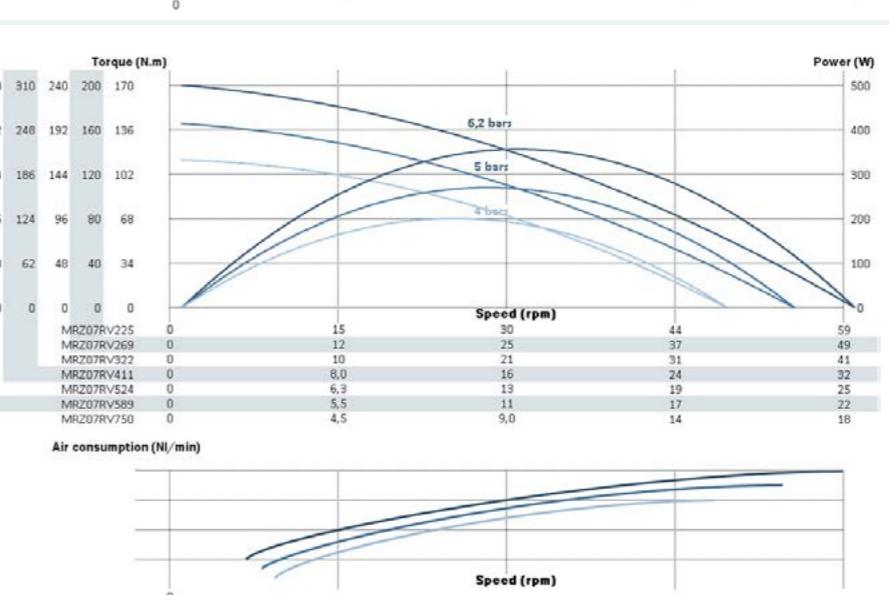


## MAXIMUM RADIAL &amp; AXIAL LOAD



## NOTES

MRZ 07 RV





MAX POWER  
**710 W**  
MAX TORQUE  
**730 Nm**

"08" series air motors **exist in many versions**, straight shaft or right angle drive, with or without integrated control handle, and with many different flanges and output shafts available as standard.

That air motor is also **available with 4 types of integrated gearboxes**, enabling it to adapt to many different **applications**, whether high speed is required (Easy duty), good balance between speed and torque (Standard duty) or high torque and robustness is mandatory (Heavy duty and Super Heavy duty).

With a maximum power of 700 W, it is one of the most **versatile air motors in the range**.

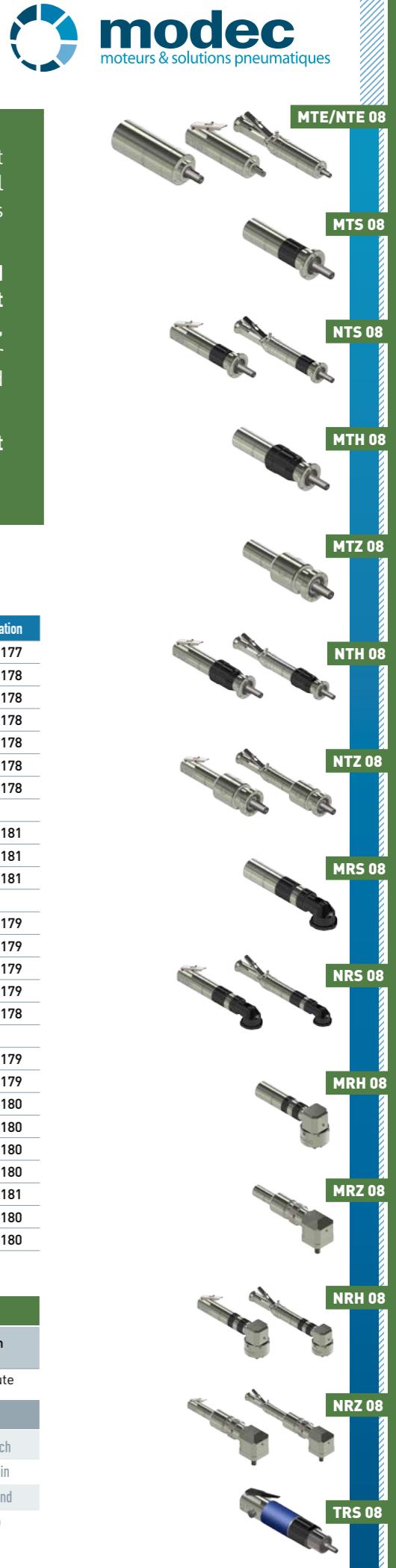
+ ACCESSORIES FOR THIS MOTOR		Reference	Information
Filtration, pressure Regulation and Lubrication unit (FRL)		AC107	Page 177
Safety Air Treatment Box (SAT Box)		AC118	Page 178
With Pedal remote control		AC119	Page 178
With handle remote control		AC120	Page 178
With remote emergency kill switch		AC125	Page 178
With remote E-Stop and pedal remote control		AC121	Page 178
With remote E-Stop and handle remote control		AC122	Page 178
Maintenance kits			
Maintenance kit for "08" series		AC302	Page 181
Maintenance kit for lube free "08" series		AC312	Page 181
Maintenance kit for kit start "08" series		AC322	Page 181
Control handles			
Safety control handle for non reversible motor		AC415	Page 179
Safety control handle for reversible motor		AC416	Page 179
Progressive control handle for non reversible motor		AC417	Page 179
Progressive control handle for reversible motor		AC418	Page 179
modec Oil Co-16		AC149	Page 178
Filters and silencers			
Metallic standard exhaust silencer		AC181	Page 179
Metallic standard inlet silencer		AC180	Page 179
Plastic standard exhaust silencer		AC183	Page 180
Plastic standard inlet silencer		AC150	Page 180
Heavy duty exhaust silencer		AC155	Page 180
Heavy duty inlet silencer		AC154	Page 180
Speed control muffler		AC172	Page 181
High flow air muffler		AC158	Page 180
Exhaust silencer filter		AC165	Page 180

#### CONNECTION AND LUBRICATION

	Min. fittings Ø		Min. pipe Ø		Lubrication (6,2 bars)
	In	Out	In	Out	
	7 mm / 0,3 in	10 mm / 0,4 in	9 mm / 0,4 in	13 mm / 0,5 in	4 drops / minute

#### CONVERSION TABLE

Watt ➤ Horse power	Newton meter ➤ Pound feet	Millimeter ➤ Inch
Watt x 0,001341 = hp	Nm x 0,7376 = lb.ft	mm x 0,03937 = in
Bar ➤ Pound per square Inch	Normo Liter / minute ➤ Standard cubic feet per minute	Kilogram ➤ Pound
Bar x 14,5 = psi	NL / min x 0,03531 = scfm	Kg x 2,205 = lb



# MOTOR MTE/NTE 08

POWER 460-700 W



PERFORMANCES	MTE/NTE 08		Reduction ratio	Air supply pressure	Speed (rpm)		Torque (N.m)			Max Power (W)	Air cons (NI/min)	Dimensions		
	Air motor reference				@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)
MTE 08 XT 001	001	6,2 bars	9200	18400	0,72	1,2	1,1	700	1000	135	54	1,1	A	Ø 54
		5 bars	8300	16600	0,61	1,0	0,88	530	850					
MTE 08 RV 001	001	4 bars	7500	15000	0,50	0,77	0,68	390	650	135	54	1,1	A	Ø 54
		6,2 bars	9200	18300	0,74	1,1	0,82	700	950					
NTE 08 XT 001	001	5 bars	8400	16800	0,62	1,0	0,72	540	750	174,1	54	1,4	A	Ø 54
		4 bars	7600	15300	0,49	0,80	0,61	390	600					
NTE 08 RV 001	001	6,2 bars	8000	16000	0,57	1,1	0,96	480	900	317,1	57	1,9	A	Ø 57
		5 bars	7200	14400	0,48	0,88	0,77	360	750					
NTE 08 XT 001	001	4 bars	6500	13000	0,40	0,68	0,60	270	600	174,1	54	1,4	A	Ø 54
		6,2 bars	7600	15200	0,58	0,92	0,81	460	950					
NTE 08 RV 001	001	5 bars	6700	13400	0,49	0,79	0,70	340	750	317,1	57	1,9	A	Ø 57
		4 bars	6000	12000	0,40	0,67	0,59	250	600					

For connection and lubrication, see page 51

Data indicated in this table have an accuracy of +/- 5%

## OPTIONS AVAILABLE FOR THE MTE 08

Collected exhaust	►	►	►	►	►	►	►	►	►	►	►	►	►					
ATEX certification	►	►	►	►	►	►	►	►	►	►	►	►	►					
Left/Right switch*	►	►	►	►	►	►	►	►	►	►	►	►	►					
Lubrication free	►	►	►	►	►	►	►	►	►	►	►	►	►					
Kit start	►	►	►	►	►	►	►	►	►	►	►	►	►					
Stainless steel	►	►	►	►	►	►	►	►	►	►	►	►	►					
Code	01	03	07	09	10	11	12	16	17	21	22	23	27	28	29	30	36	37

## OPTIONS DISPONIBLES POUR LE NTE 08 XT

Collected exhaust	►	►	►	►	►	►	►	►	►	►	►	►	►
ATEX certification	►	►	►	►	►	►	►	►	►	►	►	►	►
Left/Right switch*	►	►	►	►	►	►	►	►	►	►	►	►	►
Lubrication free	►	►	►	►	►	►	►	►	►	►	►	►	►
Kit start	►	►	►	►	►	►	►	►	►	►	►	►	►
Code	01	07	09	10	21	22	Code	03	12	16	17	29	30

+ List of available accessories for this motor page 51

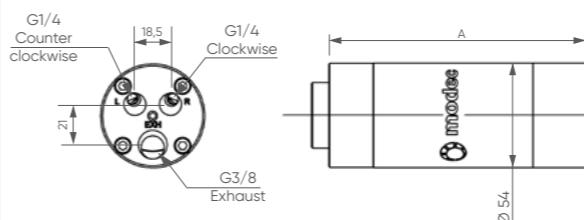
\* Reversible motors only

## OPTIONS DISPONIBLES POUR LE NTE 08 RV

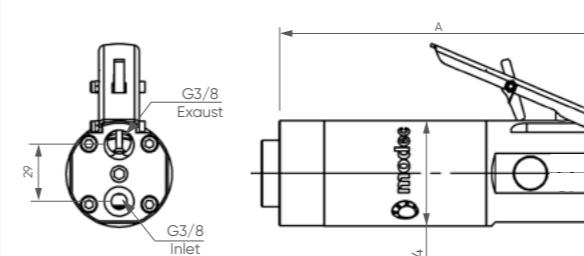
Collected exhaust	►	►	►	►	►	►	►	►	►	►	►	►	►
ATEX certification	►	►	►	►	►	►	►	►	►	►	►	►	►
Left/Right switch*	►	►	►	►	►	►	►	►	►	►	►	►	►
Lubrication free	►	►	►	►	►	►	►	►	►	►	►	►	►
Kit start	►	►	►	►	►	►	►	►	►	►	►	►	►
Code	01	07	09	10	21	22	Code	03	12	16	17	29	30

## LAYOUT

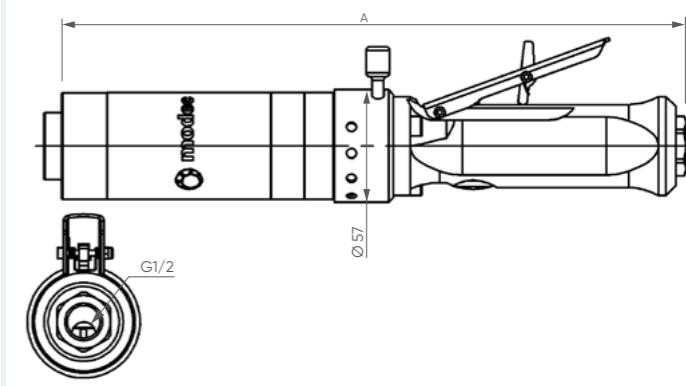
### MTE 08



### NTE 08 XT

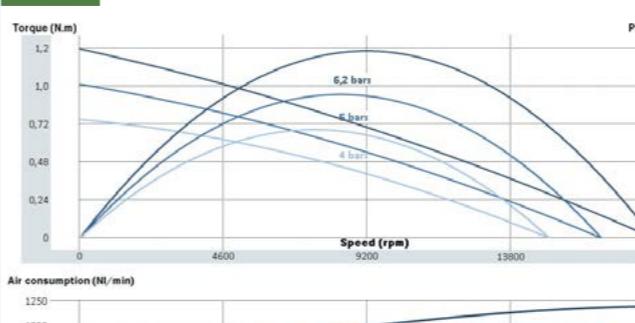


### NTE 08 RV

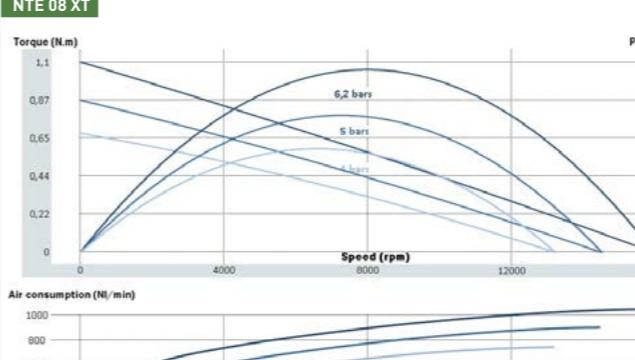


## POWER, SPEED, TORQUE AND AIR CONSUMPTION GRAPHS

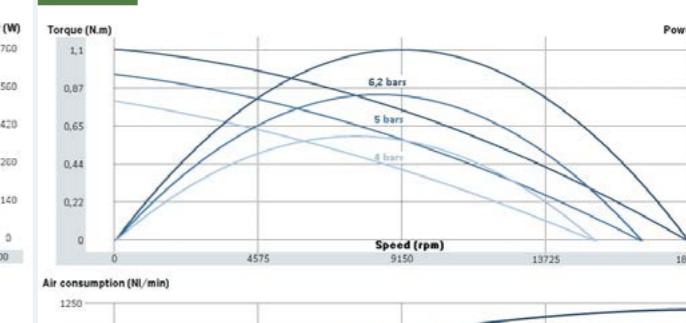
### MTE 08 XT



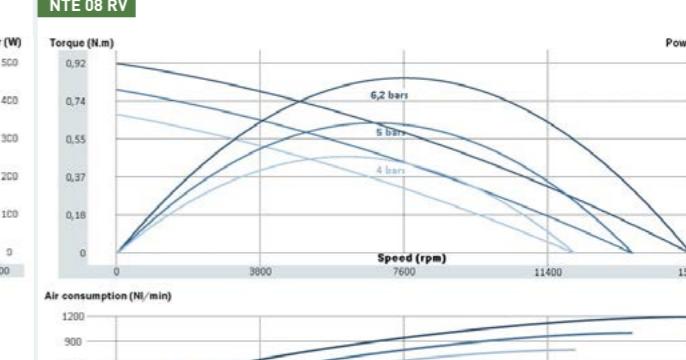
### NTE 08 XT



### MTE 08 RV



### NTE 08 RV



## NOTES

for 100 millions revolutions  
(load applied @ half shaft length)

# MOTOR MTS 08

## POWER 590-710 W



### PERFORMANCES

MTS 08 XT	Reduction ratio	Air supply pressure	Speed (rpm)		Torque (N.m)			Max Power (W)	Air cons (NL/min)	Dimensions		
			@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)
MTS 08 XT 005	5	6,2 bars	1914	3828	3,4	5,9	5,2	689	1000	136,9	54	1,7
		5 bars	1731	3462	2,9	4,8	4,2	531	850			
		4 bars	1560	3120	2,4	3,7	3,3	392	650			
MTS 08 XT 006	6	6,2 bars	1598	3196	4,1	7,1	6,2	689	1000	136,9	54	1,7
		5 bars	1445	2890	3,5	5,8	5,1	531	850			
		4 bars	1302	2604	2,9	4,4	3,9	392	650			
MTS 08 XT 007	7	6,2 bars	1254	2507	5,3	9,0	7,9	689	1000	136,9	54	1,7
		5 bars	1134	2267	4,5	7,3	6,5	531	850			
		4 bars	1022	2043	3,7	5,6	5,0	392	650			
MTS 08 XT 011	11	6,2 bars	875	1750	7,5	13	11	689	1000	136,9	54	1,7
		5 bars	791	1583	6,4	11	9,2	531	850			
		4 bars	713	1426	5,3	8,1	7,1	392	650			
MTS 08 XT 023	23	6,2 bars	416	832	14	25	22	628	1000	136,9	54	2,0
		5 bars	381	762	12	20	18	477	850			
		4 bars	346	691	10	16	14	358	650			
MTS 08 XT 028	28	6,2 bars	347	694	17	30	27	628	1000	136,9	54	2,0
		5 bars	318	636	14	24	21	477	850			
		4 bars	289	577	12	19	16	358	650			
MTS 08 XT 035	35	6,2 bars	272	545	22	39	34	628	1000	136,9	54	2,0
		5 bars	249	499	18	31	27	477	850			
		4 bars	226	453	15	24	21	358	650			
MTS 08 XT 042	42	6,2 bars	227	455	26	47	41	628	1000	136,9	54	2,0
		5 bars	208	416	22	37	33	477	850			
MTS 08 XT 054	54	6,2 bars	178	357	34	59	52	628	1000	136,9	54	2,0
		5 bars	163	327	28	47	42	477	850			
MTS 08 XT 060	60	6,2 bars	159	317	38	67	59	628	1000	136,9	54	2,0
		5 bars	145	291	31	53	47	477	850			
MTS 08 XT 077	77	6,2 bars	125	249	48	85	75	628	1000	136,9	54	2,0
		5 bars	114	228	40	68	60	477	850			
MTS 08 XT 111	111	6,2 bars	72	144	78	148	130	588	1000	187,9	54	2,3
		5 bars	67	133	65	121	106	453	850	187,9	54	2,3
MTS 08 XT 132	132	6,2 bars	60	119	54	96	84	336	650	187,9	54	2,3

For connection and lubrication, see page 51

Data indicated in this table have an accuracy of +/- 5%

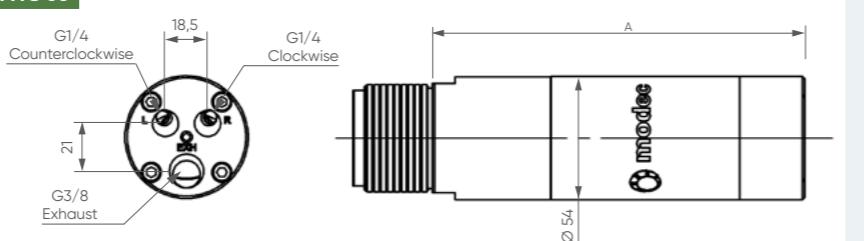
### OPTIONS AVAILABLE FOR THIS MOTOR

Collected exhaust	■	■	■	■	■	■						
ATEX certification	■	■	■	■	■	■						
Left/Right switch*	■	■	■	■	■	■						
Lubrication free	■	■	■	■	■	■						
Kit start	■	■	■	■	■	■						
Code	01	03	07	09	10	12	16	17	21	22	29	30

List of available accessories for this motor page 51

\* Reversible motors only

### LAYOUT

**MTS 08**


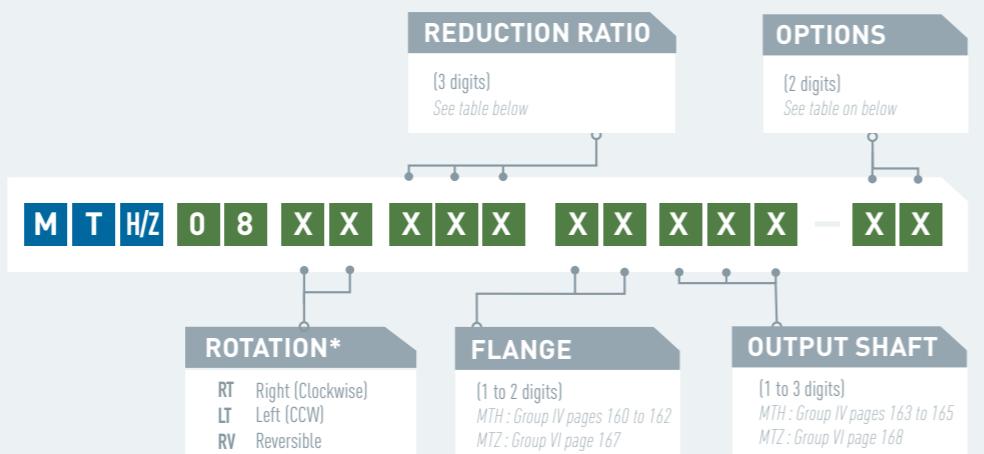
### PERFORMANCES

MTS 08 RV	Air motor reference	Reduction ratio	Air supply pressure	Speed (rpm)		Torque (N.m)			Max Power (W)	Air cons (NL/min)	Dimensions		
				@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)
MTS 08 RV 005		5	6,2 bars	1908	3816	3,6	5,2	3,9	712	950	136,9	54	1,7
			5 bars	1746	3492	3,0	4,6	3,4	543	750			
			4 bars	1590	3181	2,3	3,8	2,9	600	600			
MTS 08 RV 006		6	6,2 bars	1593	3186	4,3	6,3	4,7	712	950	136,9	54	1,7
			5 bars	1458	2915	3,6	5,5	4,1	543	750			
MTS 08 RV 007		7	6,2 bars	1250	2499	5,4	8,0	6,0	712	950	136,9	54	1,7
			5 bars	1144	2287	4,5	7,0	5,3	543	750			
MTS 08 RV 011		11	6,2 bars	872	1745	7,8	11	8,6	712	950	136,9	54	1,7
			5 bars	798	1597	6,5	10	7,5	543	750			
MTS 08 RV 023		23	4 bars	727	1454	5,1	8,4	6,4	388	600	163,9	54	2,0
			6,2 bars	394	788	15	22	21	636	950			
MTS 08 RV 028		28	4 bars	362	725	13	19	16	483	750	163,9	54	2,0
			6,2 bars	329	658	18	27	25	636	950			
MTS 08 RV 035		35	5 bars	303	605	15	22	20	483	750	163,9	54	2,0
			6,2 bars	258	516	24	34	32	636	950			
MTS 08 RV 042		42	4 bars	198	396	23	34	30	483	750	163,9	54	2,0
			6,2 bars	169	338	36	52	48	636	950			
MTS 08 RV 054		54	5 bars	155	311	30	43	38					



# MOTOR MTH 08 / MTZ 08

POWER 600-630 W



PERFORMANCES	MTH/Z 08 XT		Speed (rpm)		Torque (N.m)			Max Power (W)	Air cons (NL/min)	Dimensions		
	Air motor reference	Reduction ratio	Air supply pressure	@ max Power	Free	@ max Power	Max (stall)	Starting torque		A (mm)	Ø (mm)	Weight (kg)
MTH 08 XT 159	159	6,2 bars	60	119	96	165	145	596	1000	238,2	69	3,4
		5 bars	55	110	80	134	118	462	850			
		4 bars	50	99	64	105	92	333	650			
MTH 08 XT 190	190	6,2 bars	50	99	115	198	174	596	1000	238,2	69	3,4
		5 bars	46	92	96	160	141	462	850			
		4 bars	41	83	77	126	110	333	650			
MTH 08 XT 224	224	6,2 bars	42	84	135	233	205	596	1000	238,2	69	3,4
		5 bars	39	78	113	189	166	462	850			
		4 bars	35	70	91	148	130	333	650			
MTH 08 XT 258	258	6,2 bars	37	73	155	268	236	596	1000	238,2	69	3,4
		5 bars	34	68	130	217	191	462	850			
		4 bars	31	61	104	170	150	333	650			
MTH 08 XT 309	309	6,2 bars	31	61	186	321	283	596	1000	238,2	69	3,4
		5 bars	28	56	156	260	229	462	850			
		4 bars	25	51	125	204	179	333	650			
MTZ 08 XT 394	394	6,2 bars	24	48	237	410	360	596	1000	129,1	88,8	4,2
		5 bars	22	44	199	332	292	462	850			
		4 bars	20	40	159	260	229	333	650			
MTZ 08 XT 564	564	6,2 bars	17	34	340	587	516	596	1000	129,1	88,8	4,2
		5 bars	15	31	285	475	418	462	850			
		4 bars	14	28	228	372	328	333	650			
MTH/Z 08 RV	MTH/Z 08 RV		Speed (rpm)		Torque (N.m)			Max Power (W)	Air cons (NL/min)	Dimensions		
	Air motor reference	Reduction ratio	Air supply pressure	@ max Power	Free	@ max Power	Max (stall)	Starting torque		A (mm)	Ø (mm)	Weight (kg)
MTH 08 RV 190	190	6,2 bars	48	96	126	182	160	633	950	238,2	69	3,4
		5 bars	44	88	103	149	131	471	750			
		4 bars	40	79	85	116	102	351	600			
MTH 08 RV 224	224	6,2 bars	41	81	149	214	189	633	950	238,2	69	3,4
		5 bars	37	74	121	176	154	471	750			
		4 bars	34	67	100	137	120	351	600			
MTH 08 RV 258	258	6,2 bars	35	70	171	247	217	633	950	238,2	69	3,4
		5 bars	32	65	139	202	178	471	750			
		4 bars	29	58	115	157	139	351	600			
MTH 08 RV 309	309	6,2 bars	29	59	205	296	260	633	950	238,2	69	3,4
		5 bars	27	54	167	242	213	471	750			
		4 bars	24	49	138	189	166	351	600			
MTZ 08 RV 394	394	6,2 bars	23	46	262	377	332	633	950	129,1	88,8	4,2
		5 bars	21	42	213	309	272	471	750			
		4 bars	19	38	176	241	212	351	600			
MTZ 08 RV 564	564	6,2 bars	16	32	375	540	475	633	950	129,1	88,8	4,2
		5 bars	15	30	305	442	389	471	750			
		4 bars	13	27	252	345	303	351	600			

For connection and lubrication, see page 51

Data indicated in this table have an accuracy of +/- 5%

## OPTIONS AVAILABLE FOR THE MTH 08

+ List of available accessories for this motor page 51

Collected exhaust	03	03	07	09	10	12	16	17	21	22	29	30
ATEX certification												
Left/Right switch*												
Lubrication free												
Kit start												
Code	03	03	07	09	10	12	16	17	21	22	29	30

\* sur modèle réversible uniquement

## OPTIONS DISPONIBLES POUR LE MOTEUR MTZ 08

Collected exhaust	01	03	07	09	10	11	12	16	17	21	22	23	27	28	29	30	36	37



<tbl\_r cells="18" ix="3"



# MOTOR MRS 08

## POWER 530-640 W



MRS 08

## PERFORMANCES



For connection and lubrication, see page 51

## OPTIONS AVAILABLE FOR THIS MOTOR

Collected exhaust	■ ■ ■ ■ ■
ATEX certification	■ ■ ■ ■ ■
Left/Right switch*	■ ■ ■ ■ ■
Lubrication free	■ ■ ■ ■ ■
Kit start	■ ■ ■ ■ ■
Code	01 03 07 09 10 12 16 17 21 22 29 30

+ List of available accessories for this motor page 51

\* Reversible motors only

## REDUCTION RATIO

(3 digits)  
See table below

## OPTIONS

(2 digits)  
See table below

## ROTATION\*

RT Right (Clockwise)  
LT Left (CCW)  
RV Reversible

\* rotation direction is defined when looking from the back of the motor

## FLANGE

(1 to 2 digits)  
Group VII page 169

## OUTPUT SHAFT

(1 to 3 digits)  
Group VII pages 170 to 171

M | R | S | 0 | 8 | X | X | X | X | X | X | X | X | X | — | X | X

—

—

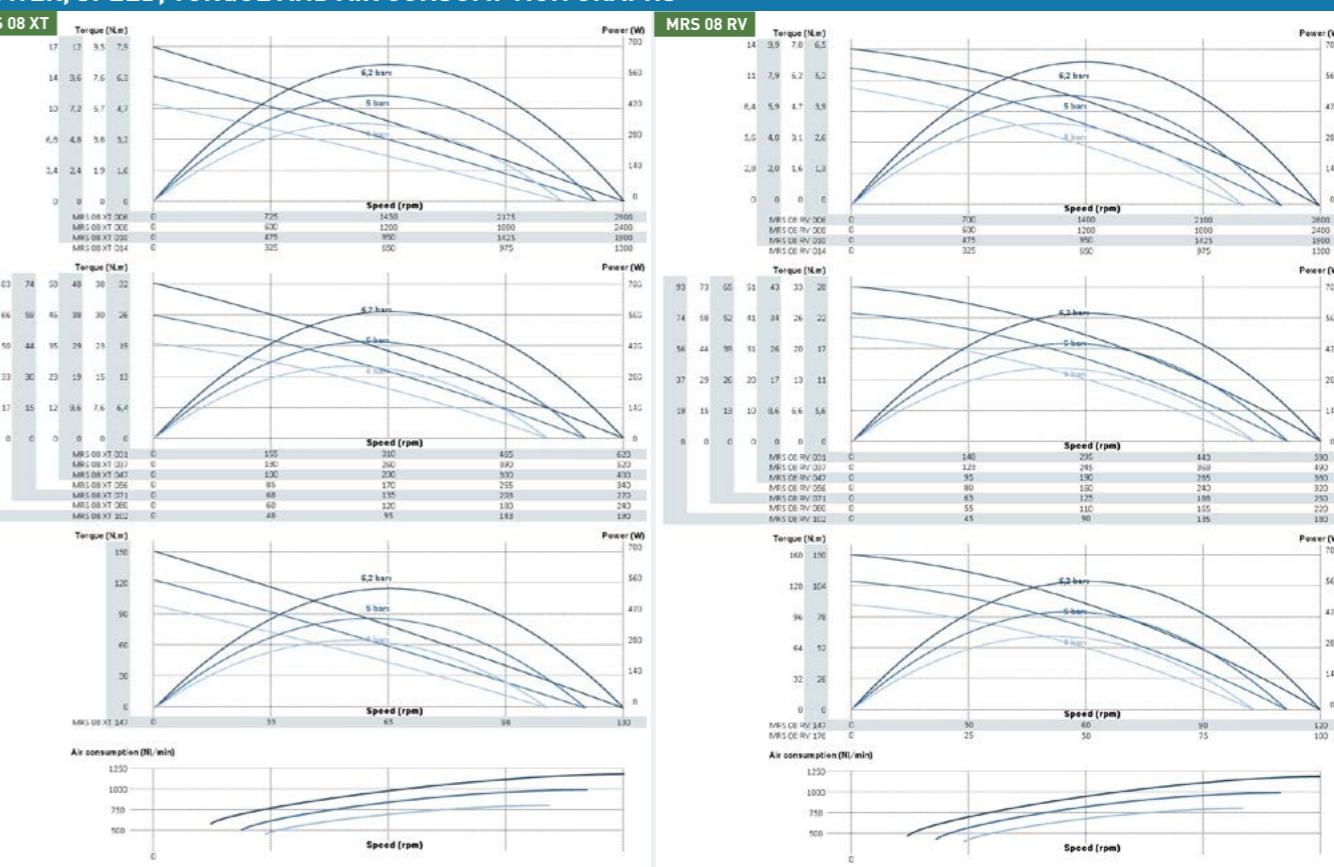
## PERFORMANCES

MRS 08 RV	Air motor reference	Reduction ratio	Air supply pressure	Speed (rpm)		Torque (N.m)			Max Power (W)	Air cons (NL/min)	Dimensions
				@ max Power	Free	@ max Power	Max (stall)	Starting torque			
MRS 08 RV 006		6	6,2 bars	1418	2837	4,3	6,5	5,7	642	950	228,9
			5 bars	1298	2596	3,6	5,7	5,0	490	750	
			4 bars	1182	2365	2,9	4,9	4,3	365	600	
MRS 08 RV 008		8	6,2 bars	1184	2368	5,2	7,8	6,9	642	950	228,9
			5 bars	1084	2167	4,3	6,8	6,0	490	750	
			4 bars	987	1974	3,5	5,8	5,1	365	600	
MRS 08 RV 010		10	6,2 bars	929	1858	6,6	9,9	8,7	642	950	228,9
			5 bars	850	1700	5,5	8,7	7,7	490	750	
			4 bars	774	1549	4,5	7,5	6,6	365	600	
MRS 08 RV 014		14	6,2 bars	648	1297	9,5	14	13	642	950	228,9
			5 bars	593	1187	7,9	12	11	490	750	
			4 bars	541	1081	6,4	11	9,4	365	600	
MRS 08 RV 031		31	6,2 bars	293	586	19	28	25	582	950	255,9
			5 bars	269	539	16	23	20	444	750	
			4 bars	248	497	13	19	17	336	600	
MRS 08 RV 037		37	6,2 bars	245	489	23	33	29	582	950	255,9
			5 bars	225	450	19	28	24	444	750	
			4 bars	207	415	15	23	20	336	600	
MRS 08 RV 047		47	6,2 bars	192	384	29	43	37	582	950	255,9
			5 bars	176	353	24	35	31	444	750	
			4 bars	163	325	20	29	25	336	600	
MRS 08 RV 056		56	6,2 bars	160	320	35	51	45	582	950	255,9
			5 bars	147	295	29	42	37	444	750	
			4 bars	136	272	24	35	31	336	600	
MRS 08 RV 071		71	6,2 bars	126	251	44	65	57	582	950	255,9
			5 bars	116	231	37	54	47	444	750	
			4 bars	106	213	30	44	39	336	600	
MRS 08 RV 080		80	6,2 bars	112	224	50	73	64	582	950	255,9
			5 bars	103	206	41	60	53	444	750	
			4 bars	95	190	34	50	44	336	600	
MRS 08 RV 102		102	6,2 bars	88	175	63	93	82	582	950	255,9
			5 bars	81	161	53	77	68	444	750	
			4 bars	74	149	43	63	56	336	600	
MRS 08 RV 147		147	6,2 bars	61	122	91	134	118	582	950	279,9
			5 bars	56	112	75	111	97	444	750	
			4 bars	52	103	62	91	80	336	600	
MRS 08 RV 176		176	6,2 bars	51	102	109	160	141	582	950	279,9
			5 bars	47	94	90	133	117	444	750	
			4 bars	43	86	74	109	96	336	600	

Voir les instructions de connexion et de lubrification en page 51

Data indicated in this table have an accuracy of +/- 5%

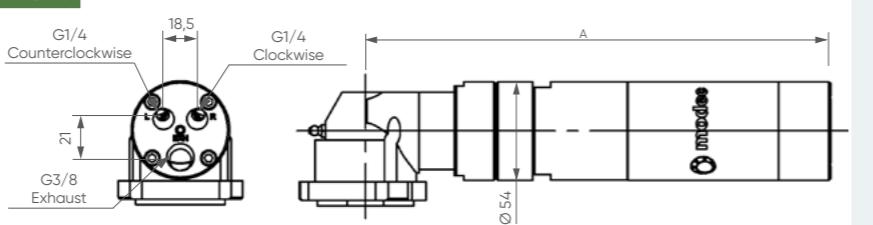
## POWER, SPEED, TORQUE AND AIR CONSUMPTION GRAPHS



Data indicated in this table have an accuracy of +/- 5%

## LAYOUT

## MRS 08



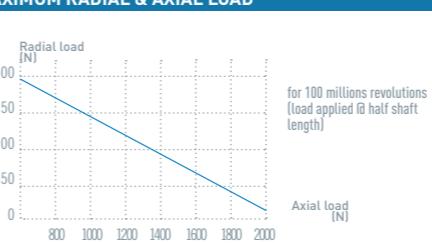
## OPTIONS AVAILABLE FOR THIS MOTOR

Collected exhaust	■ ■ ■ ■ ■
ATEX certification	■ ■ ■ ■ ■
Left/Right switch*	■ ■ ■ ■ ■
Lubrication free	■ ■ ■ ■ ■
Kit start	■ ■ ■ ■ ■
Code	01 03 07 09 10 12 16 17 21 22 29 30

+ List of available accessories for this motor page 51

\* Reversible motors only

## MAXIMUM RADIAL &amp; AXIAL LOAD



## NOTES

# MOTOR NRS 08

POWER 370-430 W



## REDUCTION RATIO

[3 digits]  
See table below

## OPTIONS

[2 digits]  
See table on right page

## ROTATION\*

RT Right (Clockwise)  
LT Left (CCW)  
RV Reversible

## FLANGE

[1 to 2 digits]  
Group VII page 169

## OUTPUT SHAFT

[1 to 3 digits]  
Group VII pages 170 to 171

\* rotation direction is defined when looking from the back of the motor

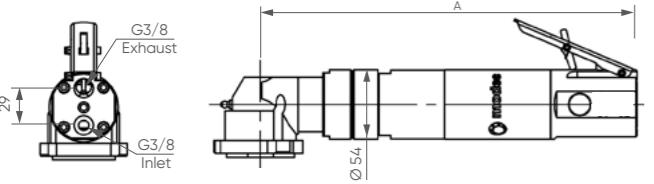
## PERFORMANCES

NRS 08 XT	Reduction ratio	Air supply pressure	Speed (rpm)		Torque (N.m)			Max Power (W)	Air cons (NL/min)	Dimensions		
			@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)
NRS 08 XT 006	6	6,2 bars	1242	2483	3,3	6,5	5,7	433	900	268	54	3,2
		5 bars	1116	2233	2,8	5,2	4,6	329	750			
		4 bars	1016	2033	2,3	4,1	3,6	244	600			
NRS 08 XT 008	8	6,2 bars	1036	2073	4,0	7,8	6,8	433	900	268	54	3,2
		5 bars	932	1864	3,4	6,3	5,5	329	750			
		4 bars	848	1697	2,7	4,9	4,3	244	600			
NRS 08 XT 010	10	6,2 bars	813	1626	5,1	9,9	8,7	433	900	268	54	3,2
		5 bars	731	1462	4,3	8,0	7,0	329	750			
		4 bars	666	1331	3,5	6,2	5,5	244	600			
NRS 08 XT 014	14	6,2 bars	568	1135	7,3	14	12	433	900	268	54	3,2
		5 bars	510	1021	6,2	11	10	329	750			
		4 bars	465	929	5,0	8,9	7,8	244	600			
NRS 08 XT 031	31	6,2 bars	265	529	14	28	25	401	900	295	54	3,5
		5 bars	242	483	12	23	20	301	750			
		4 bars	219	437	10	19	16	223	600			
NRS 08 XT 037	37	6,2 bars	202	403	14	28	24	301	750	295	54	3,5
		5 bars	221	442	17	34	30	401	900			
NRS 08 XT 047	47	6,2 bars	173	347	22	43	38	401	900	295	54	3,5
		5 bars	158	316	18	35	31	301	750			
		4 bars	143	286	15	29	25	223	600			
NRS 08 XT 056	56	6,2 bars	145	289	26	51	45	401	900	295	54	3,5
		5 bars	132	264	22	42	37	301	750			
		4 bars	120	239	18	34	30	223	600			
NRS 08 XT 071	71	6,2 bars	114	227	34	66	58	401	900	295	54	3,5
		5 bars	104	207	28	54	47	301	750			
		4 bars	94	188	23	44	38	223	600			
NRS 08 XT 080	80	6,2 bars	101	202	38	74	65	401	900	295	54	3,5
		5 bars	92	184	31	61	53	301	750			
		4 bars	83	167	26	49	43	223	600			
NRS 08 XT 102	102	6,2 bars	79	158	48	94	83	401	900	295	54	3,5
		5 bars	72	145	40	77	68	301	750			
		4 bars	65	131	33	62	55	223	600			
NRS 08 XT 147	147	6,2 bars	55	110	69	135	119	401	900	319	54	3,7
		5 bars	50	101	57	111	98	301	750			
		4 bars	46	91	47	90	79	223	600			
NRS 08 XT 176	176	6,2 bars	46	92	83	162	142	401	900	319	54	3,7
		5 bars	42	84	68	133	117	301	750			
		4 bars	38	76	56	107	94	223	600			

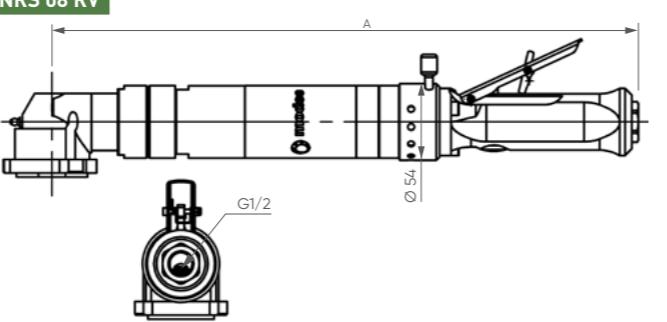
Data indicated in this table have an accuracy of +/- 5%

## LAYOUT

## NRS 08 XT



## NRS 08 RV



## PERFORMANCES

NRS 08 RV	Air motor reference	Reduction ratio	Air supply pressure	Speed (rpm)		Torque (N.m)			Max Power (W)	Air cons (NL/min)	Dimensions		
				@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)
NRS 08 RV 006	6	6,2 bars	1177	2355	3,4	5,5	4,8	420	950	406	57	3,6	
		5 bars	1048	2095	2,9	4,7	4,1	320	750				
		4 bars	942	1884	2,4	4,0	3,5	239	600				
NRS 08 RV 008	8	6,2 bars	983	1966	4,1	6,5	5,8	420	950	406	57	3,6	
		5 bars	875	1749	3,5	5,6	5,0	320	750				
		4 bars	787	1573	2,9	4,8	4,2	239	600				
NRS 08 RV 010	10	6,2 bars	771	1542	5,2	8,3	7,3	420	950	406	57	3,6	
		5 bars	686	1372	4,5	7,2	6,3	320	750				
		4 bars	617	1234	3,7	6,1	5,4	239	600				
NRS 08 RV 014	14	6,2 bars	538	1076	7,5	12	11	420	950	406	57	3,6	
		5 bars	479	958	6,4	10	9,1	320	750				
		4 bars	431	861	5,3	8,8	7,7	239	600				
NRS 08 RV 031	31	6,2 bars	227	454	12	19	17	295	750	438	57	3,8	
		5 bars	209	417	10	16	14	216	600				
NRS 08 RV 037	37	6,2 bars	190	379	15	23	20	295	750	438	57	3,8	
		5 bars	174	348	12	19	16	216	600				
NRS 08 RV 047	47	6,2 bars	149	298	19	30	26	295	750	438	57	3,8	



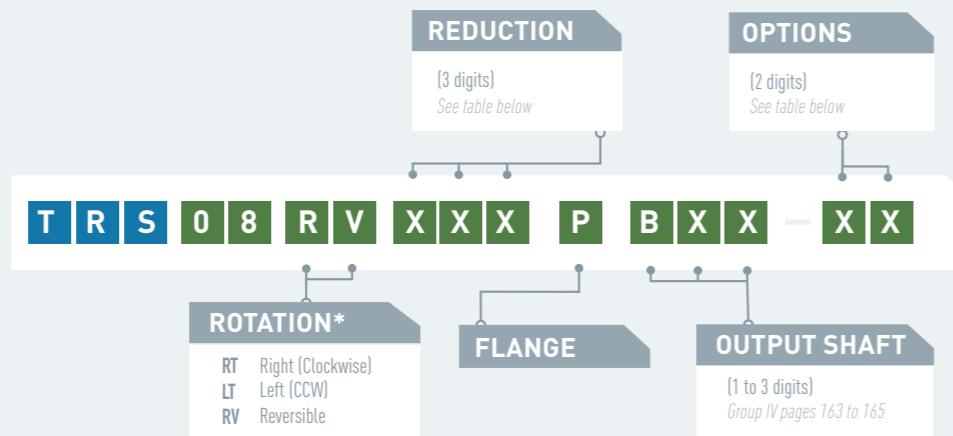


# TAPPING MACHINE TRS 08

## POWER 460 W



TRS 08



reference	Reduction ratio	Air supply pressure	Speed [rpm]		Torque (N.m)			Max Power (W)	Air cons (Nl/min)	Dimensions		
			@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)
TRS 08 RV 005	5	6,2 bars	1627	3239	2,7	3,9	3,6	457	950	176	54	2
		5 bars	1475	2950	2,3	3,2	2,9	356	750			
		4 bars	1347	2694	1,9	2,6	2,4	264	600			
TRS 08 RV 006	6	6,2 bars	1359	2704	3,2	4,7	4,3	457	950	176	54	2
		5 bars	1231	2463	2,8	3,9	3,5	356	750			
		4 bars	1124	2249	2,2	3,1	2,9	264	600			
TRS 08 RV 007	7	6,2 bars	1066	2121	4,1	6,0	5,5	457	950	176	54	2
		5 bars	966	1932	3,5	5,0	4,4	356	750			
		4 bars	882	1764	2,9	4,0	3,7	264	600			
TRS 08 RV	11	6,2 bars	744	1481	5,9	8,6	7,9	457	950	176	54	2
		5 bars	674	1349	5,0	7,1	6,3	356	750			
		4 bars	616	1231	4,1	5,7	5,3	264	600			
TRS 08 RV 023	23	6,2 bars	339	675	13	19	17	457	950	203	54	2,3
		5 bars	307	615	11	16	14	356	750			
		4 bars	281	561	9,0	13	12	264	600			
TRS 08 RV 028	28	6,2 bars	283	563	15	23	21	457	950	203	54	2,3
		5 bars	257	513	13	19	17	356	750			
		4 bars	234	468	11	15	14	264	600			
TRS 08 RV 035	35	6,2 bars	222	442	20	29	26	457	950	203	54	2,3
		5 bars	201	403	17	24	21	356	750			
		4 bars	184	368	14	19	18	264	600			
TRS 08 RV 042	42	6,2 bars	185	369	24	35	32	457	950	203	54	2,3
		5 bars	168	336	20	28	25	356	750			
		4 bars	153	307	16	23	21	264	600			
TRS 08 RV 054	54	6,2 bars	145	289	30	44	40	457	950	203	54	2,3
		5 bars	132	264	26	36	32	356	750			
		4 bars	120	241	21	29	27	264	600			
TRS 08 RV 060	60	6,2 bars	129	258	34	49	45	457	950	203	54	2,3
		5 bars	117	235	29	41	36	356	750			
		4 bars	107	214	24	33	30	264	600			
TRS 08 RV 077	77	6,2 bars	102	202	43	63	58	457	950	203	54	2,3
		5 bars	92	184	37	52	46	356	750			
		4 bars	84	168	30	42	39	264	600			
TRS 08 RV 111	111	6,2 bars	71	141	62	91	83	457	950	227	54	2,8
		5 bars	64	128	53	75	67	356	750			
		4 bars	58	117	43	60	56	264	600			
TRS 08 RV 132	132	6,2 bars	59	117	74	108	100	457	950	227	54	2,8
		5 bars	53	107	64	90	80	356	750			
		4 bars	49	98	52	72	67	264	600			
TRS 08 RV 159	159	6,2 bars	49	98	89	130	120	457	950	227	54	2,8
		5 bars	45	89	76	107	95	356	750			
		4 bars	41	81	62	87	80	264	600			
TRS 08 RV 202	202	6,2 bars	39	77	113	166	152	457	950	227	54	2,8
		5 bars	35	70	97	137	122	356	750			
		4 bars	32	64	79	110	102	264	600			

For connection and lubrication, see page 51

Data indicated in this table have an accuracy of +/- 5%

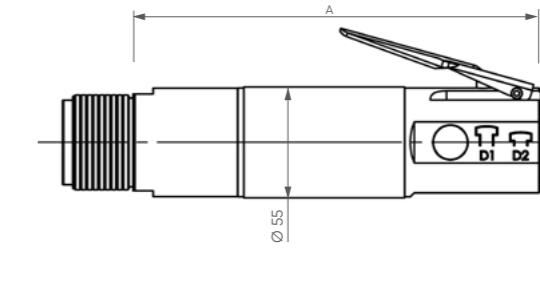
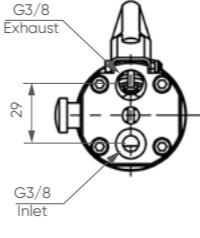
## OPTIONS AVAILABLE FOR THE TRS 08

ATEX certification	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Left/Right switch	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Lubrication free	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Kit start	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Code	03	12
	16	17
	29	30

+ List of available accessories for this motor page 51

## LAYOUT

TRS 08



## TAPPING CAPABILITY

TRS 08	M3	M4	M5	M6	M8	M10	M12	M14	M16	M18	M20

<tbl\_r cells="12" ix="1" maxcspan="1" maxr



MAX POWER  
**1300 W**  
MAX TORQUE  
**1000 Nm**

**Powerful and compact, "10" series air motors can develop more than 1200 W and weigh only 2kg for a 60 mm diameter and a total length that can be as short as 155 mm. This makes it one of the highest power-to-weight ratio air motor on the market.**

Available in 4 families (Easy, Standard, Heavy and Super heavy duty) with several types of gearboxes and right angle heads, it can develop up to 1000 Nm torque.

The wide variety of flanges and shafts allows the "10" range air motors to be easily fitted to any machine for a wide range of applications.

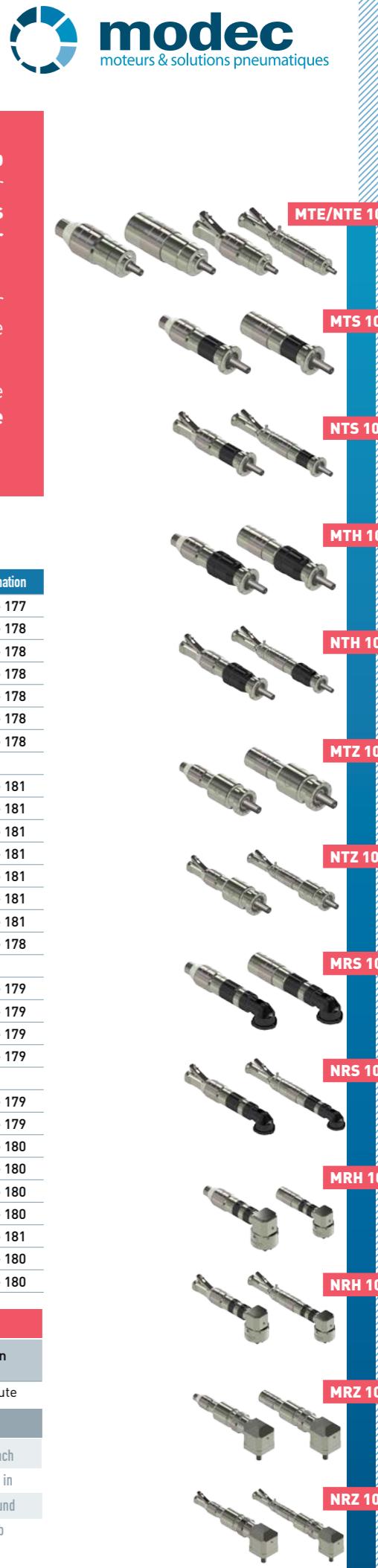
+ ACCESSORIES FOR THIS MOTOR		Reference	Information
Filtration, pressure Regulation and Lubrication unit (FRL)		AC107	Page 177
Safety Air Treatment Box (SAT Box)		AC118	Page 178
With Pedal remote control		AC119	Page 178
With handle remote control		AC120	Page 178
With remote emergency kill switch		AC125	Page 178
With remote E-Stop and pedal remote control		AC121	Page 178
With remote E-Stop and handle remote control		AC122	Page 178
Maintenance kits			
Maintenance kit for "10 XT" series		AC303	Page 181
Maintenance kit for "10 RV" series		AC308	Page 181
Maintenance kit for lube free "10 XT" series		AC313	Page 181
Maintenance kit for lube free "10 RV" series		AC318	Page 181
Maintenance kit for kit start "10 XT" series		AC323	Page 181
Maintenance kit for kit start "10 RV" series		AC328	Page 181
Exhaust collector kit for "10" series		AC340	Page 181
modec Oil Co-16		AC149	Page 178
Control handles			
Safety control handle for non reversible "10" series		AC406	Page 179
Safety control handle for reversible "10" series		AC404	Page 179
Progressive control handle for non reversible "10" series		AC400	Page 179
Progressive control handle for reversible "10" series		AC408	Page 179
Filters and silencers			
Metallic standard silencer		AC182	Page 179
Metallic standard inlet silencer (RV)		AC181	Page 179
Plastic standard silencer		AC152	Page 180
Plastic standard inlet silencer (RV)		AC183	Page 180
Heavy duty silencer		AC156	Page 180
Heavy duty inlet silencer (RV)		AC155	Page 180
High flow air muffler		AC158	Page 181
Exhaust silencer filter		AC165	Page 180
Speed control muffler		AC174	Page 180

#### CONNECTION AND LUBRICATION

	Min. fittings Ø		Min. pipe Ø		Lubrication (6,2 bars)
	In	Out	In	Out	
	10 mm / 0,4 in	16 mm / 0,6 in	13 mm / 0,5 in	20 mm / 0,8 in	6 drops / minute

#### CONVERSION TABLE

Watt ► Horse power	Newton meter ► Pound feet	Millimeter ► Inch
Watt x 0.001341 = hp	Nm x 0,7376 = lb.ft	mm x 0,03937 = in
Bar ► Pound per square Inch	Normo Liter / minute ► Standard cubic feet per minute	Kilogram ► Pound
Bar x 14,5 = psi	NL / min x 0,03531 = scfm	Kg x 2,205 = lb





# MOTOR MTS 10

## POWER 1100-1300 W



### PERFORMANCES

MTS 10 XT	Reduction ratio	Air supply pressure	Speed [rpm]		Torque [N.m]			Max Power (W)	Air cons (NL/min)	Dimensions		
			@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)
MTS 10 XT 005	5	6,2 bars	1613	3227	6,5	9,8	8,1	1106	1600	166	60,3	2,0
		5 bars	1521	3042	5,2	8,2	6,7	834	1200			
		4 bars	1433	2866	3,9	6,5	5,4	590	1000			
MTS 10 XT 006	6	6,2 bars	1347	2694	7,8	12	9,6	1106	1600	166	60,3	2,0
		5 bars	1270	2539	6,3	9,8	8,0	834	1200			
		4 bars	1196	2393	4,7	7,8	6,4	590	1000			
MTS 10 XT 007	7	6,2 bars	1057	2113	10	15	12	1106	1600	166	60,3	2,0
		5 bars	996	1992	8,0	12	10	834	1200			
		4 bars	939	1877	6,0	10	8,2	590	1000			
MTS 10 XT 011	11	6,2 bars	738	1475	14	21	18	1106	1600	166	60,3	2,0
		5 bars	695	1390	11	18	15	834	1200			
		4 bars	655	1310	8,6	14	12	590	1000			
MTS 10 XT 023	23	6,2 bars	336	672	31	47	39	1106	1600	193	60,3	2,3
		5 bars	317	634	25	39	32	834	1200			
		4 bars	299	597	19	31	26	590	1000			
MTS 10 XT 028	28	6,2 bars	281	561	38	56	46	1106	1600	193	60,3	2,3
		5 bars	264	529	30	47	38	834	1200			
		4 bars	249	498	23	38	31	590	1000			
MTS 10 XT 035	35	6,2 bars	220	440	48	72	59	1106	1600	193	60,3	2,3
		5 bars	207	415	38	60	49	834	1200			
		4 bars	196	391	29	48	39	590	1000			
MTS 10 XT 042	42	6,2 bars	184	367	58	86	71	1106	1600	193	60,3	2,3
		5 bars	173	346	46	72	59	834	1200			
		4 bars	163	326	35	58	47	590	1000			
MTS 10 XT 054	54	6,2 bars	144	288	73	110	90	1106	1600	193	60,3	2,3
		5 bars	136	272	59	91	75	834	1200			
		4 bars	128	256	44	73	60	590	1000			
MTS 10 XT 077	77	6,2 bars	101	201	105	158	129	1106	1600	193	60,3	2,3
		5 bars	95	190	84	131	107	834	1200			
		4 bars	89	179	63	105	86	590	1000			
MTS 10 RV	Reduction ratio	Air supply pressure	Speed [rpm]		Torque [N.m]			Max Power (W)	Air cons (NL/min)	Dimensions		
MTS 10 RV 005	5	6,2 bars	1721	3442	7,2	10	9,2	1298	1600	156,5	60,3	2,1
		5 bars	1617	3234	5,8	8,5	7,5	975	1300			
		4 bars	1520	3040	4,4	6,5	5,8	695	1000			
MTS 10 RV 006	6	6,2 bars	1437	2873	8,6	13	11	1298	1600	156,5	60,3	2,1
		5 bars	1350	2700	6,9	10	9,0	975	1300			
		4 bars	1269	2538	5,2	7,8	6,9	695	1000			
MTS 10 RV 007	7	6,2 bars	1127	2254	11	16	14	1298	1600	156,5	60,3	2,1
		5 bars	1059	2118	8,8	13	11	975	1300			
		4 bars	996	1991	6,7	10	8,8	695	1000			
MTS 10 RV 011	11	6,2 bars	787	1574	16	23	20	1298	1600	156,5	60,3	2,1
		5 bars	739	1479	13	19	16	975	1300			
		4 bars	695	1390	9,6	14	13	695	1000			
MTS 10 RV 023	23	6,2 bars	359	717	35	50	44	1298	1600	183,5	60,3	2,4
		5 bars	337	674	28	41	36	975	1300			
		4 bars	317	633	21	31	28	695	1000			
MTS 10 RV 028	28	6,2 bars	299	599	41	60	53	1298	1600	183,5	60,3	2,4
		5 bars	281	562	33	49	43	975	1300			
		4 bars	264	529	25	38	33	695	1000			
MTS 10 RV 035	35	6,2 bars	235	470	53	77	68	1298	1600	183,5	60,3	2,4
		5 bars	221	441	42	62	55	975	1300			
		4 bars	207	415	32	48	42	695	1000			
MTS 10 RV 042	42	6,2 bars	196	392	63	92						

# MOTOR NTS 10

## POWER 950-1250 W



## PERFORMANCES

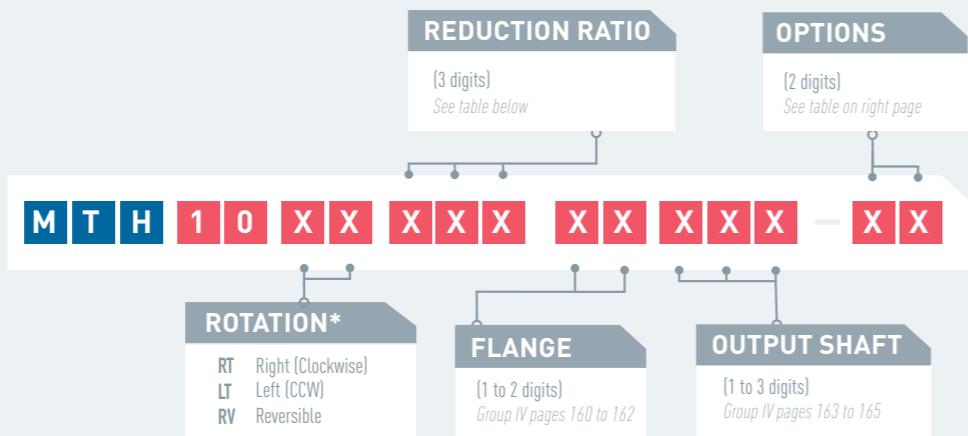
NTS 10 XT	Reduction ratio	Air supply pressure	Speed [rpm]		Torque [N.m]			Max Power (W)	Air cons (NL/min)	Dimensions		
			@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)
NTS 10 XT 005	5	6,2 bars	1925	3851	6,2	10	8,1	1243	1600	218,5	60,3	2,1
		5 bars	1774	3548	5,0	8,0	6,5	936	1300			
		4 bars	1634	3269	4,0	6,3	5,2	682	1000			
NTS 10 XT 006	6	6,2 bars	1607	3214	7,4	12	9,7	1243	1600	218,5	60,3	2,1
		5 bars	1481	2962	6,0	9,5	7,8	936	1300			
		4 bars	1364	2728	4,8	7,6	6,2	682	1000			
NTS 10 XT 007	7	6,2 bars	1261	2522	9	15	12	1243	1600	218,5	60,3	2,1
		5 bars	1162	2324	7,7	12	10	936	1300			
		4 bars	1070	2140	6,1	9,7	7,9	682	1000			
NTS 10 XT 011	11	6,2 bars	880	1760	13	21	18	1243	1600	218,5	60,3	2,1
		5 bars	811	1622	11	17	14	936	1300			
		4 bars	747	1494	8,7	14	11	682	1000			
NTS 10 XT 023	23	6,2 bars	401	802	30	47	39	1243	1600	245,5	60,3	2,3
		5 bars	370	739	24	38	31	936	1300			
		4 bars	340	681	19	30	25	682	1000			
NTS 10 XT 028	28	6,2 bars	335	670	35	57	46	1243	1600	245,5	60,3	2,3
		5 bars	309	617	29	46	37	936	1300			
		4 bars	284	568	23	36	30	682	1000			
NTS 10 XT 035	35	6,2 bars	263	525	45	72	59	1243	1600	245,5	60,3	2,3
		5 bars	242	484	37	58	48	936	1300			
		4 bars	223	446	29	46	38	682	1000			
NTS 10 XT 042	42	6,2 bars	219	439	54	86	71	1243	1600	245,5	60,3	2,3
		5 bars	202	404	44	70	57	936	1300			
		4 bars	186	372	35	56	46	682	1000			
NTS 10 XT 054	54	6,2 bars	172	344	69	110	90	1243	1600	245,5	60,3	2,3
		5 bars	159	317	56	89	73	936	1300			
		4 bars	146	292	45	71	58	682	1000			
NTS 10 XT 077	77	6,2 bars	120	240	99	158	129	1243	1600	245,5	60,3	2,3
		5 bars	111	221	81	127	105	936	1300			
		4 bars	102	204	64	102	83	682	1000			
NTS 10 RV	Reduction ratio	Air supply pressure	Speed [rpm]		Torque [N.m]			Max Power (W)	Air cons (NL/min)	Dimensions		
			@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)
NTS 10 RV 005	5	6,2 bars	1506	3011	6,0	8,4	7,4	944	1400	348	60,3	2,7
		5 bars	1406	2813	4,8	6,9	6,1	707	1200			
		4 bars	1304	2608	3,8	5,4	4,7	512	1000			
NTS 10 RV 006	6	6,2 bars	1257	2514	7,2	10	8,9	944	1400	348	60,3	2,7
		5 bars	1174	2348	5,8	8,2	7,3	707	1200			
		4 bars	1089	2177	4,5	6,4	5,7	512	1000			
NTS 10 RV 007	7	6,2 bars	986	1972	9	13	11	944	1400	348	60,3	2,7
		5 bars	921	1842	7,3	11	9,2	707	1200			
		4 bars	854	1708	5,7	8,2	7,2	512	1000			
NTS 10 RV 011	11	6,2 bars	688	1376	13	18	16	944	1400	348	60,3	2,7
		5 bars	643	1286	11	15	13	707	1200			
		4 bars	596	1192	8	12	10	512	1000			
NTS 10 RV 023	23	6,2 bars	314	627	29	40	35	944	1400	375	60,3	2,9
		5 bars	293	586	23	33	29	707	1200			
		4 bars	272	543	18	26	23	512	1000			
NTS 10 RV 028	28	6,2 bars	262	524	34	48	42	944	1400	375	60,3	2,9
		5 bars	245	489	28	40	35	707	1200			
		4 bars	227	454	22	31	27	512	1000			
NTS 10 RV 035	35	6,2 bars	205	411	44	62	54	944	1400	375	60,3	2,9
		5 bars	192	384	35	50	44	707	1200			
		4 bars	178	356	28	39	35	512	1000			
NTS 10 RV 042	42	6,2 bars	171	343	53	74	65	944	1400	375	60,3	2,9

# MOTOR MTH 10 POWER 1100-1250 W



MTH 10 XT

MTH 10 RV



\* rotation direction is defined when looking from the back of the motor

PERFORMANCES	MTH 10 XT		Air supply pressure	Speed (rpm)		Torque (N.m)			Max Power (W)	Air cons (NL/min)	Dimensions			
	Air motor reference	Reduction ratio		@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)	
MTH 10 XT 096	96	6 bars	78	156	132	192	158	1080	1600	260	69	3,4		
		5 bars	73	146	106	158	130	810	1200					
		4 bars	69	139	79	127	104	577	1000					
MTH 10 XT 115	115	6 bars	65	130	159	231	189	1080	1600	260	69	3,4		
		5 bars	61	122	127	189	155	810	1200					
		4 bars	58	116	95	153	125	577	1000					
MTH 10 XT 147	147	6 bars	51	102	202	294	241	1080	1600	260	69	3,4		
		5 bars	48	96	162	241	198	810	1200					
		4 bars	45	91	121	195	159	577	1000					
MTH 10 RV		Air supply pressure	Speed (rpm)		Torque (N.m)			Max Power (W)	Air cons (NL/min)	Dimensions				
Air motor reference			@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)		
MTH 10 RV 096	96	6 bars	85	170	140	180	158	1243	1600	250,5	69	3,4		
		5 bars	80	160	110	144	127	923	1300					
		4 bars	74	149	85	111	98	662	1000					
MTH 10 RV 115	115	6 bars	71	142	168	215	190	1243	1600	250,5	69	3,4		
		5 bars	67	134	132	173	152	923	1300					
		4 bars	62	124	102	133	117	662	1000					
MTH 10 RV 147	147	6 bars	56	111	214	275	242	1243	1600	250,5	69	3,4		
		5 bars	52	105	168	220	194	923	1300					
		4 bars	49	98	130	169	149	662	1000					

For connection and lubrication, see page 73

Data indicated in this table have an accuracy of  $\pm 5\%$ .

#### **OPTIONS AVAILABLE FOR THIS MOTOR**

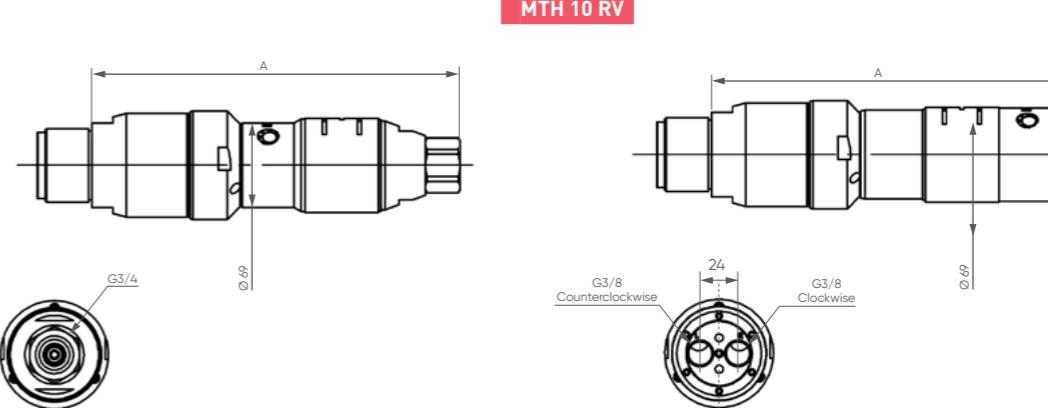
+ List of available accessories for this motor page 73

\* Reversible motors only      \*\* Non reversible motors only

*versible motors only*

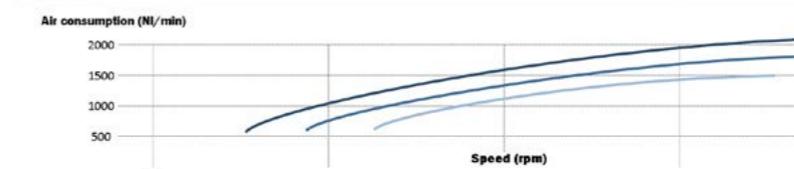
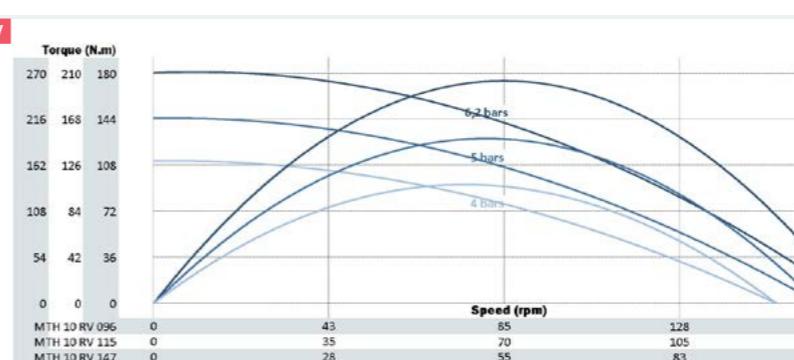
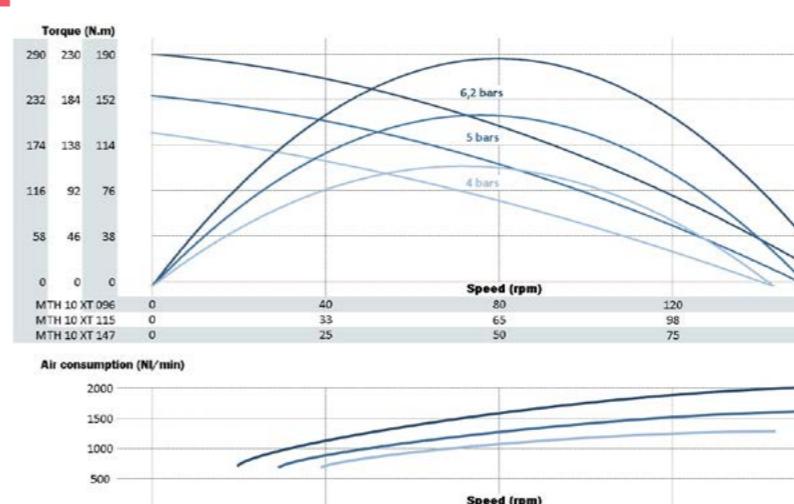
## LAYOUT

MTH 10 XT

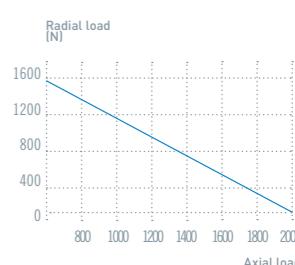


#### POWER, SPEED, TORQUE AND AIR CONSUMPTION GRAPHS

MTH 10 XT



#### **MAXIMUM RADIAL & AXIAL LOAD**



for 100 millions revolutions

## NOTES

# MOTOR NTH 10

POWER 800-1150 W



## PERFORMANCES

NTH 10 XT	Reduction ratio	Air supply pressure	Speed [rpm]		Torque [N.m]			Max Power (W)	Air cons (NL/min)	Dimensions		
			@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)
NTH 10 XT 096	96	6 bars	90	181	122	191	157	1155	1600	312,5	69	4,0
		5 bars	85	170	100	157	129	890	1300			
		4 bars	81	161	76	127	104	641	1000			
NTH 10 XT 115	115	6 bars	75	151	146	229	188	1155	1600	312,5	69	4,0
		5 bars	71	142	120	188	154	890	1300			
		4 bars	67	134	91	152	124	641	1000			
NTH 10 XT 147	147	6 bars	59	118	186	292	239	1155	1600	312,5	69	4,0
		5 bars	56	111	153	240	197	890	1300			
		4 bars	53	105	116	193	158	641	1000			
NTH 10 RV	Reduction ratio	Air supply pressure	Speed [rpm]		Torque [N.m]			Max Power (W)	Air cons (NL/min)	Dimensions		
Air motor reference			@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)
NTH 10 RV 096	96	6 bars	74	147	102	142	125	787	1400	442	69	3,7
		5 bars	70	139	83	114	101	604	1200			
		4 bars	65	129	64	88	77	434	1000			
NTH 10 RV 115	115	6 bars	62	123	122	171	150	787	1400	442	69	3,7
		5 bars	58	116	99	137	120	604	1200			
		4 bars	54	108	77	105	93	434	1000			
NTH 10 RV 147	147	6 bars	48	97	156	217	191	787	1400	442	69	3,7
		5 bars	46	91	127	175	154	604	1200			
		4 bars	42	85	98	134	118	434	1000			
NTH 10 RV 169	169	6 bars	42	84	179	250	220	787	1400	442	69	3,7
		5 bars	40	79	146	201	177	604	1200			
		4 bars	37	74	112	154	136	434	1000			
NTZ 10 RV 202	202	6 bars	35	70	215	300	264	787	1400	442	69	3,7
		5 bars	33	66	175	241	212	604	1200			
		4 bars	31	61	135	185	163	434	1000			

For connection and lubrication, see page 73

Data indicated in this table have an accuracy of +/- 5%

## REDUCTION RATIO

[3 digits]  
See table below

N T H 1 0 X X X X X X X X X X X X X X X X X X

## ROTATION\*

RT Right (Clockwise)  
LT Left (CCW)  
RV Reversible

## FLANGE

[1 to 2 digits]  
Group IV pages 160 to 162

## OUTPUT SHAFT

[1 to 3 digits]  
Group IV pages 163 to 165

\* rotation direction is defined when looking from the back of the motor

## OPTIONS

[2 digits]  
See table on right page

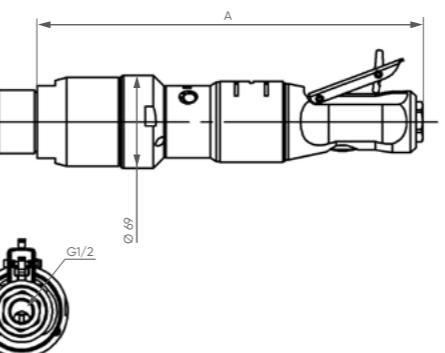
## OPTIONS AVAILABLE FOR THE NTH10XT

Collected exhaust	00	01	02	04	05	06	07	09	10	13	14	15	18	19	21	22	31	32
ATEX certification	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lubrication free	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kit start	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Speed control	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Code	00	01	02	04	05	06	07	09	10	13	14	15	18	19	21	22	31	32

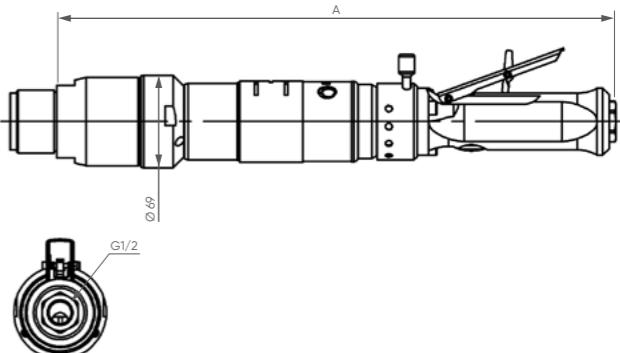
+ List of available accessories for this motor page 73

## LAYOUT

NTH 10 XT

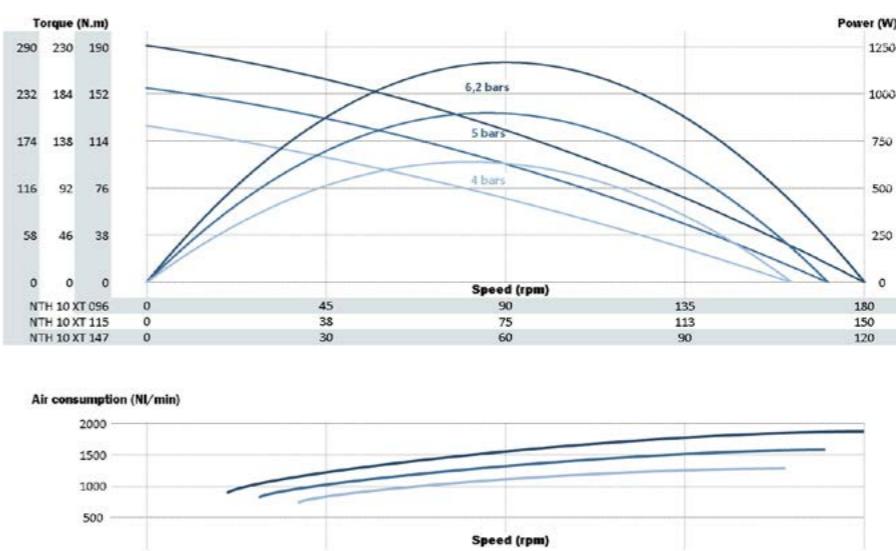


NTH 10 RV

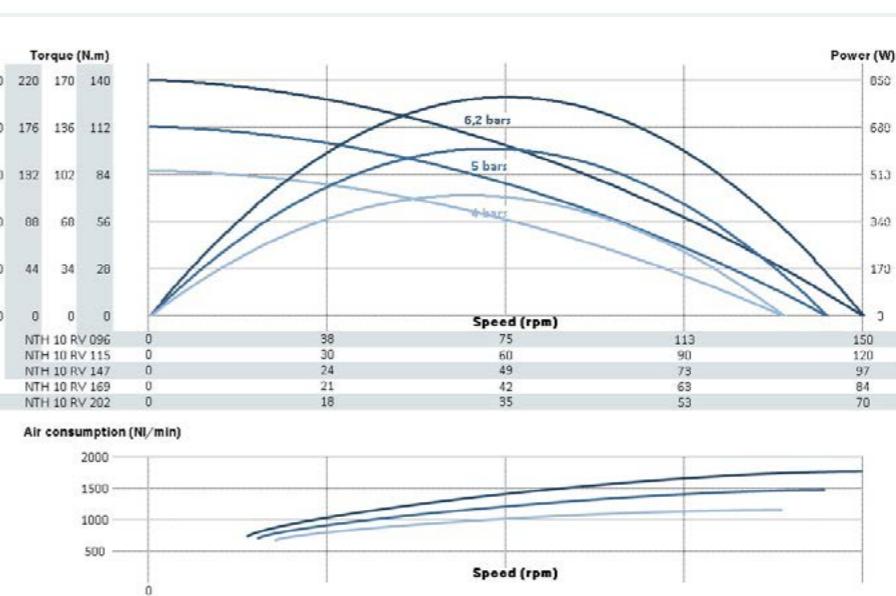


## POWER, SPEED, TORQUE AND AIR CONSUMPTION GRAPHS

NTH 10 XT



NTH 10 RV



## OPTIONS AVAILABLE FOR THE NTH10RV

ATEX certification	03	12	16	17	29	30
Left/Right switch	-	-	-	-</		



# MOTOR NTZ 10

POWER 800-1150 W



## PERFORMANCES

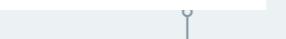
NTZ 10 XT	Reduction ratio	Air supply pressure	Speed (rpm)		Torque (N.m)			Max Power (W)	Air cons (NL/min)	Dimensions		
			@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)
NTZ 10 XT 169	169	6 bars	51	103	214	336	276	1155	1600	210,7	88,8	4,8
		5 bars	48	97	176	276	226	890	1300			
		4 bars	46	92	134	222	182	641	1000			
NTZ 10 XT 202	202	6 bars	43	86	257	403	330	1155	1600	210,7	88,8	4,8
		5 bars	40	81	211	331	271	890	1300			
		4 bars	38	76	160	267	219	641	1000			
NTZ 10 XT 258	258	6 bars	34	67	327	513	421	1155	1600	210,7	88,8	4,8
		5 bars	32	63	268	421	346	890	1300			
		4 bars	30	60	204	340	279	641	1000			
NTZ 10 XT 309	309	6 bars	28	56	392	615	504	1155	1600	210,7	88,8	4,8
		5 bars	26	53	322	505	414	890	1300			
		4 bars	25	50	244	407	334	641	1000			
NTZ 10 RV	Reduction ratio	Air supply pressure	Speed (rpm)		Torque (N.m)			Max Power (W)	Air cons (NL/min)	Dimensions		
Air motor reference	Reduction ratio	Air supply pressure	@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)
NTZ 10 RV 258	258	6 bars	27	55	274	382	336	787	1400	340,2	88,8	5,4
		5 bars	26	52	223	307	270	604	1200			
		4 bars	24	48	172	236	208	434	1000			
NTZ 10 RV 309	309	6 bars	23	46	328	458	403	787	1400	340,2	88,8	5,4
		5 bars	22	43	267	367	323	604	1200			
		4 bars	20	40	206	283	249	434	1000			
NTZ 10 RV 394	394	3 bars	18	36	418	584	514	787	1400	340,2	88,8	5,4
		2 bars	17	34	340	468	412	604	1200			
		1 bars	16	32	262	360	317	434	1000			

For connection and lubrication, see page 73

Data indicated in this table have an accuracy of +/- 5%

## REDUCTION RATIO

[3 digits]  
See table below



\* rotation direction is defined when looking from the back of the motor

## ROTATION\*

RT Right (Clockwise)  
LT Left (CCW)  
RV Reversible

[1 to 2 digits]  
Group VI page 167

[1 to 3 digits]  
Group VI page 168

## OPTIONS

[2 digits]  
See table on right page

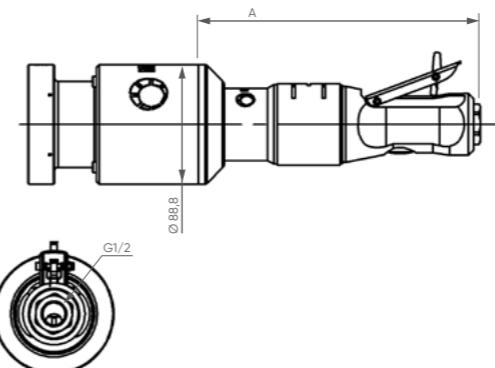
## OPTIONS AVAILABLE FOR THE NTZ10XT

Collected exhaust	00	01	02	04	05	06	07	09	10	13	14	15	18	19	21	22	31	32
ATEX certification	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lubrication free	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kit start	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Speed control	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Code	00	01	02	04	05	06	07	09	10	13	14	15	18	19	21	22	31	32

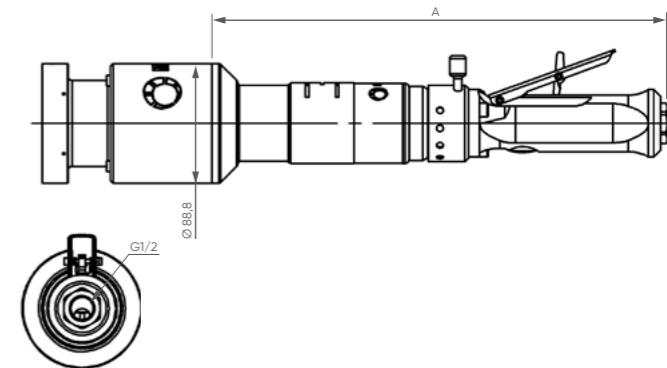
+ List of available accessories for this motor page 73

## LAYOUT

NTZ 10 XT

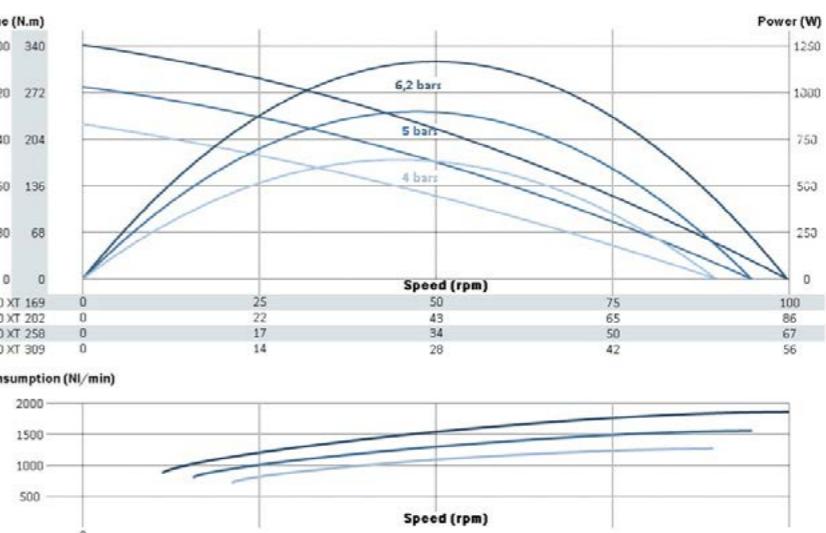


NTZ 10 RV

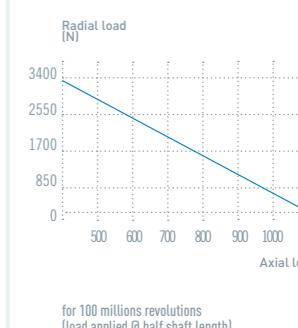


## POWER, SPEED, TORQUE AND AIR CONSUMPTION GRAPHS

NTZ 10 XT

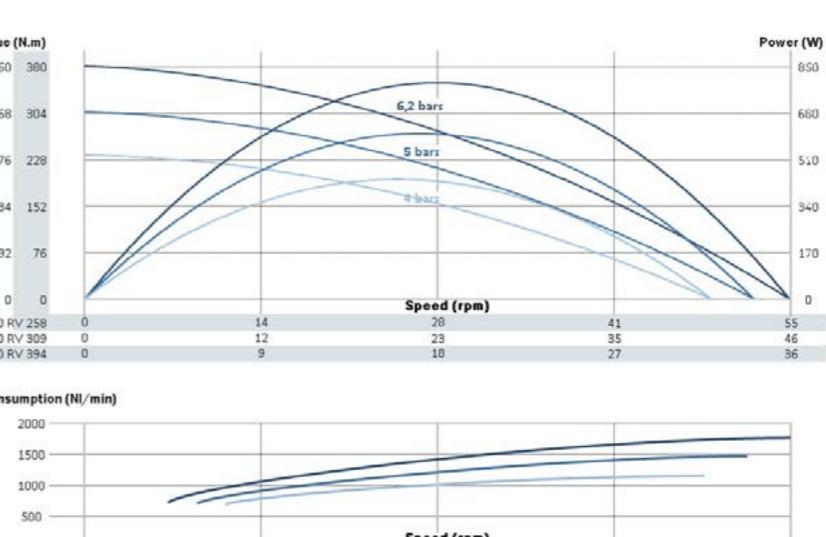


## MAXIMUM RADIAL & AXIAL LOAD



## NOTES

NTZ 10 RV



# MOTOR MRS 10

## POWER 1000-1200 W



### PERFORMANCES

MRS 10 XT	Reduction ratio	Air supply pressure	Speed [rpm]		Torque [N.m]			Max Power (W)	Air cons (Nl/min)	Dimensions		
			@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)
MRS 10 XT 006	6	6,2 bars	1190	2381	7,9	12	9,9	987	1600	258	60,3	3,1
		5 bars	1106	2213	6,4	10	8,2	736	1200			
		4 bars	1028	2057	5,0	7,9	6,5	538	1000			
MRS 10 XT 008	8	6,2 bars	994	1987	9,5	14	12	987	1600	258	60,3	3,1
		5 bars	923	1847	7,6	12	9,8	736	1200			
		4 bars	858	1717	6,0	9,5	7,8	538	1000			
MRS 10 XT 010	10	6,2 bars	779	1559	12	18	15	987	1600	258	60,3	3,1
		5 bars	724	1449	9,7	15	13	736	1200			
		4 bars	673	1347	7,6	12	9,9	538	1000			
MRS 10 XT 014	14	6,2 bars	544	1088	17	26	22	987	1600	258	60,3	3,1
		5 bars	506	1011	14	22	18	736	1200			
		4 bars	470	940	11	17	14	538	1000			
MRS 10 XT 031	31	6,2 bars	248	496	38	58	48	987	1600	285	60,3	3,4
		5 bars	230	461	30	48	39	736	1200			
		4 bars	214	428	24	38	31	538	1000			
MRS 10 XT 037	37	6,2 bars	207	414	46	69	57	987	1600	285	60,3	3,4
		5 bars	192	385	37	58	47	736	1200			
		4 bars	179	358	29	46	37	538	1000			
MRS 10 XT 047	47	6,2 bars	162	325	58	89	73	987	1600	285	60,3	3,4
		5 bars	151	302	47	73	60	736	1200			
		4 bars	140	281	37	58	48	538	1000			
MRS 10 XT 056	56	6,2 bars	136	271	70	106	87	987	1600	285	60,3	3,4
		5 bars	126	252	56	88	72	736	1200			
		4 bars	117	234	44	70	57	538	1000			
MRS 10 XT 071	71	6,2 bars	106	213	89	135	111	987	1600	285	60,3	3,4
		5 bars	99	198	71	112	92	736	1200			
		4 bars	92	184	56	89	73	538	1000			
MRS 10 RV	Reduction ratio	Air supply pressure	Speed [rpm]		Torque [N.m]			Max Power (W)	Air cons (Nl/min)	Dimensions		
Air motor reference	Reduction ratio	Air supply pressure	@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)
MRS 10 RV 006	6	6,2 bars	1233	2466	9,4	13	12	1218	1600	248,5	60,3	3,3
		5 bars	1158	2317	7,6	11	9,5	916	1300			
		4 bars	1089	2178	5,8	8,3	7,3	661	1000			
MRS 10 RV 008	8	6,2 bars	1029	2058	11	16	14	1218	1600	248,5	60,3	3,3
		5 bars	967	1934	9,0	13	11	916	1300			
		4 bars	909	1818	6,9	10	8,8	661	1000			
MRS 10 RV 010	10	6,2 bars	807	1615	14	20	18	1218	1600	248,5	60,3	3,3
		5 bars	759	1517	12	17	15	916	1300			
		4 bars	713	1426	8,9	13	11	661	1000			
MRS 10 RV 014	14	6,2 bars	564	1127	21	29	26	1218	1600	248,5	60,3	3,3
		5 bars	530	1059	17	24	21	916	1300			
		4 bars	498	996	13	18	16	661	1000			
MRS 10 RV 031	31	6,2 bars	257	514	45	64	56	1218	1600	275,5	60,3	3,6
		5 bars	241	483	36	52	46	916	1300			
		4 bars	227	454	28	40	35	661	1000			
MRS 10 RV 037	37	6,2 bars	214	429	54	77	68	1218	1600	275,5	60,3	3,6
		5 bars	201	403	43	62	55	916	1300			
		4 bars	189	379	33	48	42	661	1000			
MRS 10 RV 047	47	6,2 bars	168	336	69	98	86	1218	1600	275,5	60,3	3,6
		5 bars	158	316	55	80	70	916	1300			
		4 bars	149	297	43	61	54	661	1000			
MRS 10 RV 056	56	6,2 bars	140	281	83	117	103	1218	1600	275,5	60,3	3,6
		5 bars	132	264	66	95	84	916	1300			
		4 bars	124	248	51	73	64	661	1000			
MRS 10 RV 071	71	6,2 bars	110	220	106	149	132	1218	1600	275,5	60,3	3,6
		5 bars	103	207	85	121	107	916	1300			
		4 bars	97	195	65	93	82	661	1000			

For connection and lubrication, see page 73

Data indicated in this table have an accuracy of +/- 5%

### REDUCTION RATIO

[3 digits]  
See table below

### OPTIONS

[2 digits]  
See table on right page

M | R | S | 1 | 0 | X | X | X | X | X | X | X | X | X | X

### ROTATION\*

RT Right (Clockwise)  
LT Left (CCW)  
RV Reversible

### FLANGE

(1 to 2 digits)  
Group VII page 169

### OUTPUT SHAFT

(1 to 3 digits)  
Group VII pages 170 to 171

\* rotation direction is defined when looking from the back of the motor

### OPTIONS AVAILABLE FOR THIS MOTOR

Collected exhaust	00	01	02	03	04	05	06	07	09	10	12	13	14	15	16	17	18	19	21	22	29	30	31	32
ATEX certification																								



# MOTOR MRH 10

POWER 1000-1150 W



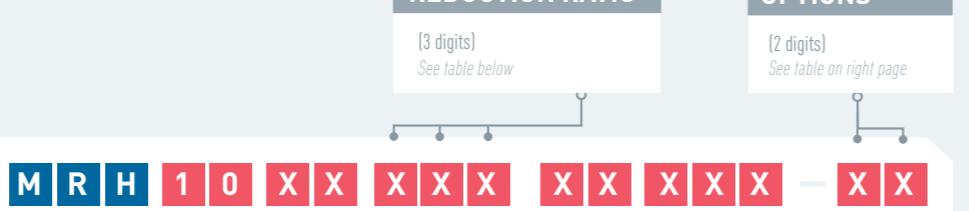
## PERFORMANCES

MRH 10 XT	Reduction ratio	Air supply pressure	Speed (rpm)		Torque (N.m)			Max Power (W)	Air cons (Nl/min)	Dimensions		
			@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)
MRH 10 XT 102	102	6,2 bars	72	145	129	191	157	978	1600	258	69	5,1
		5 bars	68	136	107	158	130	765	1200			
		4 bars	64	129	81	127	104	544	1000			
MRH 10 XT 170	170	6,2 bars	44	87	214	317	260	978	1600	282	69	5,4
		5 bars	41	82	178	262	215	765	1200			
		4 bars	39	78	133	210	172	544	1000			
MRH 10 XT 195	195	6,2 bars	38	76	246	365	299	978	1600	282	69	5,4
		5 bars	36	71	205	301	247	765	1200			
		4 bars	34	68	154	241	198	544	1000			
MRH 10 XT 234	234	6,2 bars	32	63	295	437	358	978	1600	282	69	5,4
		5 bars	30	60	245	361	296	765	1200			
		4 bars	28	56	184	289	237	544	1000			
MRH 10 XT 269	269	6,2 bars	28	55	339	503	412	978	1600	282	69	5,4
		5 bars	26	52	282	415	341	765	1200			
		4 bars	25	49	212	333	273	544	1000			
MRH 10 XT 322	322	6,2 bars	23	46	406	603	494	978	1600	282	69	5,4
		5 bars	22	43	338	498	408	765	1200			
		4 bars	20	41	254	399	327	544	1000			
MRH 10 RV	Reduction ratio	Air supply pressure	Speed (rpm)		Torque (N.m)			Max Power (W)	Air cons (Nl/min)	Dimensions		
@ max Power	Free	@ max Power	Max (stall)	Starting torque	A (mm)	Ø (mm)	Weight (kg)					
MRH 10 RV 102	102	6,2 bars	79	158	142	179	157	1143	1600	248,5	69	5,2
		5 bars	74	149	112	144	126	870	1300			
		4 bars	69	138	86	110	97	635	1000			
MRH 10 RV 170	170	6,2 bars	48	95	235	296	261	1172	1600	272,5	69	5,5
		5 bars	45	90	185	238	209	870	1300			
		4 bars	42	84	142	183	161	624	1000			
MRH 10 RV 195	195	6,2 bars	41	83	271	341	300	1172	1600	272,5	69	5,5
		5 bars	39	78	213	274	241	870	1300			
		4 bars	36	73	164	210	185	624	1000			
MRH 10 RV 234	234	6,2 bars	35	69	324	408	359	1172	1600	272,5	69	5,5
		5 bars	33	65	255	328	288	870	1300			
		4 bars	30	61	196	252	222	624	1000			
MRH 10 RV 269	269	6,2 bars	30	60	373	470	414	1172	1600	272,5	69	5,5
		5 bars	28	57	294	377	332	870	1300			
		4 bars	26	53	226	290	255	624	1000			
MRH 10 RV 322	322	6,2 bars	25	50	447	563	496	1172	1600	272,5	69	5,5
		5 bars	24	47	352	452	398	870	1300			
		4 bars	22	44	271	347	306	624	1000			

For connection and lubrication, see page 73

Data indicated in this table have an accuracy of +/- 5%

## REDUCTION RATIO

(3 digits)  
See table below

## ROTATION\*

RT Right (Clockwise)  
LT Left (CCW)  
RV Reversible

## FLANGE

(1 to 2 digits)  
Group VIII page 172

## OPTIONS

(2 digits)  
See table on right page

## OUTPUT SHAFT

(1 to 3 digits)  
Group VIII page 173

\* rotation direction is defined when looking from the back of the motor

## OPTIONS AVAILABLE FOR THIS MOTOR

Collected exhaust	00	01	02	03	04	05	06	07	09	10	12	13	14	15	16	17	18	19	21	22	29	30	31	32
ATEX certification																								
Left/Right switch*																								
Lubrication free																								
Kit start																								
Speed control**																								

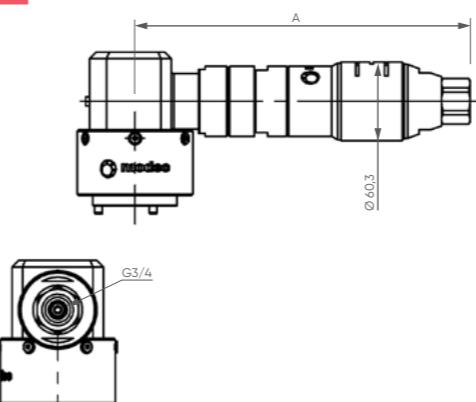
+ List of available accessories for this motor page 73

\* Reversible motors only

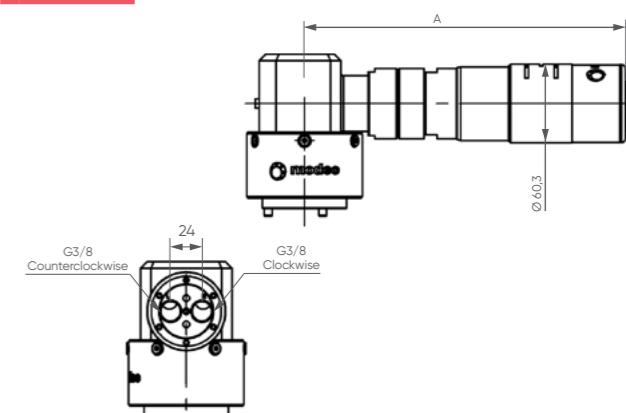
\*\* Non reversible motors only

## LAYOUT

## MRH 10 XT

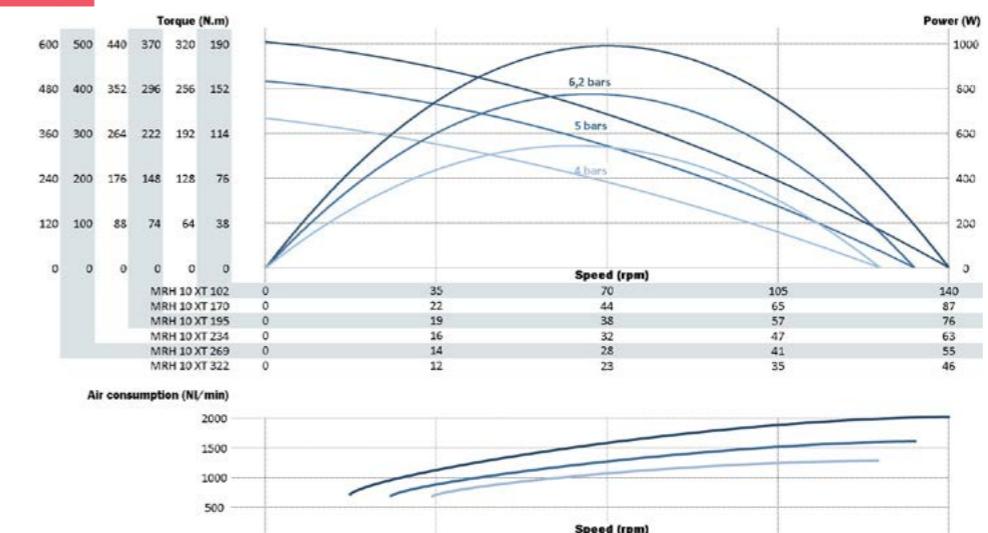


## MRH 10 RV

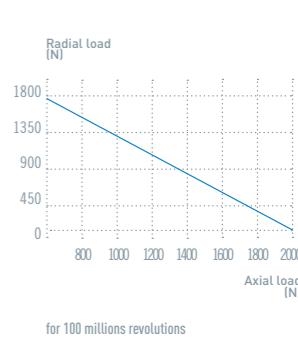


## POWER, SPEED, TORQUE AND AIR CONSUMPTION GRAPHS

## MRH 10 XT

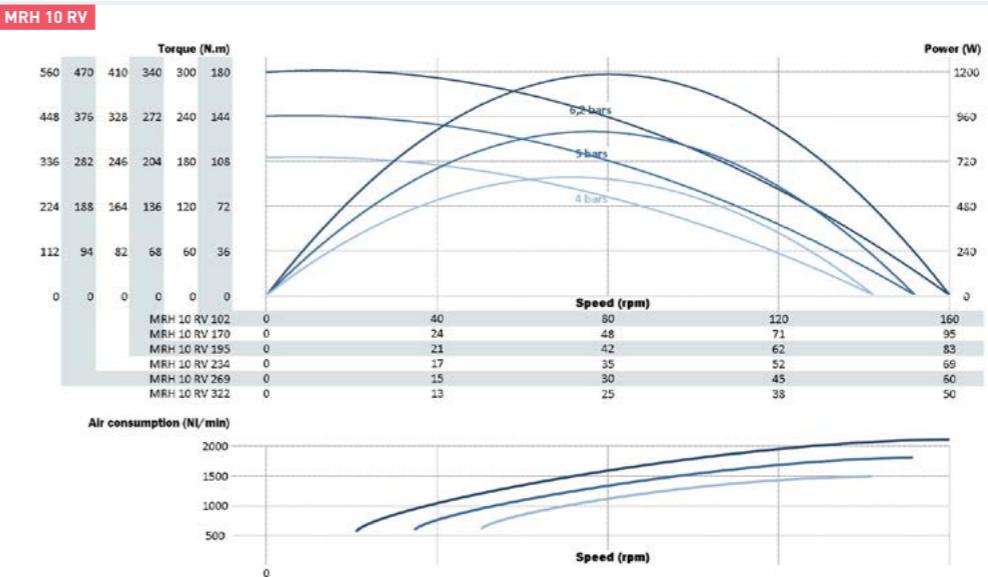


## MAXIMUM RADIAL &amp; AXIAL LOAD



## NOTES

## MRH 10 RV



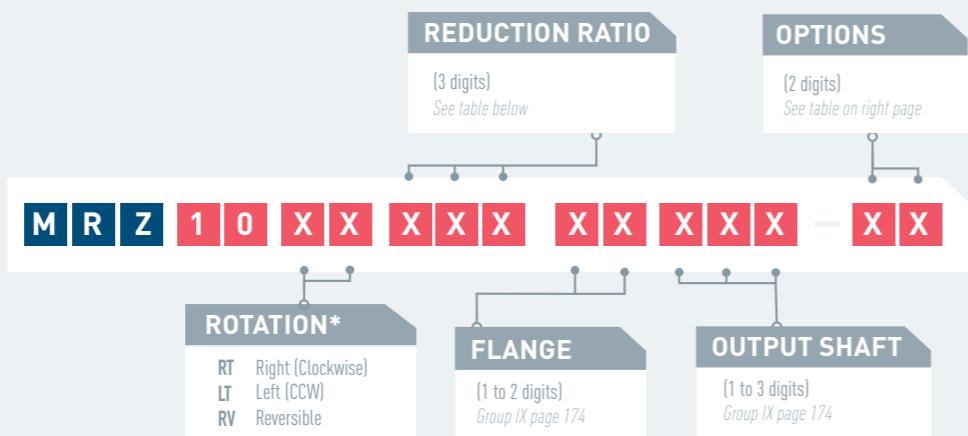


# MOTOR MRZ 10 POWER 1050-1200 W



**MRZ 10 XT**

**MRZ 10 RV**



*\* rotation direction is defined when looking from the back of the motor*

PERFORMANCES	MRZ 10 XT		Air supply pressure	Speed (rpm)		Torque (N.m)			Max Power (W)	Air cons (NL/min)	Dimensions		
	Air motor reference	Reduction ratio		@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)
	MRZ 10 XT 338	338	6,2 bars	22	44	451	677	555	1046	1600	393,8	88,8	11,5
MRZ 10 XT 399	5 bars		21	42	369	560	459	802	1200				
MRZ 10 XT 516	516	399	4 bars	20	39	279	448	367	577	1000	393,8	88,8	11,5
MRZ 10 XT 338			6,2 bars	19	38	532	799	655	1046	1600			
MRZ 10 XT 399	516	399	5 bars	18	35	436	661	542	802	1200			
MRZ 10 XT 516			4 bars	17	33	330	529	433	577	1000			
MRZ 10 XT 338	516	399	6,2 bars	15	29	689	1033	847	1046	1600	393,8	88,8	11,5
MRZ 10 XT 399			5 bars	14	27	563	855	701	802	1200			
MRZ 10 XT 516	516	516	4 bars	13	26	426	684	561	577	1000			

	MRZ 10 RV 516	516	4 bars 6,2 bars 5 bars 4 bars
<b>For connection and lubrication, see page 72.</b>			

Data indicated in this table have an accuracy of +/- 5%.

#### **OPTIONS AVAILABLE FOR THIS MOTOR**

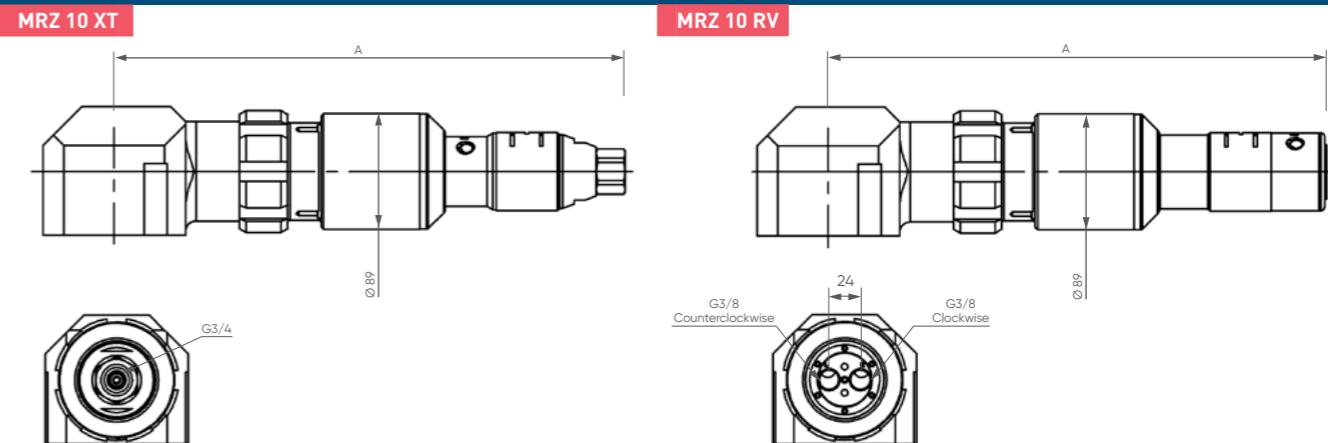
Collected exhaust		01	02	03	04	05	06	07	09	10	12	13	14	15	16	17	18	19	21	22	29	30	31	32	
ATEX certification			02				07			12	13	14	15					19	20	21	22	23	24	25	
Left/Right switch*				03						12				16	17								23	24	
Lubrication free					04				09			13		16		18		19							25
Kit start						05				10			14			17		19		22			30		32
Speed control**						06							15		16	17	18							31	32
Code	00	01	02	03	04	05	06	07	09	10	12	13	14	15	16	17	18	19	21	22	29	30	31	32	

 List of available accessories for this motor page 73

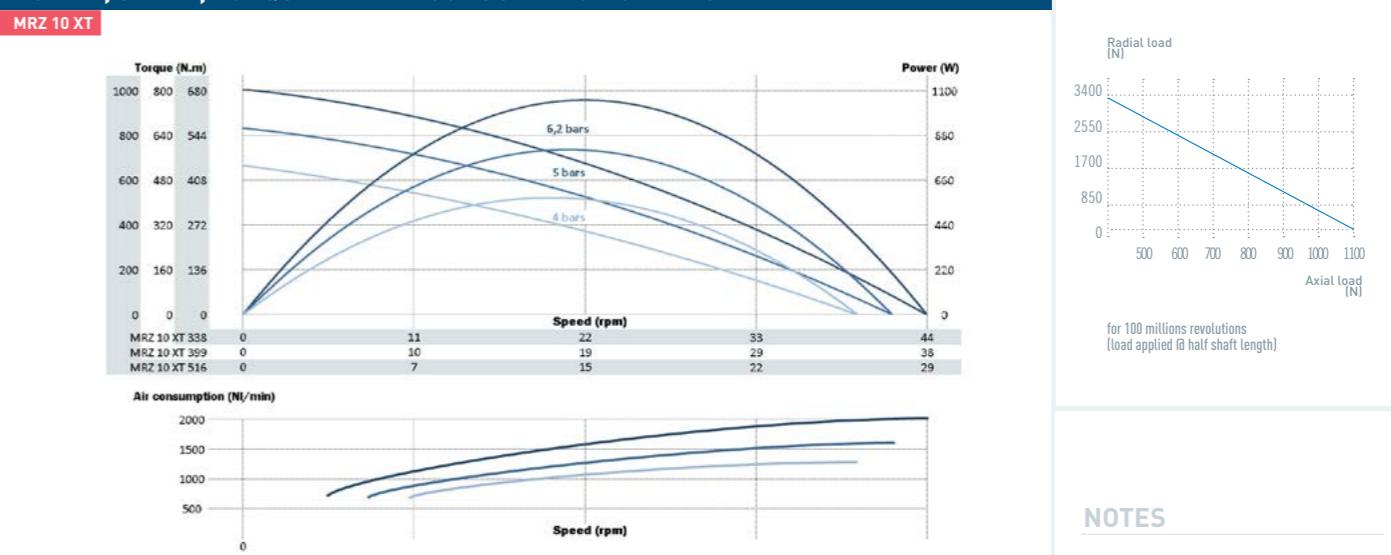
\* Reversible motors only      \*\* Non reversible motors only

*versible motors only*

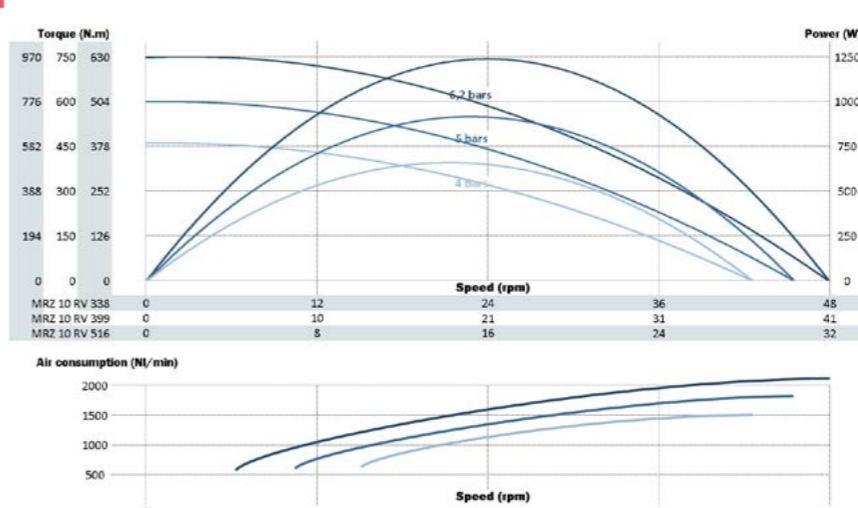
## LAYOUT



#### POWER, SPEED, TORQUE AND AIR CONSUMPTION GRAPHS



MPZ 10 PV



## NOTES





MAX POWER  
**1900 W**  
MAX TORQUE  
**840 Nm**

Twin brothers of the "10", the "20" series air motors offer the same versatility and are available with the same speed and torque ranges but **with even greater power**.

It contains the 3 same application families (Easy, Standard and Heavy duty) with the same configurations of right angle drive heads and integrated handles. **Ideal for applications as different as blasting, conveyors, lifting or integration in special machines.**

Like their little brothers, the "20" range air motors **can get an integrated speed controller**, which is indispensable for certain manual applications.

+ ACCESSORIES FOR THIS MOTOR		Reference	Information
Filtration, pressure Regulation and Lubrication unit (FRL)		AC107	Page 177
Safety Air Treatment Box (SAT Box)		AC118	Page 178
With Pedal remote control		AC119	Page 178
With handle remote control		AC120	Page 178
With remote emergency kill switch		AC125	Page 178
With remote E-Stop and pedal remote control		AC121	Page 178
With remote E-Stop and handle remote control		AC122	Page 178
Maintenance kits			
Maintenance kit for "20" series		AC304	Page 181
Maintenance kit for lube free "20" series		AC314	Page 181
Maintenance kit for kit start "20" series		AC324	Page 181
Exhaust collector kit for "20" series		AC341	Page 181
modec Oil Co-16		AC149	Page 178
Control handles			
Safety control handle for non reversible "20" series		AC406	Page 179
Safety control handle for reversible "20" series		AC404	Page 179
Progressive control handle for non reversible "20" series		AC400	Page 179
Progressive control handle for reversible "20" series		AC408	Page 179
Filters et silencers			
Metallic standard silencer		AC182	Page 179
Metallic standard inlet silencer (RV)		AC181	Page 179
Plastic standard silencer		AC152	Page 180
Plastic standard inlet silencer (RV)		AC183	Page 180
Heavy duty silencer		AC156	Page 180
Heavy duty inlet silencer (RV)		AC155	Page 180
High flow air muffler		AC159	Page 181
Exhaust silencer filter		AC161	Page 180
Speed control muffler		AC174	Page 180

#### CONNECTION AND LUBRIFICATION

	Min. fittings Ø		Min. pipe Ø		Lubrication (6,2 bars)
	In	Out	In	Out	
	10 mm / 0,4 In	16 mm / 0,6 In	13 mm / 0,5 In	20 mm / 0,8 In	7 drops / minute

#### CONVERSION TABLE

Watt ➔ Horse power	Newton meter ➔ Pound feet	Millimeter ➔ Inch
Watt x 0,001341 = hp	Nm x 0,7376 = lb.ft	mm x 0,03937 = in
Bar ➔ Pound per square Inch	Normo Liter / minute ➔ Standard cubic feet per minute	Kilogram ➔ Pound
Bar x 14,5 = psi	NL / min x 0,03531 = scfm	Kg x 2,205 = lb



MTE/NTE 20



MTS 20



NTS 20



MTZ 20



NTZ 20



MRS 20



NRS 20



MRH 20



NRH 20



MRZ 20



NRZ 20



# MOTORS MTS 20

## POWER 1700-1800 W

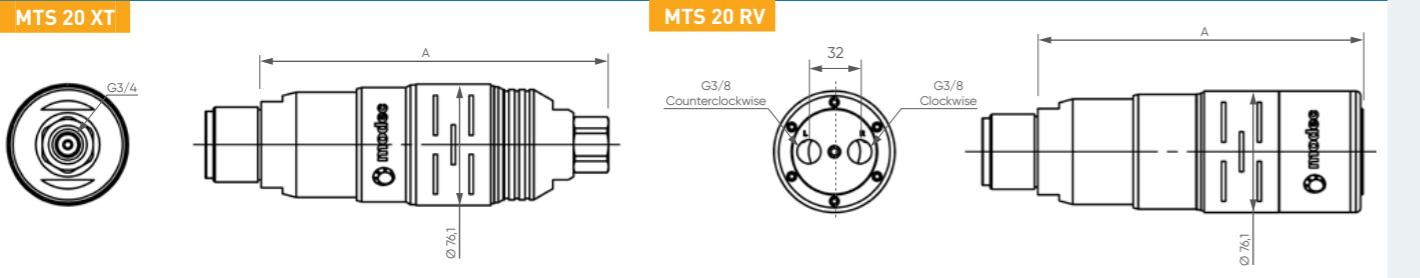


## PERFORMANCES

MTS 20 XT	Reduction ratio	Air supply pressure	Speed [rpm]		Torque [N.m]			Max Power (W)	Air cons (NL/min)	Dimensions		
			@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)
MTS 20 XT 004	4	6,2 bars	1385	2770	11	21	19	1650	1900	186,5	76,1	2,9
		5 bars	1295	2589	9,7	17	15	1311	1600			
		4 bars	1213	2426	8,2	14	12	1040	1200			
MTS 20 XT 005	5	6,2 bars	1203	2407	13	24	21	1650	1900	186,5	76,1	2,9
		5 bars	1125	2249	11	20	17	1311	1600			
		4 bars	1054	2107	9,4	16	14	1040	1200			
MTS 20 XT 006	6	6,2 bars	1005	2009	16	29	26	1650	1900	186,5	76,1	2,9
		5 bars	939	1878	13	24	21	1311	1600			
		4 bars	880	1759	11	19	17	1040	1200			
MTS 20 XT 007	7	6,2 bars	788	1576	20	37	33	1650	1900	186,5	76,1	2,9
		5 bars	737	1473	17	30	26	1311	1600			
		4 bars	690	1380	14	24	21	1040	1200			
MTS 20 XT 011	11	6,2 bars	550	1100	29	53	47	1650	1900	186,5	76,1	2,9
		5 bars	514	1028	24	43	38	1311	1600			
		4 bars	482	963	21	34	30	1040	1200			
MTS 20 XT 017	17	6,2 bars	332	664	47	88	77	1650	1900	218,5	76,1	3,5
		5 bars	310	621	40	71	63	1311	1600			
		4 bars	291	582	34	57	50	1040	1200			
MTS 20 XT 023	23	6,2 bars	251	501	63	116	102	1650	1900	218,5	76,1	3,5
		5 bars	234	469	53	94	83	1311	1600			
		4 bars	220	439	45	75	66	1040	1200			
MTS 20 XT 028	28	6,2 bars	209	419	75	139	123	1650	1900	218,5	76,1	3,5
		5 bars	196	391	64	113	99	1311	1600			
		4 bars	183	367	54	90	80	1040	1200			
MTS 20 XT 033	33	6,2 bars	175	349	90	167	147	1650	1900	218,5	76,1	3,5
		5 bars	163	327	77	135	119	1311	1600			
		4 bars	153	306	65	108	95	1040	1200			
MTS 20 XT 042	42	6,2 bars	137	274	115	213	187	1650	1900	218,5	76,1	3,5
		5 bars	128	256	98	173	152	1311	1600			
		4 bars	120	240	83	138	121	1040	1200			
MTS 20 XT 054	54	6,2 bars	108	215	147	271	239	1650	1900	218,5	76,1	3,5
		5 bars	100	201	125	220	194	1311	1600			
		4 bars	94	188	106	176	155	1040	1200			

Data indicated in this table have an accuracy of +/- 5%

## LAYOUT



## OPTIONS AVAILABLE FOR THIS MOTOR

	00	01	02	03	04	05	06	07	09	10	12	13	14	15	16	17	18	19	21	22	29	30	31	32
Collected exhaust																								
ATEX certification																								
Left/Right switch*																								
Lubrication free																								
Kit start																								
Speed control**																								
Code	00	01	02	03	04	05	06	07	09	10	12	13	14	15	16	17	18	19	21	22	29	30	31	32

List of available accessories for this motor page 101

\* Reversible motors only  
\*\* Non reversible motors only

## PERFORMANCES

MTS 20 RV	Air motor reference	Reduction ratio	Air supply pressure	Speed [rpm]		Torque [N.m]			Max Power (W)	Air cons (NL/min)	Dimensions
				@ max Power	Free	@ max Power	Max (stall)	Starting torque			
MTS 20 RV 004		4	6,2 bars	1301	2602	13	16	14	1779	2100	172,5
			5 bars	1227	2455	11	14	12	1365	1700	
			4 bars	1163	2326	8,5	11	9,9	1029	1400	
MTS 20 RV 005		5	6,2 bars	1130	2261	15	19	17	1779	2100	172,5
			5 bars	1066	2133	12	16	14	1365	1700	
			4 bars	1010	2020	9,7	13	11	1029	1400	
MTS 20 RV 006		6	6,2 bars	944	1887	18	23	20	1779	2100	172,5
			5 bars	890	1780	15	19	17	1365	1700	
			4 bars	843	1687	12	15	14	1029	1400	
MTS 20 RV 007		7	6,2 bars	740	1481	23	29	25	1779	2100	172,5
			5 bars	698	1397	19	24	21	1365	1700	
			4 bars	662	1323	15	20	17	1029	1400	
MTS 20 RV 011		11	6,2 bars	517	1034	33	41	36			

# MOTORS NTS 20

## POWER 1300-1500 W



### PERFORMANCES

NTS 20 XT	Reduction ratio	Air supply pressure	Speed (rpm)		Torque (N.m)			Max Power (W)	Air cons (NL/min)	Dimensions		
			@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)
NTS 20 XT 004	4	6,2 bars	1359	2719	10	19	17	1480	1800	329,5	76,1	3,4
		5 bars	1288	2577	8,6	16	14	1162	1500			
		4 bars	1205	2409	7,2	13	12	911	1200			
NTS 20 XT 005	5	6,2 bars	1181	2362	12	22	20	1480	1800	329,5	76,1	3,4
		5 bars	1119	2239	10	18	16	1162	1500			
		4 bars	1047	2093	8,3	15	13	911	1200			
NTS 20 XT 006	6	6,2 bars	986	1972	14	27	24	1480	1800	329,5	76,1	3,4
		5 bars	934	1869	12	22	19	1162	1500			
		4 bars	874	1747	10	18	16	911	1200			
NTS 20 XT 007	7	6,2 bars	773	1547	18	34	30	1480	1800	329,5	76,1	3,4
		5 bars	733	1466	15	28	24	1162	1500			
		4 bars	685	1371	13	23	20	911	1200			
NTS 20 XT 011	11	6,2 bars	540	1080	26	49	43	1480	1800	329,5	76,1	3,4
		5 bars	512	1023	22	40	35	1162	1500			
		4 bars	478	957	18	33	29	911	1200			
NTS 20 XT 017	17	6,2 bars	326	652	43	81	71	1480	1800	361,5	76,1	3,7
		5 bars	309	618	36	66	58	1162	1500			
		4 bars	289	578	30	55	48	911	1200			
NTS 20 XT 023	23	6,2 bars	246	492	57	107	94	1480	1800	361,5	76,1	3,7
		5 bars	233	466	48	87	77	1162	1500			
		4 bars	218	436	40	73	64	911	1200			
NTS 20 XT 028	28	6,2 bars	205	411	69	128	113	1480	1800	361,5	76,1	3,7
		5 bars	195	389	57	105	92	1162	1500			
		4 bars	182	364	48	87	77	911	1200			
NTS 20 XT 033	33	6,2 bars	171	343	82	154	135	1480	1800	361,5	76,1	3,7
		5 bars	163	325	68	126	110	1162	1500			
		4 bars	152	304	57	105	92	911	1200			
NTS 20 XT 042	42	6,2 bars	134	269	105	196	173	1480	1800	361,5	76,1	3,7
		5 bars	127	255	87	160	141	1162	1500			
		4 bars	119	238	73	133	117	911	1200			
NTS 20 XT 054	54	6,2 bars	106	211	134	250	220	1480	1800	361,5	76,1	3,7
		5 bars	100	200	111	204	180	1162	1500			
		4 bars	94	187	93	170	150	911	1200			
NTS 20 RV	Reduction ratio	Air supply pressure	Speed (rpm)		Torque (N.m)			Max Power (W)	Air cons (NL/min)	Dimensions		
Air motor reference	Reduction ratio	Air supply pressure	@ max Power	Free	@ max Power	Max (stall)	Starting torque	Max Power (W)	Air cons (NL/min)	A (mm)	Ø (mm)	Weight (kg)
NTS 20 RV 004	4	6,2 bars	1135	2270	11	14	12	1352	1800	351	76,1	4
		5 bars	1052	2104	9,3	12	10	1027	1500			
		4 bars	978	1956	7,3	9,6	8,5	749	1200			
NTS 20 RV 005	5	6,2 bars	986	1972	13	16	14	1352	1800	351	76,1	4
		5 bars	914	1828	11	14	12	1027	1500			
		4 bars	850	1700	8,4	11	9,8	749	1200			
NTS 20 RV 006	6	6,2 bars	823	1646	16	20	17	1352	1800	351	76,1	4
		5 bars	763	1526	13	16	14	1027	1500			
		4 bars	709	1419	10	13	12	749	1200			
NTS 20 RV 007	7	6,2 bars	646	1292	20	25	22	1352	1800	351	76,1	4
		5 bars	599	1197	16	21	18	1027	1500			
		4 bars	557	1113	13	17	15	749	1200			
NTS 20 RV 011	11	6,2 bars	451	902	29	36	31	1352	1800	351	76,1	4,0
		5 bars	418	836	23	30	26	1027	1500			
		4 bars	388	777	18	24	21	749	1200			
NTS 20 RV 017	17	6,2 bars	272	544	47	59	52	1352	1800	383	76,1	4,3
		5 bars	252	505	39	49	43	1027	1500			
		4 bars	235	469	31	40	35	749	1200			
NTS 20 RV 023	23	6,2 bars	205	411	63	78	69	1352	1800	383	76,1	4,3
		5 bars	190	381	51	65	57	1027	1500			
		4 bars	177	354	40	53	47	749	1200			
NTS 20 RV 028	28	6,2 bars	171	343	75	94	83	1352	1800	383	76,1	4,3
		5 bars	159	318	62	78	68	1027	1500			
		4 bars	148	296	48	64	56	749	1200			
NTS 20 RV 033	33	6,2 bars	143	286	90	113	99	1352	1800	383	76,1	4,3
		5 bars	133	265	74	93	82	1027	1500			
		4 bars	123	247	58	76	67	749	1200			
NTS 20 RV 042	42	6,2 bars	112	225	115	143	126	1352	1800	383	76,1	4,3
		5 bars	104	208	94	119	105	1027	1500			
		4 bars	97	194	74	97	86	749	1200			
NTS 20 RV 077	77	6,2 bars	62	123	210	262	231	1352	1800	383	76,1	4,3
		5 bars	57	114	172	217	191	1027	1500			
		4 bars	53	106	135	178	157	749	1200			

For connection and lubrication, see page 101

Data indicated in this table have an accuracy of +/- 5%

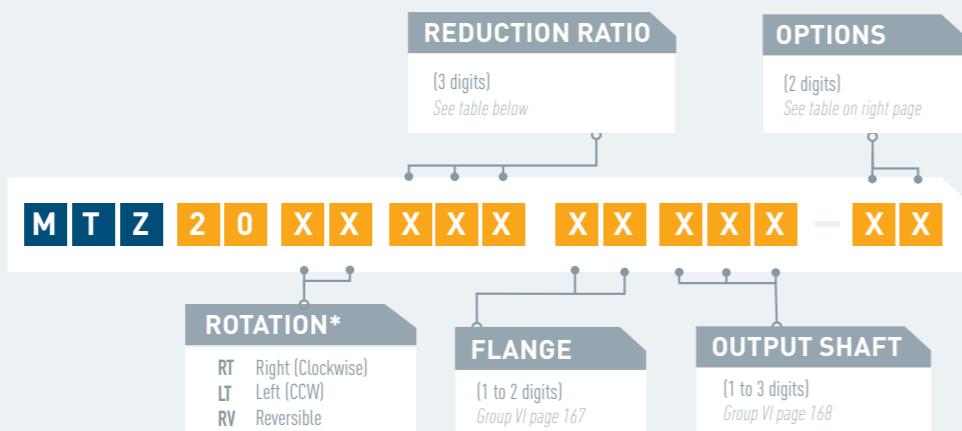
# MOTORS MTZ 20 POWER 1700-1900 W



**MTZ 20 X™**



MTZ 20 R



*\* rotation direction is defined when looking from the back of the motor*

PERFORMANCES	MTZ 20 XT		Air supply pressure	Speed (rpm)		Torque (N.m)			Max Power (W)	Air cons (NL/min)	Dimensions		
	Air motor reference	Reduction ratio		@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)
MTZ 20 XT 074	74	6,2 bars	79	157	212	404	356	1748	1900	178,7	88,8	5,3	
		5 bars	73	147	183	335	295	1407	1600				
		4 bars	69	139	155	271	238	1125	1200				
MTZ 20 XT 113	113	6,2 bars	52	103	324	617	543	1748	1900	178,7	88,8	5,3	
		5 bars	48	96	279	512	450	1407	1600				
		4 bars	45	91	237	414	364	1125	1200				
MTZ 20 RV		Air supply pressure	Speed (rpm)		Torque (N.m)			Max Power (W)	Air cons (NL/min)	Dimensions			
Air motor reference	Reduction ratio		@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)	
MTZ 20 RV 085	85	6,2 bars	63	127	283	392	345	1880	2100	164,7	88,8	5,9	
		5 bars	60	120	229	322	283	1436	1700				
		4 bars	56	112	185	257	227	1086	1400				
MTZ 20 RV 113	113	6,2 bars	48	96	376	520	458	1880	2100	164,7	88,8	5,9	
		5 bars	45	90	304	427	376	1436	1700				
		4 bars	42	84	245	342	301	1086	1400				
MTZ 20 RV 131	131	6,2 bars	42	83	433	599	527	1880	2100	164,7	88,8	5,9	
		5 bars	39	78	350	492	433	1436	1700				
		4 bars	37	72	282	392	344	1086	1400				

For connection and lubrication, see page 101

Data indicated in this table have an accuracy of +/- 5%.

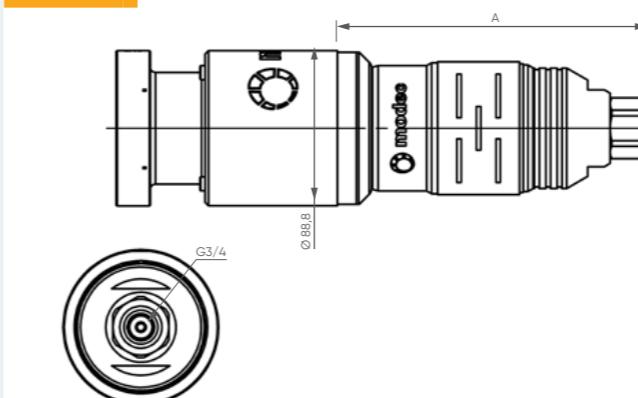
**OPTIONS AVAILABLE FOR THIS MOTOR**

 List of available accessories for this motor page 101

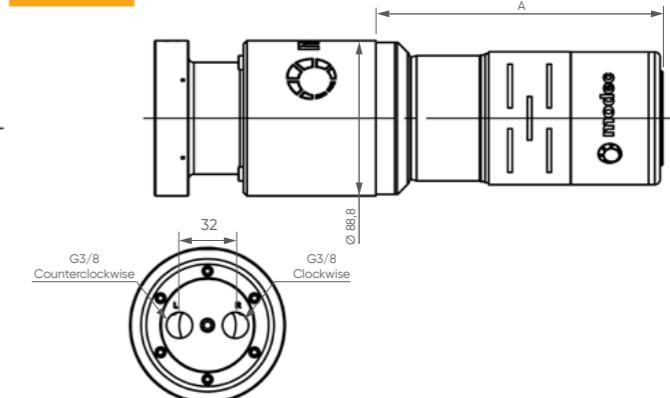
\* Reversible motors only      \*\* Non reversible motors only

## LAYOUT

**MTZ 20 XT**

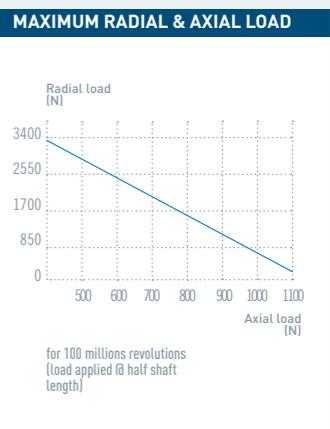
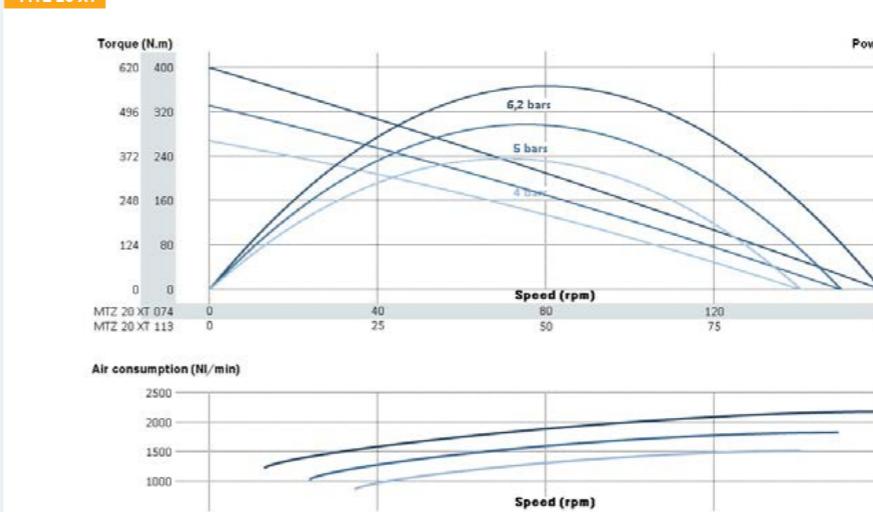


MTZ 20 RV



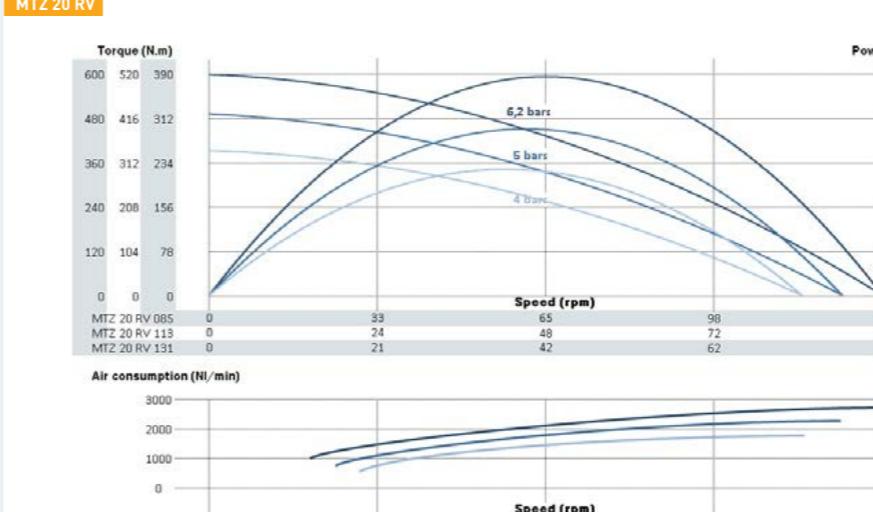
#### POWER, SPEED, TORQUE AND AIR CONSUMPTION GRAPHS

MTZ 20 XT

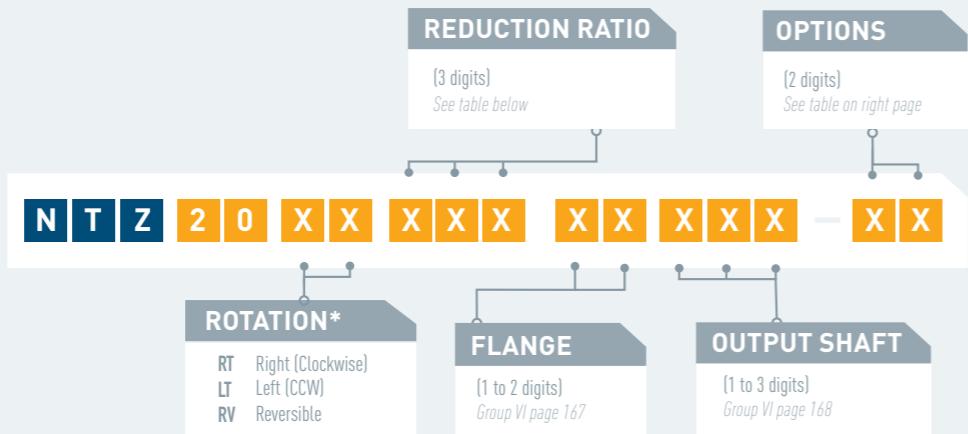


## NOTES

WTFSG-00-DV



# MOTORS NTZ 20



PERFORMANCES	NTZ 20 XT		Air supply pressure	Speed (rpm)		Torque (N.m)			Max Power (W)	Air cons (NL/min)	Dimensions		
	Air motor reference	Reduction ratio		@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)
NTZ 20 XT 074	74	6,2 bars	76	153	193	395	348	1544	1800	1500	321,7	88,8	5,8
		5 bars	71	142	162	326	287	1209	1500				
		4 bars	67	133	137	263	231	955	1200				
NTZ 20 XT 113	113	6,2 bars	50	100	295	603	531	1544	1800	1500	321,7	88,8	5,8
		5 bars	47	93	247	498	438	1209	1500				
		4 bars	44	87	209	401	353	955	1200				
NTZ 20 RV		Air supply pressure	Speed (rpm)		Torque (N.m)			Max Power (W)	Air cons (NL/min)	Dimensions			
Air motor reference	Reduction ratio		@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)	
NTZ 20 RV 085	85	6,2 bars	55	110	241	337	297	1392	1800	1500	343,2	88,8	6,6
		5 bars	51	102	196	271	239	1051	1500				
		4 bars	47	94	155	221	195	766	1200				
NTZ 20 RV 113	113	6,2 bars	42	83	320	447	394	1392	1800	1500	343,2	88,8	6,6
		5 bars	39	77	260	360	317	1051	1500				
		4 bars	35	71	206	294	258	766	1200				
NTZ 20 RV 131	131	6,2 bars	36	72	368	515	453	1392	1800	1500	343,2	88,8	6,6
		5 bars	33	67	300	415	365	1051	1500				
		4 bars	31	62	237	338	298	766	1200				

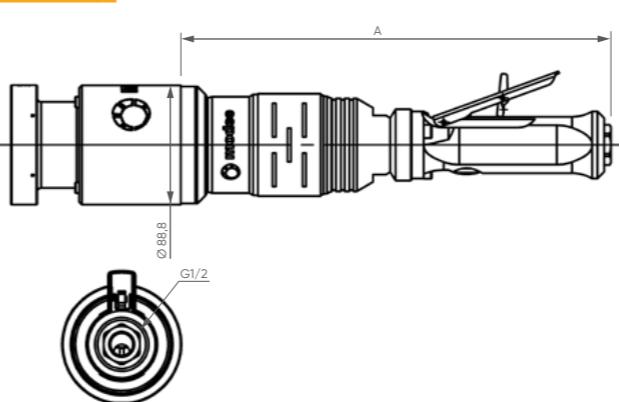
For connection and lubrication, see page 101

#### **OPTIONS AVAILABLE FOR THE NTZ 20 XT**

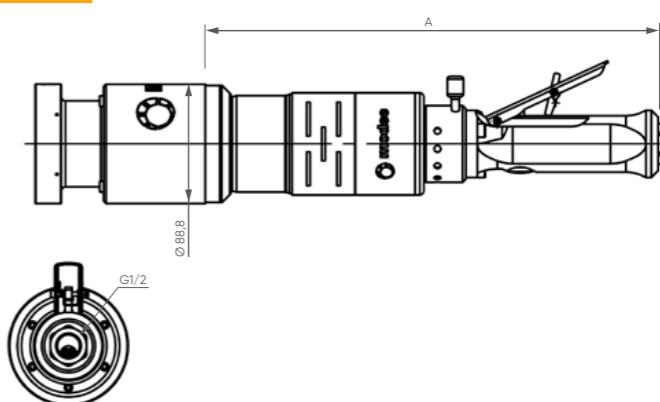
Collected exhaust																
ATEX certification																
Lubrication free																
Kit start																
Speed control																
Code	02	04	05	06	07	09	10	13	14	15	18	19	21	22	31	32

 List of available accessories for this motor page 101

NTZ 20 XT

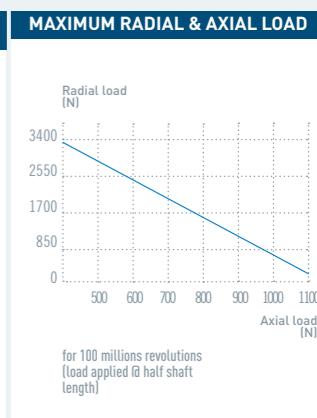
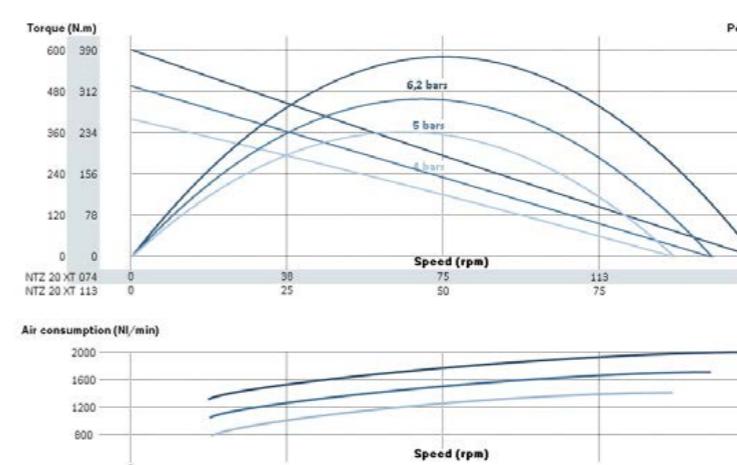


NTZ 20 RV

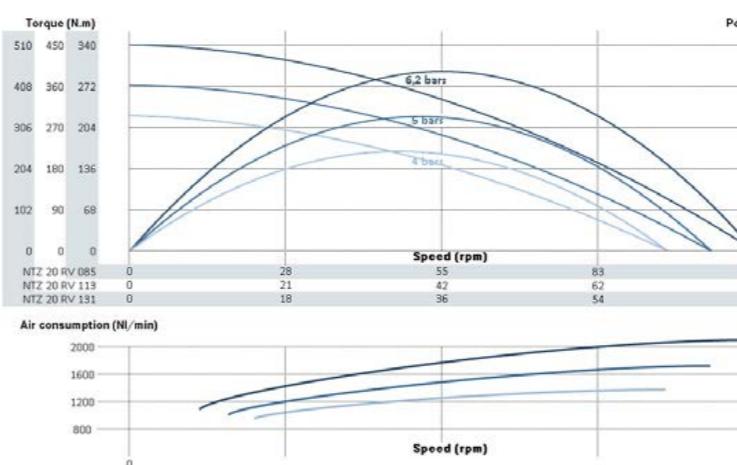


#### POWER, SPEED, TORQUE AND AIR CONSUMPTION GRAPHS

NTZ 20 XT



NTZ 20 PV



# MOTORS MRS 20

## POWER 1600-1700 W



### PERFORMANCES

MRS 20 XT	Reduction ratio	Air supply pressure	Speed [rpm]		Torque [N.m]			Max Power (W)	Air cons [NU/min]	Dimensions		
			@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)
MRS 20 XT 005	5,5	6,2 bars	1051	2102	14	26	22	1574	1900	278,5	76,1	4,1
		5 bars	968	1936	13	22	19	1298	1600			
		4 bars	895	1790	11	18	16	1021	1200			
MRS 20 XT 006	6,4	6,2 bars	913	1826	16	29	26	1574	1900	278,5	76,1	4,1
		5 bars	841	1682	15	25	22	1298	1600			
		4 bars	778	1555	13	21	18	1021	1200			
MRS 20 XT 008	8	6,2 bars	762	1524	20	35	31	1574	1900	278,5	76,1	4,1
		5 bars	702	1404	18	30	26	1298	1600			
		4 bars	649	1298	15	25	22	1021	1200			
MRS 20 XT 010	10	6,2 bars	598	1196	25	45	39	1574	1900	278,5	76,1	4,1
		5 bars	551	1102	22	38	33	1298	1600			
		4 bars	509	1018	19	32	28	1021	1200			
MRS 20 XT 014	14	6,2 bars	417	835	36	64	57	1574	1900	278,5	76,1	4,1
		5 bars	385	769	32	54	48	1298	1600			
		4 bars	355	711	27	46	40	1021	1200			
MRS 20 XT 023	23	6,2 bars	252	504	60	106	94	1574	1900	310,5	76,1	4,7
		5 bars	232	464	53	90	79	1298	1600			
		4 bars	215	429	45	75	66	1021	1200			
MRS 20 XT 027	27	6,2 bars	219	438	69	122	108	1574	1900	310,5	76,1	4,7
		5 bars	202	403	61	103	91	1298	1600			
		4 bars	186	373	52	87	76	1021	1200			
MRS 20 XT 031	31	6,2 bars	190	380	79	141	124	1574	1900	310,5	76,1	4,7
		5 bars	175	350	71	119	105	1298	1600			
		4 bars	162	324	60	100	88	1021	1200			
MRS 20 XT 037	37	6,2 bars	159	318	95	169	149	1574	1900	310,5	76,1	4,7
		5 bars	146	293	85	142	125	1298	1600			
		4 bars	135	270	72	120	105	1021	1200			
MRS 20 RV	Reduction ratio	Air supply pressure	Speed [rpm]		Torque [N.m]			Max Power (W)	Air cons [NU/min]	Dimensions		
Air motor reference	Reduction ratio	Air supply pressure	@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)
MRS 20 RV 005	5,5	6,2 bars	982	1964	16	21	19	1676	2100	264,5	76,1	4
		5 bars	928	1856	14	17	15	1314	1700			
		4 bars	877	1755	11	14	13	989	1400			
MRS 20 RV 006	6,4	6,2 bars	853	1706	19	24	21	1676	2100	264,5	76,1	4
		5 bars	806	1612	16	20	18	1314	1700			
		4 bars	762	1524	12	17	15	989	1400			
MRS 20 RV 008	8	6,2 bars	712	1424	22	29	26	1676	2100	264,5	76,1	4
		5 bars	673	1346	19	24	21	1314	1700			
		4 bars	636	1272	15	20	17	989	1400			
MRS 20 RV 010	10	6,2 bars	559	1117	29	37	33	1676	2100	264,5	76,1	4
		5 bars	528	1056	24	31	27	1314	1700			
		4 bars	499	998	19	25	22	989	1400			
MRS 20 RV 014	14	6,2 bars	390	780	41	53	47	1676	2100	264,5	76,1	4,0
		5 bars	368	737	34	44	39	1314	1700			
		4 bars	348	697	27	36	32	989	1400			
MRS 20 RV 023	23	6,2 bars	235	471	68	88	77	1676	2100	296,5	76,1	4,6
		5 bars	223	445	56	73	64	1314	1700			
		4 bars	210	421	45	60	53	989	1400			
MRS 20 RV 027	27	6,2 bars	205	409	78	101	89	1676	2100	296,5	76,1	4,6
		5 bars	193	387	65	84	74	1314	1700			
		4 bars	183	366	52	69	61	989	1400			
MRS 20 RV 031	31	6,2 bars	178	355	90	116	102	1676	2100	296,5	76,1	4,6
		5 bars	168	336	75	97	85	1314	1700			
		4 bars	159	318	59	79	70	989	1400			

# MOTORS NRS 20

POWER 1300-1500 W


**PERFORMANCES**

	NRS 20 XT		Speed [rpm]		Torque (N.m)			Max Power (W)	Air cons (NL/min)	Dimensions		
	Air motor reference	Reduction ratio	Air supply pressure	@ max Power	Free	@ max Power	Max (stall)	Starting torque		A (mm)	Ø (mm)	Weight (kg)
NRS 20 XT 005	5,5	6,2 bars 5 bars 4 bars	1026 972 909	2051 1944 1818	14 12 9,7	25 20 17	22 18 15	1486 1172 924	1800 1500 1200	421,5	76,1	4,6
NRS 20 XT 006	6,4	6,2 bars 5 bars 4 bars	891 845 790	1782 1689 1579	16 13 11	29 23 19	25 21 17	1486 1172 924	1800 1500 1200	421,5	76,1	4,6
NRS 20 XT 008	8	6,2 bars 5 bars 4 bars	744 705 659	1488 1410 1318	19 16 13	34 28 23	30 25 21	1486 1172 924	1800 1500 1200	421,5	76,1	4,6
NRS 20 XT 010	10	6,2 bars 5 bars 4 bars	583 553 517	1167 1106 1034	24 20 17	44 36 30	38 31 26	1486 1172 924	1800 1500 1200	421,5	76,1	4,6
NRS 20 XT 014	14	6,2 bars 5 bars 4 bars	407 386 361	815 772 722	35 29 24	63 51 43	55 45 37	1486 1172 924	1800 1500 1200	421,5	76,1	4,6
NRS 20 XT 023	23	6,2 bars 5 bars 4 bars	246 233 218	492 466 436	58 48 41	104 85 70	91 74 62	1486 1172 924	1800 1500 1200	453,5	76,1	4,9
NRS 20 XT 027	27	6,2 bars 5 bars 4 bars	214 203 189	427 405 379	66 55 47	119 97 81	105 86 71	1486 1172 924	1800 1500 1200	453,5	76,1	4,9
NRS 20 XT 031	31	6,2 bars 5 bars 4 bars	186 176 165	371 352 329	76 64 54	137 112 93	121 99 82	1486 1172 924	1800 1500 1200	453,5	76,1	4,9
NRS 20 XT 037	37	6,2 bars 5 bars 4 bars	155 147 137	310 294 275	92 76 64	164 134 112	145 118 98	1486 1172 924	1800 1500 1200	453,5	76,1	4,9
NRS 20 RV	Reduction ratio	Air supply pressure	Speed [rpm]		Torque (N.m)			Max Power (W)	Air cons (NL/min)	Dimensions		
Air motor reference	Reduction ratio	Air supply pressure	@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)
NRS 20 RV 005	5,5	6,2 bars 5 bars 4 bars	856 794 738	1713 1588 1476	14 12 9,2	18 15 12	16 13 11	1269 975 714	1800 1500 1200	443	76,1	5,2
NRS 20 RV 006	6,4	6,2 bars 5 bars 4 bars	744 690 641	1488 1379 1282	16 13 11	21 17 14	18 15 13	1269 975 714	1800 1500 1200	443	76,1	5,2
NRS 20 RV 008	8	6,2 bars 5 bars 4 bars	621 576 535	1242 1151 1071	20 16 13	25 21 17	22 18 15	1269 975 714	1800 1500 1200	443	76,1	5,2
NRS 20 RV 010	10	6,2 bars 5 bars 4 bars	487 452 420	974 903 840	25 21 16	32 26 22	28 23 19	1269 975 714	1800 1500 1200	443	76,1	5,2
NRS 20 RV 014	14	6,2 bars 5 bars 4 bars	340 315 293	680 630 586	36 30 23	46 38 31	40 33 27	1269 975 714	1800 1500 1200	443	76,1	5,2
NRS 20 RV 023	23	6,2 bars 5 bars 4 bars	205 190 177	411 381 354	59 49 39	76 63 52	67 55 45	1269 975 714	1800 1500 1200	475	76,1	5,5
NRS 20 RV 027	27	6,2 bars 5 bars 4 bars	178 165 154	357 331 308	68 56 44	87 72 59	77 64 52	1269 975 714	1800 1500 1200	475	76,1	5,5
NRS 20 RV 031	31	6,2 bars 5 bars 4 bars	155 144 134	310 287 267	78 65 51	100 83 68	88 73 60	1269 975 714	1800 1500 1200	475	76,1	5,5
NRS 20 RV 037	37	6,2 bars 5 bars 4 bars	129 120 112	259 240 223	94 78 61	120 100 82	106 88 72	1269 975 714	1800 1500 1200	475	76,1	5,5
NRS 20 RV 041	41	6,2 bars 5 bars 4 bars	117 108 101	234 217 201	104 86 68	133 97 80	117 97 74	1269 975 714	1800 1500 1200	475	76,1	5,5
NRS 20 RV 047	47	6,2 bars 5 bars 4 bars	102 94 87	203 188 175	119 99 78	153 127 104	135 112 92	1269 975 714	1800 1500 1200	475	76,1	5,5

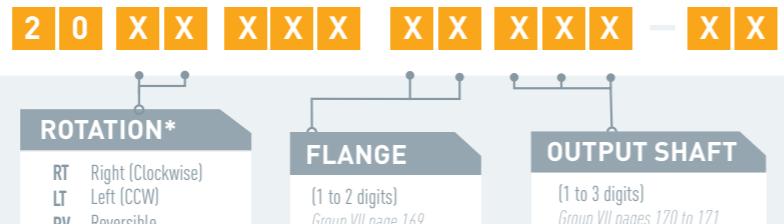
For connection and lubrication, see page 101

Data indicated in this table have an accuracy of +/- 5%

**REDUCTION RATIO**

[3 digits]  
See table below

**OPTIONS**

[2 digits]  
See table on right page


\* rotation direction is defined when looking from the back of the motor

**OPTIONS AVAILABLE FOR THE NRS 20 XT**

Collected exhaust	►	►	►	►
ATEX certification	►	►	►	►
Lubrication free	►	►	►	►
Kit start	►	►	►	►
Speed control	►	►	►	►

Code 19 21 22 31 32

+ List of available accessories for this motor page 101

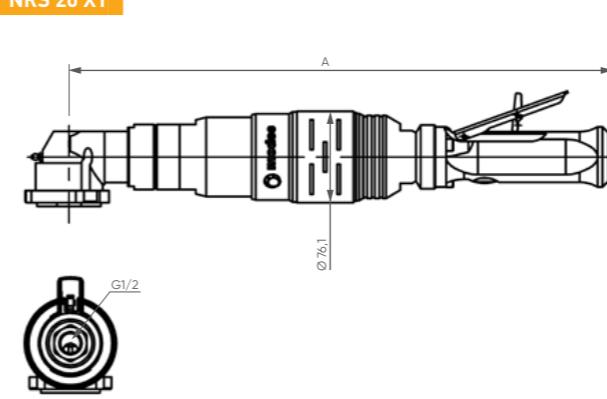
**OPTIONS AVAILABLE FOR THE NRS 20 RV**

ATEX certification	►	►	►	►
Left/Right switch	►	►	►	►
Lubrication free	►	►	►	►
Kit start	►	►	►	►
Code	03	12	16	17

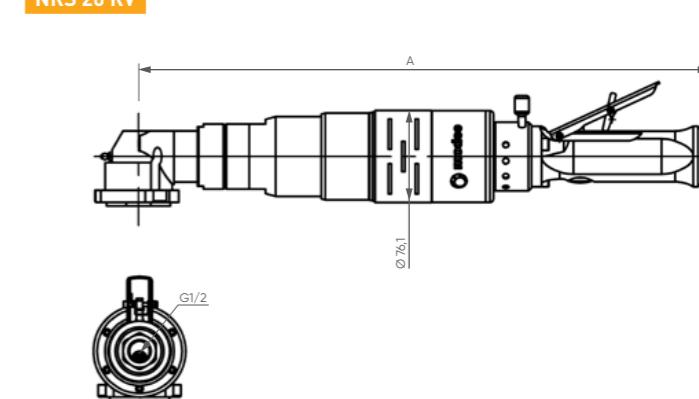
Code 29 30

**LAYOUT**

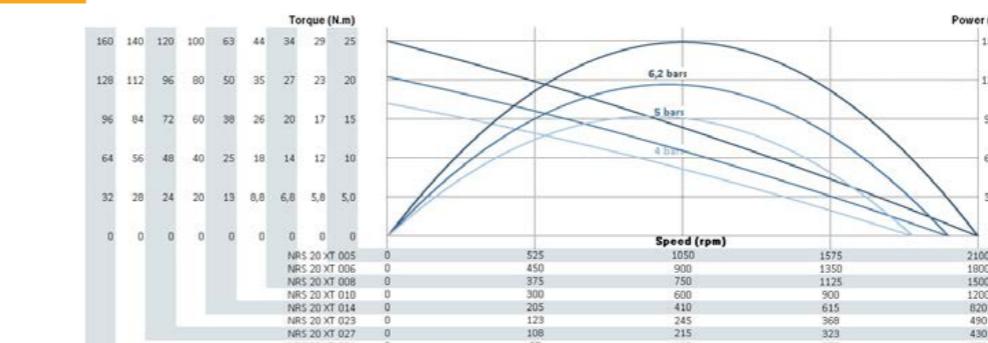
NRS 20 XT



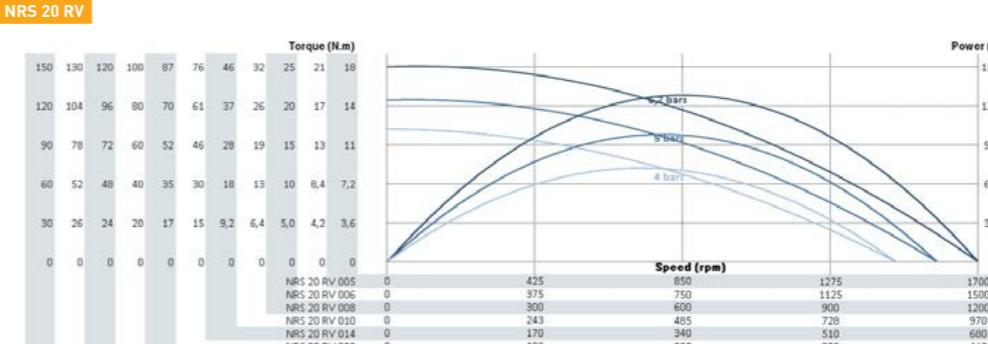
NRS 20 RV


**POWER, SPEED, TORQUE AND AIR CONSUMPTION GRAPHS**

NRS 20 XT



NRS 20 RV



# MOTORS MRH 20

## POWER 1700 W



### PERFORMANCES

MRH 20 XT	Reduction ratio	Air supply pressure	Speed (rpm)		Torque (N.m)			Max Power (W)	Air cons (NI/min)	Dimensions		
			@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)
MRH 20 XT 041	41	6,2 bars	145	289	109	183	161	1656	1900	278,5	76,1	6,0
		5 bars	137	273	91	154	136	1307	1600			
		4 bars	129	257	75	128	112	1016	1200			
MRH 20 XT 047	47	6,2 bars	126	251	126	211	185	1656	1900	278,5	76,1	6,0
		5 bars	119	237	105	177	156	1307	1600			
		4 bars	112	224	87	147	129	1016	1200			
MRH 20 XT 056	56	6,2 bars	105	210	151	252	222	1656	1900	278,5	76,1	6,0
		5 bars	99	198	126	212	187	1307	1600			
		4 bars	93	187	104	176	155	1016	1200			
MRH 20 XT 071	71	6,2 bars	82	164	192	321	283	1656	1900	278,5	76,1	6,0
		5 bars	78	155	161	271	238	1307	1600			
		4 bars	73	146	133	224	197	1016	1200			
MRH 20 XT 102	102	6,2 bars	57	115	275	460	405	1656	1900	278,5	76,1	6,0
		5 bars	54	109	230	388	341	1307	1600			
		4 bars	51	102	190	321	283	1016	1200			
MRH 20 RV	Reduction ratio	Air supply pressure	Speed (rpm)		Torque (N.m)			Max Power (W)	Air cons (NI/min)	Dimensions		
Air motor reference			@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)
MRH 20 RV 047	47	6,2 bars	116	233	140	177	156	1709	2100	264,5	76,1	6,4
		5 bars	110	221	114	148	130	1320	1700			
		4 bars	104	208	91	121	107	989	1400			
MRH 20 RV 056	56	6,2 bars	97	194	168	213	187	1709	2100	264,5	76,1	6,4
		5 bars	92	184	137	177	156	1320	1700			
		4 bars	87	174	109	145	128	989	1400			
MRH 20 RV 071	71	6,2 bars	76	152	214	271	238	1709	2100	264,5	76,1	6,4
		5 bars	72	145	174	225	198	1320	1700			
		4 bars	68	136	139	185	163	989	1400			
MRH 20 RV 102	102	6,2 bars	53	106	307	388	341	1709	2100	264,5	76,1	6,4
		5 bars	51	101	250	323	284	1320	1700			
		4 bars	48	95	199	265	233	989	1400			

For connection and lubrication, see page 101

Data indicated in this table have an accuracy of +/- 5%

### REDUCTION RATIO

[3 digits]  
See table below


### OPTIONS

[2 digits]  
See table on right page

### ROTATION\*

RT Right (Clockwise)  
LT Left (CCW)  
RV Reversible

### FLANGE

[1 to 2 digits]  
Group VIII page 172

### OUTPUT SHAFT

[1 to 3 digits]  
Group VIII page 173

\* rotation direction is defined when looking from the back of the motor

### OPTIONS AVAILABLE FOR THIS MOTOR

Collected exhaust	00	01	02	03	04	05	06	07	09	10	12	13	14	15	16	17	18	19	21	22	29	30	31	32
ATEX certification																								
Left/Right switch*																								
Lubrication free																								
Kit start																								
Speed control**																								
Code	00	01	02	03	04	05	06	07	09	10	12	13	14	15	16	17	18	19	21	22	29	30	31	32

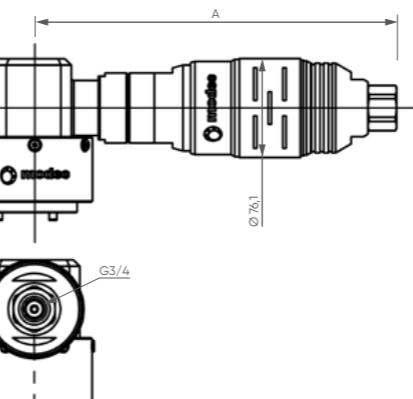
+ List of available accessories for this motor page 101

\* Reversible motors only

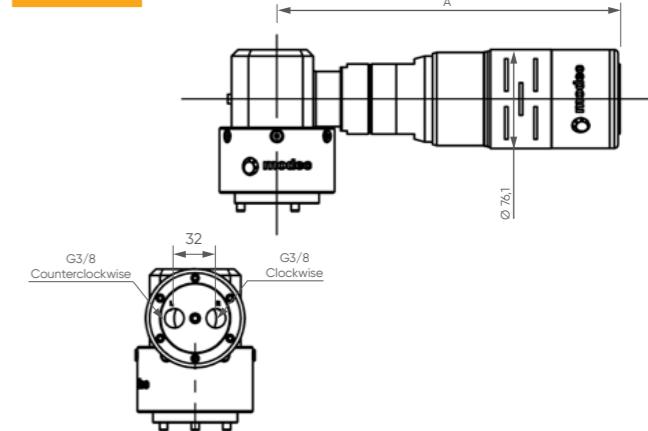
\*\* Non reversible motors only

### LAYOUT

#### MRH 20 XT

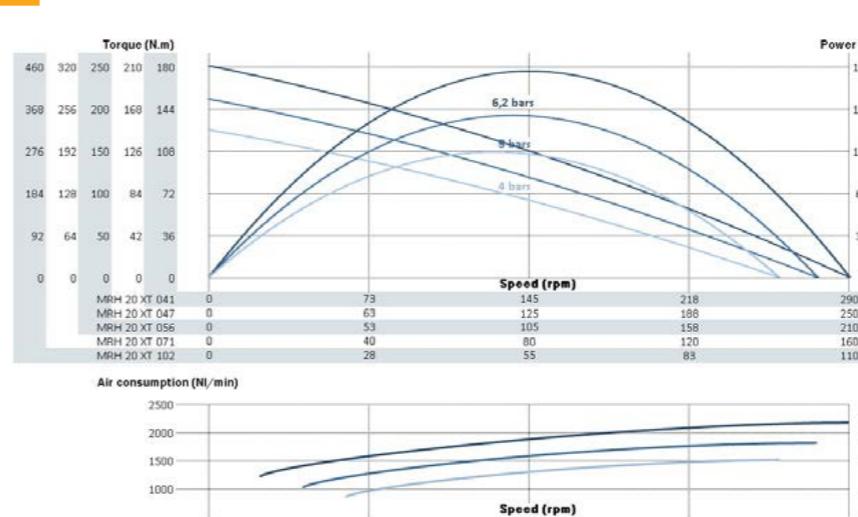


#### MRH 20 RV

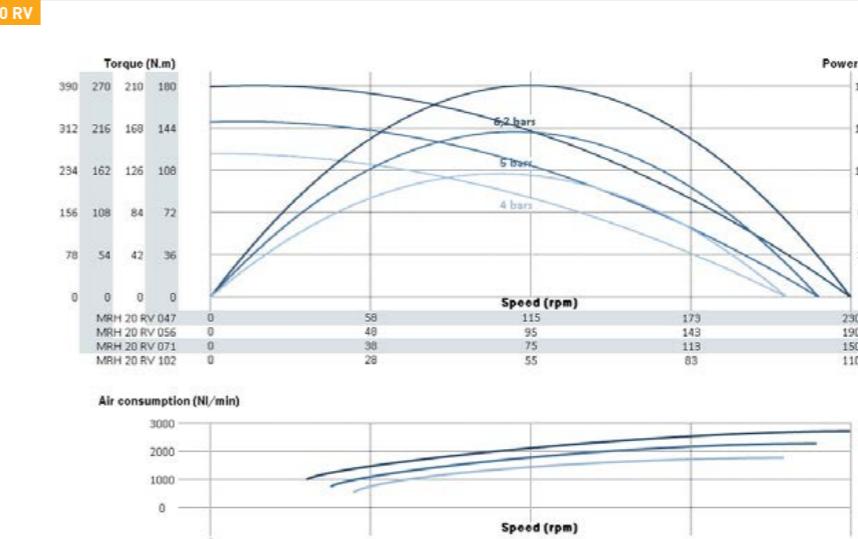


### POWER, SPEED, TORQUE AND AIR CONSUMPTION GRAPHS

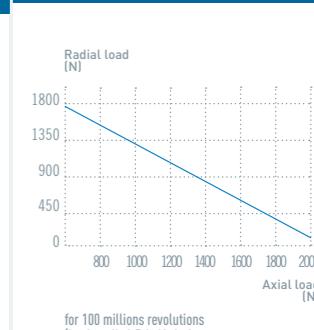
#### MRH 20 XT



#### MRH 20 RV

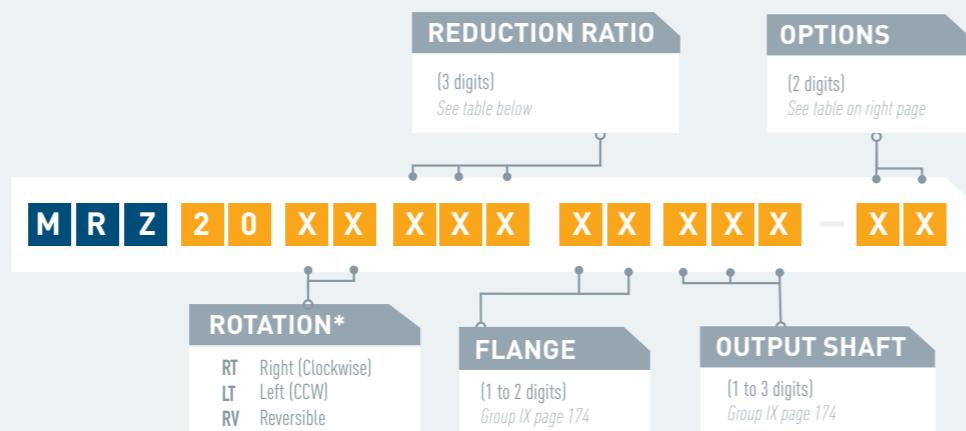


### MAXIMUM RADIAL & AXIAL LOAD





# MOTORS MRZ 20



*\* rotation direction is defined when looking from the back of the motor*

PERFORMANCES	MRZ 20 XT		Air supply pressure	Speed (rpm)		Torque (N.m)			Max Power (W)	Air cons (NL/min)	Dimensions			
	Air motor reference	Reduction ratio		@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)	
	MRZ 20 XT 115	115		6,2 bars	51	102	324	625	550	1730	1900	414,3	88,8	11,2
MRZ 20 XT 154	154	154	Air supply pressure	5 bars	48	95	268	518	456	1336	1600			
				4 bars	45	90	239	419	368	1124	1200			
				6,2 bars	38	76	435	838	737	1730	1900			
MRZ 20 RV	115	115	Air supply pressure	5 bars	35	71	360	695	611	1336	1600	414,3	88,8	10,7
				4 bars	33	67	321	561	494	1124	1200			
				6,2 bars	47	94	381	526	463	1880	2100			
MRZ 20 RV 115	154	171	Air supply pressure	5 bars	45	89	309	424	373	1443	1700	400,3	88,8	11,5
				4 bars	42	83	248	346	304	1086	1400			
				6,2 bars	35	70	510	706	621	1880	2100			
MRZ 20 RV 154	154	171	Air supply pressure	5 bars	33	67	414	568	500	1443	1700	400,3	88,8	11
				4 bars	31	62	333	464	408	1086	1400			
				6,2 bars	32	63	567	784	690	1880	2100			
MRZ 20 RV 171	171	171	Air supply pressure	5 bars	30	60	460	631	556	1443	1700	400,3	88,8	11,5
				4 bars	28	56	370	515	453	1086	1400			

**For connection and lubrication, see page 101**

Data indicated in this table have an accuracy of +/- 5%.

#### **OPTIONS AVAILABLE FOR THIS MOTOR**

Collected exhaust	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	21	22	28	29	30	31	32
ATEX certification																											
Left/Right switch*																											
Lubrication free																											
Kit start																											
Speed control**																											
Code	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	21	22	28	29	30	31	32

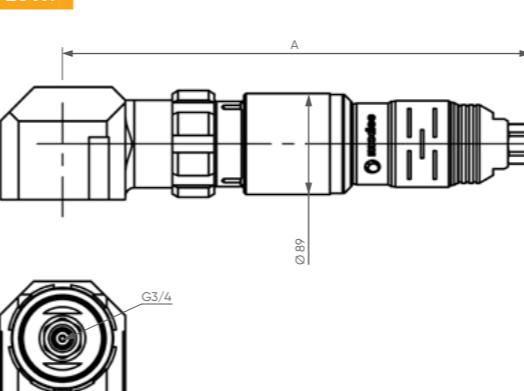
 List of available accessories for this motor page 101

\* Reversible motors only    \*\* Non reversible motors only

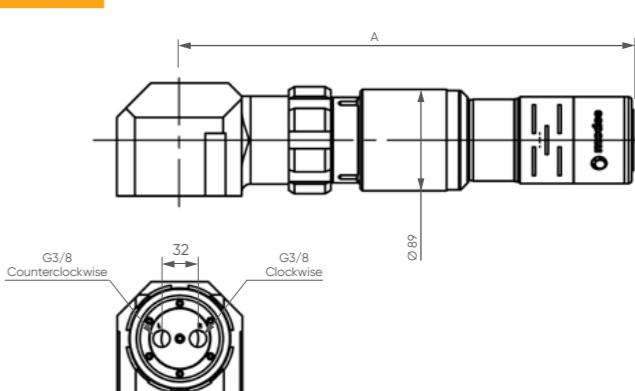
*Reversible motors only*

## LAYOUT

MRZ 20 XT

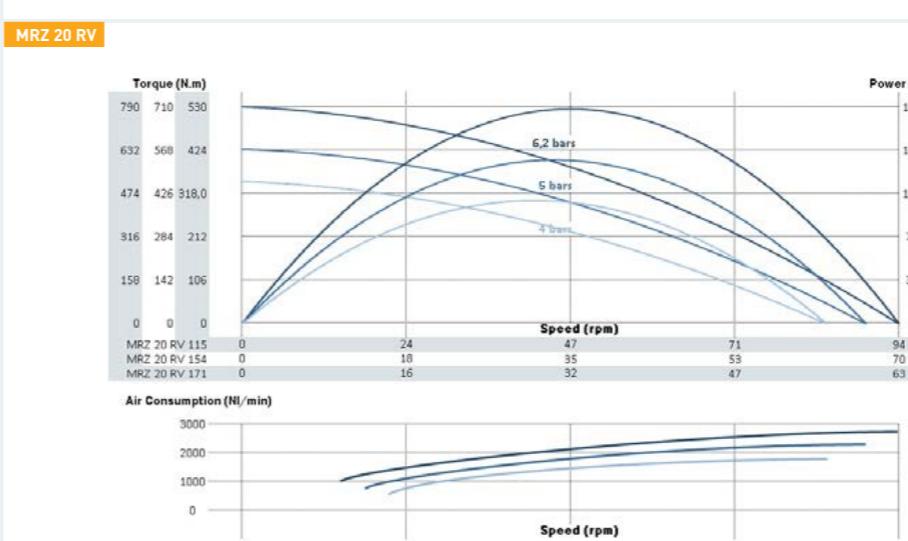
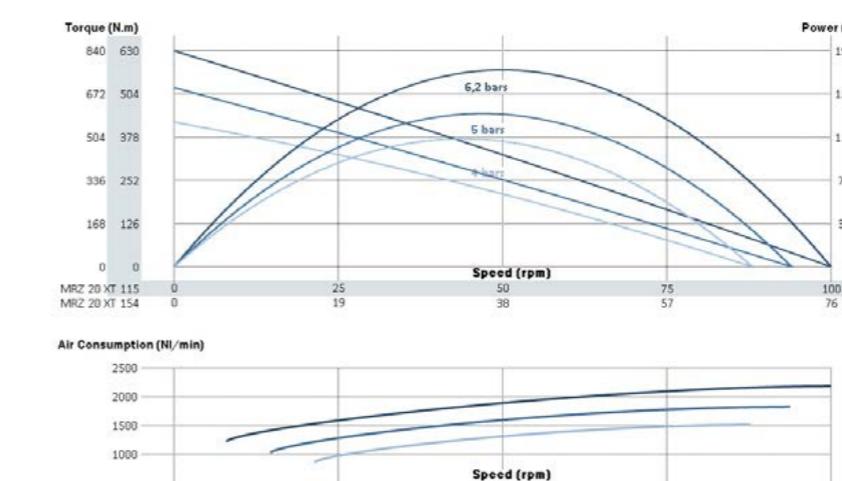


MRZ 20 R

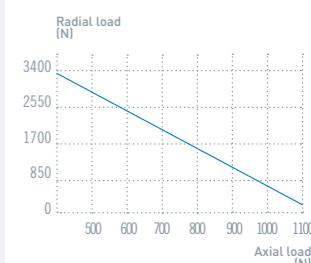


#### POWER, SPEED, TORQUE AND AIR CONSUMPTION GRAPHS

MRZ 20 XT



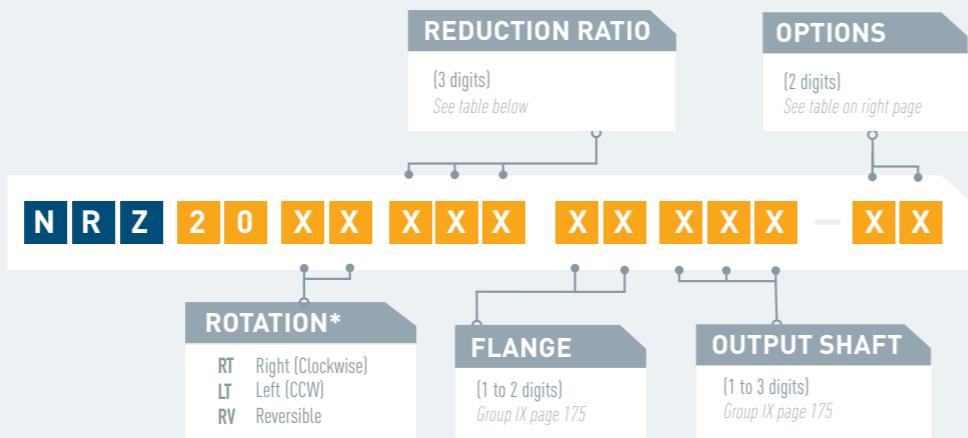
#### MAXIMUM RADIAL & AXIAL LOAD



for 100 millions revolutions  
(load applied at half shaft)

NOTES

# MOTORS NRZ 20 POWER 1400-1500 W



*\* rotation direction is defined when looking from the back of the motor*

PERFORMANCES	NRZ 20 XT		Air supply pressure	Speed (rpm)		Torque (N.m)			Max Power (W)	Air cons (NL/min)	Dimensions			
	Air motor reference	Reduction ratio		@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)	
NRZ 20 XT 115	115	6,2 bars	49	99	298	625	550	1543	1800	557,3	88,8	12,0		
		5 bars	46	92	254	507	446	1224	1500					
		4 bars	43	86	210	406	357	948	1200					
NRZ 20 XT 154	154	6,2 bars	37	74	400	838	737	1543	1800	557,3	88,8	12,0		
		5 bars	34	69	340	680	598	1224	1500					
		4 bars	32	64	282	545	479	948	1200					
NRZ 20 RV		Air supply pressure	Speed (rpm)		Torque (N.m)			Max Power (W)	Air cons (NL/min)	Dimensions				
Air motor reference			Reduction ratio	@ max Power	Free	@ max Power	Max (stall)			Starting torque	A (mm)	Ø (mm)	Weight (kg)	
NRZ 20 RV 115	115	6,2 bars	41	82	324	443	390	1393	1800	578,8	88,8	12,7		
		5 bars	38	76	267	369	325	1062	1500					
		4 bars	35	70	211	297	262	773	1200					
NRZ 20 RV 154	154	6,2 bars	31	61	434	594	523	1393	1800	578,8	88,8	12,7		
		5 bars	28	57	358	495	436	1062	1500					
		4 bars	26	52	283	399	351	773	1200					
NRZ 20 RV 171	171	6,2 bars	28	55	482	660	580	1393	1800	578,8	88,8	12,7		
		5 bars	26	51	397	550	484	1062	1500					
		4 bars	24	47	314	443	390	773	1200					
NRZ 20 RV 227	227	6,2 bars	21	42	640	875	770	1393	1800	578,8	88,8	12,7		
		5 bars	19	39	527	730	642	1062	1500					
		4 bars	18	35	416	587	517	773	1200					

**For connection and lubrication, see page 101**

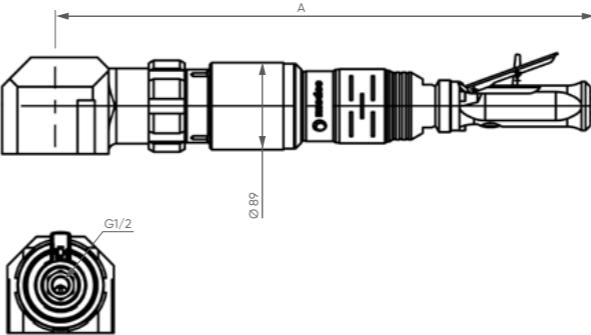
Data indicated in this table have an accuracy of +/- 5%

#### **OPTIONS AVAILABLE FOR THE NRZ 20 XT**

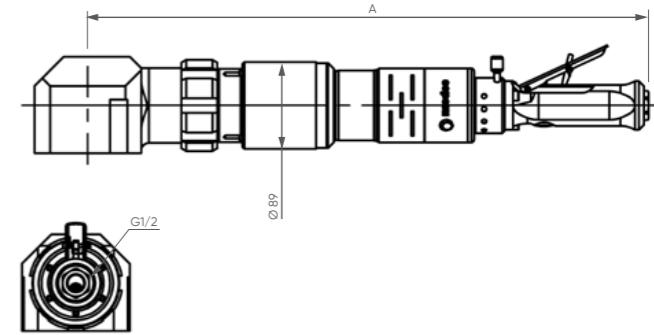
 List of available accessories for this motor page 101

## LAYOUT

NRZ 20 XT

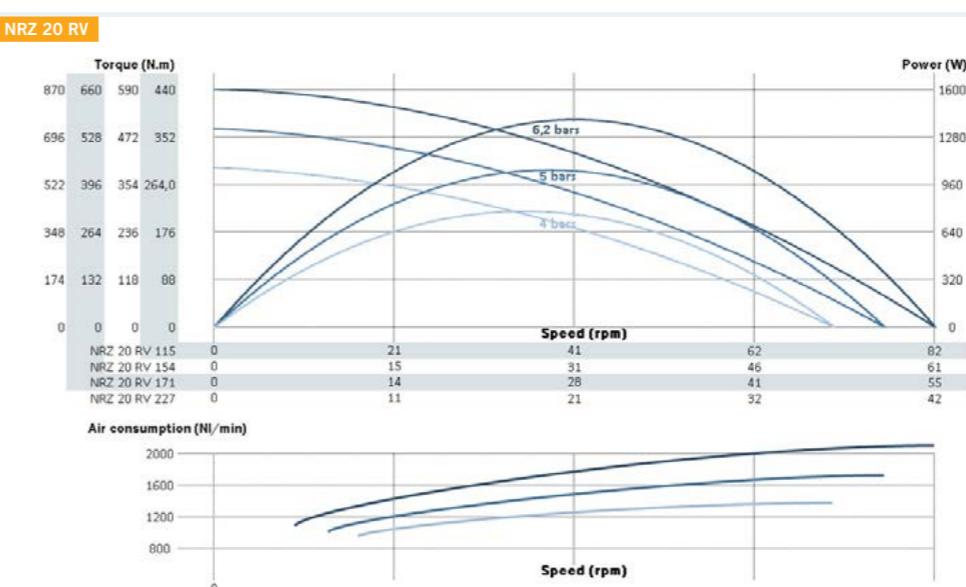
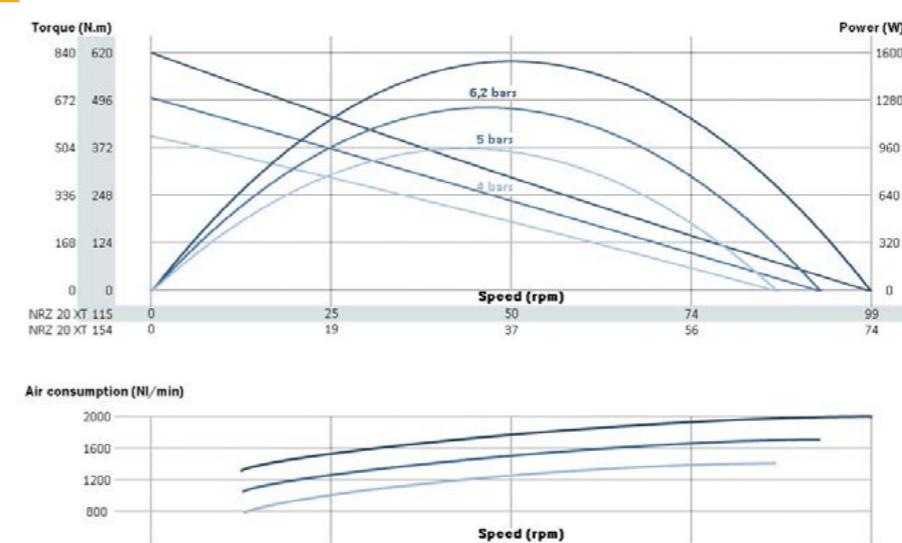


NRZ 20 RV

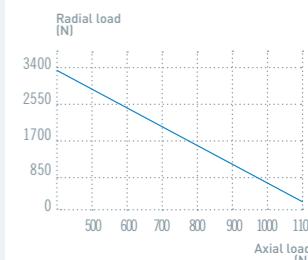


#### POWER, SPEED, TORQUE AND AIR CONSUMPTION GRAPHS

NRZ 20 XT



#### MAXIMUM RADIAL & AXIAL LOAD



NOTES



Frequently used in bolting applications with high torques, the "25" series air motors are often equipped with an angle drive head and a high flow control handle to ensure they have the necessary power.

The "25" series air motors can be found on lifting applications with torques approaching 1000 Nm. or on cutting applications with speeds above 11000 rpm.

Their high power (2700W) does not prevent them from being compact and light (3 to 12 kg depending on the chosen configuration) and very versatile.

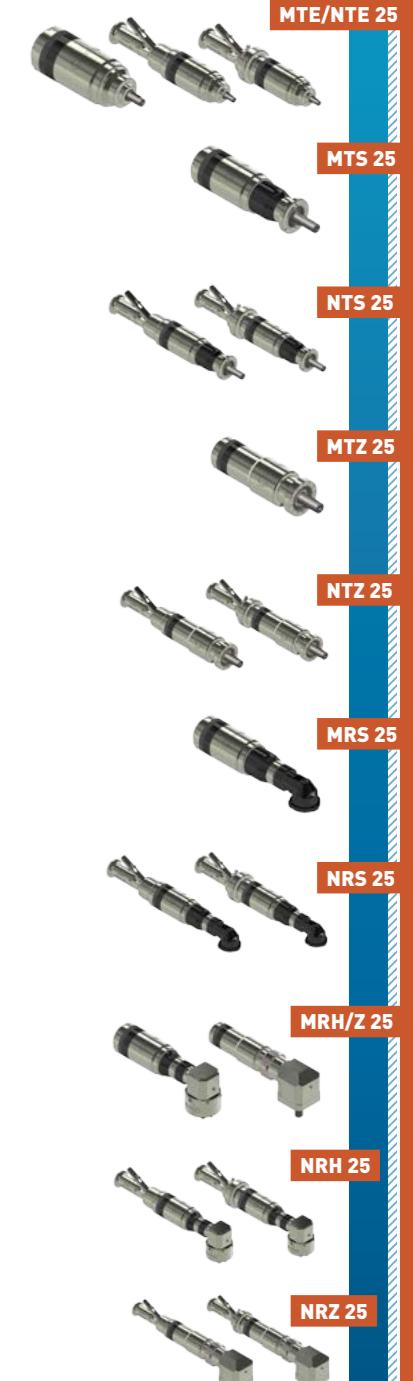
+ ACCESSORIES FOR THIS MOTOR		Reference	Information
Filtration, pressure Regulation and Lubrication unit (FRL)		AC108	Page 177
Safety Air Treatment Box (SAT Box)		AC126	Page 178
With Pedal remote control		AC127	Page 178
With handle remote control		AC128	Page 178
With remote emergency kill switch		AC129	Page 178
With remote E-Stop and pedal remote control		AC130	Page 178
With remote E-Stop and handle remote control		AC131	Page 178
Maintenance kits			
Maintenance kit for "25" series		AC305	Page 181
Maintenance kit for lube free "25" series		AC315	Page 181
Maintenance kit for kit start "25" series		AC325	Page 181
Exhaust collector kit for "25" series		AC342	Page 181
modec Oil Co-16		AC149	Page 178
Control handles			
Safety control handle for non reversible "25" series		AC412	Page 179
Safety control handle for reversible "25" series		AC414	Page 179
Progressive control handle for non reversible "25" series		AC407	Page 179
Progressive control handle for reversible "25" series		AC410	Page 179
Filters et silencers			
Metallic standard exhaust silencer		AC182	Page 179
Metallic standard inlet silencer		AC181	Page 179
Plastic standard exhaust silencer		AC153	Page 180
Plastic standard inlet silencer		AC183	Page 180
Heavy duty exhaust silencer		AC157	Page 180
Heavy duty inlet silencer		AC155	Page 180
High flow air muffler		AC160	Page 181
Exhaust silencer filter		AC185	Page 180
Speed control muffler		AC174	Page 180

#### CONNECTION AND LUBRIFICATION

	Min. fittings Ø		Min. pipe Ø		Lubrication (6,2 bars)
	In	Out	In	Out	
	10 mm / 0,4 In	16 mm / 0,6 In	13 mm / 0,5 In	20 mm / 0,8 In	10 drops / minute

#### CONVERSION TABLE

Watt ➔ Horse power	Newton meter ➔ Pound feet	Millimeter ➔ Inch
Watt x 0,001341 = hp	Nm x 0,7376 = lb.ft	mm x 0,03937 = in
Bar ➔ Pound per square Inch	Normo Liter / minute ➔ Standard cubic feet per minute	Kilogram ➔ Pound
Bar x 14,5 = psi	NL / min x 0,03531 = scfm	Kg x 2,205 = lb







# MOTORS NTS 25



## PERFORMANCES

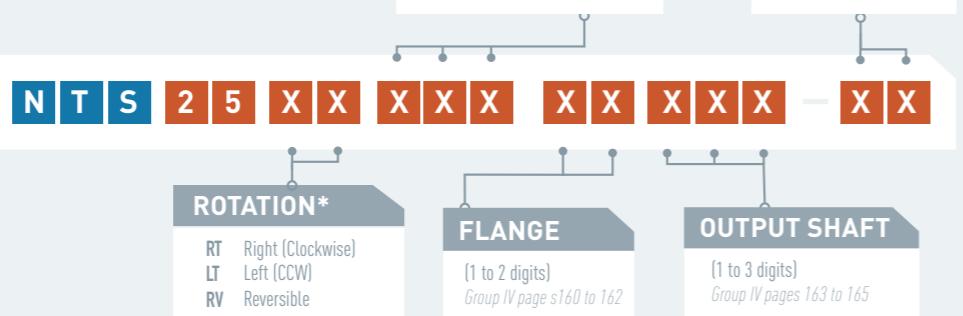
NTS 25 R

8

 For connection and lubrication, see page 125

## REDUCTION RATIO

(3 digits)  
See table below



\* rotation direction is defined when looking from the back of the motor

PERFORMANCES	NTS 25 XT		Air supply pressure	Speed (rpm)		Torque (N.m)			Max Power [W]	Air cons (NL/min)	Dimensions		
	Air motor reference	Reduction ratio		@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)
NTS 25 XT 004	4	6,2 bars	1380	2759	19	31	28	2722	2800	369,5	80	4,6	
		5 bars	1280	2561	16	26	23	2129	2300				
		4 bars	1185	2371	13	20	18	1644	1800				
NTS 25 XT 005	5	6,2 bars	1199	2397	22	36	32	2722	2800				
		5 bars	1112	2225	18	30	26	2129	2300				
		4 bars	1030	2060	15	24	21	1644	1800				
NTS 25 XT 006	6	6,2 bars	1001	2001	26	43	38	2722	2800				
		5 bars	929	1857	22	36	31	2129	2300				
		4 bars	860	1719	18	28	25	1644	1800				
NTS 25 XT 007	7	6,2 bars	785	1570	33	55	49	2722	2800				
		5 bars	728	1457	28	45	40	2129	2300				
		4 bars	674	1349	23	36	32	1644	1800				
NTS 25 XT 011	11	6,2 bars	548	1096	47	79	70	2722	2800				
		5 bars	509	1017	40	65	57	2129	2300		369,5	80	4,6
		4 bars	471	941	33	51	45	1644	1800				
NTS 25 XT 017	17	6,2 bars	331	662	79	131	115	2722	2800				
		5 bars	307	614	66	108	95	2129	2300		401,5	80	5,0
		4 bars	284	569	55	85	75	1644	1800				
NTS 25 XT 023	23	6,2 bars	250	499	104	174	153	2722	2800		401,5	80	5,0
		5 bars	232	464	88	143	126	2129	2300				
		4 bars	215	429	73	113	99	1644	1800				
NTS 25 XT 031	31	6,2 bars	188	376	138	230	203	2722	2800		401,5	80	5,0
		5 bars	175	349	116	190	167	2129	2300				
		4 bars	162	323	97	150	132	1644	1800				
NTS 25 XT 035	35	6,2 bars	164	327	159	265	233	2722	2800		401,5	80	5,0
		5 bars	152	304	134	218	192	2129	2300				
		4 bars	140	281	112	172	152	1644	1800				

NTS 25 RV	Reduction ratio	Air supply pressure	Speed (rpm)		Torque (N.m)			Max Power (W)	Air cons (NL/min)	Dimensions		
			@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)
NTS 25 RV 004	4	6,2 bars	1232	2464	18	29	25	2385	2700	380,5	80	5,0
		5 bars	1152	2303	16	23	21	1915	2200			
		4 bars	1067	2135	13	19	17	1497	1700			
NTS 25 RV 005	5	6,2 bars	1070	2140	21	33	29	2385	2700	380,5	80	5,0
		5 bars	1001	2001	18	27	24	1915	2200			
		4 bars	927	1854	15	22	19	1497	1700			
NTS 25 RV 006	6	6,2 bars	893	1787	25	39	35	2385	2700	380,5	80	5,0
		5 bars	835	1670	22	32	28	1915	2200			
		4 bars	774	1548	18	26	23	1497	1700			
NTS 25 RV 007	7	6,2 bars	701	1402	33	50	44	2385	2700	380,5	80	5,0
		5 bars	655	1310	28	41	36	1915	2200			
		4 bars	607	1214	24	34	30	1497	1700			
NTS 25 RV 011	11	6,2 bars	489	978	47	72	63	2385	2700	380,5	80	5,0
		5 bars	457	915	40	59	52	1915	2200			
		4 bars	424	848	34	48	42	1497	1700			
NTS 25 RV 017	17	6,2 bars	295	591	77	119	105	2385	2700	412,5	80	5,5
		5 bars	276	552	66	98	86	1915	2200			
		4 bars	256	512	56	80	70	1497	1700			
NTS 25 RV 023	23	6,2 bars	223	446	102	158	139	2385	2700	412,5	80	5,5
		5 bars	208	417	88	130	114	1915	2200			
		4 bars	193	386	74	105	93	1497	1700			
NTS 25 RV 031	31	6,2 bars	168	336	136	209	184	2385	2700	412,5	80	5,5
		5 bars	157	314	116	172	151	1915	2200			
		4 bars	146	291	98	140	123	1497	1700			
NTS 25 RV 035	35	6,2 bars	146	292	156	241	212	2352	2700	412,5	80	5,5
		5 bars	137	273	134	198	174	1810	2200			
		4 bars	127	253	113	161	142	1396	1700			
NTS 25 RV 042	42	6,2 bars	122	244	187	289	254	2385	2700	412,5	80	5,5
		5 bars	114	228	161	237	209	1915	2200			
		4 bars	106	211	135	193	170	1497	1700			

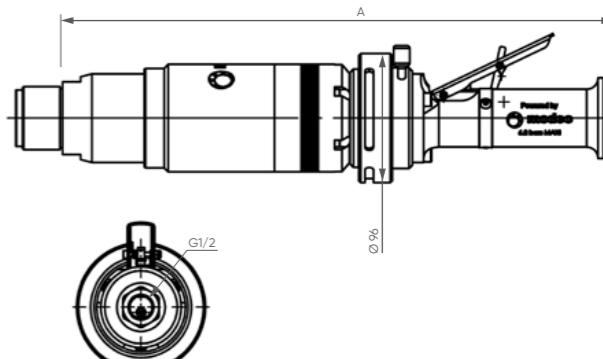
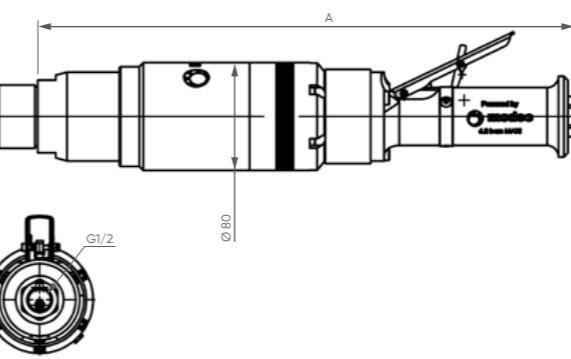
#### **OPTIONS AVAILABLE FOR THE NTS 25 XT**

Collected exhaust														
ATEX certification														
Lubrication free														
Kit start														
Code	00	01	02	04	05	07	09	10	13	14	21	22		
ATEX certification														
Left/Right switch														
Lubrication free														
Kit start														
Code									03	12	16	17	29	30

 List of available accessories for this motor page 125

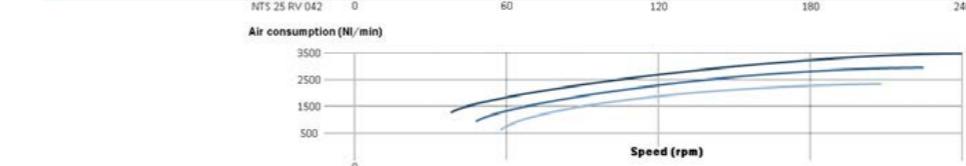
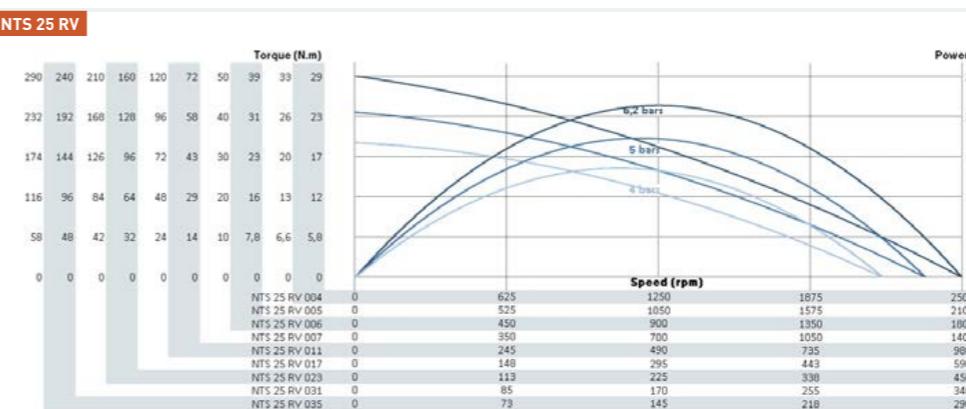
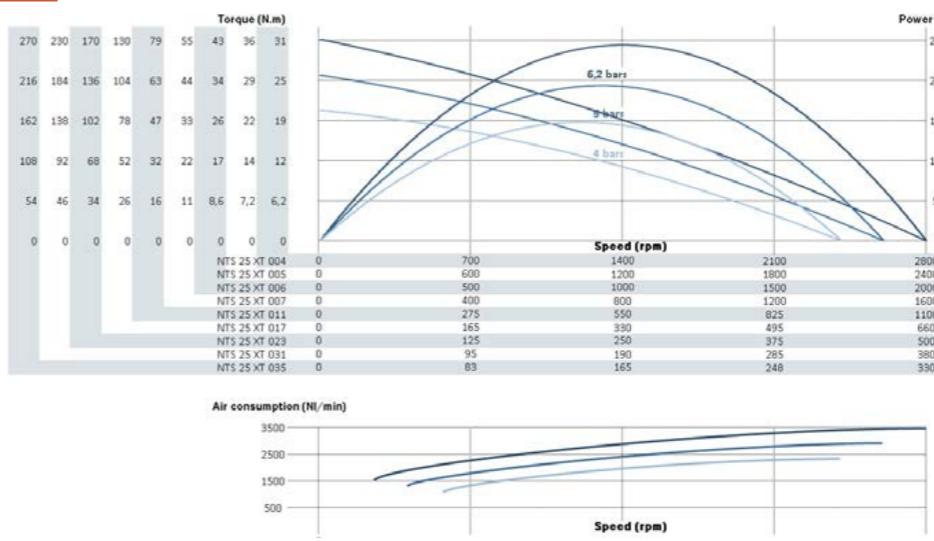
## LAYOUT

NTS 25 XT



#### **POWER, SPEED, TORQUE AND AIR CONSUMPTION GRAPHS**

NTS 25 XT



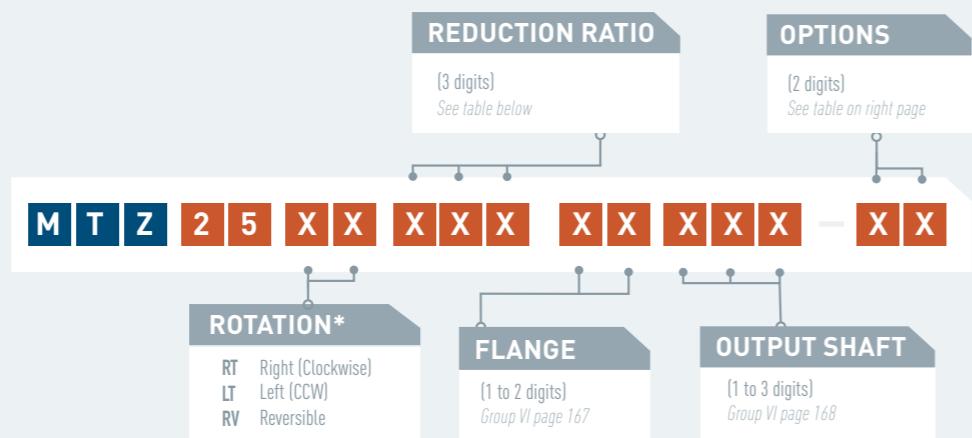
NOTES

# MOTORS MTZ 25

POWER 2400-2700 W



MTZ 25


**OPTIONS AVAILABLE FOR THIS MOTOR**

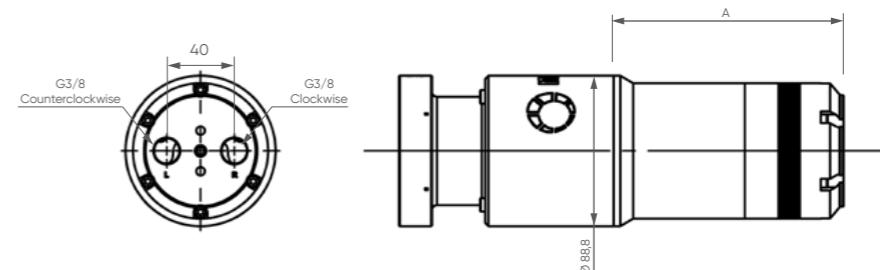
Collected exhaust	00	01	02	03	04	05	07	09	10	11	12	13	14	16	17	21	22	23	27	28	29	30	36	37
ATEX certification																								
Left/Right switch*																								
Lubrication free																								
Kit start																								
Inox																								
Code	00	01	02	03	04	05	07	09	10	11	12	13	14	16	17	21	22	23	27	28	29	30	36	37

+ List of available accessories for this motor page 125

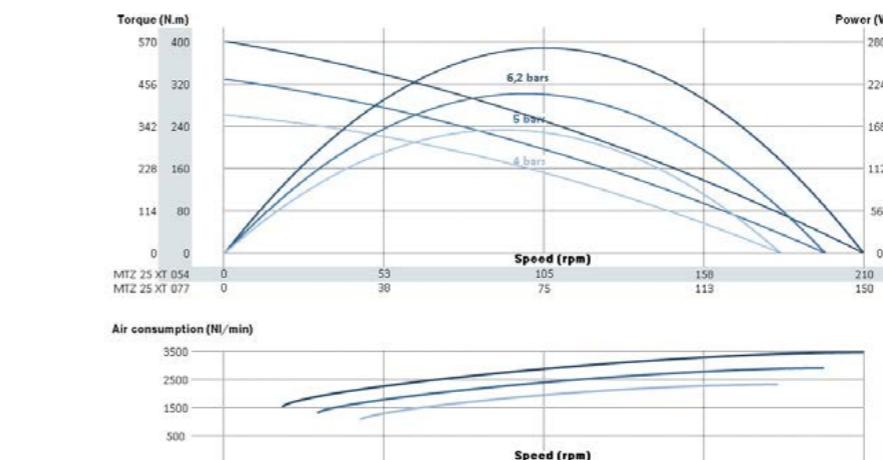
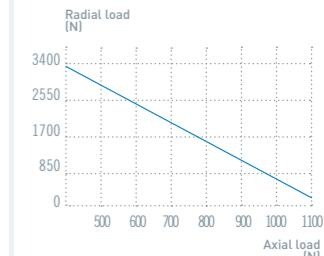
\* Reversible motors only

**LAYOUT**

MTZ 25


**POWER, SPEED, TORQUE AND AIR CONSUMPTION GRAPHS**

MTZ 25 XT


**MAXIMUM RADIAL & AXIAL LOAD**

**PERFORMANCES**

MTZ 25 XT	Reduction ratio	Air supply pressure	Speed (rpm)		Torque (N.m)			Max Power (W)	Air cons (Nm/min)	Dimensions		
			@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)
MTZ 25 XT 054	54	6,2 bars	104	208	249	399	351	2715	2800	136,1	88,8	6,1
		5 bars	98	195	206	328	289	2105	2300			
		4 bars	91	181	170	260	228	1614	1800			
MTZ 25 XT 077	77	6,2 bars	73	145	357	571	502	2715	2800	136,1	88,8	6,1
		5 bars	68	136	295	470	414	2105	2300			
		4 bars	63	127	244	372	327	1614	1800			

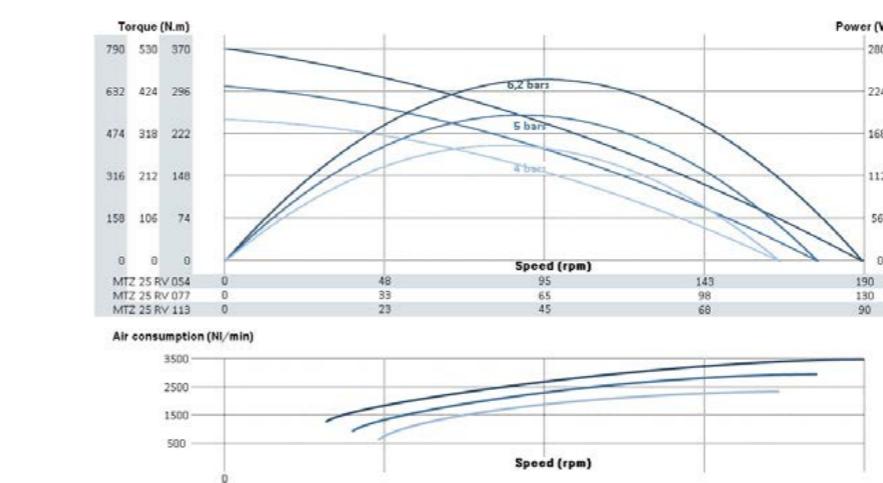
  

MTZ 25 RV	Reduction ratio	Air supply pressure	Speed (rpm)		Torque (N.m)			Max Power (W)	Air cons (Nm/min)	Dimensions		
			@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)
MTZ 25 RV 054	54	6,2 bars	95	189	242	372	327	2395	2700	136,1	88,8	6,1
		5 bars	88	176	207	306	269	1909	2200			
		4 bars	83	165	175	248	218	1512	1700			
MTZ 25 RV 077	77	6,2 bars	66	132	347	533	469	2395	2700	136,1	88,8	6,1
		5 bars	61	123	297	438	386	1909	2200			
		4 bars	58	115	251	355	313	1512	1700			
MTZ 25 RV 113	113	6,2 bars	45	90	511	785	691	2395	2700	177,2	88,8	6,4
		5 bars	42	83	437	646	568	1909	2200			
		4 bars	39	78	369	523	461	1512	1700			

For connection and lubrication, see page 125

Data indicated in this table have an accuracy of +/- 5%

MTZ 25 RV


**NOTES**

# MOTORS NTZ 25

## POWER 2400-2700 W



### PERFORMANCES



For connection and lubrication, see page 125

NTZ 25 XT	Reduction ratio	Air supply pressure	Speed [rpm]		Torque [N.m]			Max Power (W)	Air cons (NU/min)	Dimensions		
			@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)
Air motor reference												
NTZ 25 XT 054	54	6,2 bars	104	208	249	399	351	2715	2800	320,6	88,8	6,8
		5 bars	98	195	206	328	289	2105	2300			
		4 bars	91	181	170	260	228	1614	1800			
NTZ 25 XT 077	77	6,2 bars	73	145	357	571	502	2715	2800	320,6	88,8	6,8
		5 bars	68	136	295	470	414	2105	2300			
		4 bars	63	127	244	372	327	1614	1800			
NTZ 25 RV	Reduction ratio	Air supply pressure	Speed [rpm]		Torque [N.m]			Max Power (W)	Air cons (NU/min)	Dimensions		
Air motor reference			@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)
NTZ 25 RV 054	54	6,2 bars	95	189	242	372	327	2395	2700	320,6	88,8	7,3
		5 bars	88	176	207	306	269	1909	2200			
		4 bars	83	165	175	248	218	1512	1700			
NTZ 25 RV 077	77	6,2 bars	66	132	347	533	469	2395	2700	320,6	88,8	7,3
		5 bars	61	123	297	438	386	1909	2200			
NTZ 25 RV 113	113	6,2 bars	45	90	511	785	691	2395	2700	361,7	88,8	7,6
		5 bars	42	83	437	646	568	1909	2200			
		4 bars	39	78	369	523	461	1512	1700			

Data indicated in this table have an accuracy of +/- 5%

### REDUCTION RATIO

[3 digits]  
See table below

NTZ 25 XT      NTZ 25 RV

### ROTATION\*

RT Right (Clockwise)  
LT Left (CCW)  
RV Reversible

### FLANGE

[1 to 2 digits]  
Group VI page 167

### OPTIONS

[2 digits]  
See table on right page

### OUTPUT SHAFT

[1 to 3 digits]  
Group VI page 168

\* rotation direction is defined when looking from the back of the motor

### OPTIONS AVAILABLE FOR THE NTZ 25 XT

Collected exhaust	00	01	02	04	05	07	09	10	13	14	21	22
ATEX certification												
Lubrication free												
Kit start												
Code	00	01	02	04	05	07	09	10	13	14	21	22

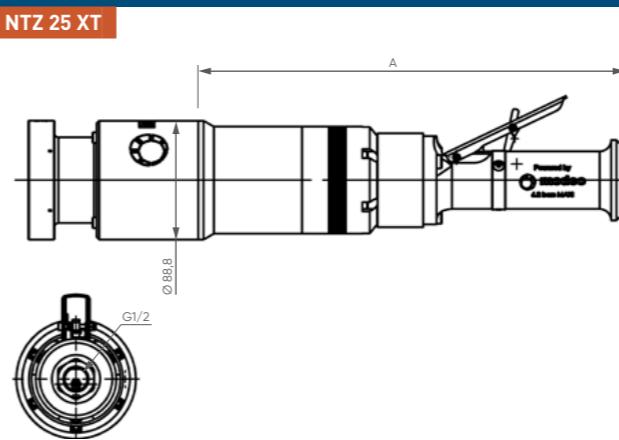
+ List of available accessories for this motor page 125

### OPTIONS AVAILABLE FOR THE NTZ 25 RV

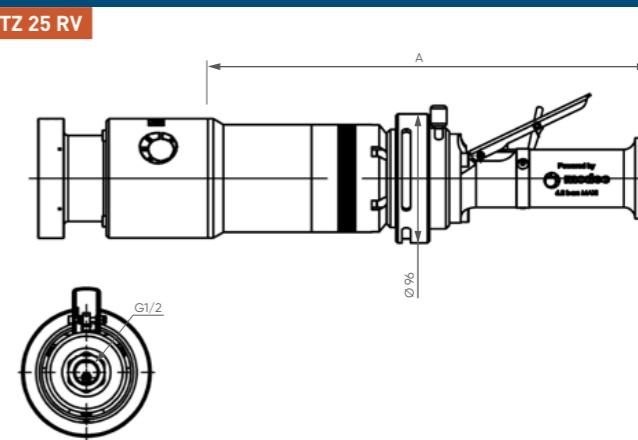
ATEX certification	03	12	16	17	29	30
Left/Right switch						
Lubrication free						
Kit start						
Code	03	12	16	17	29	30

### LAYOUT

NTZ 25 XT

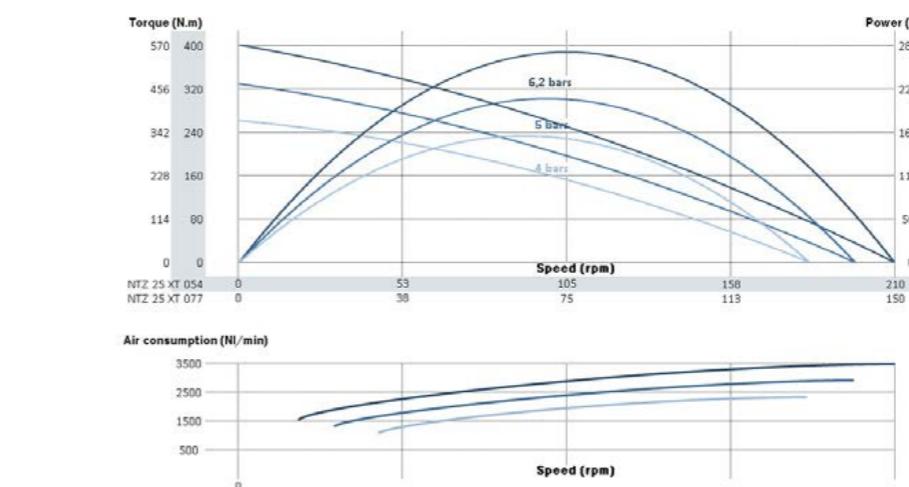


NTZ 25 RV

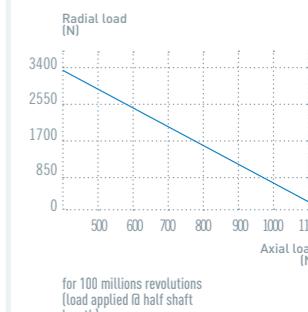


### POWER, SPEED, TORQUE AND AIR CONSUMPTION GRAPHS

NTZ 25 XT

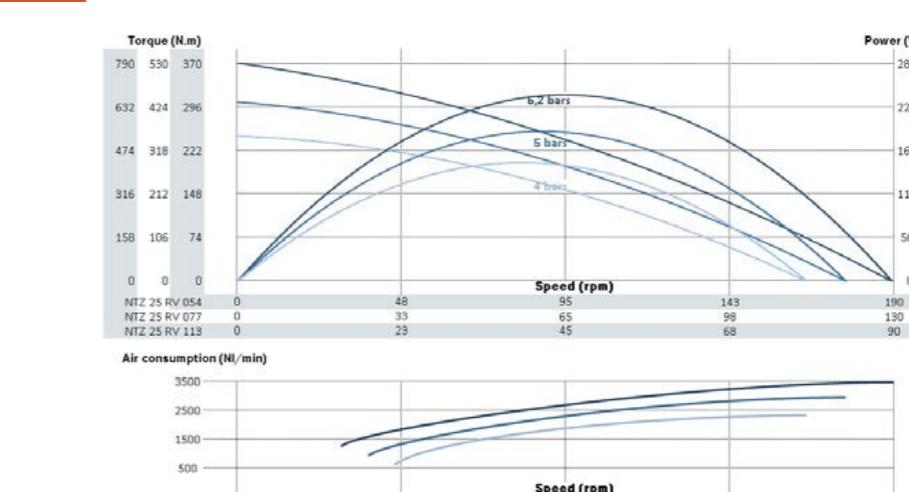


### MAXIMUM RADIAL & AXIAL LOAD



### NOTES

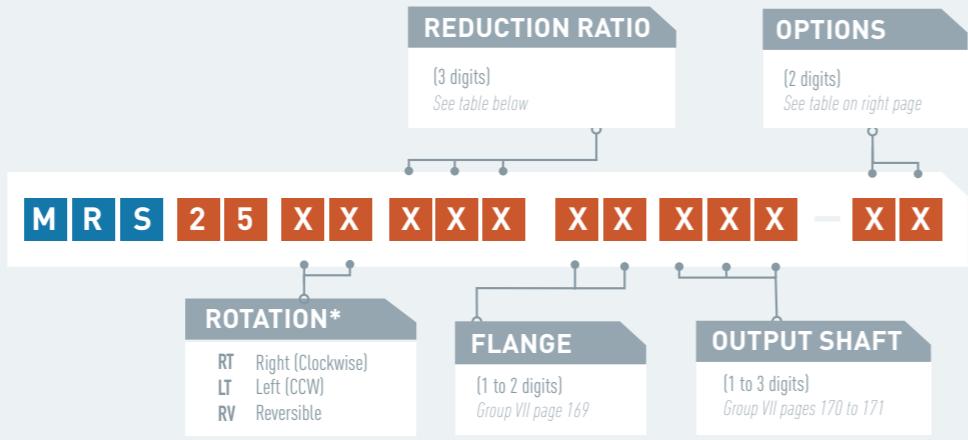
NTZ 25 RV



# MOTORS MRS 25



MRS 25



\* rotation direction is defined when looking from the back of the motor

PERFORMANCES

PERFORMANCES	MRS 25 XT		Air supply pressure	Speed (rpm)		Torque (N.m)			Max Power (W)	Air cons (NL/min)	Dimensions			
	Air motor reference	Reduction ratio		@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)	
MRS 25 XT 005	5,5	6,2 bars	1030	2060	25	40	35	2664	2800	278,5	80	4,9		
		5 bars	953	1907	20	32	28	2035	2300					
		4 bars	883	1765	17	25	22	1549	1800					
MRS 25 XT 006	6,4	6,2 bars	895	1790	28	46	40	2664	2800	278,5	80	4,9		
		5 bars	828	1657	23	37	33	2035	2300					
		4 bars	767	1534	19	29	26	1549	1800					
MRS 25 XT 008	8	6,2 bars	747	1494	34	55	48	2664	2800	278,5	80	4,9		
		5 bars	691	1383	28	44	39	2035	2300					
		4 bars	640	1280	23	35	31	1549	1800					
MRS 25 XT 010	10	6,2 bars	586	1172	43	70	62	2664	2800	278,5	80	4,9		
		5 bars	542	1085	36	56	50	2035	2300					
		4 bars	502	1004	29	45	39	1549	1800					
MRS 25 XT 014	14	6,2 bars	409	818	62	100	88	2664	2800	278,5	80	4,9		
		5 bars	379	757	51	81	71	2035	2300					
		4 bars	351	701	42	64	56	1549	1800					
MRS 25 XT 023	23	6,2 bars	247	494	103	166	146	2664	2800	310,5	80	5,2		
		5 bars	229	457	85	134	118	2035	2300					
		4 bars	212	423	70	106	93	1549	1800					
MRS 25 RV	Speed (rpm)		Air supply pressure	Torque (N.m)			Max Power (W)	Air cons (NL/min)	Dimensions					
	Air motor reference	Reduction ratio		@ max Power	Free	@ max Power	Max (stall)	Starting torque	A (mm)		Ø (mm)	Weight (kg)		
MRS 25 RV 005	5,5	6,2 bars	920	1841	23	33	29	2256	2700	278,5	80	4,9		
		5 bars	861	1721	19	28	24	1717	2200					
		4 bars	810	1621	15	23	20	1299	1700					
MRS 25 RV 006	6,4	6,2 bars	800	1599	27	38	34	2256	2700	278,5	80	4,9		
		5 bars	748	1495	22	32	28	1717	2200					
		4 bars	704	1408	18	26	23	1299	1700					
MRS 25 RV 008	8	6,2 bars	667	1335	32	46	40	2256	2700	278,5	80	4,9		
		5 bars	624	1248	26	38	34	1717	2200					
		4 bars	588	1175	21	32	28	1299	1700					
MRS 25 RV 010	10	6,2 bars	524	1047	41	58	51	2256	2700	278,5	80	4,9		
		5 bars	490	979	33	49	43	1717	2200					
		4 bars	461	922	27	40	36	1299	1700					
MRS 25 RV 014	14	6,2 bars	366	731	59	84	74	2256	2700	278,5	80	4,9		
		5 bars	342	684	48	70	61	1717	2200					
		4 bars	322	644	39	58	51	1299	1700					
MRS 25 RV 023	23	6,2 bars	221	441	98	139	122	2256	2700	310,5	80	5,2		
		5 bars	206	413	79	115	101	1717	2200					
		4 bars	194	389	64	96	84	1299	1700					

For connection and lubrication, see page 125

*Data indicated in this table have an accuracy of +/- 5%*

**OPTIONS AVAILABLE** FOR THIS MOTOR

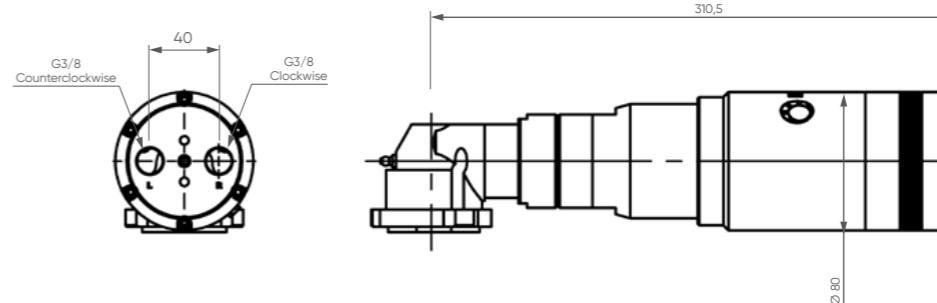
Collected exhaust																		
ATEX certification																		
Left/Right switch*																		
Lubrication free																		
Kit start																		
Code	00	01	02	03	04	05	07	09	10	12	13	14	16	17	21	22	29	30

+ List of available accessories for this motor page 125

\* Reversible motors only

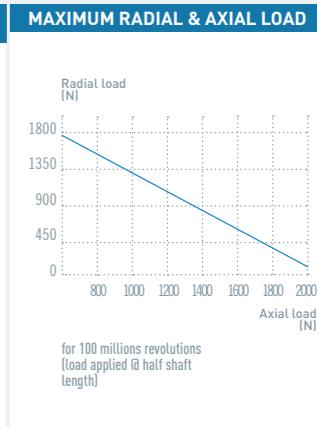
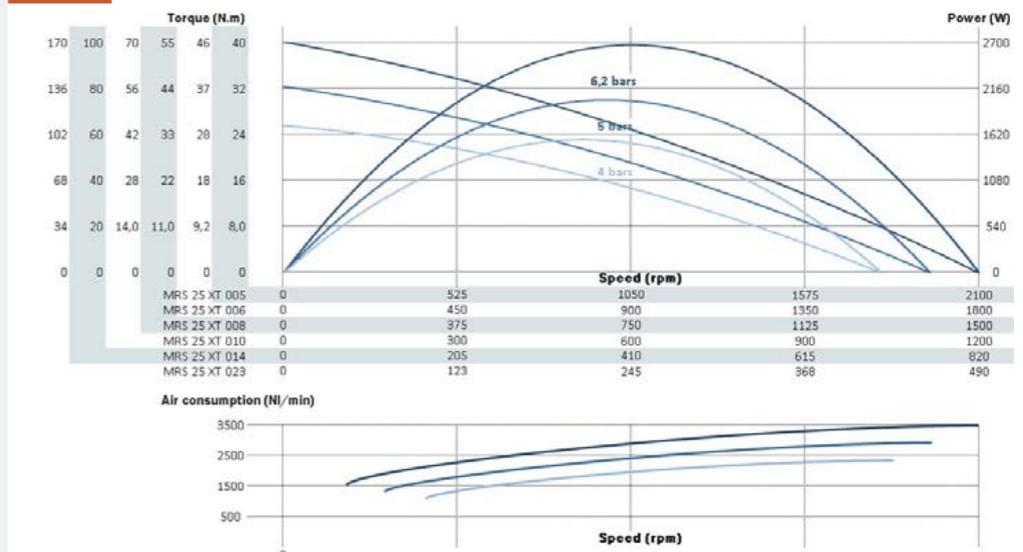
## LAYOUT

MRS 25

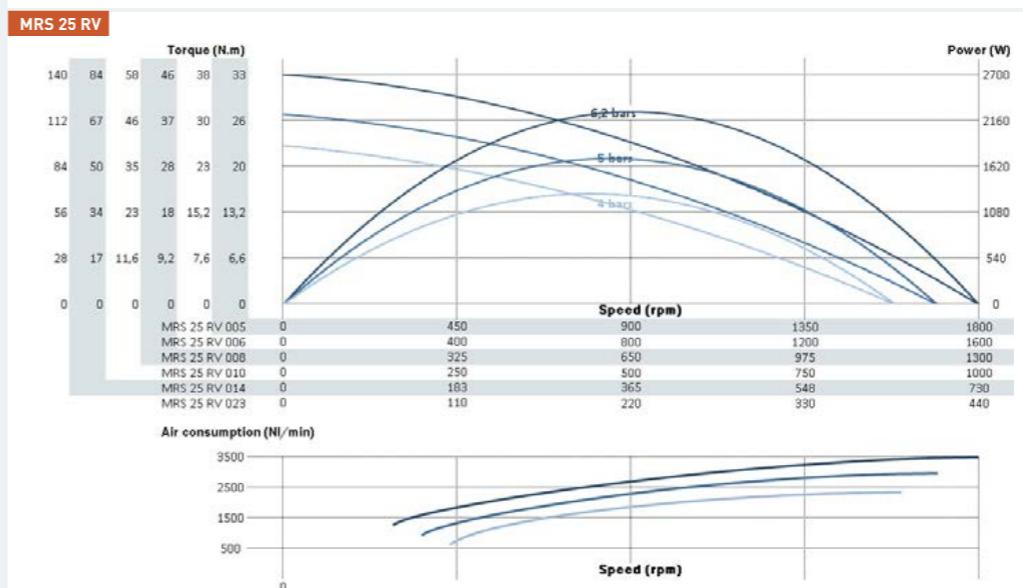


#### **POWER, SPEED, TORQUE AND AIR CONSUMPTION GRAPHS**

MRS 25 XT



NOTES



# MOTORS NRS 25

POWER 2300-2700 W



## PERFORMANCES

NRS 25 XT	Reduction ratio	Air supply pressure	Speed [rpm]		Torque [N.m]			Max Power (W)	Air cons (NL/min)	Dimensions		
			@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)
NRS 25 XT 005	5,5	6,2 bars	1030	2060	25	40	35	2664	2800	461,5	80	6,0
		5 bars	953	1907	20	32	28	2035	2300			
		4 bars	883	1765	17	25	22	1549	1800			
NRS 25 XT 006	6,4	6,2 bars	895	1790	28	46	40	2664	2800	461,5	80	6,0
		5 bars	828	1657	23	37	33	2035	2300			
		4 bars	767	1534	19	29	26	1549	1800			
NRS 25 XT 008	8	6,2 bars	747	1494	34	55	48	2664	2800	461,5	80	6,0
		5 bars	691	1383	28	44	39	2035	2300			
		4 bars	640	1280	23	35	31	1549	1800			
NRS 25 XT 010	10	6,2 bars	586	1172	43	70	62	2664	2800	461,5	80	6,0
		5 bars	542	1085	36	56	50	2035	2300			
		4 bars	502	1004	29	45	39	1549	1800			
NRS 25 XT 014	14	6,2 bars	409	818	62	100	88	2664	2800	461,5	80	6,0
		5 bars	379	757	51	81	71	2035	2300			
		4 bars	351	701	42	64	56	1549	1800			
NRS 25 XT 023	23	6,2 bars	247	494	103	166	146	2664	2800	493,5	80	6,4
		5 bars	229	457	85	134	118	2035	2300			
		4 bars	212	423	70	106	93	1549	1800			
NRS 25 RV	Reduction ratio	Air supply pressure	Speed [rpm]		Torque [N.m]			Max Power (W)	Air cons (NL/min)	Dimensions		
Air motor reference	Reduction ratio	Air supply pressure	@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)
NRS 25 RV 005	5,5	6,2 bars	920	1841	23	33	29	2256	2700	472,5	80	6,2
		5 bars	861	1721	19	28	24	1717	2200			
		4 bars	810	1621	15	23	20	1299	1700			
NRS 25 RV 006	6,4	6,2 bars	800	1599	27	38	34	2256	2700	472,5	80	6,2
		5 bars	748	1495	22	32	28	1717	2200			
		4 bars	704	1408	18	26	23	1299	1700			
NRS 25 RV 008	8	6,2 bars	667	1335	32	46	40	2256	2700	472,5	80	6,2
		5 bars	624	1248	26	38	34	1717	2200			
		4 bars	588	1175	21	32	28	1299	1700			
NRS 25 RV 010	10	6,2 bars	524	1047	41	58	51	2256	2700	472,5	80	6,2
		5 bars	490	979	33	49	43	1717	2200			
		4 bars	461	922	27	40	36	1299	1700			
NRS 25 RV 014	14	6,2 bars	366	731	59	84	74	2256	2700	472,5	80	6,2
		5 bars	342	684	48	70	61	1717	2200			
		4 bars	322	644	39	58	51	1299	1700			
NRS 25 RV 023	23	6,2 bars	221	441	98	139	122	2256	2700	504,5	80	6,6
		5 bars	206	413	79	115	101	1717	2200			
		4 bars	194	389	64	96	84	1299	1700			

For connection and lubrication, see page 125

Data indicated in this table have an accuracy of +/- 5%

## OPTIONS AVAILABLE FOR THE NRS 25 XT

Collected exhaust	00	01	02	04	05	07	09	10	13	14	21	22
ATEX certification												
Lubrication free												
Kit start												
Code	00	01	02	04	05	07	09	10	13	14	21	22
Code	03	12	16	17	29	30						

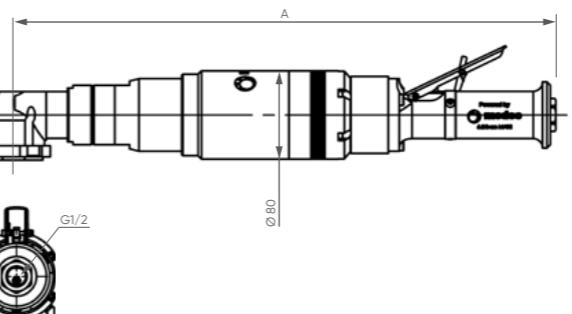
+ List of available accessories for this motor page 125

## OPTIONS AVAILABLE FOR THE NRS 25 RV

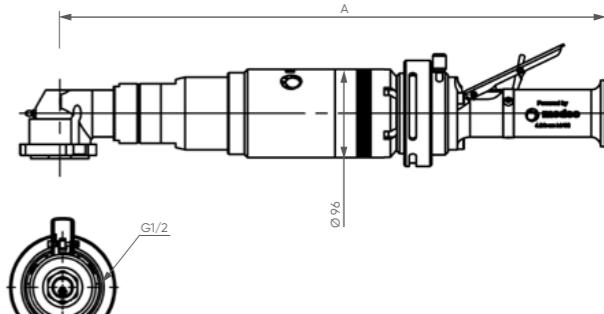
ATEX certification	00	01	02	04	05	07	09	10	13	14	21	22
Left/Right switch												
Lubrication free												
Kit start												
Code	03	12	16	17	29	30						

## LAYOUT

## NRS 25 XT

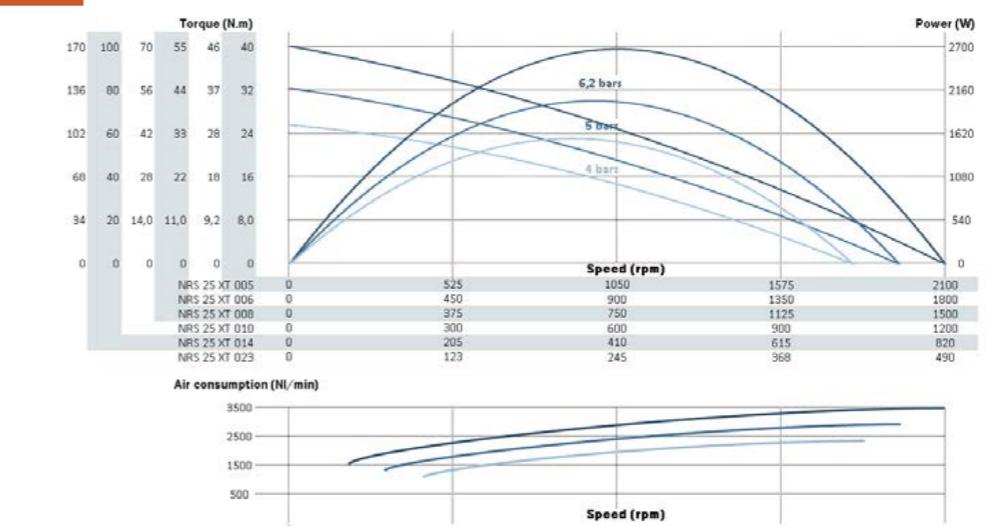


## NRS 25 RV

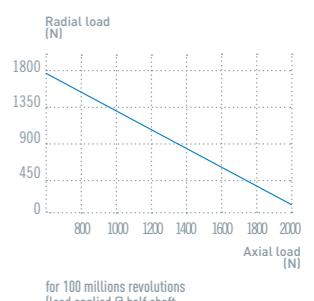


## POWER, SPEED, TORQUE AND AIR CONSUMPTION GRAPHS

## NRS 25 XT

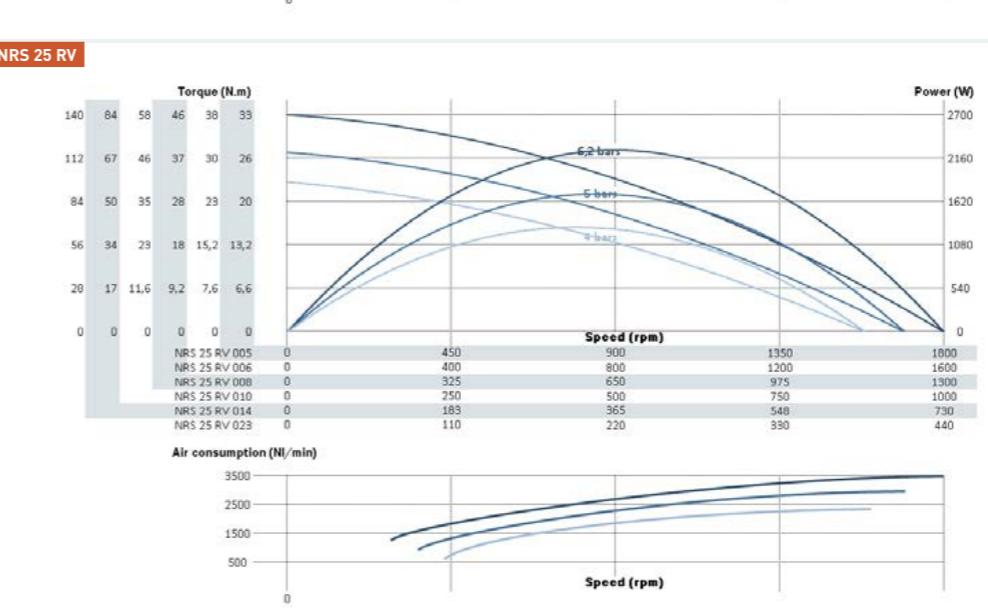


## MAXIMUM RADIAL &amp; AXIAL LOAD



## NOTES

## NRS 25 RV



# MOTORS MRH 25 / MRZ 25

POWER 2300-2700 W



## PERFORMANCES

MRH/Z 25 XT	Reduction ratio	Air supply pressure	Speed [rpm]		Torque [N.m]			Max Power (W)	Air cons [NL/min]	Dimensions		
			@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)
MRH 25 XT 041	41	6,2 bars	140	279	183	302	265	2672	2800	277	80	6,7
		5 bars	131	262	148	248	219	2036	2300			
		4 bars	122	244	121	196	173	1543	1800			
MRH 25 XT 047	47	6,2 bars	121	243	210	347	305	2672	2800	277	80	6,7
		5 bars	114	228	171	286	252	2036	2300			
		4 bars	106	212	139	226	199	1543	1800			
MRH 25 XT 056	56	6,2 bars	101	203	252	416	366	2672	2800	277	80	6,7
		5 bars	95	190	205	343	301	2036	2300			
		4 bars	89	177	166	271	238	1543	1800			
MRH 25 XT 071	71	6,2 bars	80	159	321	530	466	2672	2800	277	80	6,7
		5 bars	75	149	261	437	384	2036	2300			
		4 bars	70	139	212	345	304	1543	1800			
MRZ 25 XT 107	107	6,2 bars	53	106	483	797	701	2672	2800	371,7	88,8	12,2
		5 bars	50	99	392	657	578	2036	2300			
		4 bars	46	92	319	519	457	1543	1800			

MRH/Z 25 RV	Reduction ratio	Air supply pressure	Speed [rpm]		Torque [N.m]			Max Power (W)	Air cons [NL/min]	Dimensions		
			@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)
MRH 25 RV 041	41	6,2 bars	126	251	172	244	214	2256	2700	277	80	6,7
		5 bars	117	235	140	203	178	1717	2200			
		4 bars	111	221	112	168	148	1299	1700			
MRH 25 RV 047	47	6,2 bars	109	218	197	281	247	2256	2700	277	80	6,7
		5 bars	102	204	161	233	205	1717	2200			
		4 bars	96	192	129	194	170	1299	1700			
MRH 25 RV 056	56	6,2 bars	91	182	237	336	296	2256	2700	277	80	6,7
		5 bars	85	170	193	280	246	1717	2200			
		4 bars	80	160	155	232	204	1299	1700			
MRH 25 RV 071	71	6,2 bars	71	143	302	428	377	2256	2700	277	80	6,7
		5 bars	67	134	246	356	314	1717	2200			
		4 bars	63	126	197	296	260	1299	1700			
MRZ 25 RV 107	107	6,2 bars	48	95	453	644	567	2256	2700	371,7	88,8	12,2
		5 bars	44	89	369	536	472	1717	2200			
		4 bars	42	84	297	445	391	1299	1700			
MRZ 25 RV 154	154	6,2 bars	33	66	650	923	812	2256	2700	371,7	88,8	12,2
		5 bars	31	62	529	768	676	1717	2200			
		4 bars	29	58	425	637	561	1299	1700			

For connection and lubrication, see page 125

Data indicated in this table have an accuracy of +/- 5%

## REDUCTION RATIO

 [3 digits]  
See table below


## ROTATION\*

 RT Right (Clockwise)  
LT Left (CCW)  
RV Reversible

## FLANGE

 [1 to 2 digits]  
Group VIII page 172

## OPTIONS

 [2 digits]  
See table on right page

## OUTPUT SHAFT

 [1 to 3 digits]  
Group VIII page 173

\* rotation direction is defined when looking from the back of the motor

## OPTIONS AVAILABLE FOR THIS MOTOR

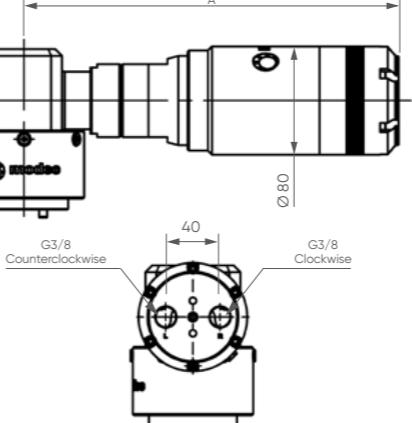
Collected exhaust	00	01	02	03	04	05	07	09	10	12	13	14	16	17	21	22	29	30
ATEX certification																		
Left/Right switch*																		
Lubrication free																		
Kit start																		

+ List of available accessories for this motor page 125

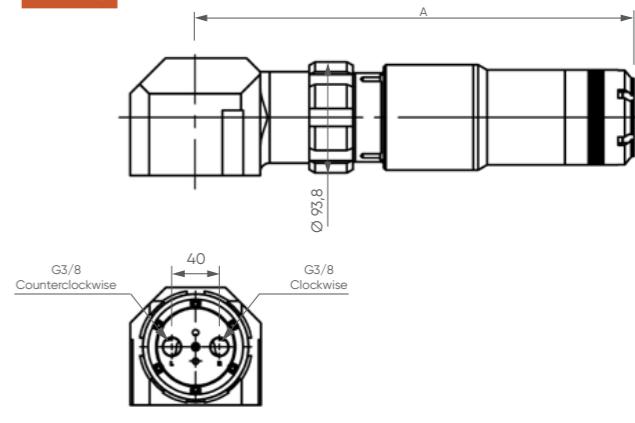
\* Reversible motors only

## LAYOUT

MRH 25

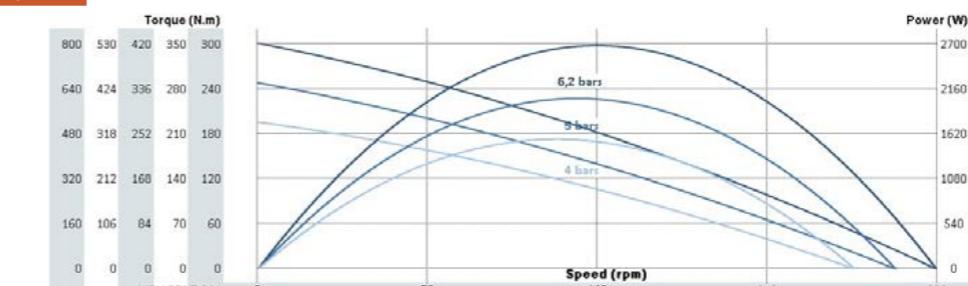


MRZ 25

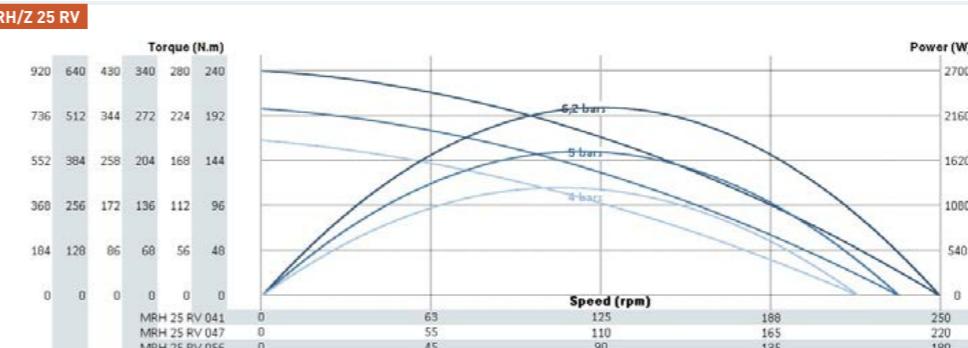


## POWER, SPEED, TORQUE AND AIR CONSUMPTION GRAPHS

MRH/Z 25 XT



MRH/Z 25 RV



# MOTORS NRH 25 / NRZ 25

**POWER**

**2300-2700 W**



## PERFORMANCES

NRH/Z 25 XT	Reduction ratio	Air supply pressure	Speed [rpm]		Torque (N.m)			Max Power (W)	Air cons (NL/min)	Dimensions		
			@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)
NRH 25 XT 041	41	6,2 bars	140	279	183	302	265	2672	2800	461,5	80	7,7
		5 bars	131	262	148	248	219	2036	2300			
		4 bars	122	244	121	196	173	1543	1800			
NRH 25 XT 047	47	6,2 bars	121	243	210	347	305	2672	2800	461,5	80	7,7
		5 bars	114	228	171	286	252	2036	2300			
		4 bars	106	212	139	226	199	1543	1800			
NRH 25 XT 056	56	6,2 bars	101	203	252	416	366	2672	2800	461,5	80	7,7
		5 bars	95	190	205	343	301	2036	2300			
		4 bars	89	177	166	271	238	1543	1800			
NRH 25 XT 071	71	6,2 bars	80	159	321	530	466	2672	2800	461,5	80	7,7
		5 bars	75	149	261	437	384	2036	2300			
		4 bars	70	139	212	345	304	1543	1800			
NRH 25 XT 107	107	6,2 bars	53	106	483	797	701	2672	2800	556,2	88,8	13,2
		5 bars	50	99	392	657	578	2036	2300			
		4 bars	46	92	319	519	457	1543	1800			

NRH/Z 25 RV	Reduction ratio	Air supply pressure	Speed [rpm]		Torque (N.m)			Max Power (W)	Air cons (NL/min)	Dimensions		
			@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)
NRH 25 RV 041	41	6,2 bars	126	251	172	244	214	2256	2700	472,5	80	8,1
		5 bars	117	235	140	203	178	1717	2200			
		4 bars	111	221	112	168	148	1299	1700			
NRH 25 RV 047	47	6,2 bars	109	218	197	281	247	2256	2700	472,5	80	8,1
		5 bars	102	204	161	233	205	1717	2200			
		4 bars	96	192	129	194	170	1299	1700			
NRH 25 RV 056	56	6,2 bars	91	182	237	336	296	2256	2700	472,5	80	8,1
		5 bars	85	170	193	280	246	1717	2200			
		4 bars	80	160	155	232	204	1299	1700			
NRH 25 RV 071	71	6,2 bars	71	143	302	428	377	2256	2700	472,5	80	8,1
		5 bars	67	134	246	356	314	1717	2200			
		4 bars	63	126	197	296	260	1299	1700			
NRH 25 RV 107	107	6,2 bars	48	95	453	644	567	2256	2700	567,2	88,8	13,6
		5 bars	44	89	369	536	472	1717	2200			
		4 bars	42	84	297	445	391	1299	1700			
NRH 25 RV 154	154	6,2 bars	33	66	650	923	812	2256	2700	567,2	88,8	13,6
		5 bars	31	62	529	768	676	1717	2200			
		4 bars	29	58	425	637	561	1299	1700			

For connection and lubrication, see page 125

Data indicated in this table have an accuracy of +/- 5%

## OPTIONS AVAILABLE FOR THE NRH / Z 25 XT

Collected exhaust	■	■	■	■	■	■	■	■	■
ATEX certification	■	■	■	■	■	■	■	■	■
Lubrication free	■	■	■	■	■	■	■	■	■
Kit start	■	■	■	■	■	■	■	■	■
Code	00	01	02	04	05	07	09	10	13
	14	21	22						

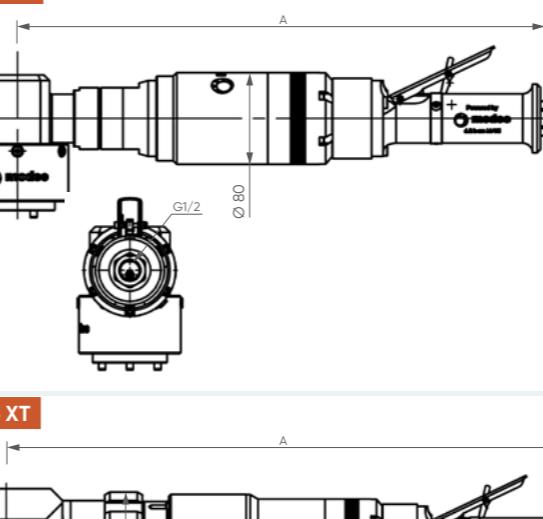
+ List of available accessories for this motor page 125

## OPTIONS AVAILABLE FOR THE NRH / Z 25 RV

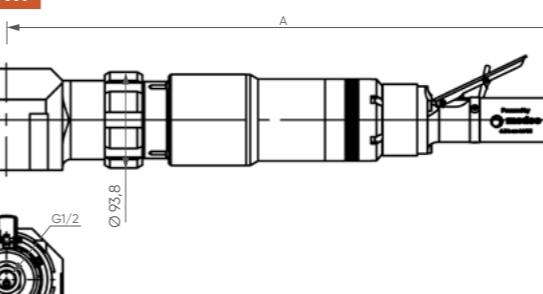
ATEX certification	■	■	■	■	■	■	■	■
Left/Right switch	■	■	■	■	■	■	■	■
Lubrication free	■	■	■	■	■	■	■	■
Kit start	■	■	■	■	■	■	■	■
Code	03	12	16	17	29	30		

## LAYOUT

NRH 25 XT



NRZ 25 XT



# 30 SERIE



MAX POWER  
**3200 W**  
MAX TORQUE  
**840 Nm**

Modec air motors « 30 » series has long proven itself in the most demanding **applications in terms of torque, power and robustness**. With a power of more than 3 kW and an exceptionally robust design, it is no surprise that these air motors can be found in the most demanding environments (**ATEX, extreme temperatures, off-shore, marine**) and on the most difficult applications (machining, conveying, drilling...).

They are of course available, like the other modec air motors, with or without right angle drive shaft and with or without handle.

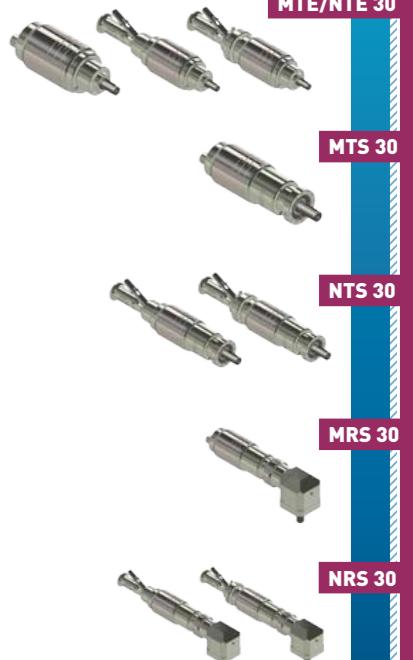
+ ACCESSORIES FOR THIS MOTOR		Reference	Information
Filtration, pressure Regulation and Lubrication unit (FRL)		AC108	Page 177
Safety Air Treatment Box (SAT Box)		AC126	Page 178
With Pedal remote control		AC127	Page 178
With handle remote control		AC128	Page 178
With remote emergency kill switch		AC129	Page 178
With remote E-Stop and pedal remote control		AC130	Page 178
With remote E-Stop and handle remote control		AC131	Page 178
Maintenance kits			
Maintenance kit for "30" series		AC306	Page 181
Maintenance kit for lube free "30" series		AC316	Page 181
Maintenance kit for kit start "30" series		AC326	Page 181
Exhaust collector kit for "30" series		AC343	Page 181
modec Oil Co-16		AC149	Page 178
Control handles			
Safety control handle for non reversible "30" series		AC412	Page 179
Safety control handle for reversible "30" series		AC414	Page 179
Progressive control handle for non reversible "30" series		AC407	Page 179
Progressive control handle for reversible "30" series		AC410	Page 179
Filters et silencers			
Metallic standard exhaust silencer		AC182	Page 179
Metallic standard inlet silencer		AC164	Page 179
Plastic standard exhaust silencer		AC153	Page 180
Plastic standard inlet silencer		AC184	Page 180
Heavy duty exhaust silencer		AC157	Page 180
Heavy duty inlet silencer		AC155	Page 180
High flow air muffler		AC160	Page 181
Exhaust silencer filter		AC185	Page 180
Speed control muffler		AC174	Page 180

## CONNECTION ET LUBRIFICATION

	Min. fittings Ø		Min. pipe Ø		Lubrication (6,2 bars)
	In	Out	In	Out	
	14 mm / 0,6 in	16 mm / 0,6 in	16 mm / 0,6 in	20 mm / 0,8 in	11 drops / minute

## CONVERSION TABLE

Watt ➡ Horse power	Newton meter ➡ Pound feet	Millimeter ➡ Inch
Watt x 0,001341 = hp	Nm x 0,7376 = lb.ft	mm x 0,03937 = in
Bar ➡ Pound per square Inch	Normo Liter / minute ➡ Standard cubic feet per minute	Kilogram ➡ Pound
Bar x 14,5 = psi	NL / min x 0,03531 = scfm	Kg x 2,205 = lb





# MOTORS MTS 30

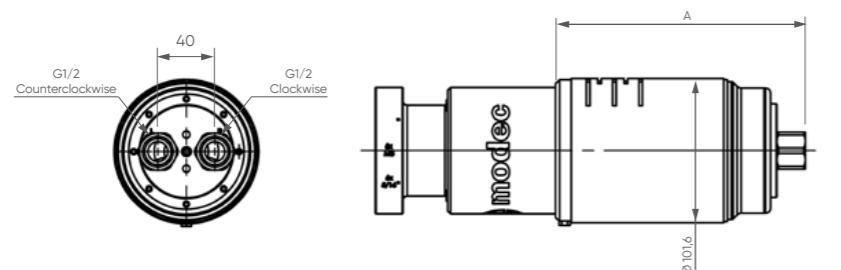
## POWER 2500-3200 W


**PERFORMANCES**


MTS 30 XT	Reduction ratio	Air supply pressure	Speed (rpm)		Torque (N.m)			Max Power (W)	Air cons (NL/min)	Dimensions		
			@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)
MTS 30 XT 004	4	6,2 bars	1345	2690	23	44	39	3209	3100	176	101,6	7,3
		5 bars	1217	2434	19	36	31	2416	2500			
		4 bars	1107	2214	16	29	25	1850	2000			
MTS 30 XT 005	5	6,2 bars	1040	2079	29	57	50	3209	3100	176	101,6	7,3
		5 bars	940	1881	25	46	41	2416	2500			
		4 bars	855	1711	21	37	33	1850	2000			
MTS 30 XT 007	7	6,2 bars	681	1362	45	87	77	3209	3100	176	101,6	7,3
		5 bars	616	1232	37	71	62	2416	2500			
		4 bars	560	1120	32	57	50	1850	2000			
MTS 30 XT 011	11	6,2 bars	475	951	64	125	110	3209	3100	176	101,6	7,3
		5 bars	430	860	54	101	89	2416	2500			
		4 bars	391	782	45	82	72	1850	2000			
MTS 30 XT 014	14	6,2 bars	363	725	85	163	144	3209	3100	176	101,6	7,3
		5 bars	328	656	70	133	117	2416	2500			
		4 bars	298	597	59	107	94	1850	2000			
MTS 30 XT 018	18	6,2 bars	280	560	109	212	186	3209	3100	176	101,6	7,3
		5 bars	253	507	91	172	151	2416	2500			
		4 bars	231	461	77	139	122	1850	2000			
MTS 30 XT 023	23	6,2 bars	217	433	141	274	241	3209	3100	176	101,6	7,3
		5 bars	196	392	118	222	195	2416	2500			
		4 bars	178	356	99	180	158	1850	2000			
MTS 30 XT 027	27	6,2 bars	184	367	167	323	284	3209	3100	176	101,6	7,3
		5 bars	166	332	139	262	231	2416	2500			
		4 bars	151	302	117	212	187	1850	2000			
MTS 30 XT 035	35	6,2 bars	142	284	216	418	368	3209	3100	176	101,6	7,3
		5 bars	128	257	180	339	298	2416	2500			
		4 bars	117	233	151	274	241	1850	2000			
MTS 30 XT 054	54	6,2 bars	93	186	330	638	562	3209	3100	176	101,6	7,3
		5 bars	84	168	275	518	456	2416	2500			
		4 bars	76	153	231	419	369	1850	2000			

For connection and lubrication, see page 145

Data indicated in this table have an accuracy of +/- 5%

**LAYOUT**
**MTS 30**

**OPTIONS AVAILABLE FOR THIS MOTOR**

	00	01	02	03	04	05	07	09	10	11	12	13	14	16	17	21	22	23	27	28	29	30	36	37
Collected exhaust																								
ATEX certification																								
Left/Right switch*																								
Lubrication free																								
Kit start																								
Inox																								
Code	00	01	02	03	04	05	07	09	10	11	12	13	14	16	17	21	22	23	27	28	29	30	36	37

+ List of available accessories for this motor page 145

\* Reversible motors only

**PERFORMANCES**

MTS 30 RV	Air motor reference	Reduction ratio	Air supply pressure	Speed (rpm)		Torque (N.m)			Max Power (W)	Air cons (NL/min)	Dimensions		
				@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)
MTS 30 RV 004		4	6,2 bars	1052	2104	23	39	29	2509	3000	176	101,6	7,4
			5 bars	968	1935	20	33	25	1983	2400			
			4 bars	880	1759	16	27	20	1483	1900			
MTS 30 RV 005		5	6,2 bars	813	1626	29	50	38	2509	3000	176	101,6	7,4
			5 bars	748	1496	25	43	32	1983	2400			
			4 bars	680	1360	21	35	26	1483	1900			
MTS 30 RV 007		7	6,2 bars	532	1065	45	77	58	2509	3000	176	101,6	7,4
			5 bars	490	979	39	65	49	1983	2400			
			4 bars	445	890	32	54	40	1483	1900			
MTS 30 RV 011		11	6,2 bars	372	743	64	110	83	2509	3000	176	101,6	7,4
			5 bars	342									

# MOTORS NTS 30

## POWER 2500-3200 W



### PERFORMANCES

NTS 30 XT	Reduction ratio	Air supply pressure	Speed (rpm)		Torque (N.m)			Max Power (W)	Air cons (NL/min)	Dimensions		
			@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)
NTS 30 XT 004	4	6,2 bars	1345	2690	23	44	39	3209	3100	340,5	101,6	8,2
		5 bars	1217	2434	19	36	31	2416	2500			
		4 bars	1107	2214	16	29	25	1850	2000			
NTS 30 XT 005	5	6,2 bars	1040	2079	29	57	50	3209	3100	340,5	101,6	8,2
		5 bars	940	1881	25	46	41	2416	2500			
		4 bars	855	1711	21	37	33	1850	2000			
NTS 30 XT 007	7	6,2 bars	681	1362	45	87	77	3209	3100	340,5	101,6	8,2
		5 bars	616	1232	37	71	62	2416	2500			
		4 bars	560	1120	32	57	50	1850	2000			
NTS 30 XT 011	11	6,2 bars	475	951	64	125	110	3209	3100	340,5	101,6	8,2
		5 bars	430	860	54	101	89	2416	2500			
		4 bars	391	782	45	82	72	1850	2000			
NTS 30 XT 014	14	6,2 bars	363	725	85	163	144	3209	3100	340,5	101,6	8,2
		5 bars	328	656	70	133	117	2416	2500			
		4 bars	298	597	59	107	94	1850	2000			
NTS 30 XT 018	18	6,2 bars	280	560	109	212	186	3209	3100	340,5	101,6	8,2
		5 bars	253	507	91	172	151	2416	2500			
		4 bars	231	461	77	139	122	1850	2000			
NTS 30 XT 023	23	6,2 bars	217	433	141	274	241	3209	3100	340,5	101,6	8,2
		5 bars	196	392	118	222	195	2416	2500			
		4 bars	178	356	99	180	158	1850	2000			
NTS 30 XT 027	27	6,2 bars	184	367	167	323	284	3209	3100	340,5	101,6	8,2
		5 bars	166	332	139	262	231	2416	2500			
		4 bars	151	302	117	212	187	1850	2000			
NTS 30 XT 035	35	6,2 bars	142	284	216	418	368	3209	3100	340,5	101,6	8,2
		5 bars	128	257	180	339	298	2416	2500			
		4 bars	117	233	151	274	241	1850	2000			
NTS 30 XT 054	54	6,2 bars	93	186	330	638	562	3209	3100	340,5	101,6	8,2
		5 bars	84	168	275	518	456	2416	2500			
		4 bars	76	153	231	419	369	1850	2000			

NTS 30 RV	Reduction ratio	Air supply pressure	Speed (rpm)		Torque (N.m)			Max Power (W)	Air cons (NL/min)	Dimensions		
			@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)
NTS 30 RV 004	4	6,2 bars	1052	2104	23	39	29	2509	3000	351,5	101,6	8,7
		5 bars	968	1935	20	33	25	1983	2400			
		4 bars	880	1759	16	27	20	1483	1900			
NTS 30 RV 005	5	6,2 bars	813	1626	29	50	38	2509	3000	351,5	101,6	8,7
		5 bars	748	1496	25	43	32	1983	2400			
		4 bars	680	1360	21	35	26	1483	1900			
NTS 30 RV 007	7	6,2 bars	532	1065	45	77	58	2509	3000	351,5	101,6	8,7
		5 bars	490	979	39	65	49	1983	2400			
		4 bars	445	890	32	54	40	1483	1900			
NTS 30 RV 011	11	6,2 bars	372	743	64	110	83	2509	3000	351,5	101,6	8,7
		5 bars	342	684	55	93	70	1983	2400			
		4 bars	311	622	46	77	58	1483	1900			
NTS 30 RV 014	14	6,2 bars	284	567	85	145	109	2509	3000	351,5	101,6	8,7
		5 bars	261	522	73	122	92	1983	2400			
		4 bars	237	474	60	101	76	1483	1900			
NTS 30 RV 018	18	6,2 bars	219	438	109	187	140	2509	3000	351,5	101,6	8,7
		5 bars	202	403	94	158	119	1983	2400			

# MOTORS MRS 30

## POWER 2500-3200 W



### PERFORMANCES

MRS 30 XT	Reduction ratio	Air supply pressure	Speed [rpm]		Torque [N.m]			Max Power (W)	Air cons [Nl/min]	Dimensions		
			@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)
MRS 30 XT 007	7	6,2 bars	673	1345	46	88	78	3208	3100	411,6	101,6	13,3
		5 bars	608	1217	38	71	63	2418	2500			
		4 bars	553	1107	32	58	51	1858	2000			
MRS 30 XT 010	10	6,2 bars	520	1040	59	114	100	3208	3100	411,6	101,6	13,3
		5 bars	470	940	49	92	81	2418	2500			
		4 bars	428	855	41	75	66	1858	2000			
MRS 30 XT 015	15	6,2 bars	340	681	90	174	153	3208	3100	411,6	101,6	13,3
		5 bars	308	616	75	141	124	2418	2500			
		4 bars	280	560	63	114	101	1858	2000			
MRS 30 XT 021	21	6,2 bars	238	475	129	249	220	3208	3100	411,6	101,6	13,3
		5 bars	215	430	107	202	178	2418	2500			
		4 bars	196	391	91	164	144	1858	2000			
MRS 30 XT 028	28	6,2 bars	181	363	169	327	288	3208	3100	411,6	101,6	13,3
		5 bars	164	328	141	265	233	2418	2500			
		4 bars	149	298	119	215	189	1858	2000			
MRS 30 XT 036	36	6,2 bars	140	280	219	423	372	3208	3100	411,6	101,6	13,3
		5 bars	127	253	182	343	302	2418	2500			
		4 bars	115	231	154	278	244	1858	2000			
MRS 30 XT 046	46	6,2 bars	108	217	283	547	482	3208	3100	411,6	101,6	13,3
		5 bars	98	196	236	444	391	2418	2500			
		4 bars	89	178	199	359	316	1858	2000			
MRS 30 XT 054	54	6,2 bars	92	184	334	646	569	3208	3100	411,6	101,6	13,3
		5 bars	83	166	278	524	461	2418	2500			
		4 bars	76	151	235	424	373	1858	2000			
MRS 30 XT 070	70	6,2 bars	71	142	432	836	736	3208	3100	411,6	101,6	13,3
		5 bars	64	128	360	678	597	2418	2500			
		4 bars	58	117	304	549	483	1858	2000			
MRS 30 RV	Reduction ratio	Air supply pressure	Speed [rpm]		Torque [N.m]			Max Power (W)	Air cons [Nl/min]	Dimensions		
Air motor reference	Reduction ratio	Air supply pressure	@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)
MRS 30 RV 007	7	6,2 bars	526	1052	46	78	59	2509	3000	411,6	101,6	13,5
		5 bars	484	967	39	66	50	1976	2400			
		4 bars	440	880	32	55	41	1481	1900			
MRS 30 RV 010	10	6,2 bars	406	813	59	101	76	2509	3000	411,6	101,6	13,5
		5 bars	374	748	50	86	64	1976	2400			
		4 bars	340	680	42	71	53	1481	1900			
MRS 30 RV 015	15	6,2 bars	266	532	90	154	116	2509	3000	411,6	101,6	13,5
		5 bars	245	490	77	131	98	1976	2400			
		4 bars	223	445	64	108	81	1481	1900			
MRS 30 RV 021	21	6,2 bars	186	372	129	221	166	2509	3000	411,6	101,6	13,5
		5 bars	171	342	110	188	141	1976	2400			
		4 bars	155	311	91	154	116	1481	1900			
MRS 30 RV 028	28	6,2 bars	142	284	169	289	217	2509	3000	411,6	101,6	13,5
		5 bars	130	261	145	246	185	1976	2400			
		4 bars	119	237	119	202	152	1481	1900			
MRS 30 RV 036	36	6,2 bars	110	219	219	375	281	2509	3000	411,6	101,6	13,5
		5 bars	101	202	187	319	239	1976	2400			
		4 bars	92	183	154	262	196	1481	1900			
MRS 30 RV 046	46	6,2 bars	85	169	283	485	363	2509	3000	411,6	101,6	13,5
		5 bars	78	156	242	413	309	1976	2400			
		4 bars	71	142	200	339	254	1481	1900			
MRS 30 RV 054	54	6,2 bars	72	144	334	572	429	2509	3000	411,6	101,6	13,5
		5 bars	66	132	286	487	365	1976	2400			
		4 bars	60	12								

# MOTORS NRS 30

## POWER 2500-3200 W



## PERFORMANCES

NRS 30 XT	Reduction ratio	Air supply pressure	Speed [rpm]		Torque (N.m)			Max Power (W)	Air cons (NL/min)	Dimensions		
			@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)
NRS 30 XT 007	7	6,2 bars 5 bars 4 bars	673 608 553	1345 1217 1107	46 38 32	88 71 58	78 63 51	3208 2418 1858	3100 2500 2000	576,1	101,6	14,4
NRS 30 XT 010	10	6,2 bars 5 bars 4 bars	520 470 428	1040 940 855	59 49 41	114 92 75	100 81 66	3208 2418 1858	3100 2500 2000	576,1	101,6	14,4
NRS 30 XT 015	15	6,2 bars 5 bars 4 bars	340 308 280	681 616 560	90 75 63	174 141 114	153 124 101	3208 2418 1858	3100 2500 2000	576,1	101,6	14,4
NRS 30 XT 021	21	6,2 bars 5 bars 4 bars	238 215 196	475 430 391	129 107 91	249 202 164	220 178 144	3208 2418 1858	3100 2500 2000	576,1	101,6	14,4
NRS 30 XT 028	28	6,2 bars 5 bars 4 bars	181 164 149	363 328 298	169 141 119	327 265 215	288 233 189	3208 2418 1858	3100 2500 2000	576,1	101,6	14,4
NRS 30 XT 036	36	6,2 bars 5 bars 4 bars	140 127 115	280 253 231	219 182 154	423 343 278	372 302 244	3208 2418 1858	3100 2500 2000	576,1	101,6	14,4
NRS 30 XT 046	46	6,2 bars 5 bars 4 bars	108 98 89	217 196 178	283 236 199	547 444 359	482 391 316	3208 2418 1858	3100 2500 2000	576,1	101,6	14,4
NRS 30 XT 054	54	6,2 bars 5 bars 4 bars	92 83 76	184 166 151	334 278 235	646 524 424	569 461 373	3208 2418 1858	3100 2500 2000	576,1	101,6	14,4
NRS 30 XT 070	70	6,2 bars 5 bars 4 bars	71 64 58	142 128 117	432 360 304	836 678 549	736 597 483	3208 2418 1858	3100 2500 2000	576,1	101,6	14,4
NRS 30 RV	Reduction ratio	Air supply pressure	Speed [rpm]		Torque (N.m)			Max Power (W)	Air cons (NL/min)	Dimensions		
			@ max Power	Free	@ max Power	Max (stall)	Starting torque			A (mm)	Ø (mm)	Weight (kg)
NRS 30 RV 007	7	6,2 bars 5 bars 4 bars	526 484 440	1052 967 880	46 39 32	78 66 55	59 50 41	2509 1976 1481	3000 2400 1900	587	101,6	14,8
NRS 30 RV 010	10	6,2 bars 5 bars 4 bars	406 374 340	813 748 680	59 50 42	101 86 71	76 64 53	2509 1976 1481	3000 2400 1900	587	101,6	14,8
NRS 30 RV 015	15	6,2 bars 5 bars 4 bars	266 245 223	532 490 445	90 77 64	154 131 108	116 98 81	2509 1976 1481	3000 2400 1900	587	101,6	14,8
NRS 30 RV 021	21	6,2 bars 5 bars 4 bars	186 171 155	372 342 311	129 110 91	221 188 154	166 141 116	2509 1976 1481	3000 2400 1900	587	101,6	14,8
NRS 30 RV 028	28	6,2 bars 5 bars 4 bars	142 130 119	284 261 237	169 145 119	289 246 202	217 185 152	2509 1976 1481	3000 2400 1900	587	101,6	14,8
NRS 30 RV 036	36	6,2 bars 5 bars 4 bars	110 101 92	219 202 183	219 187 154	375 319 262	281 239 196	2509 1976 1481	3000 2400 1900	587	101,6	14,8
NRS 30 RV 046	46	6,2 bars 5 bars 4 bars	85 78 71	169 156 142	283 242 200	485 413 339	363 309 254	2509 1976 1481	3000 2400 1900	587	101,6	14,8
NRS 30 RV 054	54	6,2 bars 5 bars 4 bars	72 66 60	144 132 120	334 286 236	572 487 400	429 365 300	2509 1976 1481	3000 2400 1900	587	101,6	14,8
NRS 30 RV 070	70	6,2 bars 5 bars 4 bars	55 51 46	111 102 93	432 370 305	740 630 518	555 473 388	2509 1976 1481	3000 2400 1900	587	101,6	14,8

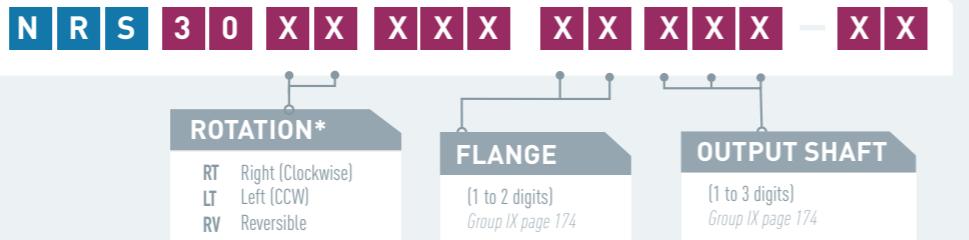
For connection and lubrication, see page 145

Data indicated in this table have an accuracy of +/- 5%

## REDUCTION RATIO

[3 digits]  
See table below

## OPTIONS

[2 digits]  
See table on right page

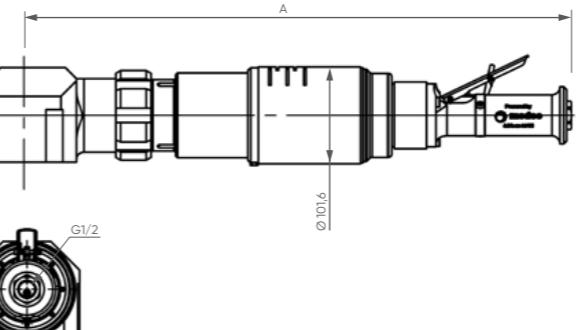
## OPTIONS AVAILABLE FOR THE NRS 30 XT

Collected exhaust	00	01	02	04	05	07	09	10	13	14	21	22
ATEX certification												
Lubrication free												
Kit start												
Code	00	01	02	04	05	07	09	10	13	14	21	22

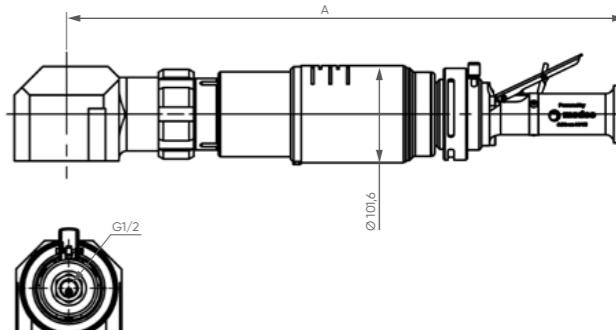
+ List of available accessories for this motor page 145

## OPTIONS AVAILABLE FOR THE NRS 30 RV

ATEX certification	03	12	16	17	29	30
Left/Right switch						
Lubrication free						
Kit start						
Code	03	12	16	17	29	30

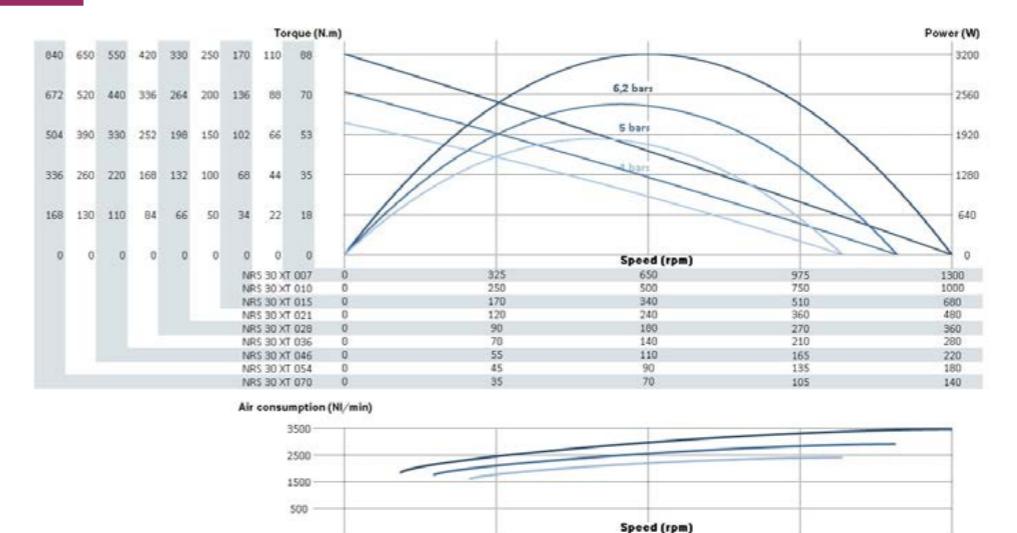
LAYOUT  
NRS 30 XT

## NRS 30 RV

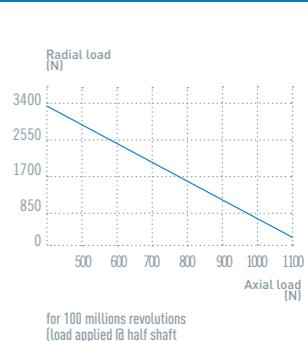


## POWER, SPEED, TORQUE AND AIR CONSUMPTION GRAPHS

## NRS 30 XT

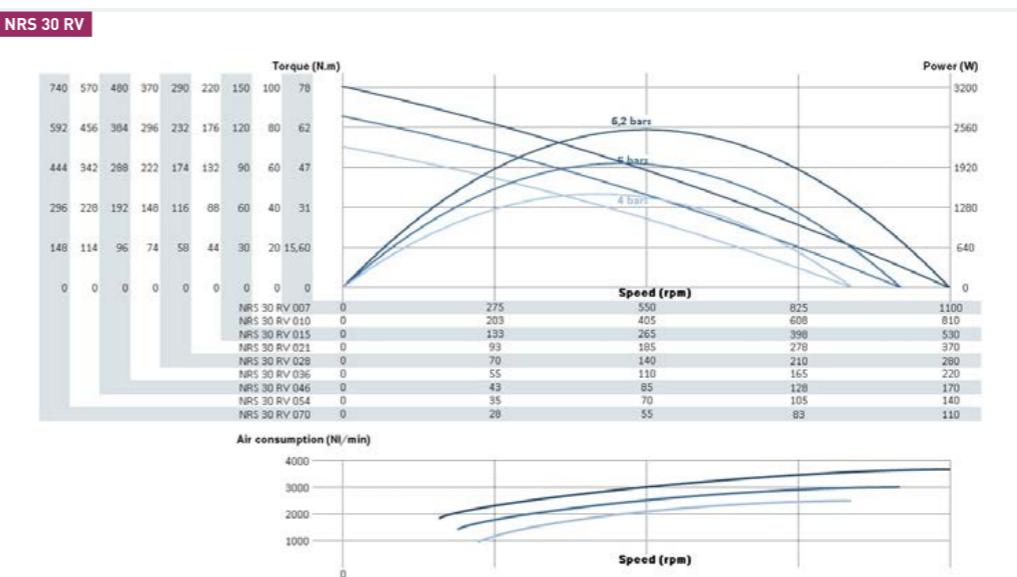


## MAXIMUM RADIAL &amp; AXIAL LOAD

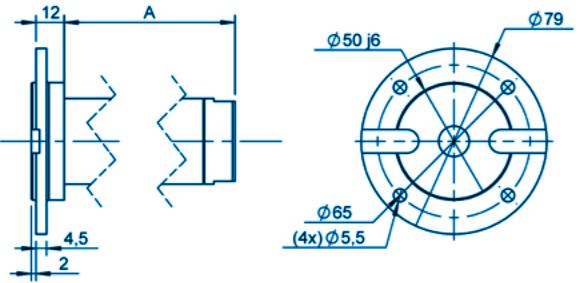
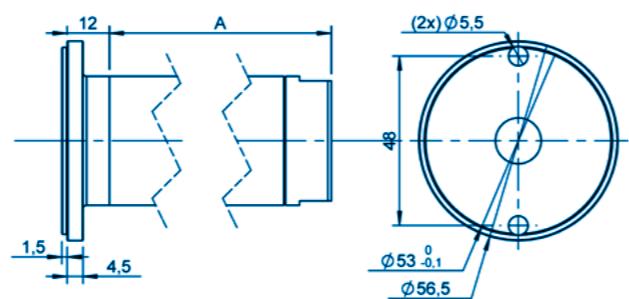
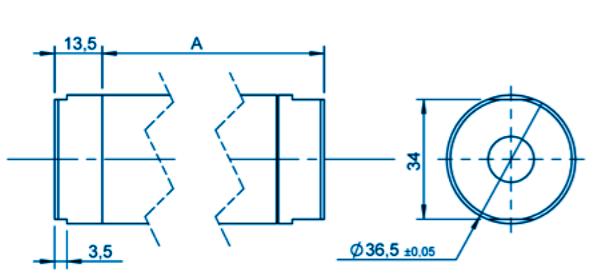
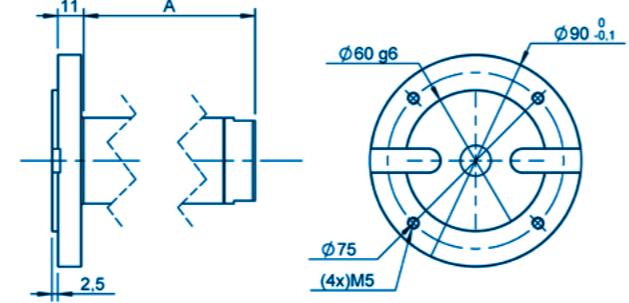
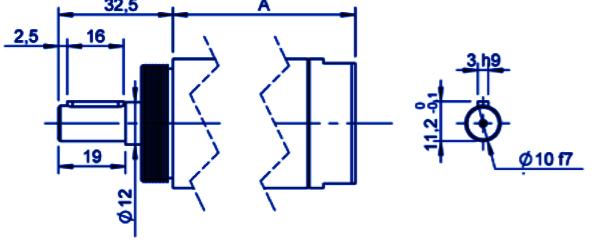
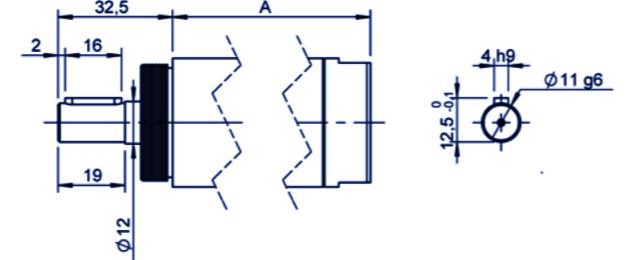
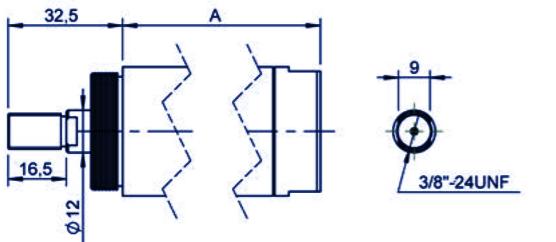


## NOTES

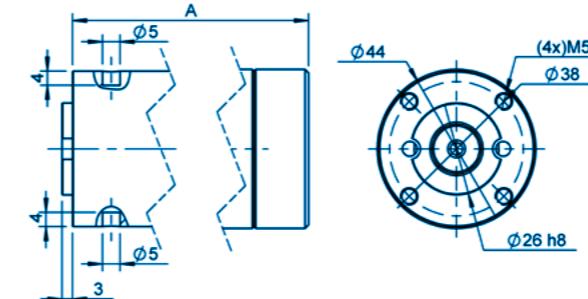
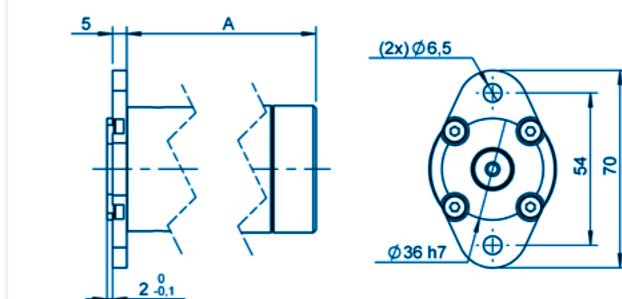
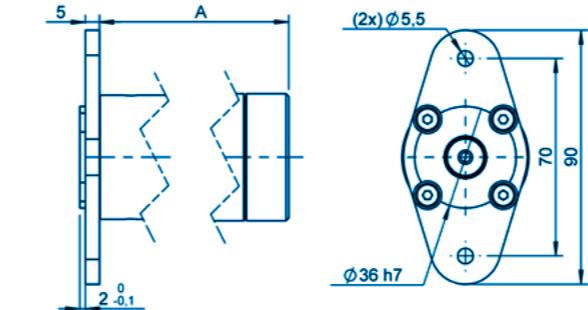
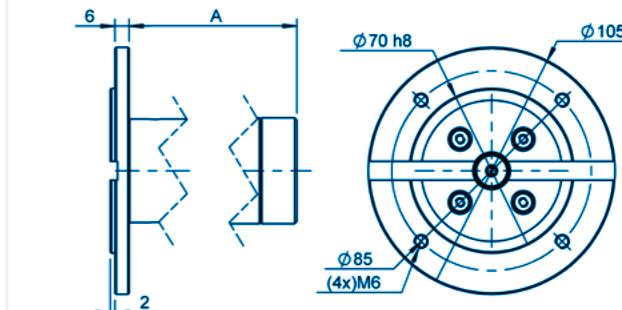
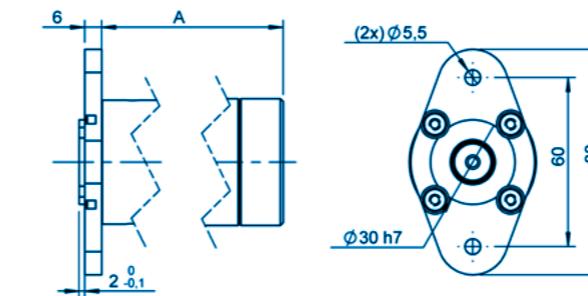
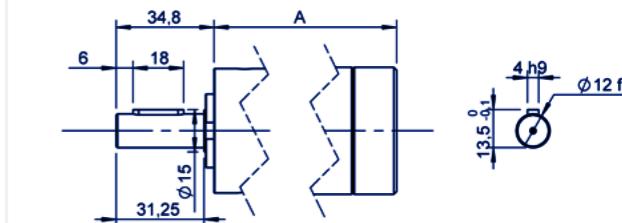
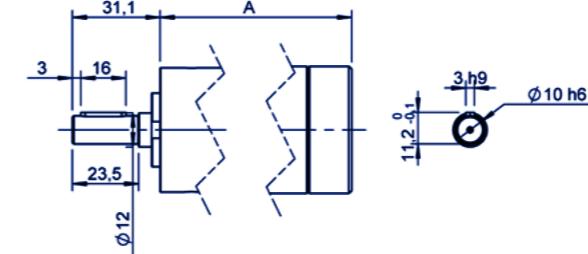
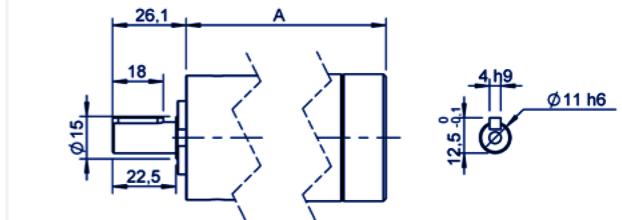
## NRS 30 RV



Coupling the motor on your machine is as critical as choosing the right motor ! With Modec, no need to modify your machine to make it compliant with the motor. We offer a wide choice of flanges and shafts so that you can find the ones that match your need. In case you don't find the right one, we can design and manufacture specific flanges and shafts on request.

**FLANGES & SHAFTS GROUP I**
**GROUP I FLANGE AA**

**GROUP I FLANGE B**

**GROUP I FLANGE P**

**GROUP I FLANGE S - IEC63B14**

**GROUP I SHAFT CL1 - KEYED Ø10**

**GROUP I SHAFT CL2 - KEYED Ø11 - IEC63B14**

**GROUP I SHAFT FI1 - THREADED 3/8" 24UNF**


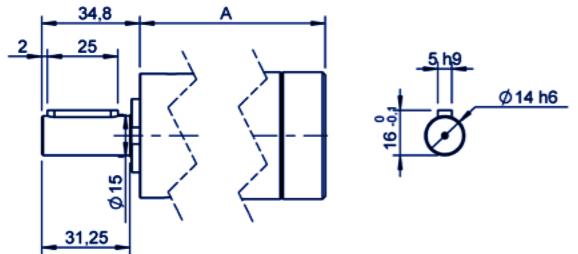
You didn't find  
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Contact us !

**FLANGES & SHAFTS GROUP II (1/2)**
**GROUP II FLANGE AA**

**GROUP II FLANGE AB**

**GROUP II FLANGE AC**

**GROUP II FLANGE AD - IEC 71B14**

**GROUP II FLANGE AE**

**GROUP II SHAFT 001 - KEYED Ø12**

**GROUP II SHAFT 004 - KEYED Ø10**

**GROUP II SHAFT 006 - KEYED Ø11**


SHAFTS **GROUP II** (2/2)

MTE 07 MTS 07

**GROUP II** SHAFT S01 - KEYED Ø14 - IEC 71B14



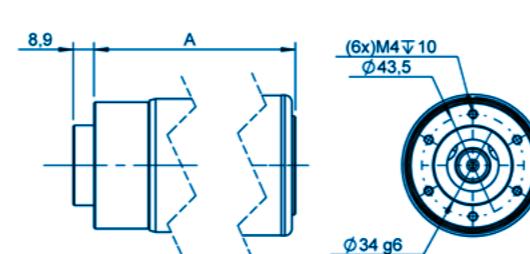
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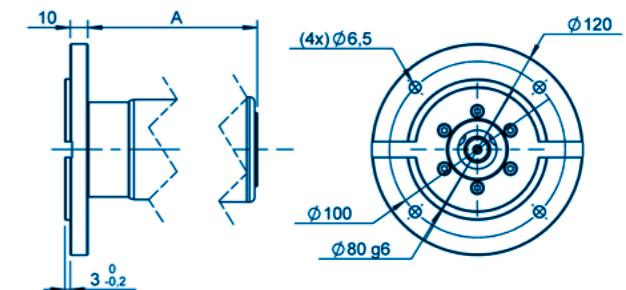
FLANGES & SHAFTS **GROUP III**

XTE 08 XTE 10 XTE 20 XTE 25

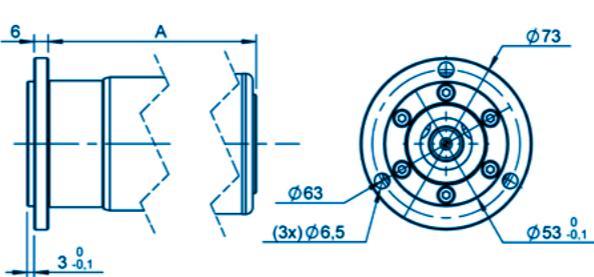
**GROUP III** FLANGE AA



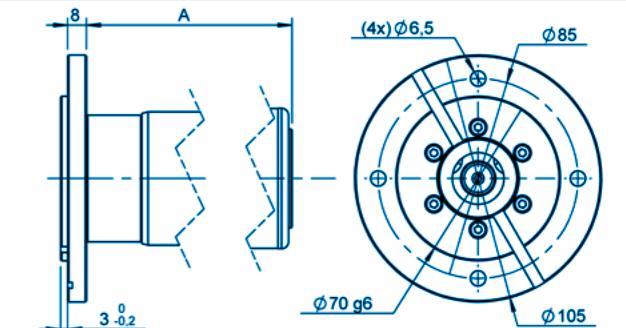
**GROUP III** FLANGE AB - IEC 80B14



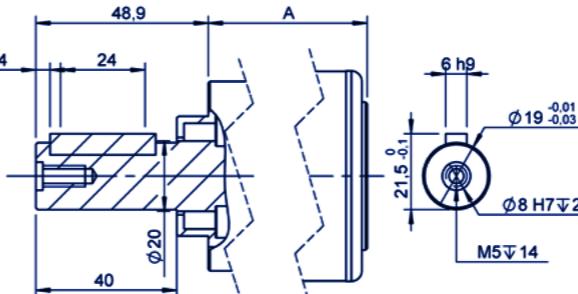
**GROUP III** FLANGE B



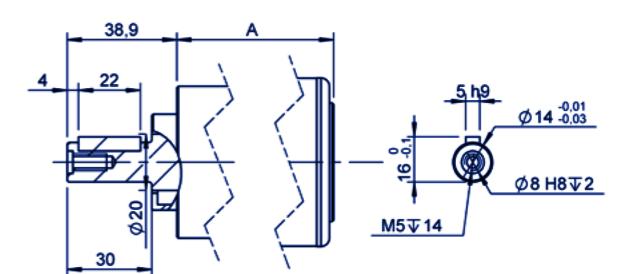
**GROUP III** FLANGE FJ - IEC 71B14



**GROUP III** SHAFT 001 - KEYED Ø19 -IEC 80B14



**GROUP III** SHAFT C25 - KEYED Ø14 -IEC 71B14



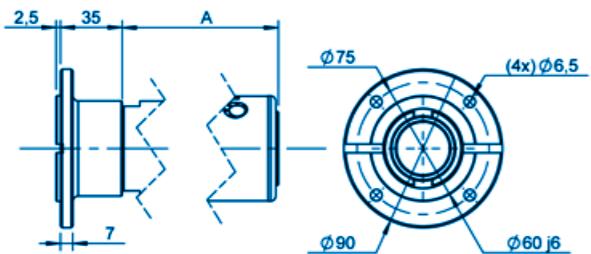
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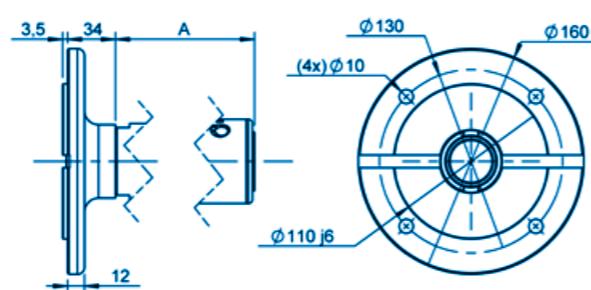
FLANGES GROUP IV (1/3)

XTH 05 XTH 07 XTS 08 XTH 08 XTS 10 XTH 10 XTS 20 XTS 25

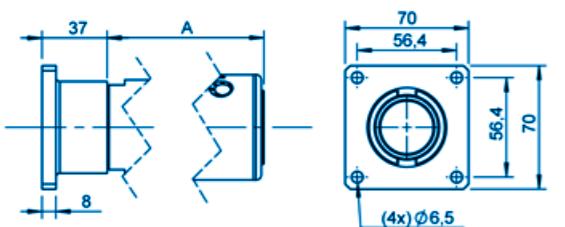
GROUP IV FLANGE AB - IEC63B14



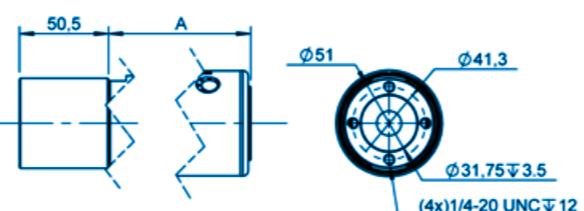
GROUP IV FLANGE AC - IEC71B5



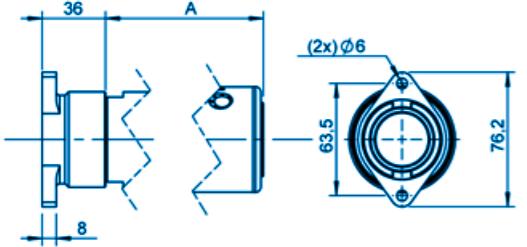
GROUP IV FLANGE AF



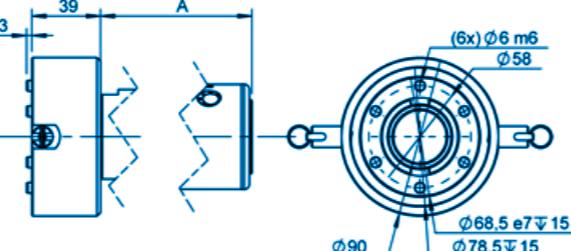
GROUP IV FLANGE AH



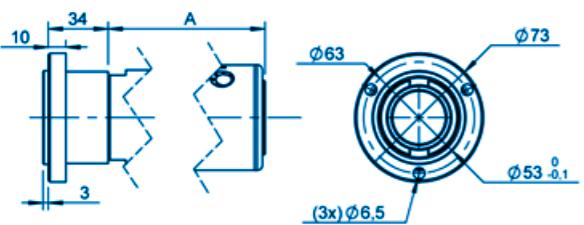
GROUP IV FLANGE AS



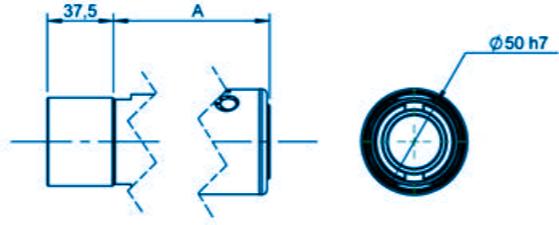
GROUP IV FLANGE AX - ARP



GROUP IV FLANGE B



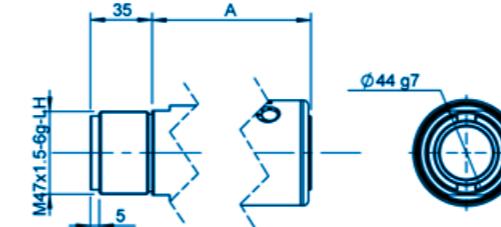
GROUP IV FLANGE BO



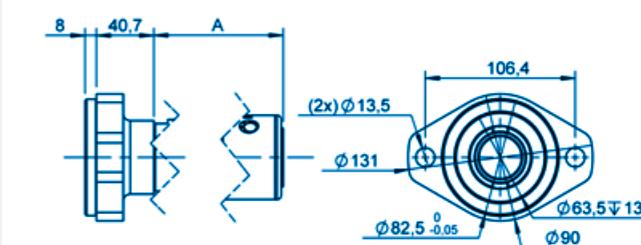
FLANGES GROUP IV (2/3)

XTH 05 XTH 07 XTS 08 XTH 08 XTS 10 XTH 10 XTS 20 XTS 25

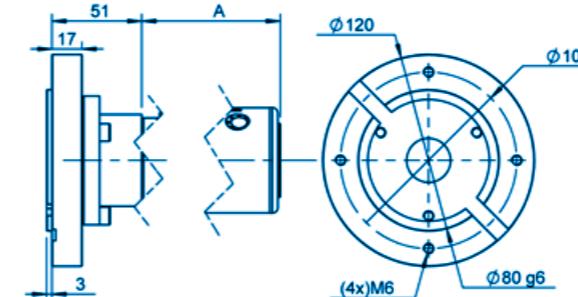
GROUP IV FLANGE F



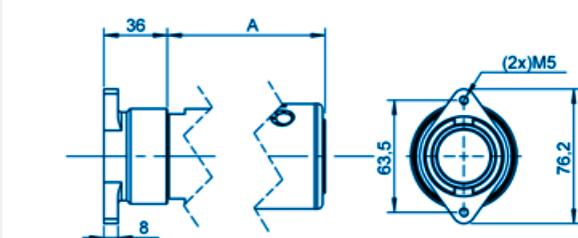
GROUP IV FLANGE FH



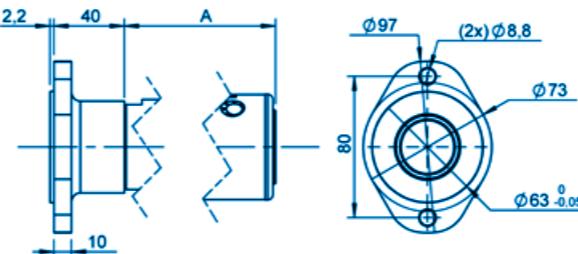
GROUP IV FLANGE FJ - IEC80B14



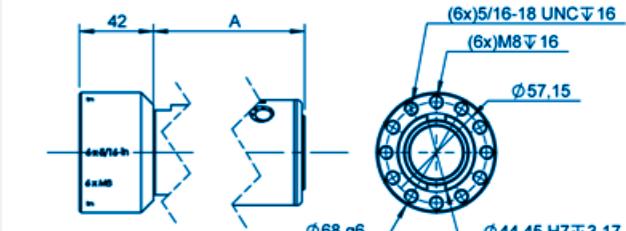
GROUP IV FLANGE J



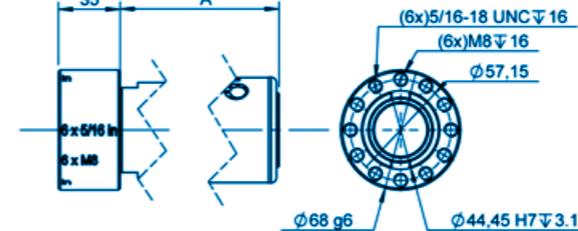
GROUP IV FLANGE L



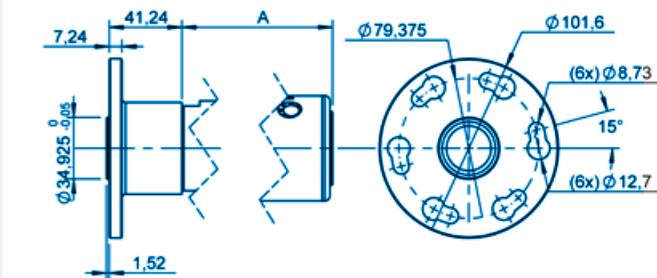
GROUP IV FLANGE M



GROUP IV FLANGE N



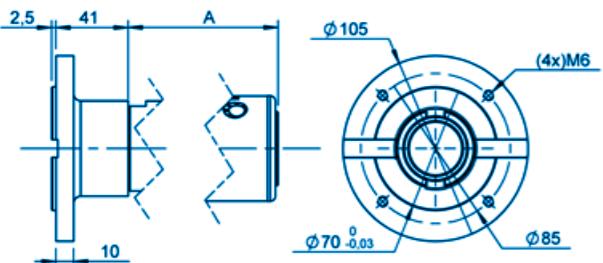
GROUP IV FLANGE Q



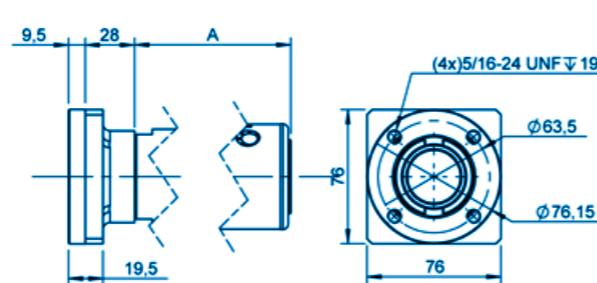
FLANGES GROUP IV (3/3)

XTH 05 XTH 07 XTS 08 XTH 08 XTS 10 XTH 10 XTS 20 XTS 25

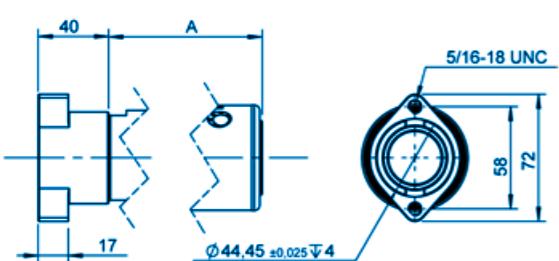
GROUP IV FLANGE R - IEC71B14



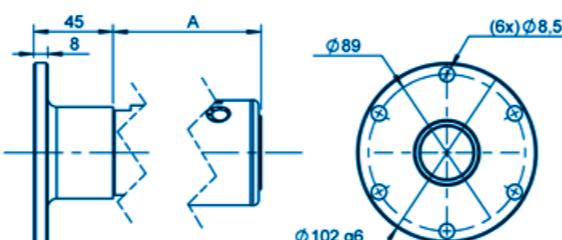
GROUP IV FLANGE S



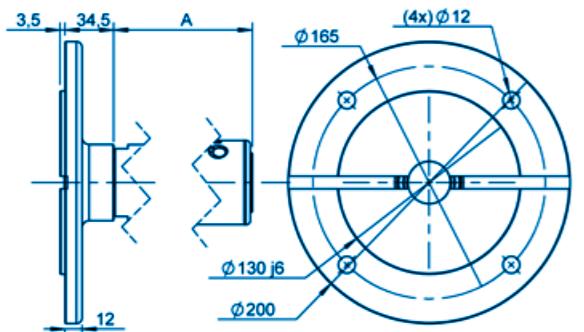
GROUP IV FLANGE U



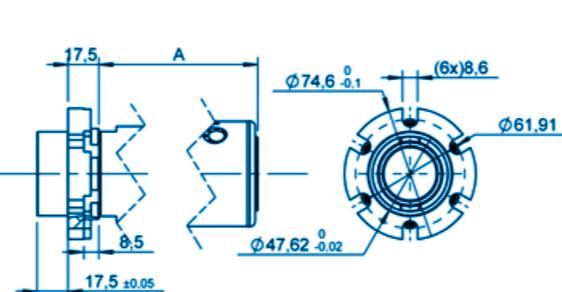
GROUP IV FLANGE V



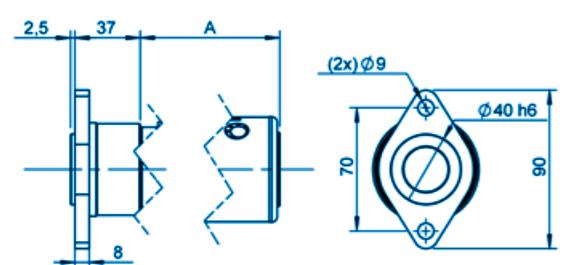
GROUP IV FLANGE W - IEC80B5



GROUP IV FLANGE Y



GROUP IV FLANGE Z



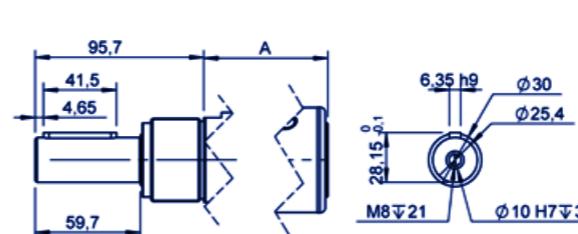
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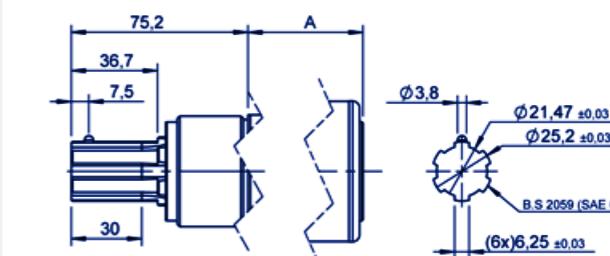
SHAFTS GROUP IV (1/3)

XTH 05 XTH 07 XTS 08 XTH 08 XTS 10 XTH 10 XTS 20 XTS 25

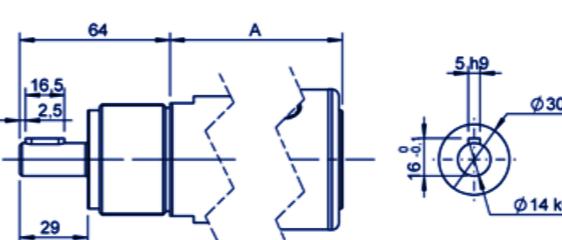
GROUP IV SHAFT 007 - KEYED Ø1"



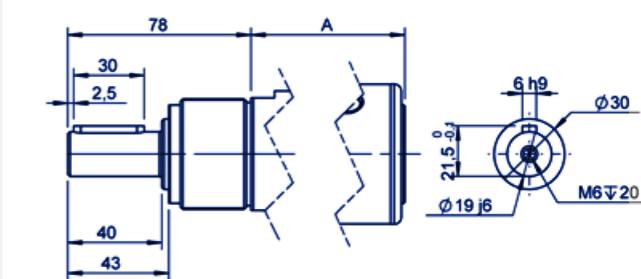
GROUP IV SHAFT 019 - SPLINED ARP



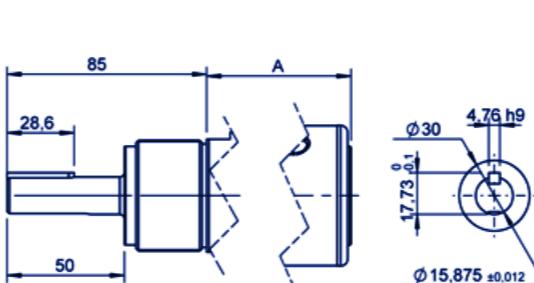
GROUP IV SHAFT C11 - KEYED Ø14 - IEC71B5 - IEC71B14



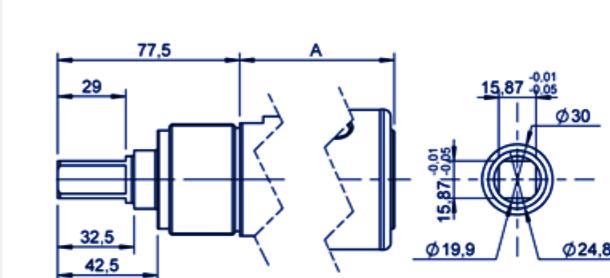
GROUP IV SHAFT C12 - KEYED Ø19 - IEC80B5 - IEC80B14



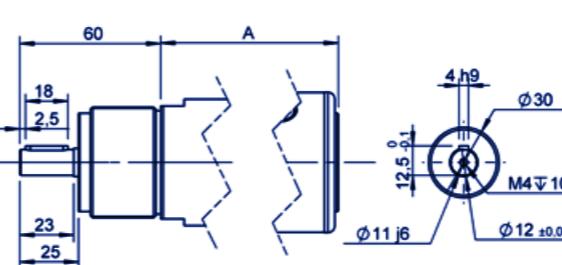
GROUP IV SHAFT C15 - KEYED Ø5/8"



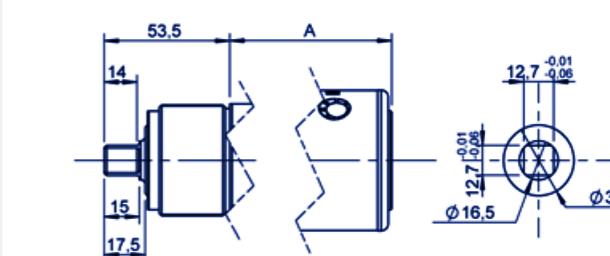
GROUP IV SHAFT C16 - SQUARE Ø5/8"



GROUP IV SHAFT C19 - KEYED Ø11 - IEC63B14



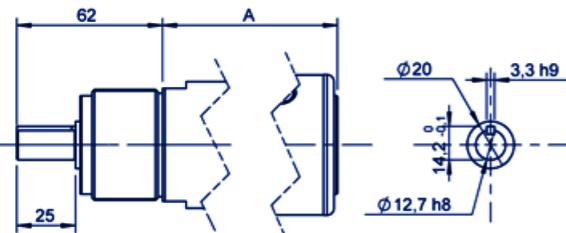
GROUP IV SHAFT CA1 - SQUARE Ø1/2"



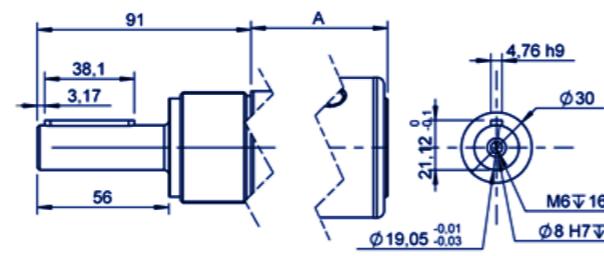
SHAFTS GROUP IV (2/3)

XTH 05 XTH 07 XTS 08 XTH 08 XTS 10 XTH 10 XTS 20 XTS 25

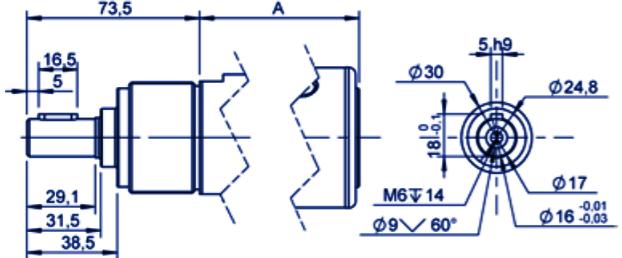
GROUP IV SHAFT CL1 - KEYED Ø1/2"



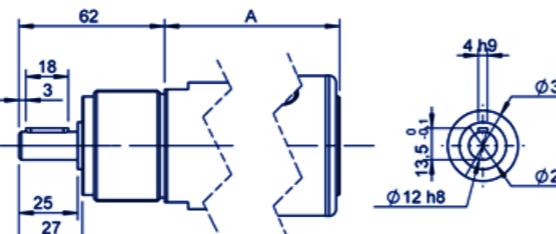
GROUP IV SHAFT CL2 - KEYED Ø3/4"



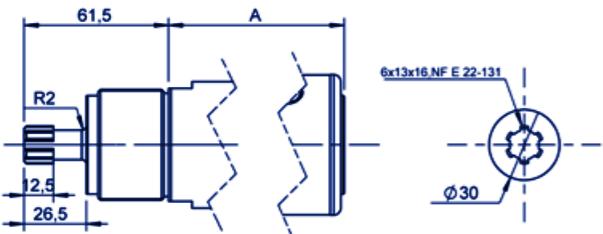
GROUP IV SHAFT CL6 - KEYED Ø16



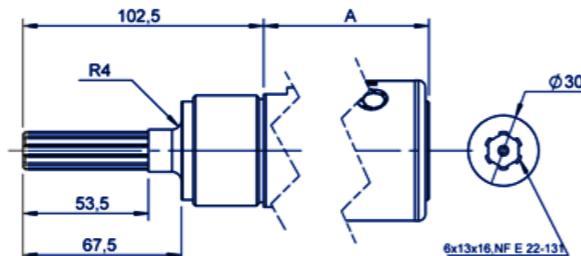
GROUP IV SHAFT CL9 - KEYED Ø12



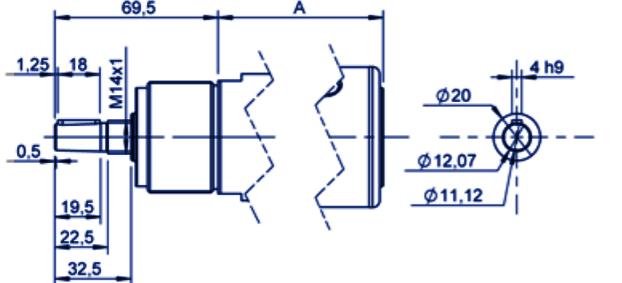
GROUP IV SHAFT CNC - SPLINED SHORT



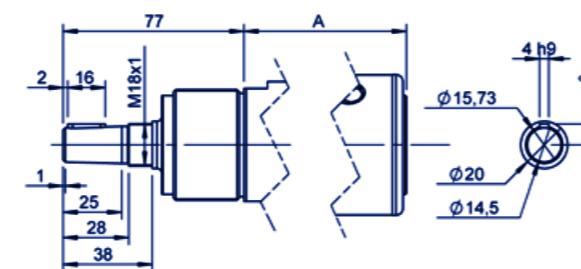
GROUP IV SHAFT CNL - SPLINED LONG



GROUP IV SHAFT CONICAL B12



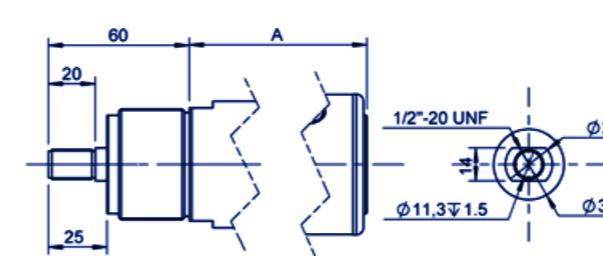
GROUP IV SHAFT CONICAL B16



SHAFTS GROUP IV (3/3)

XTH 05 XTH 07 XTS 08 XTH 08 XTS 10 XTH 10 XTS 20 XTS 25

GROUP IV SHAFT FI1 - THREADED Ø1/2"

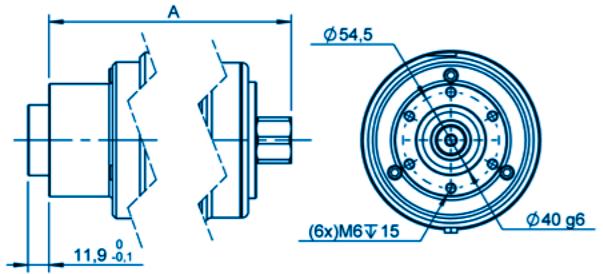


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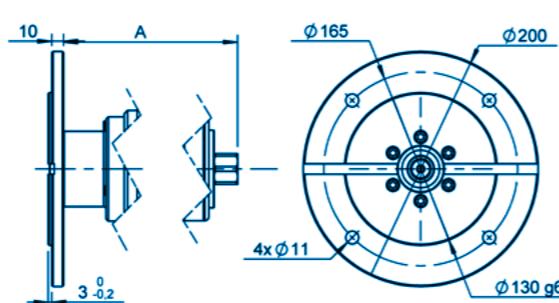
Contact us !

FLANGES & SHAFTS **GROUP V**

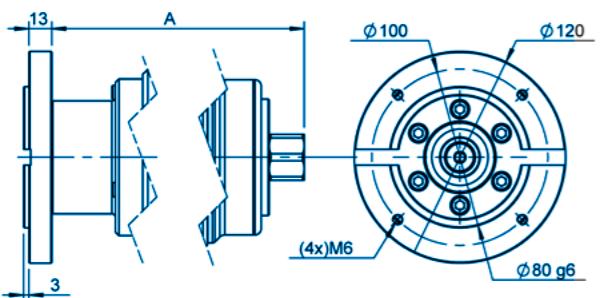
**GROUP V FLANGE AA**



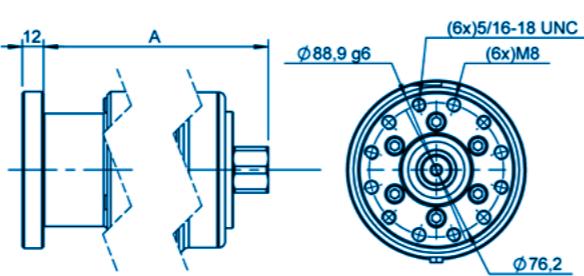
**GROUP V FLANGE AB - IEC 80B5 - IEC 90B5**



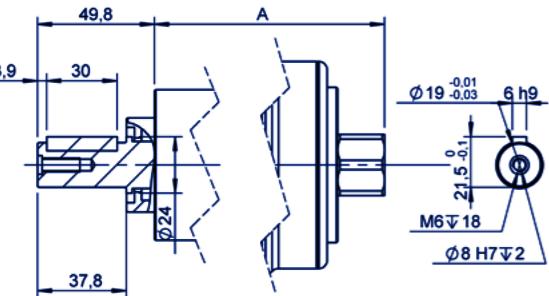
**GROUP V FLANGE AC - IEC 80B14**



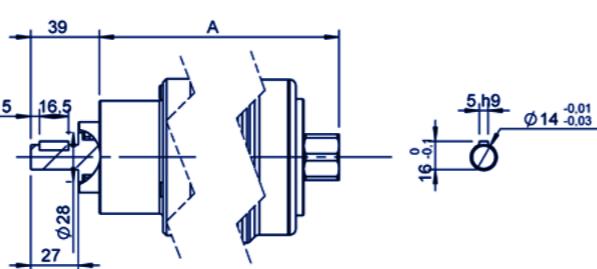
**GROUP V FLANGE B**



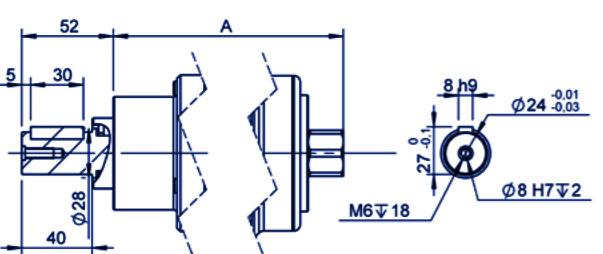
**GROUP V SHAFT 001 - KEYED Ø19 - IEC 80B14 - IEC80B5**



**GROUP V SHAFT 002 - KEYED Ø14**



**GROUP V SHAFT CL6 - KEYED Ø24 - IEC 90B5**



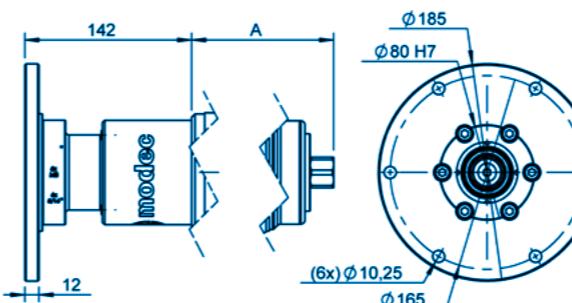
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your match ?

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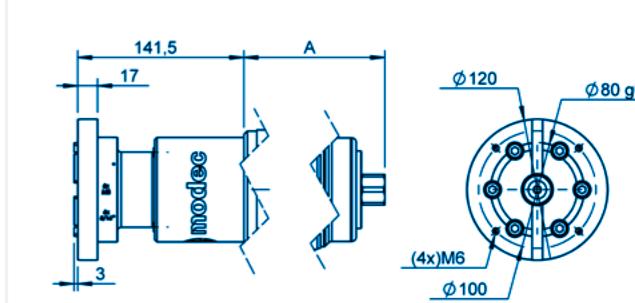
**XTE 30**

FLANGES **GROUP VI**

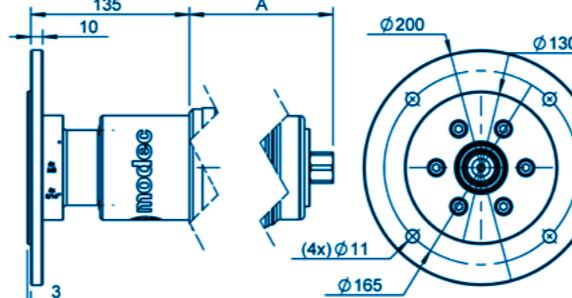
**GROUP VI FLANGE AA**



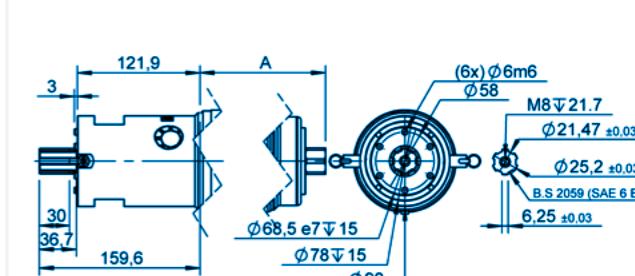
**GROUP VI FLANGE AB - IEC80B14**



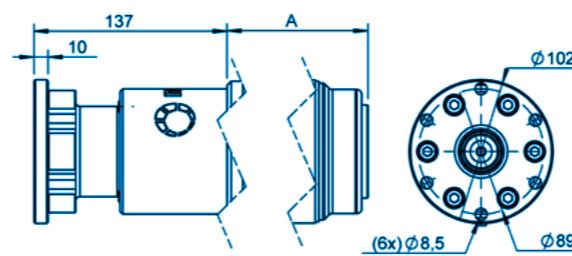
**GROUP VI FLANGE AG - IEC80B5**



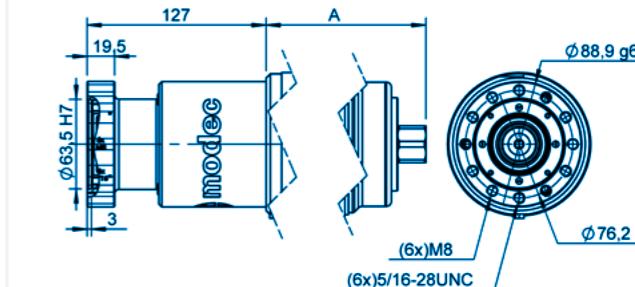
**GROUP VI FLANGE AI WITH SHAFT CNW**



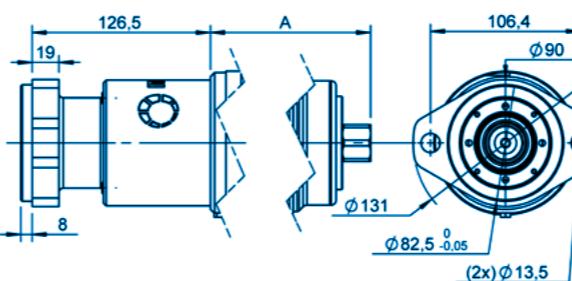
**GROUP VI FLANGE AL**



**GROUP VI FLANGE B**



**GROUP VI FLANGE H**

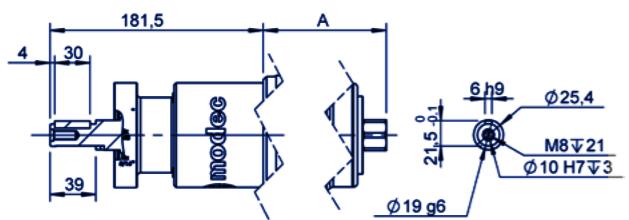


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your match ?

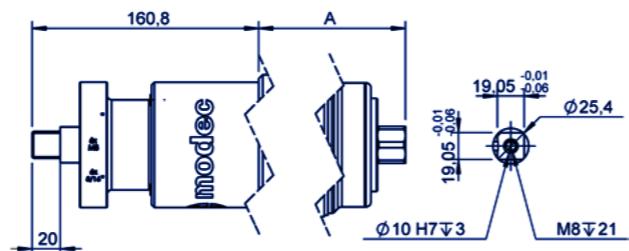
Contact us !

SHAFTS GROUP VI

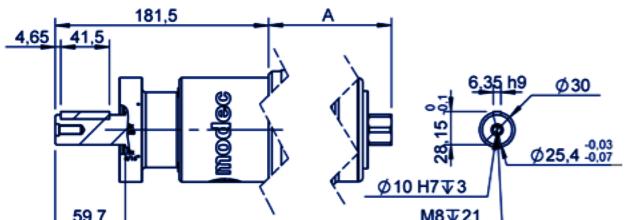
GROUP VI SHAFT 003 - KEYED Ø19 - IEC 80B14 - IEC 80B5



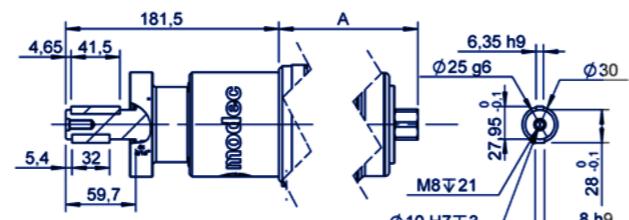
GROUP VI SHAFT CA1 - SQUARE 3/4"



GROUP VI SHAFT CL2 - KEYED Ø1"



GROUP VI SHAFT CL4 - KEYED Ø25

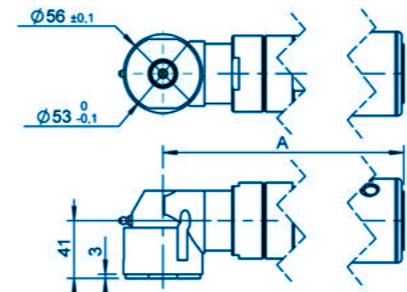


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your match ?

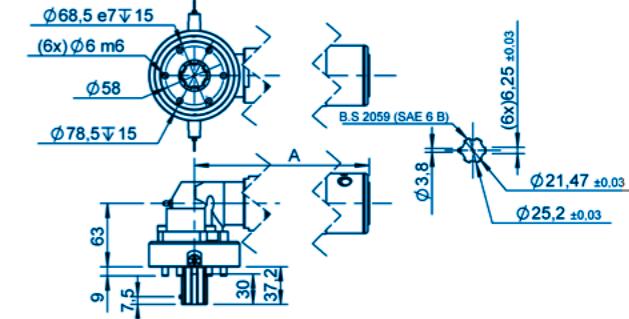
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FLANGES GROUP VII

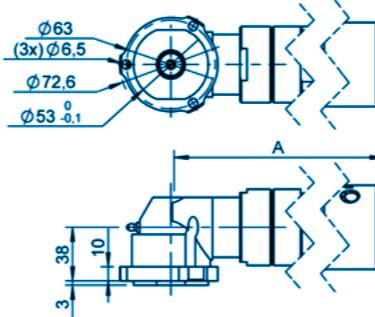
GROUP VII FLANGE AF



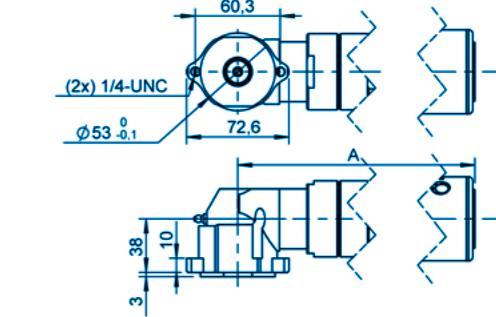
GROUP VII FLANGE AG WITH SHAFT 013



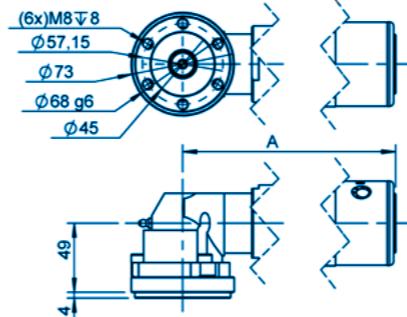
GROUP VII FLANGE B



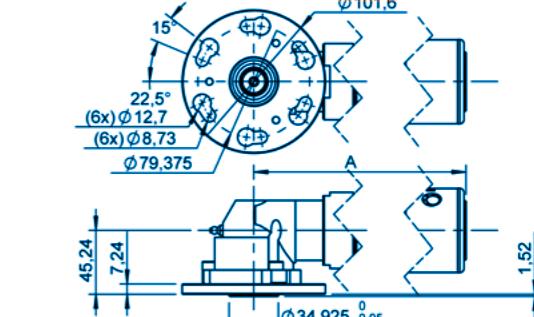
GROUP VII FLANGE E



GROUP VII FLANGE M



GROUP VII FLANGE Q



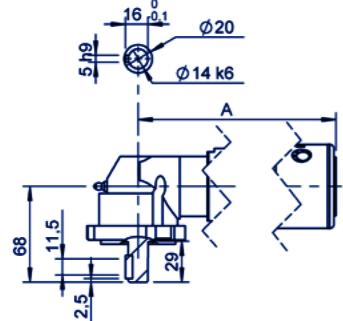
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your match ?

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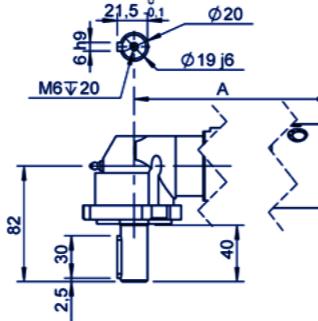
SHAFTS GROUP VII (1/2)

XRH 05 XRH 07 XRS 08 XRS 10 XRS 20 XRS 25

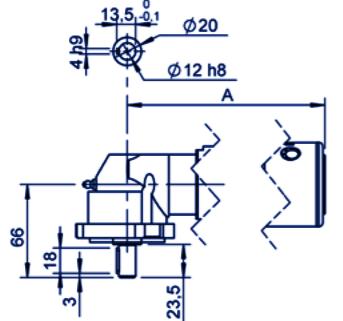
GROUP VII SHAFT 021 - KEYED Ø14



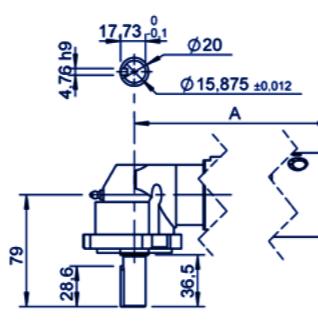
GROUP VII SHAFT C12 - KEYED Ø19



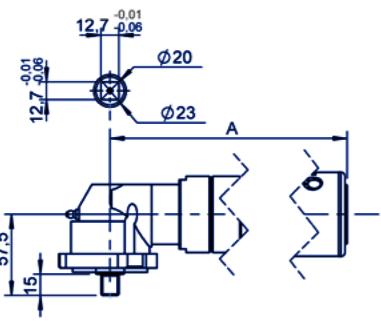
GROUP VII SHAFT C13 - KEYED Ø12



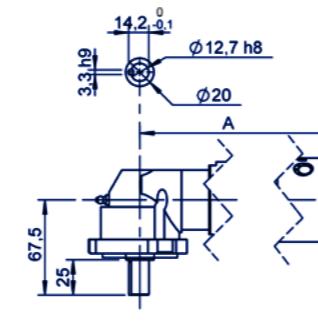
GROUP VII SHAFT C14 - KEYED Ø5/8"



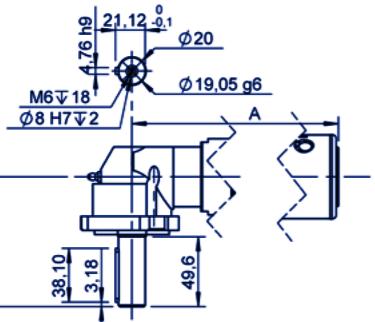
GROUP VII SHAFT CA1 - SQUARE 1/2"



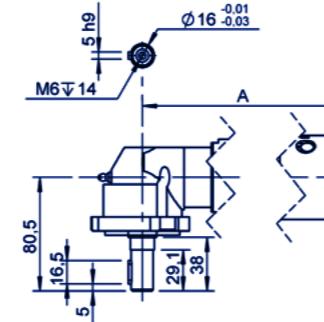
GROUP VII SHAFT CL1 - KEYED Ø1/2"



GROUP VII SHAFT CL2 - KEYED Ø3/4"



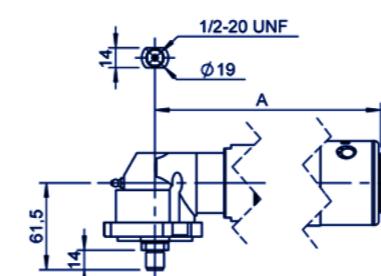
GROUP VII SHAFT CL6 - KEYED Ø16



SHAFTS GROUP VII (2/2)

XRH 05 XRH 07 XRS 08 XRS 10 XRS 20 XRS 25

GROUP VII SHAFT FI1 - THREADED Ø1/2"



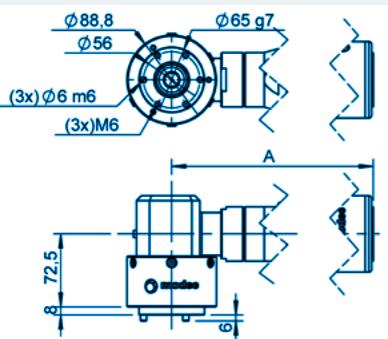
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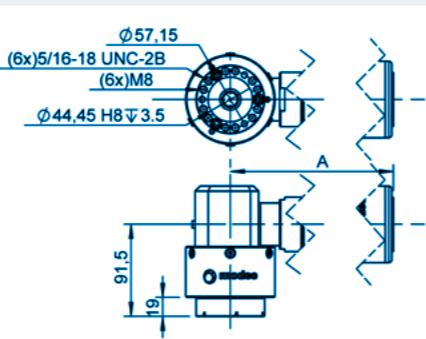
## FLANGES GROUP VIII

XRZ 05 XRZ 07 XRH 08 XRH 10 XRH 20 XRH 25

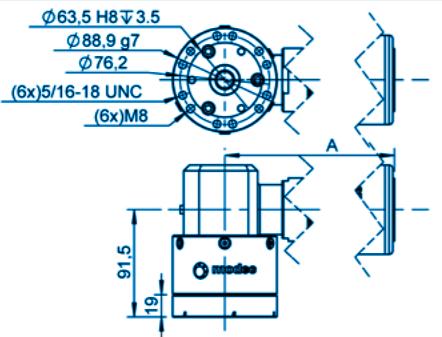
### GROUP VIII FLANGE AA



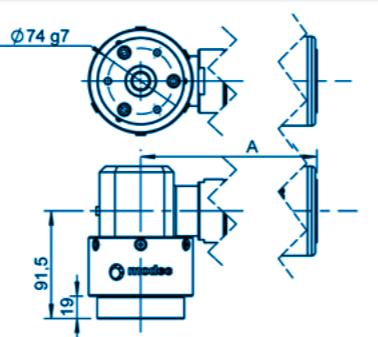
### GROUP VIII FLANGE AB



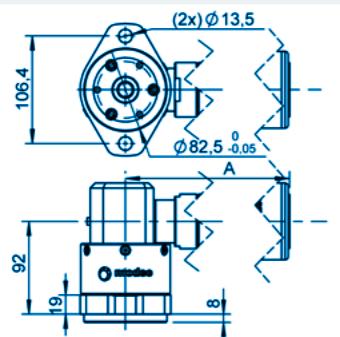
### GROUP VIII FLANGE AC



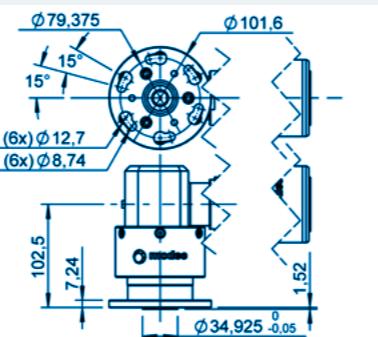
### GROUP VIII FLANGE AD



### GROUP VIII FLANGE AE



### GROUP VIII FLANGE Q



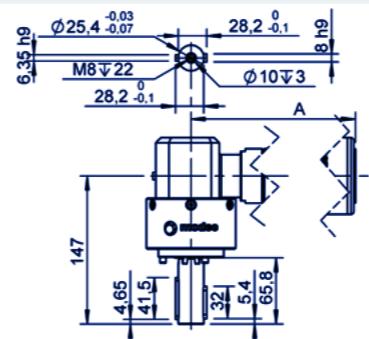
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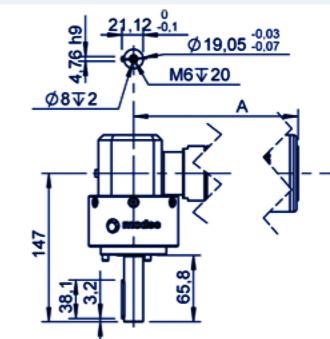
## SHAFTS GROUP VIII

XRZ 05 XRZ 07 XRH 08 XRH 10 XRH 20 XRH 25

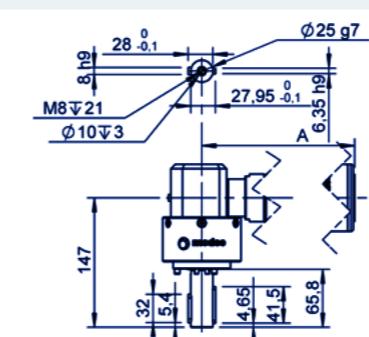
### GROUP VIII SHAFT 001 - KEYED Ø1"



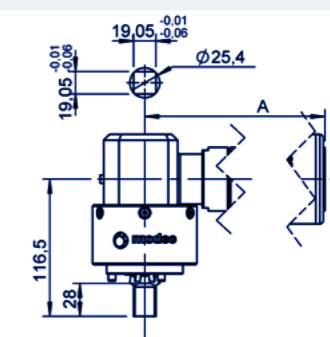
### GROUP VIII SHAFT 002 - KEYED Ø3/4"



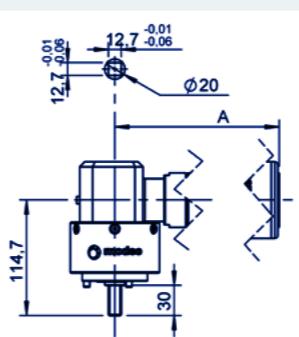
### GROUP VIII SHAFT 003 - KEYED Ø25



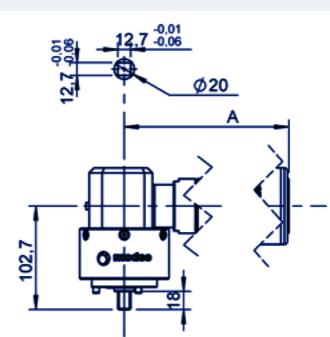
### GROUP VIII SHAFT 004 - SQUARE 3/4"



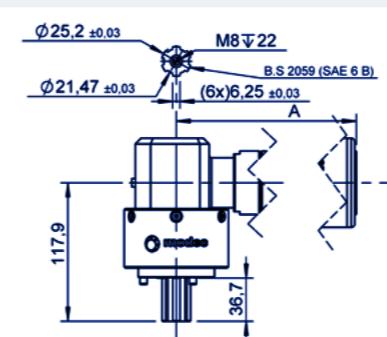
### GROUP VIII SHAFT 005 - SQUARE 1/2" LONG



### GROUP VIII SHAFT CA1 - SQUARE 1/2" SHORT



### GROUP VIII SHAFT CNW - SPLINED



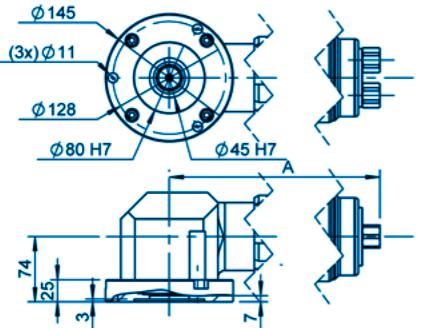
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your match ?

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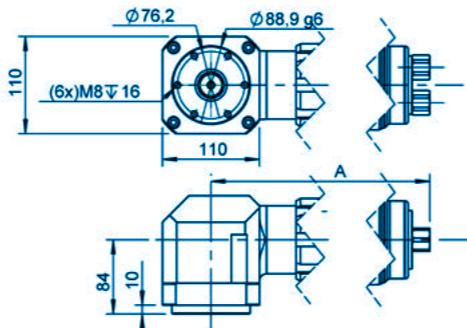
FLANGES & SHAFTS **GROUP IX**

XRZ 08 XRZ 10 XRZ 20 XRZ 25 XRS 30

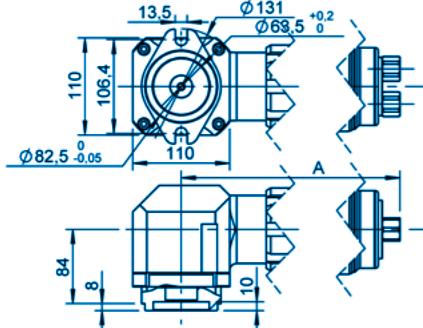
**GROUP IX FLANGE A**



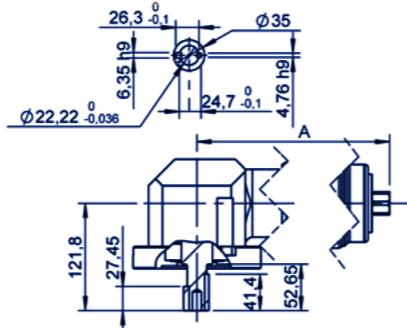
**GROUP IX FLANGE B**



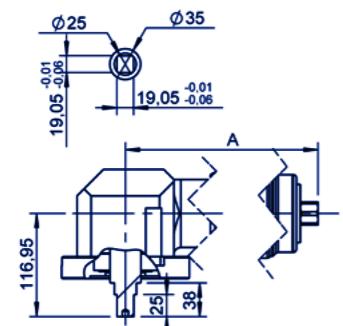
**GROUP IX FLANGE H**



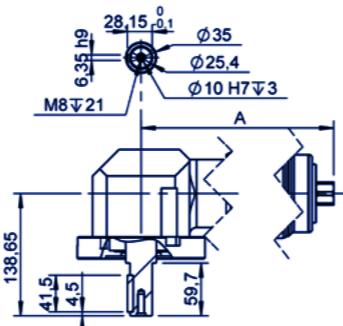
**GROUP IX SHAFT 001 - KEYED Ø7/8"**



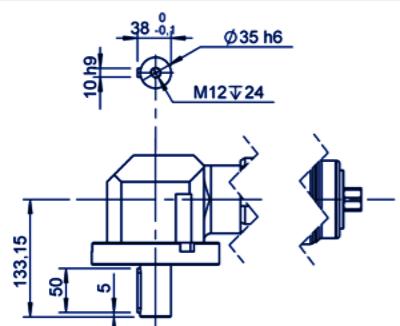
**GROUP IX SHAFT 003 - KEYED Ø3/4"**



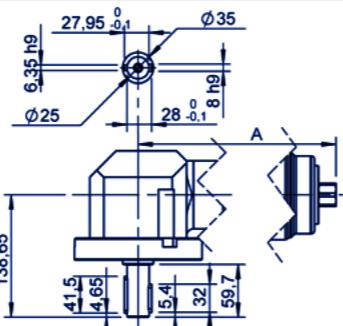
**GROUP IX SHAFT CL2 - KEYED Ø1"**



**GROUP IX SHAFT CL3 - KEYED Ø35**



**GROUP IX SHAFT CL4 - KEYED Ø25**



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**AIR MOTOR CATALOGUE**  
**OPTIONS & ACCESSORIES**

**Options** are built into motors during manufacturing :

- Exhaust collectors
- ATEX certification
- Left/Right trigger (for reversible air motors only)
- « No lube kit » for oil free motors
- « Kit start » to ensure immediate start of the motor, even in difficult conditions
- Integrated speed control
- Stainless steel casing

Options are identified with the two last digits of the commercial reference. You will find on each product file a table indicating available options.

**OPTIONS AVAILABLE FOR THIS MOTOR**

Collected exhaust	01	02	03	09	10	11	12	13	14
ATEX certification									
Left/Right switch*									
Lubrication free									
Kit start									
Speed control**									
Inox									
Code	01	02	03	09	10	11	12	13	14

\* Reversible motors only    \*\* Non reversible motors only

**OPTIONS EXHAUST COLLECTORS**

Exhaust collectors are to be mounted on the 10, 20, 25 & 30 series (other series air motors are always collected). They enable to collect exhaust in order to drive it towards a filter or silencer, or simply to bring it away from the working place. Using an exhaust collector with a silencer may slightly reduce performance (30 series) or significantly increase it (10 and 20 series). See table p.181.

It will also increase the motor maximum diameter (see an example below for the "10" series).



Exhaust collectors can also be assembled on motors after manufacturing, as accessories (see chapter "Accessories" hereafter).

**ATEX CERTIFICATION**

All modec air motors can be certified ATEX on request.

See chapter 7. Certifications in the General information section (page 18)



Modec offers a complete range of options and accessories required for an optimal performance of air motors and solutions.

**Accessories** are complementary to motors and enable an optimal functioning of the complete system :

- Filtration, Regulation & Lubrication units (FRL)
- Safety Air Treatment Boxes (SAT Box)
- Air supply lubrication oil
- Motor control handles
- Filters & silencers
- Airflow controllers
- Motors maintenance kits
- Exhaust collector kits

**LEFT/RIGHT TRIGGER**

Available for reversible air motors only, this option allows to control the rotation direction directly on the motor with a simple trigger. No need for 5/3 distribution valve and separate air supply hoses. Very convenient for motors installed on machines where a manual rotation change is required.


**LUBRICATION FREE**

Oil free motors are specially designed to work without adding oil in the air supply. This can be required in specific applications (clean rooms for example).

In that case, air quality, dryness and cleanliness is even more critical to a good functioning and lifespan of the motor. One shall use adequate filtering units and check filters regularly. No lube air motors should not be used unloaded at free speed.

When motors are not in use, make sure that they are stored in a dry, clean and ventilated environment.

**« KIT START »**

This option is typically required for applications where the motor is not frequently used and where it is important that motors will start immediately even after a long idle period. The kit start ensures that the vanes will always be out of the rotor notches and consequently that the motor will immediately start up when air comes in.


**STAINLESS STEEL MOTORS**

Available for most of our models, that option increases our motors robustness and resistance to wet and corrosive environments.

**INTEGRATED SPEED CONTROL**

The integrated speed control system enables to adjust the output shaft rotation speed simply by rotating the exhaust silencer. No need for external air flow regulator, it is a simple and efficient way to control speed. Available for « 10 » and « 20 » series non reversible air motors.


**ACCESSORIES FILTERING, PRESSURE REGULATION AND LUBRICATION UNITS (FRL)**

The Filtering, pressure Regulation and Lubrication unit (FRL) is a mandatory element for a good air motor functioning, performance, service life and control. It ensures fluid (compressed air or inert gas) filtering, drying and lubrication so that the motor will be fed with a « clean » gas. It also controls the motor performances through air pressure.

The FRL unit should be installed less than 5 m upstream from the motor and should be properly dimensioned so that the flow is consistent with the motor's consumption. Make sure that pipes and fittings are also large enough for the airflow required.

modec offers a complete range of compact and sturdy FRL, adapted to industrial environment and easy to connect.

Self-relieving regulator. Lubrication with selective oil fog. Metal bowl with polypropylene oil level viewing window. Automatic oil refilling pressurized system

Recommended oil type : MODEC CO-16 oil (see hereafter)



Reference	AC106	AC107	AC108
Max inlet pressure	16 bars	16 bars	16 bars
Pressure gauge	0 / 10 bars	0 / 10 bars	0 / 10 bars
Controlled pressure	0,5 / 8 bars	0,5 / 8 bars	0,5 / 8 bars
Ambient temperature	-10°C / +50°C	-10°C / +50°C	-10°C / +50°C
Oil bowl capacity	40 cm³	80 cm³	181 cm³
Filtration	5 µm	5 µm	5 µm
Purge system	Semi-auto	Semi-auto	Semi-auto
Connection	G 1/2	G 1/2	G 3/4
Dimensions (A x B x C)	240 x 145 x 100 mm	271 x 187 x 112 mm	342 x 210 x 142 mm
Weight (empty)	1,5 kg	2,9 kg	3,85 kg

## SAFETY AIR TREATMENT BOX (SAT BOX)

### Safety

The Safety Air Treatment Box (SAT Box) is a safety device designed to protect people & material against damages and accidents. Placed upstream from the pneumatic actuators (motors, pistons or any portable pneumatic tools) the SAT Box provides numerous important safety features:

- **Emergency kill switch**
- **Key safety lock (optional)**
- **Downstream automatic air-bleed**
- **Automatic switch off when air pressure drop is detected**



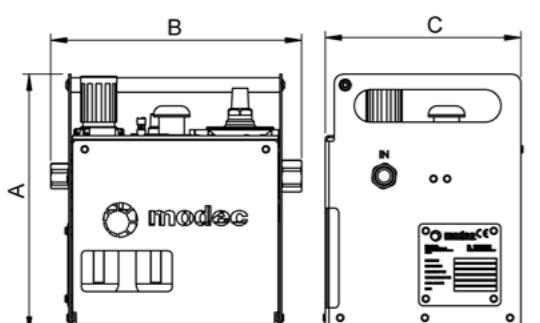
All these safety features are energized by air pressure, without any other source of energy required. This makes it possible to have it ATEX certified on request.

### Air treatment

The SAT Box also contains a FRL unit (Filtration, pressure Regulation and Filtration). Refer to the FRL description above.

### Easy control

The SAT Box can be equipped as an option with several remote control devices for an easy and efficient use (pedal, handle or emergency kill switch placed close to the operator).



All components are protected with a stable and sturdy metallic box designed for a heavy duty workshops and worksites use.

Reference	AC118	AC126
Motors series	05, 07, 08, 10, 20	25, 30
FRL type	AC107	AC108
Emergency kill switch	Yes	Yes
Automatic air bleed	Yes	Yes
Pressure gauge	0-10 bars	0-10 bars
Filtration	5 µm	5 µm
Oil bowl capacity	80 cm³	181 cm³
Controlled pressure	2 - 8 bars	2 - 8 bars
Ambient temperature	-10°C/+50°C	-10°C/+50°C
Connection	In G ½ - Out G ¾	In G ¾ - Out G ¾
Dimensions (mm) A x B x C	277 x 216 x 286 mm	304 x 216 x 348 mm
Weight (empty)	7.6 kg	11.7 kg
Option :		
Pedal remote control	AC119	AC127
Handle remote control	AC120	AC128
Remote Emergency Kill Switch	AC125	AC129
Remote pedal and EKS	AC121	AC130
Remote Handle and EKS	AC122	AC131

## PNEUMATIC OIL modec CO-16

Lubricating oil specially selected for modec air motors and actuators



### Synthetic oil

Kinematic viscosity at 40°C	: 22cSt
Viscosity index	: 145
Voluminal mass	: 824kg/m³
Flash point	: +210°C
Pour point	: -55°C
Temperature of use	: -55°C/130°C
Reference	: AC149

## MOTOR CONTROL HANDLES



### Safety handles

Safety handles change your motor into a portable tool with a manual "on/off" control. It guarantees operator's safety thanks to a specific trigger that prevents any accidental start, and an automatic return system that ensures a complete stop of the air flow as soon as the handle is released.



### Progressive control handle

The progressive control handle enables an efficient, ergonomic and safe control of the motor air supply, and consequently of the motor speed. It is particularly suited to applications requiring constant speed control and adaptation.



### Left / Right switch

This simple "Left / Right" (or "CCW / CW") lever placed in the back of the motor allows a direct rotation direction control. No need for pipes, fittings and 5/3 distribution valve anymore.

Series	Safety handles	Progressive control handles	Left / Right switch
08 XT	AC415	AC417	N/A
08 RV	AC416	AC418	AC429
10 XT	AC406	AC400	N/A
10 RV	AC404	AC408	AC430
20 XT	AC406	AC400	N/A
20 RV	AC403	AC409	AC431
25 XT	AC412	AC407	N/A
25 RV	AC414	AC410	AC432
30 XT	AC412	AC407	N/A
30 RV	AC414	AC410	AC432
Assembly on a safety handle	N/A	AC400	N/A
SAT Box remote control handle	AC405	N/A	N/A

## FILTERS & SILENCERS

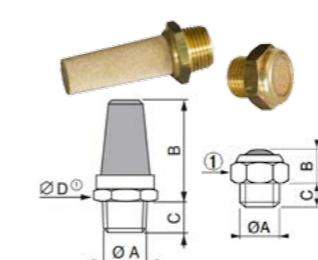
### 1 • STANDARD EXHAUST SILENCERS

Extremely compact, these metallic or plastic silencers significantly reduce exhaust noise with a minimal impact on the motor overall size.

They also prevent any external parts or impurities from getting inside the motor through exhaust vent.

**IMPORTANT :** Make sure that the silencer maximum acceptable flow is consistent with the maximal air output flow of the motor in order to avoid impact on the motor performances (torque & speed).

#### • METALLIC SILENCERS



Reference	AC169	AC168	AC180	AC181	AC164	AC182
Operating pressure	0 → 10 bars					
Ambient temperature			-10°C → +80°C			
Connection (ØA)	G 1/8	G 1/8	G 1/4	G 3/8	G 1/2	G 3/4
Dimensions (B x C x ØD) (mm)	10 x 6 x 13	22,4 x 5,6 x 13	41,6 x 8,4 x 16	49,2 x 8,8 x 24	54,6 x 11,4 x 27	82,3 x 12,7 x 36
Weight	6 g	10 g	30 g	30 g	70 g	300 g
Suitable for motors						Refer to table p.181

Mini metallic silencer (AC169): Stainless steel body, Nickel plated brass connection piece .

Other metallic silencers : Porous bronze body, brass connection piece .

#### • PLASTIC SILENCERS



Reference	AC166	AC150	AC183	AC184	AC152	AC153
Operating pressure	0 → 10 bars					
Ambient temperature			-10°C → +80°C			
Connection (ØA)	G 1/8	G 1/4	G 3/8	G 1/2	G 3/4	G 1
Dimensions (B x C x ØD) (mm)	27 x 6 x 13	34 x 7 x 15	55 x 11 x 18	62 x 12 x 23	113 x 16 x 38	141 x 20 x 48
Weight	2 g	4 g	6 g	10 g	40 g	65 g
Suitable for motors						Refer to table p.181

Polyethylene body, technical polymer connection piece .

## AIR MOTOR CATALOGUE

## OPTIONS &amp; ACCESSORIES

## 2. HEAVY DUTY EXHAUST SILENCERS

These silencers softly exhaust air and disperse it over a 360° pattern. It won't clog up even in harsh environment. Made of a corrosion-resistant metal, it can withstand shock and continuous, heavy duty use under many conditions.



Reference	AC167	AC154	AC155	AC158	AC156	AC157
Operating pressure	0 → 14 bars					
Ambient temperature	- 20°C → + 110°C					
Connection	G 1/8	G 1/4	G 3/8	G 1/2	G 3/4	G 1
Dimensions (A x B x ØC [mm])	35 x 31 x 11	44 x 39 x 14	57 x 51 x 18	69 x 61 x 22	80 x 71 x 27	99 x 88 x 33
Weight	9 g	23 g	36 g	68 g	122 g	227 g
Suitable for motors	Refer to table p.181					

Zinc-plated steel dichromate body, brass sieve

## 3. HIGH FLOW EXHAUST MUFFLER

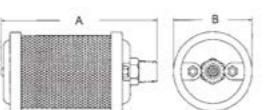
High flow exhaust muffler generate very minimal pressure drop while significantly reducing noise. They definitively are the best solution in terms of "Noise reduction / Pressure drop" ratio.

85% Noise Reduction

94% Flow Factor

Constructed with a unique expansion chamber, completely free of obstruction, exhaust air softly flows to the atmosphere without noise and oil fog, providing a clean, comfortable and productive work environment.

Composed entirely of corrosion-resistant material for long life and maintenance-free performance, units have a hex head, making it easy to attach to exhaust ports. They should be mounted in a protective position, free from excessive vibrations.



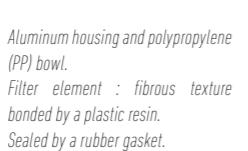
Reference	AC158	AC159	AC160
Operating pressure	0 → 10 bars		
Ambient temperature	- 40°C → + 145°C		
Connection	G 1/2	G 3/4	G 1
Dimensions (A x ØB) [mm]	152 x 80	183 x 86	222 x 98
Weight	340	450 g	590 g
Suitable for motors	Refer to table p.181		

## 4. EXHAUST FILTERS &amp; SILENCERS

Designed to reduce both exhaust noise level and pollution by eliminating solid particles and oil aerosols, these silencers must be assembled in vertical position (slope : 15° max.).

Pressure drops due to clogging of cartridge must not exceed 0,5 bar, in which case replace cartridge.

Condensates are automatically drained once they exceed a given level. The drain may however be activated manually by turning the knurled switch (1/4 turn).



Reference	AC165	AC161	AC162
Operating pressure	0 → 16 bars		
Ambient temperature	- 5°C → + 50°C		
Connection (ØG)	G 1/2	G 3/4	G 1
Dimensions (A x B x ØC [mm])	12 x 180 x 90	12 x 180 x 90	15 x 250 x 110
Weight	600	560 g	1070 g
Suitable for motors	Refer to table p.181		

Aluminum housing and polypropylene (PP) bowl.  
Filter element : fibrous texture bonded by a plastic resin.  
Sealed by a rubber gasket.

## 5. AIR MOTORS / SILENCERS CORRESPONDENCE TABLE AND POWER IMPACT

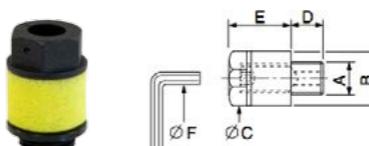
	05	07	08	10XT	10RV	20 XT	20 RV	25	30
Size	Exhaust	Inlet	Exhaust	Inlet	Exhaust	Exhaust	Inlet	Exhaust	Inlet
Plastic	G 1/8	G 1/8	G 1/4	G 1/8	G 3/8	G 1/4	G 3/4	G 3/8	G 1/2
Reference	AC166	AC166	AC150	AC166	AC183	AC150	AC152	AC152	AC151
Power impact	-14%	-10%	-10%	0	0	15%	20%	0	-3%
Metallic	AC168 ou AC169	AC168 ou AC169	AC180	AC168	AC181	AC180	AC182	AC182	AC164
Reference	-14%	-10%	-10%	0	0	15%	20%	0	0
Power impact	AC168 ou AC169	AC168 ou AC169	AC180	AC168	AC181	AC180	AC182	AC182	AC164
Heavy duty	AC167	AC167	AC154	AC167	AC155	AC154	AC156	AC156	AC184
Reference	-14%	-10%	-10%	0	0	15%	20%	0	0
Power impact	AC167	AC167	AC154	AC167	AC155	AC154	AC156	AC156	AC184
High flow exhaust muffler				AC211 + AC158	AC211 + AC158	AC159	AC159	AC239 + AC160	AC239 + AC160
Reference				AC211 + AC158	AC211 + AC158	AC159	AC159	AC239 + AC160	AC239 + AC160
Power impact				0	0	15%	20%	0	-6%
Filter				AC211 + AC165	AC211 + AC165	AC161	AC161	AC239 + AC162	AC239 + AC162
Reference				0	0	0	0	AC239 + AC162	AC239 + AC162
Power impact				0	0	0	0	AC239 + AC162	AC239 + AC162

## I AIRFLOW CONTROLLERS

## 1. SPEED CONTROL MUFFLERS

The Polyethylene Speed Control Muffler is designed to adjust the pressure gap between air input and output of the motor by controlling the low end of the flow range. In that way, input pressure remains unchanged and there is no impact on the loaded starting torque, although the torque and speed at max power are reduced. It also reduces decibel levels to an OSHA approved level.

It can be used with air or filtered inert gases, lubricated or not.



Its body is made of highly versatile and cost-effective nylon. The adjusting screw is made of high tensile steel and is coated with electroplated zinc.

Reference	AC170	AC171	AC172	AC173 +AC211
Operating pressure	0 → 10 bars			
Ambient temperature	- 10°C → + 80°C			
Connection (ØA)	G 1/8	G 1/4	G 3/8	G 1/2
Dimensions (B x C x D x E x F [mm])	15 x 13 x 6 x 14.5 x 2.5	18 x 15 x 7 x 22 x 4	24 x 20 x 8 x 30 x 6	30 x 25 x 10 x 40 x 8
Weight	5g	10g	30g	50g
Suitable for motors	« 05 »	« 07 »	« 08 »	« 10 », « 20 », « 25 », « 30 »

## 2. IN-LINE FLOW REGULATORS

In-line flow regulators control the motor air supply flow and consequently its rotation speed. They are particularly compact and easy to install either on the air motor inlet port or on the air supply pipe. They can also be used on the exhaust port.



Aluminum body  
In-line flow regulators come with appropriate fittings for assembly on air motors inlet ports.

Reference	AC186	AC187	AC188	AC189	AC190	AC191	AC192
Operating pressure	0 → 17 bars						
Ambient temperature	- 40°C - +120°C						
Air motor inlet connection	G 1/8"	G 1/8"	G 1/4"	G 3/4"	G 3/8"	G 1/2"	
Air supply connection	G 1/8"	G 1/4"	G 1/4"	G 3/8"	G 1/2"	G 1/2"	
Dimension (A x B)	50,8 x 20,6	64,8 x 26,9	64,8 x 26,9	73,4 x 31,8	73,4 x 31,8	82,6 x 41,4	82,6 x 41,4
Weight	5g	10g	10g	15g	15g	25g	25g
Suitable for motors	“05”	“07”	“08”	“10XT”	“10RV”	“20XT”	“20RV”

## I MAINTENANCE KITS



Maintenance kits contain two sets of parts required for one regular motor maintenance (refer to chapter 6 "Air motors storage & maintenance" in the first part of this catalogue). With one kit, you can perform two maintenance operations.

Maintenance kits come with an instruction notice and video tutorials are available on our YouTube channel.

Reference	05	07	08	10	20	25	30



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# SPECIAL PRODUCTS & TOOLS

## NUT RUNNERS



All our motors can be used as nut runners by using the stall torque as a maximum torque that can be set by simply adjusting air pressure.

Just refer to the "NR" products type data sheet in each series and families.

NR products type are made of a handle, a motor and a right angle head which make them a perfect, safe and ergonomic bolting tool, with a power range from 400 W ("08" series) to 3200 W ("30" series) and a bolting torque that can reach up to 1000 Nm.

It is important to note that these nut runners cannot be used as precision tools. The accuracy of the torque values indicated is +/-5%.

Don't hesitate  
to contact us

[www.fuiberica.com](http://www.fuiberica.com)  
+34 932 681 833  
fuiberica@fuiberica.com

## TAPPING MACHINES



All our motors can also be used as tapping machines in their NTxxRV type.

We have designed a specific range of tapping machines with an appropriate safety handle and rotation control. We have specific shafts designed for tappers.

*Refer to the TRS08 product data sheet on page 70.*

## SPECIAL MOTORS

Flexibility, Expertize and Innovation are our main strengths. We regularly design special motors on customer request for specific applications, and we love that !



Submarine stainless steel air motor

High speed motor  
for deburring / machining

Special shape & dimension  
air motor

Air fail brake motor

Whether it is submarine air motors, motors with air fail brakes, torque limiters or special flanges and shafts, we will answer your specific request quickly and precisely. Just ask us!