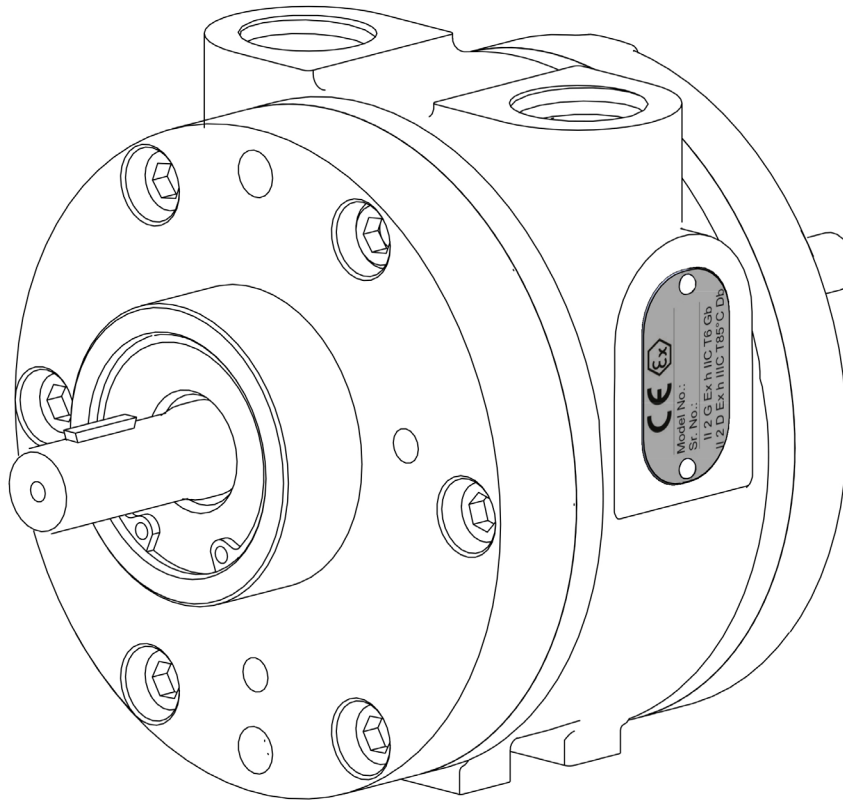




Operation and Maintenance Guide



4 V M

4 VM SG Iron and Stainless Steel Construction, All variants

Models	Descriptions
4VMSXXX	FOOT Model with Lube / Lube-Free, SG Iron / SS & NPT / BSPT Variants
4VMLXXX	FACE Model with Lube / Lube-Free, SG Iron / SS & NPT / BSPT Variants
4VMNXXX	NEMA Model with Lube / Lube-Free, SG Iron / SS & NPT / BSPT Variants
4VMDXXX	IEC Model with Lube / Lube-Free, SG Iron / SS & NPT / BSPT Variants

Read this manual carefully before installing, operating or servicing this equipment. It's the responsibility of the employer to ensure this manual is read by the operator. Please preserve this manual.

This document is issued with Product Serial No

<<Serial No>>

Table of Contents

3	Nomenclature
3	Technical Data
4	Safety Instructions
5	Installation Instructions
6	Operating instructions
7	Suggested Lubricants
7	Troubleshooting
8	Dis assembly and Re-assembly
9	Exploded View for 4VM Air Motor
10	Bill of Materials for 4VM Series (SG Iron)
11	Bill of Materials for 4VM Series (SS)
12	Dimensional Data
14	Repair Kits for 4VM
14	Test Certificate Of Materials, Performance
15	Eu Declaration Of Conformity
16	Warranty Certificate

Nomenclature

X	XX	X	X	X	X	X	X	X
Size	Motor Type	Mounting	Lubricated or Lube-Free	Material of Construction	Explosion Proof	Threading on Inlet and Outlet	Threading on Inlet and Outlet	No of Vanes
1	VM - Vane Type PM - Piston Type VG - Vane Geared PG - Piston Geared	L - Face Type	A- Lubricated	L - SG Iron	EX	R- NPT	C - Clockwise A - Anticlockwise	8- 8 Vanes
2		S- Foot Type						
4		T - Hub	O - Lube Free	S - SS				
6		D - IEC Flange Type						
8		N - NEMA Flange Type						
16								

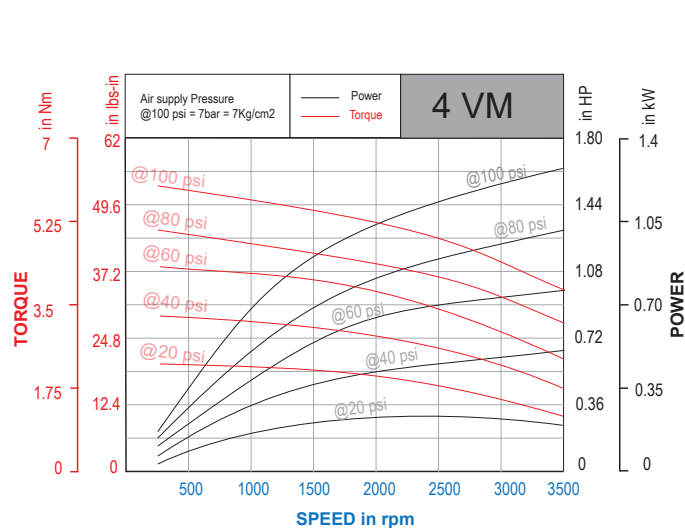
For example

4VMTALEXR is a size 4, Vane type, Hub Mounted, Lubricated, SG Iron MOC. Explosion Proof, NPT Threading, Reverssible with 4 Vanes,
 4VMTALEXR8 is a Size 4, Vane type, Hub Mounted, Lubricated, SG Iron MOC, Explosion Proof, NPT Threading, Reverssible with 8 Vanes,
 1VMTALEXRA is a Size 1, Vane type, Hub Mounted, Lubricated, SG Iron MOC, Explosion Proof, NPT Threading, Anticlockwise with 4 Vanes,

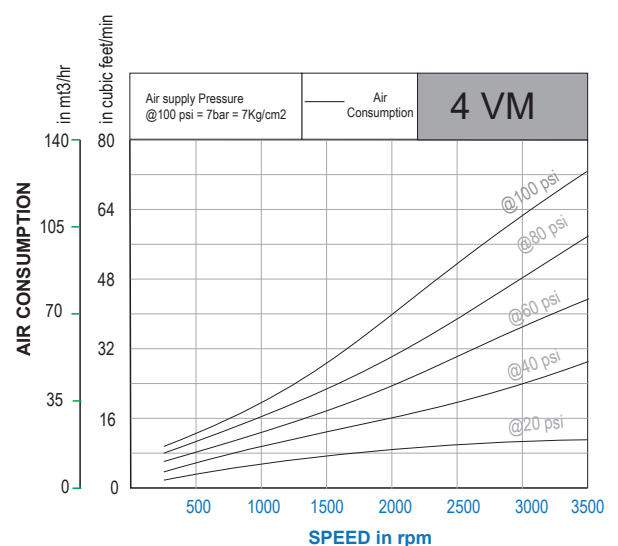
Technical Data

Power	upto 1.25 kW (1.7 HP)
Torque	upto 4 Nm (35 lbs-in)
Air Consumption	0 to 120 m3/hr (0 to 72 cfm)
Motor Weight	3.8 kgs (8.3 lbs)
Operating Pressure	1.4 to 7kg/cm2 (20 to 100PSI)
Max Allowable speed	3500 rpm (ATEX limit)



Power and Torque Graphs 4VM



Air Consumption Graph 4VM



Ex code


 II 2 G Ex h IIC T6 Gb
 II 2 D Ex h IIIC T85° C Db
 Amb. Temp (+1° C to +40° C)

Checklist for installation in hazardous areas

Read air motor label to check that motor has been designed for use in a hazardous application:

- Hazardous zone
- Hazardous category
- Equipment group
- Temperature class
- Maximum surface temperatures

Intended And Prohibitive Use**Intended Use**

Marine and Offshore industries. Can be in various application subjected to availability of air pressure.

The design of this pneumatic vane motor is confirming to EN/ ISO 80079-36 and 80079-37 explosive atmosphere suitable to use in zone 1 & 2 area, gas group IIC and Dust group IIIC, temp. Class T6 (85°C).

i. EN / ISO 80079-36 : 2016 : Explosive atmospheres—Part 36 :Non-electrical equipment for explosive atmospheres—Basic method and requirements

ii. EN / ISO 80079-37 : 2016 : Explosive atmospheres—Part 37 : Non-electrical equipment for explosive atmospheres—Non-electrical type of protection constructional safety 'c', control of ignition sources 'b', liquid immersion 'k'.

Prohibitive use


Use with non-genuine spare parts or accessories is prohibited


Safety Instructions

Following symbols are used through out this manual.


 **Warning: If not followed could cause personal injuries**

Caution: If not followed could result in damage to equipment.

 **Warning**
This manual must be read and the operating instructions carefully followed.


 **Warning**
Safety and protective clothing, eyewear, head-gear, ear protection, gloves and footwear to be worn during operation of this Vane motor.

 **Caution**
Install proper guard around the output shaft as needed.

 **Warning.**
Operators under 18 not allowed to operate this Vane motor operators must be made familiar with the instructions in this manual before attempting to operate the Vane motor Ensure that job site is clear of bystanders. Do Not dis-assemble in explosive atmosphere.

 **Caution**
Use only genuine Teryair or Teryair approved accessories.

 **Warning**
This Vane motor is designed for use in an explosive environment for Zone 1 & 2 for Gas and Dust.

 **Warning**
Operate the motor for approximately 2 hours at the maximum desired load. Measure the surface temperature of the motor on the casting opposite the pipe ports. The maximum surface temperature listed on the motor is for normal environmental and installation conditions. For air motors Temp. Class T6 (Gas) and T85° C (Dust). The maximum surface temperature

should not exceed 80° C. Do not continue to operate the motor if the measured surface temperature exceeds temperature listed on the motor. If your measured temperature does exceed listed value, consult with your Distributor / Representative for a recommendation.

Caution

Completely turn off the Vane motor and disconnect air supply line before attempting any service. Read Assembly and Dis-assembly instructions.

Warning

Do not use a hammer on the shaft or connections.

Do Not dis-assemble in explosive atmosphere.

Warning

Take care not to exceed the supply air pressure maximum 7kg/cm²(100 psi) for Lubricated and maximum 5.6 kg/cm²(80 psi) for Lube-free .

Caution

Do not exert excessive pressure against the work surface. Keep hoses in good condition. Check hoses for signs of wear, cracks & bulges and ensure that they are secure. Accidental disconnection while hose is pressurized makes the hose whip and can be a safety hazard.

Caution

- Please check the hose connection prior to starting motor
- Keep hands & clothing away from moving parts.
- Store these Vane motors in secure & dry environment.
- Do not modify this Vane motor in any way as this will invalidate the warranty and could lead to serious injury.
- Do not drag this Vane motor by air hose.

Warning

Check the site to make sure that the Vane motor will be adequately ventilated and that there is no external heat input.

Safety wear mandatory while operating Vane motor

Air stream from product may contain solid o liquid particle that can result eye or skin damage. Eye and face and ear protection must be worn at all times during operation

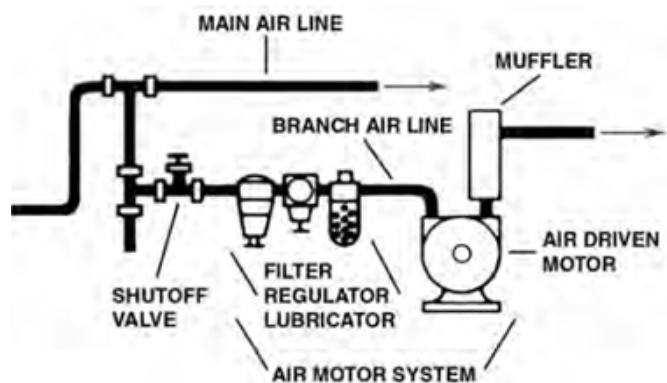
Suitable gloves must be worn at all times during operation.

Operators must wear helmets of suitable strength at all times. Helmet must be able to withstand 10G in 8ms without fracturing.

Waterproof heavy duty outerwear and Shoes with toe cap protection are a must during operation

Installation Instructions

An automatic air line lubricator should be installed in the air line as close as possible and no more than 18 inches (1/2 meter) from the air motor. Install the lubricator level with or above the air motor so that the oil mist will blow directly into or fall down into the motor. Install a filter in the air line before the connection to the motor. Next install an air pressure regulator to control motor speed and torque.



Clean the compressed air connection with low pressure air to remove any dirt from the line before connecting to the ports. Use the proper sized fasteners. For the most efficient output and control of speed, use air lines that are the same size as the motor inlet port if the connection is less than 7 feet (2 meters). For longer connections, use the next pipe size larger than the motor intake port. Connect lines to motor in the proper direction

Operating instructions

Vane motors are rugged dependable product designed to give you years of satisfactory service. Follow the instructions mentioned here to enhance life and performance. Check the direction of the motor airflow. A single rotation motor will operate properly only in one direction. Single rotation motors require a muffler to be connected to the air port. Remove the plastic shipping plugs from the ports. Save plugs for future use during shutdown.

Daily Before Operating

1. Disconnect air line and muffler.
2. Add flushing solvent directly into motor. If using liquid solvent pour in 1 to 2 ounces of recommended oil into the motor.
3. Rotate the shaft by hand in both directions for a few minutes.
4. You must wear eye protection for this step. Cover exhaust with a cloth and reconnect the air line.
5. DO NOT use kerosene or ANY other combustible solvents to flush this product.
6. Restart the motor at a low pressure of approximately 10 PSI/0.7 bar until there is no trace of solvent in the exhaust air.
7. Listen for changes in the sound of the motor. If motor sounds smooth, you are finished. If motor does not sound like it running smoothly, installing a service kit will be required.

Air Supply

The air should be clean and dry. Supply air pressure maximum 7kg/cm²(100 psi) for Lubricated and maximum 5.6 kg/cm²(80 psi) for Lube-free.

Hoses

- Daily before operation check the hoses, especially the high pressure hoses for damage or leaks
- Use genuine Teryair spares and if possible mention the serial number of the Vane motor when ordering spares.

Mounting

This product can be installed in any orientation. Mount the motor to a solid metal base plate that is mounted to a stable, rigid operating surface. Use shock mounts to reduce noise and vibration. Install a pressure regulator or simple shut-off valve to control motor.

Storage

- It is your responsibility to follow proper shutdown procedures before storage.
- Turn off air intake supply.
- Disconnect air supply and vent all air lines.
- Remove Vane motor from connecting machinery.
- Remove the muffler.
- Wear eye protection. Keep away from air stream. Use clean, dry air to remove condensation from the inlet port of the motor.
- Lubricate motor with a small amount of oil into the intake port. Rotate shaft by hand several times to distribute oil.
- Plug or cap each port.
- Coat output shaft with oil or grease.
- Store motor in a dry environment.

Lubrication Requirements

Lubricated Vane motor: Always install a line lubricator on the air line as close to the Vane motor as possible. A Filter Regulator Lubricator unit (FRL) is strongly recommended. Keep the lubricator bowl topped up with recommended grade of oil and check that the oil is reaching the Vane motor. Running the Lubricated Vane motor without lubrication is likely to cause damage to the components causing premature replacement.

Suggested Lubricants

Brand	Above 27 Deg C (From 5 Deg C to 27 Deg C	Below 5 Deg C
Shell	Toona R 72	Toona R 41	Toona R 27
Mobil	Almo 529	Almo 527	Almo 525
Esso	--	Arox EP.65	Arox EP.45
Caltex	Rando Oil 100	Rando Oil 100	Rando Oil 46
Texaco	--	--	Airolene Tool Oil
Daltron	Regal Oil F (R&O)	Regal Oil PE(P&E)	Regal Oil PE(R&O)
Burmah Castrol	Silkolene 881	Silkolene 548/T	Silkolene 733
BP	Castrol RD Oil 3	Castrol RD Oil Light	Megna SPX
Duckham	Garnet 7	Garnet 6	Zero Fio 5
Sternol	Merlin 87	Merlin 71	Merlin 54

Troubleshooting

Low Torque	Low Speed	Won't run	Runs well but slows down	Reason & Remedy for problem
√	√	√		Dirt or foreign material present. Inspect and flush.
√	√	√		Internal rust. Inspect and flush.
√	√			Low air pressure. Increase pressure.
	√			Air line too small. Install larger line(s).
	√		√	Restricted exhaust. Inspect and repair.
√	√	√	√	Motor is jammed. Have motor serviced.
	√		√	Air source inadequate. Inspect and repair.
	√		√	Air source too far from motor. Reconfigure setup.

Dis assembly and Re-assembly

Disconnect air supply and vent all air lines. Air stream from product may contain solid or liquid material that can result in eye or skin damage.

Flush this product in a well ventilated area.

Do Not use kerosene or other combustiblesolvents to flush this product.

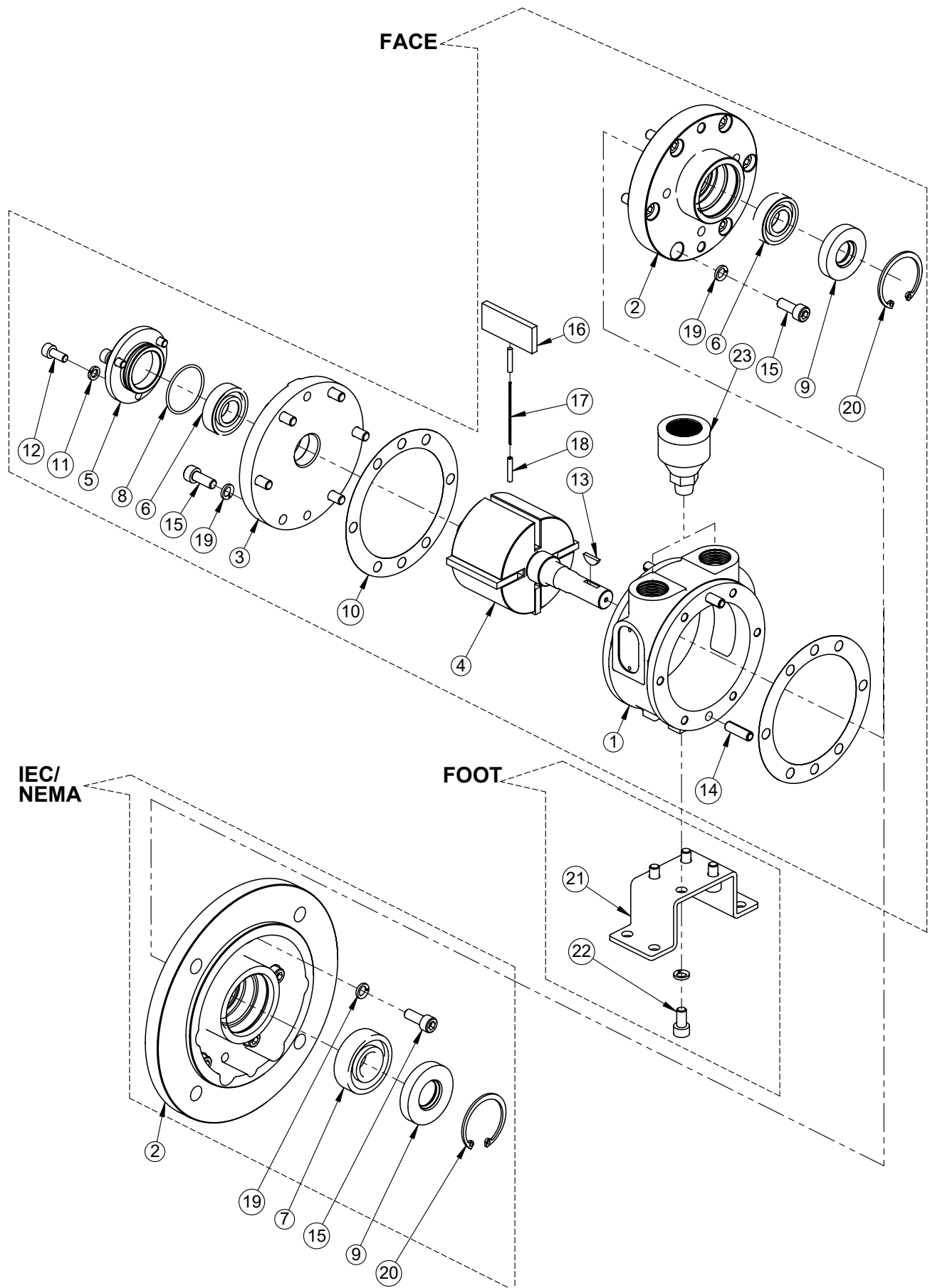
Failure to follow these instructions can result in eye injury or other serious injury.

Always open from the back side first.

Use proper tools to open the fasteners.

- a. Unscrew Allen Bolts (12) with Spring Washer (11) from Bearing Cap (5) from Rear Flange (3). Remove O-ring (8) on Bearing Cap (5) and replace with new one (if found damaged).
- b. Unscrew Allen Bolts (15) with Spring Washer (19) from Rear Flange (3) from Housing (1) & replace Shim (10) with new one (if found damaged).
- c. Now remove Ball bearing (6) from Rear Flange (3) using mallet and replace it with new one (if worn-out).
- d. Now remove the Rotor Shaft (4) with Rotor Blades (16) from the Housing (1), Now remove the Rotor Blades (16), Spring Cap (18) & Compression Spring (17) from Rotor Shaft (4) and replace them with new ones. (if found damaged)
- e. From front side of motor remove Internal Circlip (20) using circlip plier from Front flange (2) then remove Oil Seal (9), Now remove Ball bearing (6/7) by using puller and replace it with new ones (bearing & oil seal).
- f. After installation bearing seals then install the Internal Circlip (20) using circlip plier in the internal groove of Front Flange (2).
- g. Now assemble Compression Springs (17) with Spring Caps (18) on both end of springs. After that, insert the same into the Rotor Shaft's (4) through holes (use small amount of grease to prevent Spring caps to fall during assembly). Now place the 4 nos. Rotor Blades (16) into the rotor shaft grooves.
- h. Now install the above Rotor Shaft assembly into the Housing (1) and Front Flange bearing using press/mallet precisely and ensure that rotor face is not above the housing face.
- i. Now follow the above steps 'c' & 'b' in reverse manner to assemble the motor.
- j. Now after assembly, ensure that Rotor Shaft (4) is rotating smoothly inside, else tap lightly on the rotor shaft front end or rear end until you obtain smooth rotation of Rotor Shaft (4).
- k. Once smooth rotation is achieved follow the step 'a' in reverse manner and complete the assembly.

Exploded View for 4VM Series

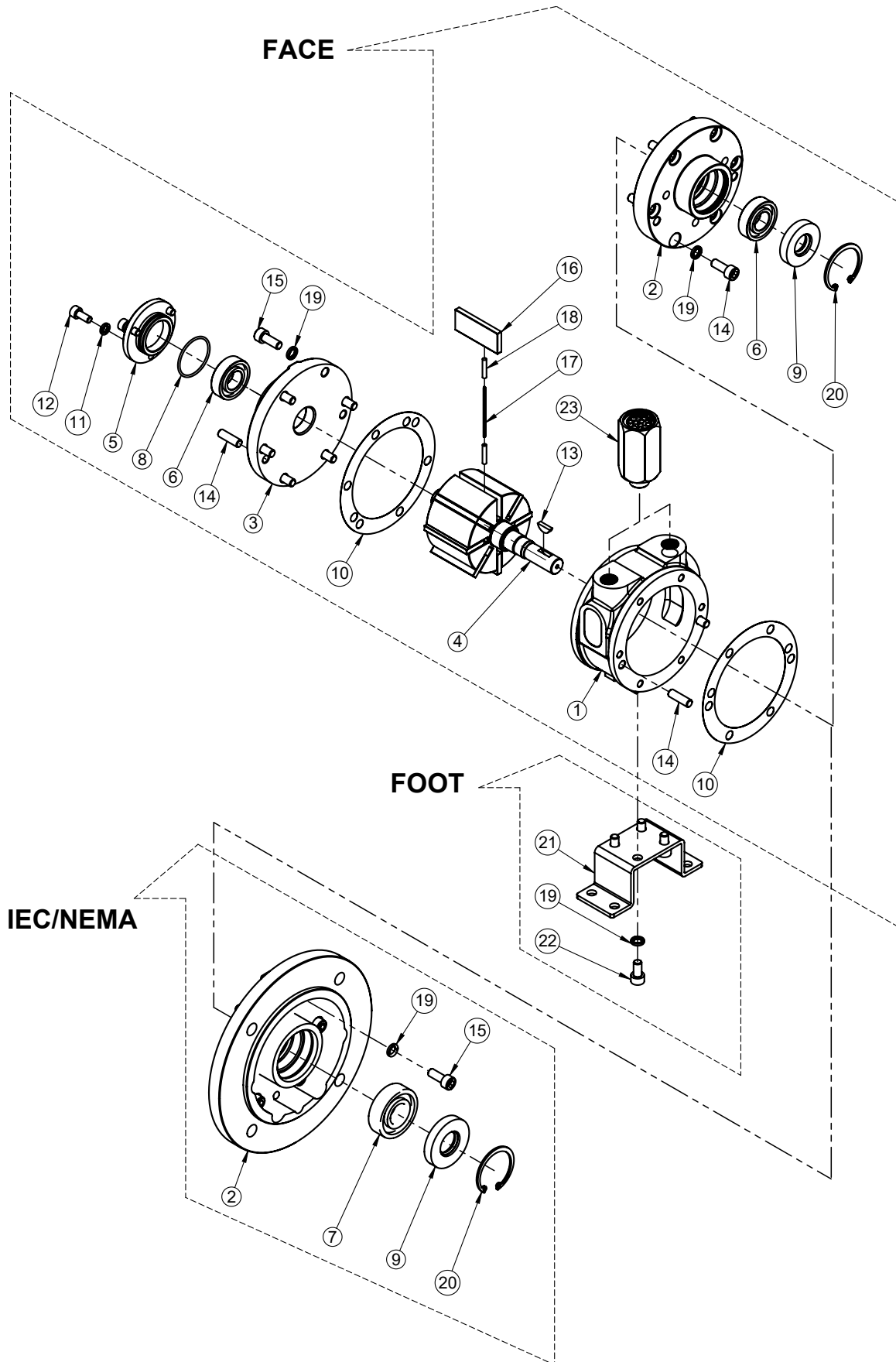


Bill of Materials for 4VM Series (SG Iron)

Illu. No.	Description	Part Number	FACE		FOOT		IEC		NEMA	
			4VMLAL	4VMLOL	4VMSAL	4VMSOL	4VMDAL	4VMDOL	4VMNAL	4VMNOL
1*	HOUSING -4VM-NPT	804 05 01	1	-	1	-	1	-	1	-
1*	HOUSING -4VM-NPT (LUBE-FREE)	804 05 01LF	-	1	-	1	-	1	-	1
1**	HOUSING -4VM-BSPT	804 05 11	1	-	1	-	1	-	1	-
1**	HOUSING -4VM-BSPT (LUBE-FREE)	804 05 11LF	-	1	-	1	-	1	-	1
2	FRONT FLANGE-4VM-FACE	804 05 04	1	-	1	-	-	-	-	-
2	FRONT FLANGE-4VM-FACE (LUBE FREE)	804 05 04LF	-	1	-	1	-	-	-	-
2	FRONT FLANGE-4VM-IEC	804 05 09	-	-	-	-	1	-	-	-
2	FRONT FLANGE-4VM-IEC (LUBE FREE)	804 05 09LF	-	-	-	-	-	1	-	-
2	FRONT FLANGE-4VM-NEMA	804 05 10	-	-	-	-	-	-	1	-
2	FRONT FLANGE-4VM-NEMA (LUBE FREE)	804 05 10LF	-	-	-	-	-	-	-	1
3	REAR FLANGE-4VM	804 05 03	1	-	1	-	1	-	1	-
3	REAR FLANGE-4VM (LUBE FREE)	804 05 03LF	-	1	-	1	-	1	-	1
4	ROTOR SHAFT-4VM-FACE	804 21 08	1	1	1	1	-	-	-	-
4	ROTOR SHAFT-4VM-IEC	804 21 09	-	-	-	-	1	1	-	-
4	ROTOR SHAFT-4VM-NEMA	804 21 10	-	-	-	-	-	-	1	1
5	BEARING CAP-4VM	804 21 02	1	1	1	1	1	1	1	1
6	BALL BEARING	804 50 01	2	2	2	2	1	1	1	1
7	BALL BEARING	803 50 01	-	-	-	-	1	1	1	1
8	'O' RING	804 40 01	1	1	1	1	1	1	1	1
9	OIL SEAL	804 60 01	1	1	1	1	-	-	-	-
9	OIL SEAL	804 60 02	-	-	-	-	1	1	1	1
10	SHIM-4VM	804 37 01	2	2	2	2	2	2	2	2
11	SPRING WASHER	805 90 01	3	3	3	3	3	3	3	3
12	ALLEN BOLT	550 90 28	3	3	3	3	3	3	3	3
13	WOODRUFF KEY-4VM-FACE	804 22 02	1	1	1	1	-	-	-	-
13	KEY-4VM-IEC	803 22 01	-	-	-	-	1	1	-	-
13	KEY-4VM-NEMA	804 22 04	-	-	-	-	-	-	1	1
14	DOWEL PIN	804 90 04	4	4	4	4	4	4	4	4
15	ALLEN BOLT	804 90 03	12	12	12	12	12	12	12	12
16	ROTOR BLADE-4VM	804 39 01	4	4	4	4	4	4	4	4
17	COMPRESSION SPRING WITH PIN	804 98 01	2	2	2	2	2	2	2	2
18	SPRING CAP	804 21 03	4	4	4	4	4	4	4	4
19	SPRING WASHER	536 90 04	12	12	16	16	12	12	12	12
20	INTERNAL CIRCLIP	804 90 02	1	1	1	1	-	-	-	-
20	INTERNAL CIRCLIP	210 90 24	-	-	-	-	1	1	1	1
21	FOOT-4VM	804 31 01	-	-	1	1	-	-	-	-
22	ALLEN BOLT	804 90 05	-	-	4	4	-	-	-	-
23*	MUFFLER-4VM-NPT	805 98 01	1	1	1	1	1	1	1	1
23**	MUFFLER-4VM-BSPT	805 98 02	1	1	1	1	1	1	1	1

Note -1) " * " Marks part are applicable for NPT Models Only
 2) " ** " Marks part are applicable for BSPT Models Only

Exploded View for 4VM Series (8 Vanes)



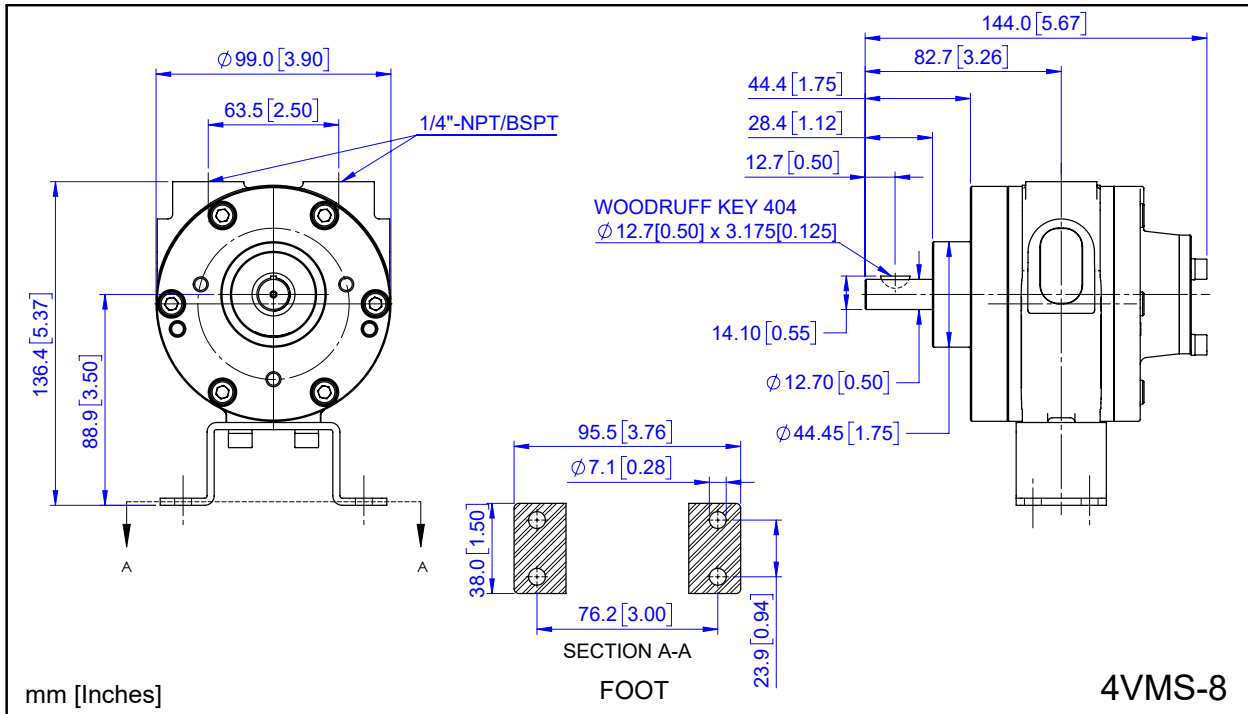
Bill of Materials for 4VM Series (8 Vanes)

Illu. No.	Description	Part Number	FACE		FOOT		IEC		NEMA	
			4VMLAL8	4VMLOL8	4VMSAL8	4VMSOL8	4VMDAL8	4VMDOL8	4VMNAL8	4VMNOL8
1*	HOUSING -4VM-NPT	804 05 14	1	-	1	-	1	-	1	-
1*	HOUSING -4VM-NPT (LUBE-FREE)	804 05 14LF	-	1	-	1	-	1	-	1
1**	HOUSING -4VM-BSPT	804 05 13	1	-	1	-	1	-	1	-
1**	HOUSING -4VM-BSPT (LUBE-FREE)	804 05 13LF	-	1	-	1	-	1	-	1
2	FRONT FLANGE-4VM-FACE	804 05 04	1	-	1	-	-	-	-	-
2	FRONT FLANGE-4VM-FACE (LUBE FREE)	804 05 04LF	-	1	-	1	-	-	-	-
2	FRONT FLANGE-4VM-IEC	804 05 09	-	-	-	-	1	-	-	-
2	FRONT FLANGE-4VM-IEC (LUBE FREE)	804 05 09LF	-	-	-	-	-	1	-	-
2	FRONT FLANGE-4VM-NEMA	804 05 10	-	-	-	-	-	-	1	-
2	FRONT FLANGE-4VM-NEMA (LUBE FREE)	804 05 10LF	-	-	-	-	-	-	-	1
3	REAR FLANGE-4VM	804 05 03	1	-	1	-	1	-	1	-
3	REAR FLANGE-4VM (LUBE FREE)	804 05 03LF	-	1	-	1	-	1	-	1
4	ROTOR SHAFT-4VM-FACE	804 21 12	1	1	1	1	-	-	-	-
4	ROTOR SHAFT-4VM-IEC	804 21 13	-	-	-	-	1	1	-	-
4	ROTOR SHAFT-4VM-NEMA	804 21 14	-	-	-	-	-	-	1	1
5	BEARING CAP-4VM	804 21 02	1	1	1	1	1	1	1	1
6	BALL BEARING	804 50 01	2	2	2	2	1	1	1	1
7	BALL BEARING	803 50 01	-	-	-	-	1	1	1	1
8	'O' RING	804 40 01	1	1	1	1	1	1	1	1
9	OIL SEAL	804 60 01	1	1	1	1	-	-	-	-
9	OIL SEAL	804 60 02	-	-	-	-	1	1	1	1
10	SHIM-4VM	804 37 01	2	2	2	2	2	2	2	2
11	SPRING WASHER	805 90 01	3	3	3	3	3	3	3	3
12	ALLEN BOLT	550 90 28	3	3	3	3	3	3	3	3
13	WOODRUFF KEY-4VM-FACE	804 22 05	1	1	1	1	-	-	-	-
13	KEY-4VM-IEC	803 22 01	-	-	-	-	1	1	-	-
13	KEY-4VM-NEMA	804 22 04	-	-	-	-	-	-	1	1
14	DOWEL PIN	804 90 04	4	4	4	4	4	4	4	4
15	ALLEN BOLT	804 90 03	12	12	12	12	12	12	12	12
16	ROTOR BLADE-4VM	804 39 01	8	8	8	8	8	8	8	8
17	COMPRESSION SPRING WITH PIN	804 98 01	4	4	4	4	4	4	4	4
18	SPRING CAP-4VM	804 21 03	8	8	8	8	8	8	8	8
19	SPRING WASHER	536 90 04	12	12	16	16	12	12	12	12
20	INTERNAL CIRCLIP	804 90 02	1	1	1	1	-	-	-	-
20	INTERNAL CIRCLIP	210 90 24	-	-	-	-	1	1	1	1
21	FOOT-4VM	804 31 01	-	-	1	1	-	-	-	-
22	ALLEN BOLT	804 90 05	-	-	4	4	-	-	-	-
23*	MUFFLER-4VM-NPT	803 98 01	1	1	1	1	1	1	1	1
23**	MUFFLER-4VM-BSPT	803 98 02	1	1	1	1	1	1	1	1

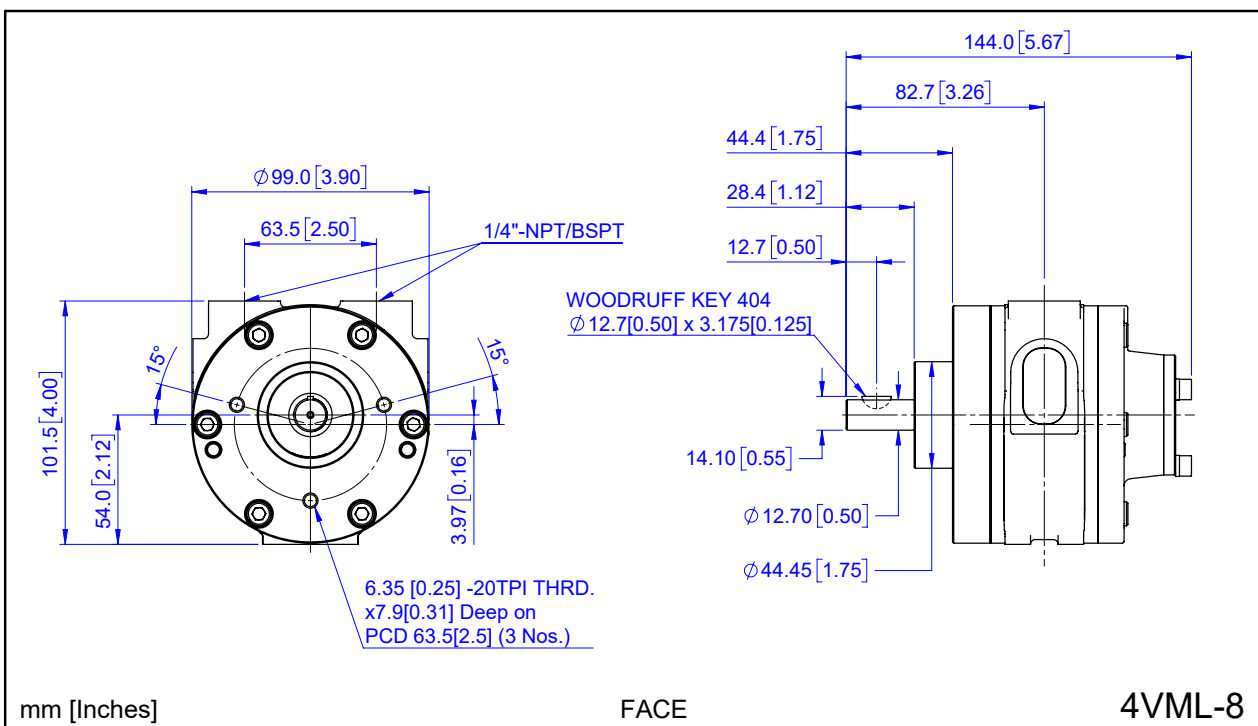
Note -1) „ * „ Marks part are applicable for NPT Models Only
 2) „ ** „ Marks part are applicable for BSPT Models Only

Dimensional Data

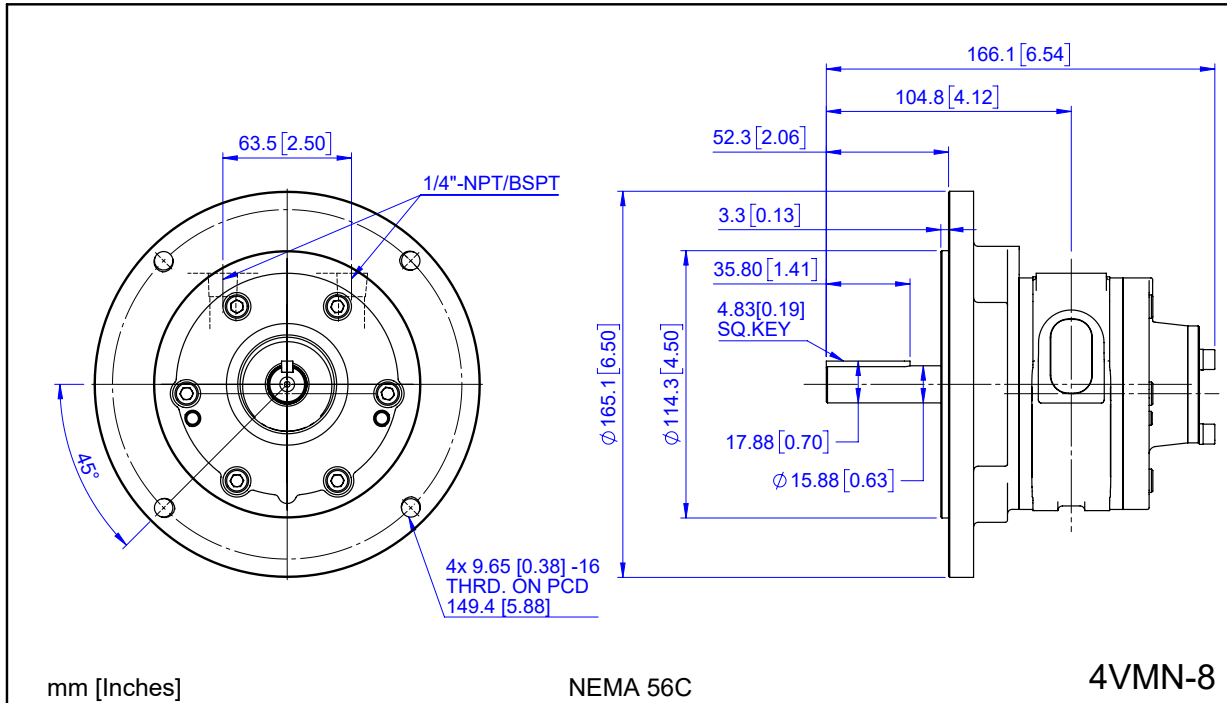
Foot Mounting 4VM



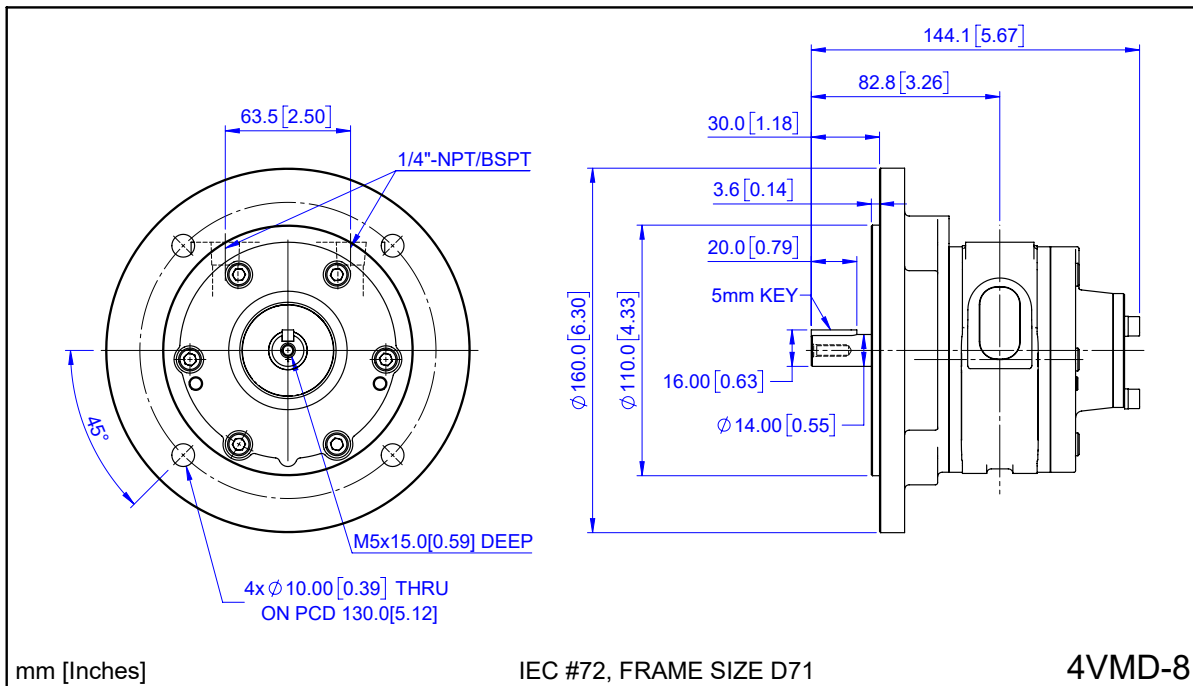
FACE Mounting 4VM



NEMA Flange Mounting 4VM



IEC Flange Mounting 4VM



Repair Kits for 4VM

Repair KIT Ordering No	Suitable for
8049701	<i>Suitable for 4VM FACE / FOOT variant</i>
8049702	<i>Suitable for 4VM IEC / NEMA variant</i>
8049704	<i>Suitable for 4VM FACE / FOOT (8 vanes) variant</i>
8049705	<i>Suitable for 4VM IEC / NEMA (8 vanes) variant</i>

Note - Repair Kit includes Blades, Bearings, Shims, Blade springs, Oil Seals and O rings

EU DECLARATION OF CONFORMITY

Object of declaration

PRODUCT : PNEUMATIC VANE MOTOR

MODEL : <<Model Number>>

MANUFACTURER'S NAME : TERYAIR EQUIPMENT PVT. LTD.

ADDRESS : **SITE - 1: BUILDING A - 1/2, 102 TO 105 & BUILDING C 12 & 13,
TIRUPATI UDYOG NAGAR, SATIVALI ROAD, VASAI (E),
PALGHAR : 401208.**
**SITE - 2: AUGUSTINE - II, COLACO INDUSTRIAL COMPLEX, GALA NO
101 TO 107, SATIVALI ROAD, VILLAGE WALIV, VASAI (E), PALGHAR:
401208**

To provide presumption of conformity in order to directive 2014/34/EU; the following harmonized standards and/or other normative documents as referenced within the following official journals are applied:

APPLICABLE DIRECTIVE: ATEX DIRECTIVE (2014/34/EU)

APPLICABLE STANDARDS:


EN ISO 80079-36: 2016 : Explosive atmospheres —Part 36: Non-electrical equipment for explosive atmospheres Basic method and requirements.

EN ISO 80079-37:2016 : Explosive atmospheres —Part 37: Non-electrical equipment for explosive atmospheres Non- electrical type of protection constructional safety 'c', control of ignition sources 'b', liquid immersion 'k'.

Notified body to whom Technical file has logged with: - Technicka Inspekcia (Ref: 1354).

DECLARATION: - TERYAIR EQUIPMENT PVT. LTD., declare that under our sole responsibility for the supply of the product defined above, the said product complies with all the applicable Directives, Regulations and all essential Health and Safety requirements applying to it.

I, the undersigned, hereby declare that the product specified above conforms to the above standard(s).

ATEX MARKING APPLIED:  **CE** II 2 GD Ex h IIC T6 Gb
Ex h IIIC T85°C Db

Signed for and on behalf of



TERYAIR EQUIPMENT PVT. LTD.

Place of Issue : Vasai

Date : <<Date>>



Warranty Certificate

Every product manufactured by Teryair
is built to meet the highest standards of quality.

Teryair warrants that the Products, accessories and parts manufactured or supplied by the company be free from defects in material and workmanship for a period of six months from date of Teryair authorized dealer invoice to customer, or one year from date of Teryair invoice to dealer, whichever is earlier. Failure due to normal wear, misapplication, or abuse is, of course, excluded from this warranty.

Since the use of Teryair products and parts is beyond our control, Teryair cannot guarantee the suitability of any product or part for a particular application and Teryair shall not be liable for any consequential damage or expense arising from the use or misuse of its products on any application. Teryair does not warranty bought out products or components such as electric motors and hardware but will assist in directing warranty queries to the dealer/manufacturer responsible. Teryair responsibility is limited solely to replacement or repair of defective Teryair products or components.

Dealer/End User shall have no right or remedy and Teryair shall have no liability or obligation under the warranty, if: (i) a Product is altered, changed, modified or tampered with in any way; (ii) a Product is damaged after deposit with the transporter for shipment; (iii) a Product is not properly preserved, packaged, stored, processed or handled after receipt; (iv) a Product is not used and maintained in accordance with Teryair's recommended operating and maintenance manuals, instructions and procedures, if any; (v) a Product is not properly incorporated or installed in, or not properly combined with, an Other Product; (vi) the issue with a Product is directly or indirectly attributable to, or directly or indirectly results from or arises out of, a failure, substandard performance or other issue with another product, material, component or part not supplied by Teryair; (vii) the issue with a Product is directly or indirectly attributable to, or directly or indirectly results from or arises out of, compliance with any design, specification or other specific requirement of Dealer/End User; (viii) a Product is used in a manner, with a substance or for a purpose other than the normal manner, substance and purpose for which it is intended or is otherwise subjected to abnormal use or service; (ix) a Product is subjected to a power surge, brown out or other similar occurrence; (x) the issue with a Product is directly or indirectly attributable to, or directly or indirectly results from or arises out of, normal wear and tear of such Product (including, without limitation, things such as worn seals, diaphragms, balls, O rings, gaskets, chisels, cutters, hoses and other such wearing components; (xi) the issue with a Product is directly or indirectly.

Model Number : <<Model Number>>
Serial Number : <<Serial No>>
Dated : <<Date>>

M. Yadav, Q.A. Manager
(Company Seal)

This page is intentionally
Left blank.