INSTRUCTIONS 1401-AL00 e

Section	1401
Effective	April 2020
Replaces	July 2019

Original instructions

MX12
SCREW COMPRESSORS

INSTALLATION
OPERATION
MAINTENANCE
SAFETY
STORAGE

This Instructions only contains bare shaft machine information.
It is imperative to have in complement the accessories instructions, also the parts list before installing the equipment.

WARRANTY :

MX12 screw compressors are covered 24 months by warranty within the limits mentioned in our General Sales Conditions. The use of the BSC3 oil carries our warranty from 24 to 36 months. In case of a use other than that mentioned in the Instructions manual, and without preliminary agreement of MOUVEX, warranty will be canceled.
Warranty extension with oil BSC3 : See § WARRANTY.

a DOVER company

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Your distributor :

MOUVEX TRUCK SCREW COMPRESSOR

SAFETY, OPERATION AND MAINTENANCE INSTRUCTIONS

MODEL : MX12

Definition of safety symbols

This is a SAFETY ALERT SYMBOL.
When you see this symbol on the product, or in the manual, look for one of the following signal words and be alert to the potential for personal injury, death or major property damage.

DANGER

Warns of hazards that WILL cause serious personal injury, death or major property damage.

WARNING

Warns of hazards that CAN cause serious personal injury, death or major property damage.

CAUTION

Warns of hazards that CAN cause personal injury or property damage.

NOTICE

Indicates special instructions which are very important and must be followed.

REMARKS :

MOUVEX truck screw-type compressors MUST be installed in systems designed by qualified personnel. The installation MUST be in compliance with local standards, national regulations and rules of safety.

This manual is designed to permit installation and commissioning of MOUVEX truck screw-type compressors and MUST accompany the compressor.

Maintenance of MOUVEX screw-type compressors must ONLY be carried out by qualified technicians. This maintenance must meet local and national standards as well as all safety regulations. Read this manual, including all instructions and warnings, in full BEFORE any use of MOUVEX compressors.

Do not remove the warning and use label stickers that are found on the compressors.

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ADDITIONAL DOCUMENTATION

The table below gives the list of instructions in addition to this central instruction :

MX12 application	Instructions
Check and relief valve	NT 1401-E00
Torque limiter	NT 1401-B00
Air cooler	NT 1401-AJ00

SAFETY DATA

⚠ WARNING  Hazardous machinery can cause severe personal injury or property damage.	IT IS IMPERATIVE TO APPLY THE TRUCK PARKING BRAKE AND TO BLOCK THE WHEELS BEFORE ANY INTERVENTION DUE TO RISKS OF SERIOUS BODILY INJURIES OR PROPERTY DAMAGE.
⚠ WARNING  Hazardous fluids can cause fire, serious personal injury or property damage.	COMPRESSING GASES INTO A VESSEL CONTAINING FLAMMABLE OR EXPLOSIVE GASES OR COMPRESSING FLAMMABLE OR EXPLOSIVE GASES, CAN CAUSE PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.
⚠ WARNING  Hazardous pressure can cause personal injury or property damage.	FAILURE TO INSTALL ADEQUATELY SIZED PRESSURE RELIEF VALVE(S) CAN CAUSE PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.
⚠ CAUTION  Extreme heat can cause injury or property damage.	COMPRESSOR, PIPING AND ACCESSORIES WILL BECOME HOT DURING OPERATION AND CAN CAUSE SERIOUS PERSONAL INJURY.
⚠ WARNING  Hazardous or toxic fluids can cause serious injury.	CONTENTS OF THE COMPRESSOR, TANK, PIPING, AND FILTERS COULD BE HAZARDOUS TO HEALTH. TAKE ALL NECESSARY PRECAUTIONS WHEN PERFORMING COMPRESSOR SERVICE OR MAINTENANCE.
⚠ WARNING  A loud noise can cause permanent body damage.	THE NOISE EMITTED BY WORKING MOUVEX SCREW COMPRESSOR CAN BE HIGHER THAN 80 DBA. THE END USERS MUST USE, WHEN NECESSARY THE APPROPRIATE EAR PROTECTIONS. FAILURE TO WEAR HEAR PROTECTIONS IN AREAS WHERE THE NOISE IS HIGHER THAN 80 DBA CAN LEAD TO PERMANENT BODY DAMAGE.

SAFETY CHECK LIST

1. Before operating the compressor, ensure the vessel to which the compressor is connected is certified to withstand the pressure.

2. Verify adequately sized relief valves have been fitted to protect the vessel. Do not use solvents or inflammable products for cleaning the pipelines and the accessories.

3. Gas/air mixtures which are potentially volatile/explosive must not be introduced or allowed to be introduced into the compressor.

4. All pressure vessel and piping connected to the compressor must be isolated and in a safe operating condition.

5. Operators should wear ear protection when operating truck mounted compressors.

6. There are components within the compressor of sufficient weight to cause injury if mishandled. Use proper lifting devices as necessary.

7. Where necessary, this equipment should be grounded to control static electricity.

8. The temperature of the air leaving the compressor is elevated above ambient due to air compression. Check that the elevated temperatures do not adversely affect the product and any material used in design of the system. Attach clearly marked warning signs to warn of potentially hot surfaces on the compressor, piping and accessories which will burn if touched.

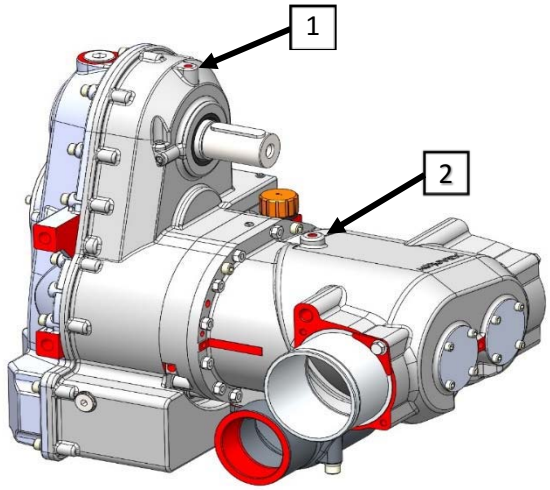
9. Mounting of the compressor must be correctly engineered and the compressor must be properly secured. Refer to the Compressor Mounting section of this manual.

NOTICE :

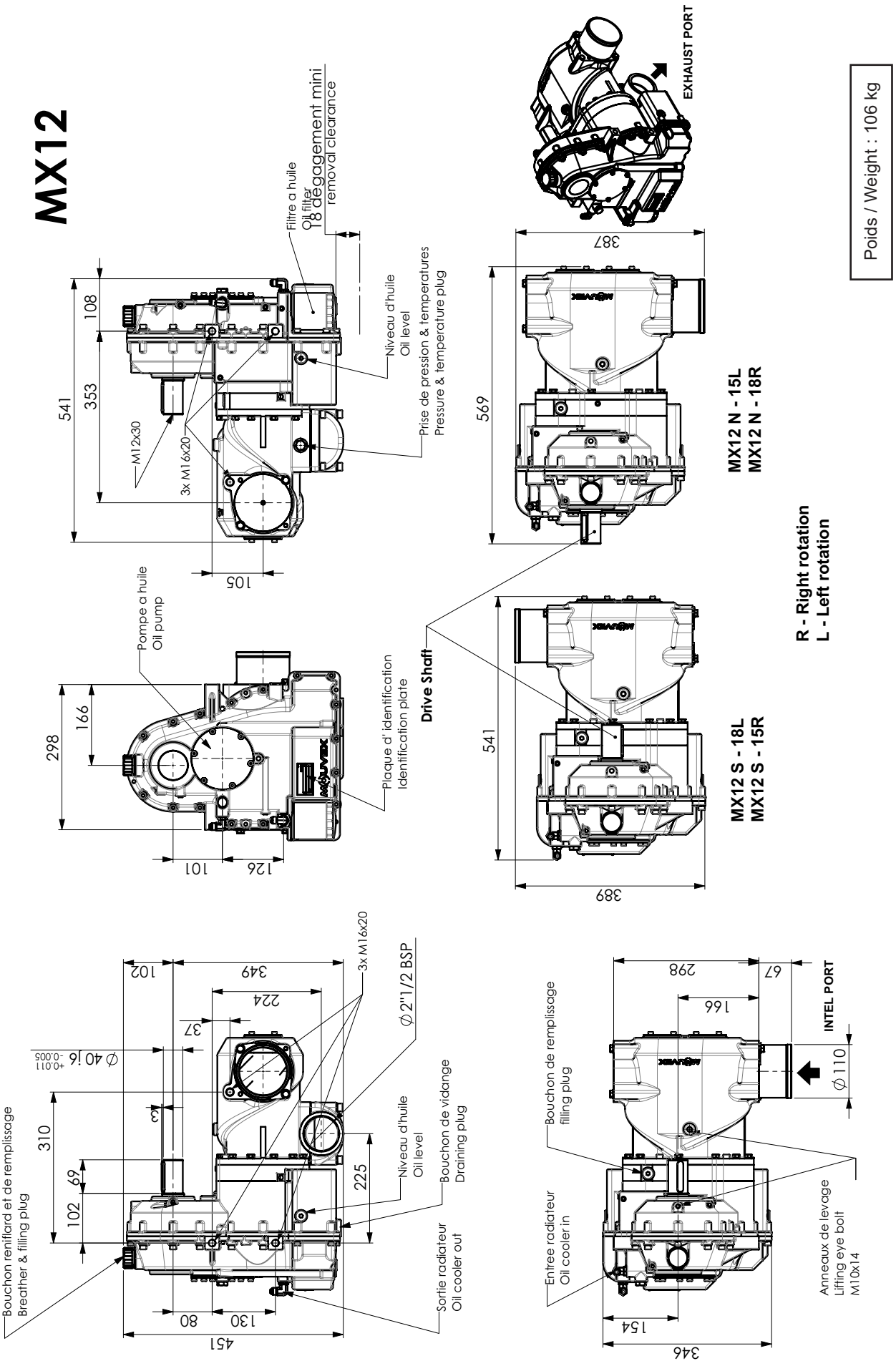
MOUVEX COMPRESSORS ARE DESIGNED TO PRODUCE COMPRESSED AIR. NOT TO PUMP LIQUIDS, LIQUEFIED GASSES OR POWDERS THOUGH THE COMPRESSOR.

LIFTING POINTS :

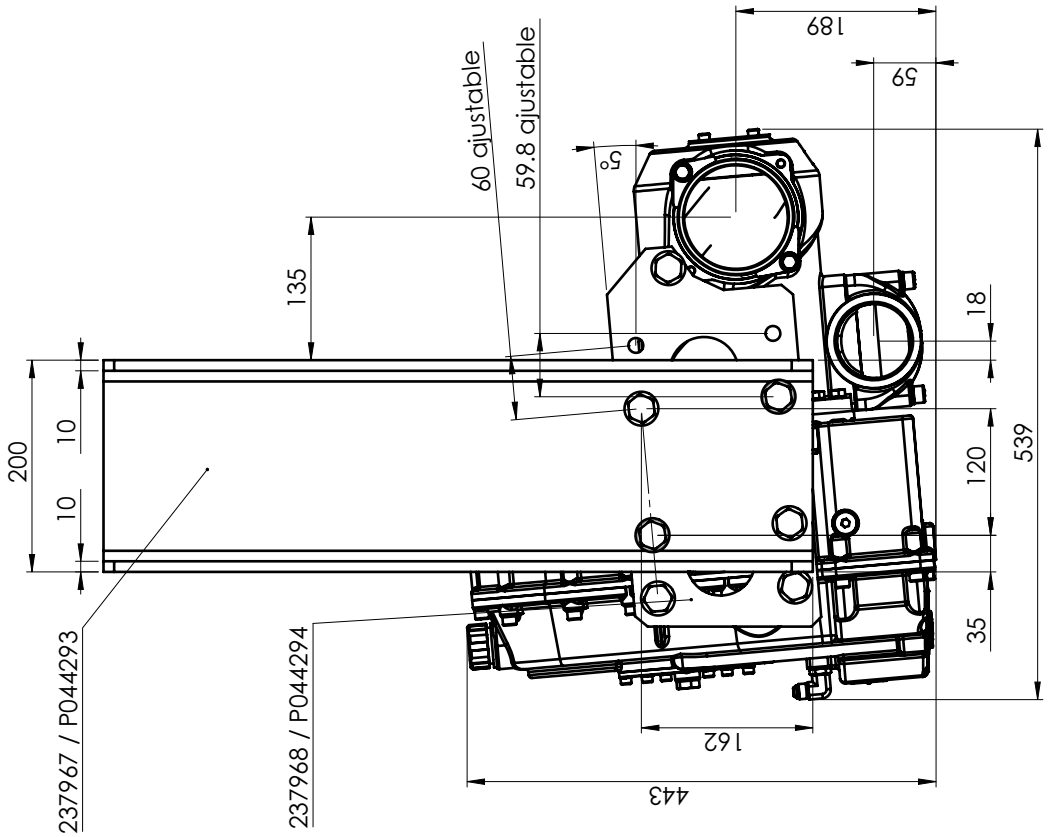
To connect 1 lifting ring to the item (1) alone or 2 lifting rings to the items (1) + (2).



1. OVERALL DIMENSIONS

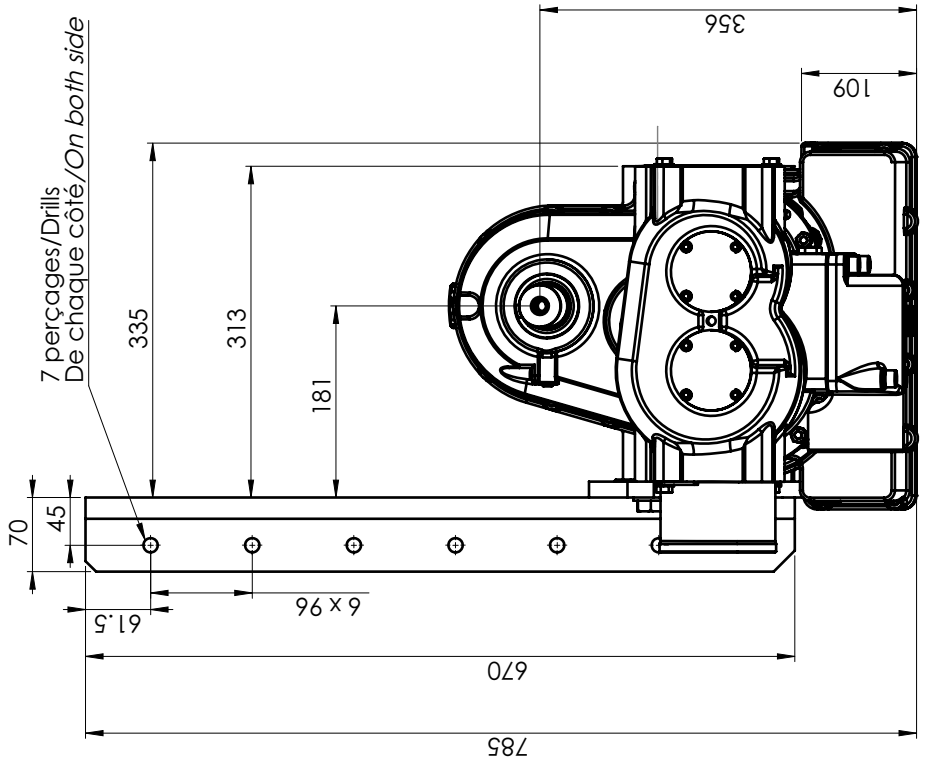


1. OVERALL DIMENSIONS (continued)



NOTES:

1. 3 positions possibles (Position 2 representée/*represented*)



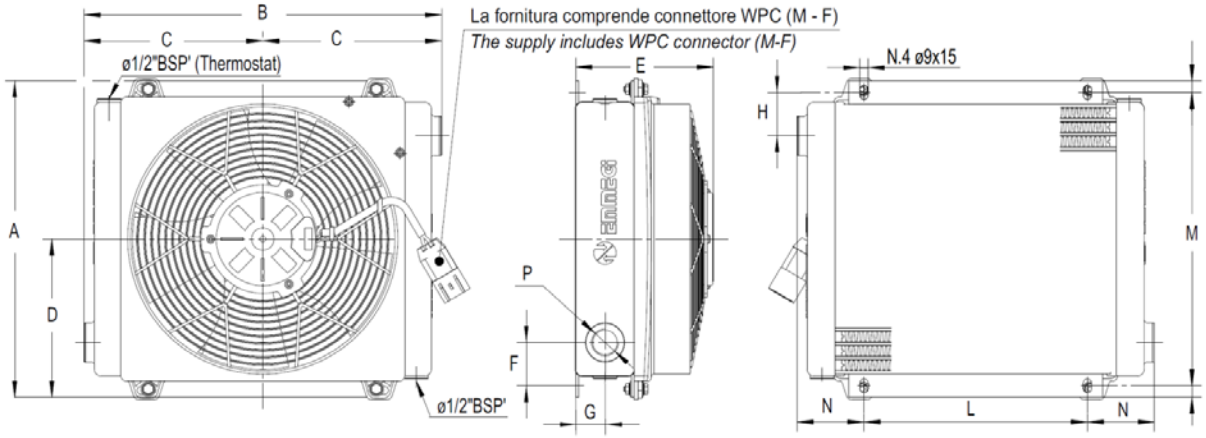
UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN MM

Poids compresseur nu /
Bare compressor weight :
104 kg

1. OVERALL DIMENSIONS (continued)

Oil cooler

I. DIMENSIONS



A	B	C	D	F	G	H	L	M	N
243	309	154.5	121.5	147	31.5	46	150	223	79.5

II. COURANT (VOLTAGE)

24V
12V si besoin *(as an option).* Demander à l'avance *(ask in advance)*

III. FLEXIBLE

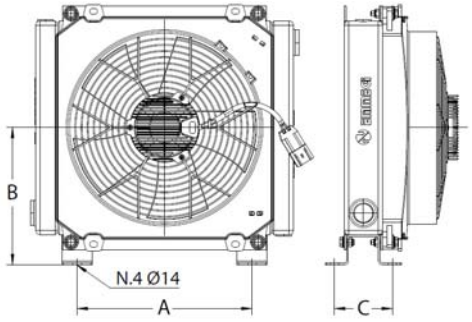
Fourni *(supplied).*
Longueur *(length):* 2m.

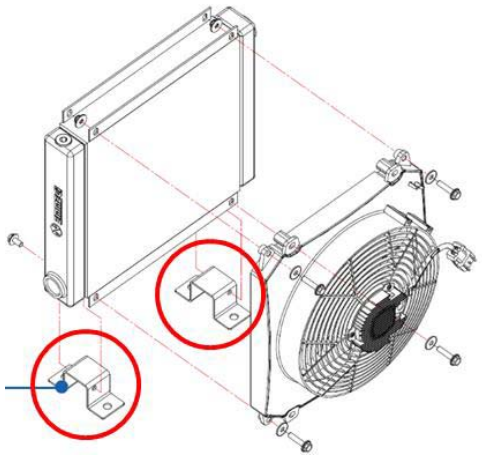
IV. OPTIONS

A. 2 pattes *(2 Supporting frame)*

Fourni si besoin *(provided if needed)*

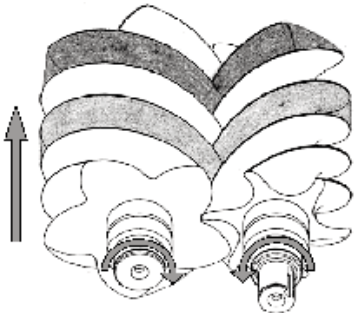
A	B	C
130	86	96





2. GENERAL DATA

2.1 Principle of operation



The male screw and the female screw mesh and rotate in opposite directions inside the casing fitted with inlet and discharge ports.

Rotation generates a volume increase on the inner face between threads and grooves, which corresponds to inlet, and a volume reduction on the upper face, which corresponds to compression.

On the discharge port side, a set of gears synchronizes the male screw and the female screw. Thus, the screws are not in contact. The discharged air does not enter in contact with any friction part and remains clean and free from particles.

On the drive shaft side, the female screw is driven by a set of step-up gears.

An oil pump delivers pressurized oil which circulates, lubricating gears and ball bearings.

Sealing is provided between lubricated parts and the compression stage by means of labyrinth seals. These seals do not enter in contact with the shaft and are not subject to wear.

Thanks to their technology, MX12 compressors are reliable and have a long service life.

MX12 compressors need very limited maintenance, which reduce vehicle downtime.

MX12 version S drive speed were defined so as to drive it directly through universal joints from a P.T.O. shaft. MX12 compressor is therefore fitted within the chassis. Thanks to this system, the installation is lighter and saves space on the side of the vehicle for other accessories.

MX12 version N can be directly driven by an electric, hydraulic or diesel motor.

⚠ CAUTION

Our compressors are delivered without oil. The use of a compressor with an incorrect oil level can lead to important property damage and serious injuries.

2.2 Technical characteristics

The operating characteristics are given in the indicative operation conditions : ambient temperature and air inlet temperature 20°C, atmospheric pressure : 1013 mbars.

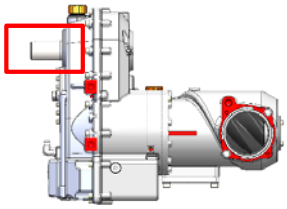
Speed allowed at the compressor drive shaft (rpm) :

Version	1	2	3	4	5
15	863	1007	1151	1295	1439
18	1036	1209	1382	1554	1727
20	1152	1344	1536	1728	1920

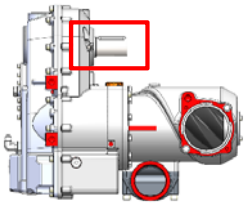
Rotation direction:

Version	S	N
15	R	L
18	L	R
20	R	L

N version



S version



2. GENERAL DATA (continued)

2.3 Operating ranges

The operating ranges specified in the § TECHNICAL CHARACTERISTICS give the conditions that must be respected on mounting and packaging of the MX12.

2.3.1 CONDITIONS AT SUCTION

In all cases of use, the compressor inlet suction air must be filtered in order to eliminate particles bigger than 5 µm.

Compressor functionning under pressure :
The maximum pressure drop at suction must be lower than 75 mbar.

A clogging indicator device turns red when the filter needs to be changed.

REMINDER :
THE CLOGGING INDICATOR MUST NOT BE RED WHEN THE COMPRESSOR IS IN PRESSURE OPERATION.

CONDITIONS AT DISCHARGE

The MX12 compressor must be protected by a valve that protects the compressor against accidental over-pressure.

See Instructions 1401-E00 SCREW COMPRESSORS CHECK AND RELIEF VALVE.

Maximum acceptable discharge pressure : see curve below.

CAUTION

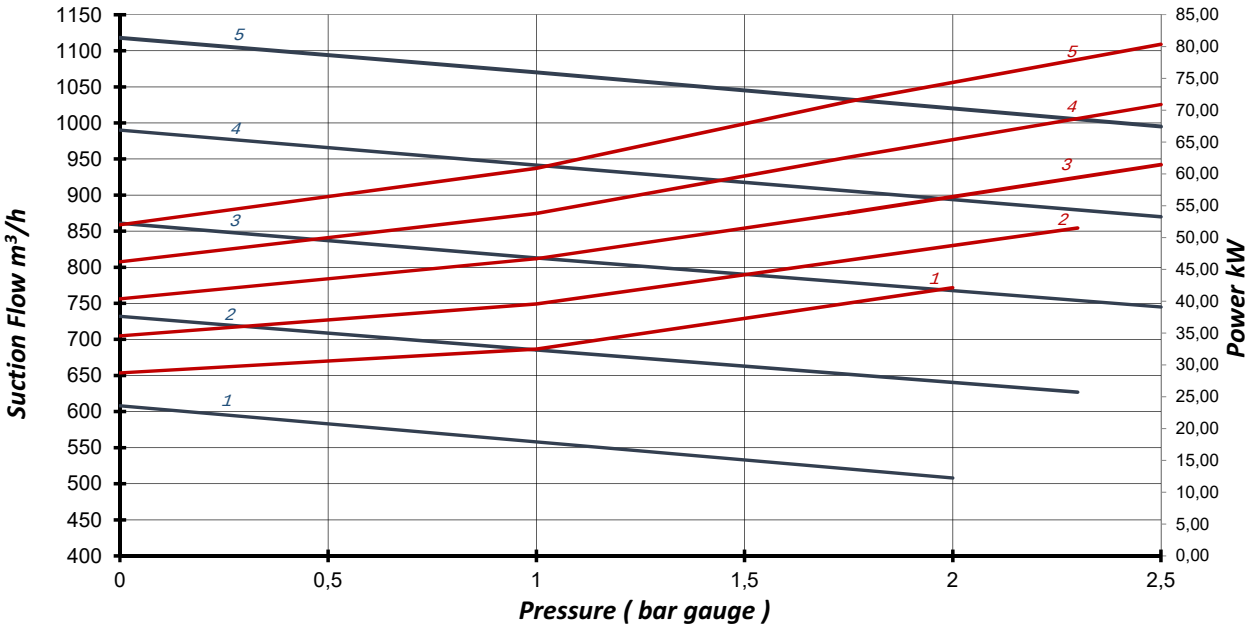
Having the compressor run above its maximal temperature may lead to serious body injuries or property damages.

2.3.3 RECOMMENDED DRIVE CONDITIONS

Operating torque at full speed (Nm)

Version	1 bar	1,5 bar	2 bar	2,5 bar
15	406	451	496	538
18	337	376	414	444
20	303	338	372	400

Characteristics of bare shaft end compressor :



3. INSTALLATION

The screws used to :

- hold the compressor in place
- mount the inlet flange
- mount the discharge flange

must be at least quality 8-8.

During the assembly, check that no foreign body penetrates into the compressor. The piping inlet and outlet must be perfectly clean.

Any foreign body risks to damage seriously the compressor.

All the fixation points availables must be used.

CAUTION

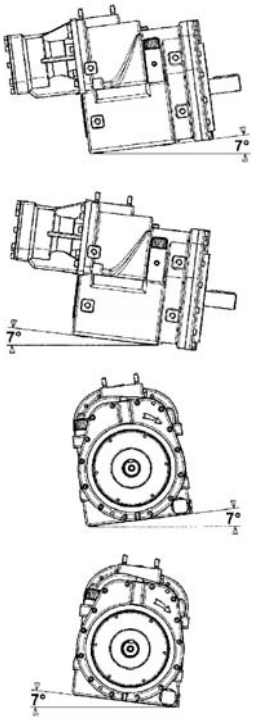
The presence of foreign bodies in the compressor inlet channel is susceptible of leading to serious property damage or serious injuries.

3.1 Mounting location

The compressor must be installed in a location where it is easily accessible. In particular, check that the oil filling plug , the magnetic plugs and the filter are accessible.

Choose a location where the compressor is relatively protected from gravel projections and road spray as well as exhaust fumes and engine heat. When the compressor is directly driven by universal joints, it will be installed between the chassis side members. In other cases, it can be installed either between the side members or beside the chassis side. The compressor may be installed with a small angle, but please ensure not to exceed the angular values set out in the diagrams below.

If the compressor is to be painted, use high temperature resistant paint.



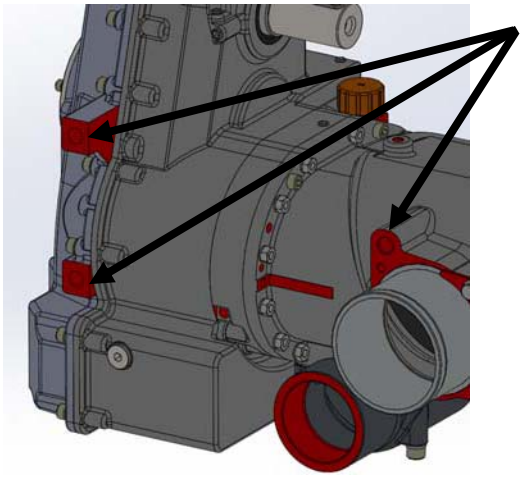
IMPORTANT

During operation, the temperature of the surface of a compressor and nearby parts can be in the region of 200°C.

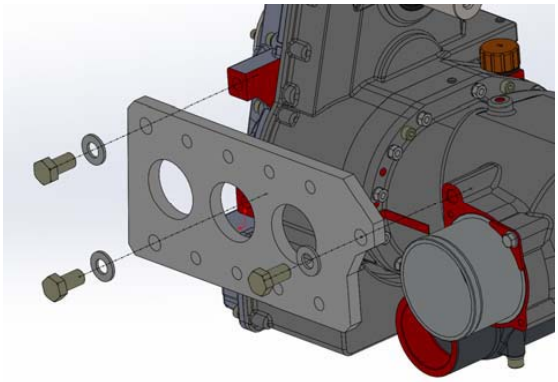
The compressor and the parts located nearby are thus susceptible of provoking serious burns and property damage.

Be careful to not approach elements that are sensitive to heat and affix plates informing users that the compressor is hot, to prevent any risk of burns.

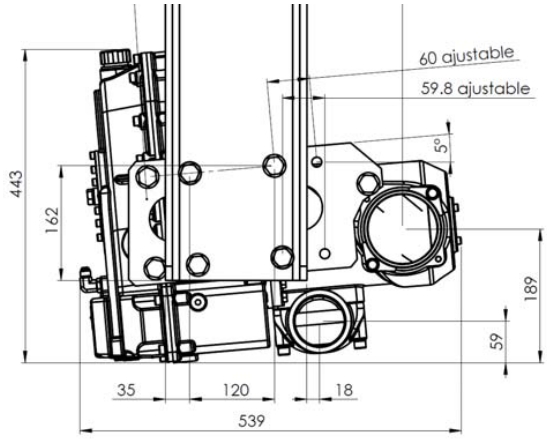
3.2 Fixations



3.2.1 Install lateral plate

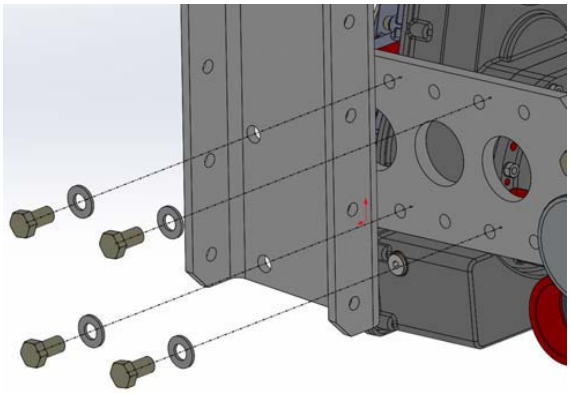


3.2.2 Install U



NOTA :

3 possible positions (position 2 shown).

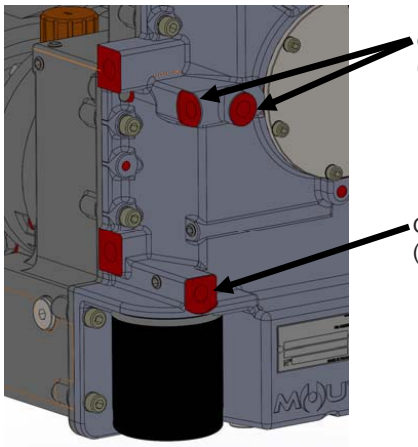


The length of this U is too high on purpose (to cover any brand for the beginning of this project).

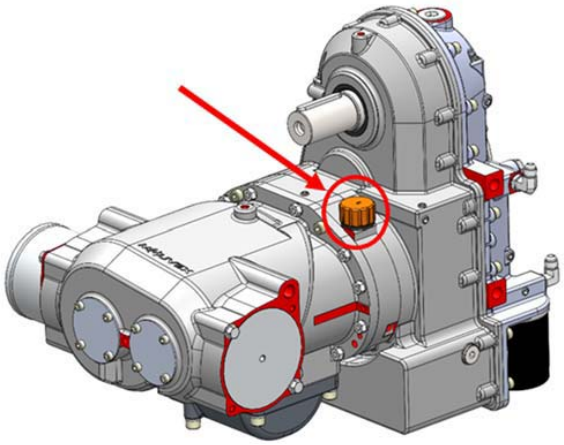
It needs to be drill depending the brand and cut at the right length too fit the chassis.

3.3 Connections

3.3.1 Oil cooler



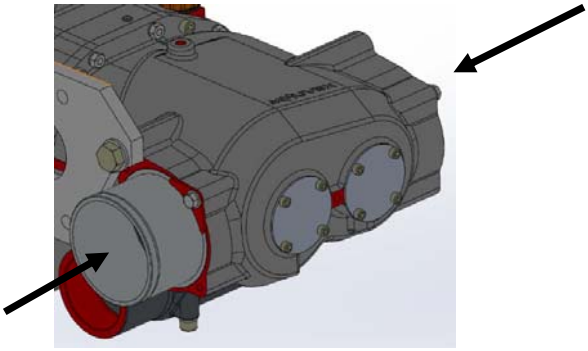
3.3.2 Breather



3.3.3 Inlet

It uses the same parts than MH6.

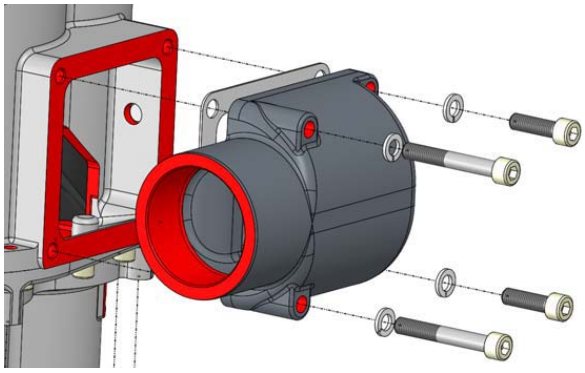
There are 2 positions possible: left or right.



Closed

Inlet

3.3.4 Outlet



It is square so several positions are possible.

3. INSTALLATION (continued)

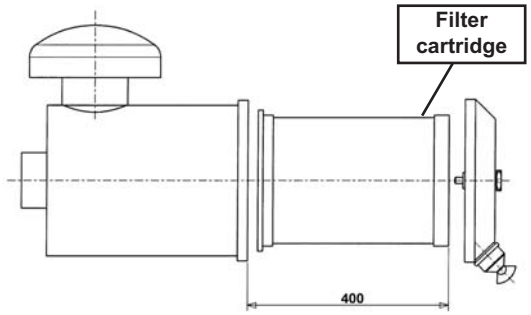
3.4 At suction

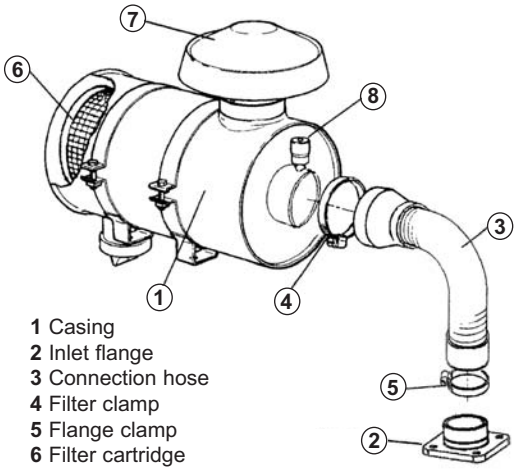
The suction side of the compressor must be fitted with a air filter. This filter must be installed horizontally, rain protection cap upwards. It must be positioned to avoid gravel projections and road spray as well as exhaust fumes and engine heat.

The air filter is connected to the compressor by a hose. Before making this connection, which must be perfectly sealed, make sure that the inlet pipe and attachment flanges are clean.

The clogging indicator must remain visible to the operator.

The filter must be easily accessible. Leave enough room (about 400 mm) to replace the cartridge, as shown on the drawing below :





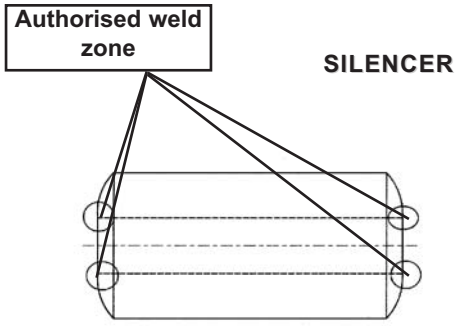
1 Casing
2 Inlet flange
3 Connection hose
4 Filter clamp
5 Flange clamp
6 Filter cartridge
7 Rain protection cap
8 Clogging indicator

3.5 Discharge

3.5.1 Silencer

Dampens noise in pipes. It shall be positioned as close as possible to the compressor discharge.

It must be directly welded to the discharge pipe.



Any weld performed outside of this zone of authorized welding will seriously damage the silencer. In particular, it is not authorized to weld a fixation foot on the silencer.

3.5.2 Check valve and relief valve

The compressor must be protected by a check valve and a relief valve.

See Instructions 1401-E00 SCREW COMPRESSOR CHECK AND RELIEF VALVE.

3.6 Drive

Our screw compressors can be the object of various modes of driving, it is however necessary to take care of the adapted protection systems.

Thank you to respect the following recommendations imperatively.

Recommendations

Driving mode	Torque limiter	Specific rubber coupling (1)	Comments
PTO + Cardan	Yes	No	
Electric motor, direct	No	No	Starting up Star / Triangle
Diesel engine, direct	Yes	Yes	With or without clutch
Pulley/notched belts (synchronous)	Yes	No	
Pulley/not notched belts (asynchronous)	No	No	

(1) Type STROMAG PERIFLEX VN must be defined case by case according to the power to transmit, the speed and type of engine. This device allows to filter the vibrations of the engine which in the long term can generates the rupture of the small pinion shaft of the compressor.

3.6.1 Speed range

The compressor may be driven :
- Directly by a PTO shaft
- By belt /pulley arrangement
- By hydraulic transmission
- By an internal combustion engine or electric motor.

The selection of the drive mode will take into account :
- The compressor mounting configuration
- The driving shaft rotation direction
- The expected power requirement for the given application
- The acceptable rpm range for the driving equipment
- The acceptable rpm range for the compressor.

CAUTION

The use of compressors outside of their operating speed range can lead to property damage or serious injuries. See central IOM.

The non balancing of the drive shafts can lead to mechanical ruptures that are susceptible of causing important property damage and/or serious injuries.

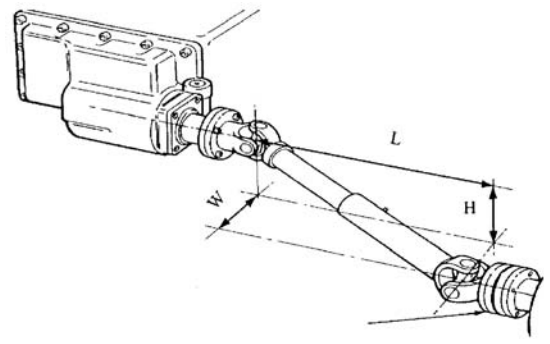
Not following assembly instruction can lead to mechanical ruptures that may create major property damage and/or serious injuries.

In all cases, the drive must make it possible :

- To maintain the compressor rotation speed during load variations (pressure variations).
- Not to subject the compressor to sudden or insufficient starts/stops.

3.6.2 PTO shaft drive

It is mandatory to comply with the following instructions :
- The shaft must be dynamically balanced.
- Its length and its angle must be as small as possible, see table.
- The drive shaft slides perfectly well during rotation.
- The jaws of the universal joints are parallel.
- Coupling flanges show no eccentricity nor warping of the bearing surface.
- The angle formed by the universal joint and the drive shaft must not exceed 15°.
- The compressor shaft must be parallel to that of the drive shaft.



$$A = \sqrt{\frac{H^2 + W^2}{L}}$$

If H = Zero, A = W / L

If W = Zero, A = H / L

A	Universal joint angle	
0,017	1°	VERY GOOD
0,035	2°	
0,052	3°	
0,070	4°	
0,087	5°	
0,105	6°	GOOD
0,125	7°	
0,141	8°	
0,158	9°	
0,176	10°	
0,194	11°	LIMIT VALUES
0,213	12°	
0,231	13°	
0,249	14°	
0,268	15°	

To protect the P.T.O in the event of compressor stalling, **it is necessary to install a torque limiter.** The MOUVEX company shall not be held responsible for damage resulting from such stalling if this stalling is caused by wrong manipulation with the compressor or if a wrong torque limiter is installed.

See Instructions 1401-B00 TORQUE LIMITER - SCREW COMPRESSORS.

CAUTION

If the greasing instructions for the universal joint are not respected, this can lead to ruptures of this universal joint, as well as property damage and serious injuries

3.6.3 Belt / pulley arrangements

The pulley ratio is determined according to the P.T.O speed and the compressor speed.

To determine the types of belts and pulleys, refer to the manufacturer ' s recommendations.

You must observe the following installation rules :
- The shaft supporting the driving pulley must be perfectly parallel with the compressor shaft.
- Pulleys must be correctly aligned.
- Belts shall be sufficiently tensioned to avoid any slack or slide.
- The belts must be able to pass the power consumed by the compressor.

4. USE OF COMPRESSOR

The operator should remain nearby the equipment throughout the use to ensure the proper functioning of the system.

It is imperative to hold the hose in order to avoid whipping during pressurization.

WARNING: SEVERE PERSONAL INJURY OR PROPERTY DAMAGE CAN CAUSE FROM WHIPPING HOSES.

4.1 Lubricant recommendations

MOUVEX BSC3 oil is recommended.

With BSC3 oil, oil change is recommended every year or 400 working hours.

CAUTION

In case of operations done **under minus 25°C**, BSC3 oil viscosity sharply increases and can generate starting troubles. It will be necessary, in that case, to preheat the compressor body.

It is also allowed to use oil SAE 5W40 temporarily allowing to tolerate -35°C.

That implies the following constraints :

- Oil must be replaced every 100 operating hours.
- Imperative return to the BSC3 when the temperature becomes again positive.

Oils BSC and SAE are miscible; the passage of the one with the other thus does not imply particular procedure of cleaning.

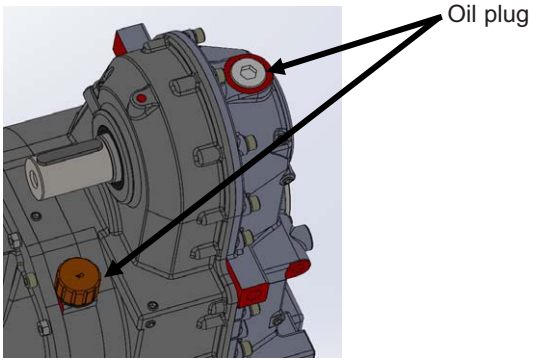
4.2 Filling of lubricant

CAUTION

Our compressors are delivered without oil. The use of a compressor with an incorrect oil level can lead to important property damage and serious injuries.

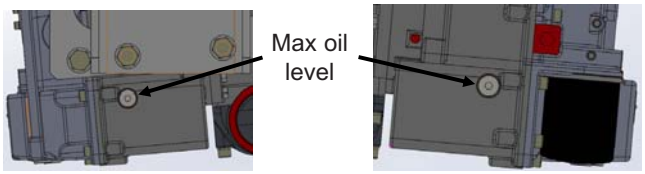
The quantity of oil for a MX12 compressor is approximately **4,7 l** :

- ~3,5 l inside the compressor,
- ~1,2 l inside the cooler, pipes and filter.



Compressor installed on the truck :

- Add around 4,5 l by the oil plug inside the compressor.
- Run the compressor for 1 min.
- Use one of the side plug in order to set up the maximum oil level. Put oil until it reach leaking level.



Before starting the system, fill the casing with oil until reaching the overflow level.

NB : A residual volume of 0,5 l of oil may be present inside the compressor when it leaves the factory.

After filling, the level must under no circumstances exceed the maximum oil level.

4. USE OF COMPRESSOR (continued)

4.3 Operation

- The compressor must be started with the discharge valves open.
- When it is started for the first time, check the compressor rotation direction. Also check rotation speed (refer to § TECHNICAL CHARACTERISTICS).
- The compressor shall be stopped without any counterpressure at discharge.
- At the first start, check that the combinations of rotation speed and discharge pressure of the compressors are in conformity with those indicated in § TECHNICAL CHARACTERISTICS.

⚠ CAUTION

Before any equipment startup, it is necessary to check the coherency between the motor rotation direction and the compressor operating direction. A startup with rotation in the wrong direction will lead to irreversible property damage on the compressors that is not covered by the guarantee.

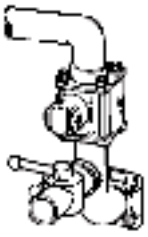
During operation, the temperature of the surface of a compressor and nearby parts can be in the region of 200°C. The compressor and the parts located nearby are thus susceptible of provoking serious burns and property damage. Be careful to not approach elements that are sensitive to heat and affix plates informing users that the compressor is hot, to prevent any risk of burns.

4.4 Starting-up

BEFORE starting compressor, open all air valves necessary to vent the tank and compressor to atmosphere.

Verify there is no possibility of operating at pressure before compressor reaches correct speed.

OPEN



Close all valves and proceed to pressurize the tank and discharge the cargo.

CLOSE

4.4.1 Start-up procedure for manual gear box

- Start the engine and run with standard speed.
- Depress clutch and engage the PTO.
- Release the clutch SLOWLY.
- Set engine speed to give the correct compressor speed.

PTO

ON SLOWLY

4.4.2 Shutting down procedure for manual gear box

- Depress the clutch and disengage the PTO.

PTO

OFF

- Reduce engine speed to idle.

⚠ CAUTION

ALWAYS DISENGAGE THE DRIVE BEFORE SLOWING ENGINE DOWN.

- Release the clutch.

NOTICE :

COMPRESSOR MUST OPERATE AT FIXED SPEED WITHIN THECOMPRESSOR MODEL SPEEDLIMITS. SPEED MUST REMAINCONSTANT THROUGHOUT THE OFF LOADING OPERATION.

5. MAINTENANCE

5.1 Maintenance schedules

After every cleaning of the truck

Always run the compressor for 15 minutes to remove any water that inadvertently gets into the piping. DO NOT fog or introduce anti-corrosive liquids into the compressor to prevent corrosion : Use of liquids in the compressor will cause failure.

According to the prescriptions of § LUBRICANT RECOMMENDATIONS.

Change the compressor oil and clean the magnetic plugs.

Weekly

The compressor should be run for at least 15 minutes to prevent moisture from collecting inside. This will reduce the risk of corrosion damage to the compressor and other equipment in the piping.

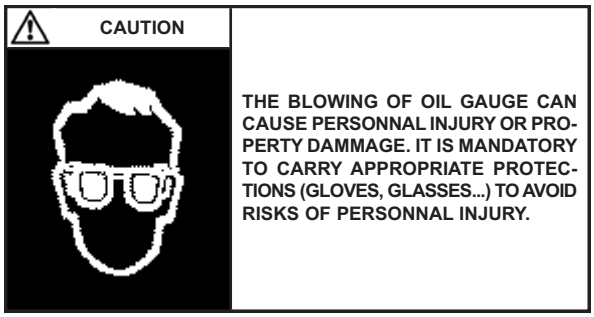
Clean the outer surfaces and the compressor cooling wings, and the multiplier inlet grille. Inspect DAILY if operating in dirty or severe environment. Check the condition of the inlet filter hose for splits and tears. Replace or repair as necessary.

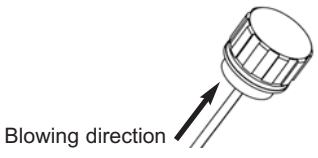
Inspect compressor, system piping and components. Clean or repair as necessary.

Monthly

Check oil level, add the necessary volume if necessary.

Check for cleanliness the breather inside the oil jauge, clean with an air blower if necessary.





5.2 Compressor oil change procedure

Oil gauge : See § LUBRICANT RECOMMENDATIONS.

Replace the oil filter at each oil change.

5.3 Air filter replacement procedure

Check weekly the clogging indicator. When it turns red, replace the filter cartridge.

Before installing a new cartridge, clean the internal part of the filter housing with a clean damp cloth.

CAUTION

The presence of foreign bodies in the compressor inlet channel is susceptible of leading to serious property damage or serious injuries.

5.4 Drive train inspection

5.4.1 PTO Drive

Check monthly that there is no clearance in the jaws and PTO cross pieces by turning the universal joint manually in one direction then in the other direction. Lubricate the universal seal as per manufacturer' s recommendations.

5.4.2 Belt & pulley drive

Check monthly that belt tension is sufficient. Retension belts as required

Lubricate the pulley support shaft bearings as per manufacturer' s recommendations.

5.5 Check valve and relief valve inspection

See Instructions 1401-E00 SCREW COMPRESSOR CHECK AND RELIEF VALVE.

6. TROUBLESHOOTING

CAUTION :
OBSERVE ALL SAFETY WARNINGS CONTAINED IN THIS MANUAL.

Problem	Possible origin	Possible solution
1. Pressure issue	Too much pressure drop.	To check pipes diameter.
	Relief valve damaged.	To check the opening point.
	No return valve damaged.	To check the proper operating of the No return valve.
2. Flow rate issue	Wrong Compressor speed.	To adjust the speed by taking care of the range allowed.
	Relief valve damaged.	To check the opening point.
3. Abnormal high temperature	Air filter clogged.	To clean the cartridge or to replace it.
	Air pressure too much high.	To see problems 1. / 2.
	Outside temperature too much high.	To respect the maximum external temperature allowed.
	Lack of oil.	To check the oil level.
	Compressor speed too much low.	To adjust the speed by taking care of the range allowed.
4. Inlet pressure drop > 75 mbar (Clogging indicator red)	Air filter clogged.	To clean the cartridge or to replace it.
	Air inlet hose folded.	To check the air inlet hose.
5. Compressor doesn't operate	Torque limiter damaged.	To replace the torque limiter.
	Transmission damaged.	To consult your Service point.
6. Torque limiter damaged	Screw Compressor damaged.	To consult your Service point.
	Wrong motor / transmission management.	To consult your Truck dealer.
	Oil too much viscous.	To be in compliance with the MOUVEX Instructions.
7. Oil leak	Too much oil.	To check the oil level.
	Oil breather clogged.	To clean the oil breather.
8. Vibrations	Wrong motor speed.	To increase the speed by taking care of the range allowed.
	Transmission damaged.	To check the driving shaft.
	Lack of rigidity of the chassis.	To be in compliance with the Truck Manufacturer Instructions.

7. WARRANTY

7.1 Warranty claims

The following part are considered as wear part :

- Inlet filter cartridge
- Compressor oil

No failure connected with wear part damage will be accepted under warranty conditions.

The following situations will void warranty for all components of the package :

- Tampering with the setting of the relief valve.
- Presence of foreign body inside the compressor body.
- Traces of damage representative of abnormal use of the package.
- Use of non genuine parts.
- If the compressor is repaired by a repairer who is not a MOUVEX-approved repairer.
- Construction of the package not validated by our Design Office.
- Use of an oil other than BSC3.

Before returning your equipment to the factory, you must first obtain an Equipment return approval (RMA) from our After Sales Department.

A Compressors form information shall be filled by the installer or distributor and send to MOUVEX in order to claim for a warranty.

7.2 24-months warranty extension with BSC3 oil

The 24-months warranty extension with BSC3 oil option increases the warranty for the screw compressor to 60 months :

- Europe zone only,
- Only concerns the bare shaft compressor with or without multiplier, excluding packages and accessories (air filter, torque limiter, check relief valve...),
- Use of BSC3 oil (provide invoices),
- Conditions identical to the current standard warranty.

8. STORAGE CONDITIONS

8.1 Compressor

The equipment must be systematically stored in an area sheltered from bad weather.

The equipment must bear its original protective components until it is installed in its final application.

If installation is interrupted, put back in place the original protective components or equivalent components.

8.2 BSC oil

In its unopened original container in a dry, frost-free and light-free place.

The maximum shelf life is approx. 60 months.

9. SCRAPPING

The compressor must be scrapped in compliance with the regulations in force.

During this operation, particular care must be paid to the drainage stages of the compressor.

DECLARATION UE DE CONFORMITE
EU CERTIFICATE OF CONFORMITY – EU KONFORMITÄTSERKLÄRUNG

MOUVEX sas, ZI La Plaine des Isles – 2 Rue des Caillottes – 89000 Auxerre France, déclare que l'équipement suivant / *declares the following equipment / erklärt, dass folgende Ausrüstung:*

Modèle :_____ **N° de série :**_____ (A) Répondant aux spécifications indiquées dans l'ARC N° : _____ (B)
Designation / Bezeichnung *Serial N° / Serien Nr* *According to the specifications recorded in the acknowledgment of order N°: Entsprechend den Spezifikationen aus AB-Nr :*

Pour la Sté MOUVEX sas, fait à Auxerre le : _____
For Mouvex sas company – Date :
Fur die Fa Mouvex sas - Datum :

Responsable Qualité Clients
Customer Quality Manager / Qualitätsbeauftragter

Configuration : *Konfiguration*
☐ Pompe / Compresseur arbre nu *(Pump / Compressor « bare-shaft »)* *(Pumpe / Kompressor, freies Wellenende*
☐ Groupe de pompage / de compression *(Pumping Unit / Compressor Unit)* *(Pumpen- / Kompressoraggregat)*

Type / *Geräteart* :
☐ Pompe à mvt excentré *(Eccentric Disc Pump /* Ringkolbenpumpe*)*
☐ Pompe péristaltique *(Peristaltic Pump /* Schlauchpumpe*)*
☐ Pompe centrifuge *(Centrifugal Pump /* Kreiselpumpe*)*
☐ Pompe à lobes *(Lobes Pump /* Drehkolbenpumpe*)*
☐ Pompe à palettes *(Vanes Pump /* Flügelzellenpumpe*)*
☐ Autre pompe *(Other Pump / Andere Pumpe)*
☐ Compresseur à Vis *(Screws compressor /* Schraubenverdichter*)*
☐ Compresseur à palettes *(Vanes compressor /* Flügelzellenverdichter*)*
☐ Refroidisseur Hydraulique *(Hydraulic oil cooler /* Hydraulikkühler*)*

Est conforme aux dispositions suivantes :

☐ **Directive « MACHINES » 2006/42/CE** et aux législations nationales la transposant, portant sur les dispositifs de sécurité liés aux risques mécaniques et électriques applicables aux machines tournantes.

NF EN 809:2009 NF EN 1672-2:2009 NF EN ISO 13857:2008
NF EN 12162:2009

☐ **Directive « ATEX » 2014/34/UE** du 26 février 2014 et aux législations nationales la transposant, portant sur les appareils destinés à être utilisés en atmosphères explosibles. Conformité obtenue par application des normes :

NF EN 1127-1:1997 NF EN 13463-1:2009 NF EN 13463-5:2009

Certification ATEX délivrée par INERIS*, Organisme Certificateur, et portant le marquage suivant : (C)

Is in conformity with the provisions of the following Directive:

☐ ***« MACHINES » Directive 2006/42/EEC*** *as transposed by the national legislation, concerning safety equipments and arrangements relative to mechanical and electric risks applicable to rotative machines.*

NF EN 809:2009 NF EN 1672-2:2009 NF EN ISO 13857:2008
NF EN 12162:2009

☐ ***« ATEX » Directive 2014/34/EU*** *(26 Feb. 2014) as transposed by the national legislation, concerning equipment intended to be used in explosive atmospheres. Conformity obtained by application of the standards :*

NF EN 1127-1:1997 NF EN 13463-1:2009 NF EN 13463-5:2009

ATEX Certification delivered by INERIS, Notified Body, and with the following marking:* (C)

den Bestimmungen der nachstehenden Richtlinien entspricht:

☐ ***„Maschinen-Richtlinie" 2006/42/EEC*** *wie umgesetzt im nationalen Recht hinsichtlich der Ausrüstungssicherheit und Sicherheitsvorkehrungen bezogen auf mechanische und elektrische Risiken, die für rotierende Maschinen gelten.*

NF EN 809:2009 NF EN 1672-2:2009 NF EN ISO 13857:2008
NF EN 12162:2009

☐ ***„ATEX" Richtlinie 2014/34/EU*** *(26. Feb. 2014) wie umgesetzt im nationalen Recht in Bezug auf Ausrüstungen für den Einsatz in explosionsgefährdeter Atmosphäre. Die Konformität hat Geltung durch Anwendung folgender Normen:*

NF EN 1127-1:1997 NF EN 13463-1:2009 NF EN 13463-5:2009

Die ATEX-Zertifizierung wurde von der benannten Stelle INERIS erteilt, und mit folgender Kennzeichnung: (C)*

II __ G ____ II __ – T __ **Temp Max produit pompé / *Max Temp Flow / Max. T° Medium* = _____ °C** (X = voir notice / see IOM / siehe Handbuch)

L'équipement désigné ci-dessus doit impérativement respecter les conditions d'utilisation ATEX décrites dans nos notices d'instruction. Il doit être employé conformément à l'utilisation qui en a été prévue de par sa conception et sa fabrication, et conformément aux normes en vigueur.

Nous, soussignés, déclarons que l'équipement concerné est conforme aux Directives listées ci-dessus et aux normes applicables s'y rapportant.

The equipment indicated above must imperatively comply with the ATEX conditions of use described in our Instruction book. It must be used according to the foreseen use by its design and its manufacturing, and according to the current standards.

We, undersigned, declare that the concerned equipment is in conformity with the Directives listed above and in the applicable standards in force.

Oben stehend bezeichnete Ausrüstung muss unbedingt den in unseren Betriebsanleitungen beschriebenen ATEX Anwendungs-bedingungen entsprechen. Sie ist entsprechend dem durch Konstruktion und Fabrikation vorgesehenen Verwendungszweck und entsprechend den geltenden Normen einzusetzen.

Die Unterzeichner erklären, dass die bezeichnete Ausrüstung den oben aufgeführten Richtlinien und den diesbezüglich geltenden Normen entspricht.

** (INERIS – Parc Techno Atala – 60550 Verneuil-en-Halatte – France).*