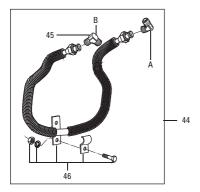
CAST IRON INDUSTRIAL COMPRESSORS

TECHNICAL CATALOGUE

COMPRESSOR MSL 30 MAX - TWO STAGE - 175 PSI

TECHNICAL DATA

MODEL	DISPLACEMENT cfm	() MAX. PRESSURE psi	Q1' RPM	MOTOR hp (running)	© BELT	MOTOR	DLES		CAP.	WEIGHT in Ibs	DISCHARGE
MSL 30 MAX	30	175	820	7.5	2-A	4.0	103	1.5	1.58	144	3/4" NPT
	6 4-13 4 15		38 36 4 - 8 -4 - 8 33 13	27	0		34 pply loctite 243 inly on the bolt.		8-7- 8-7- 27		



9

POSITION	lbf.in	lbf.ft	N.m	
(T1) 43 - 31	221.3	18.3	25.0	
T2 39 - 40	486	39.8	55.0	
T3 14	256	21.0	29	
(T4) 24 - 26	132	10.8	15	
(T5) 20	1,124.0	92.2	127.0	

WARNING

The two parts of connecting rod (N° 29 and 33) are unique pair of assembly. The connecting rod won't work well if its pairs is not assembled and if the right torque (221.3 lbf.in and 18.3 lbf.ft) is not applied in the bolt N° 31.

TABLE 1 - Torque Especification

1

BARE PUMP PARTS

QTY.

№ CODE DENOMINATION QTY. 1 709.1338-0/AT Cylinder cover 01 2 830.1263-0 1" NPT Air filter 01 3 830.1257-0 Filter element 01 4 830.1897-0 Gasket (kit) 01 5 022.0177-0/AT LP 1/8" ASME safety valve 01 6 809.1787-0/AT Valve plate 01 7 830.1898-0 Valve plate repair 01 9 003.0005-5/AT NPT 1/8" x 1/4" elbow 01 11 709.1585-0/AT Crankcase breather tube 01 12 003.0054-3/AT NPT 1/8" x 1/4" straight connection 01 13 709.1708-0/AT Cylinder D= 120mm d=2.1/2" 01	lt
1 7/9.133-0/AI Clyinder Cover 01 2 830.1263-0 1" NPT Air filter 01 3 830.1257-0 Filter element 01 4 830.1897-0 Gasket (kit) 01 5 022.0177-0/AT LP 1/8" ASME safety valve 01 6 809.1787-0/AT Valve plate 01 7 830.1898-0 Valve plate repair 01 8 830.1995-0 Gasket/valve plate repair 01 9 003.0005-5/AT NPT 1/8" x 1/4" elbow 01 10 830.0599-8 1/4" ring (kit) 01 11 709.1585-0/AT Crankcase breather tube 01 12 003.0054-3/AT NPT 1/8" x 1/4" straight connection 01	lt
3 830.1257-0 Filter element 01 4 830.1897-0 Gasket (kit) 01 5 022.0177-0/AT LP 1/8" ASME safety valve 01 6 809.1787-0/AT Valve plate 01 7 830.1898-0 Valve plate repair 01 8 830.1995-0 Gasket/valve plate repair 01 9 003.0005-5/AT NPT 1/8" x 1/4" elbow 01 10 830.0599-8 1/4" ring (kit) 01 11 709.1585-0/AT Crankcase breather tube 01 12 003.0054-3/AT NPT 1/8" x 1/4" straight connection 01	
4 830.1897-0 Gasket (kit) 01 5 022.0177-0/AT LP 1/8" ASME safety valve 01 6 809.1787-0/AT Valve plate 01 7 830.1898-0 Valve plate repair 01 8 830.1995-0 Gasket/valve plate repair 01 9 003.0005-5/AT NPT 1/8" x 1/4" elbow 01 10 830.0599-8 1/4" ring (kit) 01 11 709.1585-0/AT Crankcase breather tube 01 12 003.0054-3/AT NPT 1/8" x 1/4" straight connection 01	
4 330.1897-0 Gasket (kt) 01 5 022.0177-0/AT LP 1/8" ASME safety valve 01 6 809.1787-0/AT Valve plate 01 7 830.1898-0 Valve plate repair 01 8 830.1995-0 Gasket/valve plate repair 01 9 003.0005-5/AT NPT 1/8" x 1/4" elbow 01 10 830.0599-8 1/4" ring (kit) 01 11 709.1585-0/AT Crankcase breather tube 01 12 003.0054-3/AT NPT 1/8" x 1/4" straight connection 01	edle (kit)
6 809.1787-0/AT Valve plate 01 7 830.1898-0 Valve plate repair 01 8 830.1995-0 Gasket/valve plate repair 01 9 003.0005-5/AT NPT 1/8" x 1/4" elbow 01 10 830.0599-8 1/4" ring (kit) 01 11 709.1585-0/AT Crankcase breather tube 01 12 003.0054-3/AT NPT 1/8" x 1/4" straight connection 01	edle (kit)
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8 330.1993-0 Gasket/Valve plate repair 01 31 516 5176 x 1.3/4 Aller Intex. Intex 9 003.0005-5/AT NPT 1/8" x 1/4" elbow 01 32 809.1082-C/AT Guide bushing connecting rod (kit 10 830.0599-8 1/4" ring (kit) 01 33 809.1083-0/AT LP connecting rod (kit) 11 709.1585-0/AT Crankcase breather tube 01 34 830.1079-0 HP Ø 2. 1/2" piston (kit) 12 003.0054-3/AT NPT 1/8" x 1/4" straight connection 01 35 830.1078-0 HP 2. 1/2" ring (kit)	
10 830.0599-8 1/4" ring (kit) 01 33 809.1083-0/AT LP connecting rod (kit) 11 709.1585-0/AT Crankcase breather tube 01 34 830.1079-0 HP Ø 2. 1/2" piston (kit) 12 003.0054-3/AT NPT 1/8" x 1/4" straight connection 01 35 830.1078-0 HP 2. 1/2" ring (kit)	bolt
11 709.1585-0/AT Crankcase breather tube 01 34 830.1079-0 HP Ø 2. 1/2" piston (kit) 12 003.0054-3/AT NPT 1/8" x 1/4" straight connection 01 35 830.1078-0 HP Ø 2. 1/2" ring (kit)	th 4 pcs)
12 003.0054-3/AT NPT 1/8" x 1/4" straight connection 01 35 830.1078-0 HP 2. 1/2" ring (kit)	
13 709.1708-0/AT Cylinder D=120mm d=2.1/2" 01 36 830.1091-0 LP 120mm ring (kit)	
14 * 3/8" x 1" Hex. head bolt 06 37 016.0121-0/AT LP Ø 120mm piston	
15 028.0297-0/AT M18 plug 01 38 022.0215-0/AT HP 1/8" ASME safety val	
16 709.1574-0/AT Crankcase with breather for cover 01 39 * 3/8" x 2.1/2" Allen hex. head bolt (e note 2)
17 003.0028-4/AT 1/4" plug 01 40 * 3/8" x 1.1/2" allen hex head	olt
18 830.0154-2 1" oil level sight 01 41 * 3/8" lock washer	
19 019.0007-2/AT 6306 bearing 01 42 830.1083-0 Washer copper (kit with 10	:s)
20 830.1092-0 Crankshaft (kit) 01 43 * 5/16" x 1.3/4" Allen hex. hea	oolt
21 019.0074-0/AT 6308 bearing 01 44 709.1590-0/AT Intercooler whit nut (kit	
22 60082501/AT Oil seal O1 45 003.0772-0/AT NPT 3/4" x 3/4" elbow	
23 709.1577-0/AT Flange 01 46 830.1084-0/AT Intercooler holder (kit)	

* Part available in the market - not sold by Schulz S.A. ** Assembled of the intercooler holder (item 46)

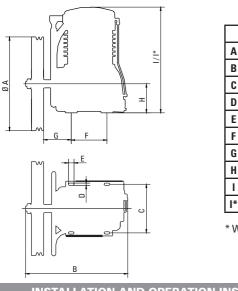
Note: 1 - HP=High Pressure ; LP= Low Pressure.

2 - Not assemble lock washer in the position nº 39 for bolt internal.



TECHNICAL CATALOGUE

DIMENSIONS



inch mm 420.0 16.53 451.0 17.7 255.0 10.0 10.5 0.41 25.5 1.0 191.0 7.6 118.0 4.6 130.0 5.1 480.0 18.9 500.0 19.7

MSL 30 MAX



INSTALLATION AND OPERATION INSTRUCTIONS

INSTALLATION AND LOCATION

1. Installation:

Install the compressor in a covered, well ventilated area, free of dust, toxic gases, humidity or any other kind of pollution. The

compressor should be located no closer than 32" (800mm) from a wall or any other obstacle that could interfere with the air flow through the fan. This distance will also make maintenance easier. Place the compressor on a leveled surface. Rotation of the flywheel must be in the direction of the arrow cast into the flywheel. The maximum ambient temperature recommended while working is 104°F or 40°C. If necessary, install an exhaust fan to

guarantee fresh air and to dissipate heat.

Before making the electrical connections, check oil level and top-up lubricating oil. For type of oil, see table at the end of these instructions.

2. Electrical connection: The country's valid electrical standards must be followed regarding Low Voltage Electrical Installation.

OPERATION

1. Initial start procedure:

Before turning on the compressor, check the crankcase oil level. It must be in the middle of the oil level sight or oil level dipstick . As to the type of oil to be used and the recommended change intervals, check at "Lubrication" and as to its volume, check the Technical Data Table.

2. Start:

Turn on the electrical start key and let your compressor run for about 10 (ten) minutes, what will keep the tank's internal pressure or compressed air around 20 psi. This will optimize a homogeneous lubrication of the parts.

LIMITED WARRANTY

All component parts on your SCHULZ compressor are warranted to be free of defects in workmanship and material for a period of one year. Transportation charges are responsibility of the purchaser. This warranty extends to the original purchaser of the compressor only.

There are no express warranties except as contained in this limited warranty statement and implied warranties, including those of merchantability and fitness for a particular purpose, are limited to the period of warranty. Our liability is limited solely to replacement of nonconforming parts as set forth herein and does not include any liability for any incidental, consequential, or other damages of any kind. This warranty gives you specific legal rights, and you may also have other rights that vary from state to state.

DISTRIBUTOR

MAINTENANCE WARNING

Turn off power before servicing and be sure the air tank is unloaded. These instructions are based on normal operating conditions. If the compressor is located in an exceedingly dusty area, increase the frequency of all inspections.

DAILY

- Inspect the compressor visually.
- Check oil level and add some if necessary, before turning the compressor on.
- Drain moisture from the piping system.
- Be sure there is no excessive or unusual vibration or noise.

WFFKIY

- Remove and clean intake air filters; do not wash the filter element.

- Check V-belts for tightness. Belt tension should be adjusted to allow approximately 3/8" to 1/2" (9 to 13 mm) deflection with normal thumb pressure or weight of the 3.7kg (8.15lb).

- Clean cylinders externally, cylinder head, motor, fan blade, tubing, and tank.
- Safety valve should be tested manually to see if it is working properly.

MONTHLY

- Check entire system for air leakage around fittings, etc by using water and soap lather

- Check the pressure switch operation.
- Check for oil contamination and change it if necessary.

QUARTERLY

- Change the air filter element every 300 working hours or quarterly. (Whichever occurs first).

- Fasten bolts and nuts as required. (See Table 1)

- Change oil more frequently if compressor is located in a very dirty environment. -WHILE RUNNING IN A PERIOD OF ABOUT 100 WORKING HOURS THE OIL LEVEL SHOULD BE CARE FULLY CHECKED.

ANNUALLY

- Test and calibrate the pressure switch, pressure gauge and safety valve according to their own technical standards. These parts must be removed from the tank andpumpto be tested.

- Inspect and clean the suction and discharge valve(s) plate(s) every 1000 (one thousand) working hours (whichever occurs first), located between the cylinder and its cover and, if necessary, replace it (them) according to the operation conditions.

- The first oil change should be made after 8 hours of operation.
- The second oil change after 40 hours of operation.

- The third and following exchanges should be made after 200 hours of operation, or 60 (sixty) days, whichever occurs first.

Note:

Heavy Duty and multi-viscous oils are not adequate for Schulz air compressor's lubrication. The same applies to oils that tend to emulsify.

We recommend good industrial oil for air compressors, with rust and oxidation inhibitors and high viscosity level (from 90 to 95), SAE or ISO, as indicated in the table helow:

RECOMMENDED LUBRICANT OILS FOR SCHULZ AIR PUMPS

AMBIENT TEMPERATURE F (C)					
Below 32 °F Below 0 °C	32 °F to 68 °F 0 °C to 20 °C	68 °F to 104 °F 20 °C to 40 °C			
SAE 10W or ISO 32	SAE 20W or ISO 68	SAE 30 or ISO 100			

NOTE: Schulz reserves the right to make changes without prior notice.



ORIGINAL REPLACEMENT PARTS Contact Authorized Distributor

RECYCLABLE

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