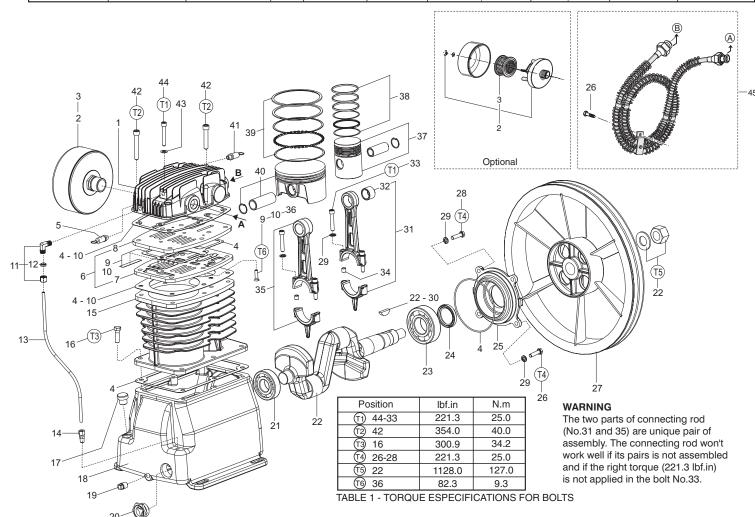
# SCHUZ

CAST IRON INDUSTRIAL COMPRESSORS

# TECHNICAL DATA

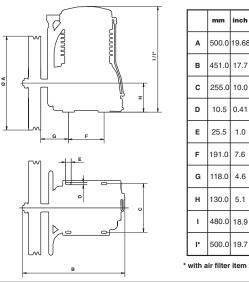
MODEL	DISPLACEMENT	MAX. PRESSURE	RPM	MOTOR hp	BELT	MOTOR PULLEY 2 POLES		OIL CAP.		WEIGHT	DISCHARGE
	cfm	psig		(running)				l	qt.	in lbs SIZE	SIZE
MCI 40 MAY	40	475	1 050	10	0.4	mm	inch	4.5	1.50	105	O/A" NIDT
MSL 40 MAX	40	175	1,050	10	2-A	150	6.0	1.5	1.58	185	3/4" NPT



## BARE PUMP PARTS

BARE PUMP PARIS							
No.	CODE	DENOMINATION	QTY	No	CODE	DENOMINATION	QTY
1	709.1583-0	Cylinder cover	01	26	*	5/16" x 1.1/4" Hex. head bolt**	01
2	60319022	1" NPT Air filter	01	27	709.1611-0	Flywheel	01
3	007.0118-0	Filter element	01	28	*	5/16" x 1" Hex. head bolt	03
1 4	830.1090-0/NA	Gasket kit	01	29	*	5/16" lock washer	08
5	022.0177-0	LP 1/8" ASME safety valve	01	30	709.0147-1	Key	01
6	809.1061-0	Valve plate	01	31	830.1093-0	HP connecting rod with needle bearing kit	01
ŏ	709.1336-0	Bottom valve plate	01	32	019.0028-0	Needle bearing	01
8	709.1395-0	Top valve plate	01	33	*	5/16" x 1.3/4" Allen hex. head bolt	04
9	830.1075-0	Valve plate kit	01	34	809.1082-C		04
10	830.1076-0	Gasket/valve plate kit (kit)	01	35	809.1083-0	LP connecting rod kit	01
111	003.0005-5	NPT 1/8" x 1/4" elbow	01	36	*	1/4" x 5/8" Flat head bolt	02
12	830.0599-8	1/4" ring kit	01	37	830.1079-0	HP Ø 2. 1/2" piston	01
13	709.1585-0	Crankcase breather tube	01	38	830.1078-0	HP 2. 1/2" ring kit	01
				39	830.1091-0	LP 120mm ring kit	01
14	003.0054-3	NPT 1/8" x 1/4" straight connection	01	40	016.0121-0	LP Ø 120mm piston	01
15	709.1576-0	Cylinder	01	41	022.0189-0	HP 1/8" ASME safety valve	01
16	200 2007 0	3/8" x 1" Hex. head bolt	06	42	*	3/8" x 3" Allen hex. head bolt	08
17	028.0297-0	M18 plug	01	43	830.1083-0	Washer copper kit 5/16" x 2" Allen hex. head bolt	01
18	709.1574-0	Crankcase	01	44			02
19	003.0028-4	1/4" plug	01	45	709.1663-0	Intercooler kit	01
20	830.0154-2	1" oil level sight	01	46	0030151-5	NPT 3/4" x 3/4" elbow (not shown)	02
21	019.0007-2	6306 bearing	01	47	21011002	BSP 3/4" x 3/4" straight connection (not shown)	02
22	830.1092-0	Crankshaft kit	01	48	709.1612-0	Pulley (not shown)	01
23	019.0074-0	6308 bearing	01	49	*	3/8" x 1/2" Allen hex. without head assembled of	01
24	60082501	Oil seal	01			the pulley (not shown)	UI
25	709.1577-0	Flange	01				

#### DIMENSIONS MSL 40 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.

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 psig. 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.



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## **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.

#### WEEKLY

- Remove and clean intake air filters; do not wash the filter element.
- Check V-belt for tightness. Belt tension should be adjusted to allow approximately 3/8" to 1/2" (9 to 13 mm) deflection with normal thumb pressure.
- Clean cylinders externally, cylinder head, motor, fan blade, tubing, and tank.
- ASME 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 CAREFULLY CHECKED.

## ANNUALLY

- Test and calibrate the pressure switch, pressure gauge and ASME safety valve according to their own technical standards. These parts must be removed from the tank and pump to be tested.
- Inspect and clean the suction and discharge valve(s) plate(s) every 1,000 (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.

## **LUBRICATION**

- 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 below:

## RECOMMENDED LUBRICANT OILS FOR SCHULZ AIR PUMPS

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

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

