BULLSEYE
Armored Cycle Indicator

PATTON®
DIVIDER BLOCK SYSTEMS

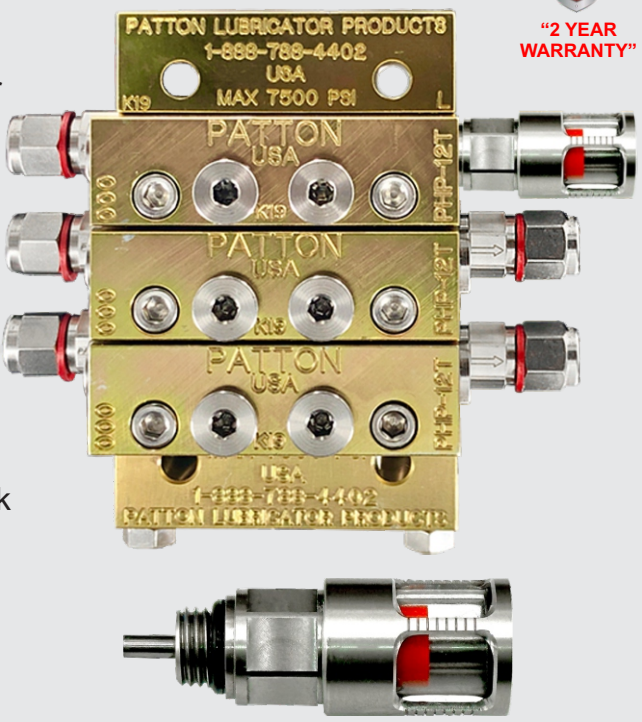
Manage Lube Oil Consumption
Monitor Divider Block System Performance

"BULLSEYE" Armored Cycle Indicator Features and Benefits:

- **Chemical Resistance**: Glass viewing tube, unaffected by chemicals or spray brake cleaner.
- **Armored Protection**: Prevents glass breakage of viewing tube.
- **Precision Markings**: Tick marks on shield validate piston travel to observe piston travel & operation.
- **Diagnostics**: Red indicator follows movement of divider block piston to identify system issues.
- **Efficiency**: Monitor cycle time of divider block assembly, set lube rates to manage lube oil consumption.
- **Compatibility**: Retrofit for Ariel, Graco, Sloan, LSI, and CPI divider block systems.

MADE IN THE U.S.A

"2 YEAR WARRANTY"



Part# PLP-BACI

BULLSEYE
Armored Cycle Indicator
(Patent Pending)

PATTON DIVIDER BLOCK SYSTEMS
Pro-Tecting "Your" Compressor

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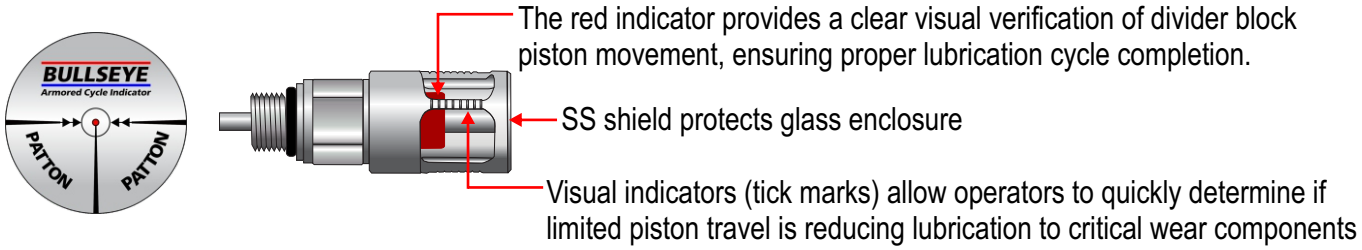
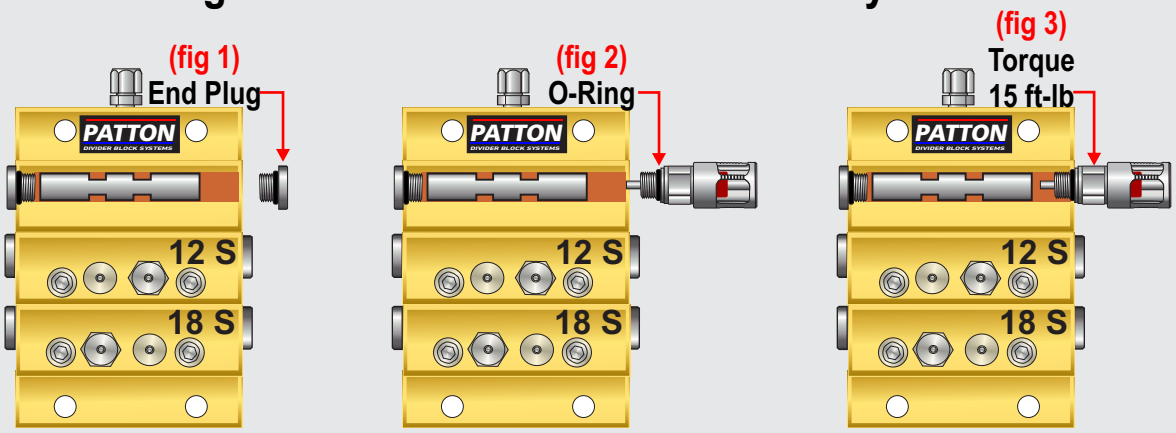
BUILT TANK TOUGH
2-Year Factory Warranty

"BULLSEYE" ARMORED CYCLE INDICATOR

How the Cycle Indicator Works: As oil flows through the divider block assembly, internal pistons move back and forth delivering precise volumes of oil to rod packing and cylinder lubrication points. The indicator's stainless steel pin is held in contact with the end of the piston by a pre-loaded spring, allowing the red indicator to accurately mimic the exact movement of the piston inside the divider block. This visual feedback provides a reliable method to monitor piston travel and verify proper operation of the lubrication circuit in real time.



Installing Patton's "BULLSEYE" Armored Cycle Indicator



NOTE: Patton's cycle indicator may be installed in any size divider block.

1) Remove end plug from divider block. (fig 1)
2) Ensure o-ring is in place on thread of indicator. (fig 2)
3) Screw indicator into end of divider block & torque to 15 ft-lbs max.(fig 3)
4) After installation purge air from system.

NOTE: Chemical-Resistant Glass Enclosure

The glass enclosure is unaffected by brake cleaner, solvents, or other chemicals, ensuring long-term durability and visibility in harsh environments.

HOW TO CHECK CYCLE TIME OF THE DIVIDER BLOCK ASSEMBLY & DETERMINE LUBE OIL CONSUMPTION

NOTE: To find the recommended cycle time of your divider block system contacting the Patton or the Compressor OEM.. Recommended cycle time for Ariel compressors, is stamped on metal tag on top right of lube box.

Step-by Step Procedure to Find Cycle Time:

Step 1. You'll need a timing device that displays seconds (watch, stopwatch, or phone timer).

Step 2. Watch several cycles of the red indicator traveling left to right. and focus on the exact moment red indicator stops in the farthest outward position.

Step 3. Start the timer, the moment the indicator stops at the outward movement away from the divider block.(figure **"A"**)

NOTE: Indicator stopping at inward movement, equals 1/2 piston stroke. (fig **"B"**)

Step 4. Focus on the red indicator and notice when the indicator reaches the outward position and stops. (figure **"C"**)

Step 5. Stop timer the moment the indicator stops at the outward movement away from the divider block.(figure **"C"**)

Step 6. Repeat Steps 3 through 6, three times, and average the 3 cycle times. This will give you the accurate cycle time of the divider block assembly.

Important Notes: Erratic or forceful movement of the cycle indicator, or inconsistent cycle times, may indicate one of the following:

- Air in the system
- Leaking check valve
- Oil supply issues
- Divider block piston sticking
- Excessive differential pressure between injection points.

Adjusting lube pump output to achieve the recommended cycle time:

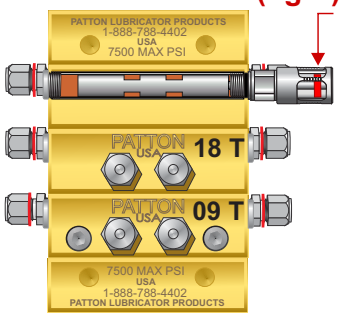
- Reduces lube oil waste
- Prevents valve damage from excessive oil
- Ensures calculated lubrication to rings, rods, packing & cylinders

Caution: Never change lubrication rates on any divider block system unless authorized by the compressor OEM or engineer responsible for the system design.

Patton's design team can evaluate your current system and help optimize lube rates for reliability and cost savings.

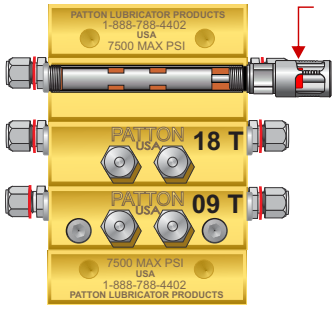
Need Help? Call Patton 1-888-788-4402) :

(fig A)



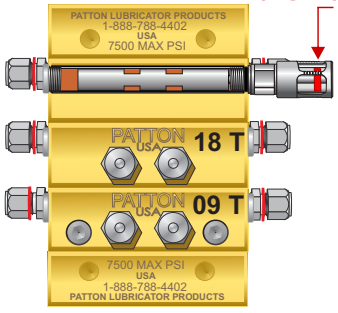
Start timing when red indicator stops at outward movement

(fig B)



Red indicator stopping at inward movement, equals 1/2 Piston Travel

(fig C)

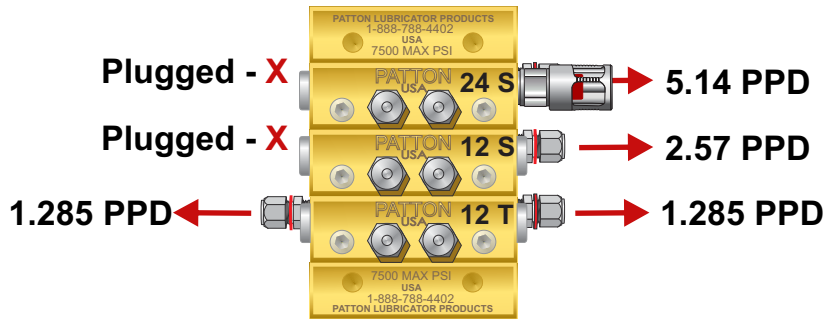


Stop timing when red indicator stops at outward movement

PATTON DIVIDER BLOCK SYSTEMS
Protecting "Your" Compressor

How Do I Determine Oil Consumption of Divider Block Lubrication Systems?

Step 1. Find cycle time of the divider block assembly. (see page 3)
For this example, we will use **a 28 second cycle time**. You must use actual cycle time of the divider block system to calculate 24 hr. oil consumption in Pints Per Day.



Step 2 Total divider block value is 48 & Cycle time is 28 seconds

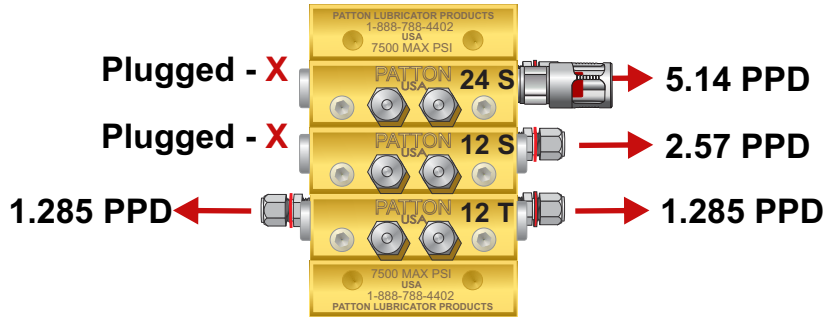
Step 3) Multiply Divider Block Total **48** x **6** = **288**

Step 4) Divide **288** by Divider Block Cycle Time **28** Secs."

Total PPD for this example **= 10.28** Pints Per Day

How Do I Determine What Cycle Time of The Divider Block Should Be, "If I Know What Oil Consumption Should Be?"

EXAMPLE: Suggested oil consumption of system should be **10.28 PPD**.



Step 1) Add the divider blocks together, = 48 - cycle time is 28 Seconds

Step 2) Multiply Divider Block Total **48** x **6** = **288**

Step 3) Divide **288** By The Suggested Pints Per Day **10.28**

Adjust Lube Pump To Reach a **= 28** Second Cycle Time of The Divider Block