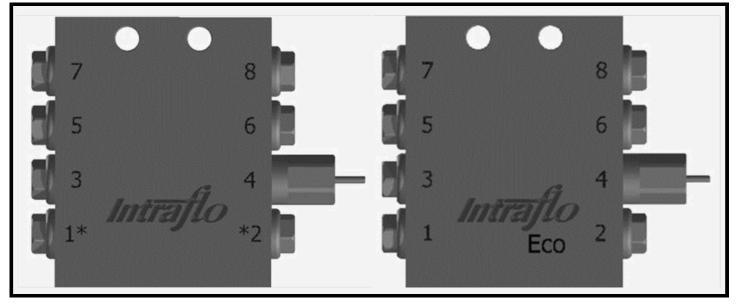
Intra

# Series Progressive Grease Metering Valves



40 Series Divider Valve / 41 Series (Eco) Divider Valve

Information subject to change without notice

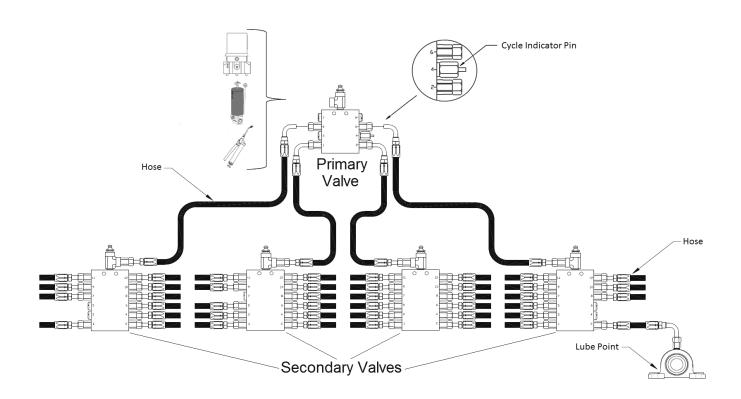


## **Application**

• 40/41 Series Divider Valves are designed to dispense lubricant in centralized lubrication systems.

#### <u>General</u>

- 40/41 Series Divider Valves are proportioning devices that consist of a minimum of three metering pins.
- The primary divider value is the first value in a system. This value receives pressurized grease directly from a grease pump or grease gun.
- The secondary valve is any valve receiving its lubricant from the primary valve.
- A secondary valve should never feed a tertiary valve.
- 40/41 Series Divider Valves are available with cycle indicator pins for visual confirmation of a complete valve cycle.
- Never plug outlets 1 or 2 on a 40 Series valve. Doing so will cause the valve to stop working.
- None of the outlets on a 41 Series valve should be plugged for any reason. Doing so will cause the valve to stop working.
- 40/41 Series Divider Valves are corrosion resistant.
- One cycle switch can monitor a multiple valve system.
- It is the responsibility of the O.E.M/End User to ensure proper lubricant volumes under actual working conditions.
- Every 40/41 Series Divider Valve is cycled and pressure tested before packaging.
- Use only original INTRAFLO system components
- Never exceed the maximum working pressure of the lowest rated system component.
- Never use system components above or below their rated temperature range.
- 40/41 Series Divider Valves carry a full 2 year warranty against manufacturing defects.
- 40/41 Series Divider Valves are Made in the U.S.A.

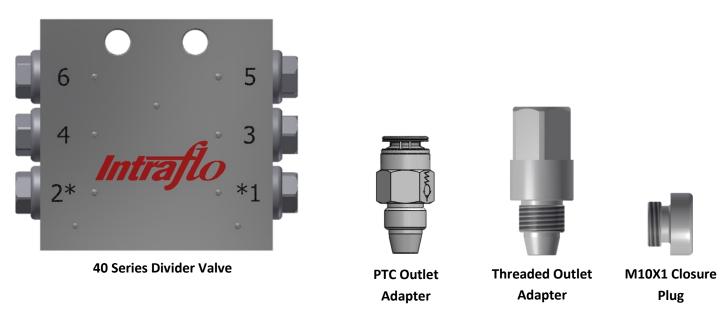




# Crossporting (40 Series Valves only)

Each outlet on the 40 Series Valve is marked with a number. By placing an M10x1 closure plug in an outlet, the lubricant is redirected to the next adjacent outlet in descending numerical order. Crossporting allows multiple outlets to be combined together to meet the demands of larger lube points. Special attention must be paid to *never plug outlets 1 or 2*. There are no crossport passages in either of these outlets, plugging them will cause the valve to stop working.

Intraflo valve outlet adapters or M10x1 closure plugs are the only fittings approved for 40 Series Valve outlets. The design of the outlet adapter is crucial to proper valve function. Any fitting other than a valve outlet adapter or M10x1 closure plug may cause the valve to malfunction. **41 Series Divider Valves (Eco) cannot be crossported!** 

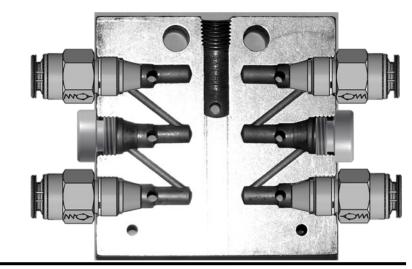


### Crossporting-Continued (40 Series Valves Only)

Cutaway #1 shows the pathways that make crossporting possible. When an M10X1 closure plug is placed in an outlet, the lubricant is redirected to the next adjacent outlet in descending numerical order. For example, cutaway #2 shows an outlet adapter in port #5, an M10x1 closure plug in port #3 and an outlet adapter in port #1. With this configuration port #5 will receive only a single shot of grease per cycle (.012in<sup>3</sup>), port #3 will have its volume of grease redirected down to port #1 via the crossport path that links the two outlets and port #1 now receives a double shot (.024in<sup>3</sup>). **Note:** The conical shape of the valve outlet adapter seals off the crossport paths when they are not needed.



40 Series cutaway #2



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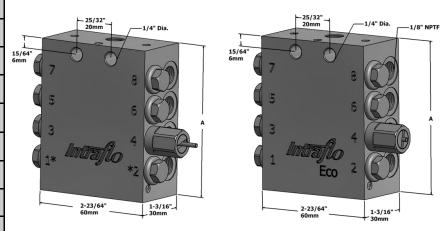


#### **Technical Data**

- 40/41 Series Divider Valves accurately dispense lubricant to as many as 20 outlets
- 40/41 Series Divider Valves have a maximum operating pressure of 5076 psig. / 350 bar
- 40/41 Series Divider Valves have a minimum operating pressure of 200 psig. / 14 bar
- 40/41 Series Divider Valves have a lubricant inlet measuring 1/8" NPTF (F)
- 40/41 Series Divider Valves have a maximum operating temperature of 212°F / 70°C
- 40/41 Series Divider Valves have a minimum operating temperature of -22°F / -30°C
- Each individual outlet of the 40/41 Series Divider Valves dispense .012in<sup>3</sup> of grease per cycle
- One "Cycle" is the reciprocation of the indicator pin from its original start position back to its original start position
- Tightening torque Closure plug (M11 Piston) 12 ft.lbs. / 16 Nm
- Tightening torque Closure plug (M10 Outlet) 12 ft.lbs. / 16 Nm
- Tightening torque Valve Outlet Adapter (40 Series Valve) 12 ft.lbs. / 16 Nm
- Tightening torque Divider Valve Outlets (41 Series Valve) 2-3 T.F.F.T (Turns From Finger Tight)
- Tightening torque 40/41 Series Divider Valve Inlet 2-3 T.F.F.T (Turns From Finger Tight)
- Maximum Grease Viscosity NLGI 2
- Corrosion resistant plating is Chromium Free RoHS & ELV Compliant

#### 40/41 Series Divider Valve Dimensions

| Number of Outlets | Dimension A      |               |
|-------------------|------------------|---------------|
| 6                 | 2.36in. / 60 mm  | T             |
| 8                 | 2.95in. / 75 mm  | 15/64"<br>6mm |
| 10                | 3.54in. / 90 mm  |               |
| 12                | 4.14in. / 105 mm |               |
| 14                | 4.8in. / 120 mm  |               |
| 16                | 5.4in. / 135 mm  |               |
| 18                | 5.9in. / 150 mm  |               |
| 20                | 6.5 in. / 165 mm |               |





# **Troubleshooting**

| Issue   | Correction Procedure  |
|---|---|
| Primary Divider Valve will<br>not accept grease | 1. Check to make sure no divider valves have ports #1 or #2 plugged. If found, remove   |
|   | closure plugs and reconfigure valve to correct issue.   |
|   | <ol><li>Check to make sure that no grease lines are kinked/pinched. If found,<br/>reroute/replace lines to correct issue.</li></ol>   |
|   | 3. Note Locations then remove all supply lines (lines from valve to valve)  |
|   | 4. Attempt to manually cycle primary valve.   |
|   | 5. If valves cycles freely, jump down to #12  |
|   | 6. If valve does not cycle freely, continue to #7   |
|   | 7. Note location then remove all M10 dosure plugs/outlet adapters.  |
|   | 8. Attempt to manually cycle primary valve.   |
|   | 9. If valve still does not cycle, replace divider valve.  |
|   | 10. If valve cycles freely, reinstall outlet adapters/M10 closure plugs one at a time until defective fitting is identified.  |
|   | 11. Replace defective fitting. Manually cycle valve to ensure proper function before continuing.  |
|   | 12. Reinstall supply lines one at a time. Manually cycle valve after each line is installed.  |
|   | 13. If valve cycles freely with all supply lines installed, blockage has been eliminated.<br>Cycle system manually a few times to ensure system continues to function properly. |
|   | 14. When valve fails to cycle freely when one of the supply lines is reinstalled, follow that line to the secondary valve that it supplies.                                     |
|   | 15. Once the Secondary Valve has been located, disconnect its supply line and attempt to manually cycle the Primary Valve again.  |
|   | 16. If the Primary Valve cycles freely, and the supply line dispenses grease, reinstall the supply line and continue to #18   |
|   | 17. If the primary valve does not cycle freely, and the supply line does not dispense grease, inspect supply line and fittings for blockages. Repair/replace/reinstall          |
| Secondary Valve will not<br>accept grease       | 18. Note Locations then remove all feed lines (lines from valve to bearing) from<br>Secondary Valve   |
|   | 19. Attempt to manually cycle secondary valve.  |
|   | 20. If valves cycles freely, jump down to #27   |
|   | 21. If valve does not cycle freely, continue to #22   |
|   | 22. Note location then remove all M10 dosure plugs/outlet adapters.   |
|   | 23. Attempt to manually cycle secondary valve.  |
|   | 24. If valve still does not cycle, replace secondary valve.   |
|   | 25. If valve cycles freely, reinstall outlet adapters/M10 closure plugs one at a time until defective fitting is identified.  |
|   | 26. Replace defective fitting then manually cycle valve to ensure proper function before<br>continuing.   |
|   | 27. Reinstall feed lines one at a time, manually cycling valve after each line is installed.  |
|   | 28. When valve fails to cycle freely when one of the feed lines is reinstalled, follow that line to the bearing that it greases.  |
|   | 29. Once the bearing point has been located, disconnect the feed line and attempt to manually cycle the secondary valve.  |
|   | 30. If the secondary valve cycles freely, and the feed line dispenses grease, repair or   |
|   | replace bearing.<br>31. If the secondary valve does not cycle freely, and the feed line does not dispense   |
|   | grease, inspect feed line and fittings for blockages. Repair/replace/reinstall<br>32. If system still fails to operate, contact your local Intraflo Products Representative.    |
|   | Jaz. In system stimmins to operate, contact your local intrano Products Representative.   |