



Intellect II Valve Driver

Product Data Sheet

The Intellect II is a programmable precision fluid directional control instrument with non-volatile user program memory and system input/output (I/O). The Intellect II is designed with the flexibility and versatility to meet a variety of system configurations. It can be used as a stand alone controller, or integrated into system configurations. The module is capable of simple closed loop control of an external quantity or process without the need of an external controller for direction.

The Intellect II can be coupled with a variety of valve selections to meet specific needs. Valve drive communications are compatible with other Kloehn devices.

The Intellect II Valve Driver is available as a single unit or as a stacked pair that are stacked on top of each other. The dual stacked Intellect II has the same form factor as Kloehn's VersaPump 6.

Physical

- Height 5.0 (single); 10.0 (stacked)
- Width 2.55"
- Depth 4.75" (face plate to back plate)
- Weight 2.5 lbs (single); 5.0 lbs (stacked)

Environmental

- Operating temperature of 0° to 55° C
- Operating humidity of 5 to 95% RH, non-condensing at 55° C
- Storage temperature of -25°C to 85° C
- RoHS and WEEE compliant

Mechanical

- Operation in any orientation
- Mounting holes at bottom as well as on the face plate
- Stackable – optional stacking kit available
- Multiple Valve Choices: Valve type – 2 way to 12 way
- PC Board - **Driver / Control board** (fully functional motor drivers and control electronics).
- Optional RS232 PCB with termination for communication bus

Interface

- RS-485 or RS-232 communications
- Data terminal or OEM protocol
- 1200 to 38.4K baud, 8 data bits, 1 stop bit, no parity, half duplex
- User I/O: Three inputs, three output
- Switched device address

Power

- Operation at 24V (with a maximum power voltage ripple of 720mv peak-to-peak)
Power consumption – 40 watts, 8.5 watts idle for single valve driver; 80 watts, 17 watts idle for the stacked Intellect.

Ancillary items:

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|--|-----------|
| • Communication cable RS485, 6" long; pump to pump (2 units) | P/N 17736 |
| • Optional RS232 Communication PCB | P/N 50677 |
| • Starter Kit (includes all items listed below) | P/N 17730 |
| • 24VDC Power supply | P/N 50601 |
| • Software; operator's manual; and application notes. | P/N 23422 |
| • Communications cable (RS232 / 5' long; Intellect to computer) | P/N 17734 |
| • Decal | P/N 24606 |
| • Stacking Kit (stacks two Intellect II units – One on top of the other) | P/N 24636 |

Software support:

- KloehnControl (script programming - configuration and debug program)
- KSerial (command-line communication utility)
- KCom (machine language helper program)
- KProbe (communication trouble shooting utility)

For additional information see the Intellect II hardware user's manual, P/N 24633.

Valves:

<u>Configuration</u>	<u>Orifice</u>	<u>Distribution</u>	<u>non-distribution</u>	<u>Port Thread</u>
3-WAY	0.8mm	20463	18355	¼-28 UNF
3-WAY	0.059	17316	17315	¼-28 UNF
4-WAY	0.8mm	-----	20464	¼-28 UNF
4-WAY	0.059	17318	17317	¼-28 UNF
5-WAY	0.059	17748	17745	¼-28 UNF
6-WAY	0.8mm	24663	20465	¼-28 UNF
6-WAY	0.059	17320	17319	¼-28 UNF
8-WAY	0.076	19673	-----	¼-28 UNF
8-WAY	0.8mm	20466	20479	¼-28 UNF
8-WAY	0.059	17322	17321	¼-28 UNF
12-WAY	0.040	24493	-----	¼-28 UNF

Valve construction:

- Valve wetted surfaces have a Kel-F body insert and PTFE (Teflon) plug.
- Port connection is 1/4-28 UNF.

