





BLAIN PRODUCTS AVAILABLE FROM HYDRATEC

BLAIN NEW GENERATION CONTROL VVVF VALVE: EV4



12months on-site warranty

All our work comes with the assurance that any callbacks are covered including parts and labour



Our engineers are certified First Aiders so can even work when the site First Aider is absent

BLAIN

Hydratec have been installing Blain hydraulic valves and components since the foundation of our business. As a result, we have supplied and installed hundreds of Blain valves in a wide range of building types and heights. All successful and providing a long term and reliable solution for hydraulic elevator power systems.

With the introduction of Blain's new generation EV4-VVVF range, Hydratec are now supplying and installing these high performance, reliable, energy-efficient drive systems.

The Blain EV4-VVVF provides the widest choice of VVVF solutions offered to the elevator industry for high performance passenger elevators. EV4s are smooth, reliable and precise in operation throughout extreme load and temperature variations with inbuilt overload protection and offer a range of different energy saving modes. The EV4 system uses the control of Blain's VVVF drive in the up travel, while down travel is managed by the EV4 valve itself.

BENEFITS*

- · Improved ride comfort
- · Reduction in tank heat
- Lower power energy efficiency
- · Lower noise levels
- VVVF drive requires no additional electronic regulator for upwards or downwards movements
- · Simple responsive adjustment
- Self-cleaning main line filter (Z-T)
- Temperature and pressure compensations
- Built-in turbulence suppressors
- · Pressure gauge and shut off valve
- 70 HRc Rockwell hardened bore surfaces
- · Self-closing manual lowering
- 100% continuous duty solenoids
- Self-cleaning pilot line filters
- Compact and aesthetic design

Configured to work with a V1000 Yaskawa inverter, the Blain EV4 uses software, programmed to provide excellent travel characteristics. The software was designed to sense the load condition to allow essential compensation for the motor output. The software is also intelligent and modifies transition times, when necessary, to assure good ride quality. Moreover, Yaskawa inverter can be optionally used for the down travel to control down speed and to

improve ride quality without needing any modification on the EV4 valve. In order to allow accurate load compensation and to account for the effects of oil temperature variation, an inexpensive temperature sensor is included in the system.

The complete solution can be easily applied to all hydraulic lifts, by adding the EV4 valve and Yaskawa inverter to the existing system.

The EV4 solution – ideal for hydraulic modernisations without the need to replace the power unit or the elevator controller.





Technical Data	Unit	³ ⁄ ₄ " EV4	1 ½" & 2" EV4	2 ½" EV4
Flow Range	lpm (USgpm)	10-125 (2-33)	30-800 (8-212)	500-1530 (130-405)
Recommended Pressure Range	bar (psi)	8-55 (117-797)	8-55 (117-797)	8-55 (117-797)
Burst Pressure Z	bar (psi)	575 (8340)	505 (7324)	340 (4931)
Pressure Drop P–Z	bar (psi)	6 (88) at 125 lpm	4 (58) at 800 lpm	4 (58) at 1530 lpm
Weight	kg (lbs)	5 (11)	10 (22)	14 (31)

Oil Viscosity	25-75 cSt. at 40°C (104°F).		
Max. Oil Temperature	55°C (131°F)		
Solenoids AC	24 V/1.8 A, 42 V/1.0 A, 110 V/0.43 A, 230 V/0.18 A, 50/60 Hz.		
Solenoids DC	12 V/2.0 A, 24 V/1.1 A, 42 V/0.5 A, 48 V/0.6 A, 80 V/0.3 A, 110 V/0.25 A, 196 V/0.14 A.		
Insulation Class, AC and DC	IP 68		

See below*



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