





Servicechilled or hot water, up to 60% glycol max (open loop/steam not allowed)Flow Characteristicequal percentage or linearSize [mm]0.75" [20]End FittingNPT female endsBodyforged brass, nickel platedSensor Housingforged brass, nickel platedBallstainless steelStemstainless steelSeatTeflon® PTFESeat 0-ringEPDMCharacterized DiscTEFZEL® or stainless steelBody Pressure Rating [psi]360Media Temperature Range14°F to 250°F [-10°C to 120°C](Water)Differential Pressure Range5 to 50 psid, 1 to 50 psid (with flow reduction. See chart.), or 8 to 50 psid (with flow increase. See chart.)Close-Off Pressure200 psiInlet Length to Meet Specified Measurement Accuracy5X nominal pipe size (NPS)Ambient Humidity<95% RH non-condensingFlow Measurement Tolerance±2% *Flow Measurement Repeatability±0.5%Sensor Technologyultrasonic with glycol and temperature compensationRangeability100:1Power Supply for the Flow Sensorsensor is powered by the actuatorWeight4 lb [1.8 kg]	Technical Data	
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Stemstainless steelSeatTeflon® PTFESeat O-ringEPDMCharacterized DiscTEFZEL® or stainless steelBody Pressure Rating [psi]360Media Temperature Range14°F to 250°F [-10°C to 120°C](Water)14°F to 250°F [-10°C to 120°C]Differential Pressure Range5 to 50 psid, 1 to 50 psid (with flow reduction. See chart.), or 8 to 50 psid (with flow increase. See chart.)Close-Off Pressure200 psiInlet Length to Meet Specified Measurement Accuracy5X nominal pipe size (NPS)Flow Measurement Tolerance±2%*Flow Control Tolerance±5%Flow Measurement Repeatability±0.5%Sensor Technologyultrasonic with glycol and temperature compensationRangeability100:1Power Supply for the Flow Sensorsensor is powered by the actuatorWeight4 lb [1.8 kg]	Sensor Housing	forged brass, nickel plated
SeatTeflon® PTFESeat O-ringEPDMCharacterized DiscTEFZEL® or stainless steelBody Pressure Rating [psi]360Media Temperature Range (Water)14°F to 250°F [-10°C to 120°C]Differential Pressure Range5 to 50 psid, 1 to 50 psid (with flow reduction. See chart.), or 8 to 50 psid (with flow increase. See chart.)Close-Off Pressure200 psiInlet Length to Meet Specified Measurement Accuracy5X nominal pipe size (NPS)Flow Measurement Tolerance±2%*Flow Measurement Repeatability±0.5%Sensor Technologyultrasonic with glycol and temperature compensationRangeability100:1Power Supply for the Flow Sensorsensor is powered by the actuatorWeight4 lb [1.8 kg]	Ball	stainless steel
Seat O-ring   EPDM     Characterized Disc   TEFZEL® or stainless steel     Body Pressure Rating [psi]   360     Media Temperature Range (Water)   14°F to 250°F [-10°C to 120°C]     Differential Pressure Range   5 to 50 psid, 1 to 50 psid (with flow reduction. See chart.), or 8 to 50 psid (with flow increase. See chart.)     Close-Off Pressure   200 psi     Inlet Length to Meet Specified Measurement Accuracy   5X nominal pipe size (NPS)     Ambient Humidity   <95% RH non-condensing	Stem	stainless steel
Characterized DiscTEFZEL® or stainless steelBody Pressure Rating [psi]360Media Temperature Range (Water)14°F to 250°F [-10°C to 120°C]Differential Pressure Range5 to 50 psid, 1 to 50 psid (with flow reduction. See chart.), or 8 to 50 psid (with flow increase. See chart.)Close-Off Pressure200 psiInlet Length to Meet Specified Measurement Accuracy5X nominal pipe size (NPS)Flow Measurement Tolerance±2%*Flow Measurement Repeatability±0.5%Sensor Technologyultrasonic with glycol and temperature compensationRangeability100:1Power Supply for the Flow Sensorsensor is powered by the actuatorWeight4 lb [1.8 kg]	Seat	Teflon® PTFE
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Media Temperature Range   14°F to 250°F [-10°C to 120°C]     (Water)   14°F to 250°F [-10°C to 120°C]     Differential Pressure Range   5 to 50 psid, 1 to 50 psid (with flow reduction. See chart.), or 8 to 50 psid (with flow increase. See chart.)     Close-Off Pressure   200 psi     Inlet Length to Meet Specified   5X nominal pipe size (NPS)     Measurement Accuracy   5% RH non-condensing     Flow Measurement Tolerance   ±2%*     Flow Measurement Repeatability   ±0.5%     Sensor Technology   ultrasonic with glycol and temperature compensation     Rangeability   100:1     Power Supply for the Flow Sensor   sensor is powered by the actuator     Weight   4 lb [1.8 kg]	Characterized Disc	TEFZEL® or stainless steel
(Water)   5 to 50 psid, 1 to 50 psid (with flow reduction. See chart.), or 8 to 50 psid (with flow increase. See chart.)     Close-Off Pressure   200 psi     Inlet Length to Meet Specified   5X nominal pipe size (NPS)     Measurement Accuracy   5%     Ambient Humidity   <95% RH non-condensing	Body Pressure Rating [psi]	360
Differential Pressure Range   5 to 50 psid, 1 to 50 psid (with flow reduction. See chart.), or 8 to 50 psid (with flow increase. See chart.)     Close-Off Pressure   200 psi     Inlet Length to Meet Specified   5X nominal pipe size (NPS)     Measurement Accuracy   5%     Ambient Humidity   <95% RH non-condensing	Media Temperature Range	14°F to 250°F [-10°C to 120°C]
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flow increase. See chart.)     Close-Off Pressure   200 psi     Inlet Length to Meet Specified   5X nominal pipe size (NPS)     Measurement Accuracy   -     Ambient Humidity   <95% RH non-condensing	Differential Pressure Range	
Close-Off Pressure   200 psi     Inlet Length to Meet Specified   5X nominal pipe size (NPS)     Measurement Accuracy   5X nominal pipe size (NPS)     Ambient Humidity   <95% RH non-condensing		,
Inlet Length to Meet Specified   5X nominal pipe size (NPS)     Measurement Accuracy   5X nominal pipe size (NPS)     Ambient Humidity   <95% RH non-condensing	Close Off Pressure	,
Measurement Accuracy   Ambient Humidity <95% RH non-condensing		•
Ambient Humidity   <95% RH non-condensing	ů l	5X hommal pipe size (NPS)
Flow Measurement Tolerance   ±2%*     Flow Control Tolerance   ±5%     Flow Measurement Repeatability   ±0.5%     Sensor Technology   ultrasonic with glycol and temperature compensation     Rangeability   100:1     Power Supply for the Flow Sensor   sensor is powered by the actuator     Weight   4 lb [1.8 kg]		<95% RH non-condensing
Flow Measurement Repeatability ±0.5%   Sensor Technology ultrasonic with glycol and temperature compensation   Rangeability 100:1   Power Supply for the Flow Sensor sensor is powered by the actuator   Weight 4 lb [1.8 kg]		5
Sensor Technology ultrasonic with glycol and temperature compensation   Rangeability 100:1   Power Supply for the Flow Sensor sensor is powered by the actuator   Weight 4 lb [1.8 kg]	Flow Control Tolerance	±5%
Sensor Technologyultrasonic with glycol and temperature compensationRangeability100:1Power Supply for the Flow Sensorsensor is powered by the actuatorWeight4 lb [1.8 kg]	Flow Measurement Repeatability	±0.5%
compensationRangeability100:1Power Supply for the Flow Sensorsensor is powered by the actuatorWeight4 lb [1.8 kg]		ultrasonic with glycol and temperature
Power Supply for the Flow Sensor sensor is powered by the actuator   Weight 4 lb [1.8 kg]		0,5
Weight 4 lb [1.8 kg]	Rangeability	100:1
	Power Supply for the Flow Sensor	sensor is powered by the actuator
	Weight	4 lb [1.8 kg]
GPM   6.5	GPM	6.5
Leakage 0%	Leakage	0%

#### Application

Water-side control of heating and cooling systems for AHUs and water coils. Equal Percentage/ Linear: heating and cooling applications.

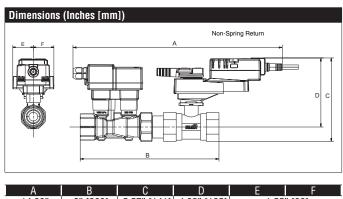
### Operation

The Electronic Pressure Independent Control Valve is a two-way valve that maintains constant flow regardless of pressure variations in the system.

### **Product Features**

Provides constant flow regardless of pressure variations in the system. Maximizes chiller P, preventing energizing additional chillers due to low T. Simplified valve sizing and selection, no Cv calculations required.

Suitable Actuators			
	Non-Spring	Electronic Fail-Safe	
P2075S-065	LR	AKRX	



A	В	С	D	E	F
14.83" [377]	8" [203]	5.57" [141]	4.92" [125]	1.55	" [39]

\*All flow tolerances are at 68°F (20°C) & water.



Dimensions (Inches [mm])		
	Electronic Fail-Safe	
A 16.63" [422]	B     C     D     E     F       8" [203]     8.11" [195]     7.06" [179]     1.89" [48]	



## LRX24-EP-MOD



Technical Data	
Power Supply	24 VAC, ±20%, 50/60 Hz, 24 VDC, ±10%
Power Consumption Running	3.5 W
Transformer Sizing	6 VA (class 2 power source)
Electrical Connection	3ft [1m], 18 GA plenum cable with 1/2" conduit connector
Overload Protection	electronic thoughout 0° to 90° rotation
Operating Range Y	2 to 10 VDC (default) VDC variable
Input Impedance	100 kΩ (0.1 mA), 500 Ω
Feedback Output U	2 to 10 VDC (default) VDC variable
Angle of Rotation	90°
Nominal torque	Min. 45 in-Ibs [5 Nm]
Direction of Rotation (Motor)	reversible with pc tool
Position Indication	integrated into handle
Manual Override	external push button
Ambient Humidity	5 to 95% RH non condensing (EN 60730-1)
Ambient Temperature Range	-22°F to 122°F [-30°C to 50°C]
Storage Temperature Range	-40°F to 176°F [-40°C to 80°C]
Housing	NEMA 2, IP54
Housing Material	UL94-5VA
Agency Listings†	cULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1:02, CE acc. to 2004/108/EC and 2006/95/EC
Noise Level (Motor)	max. 35 dB (A)
Servicing	maintenance free
Quality Standard	ISO 9001
Weight	1.5 lb [0.7 kg]
Degree of Protection IEC/EN	IP54

 $\ensuremath{\mathsf{TRated}}$  Impulse Voltage 800V, Type action 1.B , Control Pollution Degree 3.



# LRX24-EP-MOD

### Wiring Diagrams

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### 🔀 INSTALLATION NOTES

Provide overload protection and disconnect as required.

Actuators may be connected in parallel. Power consumption and input impedance must be observed.

Actuators may also be powered by 24 VDC.

Actuators are provided with color coded wires. Wire numbers are provided for reference.

Actuators are provided with a numbered screw terminal strip instead of a cable.

IN4004 or IN4007 diode required

Meets cULus requirements without the need of an electrical ground connection.

### WARNING! LIVE ELECTRICAL COMPONENTS!

During installation, testing, servicing and troubleshooting of this product, it may be necessary to work with live electrical components. Have a qualified licensed electrician or other individual who has been properly trained in handling live electrical components perform these tasks. Failure to follow all electrical safety precautions when exposed to live electrical components could result in death or serious injury.

