

# Electronic and Pneumatic Drains

Condensate Management Solutions

Energy efficient electronic and pneumatic drains reliably remove condensate from compressed air systems in an environmentally friendly manner.



## The Importance of Drains in Optimising your Compressed Air System

Compressed air contains a certain amount of water vapor depending on the temperature and the percentage of saturation. Once the air temperature drops below the dew point, water vapor begins to condense. If this condensate comes in contact with tools or equipment, it can cause serious damage, including corrosion or contamination.

No-loss drains are critical to the reliability and energy efficiency of your compressed air system by removing this harmful condensate without compressed air loss.

### Where Condensate Occurs

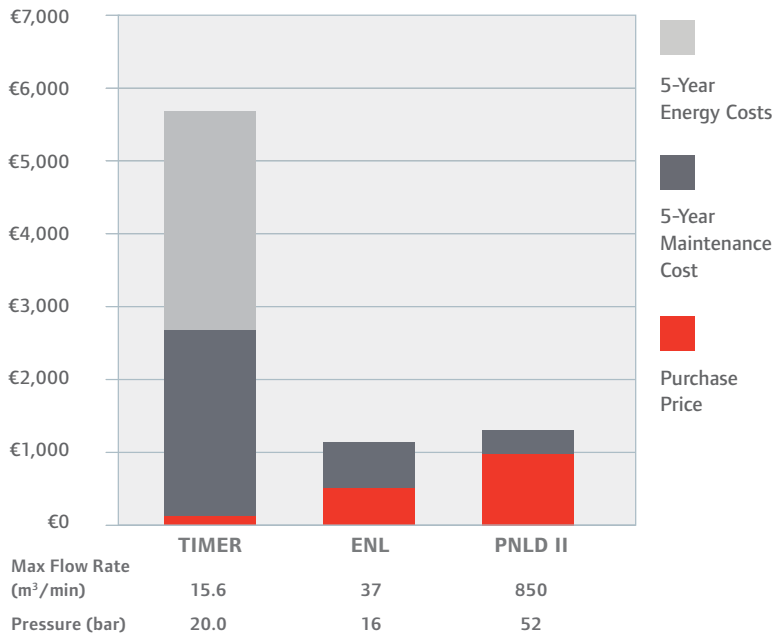
Up to 70% of the moisture is removed from compressed air as it passes through the after-cooler—the remaining condensate can collect in many areas throughout your compressed air system. Hence drains may be necessary throughout your operation.



# Which Drain is Right for You?

Choosing the right drain depends on your specific application and capital requirements. Although the EDV has a significantly lower purchase price, both the ENL and the PNL D II have a lower total cost of ownership due to lower maintenance and energy costs. **As your trusted partner in compressed air, let your Ingersoll Rand representative help you make the right choice!**

## 5-Year Total Cost Comparison



### Condensate Drain Offering

**GOOD**



**EDV**

- Timer-controlled drain
- Low initial investment
- NEMA 4/IP65 rating
- Easy to install

**BETTER**



**ENL**

- Electronic control sensor
- Drains on demand
- NEMA 4/IP67 rating
- Easy maintenance
- No air loss

**BEST**



**PNL D II**

- Robust pneumatic design
- Large orifices, clog free
- No electricity required
- No consumable parts
- No air loss



## Electronic Timer-Controlled Drain Valves (EDV)

The timer-controlled drain valve is a full featured, automatic electronic drain valve that effectively removes condensate on a timed basis. Easy to use, its compact footprint makes it a versatile choice for any air system component where a simple design is sufficient.

### Timer-Controlled EDV Features

- **Timer-controlled dials** for easy operation
- **Electronic design** operates at either 110/120 V or 230/240 V
- **NEMA 4/IP65 enclosure** enhances protection against water and particulates
- **Compact size** for confined spaces, mounts in any orientation
- **Y-strainer with mesh filter screen and ball valve** prevents clogging and simplifies maintenance
- **Bright LED indicator lights** signify when electrical power is on and valve is open
- **Test switch** for manual override to actuate drain
- **Enhanced safety** through CE & UL agency approved components

EDV Features			
Feature	Data	Feature	Data
Timer Interval	0.5-45 minutes	Manual Override	Yes
Drain Cycle	0.5-10 seconds	Seals	Viton®
Maximum Air Pressure	2.3 mm-17.25 barg/11.1 mm-20.0 barg	Indicator Lights	Bright LED
Weight	2.3 mm-660 g/11.1 mm-990 g	Controls	Large, easy to read and adjust
Operating Temperature		Mounting	NPT connections
Fluid	1°C - 129°C (33°F-265°F)	Enclosure	NEMA 4/IP65
Ambient	-16°C - 52°C (4°F-125°F)	Valve Body	Low lead brass (≤ 0.5%)



## Electronic No-Loss Drains (ENL)

The ENL features a drain-on-demand design to eliminate air loss and clogging while reducing energy costs. Designed to work with a wide range of compressors and accessories, its lightweight, compact design makes it easy to use in confined spaces. With a variety of models, connections and accessories, as well as the ability to operate across a wide range of voltages and flow rates, the ENL provides a condensate drain for virtually any heavy-duty application.

### ENL Features

- **Energy saving** electronic, zero air loss design
- **Water-tight NEMA 4/IP67 enclosure** protects electronics
- **Robust internal components** are compatible with all coolants and withstand debris
- **Large inlet orifices and durable membrane** prevent clogging
- **Complete service unit** (ENL 2, 5 & 10) or wearing parts kit simplifies maintenance
- **Intelligent sensing system** operates with any mixture of oil and water
- **Remote alarm** indicates blockage, overflow and power loss

ENL Features			
Feature	Data	Feature	Data
Enclosure	NEMA 4/IP67	Heating Element	110/120 V or 230/240 V
Maximum Operating Pressure	Up to 63 bar (915 psi)	Inlet Size	0.5-1.0 BSP
Maximum Volume	1,415 m <sup>3</sup> /min (50,000 cfm)	Discharge Size	0.5 BSP



## Pneumatic No-Loss Drains (PNLD II)

The PNLD II line of fully pneumatic no-loss drains easily removes condensate with high levels of rust and oil, while eliminating air loss, even at elevated pressure.

The PNLD II requires no electricity, pre-settings or manual intervention, making it ideal for use in commercial and industrial applications. Designed to work with a variety of system components, the PNLD II is easy to install and operates virtually clog-free.

### PNLD II Features

- **Automatically purges condensate** when it reaches a certain level
- **Clear cylinder** allows for easy visual inspection
- **Automatically shuts off** when condensate is evacuated
- **Viton® seals, stainless steel float and actuating cylinder** prevent deterioration and corrosion
- **Full-port ball valve** reduces clogging
- **High volume capacity**, up to 850 m<sup>3</sup>/min (30,000 cfm)
- **Extended maximum operating pressure** up to 750 psi (51 bar)
- **Works with high temperature liquids** up to 82°C (180°F)
- **100% stainless steel component option** available to further resist rust, corrosion and contaminants

PNLD II Features		
Feature	Standard PNLD II	Stainless Steel PNLD II
Ball Valve	Brass (Stainless Steel for HP Model)	Stainless Steel
Ball and Stem	Stainless Steel	Stainless Steel
Float	Stainless Steel	Stainless Steel
Seat	Stainless Steel	Stainless Steel
Seals	Viton®	Viton®
Heads	Aluminum Alloy	Stainless Steel
Trigger	Aluminum Alloy	Stainless Steel
Rods and Nuts	Zinc-plated Steel	Stainless Steel

EDV Drain Offering								
EDV Drain Plug Type	Orifice (mm)	Inlet Size BSP in	Outlet Size BSP in	Max. Air Pressure bar g	Air Flow (m <sup>3</sup> /min)			CPN
					Compressor	Dryer	Filter	
F	2.3	0.5	0.25	17.25	2.27	22.65	283.17	47575947001
F	11.1	0.5	0.25	20.00	2.27	22.65	283.17	47575948001
F	11.1	0.5	0.5	20.00	15.57	155.74	283.17	47575949001
G	2.3	0.5	0.25	17.25	2.27	22.65	283.17	47575950001
G	11.1	0.5	0.25	20.00	2.27	22.65	283.17	47575951001
G	11.1	0.5	0.5	20.00	15.57	155.74	283.17	47575952001
Cord No Plug	2.3	0.5	0.25	17.25	2.27	22.65	283.17	47575953001
Cord No Plug	11.1	0.5	0.25	20.00	2.27	22.65	283.17	47575956001
Cord No Plug	11.1	0.5	0.5	20.00	15.57	155.74	283.17	47575957001

EDV Drain Accessories and Components	
Part Number	CPN
0.25" Male BSP Valve Connection	47575958001
0.50" Male BSP Valve Connection	47575959001
Stainless Steel Filter Screen	38000154

ENL Drain Offering									
Model	Inlet Size BSP in	Discharge Size BSP in	Max. Operating Pressure bar g	Air Flow (m <sup>3</sup> /min)			CPN		
				Compressor	Dryer	Filter	115V	230V	
ENL 2	0.5	0.25	16	3	6	28	38445920	38445938	
ENL 5	0.5	0.25	16	6	13	64	38445946	38445953	
ENL 10	0.5	0.5	16	14	28	142	38478939	38478947	
ENL 30	0.5	0.5	16	37	74	368	38445961	38445979	
ENL 100	0.75	0.5	16	142	283	1,416	38445987	38445995	
ENL 1000	1	0.5	16	1,416	2,832	14,158	38446001	38446019	
ENL 6 HP	0.5	0.5	63	8	16	79	38446027	38446035	
ENL 30 HP	0.5	0.5	50	37	74	368	38446043	38446050	

ENL Accessories		
Description	Model	CPN
Heating Element	All 110/120V	38446068
Heating Element	All 230/240V	38446084
Insulation Shell	ENL 6HP	38446076
Insulation Shell	ENL 30 & 30HP	38448585
Insulation Shell	ENL 100	38446092

ENL Maintenance Kits		
Description	Model	CPN
Complete Service Unit	ENL 2	38446100
Complete Service Unit	ENL 5	38446118
Complete Service Unit	ENL 10	38478921

ENL Maintenance Kits		
Description	Model	CPN
Wearing Parts Kit	ENL 30	38446134
Wearing Parts Kit	ENL 100	38446142
Wearing Parts Kit	ENL 1000	38446159
HP Wearing Parts Kit	ENL 6 HP	38446126
HP Wearing Parts Kit	ENL 30 HP	38448403

PNLD II Drain Offering					
Model	Description	Max. Operating Pressure bar g	Control Air bar g	Max. Air Flow (m <sup>3</sup> /min)	CPN
PNLD II 28 LP	Drain Standard	31	2.8-8.9	850	38445490
PNLD II 28 MP	Drain Standard	31	3.8-8.9	850	38444345
PNLD II 28 HP	Drain Standard	52	3.8-8.9	850	38445508
PNLD II 28 LP	Drain Stainless Steel	31	2.8-8.9	850	47575756001
PNLD II 28 MP	Drain Stainless Steel	31	3.8-8.9	850	47575757001
PNLD II 28 HP	Drain Stainless Steel	52	3.8-8.9	850	47575758001

PNLD II 28 Standard with Added Features	
Part Number	CPN
PNLDII-28 MP, with 230V Heater	38060760

PNLD II 28 Drain Accessories	
Description	CPN
120 V Heater Option	38441200
230 V Heater Option	38463881
Kit, BSP Adapter Fittings, Stainless	47575763001



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