

Servicing Your Pneumatic Needs For Over 40 Years

DURATEC AIRLINE PIPING System

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Features and Specifications for Duratec Airline Piping System

Duratec® is an innovative compressed air and inert gas distribution system designed to be leak proof, installed quickly, easily, and maintained cost-effectively. As a result, the Duratec® Airline Piping System saves you time and money.

Traditional metallic compressed air systems are a main cause of unnecessary energy use, excessive wear and tear on compressors and high consumption of compressor oils and filters. Corrosion and leakage at pipe joints and fitting connections which often go undetected until they are discovered during a detailed compressed air system audit.

Duratec® pipe comes in 100' or 300' coils, which significantly reduces the number of joints in your system. Duratec® fittings feature unique double O-ring seals to ensure long-term joint integrity. The entire Duratec® system can be easily and quickly installed, modified or expanded without the need for specialized equipment.

All compressed air and inert gas pipe in sizes 1" and smaller are PE-AL-PE composite pipe made with raised temperature polyethylene and aluminum conforming to ASTM F1282 and CAS B127.9.

All compressed air and inert gas fittings in sizes 1" and smaller are nickel plated brass (or stainless steel limited options) and shall conform to the dimensional and physical requirements of ASTM F1974 and CSA B137.9.

FEATURES

- Low installation costs.
- Quick installation.
- Ease of handling.
- Fewer fittings used.
- Quick removable connections.
- Flexible yet rigid.
- Low operating costs.

ODECIEICATIONS

- Extended life.
- Meets OSHA and NSF standards.

Plant Air.

- Inert Gas Distribution.
- Manufacturing hand tool operation.
- Manual and automated welding operations.

USES

- Semi-Conductor tool hook up.
- Valve actuation control systems.
- Microbulk inert gas delivery systems
- Robotic Installations.

| SPECIFICATIONS | | |
|-----------------------------------|----------------------------------|----------------------|
| TEMPERATURE RANGE | OPERATION PRESSURE | QUICK BURST PRESSURE |
| 34°F to 200°F (1.1°C - 93.3°C) | 200 PSI @73°F 160 PSI @ 140°F | 800 PSI |

Low Installation Costs: Duratec reduces costs on a typical installation not only for materials but also for labor and transportation costs when compared to traditional materials. How? Duratec's lightweight construction and simple assembly procedures.

Ease of Handling: Duratec is 75% lighter than the equivalent diameter of copper and SCH 40 Carbon Steel.

Quick Removable Connections: Threading is not required. All joints have double O-ring seals and can be quickly assembled or disassembled. Easy on-site modifications and repairs can be made.

Quick Installation: No special training or equipment is required to complete a Duratec system.

Clean: All Duratec pipe is packaged in cardboard boxes preventing contamination before use. The smooth PE-RT inner layer cannot rust, corrode or form loose scale. Clean air remains clean throughout the life of the system.

Flexible Yet Rigid: Due to its composite structure, Duratec pipe can be easily bent by hand and will maintain its desired shape up to the bending radus of five (5) times the diamter of the pipe. This unique feature allows for straight, professional looking installation and eliminates sagging.

Lower Operating Costs: Due to Duratec's advantages over metal systems, it costs you less time, labor and money to keep a Duratec system in optimal condition.

Pressure loss means money loss: Metal systems can lose pressure due to pin-hole leaks and leakage at connections, all of which result in increased energy costs. Duratec's high-quality construction, on the other hand, guarantees consistent pressure for years to come.

Smooth Interior: Less friction means lower pressure drops and higher low rates. This may allow for smaller pipe sizes to be used.

Extended Life: Duratec is designed not to rust, scale or pit. Once properly selected for the application and correctly installed, Duratec Airline Systems will provide years of maintenance-free service.

Corrosion Resistant: Duratec's tough outer PE-RT (Polyethylene of Raised Temperature) layer protects it against corrosion and deterioration and ensures long service life even in the most aggressive manufacturing environments. Its inner PE-RT layer is unaffected by inert gasses and commonly used compressor oils. Combined with its industrial nickel-plated Duratec fittings, the system provides long-term performance superior to metal piping systems.

Fewer Fittings: Duratec pipe comes in convenient 100' and 300' coils eliminating several joints and the need for threading, or soldering.

Safe: Duratec's unique composite construction means that accidental impact or puncture of the pipe results in a safe, ductile mode of failure. Duratec pipe has been third-party tested and certified to stringent OSHA safety requirements for compressed air systems, standards that guarantee safety comes first.

Performance: Duratec pipe and fittings are engineered to provide top-notch performance. Rated for long term continuous operating pressures of 200 PSI at 73°F and 160 PSI at 140°F, Duratec pipe and fitting assemblies are also capable of sustaining quick burst pressures in excess of 800 PSI. Duratec pipe can be placed underground as long as it is below the frost line.



| Part # | ID Pipe | Lis | st Price | QTY | F | kg Price |
|---------------|---------|-----|----------|------|----|----------|
| PCDP-500-4 | 1/2" | \$ | 2.88 | 100' | \$ | 288.38 |
| PCDP-500-4-R | 1/2" | \$ | 2.88 | 300' | \$ | 865.14 |
| PCDP-750-4 | 3/4" | \$ | 4.44 | 100' | \$ | 443.71 |
| PCDP-750-4-R | 3/4" | \$ | 4.44 | 300' | \$ | 1,331.13 |
| PCDP-1000-4 | 1" | \$ | 5.88 | 100' | \$ | 587.86 |
| PCDP-1000-4-R | 1" | \$ | 5.88 | 300' | \$ | 1,763.58 |



| Part # | Pipe-In A | Pipe-In B | QTY | Pk | g Price |
|------------|-----------|-----------|-----|----|---------|
| PC56D-810 | 1/2" | 3/4" | 1 | \$ | 49.32 |
| PC56D-1012 | 3/4" | 1" | 1 | \$ | 71.36 |



| Part # | Pipe-In | NPT F | QTY | List Price |
|----------|---------|-------|-----|-------------|
| PC57D-88 | 1/2" | 1/2" | 1 | \$ 30.18 |



| Part # | Pipe-In | QTY | List Price |
|----------|---------|-----|-------------|
| PC61D-8 | 1/2" | 1 | \$ 18.76 |
| PC61D-10 | 3/4" | 1 | \$ 35.94 |
| PC61D-12 | 1" | 1 | \$ 52.63 |



| Pipe-In | QTY | | List Price |
|---------|--------------|------------------|------------------------|
| 1/2" | 1 | \$ | 23.71 |
| 3/4" | 1 | \$ | 59.13 |
| 1" | 1 | \$ | 102.49 |
| | 1/2" 3/4" | 1/2" 1 3/4" 1 | 1/2" 1 \$ 3/4" 1 \$ |

ADAPTER



| Part # | Pipe-In | Tube | QTY | List Price |
|------------|---------|------|-----|----------------|
| PC63D-88 | 1/2" | 1/2" | 1 | \$ 29.54 |
| PC63D-1010 | 3/4" | 3/4" | 1 | \$ 54.21 |
| PC63D-1212 | 1" | 1" | 1 | \$ 98.46 |



| Part # | Pipe-In | QTY | List Price |
|----------|---------|-----|--------------|
| PC64D-8 | 1/2" | 1 | \$ 47.40 |
| PC64D-10 | 3/4" | 1 | \$ 85.26 |
| PC64D-12 | 1" | 1 | \$ 152.86 |



| Part # | Pipe A | Pipe B | Pipe C | QTY | Li | st Price |
|---------------|--------|--------|--------|-----|----|----------|
| PC64DR-1088 | 3/4" | 1/2" | 1/2" | 1 | \$ | 50.28 |
| PC64DR-10810 | 3/4" | 1/2" | 3/4" | 1 | \$ | 74.85 |
| PC64DR-10108 | 3/4" | 3/4" | 1/2" | 1 | \$ | 74.85 |
| PC64DR-12128 | 1" | 1" | 1/2" | 1 | \$ | 131.01 |
| PC64DR-121010 | 1" | 3/4" | 3/4" | 1 | \$ | 98.56 |
| PC64DR-121210 | 1" | 1" | 3/4" | 1 | \$ | 145.78 |



| Part # | Pipe-In | QTY | List Price |
|------------|---------|-----|-------------|
| PC65D-88 | 1/2" | 1 | \$ 26.67 |
| PC65D-1010 | 3/4" | 1 | \$ 67.94 |

| FEMALE CONNECTOR |
|------------------|
| |

| Part # | Pipe-In | NPT F | QTY | List Price |
|------------|---------|-------|-----|-------------|
| PC66D-88 | 1/2" | 1/2" | 1 | \$ 20.28 |
| PC66D-1010 | 3/4" | 3/4" | 1 | \$ 39.25 |
| PC66D-1212 | 1" | 1" | 1 | \$ 66.92 |

FEMALE TEE



| Part # | Pipe-In | NPT F | QTY | List Price |
|-------------|---------|-------|-----|-------------|
| PC67D-888 | 1/2" | 1/2" | 1 | \$ 43.36 |
| PC67D-10108 | 3/4" | 1/2" | 1 | \$ 48.36 |

MALE CONNECTOR

| Part # | Pipe-In | NPT M | QTY | List Price |
|------------|---------|-------|-----|-------------|
| PC68D-88 | 1/2" | 1/2" | 1 | \$ 18.97 |
| PC68D-1010 | 3/4" | 3/4" | 1 | \$ 38.92 |
| PC68D-1212 | 1" | 1" | 1 | \$ 60.25 |



| Part # | Pipe-In | NPT M | QTY | I | List Price |
|---------------|---------|-------|-----|----|------------|
| PC68D-88-SS | 1/2" | 1/2" | 1 | \$ | 58.17 |
| PC68D-1212-SS | 1" | 1" | 1 | \$ | 141.85 |



| Part # | Pipe-In | QTY | List Price |
|----------|---------|-----|--------------|
| PCDBV-8 | 1/2" | 1 | \$ 81.86 |
| PCDBV-10 | 3/4" | 1 | \$ 106.43 |
| PCDBV-12 | 1" | 1 | \$ 141.67 |



| Part # | NPT M | NPT F | QTY | L | ist Price |
|-----------|-------|-------|-----|----|-----------|
| PCDWB-108 | 3/4" | 1/2" | 1 | \$ | 237.24 |



| Part # | Pipe Size | QTY | List Price |
|----------|-----------|-----|------------|
| PCDPC-8 | 1/2" | 1 | \$ 2.88 |
| PCDPC-10 | 3/4" | 1 | \$ 3.06 |
| PCDPC-12 | 1" | 1 | \$ 4.54 |



| Part # | ID | List | t Price | QTY | Pk | g. Price | |
|---|----|------|---------|-----|----|----------|--|
| PCDOR-12 | 1" | \$ | 1.06 | 50 | \$ | 53.13 | |
| Mara sizes available for energial order | | | | | | | |

More sizes available for special order



| Part # | ID | List | t Price | QTY | Pł | kg. Price | |
|--|----|------|---------|-----|----|-----------|--|
| PCDSR-12 | 1" | \$ | 4.08 | 50 | \$ | 207.17 | |
| More sizes available for special order | | | | | | | |

| | BENDING S | BENDING SPRING | | | |
|----------|-----------|----------------|----|----------|--|
| | COMI | GE Ng N | | | |
| Part # | ID | QTY | Li | st Price | |
| PCDBS-12 | 1" | 1 | \$ | 162.50 | |

More sizes available for special order

| | BEVELING | | | |
|--------|---------------------------|-----|----------|----------|
| Part # | ID | QTY | - Li: | st Price |
| PCBEV | 3/8" - 1" | 1 | \$ | 22.81 |
| | PIPE CUTTI REPLACEMENT | | | |
| Part # | ID | QTY | Li | st Price |

3/8 - 1"

SS BLADES

\$

\$

1

68.75

35.88

PCDTC

PCDRB

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