Parker Hannifin Pneumatic V1.0
AUTOMATION STUDIO™ CATALOGUE

Famic Technologies Inc. is proud to present the latest version of the **Parker Hannifin Catalogue for Automation Studio™**! All of the digital products in this virtual Catalogue are pre-configured with Parker Hannifin's latest technical specifications and are compatible with the **Pneumatic Workshop of Automation Studio™ 6.4**. Users may now quickly get access to Parker components for their systems integration and spend less time developing component models.

The Catalogue features include a Product Configurator compatible with the manufacturer product options, technical documentation, product images and virtual test benches for user convenience. This complimentary package of Automation Studio™ has been developed in accordance with Famic's software certification process.

Catalogue Product List

The components have been categorised on the basis of the product family, as specified on Parker Hannifin's website (http://ph.parker.com/us/17571/en/pneumatics-division-pnd). The following products are now available in this Catalogue:

Pneumatic Solenoid Valve
- Viking Lite Series - [P2LAZ, P2LBZ, P2LCZ]
- Viking Xtreme Series - [P2LAX, P2LBX, P2LCX, P2LDX]
- XM Series
- N Series
- Adex Series - [A00,A05,A12]
- Cyclone Series - [7]
- B3 Series - [B3]
- B5 Series - [B5]
- B6 Series - [B6]
- B7 Series - [B7]
- B8 Series - [B8]

Pneumatic Manual Valve
- Viking Xtreme Manual Series - [P2LAX, P2LBX, P2LCX, P2LDX]
- HV Series
- VL Series
- PL Series
- M0 Series
- DirectAir 4 Series - [52]
- 42 Series
- DirectAir 2 Series - [40,41]

Pneumatic Cylinders
- Pneumatic Guided Cylinder Slide - P5T Series
- Pneumatic ISO/VDMA Cylinder - P1D Series
- Pneumatic NFPA Cylinder - 4MA Series
- Pneumatic Round Body Cylinder - SR_SRM Series
- Rodless Pneumatic Cylinders, Standard - Origa OSP-P Series
- Pneumatic Compact Cylinder - LP Series
- Pneumatic Compact Cylinder - P1Q Series (Economy)
- Pneumatic Guided Cylinder Slide - HBC Series
- Pneumatic Guided Cylinder Slide - HBR Series
- Pneumatic Guided Cylinder Slide - HBT Series
- Pneumatic Guided Cylinder Slide - P5E Series
- Pneumatic Guided Cylinder Slide - P5L-B Series
- Pneumatic Guided Cylinder Slide - P5L-R Series
- Pneumatic Guided Cylinder Slide - P5L-T Series
- Pneumatic ISO Cylinder - P1A Series (Non-Repairable)
- Pneumatic Rodless Cylinder - P1X Series
- Pneumatic Round Body Cylinder - P Series
- Pneumatic Round Body Cylinder - SRD_SRDM Series

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- Pneumatic Round Body Cylinder - SRG_SRGM Series
- Pneumatic Non-Rotating Piston Rod Cylinder - 2MNR
- Pneumatic Round Body Cylinder - SRX Series
- Pneumatic Guided Cylinder – XLB
- Pneumatic Guided Cylinder – XLR
- Pneumatic Guided Cylinder – XLT
- Pneumatic Guided Cylinder Slide - HBB Series

Pneumatic Rotary Actuators
- B671/F672 Series (Heavy Duty Rack-and-Pinion) - [B671, F672,F172]
- HP Series (Large Bore Rack-and-Pinion)
- PRN Series (Vane)
- PTR Series (Rack-and-Pinion)
- PV Series (Vane)

Air Preparation Accessories
- Muffler / Reclassifiers
- Pressure Switch - PPS1 Series
- Dump Valve - [06T,07T]
- Global Dump Valve - [P31D,P32D]
- Soft Start / Dump Valve - [06S,07S]
- Global Soft Start / Dump Valve - [P3YT,P31T,P32T,P33T]
- Soft Start Valve - [06P, 07P]
- Global Soft Start Valve - [P3YS,P31S,P32S]

Compressed Air Filters
- Global Compact Coalescing Filter - P32F Series
- Global Hi - Flow Coalescing Filter - P3YF Series (Oil Removal)
- Global Miniature Coalescing Filter - P31F Series
- Global Particulate Filter - [P31F, P32F,P33F,P3YF]
- Global Standard Coalescing Filter - P33F Series

- Bulk Liquid Separators - P3TF Series
- Compact Coalescing Filter - 11F Series, Prep - Air II (Oil Removal)
- Economy Coalescing Filter - 15F Series, Prep - Air II (Oil Removal)
- Hi- Flow Coalescing Filter - [F701,P3NF,35F,43F]
- Main Line Particulate Filter - 35F/43F Series (High - Flow)
- Miniature Coalescing Filter – [02F,10F]
- Particulate Filter - [02F,05F,06F,07F,14F,F602,P3NF]
- Stainless Steel Particulate Filter - [PF10,PF504]
- Standard Coalescing Filter – [12F,PF11]

Filter Regulator Lubricator (FRL) Combinations
- Global Hi - Flow Modular FRL Combo - P3YCA Series
- Global Hi - Flow Modular FRL Combo - P3YCB Series
- Mini Global Modular FRL Combo -P31 Series
- Compact Global Modular FRL Combo - P32 Series
- Standard Global Modular FRL Combo - P33 Series
- Compact Modular 2 - Unit Micro-Mist FRL Combo - 16H ,6H Series
- Compact Modular 3 - Unit Micro - Mist FRL Combo - 16B, 06B Series
- Hi - Flow Modular 2 - Unit Mist FRL Combo - P3NCA, P3NCB Series
- Standard Modular 2 - Unit Micro - Mist FRL Combo - 17H , 07H Series
- Standard Modular 3 - Unit Micro Mist FRL Combo - 17B, 07B Series

Pipe Nippled FRL Combinations
- Pipe Nippled FRL 3-Piece Combo - C628 Series
- Pipe Nippled FRL 2-Piece Combo - 17G Series
- Pipe Nippled FRL 3-Piece Combo - 17A Series
- Pipe Nippled FRL 3-Piece Combo - 16G Series
- Pipe Nippled FRL 3-Piece Combo - 16A Series
- Pipe Nippled FRL 3-Piece Combo - 14A Series
- Pipe Nippled FRL 2-Piece Combo - 07G Series
- Pipe Nippled FRL 3-Piece Combo - 07A Series
- Pipe Nippled FRL 2-Piece Combo - 06G Series
- Pipe Nippled FRL 3-Piece Combo - 06A Series
- Pipe Nippled FRL 2-Piece Combo - 14G Series

Filter Regulators
- Global Hi-Flow Filter Regulator - P3YE Series
- Global Modular Compact Filter Regulator - P32E Series
- Global Modular Mini Filter Regulator - P31E Series
- Global Modular Semi-Precision Filter Regulator - P32E Series
- Global Modular Standard Filter Regulator - P33E Series
- Compact Filter Regulator - 06E Series Prepair II
- Economy Filter Regulator - 05E Series Prepair II
- Hi-Flow Filter Regulator - P3NE Series
- Miniature Filter Regulator - 14E Series
- Miniature Filter Regulator - B34 Series
- Precision Filter Regulator - 27E Series Prepair II
- Precision Filter Regulator - P3EA632 Series
- Stainless Steel Miniature Filter Regulator - PB548, PB558 Series
- Stainless Steel Standard Filter Regulator - PB11, PB12 Series
- Standard Coalescing Filter Regulator - 12E Series Prepair II

- Standard Filter Regulator - 07E Series Prepair II

Lubricators :
Standard Mist Lubricators
- Standard Mist Lubricators – [09L,L606,P3NL]
- Global Standard Mist Lubricators - P3YL Series (High - Flow)
- Stainless Steel Standard Mist Lubricators - PL10 Series (Standard)
- Standard Mist Lubricators - [02L,04L,06L,07L]
- Global Standard Mist Lubricators - [P31L,P32L,P33L]

Atomised Mist Lubricators
- Micro-Mist Lubricators - Prep-Air II 15L,16L,17L]

Compressed Air Dryers :
Regenerative Desiccant Dryers
- Regenerative Desiccant Dryers - P3TJA (3 - 20 SCFM)
- Heatless Desiccant Air Dryers - PTW Series

Inline Desiccant Dryers
- Compact Inline Desicant Dryers - DD15, DD30, DD60 Series
- Mini Disposable Inline Desiccant Dryers - DD10 Series

Refrigerated Dryers
- Refrigeration Dryer Series - PRD10 - PRD250 (10 - 250 SCFM)
- Refrigeration Dryer Series - PRD325 - PRD2400 (325 - 2400 SCFM)

Standard Pressure Regulators
- Global Modular High Flow Pressure Regulator - P3YR Series (Standard)
- Global Modular Pressure Regulator – [P31H, P31R,P32H,P32R,P33H,P33R]
- High Flow Pressure Regulator – [09R,P3NR,R119]
- Pressure Regulator – [05R,P3A-R,R34,R45]
- Semi - Precision Dial Knob Regulator - [51R,52R,53R,54R,27R]
- Stainless Steel Pressure Regulator - [PR10,PR11,PR354,PR364]

Precision Pressure Regulators
- Precision Pneumatic Input Signal Amplifier - P3BA208 (Compact)
- Precision Pneumatic Input Signal Amplifier - P3BA45 (Standard)
- Precision Filter Regulator - P3EA632
- High Precision Regulator - P3RA102 (Standard)
- High Precision Relief Valve - P3RA102BP
- High Precision Regulator - P3RA302 (Compact)

Pilot Operated Pressure Regulators
- Precision Pneumatic Input Signal Amplifier – [P3BA208,P3BA45]
- Compact Pilot Operated Pressure Regulator - 11R Series
- Standard Pilot Operated Pressure Regulator - 12R Series
- Global High - Flow Pilot Controlled Pressure Regulator - P3YR

- High - Flow Pilot Controlled Pressure Regulator – [P3NR,R119]

Electronic And Proportional Pressure Regulator
- Electronic Proportional Regulators – [P3YP,P31P,P32P]
- Programmable Air Regulating Valve (Binary) - Par - 15 Series

Vacuum Cups
- P5V-CFS Series
- PBG Series
- PCG Series
- PFG Series
- PJG Series
- PUGB Series

Vacuum Generators
- CEK Series
- CHF Series
- CV Series
- CV-CK Series
- CVXCEK Series
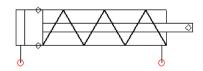- CVX0260B Series
- MC22 Series
- MC72 Series
- MCA Series

1-1/8"PUR16X6"

Ex.: Pneumatic Round Body Cylinder, Series P

Product Selection and Configuration

The **Catalogue Manager** of **Automation Studio™** consists of three sections, as shown in Figure 1. The first section (1) contains a catalogue tree similar to the manufacturer's website where a user can easily find a component as per the requirements. In the catalogue tree, components have been categorised as per their types and function. The second section (2) consists of different tabs where the user can get information like technical data, images or 3D CAD files (when available) of the selected component. The "Documents" tab of this section contains test files and the manufacturer's technical specifications of the product. Section (3) shows a "Set Specific Part Number" function button which opens the "Product Configurator" window as shown in Figure 2.
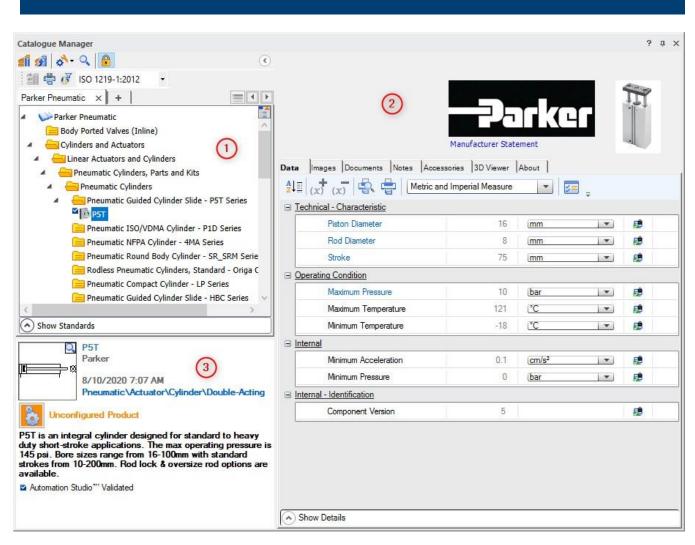
Figure 1: Catalogue Manager Window Displaying Technical Data and Symbol of the Pneumatic Round Body Cylinder, P Series.

Using the "Product Configurator", the user can easily select specific product characteristics and configure the manufacturer specific part number of the component. The options to choose the desired mounting style, cylinder bore, stroke and more, are available. The product information, technical data and symbol get updated with the selected options. The "Symbol Viewer" button (refer to Figure 2) allows the user to magnify the view of the configured component's symbol. All these Catalogue Manager features were designed to enable the user to easily choose and configure pre-modelled components.

Users may now simply drag and drop the desired component into the editor area of Automation Studio™ for circuit integration. The component models can be directly used for the design of a pneumatic circuit, real-time simulation or monitoring in Automation Studio™.
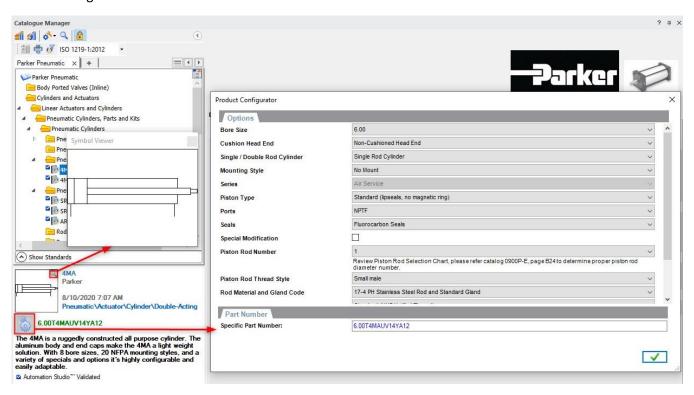

Figure 2: A Configured Part Number of the Pneumatic Round Body Cylinder, Series P Using the Catalogue Manager's Product Configurator Window.

Product Test and Application

The components in the Catalogue are configured and tested for various sizes, rated flows and pressure ratings at a 10 millisecond interval simulation pace. The simulation models take into consideration each product's performance data available in the manufacturer specification and adjust them to the specific project working conditions (reference pressure, temperature, etc.). For example, to verify the influence of flow on the outlet pressure of a Pressure Regulator, the pressure regulation test is simulated & confirmed as per the specification as shown in Figure 3. This virtual test bench is available in the Catalogue.
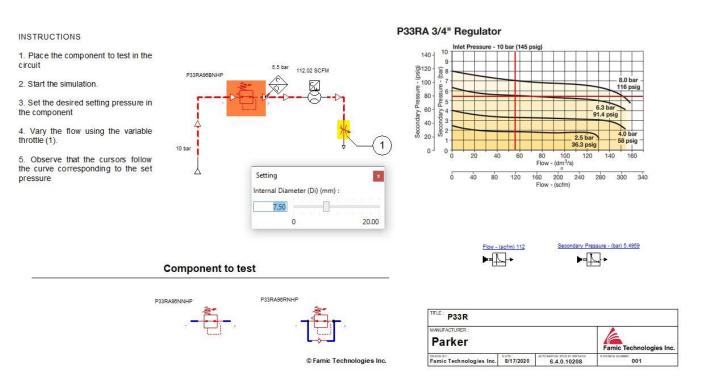
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Pressure Regulation Test

Figure 3: Regulation Test of P33R Series, Pressure Regulator.

Figure 4 features a ready to simulate Parker Viking Xtreme P2LAX directional valve drag and dropped from the catalogue into a packaging machine application circuit in Automation Studio™. It demonstrates that the same size components are compatible and can be quickly configured and combined into industry-relevant applications.

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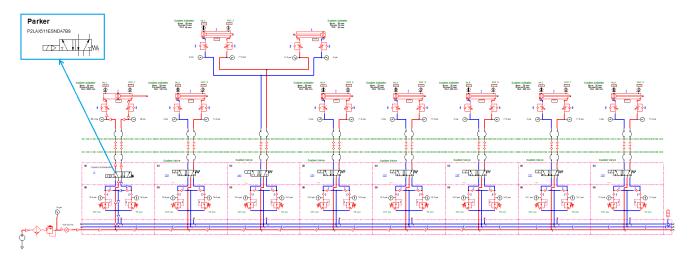Packaging Machine Pneumatic Circuit

Figure 4: An Application Project in Automation Studio™ Featuring Ready to Simulate P2LAX Valve.

These test cases demonstrate how pneumatic circuits containing **Parker Hannifin** components can be quickly simulated, analysed and monitored in real-time using the latest version of the **Automation Studio™ Catalogue.**

For more details about this catalogue, please contact our Support Team at support@famictech.com.

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