

BUCHER

hydraulics

D03-Series Hydraulic Valves



Part No. [50020851098714](#)

Overview

These hydraulic solenoid valves are in the NFPA D03 configuration. They deliver outstanding performance in a compact package. Mounting bolts included.

Features

- 4-way, 3-position
- Four different center conditions
- 120 VAC or 24 VDC double solenoids
- Manual overrides

D03-Series Bucher Hydraulic Valves								
Part No.	Ports	Position	Type	Solenoid	Voltage	Weight (lbs)	Drawing Link	Price
50020851098714	4-port (4-way)	3-position	Center tandem	Double solenoid	120 VAC	4.30	PDF	\$288.00
51020850058414*			Center closed			4.30	PDF	\$288.00
50020851106114			Center open			4.30	PDF	\$288.00
51020851106214*			Center float			4.30	PDF	\$288.00
50020851101114			Center tandem		24 VDC	4.75	PDF	\$288.00
50020852089314*			Center closed			4.75	PDF	\$288.00
51020852389414			Center open			5.05	PDF	\$288.00
50020851938214*			Center float			4.75	PDF	\$288.00

Note: Power A.C. Coils incorporate integrally molded full wave rectifiers.

A.C. Coils are rated 50/60 HZ.

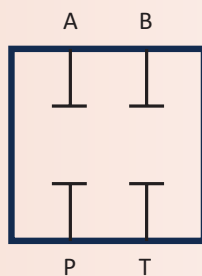
* Unloader valve (P/N 51020850999) is required to be installed in the manifold when using a valve which blocks the P port.

Valve Types

4-port (4-way), 3-position Bucher hydraulic control valves are available with four valve center options.

Closed Center Valves

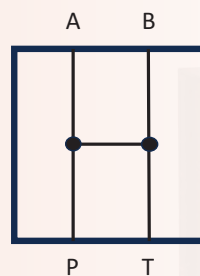
A closed center valve allows the operator to stop and hold a load when needed by blocking P, T, A and B in a neutral position. An unloader valve (P/N [51020850999](#)) is required when using a valve that blocks the P port to prevent overheating.



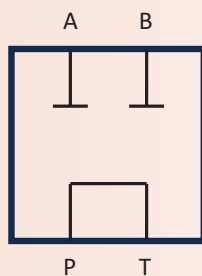
Closed Center

Open Center Valves

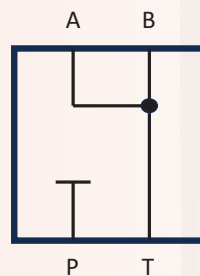
An open center valve allows the cylinder to "freewheel" while in neutral by connecting P, T, A and B together, providing an open path from all working lines directly back to the reservoir, bypassing the pump. The open center valve allows for a constant flow of hydraulic oil without building additional pressure.



Open Center



Tandem Center



Float Center

Tandem Center Valves

With a tandem center valve, loads can be held in neutral as the flow to A and B are closed off by connecting P to T. The tandem center valve works similar to an open center valve and allows for continuous flow of oil from the pump to the tank.

Float Center Valves

A float center valve blocks P making it a closed-center circuit. It has an open connection from working ports A and B to the tank. An unloader valve (P/N [51020850999](#)) is required when using a valve that blocks the P port to prevent overheating.

Bucher T-Series Valve Mounting Accessories

Hydraulic Power Unit Accessories

Mounting accessories include directional valve adapters to allow mounting of D03 valves to the T5 and T6 series units and D05 valves to the Hi-Lo unit.



Part No. [510204910200](#)



Part No. [51020070044](#)

Bucher T-Series Valve Mounting Accessories

Part No.	Description	Weight (lbs)	Drawing Link	Price
510204910200*	Bucher valve adapter, for use with D03 series valves and T5x and T6x power units.	2.55	PDF	\$109.00
51020070043	Bucher mounting bolts, for use with 1 D03 series valve adapter and T5x and T6x power units.	0.20	N/A	\$7.25
51020070044	Bucher mounting bolts, for use with 2 D03 series valve adapters and T5x and T6x power units.	0.30	N/A	\$32.50
51020070045	Bucher mounting bolts, for use with 3 D03 series valve adapters and T5x and T6x power units.	0.45	N/A	\$43.50
51024491146	Bucher valve adapter, for use with D05 series valves and T9x power unit.	3.15	N/A	\$164.00
51020070047	Bucher mounting bolts, for use with 1 D05 series valve adapter and T9x power unit.	0.20	N/A	\$9.00

** No more than (3) of the valve adapters are recommended to stack on the base manifold.

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Hydraulic Power Unit Accessories

Overview

Bucher HPU Accessories include coils, replacement fluid filters, and unloader valve. The unloader valve [51020850999](#) is required to be installed in the manifold when using center closed or center float control valves. Refer to the manual for installation instructions.



Part No. [51020850999](#)



Part No. [51020191424](#)



Part No. [51020321165](#)

Bucher Hydraulic Power Unit Accessories					
Part No.	Description	Weight (lbs)	Drawing Link	Insert Link	Price
51020850999	Bucher unloader valve, 2-port (2-way), 2-position, normally open, single solenoid spring return, twist manual override.	0.35	PDF	N/A	\$128.00
51020191424	Bucher solenoid coil, replacement, 24 VDC, 22W, DIN 43650 connector. For use with Bucher solenoid valve 51020850999.	0.85	PDF	N/A	\$76.00
51020191422	Bucher solenoid coil, replacement, 120 VAC, 22W, DIN 43650 connector. For use with Bucher solenoid valve 51020850999.	0.80	PDF	N/A	\$83.00
51020321016	Bucher filter, hydraulic fluid, replacement, 10 micron, spin-on. For use with M-Series hydraulic power units.	1.35	N/A	N/A	\$44.50
500203226596	Bucher filter, hydraulic fluid, replacement, 7 micron, spin-on. For use with T5x and T6x series hydraulic power units.	1.40	N/A	N/A	\$60.00
51020321165	Bucher filter, hydraulic fluid, replacement, 10 micron, spin-on. For use with T9x series hydraulic power units.	2.50	N/A	N/A	\$80.00

To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific part number's web page.

For additional details see manufacturer's technical specifications, manuals and inserts (where applicable).

Note: Power A.C. Coils incorporate integrally molded full wave rectifiers.

A.C. Coils are rated 50/60 HZ.

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Hydraulic Power Units - Overview

Bucher Hydraulics is a respected manufacturer that has been producing hydraulic components for 100 years. The M-series and T-series power units in this catalog are produced in Canada. All units include a welded steel reservoir, TEFC motor and spin-on filter.

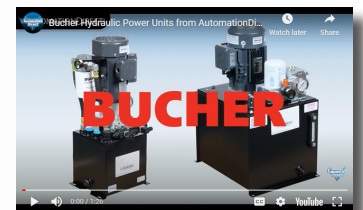
Features

- Totally enclosed fan cooled Premium Efficiency electric motor, rated for 60 Hz. 3-phase motors will also work at some 50 Hz voltages.
- Powder coated reservoir plumbed for vertical mounting
- Adjustable Safety Relief valve preset at factory
- Hydraulic connections:
 - T-Series: Aluminum adaptable base manifold with SAE 10, P & T ports
 - M-Series: Aluminum D03 manifold with SAE #6 A&B ports with included 4-Way/3-Position D03 Tandem Center valve
- Suction strainer at pump inlet
- Return line spin-on type filter with visual by-pass indicator
- Bayonet style filler / breather assembly with strainer basket (T-Series)
- Threaded style filler / breather assembly with dipstick (M-Series)
- Sight / level / temperature gauge (T-Series only)
- Liquid filled pressure gauge with isolator
- Two extra 1" NPT couplings through top of reservoir for electrical sensors should you need remote live data of level or temperature
- 3/4" NPT drain port on lower front / side of reservoir

Applications

- Industrial Presses and Processes
- CNC Machinery – Manufacturing
- Rollforming Equipment
- Material Lifts
- Automotive Lifts / Motorcycle Lifts
- Factory Automation
- Elevators
- Scissor Lifts & Platforms
- Material Handling Equipment
- Hydraulic Door Systems
- Positioning Equipment

Parts and Accessories



Click on the thumbnail or go to <https://www.automationdirect.com/VID-HY-0002> for a short video on Bucher Hydraulic Power Units.