



Series 70 - External Pilot Solenoid Valves

Metal Work Series 70 external pilot solenoid valves are an excellent choice for applications outside the pressure range for standard solenoid valves, such as vacuum applications.



Part No. 70300200500U

Features

- 3-port (3-way), 2-position configurations
- Coils purchased separately
- 1/8", 1/4", 3/8" and 1/2" NPT



See www.AutomationDirect.com for a wide variety of fitting options

Metal Work Series 70 - External Pilot Solenoid Valves				
Model	7010020500U	7020020500U	7040020500U	7030020500U
Price	\$50.00	\$58.00	\$69.00	\$131.00
Drawing Link	PDF	PDF	PDF	PDF
Weight (lb)	0.24	0.35	0.58	1.51
Manufacturer Specs	PDF	PDF	PDF	PDF
Valve Type	3-port (3-way), 2-position			
Valve Configuration	N.C.			
Operator	Solenoid			
Acting	Single solenoid, spring return			
Inlet Port Size	1/8" FNPT	1/4" FNPT	3/8" FNPT	1/2" FNPT
Outlet Port Size	1/8" FNPT	1/4" FNPT	3/8" FNPT	1/2" FNPT
Pilot Port Size	#10-32 F UNF	1/8" FNPT	1/8" FNPT	1/8" FNPT
Flow (Cv)	0.55	1.1	2.1	4.6
Media	Filtered air without lubrication; lubrication, if used, must be continuous			
Pressure Range	Operating: Vacuum to 145 psi; Min Pilot: 36.3 psi			
Temperature	14°F to 140°F (-10°C to 60°C)			
Lubrication	ISO and UNI FD 22			
Life Cycle	50 million cycles			
Specifications When Used With Metal Work Coils (Sold Separately)				
Voltage (± 10%)	12; 24 VDC - 24; 110; 220V AC 50/60Hz			
Power Consumption	DC Coils: 2W ; AC Coils: 3.5 VA			
Insulation	Class F			
Actuation Response Time (TRA) / Reset Response Time (TRR) at 87 psi	15/35 ms			
Protection	IP 65 with connector			
Connection	11mm DIN style wiring plug			
Agency Approvals*	Coils have CE mark			

* 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).



Series 70 - Valve Components

Metal Work Series 70 valves is one of the most popular lines of valves produced in Italy by Metal Work. They feature heavy duty construction and many options to choose from.

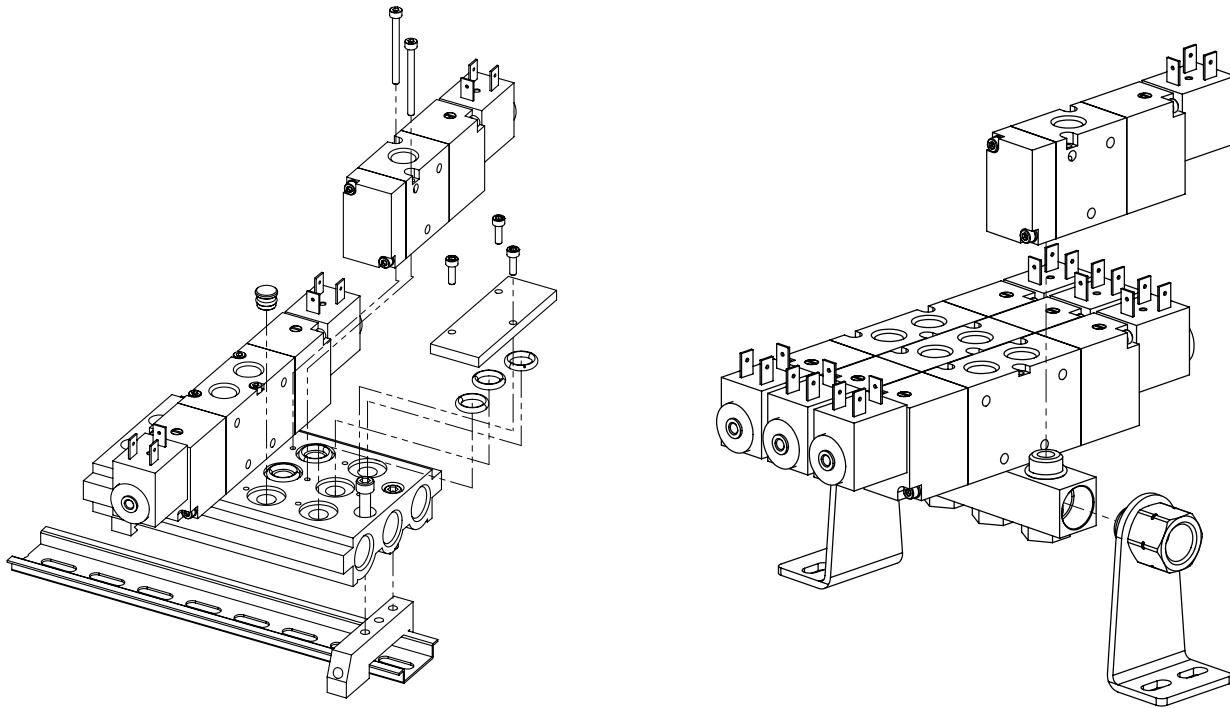
Features

- Most styles available in four sizes
- 3-port (3-way) and 5-port (4-way) body-ported valves
- 2-position and 3-position operation
- Manual, mechanically operated, air pilot and solenoid valves

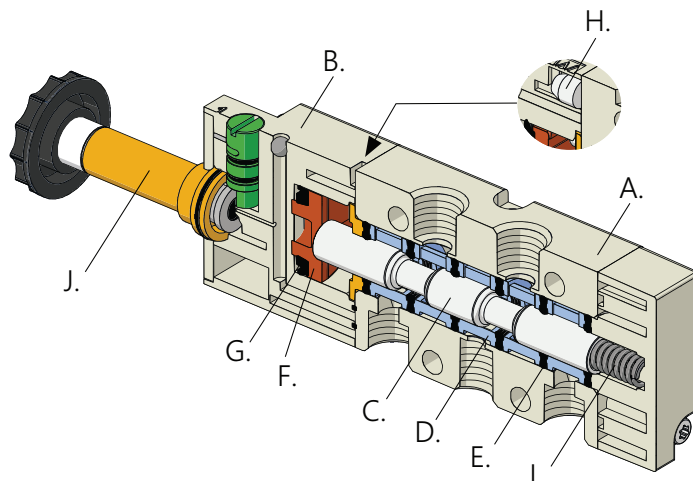


Scan or click the above QR code for the Metal Work Series 70 Instructions Insert

Valve Base Assembly Examples



- A. VALVE BODY: Aluminum
- B. CONTROL/END CAP: Plastic
- C. SPOOL: chemically Nickel-plated aluminum
- D. SPOOL GUIDES: Plastic
- E. GASKETS: NBR
- F. PISTONS: Hostaform®
- G. PISTON GASKET: NBR
- H. FILTER: Sintered bronze
- I. SPRINGS: Spring steel
- J. OPERATOR: Brass pipe - Stainless steel core





Series 70 - Compact Valve Manifolds

Metal Work series 70 compact valve manifolds are a space-saving choice when using several Series 70 air pilot or solenoid valves.



Part No. 0221000200U



Part No. 0221000700U

Features

- 2 to 7-station manifolds
- Fit 1/8" or 1/4" NPT valves
- 3 heights of mounting bracket sold separately
- Work with all Series 70 valves



See www.AutomationDirect.com for a wide variety of fitting options

Metal Work Series 70 - Compact Valve Manifolds

Part No.	Description	Drawing Link	Price	Weight (lb)	Manufacturer Specs
0221000200U	Metal Work air compact valve manifold, aluminum, white, 145 psi (10 bar) maximum operating pressure, (2) stations, 1/4in female NPT inlet(s). For use with 1/8in NPT Series 70 valves.	PDF	\$12.00	0.16	PDF
0221000300U	Metal Work air compact valve manifold, aluminum, white, 145 psi (10 bar) maximum operating pressure, (3) stations, 1/4in female NPT inlet(s). For use with 1/8in NPT Series 70 valves.	PDF	\$13.00	0.22	PDF
0221000400U	Metal Work air compact valve manifold, aluminum, white, 145 psi (10 bar) maximum operating pressure, (4) stations, 1/4in female NPT inlet(s). For use with 1/8in NPT Series 70 valves.	PDF	\$16.00	0.29	PDF
0221000500U	Metal Work air compact valve manifold, aluminum, white, 145 psi (10 bar) maximum operating pressure, (5) stations, 1/4in female NPT inlet(s). For use with 1/8in NPT Series 70 valves.	PDF	\$25.00	0.36	PDF
0221000600U	Metal Work air compact valve manifold, aluminum, white, 145 psi (10 bar) maximum operating pressure, (6) stations, 1/4in female NPT inlet(s). For use with 1/8in NPT Series 70 valves.	PDF	\$31.50	0.43	PDF
0221000700U	Metal Work air compact valve manifold, aluminum, white, 145 psi (10 bar) maximum operating pressure, (7) stations, 1/4in female NPT inlet(s). For use with 1/8in NPT Series 70 valves.	PDF	\$39.00	0.5	PDF
0222000200U	Metal Work air compact valve manifold, aluminum, white, 145 psi (10 bar) maximum operating pressure, (2) stations, 3/8in female NPT inlet(s). For use with 1/4in NPT Series 70 valves.	PDF	\$13.00	0.2	PDF
0222000300U	Metal Work air compact valve manifold, aluminum, white, 145 psi (10 bar) maximum operating pressure, (3) stations, 3/8in female NPT inlet(s). For use with 1/4in NPT Series 70 valves.	PDF	\$18.00	0.29	PDF
0222000400U	Metal Work air compact valve manifold, aluminum, white, 145 psi (10 bar) maximum operating pressure, (4) stations, 3/8in female NPT inlet(s). For use with 1/4in NPT Series 70 valves.	PDF	\$21.50	0.38	PDF
0222000500U	Metal Work air compact valve manifold, aluminum, white, 145 psi (10 bar) maximum operating pressure, (5) stations, 3/8in female NPT inlet(s). For use with 1/4in NPT Series 70 valves.	PDF	\$27.00	0.47	PDF
0222000600U	Metal Work air compact valve manifold, aluminum, white, 145 psi (10 bar) maximum operating pressure, (6) stations, 3/8in female NPT inlet(s). For use with 1/4in NPT Series 70 valves.	PDF	\$32.50	0.56	PDF
0222000700U	Metal Work air compact valve manifold, aluminum, white, 145 psi (10 bar) maximum operating pressure, (7) stations, 3/8in female NPT inlet(s). For use with 1/4in NPT Series 70 valves.	PDF	\$31.50	0.66	PDF

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



Series 70 - Compact Valve Manifold Accessories

Metal Work series 70 compact valve manifold accessories; for use on Series 70 air pilot or solenoid valves.



Part No. 0221000191U



Part No. 0222000191U

Features

- Fit 1/8" or 1/4" NPT valves
- 3 heights of mounting bracket sold separately



See www.AutomationDirect.com for a wide variety of fitting options

Metal Work Series 70 - Compact Valve Manifold Accessories

Part No.	Description	Drawing Link	Price	Weight (lb)	Manufacturer Specs
<u>0221000190U</u>	Metal Work bracket, 120mm. For use with Series 70 1/8in compact manifolds.	<u>PDF</u>	\$15.00	0.68	<u>PDF</u>
<u>0221000191U</u>	Metal Work bracket, 60mm. For use with Series 70 1/8in compact manifolds.	<u>PDF</u>	\$11.50	0.49	<u>PDF</u>
<u>0221000192U</u>	Metal Work bracket, 30mm. For use with Series 70 1/8in compact manifolds.	<u>PDF</u>	\$11.00	0.42	<u>PDF</u>
<u>0222000190U</u>	Metal Work bracket, 120mm. For use with Series 70 1/4in compact manifolds.	<u>PDF</u>	\$12.50	0.75	<u>PDF</u>
<u>0222000191U</u>	Metal Work bracket, 60mm. For use with Series 70 1/4in compact manifolds.	<u>PDF</u>	\$14.50	0.55	<u>PDF</u>
<u>0222000192U</u>	Metal Work bracket, 30mm. For use with Series 70 1/4in compact manifolds.	<u>PDF</u>	\$11.50	0.48	<u>PDF</u>

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



Series 70 - Valve Manifolds



Part No. 0223000201U



Part No. 0223000701U



Part No. 0223001001U

Metal Work Series 70 valve manifolds are an excellent choice for installing several Series 70 air pilot or solenoid valves in a pneumatic system.

Features

- 2 to 10 station manifolds
- Fit 1/8" or 1/4" NPT valves
- 3-port and 5-port valves can be mixed on the same manifold
- Blanking plates for future expansion



See www.AutomationDirect.com for a wide variety of fitting options

Metal Work Series 70 - Valve Manifolds					
Part No.	Description	Drawing Link	Price	Weight (lb)	Manufacturer Specs
0223000201U	Metal Work air valve manifold, aluminum, silver, 145 psi (10 bar) maximum operating pressure, (2) stations, 1/4in female NPT inlet(s), 1/4in female NPT exhaust(s). For use with 1/8in NPT Series 70 valves.	PDF	\$39.00	0.51	PDF
0223000301U	Metal Work air valve manifold, aluminum, silver, 145 psi (10 bar) maximum operating pressure, (3) stations, 1/4in female NPT inlet(s), 1/4in female NPT exhaust(s). For use with 1/8in NPT Series 70 valves.	PDF	\$47.50	0.71	PDF
0223000401U	Metal Work air valve manifold, aluminum, silver, 145 psi (10 bar) maximum operating pressure, (4) stations, 1/4in female NPT inlet(s), 1/4in female NPT exhaust(s). For use with 1/8in NPT Series 70 valves.	PDF	\$56.00	0.89	PDF
0223000501U	Metal Work air valve manifold, aluminum, silver, 145 psi (10 bar) maximum operating pressure, (5) stations, 1/4in female NPT inlet(s), 1/4in female NPT exhaust(s). For use with 1/8in NPT Series 70 valves.	PDF	\$64.00	1.08	PDF
0223000601U	Metal Work air valve manifold, aluminum, silver, 145 psi (10 bar) maximum operating pressure, (6) stations, 1/4in female NPT inlet(s), 1/4in female NPT exhaust(s). For use with 1/8in NPT Series 70 valves.	PDF	\$77.00	1.35	PDF
0223000701U	Metal Work air valve manifold, aluminum, silver, 145 psi (10 bar) maximum operating pressure, (7) stations, 1/4in female NPT inlet(s), 1/4in female NPT exhaust(s). For use with 1/8in NPT Series 70 valves.	PDF	\$85.00	1.46	PDF
0223000801U	Metal Work air valve manifold, aluminum, silver, 145 psi (10 bar) maximum operating pressure, (8) stations, 1/4in female NPT inlet(s), 1/4in female NPT exhaust(s). For use with 1/8in NPT Series 70 valves.	PDF	\$96.00	1.64	PDF
0223000901U	Metal Work air valve manifold, aluminum, silver, 145 psi (10 bar) maximum operating pressure, (9) stations, 1/4in female NPT inlet(s), 1/4in female NPT exhaust(s). For use with 1/8in NPT Series 70 valves.	PDF	\$104.00	1.83	PDF
0223001001U	Metal Work air valve manifold, aluminum, silver, 145 psi (10 bar) maximum operating pressure, (10) stations, 1/4in female NPT inlet(s), 1/4in female NPT exhaust(s). For use with 1/8in NPT Series 70 valves.	PDF	\$130.00	2.02	PDF
0224000201U	Metal Work air valve manifold, aluminum, silver, 145 psi (10 bar) maximum operating pressure, (2) stations, 3/8in female NPT inlet(s), 3/8in female NPT exhaust(s). For use with 1/4in NPT Series 70 valves.	PDF	\$43.50	0.65	PDF
0224000301U	Metal Work air valve manifold, aluminum, silver, 145 psi (10 bar) maximum operating pressure, (3) stations, 3/8in female NPT inlet(s), 3/8in female NPT exhaust(s). For use with 1/4in NPT Series 70 valves.	PDF	\$53.00	0.88	PDF
0224000401U	Metal Work air valve manifold, aluminum, silver, 145 psi (10 bar) maximum operating pressure, (4) stations, 3/8in female NPT inlet(s), 3/8in female NPT exhaust(s). For use with 1/4in NPT Series 70 valves.	PDF	\$63.00	1.11	PDF
0224000501U	Metal Work air valve manifold, aluminum, silver, 145 psi (10 bar) maximum operating pressure, (5) stations, 3/8in female NPT inlet(s), 3/8in female NPT exhaust(s). For use with 1/4in NPT Series 70 valves.	PDF	\$76.00	1.34	PDF
0224000601U	Metal Work air valve manifold, aluminum, silver, 145 psi (10 bar) maximum operating pressure, (6) stations, 3/8in female NPT inlet(s), 3/8in female NPT exhaust(s). For use with 1/4in NPT Series 70 valves.	PDF	\$86.00	1.57	PDF

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



Series 70 - Valve Manifolds

Metal Work Series 70 - Valve Manifolds					
Part No.	Description	Drawing Link	Price	Weight (lb)	Manufacturer Specs
<u>0224000701U</u>	Metal Work air valve manifold, aluminum, silver, 145 psi (10 bar) maximum operating pressure, (7) stations, 3/8in female NPT inlet(s), 3/8in female NPT exhaust(s). For use with 1/4in NPT Series 70 valves.	<u>PDF</u>	\$99.00	1.81	<u>PDF</u>
<u>0224000801U</u>	Metal Work air valve manifold, aluminum, silver, 145 psi (10 bar) maximum operating pressure, (8) stations, 3/8in female NPT inlet(s), 3/8in female NPT exhaust(s). For use with 1/4in NPT Series 70 valves.	<u>PDF</u>	\$116.00	2.01	<u>PDF</u>
<u>0224000901U</u>	Metal Work air valve manifold, aluminum, silver, 145 psi (10 bar) maximum operating pressure, (9) stations, 3/8in female NPT inlet(s), 3/8in female NPT exhaust(s). For use with 1/4in NPT Series 70 valves.	<u>PDF</u>	\$141.00	2.27	<u>PDF</u>
<u>0224001001U</u>	Metal Work air valve manifold, aluminum, silver, 145 psi (10 bar) maximum operating pressure, (10) stations, 3/8in female NPT inlet(s), 3/8in female NPT exhaust(s). For use with 1/4in NPT Series 70 valves.	<u>PDF</u>	\$176.00	2.5	<u>PDF</u>

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



Series 70 - Valve Manifold Accessories



Part No. 0226004001



Part No. 0226004500



Part No. 0226004600



Part No. 0226004701



See www.AutomationDirect.com for a wide variety of fitting options

Metal Work Series 70 - Valve Accessories

Part No.	Description	Drawing Link	Price	Weight (lb)	Manufacturer Specs
<u>0226004001</u>	Metal Work manifold port plug, for use with Series 70 1/8in manifolds.	<u>PDF</u>	\$1.00	0.01	<u>PDF</u>
<u>0226004500</u>	Metal Work blanking plate, for use with Series 70 1/8in manifolds. Mounting hardware included.	<u>PDF</u>	\$2.50	0.05	<u>PDF</u>
<u>0226004600</u>	Metal Work DIN rail adapter, for use with Series 70 1/8in manifolds.	<u>PDF</u>	\$2.50	0.08	<u>PDF</u>
<u>0226004701</u>	Metal Work gasket kit, for use with Series 70 1/8in manifolds, includes (3) o-rings and (3) screws.	<u>PDF</u>	\$1.50	0.02	<u>PDF</u>
<u>0226005001</u>	Metal Work manifold port plug, for use with Series 70 1/4in manifolds.	<u>PDF</u>	\$1.00	0.02	<u>PDF</u>
<u>0226005500</u>	Metal Work blanking plate, for use with Series 70 1/4in manifolds. Mounting hardware included.	<u>PDF</u>	\$2.75	0.06	<u>PDF</u>
<u>0226005600</u>	Metal Work DIN rail adapter, for use with Series 70 1/4in manifolds.	<u>PDF</u>	\$3.00	0.08	<u>PDF</u>
<u>0226005701</u>	Metal Work gasket kit, for use with Series 70 1/4in manifolds, includes (3) o-rings and (3) screws.	<u>PDF</u>	\$1.50	0.02	<u>PDF</u>



Accessories



Metal Work Syntesi Accessories						
Item Photo	Part No.	Price	Description	Drawing Link	Manufacturer Specs	Weight (lbs)
	<u>88257G4</u>	\$11.75	Metal Work solenoid coil, 12 VDC, 2W, 11mm DIN style wiring plug. For use with Metal Work valves.	<u>PDF</u>	<u>PDF</u>	0.10
	<u>88257G5</u>	\$11.75	Metal Work solenoid coil, 24 VDC, 2W, 11mm DIN style wiring plug. For use with Metal Work valves.	<u>PDF</u>	<u>PDF</u>	0.10
	<u>88257G6</u>	\$11.75	Metal Work solenoid coil, 24 VAC, 3.5VA, 11mm DIN style wiring plug. For use with Metal Work valves.	<u>PDF</u>	<u>PDF</u>	0.10
	<u>88257G7</u>	\$11.75	Metal Work solenoid coil, 110 VAC, 3.5VA, 11mm DIN style wiring plug. For use with Metal Work valves.	<u>PDF</u>	<u>PDF</u>	0.10
	<u>88257G8</u>	\$11.75	Metal Work solenoid coil, 240 VAC, 3.5VA, 11mm DIN style wiring plug. For use with Metal Work valves.	<u>PDF</u>	<u>PDF</u>	0.10
	<u>TAP-ACC21</u>	\$11.00	NITRA padlock, replacement, brass. For use with TAP unit.	N/A	N/A	0.5