

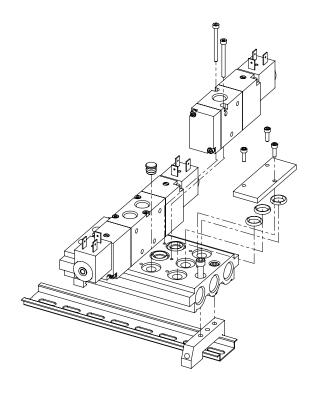
Series 70 - Valve Components

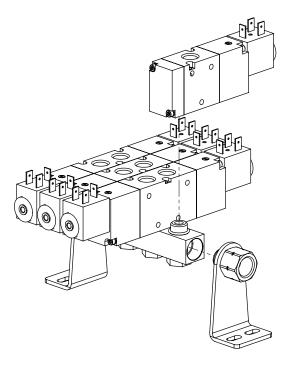
Metal Work Series 70 valves is one of the most popular lines of valves produced in Italy by Metal Work. They feature heavy duty construction and many options to choose from.

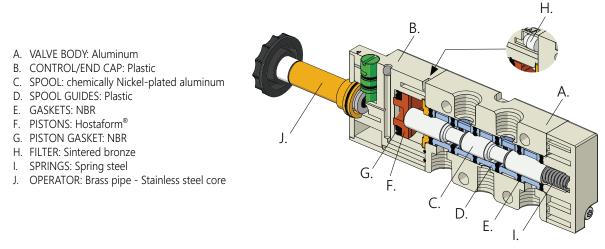
Features

- 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

Valve Base Assembly Examples









Series 70 - Manual Valves







Part No. 7010001700U

devices.

- 90-degree or axial hand lever operation
- 3-port (3-way), 2-position, 5-port (4-way), 2-position, and 5-port (4-way), 3-position configurations

Metal Work Series 70 manual valves are rugged and reliable. They are easy to install and operate to control various pneumatic

• 1/8", 1/4" and 1/2" NPT sizes



See <u>www.AutomationDirect.com</u> for a wide variety of fitting options

		N	letal Wo	rk Serie	s 70 - 1/	8" NPT P	ort Man	ual Valve	es			
Model	<u>701000100U</u>	701000200U	701000300U	<u>7010000400U</u>	<u>701000500U</u>	<u>701000600U</u>	<u>7010000700U</u>	<u>701000900U</u>	<u>7010001000U</u>	<u>7010001100U</u>	<u>7010001400U</u>	<u>7010001700U</u>
Price	\$36.50	\$36.50	\$40.00	\$40.00	\$43.00	\$43.00	\$43.00	\$43.00	\$43.00	\$43.00	\$30.50	\$33.50
Drawing Link	<u>PDF</u>	PDF	PDF	PDF	PDF	PDF	PDF	PDF	PDF	PDF	PDF	PDF
Weight (lb)	0.	39			0.45				0.55			0.39
Manufacturer Specs	PDF	PDF	PDF	PDF	PDF	PDF	PDF	PDF	PDF	PDF	PDF	PDF
Valve Type	3-port (3-wa	y), 2-position	5-port (4-wa	y), 2-position	5-port (4-way), 3-position, center closed	5-port (4-way), 3-position, center exhaust	5-port (4-way), 3-position, center pressure	5-port (4-way), 3-position, center exhaust	5-port (4-way), 3-position, center closed	5-port (4-way), 3-position, center pressure	3-port (3-way), 2-position	5-port (4-way), 2-position
Valve Configuration	N.C.						N/A					
Operator					90-deg h	nand lever					Axial ha	ind lever
Acting	Spring return	Detented	Spring return		Det	ented			Spring return	1	Dete	ented
Inlet Port Size						1/8" F	NPT					
Outlet Port Size						1/8" F	NPT					
Flow (Cv)						0.5	5					
Media				Filtered	l air without lu	brication; lubri	cation, if used	, must be cor	itinuous			
Pressure Range		Vacuum to 145 psi										
Temperature					1	4°F to 140°F (-10°C to 60°C	C)				
Lubrication						ISO and U	NI FD 22					
Life Cycle						1 million	cycles					



METAL[®] Series 70 - Manual Valves

		Met	al Work	Series 7	<u>/0 - 1/4"</u>	NPT Po	rt Manu	al Valve	S			
Model	<u>702000100U</u>	7020000200U	<u>702000300U</u>	<u>7020000400U</u>	<u>702000500U</u>	<u>702000600U</u>	<u>7020000700U</u>	<u>702000900U</u>	7020001000U	<u>7020001100U</u>	<u>7020001400U</u>	<u>7020001700U</u>
Price	\$62.00	\$62.00	\$67.00	\$67.00	\$70.00	\$70.00	\$70.00	\$70.00	\$70.00	\$70.00	\$37.00	\$42.50
Drawing Link	PDF	PDF	PDF	PDF	PDF	PDF	PDF	<u>PDF</u>	PDF	PDF	<u>PDF</u>	PDF
Weight (lb)	0	.56			0.66				0.79		0.49	0.59
Manufacturer Specs	PDF	PDF	PDF	PDF	PDF	PDF	PDF	PDF	PDF	PDF	PDF	PDF
Valve Type	3-port 2-pc	(3-way), sition	5-port 2-po	(4-way), sition	5-port (4-way), 3-position, center closed	5-port (4-way), 3-position, center exhaust	5-port (4-way), 3-position, center pressure	5-port (4-way), 3-position, center exhaust	5-port (4-way), 3-position, center closed	5-port (4-way), 3-position, center pressure	3-port (3-way), 2-position	5-port (4-way), 2-position
Valve Configuration	N.C.						N/A					
Operator					90-deg h	and lever					Axial ha	ind lever
Acting	Spring return	Detented	Spring return		Dete	ented			Spring return	ו	Dete	ented
Inlet Port Size						1/4"	FNPT					
Outlet Port Size						1/4"	FNPT					
Flow (Cv)						1	.1					
Media				Filtered	air without lu	prication; lubr	ication, if use	d, must be co	ontinuous			
Pressure Range							to 145 psi					
Temperature					14		(-10°C to 60°	°C)				
Lubrication							UNI FD 22					
Life Cycle						1 millio	n cycles					

		Metal Wo	ork Series	70 - 1/2'	' NPT Por	t Manual	Valves			
Model	703000100U	703000200U	<u>703000300U</u>	703000400U	703000500U	703000600U	703000700U	7030009000	7030001000U	7030001100U
Price	\$131.00	\$131.00	\$148.00	\$148.00	\$160.00	\$160.00	\$160.00	\$160.00	\$160.00	\$160.00
Drawing Link	<u>PDF</u>	PDF	<u>PDF</u>	PDF	PDF	PDF	PDF	PDF	PDF	PDF
Weight (lb)	3.24	3.2	3.62		3.59		3.56		3.98	
Manufacturer Specs	<u>PDF</u>	PDF	<u>PDF</u>	PDF	PDF	PDF	PDF	PDF	PDF	PDF
Valve Type	3-port (3-wa	y), 2-position	5-port (4-wa	y), 2-position	5-port (4-way), 3-position, center closed	5-port (4-way), 3-position, center exhaust	5-port (4-way), 3-position, center pressure	5-port (4-way), 3-position, center exhaust	5-port (4-way), 3-position, center closed	5-port (4-way), 3-position, center pressure
Valve Configuration	N.C.					N/A				
Operator					90-deg h	and lever				
Acting	Spring return	Detented	Spring return		Dete	ented			Spring return	
Inlet Port Size					1/2"	FNPT				
Outlet Port Size					1/2"	FNPT				
Flow (Cv)					4	.6				
Media			Filte	red air without	lubrication; lubr	ication, if used,	must be contin	uous		
Pressure Range					Vacuum	to 145 psi				
Temperature					14°F to 140°F	(-10°C to 60°C)			
Lubrication						UNI FD 22				
Life Cycle					1 millio	n cycles				



Part No. 7010001300U

Series 70 - Knob-Actuated Valves

Metal Work Series 70 knob-actuated valves are an excellent choice for non-electric applications.

Features

- Easy push-pull knob operation
- 3-port (3-way), 2-position and 5-port (4-way), 2-position
- configurations • 1/8" NPT port sizes



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

Me	tal Work Series	70 - Knob-Actua	ated Valves			
Model	7010001200 <u>U</u>	7010001300 <u>U</u>	7010001500 <u>U</u>	<u>7010001600U</u>		
Price	\$25.50	\$28.00	\$29.00	\$32.00		
Drawing Link	PDF	PDF	PDF	<u>PDF</u>		
Weight (lb)	0.	.32	0.	.38		
Manufacturer Specs	PDF	PDF	PDF	<u>PDF</u>		
Valve Type	3-port (3-way), 2-position 5-port (4-way), 2-position					
Valve Configuration	N.C.	N.C. N/A				
Operator		Kr	nob			
Acting	Spring return	Detented	Spring return	Detented		
Inlet Port Size		1/8"	FNPT			
Outlet Port Size		1/8"	FNPT			
Flow (Cv)		0.	55			
Media	Filtered	air without lubrication; lubr	ication, if used, must be c	ontinuous		
Pressure Range		Vacuum	to 145 psi			
Temperature		14°F to 140°F	(-10°C to 60°C)			
Lubrication		ISO and	UNI FD 22			
Life Cycle		1 millio	n cycles			



Series 70 - Mechanically-Operated Valves



Part No. 7001000100U



Part No. 7001000500U

Part No. 7001000700U

Part No. 7001000200U

Part No. 7001000600U



Part No. 7001000910U

Metal Work Series 70 mechanically-operated valves are an excellent choice for many applications where electrical sensors are not wanted.

Features

- Various actuator types to suit many applications
- 3-port (3-way), 2-position and 5-port (4-way), 2-position configurations
- 1/8" NPT port sizes



See <u>www.AutomationDirect.com</u> for a wide variety of fitting options

	Metal W	lork Series	70 - Mech	anically-Op	erated Val	ves			
Model	7001000100 <u>0</u>	<u>7001000110U</u>	<u>7001000200U</u>	7001000210 <u>0</u>	<u>7001000400U</u>	7001000410 <u>U</u>	7001000500 <u>U</u>	7001000510U	
Price	\$23.00	\$25.50	\$41.50	\$44.50	\$43.00	\$47.00	\$32.00	\$35.00	
Drawing Link	PDF	PDF	PDF	PDF	PDF	PDF	PDF	PDF	
Weight (lb)	0.2	0.27	0.29	0.35	0.32	0.38	0.32	0.38	
Manufacturer Specs	PDF	PDF	PDF	PDF	PDF	PDF	PDF	PDF	
Valve Type	3-port (3-way), 2-position, spring return	5-port (4-way), 2-position, spring return	3-port (3-way), 2-position, spring return	5-port (4-way), 2-position, spring return	3-port (3-way), 2-position, spring return	5-port (4-way), 2-position, spring return	3-port (3-way), 2-position, spring return	5-port (4-way), 2-position, spring return	
Valve Configuration	N.C.	N/A	N.C.	N/A	N.C.	N/A	N.C.	N/A	
Operator	Plu	nger	Pilot-assis	ted plunger	Pilot-assiste	d roller lever	Rolle	r lever	
Acting				Spring	return				
Inlet Port Size				1/8"	FNPT				
Outlet Port Size				1/8"	FNPT				
Flow (Cv)				0.	55				
Media			Filtered air witho	ut lubrication; lubr	ication, if used, m	ust be continuous			
Pressure Range	Vacuum	Vacuum to 145 psi 36.3 to 145 psi Vacuum to 145 psi							
Temperature		14°F to 140°F (-10°C to 60°C)							
Lubrication				ISO and I	JNI FD 22				
Life Cycle				2 millio	n cycles				



Series 70 - Mechanically-Operated Valves

Metal V	/ork Series	70 - Mech	anically-Op	erated Val	ves		
Model	<u>7001000600U</u>	7001000610U	<u>7001000700U</u>	7001000710U	7001000900U	7001000910U	
Price	\$32.50	\$35.00	\$56.00	\$59.00	\$57.00	\$60.00	
Drawing Link	PDF	PDF	PDF	PDF	PDF	PDF	
Weight (lb)	0.34	0.4	0.34	0.	.44	0.54	
Manufacturer Specs	PDF	PDF PDF PDF PDF PDF					
Valve Type	3-port (3-way), 2-position, spring return	5-port (4-way), 2-position, spring return	3-port (3-way), spring return	5-port (4-way), 2-position, spring return	3-port (3-way), 2-position, spring return	5-port (4-way), 2-position, spring return	
Valve Configuation	N.C.	N/A	N.C.	N/A	N.C.	N/A	
Operator	Unidirection	al roller lever	Pilot-assis	ted whisker		adjustable roller ver	
Acting			Spring	g return			
Inlet Port Size			1/8"	FNPT			
Outlet Port Size			1/8"	FNPT			
Flow (Cv)			0.	55			
Media		Filtered air witho	ut lubrication; lubr	ication, if used, m	ust be continuous		
Pressure Range	Vacuum to 145 psi 36.3 to 145 psi Vacuum to 145 psi						
Temperature	14°F to 140°F (-10°C to 60°C)						
Lubrication			ISO and	UNI FD 22			
Life Cycle			2 millio	n cycles			

See <u>www.AutomationDirect.com</u> for a wide variety of fitting options



Series 70 - Mechanical Valves for Use with Panel Operators



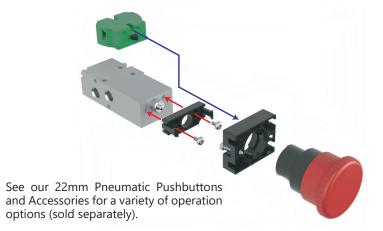


Features

- Fit NITRA 22mm pneumatic pushbuttons
- 3-port (3-way), 2-position and 5-port (4-way), 2-position configurations
- 1/8" NPT port sizes

Part No. 7010001800U

Metal Work Series 70) - Mechanical Va	alves			
Model	<u>7010001800U</u>	7010001900U			
Price	\$42.00	\$46.00			
Drawing Link	<u>PDF</u>	<u>PDF</u>			
Weight (lb)	0.29	0.35			
Manufacturer Specs	<u>PDF</u>	PDF			
Valve Type	3-port (3-way), 2-position, spring return	5-port (4-way), 2-position, spring return			
Valve Configuration	N.C.	N/A			
Operator	Pneuma	tic switch			
Acting	Spring	ı return			
Inlet Port Size	1/8"	FNPT			
Outlet Port Size	1/8"	FNPT			
Flow (Cv)	0.	55			
Media		ation; lubrication, if used, continuous			
Pressure Range	36.3 to 145 psi				
Temperature	14°F to 140°F (-10°C to 60°C)				
Lubrication	ISO and I	JNI FD 22			
Life Cycle	1 millio	n cycles			







Series 70 - Air Pilot Valves



Part No. 7020010200U



Part No. 7030011200U

Metal Work Series 70 air pilot valves are an excellent choice for many pneumatic applications.

Features

- 3-port (3-way), 2-position, 5-port (4-way), 2-position, and 5-port (4-way), 3-position configurations
- 1/8", 1/4", 3/8" and 1/2" NPT



See <u>www.AutomationDirect.com</u> for a wide variety of fitting options

	Metal Work	Series 70 -	1/8" NPT P	ort Air Pilot	Valves			
Model	7010010200U	<u>7010010400U</u>	Z010011100U	Z010011200U	Z010012100U	7010012200U	7010012300U	
Price	\$29.50	\$29.50	\$35.00	\$37.50	\$39.50	\$39.50	\$39.50	
Drawing Link	PDF	PDF	PDF	PDF	PDF	PDF	PDF	
Weight (lb)	0	.2	0.26	0.	.28	0.	33	
Manufacturer Specs	PDF	PDF	PDF	PDF	PDF	<u>PDF</u>	<u>PDF</u>	
Valve Type	3-port (3-way), 2-position	3-port (3-way), 2-position	5-port (4-way), 2-position	5-port (4-way), 2-position	5-port (4-way), 3-position, center closed	5-port (4-way), 3-position, center exhaust	5-port (4-way), 3-position, center pressure	
Valve Configuration	N.C.	N.C. N.O. N/A						
Operator		Pilot						
Acting	Sing	gle air pilot, spring re	eturn		Double	air pilot		
Inlet Port Size				1/8" FNPT				
Outlet Port Size				1/8" FNPT				
Pilot Port Size				1/8" FNPT				
Flow (Cv)				0.55				
Media		Filter	ed air without lubric	ation; lubrication, if	used, must be conti	nuous		
Pressure Range	Operating: Va	cuum to 145 psi ; Mi	n pilot: 36.3 psi	pilot: 36.3 psi Operating: Vacuum to 145 psi ; Min pilot: 14.5 psi				
Actuation Response Time (TRA) / Reset Response Time (TRR) at 87 psi		6/15 ms		7/7 ms		6/15 ms		
Temperature			14°F	to 140°F (-10°C to	60°C)			
Lubrication				ISO and UNI FD 22	2			
Life Cycle				50 million cycles				

1-800-633-0405



Series 70 - Air Pilot Valves

PNEUMATIC	84-1-1-144-	0						
	Metal Wor	<u>k Series /U ·</u>	<u>1/4" NPT P</u>	ort Air Pilot	valves	T.		
Model	<u>7020010200U</u>	<u>7020010400U</u>	7020011100 <u>U</u>	7020011200 <u>U</u>	7020012100 <u>U</u>	7020012200U	7020012300 <u>U</u>	
Price	\$37.50	\$37.50	\$43.00	\$47.00	\$49.50	\$49.50	\$49.50	
Drawing Link	PDF	PDF	PDF	<u>PDF</u>	<u>PDF</u>	<u>PDF</u>	<u>PDF</u>	
Weight (lb)	0.28	0.28	0.	39		0.46		
Manufacturer Specs	PDF	PDF	PDF	PDF	<u>PDF</u>	<u>PDF</u>	<u>PDF</u>	
Valve Type	3-port (3-way), 2-position	3-port (3-way), 2-position	5-port (4-way), 2-position	5-port (4-way), 2-position	5-port (4-way), 3-position, center closed	5-port (4-way), 3-position, center exhaust	5-port (4-way), 3-position, center pressure	
Valve Configuration	N.C.	N.O.	N/A					
Operator	Pilot							
Acting	Sing	gle air pilot, spring re	eturn		Double	air pilot		
Inlet Port Size				1/4" FNPT				
Outlet Port Size				1/4" FNPT				
Pilot Port Size				1/8" FNPT				
Flow (Cv)				1.1				
Media		Filte	red air without lubric	ation; lubrication, if	used, must be contir	nuous		
Pressure Range	Operating: Vac	cuum to 145 psi ; Mi	Vin pilot: 36.3 psi Operating: Vacuum to 145 psi ; Min pilot: 14.5 psi					
Actuation Response Time (TRA) / Reset Response Time (TRR) at 87 psi		7/15 ms		7/7 ms		7/15 ms		
Temperature			14°F	to 140°F (-10°C to	60°C)			
Lubrication				ISO and UNI FD 22				
Life Cycle				50 million cycles				

	Metal Work Ser	ies 70 - 3/8" NPT	Port Air Pilot Val	ves			
Model	7040010200U	7040010400U	Z040011100U	Z040011200U	7040012100U		
Price	\$51.00	\$51.00	\$59.00 \$64.00		\$67.00		
Drawing Link	PDF	PDF	PDF	PDF	<u>PDF</u>		
Weight (lb)	0.	51	0.71	0.76	0.93		
Manufacturer Specs	PDF	PDF	PDF	PDF	PDF		
Valve Type	3-port (3-way), 2-position,	3-port (3-way), 2-position	5-port (4-way), 2-position,	5-port (4-way), 2-position	5-port (4-way), 3-position, center closed		
Valve Configuration	N.C.	N.O.		N/A			
Operator			Pilot				
Acting		Single air pilot, spring return	ı	Double	air pilot		
Inlet Port Size			3/8" FNPT				
Outlet Port Size			3/8" FNPT				
Pilot Port Size			1/8" FNPT				
Flow (Cv)			2.1				
Media		Filtered air without lu	brication; lubrication, if used	l, must be continuous			
Pressure Range	Operating	Vacuum to 145 psi ; Min pi	Operating: Vacuum to 145 Operating: Vacuum				
Actuation Response Time (TRA) / Reset Response Time (TRR) at 87 psi		5/28 ms	/28 ms 13/13 ms 5/28 ms				
Temperature		1	4°F to 140°F (-10°C to 60°	C)			
Lubrication			ISO and UNI FD 22				
Life Cycle			50 million cycles				

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

www.automationdirect.com



Series 70 - Air Pilot Valves

Metal Wo	ork Series 70 ·	• 1/2" NPT Poi	rt Air Pilot Val	ves		
Model	7030010200U	7030010400U	7030011100 <u>U</u>	7030011200U	7030012100U	
Price	\$91.00	\$91.00	\$132.00	\$145.00	\$154.00	
Drawing Link	PDF	PDF	PDF	PDF	<u>PDF</u>	
Weight (lb)	1.	47	1	.86	2.62	
Manufacturer Specs	PDF	PDF	PDF	PDF	<u>PDF</u>	
Valve Type	3-port (3-way), 2-position	3-port (3-way), 2-position	5-port (4-way), 2-position	5-port (4-way), 2-position	5-port (4-way), 3-position, center closed	
Valve Configuration	N.C.					
Operator			Pilot			
Acting	Si	ngle air pilot, spring ret	urn	Double	air pilot	
Inlet Port Size			1/2" FNPT			
Outlet Port Size			1/2" FNPT			
Pilot Port Size			1/8" FNPT			
Flow (Cv)			4.6			
Media		Filtered air without lubr	ication; lubrication, if u	sed, must be continuou	IS	
Pressure Range	Operating: V	acuum to 145 psi ; Min	pilot: 36.3 psi	Operating: Vacuum Operating: Vacuum to 145 psi ; Min pilot: to 145 psi ; Min 14.5 psi 36.3 psi		
Actuation Response Time (TRA) / Reset Response Time (TRR) at 87 psi					16/80 ms	
Temperature	14°F to 140°F (-10°C to 60°C)					
Lubrication			ISO and UNI FD 22			
Life Cycle			50 million cycles			



Part No. 7010021100U

Series 70 - Solenoid Valves

Part No. 7030021200U

Metal Work Series 70 solenoid valves are an excellent choice for many pneumatic automation applications. They can be used individually or built into a bank with optional manifolds.

Features

- Single and double solenoid models. Coils purchased separately
- 3-port (3-way), 2-position, 5-port (4-way), 2-position, and 5-port (4-way), 3-position configurations
- 1/8", 1/4", 3/8" and 1/2" NPT



Part No. 70100211000	1 411110	. 10000212000					3 60	(6	
							<u>mationDirect.com</u> fo y of fitting options		
	Metal Wo	ork Series	70 - 1/8" N	PT Port So	lenoid Valv		y or many optionic		
Model	7010020100 <u>U</u>	7010020200 <u>U</u>	7010020400 <u>0</u>	7010021100 <u>U</u>	7010021200 <u>U</u>	7010022100 <u>U</u>	7010022200 <u>U</u>	7010022300U	
Price	\$76.00	\$50.00	\$48.50	\$56.00	\$75.00	\$86.00	\$86.00	\$86.00	
Drawing Link	PDF	PDF	PDF	PDF	PDF	PDF	PDF	PDF	
Weight (lb)	0.31	0	.24	0.31		0.	38		
Manufacturer Specs	PDF	PDF	PDF	PDF	PDF	PDF	PDF 5-port (4-way),	PDF	
Valve Type	3-р	ort (3-way), 2-pos	sition	5-port (4-wa	ay), 2-position	5-port (4-way), 3-position, center closed	5-port (4-way), 3-position, center pressure		
Valve Configuration	N/A	N.C.	N.O.			N/A			
Operator		Solenoid							
Acting	Double solenoid	Double Signle solenoid, spring return Double solenoid							
Inlet Port Size		1/8" FNPT							
Outlet Port Size				1/8"	FNPT				
Flow (Cv)				0.	.55				
Media			Filtered air witho	ut lubrication; lubr	rication, if used, m	ust be continuous	3		
Pressure Range	14.5 to 145 psi		36.3 to 145 psi		14.5 to 145 psi		36.3 to 145 psi		
Temperature				14°F to 140°F	(-10°C to 60°C)				
Lubrication					UNI FD 22				
Life Cycle					on cycles				
Spec	cifications \	Nhen Used	With Meta	al Work Coi	ls (Sold Se	parately)			
Voltage (± 10%)			12	2; 24 VDC - 24; 11	0; 220V AC 50/60)Hz			
Power Consumption				DC Coils: 2W ;	AC Coils: 3.5 VA				
Insulation				Cla	iss F				
Actuation Response Time (TRA) / Reset Response Time (TRR) at 87 psi	20/20 ms		15/35 ms		20/20 ms		15/35 ms		
Protection			· · · · · · · · · · · · · · · · · · ·	IP 65 with	n connector	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·		
Connection				11mm DIN st	yle wiring plug				
Agency Approvals*				Coils hav	e CE mark				
* To obtain the most current aconey approval info	rmation soo the Acr	new Approval Cha	cklist soction on the	specific part numb	or's woh page				

* 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 manfacturer's technical specifications, manuals and inserts (where applicable).



Series 70 - Solenoid Valves

	Metal Work Series 70 - 1/4" NPT Port Solenoid Valves							
Model	<u>7020020100U</u>	<u>7020020200U</u>	<u>7020020400U</u>	<u>7020021100U</u>	7020021200U	<u>7020022100U</u>	7020022200U	7020022300U
Price	\$78.00	\$58.00	\$55.00	\$62.00	\$79.00	\$99.00	\$99.00	\$99.00
Drawing Link	PDF	PDF	PDF	PDF	PDF	PDF	PDF	PDF
Weight (lb)	0.43	0.	35	0.45	0.53	0.58	0.58	0.58
Manufacturer Specs	PDF	PDF	PDF	PDF	<u>PDF</u>	PDF	<u>PDF</u>	PDF
Valve Type	3-port (3-way),	2-position, single return	solenoid, spring	5-port (4-wa	y), 2-position	5-port (4-way), 5-port (4-way), 5-port (4-way), 3-position, 3-position, 3-position, center closed center exhaust center pressur		
Valve Configuration	N/A	N.C.	N.O.			N/A		
Operator				Sole	enoid			
Acting	Double solenoid	Signle	e solenoid, spring	return		Double	solenoid	
Inlet Port Size				1/4"	FNPT			
Outlet Port Size				1/4"	FNPT			
Flow (Cv)				1	.1			
Media			Filtered air without	ut lubrication; lubr	ication, if used, m	ust be continuous	3	
Pressure Range	14.5 to 145 psi		36.3 to 145 psi		14.5 to 145 psi		36.3 to 145 psi	
Temperature				14°F to 140°F	(-10°C to 60°C)			
Lubrication				ISO and	UNI FD 22			
Life Cycle				50 millio	on cycles			
Spec	ifications V	Vhen Used	With Meta	l Work Coi	ls (Sold Se	parately)		
Voltage (± 10%)			12	; 24 VDC - 24; 11	0; 220V AC 50/60)Hz		
Power Consumption				DC Coils: 2W ;	AC Coils: 3.5 VA			
Insulation				Cla	ss F			
Actuation Response Time (TRA) / Reset Response Time (TRR) at 87 psi	21/21 ms 19/45 ms 21/21 ms 19/45 ms							
Protection				IP 65 with	connector			
Connection				11mm DIN st	yle wiring plug			
Agency Approvals*				Coils have	e CE mark			

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



Series 70 - Solenoid Valves

	Metal Wo	rk Series 7	70 - 3/8" N	PT Port So	lenoid Valv	es		
Model	<u>7040020100U</u>	<u>7040020200U</u>	<u>7040020400U</u>	<u>7040021100U</u>	7040021200U	<u>7040022100U</u>	70400222000	7040022300 <u>U</u>
Price	\$89.00	\$69.00	\$69.00	\$73.00	\$95.00	\$118.00	\$118.00	\$118.00
Drawing Link	<u>PDF</u>	PDF	PDF	PDF	PDF	PDF	PDF	PDF
Weight (lb)	0.69	0.	58	0.82	0.89	1.06	1.	.06
Manufacturer Specs	PDF	PDF	PDF	PDF	PDF	PDF	PDF	PDF
Valve Type	3-ро	ort (3-way), 2-pos	ition	5-port (4-wa	y), 2-position	5-port (4-way), 5-port (4-way), 5-port (4-way) 3-position, 3-position, 3-position, center closed center exhaust center pressu		
Valve Configuration	N/A	N.C.	N.O.			N/A		
Operator				Sole	enoid			
Acting	Double solenoid	Signle	e solenoid, spring	return		Double	solenoid	
Inlet Port Size				3/8"	FNPT			
Outlet Port Size				3/8"	FNPT			
Flow (Cv)				2	1			
Media			Filtered air without	ut lubrication; lubr	rication, if used, m	ust be continuous	3	
Pressure Range	14.5 to 145 psi		36.3 to 145 psi		14.5 to 145 psi		36.3 to 145 psi	
Temperature				14°F to 140°F	(-10°C to 60°C)			
Lubrication				ISO and	UNI FD 22			
Life Cycle					on cycles			
Spec	ifications V	Vhen Used	With Meta	l Work Coi	ls (Sold Se	parately)		
Voltage (± 10%)			12	; 24 VDC - 24; 11	0; 220V AC 50/60)Hz		
Power Consumption				DC Coils: 2W ;	AC Coils: 3.5 VA			
Insulation	Class F							
Actuation Response Time (TRA) / Reset Response Time (TRR) at 87 psi	18/18 ms 21/72 ms 18/18 ms 21/72 ms							
Protection				IP 65 with	connector			
Connection				11mm DIN st	yle wiring plug			
Agency Approvals*				Coils hav	e 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 manfacturer's technical specifications, manuals and inserts (where applicable).



Series 70 - Solenoid Valves

	Metal Work Series 70 - 1/2" NPT Port Solenoid Valves							
Model	<u>7030020100U</u>	<u>7030020200U</u>	<u>7030020400U</u>	<u>7030021100U</u>	<u>7030021200U</u>	<u>7030022100U</u>	70300222000	7030022300U
Price	\$162.00	\$131.00	\$131.00	\$151.00	\$183.00	\$195.00	\$195.00	\$195.00
Drawing Link	PDF	PDF	PDF	PDF	PDF	PDF	PDF	PDF
Weight (lb)	1.64	1.	.51	1.95	2.02		2.75	
Manufacturer Specs	PDF	PDF	PDF	PDF	PDF	PDF	PDF	PDF
Valve Type	3-р	ort (3-way), 2-pos	ition	5-port (4-wa	y), 2-position	5-port (4-way), 5-port (4-way), 5-port (4-way) 3-position, 3-position, 3-position, center closed center exhaust center pressu		
Valve Configuration	N/A	N.C.	N.O.			N/A		
Operator			Solenoid					
Acting	Double solenoid	Signl	e solenoid, spring	return		Double	solenoid	
Inlet Port Size				1/2"	FNPT			
Outlet Port Size				1/2"	FNPT			
Flow (Cv)				4	.6			
Media			Filtered air witho	ut lubrication; lubr	ication, if used, m	ust be continuous	5	
Pressure Range	14.5 to 145 psi		36.3 to 145 psi		14.5 to 145 psi		36.3 to 145 psi	
Temperature				14°F to 140°F	(-10°C to 60°C)			
Lubrication				ISO and I	JNI FD 22			
Life Cycle				50 millio	on cycles			
Spec	ifications \	Nhen Used	With Meta	ıl Work Coi	ls (Sold Se	parately)		
Voltage (± 10%)			12	2; 24 VDC - 24; 11	0; 220V AC 50/60	Hz		
Power Consumption				DC Coils: 2W ;	AC Coils: 3.5 VA			
Insulation				Cla	ss F			
Actuation Response Time (TRA) / Reset Response Time (TRR) at 87 psi	t 25/25 ms 36/100 ms 25/25 ms 36/100 ms							
Protection				IP 65 with	connector			
Connection				11mm DIN st	yle wiring plug			
Agency Approvals*				Coils have	e CE mark			

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



Series 70 - External Pilot Solenoid Valves



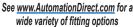
Part No. 70300200500U

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.

Features

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





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		Ν	.C.				
Operator	Solenoid						
Acting	Signle 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 a	ir without lubrication; lubr	ication, if used, must be o	continuous			
Pressure Range		Operating: Vacuum to 14	15 psi; Min Pilot: 36.3 ps	i			
Temperature		14°F to 140°F	(-10°C to 60°C)				
Lubrication		ISO and	UNI FD 22				
Life Cycle		50 millio	on cycles				
Specifications When	Used With Me	tal Work Coils (Sold Separately	()			
<i>Voltage</i> (± 10%)			0; 220V AC 50/60Hz				
Power Consumption		DC Coils: 2W ;	AC Coils: 3.5 VA				
Insulation		Cla	ss F				
Actuation Response Time (TRA) / Reset Response Time (TRR) at 87 psi			5 ms				
Protection			connector				
Connection			yle wiring plug				
Agency Approvals*		Coils hav	e 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 manfacturer's technical specifications, manuals and inserts (where applicable).



Series 70 - Compact Valve Manifolds



Part No. 0221000700U

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

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 <u>www.AutomationDirect.com</u> for a wide variety of fitting options

	Metal Work Series 70 - Compact Valve Manifolds								
Part No.	Description	Drawing Link	Price	Weight (lb)	Manufacturer Specs				
<u>0221000200U</u>	Metal Work air compact valve manifold, aluminum, 145 psi (10 bar) maximum operating pressure, (2) stations, 1/4in female NPT inlet(s). For use with 1/8in NPT Series 70 valves.	<u>PDF</u>	\$12.00	0.16	PDF				
<u>0221000300U</u>	Metal Work air compact valve manifold, aluminum, 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				
<u>0221000400U</u>	Metal Work air compact valve manifold, aluminum, 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				
<u>0221000500U</u>	Metal Work air compact valve manifold, aluminum, 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				
<u>0221000600U</u>	Metal Work air compact valve manifold, aluminum, 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				
<u>0221000700U</u>	Metal Work air compact valve manifold, aluminum, 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				
<u>0222000200U</u>	Metal Work air compact valve manifold, aluminum, 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				
<u>0222000300U</u>	Metal Work air compact valve manifold, aluminum, 145 psi (10 bar) maximum operating pressure, (3) stations, 3/8in female NPT inlet(s). For use with 1/4in NPT Series 70 valves.	<u>PDF</u>	\$18.00	0.29	PDF				
<u>0222000400U</u>	Metal Work air compact valve manifold, aluminum, 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				
<u>0222000500U</u>	Metal Work air compact valve manifold, aluminum, 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				
<u>0222000600U</u>	Metal Work air compact valve manifold, aluminum, 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				
<u>0222000700U</u>	Metal Work air compact valve manifold, aluminum, 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				



Series 70 - Compact Valve Manifold Accessories



Part No. 0221000191U



Part No. 0222000191U

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

Features

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

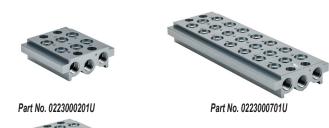


See <u>www.AutomationDirect.com</u> for a wide variety of fitting options

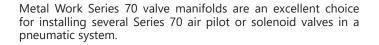
Metal Work Series 70 - Compact Valve Manifold Accessories								
Part No.	Description	Drawing Link	Price	Weight (lb)	Manufacturer Specs			
<u>0221000190U</u>	Metal Work bracket, 120mm. For use with Series 70 1/8in compact manifolds.	<u>PDF</u>	\$15.00	0.68	<u>PDF</u>			
<u>0221000191U</u>	Metal Work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



Series 70 - Valve Manifolds



Part No. 02230010010



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 <u>www.AutomationDirect.com</u> for a wide variety of fitting options

	Metal Work Series 70 - Valve Manifolds						
Part No.	Description	Drawing Link	Price	Weight (lb)	Manufacturer Specs		
<u>0223000201U</u>	Metal Work air valve manifold, aluminum, 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	<u>PDF</u>		
<u>0223000301U</u>	Metal Work air valve manifold, aluminum, 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	<u>PDF</u>		
<u>0223000401U</u>	Metal Work air valve manifold, aluminum, 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	<u>PDF</u>		
<u>0223000501U</u>	Metal Work air valve manifold, aluminum, 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	<u>PDF</u>		
<u>0223000601U</u>	Metal Work air valve manifold, aluminum, 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	<u>PDF</u>		
<u>0223000701U</u>	Metal Work air valve manifold, aluminum, 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	<u>PDF</u>		
<u>0223000801U</u>	Metal Work air valve manifold, aluminum, 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	<u>PDF</u>		
<u>0223000901U</u>	Metal Work air valve manifold, aluminum, 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	<u>PDF</u>		
<u>0223001001U</u>	Metal Work air valve manifold, aluminum, 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	<u>PDF</u>		
<u>0224000201U</u>	Metal Work air valve manifold, aluminum, 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	<u>PDF</u>		
<u>0224000301U</u>	Metal Work air valve manifold, aluminum, 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		
<u>0224000401U</u>	Metal Work air valve manifold, aluminum, 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		
<u>0224000501U</u>	Metal Work air valve manifold, aluminum, 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		
<u>0224000601U</u>	Metal Work air valve manifold, aluminum, 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		



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, 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.	PDF	\$99.00	1.81	PDF		
<u>0224000801U</u>	Metal Work air valve manifold, aluminum, 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.	PDF	\$116.00	2.01	PDF		
<u>0224000901U</u>	Metal Work air valve manifold, aluminum, 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.	PDF	\$141.00	2.27	PDF		
<u>0224001001U</u>	Metal Work air valve manifold, aluminum, 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.	PDF	\$176.00	2.5	PDF		



Series 70 - Valve Manifold Accessories



Part No. 0226004001







2



See <u>www.AutomationDirect.com</u> 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	PDF				
<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	PDF				
<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	PDF				
<u>0226005001</u>	Metal Work manifold port plug, for use with Series 70 1/4in manifolds.	<u>PDF</u>	\$1.00	0.02	PDF				
<u>0226005500</u>	Metal Work blanking plate, for use with Series 70 1/4in manifolds. Mounting hardware included.	PDF	\$2.75	0.06	PDF				
<u>0226005600</u>	Metal Work DIN rail adapter, for use with Series 70 1/4in manifolds.	<u>PDF</u>	\$3.00	0.08	PDF				
<u>0226005701</u>	Metal Work gasket kit, for use with Series 70 1/4in manifolds, includes (3) o-rings and (3) screws.	PDF	\$1.50	0.02	PDF				