

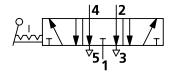
5/3-way valve

manually operated, series 70 low temperature



Art. No. 149922 Type No. 70L2000600





Exemplary illustration

The series 70 low temperature valves in manually operated version with hand lever complement our range of traditional way valves of series 70. They represent a selection of the most commonly used manually operated way valves, which are manufactured with components for special low temperature applications. These valves are also suitable for use with vacuum.

Technical data

Function	5/3
Operation	mid-position exhausted, detent
Connection	G 1/4 IT
DN	7.5
Flow rate measurement 1	flow rate at 6 bar and Δp 0.5 bar
Flow rate 1	750 NI/min
Flow rate measurement 2	flow rate at 6 bar and Δp 1 bar
Flow rate 2	1100 Nl/min
Medium	filtered, dry and unlubricated compressed air
Required purity class in accordance w. ISO 8573-1	4.2.3
Operating pressure	-0.99 - 10 bar
Temperature range	-40 to 60 °C
Valve body	aluminium
Piston	nickel-plated aluminium
Sealant	NBR
Spring	special steel



Commercial data

Customs tariff number	84818079
Country of origin	IT
eCl@ss 5.1.4	27291801
eCl@ss 9.0	27291390
UNSPSC_Code_v190501	40141603
UNSPSC_CodeDesc_v190501	Pneumatic valves



VALVES SERIES 70

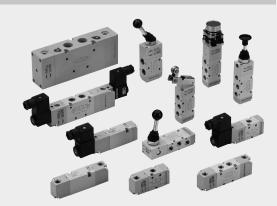
The Series 70 forms part of Metal Work's full range of traditional valves.

They are available in sizes 1/8'', 1/4'', 3/8'' and 1/2'', versions 3/2, 5/2, 5/3 and double 3/2, with mechanical, manual, pneumatic and

They can be installed in line, onto a wall, on the cylinder (using a special bracket) or in series (on a multiple or modular base) to suit all possible applications.

A range of valves (Series 70 LT) designed using components for specific low-temperature applications is now available for the most commonly used types and sizes.

These highly reliable valves comply with the main applicable standards, including Atex, ISO 13489 and SIL, as stated in the documents and certificates available online.

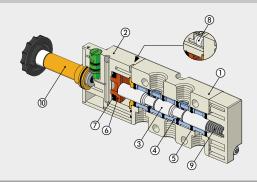


TECHNICAL DATA			1/8″	1/4″	3/8″	1/2″
Thread on the valve ports			1/8"	1/4"	3/8″	1/2″
Operating pressure series 70 versions		bar				
monostable and bistable differential				2.5 t	o 10	
bistable				1 to		
asserved				vacuun	1 to 10	
Operating pressure series 70 LT (low temp	perature) versions	bar				
hand operated				m to 10		•
pneumatic and solenoid/pneumatic	t = -40°C to -10°C			o 10		
	t = -10°C to +60°C	-	3 to	o 10		-
Minimum pilot pressure		bar		2.	5	
Operating temperature range		°C				
series 70 versions				-10 to		
series 70 LT (low temperature) versions				-40 to		ı
Nominal diameter		mm	5	7.5	13.3	15
Conductance C		NI/min · bar	121.43	264.26	505.52	971.43
Critical ratio b		bar/bar	0.32	0.27	0.32	0.43
Flow rate at 6 bar ΔP 0.5 bar		NI/min	400	750	1560	3200
Flow rate at 6 bar ΔP 1 bar		NI/min	550	1100	2150	4600
Installation				rtical assembly is not recomm		
Fluid				d air without lubrication; lubri		
			For series 70 LT (low-t	temperature) versions, it is		perfetamente dried air.
Recommended lubricant				ISO and U		
			For series 70 LT	Γ (low-temperature) it is no	t expected to be used wit	h lubricated air.
Maximum coil nut torque		Nm		1		
Compatibility with oils				See cha	pter Z1	

COMPONENTS SERIES 70

- ① VALVE BODY: Aluminium
- ② CONTROL/END CAP: plastic

- (2) CONTROL/END CAP: plastic
 (3) SPOOL: chemically nickel-plated aluminium
 (4) DISTANCE PLATES: plastic
 (5) GASKETS: NBR
 (6) PISTONS: Hostaform®
 (7) PISTON GASKET: NBR
 (8) FILTER: plastic
 (9) SPRINGS: special steel
 (10) OPERATOR: Brass pipe Stainless steel core



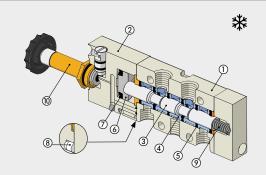


RIEGLER



COMPONENTS SERIES 70 LT (LOW TEMPERATURE)

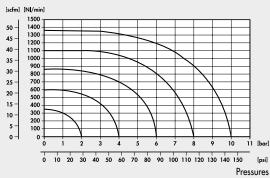
- ① ALVE BODY: aluminium
- CONTROL: aluminium
 SPOOL: chemically nickel-plated aluminium
 DISANTE LANDS: plastic
- ⑤ GASKETS: HNBR
- PISTONS: aluminium
- 7 PISTON GASKET: HNBR
- FILTER: plastic
- SPRINGS: special steel
- (ii) OPERATOR: brass pipe Stainless steel core (version specific for low-temperature applications)



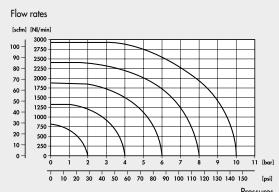
FLOW CHARTS

VALVES SERIES 70 1/8"

Flow rates

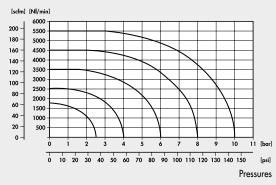


VALVES SERIES 70 1/4"

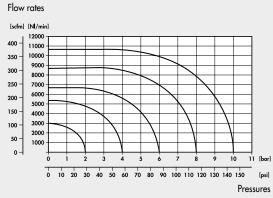


VALVES SERIES 70 3/8"

Flow rates



VALVES SERIES 70 1/2"







PNEUMAT

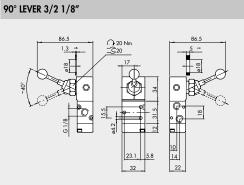
VALVES SERIES 70 LT (LOW TEMPERATURE)

TECHNICAL DATA		1/8″	1/4"	3/8″	
Operating pressure standard	bar		•		
hand operated		,	Vacuum to 1	0	
pneumatic and solenoid/pneumatic	t = -40°C to -10 °C		5 to 10		(4)
	$t = -10^{\circ}C$ to $+60^{\circ}C$		3 to 10		
Operating temperature range	°C		-40 to +60		
Nominal diameter	mm	5	7.5	13.3	
Conductance C	Nl/min · bar	121.43	264.26	505.52	
Critical ratio b	bar/bar	0.32	0.27	0.32	Contract of the contract of th
Flow rate at 6 bar ΔP 0.5 bar	NI/min	400	750	1560	1000
Flow rate at 6 bar ΔP 1 bar	NI/min	550	1100	2150	
PNEUMATIC			•		
Minimum pilot pressure	bar				
t = -40°C to -10°C			5		0
t = -10°C to +60°C			3		4 7
TRA / TRR monostable at 6 bar (at 20	°C) ms	6/15	7/15	5/28	· · · · · · · · · · · · · · · · · · ·
TRA / TRR bistable at 6 bar (at 20°C)	ms	7/7	7/7	13/13	1011200
SOLENOID/PNEUMATIC					BB: 88-701-1-1-1
TRA / TRR monostable at 6 bar (at 20	°C) ms	15/35	19/45	21/72	Θ :
TRA / TRR bistable at 6 bar (at 20°C)	ms	20/20	21/21	18/18	
Coil voltage values			12; 24 VDC	:	
		24; 110	; 220V AC	50/60Hz	
Power	t = -40°C to -10 °C	5 W	(DC) - 5 VA	(AC)	
	$t = -10^{\circ}C$ to $+60^{\circ}C$	2 W	(DC) - 3.5 VA	4 (AC)	(a) (b) (c)
Voltage tolerance	%		-10 to +15		and the state of t
Insulation class			F 155		1 2 100 april 100
Maximum coil nut torque	Nm		1		701.102.11
Hand operator			Bistable		8
Notes: after a long stop and with very lo			ne first		0
drives may be slower. It recommends the	use of perfectly dry ai	r.			
•	. , ,				

SYNOPTIC, SIZES AND VERSIONS

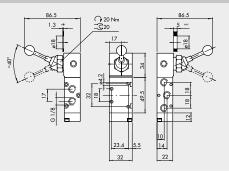
P N V	2	3	P N	S	OO	L T
Family	DIMENSIONS	FUNCTION	OPERATORS 14	RESETTING (12)	Further Deta	AILS
MAV manual valves PNV pneumatic valves SOV solenoid/ pneumatic	2 1/8" 3 1/4" C 3/8"	3 3/2 5 5/2 6 5/3	LE leva 90° PN pneumatic SO solenoid	S mechanical springs B bistable O stable for 5/3	OO no indication NC normally closed NO normally open CC closed centres OC open centres PC pressure centres	LT low temperature

VALVES SERIES 70 LT, HAND OPERATED (LOW TEMPERATURE)



Symbol	Cod	le	Abbrev.	Weight [g]
PITT.	₩ 70L	1000100	MAV 23 LES NC LT	184
<u></u>				
2	₩ 70L	1000200	MAV 23 LEB OO LT	187
TATAL				

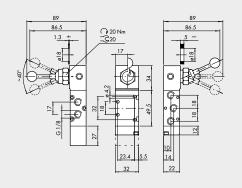
90° LEVER 5/2 1/8"



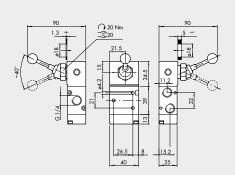
Symbol	Code	Abbrev.	Weight [g]
21. 11. 11. 11. 11. 11. 11. 11. 11. 11.	※ 70L100030	0 MAV 25 LES OO LT	210
♥s ♥s			
		0 MAV 25 LEB OO LT	213
11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			



90° LEVER 5/3, 1/8"



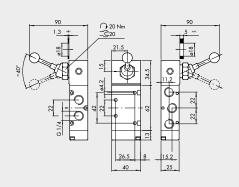
90° LEVER 3/2, 1/4"



Symbol		Code	Abbrev.	Weight [g]
	*	70L1001000	MAV 26 LES CC LT	242
	*	70L1000900	MAV 26 LES OC LT	242
	*	70L1001100	MAV 26 LES PC LT	242
	*	70L1000500	MAV 26 LEO CC LT	194
P 1 2 7 1 1 1 1 1 1 1 1 1	*	70L1000600	MAV 26 LEO OC LT	194
	*	70L1000700	MAV 26 LEO PC LT	194

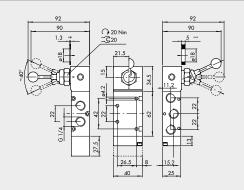
Symbol		Code	Abbrev.	Weight [g]	
P 1 1 1	*	70L2000100	MAV 33 LES NC LT	272	
<u>⊢r√la i</u> w					
21	*	70L2000200	MAV 33 LEB OO LT	272	
A T T A T					

90° LEVER 5/2, 1/4"



Symbol		Code	Abbrev.	Weight [g]
AND M	*	70L2000300	MAV 35 LES OO LT	326
φ, φ,				
2/\ III / I	*	70L2000400	MAV 35 LEB OO LT	326

90° LEVER 5/3, 1/4"



Symbol		Code	Abbrev.	Weight [g]
	*	70L2001000	MAV 36 LES CC LT	354
	*	70L2000900	MAV 36 LES OC LT	354
	*	70L2001100	MAV 36 LES PC LT	354
	*	70L2000500	MAV 36 LEO CC LT	288
	*	70L2000600	MAV 36 LEO OC LT	288
	*	70L2000700	MAV 36 LEO PC LT	288

B1.38