

4-Way Pilot Valves

Models 4058 and 4458 Aluminum and stainless steel versions

Overview

AMOT Models 4058 and 4458 4-way valves were developed for use in manual and automatic hydraulic or pneumatic control systems. They offer versatility in operation requirements and allowable pressure limits. For a 1/4" size control valve, they offer exceptional flow capacity.

These valves are suitable for use on clean air, natural gas, L.P. gases, petroleum-based lubricants and hydraulic oils as well as many other fluids making use of the patented "Tad-Pole" seal from AMOT which provides for lower friction and longer cycle life than conventional O-rings.



**Type 4058 Valve
(Aluminum)**

Typical applications

- Hydraulic fluid and actuator control
- Pneumatic panel and safety control systems

Key features and benefits

- Balanced force design, pressure can be applied to any port
- Center dead spot - no port overlap
- Arranged for panel or bracket mounting
- Available in aluminum or 316 stainless steel



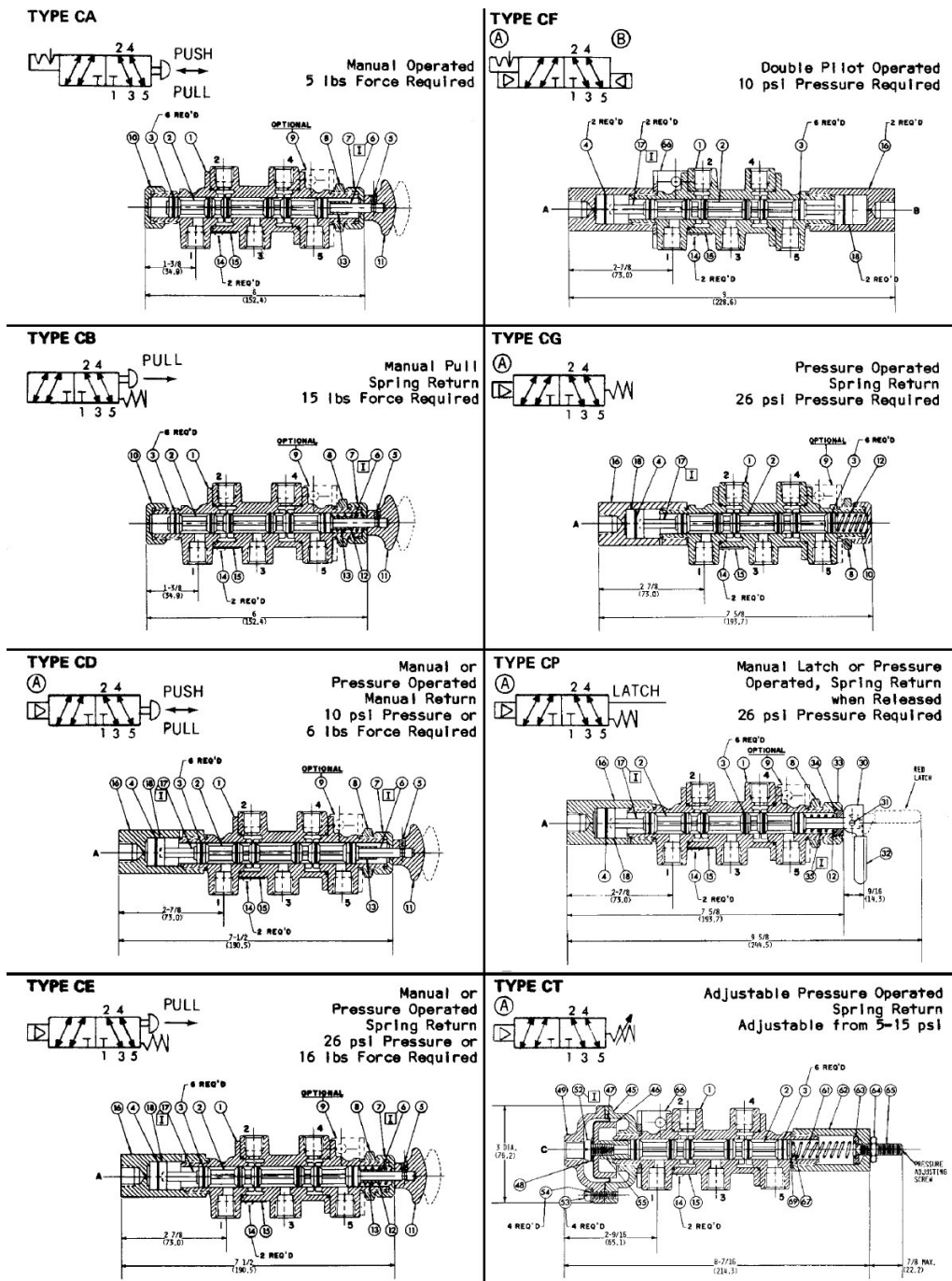
4-Way Pilot Valves - Models 4058/4458

Operation (manual or automatic)

Each valve is carefully assembled, tested and inspected to ensure that high quality standards are met. Valves are made from precision cast and machined aluminum or stainless steel parts. The unique porting arrangement

eliminates steel ring cutting and permits pressure inlet at any port without danger of seal "blow out". Standard construction permits valves pressures to 125 psi.

Valve Types



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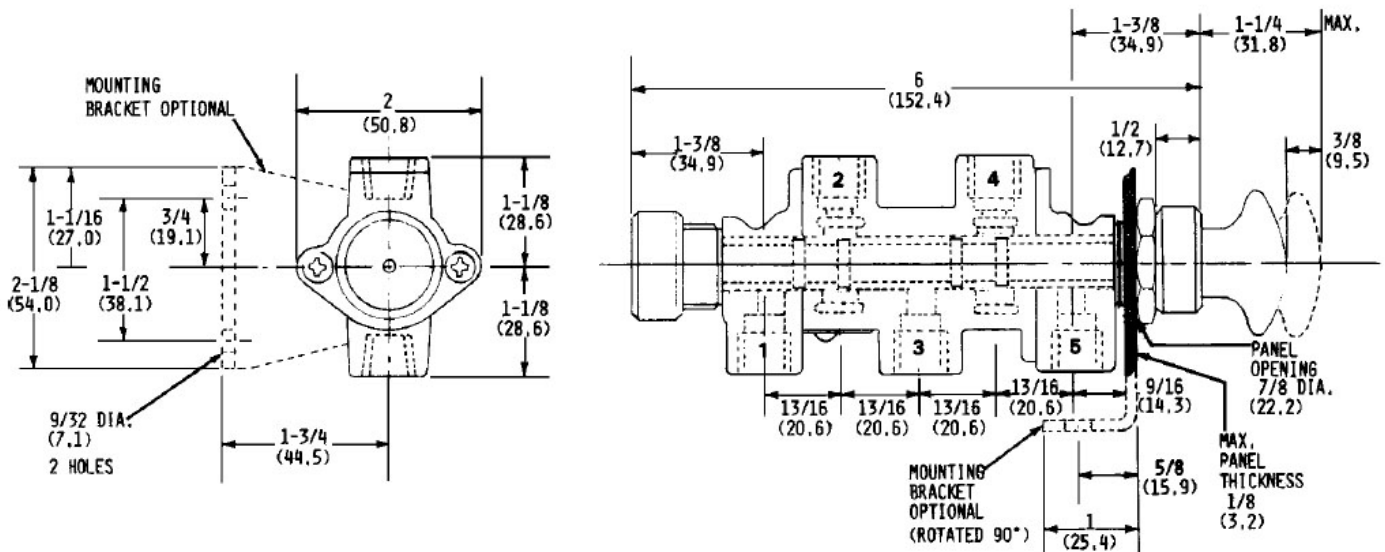
Specification

Body material	4058	Precision cast aluminum
	4458	316 Stainless steel
Standard pool material	Anodized aluminum	
Standard seal material	Viton	
Maximum temperature	120°C	(248°F)
Flow coefficient	Kv = 1.0	Cv = 1.2
Maximum pressure at Ports 1, 2, 3, 4 or 5*	8.62 bar	(125 psi)
Maximum pressure at Ports A or B	10.34 bar	(150 psi)
Maximum pressure at Port C (types CT)**	8.62 bar	(125 psi)
Net weight	4058	0.4 - 1.0 kg (0.9 - 2.2 lb)
	4458	1.0 - 2.9 kg (2.2 - 6.4 lb)

* 10.34 bar (150 psi) if a slight increase in operation force and pressures is acceptable.

** 24.11 (350 psi) if a suitable orifice is used to prevent damage to valve components from sudden application of pressure.

Dimensions



Dimensions in inches (mm)

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How to order

Use the table below to select the unique specification of your 4058 and 4458 4-Way Pilot Valve

Example	4058D	007E	1	-AA	Code Description	
Basic Models						
Basic Model Number	4058D				Precision Cast Aluminum body	
	4458A				316 Stainless Steel body	
Operator, Finish & Thread						
Operator, Finish & Thread	type CA	010B			Stainless Steel NPT with Viton Seal	
		011B			Gulfproofed NPT with Viton Seal	
	type CB	009B			Stainless Steel NPT with Viton Seal	
		012B			Gulfproofed NPT with Viton Seal	
	type CD	007E			Stainless Steel NPT with Viton Seal	
		014E			Gulfproofed NPT with Viton Seal	
	type CE	006E			Stainless Steel NPT with Viton Seal	
		015E			Gulfproofed NPT with Viton Seal	
	type CF	005H			Stainless Steel NPT with Viton Seal	
		016H			Gulfproofed NPT with Viton Seal	
	type CG	004E			Stainless Steel NPT with Viton Seal	
		017E			Gulfproofed NPT with Viton Seal	
	type CP	003E			Stainless Steel NPT with Viton Seal	
		018E			Gulfproofed NPT with Viton Seal	
	type CT	019L			Gulfproofed NPT with Viton Seal	
	Spools					
	Spools			1		Standard spool number
	Special Requirements					
				-AA	Standard	
				-**	Contact AMOT for special requirements made to order.	

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Options

Bracket Mounting or Panel Mounting. A satin chrome nut, Part Number: 3496L001 is available as an option, and it substitutes for the standard nut to improve the appearance for the front of a panel mounting.

Red Knob: Part Number 681L001 is available for types CA, CB, CD or CE as a substitute for the standard black knob.

Service Kits

For all types except CT (Viton) Kit 9129X001			
Ref no.:	Qty	Description	Part no.
3	6	Seal ring, Viton	7896L002
4	2	Seal ring, Viton	7898L002

(May contain extra parts when used with some valves).

Installation

All connections on 4058 and 4458 valves are made with 1/4" pipe thread fittings. Apply a quality thread sealant such as Loctite Pipe Sealant to pipe thread connections but do not permit it to enter the valve passages. Teflon thread sealing tape may be used but must be applied so that shreds of the tape do not enter the valve.

Avoid overtightening fittings on the valve part bosses as they may be cracked, especially when Teflon thread sealing tape is used.

All valves may be bracket mounted; most are also suitable for panel mounting. A satin chrome nut, Part No: 3496L001, is available as an option for most types. It substitutes for standard nut to improve the appearance for front of panel mountings. A red knob, part no 681L001, is available for Types CA, CB, CD or CE if desired as a substitute for standard black knob.

Maintenance

AMOT 4058/4458 valves make use of our 'tad pole' rubber seals to provide low operating forces and high cycle life. Wear can be observed by checking for leakage which will increase as there is more wear.

To check the seal rings, the valve spool can be removed. This is done on most versions by simply removing the end cap and pulling out the spool. Spools on panel mounted valves can be removed from in front of the panel without disconnecting any piping.

To replace seal rings, remove the spool, take off the old rings, thoroughly clean the grooves, and coat the grooves with Dow Corning no 33 grease (AMOT part no: 911L001). Lightly coat the new rings with grease and install them, first inserting the tin tail section of the ring into one side of the groove. Work around the ring until it is uniformly positioned. Remove excess grease and reinstall the piston.

When these valves are used in safety control systems, it is recommended that the system be checked monthly for proper functioning.

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