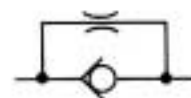




HYDRAULIC VALVES

DIRECTIONAL CONTROL ACCESSORIES ORIFICE PLATES



FUNCTION

To restrict the fluid flow in or out of valve ports.

APPLICATION

"IN-FLOW" POSITION

Orifice plates installed in this position restrict flow entering the valve port from a cylinder or motor, offering these advantages:

1. Prevents cavitation of cylinder or motor having an inertia load.
2. Improves control of operation for double or single acting cylinders when lowering.
3. Improves control of rotary cylinders which have inertia loads in both directions. (use an orifice plate in both cylinder ports)

"OUT-FLOW" POSITION

Orifice plates installed in this position restrict flow of pressurized oil flowing out of the valve port to a cylinder or motor, offering the advantage of:

Improved control for extending single or double acting cylinders or speed of a hydraulic motor.

ORIFICE SIZING:

CROSS Engineering will calculate the proper orifice size for each application if flow rate, system pressure, and pressure drop requirements are supplied.

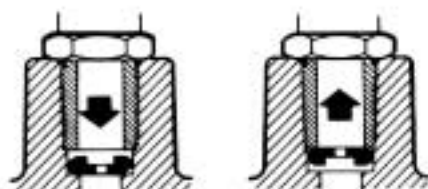
ORIFICE SIZES AVAILABLE

.031	.081
.040	.094
.047	.109
.052	.125
.055	.140
.060	.156
.063	.204
.078	.250

INSTALLATION INSTRUCTIONS

Insert orifice plate into port in proper position to obtain desired direction of flow restriction. Lips of plate always point toward the pressure source to assure proper seating. (For "IN-FLOW" restriction, plate lips point "OUT". For "OUT-FLOW" restriction, plate lips point "IN".

$\frac{3}{4}$ - 16 (SAE #8) Ports



IN-FLOW OUT-FLOW
RESTRICTION

The lower face of the fitting inserted into the port will limit the upward travel of the orifice plate.

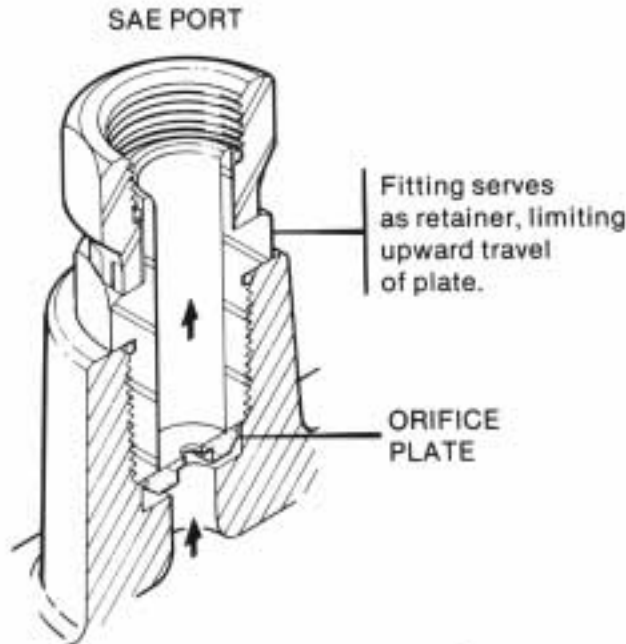
$\frac{1}{2}$ " NPTF Ports



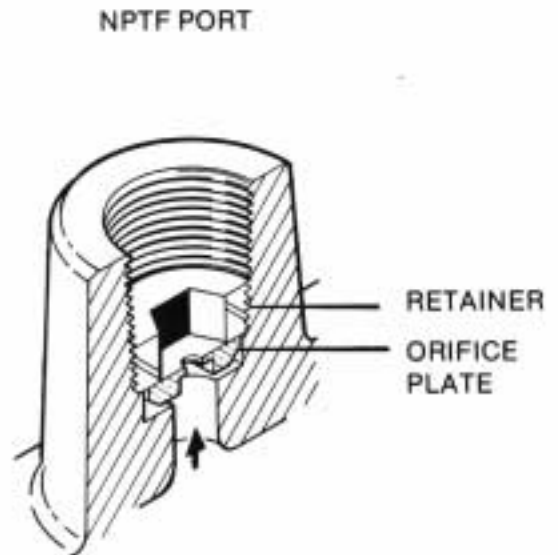
IN-FLOW OUT-FLOW
RESTRICTION

It is necessary to use the retainer (#1A0741) screwed into the port until it bottoms on the port thread, to limit the upward travel of the orifice plate. CAUTION: After installation of retainer, check to see that orifice plate is free to move at least $\frac{1}{32}$ inch.

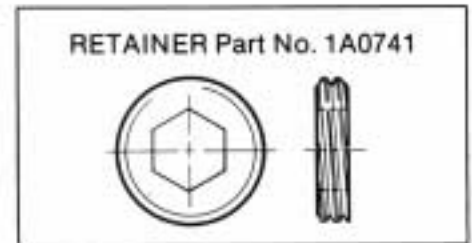
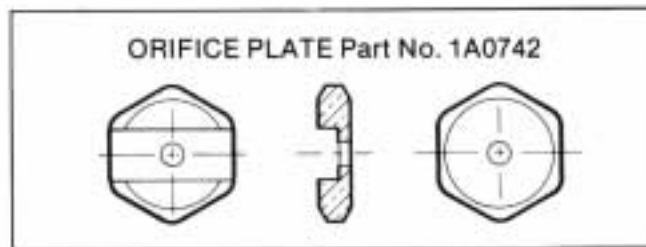
ORDERING INFORMATION



ORIFICE PLATE ONLY
Available for 1/4" - 16 (SAE #8)
ports only.



ORIFICE PLATE and RETAINER
Available for 1/2" ports only.



SAE #8 (1/4" - 16)	ORIFICE PLATE - 1A0742	HOLE DIA. use 3 digit decimal to identify diameter of hole in orifice plate.
NPTF (1/2")	RETAINER - 1A0741 ORIFICE PLATE - 1A0742	

EXAMPLE: 1A0742-125 describes an orifice plate with 1/8" hole. If the hole diameter is not specified, plates without hole will be shipped and customer must drill.



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