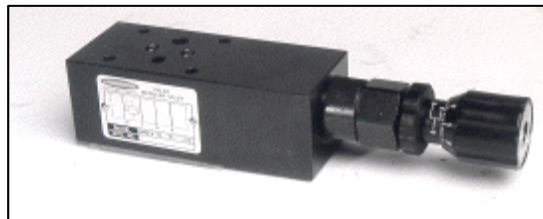


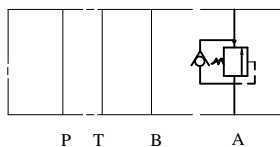
# IFP MCB03 COUNTER BALANCE MODULE



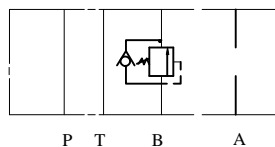
- ISO4401-03 SIZE/NFPA D03
- ADJUSTABLE MICROMETER KNOB STANDARD
- EXTREMELY PRECISE CONTROL
- LOW PRESSURE OVERRIDE



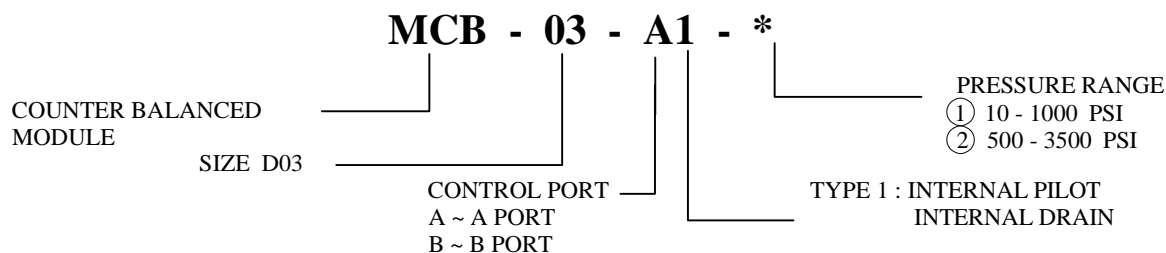
MCB-03-A



MCB-03-B



## ORDERING CODE



## SPECIFICATIONS

TYPES	SIZE	MAX. PRESSURE (PSI)	RATED FLOW (GPM)	PRESSURE RANGE (PSI)	WEIGHT lbs
MCB-03-A1-*	D03	4500 PSI	15	① 10 - 1000 PSI	2.40
MCB-03-B1-*				③ 500 - 3500 PSI	2.40

IFP offers a modular Counter Balanced Valve designed for use in applications requiring a valve to restrain flow and prevent cavitation by keeping the load from running ahead of the pump. They also serve as safety devices in case of line breakage, provide thermal relief protection in blocked systems, and can function as a deceleration valve. The use of stackable modules offers cost effective, compact hydraulic systems in which the modules are "sandwiched" between a directional valve and standard mounting surface.

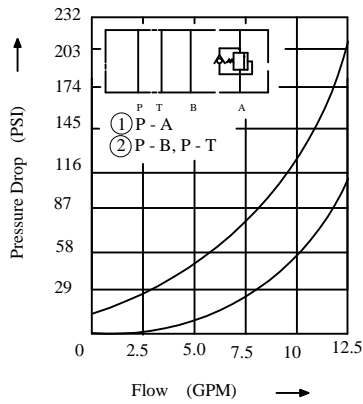
# IFP MCB03 COUNTER BALANCE MODULE



## **PERFORMANCE CURVES** Viscosity (100-150 SUS)

MCB-03-A1- \*

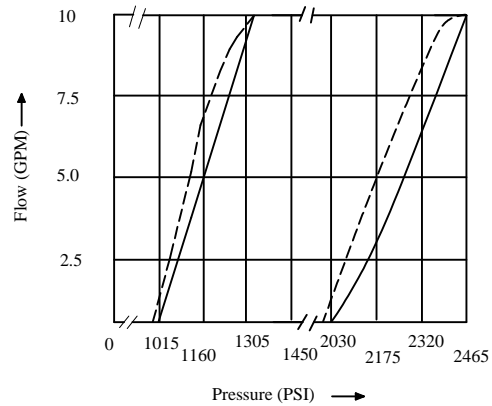
Pressure Drop characteristic



MCB-03-A1- \*  
B1

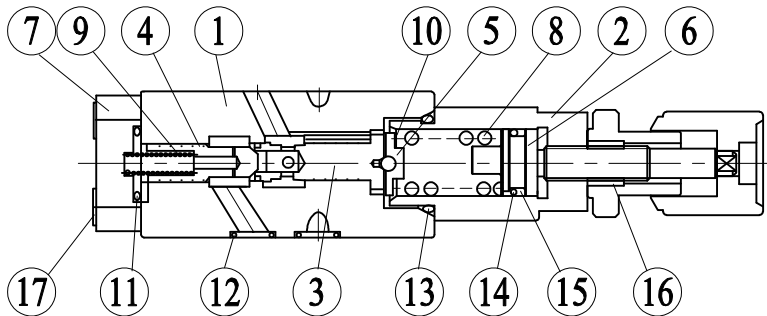
Pressure - Flow characteristic

————— PRESSURE INCREASE  
- - - - - PRESSURE DECREASE



## **CROSS SECTION DIAGRAM**

MCB-03-A1-\*



NO.	DESCRIPTION
1	BODY
2	RETAINER
3	SPOOL
4	POPPET
5	GUIDE
6	SCREW
7	COVER
8	SPRING
9	SPRING
10	BALL
11	O-RING
12	O-RING
13	O-RING
14	O-RING
15	BACK-UP RING
16	KNOB UNIT
17	SCREW

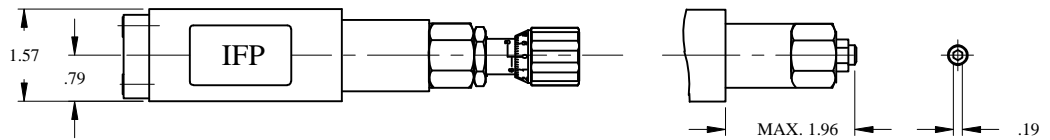
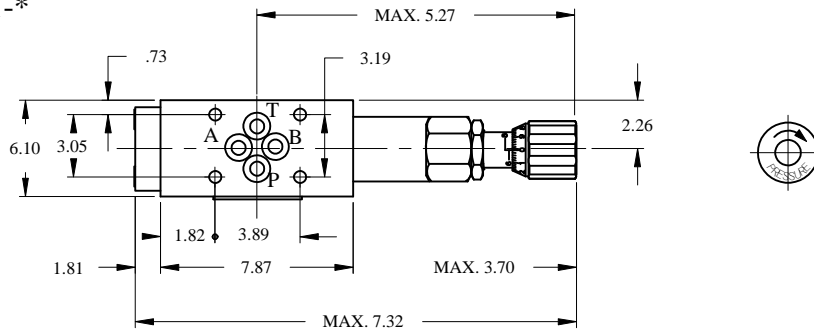
NO.	PARTS NAME	PARTS NO.	Q'TY
11	O-RING	P16, 90°	1
12	O-RING	P9, 90°	4
13	O-RING	P22, 90°	1
14	O-RING	P14, 70°	1

# IFP MCB03 COUNTER BALANCE MODULE

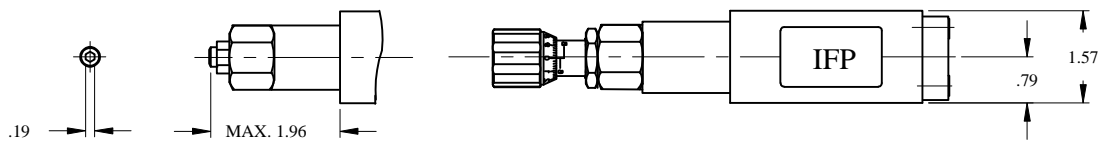
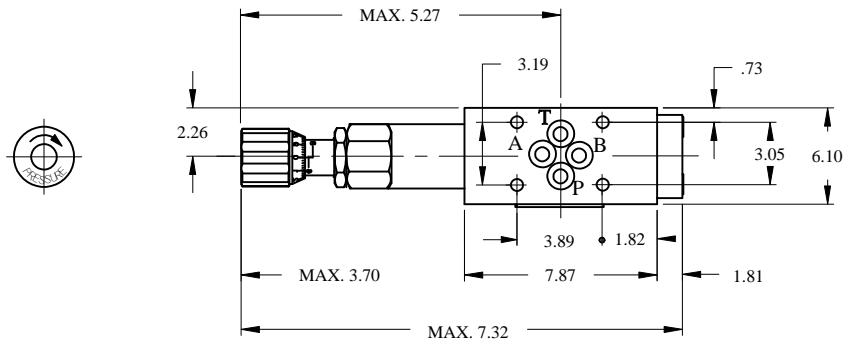


## DIMENSIONS

MCB-03-A1-\*



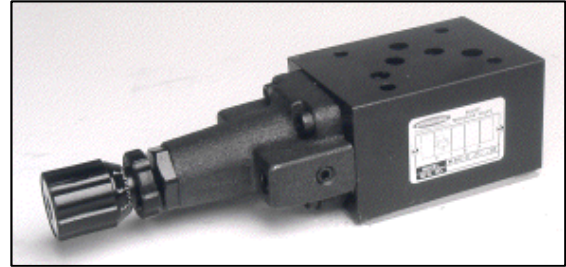
MCB-03-B1-\*



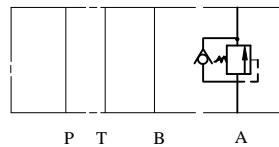
# IFP MCB05 COUNTER BALANCE MODULE



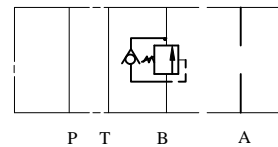
- ISO4401-05 SIZE/NFPA D05
- ADJUSTABLE MICROMETER KNOB STANDARD
- EXTREMELY PRECISE CONTROL
- LOW PRESSURE OVERRIDE



MCB-05-A



MCB-05-B



## ORDERING CODE

**MCB - 05 - A1 - \***

COUNTER BALANCED  
MODULAR VALVE  
SIZE D05

CONTROL PORT  
A ~ A PORT  
B ~ B PORT

PRESSURE RANGE  
① 50 - 125 PSI  
② 125 - 500 PSI  
3 500 - 3000 PSI

TYPE 1 : INTERNAL PILOT  
INTERNAL DRAIN

## SPECIFICATIONS

TYPES	SIZE	MAX. PRESSURE (PSI)	RATED FLOW (GPM)	PRESSURE RANGE (PSI)	WEIGHT lbs
MCB-05-A1-*	D05	4500 PSI	30	① 50 - 125 PSI	7.70
MCB-05-B1-*				② 125 - 500 PSI	
				③ 500 - 3000 PSI	

IFP offers a modular Counter Balanced Valve designed for use in applications requiring a valve to restrain flow and prevent cavitation by keeping the load from running ahead of the pump. They also serve as safety devices in case of line breakage, provide thermal relief protection in blocked systems, and can function as a deceleration valve. The use of stackable modules offers cost effective, compact hydraulic systems in which the modules are "sandwiched" between a directional valve and standard mounting surface.

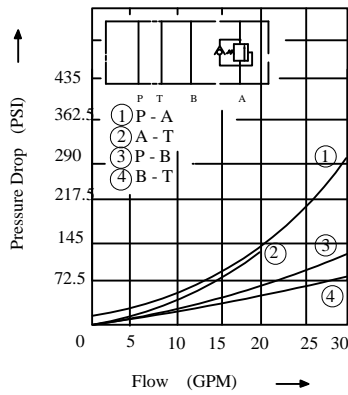
# IFP MCB05 COUNTER BALANCE MODULE



## PERFORMANCE CURVES Viscosity (100-150 SUS)

MCB-05-A1- \*

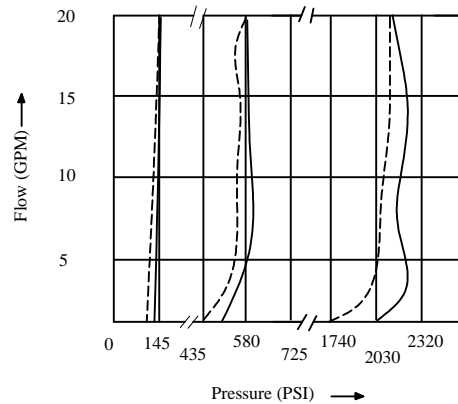
Pressure Drop characteristic



MCB-05-A1- \*  
B1

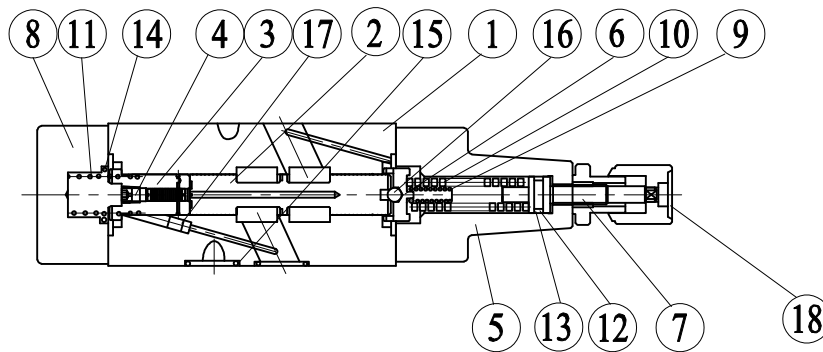
Pressure - Flow characteristic

————— PRESSURE INCREASE  
- - - - - PRESSURE DECREASE



## CROSS SECTION DIAGRAM

MCB-05-A1-1



NO.	DESCRIPTION
1	BODY
2	SPOOL
3	SPOOL
4	SLEEVE
5	COVER
6	GUIDE
7	SCREW
8	COVER
9	SPRING
10	SPRING
11	O-RING
12	BACK-UP RING
13	O-RING
14	O-RING
15	O-RING
16	BALL
17	ORIFICE
18	PLATE

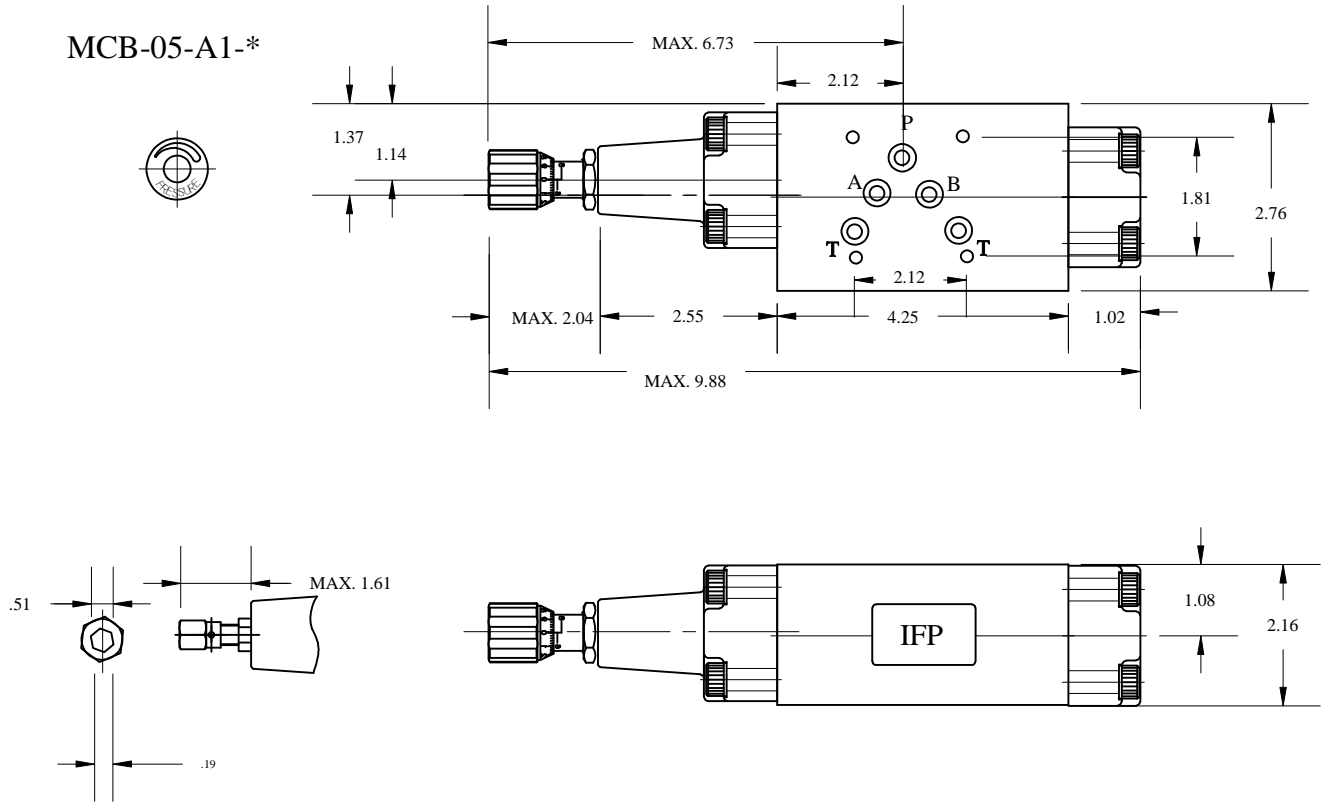
NO.	PARTS NAME	PARTS NO.	Q'TY
13	O-RING	P8, 70°	1
14	O-RING	P26, 90°	2
15	O-RING	AS-568-014	5

# IFP MCB05 COUNTER BALANCE MODULE

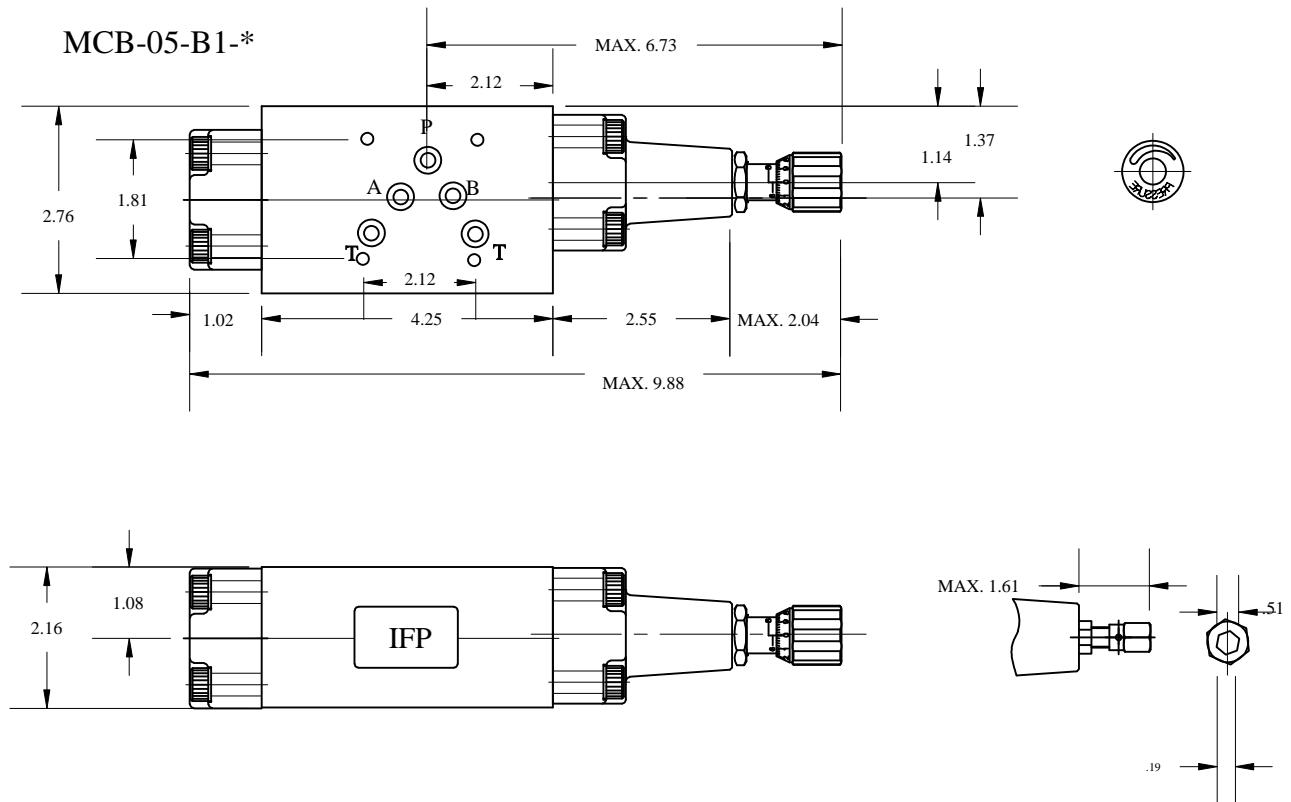


## DIMENSIONS

MCB-05-A1-\*



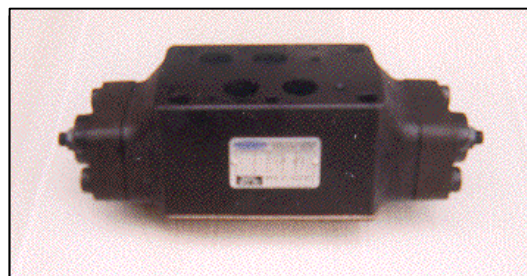
MCB-05-B1-\*



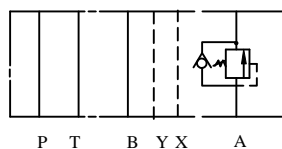
# IFP MCB07 COUNTER BALANCE MODULE



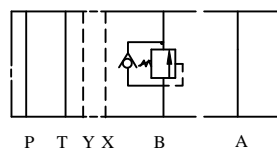
- ISO4401-07 SIZE/NFPA D07
- EASY ADJUSTABLE KNOB
- EXTREMELY PRECISE CONTROL
- LOW PRESSURE OVERRIDE



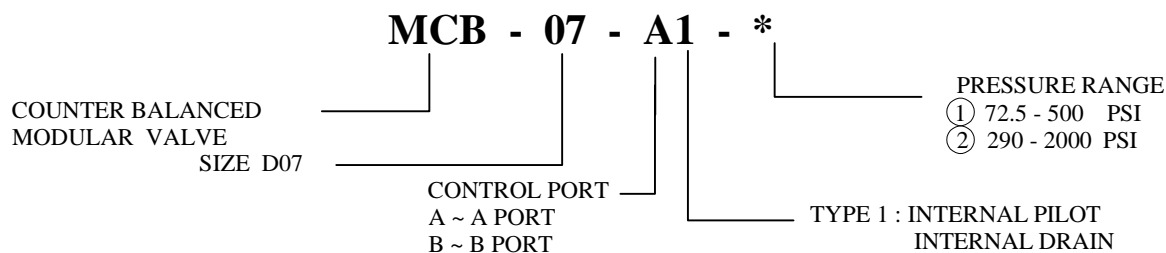
MCB-07-A



MCB-07-B



## ORDERING CODE



## SPECIFICATIONS

TYPES	SIZE	MAX. PRESSURE (PSI)	RATED FLOW (GPM)	PRESSURE RANGE (PSI)	WEIGHT lbs
MCB-07-A1-*	D07	4570 PSI	79.3	① 72.5 - 500 PSI	17.70
MCB-07-B1-*				② 290 - 2030 PSI	

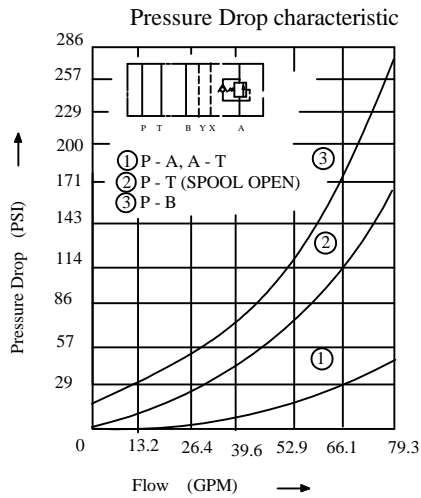
IFP offer a modular Counter Balanced Valve designed for use in applications requiring a valve to restrain flow and prevent cavitation by keeping the load from running ahead of the pump. They also serve as safety devices in case of line breakage, provide thermal relief protection in blocked systems, and can function as a deceleration valve. The use of stackable modules offers cost effective, compact hydraulic systems in which the modules are "sandwiched" between a directional valve and standard mounting surface.

# IFP MCB07 COUNTER BALANCE MODULE



## PERFORMANCE CURVES Viscosity (100-150 SUS)

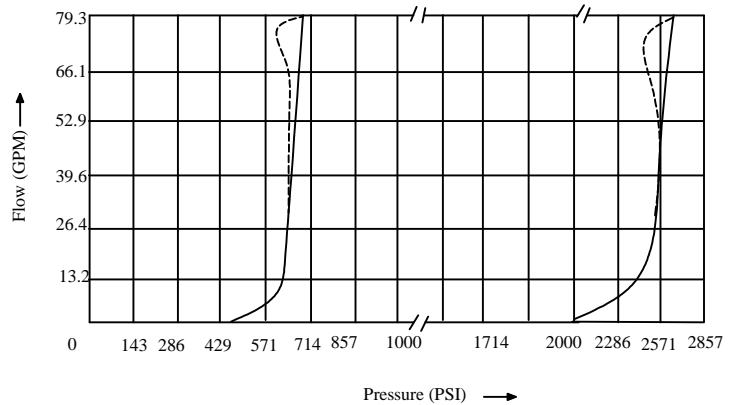
MCB-07-P-\*



MCB-07-P-\*

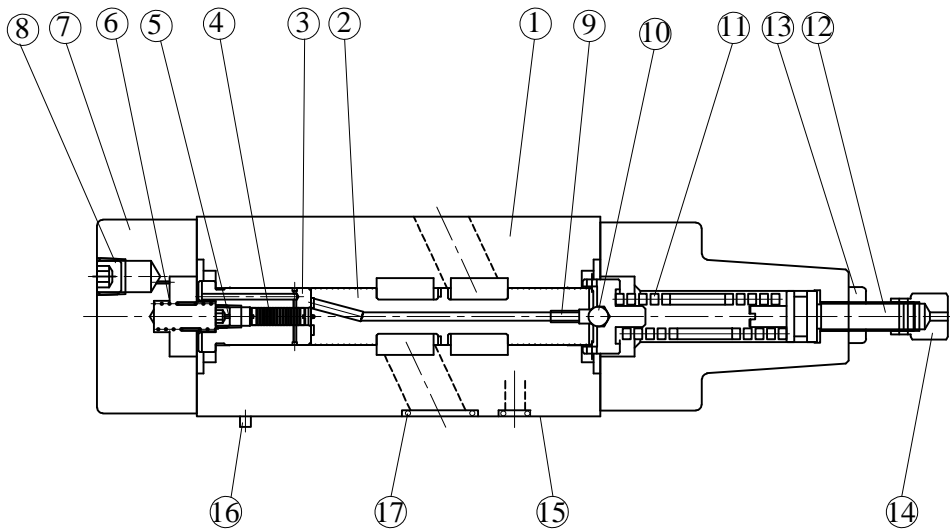
Pressure - Flow characteristic

—— MCB-07-A1-\* pressure increasing  
- - - - MCB-07-B1-\* pressure decreasing



## CROSS SECTION DIAGRAM

MCB-07-P-\*



NO. DESCRIPTION

1	BODY
2	SPOOL
3	SLEEVE
4	PISTON
5	CHOKE
6	SPRING
7	COVER
8	PLUG
9	CHOKE
10	BALL
11	SPRING
12	SCREW
13	NUT
14	ADJUSTMENT ELEMENT
15	CONNECTIONS
16	PIN
17	O-RING
	PORTS A,B,P,T:AS568-118
	PORTS X,Y:AS568-012

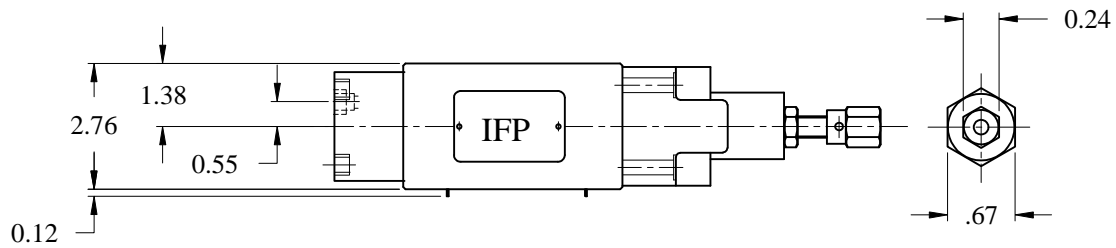
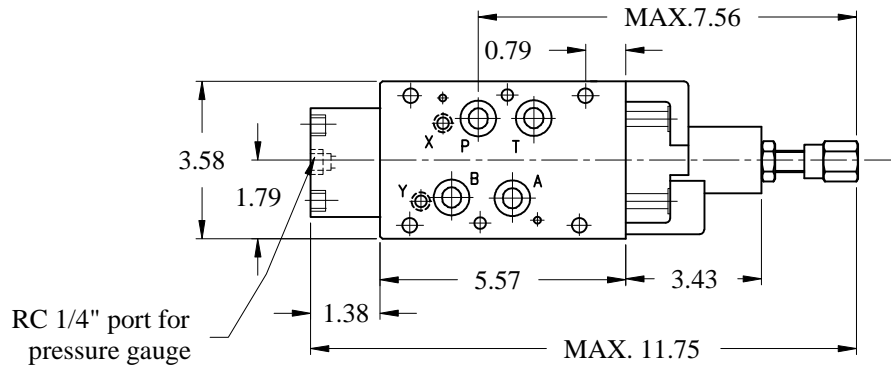


# IFP MCB07 COUNTER BALANCE MODULE



## DIMENSIONS

MCB-07-A1-\*



MCB - 07 - B1 - \*

