

MICRO-MINI HYdraulics, Inc.

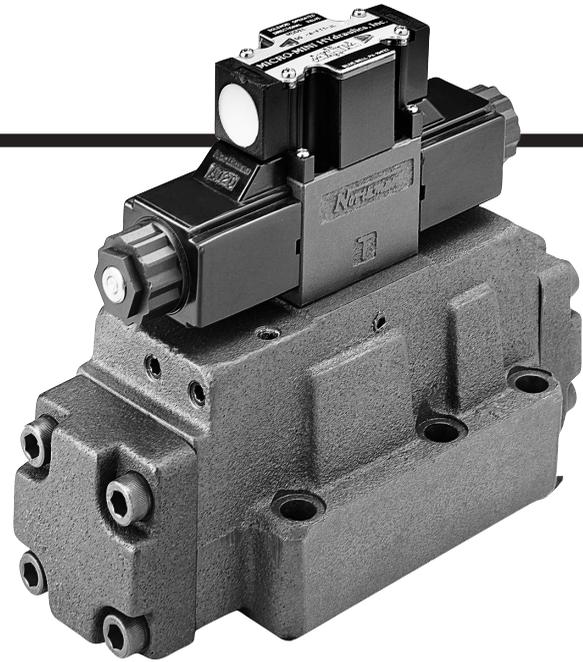
D08 DIRECTIONAL VALVES

QUICK REFERENCE

Mounting Interface

NFPA-D08

- Nominal Flow – 80GPM
Maximum Flow – 133 GPM
(See chart for typical flow and pressure limits.)
- Pilot Pressure - 65 PSI MIN.
3000 PSI MAX.
- Temperature Range
Recommended 100° - 140° F
Maximum -5° - 190° F
- Wet Armature Solenoids
Plug-in-Coils
- Maximum Pressure Ports
P-A-B – 4500 PSI
T – 3000 PSI externally drained
1000 PSI internally drained



- Filtration Requirements
up to 3000 PSI
ISO 4406 20/6
above 3000 PSI
ISO 4406 18/14
- Viscosity Range
Recommended 77 - 245 SUS
Maximum 60 - 4000 SUS
- Manual Solenoid Override

ORDERING INFORMATION

D08 - A - FFF - EP - ID - JL - A120 - SC - V - Z

MOUNTING
INTERFACE

DESIGN

SPOOL FUNCTION
AND TYPE
(see Chart on next page)

EP = Ext. Pilot, IP = Int. Pilot

ID = Int. Drain, ED = Ext. Drain

WIRING CONNECTION

JL = Junction Box with indicating Light
DN = Hirschmann Type (DIN) with indicating light

SHIFT SPEED
CONTROL

INTERFACE SEALS
Omit = Buna N / V = Viton

SURGE CONTROL OPTION
for DC voltage coils

COIL VOLTAGE

A120 = AC120V, 60 Hz; AC 110V/50Hz
A240 = AC240V, 60 Hz; AC 220V/50Hz
R120* = AC120V, 60 Hz; AC 110V/50Hz
R240* = AC240V, 60 Hz; AC 220V/50Hz
D12 = DC12; D24 = DC24

*Note: R120 & R240 coils contain
rectifier to operate valve on DC voltage.

Contact factory for other voltages.

MICRO-MINI HYdraulics, Inc.
Blue Bell, Pennsylvania 19422

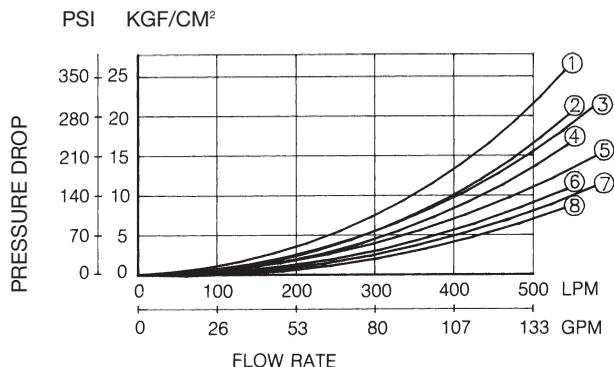
D08
DIRECTIONAL
VALVES



PRESSURE DROP CURVES

Fluid Viscosity: 35cst (175 ssu)

PERFORMANCE CURVES



VISCOSITY FACTORS

Viscosity	CST	15	20	30	40	50	60	70	80	90	100
	SSU	77	98	141	186	232	278	324	371	417	464
Factor		0.81	0.87	0.96	1.03	1.09	1.14	1.19	1.23	1.27	1.30

The pressure drop ($\Delta P'$) can be obtained from the formula $\Delta P' = \Delta p(G'/0.85)$ for other specific gravity (G').

MODEL NO.	Pressure Drop Curve Number				
	P->A	B->T	P->B	A->T	P->T
FC	8	5	8	7	-
FO	6	4	6	7	6
FFF	8	5	8	7	-
FFFX	8	5	8	7	-
FFO1	8	4	5	7	2
FTTO	5	1	5	4	3
FTTC	6	5	6	7	3
FOP	6	5	6	7	-
FF1	8	5	8	7	-
FOP1	8	4	5	7	-
MC	8	5	8	7	-
MO	6	4	6	7	-
JC	8	5	8	7	-
JO	6	4	6	7	-
JP	5	-	8	-	-
GC	8	5	8	7	-
GO	6	4	6	7	-
GP	8	-	5	-	-

SPOOL FUNCTIONS

Double solenoid valves, 3 position, spring centered

APPLICATION	TYPE	GRAPHIC SYMBOLS
THREE POSITION SPRING CENTERED	FC	
	FO	
	FFF	
	FFFX	
	FFO1	
	FTTO	
	FTTC	
	FOP	
	FF1	
	FOP1	
	FFO2	
	FF2	
	FOP2	

Single solenoid valves, 2 position, solenoid B

APPLICATION	TYPE	GRAPHIC SYMBOLS
TWO POSITION SPRING OFFSET	JC	
	JO	
	JP	
TWO POSITION SPRING CENTERED	JFC	
	JFO	
	JFFF	
	JFFFX	
	JFFO1	
	JFTTO	
	JFTTC	
	JFOP	
	JFF1	
	JFOP1	

Single solenoid valves, 2 position, solenoid A

APPLICATION	TYPE	GRAPHIC SYMBOLS
TWO POSITION SPRING OFFSET	GC	
	GO	
	GP	
TWO POSITION SPRING CENTERED	GFC	
	GFO	
	GFFF	
	GFFFX	
	GFFO1	
	GFTTO	
	GFTTC	
	GFOP	
	GFF1	
GFOP1		

Double solenoid valves, 2 position, detented

APPLICATION	TYPE	GRAPHIC SYMBOLS	APPLICATION	TYPE	GRAPHIC SYMBOLS
TWO POSITION DETENT	MC		TWO POSITION DETENT	MO	

PORT INTERCONNECTION:

- With solenoid "a" energized P->A B->T
- With solenoid "b" energized P->B A->T
- Both port interconnections are reversed for FF01, FF02, FTTO, and FTTC type.