

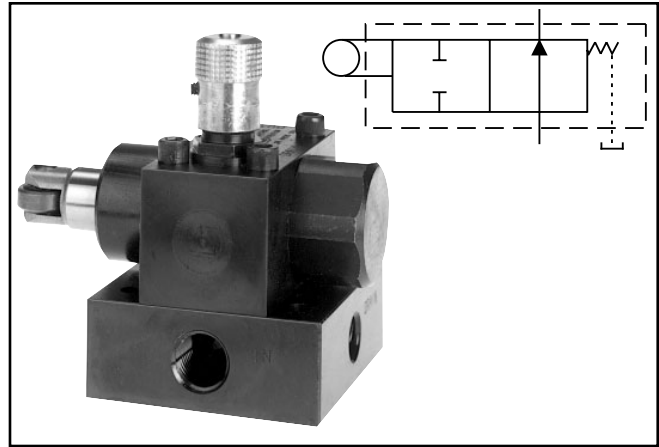
**General Description**

Series D deceleration valve is a cam operated 2-way valve with tapered spool. As the cam depresses the plunger, flow through the valve is gradually decreased to the cut-off point.

This valve is also available as a normally closed, cam operated 2-way valve.

**Specifications**

<b>Maximum Operating Pressure</b>	210 Bar (3000 PSI)
<b>Maximum Flow</b>	See flow vs. pressure drop curves, reverse flow vs. pressure drop, flow vs. plunger travel curves
<b>Nominal Flow</b>	D600 37.9 LPM (10 GPM) D1200 132.5 LPM (35 GPM)
<b>Port Configurations</b>	See dimensional drawings and/or ordering information for configuration availability



**Features**

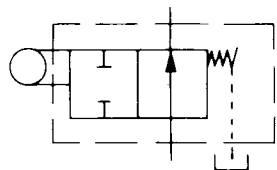
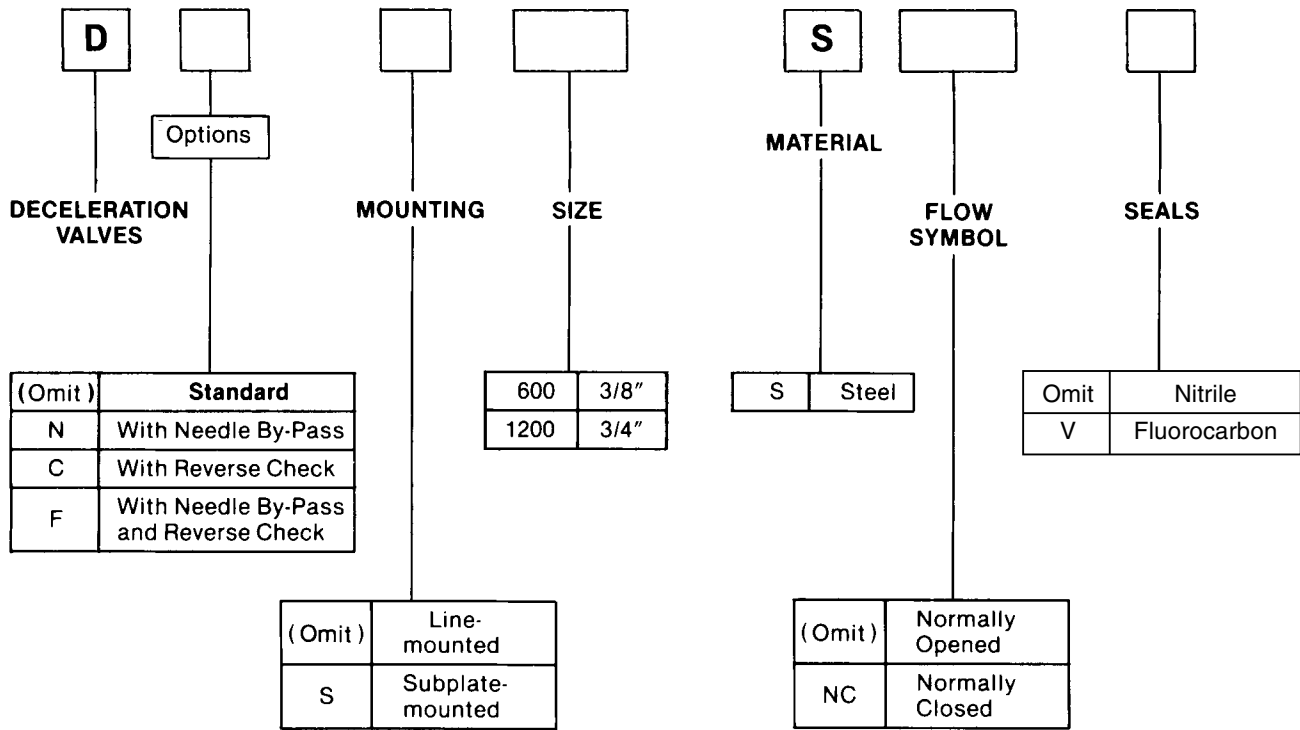
- The exclusive “Colorflow” color-band reference scale on the valve stem is a great convenience and time-saver in setting the valve originally and in returning it to any previous setting.
- A simple set screw locks the valve on any desired setting.

**Flow Data**

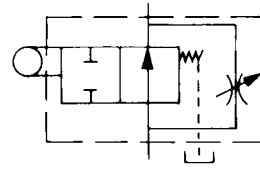
Valve Model	Flow, max., GPM (L/M)	Pressure Drop $\Delta P$ @ (Max.) PSI (Bar) (Plunger Full Open)	Mounting	Port Size	Subplate Port Location
D600	19 (72)	200 (14)	Inline	3/8 NPTF	—
DC600	19 (72)	200 (14)	Inline	3/8 NPTF	—
DF600	19 (72)	200 (14)	Inline	3/8 NPTF	—
DN600	19 (72)	200 (14)	Inline	3/8 NPTF	—
DNS600	19 (72)	200 (14)	Subplate	3/8 NPTF	Side
DS600	19 (72)	200 (14)	Subplate	3/8 NPTF	Side
D1200	60 (227)	120 (8)	Inline	3/4 NPTF	—
DC1200	60 (227)	120 (8)	Inline	3/4 NPTF	—
DF1200	60 (227)	120 (8)	Inline	3/4 NPTF	—
DFS1200	60 (227)	120 (8)	Subplate	3/4 NPTF	Bottom
DN1200	60 (227)	120 (8)	Inline	3/4 NPTF	—
DNS1200	60 (227)	120 (8)	Subplate	3/4 NPTF	Bottom
DS1200	60 (227)	120 (8)	Subplate	3/4 NPTF	Bottom
DCS1200	60 (227)	120 (8)	Subplate	3/4 NPTF	Bottom

**Reverse Flow**

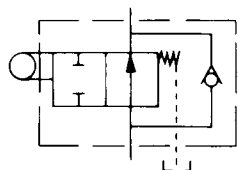
Valve Model	With Check GPM (L/M)	With Needle	With Check & Needle GPM (L/M)	Flow Path
D**600S**	19 (72)	N.O. or N.C. valve reverse flow is proportional to needle setting	19 (72)	Normally Open or Closed
D**1200S**	60 (227)		60 (227)	Normally Open or Closed



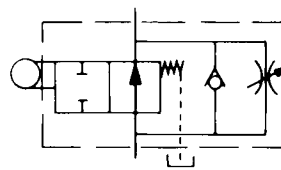
STANDARD  
 DECELERATION VALVE



DECELERATION VALVE  
 WITH NEEDLE BY-PASS



DECELERATION VALVE  
 WITH REVERSE CHECK

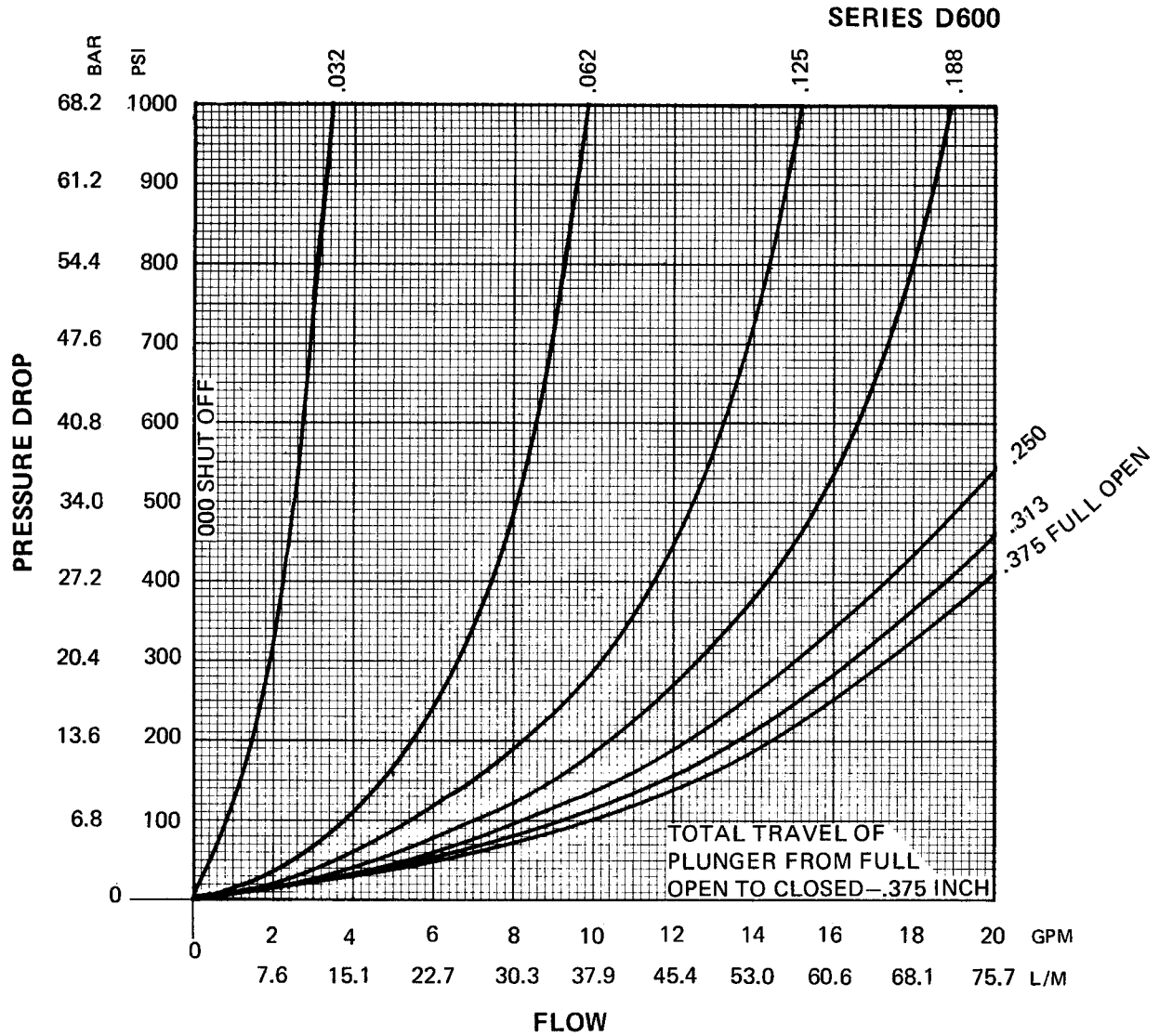


DECELERATION VALVE  
 WITH NEEDLE BY-PASS  
 AND REVERSE CHECK.

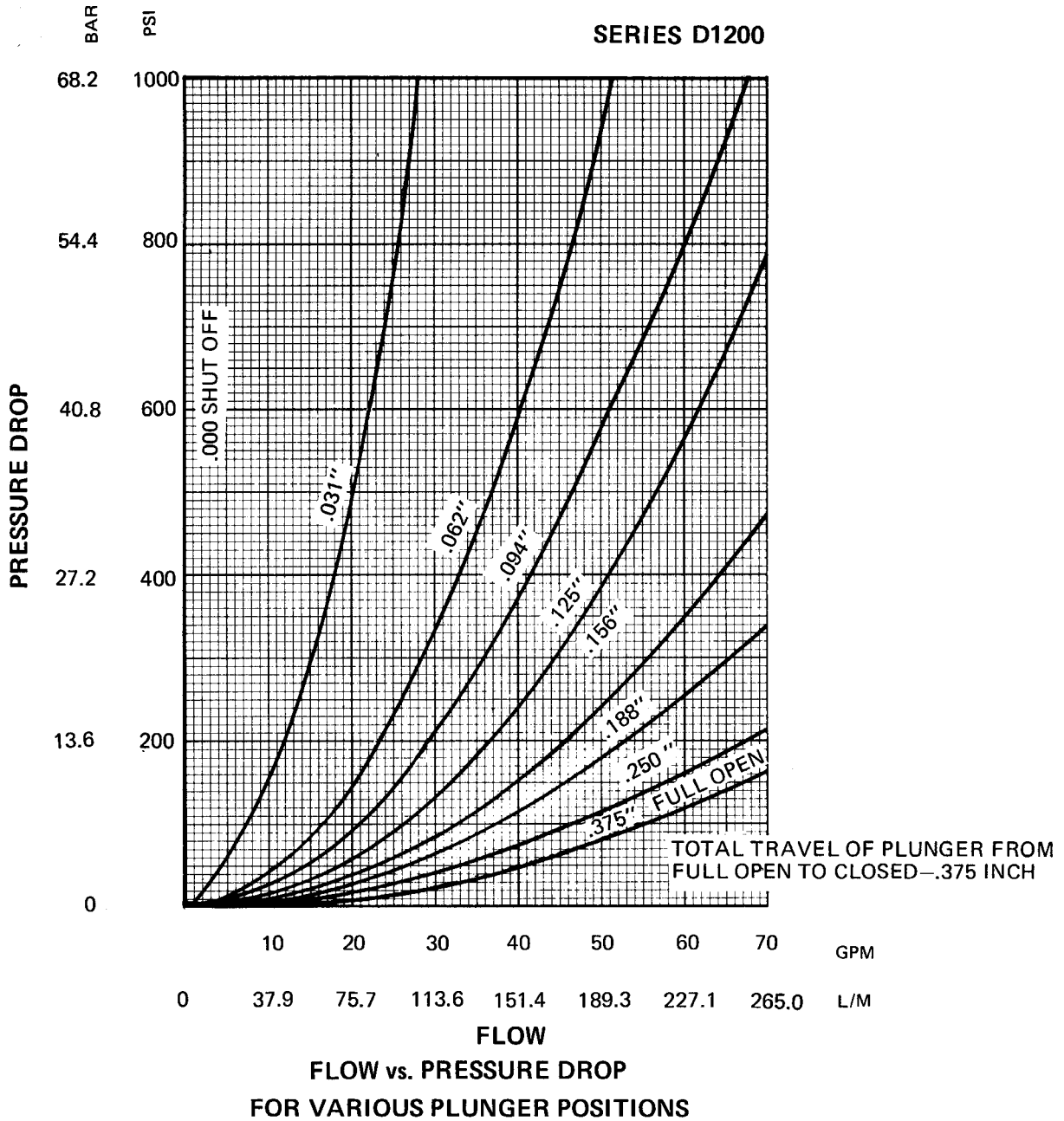
**Bolt Kits**

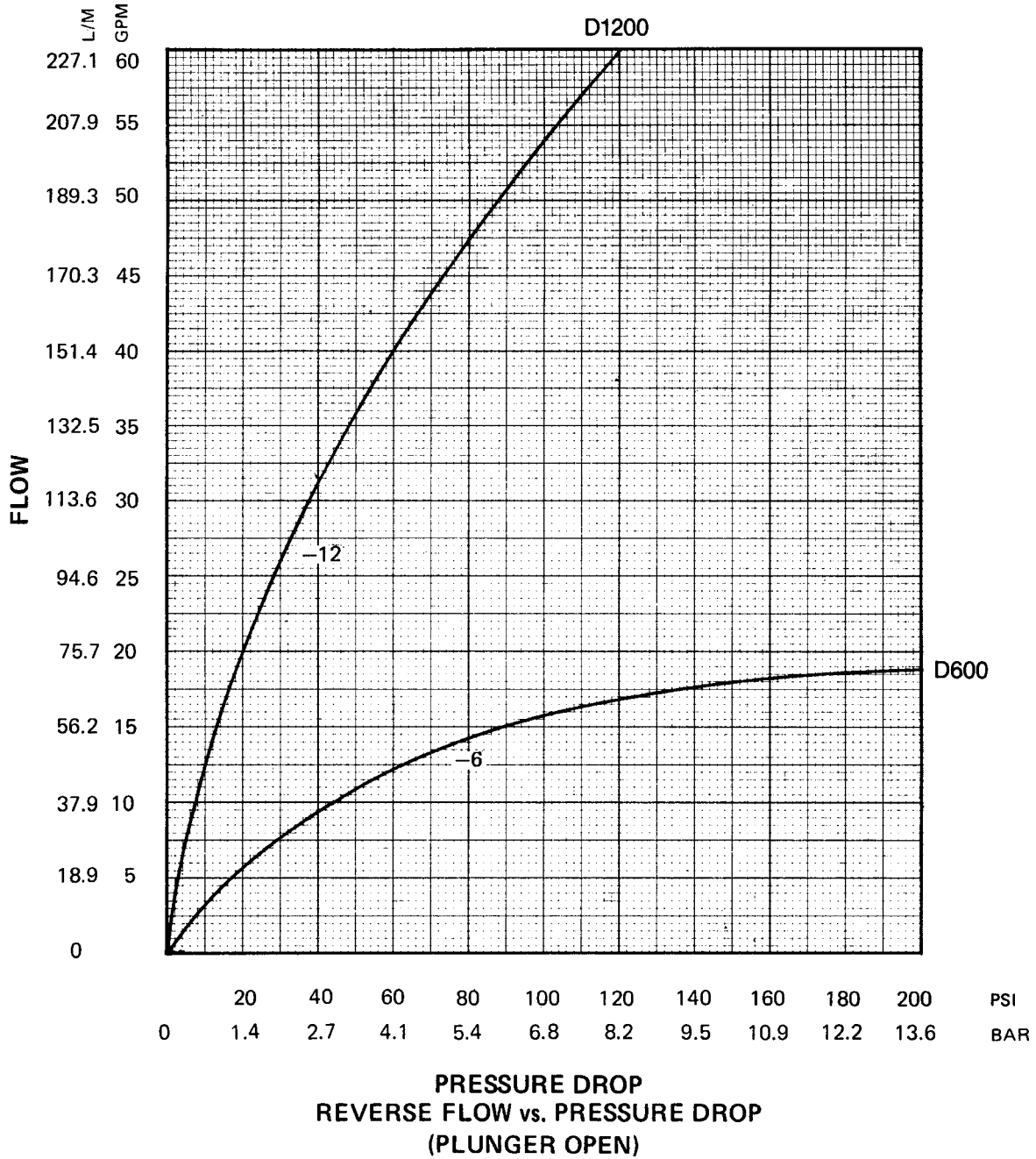
Valve	Bolt Kit	Bolts SAE Grade 8 or Better	Bolt Torque
DNS600S DS600S	BK06	1/4-20 x 2"	19 FT.-LBS.
DCS1200S DFS1200S	BK38	3/8-16 x 1-3/4"	34 FT.-LBS.
DNS1200S DS1200S	BK11	3/8-16 x 2-3/4"	34 FT.-LBS.





**FLOW vs. PRESSURE DROP  
 FOR VARIOUS PLUNGER POSITIONS**

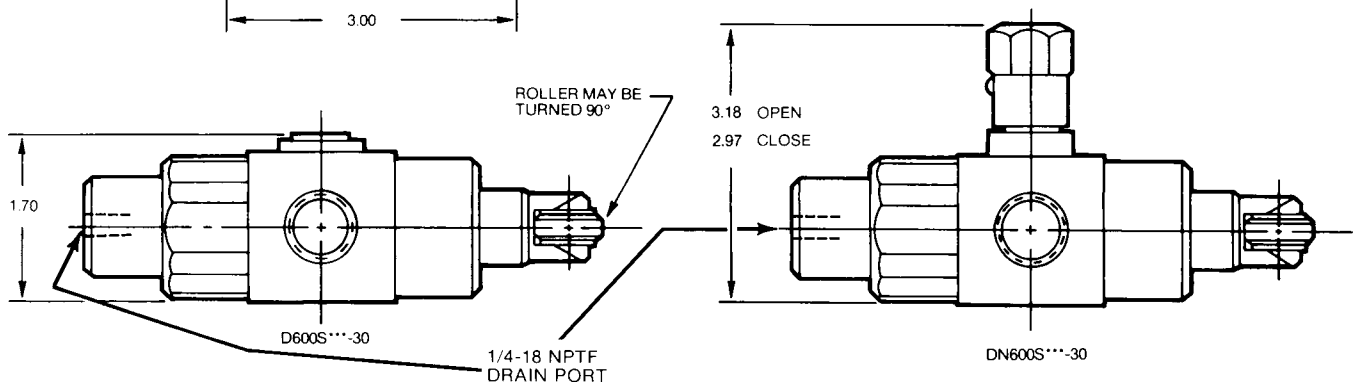
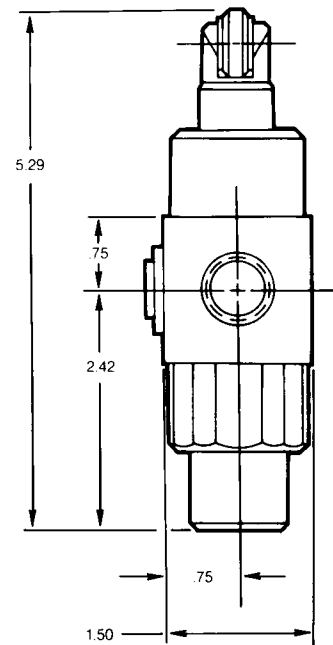
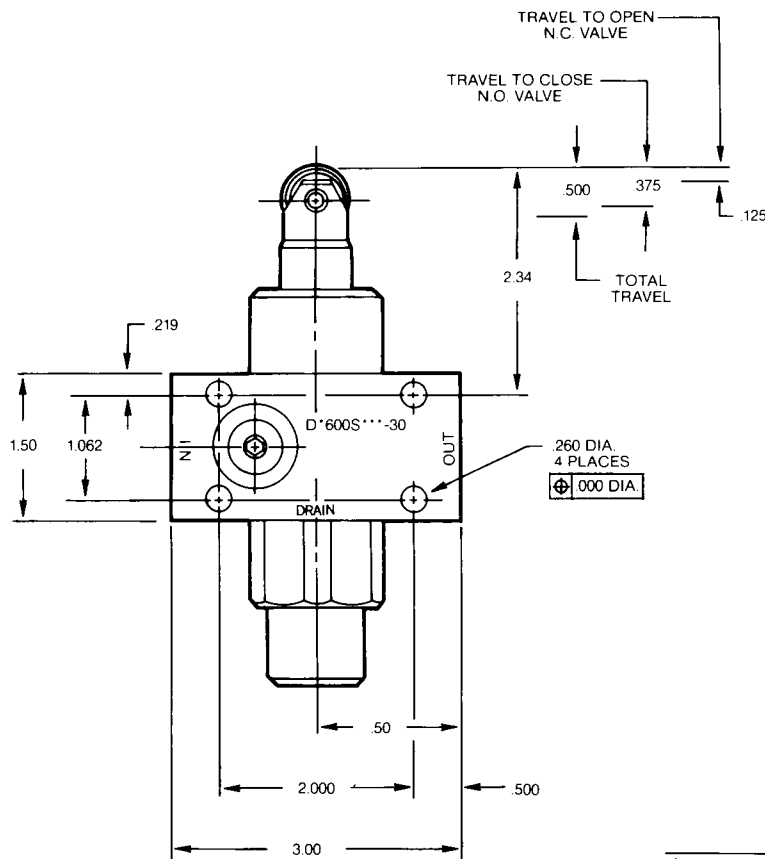
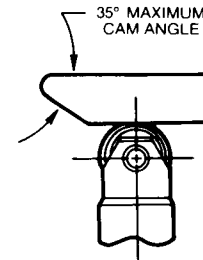
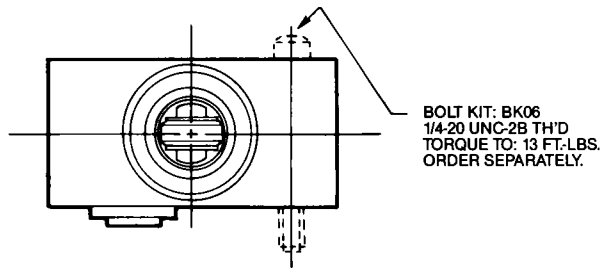
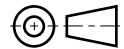




Dimensions are shown in inches

**Models D600S and DN600S**

In-line mounted Deceleration Valves



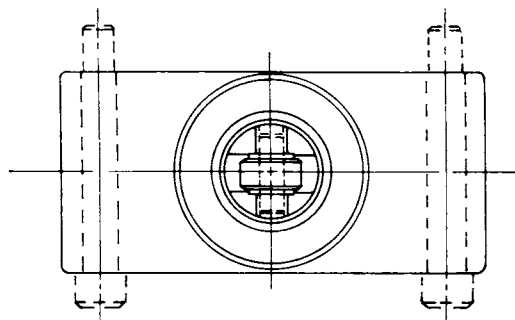
**Dimensions**

**Series D**

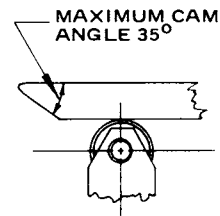
Millimeter equivalents for inch dimensions are shown in (\*\*)

**Model D1200S**

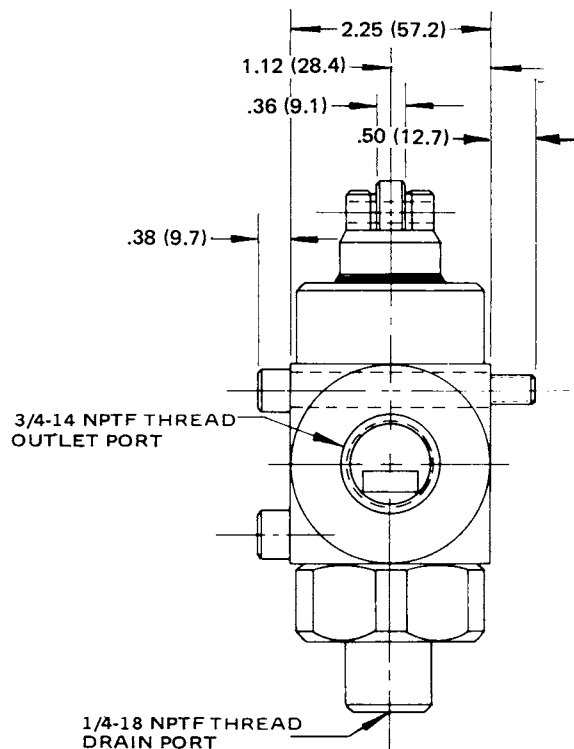
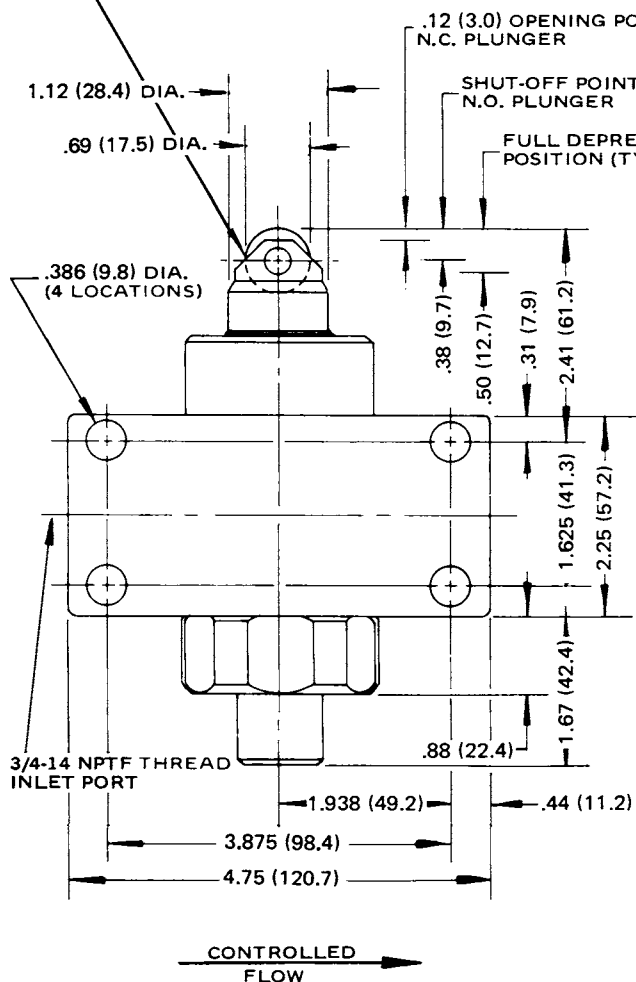
In-line mounted, normally-open/normally-closed  
Deceleration Valves



Weight  
6.5 Lb. (3.0 Kg.)



PLUNGER AND ROLLER  
TO BE ASSEMBLED IN  
PLANE AS SHOWN.  
CAN BE ROTATED 90°  
FROM POSITION SHOWN.



1. WORKING PRESSURE, MAX.: 3000 PSI (210 Bar)
2. DRAIN: MAX. ALLOWABLE BACK PRESSURE: 30 PSI (2 Bar)
3. FORCE TO DEPRESS PLUNGER: 50 Lbs. (22.8 Kg.) (DRAIN PRESSURE INCREASES FORCE REQ'D. TO DEPRESS PLUNGER.)

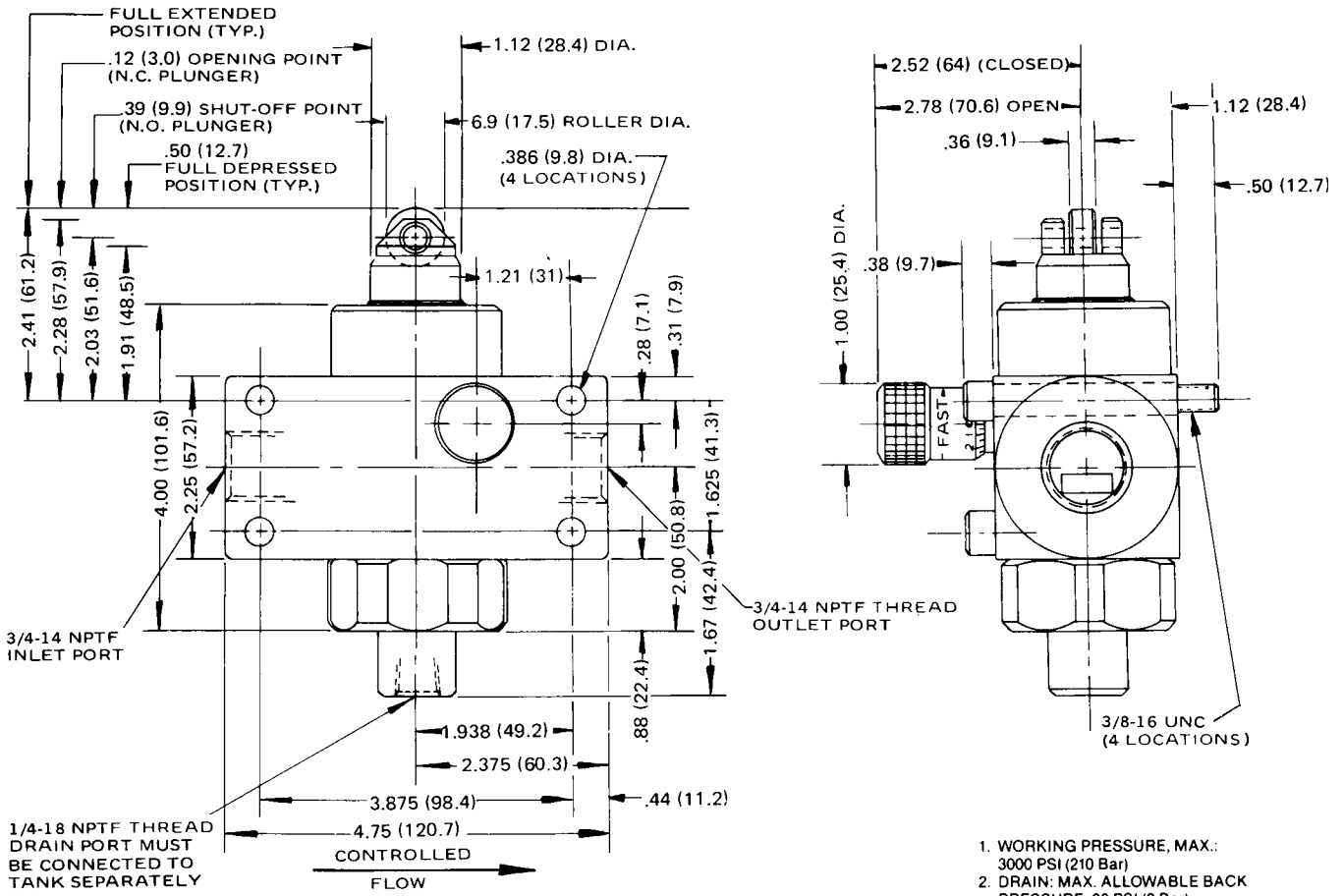
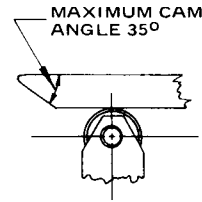
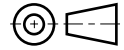
**G**

Millimeter equivalents for inch dimensions are shown in (\*\*)

**Model DN1200S**

In-line mounted Deceleration Valve  
 with bypass needle

Weight  
 7.5 Lb. (3.4 Kg.)



1. WORKING PRESSURE, MAX.: 3000 PSI (210 Bar)
2. DRAIN: MAX. ALLOWABLE BACK PRESSURE: 30 PSI (2 Bar)
3. FORCE TO DEPRESS PLUNGER: 50 Lbs. (22.8 Kg.) (DRAIN PRESSURE INCREASES FORCE REQ'D. TO DEPRESS PLUNGER)

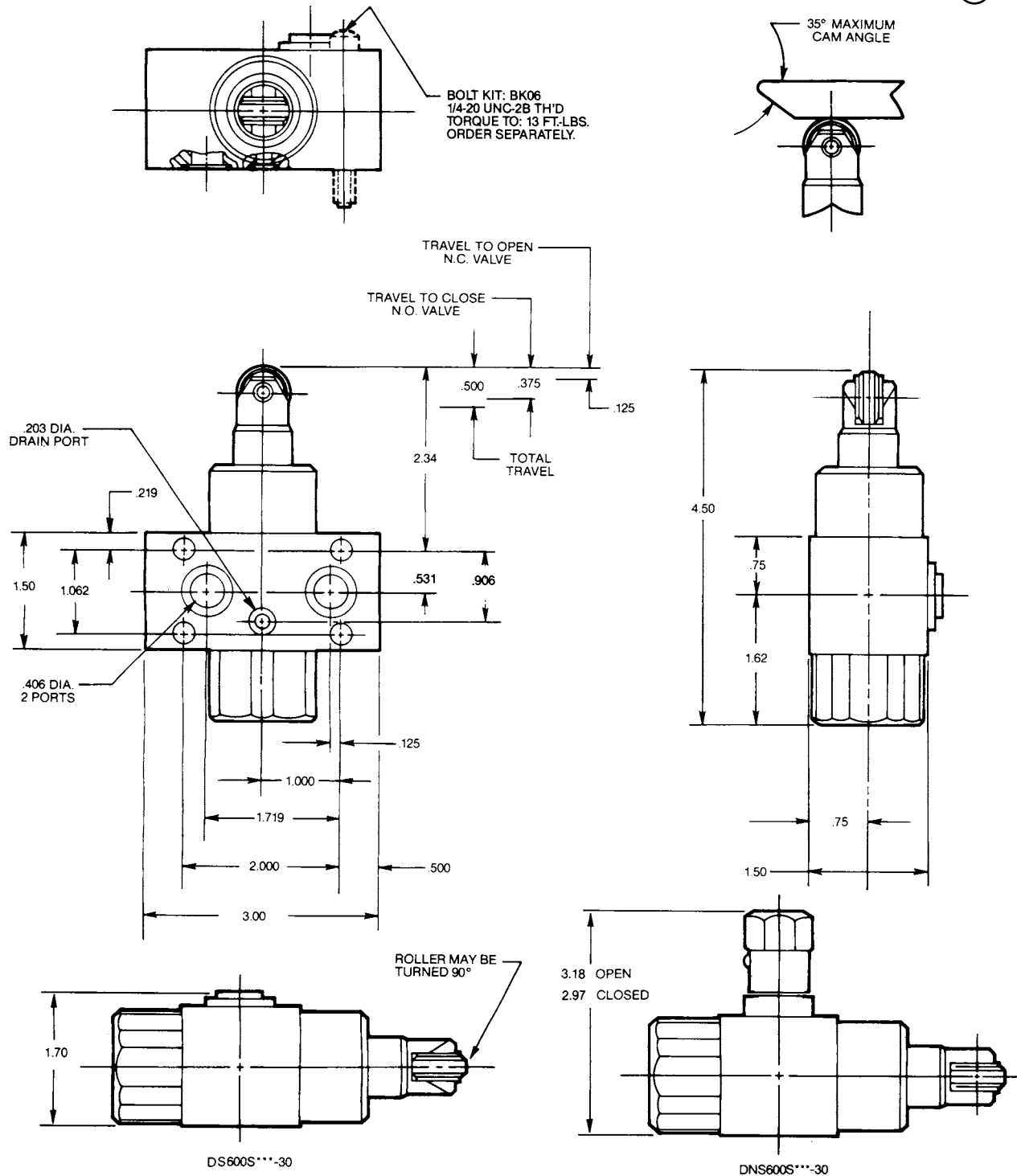
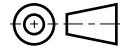




Dimensions are shown in inches

**Models DNS600S – DS600S**

Manifold mounted Deceleration Valves

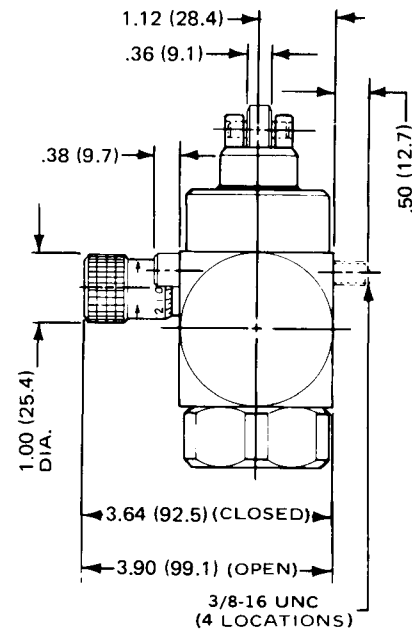
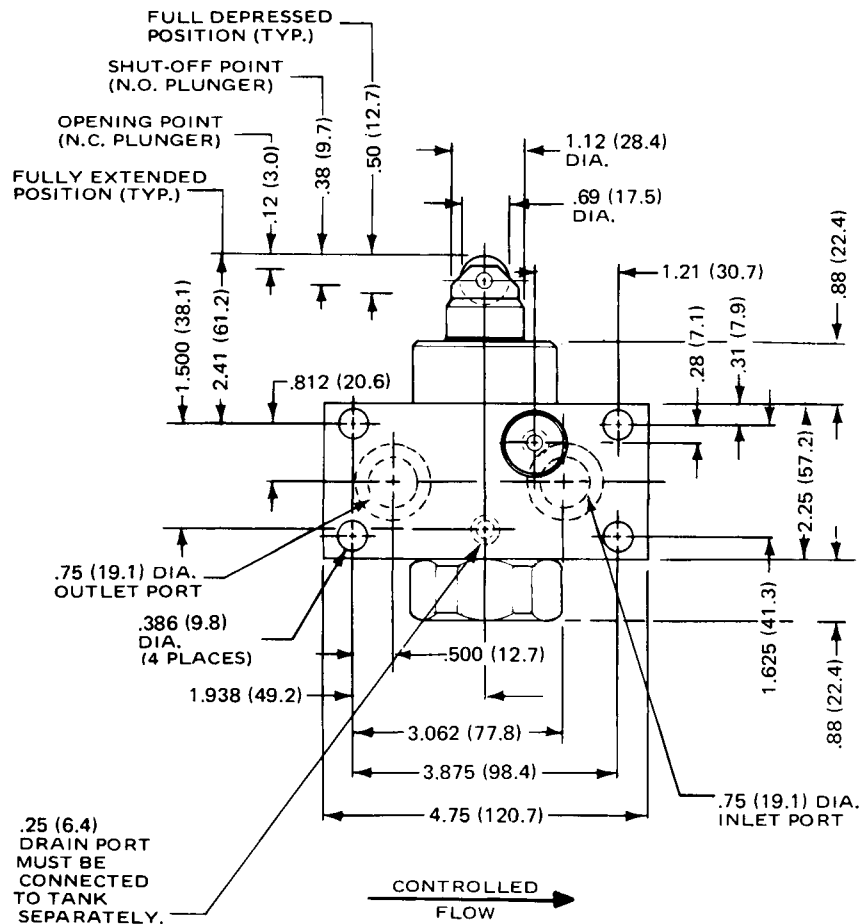
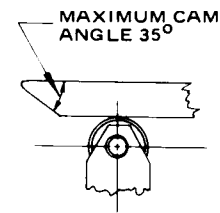
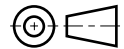


**G**

Millimeter equivalents for inch dimensions are shown in (\*\*)

**Model DNS1200S**

Manifold mounted Deceleration Valve  
with bypass needle



1. WORKING PRESSURE, MAX.:  
3000 PSI (210 Bar)
2. DRAIN: MAX. ALLOWABLE BACK  
PRESSURE: 30 PSI (2 Bar)
3. FORCE TO DEPRESS PLUNGER:  
50 Lbs. (22.8 Kg.) (DRAIN PRESSURE  
INCREASES FORCE REQ'D. TO  
DEPRESS PLUNGER.)

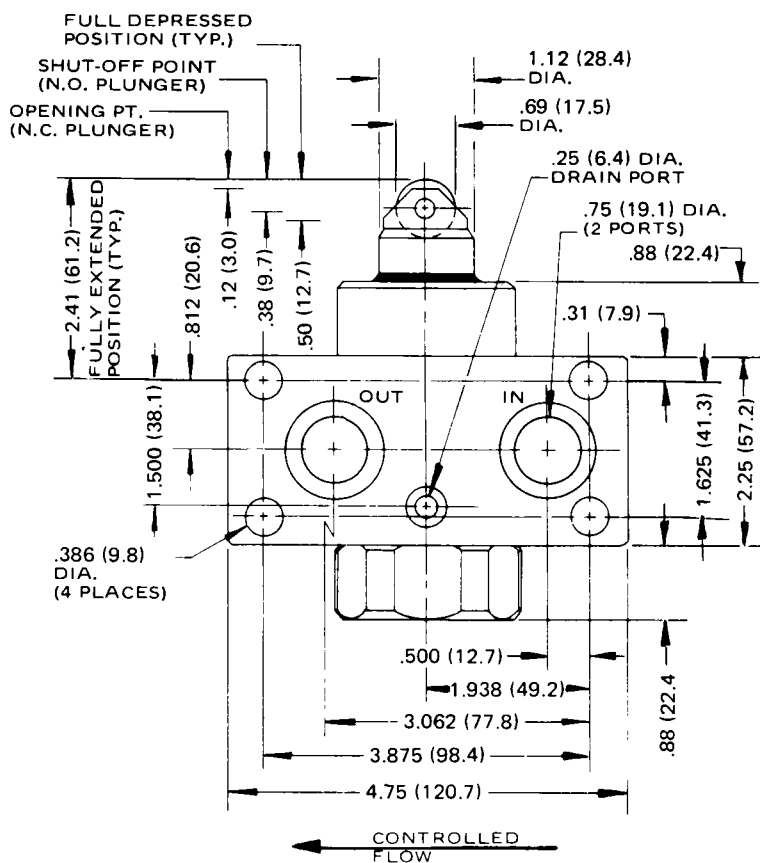
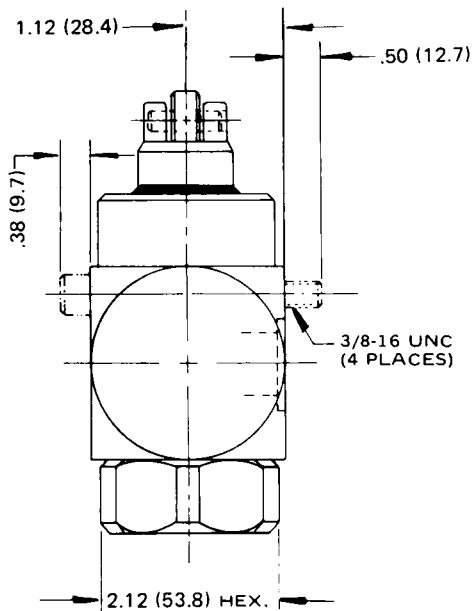
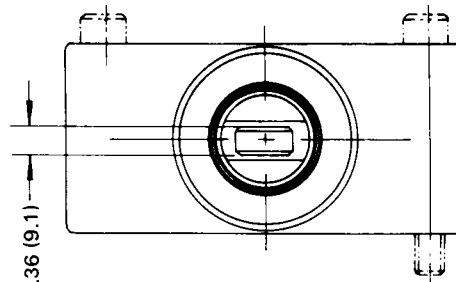
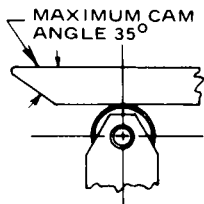
Weight  
7.5 Lb. (3.4 Kg.)



Millimeter equivalents for inch dimensions are shown in (\*\*)

**Model DS1200S**

Manifold mounted, normally open/normally closed  
Deceleration Valve



**NOTES:**

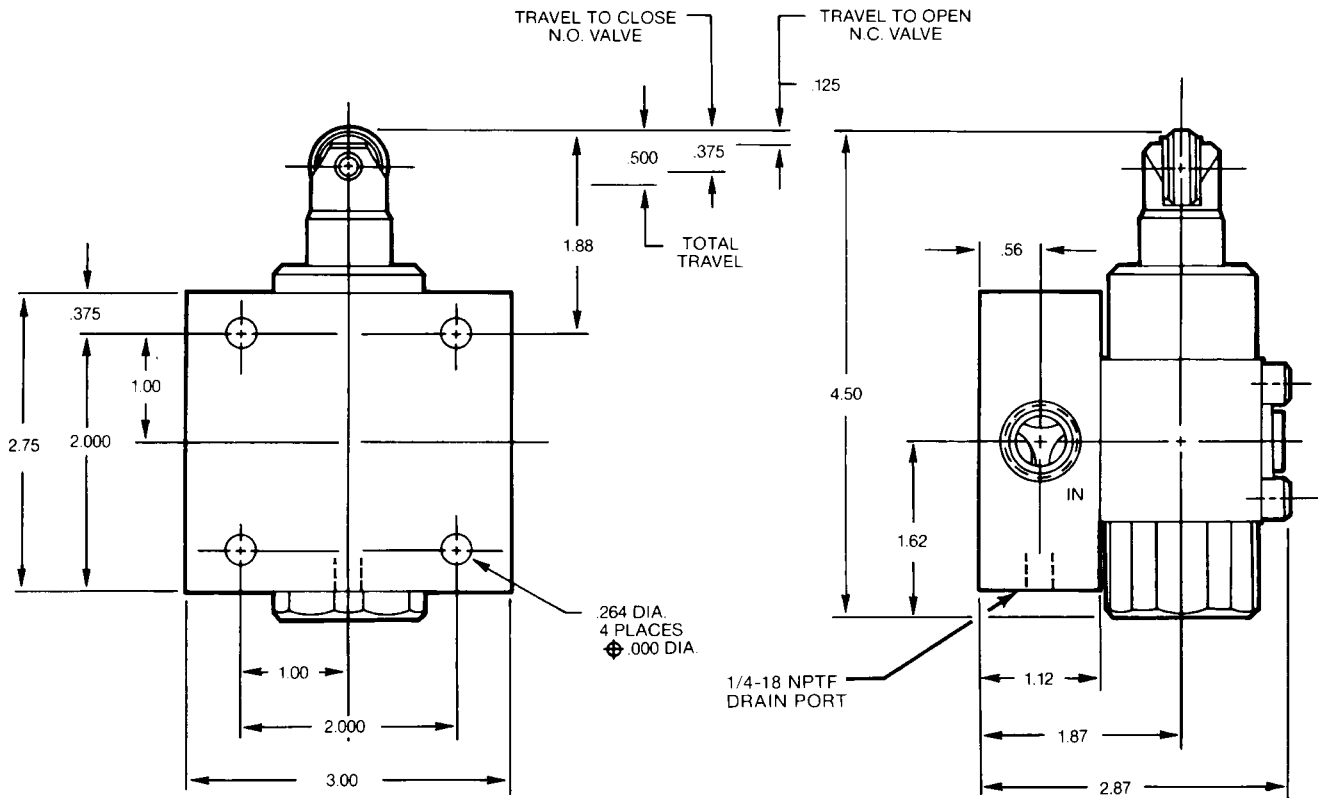
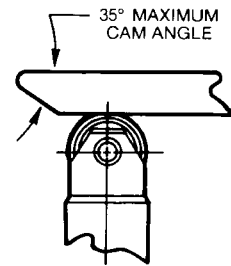
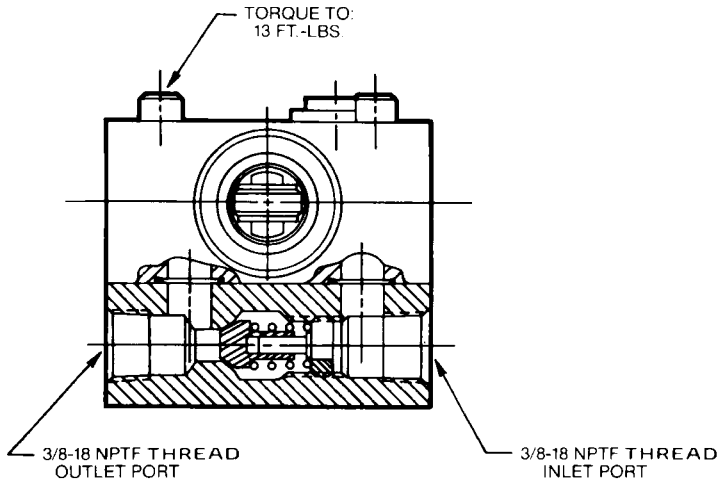
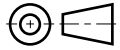
1. MAX. WORKING PRESSURE 3000 PSI.
  2. DRAIN-MAX. ALLOWABLE BACK PRESSURE 30 PSI.
  3. FORCE-REQ'D. TO DEPRESS PLUNGER 50 LBS.
- "DRAIN PRESSURE INCREASES FORCE REQ'D. TO DEPRESS PLUNGER."



Dimensions are shown in inches

**Model DC600S**

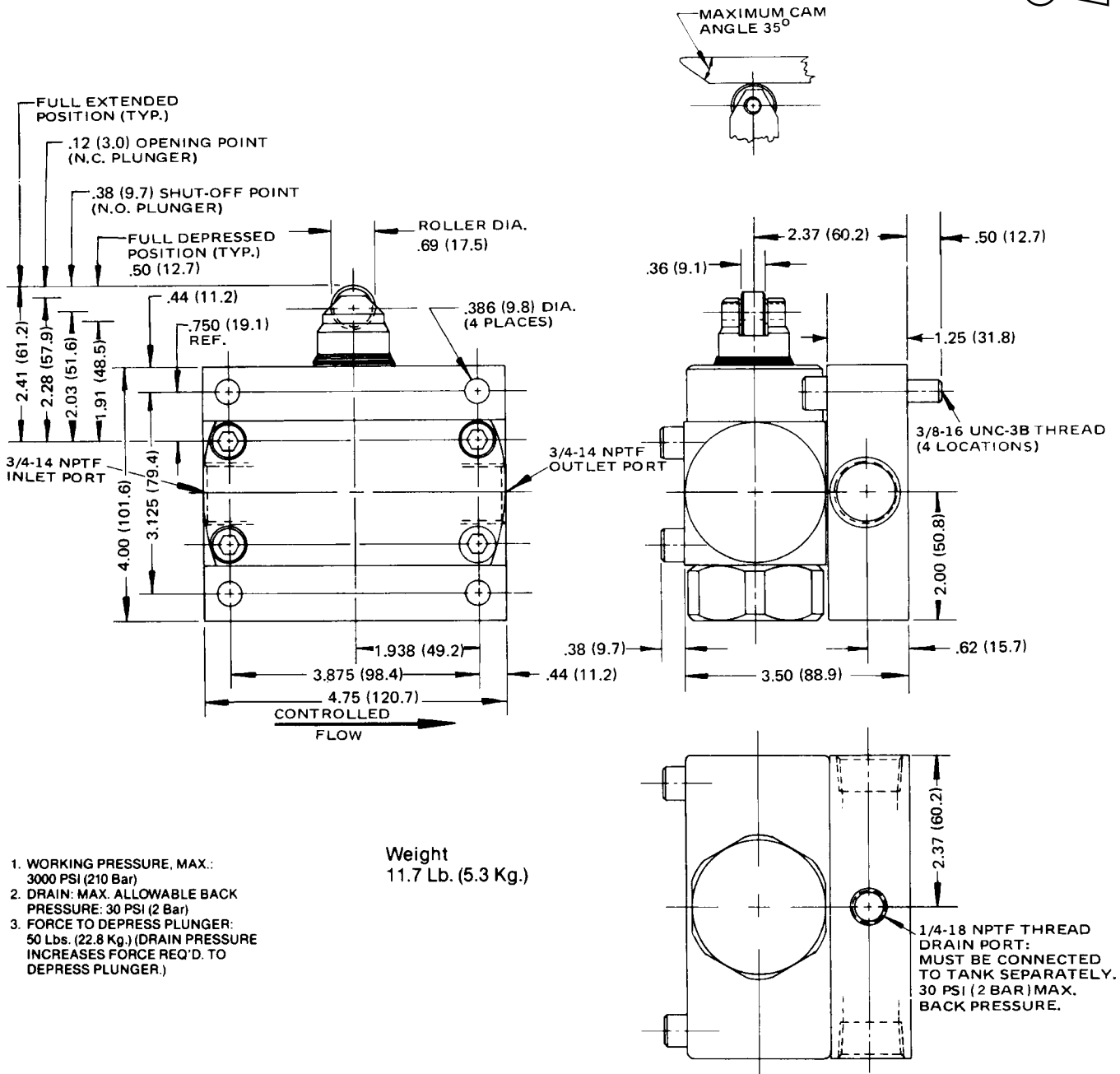
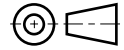
In-line mounted Deceleration Valve  
with reverse check



Millimeter equivalents for inch dimensions are shown in (\*\*)

**Model DC1200S**

In-line mounted Deceleration Valve  
with reverse check



- 1. WORKING PRESSURE, MAX.: 3000 PSI (210 Bar)
- 2. DRAIN: MAX. ALLOWABLE BACK PRESSURE: 30 PSI (2 Bar)
- 3. FORCE TO DEPRESS PLUNGER: 50 Lbs. (22.8 Kg.) (DRAIN PRESSURE INCREASES FORCE REQ'D. TO DEPRESS PLUNGER.)

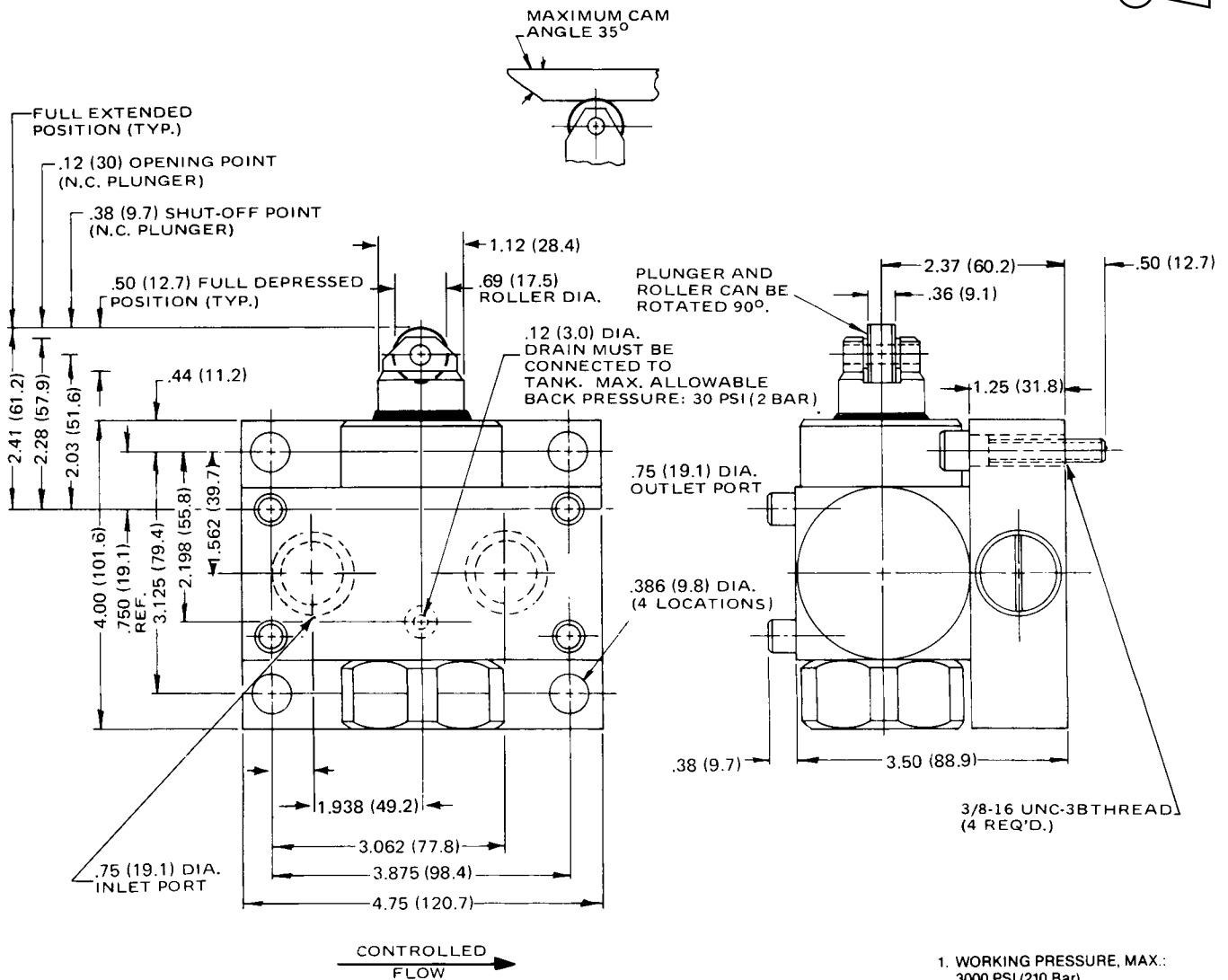
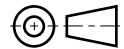
**Weight**  
11.7 Lb. (5.3 Kg.)



Millimeter equivalents for inch dimensions are shown in (\*\*)

**Model DCS1200S**

Manifold mounted Deceleration Valve  
with reverse check

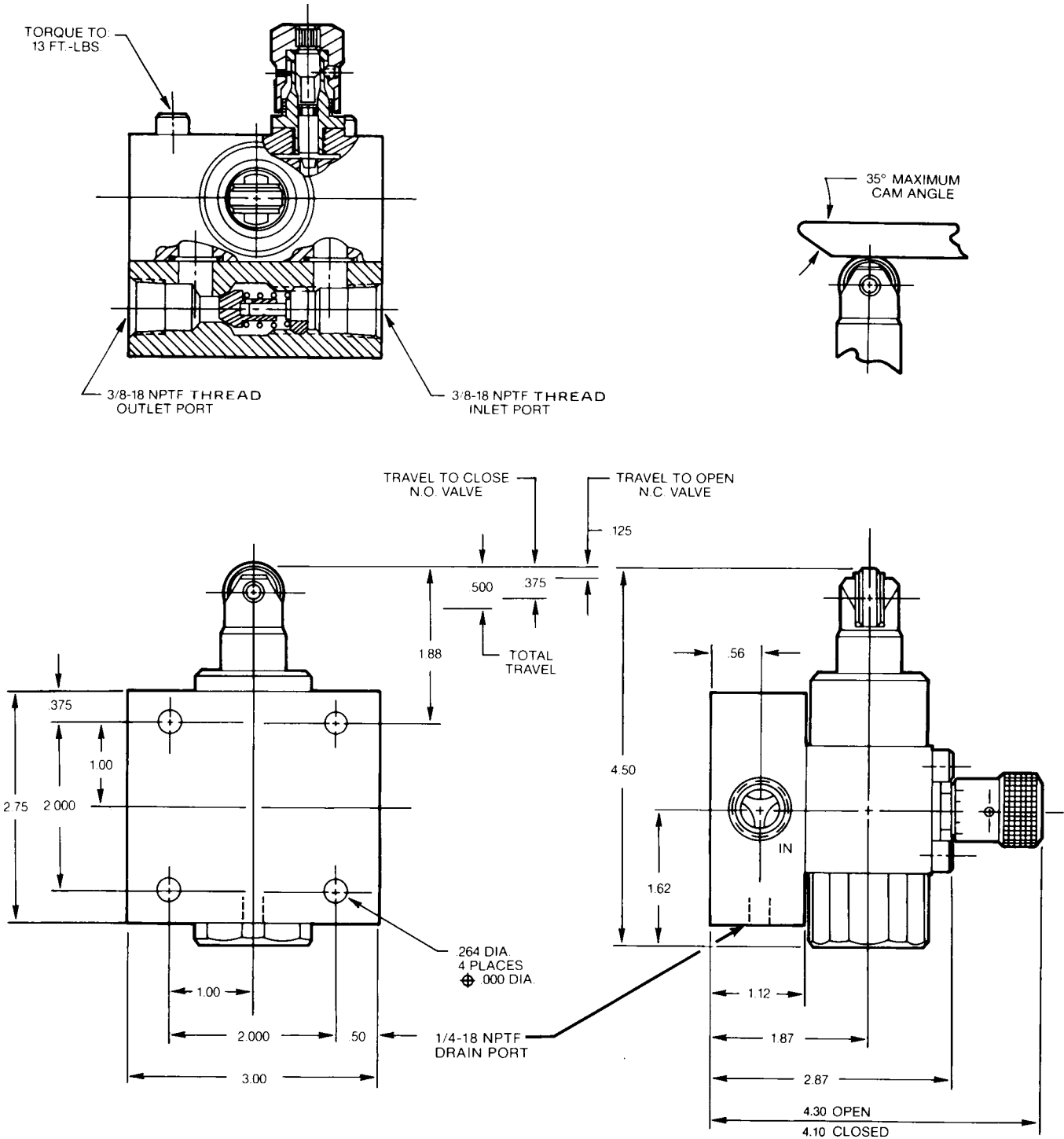
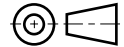


1. WORKING PRESSURE, MAX.: 3000 PSI (210 Bar)
2. DRAIN: MAX. ALLOWABLE BACK PRESSURE: 30 PSI (2 Bar)
3. FORCE TO DEPRESS PLUNGER: 50 Lbs. (22.8 Kg.) (DRAIN PRESSURE INCREASES FORCE REQ'D. TO DEPRESS PLUNGER.)

Dimensions are shown in inches

**Model DF600S**

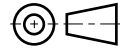
In-line mounted Deceleration Valve  
with reverse check and bypass needle



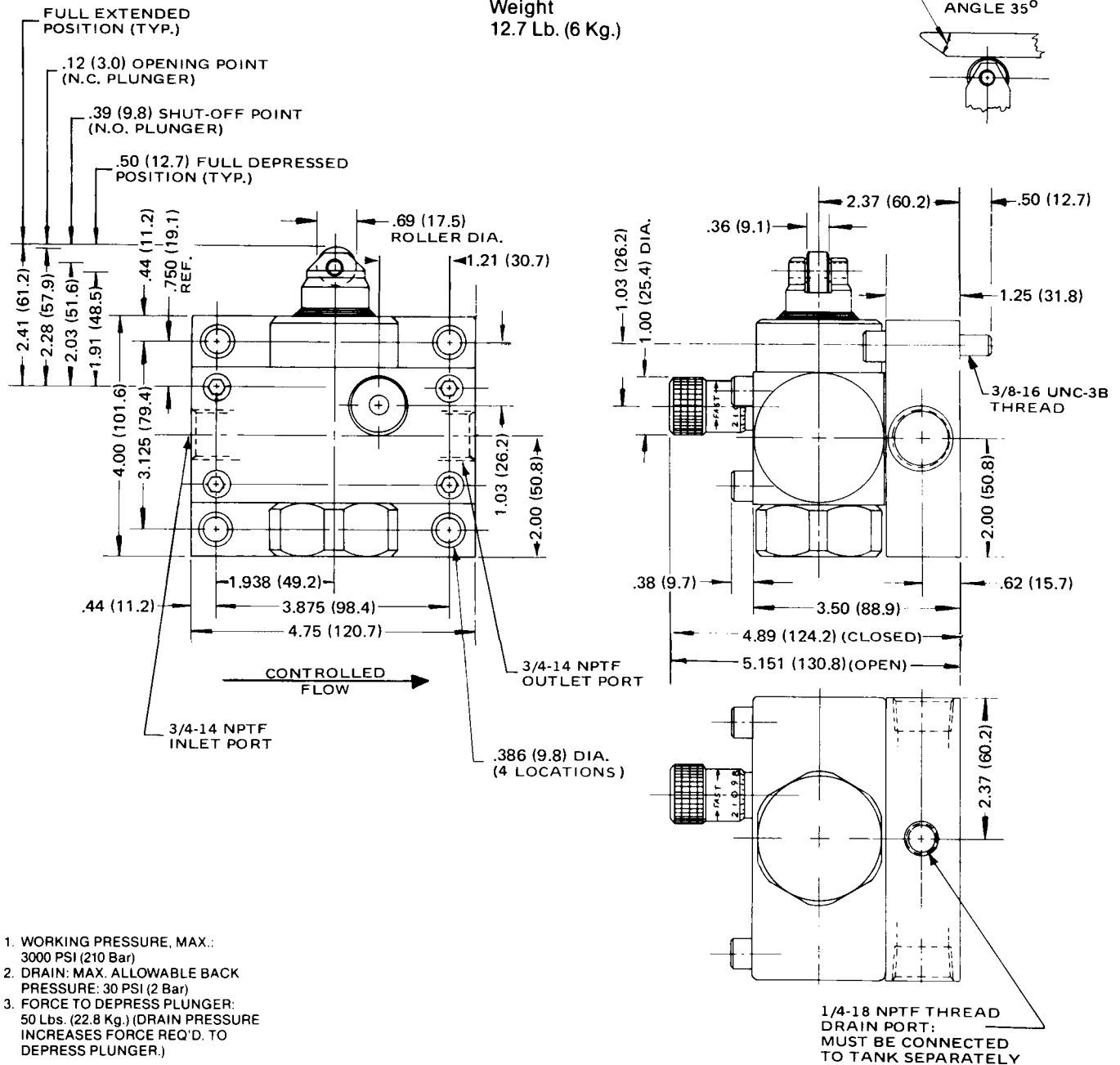
Millimeter equivalents for inch dimensions are shown in (\*\*)

**Model DF1200S**

In-line mounted Deceleration Valve  
with reverse check and bypass needle



Weight  
12.7 Lb. (6 Kg.)



1. WORKING PRESSURE, MAX.:  
3000 PSI (210 Bar)
2. DRAIN: MAX. ALLOWABLE BACK PRESSURE: 30 PSI (2 Bar)
3. FORCE TO DEPRESS PLUNGER:  
50 Lbs. (22.8 Kg.) (DRAIN PRESSURE INCREASES FORCE REQ'D. TO DEPRESS PLUNGER.)



