

Performance Data

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

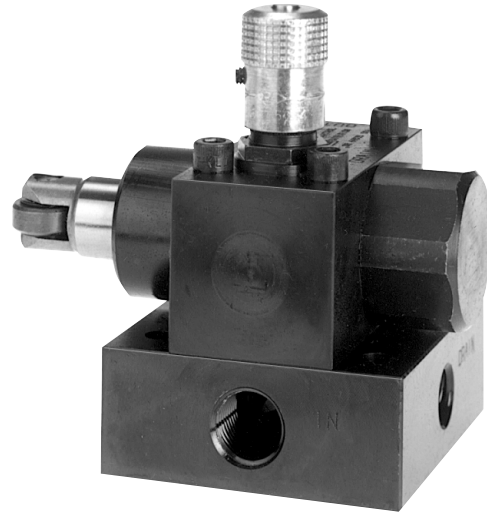
This valve is also available as a normally closed, cam operated, two-way valve.

MAXIMUM PRESSURE
3000 PSI (210 Bar)

MAXIMUM FLOW
See flow vs. pressure drop curves, reverse flow vs. pressure drop, flow vs. plunger travel curves and

NOMINAL FLOW
D600 10 GPM (37.9 Bar)
D1200 35 GPM (132.5 Bar)

PORT CONFIGURATIONS
See dimensional drawings and/or ordering information for configuration availability.



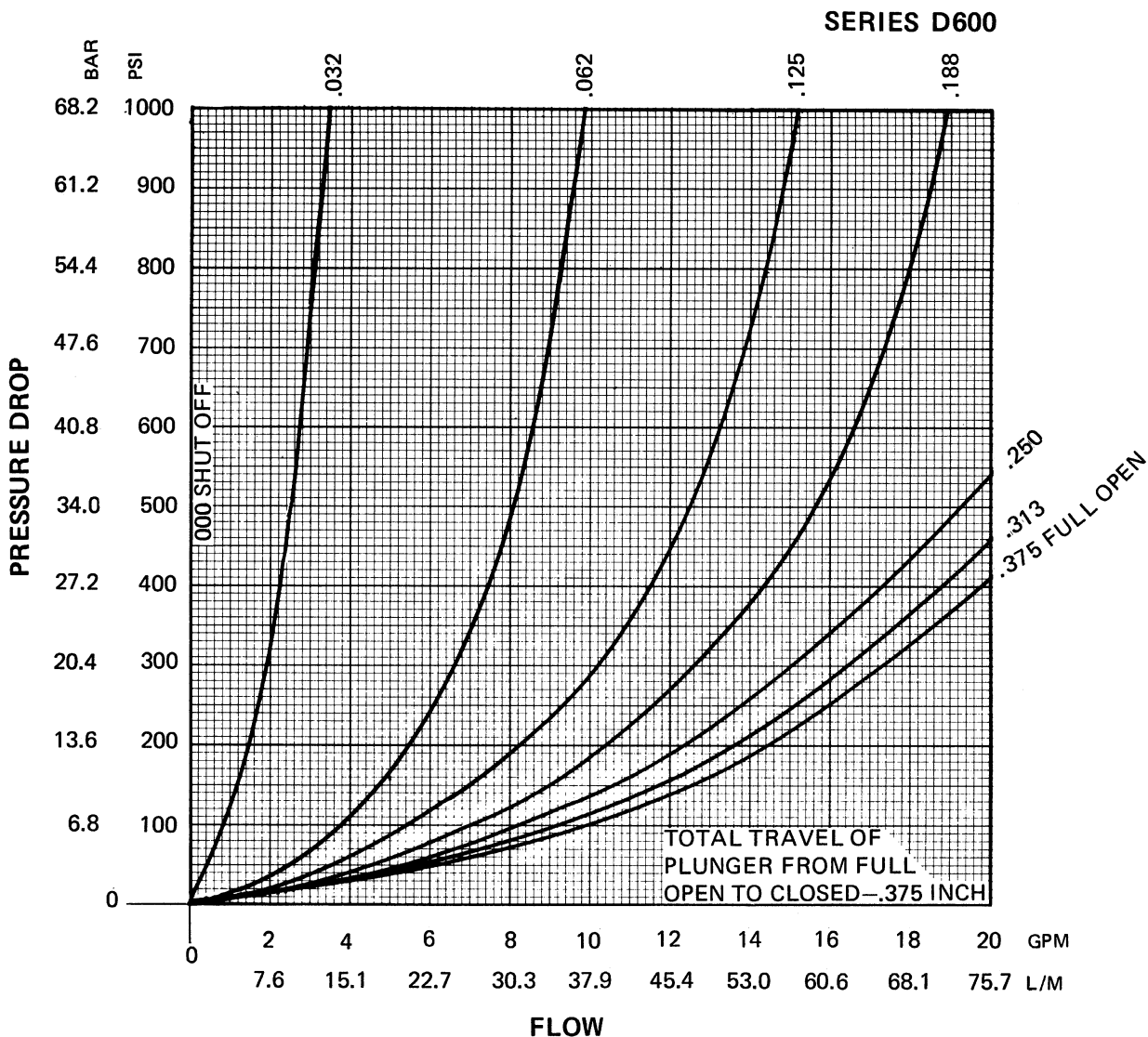
Quick Reference Data Chart

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

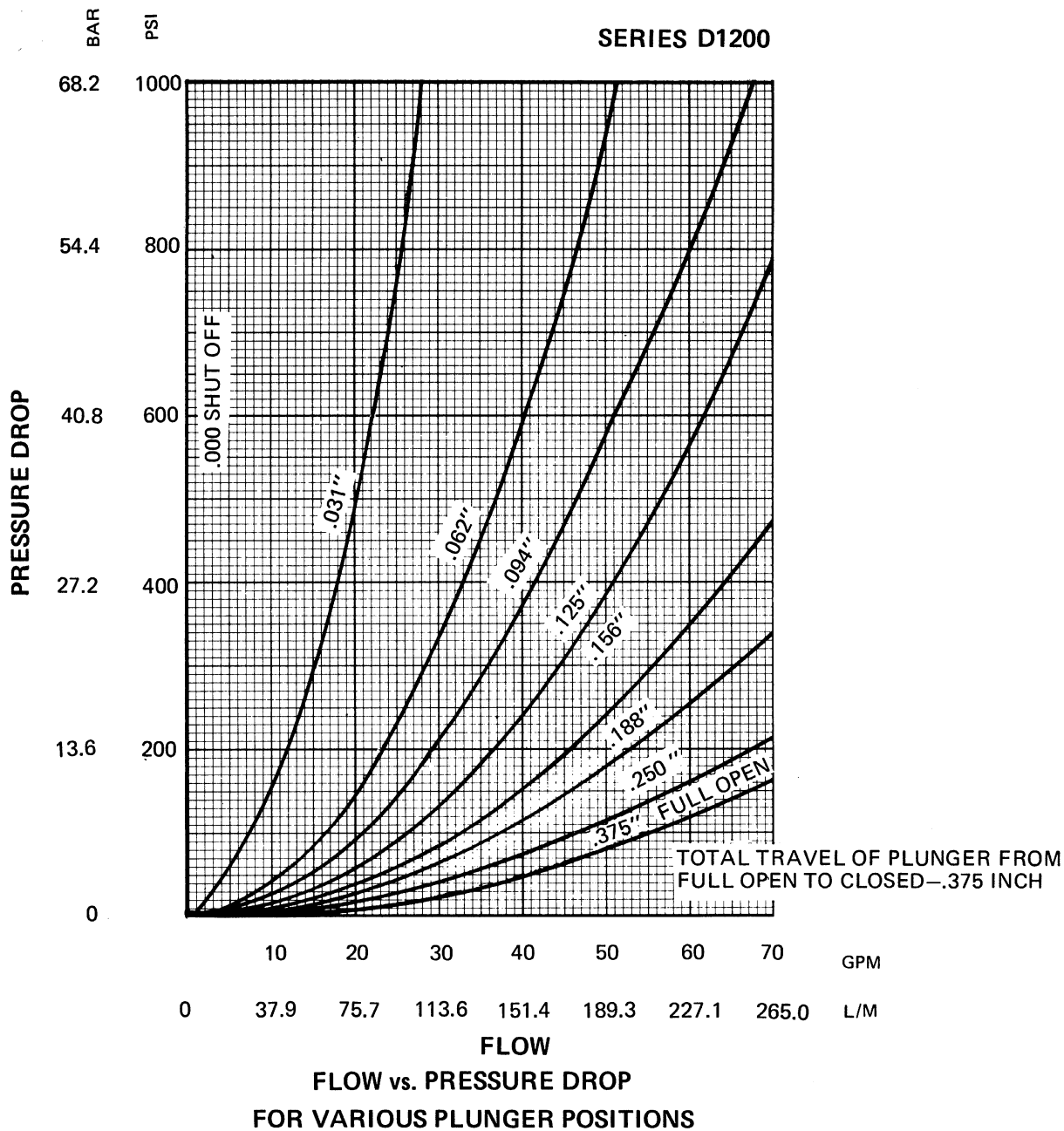
Performance Data



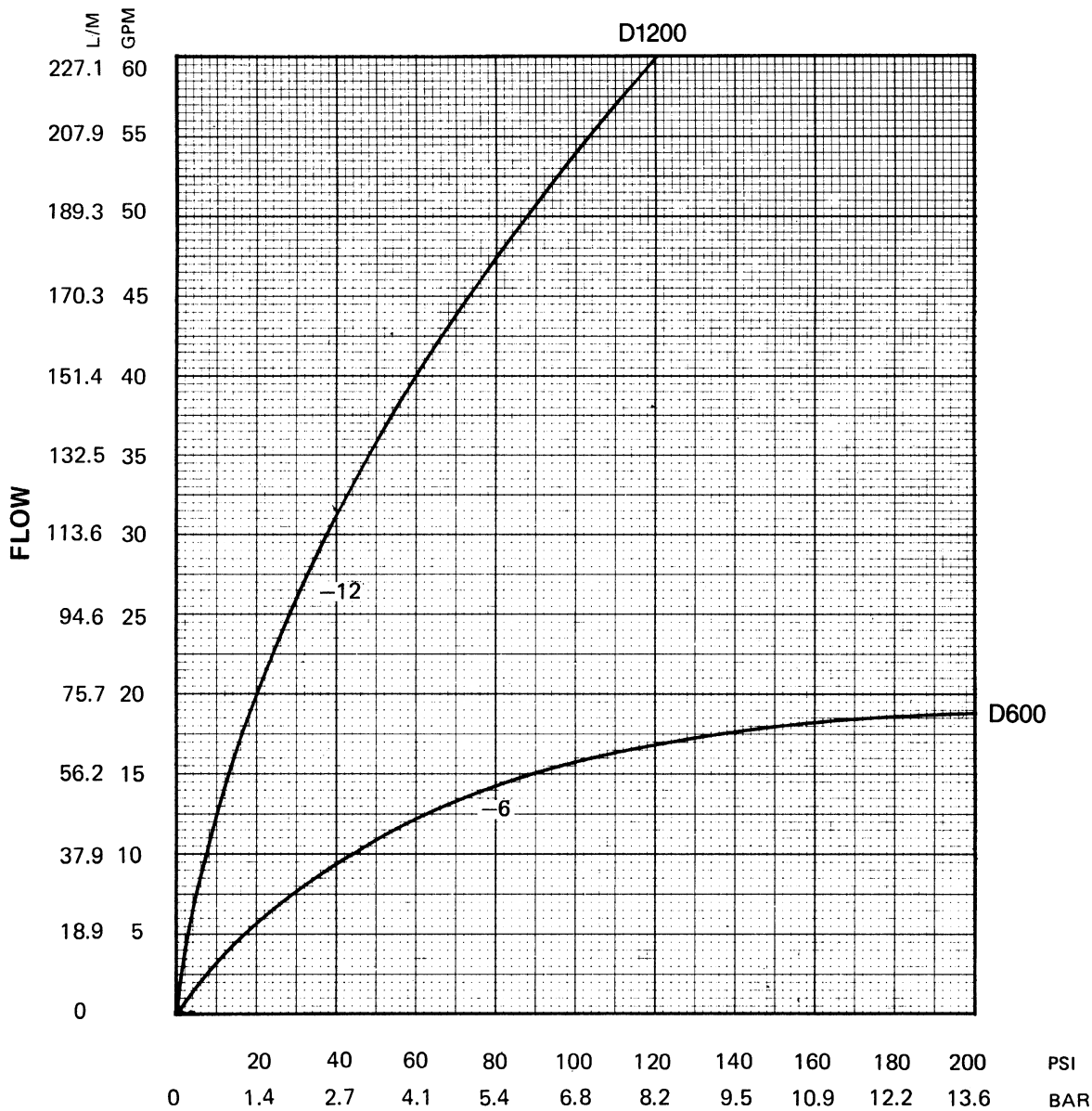
**FLOW vs. PRESSURE DROP
FOR VARIOUS PLUNGER POSITIONS**



Performance Data



Performance Data



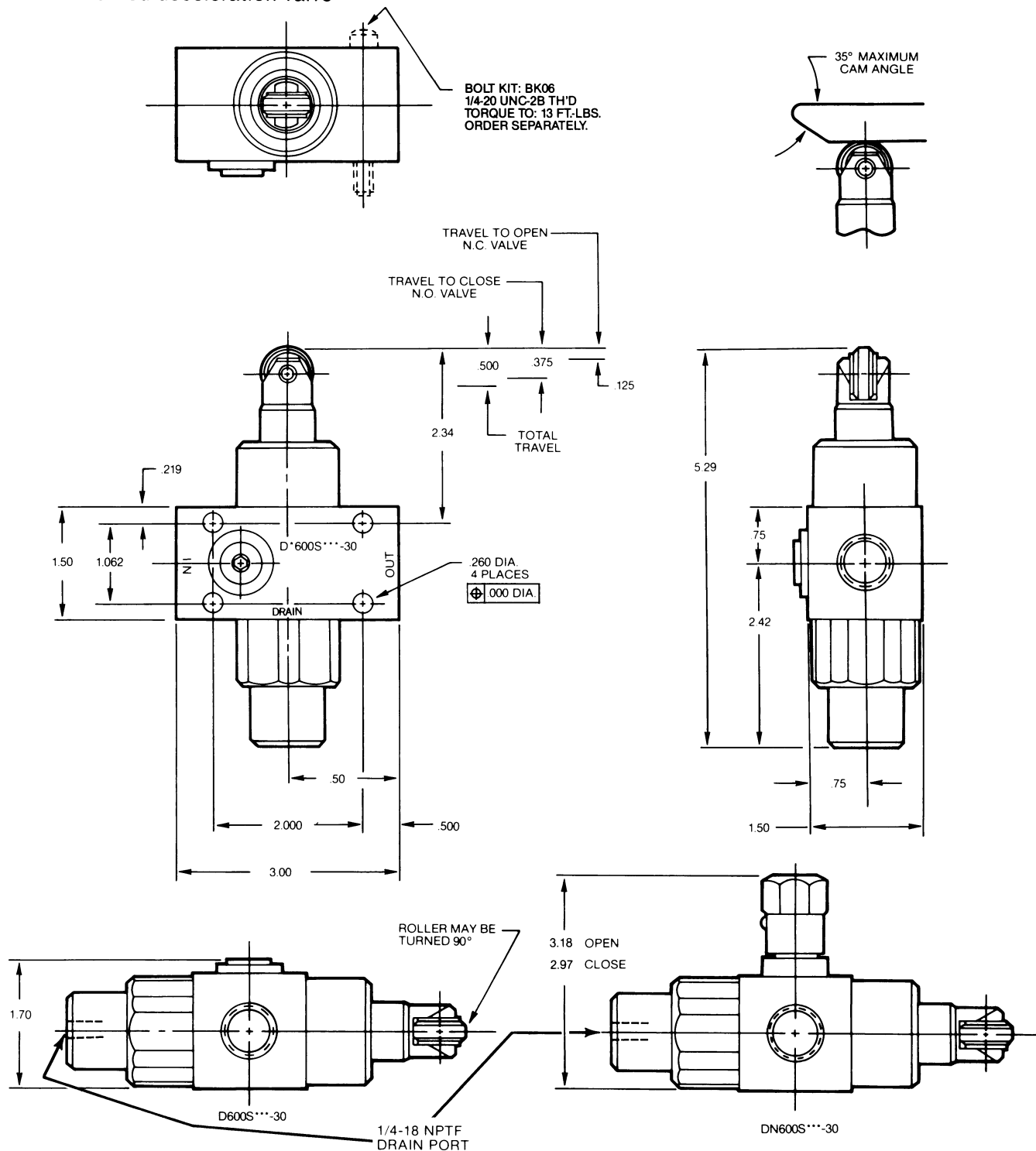
**REVERSE FLOW vs. PRESSURE DROP
(PLUNGER OPEN)**



Dimensions

Models D600S and DN600SS

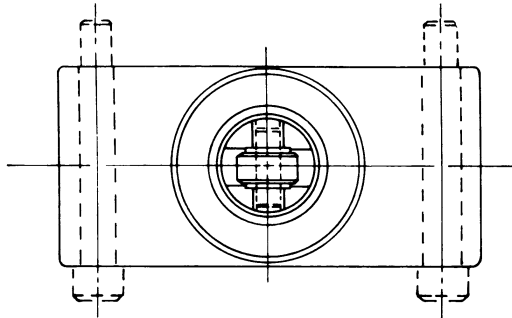
In-line mounted deceleration valve



Dimensions

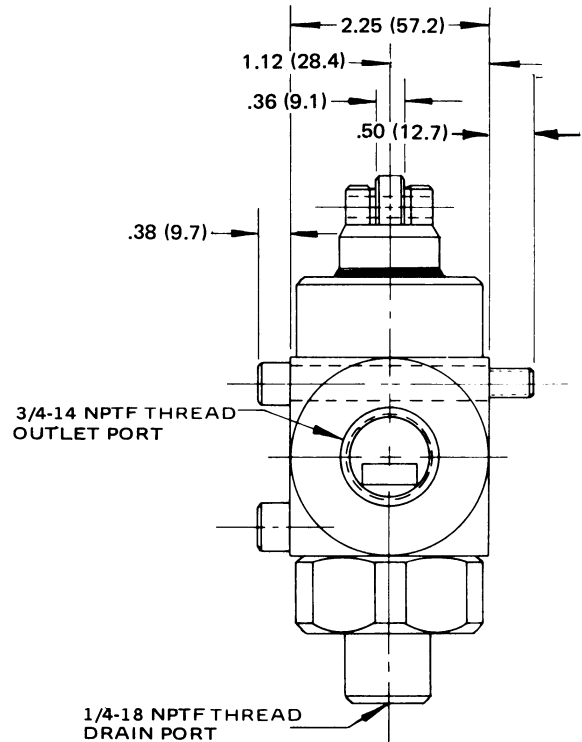
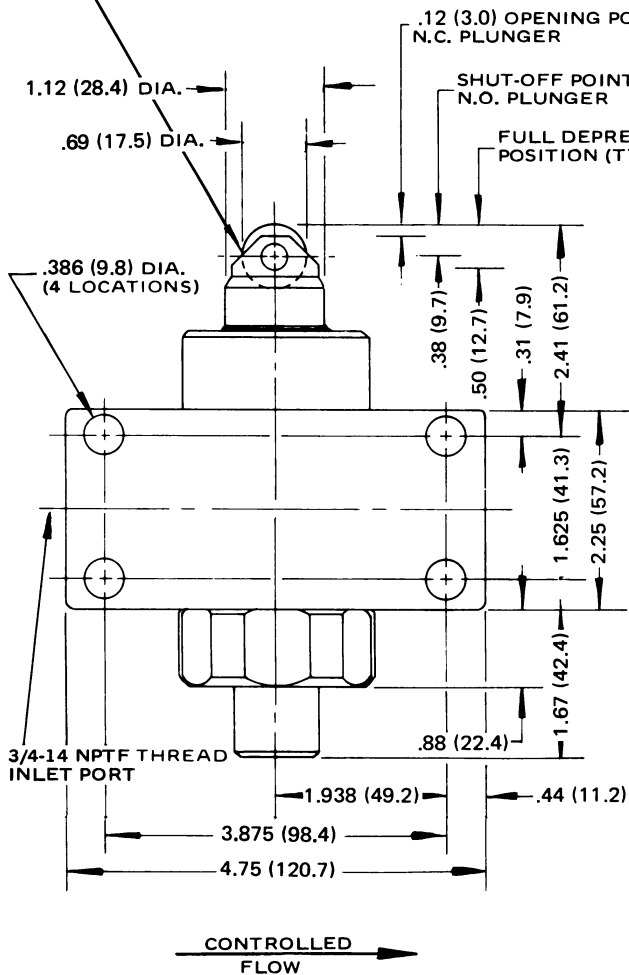
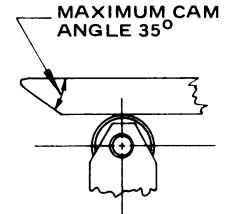
Model D1200S

Inline-mounted Deceleration Valves,
Normally-open/Normally-closed



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

Weight
6.5 Lb. (3.0 Kg.)



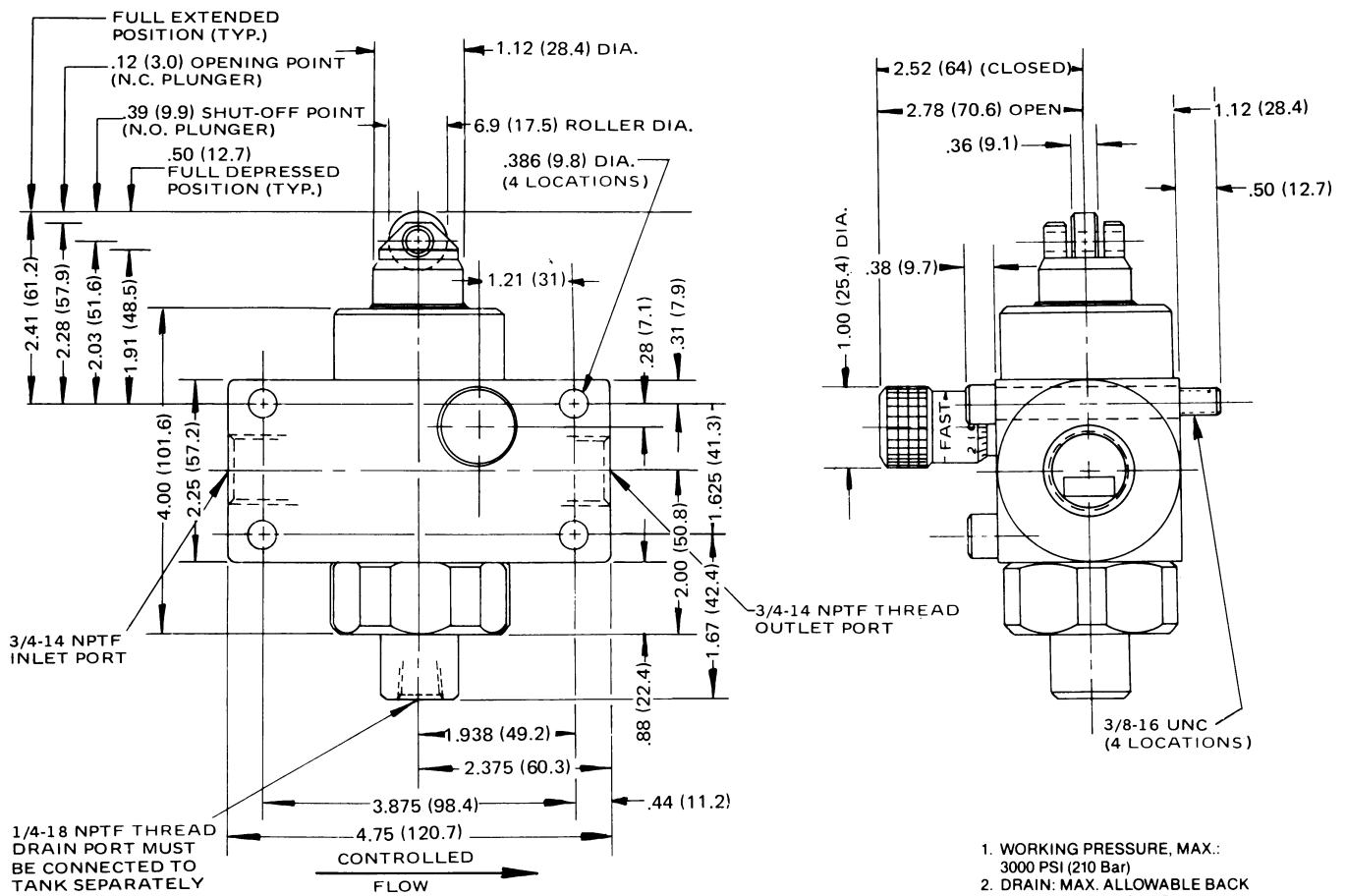
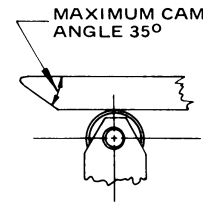
1. WORKING PRESSURE, MAX.: 3000 PSI (210 Bar)
2. DRAIN: MAX. ALLOWABLE BACK PRESSURE: 30 PSI (2 Bar)
3. FORCE TO DEPRESS PLUNGER: 50 Lbs. (22.8 Kg.) (DRAIN PRESSURE INCREASES FORCE REQ'D. TO DEPRESS PLUNGER.)

Dimensions

Model DN1200S

Inline-mounted Deceleration Valve with
bypass needle

Weight
7.5 Lb. (3.4 Kg.)



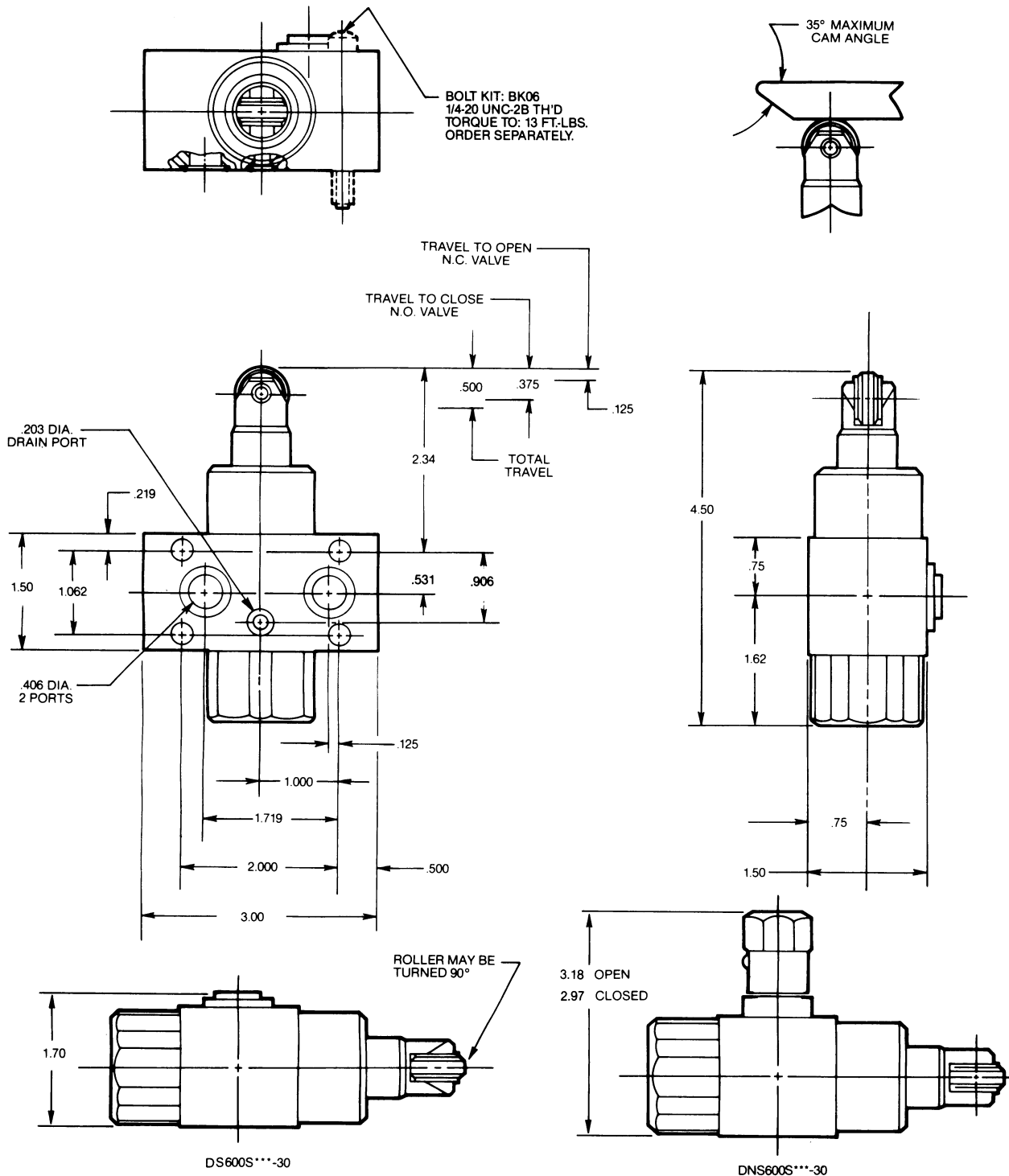
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Dimensions

Models DNS600S – DS600S

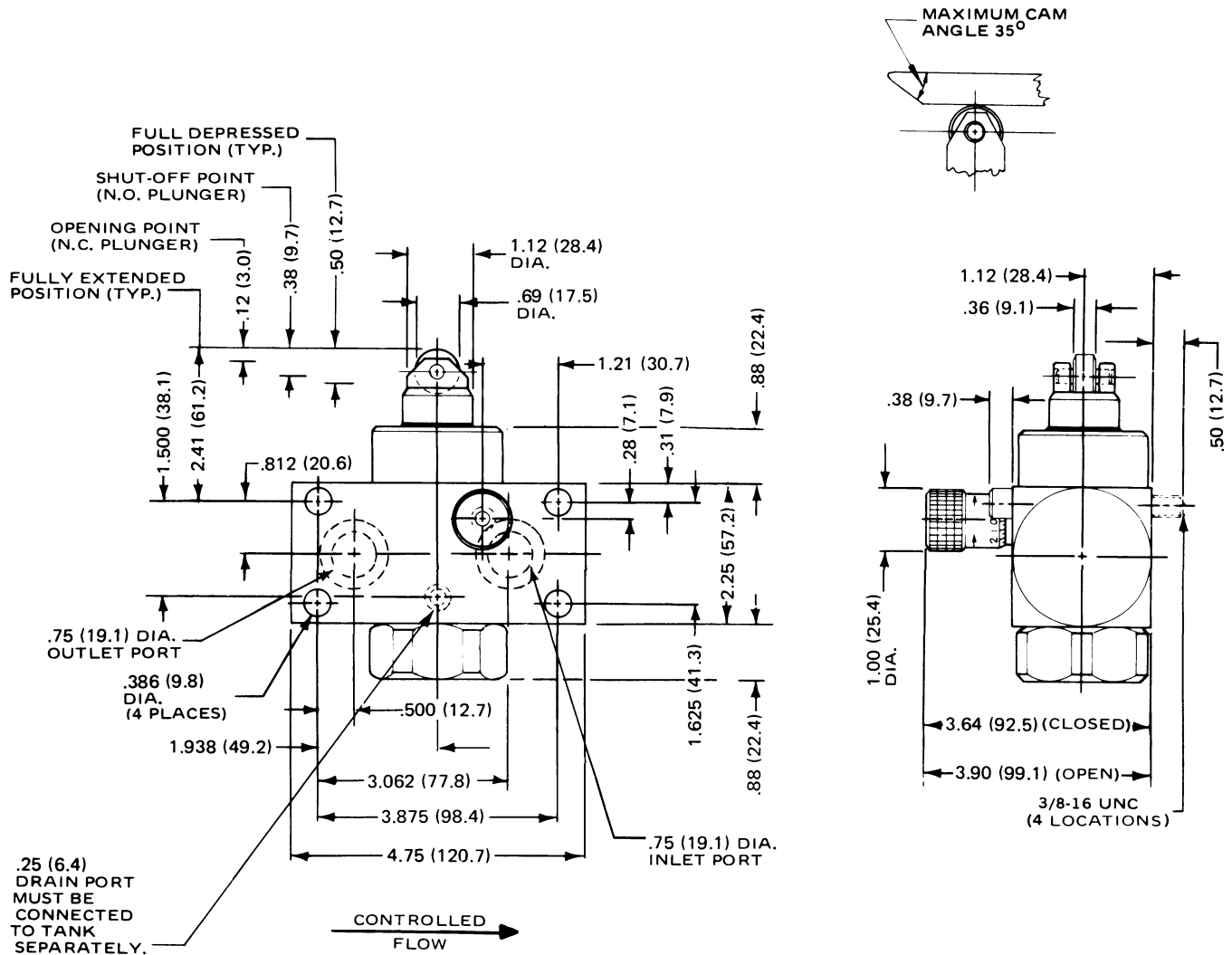
Manifold-mounted Deceleration Valve



Dimensions

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.)

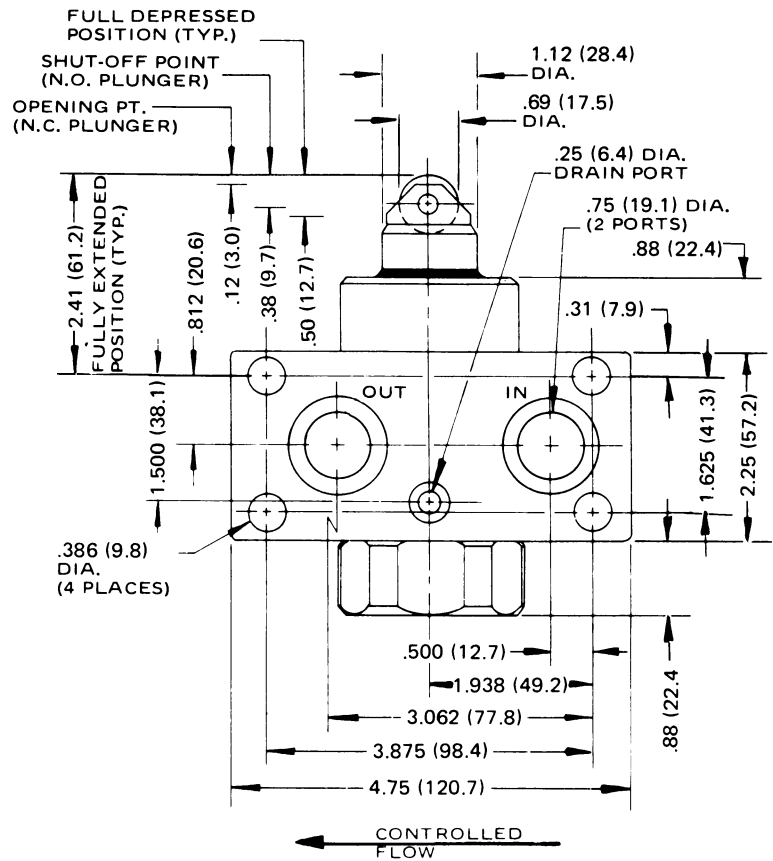
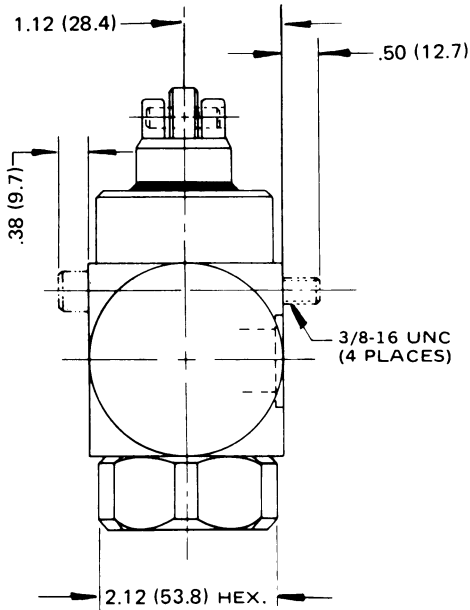
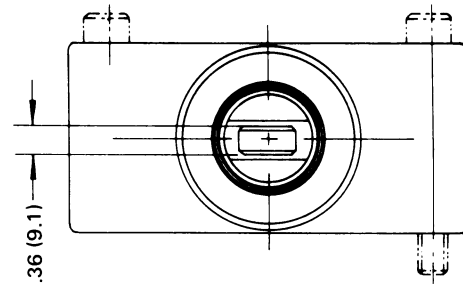
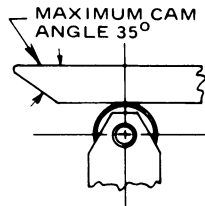
Weight
7.5 Lb. (3.4 Kg.)



Dimensions

Model DS1200S

Manifold-mounted-Normally-open/
Normally-closed Deceleration Valve



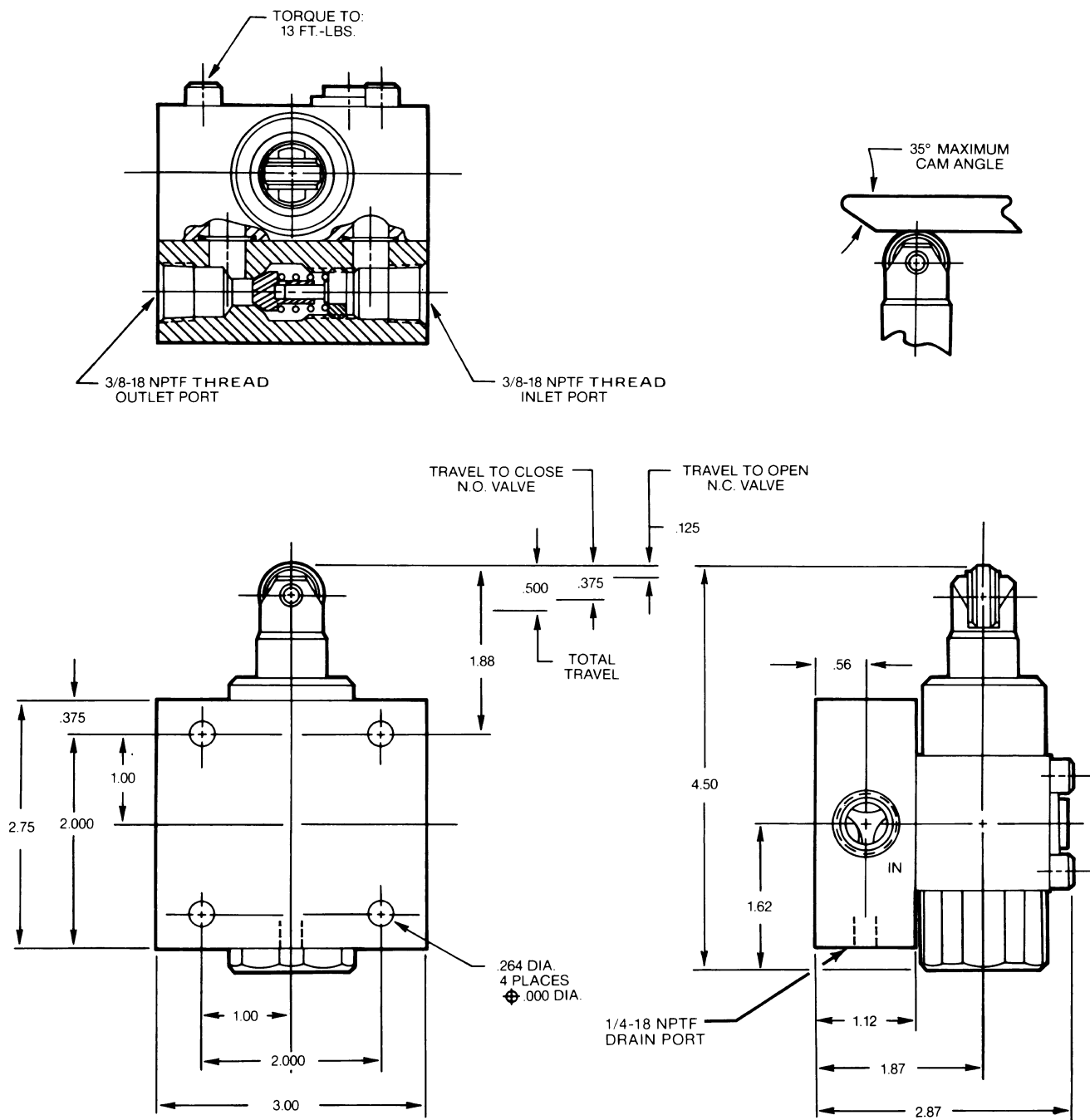
NOTES:

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

Model DC600S

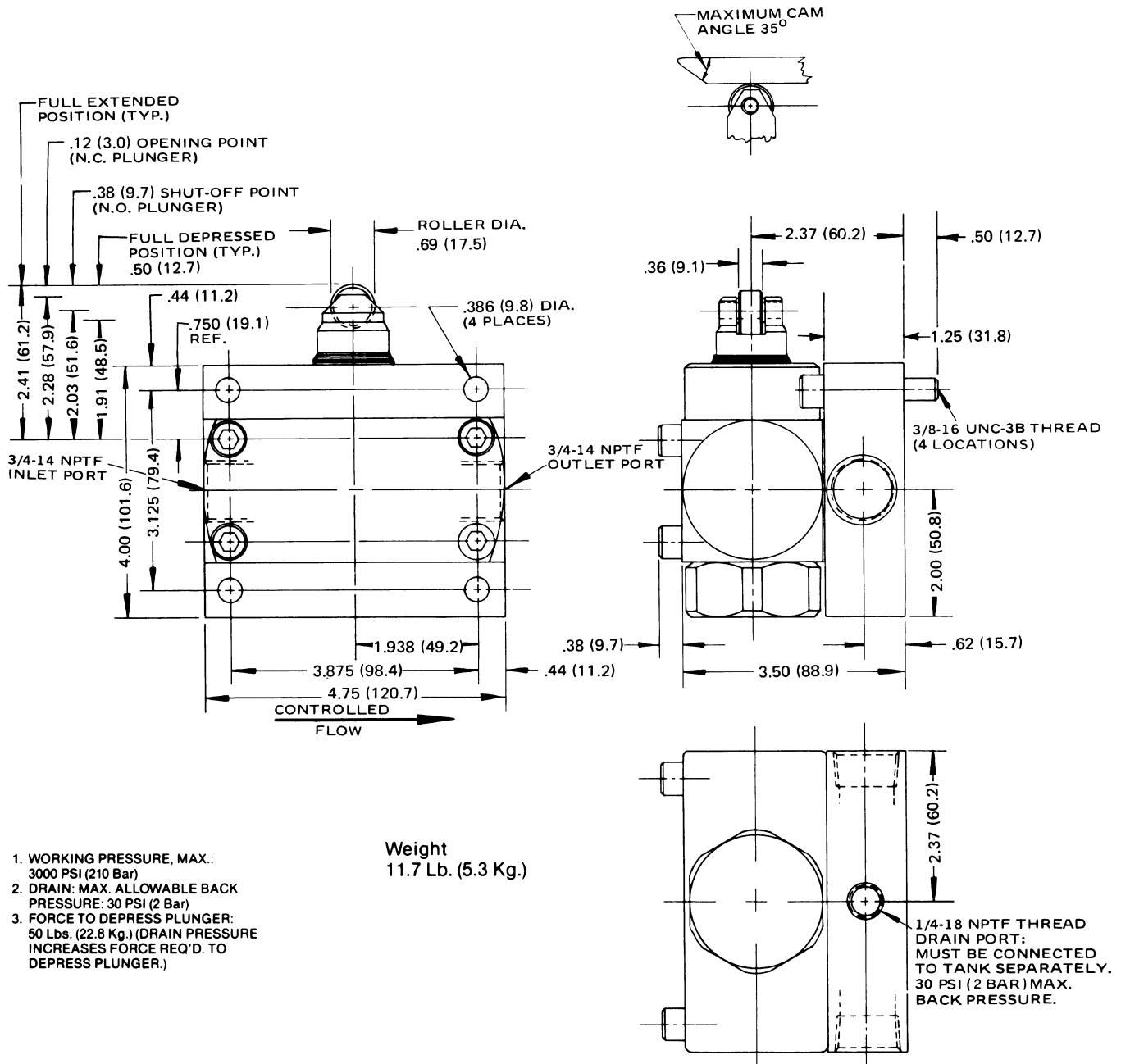
Inline-mounted Deceleration Valve
with reverse check



Dimensions

Model DC1200S

Inline-mounted Deceleration Valve
with reverse check

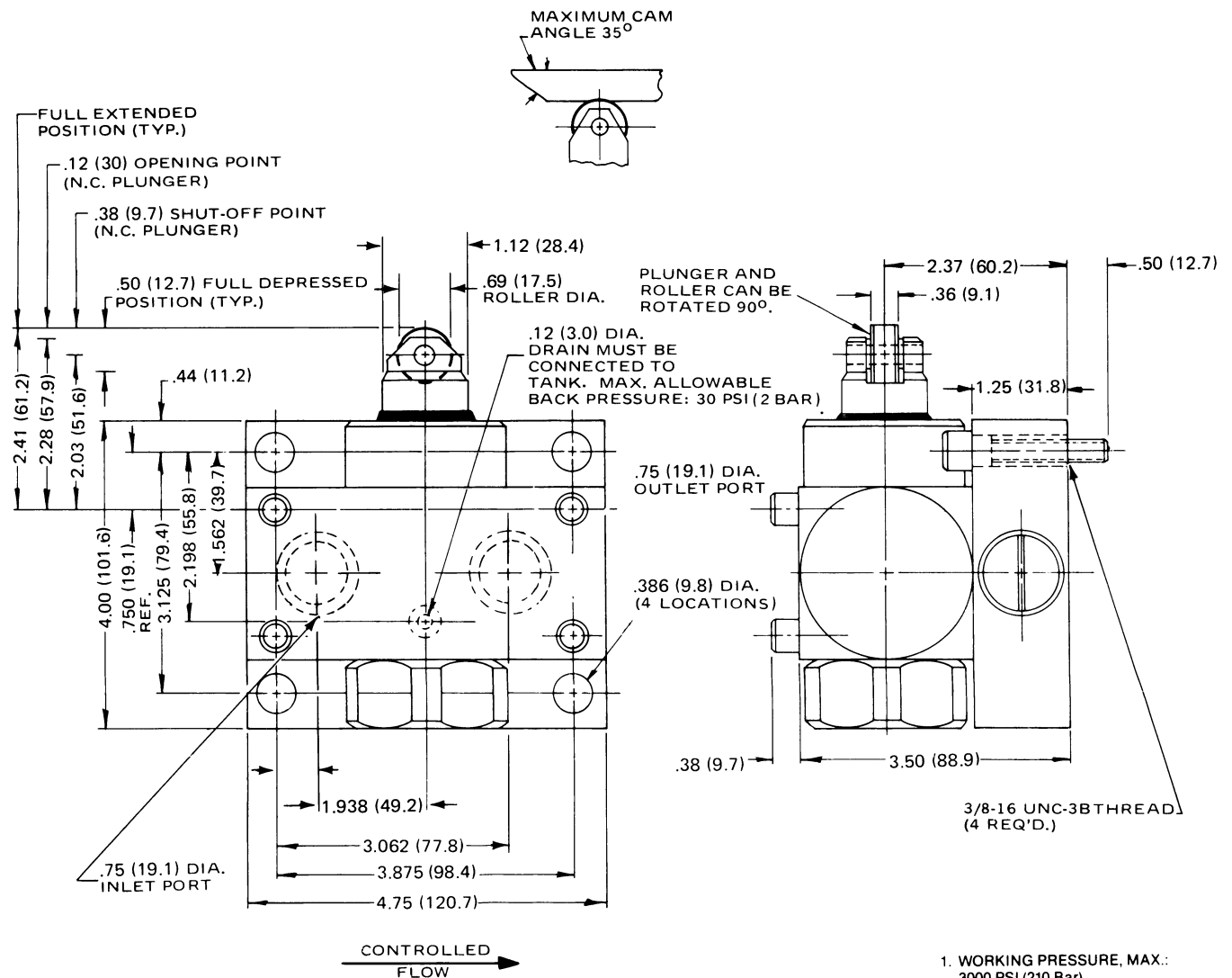


1. WORKING PRESSURE, MAX.: 3000 PSI (210 Bar)
2. DRAIN: MAX. ALLOWABLE BACK PRESSURE: 30 PSI (2 Bar)
3. FORCE TO DEPRESS PLUNGER: 50 Lbs. (22.8 Kg.) (DRAIN PRESSURE INCREASES FORCE REQ'D. TO DEPRESS PLUNGER.)

Dimensions

Model DCS1200S

Manifold-mounted Deceleration Valve
with reverse check



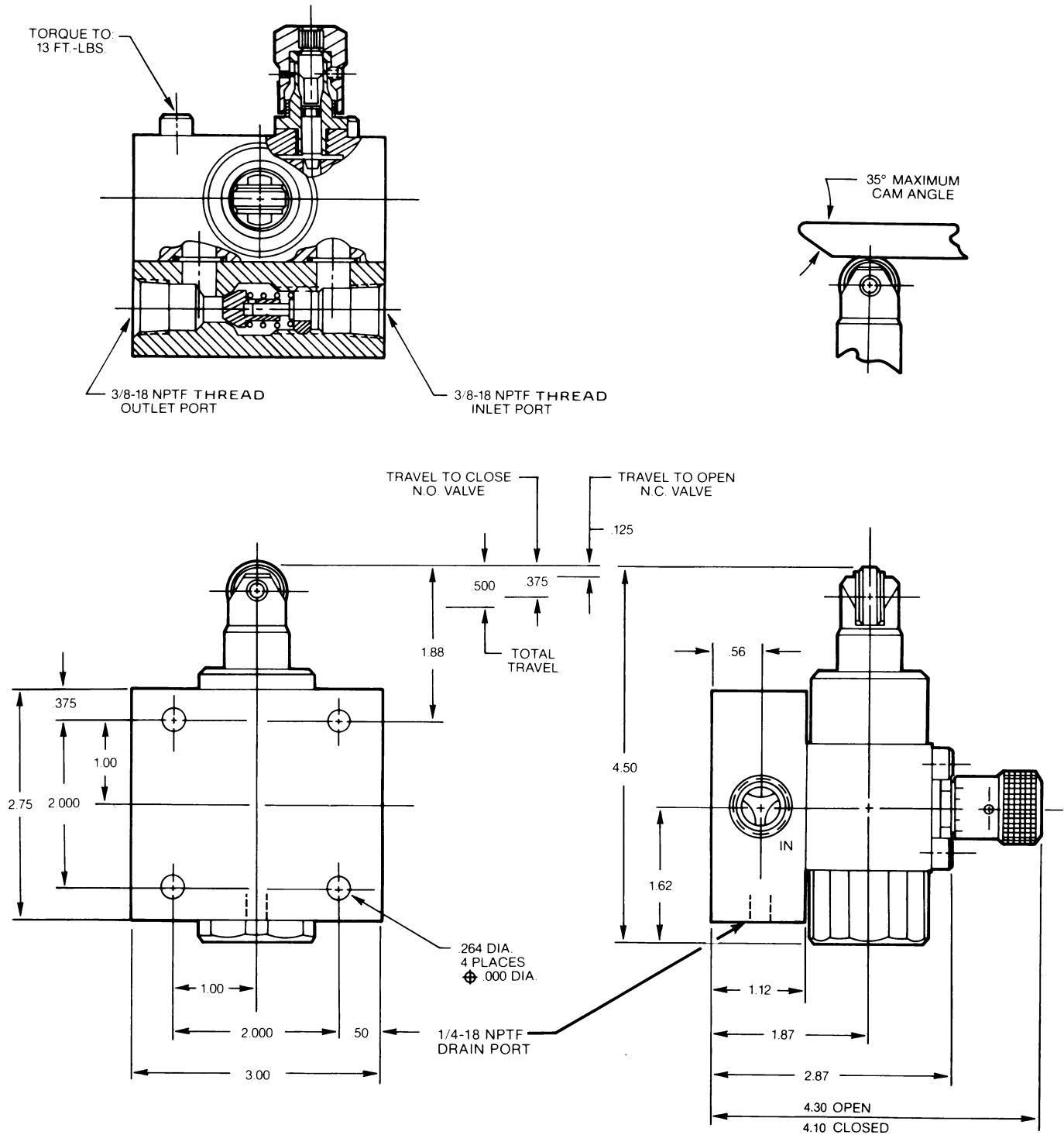
1. WORKING PRESSURE, MAX.: 3000 PSI (210 Bar)
2. DRAIN: MAX. ALLOWABLE BACK PRESSURE: 30 PSI (2 Bar)
3. FORCE TO DEPRESS PLUNGER: 50 Lbs. (22.8 Kg.) (DRAIN PRESSURE INCREASES FORCE REQ'D. TO DEPRESS PLUNGER.)



Dimensions

Model DF600S

Inline-mounted Deceleration Valve
with reverse check and bypass needle



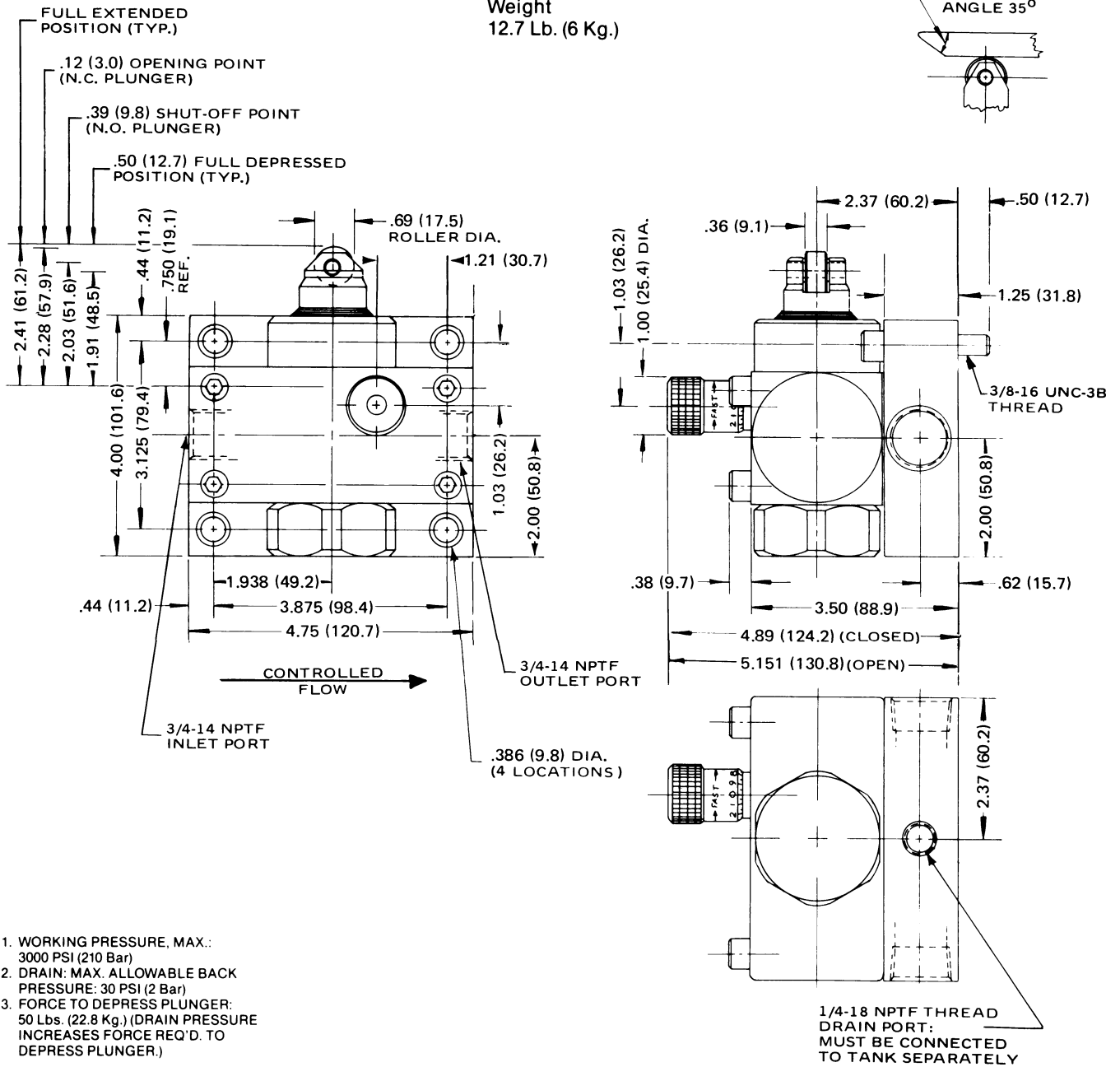
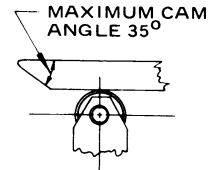
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Dimensions

Model DF1200S

Inline-mounted Deceleration Valve
with reverse check and bypass needle

Weight
12.7 Lb. (6 Kg.)



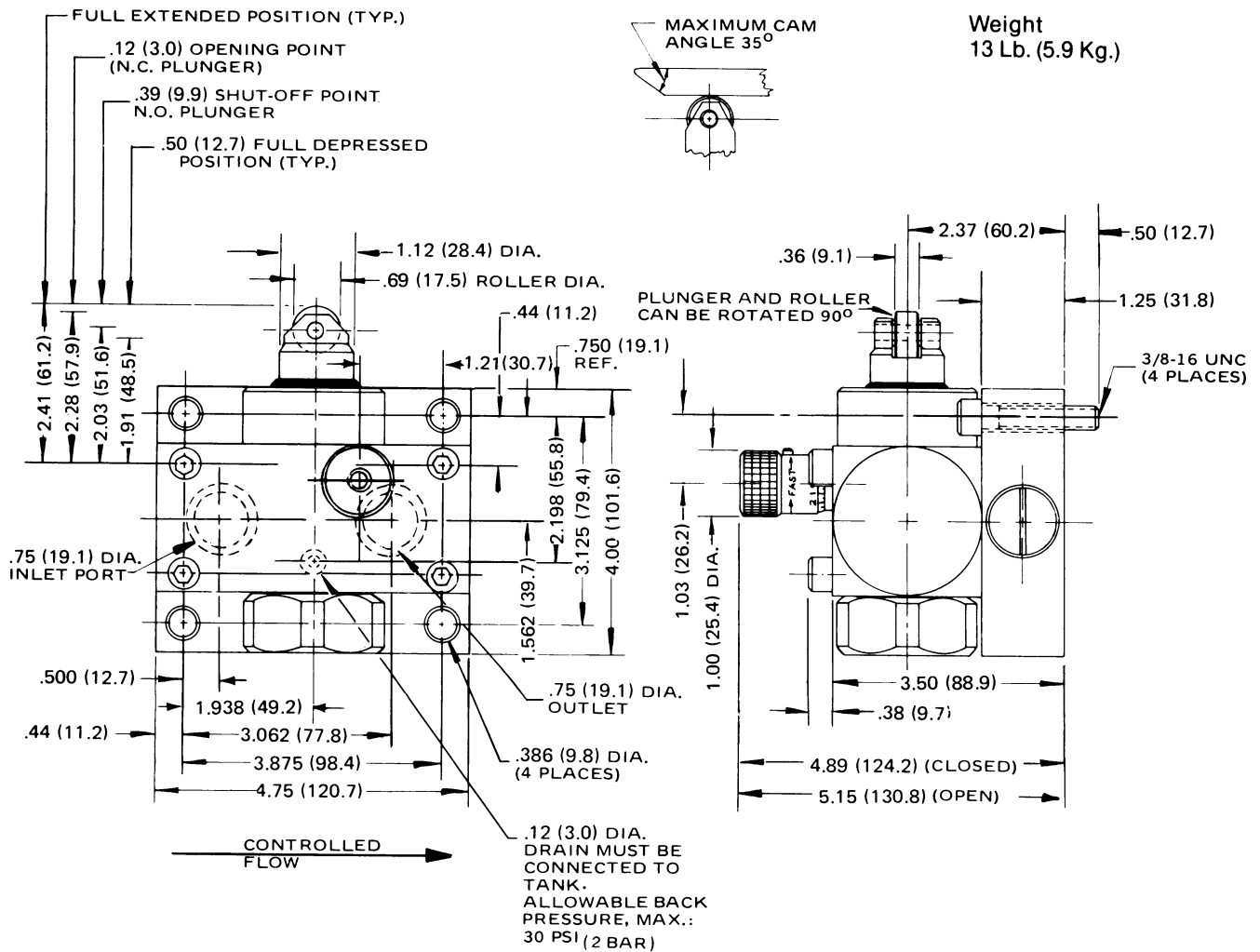
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3000 PSI (210 Bar)
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3. FORCE TO DEPRESS PLUNGER: 50 Lbs. (22.8 Kg.) (DRAIN PRESSURE INCREASES FORCE REQ'D. TO DEPRESS PLUNGER.)



Dimensions

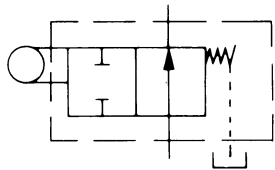
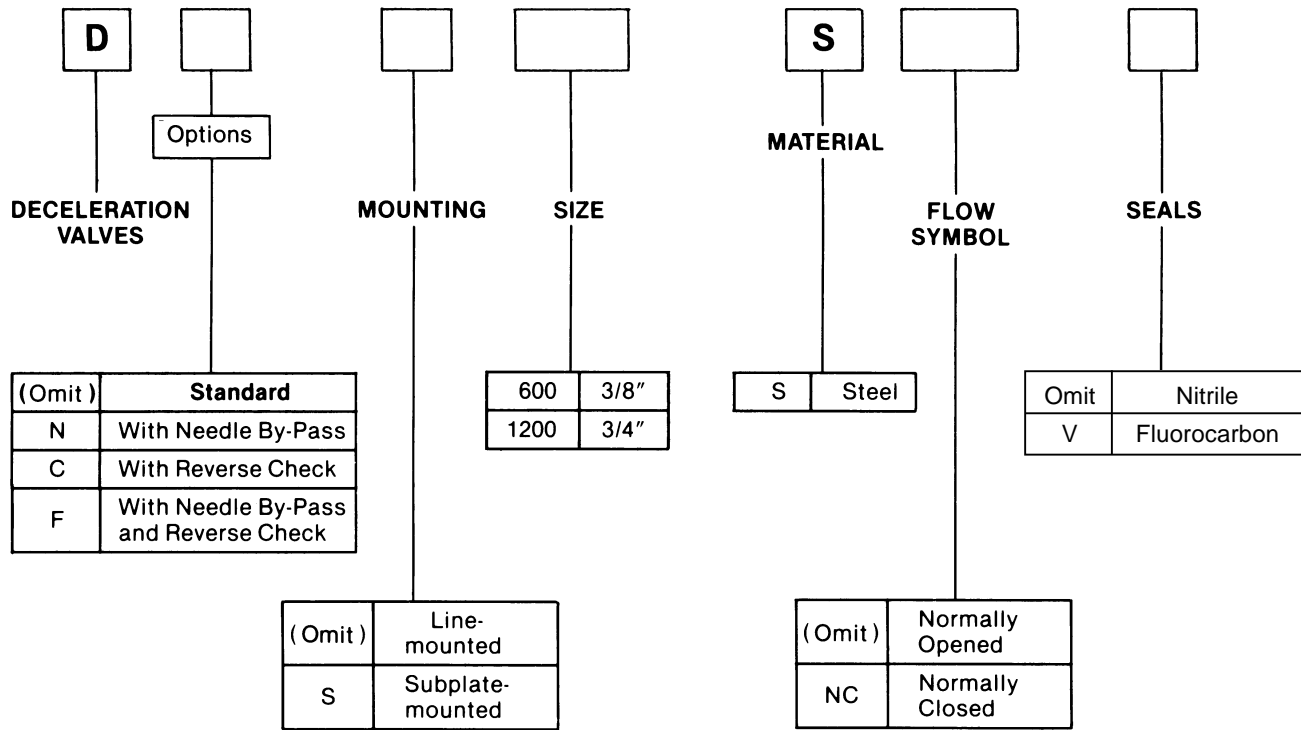
Model DFS1200S

Manifold-mounted Deceleration Valve
with reverse check and bypass needle

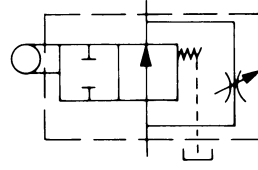


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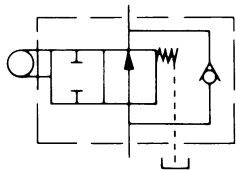
Ordering Information



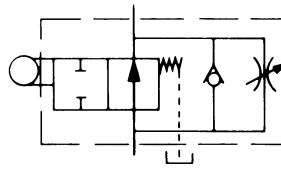
STANDARD
DECELERATION VALVE



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.

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