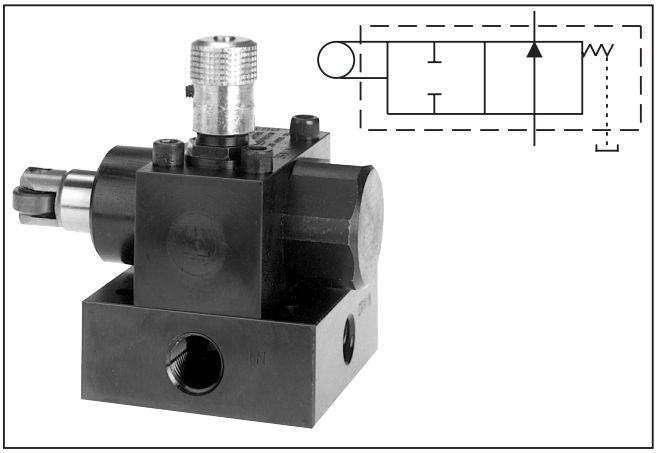
General Description

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

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



Specfications

Maximum Operating Pressure	210 Bar (3000 PSI)
Maximum Flow	See flow vs. pressure drop curves, reverse flow vs. pressure drop, flow vs. plunger travel curves
Nominal Flow	D600 37.9 LPM (10 GPM) D1200 132.5 LPM (35 GPM)
Port Configurations	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.

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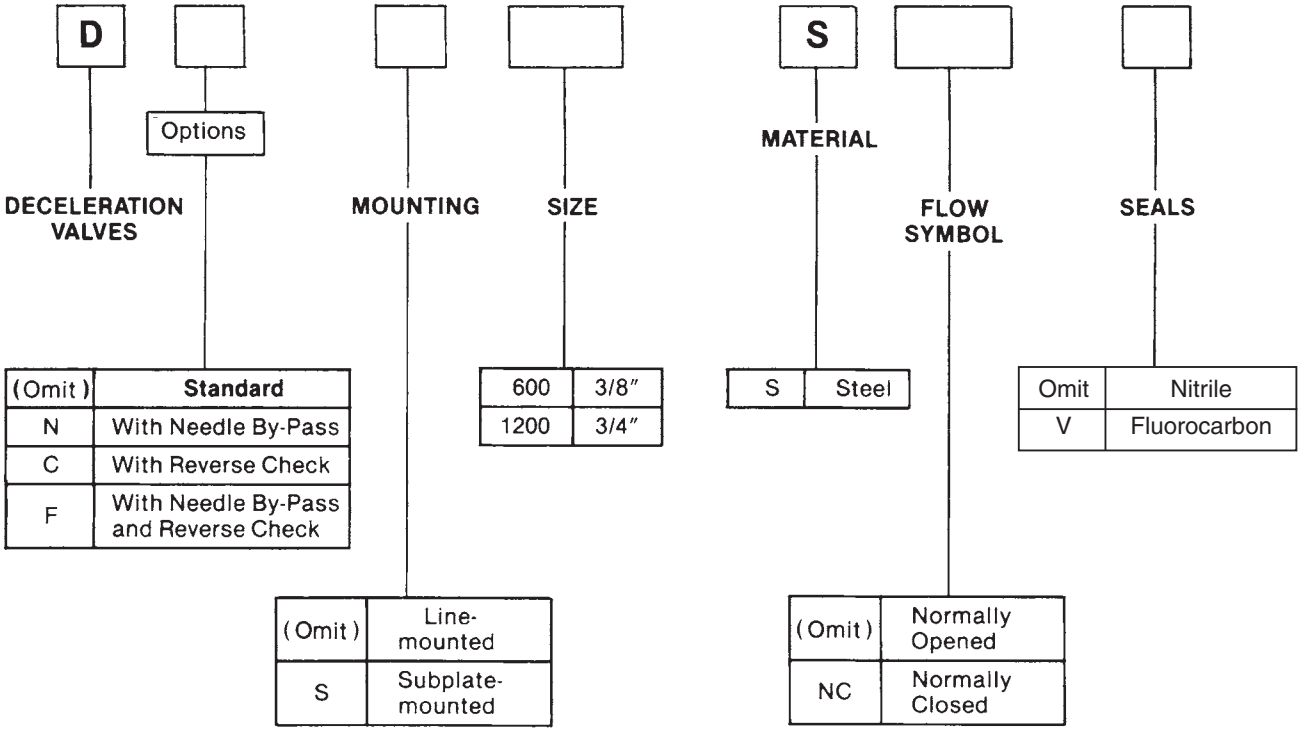
Flow Data

Valve Model	Flow, max., GPM (L/M)	Pressure Drop △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



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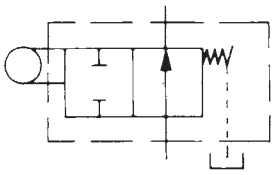
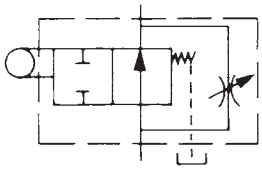
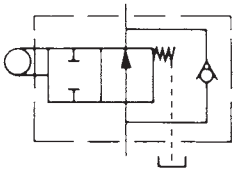


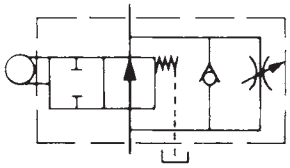
STANDARD DECELERATION VALVE



DECELERATION VALVE WITH NEEDLE BY-PASS



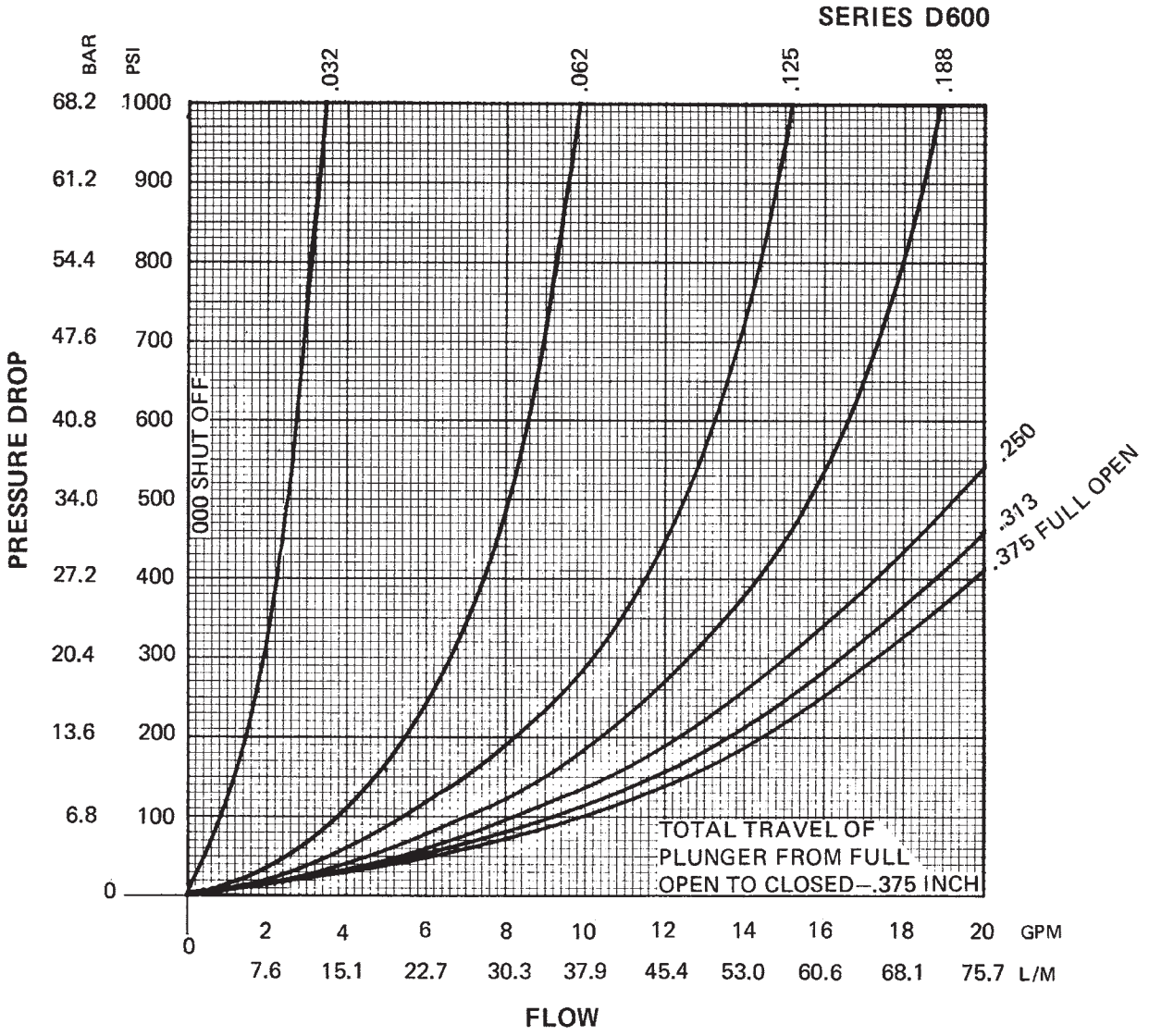
DECELERATION VALVE WITH REVERSE CHECK



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

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3000-D1.p65, dd

Parker Hannifin Corporation
Hydraulic Valve Division
Elyria, Ohio, USA

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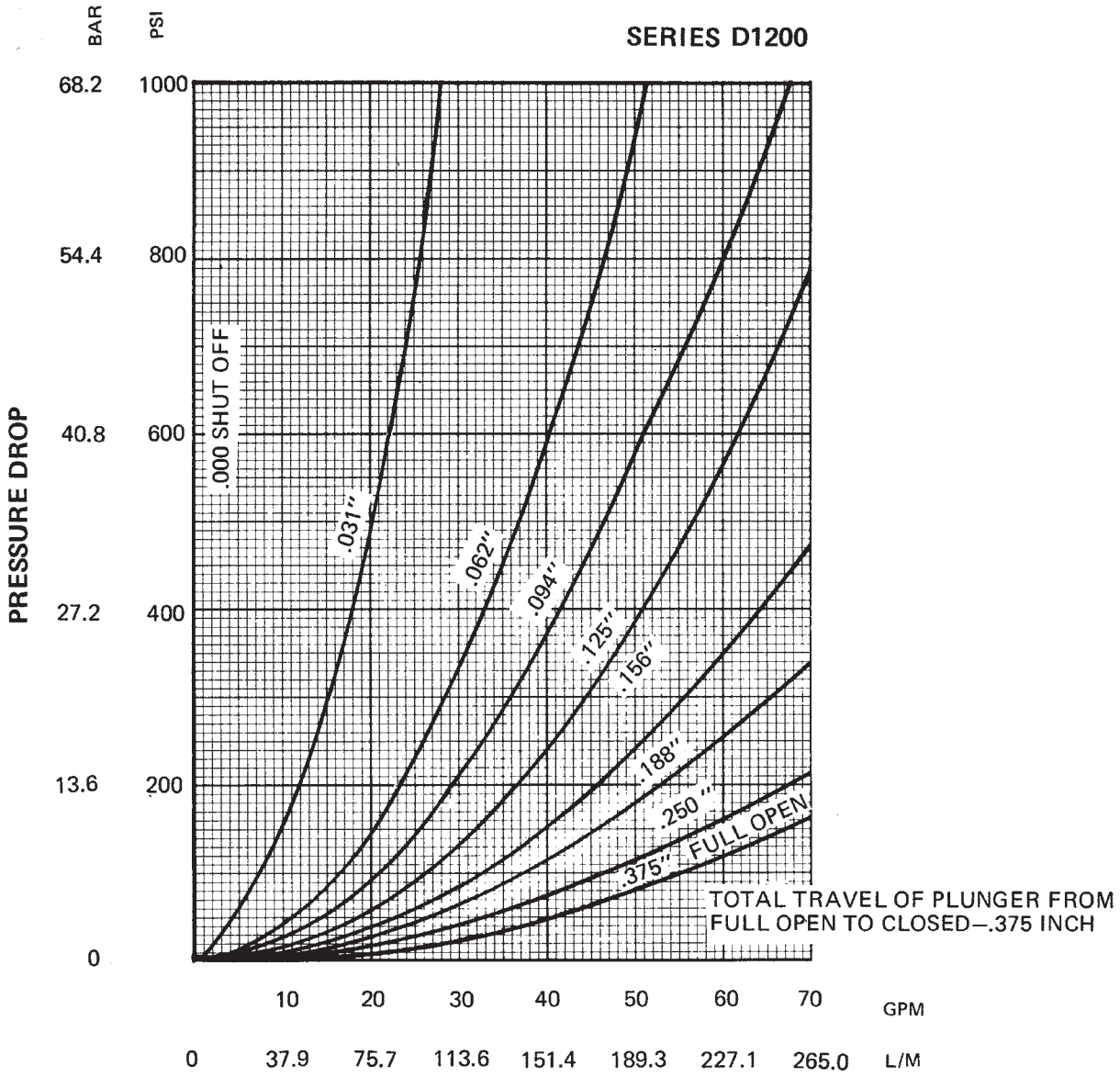
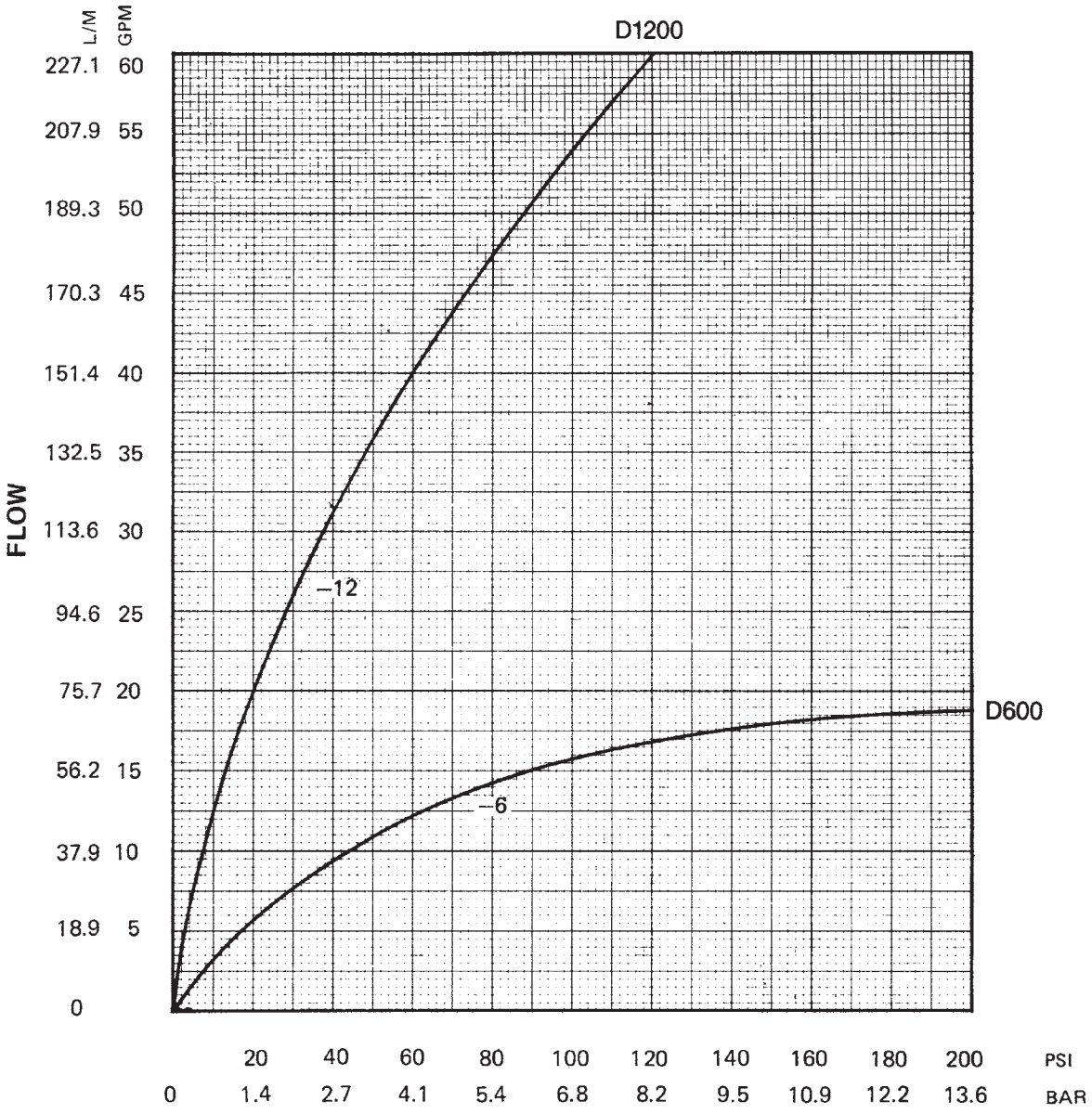


FLOW vs. PRESSURE DROP
FOR VARIOUS PLUNGER POSITIONS

3000-D1.p65, dd

Parker Hannifin Corporation
Hydraulic Valve Division
Elyria, Ohio, USA



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

D

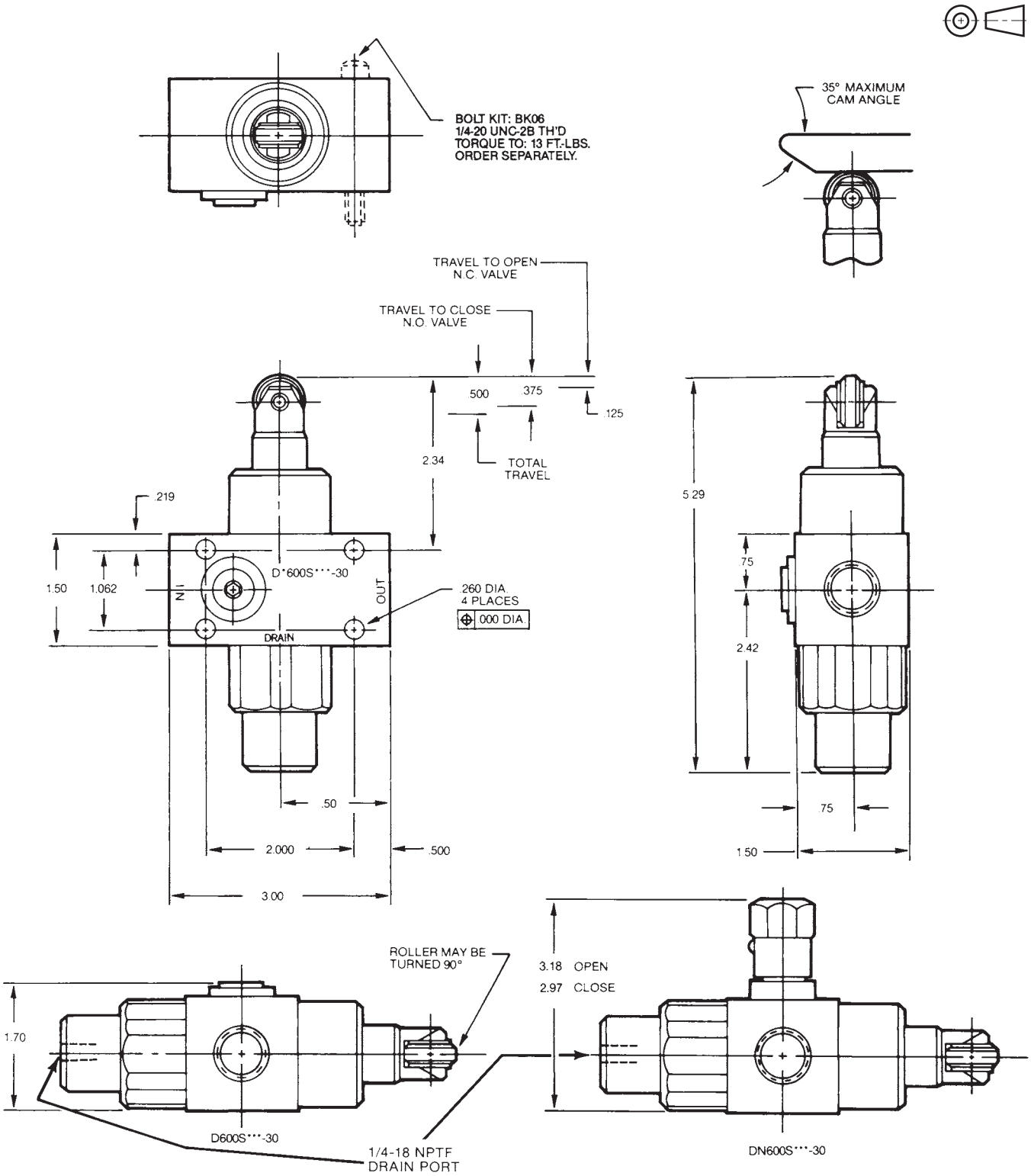
3000-D1.p65, dd

Parker Hannifin Corporation
Hydraulic Valve Division
Elyria, Ohio, USA

Dimensions are shown in inches

Models D600S and DN600S

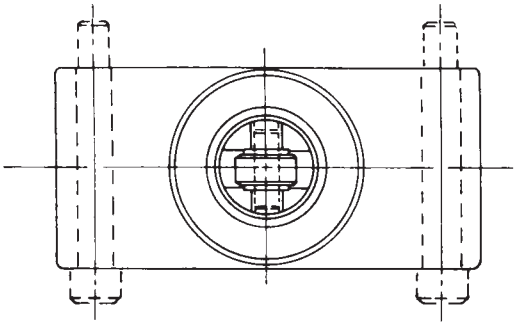
In-line mounted Deceleration Valves



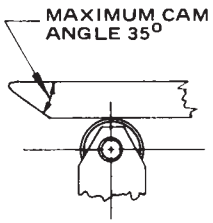
Millimeter equivalents for inch dimensions are shown in (**)

Model D1200S

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



Weight
6.5 Lb. (3.0 Kg.)



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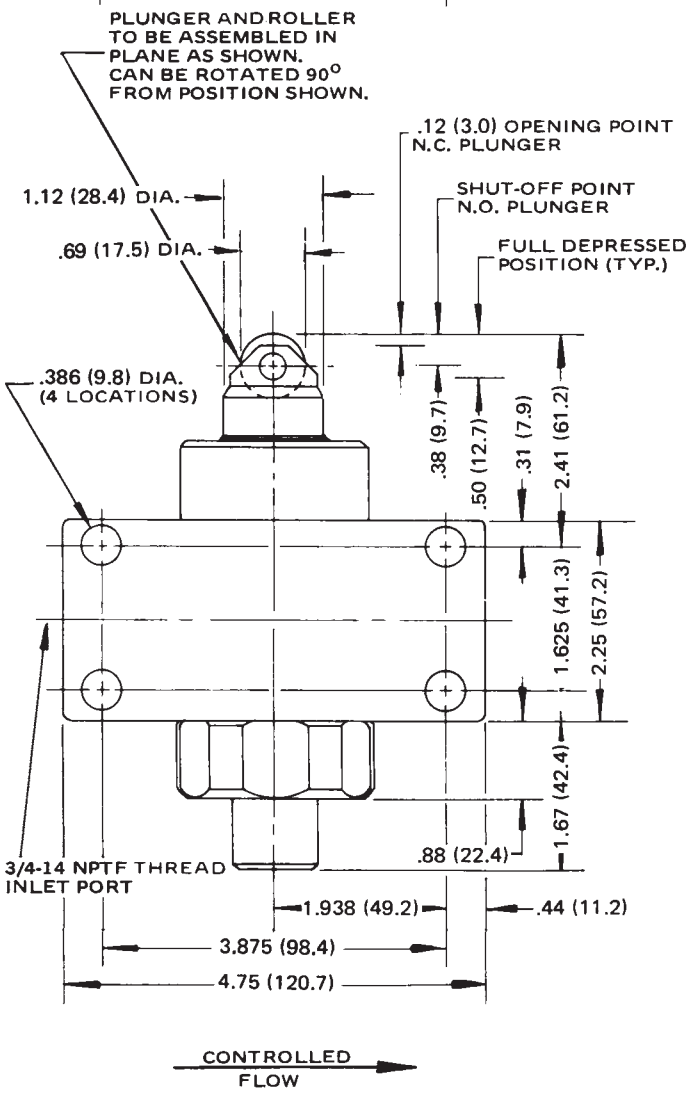
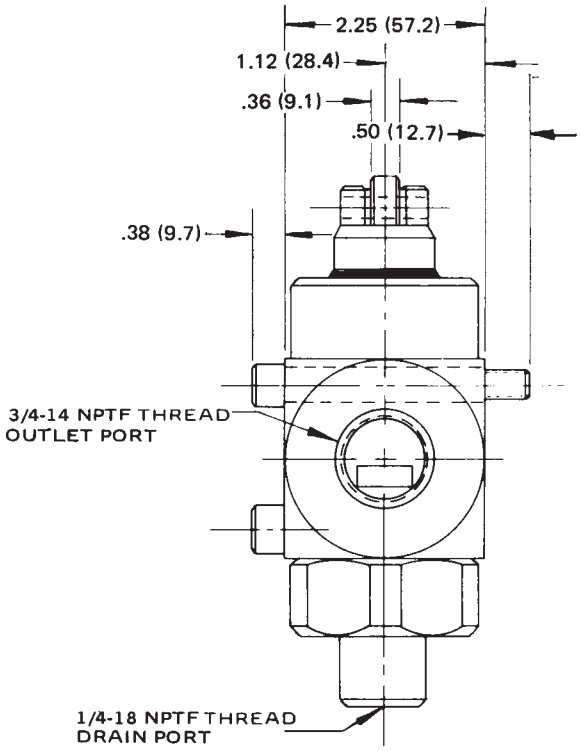


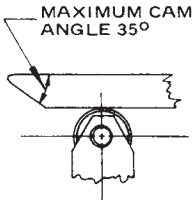


1. WORKING PRESSURE, MAX.: 3000 PSI (210 Bar)
2. DRAIN: MAX. ALLOWABLE BACK PRESSURE: 30 PSI (2 Bar)
3. FORCE TO DEPRESS PLUNGER: 50 Lbs. (22.8 Kg.) (DRAIN PRESSURE INCREASES FORCE REQ'D. TO DEPRESS PLUNGER.)

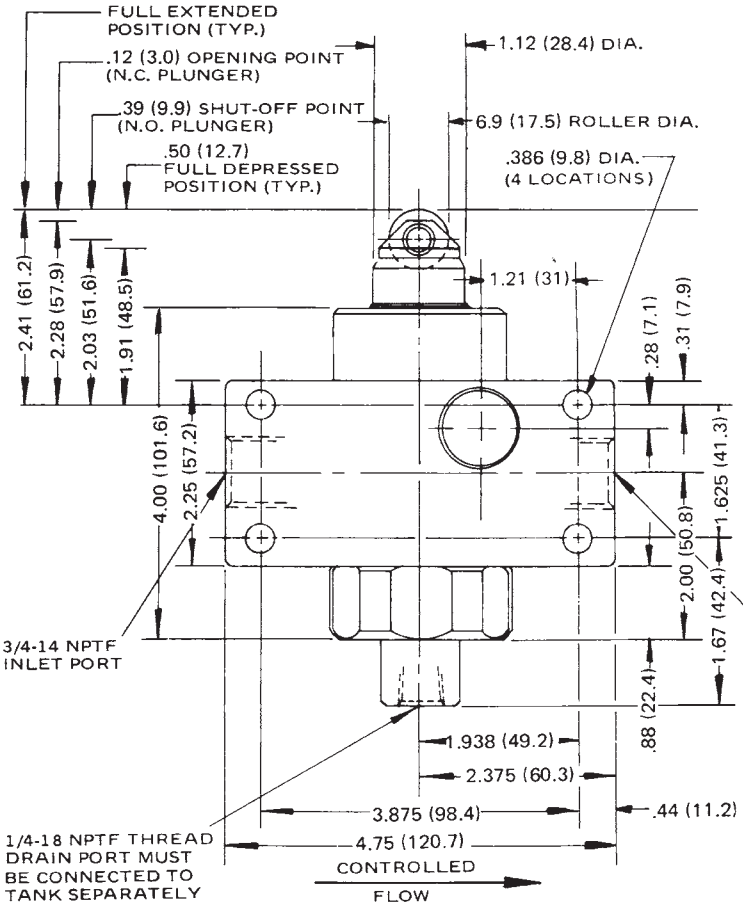
Millimeter equivalents for inch dimensions are shown in (**)

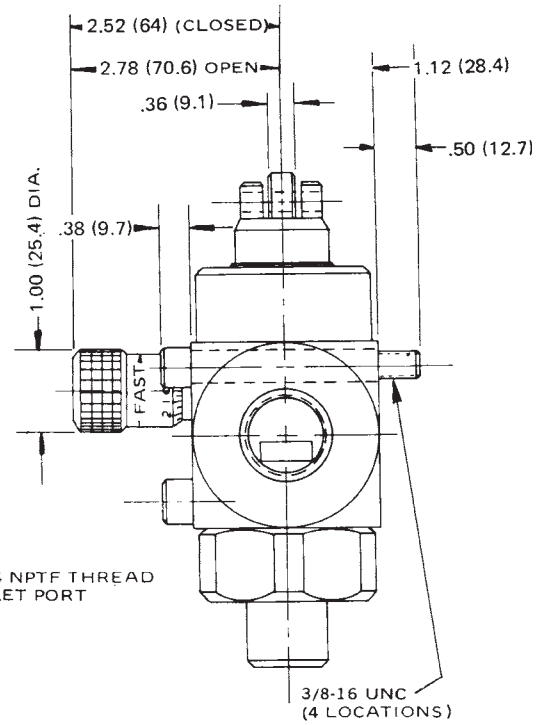
Model DN1200S

In-line mounted Deceleration Valve
with bypass needle



Weight
7.5 Lb. (3.4 Kg.)



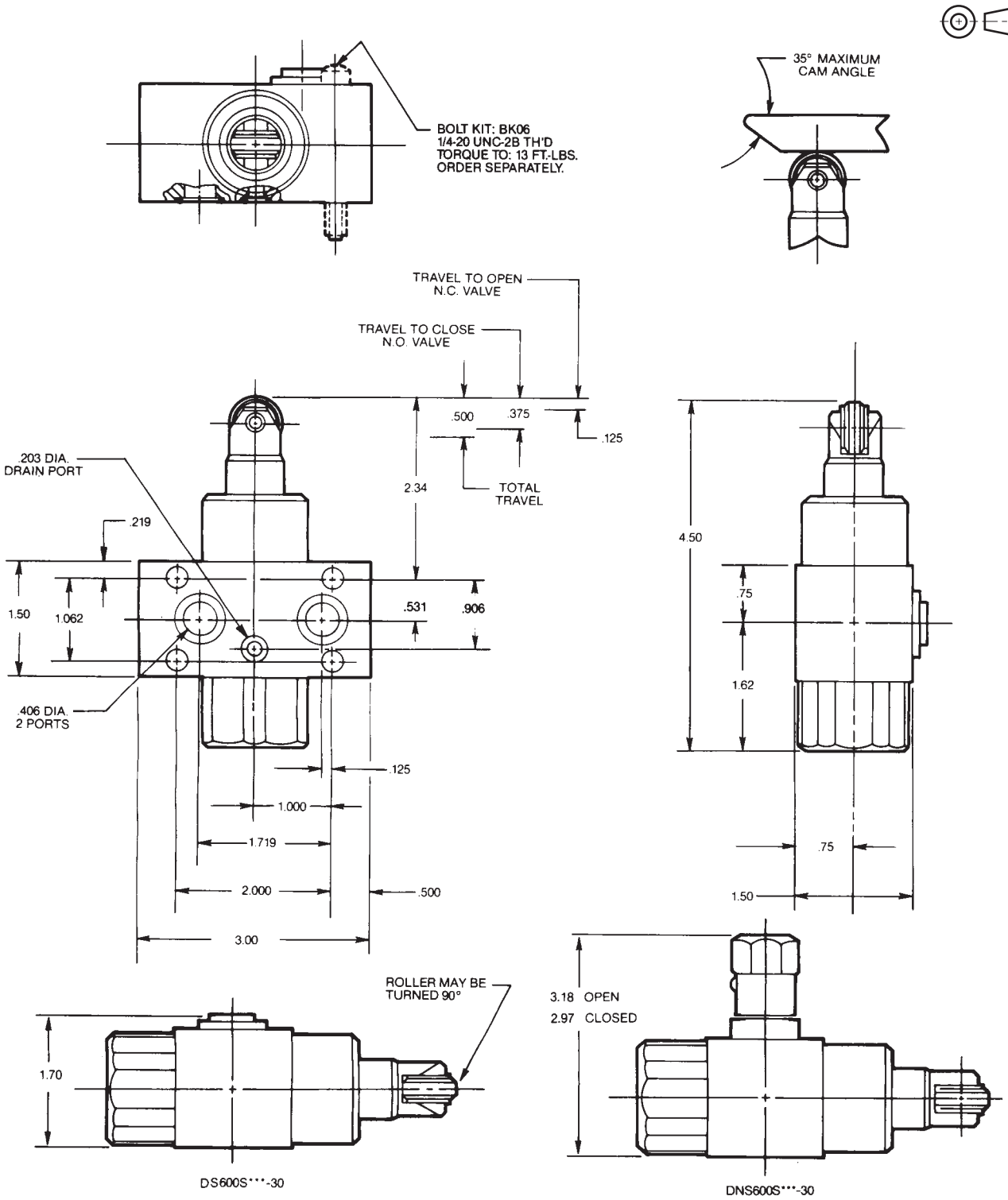


1. WORKING PRESSURE, MAX.: 3000 PSI (210 Bar)
2. DRAIN: MAX. ALLOWABLE BACK PRESSURE: 30 PSI (2 Bar)
3. FORCE TO DEPRESS PLUNGER: 50 Lbs. (22.8 Kg.) (DRAIN PRESSURE INCREASES FORCE REQ'D. TO DEPRESS PLUNGER.)

Dimensions are shown in inches

Models DNS600S – DS600S

Manifold mounted Deceleration Valves



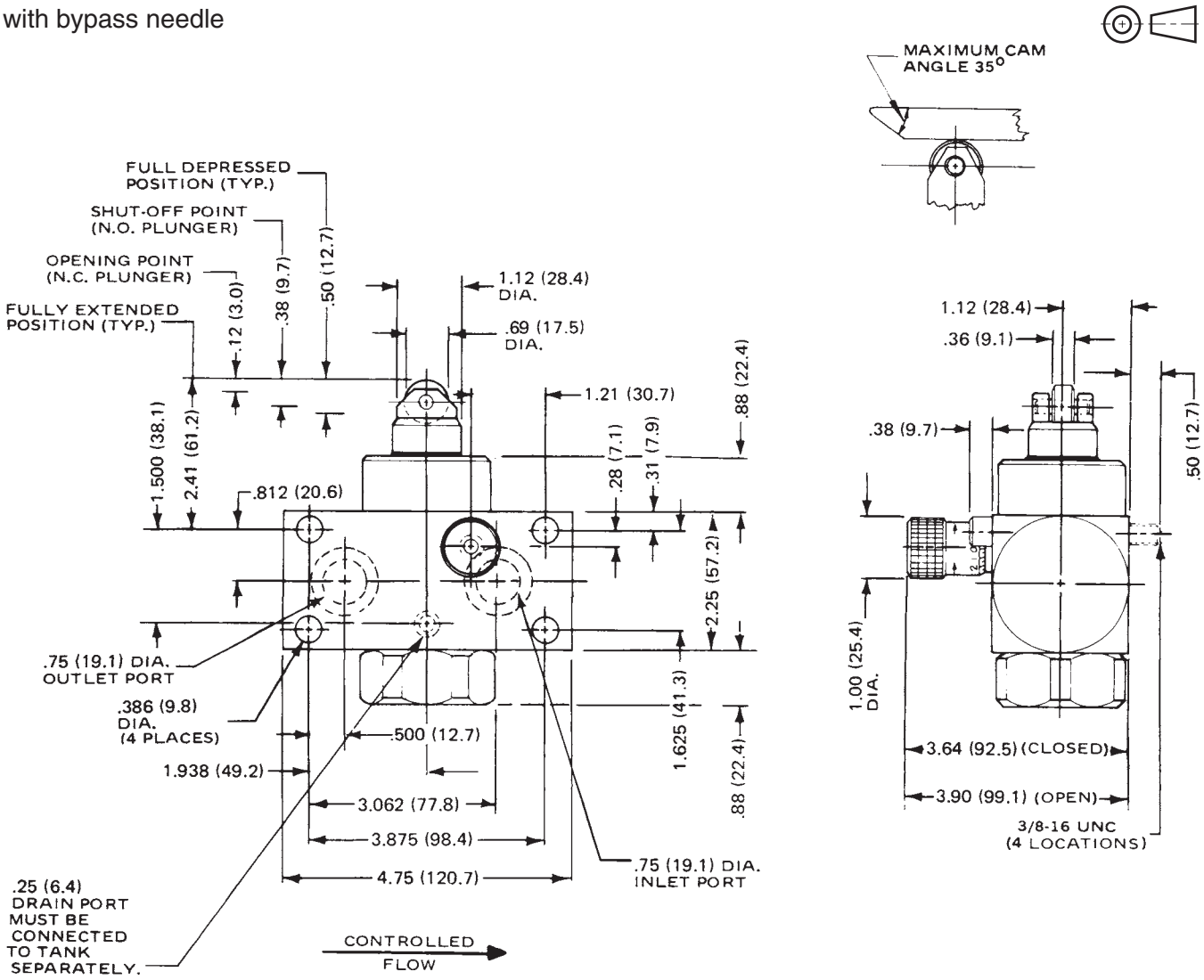
3000-D1.p65, dd

Parker Hannifin Corporation
Hydraulic Valve Division
Elyria, Ohio, USA

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

Model DNS1200S

Manifold mounted Deceleration Valve
with bypass needle



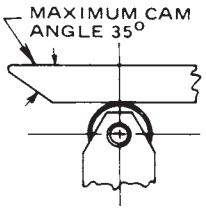
1. WORKING PRESSURE, MAX.: 3000 PSI (210 Bar)
2. DRAIN: MAX. ALLOWABLE BACK PRESSURE: 30 PSI (2 Bar)
3. FORCE TO DEPRESS PLUNGER: 50 Lbs. (22.8 Kg.) (DRAIN PRESSURE INCREASES FORCE REQ'D. TO DEPRESS PLUNGER.)

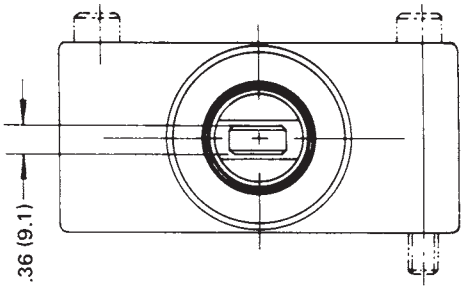
Weight
7.5 Lb. (3.4 Kg.)

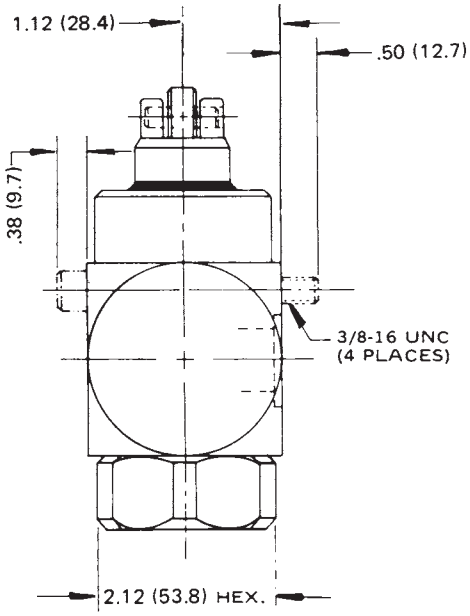
Millimeter equivalents for inch dimensions are shown in (**)

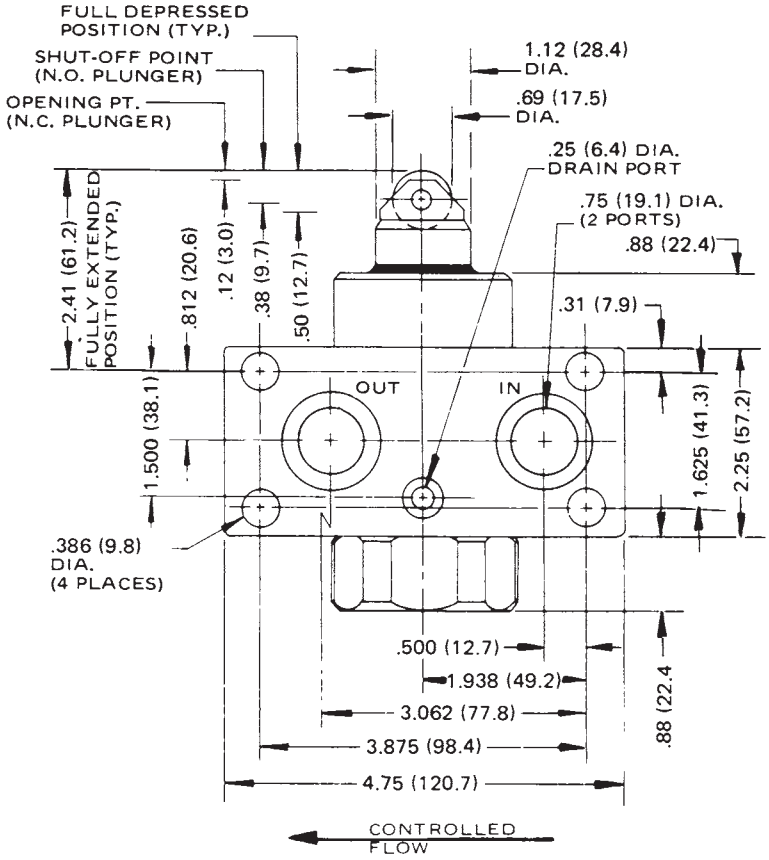
Model DS1200S

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."

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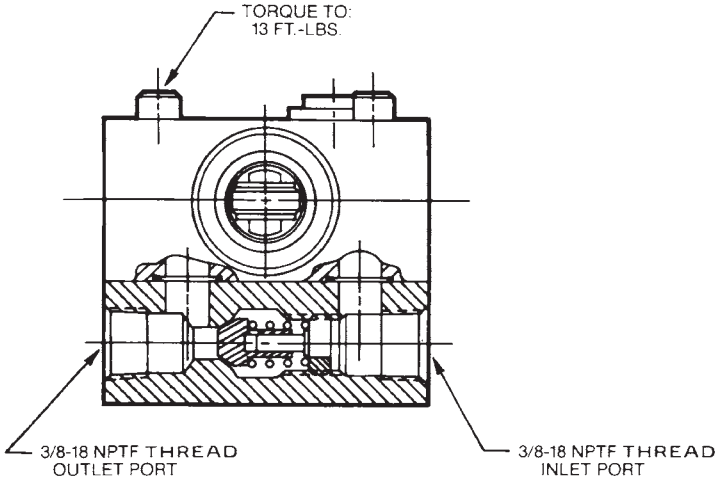
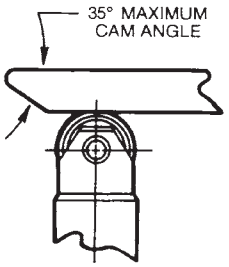
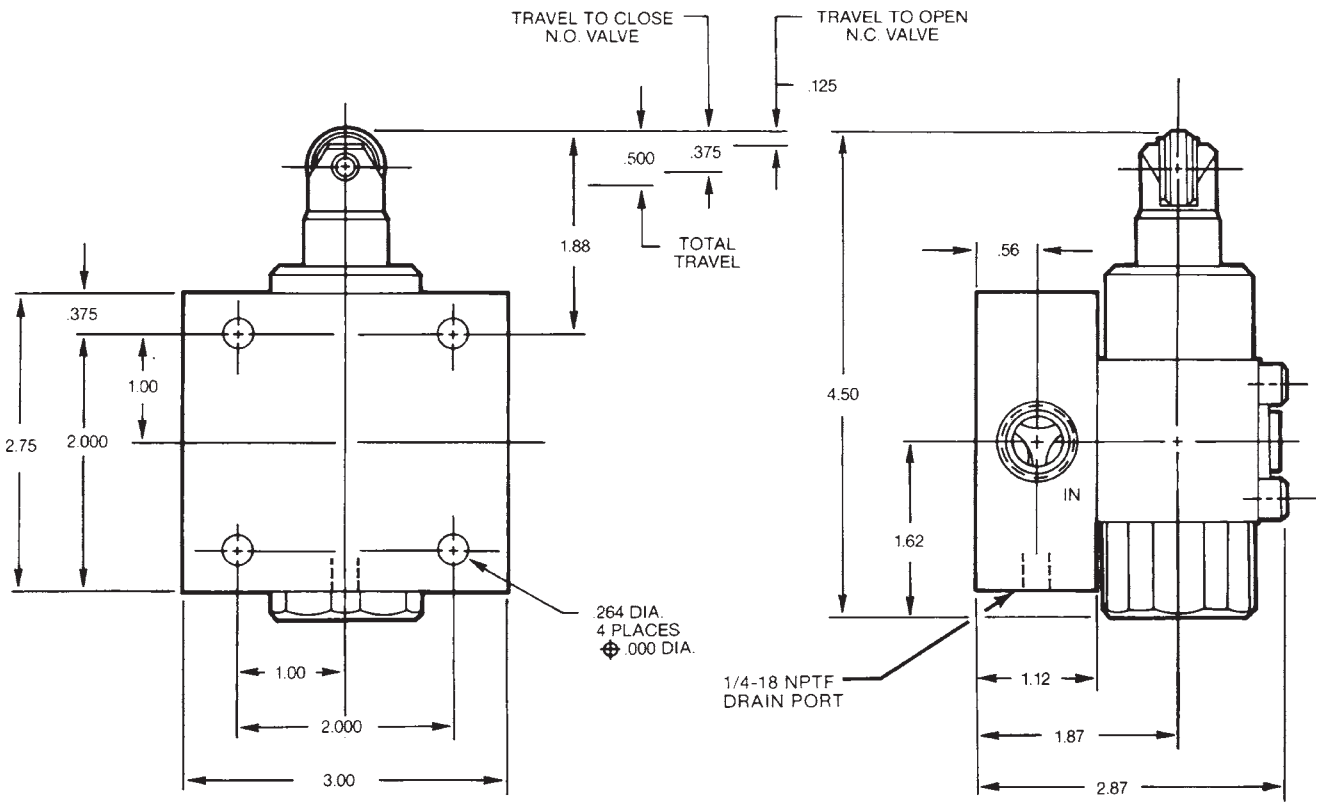
Dimensions are shown in inches

Model DC600S

In-line mounted Deceleration Valve
with reverse check



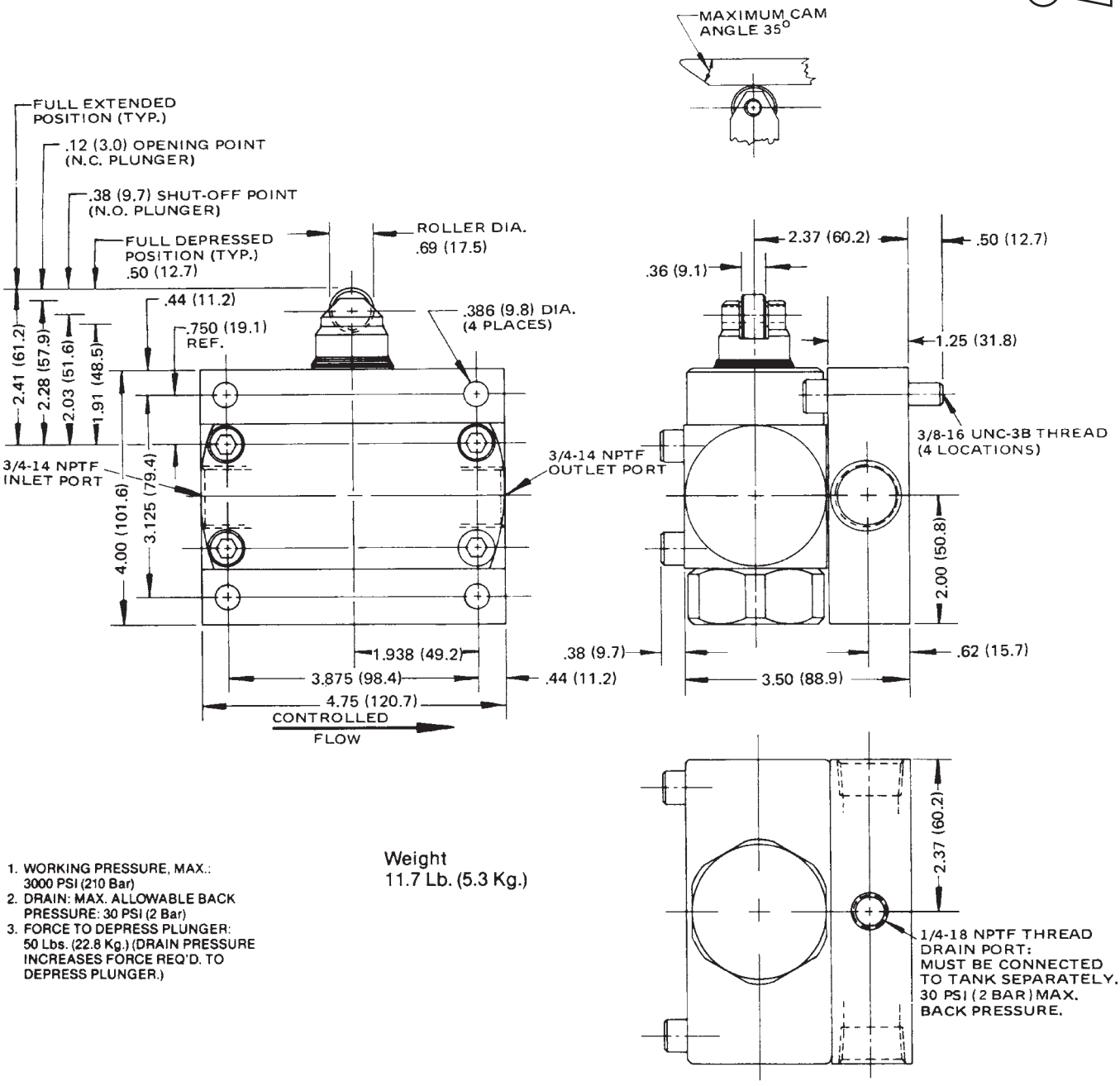




Millimeter equivalents for inch dimensions are shown in (**)

Model DC1200S

In-line mounted Deceleration Valve
with reverse check



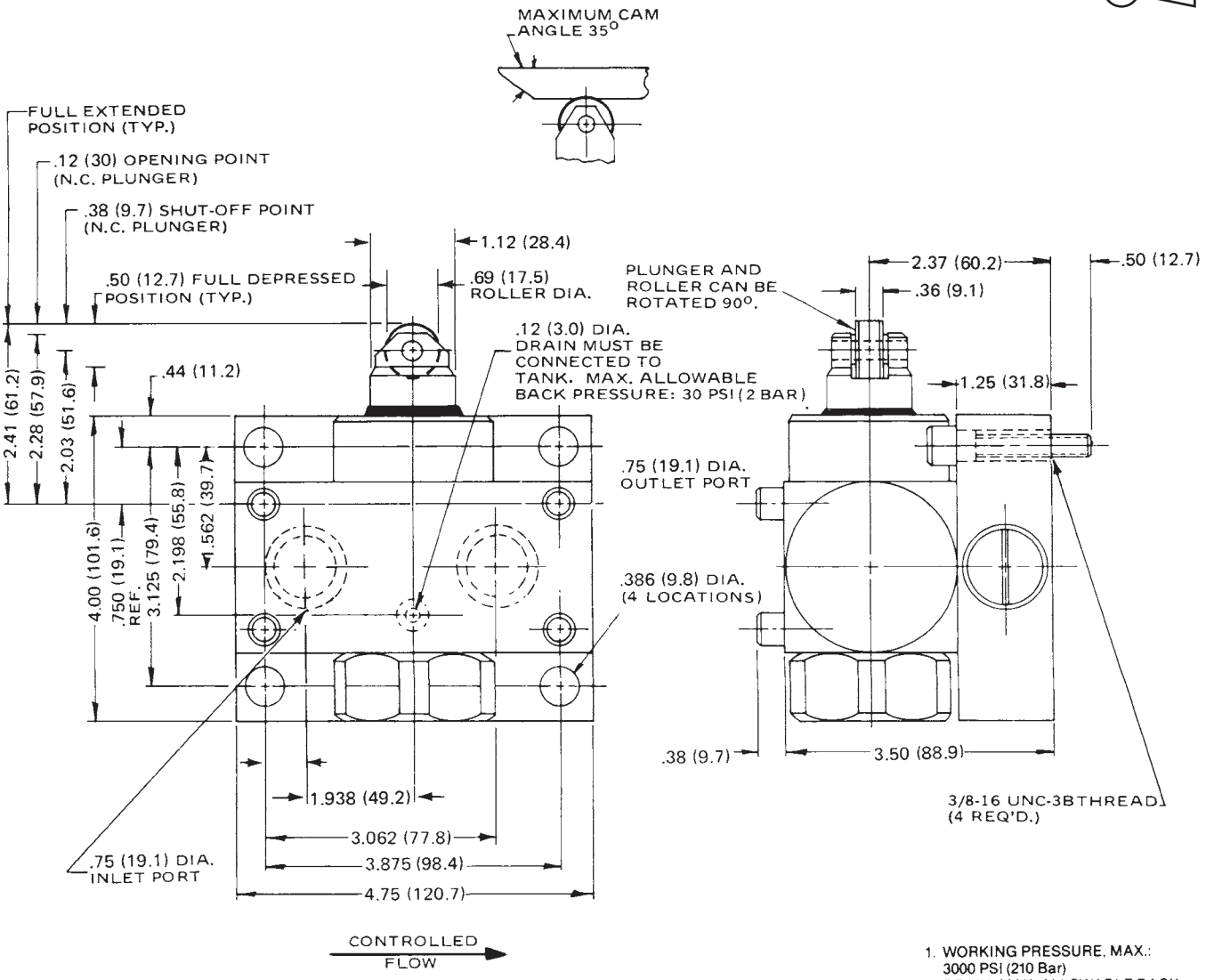
1. WORKING PRESSURE, MAX.: 3000 PSI (210 Bar)
2. DRAIN: MAX. ALLOWABLE BACK PRESSURE: 30 PSI (2 Bar)
3. FORCE TO DEPRESS PLUNGER: 50 Lbs. (22.8 Kg.) (DRAIN PRESSURE INCREASES FORCE REQ'D. TO DEPRESS PLUNGER.)

Weight
11.7 Lb. (5.3 Kg.)

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

Model DCS1200S

Manifold mounted Deceleration Valve
with reverse check

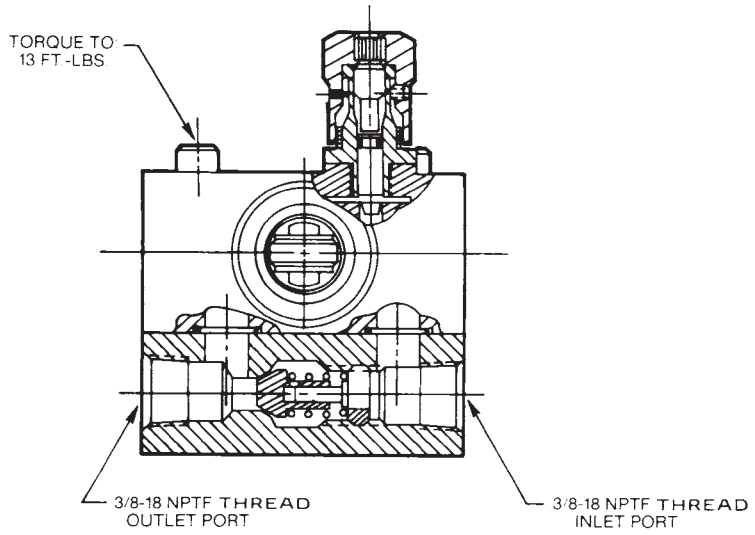


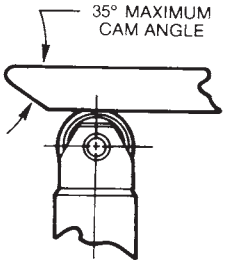
1. WORKING PRESSURE, MAX.: 3000 PSI (210 Bar)
2. DRAIN: MAX. ALLOWABLE BACK PRESSURE: 30 PSI (2 Bar)
3. FORCE TO DEPRESS PLUNGER: 50 Lbs. (22.8 Kg.) (DRAIN PRESSURE INCREASES FORCE REQ'D. TO DEPRESS PLUNGER.)

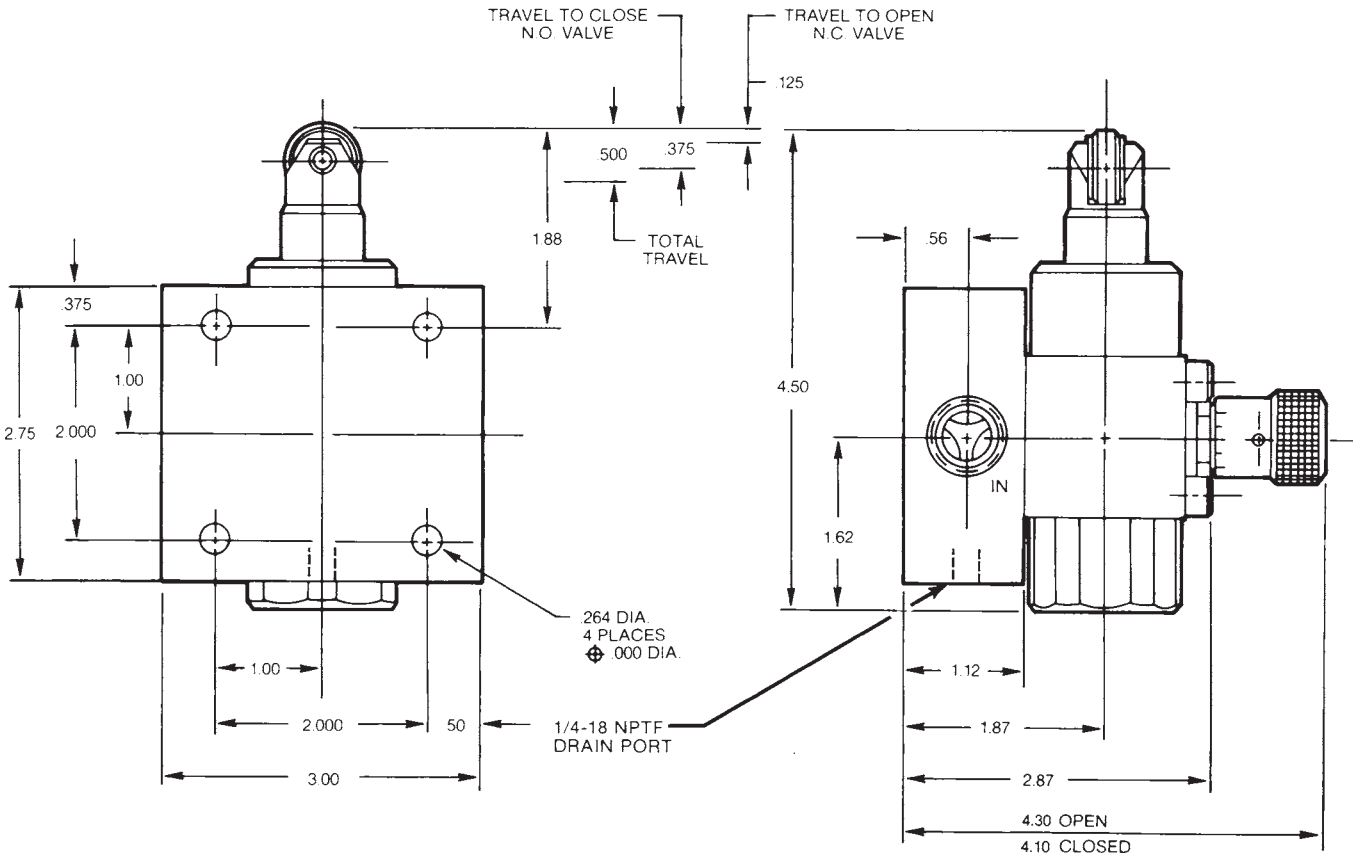
Dimensions are shown in inches

Model DF600S

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







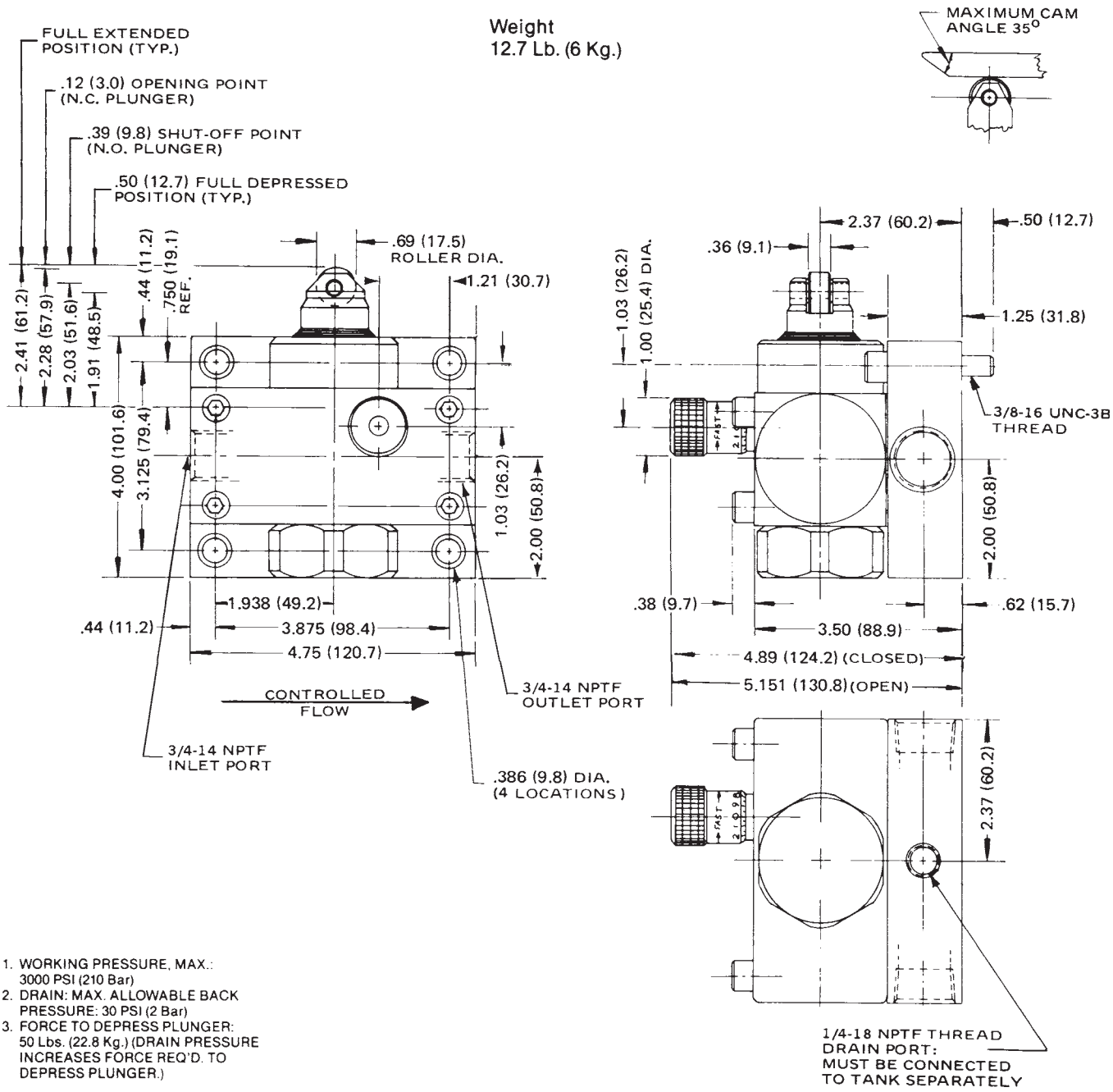
3000-D1.p65, dd

Parker Hannifin Corporation
Hydraulic Valve Division
Elyria, Ohio, USA

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

Model DF1200S

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

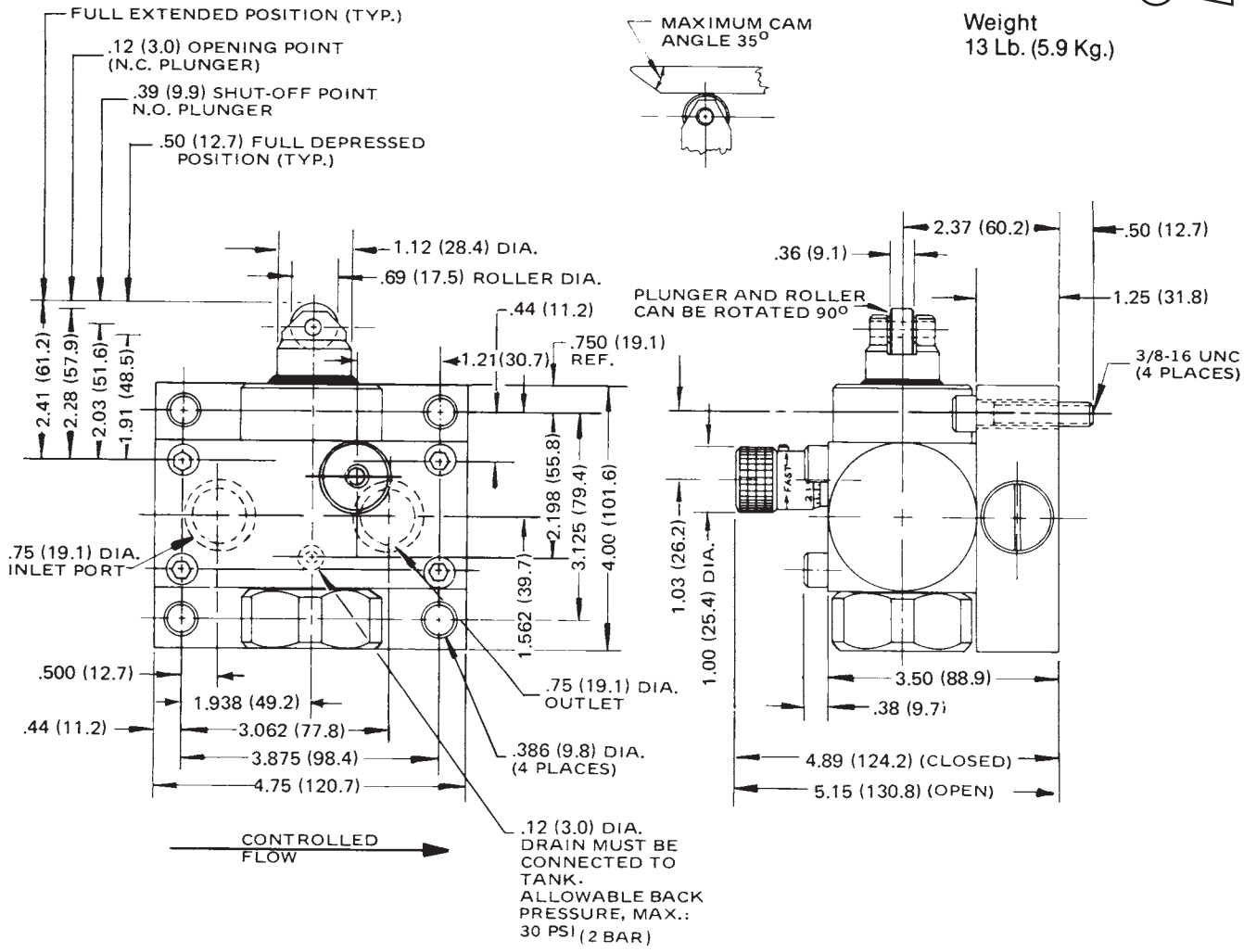


1. WORKING PRESSURE, MAX.: 3000 PSI (210 Bar)
2. DRAIN: MAX. ALLOWABLE BACK PRESSURE: 30 PSI (2 Bar)
3. FORCE TO DEPRESS PLUNGER: 50 Lbs. (22.8 Kg.) (DRAIN PRESSURE INCREASES FORCE REQ'D. TO DEPRESS PLUNGER.)

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

Model DFS1200S

Manifold mounted Deceleration Valve
with reverse check and 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.)

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