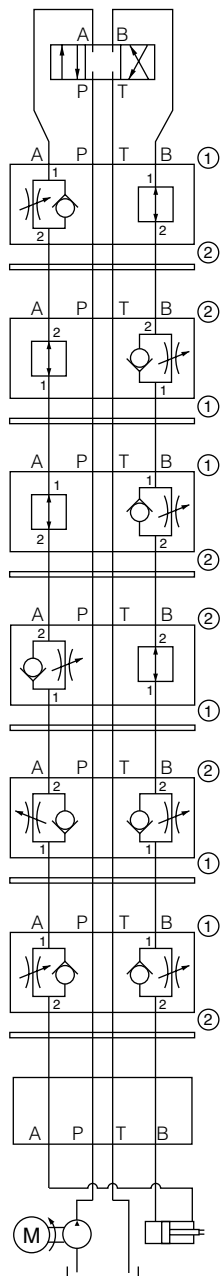
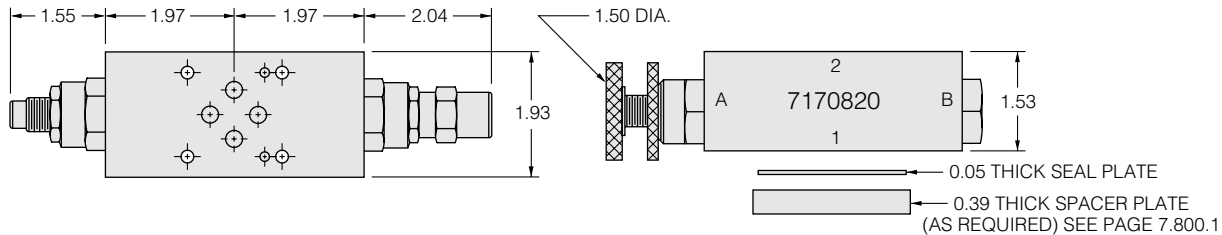


Flow Control Sandwich Valves

HydraForce's quiet, durable flow controls and flow regulators have been proven in hundreds of applications. Now available in sandwich format, these cartridge valves feature high accuracy in compensated or non-compensated versions.



Flow Control, Meter Out A **Model No. FC10-20x-S03A-x**
 Side Up: 1 Plug: 6103010 Seal Plate: Yes Catalog Ref.: 5.201.1
 Block No.: 7170820 Plug Side: B Max Flow:

Flow Control, Meter In B **Model No. FC10-20x-S03B-x**
 Side Up: 2 Plug: 6103010 Seal Plate: Yes Catalog Ref.: 5.201.1
 Block No.: 7170820 Plug Side: A Max Flow:

Flow Control, Meter Out B **Model No. FC10-20x-S03B-x**
 Side Up: 1 Plug: 6103010 Seal Plate: Yes Catalog Ref.: 5.201.1
 Block No.: 7170820 Plug Side: A Max Flow:

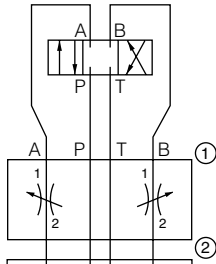
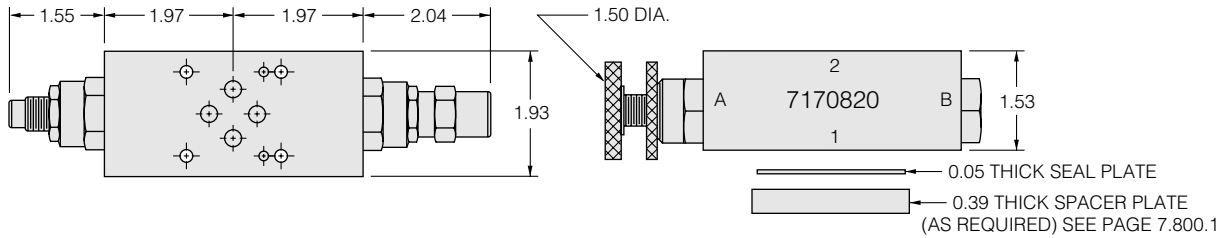
Flow Control, Meter In A **Model No. FC10-20x-S03A-x**
 Side Up: 2 Plug: 6103010 Seal Plate: Yes Catalog Ref.: 5.201.1
 Block No.: 7170820 Plug Side: B Max Flow: 12 gpm

Dual Flow Control, Meter In **Model No. FC10-20x-S03D-x**
 Side Up: 2 Plug: None Seal Plate: Yes Catalog Ref.: 5.201.1
 Block No.: 7170820 Plug Side: n/a Max Flow: 12 gpm

Dual Flow Control, Meter Out **Model No. FC10-20x-S03D-x**
 Side Up: 1 Plug: None Seal Plate: Yes Catalog Ref.: 5.201.1
 Block No.: 7170820 Plug Side: n/a Max Flow: 12 gpm

ISO/CETOP 3 Manifold

Flow Control Sandwich Valves



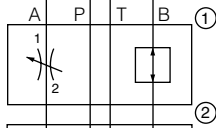
Dual Needle Valve

Side Up: 2
Block No.: 7170820

Model No. NV10-20x-S03D-x

Plug: None
Plug Side: n/a
Seal Plate: Yes
Max Flow: 12 gpm

Catalog Ref.: 5.012.1



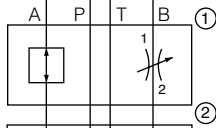
Needle Valve on A

Side Up: 2
Block No.: 7170820

Model No. NV10-20x-S03A-x

Plug: 6103010
Plug Side: B
Seal Plate: Yes
Max. Flow: 12 gpm

Catalog Ref.: 5.012.1



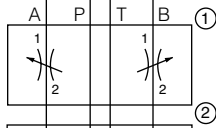
Needle Valve on B

Side Up: 2
Block No.: 7170820

Model No. NV10-20x-S03B-x

Plug: 6103010
Plug Side: A
Seal Plate: Yes
Max. Flow: 12 gpm

Catalog Ref.: 5.012.1



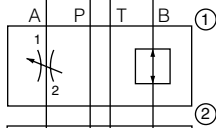
Dual Needle Valve, Fine Metering

Side Up: 2
Block No.: 7170820
Plug: None
Plug Side: n/a

Model No. NV10-21x-S03D-x

Seal Plate: Yes
Max Flow: 12 gpm

Catalog Ref.: 5.032.1



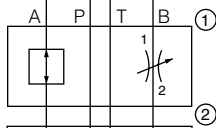
Needle Valve on A, Fine Metering

Side Up: 2
Block No.: 7170820
Plug: 6103010
Plug Side: B

Model No. NV10-21x-S03A-x

Seal Plate: Yes
Max. Flow: 12 gpm

Catalog Ref.: 5.032.1



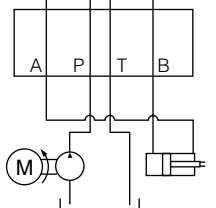
Needle Valve on B, Fine Metering

Side Up: 2
Block No.: 7170820
Plug: 6103010
Plug Side: A

Model No. NV10-21x-S03B-x

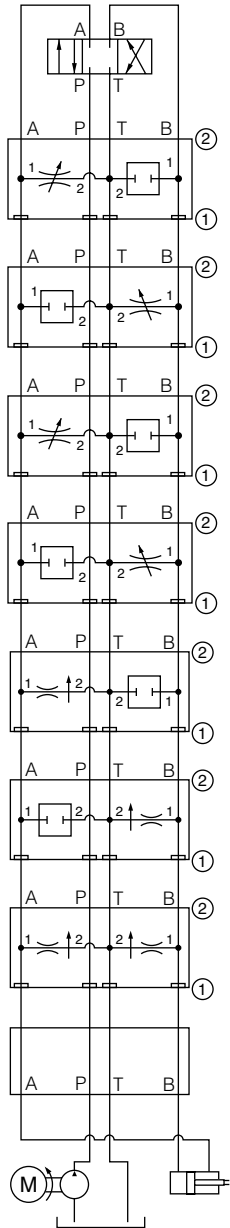
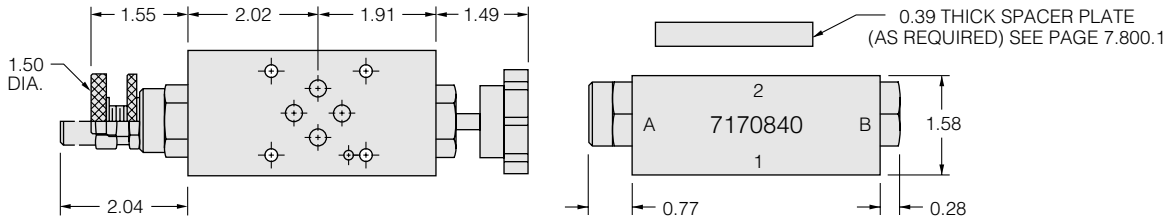
Seal Plate: Yes
Max. Flow: 12 gpm

Catalog Ref.: 5.032.1



ISO/CETOP 3 Manifold

Flow Control Sandwich Valves



Needle Valve, Bleed Off A to T

Side Up: 2 Plug: CP10-20-x
Block No.: 7170840 Plug Side: B

Model No. NV10-20x-S03U-x

Seal Plate: No Catalog Ref.: 5.012.1

Needle Valve, Bleed Off B to T

Side Up: 2 Plug: CP10-20-x
Block No.: 7170840 Plug Side: A

Model No. NV10-20x-S03V-x

Seal Plate: No Catalog Ref.: 5.012.1

Needle Valve, Fine Metering A to T

Side Up: 2 Plug: CP10-20-x
Block No.: 7170840 Plug Side: B

Model No. NV10-21x-S03U-x

Seal Plate: No Catalog Ref.: 5.032.1

Needle Valve, Fine Metering B to T

Side Up: 2 Plug: CP10-20-x
Block No.: 7170840 Plug Side: A

Model No. NV10-21x-S03V-x

Seal Plate: No Catalog Ref.: 5.032.1

Bleed Off P.C. Flow Regulator A to T

Side Up: 2 Plug: CP10-20-x
Block No.: 7170840 Plug Side: B

Model No. FR10-20F-S03U-x-xx

Seal Plate: No Catalog Ref.: 5.301.1
Max. Fixed Flow: Preset to 6 gpm

Bleed Off P.C. Flow Regulator B to T

Side Up: 2 Plug: CP10-20-x
Block No.: 7170840 Plug Side: A

Model No. FR10-20F-S03V-x-xx

Seal Plate: No Catalog Ref.: 5.301.1
Max. Fixed Flow: Preset to 6 gpm

Bleed Off P.C. Flow Regulator A & B to T

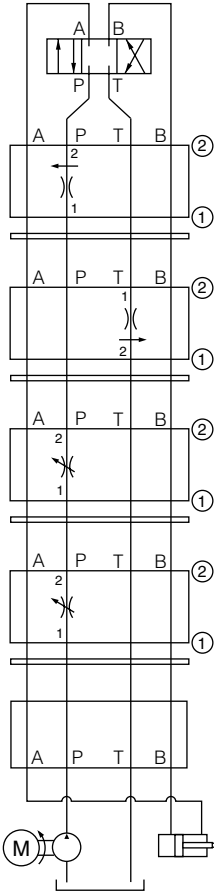
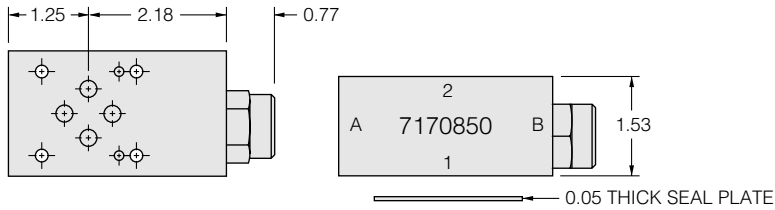
Side Up: 2 Plug: None
Block No.: 7170840 Plug Side: n/a

Model No. FR10-20F-S03W-x-xx/xx

Seal Plate: No Catalog Ref.: 5.301.1
Max. Fixed Flow: Preset to 6 gpm Specify side A first

ISO/CETOP 3 Manifold

Flow Control Sandwich Valves



Flow Regulator P.C. Fixed on P

Side Up: 2 Plug: None
 Block No.: 7170850 Plug Side: n/a

Model No. FR10-20F-S03P-x

Seal Plate: Yes Catalog Ref.: 5.301.1
 Max. Fixed Flow: Preset to 6 gpm

Flow Regulator P.C. Fixed out T

Side Up: 1 Plug: None
 Block No.: 7170850 Plug Side: n/a

Model No. FR10-20F-S03T-x-xx

Seal Plate: Yes Catalog Ref.: 5.301.1
 Max. Fixed Flow: Preset to 6 gpm

Needle Valve on P

Side Up: 2 Plug: None
 Block No.: 7170850 Plug Side: n/a

Model No. NV10-20x-S03P-x

Seal Plate: Yes Catalog Ref.: 5.012.1

Needle Valve on P, Fine Metering

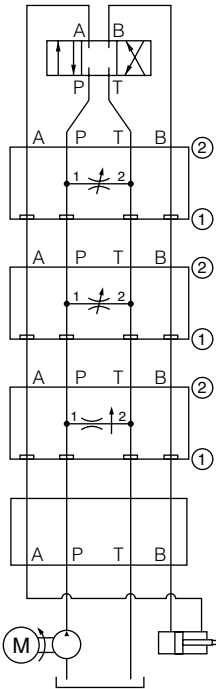
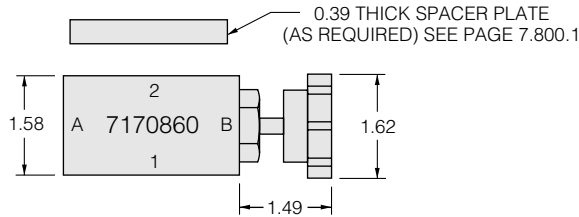
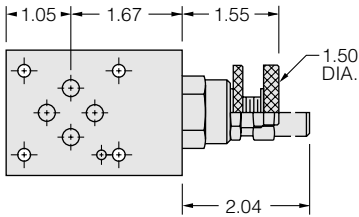
Side Up: 2 Plug: None
 Block No.: 7170850 Plug Side: n/a

Model No. NV10-21x-S03P-x

Seal Plate: Yes Catalog Ref.: 5.032.1

ISO/CETOP 3 Manifold

Flow Control Sandwich Valves



Needle Valve, Coarse Adjustment, Bleed Off P to T

Model No. NV10-20x-S03S-x

Side Up: 2 Plug: None Seal Plate: No Catalog Ref.: 5.012.1
 Block No.: 7170860 Plug Side: n/a Max Flow:

Needle Valve, Fine Adjustment, Bleed Off P to T

Model No. NV10-21x-S03S-x

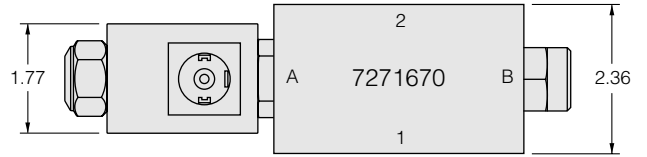
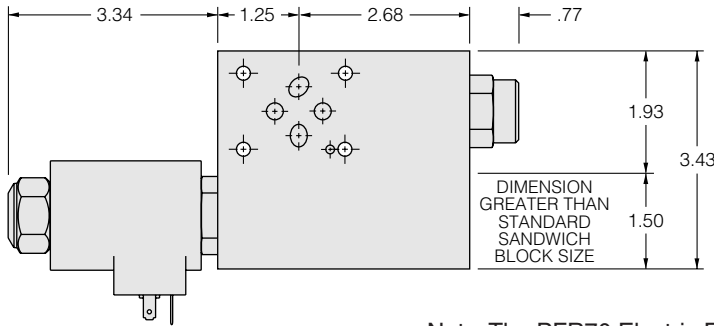
Side Up: 2 Plug: None Seal Plate: No Catalog Ref.: 5.032.1
 Block No.: 7170860 Plug Side: n/a Max. Flow:

Flow Regulator P.C. Fixed, Bleed Off P to T

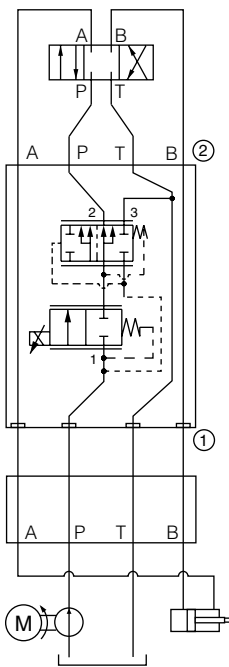
Model No. FR10-20F-S03S-x-xx

Side Up: 2 Plug: None Seal Plate: No Catalog Ref.: 5.301.1
 Block No.: 7170860 Plug Side: n/a Max. Fixed Flow: Preset to 6 gpm

Flow Control Sandwich Valves



Note: The PFR70 Electric Flow Regulator mounts on a standard D03 footprint, but it does not conform to standardized sandwich width. The housing will overhang the normal pad and should be considered in design of installation.



Electric Flow Regulator

Model No. PFR70-33B-x80-S03x-N-xxxx

Side Up:

Plug: None

Seal Plate: No

Catalog Ref.:

Block No.: 7271670

Plug Side: n/a

Max Flow: Consult factory for standard Flow Rate/Pressure Compensator Settings