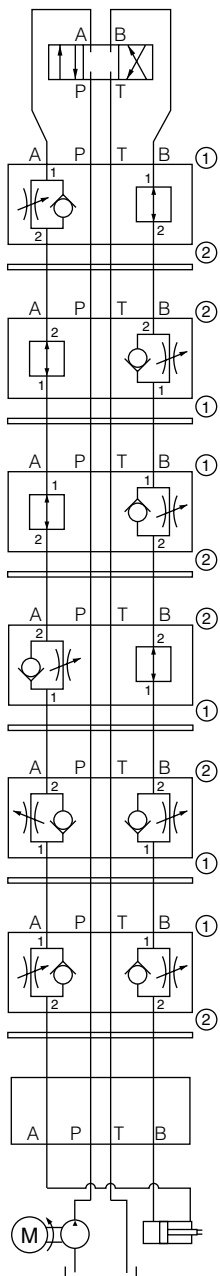
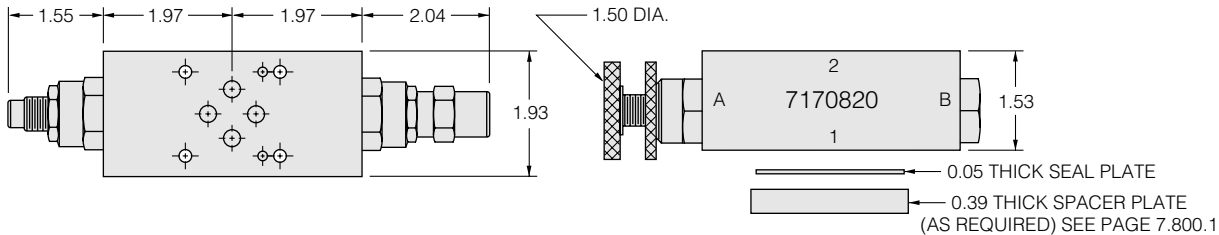


# D03 (NG6) SANDWICH VALVES

## 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:

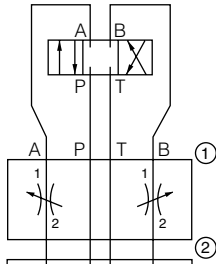
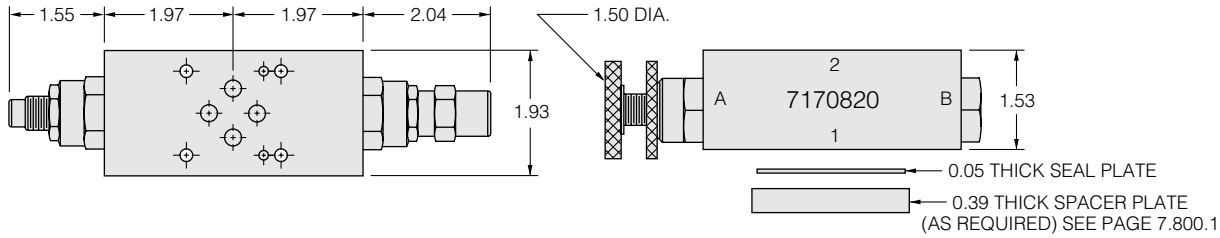
**Flow Control, Meter In A**      **Model No. FC10-20x-S03A-x**  
 Side Up: 2      Plug: 6103010      Seal Plate: Yes      Catalog Ref.: 5.201.1  
 Block No.: 7170820      Plug Side: B      Max. Flow: 12 gpm

**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**

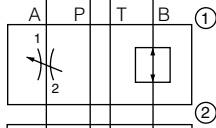
# Flow Control Sandwich Valves



**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

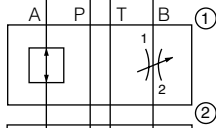
Catalog Ref.: 5.012.1



**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

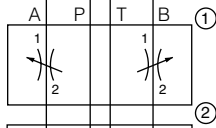
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**Needle Valve on B**  
Side Up: 2  
Block No.: 7170820

**Model No. NV10-20x-S03B-x**  
Plug: 6103010  
Plug Side: A  
Seal Plate: Yes  
Max. Flow: 12 gpm

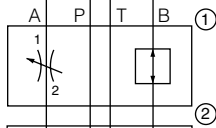
Catalog Ref.: 5.012.1



**Dual Needle Valve, Fine Metering**  
Side Up: 2  
Block No.: 7170820

**Model No. NV10-21x-S03D-x**  
Plug: None  
Plug Side: n/a  
Seal Plate: Yes  
Max Flow: 12 gpm

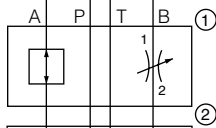
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**Needle Valve on A, Fine Metering**  
Side Up: 2  
Block No.: 7170820

**Model No. NV10-21x-S03A-x**  
Plug: 6103010  
Plug Side: B  
Seal Plate: Yes  
Max. Flow: 12 gpm

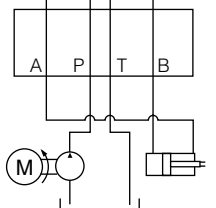
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**Needle Valve on B, Fine Metering**  
Side Up: 2  
Block No.: 7170820

**Model No. NV10-21x-S03B-x**  
Plug: 6103010  
Plug Side: A  
Seal Plate: Yes  
Max. Flow: 12 gpm

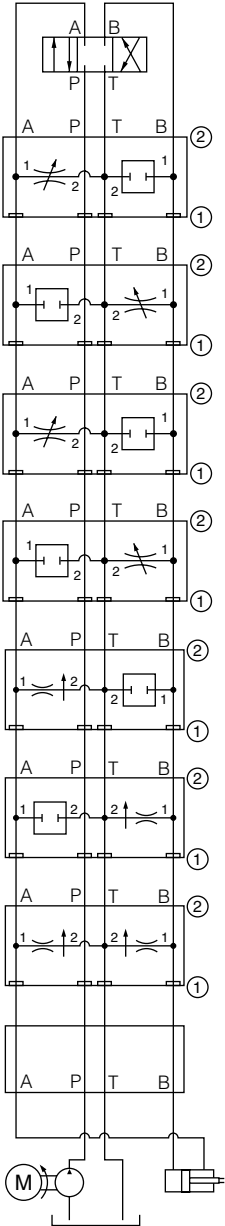
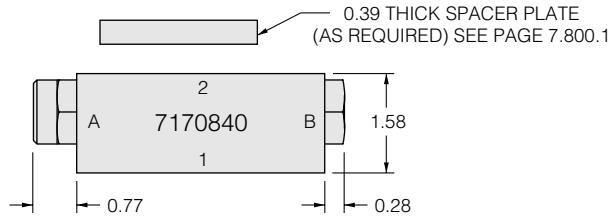
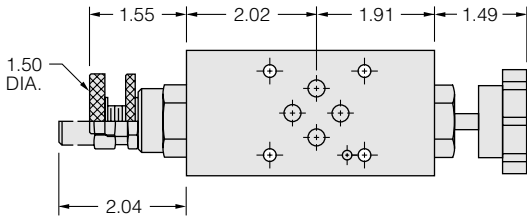
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**ISO/CETOP 3 Manifold**

# D03 (NG6) SANDWICH VALVES

## 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**

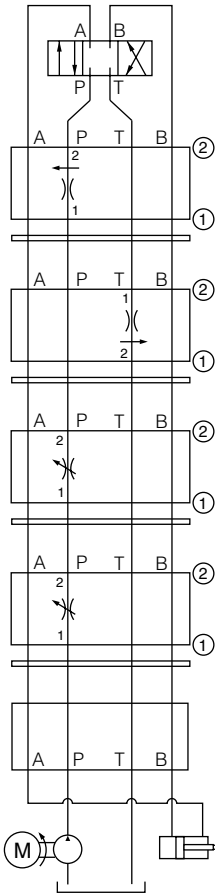
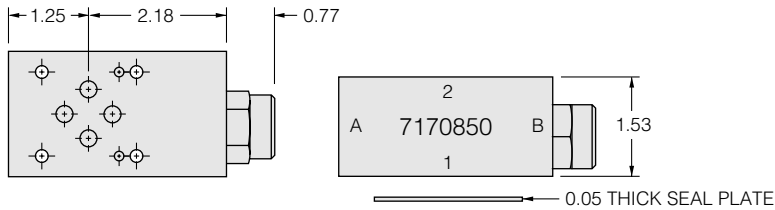
Side Up: 2      Plug: None  
Block No.: 7170840      Plug Side: n/a

**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

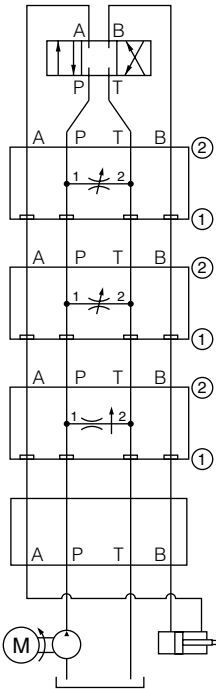
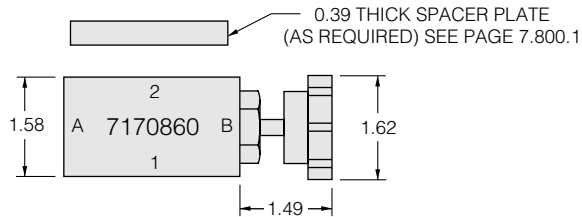
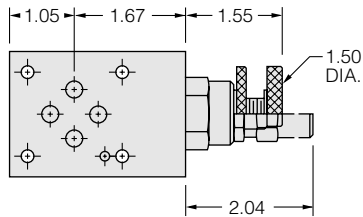
**Model No. NV10-21x-S03P-x**

Seal Plate: Yes              Catalog Ref.: 5.032.1

**ISO/CETOP 3 Manifold**

# D03 (NG6) SANDWICH VALVES

## Flow Control Sandwich Valves

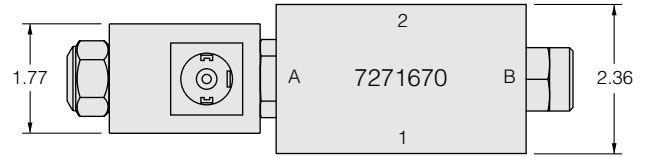
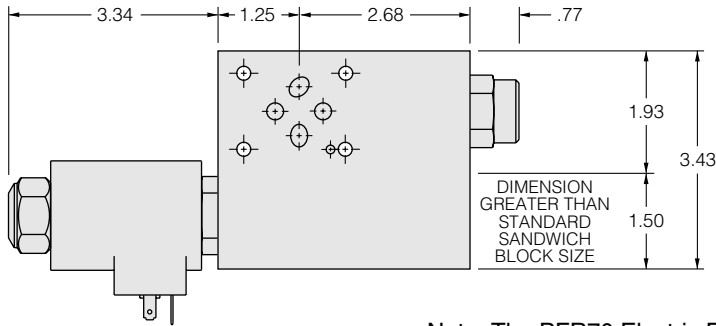


**Needle Valve, Coarse Adjustment, Bleed Off P to T** **Model No. NV10-20x-S03S-x**  
 Side Up: 2 Plug: None Seal Plate: No Catalog Ref.: 5.012.1  
 Block No.: 7170860 Plug Side: n/a Max Flow:

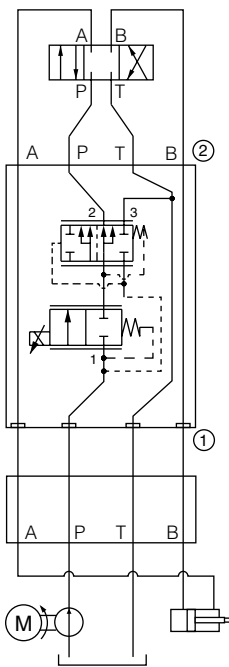
**Needle Valve, Fine Adjustment, Bleed Off P to T** **Model No. NV10-21x-S03S-x**  
 Side Up: 2 Plug: None Seal Plate: No Catalog Ref.: 5.032.1  
 Block No.: 7170860 Plug Side: n/a Max. Flow:

**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  
 Block No.: 7271670 Plug Side: n/a

Seal Plate: No Catalog Ref.:  
 Max Flow: Consult factory for standard  
 Flow Rate/Pressure Compensator Settings