Sandwich Assemblies

ISO 08 / CETOP 8 RELIEF VALVES
(SIDE PORTED SUBPLATE / REAR PORTED SUBPLATE / SIDE PORTED SUBPLATE WITH GASKET MOUNTED TANK PORT)

### T-3A Cavity

**PILOT OPERATED**

**Function**

\[ P \text{ to } T \] (Side Ports)

**Ports**

- A, B, P, T
- X, Y

**Assembly Model Code**

- 1" NPTF 1/4" NPTF: RPGC-LAN-CSE
- SAE-16  SAE-6: RPGC-LAN-CSM

*Add modifier /S to order Ductile Iron for pressure rating over 3000 psi.

**Ports**

- A, B, P, T
- X, Y

**Assembly Model Code**

- 1" NPTF 1/4" NPTF: RPGC-LAN-CRE
- SAE-16  SAE-6: RPGC-LAN-CRM

*Add modifier /S to order Ductile Iron for pressure rating over 3000 psi.

**Function**

\[ P \text{ to } T \] (Rear Ports)

**Ports**

- A, B, P, T
- X, Y

**Assembly Model Code**

- 1" NPTF 1/4" NPTF: RDF A-LAN-CRE
- SAE-16  SAE-6: RDF A-LAN-CRM

*Add modifier /S to order Ductile Iron for pressure rating over 3000 psi.

**Function**

\[ P \text{ to } T \] (Gasket Mounted T and Y Port, Other Ports on Side)

**Ports**

- A, B, P, T
- X, Y

**Assembly Model Code**

- 1" NPTF 1/4" NPTF: RDF A-LAN-CTE
- SAE-16  SAE-6: RDF A-LAN-CTM

*Add modifier /S to order Ductile Iron for pressure rating over 3000 psi.

### NOTES:

- Page 2 for cartridge models RP*C-*** and RD*A-*** show performance curves, technical tips, and options.
- See page 140 for technical information about sandwich bodies including ISO interface patterns, mounting instructions, studrods, and studkits.
- Go to www.sunhydraulics.com for more product information and pricing.
- Model Codes printed in red are Preferred Products and are readily available.
## Sandwich Assemblies

### ISO 08 / CETOP 8 RELIEF VALVES

#### T-16A Cavity

**PILOT OPERATED**

<table>
<thead>
<tr>
<th>Assembly</th>
<th>Model Code*</th>
</tr>
</thead>
<tbody>
<tr>
<td>RPIC-LAN-CDO</td>
<td></td>
</tr>
<tr>
<td><em>Add modifier /S to order Ductile Iron for pressure rating over 3000 psi.</em></td>
<td></td>
</tr>
<tr>
<td>RPIC-LAN-CDC</td>
<td></td>
</tr>
<tr>
<td><em>Add modifier /S to order Ductile Iron for pressure rating over 3000 psi.</em></td>
<td></td>
</tr>
<tr>
<td>RPIC-LAN-CDD</td>
<td></td>
</tr>
<tr>
<td><em>Add modifier /S to order Ductile Iron for pressure rating over 3000 psi.</em></td>
<td></td>
</tr>
<tr>
<td>RPIC-LAN-CDZ</td>
<td></td>
</tr>
<tr>
<td><em>Add modifier /S to order Ductile Iron for pressure rating over 3000 psi.</em></td>
<td></td>
</tr>
<tr>
<td>RPIC-LAN-CDW</td>
<td></td>
</tr>
<tr>
<td><em>Add modifier /S to order Ductile Iron for pressure rating over 3000 psi.</em></td>
<td></td>
</tr>
</tbody>
</table>

**DIRECT ACTING**

<table>
<thead>
<tr>
<th>Assembly</th>
<th>Model Code*</th>
</tr>
</thead>
<tbody>
<tr>
<td>RDHA-LAN-CDO</td>
<td></td>
</tr>
<tr>
<td><em>Add modifier /S to order Ductile Iron for pressure rating over 3000 psi.</em></td>
<td></td>
</tr>
<tr>
<td>RDHA-LAN-CDC</td>
<td></td>
</tr>
<tr>
<td><em>Add modifier /S to order Ductile Iron for pressure rating over 3000 psi.</em></td>
<td></td>
</tr>
<tr>
<td>RDHA-LAN-CDD</td>
<td></td>
</tr>
<tr>
<td><em>Add modifier /S to order Ductile Iron for pressure rating over 3000 psi.</em></td>
<td></td>
</tr>
<tr>
<td>RDHA-LAN-CDZ</td>
<td></td>
</tr>
<tr>
<td><em>Add modifier /S to order Ductile Iron for pressure rating over 3000 psi.</em></td>
<td></td>
</tr>
<tr>
<td>RDHA-LAN-CDW</td>
<td></td>
</tr>
<tr>
<td><em>Add modifier /S to order Ductile Iron for pressure rating over 3000 psi.</em></td>
<td></td>
</tr>
</tbody>
</table>

**Function**

- **P to T (High Capacity)**
- **A to T (High Capacity)**
- **B to T (High Capacity)**
- **A and B to T (High Capacity)**
- **A to B and B to A (High Capacity) (Cross-port)**

**NOTES:** Page 2 for cartridge models RP*C-*** and RD*A-*** show performance curves, technical tips, and options. See page 140 for technical information about sandwich bodies including ISO interface patterns, mounting instructions, studrods, and studkits. Go to www.sunhydraulics.com for more product information. Model Codes printed in red are Preferred Products and are readily available.
Sandwich Assemblies

ISO 08 / CETOP 8 SEQUENCE VALVES

T-17A Cavity

All sandwich bodies shown below are 4.50” wide

PILOT OPERATED

Function

In to P

Assembly

Model Code

RSHC-LAN-HBW

*(Add modifier /S to order Ductile Iron for pressure rating over 3000 psi.)

Function

In to A (Reverse Free Flow Check)

Assembly

Model Code

RSHC-LAN-HB4

*(Add modifier /S to order Ductile Iron for pressure rating over 3000 psi.)

Function

Out of A (Reverse Free Flow Check)

Assembly

Model Code

RSHC-LAN-HB6

*(Add modifier /S to order Ductile Iron for pressure rating over 3000 psi.)

Function

Out of B (Reverse Free Flow Check)

Assembly

Model Code

RSHC-LAN-HB7

*(Add modifier /S to order Ductile Iron for pressure rating over 3000 psi.)

NOTES: Pages 20 for cartridge models RS*C-*** and page 102 for CX*A-*** show performance curves, technical tips, and options. See page 140 for technical information about sandwich bodies including ISO interface patterns, mounting instructions, studrods, and studkits. Go to www.sunhydraulics.com for more product information. Model Codes printed in red are Preferred Products and are readily available.

US Selected Assemblies Catalogue #999-901-192 195
Sandwich Assemblies

ISO 08 / CETOP 8 REDUCING VALVES

T-19A Cavity/T-17A Cavity

All sandwich bodies shown below are 4.50” wide

PILOT OPERATED

Function

On P Drained to T (High Capacity)

Assembly

PBJB-LAN-HBO

Add modifier S to order Ductile Iron for pressure rating over 3000 psi.

Function

On A Drained to B (High Capacity)

Assembly

PBJB-LAN-HBA

Add modifier S to order Ductile Iron for pressure rating over 3000 psi.

Function

On B Drained to A (High Capacity)

Assembly

PBJB-LAN-HBB

Add modifier S to order Ductile Iron for pressure rating over 3000 psi.

Assembly

PBHB-LAN-HBK

Add modifier S to order Ductile Iron for pressure rating over 3000 psi.

Assembly

PBHB-LAN-HBJ

Add modifier S to order Ductile Iron for pressure rating over 3000 psi.

Function

On A Drain to T
(Reverse Free Flow Check)

Function

On B Drain to T
(Reverse Free Flow Check)

NOTES: Page 34 for cartridge model PBJB-*** and page 102 for CX*D-*** show performance curves, technical tips, and options. See page 140 for technical information about sandwich bodies including ISO interface patterns, mounting instructions, studrods, and studkits. Go to www.sunhydraulics.com for more product information. Model Codes printed in red are Preferred Products and are readily available.
Sandwich Assemblies

ISO 08 / CETOP 8 REDUCING / RELIEVING VALVES

T-19A Cavity/T-17A Cavity

PILOT OPERATED

<table>
<thead>
<tr>
<th>Assembly Model Code*</th>
<th>Assembly Model Code*</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPJB-LAN-HBO</td>
<td>PPJB-LAN-HBA</td>
</tr>
<tr>
<td>PPJB-LAN-HBB</td>
<td>PPJB-LAN-HBB</td>
</tr>
<tr>
<td>PPJB-LAN-HBK</td>
<td>PPJB-LAN-HBB</td>
</tr>
<tr>
<td>PPJB-LAN-HBJ</td>
<td>PPJB-LAN-HBJ</td>
</tr>
</tbody>
</table>

*Add modifier /S to order Ductile Iron for pressure rating over 3000 psi.

DIRECT ACTING

Function

<table>
<thead>
<tr>
<th>Assembly Model Code*</th>
<th>Assembly Model Code*</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRJB-LAN-HBO</td>
<td>PRJB-LAN-HBA</td>
</tr>
<tr>
<td>PRJB-LAN-HBB</td>
<td>PRJB-LAN-HBB</td>
</tr>
<tr>
<td>PRJB-LAN-HBK</td>
<td>PRJB-LAN-HBJ</td>
</tr>
</tbody>
</table>

*Add modifier /S to order Ductile Iron for pressure rating over 3000 psi.

Function

<table>
<thead>
<tr>
<th>Assembly Model Code*</th>
<th>Assembly Model Code*</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPJB-LAN-HBO</td>
<td>PPJB-LAN-HBA</td>
</tr>
<tr>
<td>PPJB-LAN-HBB</td>
<td>PPJB-LAN-HBB</td>
</tr>
<tr>
<td>PPJB-LAN-HBK</td>
<td>PPJB-LAN-HBK</td>
</tr>
<tr>
<td>PPJB-LAN-HBJ</td>
<td>PPJB-LAN-HBJ</td>
</tr>
</tbody>
</table>

*Add modifier /S to order Ductile Iron for pressure rating over 3000 psi.

Function

<table>
<thead>
<tr>
<th>Assembly Model Code*</th>
<th>Assembly Model Code*</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRJB-LAN-HBO</td>
<td>PRJB-LAN-HBA</td>
</tr>
<tr>
<td>PRJB-LAN-HBB</td>
<td>PRJB-LAN-HBB</td>
</tr>
<tr>
<td>PRJB-LAN-HBK</td>
<td>PRJB-LAN-HBJ</td>
</tr>
</tbody>
</table>

*Add modifier /S to order Ductile Iron for pressure rating over 3000 psi.

NOTES: Page 42 for cartridge model PP*B-*** and PR*B-***, and page 102 for CX*D-*** shows performance curves, technical tips, and options. See page 140 for technical information about sandwich bodies including ISO interface patterns, mounting instructions, studrods, and studkits.

Go to www.sunhydraulics.com for more product information.

Model Codes printed in red are Preferred Products and are readily available.
### Sandwich Assemblies

#### ISO 08 / CETOP 8 COUNTERBALANCE VALVES

**T-19A Cavity**

All sandwich bodies shown below are 4.50" wide

<table>
<thead>
<tr>
<th>PILOT RATIOS</th>
<th>Function</th>
<th>Assembly Model Code*</th>
</tr>
</thead>
<tbody>
<tr>
<td>3:1, 1.5:1 and 2:1</td>
<td>On A Pilot from B (High Capacity)</td>
<td>CBI*-LHN-HBA</td>
</tr>
<tr>
<td>2.3:1, 4.5:1 and 10:1</td>
<td>On B Pilot from A (High Capacity)</td>
<td>CBI*-LHN-HBB</td>
</tr>
<tr>
<td>(Cross-Piloted) (High Capacity)</td>
<td>On A and B (Cross-Piloted) (High Capacity)</td>
<td>CBI*-LHN-HBY</td>
</tr>
</tbody>
</table>

*Add modifier /S to order Ductile Iron for pressure rating over 3000 psi.

### Notes

- Page 50 for cartridge model CB**-*** show performance curves, technical tips, and options.
- See page 140 for technical information about sandwich bodies including ISO interface patterns, mounting instructions, studrods, and studkits.
- Go to www.sunhydraulics.com for more product information.
- Model Codes printed in red are Preferred Products and are readily available.
Sandwich Assemblies

ISO 08 / CETOP 8 PILOT-TO-OPEN CHECK VALVES

T-19A Cavity

**PILOT OPERATED**

All sandwich bodies shown below are 4.50” wide

**Function**

On A Pilot from B (High Capacity)

**Assembly**

CKIB-XCN-HBA

*Add modifier /S to order Ductile Iron for pressure rating over 3000 psi.

**Function**

On B Pilot from A (High Capacity)

**Assembly**

CKIB-XCN-HBB

*Add modifier /S to order Ductile Iron for pressure rating over 3000 psi.

**Function**

On A and B

Cross-Piloted (High Capacity)

**Assembly**

CKIB-XCN-HBY

*Add modifier /S to order Ductile Iron for pressure rating over 3000 psi.

NOTES: Page 78 for cartridge model CK*** show performance curves, technical tips, and options. See page 140 for technical information about sandwich bodies including ISO interface patterns, mounting instructions, studrods, and studkits. Go to www.sunhydraulics.com for more product information. Model Codes printed in red are Preferred Products and are readily available.
### Sandwich Assemblies

**ISO 08 / CETOP 8 CHECK VALVES**

T-18A Cavity/T-16A Cavity

<table>
<thead>
<tr>
<th>CHECK VALVE</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Diagram" /></td>
</tr>
</tbody>
</table>

All sandwich bodies shown below are 4.50” wide

#### Function

**On P (High Capacity)**

```
| Assembly Model Code: |
| CXJA-XCN-IBO |
```

*Add modifier /S to order Ductile Iron for pressure rating over 3000 psi.

#### Function

**On T (High Capacity)**

```
| Assembly Model Code: |
| CXJA-XCN-IBV |
```

*Add modifier /S to order Ductile Iron for pressure rating over 3000 psi.

#### Function

**T to A and B**

```
| Assembly Model Code: |
| CXHA-XAN-CDV |
```

*Add modifier /S to order Ductile Iron for pressure rating over 3000 psi.

#### Function

**On A and B Free Flow Out of Valve (High Capacity)**

```
| Assembly Model Code: |
| CXJA-XCN-IBZ |
```

*Add modifier /S to order Ductile Iron for pressure rating over 3000 psi.

---

**NOTES:** Page 102 for cartridge model CX*A-*** shows performance curves, technical tips, and options. See page 140 for technical information about sandwich bodies including ISO interface patterns, mounting instructions, studrods, and studkits. Go to www.sunhydraulics.com for more product information.

Model Codes printed in red are Preferred Products and are readily available.
## Sandwich Assemblies

### ISO 08 / CETOP 8 FLOW CONTROL VALVES

**T-18A Cavity**

All sandwich bodies shown below are 4.50” wide.

<table>
<thead>
<tr>
<th>Assembly Model Code</th>
<th>Full Adjustable Needle</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>NFFC-LGN-IBO</td>
<td></td>
<td>Meter-In P (High Capacity)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Note: Free Flow Check on FDFA Only</td>
</tr>
</tbody>
</table>

### FULLY ADJUSTABLE NEEDLE

<table>
<thead>
<tr>
<th>Assembly Model Code</th>
<th>Full Adjustable Needle With Free Flow Check</th>
</tr>
</thead>
<tbody>
<tr>
<td>NCGB-LCN-IBE</td>
<td></td>
</tr>
<tr>
<td></td>
<td>*Add modifier /S to order Ductile Iron for pressure rating over 3000 psi.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Assembly Model Code</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Meter-Out A (High Capacity)</td>
</tr>
<tr>
<td>FDFA-LAN-IBE</td>
<td></td>
</tr>
</tbody>
</table>

### FULLY ADJUSTABLE PRESSURE COMPENSATED WITH FREE FLOW CHECK

<table>
<thead>
<tr>
<th>Assembly Model Code</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Meter-Out B (High Capacity)</td>
</tr>
<tr>
<td>FDFA-LAN-IBF</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Assembly Model Code</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Meter-In A and B (High Capacity)</td>
</tr>
<tr>
<td>FDFA-LAN-IBZ</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Assembly Model Code</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Meter-Out A and B (High Capacity)</td>
</tr>
<tr>
<td>FDFA-LAN-IBY</td>
<td></td>
</tr>
</tbody>
</table>

### NOTES:

- Pages 110 for cartridge model NC*B-*** and page 126 for FD*A-*** show performance curves, technical tips, and options.
- See page 140 for technical information about sandwich bodies including ISO interface patterns, mounting instructions, studrods, and studkits.
- Go to www.sunhydraulics.com for more product information.
- Model Codes printed in red are Preferred Products and are readily available.
Sandwich Assemblies

ISO 08 / CETOP 8 CIRCUIT SAVER VALVES (PRESSURE COMPENSATOR / LOAD SENSING / REGENERATIVE)

T-13A Cavity/T-19A Cavity

All sandwich bodies shown below are 4.50" wide

Function
YFIA: Pressure Compensator (Restrictive)
YFIB: Pressure Compensator (Restrictive) with External Port

Function
Shuttle A and B (Output External)

Function
B to A Regenerative (High Capacity)

Function
A to B Regenerative (High Capacity)

NOTES: Page 50 for cartridge model CB*A-*** shows performance curves, technical tips, and options.
See page 140 for technical information about sandwich bodies including ISO interface patterns, mounting instructions, studrods, and studkits.
Go to www.sunhydraulics.com for more product information.