

Flow Dividers

Priority, Proportional, Variable
Priority and Load Sensing
Priority Flow Dividers



Powering Business Worldwide

Flow Dividers

Priority, Proportional, Variable Priority, and Load Sensing

Priority Flow Dividers



Eaton® Flow Dividers are available in priority, proportional, variable and load sensing versions with a wide range of standard flow ratings and relief settings. Many are also available in either adjustable or non-adjustable versions, thus providing multiple configurations allowing the use of these products in virtually any mobile application.

Eaton load sensing priority valves provide dependable flow on demand for load sensing steering, braking or other priority functions while allowing excess flow to be used for auxiliary functions. Used with fixed or variable displacement pumps, a dynamic signal system increases machine performance and stability. Static signal systems are also available. Applications include ag tractors, motor graders, lift trucks, and backhoe/loaders.

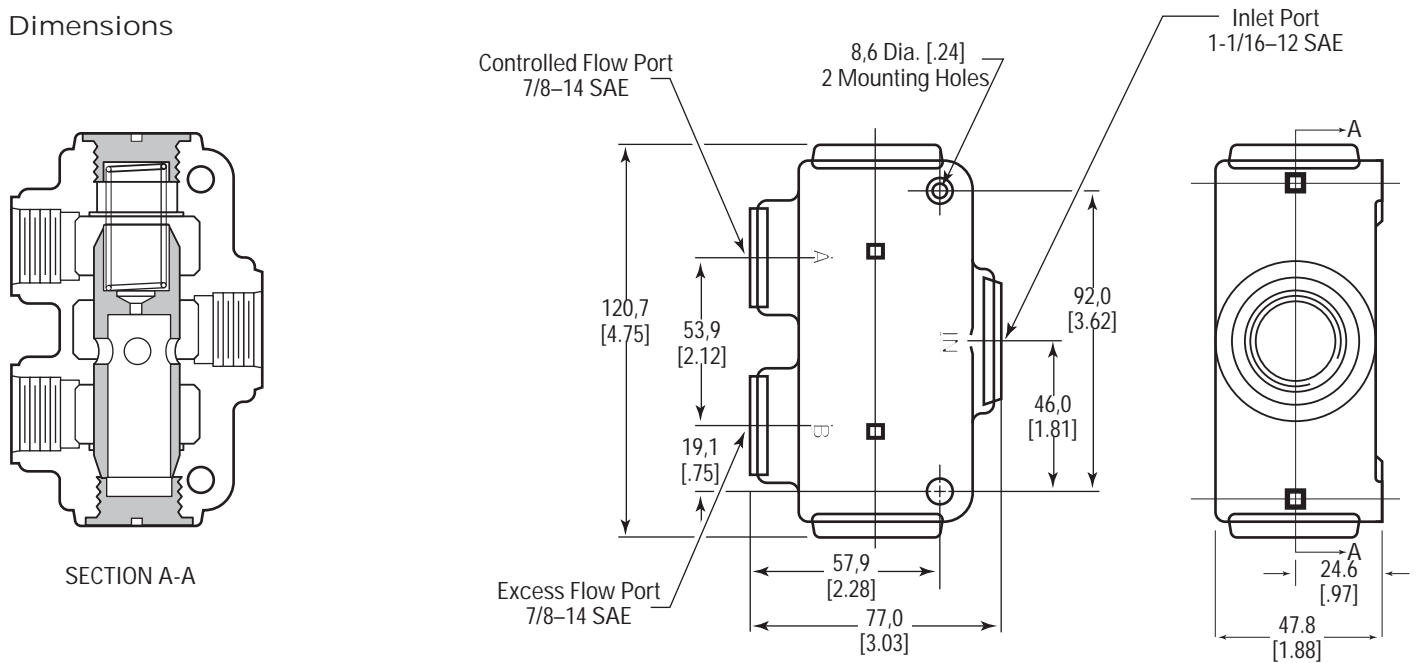
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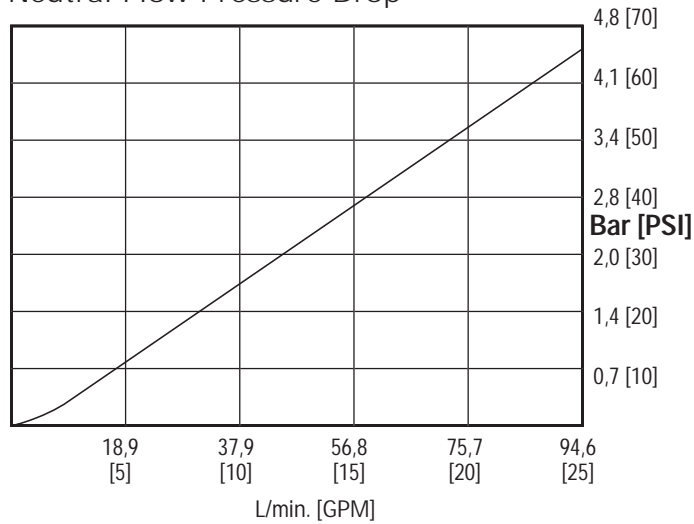
Model 32306

Priority Flow Divider

Dimensions

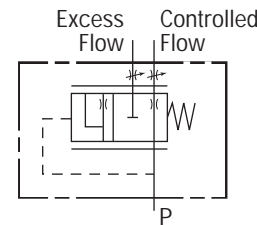


Neutral Flow Pressure Drop



Note: All tests performed with oil viscosity 150 SUS @ 37,7C [100F] with oil temp @ 54,4C [130F].

Schematic



SPECIFICATIONS

| | |
|---|-------------------------|
| Rated Input Flow | 96.6 L/min. [25 G.P.M.] |
| Rated Pressure | 172.4 bar [2500 PSI] |
| Maximum Pressure Drop Through Valve at Rated Input Flow | 4.5 bar [65 PSI] |
| Weight | 1.6 kg. [3.5 lbs.] |
| Paint | Primer |

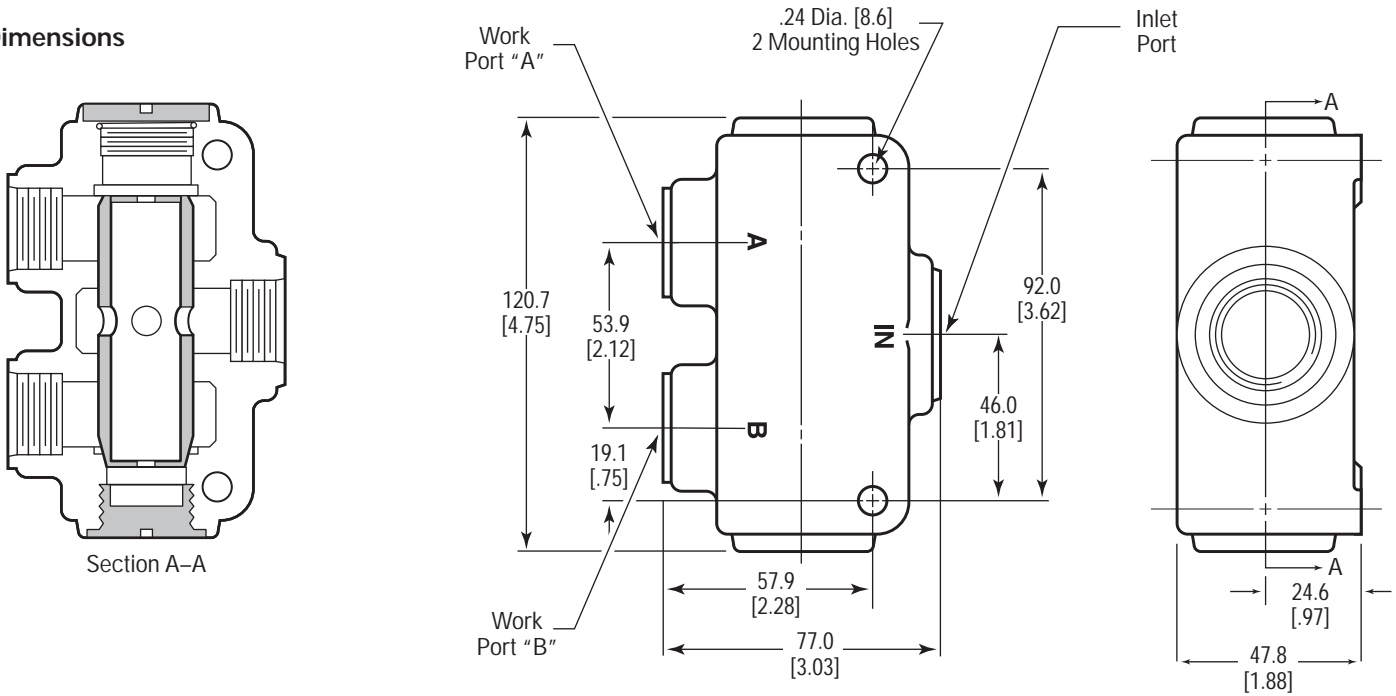
ORDERING INFORMATION

| Order No. | 32306-DAB | 32306-DAC | 32306-DAD |
|---|-----------|-----------|-----------|
| Controlled Flow Setting L/min. [G.P.M.] | 11.4 [3] | 18.9 [5] | 26.5 [7] |

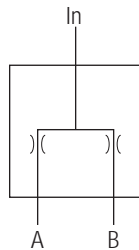
Model 32501

Proportional Flow Divider

Dimensions



Schematic



SPECIFICATIONS

| | |
|---|--------------------------|
| Rated Input Flow | 113.6 L/min. [30 G.P.M.] |
| Rated Pressure | 172.4 bar [2500 PSI] |
| Maximum Pressure Drop Through Valve at Rated Input Flow | 8.6 bar [125 PSI] |
| Weight | 1.6 kg. [3.5 lbs.] |
| Paint | Primer |

ORDERING INFORMATION

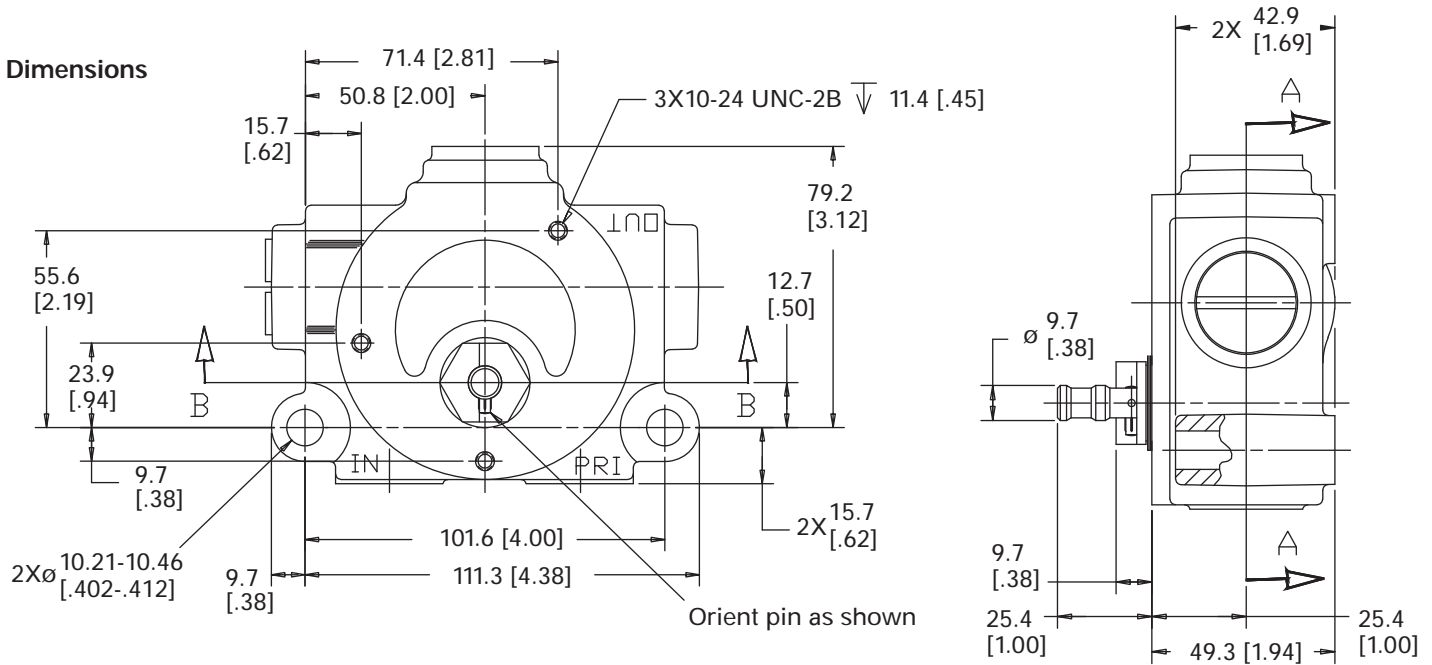
| Maximum Input Flow L/min [G.P.M.] | Order Number | Flow Division Ratio | | Inlet Port Size S.A.E. | Work Port "A" & "B" Size S.A.E. |
|---|--------------|---------------------|----------|------------------------|---------------------------------|
| | | Port "A" | Port "B" | | |
| 37.9 [10] | 32501-DAA | 50% | 50% | 3/4-16 | 3/4-16 |
| | 32501-DAB | 33% | 67% | | |
| 75.7 [20] | 32501-DAC | 50% | 50% | 7/8-14 | 3/4-16 |
| | 32501-DAD | 33% | 67% | | |
| 113.6 [30] | 32501-DAE | 50% | 50% | 1-1/16-12 | 7/8-14 |
| | 32501-DAF | 33% | 67% | | |

Model 32700

Variable Priority

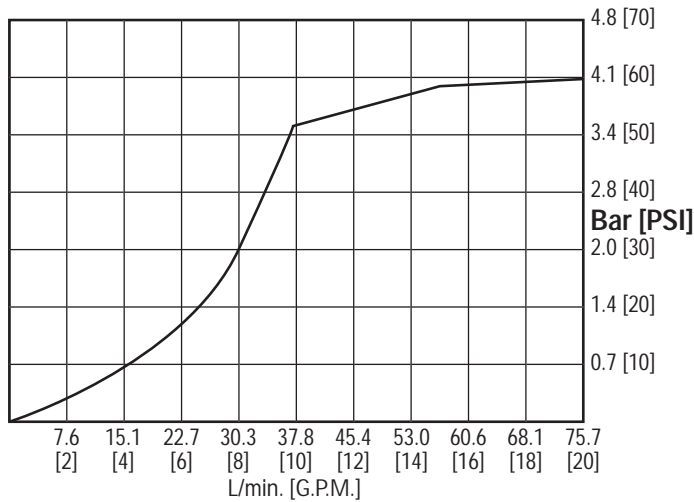
Flow Control

Dimensions



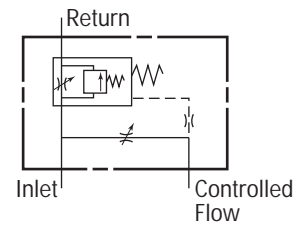
Note: Return port flow cannot be pressurized.

Neutral Flow Pressure Drop with Adjustable Orifice Open



Note: All tests performed with oil viscosity 150 SUS @ 37.7C [100F] with oil temp @ 54.4C [130F].

Schematic



SPECIFICATIONS

| | |
|--|---|
| Rated Input Flow | 75.7 L/min. [20 G.P.M.] |
| Rated Pressure | 172.4 bar [2500 PSI] |
| Maximum Pressure Drop Through Valve at 56.8 L/min. [15 G.P.M.] Input | 4.0 bar [48 PSI] |
| Maximum Controlled Flow | 36.0 L/min. [9.5 G.P.M.] |
| Controlled Flow Adjustment Range | 5.7 L/min. [1.5 G.P.M.] to 36.0 L/min. [9.5 G.P.M.] |
| Relief Valve Factory Setting | 151.7 bar [2200 PSI] @ 36.0 L/min. [9.5 G.P.M.] |
| Weight | 2.04 kg. [4.5 lbs.] |
| Paint | Primer |

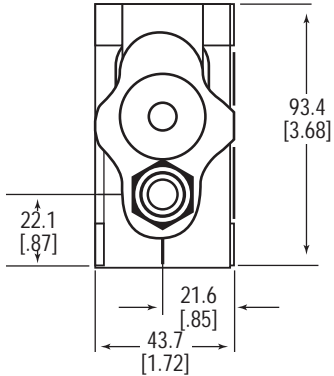
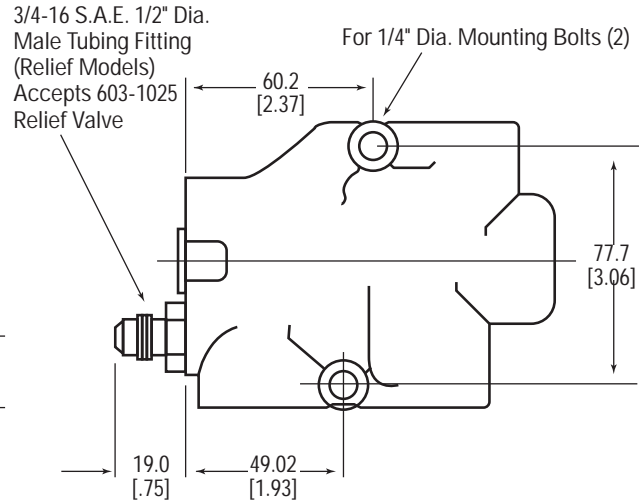
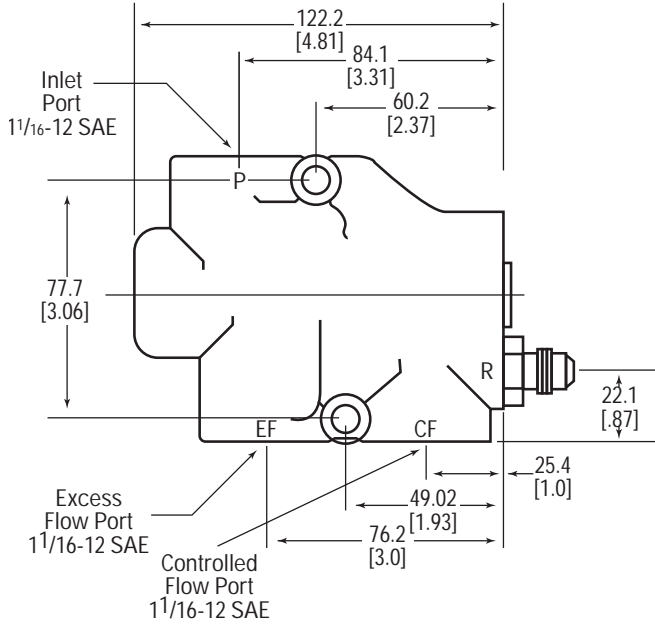
ORDERING INFORMATION

| | |
|-----------|-----------|
| Order No. | 32700-DAA |
|-----------|-----------|

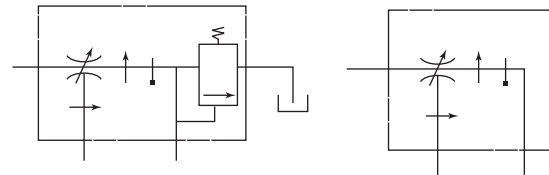
Model VFA Priority Flow Dividers

Non-Adjustable Divider

Dimensions



Schematics



SPECIFICATIONS

| | |
|-------------------------|------------------------|
| Rated Input Flow | 115 L/min. [30 G.P.M.] |
| Maximum Controlled Flow | 75 L/min. [20 G.P.M.] |
| Rated Pressure | 170 bar [2500 PSI] |
| Weight | 3.2 kg. [7 lbs.] |

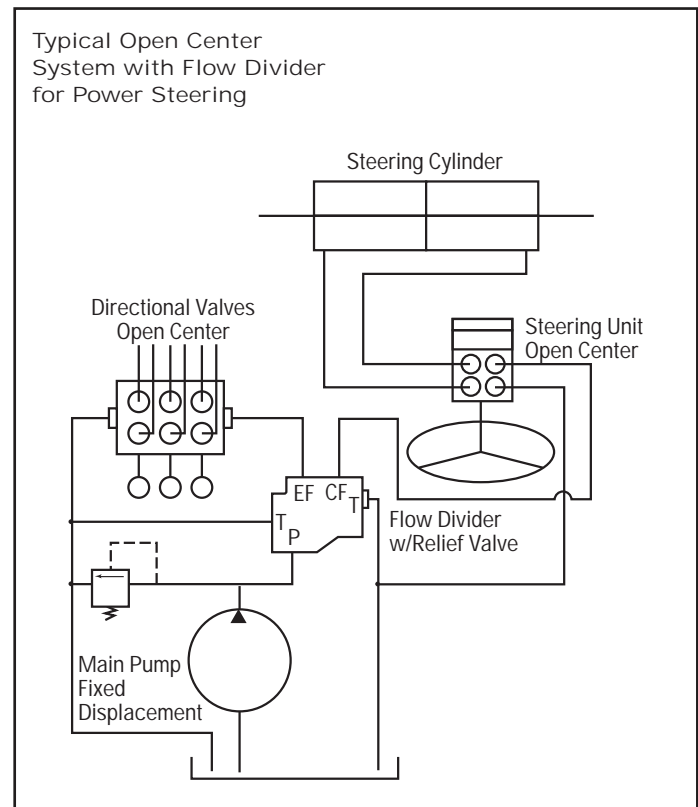
Optional CF Relief Valve to 170 bar [2500 PSI]

ORDERING INFORMATION

| | |
|------------------------------------|------------------|
| Fixed CF Setting with Relief Valve | 604-1106-001-XX* |
| Fixed CF Setting w/o Relief Valve | 604-1102-001-XX* |

* CF setting and CF relief valve pressure (if used) must be specified to determine two digit suffix code.

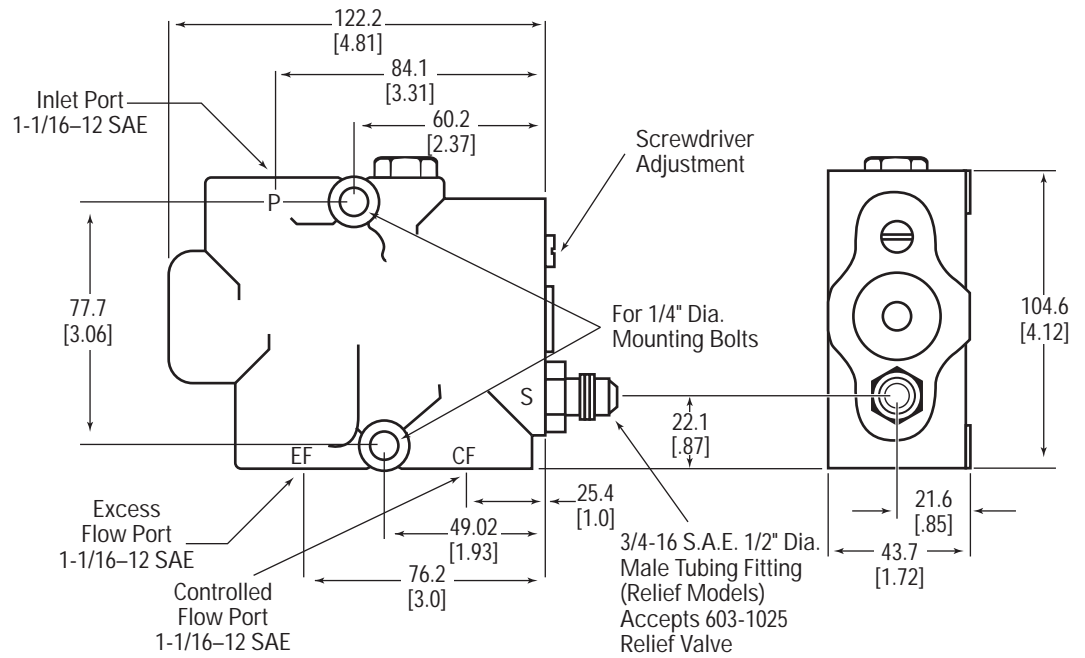
See page 17 for choosing the two digit relief valve pressure setting code.



Model VFA Priority Flow Dividers

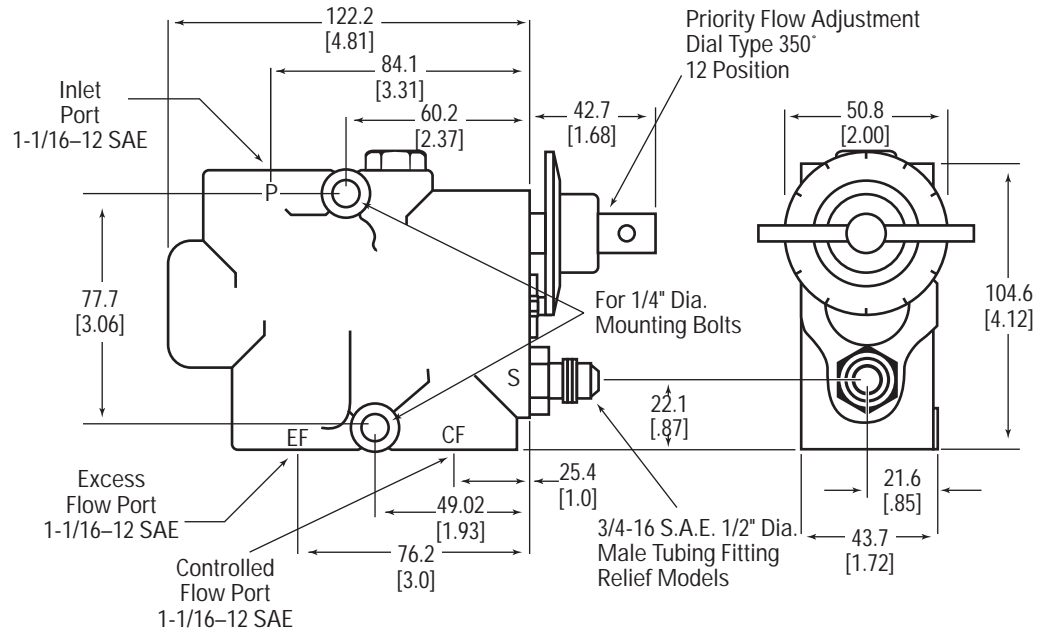
Screwdriver Adjustable
Controlled Flow to 12 G.P.M.

Dimensions



350° Dial Adjustable
Controlled Flow to 12 G.P.M.

Dimensions



ORDERING INFORMATION

| | |
|---|------------------|
| Screwdriver Adjust CF Setting w/o Relief Valve | 604-1141-001-XA |
| Screwdriver Adjust CF Setting with Relief Valve | 604-1142-001-XX* |
| 350° Dial Adjust CF Setting w/o Relief Valve | 604-1120-001-XA |
| 350° Dial Adjust CF Setting with Relief Valve | 604-1122-001-XX* |

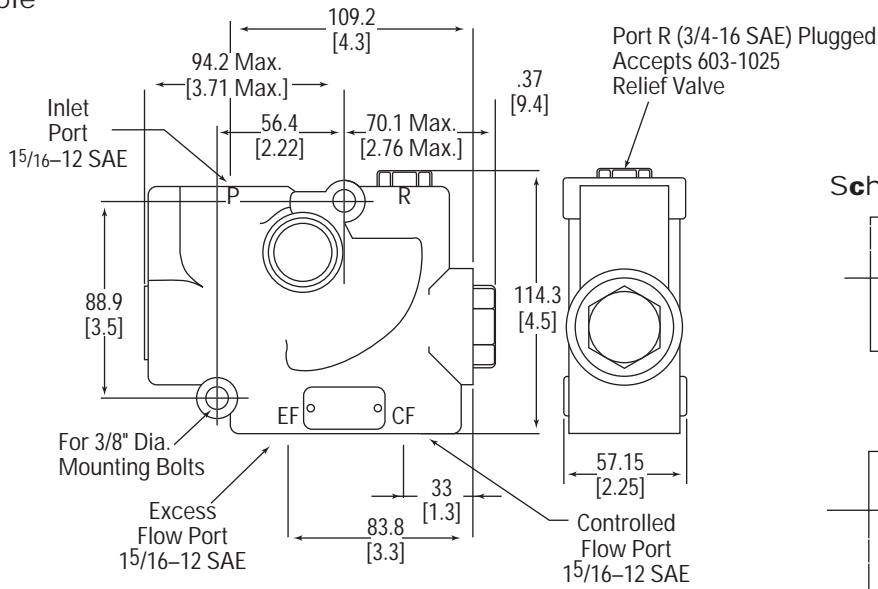
*CF setting and CF relief valve pressure (if used) must be specified to determine two digit suffix code.
See page 17 for choosing the two digit relief valve pressure setting code.

Model F1217

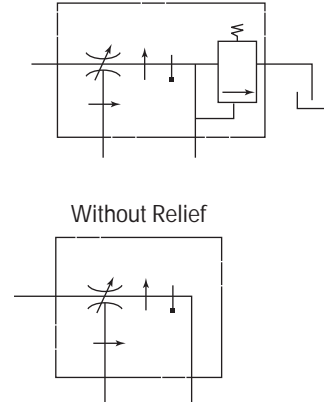
Priority Flow Dividers

Non-Adjustable

Dimensions

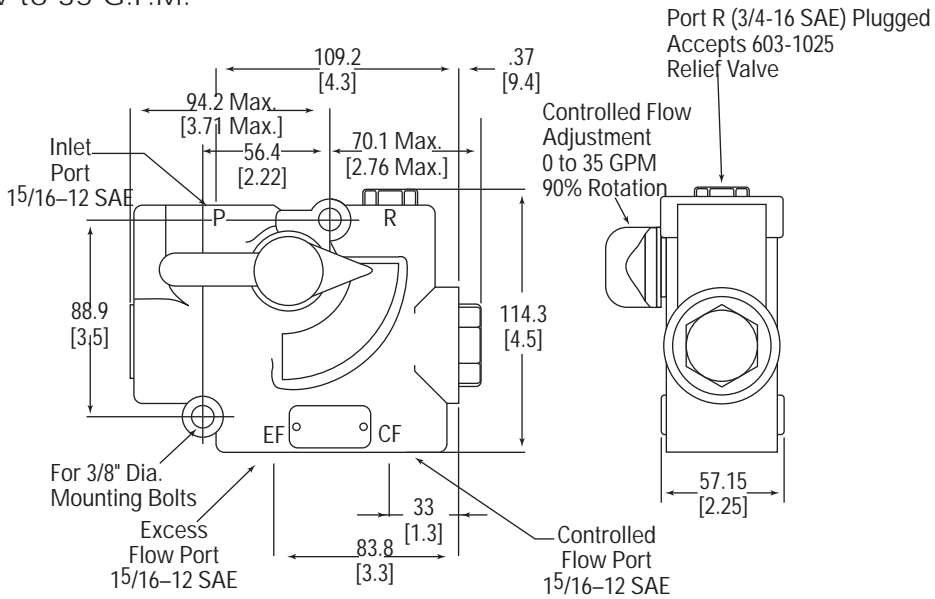


Schematics



90° Lever Adjustable
Controlled Flow to 35 G.P.M.

Dimensions



SPECIFICATIONS

| Specifications | |
|-------------------------|------------------------|
| Rated Input Flow | 175 L/min. [45 G.P.M.] |
| Maximum Controlled Flow | 135 L/min. [35 G.P.M.] |
| Rated Pressure | 195 bar [2800 PSI] |
| Weight | 4.1 kg. [9 lbs.] |

ORDERING INFORMATION

| | |
|---|------------------|
| Non-Adjustable Setting w/o Relief Valve | 604-1037-002-XX* |
| 90° Lever Adjust CF Setting w/o Relief Valve | 604-1091-002-XA |
| 90° Lever Adjust CF Setting with Relief Valve | 604-1039-002-XX* |

* CF setting and CF relief valve pressure (if used) must be specified to determine two digit suffix code.

See page 17 for choosing the two digit relief valve pressure setting code.

Optional CF Relief Valve to 170 bar [2500 PSI]

VL Load Sensing Priority Valves

Eaton® load sensing priority valves can be used with open center, closed center, or load sensing systems. Use in an open center system with a fixed displacement pump, or a closed center system with a pressure compensated pump, offers many of the features of a load sensing system. Excess flow is available for auxiliary circuits.

Priority valves are sized for design pressure drop at maximum pump output flow rate and priority flow requirements. The minimum control pressure must ensure adequate steering flow rate and must be matched with the steering control unit. The dynamic signal priority valve must be used with a dynamic signal steering control unit.

A pilot line is required to sense pressure downstream from the variable control orifice in the steering control spool. If there is an appreciable pressure drop (at the maximum steering rate) in the line between the CF port of the priority valve

and the P port of the steering unit due to remote location of the priority valve, a higher control pressure or a dynamic signal steering unit and priority valve must be used. Another alternative is the use of the external PP pilot option, with the pilot line connected as close as possible to the steering unit. The total system performance depends on careful consideration of the control pressure chosen and pressure drop in the CF line.

Eaton offers two types of load sensing signal systems: static and dynamic.

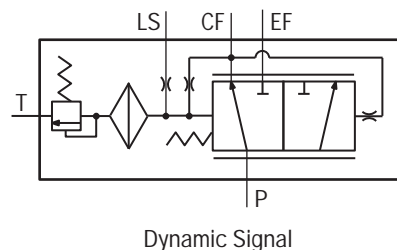
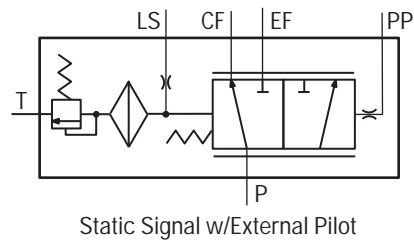
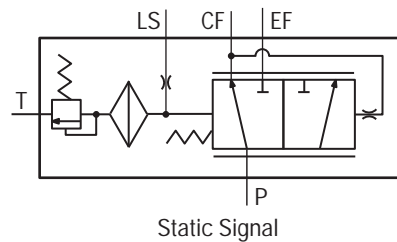
Static: Used for conventional applications in which response or circuit stability is not a problem. The load sensing pilot line should not exceed 2 meters [6 feet].

Dynamic: The dynamic signal system offers several advantages, including faster steering response, improved cold weather startup performance, and increased flexibility to optimize system performance and stability. Furthermore, it reduces the reverse flow through the steering unit (wheel kick), which can eliminate the

need for an inlet check valve. This design increases the CF spring differential by a “boost ratio” that is determined by the sizing of the orifices.

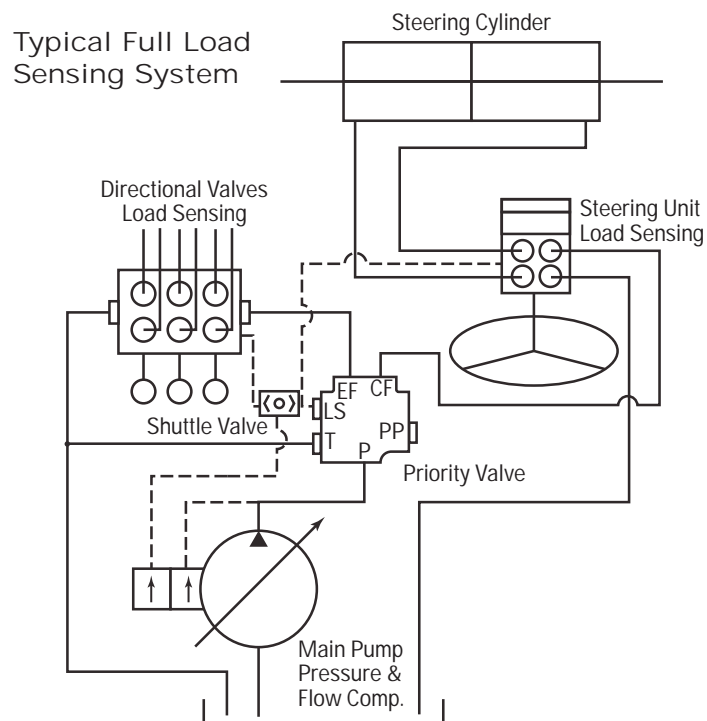
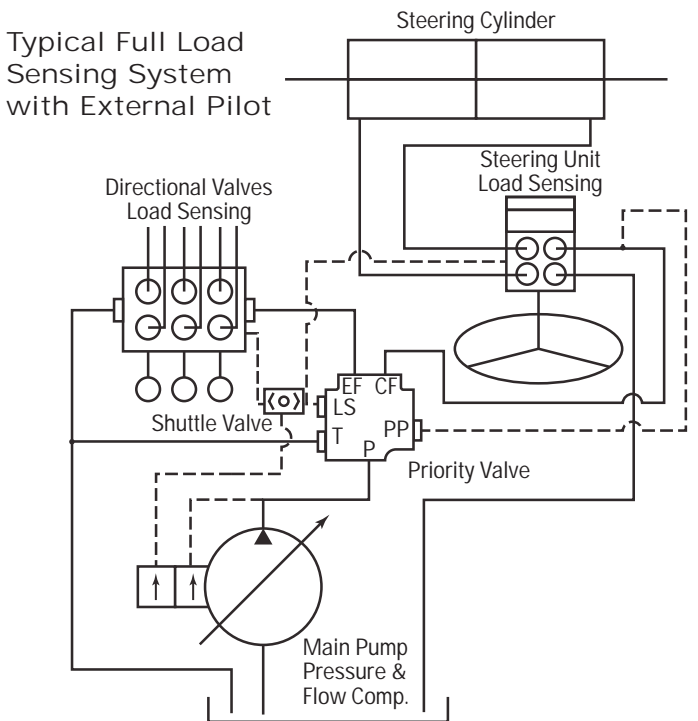
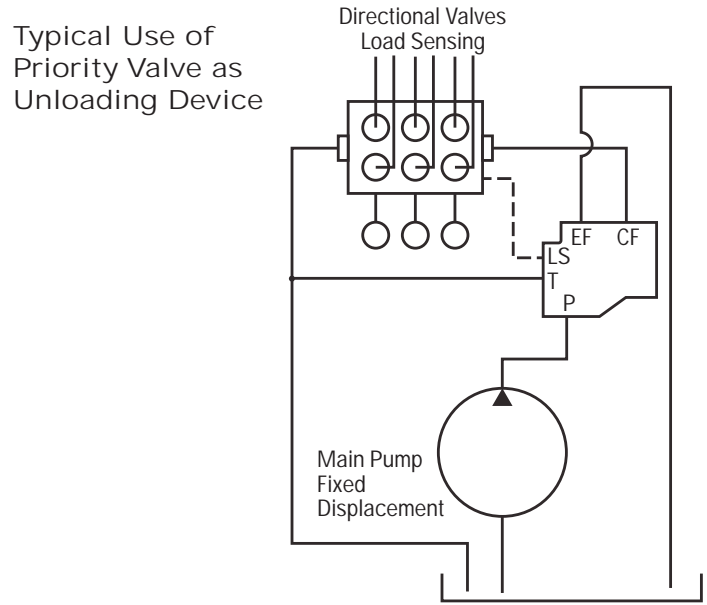
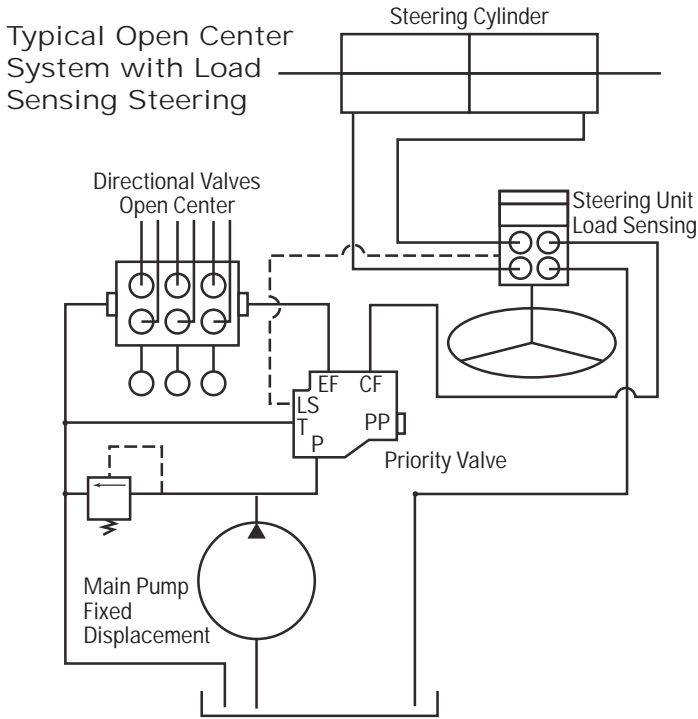
The priority (CF) circuit pilot relief valve must be factory set at least 20 bar [290 PSI] above the maximum steering pressure requirement. All of the flow other than the small pilot flow of the relief valve will be directed to the excess flow (EF) circuit when the CF relief setting is reached. A pump pressure compensator or master relief valve is required upstream of the priority valve. The compensator or relief must be set at least 10 bar [145 PSI] above the CF relief setting.

Schematics



Sample Circuits

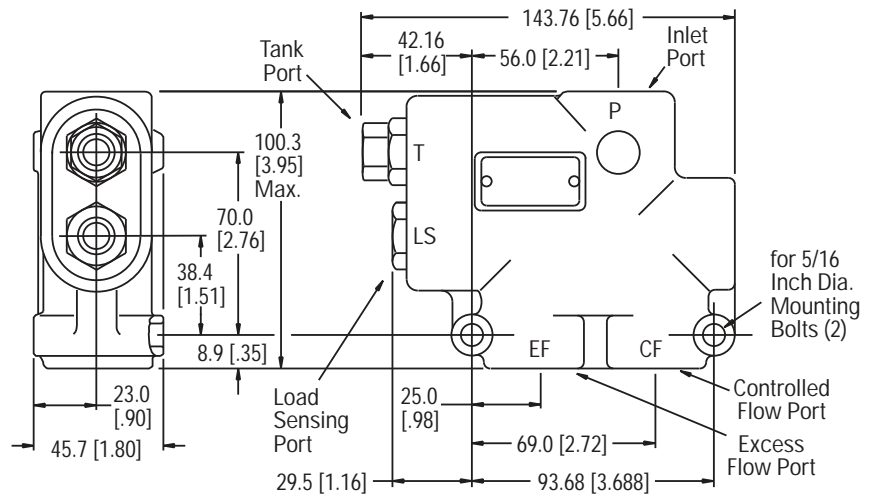
These sample circuit configurations show only a few applications possible with the VLC, VLE, and VLH priority valves. Your Eaton distributor can assist with your choice in valves for optimum performance.



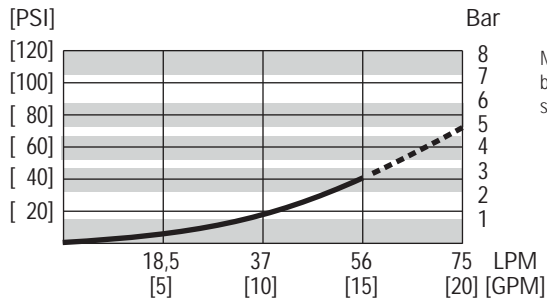
Model VLC

Load Sensing Priority Valves

Dimensions



VLC P-EF Pressure Drop



Minimum P port pressure will be equal to control pressure setting.

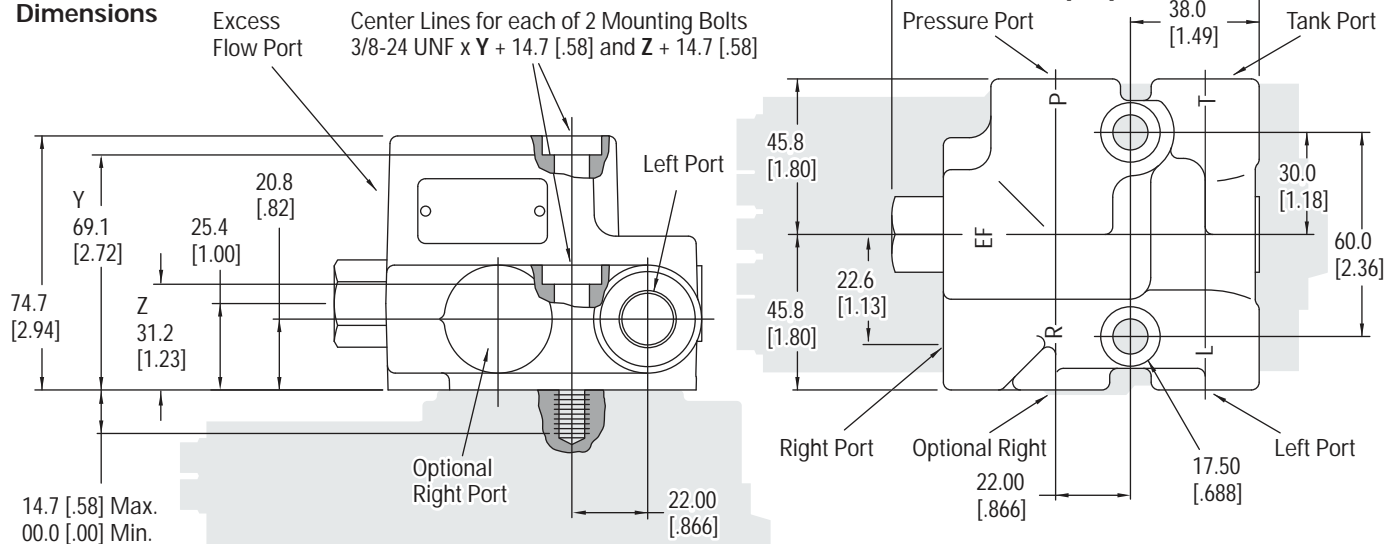
SPECIFICATIONS:
 NFPA Fatigue Rated P and EF Pressure
 NFPA Fatigue Rated CF Pressure

| | |
|-----------------------------|-----------------------|
| Rated Input Flow | 60 L/min. [16 G.P.M.] |
| Rated Inlet and EF Pressure | 276 bar [4000 PSI] |
| Rated CF Pressure | 276 bar [4000 PSI] |
| Maximum CF Relief Setting | 276 bar [4000 PSI] |

Minimum Pressure Drop P - EF
 Oil Viscosity 25 cSt [120 SUS]

Bolt-on (Manifold Mount) Load Sensing Priority Valve

Dimensions

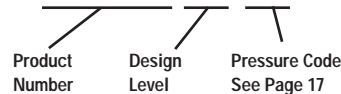


Model VLC

Ordering Information/ Order Numbers

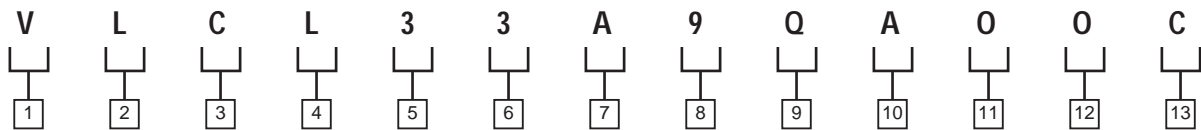
| | | | Signal Type & Control Pressure Bar [PSI] | | | | | |
|----------------------|----------------------------|-------------------------------------|--|----------|----------|-----------|-----------|------------|
| | | | Static | Dynamic | Static | Dynamic | Static | Dynamic |
| Configuration | Ports (5) | Port Size | 3,5 [50] | 5,2 [75] | 5,2 [75] | 7,6 [110] | 6,9 [100] | 10,0 [145] |
| Line | P & EF CF LS & T | 7/8 - 14 3/4 - 16 7/16 - 20 | 606-1217 | 606-1232 | 606-1218 | 606-1314 | 606-1219 | 606-1315 |
| Line | P & EF CF LS & T | 3/4 - 16 9/16 - 18 7/16 - 20 | 606-1214 | 606-1327 | 606-1215 | 606-1278 | 606-1216 | 606-1328 |
| Line | P & EF CF LS & T | M22 X 1,5 M18 X 1,5 M12 X 1,5 | 606-1329 | 606-1330 | 606-1331 | 606-1332 | 606-1333 | 606-1334 |
| Line | P & EF CF LS & T | G1/2 - 14 G1/2 - 14 G1/4 - 19 | 606-1335 | 606-1336 | 606-1337 | 606-1338 | 606-1339 | 606-1340 |
| Manifold (Metric) | P & EF T & L R (end) | G1/2 G3/8 G3/8 | | | | 612-0001 | | |
| Manifold (Metric) | P & EF T, L & R (side) | G1/2 G3/8 | | | | 612-0005 | | |
| Manifold (Series 10) | P & EF T, L & R (side) | G1/2 G3/8 | | | | 612-1005 | | |

Example: 606-1218-004-QA



The example product number describes a VLC with 5,2 bar [75 PSI] control pressure, static signal, 7/8 – 14 P and EF ports, 3/4 – 16 CF port, 7/16 – 20 LS and T ports, 172 bar [2500 PSI] relief valve setting.

Model VLC - Model Code



1 Product

V – Valve

2 Type

L – External pilot operated flow control (priority) valve

3 Inlet Flow Rating

C – 60.6 L/min. [16 G.P.M.]

4 Configuration

L – Line mount
M – Manifold mount (bolt-on to metric SCU)
S – Manifold mount to series 10 SCU

5 Ports

2 – CF 9/16, P & EF 3/4 – 16, LS & T, 7/16 – 20
3 – CF 3/4 - 16, P & EF 7/8 – 14, LS & T, 7/16 – 20
4 – CF M18 x 1.5, P & EF M22 x 1.5, LS & T, M12 x 1.5
5 – CF G1/2, P & EF G1/2, LS & T, G1/4
A – P & EF G1/2, T, L & R G3/8
B – P & EF M22 x 1.5, T, L & R M18 x 1.5
C – P & EF G1/2, L & R G3/8
D – P & EF 7/8 – 14, T, L & R 3/4 – 16
E – P & EF 7/8 – 14, T & L 3/4 – 16, R 3/4 – 16 (End)
F – P & EF G1/2, T & L G3/8, R G3/8 (End)

6 Pilot Signal

1 – LS pilot only – static
2 – PP and LS pilots – static
3 – LS pilot only – dynamic

7 Control Spring

6 – PP and LS pilots – dynamic
Z – 3.4 bar [50 lbf/in²]
A – 5.2 bar [75 lbf/in²]
B – 6.9 bar [100 lbf/in²]
C – 10.3 bar [150 lbf/in²]

8 Relief Valve

0 – None (solid plug)
4 – None (shipping plug)
9 – Inverted style cartridge

9, 10 Relief Setting

00 – None
XX – Setting per code on page 17

11 Special Features

0 – Static or Std. Dynamic with 1.45 Boost
A – Dynamic with 2.0 Boost
C – Dynamic with 1.64 Boost
D – Dynamic with 1.67 Boost

12 Paint

0 – Standard - painted black
G – Painted red oxide primer

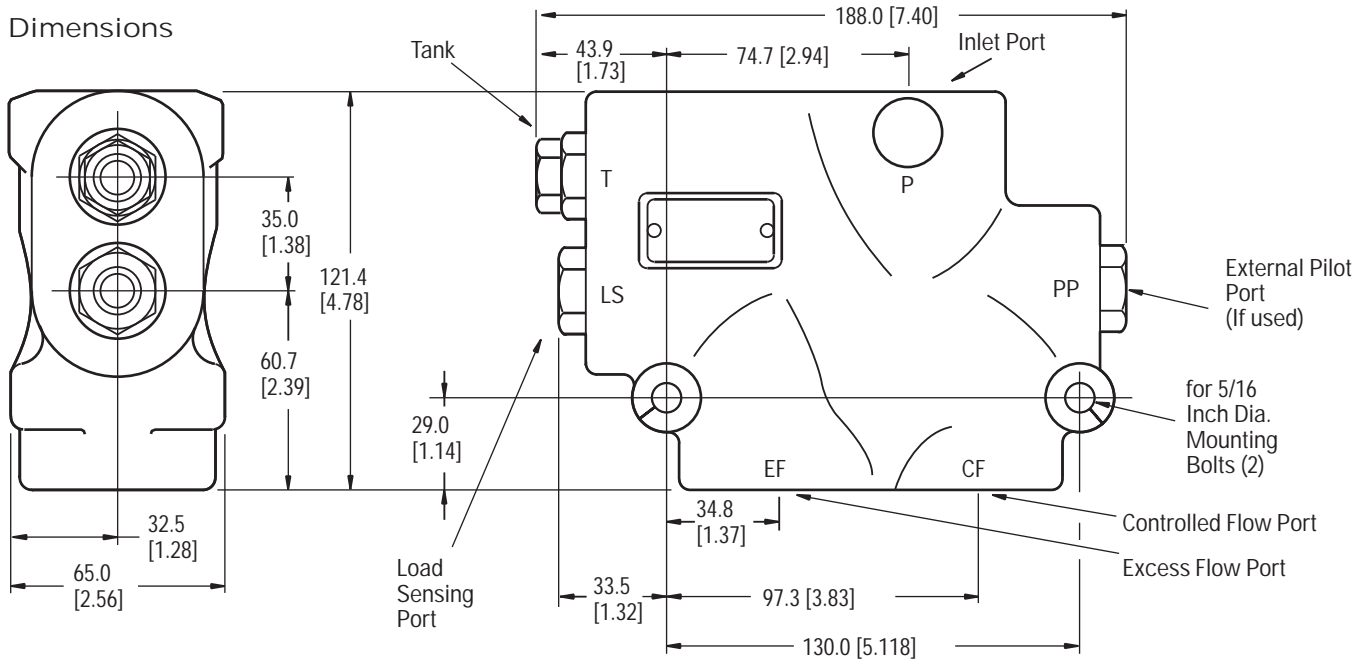
13 Design Code

D – Fourth Design

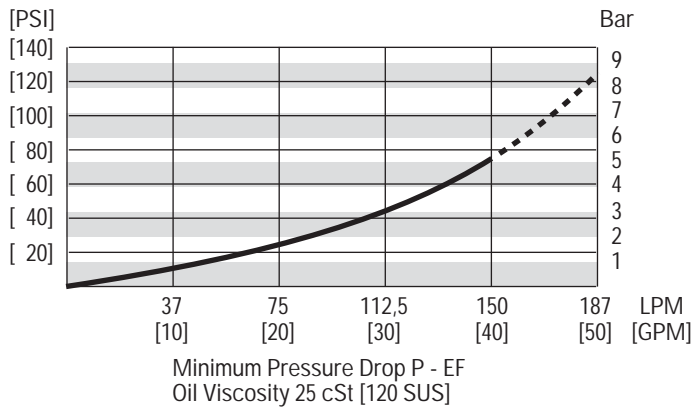
Model VLE

Load Sensing

Priority Valve



VLE P-EF Pressure Drop



SPECIFICATIONS:
 NFPA Fatigue Rated P and EF Pressure
 NFPA Fatigue Rated CF Pressure

| | |
|---------------------------------|-------------------------|
| Rated Input Flow | 150 L/min. [40 G.P. M.] |
| Rated Inlet and EF Pressure | 310 bar [4500PSI] |
| Rated CF Pressure | 276 bar [4000 PSI] |
| Maximum CF Relief Valve Setting | 276 bar [4000 PSI] |

Minimum P port pressure will be equal to control pressure setting.

Model VLE

Ordering Information/ Order Numbers

| | | Signal Type & Control Pressure Bar [PSI] | | | | | |
|------------------------|---|--|----------|-----------|-----------|------------|------------|
| | | Static | | Dynamic | | Dynamic | |
| Ports (5) | Port Size | 4,5 [65] | 5,5 [80] | 6,9 [100] | 8,6 [125] | 10,3 [150] | 12,8 [185] |
| P & EF CF LS & T | 1-1/16 - 12 3/4 - 16 7/16 - 20 | 606-1093 | 606-1294 | 606-1094 | 606-1295 | 606-1095 | 606-1296 |
| P & EF CF LS & T | 1-1/16 - 12 7/8 - 14 7/16 - 20 | 606-1046 | 606-1341 | 606-1047 | 606-1342 | 606-1048 | 606-1343 |
| P & EF CF LS & T | 1-5/16 - 12 7/8 - 14 7/16 - 20 | 606-1058 | 606-1344 | 606-1059 | 606-1345 | 606-1060 | 606-1346 |
| P & EF CF LS & T | 1-5/16 - 12 1-5/16 - 12 7/16 - 20 | 606-1141 | 606-1347 | 606-1142 | 606-1348 | 606-1143 | 606-1349 |
| P & EF CF LS & T | 1-5/16 - 12 1-1/16 - 12 7/16 - 20 | 606-1350 | 606-1282 | 606-1351 | 606-1281 | 606-1454 | 606-1323 |
| P & EF CF LS & T | M27 X 2 M18 X 1,5 M12 X 1,5 | 606-1353 | 606-1354 | 606-1355 | 606-1356 | 606-1357 | 606-1358 |
| P & EF CF LS & T | G3/4 - 14 G1/2 - 14 G1/4 - 19 | 606-1359 | 606-1360 | 606-1361 | 606-1362 | 606-1363 | 606-1364 |

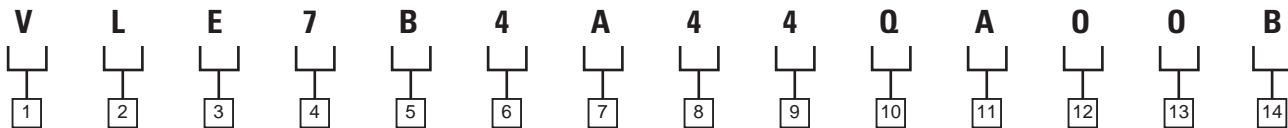
Example

Example: 606-1094-003-QA

Product Number Design Level Pressure Code
See Page 17

The example product number describes a VLE with 6,9 bar [100 PSI] control pressure, static signal, 1-1/16 – 12 P and EF ports, 3/4 – 16 CF port, 7/16 – 20 LS and T ports, 172 bar [2500 PSI] relief valve setting.

Model VLE - Model Code



1 Product

V – Valve

2 Type

L – External pilot operated flow control (priority) valve

3 Inlet Flow Rating

E – 151 L/min. [40 G.P.M.]

4 Ports

1 CF 1-1/16 - 12, P & EF 1-5/16 - 12, LS & T 7/16 - 20
3 CF 3/4 - 16, P & EF 7/8 - 14, LS & T 7/16 - 20
4 CF 7/8 - 14, P & EF 1-1/16 - 12, LS & T 7/16 - 20
5 CF 7/8 - 14, P & EF 1-5/16 - 12, LS & T 7/16 - 20
6 CF 3/4 - 16, P & EF 1-1/16 - 12, LS & T 7/16 - 20
7 CF, P & EF 1-5/16 - 12, LS & T 7/16 - 20

9 CF 3/4 - 16, P & EF 1-5/16 - 12, LS & T 7/16 - 20

A CF M18 x 1.5, P & EF M27 x 2, LS & T M12 x 1.5

B CF G1/2, P & EF G3/4, LS & T G1/4

C CF M22x1.5, P & EF M27x2, LS & T M14x1.5

5 Metering Type

O Standard
A High flow CF
B Double EF land, tapered
C Double EF land, notched
D High gain, straight land
E EF slots don't close completely

6 Pilot Signal

1 LS pilot only – static
2 PP & LS pilots – static
3 LS pilot only – dynamic
4 PP & LS pilots – dynamic

7 Control Spring

A 4.5 bar [65 lbf/in²]
B 6.9 bar [100 lbf/in²]
C 10.3 bar [150 lbf/in²]

8 Relief Valve

0 None (solid plug)
4 Inverted style cartridge

9 Relief Dashpot

0 None (Std. with relief valve) or none (Std. with no relief valve)
4 0.67 [.0265] Dia. (Standard with inverted relief valve)

10-11 Relief Setting

00 None
XX Setting per code on page 17

12 Special Features

O LS & PP - .91 [.036] Dia.
D LS & PP - .79 [.031] Dia.
E Dynamic with 1.19 Boost
F PP- .79 (.031) Dia. Dynamic with 1.08 boost
G Dynamic with 1.37 Boost
H PP- .91 (.036) Dia. Dynamic with 1.08 Boost
N Dynamic with 1.42 Boost
P Dynamic with 1.23 Boost (Standard)
R PP- .91 (.036) Dia. Dynamic with 2.00 Boost
S Dynamic with 1.67 Boost
T PP- .64 (.025) Dia. Dynamic with 2.00 Boost

13 Paint

0 Standard - painted black
7 Painted red oxide primer

14 Design code

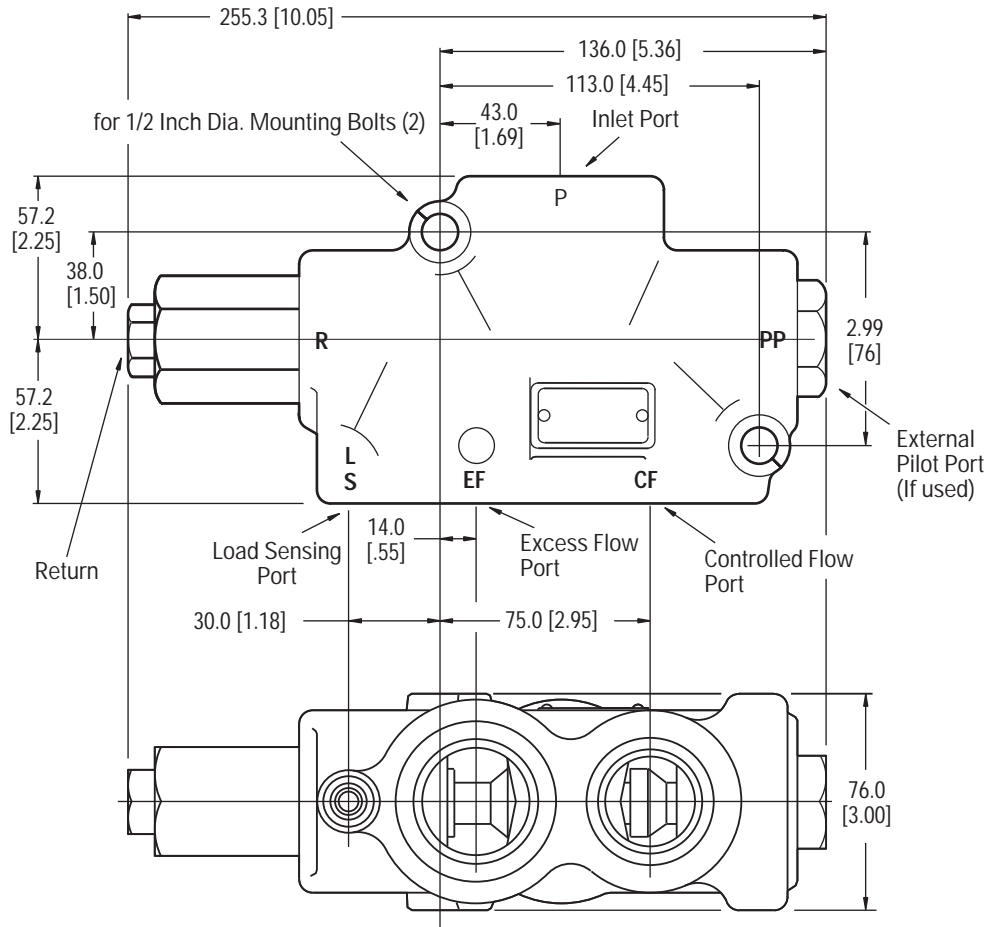
B – Second design

Model VLH

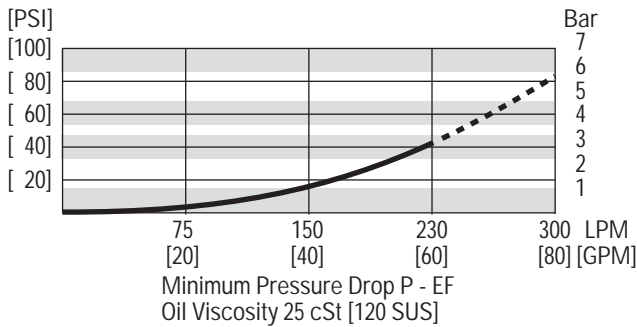
Load Sensing

Priority Valve

Dimensions



VLH P-EF Pressure Drop



SPECIFICATIONS:

- NFPA Fatigue Rated P and EF Pressure
- NFPA Fatigue Rated CF Pressure

| | |
|-----------------------------|------------------------|
| Rated Input Flow | 240 L/min. [63 G.P.M.] |
| Rated Inlet and EF Pressure | 297 bar [4300 PSI] |
| Rated CF Pressure | 276 bar [4000 PSI] |
| Maximum CF Relief Setting | 276 bar [4000 PSI] |

Minimum P port pressure will be equal to control pressure setting.

Model VLH

Order Information/ Order Numbers

| | | Signal Type & Control Pressure Bar [PSI] | | | | | |
|------------------------|--|--|----------|-----------|-----------|------------|------------|
| | | Static | Dynamic | Static | Dynamic | Static | Dynamic |
| Ports (5) | Port Size | 4,5 [65] | 5,5 [80] | 6,9 [100] | 8,6 [125] | 10,3 [150] | 12,8 [185] |
| P & EF CF LS & R | 1-5/8 - 12 1-5/16 - 12 7/16 - 20 | 606-1201 | 606-1288 | 606-1202 | 606-1289 | 606-1203 | 606-1290 |
| P & EF CF LS & R | 1-5/8 - 12 1-1/16 - 12 7/16 - 20 | 606-1368 | 606-1316 | 606-1369 | 606-1285 | 606-1376 | 606-1286 |
| P & EF CF LS & R | 1-5/8 - 12 3/4 - 16 7/16 - 20 | 606-1189 | 606-1371 | 606-1190 | 606-1372 | 606-1191 | 606-1373 |

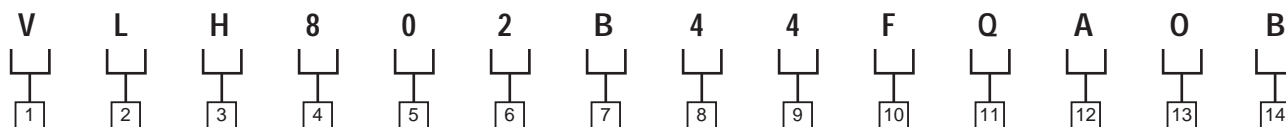
Example

Example: 606-1202-003-QA



The example product number describes a VLH with 6,9 bar [100 PSI] control pressure, static signal, 1-5/8 - 12 P and EF ports, 1-5/16 - 20 CF port, 7/16 - 20 LS and T ports, 172 bar [2500 PSI] relief valve setting.

Model VLH - Model Code



1 Product

V - Valve

2 Type

L - External pilot operated flow control (priority) valve

3 Inlet Flow Rating

H - 240 L/min. [63 G.P.M.]

4 Ports

7 CF 1-1/16 - 12, P & EF
1-5/8 - 12, LS & T 7/16 - 20
8 CF 3/4 - 16, P & EF 1-5/8 - 12, LS & T 7/16 - 20
9 CF 15/16 - 12, P & EF 1-5/8 - 12, LS & T 7/16 - 20
D CF 7/8-14, P&EF 1-5/8 - 12, LS&T 7/16 - 20
F CF M27 x 2, P&EF M33x2, LS & T M14x1.5
L CF M22 x 1.5, P&EF M42x2, LS & T M14x1.5

5 Adjustments

0 Non-adjustable

6 Pilot Signal

1 LS pilot only - static
2 PP & LS pilots - static
3 LS pilot only - dynamic
4 PP & LS pilots - dynamic

7 Control Spring

A 5.2 bar [75 lbf/in²]
B 6.9 bar [100 lbf/in²]
C 10.3 bar [150 lbf/in²]
D 14.5 bar [210 lbf/in²]

8 Relief Valve

0 None (solid plug)
4 Inverted style cartridge

9 Relief Dashpot

0 None (Std. with no relief valve)
4 0.67 [.0265] DIA. (Standard with inverted relief valve)

10-11 Relief Setting

00 None
XX Setting per code on page 17

12 Special Features

O LS & PP - 1.19 [.047] Dia.
A LS & PP - 0.58 [.023] Dia.
B LS & PP - 0.71 [.028] Dia.
C Dynamic with 1.37 Boost
D Dynamic with 1.23 Boost (Standard)
H Dynamic with 1.64 Boost
J Dynamic with 1.42 Boost

13 Paint

0 - Standard - painted black

14 Design Code

B - Second design

Relief Valve Setting Code

Use this chart to find the two digit suffix that corresponds to the nominal pressure setting. The factory pressure setting tolerance is -0 psi, +100 psi (-0 bar, +7bar).

Settings in bold print are preferred standard settings.

| SUFFIX | BAR | PSI | SUFFIX | BAR | PSI | SUFFIX | BAR | PSI | SUFFIX | BAR | PSI |
|-----------|-----------|-------------|-----------|------------|-------------|-----------|------------|-------------|-----------|------------|-------------|
| AA | 17 | 250 | GA | 104 | 1500 | SA | 190 | 2750 | ZA | 276 | 4000 |
| AB | 19 | 275 | GB | 105 | 1525 | SB | 191 | 2775 | ZB | 279 | 4050 |
| AC | 21 | 300 | GC | 107 | 1550 | SC | 193 | 2800 | ZC | 283 | 4100 |
| AD | 23 | 325 | GD | 109 | 1575 | SD | 195 | 2825 | ZD | 286 | 4150 |
| AE | 24 | 350 | GE | 111 | 1600 | SE | 197 | 2850 | ZE | 290 | 4200 |
| AF | 26 | 375 | HA | 112 | 1625 | TA | 198 | 2875 | ZF | 293 | 4250 |
| AG | 28 | 400 | HB | 114 | 1650 | TB | 200 | 2900 | ZG | 297 | 4300 |
| AH | 29 | 425 | HC | 116 | 1675 | TC | 202 | 2925 | ZH | 300 | 4350 |
| AJ | 31 | 450 | HD | 117 | 1700 | TD | 204 | 2950 | ZJ | 304 | 4400 |
| AK | 33 | 475 | HE | 119 | 1725 | TE | 205 | 2975 | ZK | 307 | 4450 |
| AL | 35 | 500 | JA | 121 | 1750 | UA | 207 | 3000 | ZL | 311 | 4500 |
| AM | 36 | 525 | JB | 123 | 1775 | UB | 209 | 3025 | ZM | 314 | 4550 |
| AN | 38 | 550 | JC | 124 | 1800 | UC | 211 | 3050 | ZN | 317 | 4600 |
| AP | 40 | 575 | JD | 126 | 1825 | UD | 212 | 3075 | ZP | 321 | 4650 |
| AQ | 42 | 600 | JE | 128 | 1850 | UE | 214 | 3100 | ZQ | 324 | 4700 |
| AR | 43 | 625 | KA | 129 | 1875 | UF | 216 | 3125 | ZR | 328 | 4750 |
| AS | 45 | 650 | KB | 131 | 1900 | UG | 217 | 3150 | ZS | 331 | 4800 |
| AT | 47 | 675 | KC | 133 | 1925 | UH | 219 | 3175 | ZT | 335 | 4850 |
| AU | 48 | 700 | KD | 135 | 1950 | UJ | 221 | 3200 | ZU | 338 | 4900 |
| AV | 50 | 725 | KE | 136 | 1975 | UK | 223 | 3225 | ZV | 342 | 4950 |
| BA | 52 | 750 | LA | 138 | 2000 | VA | 224 | 3250 | IA | 345 | 5000 |
| BB | 54 | 775 | LB | 140 | 2025 | VB | 226 | 3275 | IB | 348 | 5050 |
| BC | 55 | 800 | LC | 142 | 2050 | VC | 228 | 3300 | IC | 352 | 5100 |
| BD | 57 | 825 | LD | 143 | 2075 | VD | 229 | 3325 | ID | 355 | 5150 |
| BE | 59 | 850 | LE | 145 | 2100 | VE | 231 | 3350 | IE | 359 | 5200 |
| BF | 60 | 875 | MA | 147 | 2125 | VF | 233 | 3375 | IF | 362 | 5250 |
| BG | 62 | 900 | MB | 148 | 2150 | VG | 235 | 3400 | IG | 366 | 5300 |
| BH | 64 | 925 | MC | 150 | 2175 | VH | 236 | 3425 | IH | 369 | 5350 |
| BJ | 66 | 950 | MD | 152 | 2200 | VJ | 238 | 3450 | IJ | 372 | 5400 |
| BK | 67 | 975 | ME | 154 | 2225 | VK | 240 | 3475 | IK | 376 | 5450 |
| CA | 69 | 1000 | NA | 155 | 2250 | WA | 242 | 3500 | IL | 379 | 5500 |
| CB | 71 | 1025 | NB | 157 | 2275 | WB | 243 | 3525 | IM | 383 | 5550 |
| CC | 72 | 1050 | NC | 159 | 2300 | WC | 245 | 3550 | IN | 386 | 5600 |
| CD | 74 | 1075 | ND | 160 | 2325 | WD | 247 | 3575 | IP | 390 | 5650 |
| CE | 76 | 1100 | NE | 162 | 2350 | WE | 248 | 3600 | IQ | 393 | 5700 |
| DA | 78 | 1125 | PA | 164 | 2375 | WF | 250 | 3625 | IR | 397 | 5750 |
| DB | 79 | 1150 | PB | 166 | 2400 | WG | 252 | 3650 | IS | 400 | 5800 |
| DC | 81 | 1175 | PC | 167 | 2425 | WH | 254 | 3675 | IT | 403 | 5850 |
| DD | 83 | 1200 | PD | 169 | 2450 | WJ | 255 | 3700 | IU | 407 | 5900 |
| DE | 85 | 1225 | PE | 171 | 2475 | WK | 257 | 3725 | IV | 410 | 5950 |
| EA | 86 | 1250 | QA | 172 | 2500 | YA | 259 | 3750 | IW | 414 | 6000 |
| EB | 88 | 1275 | QB | 174 | 2525 | YB | 260 | 3775 | | | |
| EC | 90 | 1300 | QC | 176 | 2550 | YC | 262 | 3800 | | | |
| ED | 91 | 1325 | QD | 178 | 2575 | YD | 264 | 3825 | | | |
| EE | 93 | 1350 | QE | 179 | 2600 | YE | 266 | 3850 | | | |
| FA | 95 | 1375 | RA | 181 | 2625 | YF | 267 | 3875 | | | |
| FB | 97 | 1400 | RB | 183 | 2650 | YG | 269 | 3900 | | | |
| FC | 98 | 1425 | RC | 185 | 2675 | YH | 271 | 3925 | | | |
| FD | 100 | 1450 | RD | 186 | 2700 | YJ | 272 | 3950 | | | |
| FE | 102 | 1475 | RE | 188 | 2725 | YK | 274 | 3975 | | | |

XA through XZ—Special

CF Relief Valve Pressure and CF Setting Code

For VFA and F1217
Flow Dividers

Use this chart to find the two-digit suffix code; the first digit corresponds to the nominal CF relief valve pressure setting, and the second digit corresponds to the nominal CF flow setting. Use Table 1 to find the first digit in the suffix code for both the VFA and F1217 valves. Use Table 2A to find the second digit in the suffix code of **VFA valves only**; use Table 2B to find the second digit in the suffix code of **F1217 valves only**.

Table 1: CF RV Setting

| SUFFIX | BAR | PSI | SUFFIX | BAR | PSI |
|--------|-----|------|--------|-----|-----------------|
| A | 35 | 500 | N | 138 | 2000 |
| B | 43 | 625 | O | 147 | 2125 |
| C | 52 | 750 | P | 155 | 2250 |
| D | 60 | 875 | Q | 164 | 2375 |
| E | 69 | 1000 | R | 172 | 2500 |
| F | 78 | 1125 | X | — | no relief valve |
| G | 86 | 1250 | 2 | — | 2 relief valves |
| H | 95 | 1375 | | | |
| J | 104 | 1500 | | | |
| K | 112 | 1625 | | | |
| L | 121 | 1750 | | | |
| M | 129 | 1875 | | | |

Table 2A: CF Flow (VFA)

| SUFFIX | L/MIN | GPM |
|--------|------------|------------|
| A | Adjustable | Adjustable |
| B | 13.2, 14.0 | 3.5, 3.7 |
| C | 15.1 | 4 |
| D | 60.6 | 16 |
| E | 20.8 | 5.5 |
| F | 17 | 4.5 |
| G | 7.6 | 2 |
| H | 37.9 | 10 |
| J | 22.7 | 6 |
| K | 11.4 | 3 |
| L | 30.3 | 8 |
| M | 34.1 | 9 |
| N | 45.4 | 12 |
| Q | 18.9 | 5 |

Table 2B: CF Flow (F1217)

| SUFFIX | L/MIN | GPM |
|--------|------------|------------|
| A | Adjustable | Adjustable |
| B | 15.1 | 4 |
| C | 18.9 | 5 |
| D | 22.7 | 6 |
| E | 75.7 | 20 |
| F | 11.4 | 3 |
| G | 13.2 | 3.5 |
| H | 113.6 | 30 |
| J | 132.5 | 35 |
| K | 53 | 14 |
| R | 56.8 | 15 |

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Eaton
Hydraulics Operations USA
14615 Lone Oak Road
Eden Prairie, MN 55344
USA
Tel: 952-937-9800
Fax: 952-294-7722
www.eaton.com/hydraulics

Eaton
Hydraulics Operations Europe
Route de la Longeraie 7
1110 Morges
Switzerland
Tel: +41 (0) 21 811 4600
Fax: +41 (0) 21 811 4601

Eaton
Hydraulics Operations Asia Pacific
11th Floor Hong Kong New World Tower
300 Huaihai Zhong Road
Shanghai 200021
China
Tel: 86-21-6387-9988
Fax: 86-21-6335-3912