

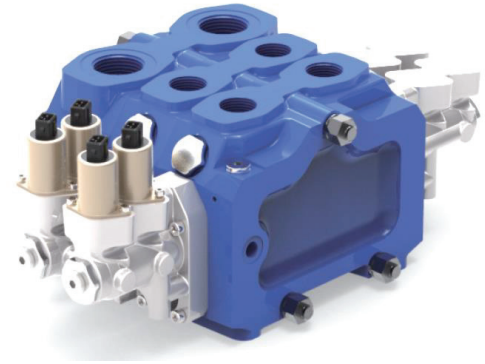
L275 SERIES

POST-COMPENSATED SECTIONAL LOAD SENSE VALVE



TAKE CONTROL

Take control with Muncie Power Products' L275 directional control valve. The L275 is constructed with high-grade iron castings and nickel-plated spools for use in high-pressure applications and can be configured with many different spool options. The L275 is designed for flow rates up to 80 GPM (300 LPM). Muncie Power Products takes pride in supplying the highest quality products along with outstanding service and support.



KEY FEATURES

- High-grade iron castings allow for high-pressure capabilities for the most extreme applications
- Nickel-plated spools resist wear allowing for long life under high-pressure conditions
- Tight tolerances and precision machining keep internal spool leakages low
- Internal oil core design allows for higher flow rates and low pressure drops
- Local post compensator on each work section for good flow sharing properties

TECH SPECS

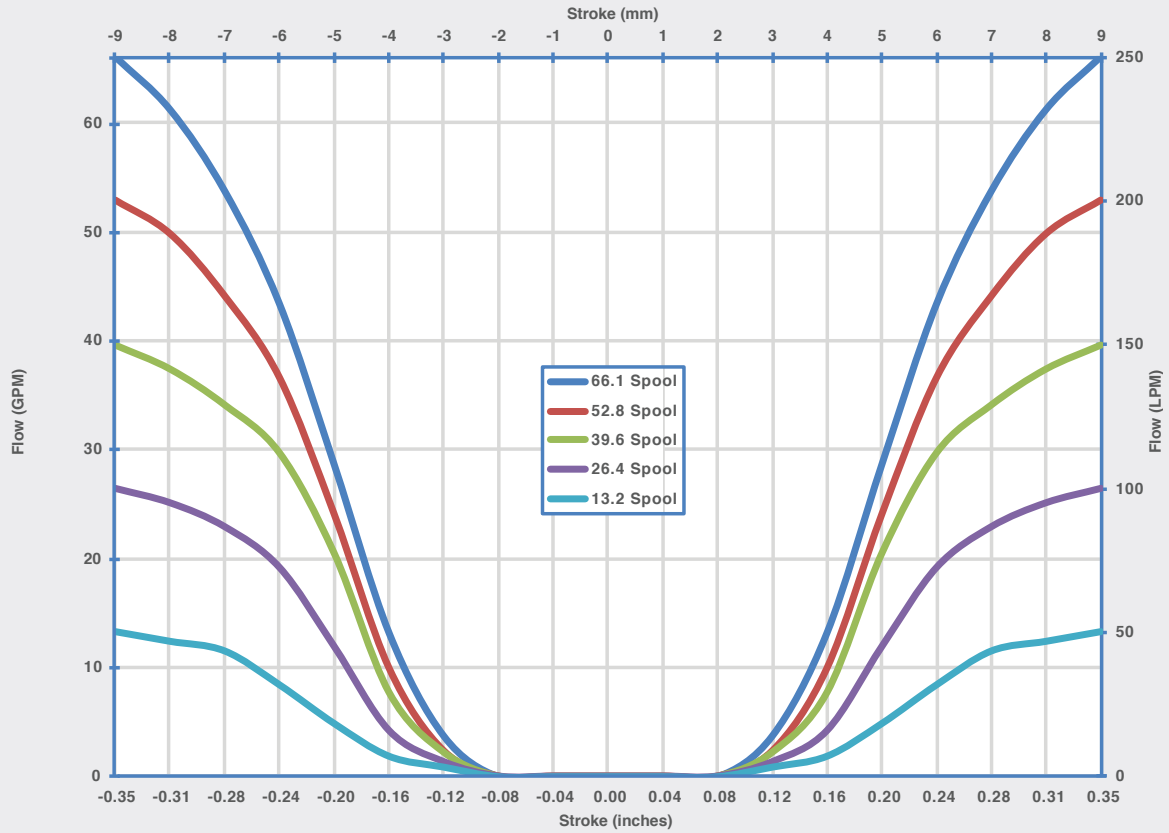
DESIGN TYPE	SECTIONAL
Maximum Work Sections	8* Sections, lead times will apply
Circuit Types	Closed center load sense post compensation
Flow Capacity	Nominal: 72.5 GPM (275 LPM) Maximum: 80 GPM (300 LPM)
Maximum Pressure	5,075 PSI (350 BAR)
Maximum Back Pressure	145 PSI (10 BAR)
Stand by Pressure	200 PSI (14 BAR)
Recommended Filtration	20/18/15 (ISO 4406:1999)
Oil Viscosity Range	60 to 1,360 SUS (10 to 300 cSt)
Oil Temperature Range	-40 to 185°F (-40 to 85°C)
Recommended Oil Temperature	-40 to 140°F (-40 to 60°C)
Approximate Weights (Standard Options)	Inlet: 31 lbs. (14.1 kg) Work Section: Integrated Outlet: 35.1 lbs. (15.9 kg) Standard Work Section: 26.3 lbs. (12.0 kg)

*Note: 4-8 sections, lead times will apply

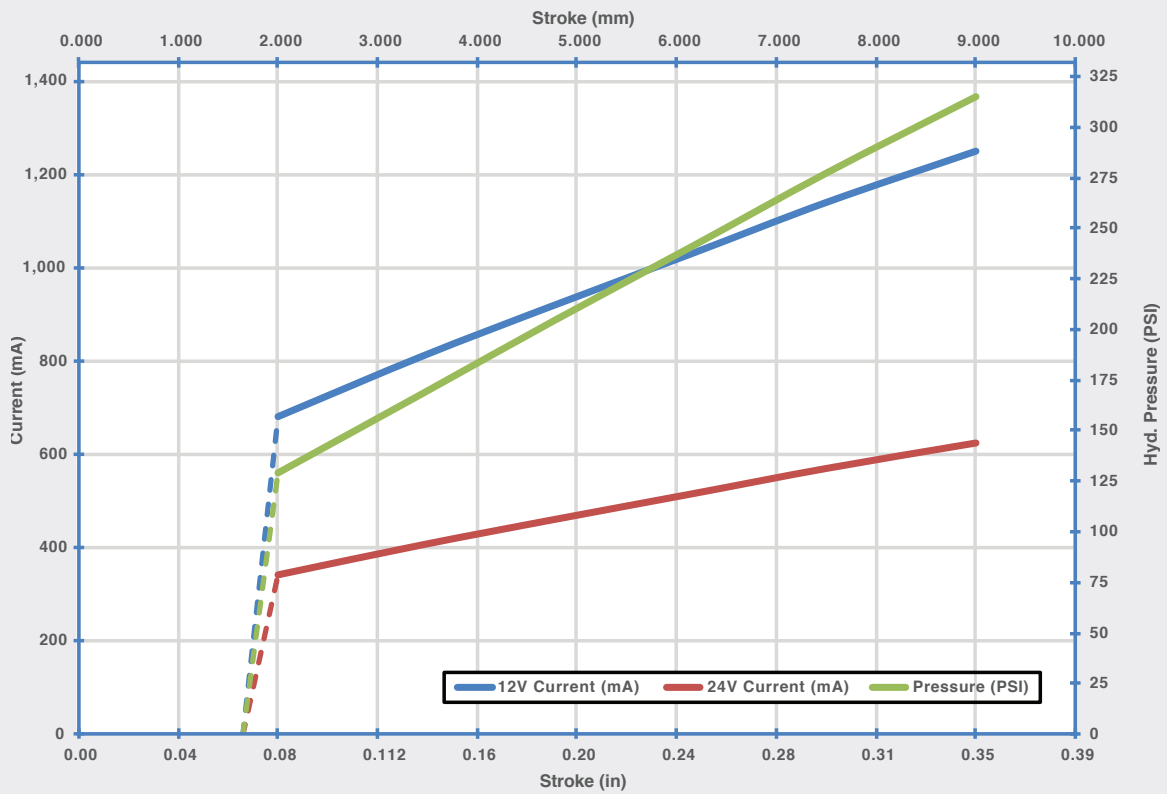
PERFORMANCE CURVES

FIXED DISPLACEMENT SYSTEMS

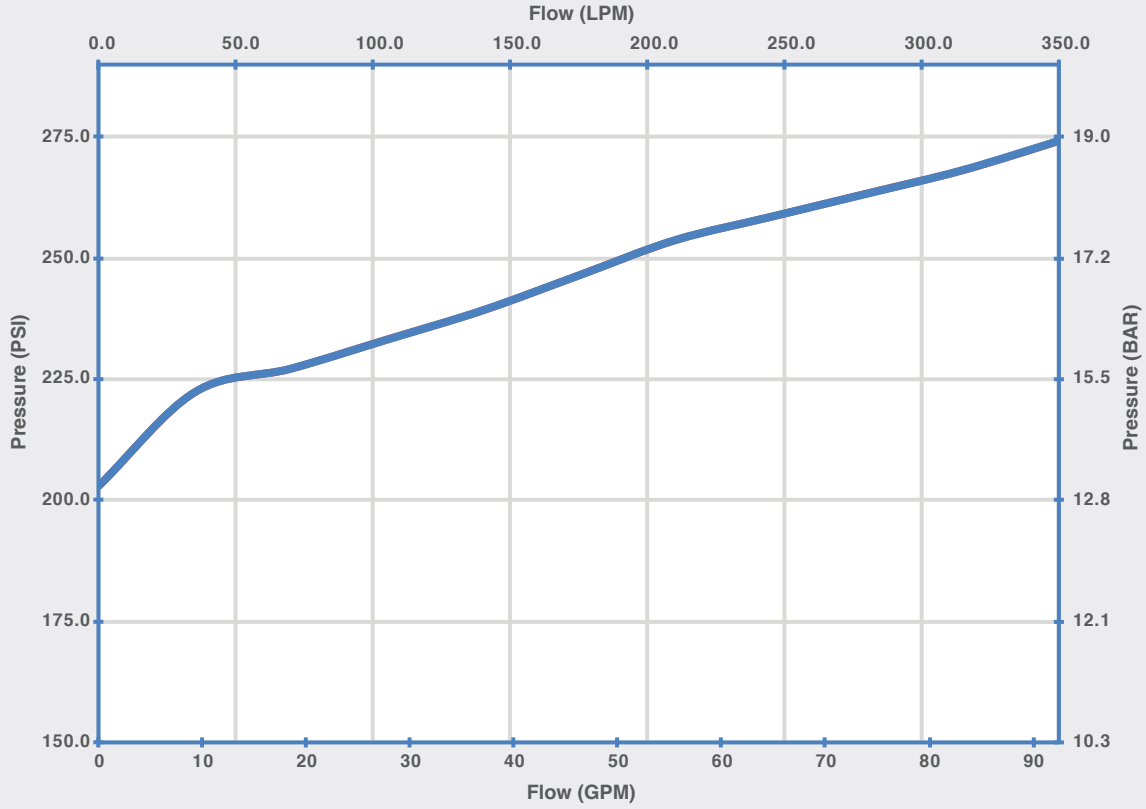
Post-compensated Spool Flow Characteristics



Spool Travel with Electric Current or Hydraulic Pressure

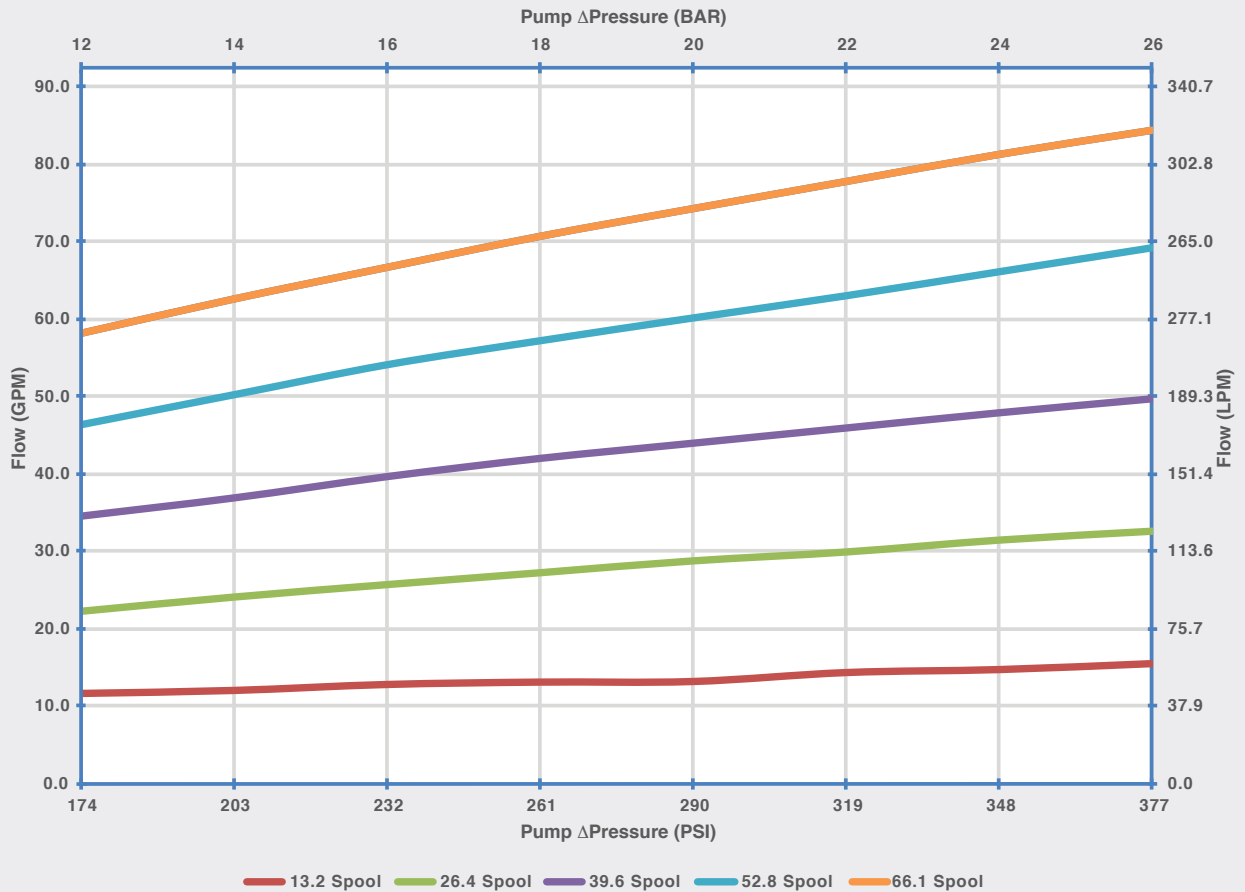


Inlet Compensator Pressure Drop for Fixed Displacement Pumps (P-T)

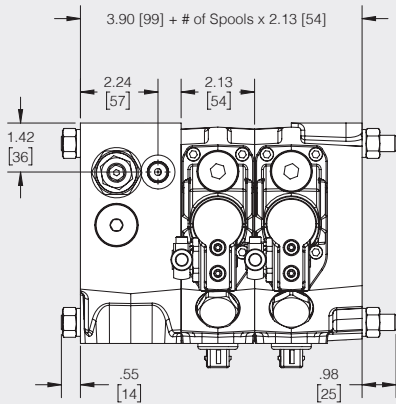


VARIABLE DISPLACEMENT SYSTEMS

Post-compensated Spool Flow Characteristics as a Function of Pump ΔP Setting



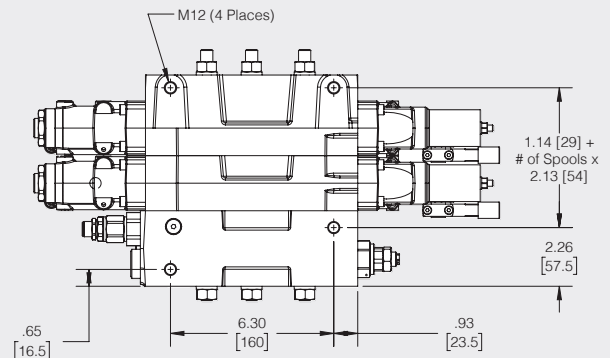
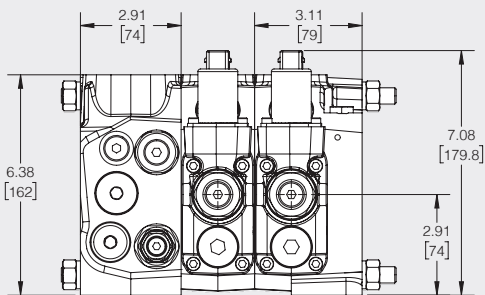
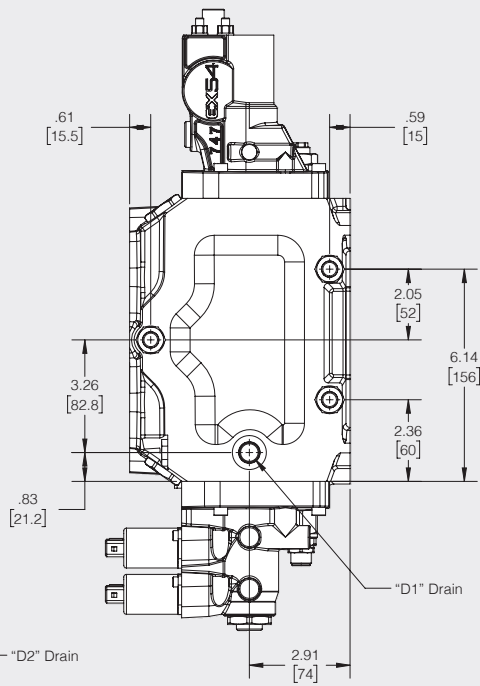
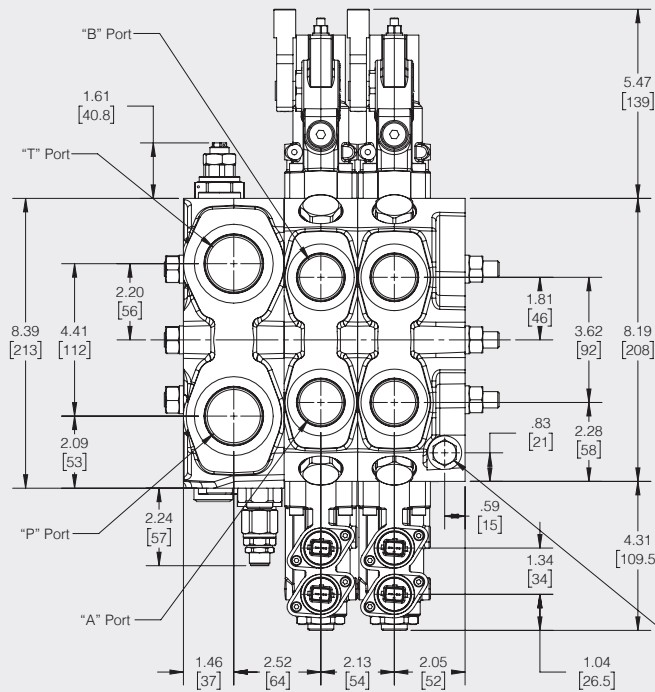
DIMENSIONS



PORT SIZE AND TYPE

INLET, P = -20 SAE
 OUTLET, T = -20 SAE
 WORK, A & B = -16 SAE
 DRAIN, D1 & D2 = -6 SAE

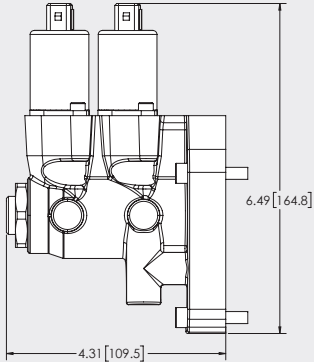
Note: D1 or D2 must be utilized to drain the LS signal & pilot pressure
 (One must be plumbed to tank)



ELECTROHYDRAULIC CONTROLS

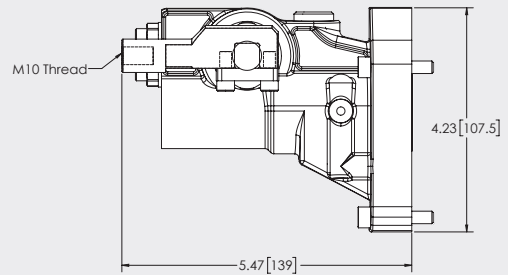
L275-BC-49

3 Position Electrohydraulic Control,
Proportional 12 VDC (2 Solenoids
w/ Deutsch, DT4)



L275-CT-BV

Lever Control with Stroke Limiters,
used with Electrohydraulic Control



INLET SECTIONS

L275-A-QI-J00-16-12-X

MPP Valve Series

L275 = 72.5 GPM Nominal LS Valve

Section Type:

A = Inlet

Port Type:

QI = -20 SAE by -20 SAE w/-6 SAE LS Port

Inlet Options:

K00 = Inlet for Fixed Displacement Pumps
has Main RV and LS RV

J00 = Inlet for Variable Displacement Pumps
has Main RV and LS RV

Special Features:

X = Standard

T = Setup for Transition Plate

LS Relief Valve Setting*:

12 = 1,740 PSI (120 BAR)

Main RV Setting*:

16 = 2,300 PSI (160 BAR)

**LS Relief must be, at minimum, 580 PSI (40 BAR) less than the Main RV*

INLET RELIEF VALVES (Main & Load Sense)

L275-AB-L-200-LS

L275 Valve Series

L275 = 72.5 GPM Nominal LS Valve

Section Type:

AB = Used with Inlet

Relief Valve Adjustment Range:

Main RV Options:

F = 580-5,075 PSI (40-350 BAR)

Load Sense RV Options:

L = 1,740-3,625 PSI (120-250 BAR)

M = 3,640-5,075 PSI (251-650 BAR)

Relief Valve Use:

Blank = Main Relief Valve

LS = Load Sense Relief Valve

Relief Valve Setting in BAR:

Main RV Options:

160 = 2,300 PSI

Load Sense RV Options:

120 = 1,740 PSI

251 = 3,640 PSI

WORK SECTIONS & INTEGRATED WORK SECTION OUTLETS/END PLATES

L275-ZX-BV-49 GI-02-X

L275 Valve Series

L275 = 72.5 GPM Nominal LS Valve

Spool Type:

Cylinder	Motor	Max Flow	
		GPM	LPM
ZJ	YM	13.2	50.0
ZR	YT	26.4	100.0
ZT	YV	39.6	150.0
ZW	YY	52.8	200.0
ZX	YZ	66.1	250.0

Control Type:

BV = "A" Side Electrohydraulic Control w/Stroke Limiter and Connection for Backup Lever (12V Deutsch) (See Note 1)
*04-08 sections, lead times will apply

Back-cap Positioners & Controls:

49 = "B" Side Electrohydraulic Shifter (12V Deutsch) (See Note 2)

Port Type

Standard Work Section Ports

GI = -16 SAE

End/Last Work Section Ports

QH = -16 SAE by -16 SAW w/-6 SAE LS Port

Special Features:

X = No Option (Standard)
C = Last Work Section with Integrated Outlet

Work Port Options:

02 = Machined with Steel Plugs (Standard)

RV Set @ 1,000 PSI (70 BAR) ADJUSTABLE from 435 - 2,175 PSI (70 - 150 BAR)

03 = RV on "A" Port, Set @ 1,000 PSI (70 BAR)

04 = RV on "B" Port, Set @ 1,000 PSI (70 BAR)

05 = RV on "A & B" Ports, Set @ 1,000 PSI (70 BAR)

RV Set @ 2,190 PSI (151 BAR) ADJUSTABLE from 2,190 - 3 335 PSI (151 - 230 BAR)

22 = RV on "A" Port, Set @ 2,191 PSI (151 BAR)

23 = RV on "B" Port, Set @ 2,191 PSI (151 BAR)

25 = RV on "A & B" Ports, Set @ 2,191 PSI (151 BAR)

RV+AC Set @ 1,900 PSI (130 BAR) ADJUSTABLE from 725 - 6,090 PSI (50 - 250 BAR)

53 = RV+AC on "A" Port, Set @ 1,900 PSI (130 BAR)

54 = RV+AC on "B" Port, Set @ 1,900 PSI (130 BAR)

55 = RV+AC on "A & B" Ports, Set @ 1,900 PSI (130 BAR)

Steel Plug to Create P-T for Single-acting Function

56 = Steel Plug on "A" Port for Single-acting Function on "B"

57 = Steel Plug on "B" Port for Single-acting Function on "A"

Anti-Cavitation Valves: (AC Valves)

11 = Anti-cavitation on "A" Port

12 = Anti-cavitation on "B" Port

13 = Anti-cavitation on "A & B" Ports

Notes:

- Standard Handle Kit P/N: VLVH-01-B-180 (Length: 7" (180mm))
- Control "BV" and Back-cap "49" Must Be Used Together

STANDARD TIE ROD KITS

L275-T-01

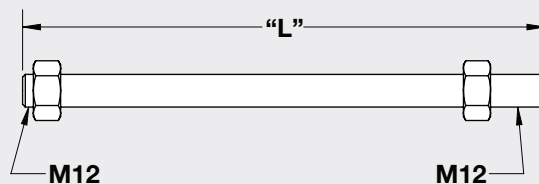
L275 Valve Series

T = Tie Rod

Number of Work Sections

01-08 (1-8 Work Sections)

*04-08 sections, lead times will apply



Torque to: 44.25 lb.ft. (60 Nm)

No. of Work Sections	1	2	3	4	5	6	7	8
"L" (in/mm)	7.56 / 192	9.69 / 246	11.81 / 300	13.94 / 354	16.06 / 408	18.19 / 462	20.31 / 516	22.44 / 570

WORK PORT OPTIONS

L275-W30-L-150

L275 Valve Series

Work Port Option:

- W30 = Work Port Relief
- W33 = Work Port RV + Anti-Cavitation
- W04 = Work Port Anti-Cavitation Only
- WCX = Blanking Plug

RV Setting (in Bar):

Standard Settings:

- 70 = 1,015 PSI (70 BAR), use w/W30
- 150 = 2,175 PSI (150 BAR). use w/W30
- 130 = 1,900 PSI (130 BAR), use w/W33
- XXX = No Setting, used w/W04 & WCX

Setting Range:

- K = 1,015 - 2,175 PSI (70 - 150 BAR)
- L = 2,190 - 3,335 PSI (151 - 230 BAR)
- H = 3,350 - 4,060 PSI (231 - 280 BAR)
- M = 4,045 - 5,075 PSI (281 - 350 BAR)
- X = No Range, used w/W04 or WCX

TRANSITION PLATE from L275 to L125 work sections

L275L125-B-XX-01

L275 & L125 Valve Series

L275 L125 = Multi-Series Part

B = Intermediate Section

Special Features:

01 = L275 to L125 Transition Plate

Port Type:

XX = No Ports

TRANSITION PLATE TIE ROD KITS

L275-T-01-TS

L275 Valve Series

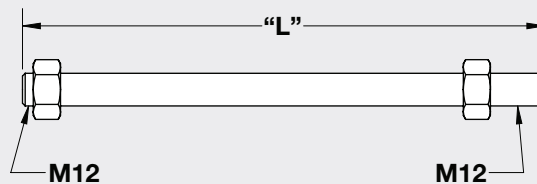
T = Tie Rod

Stud Type

TS = Transition Plate Studs

Number of Work Sections

01-03 (1-3 Work Sections)



No. of Work Sections	1	2	3
"L" (in/mm)	6.26 / 159	7.44 / 189	10.71 / 272

ORDER EXAMPLE

If you would like to order an assembled valve, you will need to order each item separately. The order in which parts are entered is how the valve will be built from left to right. Below are two examples of valve assembly orders:

Part Number	Qty.	Description
L275-A-QI-J00-16-12-X	1	Inlet with main RV and LS RV
L275-ZX-BV-49-GI-02-X	2	Work section 1 and 2
L275-ZX-BV-49-QH-02-X	1	Work section/end plate
L275-T03	1	Stud kit for 3 section assembly

Part Number	Qty.	Description
L275-A-QI-J00-16-12-X	1	Inlet with main RV and LS RV
L275-ZX-BV-49-GI-02-X	2	L275 work section 1 and 2
L275L125-B-XX-01	1	Transition plate from L275 to L125
L125-ZR-AJ-01-FM-02-X	2	L125 work section 1 and 2
L125-YT-BV-40-FM-02-X	1	L125 work section 3
L125-C-ER-2EH-1MI-XXX	1	L125 end plate for E/H controls
L275-T02-TS	1	L275 stud kit for transition plate
L125-T03	1	L125 stud kit for 3 sections