

# Balancing Valve and Balancing Valve Assembly

## PRODUCT DESCRIPTION

Balancing Valves (BV) increase the efficiency and reliability of all divider block systems operating at high pressures by balancing the effect of injection point differentials on the divider block.

The valves are recommended for divider block systems experiencing outlet pressure differentials  $\geq 1000$  PSI (70 BAR).

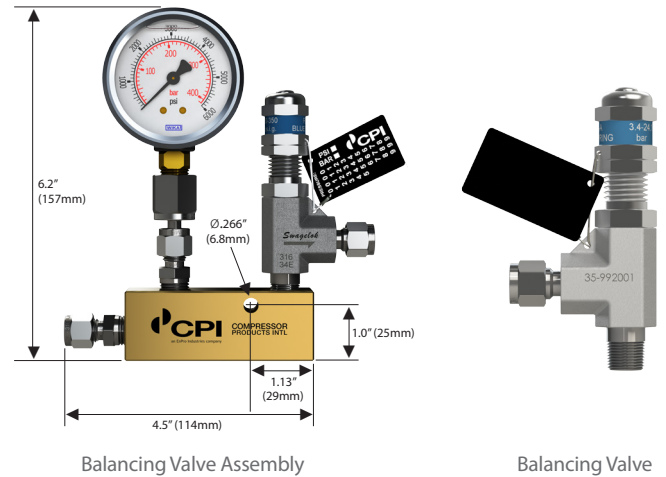
They can be supplied factory preset to one of the charted set pressures or provided as components when field setting is required. However, balancing valves require a specific procedure to change the pressure valves settings in the field.

When ordered as a Balancing Valve Assembly (BVA), the balancing valve is manifolded together with a pressure gauge mounted on a rotatable tube fitting. Operators can easily adjust the orientation of the pressure gauge in the field.

Individual spring kits come with a lock wire and seal to prevent further tampering, and a punch tag for pressure set point identification.

## FEATURES

- Equalize divider block system outlet pressures to:
  - Maintain piston synchronization
  - Prevent piston slap
  - Reduce piston by-passing
  - Reduce premature wear of divider blocks
  - Reduce blown rupture disc problems
- Pressure gauge enables operator to easily balance outlet pressures
- Tube fittings allow for ease of installation along tubing lines



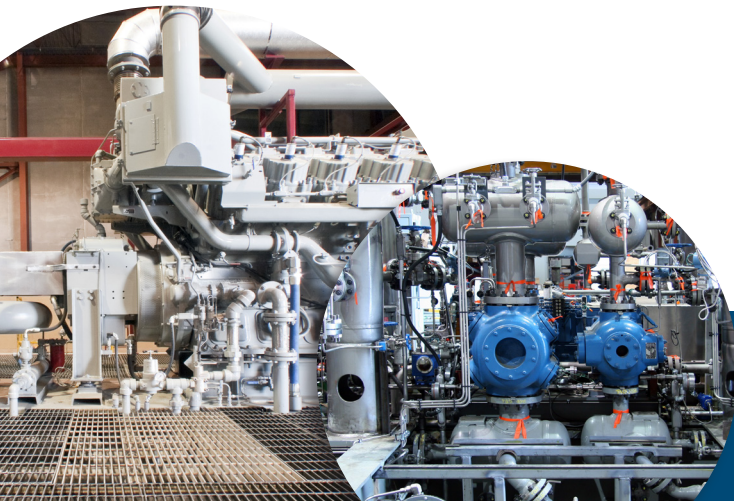
## TECHNICAL SPECIFICATIONS

Set pressure range from 1,000 psi (69 bar) to 5,800 psi (400 bar)

BV Inlet: 1/4" O.D. tube or 1/4" Male NPT; Outlet: 1/4" O.D. tube

BVA Inlet: 1/4" O.D. tube; Outlet: 1/4" O.D. tube

BVA: 6,000 psi (410 bar) pressure gauge, standard or CE

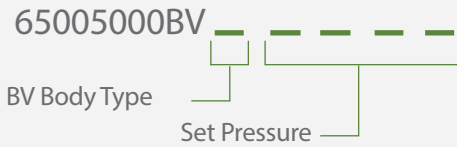


Proven Solutions for the Global Compression Industry™

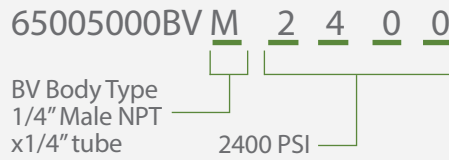
## HOW TO CREATE A BALANCING VALVE PART NUMBER

1. Select BV body type by indicating an 'S' for 1/4" tube x 1/4" tube or 'M' for 1/4" male NPT x 1/4" tube. This letter goes in the space labeled 'BV body type' below.

2. From the chart at the right, select the 4 digit set pressure that fits your application. This number fills in the four spaces indicated as 'set pressure'.

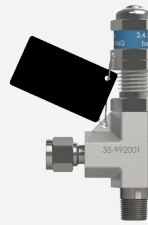


Example part number 65005000BVM2400:  
BV with 1/4" male NPT x 1/4" tube, set pressure 2400 PSI



Use the following part numbers to order BV body types separately. Does NOT include spring kit.

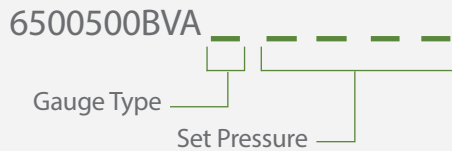
PART NO.	DESCRIPTION
S - 650140000SS4R3A	BV body type 1/4" tube x 1/4" tube
M - 65014000SS4R3A1	BV body type 1/4" male NPT x 1/4" tube



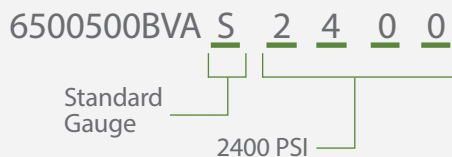
## HOW TO CREATE A BALANCING VALVE ASSEMBLY PART NUMBER

1. Select BVA subassembly gauge style by indicating an 'S' for standard or 'E' for European CE. This letter goes in the space labeled 'gauge type' below.

2. From the chart at the right, select the 4 digit set pressure that fits your application. This number fills in the four spaces indicated as 'set pressure'.



Example part number 6500500BVAS2400:  
BVA with a standard gauge, set pressure 2400 PSI



Use the following part numbers to order BVA subassembly separately. Does NOT include spring kit.

PART NO.	DESCRIPTION
S - 65005000BVASSUB	BVA Subassembly with 6,000 PSI (410 bar) standard gauge
E - 65005000BVAESUB	BVA Subassembly with 6,000 PSI (410 bar) CE gauge



## BV & BVA SET PRESSURES, SPRING KIT PART NUMBERS:

SET PRESSURE PSIG (BAR)	SPRING & TAG KIT PIN
1,000 (69)	650140SPRKITPPL Purple
1,100 (76)	
1,200 (83)	
1,300 (90)	
1,400 (97)	
1,500 (103)	650140SPRKITORN Orange
1,600 (110)	
1,700 (117)	
1,800 (124)	
1,900 (131)	
2,000 (138)	650140SPRKITBRN Brown
2,100 (145)	
2,200 (152)	
2,300 (159)	
2,400 (165)	
2,500 (172)	650140SPRKITWHT White
2,600 (179)	
2,700 (186)	
2,800 (193)	
2,900 (200)	
3,000 (207)	650140SPRKITRED Red
3,100 (214)	
3,200 (221)	
3,300 (228)	
3,400 (234)	
3,500 (241)	650140SPRKITGRN Green
3,600 (248)	
3,700 (255)	
3,800 (262)	
3,900 (269)	
4,000 (276)	650140SPRKITGRN Green
4,100 (283)	
4,200 (290)	
4,300 (296)	
4,400 (303)	
4,500 (310)	650140SPRKITRED Red
4,600 (317)	
4,700 (324)	
4,800 (331)	
4,900 (338)	
5,000 (345)	650140SPRKITGRN Green
5,100 (352)	
5,200 (359)	
5,300 (365)	
5,400 (372)	
5,500 (379)	650140SPRKITGRN Green
5,600 (386)	
5,700 (393)	
5,800 (400)	



Proven Solutions for the Global Compression Industry™

CPI provides industry leading lubrication system products and services, partnering with our customers to develop individual solutions to their unique lubrication needs. From individual components to complete, turnkey systems, we can provide the resources and expertise to ensure your compressor operates at peak performance and longevity.