



HP+ Divider Blocks

PRODUCT DESCRIPTION

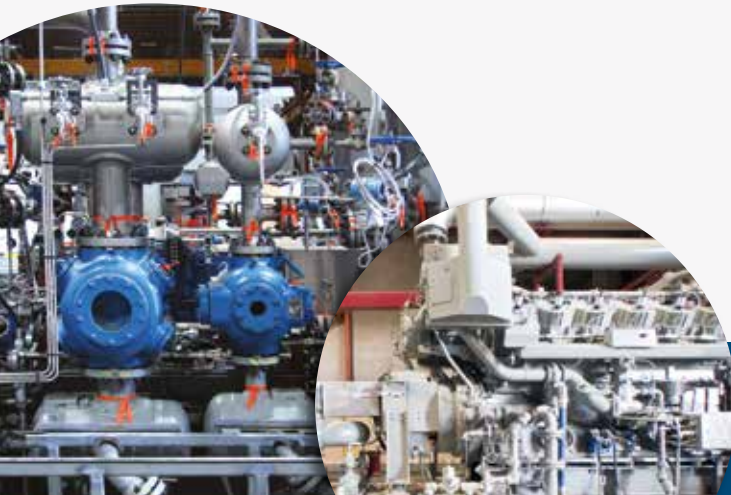
Divider blocks (also known as distribution blocks or divider valves) provided by CPI precisely distribute correct lubrication, reducing the size of lubricator boxes and maximizing lubrication system efficiency.

CPI's HP+ divider blocks are a high performance product line featuring:

- Standard base plate assembly mounts to multiple traditional industry bolt patterns
- Simplified ordering process to save time and reduce errors
- Improved performance for applications up to 6,500 psi (448 bar)
- Improved piston-to-bore geometry for consistent oil output and longer product life
- Improved overall sealing with precision CPI 1/8" ORB port geometry
- Complete assembly standard with O-ring seals eliminating leakage and need for sealant
- Each assembly comes standard with 1/8" ORB inlet tube fitting
- Nickel plated components improve corrosion resistance
- All base plate assemblies feature internal check valves for added performance protection
- Standard O-ring seals are VITON® O-Rings (FKM) for improved chemical and heat resistance
- Each divider block assembly is easily configured to the customer's specific lubrication needs



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CPI® COMPRESSOR PRODUCTS INTL

Proven Solutions for the Global Compression Industry™

BASE PLATE ASSEMBLIES

The HP+ base plate assemblies are pre-assembled and available to accommodate three to seven elements. The HP+ design mounts to multiple traditional industry bolt patterns (CCT, Lincoln, Trabon®). The base plate assemblies are fully assembled to simplify ordering and customer inventory. Each assembly comes with the CPI 1/8" ORB to 1/4" OD tube inlet fitting - Part No. 65005000042MCOR



PART NO.	PART TYPE	DESCRIPTION
650030000HPPBP3	Base Plate Assemblies	HP Plus 3 Section Base Plate
650030000HPPBP4	Base Plate Assemblies	HP Plus 4 Section Base Plate
650030000HPPBP5	Base Plate Assemblies	HP Plus 5 Section Base Plate
650030000HPPBP6	Base Plate Assemblies	HP Plus 6 Section Base Plate
650030000HPPBP7	Base Plate Assemblies	HP Plus 7 Section Base Plate

METERING ELEMENTS

CPI's HP+ divider block metering elements range in size 06 to 30 with oil output from 0.006 in³ (0.10 cc) to 0.060 in³ (1.00 cc). Twin elements (T) are ported to deliver oil to both left and right base outlet ports. Single elements (S) are ported to deliver oil to one base outlet port, either left or right side as desired. Crosssport bars are available to configure the oil output of the assembly. A crosssport bar transfers the oil from the above element to the next element in series.

PART NO.	PART TYPE	DESCRIPTION	OIL VOLUME per working outlet	
			in ³	cc
650030000HPP06S	ELEMENTS	HP Plus 06S Element	0.012	0.20
650030000HPP06T	ELEMENTS	HP Plus 06T Element	0.006	0.10
650030000HPP09S	ELEMENTS	HP Plus 09S Element	0.018	0.30
650030000HPP09T	ELEMENTS	HP Plus 09T Element	0.009	0.15
650030000HPP12S	ELEMENTS	HP Plus 12S Element	0.024	0.40
650030000HPP12T	ELEMENTS	HP Plus 12T Element	0.012	0.20
650030000HPP15S	ELEMENTS	HP Plus 15S Element	0.030	0.50
650030000HPP15T	ELEMENTS	HP Plus 15T Element	0.015	0.25
650030000HPP18S	ELEMENTS	HP Plus 18S Element	0.036	0.60
650030000HPP18T	ELEMENTS	HP Plus 18T Element	0.018	0.30
650030000HPP21S	ELEMENTS	HP Plus 21S Element	0.042	0.70
650030000HPP21T	ELEMENTS	HP Plus 21T Element	0.021	0.35
650030000HPP24S	ELEMENTS	HP Plus 24S Element	0.048	0.80
650030000HPP24T	ELEMENTS	HP Plus 24T Element	0.024	0.40
650030000HPP30S	ELEMENTS	HP Plus 30S Element	0.060	1.00
650030000HPP30T	ELEMENTS	HP Plus 30T Element	0.030	0.50



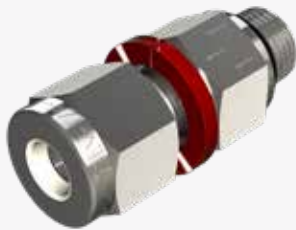
CROSSPORT BARS



PART NO.	PART TYPE	DESCRIPTION
650030000HPPCPL	Crossport Bars	HP Plus Crossport Bar Left
650030000HPPCPR	Crossport Bars	HP Plus Crossport Bar Right
650030000HPPCPB	Crossport Bars	HP Plus Crossport Bar Both

BASE PLATE CHECK VALVES

CPI recommends the use of the integral check valve and tube fitting featuring the CPI 1/8" ORB geometry for HP+ applications. This check valve is stainless steel and features an VITON® O-Rings (FKM) poppet sealing element. This check valve is only available from CPI and CPI distributors. Other check valves are available if the recommended check valve does not meet the customer's application.



PART NO.	PART TYPE	DESCRIPTION
65002000421PROR	Base Plate Check Valves	Base Plate Outlet Check Valve Tube Fitting, 1/8" ORB X 1/4" Tube, Poppet, Red Ring

BASE PLATE FITTINGS

CPI offers other 1/8" ORB fittings to support customer's specific needs. Industry standard 1/8" NPT fittings can be used with sealant if a 1/8" ORB fitting solution is not available.



PART NO.	PART TYPE	DESCRIPTION
65005000042MCOR	Base Plate Fittings	Base Plate Inlet Tube Fitting, 1/8" ORB x 1/4" Tube, Black Ring
650050004NPT2OR	Base Plate Fittings	Base Plate Port Adapter, 1/8" ORB x 1/4" NPT Female
65005000042TAOR	Base Plate Fittings	Tube Adapter Fitting, 1/8" ORB x 1/4" Tube Stub

MOUNTING BRACKETS

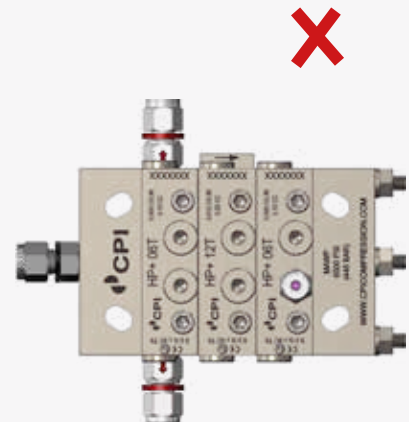
CPI offers numerous mounting bracket options.



PART NO.	PART TYPE	DESCRIPTION	FITS DIVIDER BLOCK SIZE
6500300000DBMBL	Mounting Brackets	Divider Block Mounting Bracket, L Configuration	All
6500300000DBMBZ	Mounting Brackets	Divider Block Mounting Bracket, Z Configuration	All
6500300DBMB9008	Mounting Brackets	Divider Block Mounting Bracket, 90 Degree Configuration (8")	3-5 Section HP Plus Blocks
6500300DBMB9010	Mounting Brackets	Divider Block Mounting Bracket, 90 Degree Configuration (10")	6-7 Section HP Plus Blocks
6500300DBMB9012	Mounting Brackets	Divider Block Mounting Bracket, 90 Degree Configuration (12")	All

MOUNTING RECOMMENDATIONS

Always mount a divider block to a flat surface with an approved orientation. Metering element piston-to-bore clearance is extremely close and precise. Any distortion that occurs during mounting can create piston-to-bore binding which leads to inconsistent operation, accelerated wear, and lubrication system shutdowns.

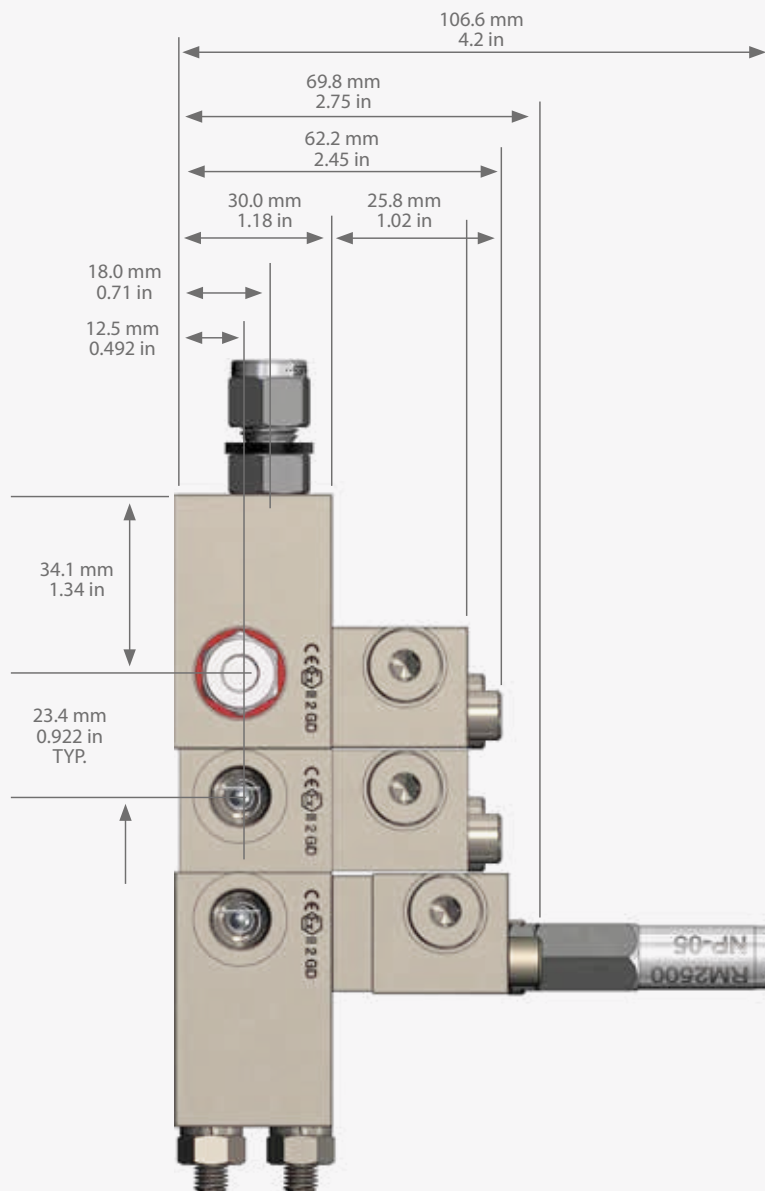


REPLACEMENT PARTS KITS

CPI offers the following replacement parts for field maintenance and service work.

PART NO.	PART TYPE	DESCRIPTION
650030001827PPK	Replacement Part Kits	1/8" ORB Port Plug Kit, Qty 25 Element Pin Indicator Ports and Base Plate Ports
650030071620PPK	Replacement Part Kits	7/16-20 ORB Port Plug Kit, Qty 25 Element Piston Bore Port
65003HPPXDPVORK	Replacement Part Kits	O-Ring Kit, A5568-006, Black Viton®, 90 Dur, Qty 150 Small Hydraulic Passage O-Rings
65003000HPPECHK	Replacement Part Kits	HP+ Element SHCS Kit, 1/4-28 x 1.5in, Qty 50 Mounts HP+ Elements to Base Plates

PRODUCT DIMENSIONS



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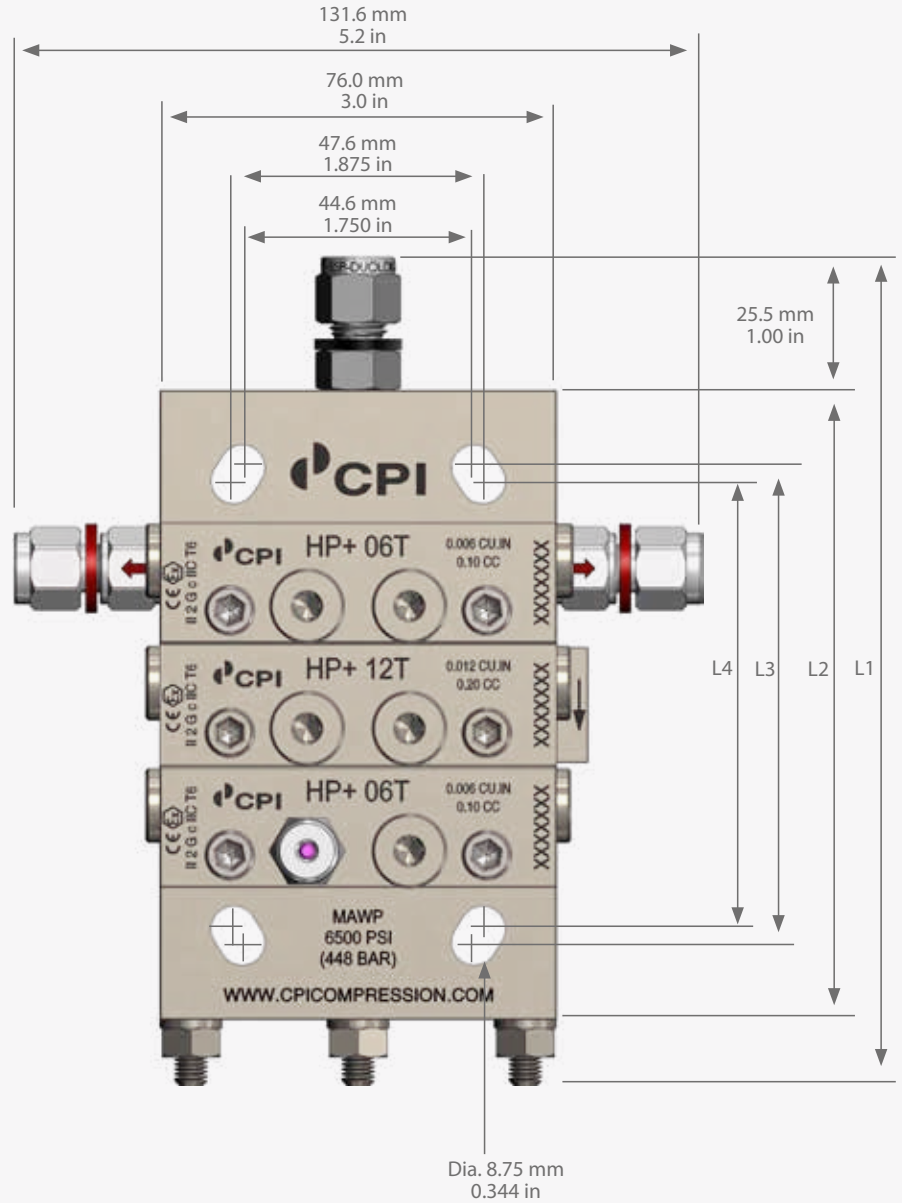
3 ELEMENT	INCHES	mm
L1	6.24	158.6
L2	4.74	120.4
L3	3.575	90.8
L4	3.375	85.7

4 ELEMENT	INCHES	mm
L1	7.17	182.0
L2	5.66	143.8
L3	4.497	114.2
L4	4.297	109.1

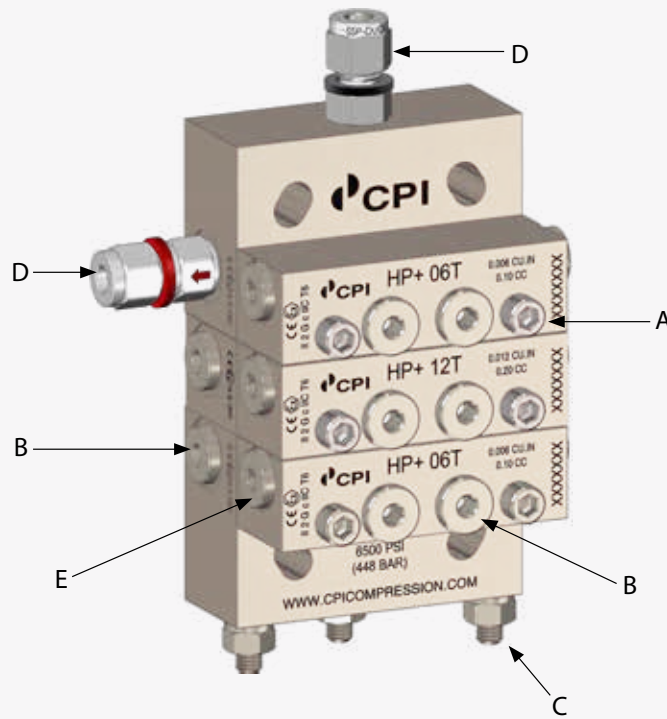
5 ELEMENT	INCHES	mm
L1	8.09	205.4
L2	6.59	167.2
L3	5.419	137.6
L4	5.219	132.5

6 ELEMENT	INCHES	mm
L1	9.01	228.9
L2	7.51	190.7
L3	6.341	161.1
L4	6.141	156.0

7 ELEMENT	INCHES	mm
L1	9.93	252.3
L2	8.43	214.1
L3	7.263	184.5
L4	7.063	179.4



TORQUE SPECIFICATIONS



LOCATION	DESCRIPTION	TORQUE (IN-LBS)	TORQUE (N-m)
A	Element SHCS	120	13.6
B	Element and Base Plate Recessed Hex Head 1/8" ORB Plug	60	6.8
C	Tie Rod Nuts	80	9.0
D	Check Valves, Tube Fittings, Pin Indicators with 1/8" ORB	80	9.0
E	Element Piston Port Recessed Hex Head ORB Plug and Accessories (Neomag® and Shutdown Device Magnet Assembly)	80	9.0

NOTES:

All values have a tolerance of ± 5 in lb (0.5 N-m)

All ORB style fittings should have a lubricant applied to the O-Ring prior to assembly to avoid O-Ring damage.

Lubricate element bolt threads with oil for improved torque accuracy.

ELEMENT INSTALLATION PROCEDURE:

Step 1: Seat the element by lightly tightening both SHCS to around 30 in lb (3.4 N-m)

Step 2: Torque both SHCS to 60 in lb (6.8 N-m)

Step 3: Torque both SHCS to 120 in lb (13.6 N-m)

HP+ divider blocks feature a CPI 1/8" ORB threaded port for all inlets, outlets, and metering element pin indicator ports. This thread geometry, when used with CPI designed check valves, fittings and accessories eliminates the use of thread sealants for a leak-free and easy to maintain design. This 1/8" ORB port also allows the use of standard 1/8" NPT fittings to be installed using traditional thread sealant. The CPI 1/8" ORB fittings, check valves and accessories are only available from CPI. Do not use an SAE-03 J514 ORB fitting in this port.



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.