

XD+ Divider Blocks

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

CPI's XD+ divider blocks are an extreme duty performance product line featuring:

- Symmetric element design adds mass around the piston for improved performance at higher pressures by reducing piston bore warping and expansion
- Improved piston-to-bore geometry for consistent oil output and longer product life
- Extreme performance for applications up to 8,000 psi (551 bar)
- Simplified ordering process to save time and reduce errors
- Improved overall sealing with precision CPI 1/8" ORB port geometry
- Dual inlet ports on top and bottom of divider block assembly for added flexibility
- Complete assembly standard with O-ring seals eliminating leakage and need for sealant
- Each assembly comes standard with ORB inlet tube fitting and 1/4" NPT adapter 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











BASE PLATE ASSEMBLIES

The XD+ base plate assemblies are pre-assembled and available to accommodate three to six elements. The XD+ design mounting pattern is unique. CPI offers all mounting brackets and information to provide easy customer installation. The base plate assemblies are fully assembled to simplify ordering and customer inventory. Each assembly comes with the CPI 1/8" ORB to ½" OD tube inlet fitting (Part No. 65005000042MCOR) and CPI 1/8" ORB to ½" NPT female adapter fitting (Part No. 6500500004NPT2OR).

PART NO.	PART TYPE	DESCRIPTION
650030000XDPBP3	Base Plate Assemblies	XD Plus 3 Section Base Plate
650030000XDPBP4	Base Plate Assemblies	XD Plus 4 Section Base Plate
650030000XDPBP5	Base Plate Assemblies	XD Plus 5 Section Base Plate
650030000XDPBP6	Base Plate Assemblies	XD Plus 6 Section Base Plate



METERING ELEMENTS

CPI's XD+ 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. Crossport bars are available to configure the oil output of the assembly. A crossport 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	
650030000XDP06S	Elements	XD Plus 06S Element	0.012	0.20
650030000XDP06T	Elements	XD Plus 06T Element	0.006	0.10
650030000XDP09S	Elements	XD Plus 09S Element	0.018	0.30
650030000XDP09T	Elements	XD Plus 09T Element	0.009	0.15
650030000XDP12S	Elements	XD Plus 12S Element	0.024	0.40
650030000XDP12T	Elements	XD Plus 12T Element	0.012	0.20
650030000XDP15S	Elements	XD Plus 15S Element	0.030	0.50
650030000XDP15T	Elements	XD Plus 15T Element	0.015	0.25
650030000XDP18S	Elements	XD Plus 18S Element	0.036	0.60
650030000XDP18T	Elements	XD Plus 18T Element	0.018	0.30
650030000XDP21S	Elements	XD Plus 21S Element	0.042	0.70
650030000XDP21T	Elements	XD Plus 21T Element	0.021	0.35
650030000XDP24S	Elements	XD Plus 24S Element	0.048	0.80
650030000XDP24T	Elements	XD Plus 24T Element	0.024	0.40
650030000XDP30S	Elements	XD Plus 30S Element	0.060	1.00
650030000XDP30T	Elements	XD Plus 30T Element	0.030	0.50



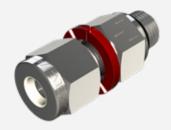
CROSSPORT BARS



PART NO.	PART TYPE	DESCRIPTION
650030000XDPCPL	Crossport Bars	XD Plus Crossport Bar Left
650030000XDPCPR	Crossport Bars	XD Plus Crossport Bar Right
650030000XDPCPB	Crossport Bars	XD 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, Custom 1/8" ORB X 1/4" Tube,
		Black Ring
650050004NPT2OR	Base Plate Fittings	Base Plate Port Adapter, Custom 1/8" ORB X 1/4"
		NPT Female
65005000042TAOR	Base Plate Fittings	Tube Adapter Fitting, Custom 1/8" ORB X 1/4" Tube Stub



MOUNTING BRACKETS

CPI offers numerous mounting bracket options. When using the bottom inlet port for the XD+ a taller 90 degree configuration bracket may be required.



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")	3-4 Section XD Plus Blocks
6500300DBMB9010	Mounting Brackets	Divider Block Mounting Bracket, 90 Degree Configuration (10")	5 Section XD Plus Block
6500300DBMB9012	Mounting Brackets	Divider Block Mounting Bracket, 90 Degree Configuration (12")	6 Section XD Plus Block

MOUNTING RECOMMENDATIONS

Always mount a divider block to a flat surface. 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.

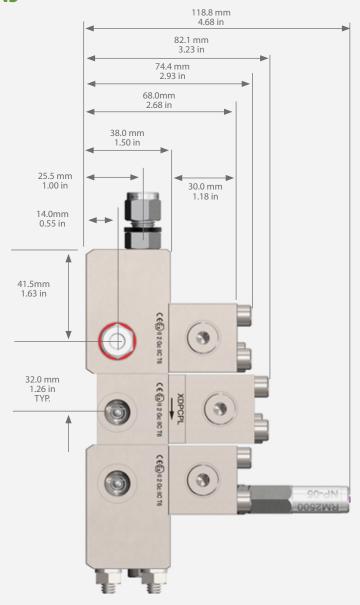


REPLACEMENT PARTS KITS

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, AS568-006, Black Viton®, 90 Dur, Qty 150
		Small Hydraulic Passage O-Rings
65003000XDPESHK	Replacement Part Kits	XD+ Element SHCS Kit, 1/4-28 x 1.75in, Qty 50
		Mounts XD+ Elements to Base Plates

PRODUCT DIMENSIONS





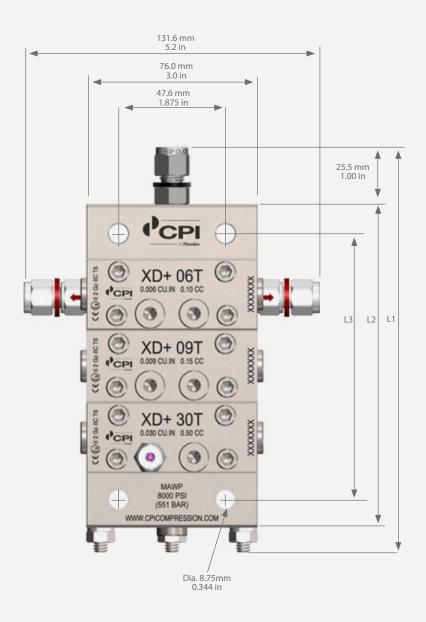
PRODUCT DIMENSIONS

3 ELEMENT	INCHES	mm
L1	7.1	180.3
L2	5.67	144.0
L3	4.665	118.5

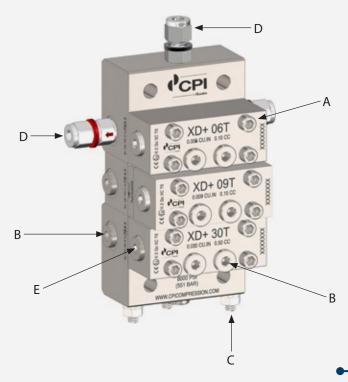
4 ELEMENT	INCHES	mm
L1	8.4	212.3
L2	6.93	176.0
L3	5.925	150.5

5 ELEMENT	INCHES	mm
L1	9.6	244.3
L2	8.19	208.0
L3	7.185	182.5

6 ELEMENT	INCHES	mm
L1	10.9	276.3
L2	9.45	240.0
L3	8.445	214.5



TORQUE SPECIFICATIONS



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

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:

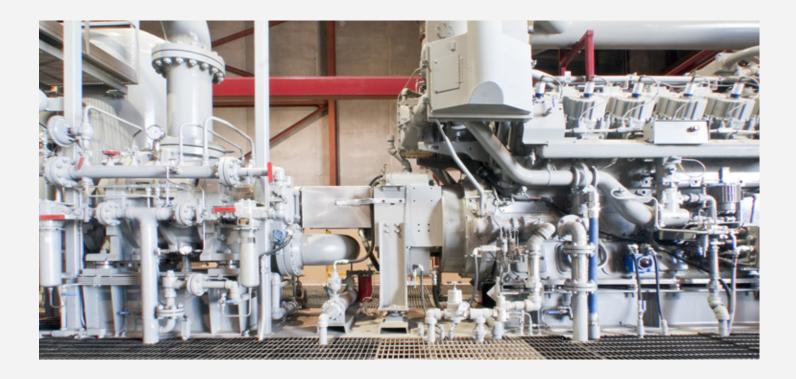
NOTE: TORQUE SHCS IN A "CRISSCROSS" PATTERN.

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

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

XD+ divider blocks feature a CPI 1/8" ORB threaded port for all inlets, outlets, and metering element pin indicator ports. This custom 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, part of the Howden group, 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.



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