

Manifold Accessories

HydraForce offers a range of accessories that can be used on its manifolds and housings. Port plugs, orifice plugs, plates and discs, screen cartridges, pilot pistons, and adaptor lock kits are among the offerings.

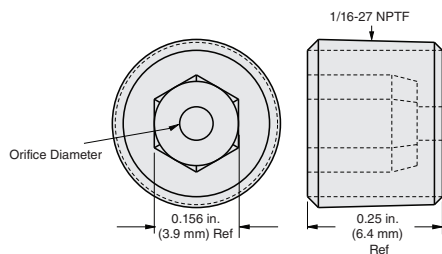
An Orifice Sizing Guide is available on catalog page 8.460.1. The Sizing Guide provides drill-through diameters for orifices for given flow ranges and pressures. It is helpful for sizing both orifice discs and plugs.

This section provides an overview of the accessories, with part numbers and sizing information.

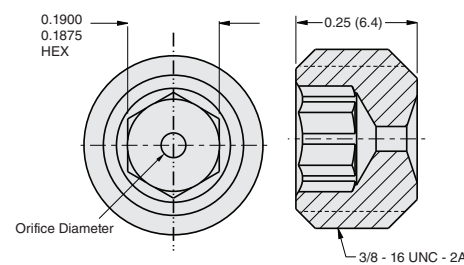
ORIFICE PLUGS

Made from a hex socket plug, orifice plugs can be pre-drilled or ordered as blanks. Orifice diameters can be specified within a range. See the Sizing Guide on catalog page 8.460.1.

Orifice Plug - Level Seal Plug 1/16" Taper - 6101

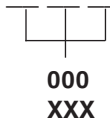


Orifice Plug - 3/8" Hex Socket - 6112



To Order:

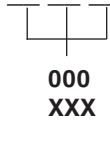
6101



Orifice Size

Blank (No Orifice) or . . .
XXX Specify Orifice Diameter from .020 to .156

6112



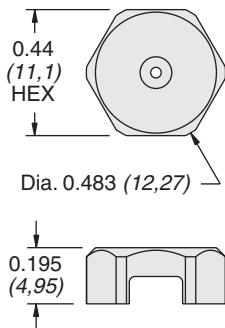
Orifice Size

Blank (No Orifice) or . . .
XXX Specify Orifice Diameter from .020 to .187

Note: Specify diameter in 0.001 inch increments with a tolerance of ± 0.001 . Minimum drill diameter is 0.020 in. Refer to Sizing Guide on catalog page 8.460.1. For smaller orifice sizes consult factory.

ORIFICE PLATES

Orifice Plates produce a higher restriction in one direction and a lower restriction in the other direction.

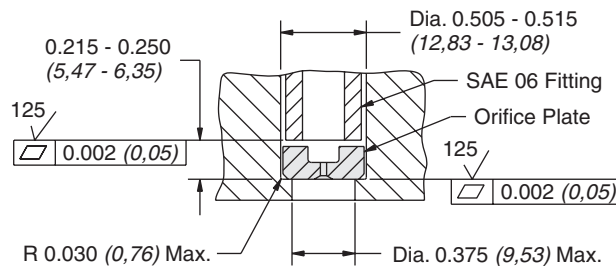


Inch
(mm)

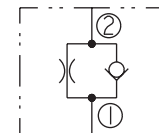
Orifice Plates

Orifice Dia.	Part No.
0.037 ± 0.002	4500210
0.046 ± 0.002	4500220
0.059 ± 0.002	4500230
0.030 ± 0.002	4531610
0.120 ± 0.002	4531840
0.156 ± 0.002	4531850
0.032 ± 0.002	4536440

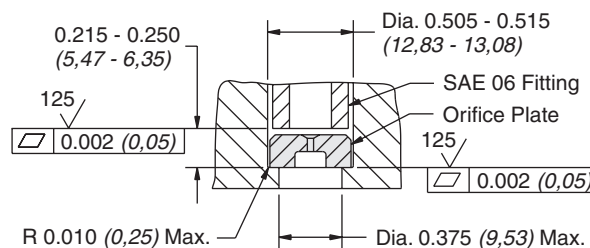
STANDARD POSITION



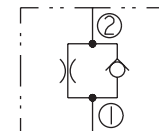
Flow is regulated from a hydraulic cylinder or motor, to the control valve



INVERTED POSITION



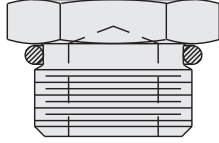
Flow is regulated from the control valve, to a hydraulic cylinder or motor



Manifold Accessories (cont'd)

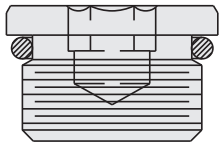
SAE PORT PLUGS

Available in Hex Head or Hex Socket Versions



**Hex Head
O-Ring Boss Plug**

Size	Part No.
SAE 2	6103102
SAE 4	6103104
SAE 6	6103106
SAE 8	6103108
SAE 10	6103110
SAE 12	6103112
SAE 16	6103116
SAE 20	6103120



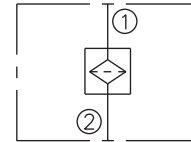
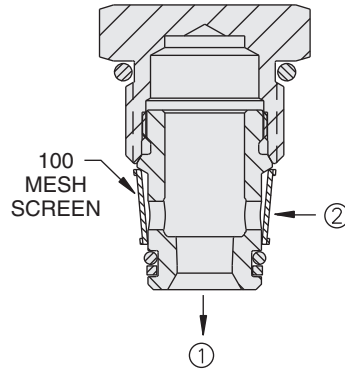
**Hex Socket
O-Ring Boss Plug**

Size	Part No.
SAE 2	6103002
SAE 4	6103004
SAE 6	6103006
SAE 8	6103008
SAE 10	6103010
SAE 12	6103012
SAE 16	6103016
SAE 20	6103020

SCREEN CARTRIDGES

These 100-mesh screen cartridges are not recommended substitutes for hydraulic filters. However, they are good low-cost "rock catchers" for shielding control orifices, pilot lines, etc.

Use SCxx cartridges for flow from port 2 to port 1 only.



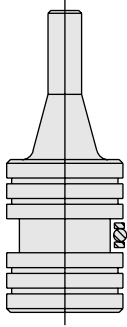
USASI SYMBOL

Size	Model	Part No.
08	SC08-20-0-N-100	5290210
10	SC10-20-0-N-100	5291210
16	SC16-20-0-N-100	5293601

Manifold Accessories (cont'd)

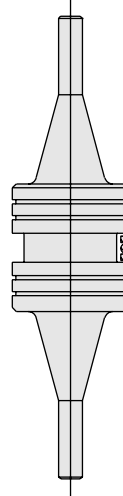
PILOT PISTONS

Pilot pistons can be successfully applied in aluminum housings if the designer and the fabricator prepare the bore correctly.



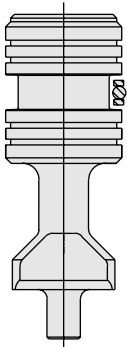
Single Piston

Size	Without Seals Part No.	With Seals Part No.	Cavity
08	7013280	7013280S	VC08-PCV
10	7013200	7013200S	VC10-PCV
12	7013360	7013360S	VC12-PCV
16	7013170	7013170S	VC16-PCV



Double Piston

Size	Without Seals Part No.	With Seals Part No.	Cavity
08	7013380	7013380S	VC08-DCV
10	7013300	7013300S	VC10-DCV
12	7013340	7013340S	VC12-DCV



Heavy Duty Piston

Includes oil passage in nose for use with center-hole poppets.

Size	Without Seals Part No.	With Seals Part No.	Cavity
10	4542160	4542160S	VC10-PCV
10	7030310	7030310S	VC10-CBV

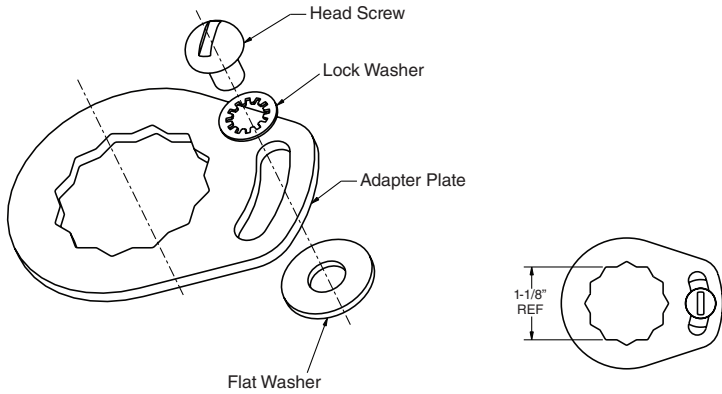
See Pilot Piston Cavity details in Catalog Section 9:

08-size cavities: section 9.108.1
 10-size cavities: section 9.110.1
 12-size cavities: section 9.112.1
 16-size cavities: section 9.116.1

Manifold Accessories (cont'd)

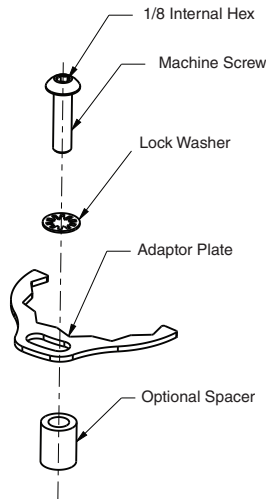
ADAPTOR LOCKDOWN KITS

Lockdown kits can be used to help prevent valves from backing out of their cavities. Kits include adaptor plate, lock washer and machine screw. HyPerformance™ valves, which have a larger hex size than comparable standard valves, use a special kit with clear zinc, circular adaptor plates that can be readily distinguished from the adaptor lockdown plates for standard valves.



Valve Model	Ref. Dim.	Kit Part No.
MR10	1 in.	5399000
HyPerformance™	1-1/16 in.	4605870
PV70 & ZL70	1-1/8 in.	4205140
SV12	1-1/8 in.	4205140
PD12	1-1/4 in.	5960110
PD16	1-1/2 in.	5960108
EP20 & PD42	1-7/8 in.	5960109
Valves with 1-inch Nominal Hex	1 in.	5965000

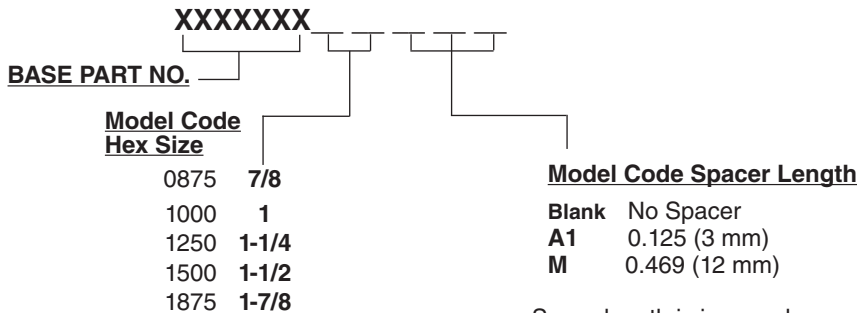
Adapter Lockdown Kit for SV12 Valve - P/N 4205140



Adapter Lockdown Kit for HyPerformance Valves - P/N 4605870

ADAPTER LOCKDOWN KIT ORDERING INFORMATION

Adapter lockdown kits may be used to help retain valves in their cavities. Kits include adaptor plate, lock washer, machine screw and optional spacer.



Screw length is increased as necessary to accommodate spacer length.