# **Hydraulic Quick Couplings**Mold Coolant

## Moldmate Series Coolant Line Connectors

Brass body, silicone seal





### Moldmate Series (1/4", 3/8", 1/2") **Performance** Test Fluid: Water (Straight Coupler) 50 45 1/4" Valved 40 3/8" Valved **Drop in PSID** 35 35 25 1/4" Non-valved 20 3/8" Non-valved 15 1/2" Non-valved 10 16 Flow in USGPM

### Guidelines for Selection and Use:

Non-valved couplers provide maximum flow for efficient cooling. Valved couplers shut off automatically when disconnected. Valved couplers can be used with either valved or non-valved nipples. A valved nipple, however, must be used with a valved coupler.

Moldmate couplings are rated for 200 psi max pressure. Most thermoplastic and thermoset heat transfer systems have pumps which provide relatively high flow rates at low pressures. Water and water glycol systems usually have capacities ranging from 10 to 40 gpm with most from 10 to 15 gpm. Normal medial opening pressures are 20 to 60 psi for these systems. Heat transfer systems using oil generally operate from 10 to 30 psi. However, their flow rates are usually much higher, requiring the total volume of oil to be circulated at least once per minute.

The number of hose connections in a single mold system results in a cumulative pressure drop. Please note the Pressure Drop vs. Flow Rate chart provided, to select the appropriate size.

Temperature is another important consideration. Parker Moldmate couplings with the standard silicone seal have a temperature capability of -90° to +400°F. Rapid deterioration of the seal and leakage may result if used beyond these limits.

External conditions of temperature, corrosive atmospheres, and other abnormalities may affect coupling performance and must be considered when selection is made. Consult QCD with questions.

Moldmate series couplings are specifically designed for connecting coolant lines to molds and dies on injection molding machinery and die casting equipment. These couplings significantly reduce downtime, by providing a quick and easy way to connect and disconnect lines during mold changes.

#### Features:

- Rated pressure is 200 psi
- Valved and unvalved options. Valved couplers have silver colored sleeves
- Brass material with standard silicone interface seals are compatible with water and water glycol fluids. Valved versions have a fluorocarbon seal on the poppet.
- Optional fluorocarbon seal for use with oil based media
- Short nipples can be installed recessed below the mold surface enabling more efficient storage and protecting the nipple from damage
- Standard and Push-Lok hose barb ends are available in straight, 45 or 90 degree configurations
- Manual sleeve operation
- Extension nipples are offered in several lengths

### Applications:

- Mold coolant lines
- Die casting equipment

### Special Order Information:

Standard seal material is Silicone and is compatible with water and water glycol fluids commonly used in heat transfer systems. Fluorocarbon seals are available for use with oilbased media. To specify a Fluorocarbon seal, add the suffix "Y" to the standard moldmate part number, thus: PC206Y.

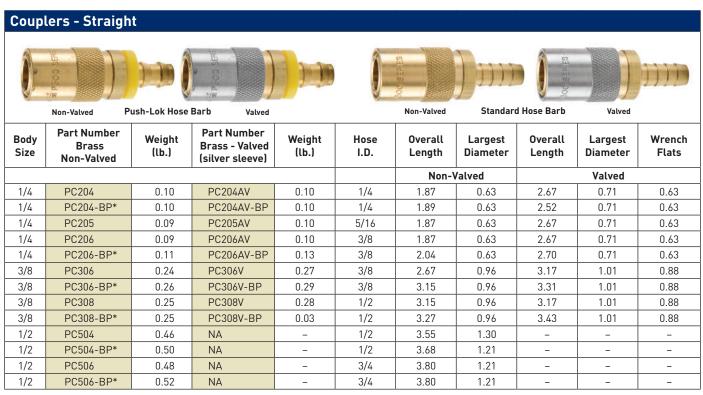
Specifications				
Body Size	1/4 3/8 1/2			
Rated Pressure (psi)	200			
Rated Flow (gpm)	3	6	12	

Material	Temperature Range	
Standard Silicone seal	-20° to +400° F	
*Optional Fluorocarbon seal	-15° to +400° F	

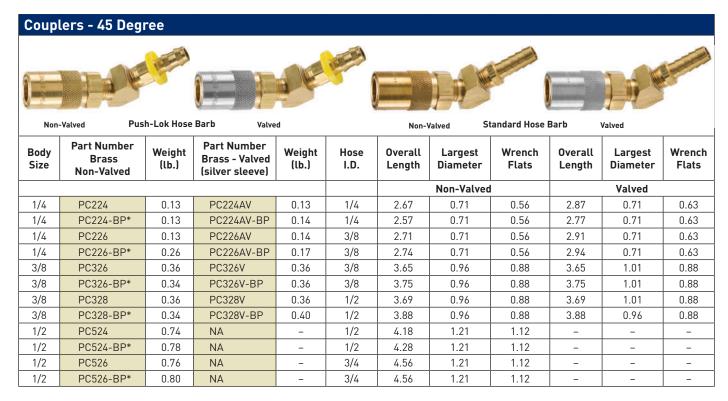
<sup>\*</sup> For use with oil based media only



Brass body, silicone seal



NA = Not Available



<sup>\*</sup> Suffix BP in part number denotes Push-Lok hose barb. Without suffix denotes standard hose barb.

Push-Lok hose barbs are designed for use with Parker Push-Lok hose and do not require clamps.

Valved Couplers can be used with either non-valved or valved nipples.



WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov



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#### Couplers - 90 Degree Push-Lok Hose Barb Non-Valved Standard Hose Barb Valved Weight **Overall** Wrench Body Part No. Brass Part No. Brass Weight Hose Largest **Overall** Wrench Largest Non-Valved (lb.) Valved (silver sleeve) (lb.) I.D. Length **Flats** Diameter Length Flats Diameter Size Non-Valved Valved PC214 0.13 PC214AV 0.14 1/4 1.78 0.56 0.71 1.98 0.63 0.71 1/4 PC214-BP\* 0.14 PC214AV-BP 0.14 1/4 1.78 0.56 0.71 1.98 0.63 0.71 PC215AV 0.14 0.71 1/4 PC215 0.13 5/16 1.78 0.71 0.56 1.98 0.63 PC216 PC216AV 0.15 3/8 1.78 0.56 0.71 0.71 1/4 0.14 1.98 0.63 1/4 PC216-BP\* PC216AV-BP 0.17 3/8 1.80 0.56 0.71 2.00 0.63 0.71 0.16 3/8 0.31 3/8 0.88 0.96 0.96 PC316 0.31 PC316V 2.78 2.78 0.88 3/8 0.37 3/8 0.96 2.78 PC316-BP\* 0.37 PC316V-BP 2.78 0.88 0.88 0.96 3/8 PC318 0.33 PC318V 0.35 1/2 2.78 0.88 0.96 2.78 0.88 0.96 3/8 PC318-BP\* 0.37 PC318V-BP 0.39 1/2 2.80 0.88 0.96 2.80 0.88 0.96 1/2 0.79 1/2 3.50 1.12 1.21 PC514 NA 1/2 PC514-BP\* 0.83 NA 1/2 3.50 1.12 1.21 1.21 1/2 PC516 0.80 NA 3/4 3.50 1.12 1.21 1/2 PC516-BP\* 0.84 NA 3/4 3.50 1.12

### **Sub Assemblies and Individual Replacement Parts**

### Non-valved Sub-assembly (Brass Sleeve)



Body Size	Part No. Brass Non-Valved	Weight (lb.)	Thread Size	Length	Largest Diameter	Wrench Flats
1/4	P208-01A	0.07	1/8-27 NPTF	1.15	0.71	0.56
3/8	P308-01A	0.21	1/4-18 NPTF	1.84	0.96	0.88
3/8	P308-01A-HF	0.20	3/8-18 NPTF	1.84	0.96	0.88
1/2	PC500	0.34	1/2-14 NPTF	2.02	1.21	1.12

### Valved Sub-assembly (Silver Colored Sleeve)



Bodies are designed for use with a valve and spring retained by a male pipe fitting (i.e. hose barb). An end fitting is required to retain the internal valving. Valve, valve spring, and end fitting are not included with subassembly and must be ordered separately.

Body Size	Part No. Brass Valved	Weight (lb.)	Thread Size	Length	Largest Diameter	Wrench Flats
1/4	P201-01A	0.07	1/8-27 NPTF	1.35	0.71	0.56
3/8	P301-01A	0.21	1/4-18 NPTF	1.84	0.96	0.88



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<sup>\*</sup> Suffix BP in part number denotes Push-Lok hose barb. Without suffix denotes standard hose barb. Push-Lok hose barbs are designed for use with Parker Push-Lok hose and do not require clamps. Valved Couplers can be used with either non-valved or valved nipples.

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### **Sub Assemblies and Individual Replacement Parts**

Valves (for Valved Sub-assembly)			Valve Springs (for Valved Sub-assembly)		
		Ollo			
Body Size	Part Number	Material	Body Size	Part Number	Material
1/4	3613001	Brass	1/4	7820123	Stainless
3/8	P300-11S	Brass	3/8	P300-6	Stainless

### Replacement Seals (for both Valved and Non-valved)



Body Size	Part Number	Material	Body Size	Part Number	Material
1/4	P200-9A	* Silicone	1/4	P200-9AY	* Fluorocarbon
3/8	P300-9A	* Silicone	3/8	P300-9AY	* Fluorocarbon
1/2	P500-9A	* Silicone	1/2	P500-9AY	* Fluorocarbon

<sup>\*</sup> Note: Bulk seals are not returnable.

Assembly Instruction Sheet (for all sizes & configurations)				
Part Number				
9090065				





