# **Hydraulic Quick Couplings**Mold Coolant

# Moldmate Series Special Purpose-Mold Coolant

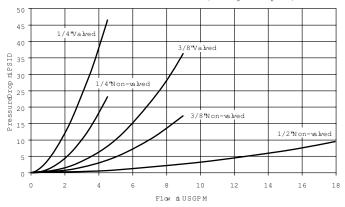
Brass body, silicone seal





### Performance

Moldmate Series (1/4", 3/8", 1/2") Test Fluid: Water (Straight Coupler)



#### **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	1/4 3/8 1/					
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



**B** Hydraulics

# Couplers - 90 Degree





Push-Lok Hose Barb

Body Size	Part No. Brass Non-Valved	Weight (lb.)	Part No. Brass Valved (silver sleeve)	Weight (lb.)	Hose I.D.	Overall Length	Wrench Flats	Largest Diameter	Overall Length	Wrench Flats	Largest Diameter
					Non-Valved			Valved			
1/4	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
1/4	PC215	0.13	PC215AV	0.14	5/16	1.78	0.56	0.71	1.98	0.63	0.71
1/4	PC216	0.14	PC216AV	0.15	3/8	1.78	0.56	0.71	1.98	0.63	0.71
1/4	PC216-BP*	0.16	PC216AV-BP	0.17	3/8	1.80	0.56	0.71	2.00	0.63	0.71
3/8	PC316	0.31	PC316V	0.31	3/8	2.78	0.88	0.96	2.78	0.88	0.96
3/8	PC316-BP*	0.37	PC316V-BP	0.37	3/8	2.78	0.88	0.96	2.78	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	PC514	0.79	NA	-	1/2	3.50	1.12	1.21		-	
1/2	PC514-BP*	0.83	NA	-	1/2	3.50	1.12	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	1.21		-	

<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.

# **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)



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

<sup>\*</sup>Bodies are designed for use with valves retained by a male pipe fitting (i.e. hose barb). Order valves and valve springs seperately.

