



Multi-Couplings for OEM's

Quick and Efficient Connections/Disconnections for Multiple Fluid Lines



ENGINEERING YOUR SUCCESS.

Simplify connections and save time with Parker's Multi-Couplings

When you're on the jobsite, the more ways you can minimize human error, the better. But the more hydraulic lines on a piece of equipment, the higher your risk for a wrong connection, leakage, or contamination, which can lead to:

- Unplanned downtime
- Safety issues
- Equipment/machine failure

Parker's Multi-Couplings provide a more streamlined and efficient connection which combines multiple couplings into a single connection point for easier connection and disconnection.

With a simple, single motion using an ergonomic lever, an operator can easily connect and disconnect the Multi-Coupling.



The Multi-Coupling allows the end user to:



Save Time

Single connection to couple multiple and various media lines simultaneously.



Maintain Safety

Locking options keep the connection secure while the equipment is in operation.



Avoid Errors

Keyed configurations and unique layouts reduce human error and provide mistake-proof connections that prevent crossed lines and assure consistent proper connections.



Increase Productivity

Simplifying equipment operation eliminates extensive training and improves "ease of use" for the end user.

Custom-Designed For Your Needs

Including:

- Various media lines
- Multiple hydraulic lines
- Different sizes
- Accommodations for electrical connectors

Parker's Multi-Couplings are uniquely designed and produced to meet your exact needs

Our engineering team works with you to enhance your equipment functionality and bring value to your end customer. Our comprehensive and collaborative process ensures quick development, and helps to accelerate the speed to market for equipment manufacturers.



Our Development Process:



Multi-Couplings are built to match the unique, custom layouts that you require, including:

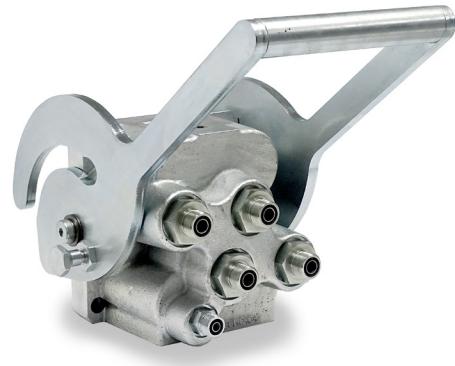
- Connector options:
 - Non-spill
 - Connect under pressure
- Various media lines
- Electrical accommodations
- System operating pressures up to 4,000 psi
- Up to 1-inch coupling size
- Locking options
- Cover options



Partnering with Parker

Parker's Quick Coupling Division (QCD) is the world's largest manufacturer of hydraulic and pneumatic quick couplings. Our strength in engineering and innovative design provided the agriculture industry with its first single-point connection to mate both hydraulic and electrical lines on tractor implements and harvesters.

QCD's state-of-the-art assembly cells feature new technologies and automated mistake-proofing systems with integrated in-line leak testing. With our comprehensive testing and leading manufacturing capabilities, we ensure a consistently reliable product is delivered to each customer.



Our extensive material and design knowledge with castings and forgings make QCD an ideal partner for OEM's in several markets, including:



Agriculture



Oil & Gas



Construction



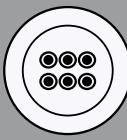
Forestry



Turf Care



Industrial



Body Size

1/2"

Multi-Couplings

MACH-Series

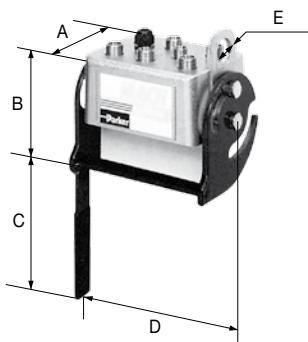


Technical Performance Data

Body Size inch	Temperatur Range	Maximum operating pressure
1/2"	-30°C up to +110°C	250 bar

Top Connector (Coupling Plate)

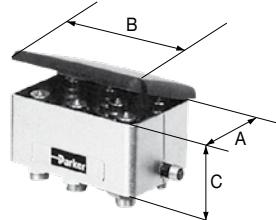
This top connector unit includes the top casting and automatic protective cover, 4 to 7 female quick couplings and a complete locking system. In the most common version with 7 lines, the top connector is also equipped with a 6 line male electrical connector as a standard feature.



	1/2"
A	120 mm
B	145 mm
C	160 mm
D	210 mm
E	Ø 30 mm

Base Connector (Plug Plate)

This base connector unit includes the base casting and automatic protective cover, 4 to 7 male quick couplings and the positioning pins. Also included are an adaptor and a plastic hose to drain oil. In the most common version with 7 lines, the base connector is also equipped with a 6 line male electrical connector as a standard feature.



	1/2"
A	109 mm
B	170 mm
C	70 mm

Technical Description

The couplings meet the requirements of ISO 7241-1 Series A. Possible to connect 4, 5, 6 or 7 hydraulic lines simultaneously. No coupling misconnection or accidental disconnection. Using a standard interface will still allow end users to connect their standard quick coupling equipped implements. In the version with seven lines (MACH 7), the base connector is equipped with an electrical connector as standard feature, which is an option on the MACH 4, 5 and 6.

Advantages

Individual ball locking system and central cam locking mechanism: a simple movement enables to connect all the hydraulic lines. Three part poppet style valving with a molded shaped seal to prevent seal washout at high flow rates. Possible to connect with two lines under 200 bar, if other lines are not under pressure. Easy and fast connection and disconnection of implements or tooling.

Applications

- Agricultural (front loaders, hedge cutters,...)
- Road service vehicles (road systems lorries, road sweepers, snowploughs,...)
- Industrial Applications

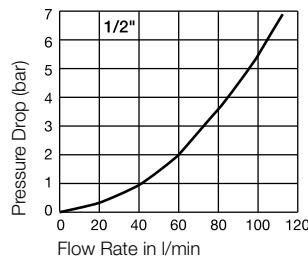
Working Pressure

max. 250 bar

Working Temperature

-30°C up to +110°C (NBR) depending on the medium.

Flow Capacity with Oil with Viscosity of 43cSt at 38°C as per ISO 7241/2-2000

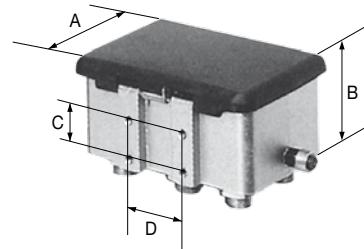


Material

Coupling-/Plug Plates	Steel
Support Plate	Steel
Protective Cap	Thermoplastic
Couplings and Plugs	Steel
Seals	NBR
Locking Mechanism	Steel
Connector Castings	Aluminium

Installation

Base unit: Mounted with 4 screws M 8 x 1,25 mm



	1/2"
A	125 mm
B	80 mm
C	30 mm
D	50 mm

Coupling Plate**MACH-Series**

Body Size	Number of Hydraulic Lines	Number of Threads DIN2353 15L (M22x1,5)	Number of Threads DIN2353 12L (M18x1,5)	Electrical Connector	Part Number
	1/2"	4	4	0	without MACH4/715LT
	1/2"	4	4	0	with MACH4/715LTE
	1/2"	5	5	0	without MACH5/715LT
	1/2"	5	5	0	with MACH5/715LTE
	1/2"	6	6	0	without MACH6/715LT
	1/2"	6	6	0	with MACH6/715LTE
	1/2"	7	6	1	with MACH7T

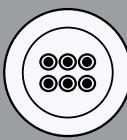
Plug Plate**MACH-Series**

Body Size	Number of Hydraulic Lines	Number of Threads DIN2353 15L (M22x1,5)	Number of Threads DIN2353 12L (M18x1,5)	Electrical Connector	Part Number
	1/2"	4	4	0	without MACH4/715LB
	1/2"	4	4	0	with MACH4/715LBE
	1/2"	5	5	0	without MACH5/715LB
	1/2"	5	5	0	with MACH5/715LBE
	1/2"	6	6	0	without MACH6/715LB
	1/2"	6	6	0	with MACH6/715LBE
	1/2"	7	6	1	with MACH7B

Oil Drain Kit

Description	Part Number
This kit includes the removable tank to contain oil spillage and a holding fixture.	MACH A

Description	End Configuration	Part Number
Electrical socket		MACH 8900214
Washer		MACH 8900227
Grommet		MACH 8900226
Electrical plug		MACH 8900213
Snap ring		MACH7980035
Counter plate		MACHF08767030
Cover		MACH5400303
Adaptor outside seal		JT020117N0552
Coupling	DIN 2353-15L	3V54D6X5MCH
Plug	DIN 2353-15L	4V14E6X5MCHA
Coupling	DIN 2353-12L	3V54D6X4MCH
Plug	DIN 2353-12L	4V14E6X4MCHA



Body Size

1/2"

Multi-Couplings

MACH 2-Series



Technical Performance Data

Body Size inch	Temperatur Range	Maximum operating pressure
1/2"	-30°C up to +110°C	250 bar

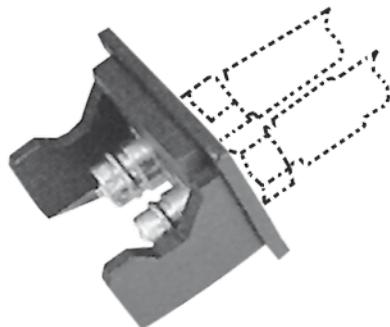
Connecting box (Coupling Plate)

Complete unit including the base connector unit, its dust cover, a lever acting as a central locking device and 2 female couplings.



Plug Plate

Complete unit including the connecting plug and 2 male tips, which meet the requirements of ISO 7241-1-A.



Technical Description

The couplings meet requirements of ISO 7241-1 Series A. Possibility to connect 2 hydraulic lines simultaneously. No coupling misconnection or accidental disconnection. Possibility of connecting under pressure up to 250 bar in one hydraulic line only.

Advantages

Central came locking system. Poppet style valving with a molded shaped seal to prevent seal washout at high flow rates.

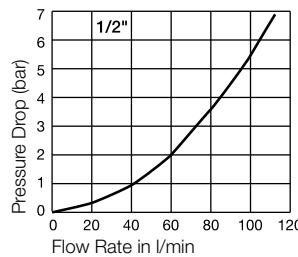
Applications

- Agricultural (front loaders, hedge cutters,...)
- Road service vehicles (road systems lorries, road sweepers, snowploughs,...)
- Industrial Applications

Working Pressure
max. 250 bar

Working Temperature
-30°C up to +110°C (NBR)
depending on the medium.

Flow Capacity with Oil with Viscosity of 43cSt at 38°C as per ISO 7241/2-2000

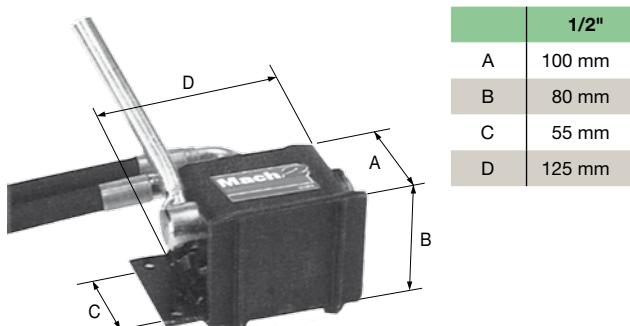


Material

Protective Cap	Thermoplastic
Quick Connect Couplings/-Plugs	Steel
Seals	NBR
Locking Mechanism	Steel
Casting Boxes	Steel

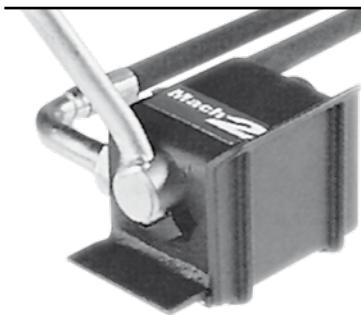
Installation

Mechanical attachment: 2 mounting holes Ø 8,5 mm



Coupling Plate

MACH 2-Series



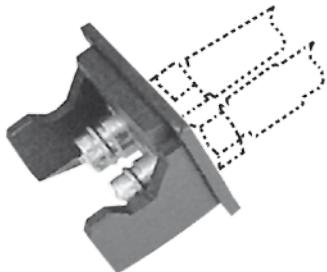
End Configuration	Coupling (2 pcs.)	Top Casting (1 pc.)	Weight gr.	Part Number
	M 22 x 1,5 - DIN2353-15L	1/2"	1/2"	2723

Other types of MACH 2 with non-spill connections are also available on request.

Please consult us for further information.

Plug Plate

MACH 2-Series

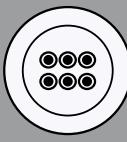


End Configuration	Coupling (2 pcs.)	Top Casting (1 pc.)	Weight gr.	Part Number
	M 22 x 1,5 - DIN2353-15L	1/2"	1/2"	1203

Spare Parts

Part Number	Description	
JT020117N0552	Coupling seal	
LV54D6X5MLXC	Coupling	
LV14E6X5MLX	Plug	

⚠ Please consider our security advices on the pages 12/13 ⚠



Body Size

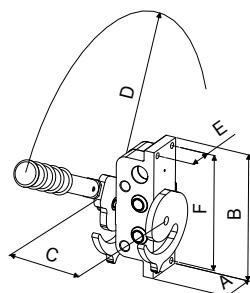
3/8" up to 1/2"

Multi-Line

C-Line Compact

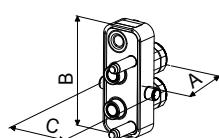


All designs with female thread.



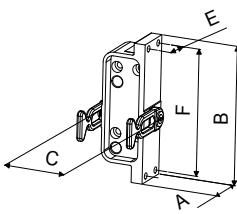
Coupling Plate / Combinations

	3/8" and 1/2"
A	60 mm
B	189 mm
C	108 mm
D	278 mm
E	40 mm
F	173 mm



Plug Plate / Combinations

	3/8"	1/2"
A	72 mm	84 mm
B	150 mm	150 mm
C	88 mm	88 mm



Support Plate

	3/8" and 1/2"
A	52 mm
B	189 mm
C	86 mm
E	30 mm
F	173 mm

Technical Description

Multiple connector system with locking lever and safety locking. Original TEMA plug-profile with spill-proof flat face design. Coupling body/plug fitted with high-flow valve system.

Pressure Eliminator

All plugs are fitted with pressure eliminators to eliminate residual pressures up to maximum working pressure on the plug side (maximum 50 bar on the coupling side).

7-pole Electrical Connection

- Male part (coupling plate)
- Cable: 7 x 1,5 RDOE 5m
- Female part (plug plate)
- Cable: 7 x 1,5 RDOE 3m
- Not IP classified
- Contact block: NBR
- Connector: (pins and casing) bronze, silver plated
- Electric connection box: Thermoplastic (POM)
- Pull relief (cable): PA/NBR
- Max. voltage: 24 V
- Max. current: 16 A*

* For return-current through cable, the total permitted current through the connector is maximum 16 A.

Working Temperature

-30°C up to +100°C (NBR/PUR)

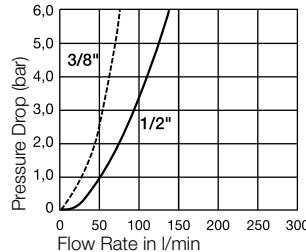
Working Pressure

Max. pressure range: 350 bar (safety factor 4:1)

Attention:

Half the number of connections in the respective sizes.

Flow Capacity with Oil with Viscosity of 32cSt at 40°C as per ISO 7241/2-2000



Hydraulic Flow:

3/8" – 54 l/min (3 bar press. drop)
1/2" – 97 l/min (3 bar press. drop)

Nominal Diameter in mm:

3/8" – 10
1/2" – 12,5

Material

Coupling-/Plug Plates	Aluminium, anodised-blue
Support Plate	Aluminium, anodised-blue
Protective Cap	Aluminium, anodised-blue, NBR-seal
Couplings and Plugs	Steel, zinc-plated, passivated (Cr3+), movable sleeves made of stainless steel AISI 304
Seals	NBR/PUR; replaceable profile ring on plug side
Locking Mechanism	Steel, zinc-plated, passivated (Cr3+)
Locking Button	Aluminium, anodised-red
Blank Plug	Thermoplastics (POM)

Coupling Plate with Protective Cap (3/8")**C-Line Compact**

		Coupling 3/8"	Electrical Connection (1 pc.)	Blank Plug 1/2"	Locking Lever Pos.	Locking Button	Weight gr.	Part Number
		2	7-pole		right	right	6000	TMFC 33Y BBR*
		2		1	right	right	4800	TMFC 33W BBR*
		2	7-pole		left	left	6000	TMFC 33Y B**
		2		1	left	left	4800	TMFC 33W B**
The protective cap is included.								
The coupling plate is supplied complete with assembly kit TM-210K.								

Plug Plate with Support Plate (3/8")**C-Line Compact**

		Plug 3/8"	Electrical Connection (1 pc.)	Blank Plug 1/2"	Locking Lever Pos.	Locking Button	Weight gr.	Part Number
		2	7-pole				3600	TMMC 33Y
		2		1			2800	TMMC 33W
The support plate is included.								
The support plate is supplied complete with assembly kit TM-214K.								

Coupling Plate with Protective Cap (1/2")**C-Line Compact**

		Coupling 1/2"	Electrical Connection (1 pc.)	Blank Plug 1/2"	Locking Lever Pos.	Locking Button	Weight gr.	Part Number
		2	7-pole		right	right	6100	TMFC 55Y BBR*
		2		1	right	right	4800	TMFC 55W BBR*
		2	7-pole		left	left	6100	TMFC 55Y B**
		2		1	left	left	4800	TMFC 55W B**
The protective cap is included.								
The coupling plate is supplied complete with assembly kit TM-210K.								

Plug Plate with Support Plate (1/2")**C-Line Compact**

		Plug 1/2"	Electrical Connection (1 pc.)	Blank Plug 1/2"	Locking Lever Pos.	Locking Button	Weight gr.	Part Number
		2	7-pole				4100	TMMC 55Y
		2		1			3300	TMMC 55W
The support plate is included.								
The support plate is supplied complete with assembly kit TM-214K.								

* Designed to be used on the right hand side of the excavator arm. On wheel-loaders the mounting is on the inside of the right loading arm. (As seen from the drivers seat).

** Designed to be used on the left hand side of the excavator arm. On wheel-loaders the mounting is on the inside of the left loading arm. (As seen from the drivers seat).