

# Macdonald Range

| PRODUCT                                | Description  | Uses  | Range   |
|--|--|---|---|
| <b>STANDARD Quick Action Couplings</b> | Macdonald STANDARD QUICK ACTION Couplings are bayonet style couplings which are used in pairs. A pair of couplings comprises a Female and Male coupling which are connected together by a push and quarter turn. Once connected, the spring loaded sleeve of the Male coupling prevents accidental disconnection. DIRECTION OF FLUID FLOW IS FROM FEMALE TO MALE on ALL Macdonald QUICK ACTION Couplings.  | Used on Compressed Air, Nitrogen and Low Pressure Steam lines in oil refineries, Chemical and Industrial Plants to ensure maximum safety of operation. Couplings may be colour coded for ease of fluid identification and may be uniquely dimensioned so that couplings intended for use with a particular fluid CANNOT BE CONNECTED to couplings intended for use with another fluid.  | <b>Standard Range</b><br>Sizes: 1/4"(6mm) to 1"(25mm) hose tail(HF or HM) inside thread (IF or IM) or outside thread (OF or OM) are available on Female or Male couplings respectively.<br><b>3/4"(19mm) Bore Range</b><br>1"(25mm) hose tail, inside or outside thread.<br><b>1"(25mm) Bore Range</b><br>1.1/4"(32mm) or 1.1/2"(38mm) hose tail, inside or outside thread.<br><b>1.1/2"(38mm) Bore Range</b><br>2"(51mm) hose tail, inside or outside thread. BSP (taper or parallel) or NPT threads available |
| <b>Air Valve Couplings</b>             | This is a one way shut - off coupling incorporating a valve which Automatically shuts-off fluid supply, upon disconnection of the Male from the Female coupling. A valve inside the Female coupling opens when the couplings are connected and closes when they are disconnected. Available in 'reverse flow' version if required.   | May be used in place of a STANDARD Female QUICK ACTION COUPLING to give Automatic shut-off of fluid flow when required. Usually fitted to a portable Air Compressor or to fixed pipework in Chemical Plants or Industrial Installations.  | Sizes 1/2"(13mm), 3/4"(19mm) or 1"(25mm) BSP or NPT threads available   |
| <b>Airstopper Couplings</b>            | If a hose bursts or a coupling downstream of the AIRSTOPPER becomes disconnected accidentally, flow through the AIRSTOPPER is Automatically and Immediately stopped, thereby avoiding hose whipping or snaking. After closing Automatically the AIRSTOPPER allows a small bleed of fluid to flow through its disc valve to warn users that the system is still live. The AIRSTOPPER may be likened to a FUSE in an electrical circuit. Available in 'reverse flow' version if required.  | Once again the AIRSTOPPER may be used in place of a STANDARD Female coupling to give instant shut-off of fluid flow in event of a hose burst or accidental disconnection. The AIRSTOPPER is used at the inlet of 19mm (3/4") or larger bore hose and is permanently installed on portable Air Compressors or fixed pipework to give added security in event of an accident. The AIRSTOPPER incorporates two valves separated by a spring and performs in the same manner as an AIR VALVE coupling when the male Coupling is disconnected from the Female. | Sizes 1/2"(13mm), 3/4"(19mm) or 1"(25mm) BSP or NPT threads available   |
| <b>Whipstopper Coupling</b>            | The WHIPSTOPPER coupling incorporates a disk valve which closes Automatically if a hose bursts or a coupling disconnects accidentally downstream of a WHIPSTOPPER. After closing Automatically the AIRSTOPPER allows a small bleed of fluid to flow through its disc valve to warn users that the system is still live.  | The WHIPSTOPPER may be used to give Automatic stoppage of fluid flow if a hose bursts or disconnects accidentally. The WHIPSTOPPER is used on 13mm(1/2") or smaller hose and may be permanently fixed to a "whip" hose fitted to an Air Tool. Larger sizes have threaded connections.   | Sizes 3/8"(9.5mm), 1/2"(13mm) Hose tail or threaded<br>Sizes 3/4" or 1" - threaded only   |
| <b>Sleeve Turn Coupling</b>            | The SLEEVE TURN feature enables the Female coupling to rotate through 360 degrees relative to the Male coupling whilst connected, thereby avoiding hose twisting or kinking.   | SLEEVE TURN couplings may be used in place of any FEMALE QUICK ACTION coupling in applications where it is desirable to rotate the Female coupling relative to the Male whilst the couplings are connected.   | <b>Standard Range</b><br>Sizes: 1/4"(6mm) to 1"(25mm) hose tail (HF) inside thread (IF) or outside thread (OF or OM) are available on Female couplings only.<br><b>Larger sizes to special order.</b>   |
| <b>Sleeve Lock Coupling</b>            | The SLEEVE LOCK feature consists of a screwed ring which locks on the male coupling body, just behind the sliding sleeve after connection of a pair of couplings. It reduces the risk of accidental coupling disconnection.  | Any Male QUICK ACTION coupling may be replaced by a SLEEVE LOCK to give additional security and reduce the possibility of accidental coupling disconnection.  | <b>Standard Range</b><br>Sizes: 1/4"(6mm) to 1"(25mm) hose tail (HM) inside thread (IM) or outside thread (OM) are available on Male couplings only.<br><b>Larger sizes to special order.</b>   |
| <b>Fire Hose Reel Couplings</b>        | Macdonald QUICK ACTION Fire Hose Reel couplings are designed to wrap readily round "First Aid" high pressure hose reels. They are compact and allow maximum water flow rates through standard bore hoses. Like STANDARD QUICK ACTION couplings they consist of a female and male half which are easily connected with a simple push and quarter turn action. This allows the spring loaded locking sleeve on the Male coupling to spring forward and create a secure connection. Disconnection is achieved by pulling back the locking sleeve and giving a quarter turn. | Used on Fire Fighting Vehicle "First Aid" high pressure hose reels, Macdonald Fire Hose Reel Couplings are compact, easily connected and disconnected and have been developed in conjunction with Fire Brigades to minimise the possibility of causing water hammer problems. Several types of hose tail forms are available, including stub & chimney. All types are available with knurled finish to give enhanced grip between hose and coupling.  | Sizes 3/4"(19mm) and 1"(25mm) hose tail, inside or outside threads available  |



# Macdonald COUPLINGS

## Materials Spec.

## Interchangeability

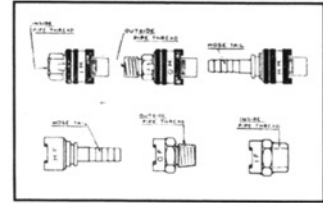
## Working Pressures

**Bodies:**  
Mild Steel, 220m07, Zinc Plated  
**Sleeve Return Springs:**  
Stainless Steel, 302 S26/2BS2056  
**Seals:**  
-30degrees C to + 120 degrees C Nitrile  
Rubber as standard.  
-20degrees C to + 200degrees C Viton to special order

Any size of styles HFJF or OF will connect with any size HM, IM or OM within each range.

Maximum safe working pressure for hose ends depends on hose specification and type of hose clamps used.

Up to 50 Bar ( 725psi ) is common.



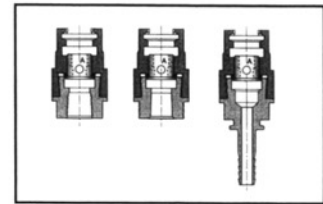
**Bodies:**  
Mild Steel, 220m07, Zinc Plated  
**Sleeve Return Springs:**  
Stainless Steel, 302 S26/2BS2056  
**Valves:**  
Brass as Standard.  
Stainless Steel to Special Order.

Will connect with any Male coupling from the STANDARD RANGE of QUICK ACTION couplings.

Maximum safe working pressure for hose ends depends on hose specification and type of hose clamps used.

Up to 50 Bar ( 725psi ) is common.

Note:  
A male coupling cannot be connected to an AIR VALVE coupling against a pressure of more than 6bar (87psi)

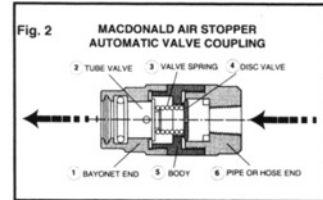


**Bodies:**  
Mild Steel, 220m07, Zinc Plated  
**Sleeve Return Springs:**  
Stainless Steel, 302 S26/2BS2056  
**Valves:**  
316 Stainless Steel.

Will connect with any Male coupling from the STANDARD RANGE of QUICK ACTION couplings.

Designed to shut-off automatically at pressures up to 10 bar (145psi).

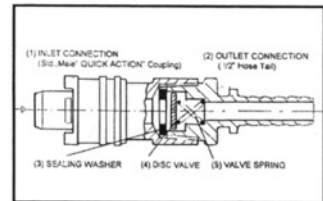
Note:  
A male coupling cannot be connected to an AIRSTOPPER coupling against a pressure of more than 6bar (87psi)



**Bodies:**  
Mild Steel, 220m07, Zinc Plated  
**Sleeve Return Springs:**  
Stainless Steel, 302 S26/2BS2056  
**Valves:**  
316 Stainless Steel.

Will connect with any Female coupling from the STANDARD RANGE of QUICK ACTION couplings or with any make of AIRSTOPPER couplings.

Designed to shut off automatically at pressures up to 10 bar (145psi).

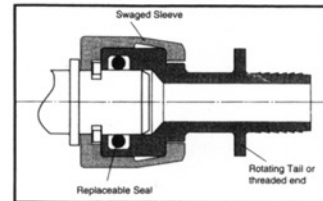


**Bodies:**  
Mild Steel, 220m07, Zinc Plated  
**Seals:**  
-30degrees C to + 120 degrees C Nitrile  
Rubber as standard.  
-20degrees C to + 200degrees C Viton to special order

Will connect with any Male coupling from the STANDARD RANGE of QUICK ACTION couplings or with any make of WHIPSTOPPER coupling.

Maximum safe working pressure for hose ends depends on hose specification and type of hose clamps used.

Up to 50 Bar ( 725psi ) is common.

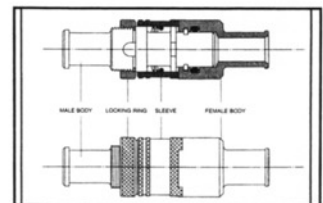


**Bodies:**  
Mild Steel, 220m07, Zinc Plated  
**Sleeve Return Springs:**  
Stainless Steel, 302 S26/2BS2056

Will connect with any Female coupling from the STANDARD RANGE of QUICK ACTION couplings.

Maximum safe working pressure for hose ends depends on hose specification and type of hose clamps used.

Up to 50 Bar ( 725psi ) is common.



**Bodies:**  
Brass As Standard - Stainless Steel to special order.  
**Springs:**  
Stainless Steel  
**Seals:**  
-30degrees C to + 120 degrees C Nitrile  
Rubber as standard.  
-20degrees C to + 200degrees C Viton to special order

Any Female hose tail, inside thread or outside thread coupling (HFJF or OF), will connect to any Male hose tail, inside thread or outside thread coupling (HM,IM or OM).

Maximum safe working pressure for hose ends depends on hose specification and type of hose clamps used. Extensive tests have been carried out at pressures of up to 100bar (1450psi) and working pressures of 40bar(580psi) are common.

