

GLOSSARY OF TERMS

AIR INCLUSION The ambient atmosphere forced or trapped into the system during connection of the quick disconnect coupling halves.

BALL VALVE Provides a rugged and reliable sealing surface.

BODY HALF Other nomenclature "female half", "coupler", "socket". The receptacle portion of a quick disconnect coupling which normally includes the mechanism to lock the two quick disconnect coupling halves together.

BREAK-AWAY Automatic separation of a quick disconnect coupling when an axial separation force is applied.

BREAK-AWAY CLAMP A clamping device that holds the quick disconnect coupling sleeve, allowing the body to move forward upon disconnect within either a single-acting or double-acting sleeve or backward upon connection within a double-acting sleeve.

BRINELLING Indentation marks (dimples) or grooves worn into the shoulder of the quick disconnect coupling male half by the locking (detent) balls in the female half.

BURST PRESSURE The pressure at which a device fails, losing its ability to contain pressure.

COMPLETE COUPLING Other nomenclature "coupling", "quick disconnect coupling". The two separate quick disconnect coupling halves connected together.

CONNECT UNDER PRESSURE Ability to connect coupling halves with internal pressure applied to either or both coupling halves.

COUPLING, FEMALE HALF Other nomenclature "body half", "coupler", "socket".

COUPLING, MALE HALF Other nomenclature "male tip", "nipple", "plug".

DOUBLE-ACTING SLEEVE Other nomenclature "two-way sleeve". Allows one hand push-to-connect or pull-to-disconnect convenience when the quick disconnect coupling female half is clamp or bulkhead mounted and connected to a hose.

DUST CAP A removable device that protects the male tip half when disconnected from the female coupling half. Excludes contamination.

DUST PLUG A removable device that protects the female body half when disconnected from the male tip half. Excludes contamination.

FLOW CHECKING Other nomenclature "ball checking", "lock-up", "check-off". Occurs when the male tip half valve closes during high flow conditions, such as when quickly lowering a heavy loader.

INTERCHANGE The ability of a quick disconnect coupling half from one manufacturer to fit and function with a mating half from another manufacturer without assurance of equal pressure containment rating or performance.

INTERFACE That portion of the male tip (nipple) half that establishes and controls interchangeability.

LOCKING BALLS Other nomenclature "detent balls". Normally found in the female half of the quick disconnect coupling, they align with the shoulder groove on the mating male half providing a durable locking mechanism while allowing both coupling halves to swivel and align easily.

OPERATING PRESSURE The maximum pressure at which a system is operated.

POPPET VALVE Machined, self aligning valve that incorporates an elastomer to provide a positive seal upon disconnection, no low pressure leakage, and generally provides higher flow than a ball valve.

QUICK DISCONNECT COUPLING A device to join or separate fluid lines without the use of tools or special devices.

RATED PRESSURE The maximum pressure at which a device is designed to operate.

SHIELDED RETAINER Other nomenclature "valve shield". Protects valving from high velocity flow, preventing flow checking. Used primarily on agricultural interchange quick disconnect couplings.

SINGLE-ACTING SLEEVE Other nomenclature "one-way sleeve". Making a connection requires manually pushing the sleeve backward or pulling the body forward when mounted in a breakaway clamp, inserting the male tip, then allowing the sleeve to return to its original position. Allows pull-to-disconnect convenience when the coupling is mounted in a breakaway clamp. Sleeve Lock Prevents accidental disconnection. An arrangement which provides an additional lock which must be actuated prior to the retraction of the locking sleeve.

SPILLAGE Occurs upon disconnection of the quick disconnect coupling. This is the fluid trapped between the mating seal and the valve seal of the mating halves.

SURGE PRESSURE The pressure existing from surge conditions.

SURGE FLOW A rapid increase in fluid flow.

THERMAL BUILD-UP Hydraulic pressure caused by expansion of the fluid due to heat from an external source such as sunlight.

TIP HALF Other nomenclature "male tip", "nipple", "plug", "male half".

TRAPPED PRESSURE Pressurized fluid trapped behind closed valving in one of the quick disconnect coupling mating halves.

VALVE RETAINER Provides the valve stop. Its precise location allows maximum flow when mating quick disconnect halves are connected.

VALVE SEAT That area of the quick disconnect coupling that comes in contact with either the ball or poppet valve, allowing a positive sealing surface. Shape and surface varies with valve style.

Types of Quick Disconnect Couplings

DOUBLE SHUT-OFF A quick disconnect coupling with shut-off valves in both mating halves.

SINGLE SHUT-OFF A quick disconnect coupling with a shut-off valve in one half only.

NON-VALVED Other nomenclature "straight-thru". A quick disconnect coupling without shut-off valves in either half.

BALL LOCKING TYPE A quick disconnect coupling which is connected and disconnected by applying an axial force to move an external sleeve. This sleeve motion allows detent balls in the female half to engage or disengage into a groove in the mating male tip (nipple) half.

THREADED TYPE A quick disconnect coupling that has threads on both mating halves and is connected or disconnected by the rotation of the sleeve on the body half with respect to the male tip.