

Tel.: +31 (0)10 - 2622160 Fax: +31 (0)10 - 2622190 Website: www.cargotransfer.net



# **EMERGENCY RELEASE COUPLERS (ER-COUPLERS):**

For safe transfer of all your hazardous and non-hazardous products. The Emergency Release Coupler (Cable release series) is designed specifically to minimize spillage and damage associated with drive away and pull away incidents. The ER-Coupler automatically senses an excessive load, closes its valves and then permits disconnection. The safety break-away valve consists of two connecting parts, each with a valve that has a flat type-sealing surface similar to a dry disconnect coupling.

When the ER-Couplings separate, it allows the valves to close. The two valves close rapidly, minimizing product exposure for personnel and the environment.

# **Product features:**

- passive security against situations where a hose or loading arm could be subjected to inadvertent excessive loads
- minimal tension forces on the cable are required to safely release the ER-couplings-system
- design features include a simple mechanism and no loose components which could be lost after release
- operates independently of shut off safety system and does not require an external power source
- easy to reset on site by one person
- high flow rate and low pressure drop
- minimal product loss upon disconnecting through independent positive shut-off of both coupling halves
- lightweight and robust construction
- available with ANSI/DIN-flanges or threaded (BSP or NPT), in diameters up to 8" as a standard

# **Range of applications:**

CTS® ER-Couplings are suitable for any situation where a hose or a loading could be subjected to inadvertent excessive tensile loads. These include amongst others:

- plant engineering and construction
- power plant construction
- chemical industry
- food processing industry
- process technology
- tank cleaning
- airfields
- rail Cars
- tank Trucks

- ship to Shore transfer operations
- ship to Rig transfer operation
- tank containers
- filling and emptying operations of liquid gas (LPG)

# **Versions of ER-Couplings**

#### **Industrial version:**

Utilized within industrial product transfer installations, the industrial ER-Coupling is specifically designed to be able to be activated with a tensile force being applied at an angle to the plane of the coupling housing, up to 90 degrees for the bolted version, and 30 degrees for cable release version. Available in both cable release and bolted versions.

#### **Marine version:**

The marine version of ER-Couplings are designed specifically to be installed within a hose connection, where the coupling would have a length of hose attached to both sides. This coupling incorporates the same internal mechanism as our Industrial couplings, but has additional external features that provide increased resistance to torsion and bending moments which may be applied to the coupling. This to prevent premature activation in the unpredictable marine environment. Typical applications include shipto-offshore platform, and ship-to-ship product transfer operations. The marine ER-Coupling is only available as a bolted version.

#### Non-closure version:

The Non-Closure version is available for both the Industrial and Marine versions of our couplings, the Non-Closure design acts purely as an identified safe parting point within the transfer system, protecting equipment and personnel. With no internal mechanism these couplings are utilised when the medium is non-hazardous and spillage is acceptable. This version is only available as a bolted version.





Offices: Coventrystraat 2 3047 AD Rotterdam The Netherlands 
 Tel.:
 +31 (0)10 - 2622160

 Fax:
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 info@cargotransfer.net

 Website:
 www.cargotransfer.net

#### **ER-Couplers**, Technical Data:

Working pressure: PN25 (360 psi) maximum

# Materials: body: Stainless Steel body: AISI316TI (1.4571), other materials on request o-rings: FPM (Viton®), other materials on request flat seals: PTFE (Teflon®), other materials on request

# **Dimensional information:**

#### **ER-Couplings**, **BSP** threaded

DN	BSP Thread	Outside diam.	Length (mm)	Weight (kg)
		(mm), max.		
40 *	1 ½	98	122	2.4
50	2	110	124	3.2
65 *	2 1⁄2	134	148	5.2
80	3	145	175	7.1
100	4	185	206	14.4
*non-s	standard size			

#### **ER-Couplings**, NPT threaded

DN	BSP Thread	Outside diam.	Length (mm)	Weight (kg)
		(mm), max.	0 1 1	0 0
40 *	1 ½	98	142	3.1
50	2	110	144	4.15
65 *	2 ½	134	168	6.4
80	3	145	195	8.55
100	4	185	226	16.1

\*non-standard size

### **ER-Couplings, Flanged (DIN or ANSI)**

DN	BSP Thread	Outside diam.	Length (mm)	Weight (kg)
		(mm), max.		
150	DIN PN 10/16	285	311	46.2
150	DIN PN 25	300	311	52.2
150	ASA 6" 150 lbs	279	311	47.3
150	ASA 6" 300 lbs	317	311	64.2
200	DIN PN 10	340	376	73.5
200	DIN PN 16	340	376	72.7
200	DIN PN 25	360	376	81.8
200	ASA 8" 150 lbs	342	376	78.2
200	ASA 8" 300 lbs	381	376	102.1

#### **Approvals:**

Functionality tested and approved by TÜV (Germany), approved by Bundesanstalt für Materialforschung (BAM, Germany) and approval in accordance to §19 Wasserhaushaltsgesetz (WHG, Germany).

Your distributor: