

DGCouplings[®]
Dry Gas Couplings

» ***Outstanding
flow rate***



Product Information

KilltheSpill

About Mann Tek

Mann Teknik AB is a Swedish company located in Mariestad, Sweden.

Mann Teknik AB produces and markets products for safe and environmentally friendly handling of aggressive fluids for the chemical and petrochemical industries.

The main product is the Dry Disconnect Couplings, DDCouplings®, for spill free liquid handling. The products are marketed through independent representatives in more than 30 countries.

Mann Teknik AB have many years of experience in designing, producing and marketing of DDCouplings® all since 1977.

Mann Teknik AB has shown a high rate of growth during the past years and is now a major player in its specialised field of operation. This is due to a determined expansion into growing markets and recognition by customers of the robust design and reliable quality of the products.

Mann Teknik AB are certified to ISO9001:2000. The products are CE-labeled. The main products are certified to PED, the European Pressure Equipment Directive and ATEX, the European directive for Equipment intended for use in Potentially Explosive Atmospheres.

The products are produced in accordance with several important standards, e.g. the NATO STANAG 3756

KilltheSpill

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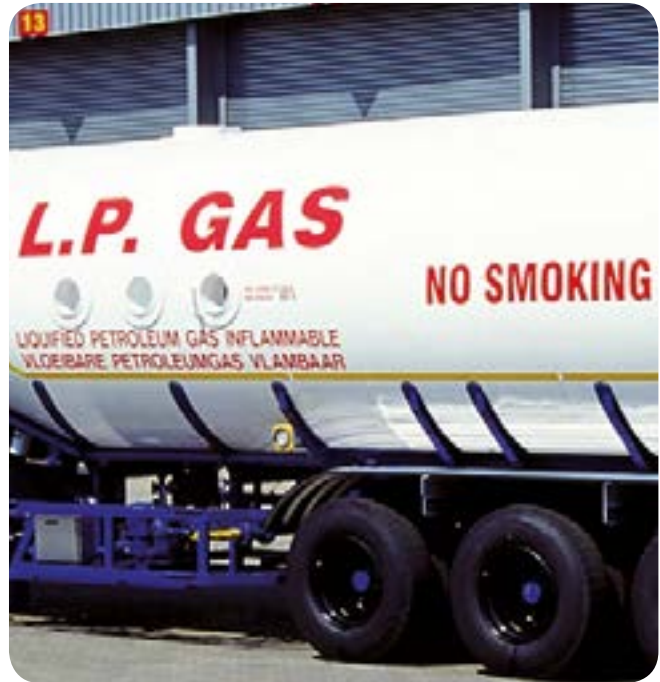
Mann-Tek Dry Gas Coupling for safe handling of LPG - in liquid or vapor phases

The Dry Gas Coupling has been developed for a safe and **quick connection and disconnection** of hoses and loading arms to tank trucks, rail tankers and tank containers. During connection and after disconnection there is **no spillage**.

This increases safety in the loading process of hazardous fluids.

Suitable for handling a range of LPG applications - Propane and Butane but also for other applications with similar requirements the Dry Gas Coupling is useful. The robust design, easy servicing and high level of security assures safe and frequent use on a long term basis. This protects the environment and the media handled, reduces the risk of accidents and saves money.

A modular design with several optional features makes it possible to find individual solutions for your special application.



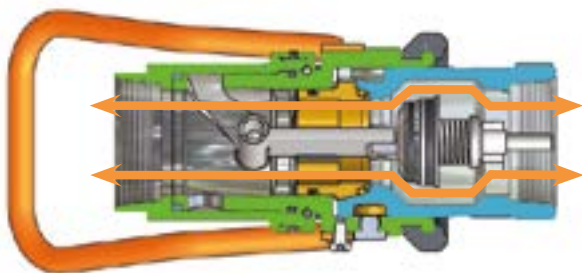
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GAS (LPG)

| Handling of LPG | Application | Size | Equipment |
|-----------------|----------------------------------|----------|-------------------|
| | Heavy vehicle filling | • 1" | Dry Gas Couplings |
| | Loading/unloading of bobtails | • 2" | Dry Gas Couplings |
| | Loading/unloading of tank trucks | • 2"- 3" | Dry Gas Couplings |
| | Loading/unloading of rail cars | • 3" | Dry Gas Couplings |
| | Loading/unloading ship to shore | • 3"- 8" | Dry Gas Couplings |

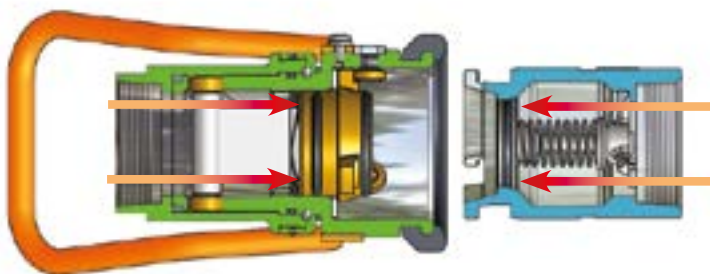


How the Mann Tek Dry Gas Coupling works



To connect

Push and turn - it's coupled
- full flow

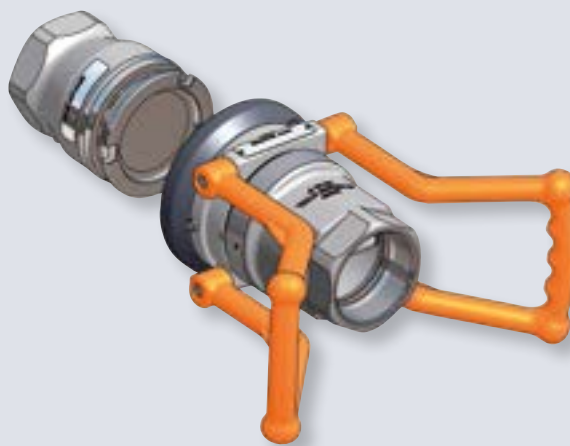


To disconnect

Turn and pull - it's released
- no spillage

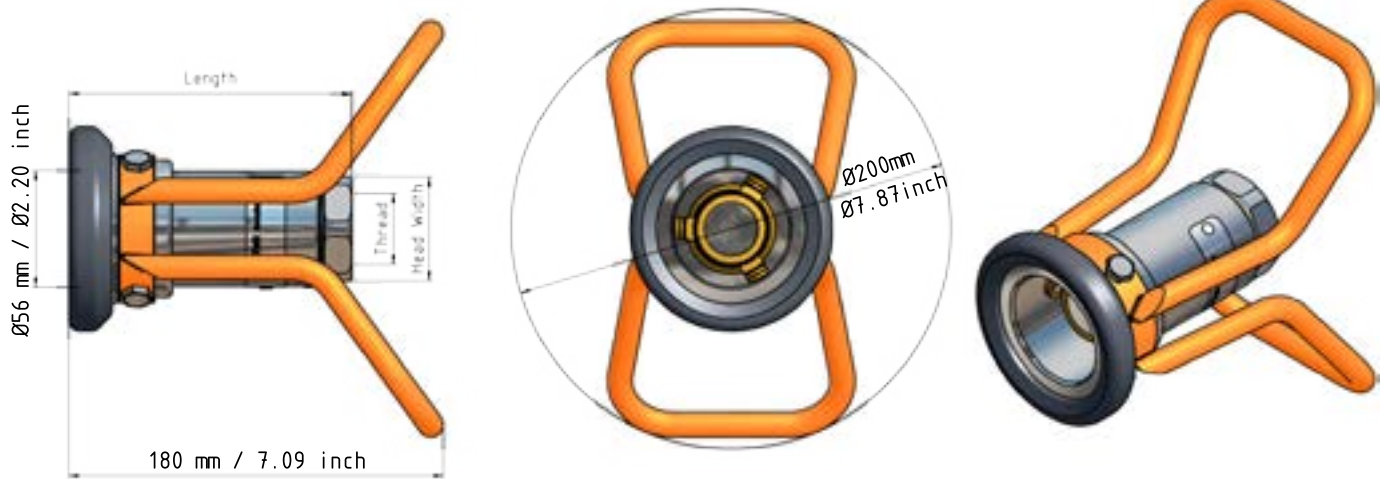
Why use the Mann Tek Dry Gas Coupling?

- Spillfree handling for loading and unloading tank trucks, rail tankers and tank containers.
- Minimization spillage and product loss keeps the environment free from Hazardous Vapors and Liquids.
- "Easy to Use" – design saves time and minimizes health risks.
- Reliability and easy servicing saves your investment.
- Approved for safe handling of LPG - Propane (CAS 74-98-6, UN 1978) and Butane (CAS 106-97-8, UN1011). UN-classification 2.1 and similar applications.
- 3" and 4" is compatible with existing Dry Disconnect / Dry Break Couplings according to STANAG 3756.
- The 1" is a heavy duty vehicle filling nozzle according to EN 13760.
- Approvals according to the European Directives PED and ATEX and the international requirements ADR, RID, IMDG and TDT.



1" Hose unit / Coupler (socket Ø56 mm / Ø2.20 inch)

With female 3/4" - 1" - 1 1/4" inlet.



Available with ACME threads for assembling direct on existing connections

Other handle and material on request

| Thread | Length mm/inch | Head Width mm/inch | Weight kg/lbs | Code Nr. |
|------------|----------------|--------------------|---------------|------------|
| 3/4" BSP | 131 / 5.16 | 50 / 1.97 | 1,9 / 4.2 | M101A4401A |
| 3/4" NPT | 135 / 5.31 | 50 / 1.97 | 2,0 / 4.4 | M102A4401 |
| 1" BSP | 133 / 5.24 | 50 / 1.97 | 1,9 / 4.2 | M103A4401A |
| 1" NPT | 137 / 5.39 | 50 / 1.97 | 2,0 / 4.4 | M104A4401 |
| 1 1/4" BSP | 140 / 5.51 | 50 / 1.97 | 1,9 / 4.2 | M105A4401A |
| 1 1/4" NPT | 144 / 5.67 | 50 / 1.97 | 2,0 / 4.4 | M106A4401 |

1" Hose unit / Coupler (socket Ø56 mm / Ø2.20 inch)

With flanged 3/4" - 1" - 1 1/4" inlet.

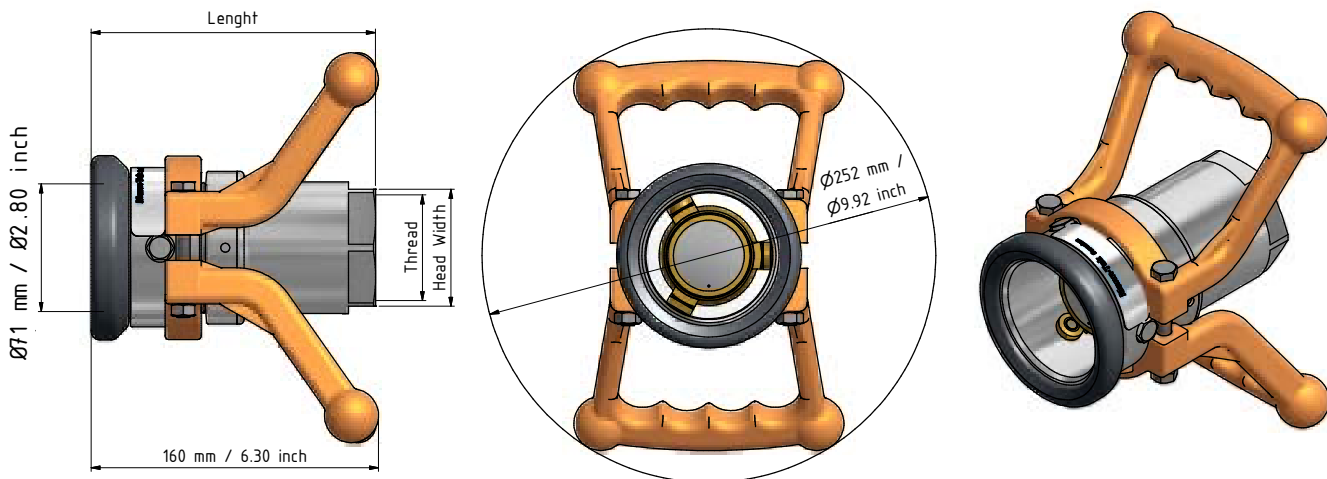


Other handle and material on request

| Connection | Length mm/inch | Thickness mm/inch | Weight kg/lbs | Code Nr. |
|---------------------|----------------|-------------------|---------------|-----------|
| 3/4" ANSI Cl. 300 | 167 / 6.57 | 15,9 / 0.63 | 3,2 / 7.1 | M150A4401 |
| DN25 PN25/40 | 169 / 6.65 | 18,0 / 0.71 | 3,4 / 7.5 | M124A4401 |
| 1" ANSI Cl. 300 | 168 / 6.61 | 17,5 / 0.69 | 3,4 / 7.5 | M152A4401 |
| DN32 PN25/40 | 169 / 6.65 | 18,0 / 0.71 | 3,6 / 7.9 | M126A4401 |
| 1 1/4" ANSI Cl. 300 | 170 / 6.69 | 19,0 / 0.75 | 3,6 / 7.9 | M154A4401 |

2" Hose unit / Coupler (socket Ø71 mm / Ø2.80 inch)

With female 1 1/2" - 2" inlet



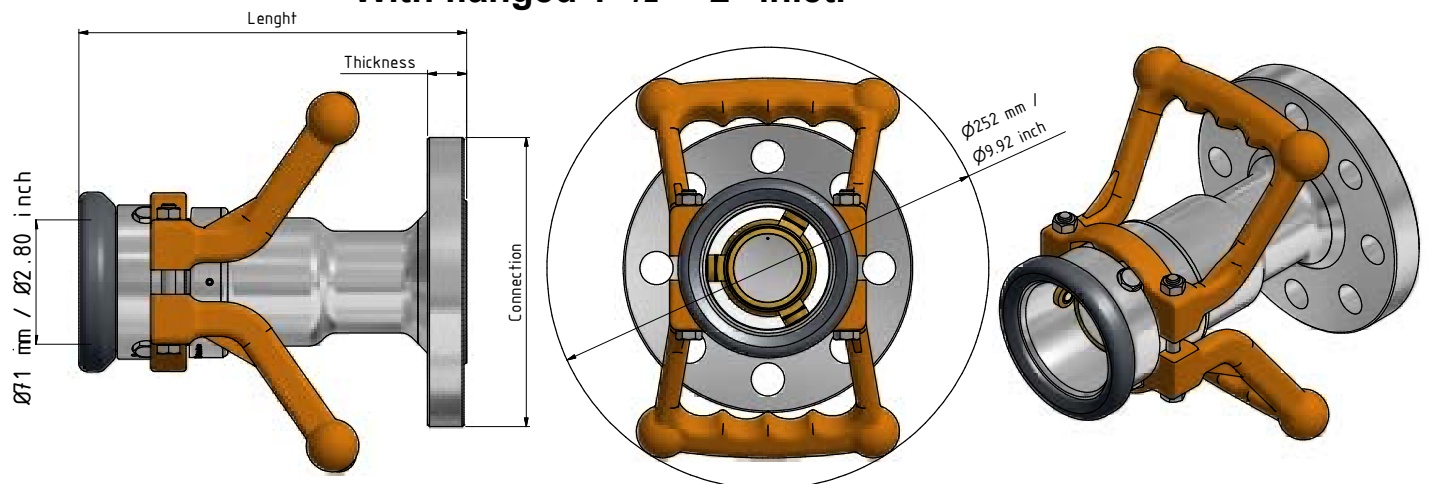
Available with ACME threads for assembling direct on existing connections

Other handle and material on request

| Thread | Length mm/inch | Head Width mm/inch | Weight kg/lbs | Code Nr. |
|------------|----------------|--------------------|---------------|------------|
| 1 1/2" BSP | 152 / 5.98 | 65 / 2.56 | 3,1 / 6.8 | M207A4401A |
| 1 1/2" NPT | 155 / 6.10 | 65 / 2.56 | 3,2 / 7.0 | M208A4401 |
| 2" BSP | 155 / 6.10 | 65 / 2.56 | 2,9 / 6.4 | M210A4401A |
| 2" NPT | 156 / 6.10 | 65 / 2.56 | 3,0 / 6.6 | M211A4401 |

2" Hose unit / Coupler (socket Ø71 mm / Ø2.80 inch)

With flanged 1 1/2" - 2" inlet.



Other handle, flange and material on request

| Connection | Length mm/inch | Thickness mm/inch | Weight kg/lbs | Code Nr. |
|---------------------|----------------|-------------------|---------------|-----------|
| DN40 PN25/40 | 216 / 8.50 | 18 / 0.71 | 5,3 / 11.7 | M228A4401 |
| 1 1/2" ANSI Cl. 300 | 218 / 8.58 | 21 / 0.83 | 5,7 / 12.6 | M256A4401 |
| DN50 PN25/40 | 218 / 8.58 | 20 / 0.79 | 6,0 / 13.2 | M231A4401 |
| 2" ANSI Cl. 300 | 220 / 8.66 | 22 / 0.87 | 6,1 / 13.4 | M258A4401 |

3" Hose unit / Coupler (socket Ø119 mm / Ø4.68 inch)

With female 2 1/2" and 3" inlet.



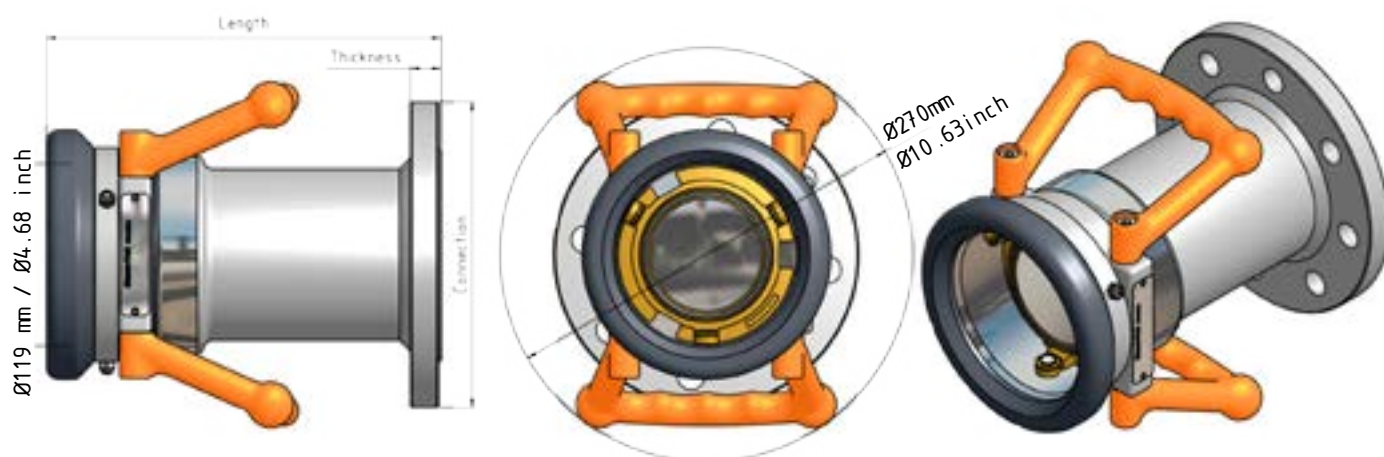
Other handle and material on request

Available with ACME and Witworth threads (ie. W90) for assembling direct on existing connections

| Thread | Length mm/inch | Head Width mm/inch | Weight kg/lbs | Code Nr. |
|------------|-------------------|-----------------------|------------------|------------|
| 2 1/2" BSP | 192 / 7.56 | 100 / 3.94 | 8,8 / 19.4 | M412B4401A |
| 2 1/2" NPT | 200 / 7.87 | 100 / 3.94 | 9,1 / 20.1 | M413B4401 |
| 3" BSP | 194 / 7.64 | 100 / 3.94 | 8,1 / 17.9 | M414B4401A |
| 3" NPT | 202 / 7.95 | 100 / 3.94 | 8,4 / 18.5 | M415B4401 |

3" Hose unit / Coupler with (socket Ø119 mm / Ø4.68 inch)

With flanged 2 1/2" and 3" inlet.



Other handle, flange and material on request

| Connection | Length mm/inch | Thickness mm/inch | Weight kg/lbs | Code Nr. |
|---------------------|-------------------|----------------------|------------------|-----------|
| DN65 PN25/40 | 260 / 10.24 | 22,0 / 0.87 | 12,6 / 27.8 | M434B4401 |
| 2 1/2" ANSI Cl. 300 | 264 / 10.39 | 25,4 / 1.0 | 13,3 / 29.3 | M460B4401 |
| DN80 PN25/40 | 267 / 10.51 | 24,0 / 0.94 | 13,2 / 29.1 | M437B4401 |
| 3" ANSI Cl. 300 | 263 / 10.35 | 28,6 / 1.13 | 15,1 / 33.3 | M462B4401 |

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4" Hose unit / Coupler (socket Ø164 mm / Ø6.46 inch)

With female 4" inlet.

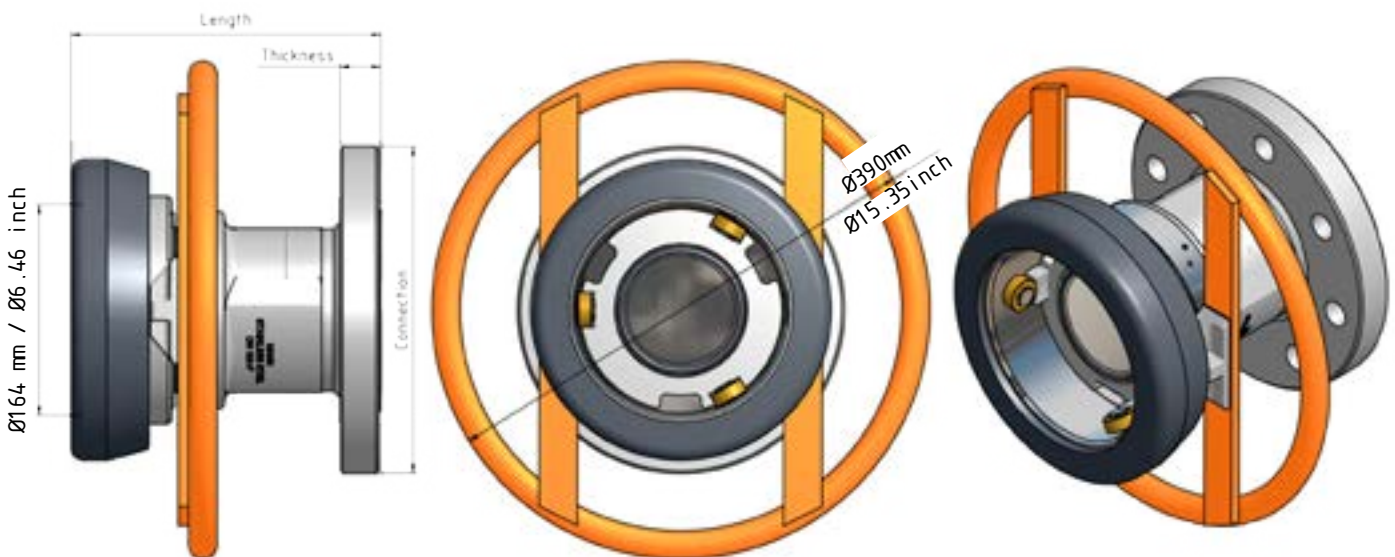


Other handle and material on request

| Thread | Length mm/inch | Head Width mm/inch | Weight kg/lbs | Code Nr. |
|--------|----------------|--------------------|---------------|------------|
| 4" BSP | 223 / 8.78 | 130 / 5.12 | 15,7 / 34.6 | M516B4401A |
| 4" NPT | 232 / 9.13 | 130 / 5.12 | 16,0 / 35.3 | M517B4401 |

4" Hose unit / Coupler (socket Ø164 mm / Ø6.46 inch)

With flanged 4" inlet.

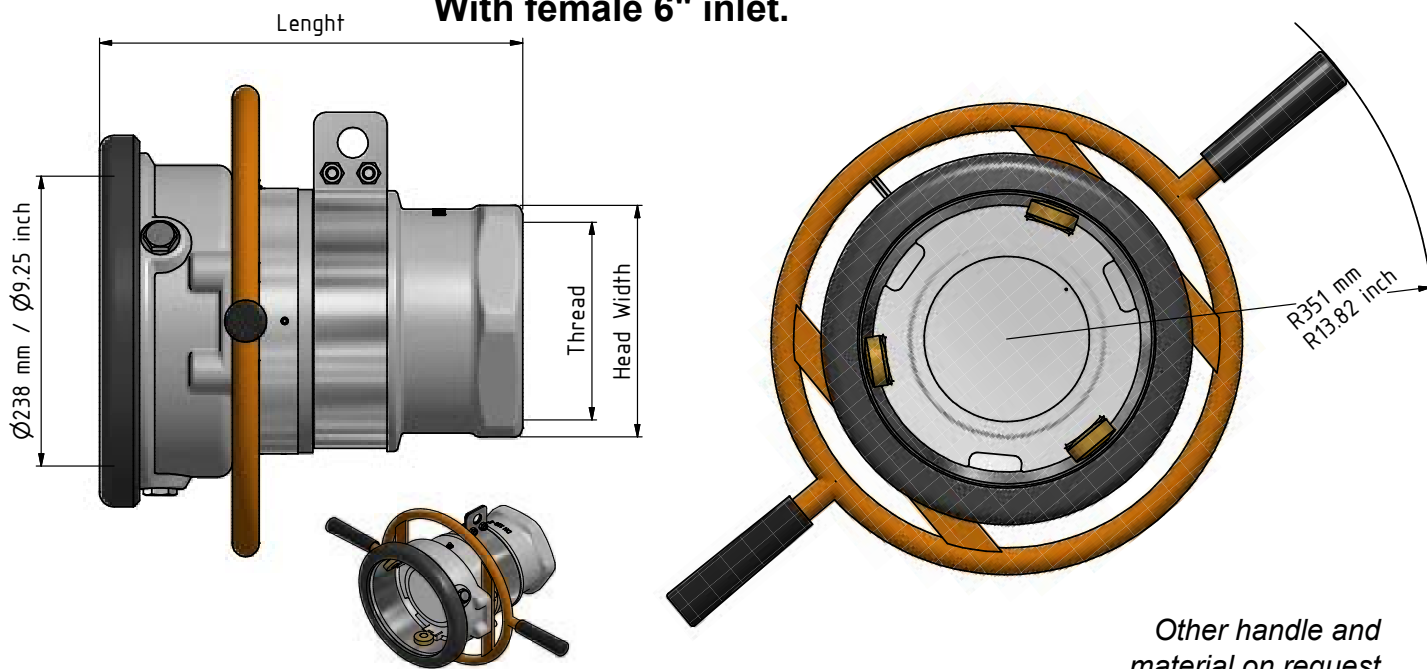


Other handle and material on request

| Connection | Length mm/inch | Thickness mm/inch | Weight kg/lbs | Code Nr. |
|-----------------|----------------|-------------------|---------------|-----------|
| DN100 PN25/40 | 233 / 9.17 | 24,0 / 0.94 | 20,8 / 45.9 | M540B4401 |
| 4" ANSI Cl. 300 | 241 / 9.49 | 31,7 / 1.25 | 24,3 / 53.6 | M564B4401 |

6" Hose unit / Coupler (socket Ø238mm / Ø9.25 inch)

With female 6" inlet.

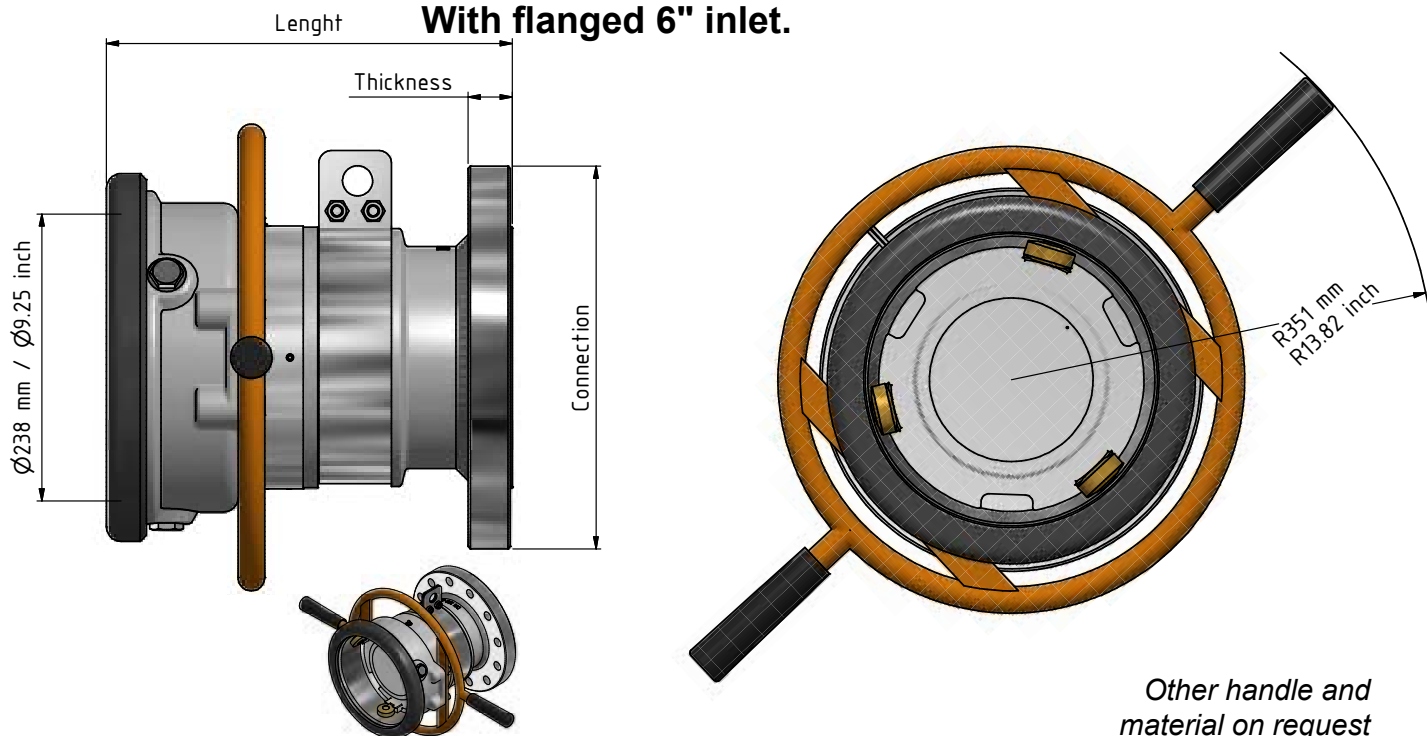


Other handle and material on request

| Thread | Length mm/inch | Head Width mm/inch | Weight kg/lbs | Code Nr. |
|--------|----------------|--------------------|---------------|-------------|
| 6" BSP | 343 / 13.5 | 190 / 7.48 | 49 / 108 | M6110B4401A |
| 6" NPT | 349 / 13.74 | 190 / 7.48 | 49,5 / 109.1 | M6111B4401 |

6" Hose unit / Coupler (socket Ø238 mm / Ø9.25 inch)

With flanged 6" inlet.



Other handle and material on request

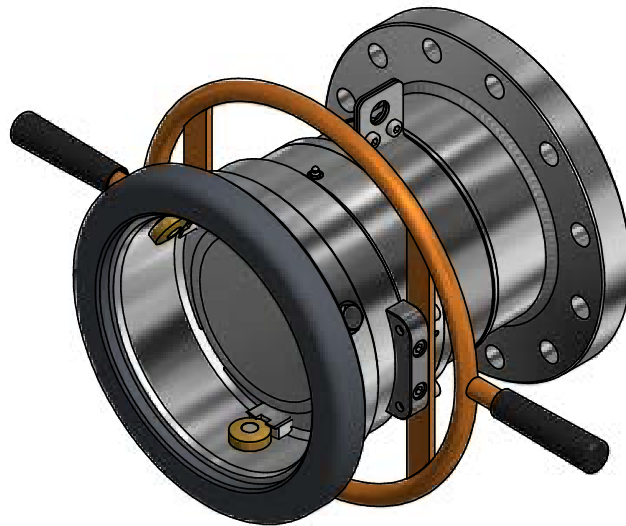
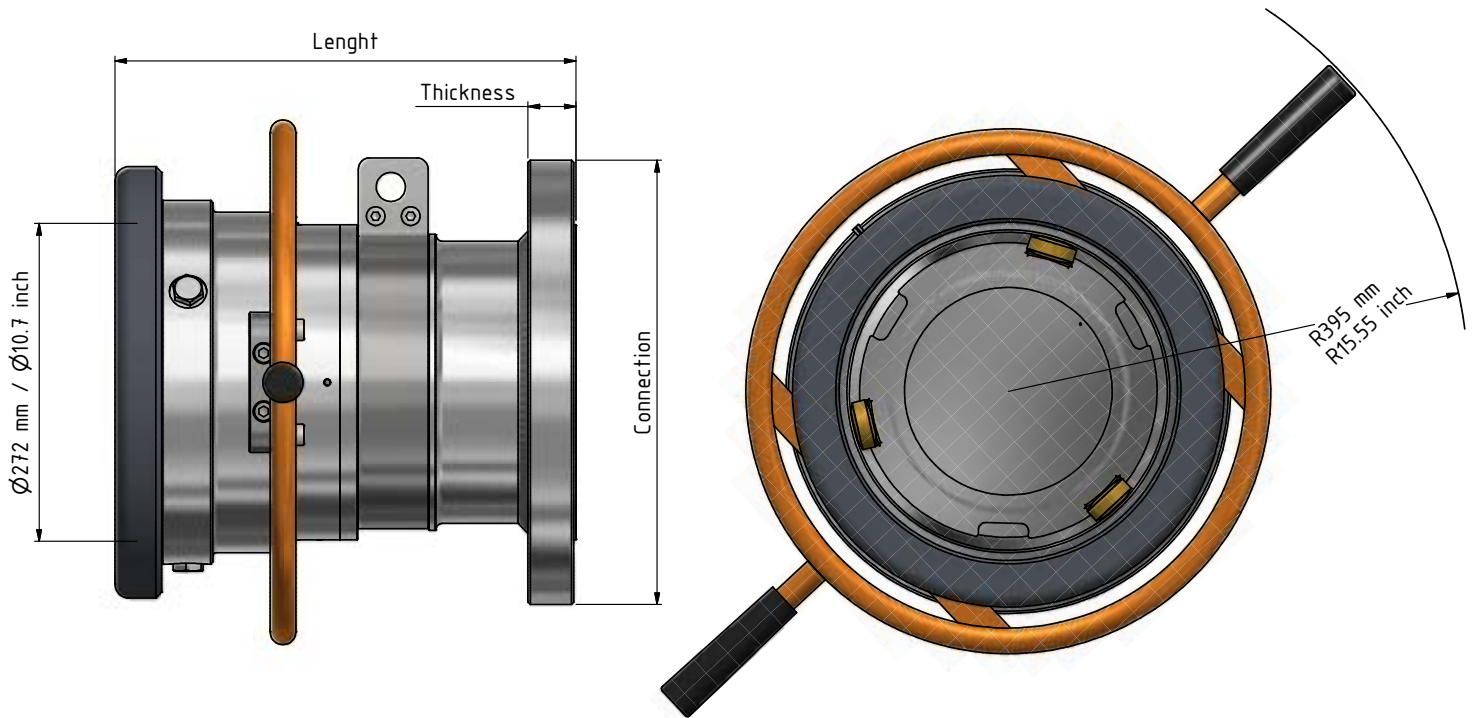
| Connection | Length mm/inch | Thickness mm/inch | Weight kg/lbs | Code Nr. |
|----------------|----------------|-------------------|---------------|------------|
| DN150 PN25/40 | 327,5 / 12.89 | 28,0 / 1.1 | 56,5 / 124.6 | M646B4401 |
| 6" ANSI Cl.300 | 336 / 13.23 | 36,5 / 1.44 | 63 / 138.9 | M6101B4401 |

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Dry Gas Coupling - 8" Hose unit/coupler

8" Hose unit / Coupler (socket $\text{Ø}272 \text{ mm}$ / $\text{Ø}10.7 \text{ inch}$)

With flanged 8" inlet.



Other handle and material on request

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| Connection | Length mm/inch | Thickness mm/inch | Weight kg/lbs | Code Nr. |
|----------------|-------------------|----------------------|------------------|------------|
| DN200 PN25 | 384 / 15.12 | 30,0 / 1.18 | 101,5 / 223.8 | M8104B4401 |
| 8" ANSI Cl.300 | 395 / 15.55 | 41,3 / 1.63 | 107,0 / 235.9 | M8106B4401 |

1" Tank unit / Adapter (socket Ø56 mm / Ø2.20 inch)

With female 3/4" - 1" - 1 1/4" inlet.



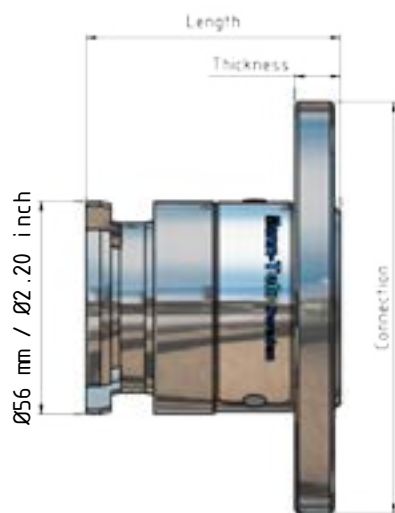
Available with ACME for assembling direct on existing connections

Other material on request

| Thread | Length mm/inch | Head Width mm/inch | Weight kg/lbs | Code Nr. |
|------------|----------------|--------------------|---------------|------------|
| 3/4" BSP | 69 / 2.72 | 50 / 1.97 | 0,7 / 1.5 | L101A4401A |
| 3/4" NPT | 74 / 2.91 | 50 / 1.97 | 0,8 / 1.8 | L102A4401 |
| 1" BSP | 70 / 2.76 | 50 / 1.97 | 0,7 / 1.5 | L103A4401A |
| 1" NPT | 77 / 3.03 | 50 / 1.97 | 0,8 / 1.8 | L104A4401 |
| 1 1/4" BSP | 70 / 2.76 | 50 / 1.97 | 0,7 / 1.5 | L105A4401A |
| 1 1/4" NPT | 78 / 3.07 | 50 / 1.97 | 0,8 / 1.8 | L106A4401 |

1" Tank unit / Adapter (socket Ø56 mm / Ø2.20 inch)

With flanged 3/4" - 1" - 1 1/4" inlet.



Other flange and material on request

| Connection | Length mm/inch | Thickness mm/inch | Weight kg/lbs | Code Nr. |
|---------------------|----------------|-------------------|---------------|-----------|
| 3/4" ANSI Cl. 300 | 70 / 2.76 | 15,9 / 0.63 | 1,3 / 2.9 | L150A4401 |
| DN25 PN25/40 | 73 / 2.87 | 18,0 / 0.71 | 1,4 / 3.1 | L124A4401 |
| 1" ANSI Cl. 300 | 72 / 2.83 | 17,5 / 0.69 | 1,5 / 3.3 | L152A4401 |
| DN32 PN25/40 | 73 / 2.87 | 18,0 / 0.71 | 1,5 / 3.3 | L126A4401 |
| 1 1/4" ANSI Cl. 300 | 74 / 2.91 | 19,0 / 0.75 | 1,5 / 3.3 | L154A4401 |

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2" Tank unit / Adapter (socket Ø71 mm / Ø 2.80 inch)

With female 1 1/2" - 2" inlet



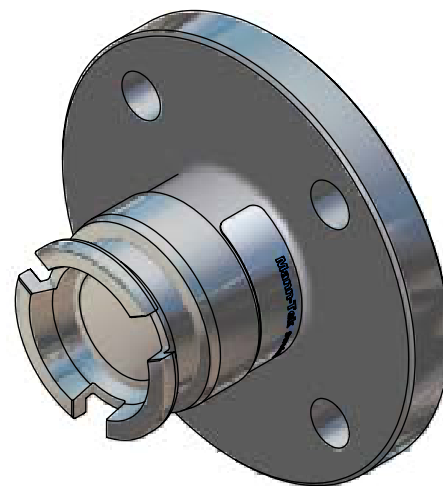
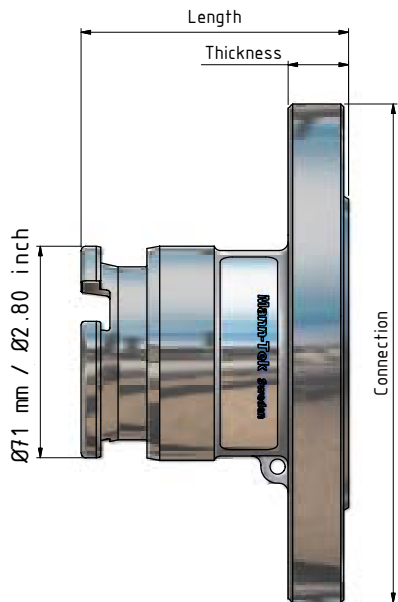
Available with ACME for assembling direct on existing connections

Other material on request

| Thread | Length mm/inch | Head Width mm/inch | Weight kg/lbs | Code Nr. |
|------------|----------------|--------------------|---------------|------------|
| 1 1/2" BSP | 99 / 3.90 | 65 / 2.56 | 1,5 / 3.3 | L207A4401A |
| 1 1/2" NPT | 102 / 4.02 | 65 / 2.56 | 1,6 / 3.5 | L208A4401 |
| 2" BSP | 101 / 3.98 | 65 / 2.56 | 1,2 / 2.6 | L210A4401A |
| 2" NPT | 102 / 4.02 | 65 / 2.56 | 1,3 / 2.9 | L211A4401 |

2" Tank unit / Adapter (socket Ø71 mm / Ø 2.80 inch)

With flanged 1 1/2" - 2" inlet.



Other flange and material on request

| Connection | Length mm/inch | Thickness mm/inch | Weight kg/lbs | Code Nr. |
|---------------------|----------------|-------------------|---------------|-----------|
| DN40 PN25/40 | 86,5 / 3.41 | 18 / 0.71 | 2,8 / 6.2 | L228A4401 |
| 1 1/2" ANSI Cl. 300 | 88,5 / 3.41 | 20 / 0.79 | 3,2 / 7.1 | L256A4401 |
| DN50 PN25/40 | 88,5 / 3.41 | 20 / 0.79 | 3,5 / 7.7 | L231A4401 |
| 2" ANSI Cl. 300 | 88,5 / 3.41 | 20 / 0.79 | 3,5 / 7.7 | L258A4401 |

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3" Tank unit / Adapter (socket Ø119 mm / Ø4.68 inch) With female 3" inlet.



Available with ACME and Witworth threads (ie. W90)
for assembling direct on existing connections

Other material on request

| Thread | Length mm/inch | Head Width mm/inch | Weight kg/lbs | Code Nr. |
|--------|-------------------|-----------------------|------------------|------------|
| 3" BSP | 134 / 5.28 | 100 / 3.94 | 3,0 / 6.6 | L414B4401A |
| 3" NPT | 144 / 5.67 | 100 / 3.94 | 3,0 / 6.6 | L415B4401 |

3" Tank unit / Adapter (socket Ø119 mm / Ø4.68 inch) With flanged 2 1/2" or 3" inlet.



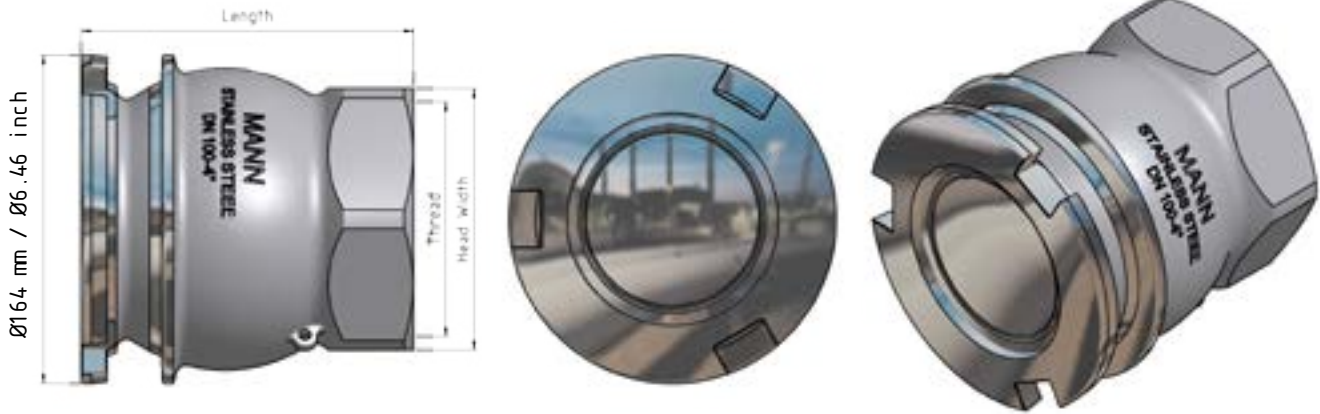
*Other flange and
material on request*

| Connection | Length mm/inch | Thickness mm/inch | Weight kg/lbs | Code Nr. |
|---------------------|-------------------|-------------------------|------------------|-----------|
| DN65 PN25/40 | 112 / 4.41 | 15 (22)* / 0.59 (0.87)* | 5,0 / 11.0 | L434B4401 |
| 2 1/2" ANSI Cl. 300 | 112 / 4.41 | 15 (24)* / 0.59 (0.94)* | 5,0 / 11.0 | L460B4401 |
| DN80 PN25/40 | 112 / 4.41 | 15 (24)* / 0.59 (0.94)* | 5,5 / 12.1 | L437B4401 |
| 3" ANSI Cl. 300 | 112 / 4.41 | 15 (24)* / 0.59 (0.94)* | 5,5 / 12.1 | L462B4401 |

* values in brackets also available on special request

4" Tank unit / Adapter (socket Ø164 mm / Ø6.46 inch)

With female 4" inlet.

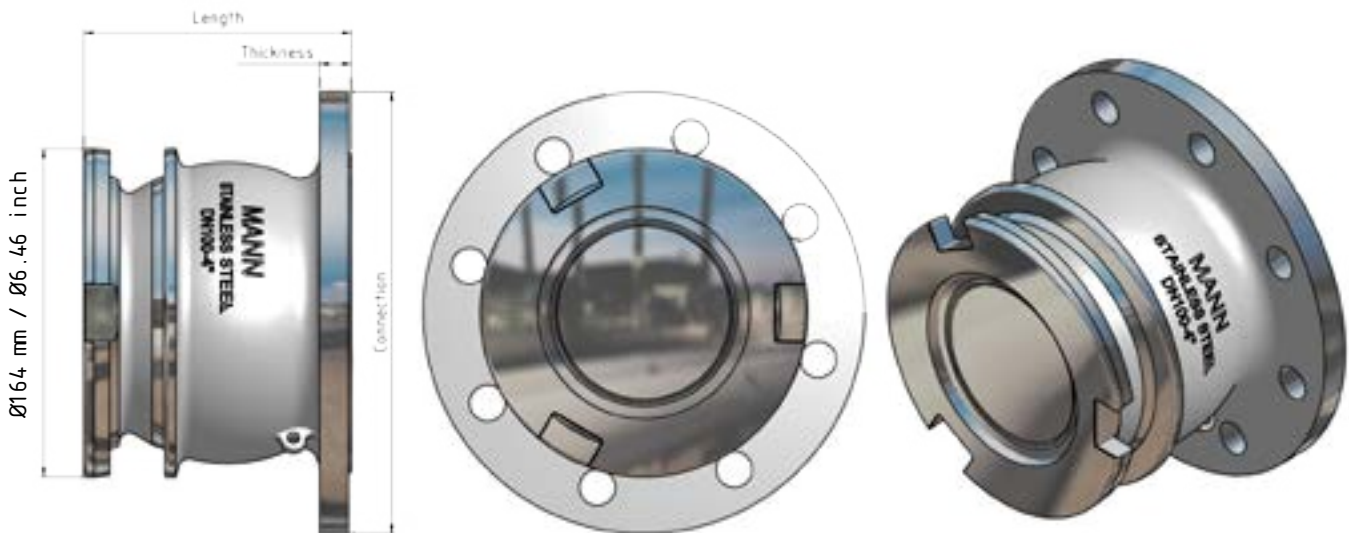


Other material on request

| Thread | Length mm/inch | Head Width mm/inch | Weight kg/lbs | Code Nr. |
|--------|----------------|--------------------|---------------|------------|
| 4" BSP | 156 / 6.14 | 125 / 4.92 | 6,1 / 13.4 | L516B4401A |
| 4" NPT | 166 / 6.54 | 125 / 4.92 | 6,3 / 13.9 | L517B4401 |

4" Tank unit / Adapter (socket Ø164 mm / Ø6.46 inch)

With flanged 4" inlet.



Other flange and material on request

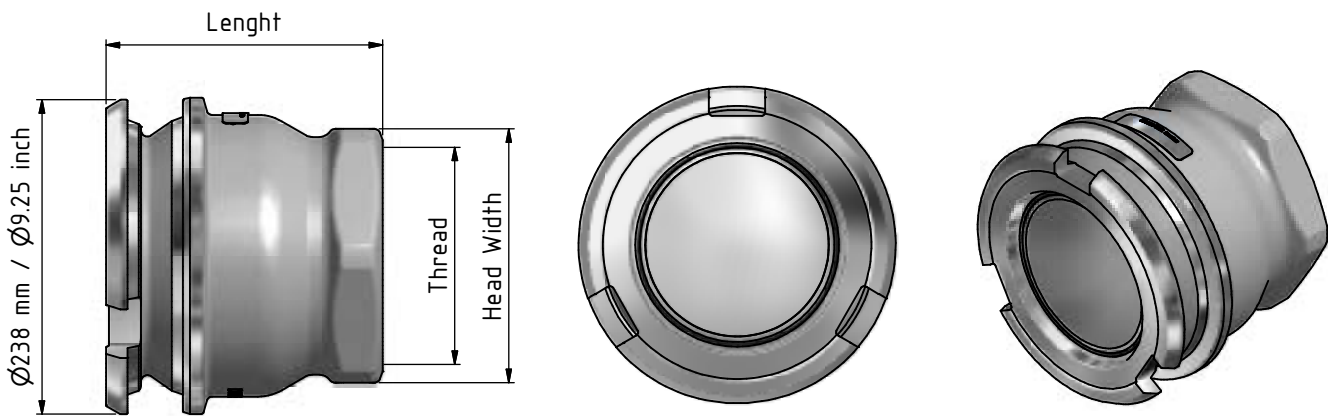
| Connection | Length mm/inch | Thickness mm/inch | Weight kg/lbs | Code Nr. |
|-----------------|----------------|-------------------------|---------------|-----------|
| DN100 PN25/40 | 134 / 5.28 | 16 (24)* / 0.63 (0.94)* | 9,3 / 20.5 | L540B4401 |
| 4" ANSI Cl. 300 | 134 / 5.28 | 16 (24)* / 0.63 (0.94)* | 9,3 / 20.5 | L564B4401 |

* values in brackets also available on special request

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6" Tank unit / Adapter (socket Ø238mm / Ø9.25inch)

With female 6" inlet.

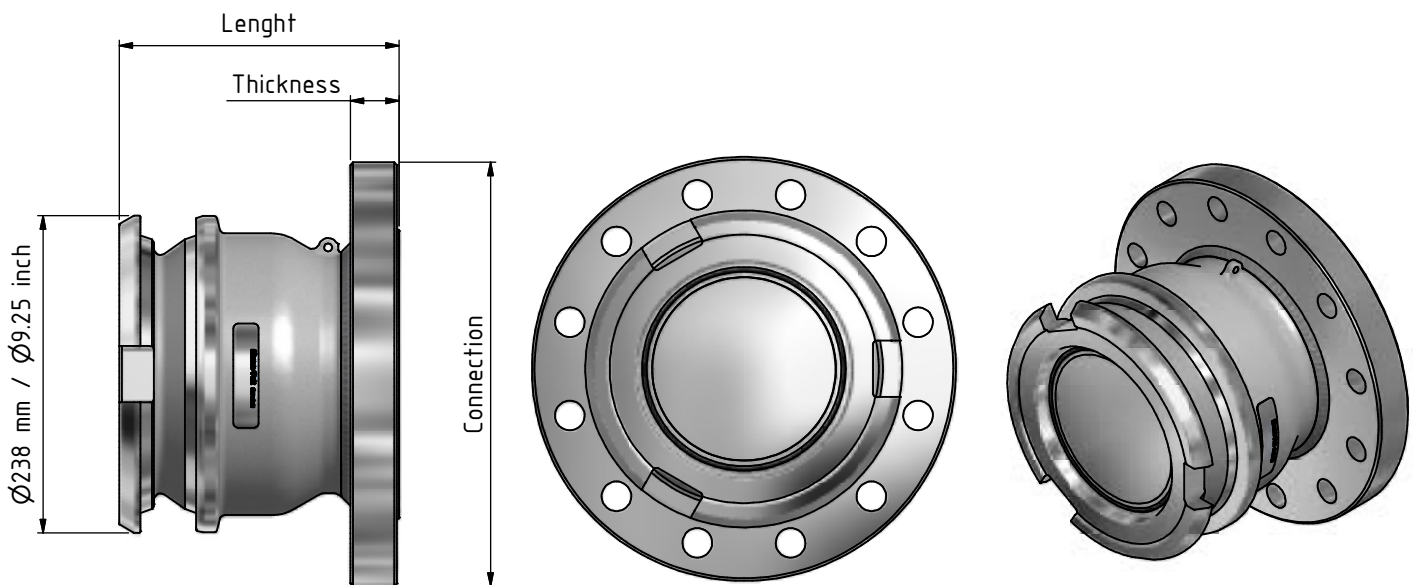


Other material on request

| Thread | Length mm/inch | Head Width mm/inch | Weight kg/lbs | Code Nr. |
|--------|----------------|--------------------|---------------|-------------|
| 6" BSP | 201 / 7.91 | 190 / 7.48 | 17 / 37.5 | L6110B4401A |
| 6" NPT | 207 / 8.15 | 190 / 7.48 | 17,3 / 38.1 | L6111B4401 |

6" Tank unit / Adapter (socket Ø238 mm / Ø9.25 inch)

With flanged 6" inlet.



Other flange and material on request

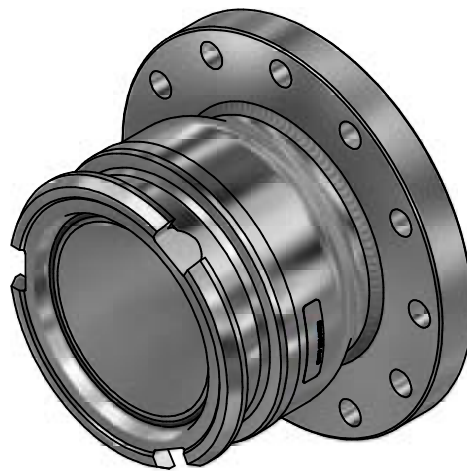
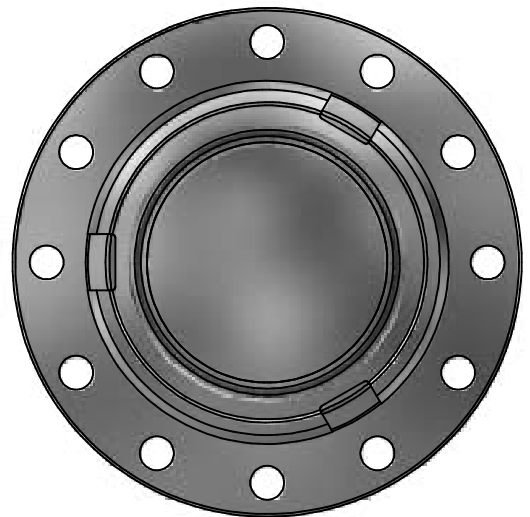
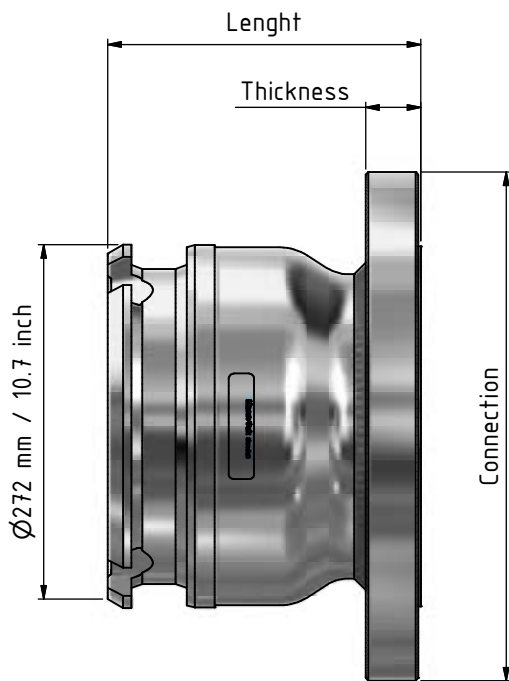
| Connection | Length mm/inch | Thickness mm/inch | Weight kg/lbs | Code Nr. |
|----------------|----------------|-------------------|---------------|------------|
| DN150 PN25/40 | 205 / 8.07 | 28 / 1.1 | 24,5 / 54.0 | L646B4401 |
| 6" ANSI Cl.300 | 213,5 / 8.41 | 36,5 / 1.44 | 31 / 68.3 | L6101B4401 |

* values in brackets also available on special request

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8" Tank unit / Adapter (socket Ø272 mm / Ø10.7 inch)

With flanged 8" inlet.



Other flange and material on request

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| Connection | Length mm/inch | Thickness mm/inch | Weight kg/lbs | Code Nr. |
|-----------------|-------------------|----------------------|------------------|------------|
| DN200 PN25 | 223 / 8.78 | 30 / 1.18 | 47,5 / 104.7 | L8104A4401 |
| 8" ANSI Cl. 300 | 234 / 9.21 | 41,3 / 1.63 | 53 / 116.8 | L8106A4401 |

Dust Cap for Tank unit / Adapter

Dust protection in rubber

A Dust Cap gives very good protection against corrosion, and withstands both hot and cold environments.

Dust Cap for increased safety

It's only possible to remove the cap from the Tank unit /Adapter after pulling the securing stiff and at the same time twisting the cap. The Dust Cap is manually lockable with padlock.



Standard Caps in Composite. It covers the widest range of chemical and petroleum products.

| Size | Code Nr. | Material |
|-------------|------------|-----------------|
| 1" (Ø56mm) | CG100D2201 | Composite |
| 2" (Ø71mm) | C200D1300 | Rubber |
| 3" (Ø119mm) | C400D1300 | Rubber |
| 3" (Ø119mm) | C400A1101 | Aluminium |
| 3" (Ø119mm) | C400E2202 | Composite |
| 3" (Ø119mm) | C400C4401 | Stainless Steel |
| 4" (Ø164mm) | C500B1101 | Aluminium |

| Size | Code Nr. | Material |
|-------------|-----------|-----------------|
| 4" (Ø164mm) | C500E2202 | Composite |
| 4" (Ø164mm) | C500C4401 | Stainless Steel |
| 6" (Ø238mm) | C600A1101 | Aluminium |
| 6" (Ø238mm) | C600A2202 | Composite |
| 6" (Ø238mm) | C600A4401 | Stainless Steel |
| 8" (Ø272mm) | C800B1101 | Aluminium |
| 8" (Ø272mm) | C800B4401 | Stainless Steel |

Pressure Cap - Working Pressure PN 25 bar / 363 psi

3rd closure (valve) on Rail tankers, Containers and Tank trucks

The pressure caps are allowed by ADR/RID regulations as 3rd closure on Rail tankers, Containers and Tank trucks. Meaning that the Pressure Cap can be used instead of the traditional Ball Valves.

The Mann Tek Pressure Cap for Tank units / Adapters is designed to maximize operator safety and containment safety.



Features

- Pressure indicator
- Depressurization
- Customs / tamper seal feature
- Automatic locking
- Manually lockable (with padlock)

| Size | Code Nr. | Material |
|-------------|------------|-----------------|
| 2" (Ø71mm) | RG200A4401 | Stainless Steel |
| 3" (Ø119mm) | RG400A4401 | Stainless Steel |

Dust Plug for Hose unit / Coupler

Use the Mann Tek Dust Plug to prevent ingress of dirt and water in the couplings. The material in the Dust Plug is composite.

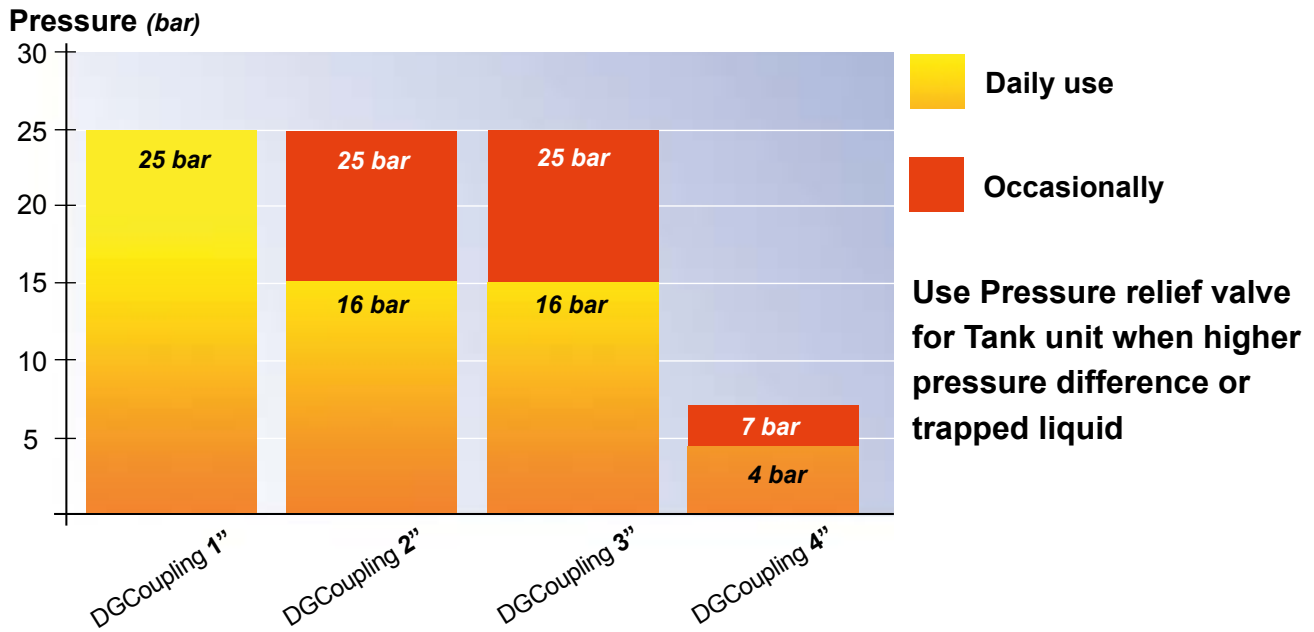
Other material on request



| Size | Code Nr. | Material |
|-------------|-----------|-----------|
| 1" (Ø56mm) | V100A2201 | Composite |
| 2" (Ø71mm) | V200A2201 | Composite |
| 3" (Ø119mm) | V400A2201 | Composite |
| 4" (Ø164mm) | V500A2201 | Composite |
| 6" (Ø238mm) | V600A2201 | Composite |
| 8" (Ø272mm) | V800A2201 | Composite |

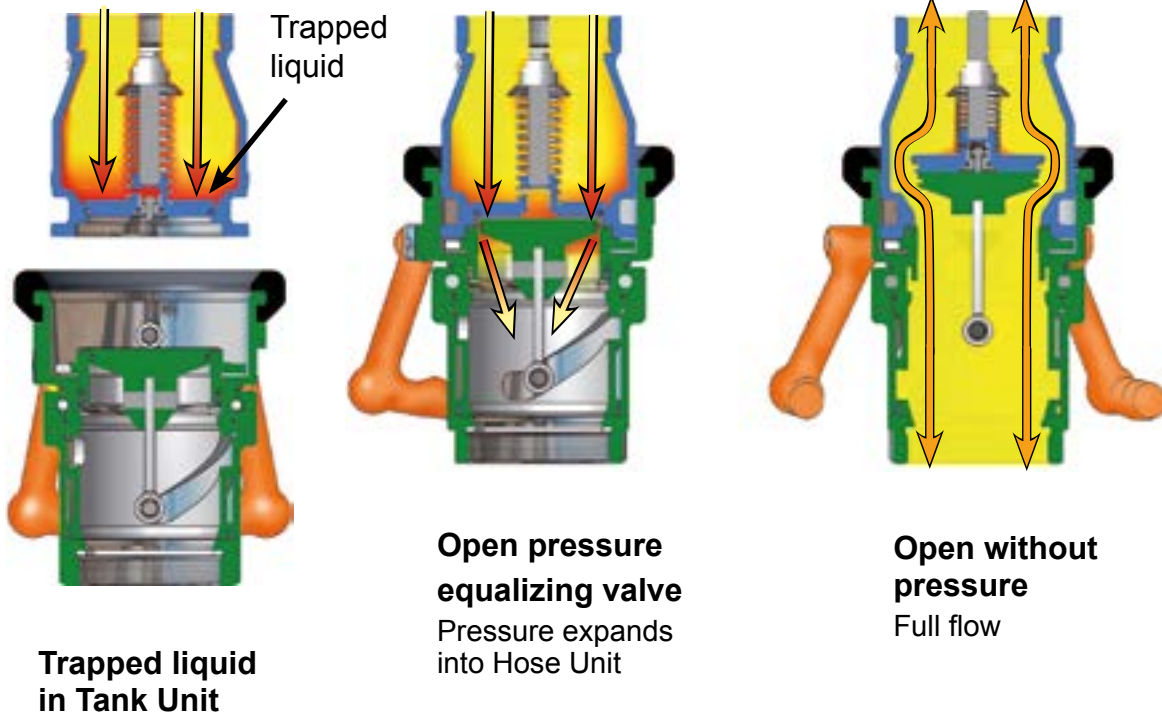
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Connection / disconnection under pressure - maximum pressure



Pressure equalizing valve for Tank units

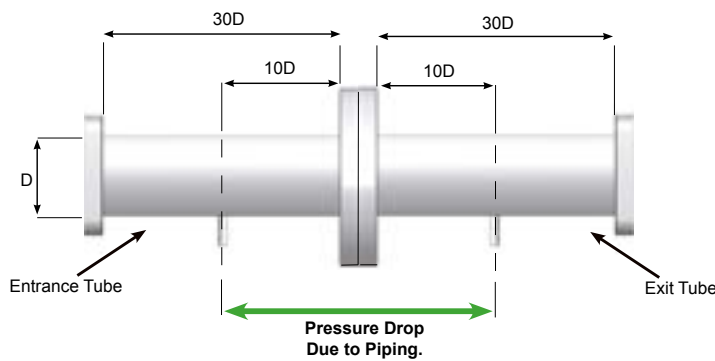
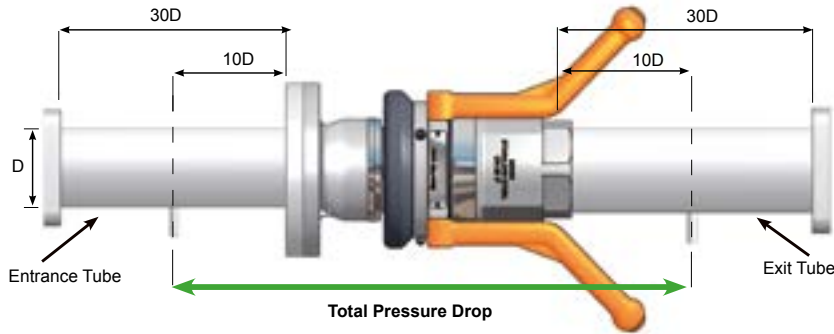
This system dissipates trapped fluid pressure into hose coupler without spillage, to allow easy connection.



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Pressure Drop Measurement - Illustration

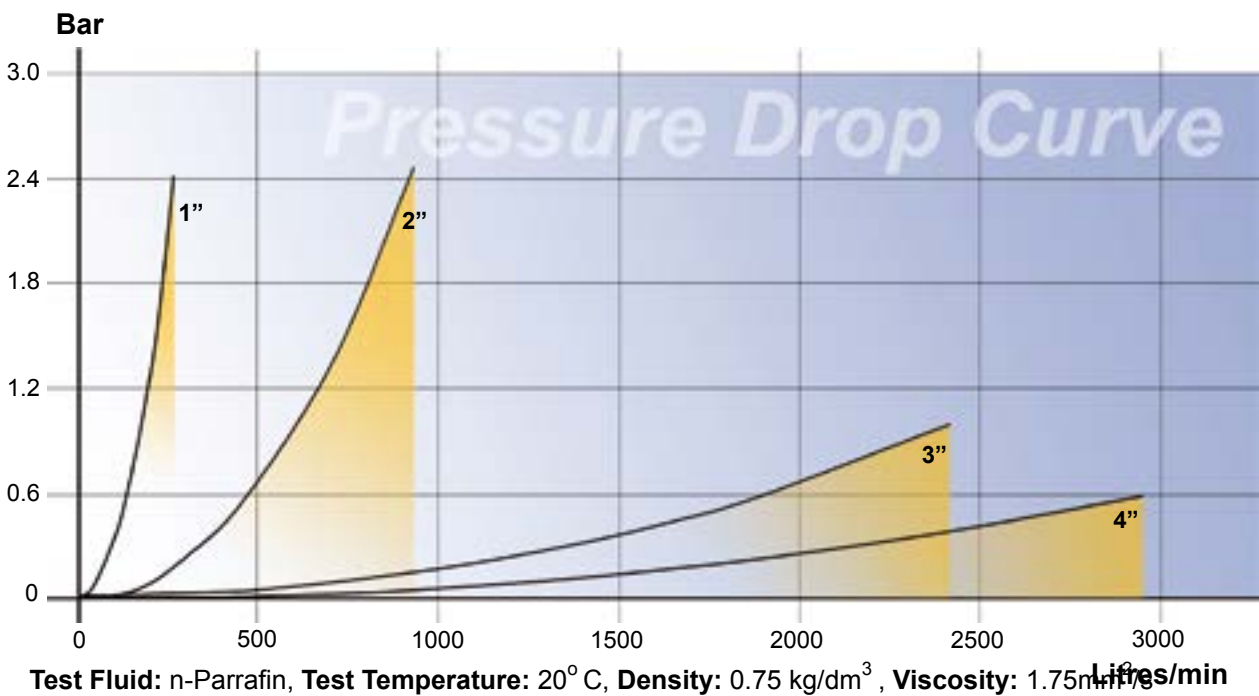
Illustration Pressure Drop Measurement
According to NATO STANAG 3756, Annex E



Pressure Drop Mann Tek DG Coupling = Total Pressure Drop - Pressure Drop Due to Piping

Pressure Drop DG Coupling = ΔP

Flow diagram Pressure Drop Curve:



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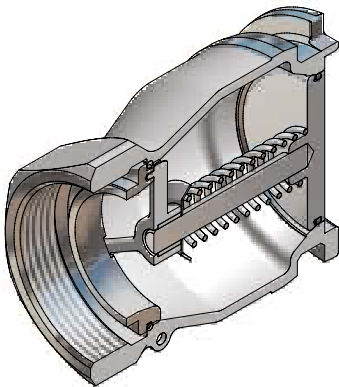
DGCoupling Hose unit with "stop before disconnect"



The Hose unit with "stop before disconnect" is a feature for detecting leakage in the Tank unit.

After stop and control for leakage the user must manually unlock the hose coupling before disconnection.

DGCouplings with ACME and Witworth threads



DGCouplings Tank units and Hose units are available with ACME and Witworth threads for assembling direct on existing connections.

Open threaded ACME couplings has been used for a long time on the rail tank resulting in high product losses, environmental effects and health risks.

Non projecting piston spindle



Tank units with no parts protruding from the coupling in connected position.

For mounting directly on ball-valves, etc.

On request!

Option - Hose unit with Break-away integrated



Where there is a risk of excessive force on the hose due to unexpected movement between the loading and unloading station, combining the Dry Gas Coupling with a Safety Break Away coupling.

On request!

Technical Data

Size: 1" (Ø56 mm), 2" (Ø71 mm), 3" (Ø119 mm), 4" (Ø164 mm)
6" (Ø238 mm) and 8" (Ø272 mm)

Materials: Gunmetal / Brass and Stainless Steel 316L
SS-EN 10 272-1.4404+AT

Seal: **Standard material:** FPM (Viton) or NBR (Nitrile) according to EN549 B2/H3

On request: EPDM, Kalrez, NBR Low temp, Perfluorelastomer (FFPM), Fluorsilicone rubber (MFQ), Chemraz and Viton GF.

Temperature range: -20°C (-4°F) to 80°C (176°F) (larger temperature range from -50°C (-58°F) up to +200°C (392 °F) is possible, depending on Seal material)

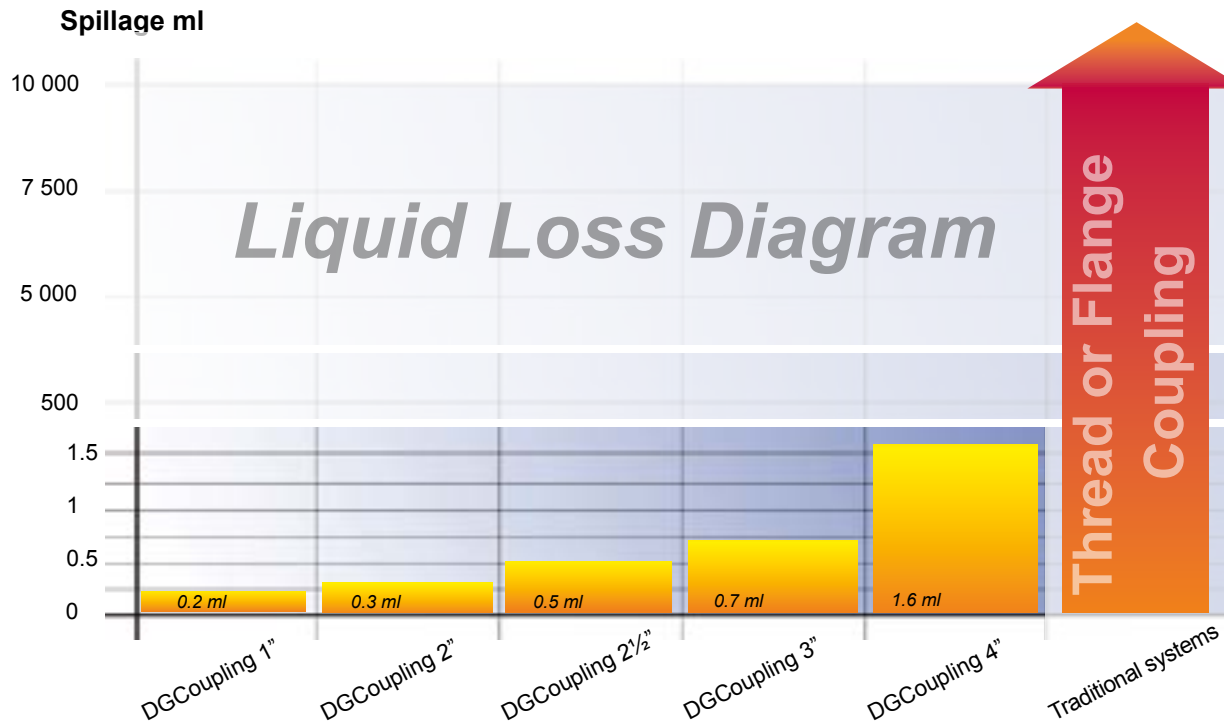
Max Working Pressure: MWP 25 bar / MAWP 300 psi

Min. Burst Pressure: 125 bar / 1813 psi

Safety Factor: 5:1

End Connections: BSP-, NPT-, ACME- and Witworth threads, DIN- and ASA-flanges. Other connections on request.

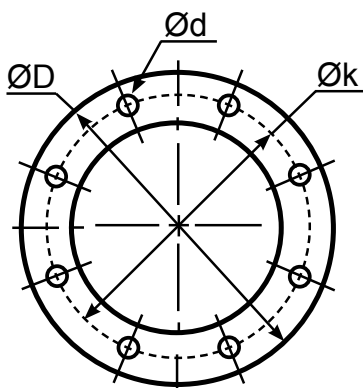
Spillage diagram:



Comparasion of liquid loss during disconnection for Dry Gas Couplings and traditional systems using open threaded couplings, or flange to flange connections. The diagram shows that liquid loss for traditional systems may be as much as 10.000 times more than when using Dry Gas Couplings.

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Flange Measurement - 1/2



- Ø D = Diameter
- Ø k = Centre diameter
- n = Numer of holes
- Ø d = Hole diameter

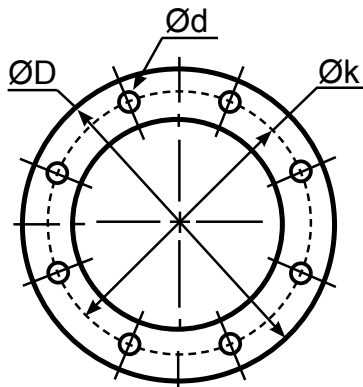
| INCH | | ANSI (ASA) B 16,5 | | | | | | | |
|--------|------|-------------------|--------|---------|------|--------|--------|----|-------|
| | | 150 psi | | 300 psi | | | | | |
| | | ØD | Øk | n | Ød | ØD | Øk | n | Ød |
| 3/4" | mm | 98,4 | 69,8 | 4 | 15,9 | 117,5 | 82,5 | 4 | 19 |
| | inch | 3 7/8 | 2 3/4 | | 5/8 | 4 5/8 | 3 1/4 | | 3/4 |
| 1" | mm | 107,7 | 79,4 | 4 | 15,9 | 123,8 | 88,9 | 4 | 19 |
| | inch | 4 1/4 | 3 1/8 | | 5/8 | 4 7/8 | 3 1/2 | | 3/4 |
| 1 1/4" | mm | 117,5 | 88,9 | 4 | 15,9 | 133,3 | 98,4 | 4 | 19 |
| | inch | 4 5/8 | 3 1/2 | | 5/8 | 5 1/4 | 3 7/8 | | 3/4 |
| 1 1/2" | mm | 127 | 98,4 | 4 | 15,9 | 155,6 | 114,3 | 4 | 22,2 |
| | inch | 5 | 3 7/8 | | 5/8 | 6 1/8 | 4 1/2 | | 7/8 |
| 2" | mm | 152,4 | 120,6 | 4 | 19 | 165,1 | 127 | 8 | 19 |
| | inch | 6 | 4 3/4 | | 3/4 | 6 1/2 | 5 | | 3/4 |
| 2 1/2" | mm | 177,8 | 139,7 | 4 | 19 | 190,5 | 149,2 | 8 | 22,2 |
| | inch | 7 | 5 1/2 | | 3/4 | 7 1/2 | 5 7/8 | | 7/8 |
| 3" | mm | 190,5 | 152,4 | 4 | 19 | 209,5 | 168,3 | 8 | 22,2 |
| | inch | 7 1/2 | 6 | | 3/4 | 8 1/4 | 6 5/8 | | 7/8 |
| 4" | mm | 228,5 | 190,5 | 8 | 19 | 254 | 200 | 8 | 22,2 |
| | inch | 9 | 7 1/2 | | 3/4 | 10 | 7 7/8 | | 7/8 |
| 5" | mm | 254 | 215,9 | 8 | 22,2 | 279,4 | 234,9 | 8 | 22,2 |
| | inch | 10 | 8 1/2 | | 7/8 | 11 | 9 1/4 | | 7/8 |
| 6" | mm | 279,4 | 241,3 | 8 | 22,2 | 317,5 | 269,9 | 12 | 22,2 |
| | inch | 11 | 9 1/2 | | 7/8 | 12 1/2 | 10 5/8 | | 7/8 |
| 8" | mm | 342,9 | 298,4 | 8 | 22,2 | 381 | 330,2 | 12 | 25,4 |
| | inch | 13 1/2 | 11 3/4 | | 7/8 | 15 | 13 | | 1 |
| 10" | mm | 406,4 | 361,9 | 12 | 25,4 | 444,5 | 387,3 | 16 | 28,6 |
| | inch | 16 | 14 1/4 | | 1 | 17 1/2 | 15 1/4 | | 1 1/8 |
| 12" | mm | 482,6 | 431,8 | 12 | 25,4 | 520,7 | 450,8 | 16 | 31,7 |
| | inch | 19 | 17 | | 1 | 20 1/2 | 17 3/4 | | 1 1/4 |

| | | TW DIN 28459 | | | | |
|-----|-----|--------------|------|------|----|------|
| | | DN | ØD | Øk | n | Ød |
| TW1 | 50 | mm | 154 | 130 | 8 | 11 |
| | | inch | 6.06 | 5.12 | | 0.43 |
| TW1 | 80 | mm | 154 | 130 | 8 | 11 |
| | | inch | 6.06 | 5.12 | | 0.43 |
| TW3 | 100 | mm | 174 | 150 | 8 | 14 |
| | | inch | 6.85 | 5.91 | | 0.55 |
| TW5 | 125 | mm | 204 | 176 | 8 | 14 |
| | | inch | 8.03 | 6.93 | | 0.55 |
| TW7 | 150 | mm | 240 | 210 | 12 | 14 |
| | | inch | 9.45 | 8.27 | | 0.55 |

| | | T.T.M.A | | | |
|------|------|---------|-------|----|------|
| INCH | | ØD | Øk | n | Ød |
| 2" | mm | 114,3 | 95,3 | 6 | 11,1 |
| | inch | 4.50 | 3.75 | | 0.44 |
| 3" | mm | 142,9 | 123,8 | 8 | 11,1 |
| | inch | 5.63 | 4.87 | | 0.44 |
| 4" | mm | 168,3 | 149,2 | 8 | 11,1 |
| | inch | 6.63 | 5.87 | | 0.44 |
| 5" | mm | 196,9 | 177,8 | 12 | 11,1 |
| | inch | 7.75 | 7.00 | | 0.44 |
| 6" | mm | 228,6 | 206,4 | 12 | 11,1 |
| | inch | 9.00 | 8.13 | | 0.44 |
| 8" | mm | 276,2 | 257,2 | 16 | 11,1 |
| | inch | 10.87 | 10.13 | | 0.44 |

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Flange Measurement - 2/2



- Ø D = Diameter
- Ø k = Centre diameter
- n = Numer of holes
- Ø d = Hole diameter

ANSI (ASA) B 16,5

| INCH | 150 psi | | | | 300 psi | | | |
|--------|-------------|-------------|--------|-------------|-------------|-------------|--------|-------------|
| | ØD | Øk | n | Ød | ØD | Øk | n | Ød |
| 3/4" | mm | 98,4 | 69,8 | 4 | 15,9 | 117,5 | 82,5 | 19 |
| | inch | 3 7/8 | 2 3/4 | | 5/8 | 4 5/8 | 3 1/4 | 4 |
| 1" | mm | 107,7 | 79,4 | 4 | 15,9 | 123,8 | 88,9 | 19 |
| | inch | 4 1/4 | 3 1/8 | | 5/8 | 4 7/8 | 3 1/2 | 4 |
| 1 1/4" | mm | 117,5 | 88,9 | 4 | 15,9 | 133,3 | 98,4 | 19 |
| | inch | 4 5/8 | 3 1/2 | | 5/8 | 5 1/4 | 3 7/8 | 4 |
| 1 1/2" | mm | 127 | 98,4 | 4 | 15,9 | 155,6 | 114,3 | 22,2 |
| | inch | 5 | 3 7/8 | | 5/8 | 6 1/8 | 4 1/2 | 4 |
| 2" | mm | 152,4 | 120,6 | 4 | 19 | 165,1 | 127 | 19 |
| | inch | 6 | 4 3/4 | | 3/4 | 6 1/2 | 5 | 8 |
| 2 1/2" | mm | 177,8 | 139,7 | 4 | 19 | 190,5 | 149,2 | 22,2 |
| | inch | 7 | 5 1/2 | | 3/4 | 7 1/2 | 5 7/8 | 8 |
| 3" | mm | 190,5 | 152,4 | 4 | 19 | 209,5 | 168,3 | 22,2 |
| | inch | 7 1/2 | 6 | | 3/4 | 8 1/4 | 6 5/8 | 8 |
| 4" | mm | 228,5 | 190,5 | 8 | 19 | 254 | 200 | 22,2 |
| | inch | 9 | 7 1/2 | | 3/4 | 10 | 7 7/8 | 8 |
| 5" | mm | 254 | 215,9 | 8 | 22,2 | 279,4 | 234,9 | 22,2 |
| | inch | 10 | 8 1/2 | | 7/8 | 11 | 9 1/4 | 8 |
| 6" | mm | 279,4 | 241,3 | 8 | 22,2 | 317,5 | 269,9 | 22,2 |
| | inch | 11 | 9 1/2 | | 7/8 | 12 1/2 | 10 5/8 | 12 |
| 8" | mm | 342,9 | 298,4 | 8 | 22,2 | 381 | 330,2 | 25,4 |
| | inch | 13 1/2 | 11 3/4 | | 7/8 | 15 | 13 | 12 |
| 10" | mm | 406,4 | 361,9 | 12 | 25,4 | 444,5 | 387,3 | 28,6 |
| | inch | 16 | 14 1/4 | | 1 | 17 1/2 | 15 1/4 | 16 |
| 12" | mm | 482,6 | 431,8 | 12 | 25,4 | 520,7 | 450,8 | 31,7 |
| | inch | 19 | 17 | | 1 | 20 1/2 | 17 3/4 | 16 |

TW DIN 28459

| | DN | ØD | Øk | n | Ød | |
|-----|-----|-------------|-------------|------|-------------|------|
| TW1 | 50 | mm | 154 | 130 | 8 | 11 |
| | | inch | 6.06 | 5.12 | | 0.43 |
| TW1 | 80 | mm | 154 | 130 | 8 | 11 |
| | | inch | 6.06 | 5.12 | | 0.43 |
| TW3 | 100 | mm | 174 | 150 | 8 | 14 |
| | | inch | 6.85 | 5.91 | | 0.55 |
| TW5 | 125 | mm | 204 | 176 | 8 | 14 |
| | | inch | 8.03 | 6.93 | | 0.55 |
| TW7 | 150 | mm | 240 | 210 | 12 | 14 |
| | | inch | 9.45 | 8.27 | | 0.55 |

T.T.M.A

| INCH | ØD | Øk | n | Ød | |
|------|-------------|-------------|-------|-------------|------|
| 2" | mm | 114,3 | 95,3 | 6 | 11,1 |
| | inch | 4.50 | 3.75 | | 0.44 |
| 3" | mm | 142,9 | 123,8 | 8 | 11,1 |
| | inch | 5.63 | 4.87 | | 0.44 |
| 4" | mm | 168,3 | 149,2 | 8 | 11,1 |
| | inch | 6.63 | 5.87 | | 0.44 |
| 5" | mm | 196,9 | 177,8 | 12 | 11,1 |
| | inch | 7.75 | 7.00 | | 0.44 |
| 6" | mm | 228,6 | 206,4 | 12 | 11,1 |
| | inch | 9.00 | 8.13 | | 0.44 |
| 8" | mm | 276,2 | 257,2 | 16 | 11,1 |
| | inch | 10.87 | 10.13 | | 0.44 |

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Product Information



DDCouplings®

Dry Disconnect Coupling.
1" to 8", PN 16 - PN 25. Aluminium, Brass-Gunmetal, Stainless Steel and PEEK. Other materials on request. According to NATO standard STANAG 3756.



DGCouplings®

Dry Gas Coupling.
1" to 8", PN25. Stainless steel.
Other materials on request.



DACouplings,

Dry Aviation Coupling.
2½", PN 10. Main body in Aluminium.
Standards: ISO 45, MS 24484, NATO STANAG 3105, British Aerospace Spec. 2C14.



Sampling, Vent or Drain unit

Stainless Steel SS-EN 10 088-1.4404+AT (AISI 316L). Ball Valve in 1.0619 and 1.4301



Full Flow - ballvalves

2" to 4", PN 10, Aluminium.
Ballvalve and 2-way Ballvalve.
Made for Petroleum Tank Trucks. Variations of flange connections.



Swivel joints

¾" to 10", PN 10 - PN 25.
Aluminium, Brass-Gunmetal, Stainless Steel.
Other materials on request.
Connection: BSP, NPT. Flanged connection (DIN, ANSI/ASA e.t.c)



SBCouplings, bolt series

Industrial and Marine Safety Break-away, breaking bolts,
Aluminium, Brass, Stainless Steel, 1" to 12", female/male threads and with flanges, with breaking bolts.
Safety Break-away, cable release
Stainless Steel, PN10 / PN 25. 2" to 4", female threads. 6" to 12", flanged connection

Business Segment Information



Offshore & Marine



Gas (LPG)



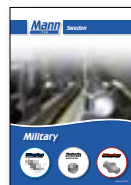
Rail tankers



Chemical industry



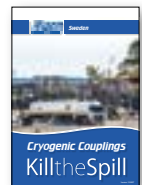
Tank trucks



Military

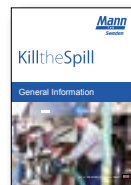


Container



Cryogenic Couplings
KilltheSpill

Company Information



General Information about Mann Tek, products and Business Segments



Quality, Health, Safety and Environment Policy.
Quality Approvals,
Product Approvals and
Declaration of Conformity

Service



Service instructions and operation manuals

Your distributor

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3125 BJ Schiedam

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Tel: +31 (0) 10 - 462 39 11

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