

When Fire Brigades or other emergency response vehicles are called to attend hazardous spills, specially equipped support vehicles provide equipment to seal leaks and collect or transfer dangerous media such as flammable liquids, gases or other chemicals into safe containers.

Commonly used coupling systems can differ from country to country, therefore there is no international standard that covers the required equipment.

In Germany a DIN 14555-12 standard exists which has recently been amended. The prescribed equipment for the vehicles has been adopted to consider state of the art hoses and couplings that are currently available on the market.

This information sheet lists the equipment available from ELAFLEX to meet the demand (DIN 14555-12) generated by this type of incident.

Couplings

At the heart of the system is the **'TW' coupling system to EN 14420-6**. When compared with previously used threaded foodstuff couplings these are easy to operate, quicker to connect, self-tightening and of rugged construction. The ELAFLEX TW brand is recognised as of quality design and manufacture and is widely in use in the chemical, petroleum based industries in Germany and other European countries.

The adapters listed in DIN 14555-12 to allow for country variation are available from ELAFLEX to provide an instant and safe connection to the relevant fitting on the affected vehicle. DIN 14555-12 prescribes adapters 'TW' to **Storz, Guillemín, Dry Disconnect Couplings (Stanag 3756)** and **Camlock (EN 14420-7)**, also flange and Rail Tanker 5½" to mention the most popular.

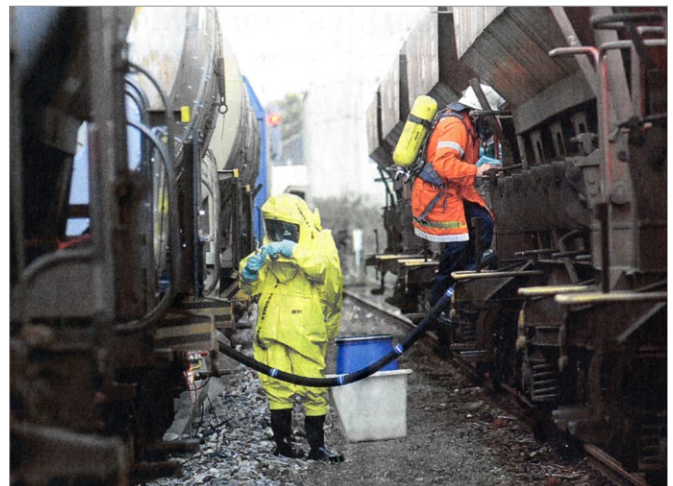
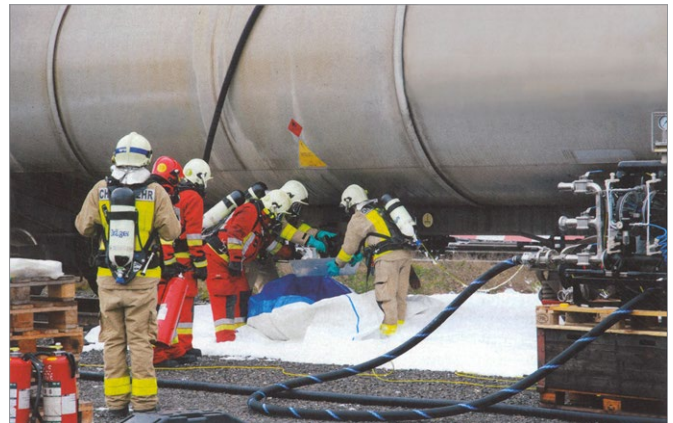
Materials: DIN 14555-12 requires all couplings and Spannfix or Spannloc hose attachment to be of stainless steel 1.4408/1.4571, seals of FKM.

Hoses and Hose Assemblies

Universal hoses to EN 12115:2011 with UPE or fluo-ropolymer lining shall be used. They must fulfill the electrical conductivity class Ω/T and shall be suitable for both suction and pressure operation. The term Ω/T requires a maximum electrical resistance of $10^6 \Omega$ for hose end to hose end and a maximum resistance of $10^9 \Omega$ through the hose wall from cover to liner. The Ω/T standard ensures that hoses meet the most stringent requirements suitable for the transfer of hazardous liquids in EX Zones, be they temporary or otherwise.

To meet this standard Elaflex recommends hose types UTS and Polypal Plus with UPE lining and ELAFLON PTFE with PTFE lining. UPE lined hoses are suitable for most common media, however ELAFLON PTFE offers chemical resistance for all commonly used media.

On request, we supply complete hose assemblies, professionally mounted, tested with certificate and to Pressure Equipment Directive 2014/68/EU.



Hose Assemblies and Fittings for Equipment Trucks for Dangerous Goods Incidents



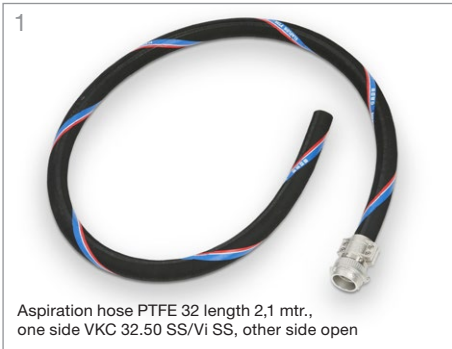
Prescribed by DIN 14555-12:

Ω/T
 Universal Hoses
 to EN 12115
 with UPE or PTFE lining

PTFE 50, length 5 mtr., assembled with MKX 50 SS/Vi SS, VKX 50 SS/Vi SS
 – alternatively: UTS 50 or Polypal Plus 50 hose types –

As a base of the equipment, DIN 14555-12 :2015-04 prescribes 10 hose assemblies DN 50 with Ω/T conductivity to EN 12115. Choose between type UTS respectively Polypal Plus (with UPE lining) or Elaflon PTFE (with PTFE lining). Male and female 'TW' hose couplings to EN 14420-6 are of stainless steel. Caps and plugs see picture 11. The hose tails are attached with Spannfix or Spannloc safety clamps, also of stainless steel.

The parts of our adapters can be secured against accidental loosening, preferred seal material for the stated use is FKM. When ordering, these details should be stated.



1
 Aspiration hose PTFE 32 length 2,1 mtr.,
 one side VKC 32.50 SS/Vi SS, other side open



2
 Adapters Dry Disconnect Stanag 3756
 DDC- M 50/65/80 SS NOT x VK 50 SS/Vi
 Hose sided MK coupling can be coupled without tools



3
 Adapters TW to EN 24420-6
 MK 50 SS/Vi x MK 50 SS/Vi, VK 80 SS/Vi x VK 50 SS/Vi,
 VK 50 SS/Vi x VK 50 SS/Vi, MK 80 SS/Vi x VK 50 SS/Vi



4
 Adapters Storz / Guillemin
 Storz C SS/Vi x VK 50 SS/Vi, Storz C SS/Vi x MK 50 SS/Vi,
 GK 50 SS/Vi x VK 50 SS/Vi, GK 80 SS/Vi x VK 50 SS/Vi



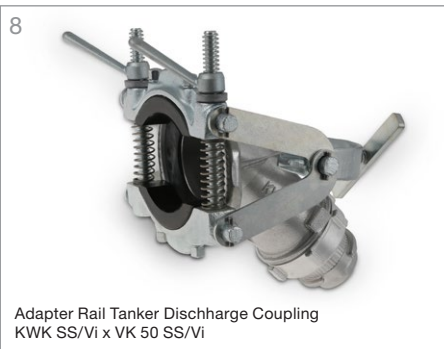
5
 Adapters Cam Locking Couplings to EN 14420-7
 AVK 50 SS/Vi x VK 50 SS/Vi, AMK 50 SS/Vi x VK 50 SS/Vi,
 AVK 75 SS/Vi x VK 50 SS/Vi



6
 Adapters Foodstuff Couplings to DIN 11851
 Female Rd 78 x 1/6 SS x VK 50 SS/Vi,
 Male Rd 78 x 1/6 SS/Vi x MK 50 SS/Vi



7
 Adapters Flange
 FGN 2" SS x VK 50 SS/Vi, FGN 3" SS x VK 50 SS/Vi,
 FGN 4" SS x VK 50 SS/Vi,



8
 Adapter Rail Tanker Discharge Coupling
 KWK SS/Vi x VK 50 SS/Vi



9
 Adapter for Rail Tanker 51/2" connection
 KWZ SS/Vi x VK 50 SS/Vi



10
 Adapter Sight Glass
 SG 2" SS/Vi with MK 50 SS/Vi and VK 50 SS/Vi



11
 Plugs and Caps
 MB 50 SS/Vi, VB 50 SS, VB 100 SS,
 BK 2" SS/Vi, BK 3" SS/Vi



12
 Assembling Tools
 EW TWS 50 (for MK 50 / VK 50),
 EW TWS 80 (for MK 80 / VK 80),
 Hinged Hook Spanner EW GH 60/90 SS