

PRODUCT SHEET

WELDED COUPLING - VACUUM/PERLITE INSULATED

Transfer Lines

Conditioning
Equipment

Components

Johnston Coupling

Welded Coupling

Blindcap / Endpiece

VI Demaco valve

Gas lock

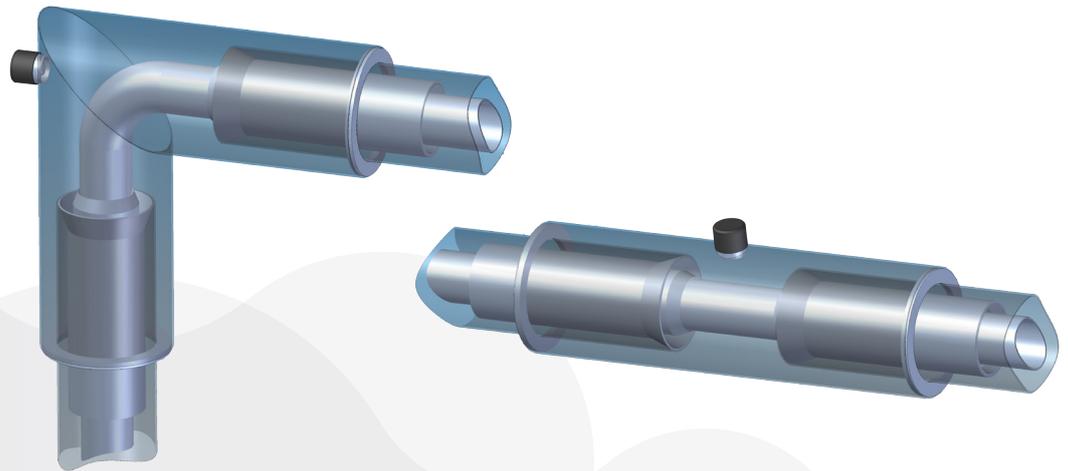
Highly flex

Pipe end heater

Filling Stations

Controlling

Welded couplings with vacuum or perlite insulation are used to connect prefabricated vacuum insulated pipe spools or vacuum insulated flexible spools. This permanent connection between the spools assures maximum safety and allows testing by NDE on the process pipe. The version with vacuum insulation, which is established on-site after testing, provides the best possible reduction of heat loss. Both versions are easy to install and have a margin of flexibility in length. In case there is a deviation between the initial engineering drawing and the actual circumstances on the construction site, the welded coupling can simply adjust the difference in length.



BENEFITS

- Lowest heat loss values due to vacuum insulation
- Permanent connection allows NDE testing
- No limits in diameter and/or pressure
- Allows limited adjustments in pipe routing while installed
- Re-vacuuming of coupling connections is possible

APPLICATION

- Ice free connection of 2 vacuum insulated spools
- Ice free connection with bulk tanks (if tank is prepared correctly)
- Where plug-in (Johnston) couplings are not available
- Low ambient temperature conditions (<-30°C)
- Suitable for all cryogenic medium and conditions
- Installations where high safety or quality aspects are required
- When zero leakage is allowed or regular inspection is hard to realise
- Tie-in connections with existing VI piping

FEATURES

- All stainless steel
- Straight, Angled and/or Tee models available
- High vacuum level insulation
- Qualified welding to the highest standards
- Design independent of design codes like AD2000/EN13480/ASME B31.3

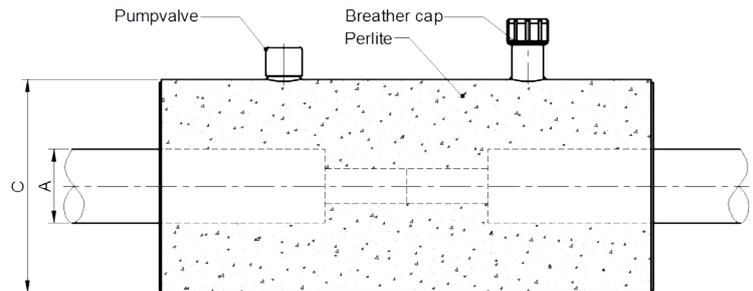
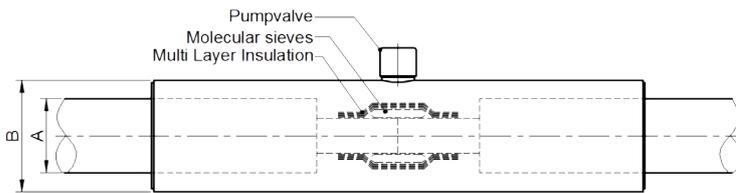
Remarks:

- Requires specialized tools
- Requires longer installation time compared to other coupling types

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PIPE SIZE		VACUUM INSULATED		PERLITE INSULATED	
A - (mm)		VACUUM JACKET O.D. B - (mm)	HEAT LOSS INDICATION PER COUPLING (W)	WELD COUPLING SLEEVE C - (mm)	HEAT LOSS INDICATION PER COUPLING (W)
DN10	∅ 63.5	∅ 114	2.1	∅ 206	14
DN15	∅ 63.5	∅ 114	2.2	∅ 206	15
DN25	∅ 63.5	∅ 114	2.8	∅ 206	16
1"	∅ 76.1	∅ 114	3.1	∅ 219	17
1½"	∅ 88.9	∅ 114	3.5	∅ 219	18
2"	∅ 114.3	∅ 154	4.6	∅ 219	21
2½"	∅ 139.7	∅ 168	5.5	∅ 219	23
3"	∅ 154	∅ 206	7	∅ 256	25
4"	∅ 168.3	∅ 206	9	∅ 273	29
6"	∅ 219.1	∅ 256	14	∅ 306	40
8"	∅ 273	∅ 306	19	∅ 406	44



MATERIALS

Vacuum jacket sleeve

1.4301/1.4306/1.4307 ~304/304L

Optional: 1.4401/1.4404 ~316/316L

Multi-Layer insulation

Glass paper and aluminum foil

DOCUMENTATION

Standard according Pressure Equipment Directive (PED)

Design according AD2000, EN13480 or ASME B31.3 (others on request)

Static vacuum with Multi-Layer insulation