

Sening[®] MultiFittings

Tank Truck Fittings

Benefits

- ▶ Over 100 years of knowledge and experience
- ▶ Modular system
- ▶ Low-maintenance, easy-to-repair design
- ▶ User-friendly operation
- ▶ Lighter components
- ▶ Everything from a single source in Sening quality



We have it all

- ▶ Manlids
- ▶ Vapor Recovery
- ▶ Collector/Manifold
- ▶ Foot Valves
- ▶ Pneumatic Controls
- ▶ Line Valves
- ▶ API Couplings
- ▶ Gravity Discharge Adapter
- ▶ Sight Glass Outlet Nozzles

Our Story

Sening has been developing and producing tank truck products for over 100 years. Today, Sening offers innovative and customer-oriented solutions in the field of tank truck fittings.

Sophisticated products are required to fulfill customers' demands for greater efficiency. The products and systems are based on specialist expertise and an understanding of customer requirements.

User-friendly operation and reliable products help minimize downtime and increase efficiency.

Sening offers the full range of products that are needed for tank trucks so as to guarantee their reliable operation.

This not only includes electronic systems but also all components for bottom loading and the broadest range of valves and flanges.

Manlids



Dome cover plate 20", MANCOV20x



Manlid 20", MANLIDx, with and without SPD sensor



Flame arrestor/vent valve combination DGB2-2/DO702-F



Flame arrestor DBG2-2 with pipe connection or sliding flange



Vent valve with pressure and vacuum relief function DO702-F



Weld ring 20", WELDRING20x



Raincover 20", RAINCOV20x



Dip stick DOP in different lengths



Electrical/pneumatic overfill prevention HANV in different lengths

Advantages

- ▶ 300 mm fill hole opening for the simple positioning of the filling arm
- ▶ Manlid easy to open and close
- ▶ Manlid can be operated one-handed
- ▶ Modular system
- ▶ Weld ring can be installed at different heights (countersunk or protruding)
- ▶ Weld ring can assume the function of a rollover bar
- ▶ Accepted system in accordance with EN 13317 (drop tested)
- ▶ TÜV-certified flame arrestor



Manlid with flame arrestor DBG2-2 combined with vent valve DO702-F, pneumatic sensor HANV and electrical overfill prevention NSE A6-2.

Select manlids with and without fill holes weld rings and rain covers.

The following components can be installed on the manlids:

- ▶ Flame arrestor DBG2-2
- ▶ Vent valve with pressure and vacuum relief function DO702-F
- ▶ Vent valve with sequential control and flame protection screen VV80-F
- ▶ Dip stick DOP
- ▶ Level sensor as electrical overfill prevention
- ▶ Level sensor as pneumatic overfill prevention HANV
- ▶ Opening sensor SPD

Type	Fill Hole	Size
Manlid with hole according to EN 13314, EN 13317	Ø 300 mm	20"
Dome cover plate according to EN 13317	-	20"
Weld ring (aluminum) according to EN 13094	-	20"

Vapor Recovery

For vapor recovery systems, we offer several vapor recovery components, which reliably prevent the emission of hydrocarbons when loading and unloading the tank truck at the terminal or the service station.

The Sening vapor recovery system is modularly designed and comprises:

- ▶ Vapor recovery valves GPRV and VRV
- ▶ Vapor displacement distributor GPVV small and wide design
- ▶ Vapor displacement safety valve GPSV
- ▶ Pneumatic interlock GPVIN

Accessories: Vapor recovery adapter 2" or 3" dust cover for vapor recovery valves



Vapor Recovery Valve VRV1 with Interlock



Version GPVZ2



Version GPVZ1



Version GPVZ1

Advantages

- ▶ Modular structure using a square flange
- ▶ Multiple assembly versions depending on space requirements in the tank truck's cabinet
- ▶ Interlock assembly top or side mounted
- ▶ Direct connection to the other side of the vehicle through 2" connection

Collector/Manifold

The modular Sening single-channel and dual-channel manifold systems allow simplification of the piping systems on vehicles with flow meters. The manifold systems have a compact design and can be combined as desired depending on the number of tank truck compartments and discharge paths.



Single-channel manifold VEK2-x



Dual-channel manifold VZK2-x



Single-channel manifold VEK2-300-3K-L with mounted API couplings

Advantages

- ▶ Low weight and compact design
- ▶ Integrated valve for opening the discharge paths
- ▶ High flow rates as a result of low pressure drop
- ▶ Minimized fuel contamination
- ▶ Variable positioning of the discharge outlets
- ▶ 300 mm and 350 mm distance between API couplings for single channel manifolds
- ▶ Reduced discharge time by simultaneously unloading of several compartments

Optional: Blind flange, discharge element and section elbow

Foot Valves

The foot valves are available with different housing shapes and sizes to meet the highly diverse requirements associated with the construction of a tank truck. All foot valves are pressure-balanced.



Foot valve BO100, pressure-balanced with SPD position sensor



Foot valve BO100 F2



Foot valve BO100 F1



Foot valve BO150

Optional: Pressure relief valve ENV1SPD position sensor
Accessories: Weld flange FL80/100 for tank compartment
Square pipe flanges FL80V and FL100V

Advantages

- ▶ Diaphragm valve with long service life
- ▶ Non-stalling
- ▶ Spring-force closure
- ▶ Low pressure drop due to large opening area

Model	Type	Flange Type	Nominal Size
BO80	90°	EN13083	DN80
BO80-T	T-Form	EN13083	DN80
BO100	90°	EN13083	DN100
BO100-F1	Slimline	Square	DN100
BO100-F2	Low Profile	Square	DN100
BO100-T	T-Form	EN13083	DN100
BO100-TF	T-Form, low profile	Square	DN100
BO100-K	3-way	EN13083	DN100
BO150	90°	EN13083	DN150
BO150-T	T-Form	EN13083	DN150

Pneumatic Controls

The pneumatically operated fittings and valves are controlled by a pneumatic switch.

It has a modular structure and can be used as an individual control block or as a control block group comprising any number of individual blocks.



Control block with common air connection and block STB-1-5-K



Control block with individual air connection and product marker STBE-2M

Type Code	Description
STB-1 to n	With common air connection and labelled 1 to n
STBE-1 to n	With individual air connection and labelled 1 to n
STBK	Master control block for vent valves activation with reduced sustaining pressure

Optional: Product marker

Line Valves

Pneumatically operated line valves are available in different sizes for flexible use in pipe systems. The new model DV100-4 is designed to allow complete drainage of pipework to reduce product contamination.



Line valve DV100-4 with SPD position sensor



Line valve V100-40

Model	Type	Flange Type	Nominal Size
DV80-2	Straight	EN13083	DN80
E80-2	Angle valve	EN13083	DN80
DV100-4	Straight	Square	DN100
TV100-2	T-Form	EN13083	DN100
V100-40	40°	EN13083	DN100

Optional: SPD position sensor, 2-stage shut-off for flow meter applications

API Couplings

API couplings are manufactured in accordance with standard API RP 1004.

The couplings are made from aluminum with hardened nose ring and to reduce wear.



4" API coupling VKV1



4" API coupling VKV1-M with sight glass, lever operated



4" API coupling VKV1-PA with sight glass, pneumatically operated



Cover VKD for API coupling

Advantages

- ▶ Modular structure, expandable with all couplings options
- ▶ Optional SPD position sensor detects opening prior to product flow

Model	Type
VKV1	4" API Coupling
VKV1-M	4" API Coupling with sight glass, lever operated
VKV1-PA	4" API Coupling with sight glass, pneumatically operated

Optional: SPD position sensor

Gravity Discharge Adapter

Gravity discharge adapter for API couplings are available in various nominal sizes and connection type for flexible use at discharge.



Gravity discharge adapter VKA4C with Camlock



Gravity discharge adapter VKA4G

Model	Sight glass and lever	Connection Type	Nominal size
VKA3G	-	Thread	G 3" BSP
VKA4G	-	Thread	G 4" BSP
VKA3C	-	Camlock	3"
VKA4C	-	Camlock	4"

Sight Glass Outlet Nozzles

The sight glass outlet nozzles are mounted at the tank truck discharge connections. A large variety of versions is available with straight or tilted outlet, with butterfly valve or with throttle valve.



Sight Glass outlet nozzle SGAT100



Sight Glass outlet nozzle SGAV100 with butterfly valve

Model	Flange type	Nominal Size
SGAT80	EN13083	DN80
SGAV80	Square	DN80
SGAT100	EN13083	DN100
SGAV100	Square	DN100

Optional: G for straight outlet, KL for butterfly valve, D for throttle valve



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