

# WEH® CNG refueling

High-performance components  
for natural gas vehicles and fueling stations



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## » Introduction

### ILLUSTRATIONS



Car refueling with TK17 CNG

Source: [www.erdgas-mobil.de](http://www.erdgas-mobil.de)



CNG fueling station

Source: [www.erdgas-mobil.de](http://www.erdgas-mobil.de)

## » Introduction

### A VISION FOR A GLOBAL CHALLENGE

With great foresight for a future global challenge, WEH Gas Technology has been a pioneer in the field of alternative fuels since 1986. The aim was to develop their own CNG fueling system with maximum safety and outstanding functionality. For acceptability reasons the system should give the operator the 'feel' of a conventional refueling system despite the highly complex technology. Today the WEH® CNG fueling system has become the worldwide NGV1 standard thus rewarding WEH's entrepreneurial courage and foresight.

A complete range of products for NGV refueling is available - from fueling nozzles, hoses, breakaway couplings and filters for fueling stations to receptacles and check valves in vehicles.

All components are protected by a patent and cover all applications for refueling cars, buses and trucks.

The well proven design, ease of operation, safety and reliability of all WEH® Products has led to widespread customer acceptance of alternative fuels and play a major part in the development of refueling systems for alternative fuels.

Today WEH is world market leader in the field of alternative refueling systems and partner to the international automobile industry. Furthermore WEH has been committed in a number of projects worldwide promoting alternative drive systems thus also being an initiator for a mobile society with a future.

#### An advanced product for a high performance application

WEH's NGV product line has been designed expressly for the demanding applications of natural gas high-pressure refueling systems. All products suit the extreme flow and temperature conditions found in practical operation. Naturally all WEH®

Products are constructed of high-quality materials. Throughout many years of experience and numerous tests special seal designs and sealing materials have been developed, which meet the demands of the medium and the application.

#### Unique WEH® Jaw locking mechanism

All fueling nozzles have the unique WEH® Jaw locking mechanism developed by WEH. The jaw locking system is superior to ball locking systems in that it tolerates dirt and reduces wear on the receptacle of the vehicle.



#### Enhanced safety by integrating a dirt particle filter

Using an integrated particle filter avoids dirt ingress and therefore leakage from the receptacle which gives enhanced safety and reliability - essential features for the volatile nature of CNG products.



#### Technically advanced safety features

Natural gas refueling can be dangerous if unsuitable products are used. WEH® Products have a very high safety standard to reduce risk factors. Effective safety systems feature in all WEH® NGV products especially in the fueling nozzles and achieve the necessary safety standards for use at self-service fueling stations.

## » Introduction

### COLOR CODING FOR INSTANT IDENTIFICATION OF PRESSURE RANGE

All 250 bar (3,600 psi) fueling nozzles have a yellow color coding for operator's ease of use to visually identify the requested pressure range immediately.

A yellow impact protection characterizes all 250 bar (3,600 psi) versions of the fueling nozzles:

- TK16 CNG
- TK17 CNG
- TK22 CNG
- TK24 CNG
- TK26 CNG

The impact protections of the 200 bar (3,000 psi) versions remain black.

A yellow sliding sleeve characterizes all 250 bar (3,600 psi) versions of the fueling nozzles:

- TK1 CNG
- TK4 CNG
- TK10 CNG

The sliding sleeves of the 200 bar (3,000 psi) versions remain black.

The fueling-sided interface of all fueling nozzles complies with the ANSI and the CSA NGV1 standard. Further certification basis are indicated for the respective product.



### COMPATIBILITY OF FUELING NOZZLES / RECEPTACLES

All WEH® Fueling nozzles and receptacles have a coding for gas type and pressure range thus not allowing connection to other gas vehicles and other pressure ranges.

OVERVIEW	Receptacle	TN1 CNG		TN5 CNG	
Fueling nozzle	Pressure PN	3,000 psi	3,600 psi	3,000 psi	3,600 psi
TK17 CNG	3,000 psi	✓	✓		
TK16 CNG					
TK10 CNG					
TK4 CNG	3,600 psi		✓		
TK1 CNG					
TK26 CNG	3,000 psi			✓	✓
TK22 CNG	3,600 psi				✓
TK24 CNG					



## » Overview

### OVERVIEW OF NOZZLES / BREAKAWAY COUPLINGS

Overview of fueling nozzles					
Type	Page	Car	Bus/truck	Self-Service	
TK17 CNG	10	✓		✓	
TK16 CNG	16	✓		✓	
TK10 CNG	22	✓			
TK4 CNG	32	✓			
TK1 CNG	36	✓			
TK26 CNG	60		✓	✓	
TK22 CNG	66		✓		
TK24 CNG	70		✓		
Overview of defueling nozzles					
Type	Page	Discharging of CNG fuel tanks – car	Discharging of CNG fuel tanks – bus / truck	Discharging of trailers	
TK23 CNG	108			✓	
TK6 CNG	112	✓			
TK21 CNG	116		✓		
Overview of breakaway couplings					
Type	Page	Car	Car – inline	Bus / truck	Bus / truck – inline
TSA1 CNG	40	✓			
TSA2 CNG	44		✓		
TSA5 CNG	74			✓	
TSA6 CNG	78				✓



## » Standards, approvals and memberships

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### CERTIFIED QUALITY MANAGEMENT

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Our high quality standard is achieved by a living quality management and the certification according to international quality standards is confirmed.



ISO 9001:2015

### INTERNATIONAL STANDARDS AND APPROVALS

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The following overview shows the standards and approvals of WEH® Products. For detailed information see the respective product.

- ANSI NGV1
- ECE R110\*
- ISO 14469
- ISO 15500
- ISO 15501

\* For reasons of precaution, we'd like to point out that

a) regarding the delivery of each article acc. to the respective order confirmation - in particular concerning ECE / EC79 articles - WEH does not confirm the fulfilment of additional requirements of the concerned end customer,

b) WEH is not subject to any external reporting obligation with regard to external change management (see page 156) and

c) WEH does not confirm the replacement of the product in the form of a regular series delivery.

Exclusions acc. to a) - c) can be agreed with the conclusion of a customer-specific project with corresponding special conditions.

### MEMBERSHIPS

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WEH is member of the NGV America.



## » Fueling nozzle TK17 CNG

### DESCRIPTION



#### Features

- Left or right single-handed operation
- Compatible with receptacles acc. to NGV1 standard and ISO 14469 (see page 7, compatibility)
- WEH® EASY-TURN 360° swivel joint
- Easy operation
- Extremely high flow rate short filling times
- Recirculation of the vented gas
- Plastic thermal protection
- Hand grip with magnet
- WEH® Jaw locking mechanism
- Colour coded impact protection (200 bar / 3,000 psi black, 250 bar / 3,600 psi yellow)
- High-grade materials
- Coding for pressure range / gas type

The first WEH user friendly 'Pistol grip' CNG fueling nozzle has been introduced - now redesigned in the pistol grip style familiar to all fueling station users. Retaining the same outstanding technical functionality as our TK16 CNG fueling nozzle, the type TK17 CNG has been remodelled with a sleek new look. The new nozzle is just as quick and easy to use as the common petrol/diesel nozzle and has a similar look and feel. Simply lift the nozzle from the dispenser and place it onto the vehicle's receptacle. Full 360° rotation makes for easy engagement with the vehicle's fuel receptacle. Compress the actuation lever until locking lever engages and the fueling procedure begins. The natural gas can only flow through the line if there is a safe connection. After refueling disengage the nozzle's locking lever and disconnect. Please note that refueling may be stopped or paused at any time. The hand grip has a magnet for actuation of the magnet switch for activation of the dispenser.

#### Safety

The TK17 CNG offers optimum safety to the operator.

The fueling nozzle remains connected to the receptacle until the gas between inlet valve and receptacle is depressurized.

#### Application

Fueling nozzle for CNG fast filling of cars at self-service fueling stations to be used with WEH® Receptacles acc. to NGV1 standard and ISO 14469 (see page 7, compatibility).

### TECHNICAL DATA

Characteristics	Basic version	Options
Nominal bore (DN)	8 mm	On request
Pressure range	P30 acc. to ANSI NGV1 / B200 acc. to ISO 14469 PN = 200 bar (3,000 psi)   PS = 300 bar P36 acc. to ANSI NGV1 / B250 acc. to ISO 14469 PN = 250 bar (3,600 psi)   PS = 350 bar	
Temperature range	-40 °F up to +185 °F	On request
Material	Corrosion resistant	On request
Sealing material	Natural gas resistant	On request
Design	With plastic thermal protection, gas recirculation and hand grip with magnet	On request
Weight	Approx. 4.41 lbs.	
Conformity / Tests / Approvals	The products comply with ANSI NGV1-2006	

# » Fueling nozzle TK17 CNG

## ORDERING | WEH® TK17 CNG Fueling nozzle

approx. dimensions (mm)



Part No.	Description	Pressure (PN)	B1 (male thread)	C2 (male thread)
C1-100529-X01	TK17 CNG	3,000 psi	UNF 9/16"-18*	UNF 7/16"-20*
C1-100077	TK17 CNG	3,600 psi	UNF 9/16"-18*	UNF 7/16"-20*

\* acc. to SAE J514, 37° cone

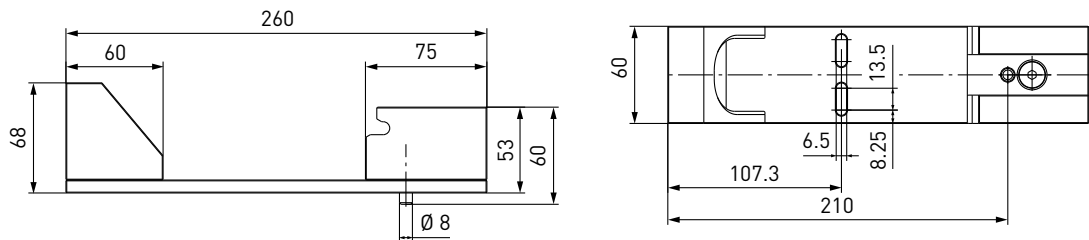
Please see page 14 onwards for fueling assemblies consisting of fueling nozzle, hose set and breakaway coupling.

## ACCESSORIES

The following accessories are available for the WEH® TK17 CNG Fueling nozzle:

### Dispenser mounting

Mounting for safe attachment of the fueling nozzle to the dispenser. Optionally with or without switch actuation.  
Design: Aluminum, stainless steel

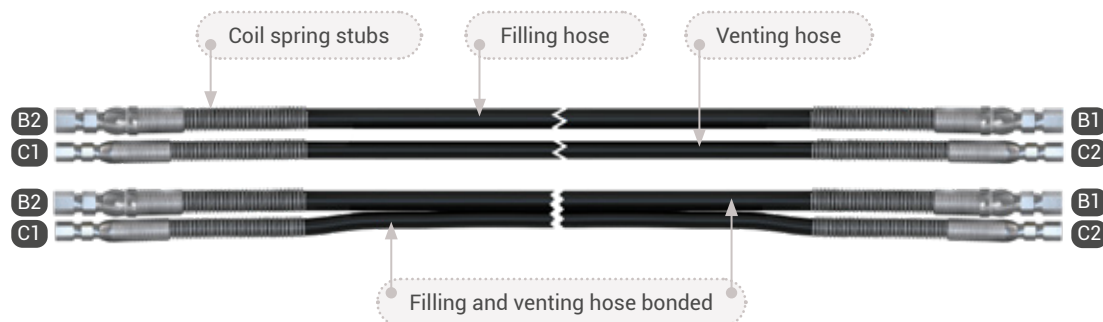


Part No.	Description
C1-66775	Dispenser mounting (switch actuated)
C1-65643	Dispenser mounting (not switch actuated)

## » Fueling nozzle TK17 CNG

### Hose sets TK17 CNG - TSA1 CNG

Filling and venting hoses for connecting fueling nozzle and TSA1 CNG breakaway coupling, complete with fittings and press-fittings supported by coil spring stubs. Available as single or twin hoses (permanently bonded).



Part No.	B1/B2 (female thread)	C1/C2 (female thread)	Hose length
<b>C1-50487</b>	UNF 9/16"-18*	UNF 7/16"-20*	3 m
<b>C1-42304</b>	UNF 9/16"-18*	UNF 7/16"-20*	4 m
<b>C1-58587</b>	UNF 9/16"-18*	UNF 7/16"-20*	5 m

\* acc. to SAE J514, 37° cone

All designs also available with permanently bonded filling and venting hose. Please contact us!

### Hose sets TK17 CNG - TSA2 CNG

Filling and venting hoses for connecting fueling nozzle / dispenser and TSA2 CNG inline breakaway coupling, complete with fittings and press-fittings supported by coil spring stubs.

Part No.	B1/B2 (female thread)	C1/C2 (female thread)	Hose length
<b>On request</b>	UNF 9/16"-18*	UNF 7/16"-20*	2.5   0.5 m
<b>On request</b>	UNF 9/16"-18*	UNF 7/16"-20*	3.5   0.5 m
<b>On request</b>	UNF 9/16"-18*	UNF 7/16"-20*	4.5   0.5 m

\* acc. to SAE J514, 37° cone

All designs also available with permanently bonded filling and venting hose. Please contact us!

# » Fueling nozzle TK17 CNG

## Fittings

Stainless steel fittings for connecting port 'B1' to the filling hose or port 'C2' to the venting hose.

Part No.	Description	Connection fueling nozzle	Connection filling hose
E80-79538	Fitting	UNF 9/16"-18* female thread	UNF 9/16"-18** female thread
E80-65592	Fitting	UNF 9/16"-18* female thread	NPT 1/4" female thread

\* acc. to SAE J514, 37° cone

\*\* acc. to SAE J1926-1

Please see page 144 onwards for a detailed overview on all available fittings.

## Spare parts

Various parts are available as spares for the TK17 CNG fueling nozzle.



Part No.	Description
E80-140262	1 Impact protection 200 bar / 3,000 psi (black)
E80-106830	1 Impact protection 250 bar / 3,600 psi (yellow)
E80-84030	2 Locking lever
E69-60763	3 Logo cap
E99-44923	Maintenance spray

When ordering please specify the part no. engraved on the fueling nozzle.

## » Fueling assembly TK17 CNG



We also offer complete sets assembled and pressure tested for installation at fueling stations. The fueling assemblies consist of a fueling nozzle, a hose set and a breakaway coupling. All fueling assemblies are available with different hose lengths and can either be delivered with a type TSA1 CNG breakaway coupling directly mounted at the dispenser or a type TSA2 CNG inline breakaway coupling mounted inbetween the hoses.

### Application

Fueling assembly for CNG fast filling of cars at self-service fueling stations.

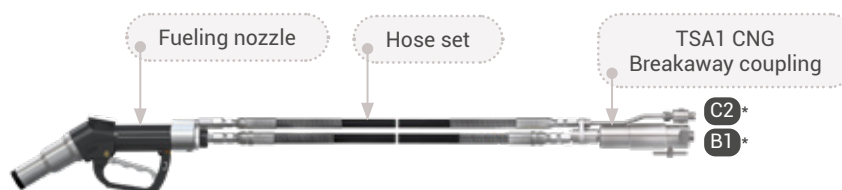
### TECHNICAL DATA

Characteristics	Basic version
Nominal bore (DN)	8 mm
Max. allowable operating pressure	PS = 345 bar (5,000 psi)
Temperature range	-40 °C up to +85 °C (-40 °F up to +185 °F)
Material	Corrosion resistant
Sealing material	Natural gas resistant
Design	TK17 CNG fueling nozzle, hose set and breakaway coupling fully assembled and pressure tested

## » Fueling assembly TK17 CNG

### ORDERING | Fueling assembly WEH® TK17 CNG with WEH® TSA1 CNG Breakaway coupling

Complete fueling assembly consisting of a TK17 CNG (200 bar / 3,000 psi) fueling nozzle, a hose set and a TSA1 CNG breakaway coupling (with 40 µm filter).



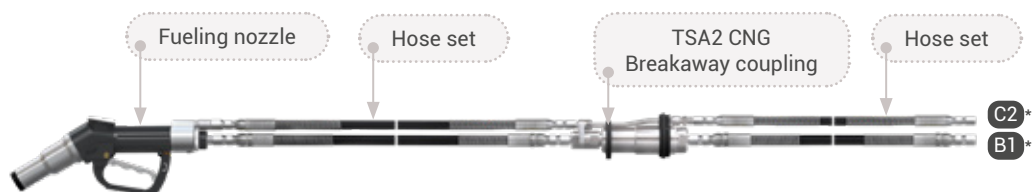
Part No.	Description	Hose length
<b>C1-80265-X01</b>	Fueling assembly with TSA1 CNG breakaway coupling	3 m
<b>C1-106328-X01</b>	Fueling assembly with TSA1 CNG breakaway coupling	4 m
<b>C1-106329-X01</b>	Fueling assembly with TSA1 CNG breakaway coupling	5 m

All designs are also available with a TK17 CNG - 250 bar (3,600 psi) fueling nozzle or with permanently bonded filling and venting hose. Please contact us!

\* For connection sizes 'B1' and 'C2' see page 44, TSA1 CNG breakaway coupling.

### ORDERING | Fueling assembly WEH® TK17 CNG with WEH® TSA2 CNG Inline breakaway coupling

Complete fueling assembly consisting of a TK17 CNG (200 bar / 3,000 psi) fueling nozzle, a hose set and a TSA2 CNG inline breakaway coupling.



Part No.	Description	Hose length
<b>C1-96368-X01</b>	Fueling assembly with TSA2 CNG inline breakaway coupling	2.5   0.5 m
<b>C1-106331-X01</b>	Fueling assembly with TSA2 CNG inline breakaway coupling	3.5   0.5 m
<b>C1-106332-X01</b>	Fueling assembly with TSA2 CNG inline breakaway coupling	4.5   0.5 m

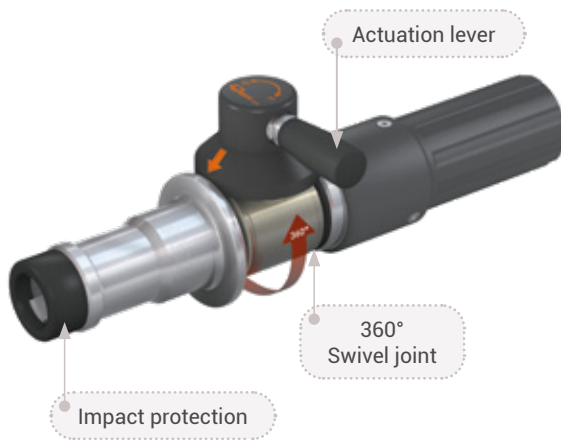
All designs are also available with a TK17 CNG - 250 bar (3,600 psi) fueling nozzle or with permanently bonded filling and venting hose. Please contact us!

\* For connection sizes 'B1' and 'C2' see page 140, TK17 CNG hose set.



## » Fueling nozzle TK16 CNG

### DESCRIPTION



#### Features

- Super light, only 1,750 grams
- Compatible with receptacles acc. to NGV1 standard and ISO 14469 (see page 7, compatibility)
- WEH® EASY-TURN 360° swivel joint for actuation lever
- Easy operation
- Extremely high flow rate short filling times
- Recirculation of the vented gas
- Plastic thermal protection
- WEH® Jaw locking mechanism
- Colour coded impact protection (200 bar / 3,000 psi black, 250 bar / 3,600 psi yellow)
- High-grade materials
- Coding for pressure range / gas type

**TK16 CNG, the world's most popular NGV1 fueling nozzle.**

Type TK16 CNG is very light in weight and therefore easy to operate. The actuation lever is located on the integrated swivel joint making it easy to rotate into the optimal actuating position. The compact actuation lever needs less effort to actuate the nozzle.

#### Safety

The TK16 CNG offers optimum safety to the operator.

The fueling nozzle remains connected to the receptacle until the gas between inlet valve and receptacle is depressurized.

#### Application

Fueling nozzle for CNG fast filling of cars at self-service fueling stations to be used with WEH® Receptacles acc. to NGV1 standard and ISO 14469 (see page 7, compatibility).

### TECHNICAL DATA

Characteristics	Basic version	Options
Nominal bore (DN)	8 mm	On request
Pressure range	P30 acc. to ANSI NGV1 / B200 acc. to ISO 14469 PN = 200 bar (3,000 psi)   PS = 300 bar P36 acc. to ANSI NGV1 / B250 acc. to ISO 14469 PN = 250 bar (3,600 psi)   PS = 350 bar	
Temperature range	-40 °F up to +185 °F	On request
Material	Corrosion resistant	On request
Sealing material	Natural gas resistant	On request
Design	With plastic thermal protection and gas recirculation	On request
Weight	Approx. 3.86 lbs.	
Conformity / Tests / Approvals	The products comply with ANSI NGV1-2006	

# » Fueling nozzle TK16 CNG

## ORDERING | WEH® TK16 CNG Fueling nozzle

approx. dimensions (mm)



Part No.	Description	Pressure (PN)	B1 (male thread)	C2 (male thread)
C1-35299-X5-X01	TK16 CNG	3,000 psi	UNF 9/16"-18*	UNF 7/16"-20*
C1-101084-X01	TK16 CNG	3,600 psi	UNF 9/16"-18*	UNF 7/16"-20*

\* acc. to SAE J514, 37° cone

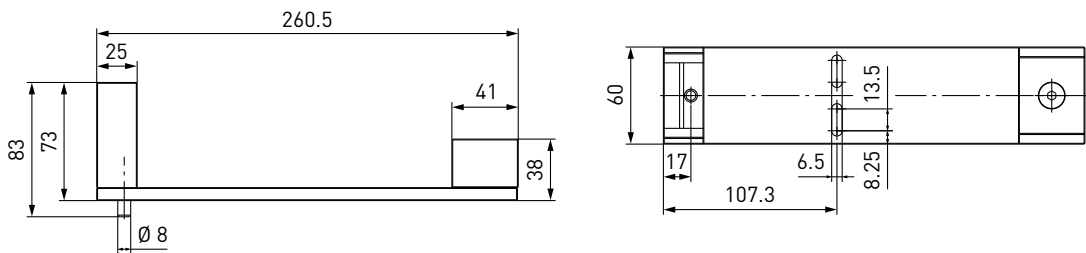
Please see page 20 onwards for fueling assemblies consisting of fueling nozzle, hose set and breakaway coupling.

## ACCESSORIES

The following accessories are available for the WEH® TK16 CNG Fueling nozzle:

### Dispenser mounting

Mounting for safe attachment of the fueling nozzle to the dispenser. Optionally with or without switch actuation.  
Design: Aluminum, stainless steel

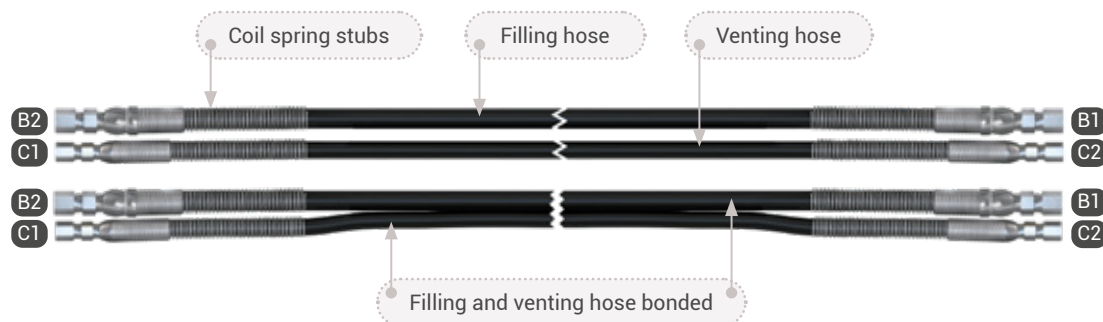


Part No.	Description
C1-51233	Dispenser mounting (switch actuated)
C1-51236	Dispenser mounting (not switch actuated)

## » Fueling nozzle TK16 CNG

### Hose sets TK16 CNG - TSA1 CNG

Filling and venting hoses for connecting fueling nozzle and TSA1 CNG breakaway coupling, complete with fittings and press-fittings supported by coil spring stubs. Available as single or twin hoses (permanently bonded).



Part No.	B1/B2 (female thread)	C1/C2 (female thread)	Hose length
<b>C1-50487</b>	UNF 9/16"-18*	UNF 7/16"-20*	3 m
<b>C1-42304</b>	UNF 9/16"-18*	UNF 7/16"-20*	4 m
<b>C1-58587</b>	UNF 9/16"-18*	UNF 7/16"-20*	5 m

\* acc. to SAE J514, 37° cone

All designs also available with permanently bonded filling and venting hose. Please contact us!

### Hose sets TK16 CNG - TSA2 CNG

Filling and venting hoses for connecting fueling nozzle / dispenser and TSA2 CNG inline breakaway coupling, complete with fittings and press-fittings supported by coil spring stubs.

Part No.	B1/B2 (female thread)	C1/C2 (female thread)	Hose length
<b>On request</b>	UNF 9/16"-18*	UNF 7/16"-20*	2.5   0.5 m
<b>On request</b>	UNF 9/16"-18*	UNF 7/16"-20*	3.5   0.5 m
<b>On request</b>	UNF 9/16"-18*	UNF 7/16"-20*	4.5   0.5 m

\* acc. to SAE J514, 37° cone

All designs also available with permanently bonded filling and venting hose. Please contact us!

### Conversion Kit

We also offer a conversion kit to fit fueling hoses with older fittings. The conversion kit consists of one fitting each for the filling and the venting line. The existing TK16 CNG fueling nozzle fittings must be removed and replaced by the conversion kit fittings.



Part No.	Description	Connection fueling nozzle	Connection filling hose
<b>W59444</b>	Conversion Kit	UNF 9/16"-18* female thread	Tube Ø 6
<b>W86380</b>	Conversion Kit	UNF 9/16"-18* female thread	Tube Ø 1/4"

\* acc. to SAE J514, 37° cone

# » Fueling nozzle TK16 CNG

## Fittings

Stainless steel fittings for connecting port 'B1' to the filling hose or port 'C2' to the venting hose.

Part No.	Description	Connection fueling nozzle	Connection filling hose
E80-79538	Fitting	UNF 9/16"-18* female thread	UNF 9/16"-18** female thread
E80-65592	Fitting	UNF 9/16"-18* female thread	NPT 1/4" female thread

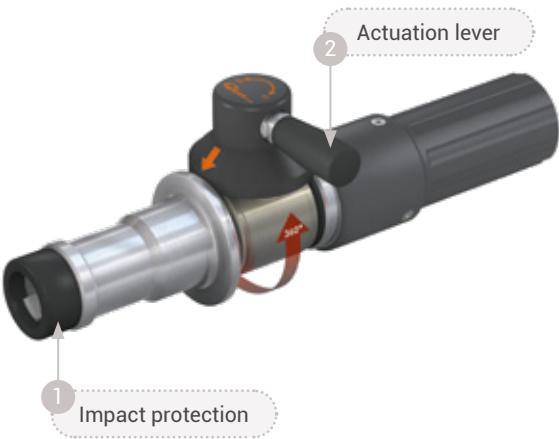
\* acc. to SAE J514, 37° cone

\*\* acc. to SAE J1926-1

Please see page 144 onwards for a detailed overview on all available fittings.

## Spare parts

Various parts are available as spares for the TK16 CNG fueling nozzle.



Part No.	Description
E81-143605	1 Impact protection 200 bar / 3,000 psi (black)
E80-106824	1 Impact protection 250 bar / 3,600 psi (yellow)
W72504	2 Actuation lever
E99-44923	Maintenance spray

## » Fueling assembly TK16 CNG



We also offer complete sets assembled and pressure tested for installation at fueling stations. The fueling assemblies consist of a fueling nozzle, a hose set and a breakaway coupling. All fueling assemblies are available with different hose lengths and can either be delivered with a type TSA1 CNG breakaway coupling directly mounted at the dispenser or a type TSA2 CNG inline breakaway coupling mounted inbetween the hoses.

### Application

Fueling assembly for CNG fast filling of cars at self-service fueling stations.

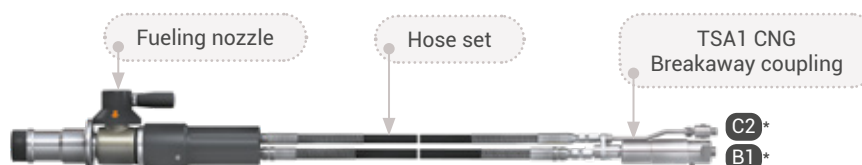
### TECHNICAL DATA

Characteristics	Basic version
Nominal bore (DN)	8 mm
Max. allowable operating pressure	PS = 345 bar (5,000 psi)
Temperature range	-40 °C up to +85 °C (-40 °F up to +185 °F)
Material	Corrosion resistant
Sealing material	Natural gas resistant
Design	TK16 CNG fueling nozzle, hose set and breakaway coupling fully assembled and pressure tested

## » Fueling assembly TK16 CNG

### ORDERING | Fueling assembly WEH® TK16 CNG with WEH® TSA1 CNG Breakaway coupling

Complete fueling assembly consisting of a TK16 CNG (200 bar / 3,000 psi) fueling nozzle, a hose set and a TSA1 CNG breakaway coupling (with 40 µm filter).



Part No.	Description	Hose length
<b>C1-81365-X01</b>	Fueling assembly with TSA1 CNG breakaway coupling	3 m
<b>C1-117123-X01</b>	Fueling assembly with TSA1 CNG breakaway coupling	4 m
<b>C1-106333-X01</b>	Fueling assembly with TSA1 CNG breakaway coupling	5 m

All designs are also available with a TK16 CNG - 250 bar (3,600 psi) fueling nozzle or with permanently bonded filling and venting hose. Please contact us!

\* For connection sizes 'B1' and 'C2' see page 44, TSA1 CNG breakaway coupling.

### ORDERING | Fueling assembly WEH® TK16 CNG with WEH® TSA2 CNG Inline breakaway coupling

Complete fueling assembly consisting of a TK16 CNG (200 bar / 3,000 psi) fueling nozzle, a hose set and a TSA2 CNG inline breakaway coupling.



Part No.	Description	Hose length
<b>C1-106330-X01</b>	Fueling assembly with TSA2 CNG inline breakaway coupling	2.5   0.5 m
<b>C1-106334-X01</b>	Fueling assembly with TSA2 CNG inline breakaway coupling	3.5   0.5 m
<b>C1-106335-X01</b>	Fueling assembly with TSA2 CNG inline breakaway coupling	4.5   0.5 m

All designs are also available with a TK16 CNG - 250 bar (3,600 psi) fueling nozzle or with permanently bonded filling and venting hose. Please contact us!

\* For connection sizes 'B1' and 'C2' see page 140, TK16 CNG hose set.

## » Fueling nozzle TK10 CNG

### DESCRIPTION



#### Features

- Compatible with receptacles acc. to NGV1 standard and ISO 14469 (see page 7, compatibility)
- Push-to-connect
- Integrated shut-off valve
- Plastic thermal protection
- Version with or without gas recirculation
- Grip position available at 45° or 90°
- Ergonomic design
- WEH® Jaw locking mechanism
- Colour coded sliding sleeve (200 bar / 3,000 psi black, 250 bar / 3,600 psi yellow)
- High-grade materials

The WEH® TK10 CNG Fueling nozzle combines user comfort with maximum convenience. The integrated WEH® TK4 CNG Fueling nozzle features 'push-to-connect' jaw locking system which automatically moves the sliding sleeve back when making a connection. The ergonomic design of the hand grip enables an easy connection to the receptacle. The hand grip is angled to prevent stresses on the high pressure hose and hose damage due to chafing on the ground.

Refueling starts after opening the ball valve. Closing the ball valve finishes refueling. Fueling nozzles with integrated gas recirculation are vented via the gas recirculation, fueling nozzles without gas recirculation are vented via a sound absorber which is directly installed at the nozzle. The TK10 CNG can then be disconnected by pulling back the sliding sleeve of the TK4 CNG.

The extended construction of the integrated TK4 CNG fueling nozzle helps in refueling difficult-to-access receptacles. WEH® Jaws grip symmetrically, avoiding damage to the receptacle profile which could result in leakage.

#### Application

Fueling nozzle for CNG fast filling of cars to be used with WEH® Receptacles acc. to NGV1 standard and ISO 14469 (see page 7, compatibility).

Operation only by specially trained service personnel. Not for self-service operation!

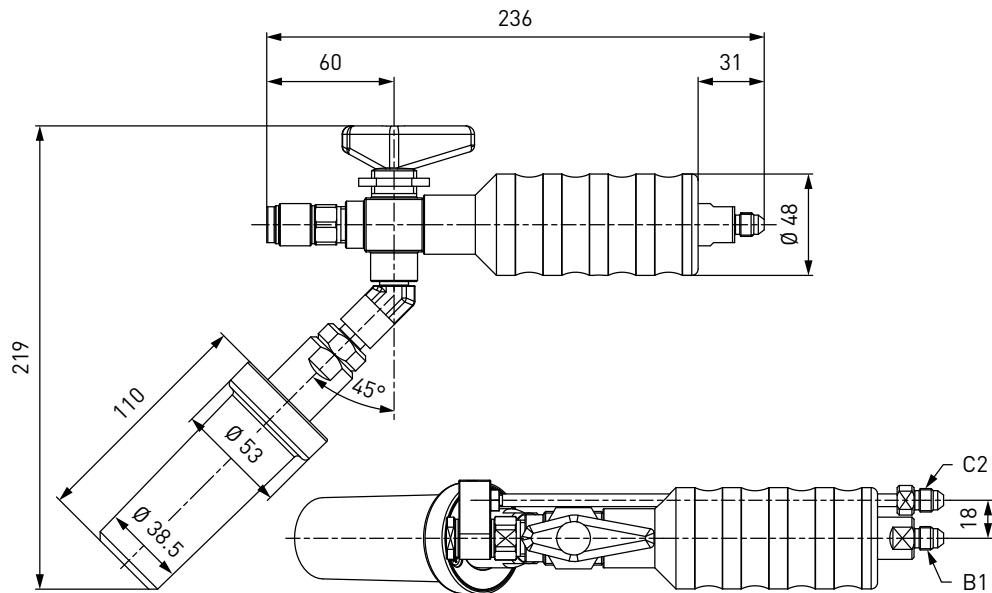
### TECHNICAL DATA

Characteristics	Basic version	Options
Nominal bore (DN)	4 mm	On request
Pressure range	P30 acc. to ANSI NGV1 / B200 acc. to ISO 14469 PN = 200 bar (3,000 psi)   PS = 300 bar P36 acc. to ANSI NGV1 / B250 acc. to ISO 14469 PN = 250 bar (3,600 psi)   PS = 350 bar	
Temperature range	-40 °C up to +85 °C (-40 °F up to +185 °F)	On request
Material	Corrosion resistant	On request
Sealing material	Natural gas resistant	On request
Design	With plastic thermal protection With or without gas recirculation Grip position 45° or 90°	On request
Weight	Approx. 2.87 lbs.	
Conformity / Tests / Approvals	The products comply with ANSI NGV1-2006 (applies to TK4 CNG)	



# » Fueling nozzle TK10 CNG

**ORDERING** | WEH® TK10 CNG Fueling nozzle with gas recirculation and grip position 45°  
 approx. dimensions (mm)



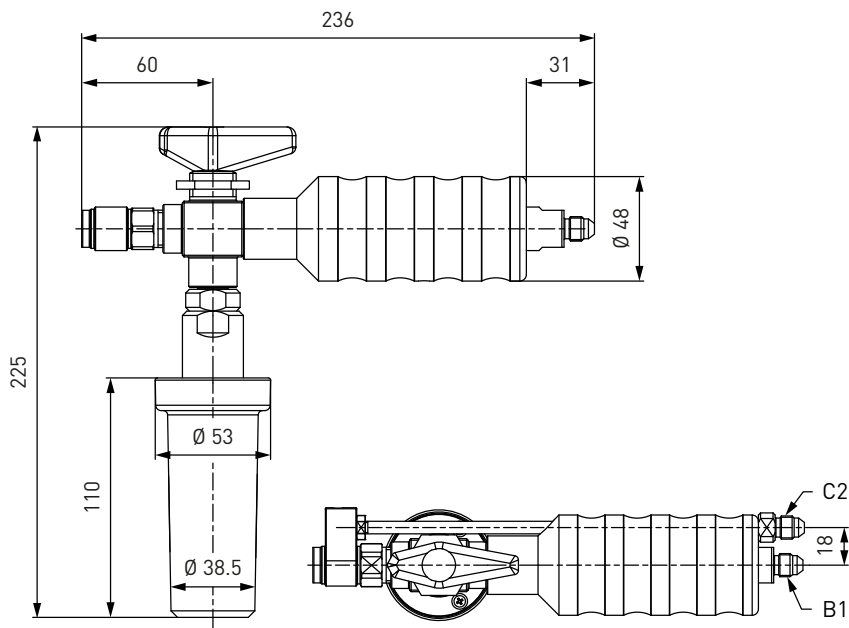
Part No.	Description	Pressure (PN)	B1 (male thread)	C2 (male thread)
C1-126013-X01	TK10 CNG	3,000 psi	UNF 7/16"-20*	UNF 7/16"-20*
C1-126011-X01	TK10 CNG	3,600 psi	UNF 7/16"-20*	UNF 7/16"-20*

\* acc. to SAE J514, 37° cone

# » Fueling nozzle TK10 CNG

**ORDERING** | WEH® TK10 CNG Fueling nozzle with gas recirculation and grip position 90°

approx. dimensions (mm)

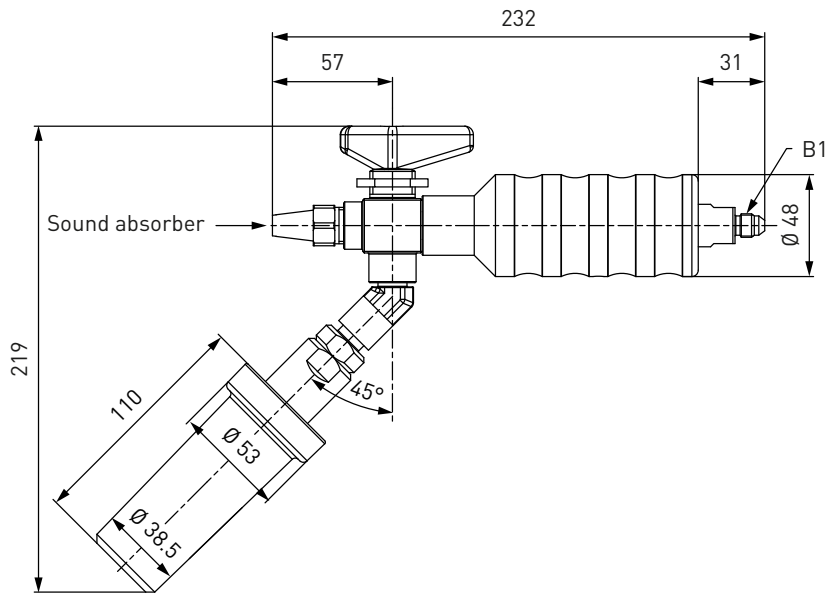


Part No.	Description	Pressure (PN)	B1 (male thread)	C2 (male thread)
C1-126014-X01	TK10 CNG	3,000 psi	UNF 7/16"-20*	UNF 7/16"-20*
C1-126012-X01	TK10 CNG	3,600 psi	UNF 7/16"-20*	UNF 7/16"-20*

\* acc. to SAE J514, 37° cone

# » Fueling nozzle TK10 CNG

**ORDERING** | WEH® TK10 CNG Fueling nozzle without gas recirculation and grip position 45°  
approx. dimensions (mm)



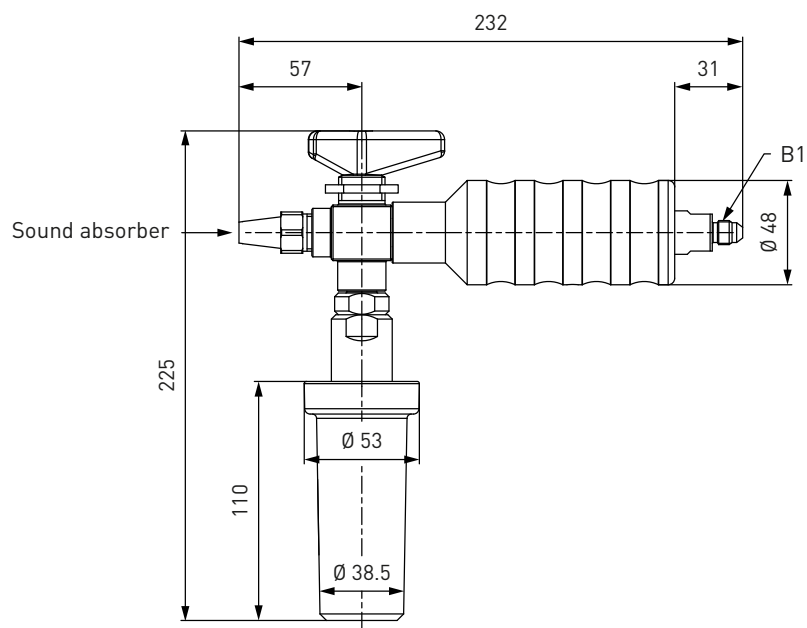
Part No.	Description	Pressure (PN)	B1 (male thread)
C1-126006-X01	TK10 CNG	3,000 psi	UNF 7/16"-20*
C1-126009-X01	TK10 CNG	3,600 psi	UNF 7/16"-20*

\* acc. to SAE J514, 37° cone

## » Fueling nozzle TK10 CNG

**ORDERING** | WEH® TK10 CNG Fueling nozzle without gas recirculation and grip position 90°

approx. dimensions (mm)



Part No.	Description	Pressure (PN)	B1 (male thread)
<b>C1-126008-X01</b>	TK10 CNG	3,000 psi	UNF 7/16"-20*
<b>C1-126010-X01</b>	TK10 CNG	3,600 psi	UNF 7/16"-20*

\* acc. to SAE J514, 37° cone

On request inlet port 'B1' is also available with other thread sizes.

Please see page 30 onwards for fueling assemblies consisting of fueling nozzle, hose set and breakaway coupling.

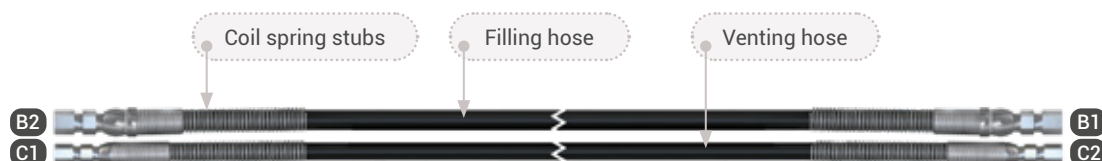
## » Fueling nozzle TK10 CNG

### ACCESSORIES

The following accessories are available for WEH® TK10 CNG Fueling nozzle:

#### Hose sets TK10 CNG - TSA1 CNG

Filling and venting hoses for connecting fueling nozzle and TSA1 CNG breakaway coupling, complete with fittings and press-fittings supported by coil spring stubs.



Part No.	B1/B2 (female thread)	C1/C2 (female thread)	Hose length
<b>C1-106385</b>	UNF 7/16"-20*	UNF 7/16"-20*	3 m
<b>C1-106386</b>	UNF 7/16"-20*	UNF 7/16"-20*	4 m
<b>C1-106387</b>	UNF 7/16"-20*	UNF 7/16"-20*	5 m

\* acc. to SAE J514, 37° cone

#### Hose sets TK10 CNG - TSA2 CNG

Filling and venting hoses for connecting fueling nozzle resp. dispenser and TSA2 CNG inline breakaway coupling, complete with fittings and press-fittings supported by coil spring stubs.

Part No.	B1/B2 (female thread)	C1/C2 (female thread)	Hose length
<b>C1-106395</b>	UNF 7/16"-20*	UNF 7/16"-20*	2.5   0.5 m
<b>C1-106396</b>	UNF 7/16"-20*	UNF 7/16"-20*	3.5   0.5 m
<b>C1-106397</b>	UNF 7/16"-20*	UNF 7/16"-20*	4.5   0.5 m

\* acc. to SAE J514, 37° cone

## » Fueling nozzle TK10 CNG

### Filling hoses

Filling hoses for connecting fueling nozzles without gas recirculation and dispenser, complete with fittings and press-fittings supported by coil spring stubs.



Part No.	B1/B2 (female thread)	Hose length
<b>E68-1032-3000</b>	UNF 7/16"-20*	3 m
<b>E68-1032-4000</b>	UNF 7/16"-20*	4 m
<b>E68-1032-5000</b>	UNF 7/16"-20*	5 m

\* acc. to SAE J514, 37° cone

### Fittings

Stainless steel fittings for connecting port 'B1' to the filling hose or port 'C2' to the venting hose.

Part No.	Description	Connection fueling nozzle	Connection filling hose
<b>E80-648P</b>	Fitting	UNF 7/16"-20* female thread	UNF 9/16"-18* male thread
<b>E80-32692</b>	Fitting	UNF 7/16"-20* female thread	UNF 7/16"-20* male thread
<b>E80-62138</b>	Fitting	UNF 7/16"-20* female thread	NPT 1/4" female thread

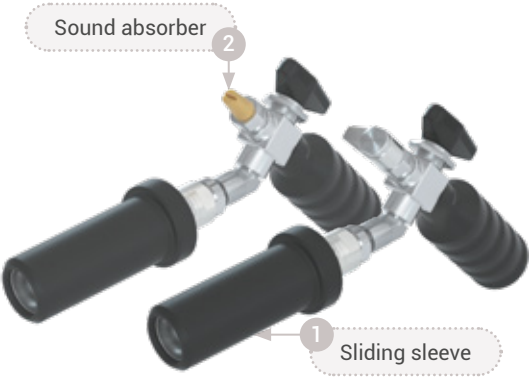
\* acc. to SAE J514, 37° cone

Please see page 144 onwards for a detailed overview on all available fittings.

# » Fueling nozzle TK10 CNG

## Spare parts

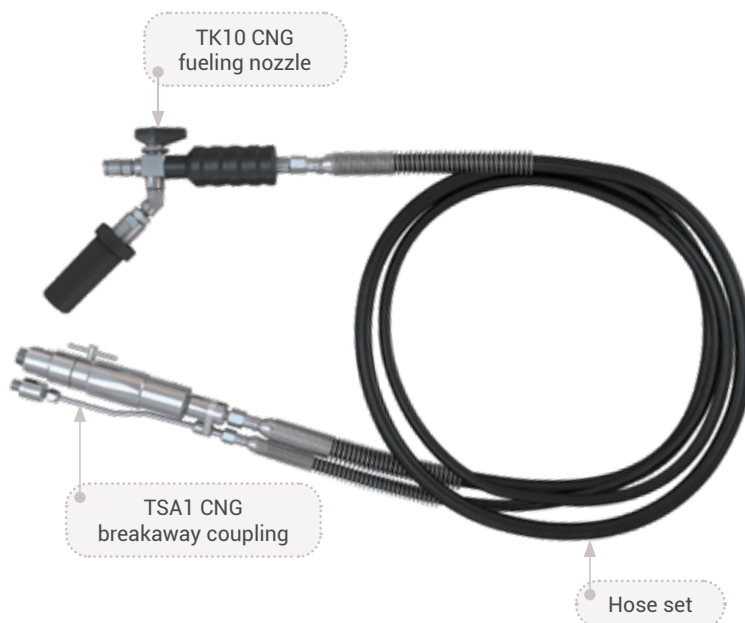
Various parts are available as spares for the TK10 CNG fueling nozzle.



Part No.	Description
W144266	1 Spare parts set 200 bar / 3,000 psi (black sliding sleeve incl. disk and 3 screws)
W144267	1 Spare parts set 250 bar / 3,600 psi (yellow sliding sleeve incl. disk and 3 screws)
E69-9311	2 Sound absorber for TK10 CNG without gas recirculation
E99-44923	Maintenance spray



## » Fueling assembly TK10 CNG



We also offer complete sets assembled and pressure tested for installation at fueling stations. The fueling assemblies consist of a fueling nozzle, a hose set and a breakaway coupling. All fueling assemblies are available with different hose lengths and can either be delivered with a type TSA1 CNG breakaway coupling directly mounted at the dispenser or a type TSA2 CNG inline breakaway coupling mounted inbetween the hoses.

### Application

Fueling assembly for CNG fast filling of cars.

Operation only by specially trained service personnel. Not for self-service operation!

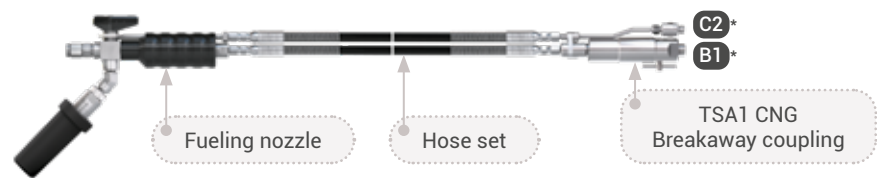
### TECHNICAL DATA

Characteristics	Basic version
Nominal bore (DN)	4 mm
Max. allowable operating pressure	PS = 5,000 psi
Temperature range	-40 °F up to +185 °F
Material	Corrosion resistant
Sealing material	Natural gas resistant
Design	TK10 CNG fueling nozzle, hose set and breakaway coupling fully assembled and pressure tested

# » Fueling assembly TK10 CNG

## ORDERING | Fueling assembly WEH® TK10 CNG with gas recirculation and WEH® TSA1 CNG Breakaway coupling

Complete fueling assembly consisting of a TK10 CNG (200 bar / 3000 psi) fueling nozzle with gas recirculation and grip position 45°, a hose set and a TSA1 CNG breakaway coupling (with 40 µm filter).

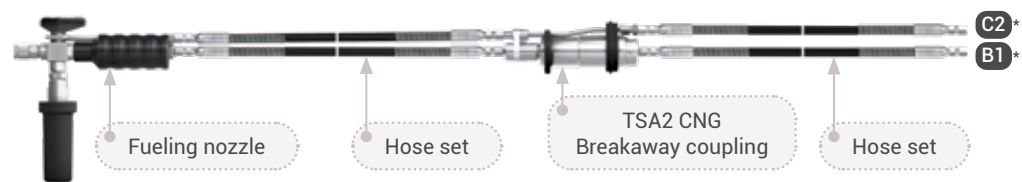


Part No.	Description	Hose length
C1-106384	Fueling assembly with TSA1 CNG breakaway coupling	3 m
C1-106389	Fueling assembly with TSA1 CNG breakaway coupling	4 m
C1-106390	Fueling assembly with TSA1 CNG breakaway coupling	5 m

All designs are also available with a TK10 CNG - 250 bar (3600 psi) fueling nozzle and/or grip position 90°. Please contact us!  
 \* For connection sizes 'B1' and 'C2' see page 44, TSA1 CNG breakaway coupling.

## ORDERING | Fueling assembly WEH® TK10 CNG with gas recirculation and WEH® TSA2 CNG Inline breakaway coupling

Complete fueling assembly consisting of a TK10 CNG (200 bar / 3000 psi) fueling nozzle with gas recirculation and grip position 90°, a hose set and a TSA2 CNG inline breakaway coupling.

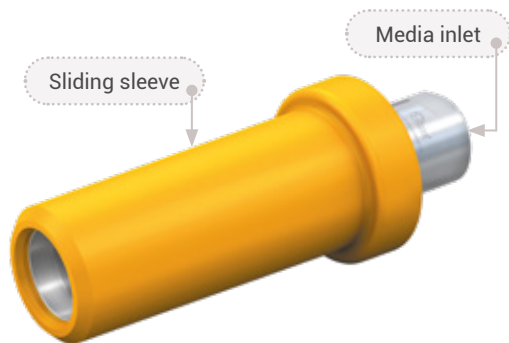


Part No.	Description	Hose length
C1-168496	Fueling assembly with TSA2 CNG inline breakaway coupling	2.5   0.5 m
C1-171630	Fueling assembly with TSA2 CNG inline breakaway coupling	3.5   0.5 m
C1-171639	Fueling assembly with TSA2 CNG inline breakaway coupling	4.5   0.5 m

All designs are also available with a TK10 CNG - 250 bar (3600 psi) fueling nozzle and/or grip position 45°. Please contact us!  
 \* For connection sizes 'B2' and 'C2' see page 140, TK10 CNG hose set.

## » Fueling nozzle TK4 CNG

### DESCRIPTION



#### Features

- Compatible with receptacles acc. to NGV1 standard and ISO 14469 (see page 7, compatibility)
- Push-Pull actuation
- Integrated shut-off valve
- Plastic thermal protection
- WEH® Jaw locking mechanism
- Colour coded sliding sleeve (3,000 psi black, 3,600 psi yellow)
- High-grade materials
- Compact design

The TK4 CNG fueling nozzle is designed specifically for fast filling of vehicles having an NGV1 receptacle at fueling stations with NGV1 standard and is best suited for this application.

The TK4 CNG is now even easier to operate. The clamping jaws are opened when the nozzle is disconnected and the sliding sleeve need not be pulled back to connect the nozzle. Just push the nozzle straight onto the receptacle and the TK4 CNG jaws clamp tightly. Once the fueling nozzle is connected, the shut-off valve in the nozzle opens and the pressure-tight connection is established.

The extended construction of the fueling nozzle allows easy refueling of difficult-to-access receptacles.

#### Application

Fueling nozzle for CNG fast filling of cars to be used with WEH® Receptacles acc. to NGV1 standard and ISO 14469 (see page 7, compatibility). Operation only by specially trained service personnel. Not for self-service operation!

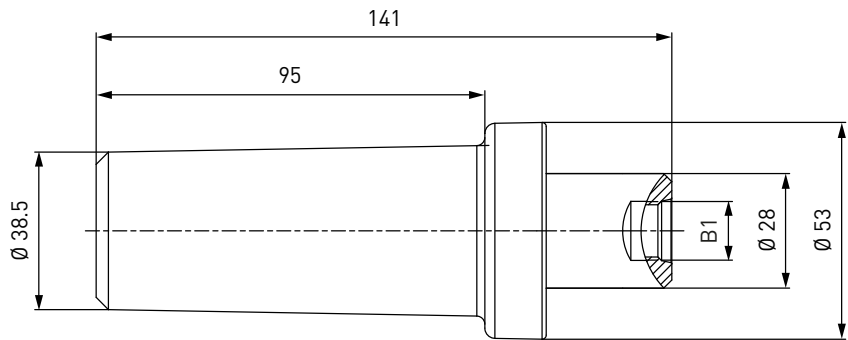
### TECHNICAL DATA

Characteristics	Basic version	Options
Nominal bore (DN)	8 mm	On request
Pressure range	P30 acc. to ANSI NGV1 / B200 acc. to ISO 14469 PN = 200 bar (3,000 psi)   PS = 300 bar P36 acc. to ANSI NGV1 / B250 acc. to ISO 14469 PN = 250 bar (3,600 psi)   PS = 350 bar	
Temperature range	-40 °F up to +185 °F	On request
Material	Corrosion resistant	On request
Sealing material	Natural gas resistant	On request
Design	With plastic thermal protection	On request
Weight	Approx. 0.88 lbs.	
Conformity / Tests / Approvals	The products comply with ANSI NGV1-2006	

# » Fueling nozzle TK4 CNG

## ORDERING | WEH® TK4 CNG Fueling nozzle

approx. dimensions (mm)



Part No.	Description	DN	Pressure (PN)	B1 (female thread)
C1-112765-X01	TK4 CNG	8	3,000 psi	UNF 9/16"-18*
C1-112764-X01	TK4 CNG	8	3,600 psi	UNF 9/16"-18*
C1-125996-X01	TK4 CNG	8	3,000 psi	UNF 9/16"-18-LH*
C1-125997-X01	TK4 CNG	8	3,000 psi	G3/8"

\* acc. to SAE J1926-1

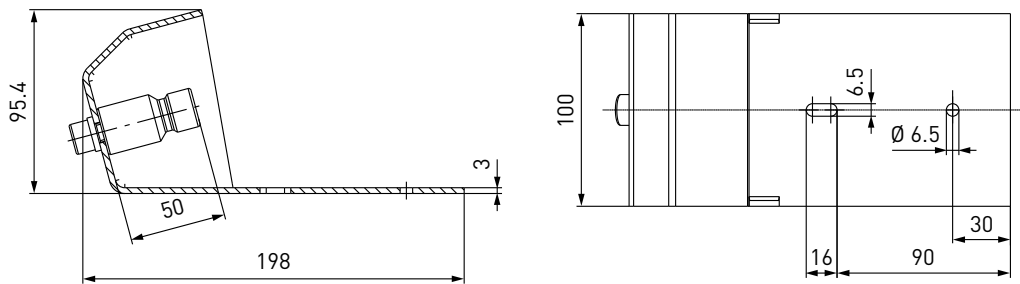
On request inlet port 'B1' is also available with other thread sizes.

## ACCESSORIES

The following accessories are available for the WEH® TK4 CNG Fueling nozzle:

### Dispenser mounting

Mounting for safe attachment of the fueling nozzle to the dispenser. Design: stainless steel



Part No.	Description
C1-100205	Dispenser mounting (not switch actuated)

## » Fueling nozzle TK4 CNG

### Filter TSF1 CNG (40 µm)

We recommend the installation of a TSF1 CNG filter (see page 96) between the nozzle and the filling hose. The filter protects your system from damage due to dirt ingress.



Part No.	Description	DN	Pressure (PN)	B1	B2
<b>C1-94070-X01</b>	TSF1 CNG	8	3,600 psi	UNF 9/16"-18* female thread	UNF 9/16"-18* male thread
<b>C1-106854-X01</b>	TSF1 CNG	8	3,600 psi	UNF 9/16"-18** male thread	UNF 9/16"-18* male thread

\* acc. to SAE J1926-1

\*\* acc. to SAE J514, 37° cone

### Filling hoses

Filling hoses for connecting fueling nozzle and dispenser, complete with fittings and press-fittings supported by coil spring stubs.



Part No.	B1/B2 (female thread)	Hose length
<b>E68-1031-3000</b>	UNF 9/16"-18*	3 m
<b>E68-1031-4000</b>	UNF 9/16"-18*	4 m
<b>E68-1031-5000</b>	UNF 9/16"-18*	5 m

\* acc. to SAE J514, 37° cone

### Fittings

Stainless steel fittings for connecting port 'B1' to the filling hose.

Part No.	Description	Connection fueling nozzle	Connection filling hose
<b>W6702</b>	Fitting	UNF 9/16"-18** male thread	UNF 9/16"-18* male thread
<b>W6705</b>	Fitting	UNF 9/16"-18** male thread	UNF 7/16"-20* male thread
<b>W6927</b>	Fitting	UNF 9/16"-18** male thread	UNF 7/8"-14* male thread
<b>E80-561P</b>	Fitting	UNF 9/16"-18** male thread	NPT 1/4" male thread

\* acc. to SAE J514, 37° cone

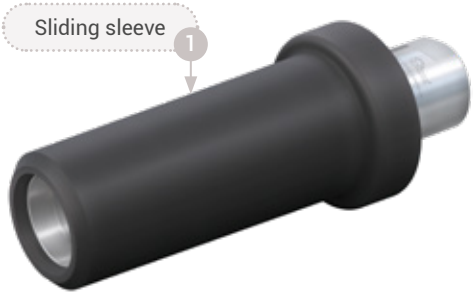
\*\* acc. to SAE J1926-1

Please see page 144 onwards for a detailed overview on all available fittings.

# » Fueling nozzle TK4 CNG

## Spare parts

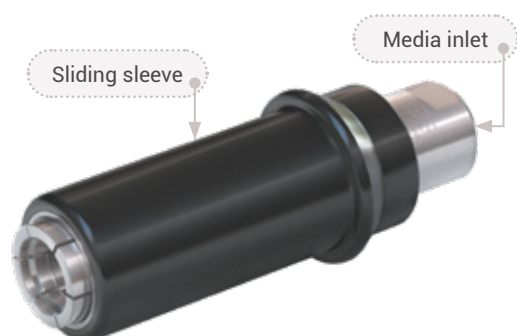
Various parts are available as spares for the TK4 CNG fueling nozzle.



Part No.	Description
W144266	1 Spare parts set 200 bar / 3,000 psi (black sliding sleeve incl. disc and 3 screws)
W144267	1 Spare parts set 250 bar / 3,600 psi (yellow sliding sleeve incl. disc and 3 screws)
E99-44923	Maintenance spray

## » Fueling nozzle TK4i CNG

### DESCRIPTION



#### Features

- Compatible with the Italian receptacle profile
- Push-Pull actuation
- Integrated shut-off valve
- Plastic thermal protection
- WEH® Jaw locking mechanism
- High-grade materials
- Compact design

The type TK4i CNG fueling nozzle has been designed especially for the Italian NGV market enabling connection to Italian receptacles with a push-pull nozzle.

The TK4i CNG is now even easier to operate. The clamping jaws are opened when the nozzle is disconnected and the sliding sleeve need not be pulled back to connect the nozzle. Just push the nozzle straight onto the receptacle and the jaws clamp tightly. Once the fueling nozzle is connected, the shut-off valve in the nozzle opens and the pressure-tight connection is established.

The jaws of the TK4i CNG are constructed to avoid compression marks on the receptacle that result from connectors using the ball valve locking principle.

The extended construction of the fueling nozzle allows easy refueling of difficult-to-access receptacles.

WEH also offers an adaptor nozzle with the new Italian standard for Italian vehicles needing to refuel in Germany (see page 134).

#### Application

Fueling nozzle for CNG fast filling of cars to be used with receptacles acc. to Italian receptacle profile.

Operation only by specially trained service personnel. Not for self-service operation!

### TECHNICAL DATA

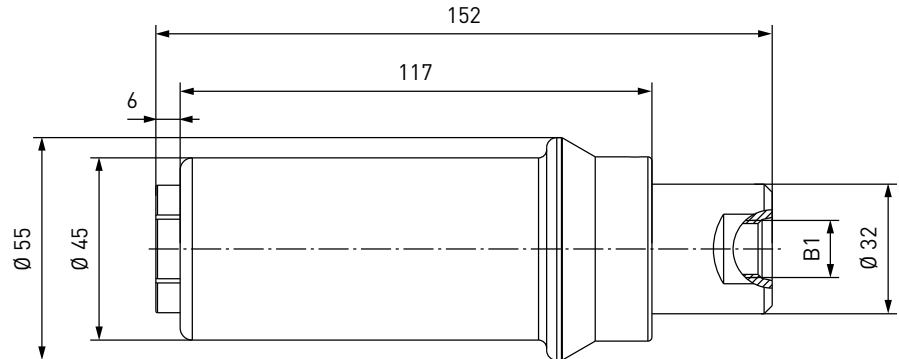
Characteristics	Basic version	Options
Nominal bore (DN)	5 mm	On request
Pressure range	PN = 200 bar (3,000 psi)   PS = 300 bar	
Temperature range	-40 °F up to +185 °F	On request
Material	Corrosion resistant	On request
Sealing material	Natural gas resistant	On request
Design	With plastic thermal protection	On request
Weight	Approx. 1.54 lbs.	



# » Fueling nozzle TK4i CNG

## ORDERING | WEH® TK4i CNG Fueling nozzle

approx. dimensions (mm)



Part No.	Description	Pressure (PN)	B1 (female thread)
C1-17901-X5-X01	TK4i CNG for vehicles with Italian receptacle profile	3,000 psi	UNF 9/16"-18*

\* acc. to SAE J1926-1

On request inlet port 'B1' is also available with other thread sizes.

## ACCESSORIES

The following accessories are available for the WEH® TK4i CNG Fueling nozzle:

### Filter TSF1 CNG (40 µm)

We recommend the installation of a TSF1 CNG filter (see page 96) between the nozzle and the filling hose. The filter protects your system from damage due to dirt ingress.



Part No.	Description	DN	Pressure (PN)	B1	B2
C1-94070-X01	TSF1 CNG	8	3,600 psi	UNF 9/16"-18* female thread	UNF 9/16"-18* male thread
C1-106854-X01	TSF1 CNG	8	3,600 psi	UNF 9/16"-18** male thread	UNF 9/16"-18* male thread

\* acc. to SAE J1926-1

\*\* acc. to SAE J514, 37° cone

## » Fueling nozzle TK4i CNG

### Filling hoses

Filling hoses for connecting fueling nozzle and dispenser, complete with fittings and press-fittings supported by coil spring stubs.



Part No.	B1/B2 (female thread)	Hose length
<b>E68-1031-3000</b>	UNF 9/16"-18*	3 m
<b>E68-1031-4000</b>	UNF 9/16"-18*	4 m
<b>E68-1031-5000</b>	UNF 9/16"-18*	5 m

\* acc. to SAE J514, 37° cone

### Fittings

Stainless steel fittings for connecting port 'B1' to the filling hose.

Part No.	Description	Connection fueling nozzle	Connection filling hose
<b>W6702</b>	Fitting	UNF 9/16"-18** male thread	UNF 9/16"-18* male thread
<b>W6705</b>	Fitting	UNF 9/16"-18** male thread	UNF 7/16"-20* male thread
<b>W6927</b>	Fitting	UNF 9/16"-18** male thread	UNF 7/8"-14* male thread
<b>E80-561P</b>	Fitting	UNF 9/16"-18** male thread	NPT 1/4" male thread

\* acc. to SAE J514, 37° cone

\*\* acc. to SAE J1926-1

Please see page 144 onwards for a detailed overview on all available fittings.

# » Fueling nozzle TK4i CNG

## Spare parts

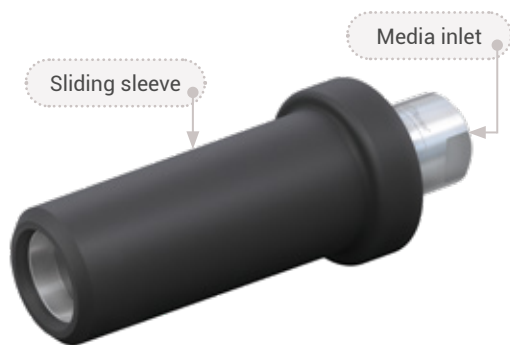
Various parts are available as spares for the TK4i CNG fueling nozzle.



Part No.	Description
W128103	1 Spare parts set (sliding sleeve incl. metal sleeve and circlip)
E99-44923	Maintenance spray

## » Fueling nozzle TK1 CNG for Slow-Fill

### DESCRIPTION



#### Features

- Compatible with receptacles acc. to NGV1 standard and ISO 14469 (see page 7, compatibility)
- Push-Pull actuation
- Integrated shut-off valve
- Plastic thermal protection
- WEH® Jaw locking mechanism
- Colour coded sliding sleeve (200 bar / 3,000 psi black, 250 bar / 3,600 psi yellow)
- High-grade materials
- Compact design

The TK1 CNG fueling nozzle is designed specifically for time filling of vehicles with 'Fuelmaker' compressors and is best suited for this application.

The TK1 CNG is now even easier to operate. The clamping jaws are opened when the nozzle is disconnected and the sliding sleeve need not being pulled back to connect the nozzle. Only push the nozzle straight onto the receptacle. The jaws of the TK1 CNG clamp onto the receptacle. While the fueling nozzle is connected, the shut-off valve in the nozzle will open - the pressure-tight connection is established. Even difficult-to-access receptacles can easily be refuelled due to the extended construction of the fueling nozzle.

#### Application

Fueling nozzle for CNG time filling of cars to be used with WEH® Receptacles acc. to NGV1 standard and ISO 14469 (see page 7, compatibility). Operation only by specially trained service personnel. Not for self-service operation!

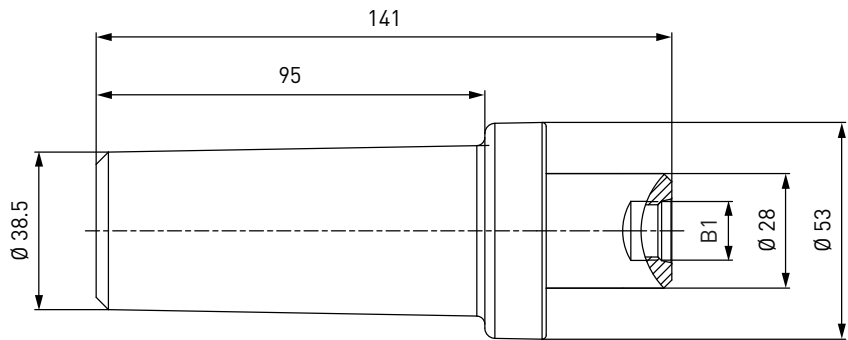
### TECHNICAL DATA

Characteristics	Basic version	Options
Nominal bore (DN)	4 mm	On request
Pressure range	P30 acc. to ANSI NGV1 / B200 acc. to ISO 14469 PN = 200 bar (3,000 psi)   PS = 300 bar P36 acc. to ANSI NGV1 / B250 acc. to ISO 14469 PN = 250 bar (3,600 psi)   PS = 350 bar	
Temperature range	-40 °F up to +185 °F	On request
Material	Corrosion resistant	On request
Sealing material	Natural gas resistant	On request
Design	With plastic thermal protection	On request
Weight	Approx. 0.88 lbs.	
Conformity / Tests / Approvals	The products comply with ANSI NGV1-2006	

# » Fueling nozzle TK1 CNG for Slow-Fill

## ORDERING | WEH® TK1 CNG Fueling nozzle

approx. dimensions (mm)



Part No.	Description	Pressure (PN)	B1 (female thread)
C1-126000-X01	TK1 CNG	3,000 psi	UNF 9/16"-18*
C1-126001-X01	TK1 CNG	3,000 psi	UNF 9/16"-18-LH*
C1-126003-X01	TK1 CNG	3,600 psi	UNF 7/16"-20-LH*

\* acc. to SAE J1926-1

On request inlet port 'B1' is also available with other thread sizes.

## » Fueling nozzle TK1 CNG for Slow-Fill

### ACCESSORIES

The following accessories are available for the WEH® TK1 CNG Fueling nozzle:

#### Filter TSF1 CNG (40 µm)

We recommend the installation of a TSF1 CNG filter (see page 96) between the nozzle and the filling hose. The filter protects your system from damage due to dirt ingress.



Part No.	Description	DN	Pressure (PN)	B1	B2
<b>C1-100700-X01</b>	TSF1 CNG	8	3,600 psi	UNF 9/16"-18-LH* female thread	UNF 9/16"-18-LH* male thread

\* acc. to SAE J1926-1

#### Filling hoses

Filling hoses for connecting fueling nozzle and dispenser, complete with fittings and press-fittings supported by coil spring stubs.



Part No.	B1/B2 (female thread)	Hose length
<b>E68-1031-3000</b>	UNF 9/16"-18*	3 m
<b>E68-1031-4000</b>	UNF 9/16"-18*	4 m
<b>E68-1031-5000</b>	UNF 9/16"-18*	5 m

\* acc. to SAE J514, 37° cone

#### Fittings

Stainless steel fittings for connecting port 'B1' to the filling hose.

Part No.	Description	Connection fueling nozzle	Connection filling hose
<b>W6702</b>	Fitting	UNF 9/16"-18** male thread	UNF 9/16"-18* male thread
<b>W6705</b>	Fitting	UNF 9/16"-18** male thread	UNF 7/16"-20* male thread
<b>W6927</b>	Fitting	UNF 9/16"-18** male thread	UNF 7/8"-14* male thread
<b>E80-561P</b>	Fitting	UNF 9/16"-18** male thread	NPT 1/4" male thread
<b>W59695</b>	Fitting	UNF 9/16"-18-LH** male thread	UNF 9/16"-18* male thread

\* acc. to SAE J514, 37° cone

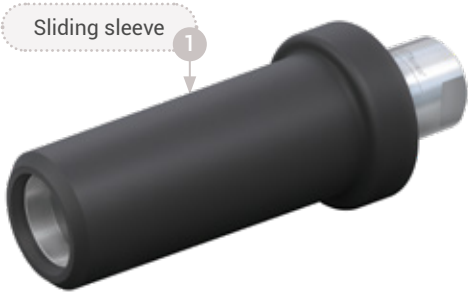
\*\* acc. to SAE J1926-1

Please see page 144 onwards for a detailed overview on all available fittings.

# » Fueling nozzle TK1 CNG for Slow-Fill

## Spare parts

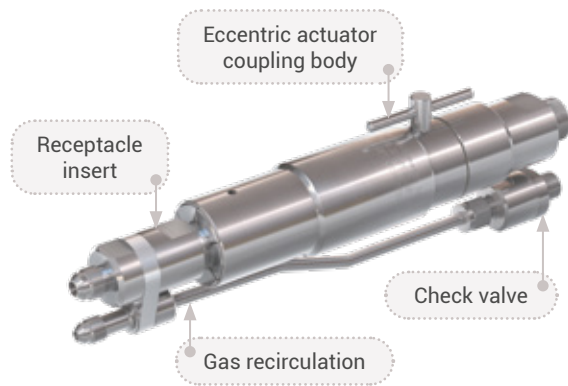
Various parts are available as spares for the TK1 CNG fueling nozzle.



Part No.	Description
W144266	1 Spare parts set 200 bar / 3,000 psi (black sliding sleeve incl. disc and 3 screws)
W144267	1 Spare parts set 250 bar / 3,600 psi (yellow sliding sleeve incl. disc and 3 screws)
E99-44923	Maintenance spray

## » Breakaway coupling TSA1 CNG

### DESCRIPTION



#### Features

- Re-usable without factory reservicing
- Installation at the dispenser
- Small compact design
- Version with or without gas recirculation
- Integrated cleanable filter (40 µm); optional without filter
- Check valve at venting line
- No additional tool necessary

The type TSA1 CNG breakaway coupling offers additional safety for your car fueling station. The breakaway is installed between the dispenser and the filling/venting hose. In the event of accidental deployment, e.g. driving a vehicle from the dispenser with the nozzle remaining in the vehicle fuel port, the coupling will separate the connections between dispenser and hose sealing both ends. This protects largely the receptacle, the fueling nozzle and the dispenser against damage. The detached coupling can be easily reattached and placed back in service after having been function tested. We recommend to use breakaways with integrated filter. The filter provides clean natural gas and is easy to maintain. Of course we also offer breakaway couplings without filter.

The breakaway device consists of a coupling body, a receptacle insert and a gas recirculation with check valve. The breakaway is also available without gas recirculation.

We also offer fueling assemblies consisting of a fueling nozzle, a hose set and a breakaway coupling (for fueling assemblies see respective fueling nozzle).

#### Application

Breakaway coupling for car fueling stations for installation between the dispenser and the filling/venting hose.

### TECHNICAL DATA

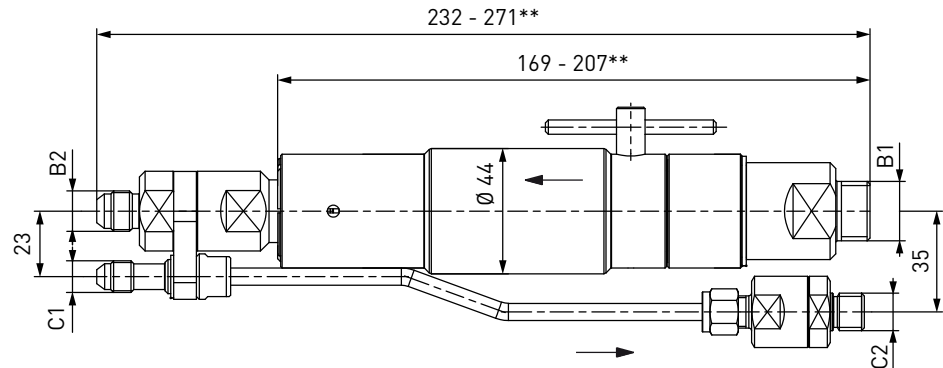
Characteristics	Basic version	Options
Nominal bore (DN)	Max. 8 mm	4 mm (C1-101108), others on request
Pressure range	PN = 200 bar (3,000 psi)   PS = 300 bar PN = 250 bar (3,600 psi)   PS = 350 bar	
Temperature range	-40 °F up to +185 °F	On request
Breakaway force	222 - 660 N	On request
Material	Corrosion resistant stainless steel, aluminum	On request
Sealing material	Natural gas resistant	On request
Design	With gas recirculation and filter (40 µm)	Without gas recirculation Without filter



# » Breakaway coupling TSA1 CNG

## ORDERING | WEH® TSA1 CNG Breakaway coupling with gas recirculation

approx. dimensions (mm)

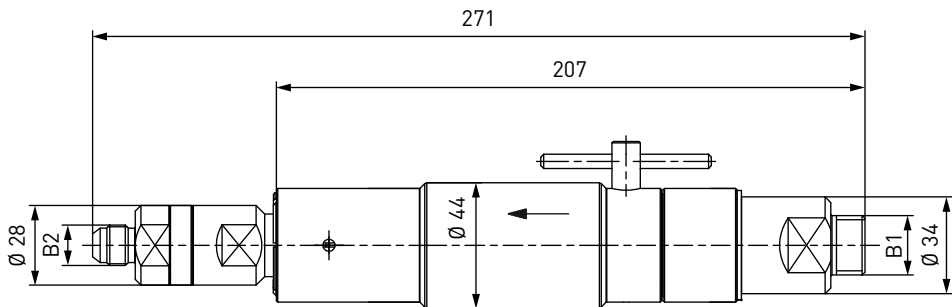


Part No.	Description	Pressure (PN)	B1 (male thread)	B2 (male thread)	C1 (male thread)	C2 (male thread)
C1-17195/7-X01	TSA1 CNG with filter	3,000 psi	G1/2"	UNF 9/16"-18*	UNF 7/16"-20*	G1/4"
C1-102487	TSA1 CNG with filter	3,600 psi	G1/2"	UNF 9/16"-18*	UNF 7/16"-20*	G1/4"
C1-17196-X7-X01	TSA1 CNG without filter	3,000 psi	G1/2"	UNF 9/16"-18*	UNF 7/16"-20*	G1/4"
C1-101108-X01	TSA1 CNG with filter	3,000 psi	G1/2"	UNF 7/16"-20*	UNF 7/16"-20*	G1/4"

\* acc. to SAE J514, 37° cone  
 \*\* length depending on type of breakaway coupling

## ORDERING | WEH® TSA1 CNG Breakaway coupling without gas recirculation

approx. dimensions (mm)



Part No.	Description	Pressure (PN)	B1 (male thread)	B2 (male thread)
C1-17197-X3-X01	TSA1 CNG with filter	3,000 psi	G1/2"	UNF 9/16"-18*

\* acc. to SAE J514, 37° cone

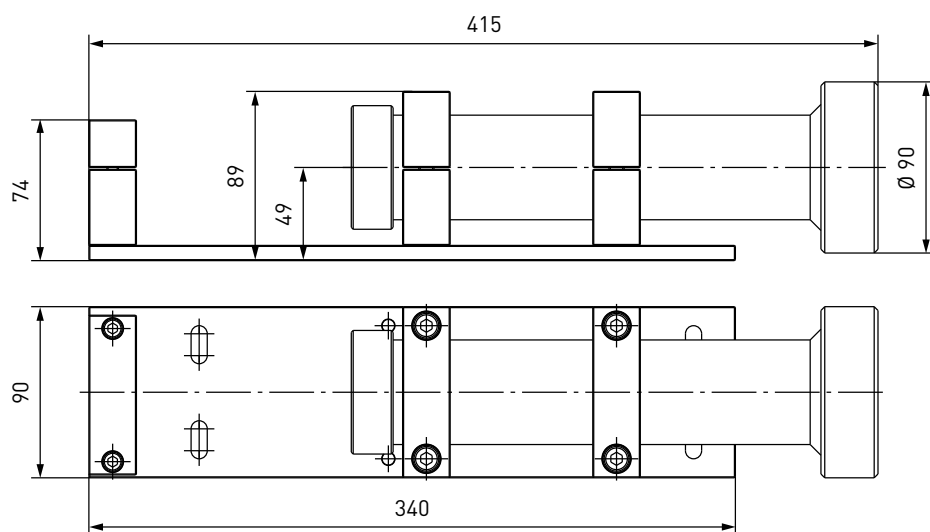
## » Breakaway coupling TSA1 CNG

### ACCESSORIES

The following accessories are available for the WEH® TSA1 CNG Breakaway coupling:

#### Dispenser mounting

The breakaway coupling can also be used with a dispenser mounting. The mounting is firmly attached to the dispenser. The integrated guide tube provides a straight pull-off force.



Part No.	Description
C1-69275	Dispenser mounting for TSA1 CNG

#### Hoses

Please see page 140 or the corresponding fueling nozzles for filling and venting hoses suitable for the TSA1 CNG breakaway coupling.

## » Breakaway coupling TSA1 CNG

### Fittings

Stainless steel fittings for connecting port 'B1' to the filling hose or port 'C2' to the venting hose.

Part No.	Description	Connection breakaway	Connection filling hose
<b>E80-79538</b>	Fitting	UNF 9/16"-18* female thread	UNF 9/16"-18** female thread
<b>E80-647P</b>	Fitting	UNF 9/16"-18* female thread	UNF 7/8"-14* male thread
<b>E80-60018</b>	Fitting	UNF 9/16"-18* male thread	G3/8" male thread

\* acc. to SAE J514, 37° cone

\*\* acc. to SAE J1926-1

Please see page 144 onwards for a detailed overview on all available fittings.

### Spare parts

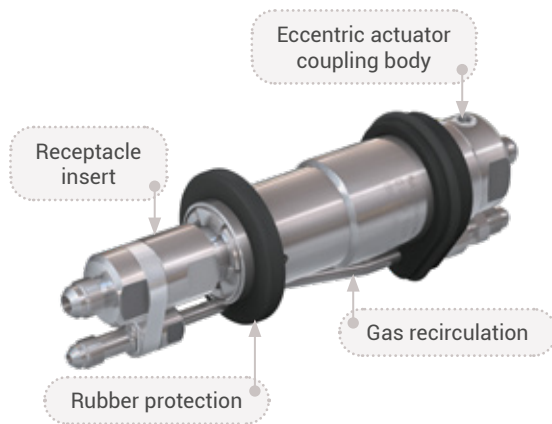
Various parts are available as spares for the TSA1 CNG breakaway coupling.



Part No.	Description
<b>W56149</b>	Receptacle insert for UNF 9/16"-18 male thread, 37° (B2), UNF 7/16"-20 male thread, 37° (C1)
<b>W101086</b>	Receptacle insert for UNF 7/16"-20 male thread, 37° (B2), UNF 7/16"-20 male thread, 37° (C1)
<b>W60006</b>	Receptacle insert for UNF 9/16"-18 male thread, 37° (B2)
<b>B200B-119056</b>	Spare seal set for receptacle insert W56149 and W101086
<b>B200B-119054</b>	Spare seal set for receptacle insert W60006
<b>E69-9061</b>	Wire filter insert 40 µm (incl. spring and back-up ring)
<b>W139032</b>	Spare part set consisting of a gas recirculation tube (length: approx. 195 mm) and a firmly mounted check valve for G1/4" male thread (C2)
<b>W139315</b>	Spare part set consisting of a gas recirculation tube (length: approx. 157 mm) and a firmly mounted check valve for G1/4" male thread (C2)

## » Inline breakaway coupling TSA2 CNG

### DESCRIPTION



#### Features

- Re-usable without factory reservicing
- Installation inbetween the filling and venting hoses
- Small compact design
- Version with or without gas recirculation
- Rubber protection
- Eccentric actuation via an allen wrench

With type TSA2 CNG, an inline breakaway coupling which is installed inbetween the filling and venting hoses, is now also available for car fueling stations. In the event of accidental deployment, e.g. driving a vehicle from the dispenser with the nozzle remaining in the vehicle fuel port, the coupling will separate the connections between dispenser and hoses sealing both ends. This protects largely the receptacle, the fueling nozzle and the dispenser against damage. The detached coupling can be easily reattached and placed back in service after having been function tested.

The breakaway device consists of a coupling body, a receptacle insert and an optional gas recirculation.

We recommend the installation of a TSF5 CNG filter (see page 122) when using the TSA2 CNG inline breakaway coupling. The filter protects your system from dirt ingress.

We also offer fueling assemblies consisting of a fueling nozzle, a hose set and a breakaway coupling (for fueling assemblies see respective fueling nozzle).

#### Application

Inline breakaway coupling for car fueling stations for installation inbetween the filling and venting hoses.

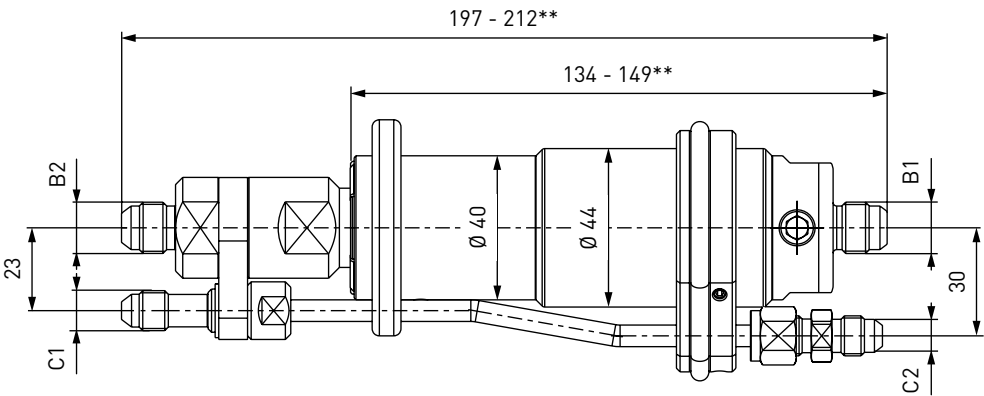
### TECHNICAL DATA

Characteristics	Basic version	Options
Nominal bore (DN)	Depending on design	On request
Pressure range	PN = 200 bar (3,000 psi)   PS = 300 bar PN = 250 bar (3,600 psi)   PS = 350 bar	
Temperature range	-40 °F up to +185 °F	On request
Breakaway force	222 - 660 N	On request
Material	Corrosion resistant stainless steel, aluminum	On request
Sealing material	Natural gas resistant	On request
Design	With gas recirculation	Without gas recirculation

# » Inline breakaway coupling TSA2 CNG

## ORDERING | WEH® TSA2 CNG Inline breakaway coupling with gas recirculation

approx. dimensions (mm)

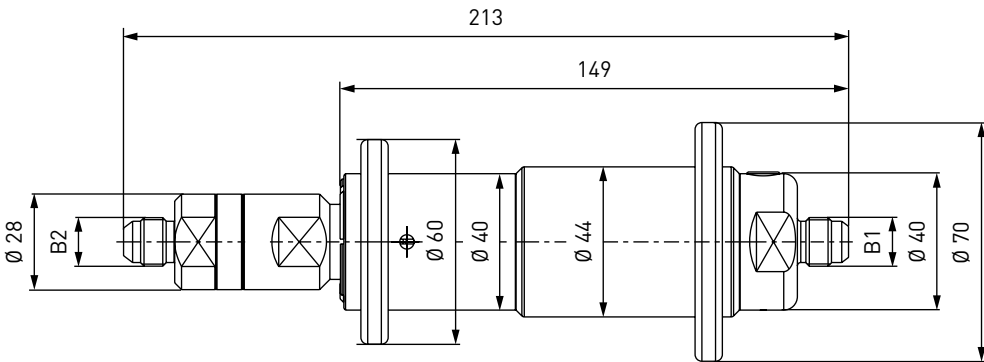


Part No.	Description	DN	Pressure (PN)	B1/B2 (male thread)	C1/C2 (male thread)
C1-60003-X1-X01	TSA2 CNG	8	3,000 psi	UNF 9/16"-18*	UNF 7/16"-20*
C1-101094-X01	TSA2 CNG	8	3,600 psi	UNF 9/16"-18*	UNF 7/16"-20*
C1-92668-X01	TSA2 CNG	4	3,000 psi	UNF 7/16"-20*	UNF 7/16"-20*

\* acc. to SAE J514, 37° cone  
 \*\* length depending on type of breakaway coupling

## ORDERING | WEH® TSA2 CNG Inline breakaway coupling without gas recirculation

approx. dimensions (mm)



Part No.	Description	DN	Pressure (PN)	B1 (male thread)	B2 (male thread)
C1-60007-X1-X01	TSA2 CNG	8	3,000 psi	UNF 9/16"-18*	UNF 9/16"-18*
C1-101042-X01	TSA2 CNG	8	3,600 psi	UNF 9/16"-18*	UNF 9/16"-18*
C1-74443-X01	TSA2 CNG	4	3,000 psi	UNF 9/16"-18*	UNF 7/16"-20*
C1-103076-X01	TSA2 CNG	4	3,000 psi	UNF 7/16"-20*	UNF 7/16"-20*

\* acc. to SAE J514, 37° cone

## » Inline breakaway coupling TSA2 CNG

### ACCESSORIES

The following accessories are available for the WEH® TSA2 CNG Inline breakaway coupling:

#### Filter TSF5 CNG (50 µm)

For upgrading existing inline breakaways without integrated filter, we recommend the installation of a TSF5 CNG filter (see page 122). The filter protects your system from dirt ingress. The TSF5 CNG is installed as prefilter in the media inlet between inline breakaway coupling and filling hose.



Part No.	Description	DN	Pressure (PN)	B1	B2
<b>C1-83120-X01</b>	TSF5 CNG	8	3,000 psi	UNF 9/16"-18* male thread	UNF 9/16"-18* female thread
<b>C1-102491-X01</b>	TSF5 CNG	8	3,600 psi	UNF 9/16"-18* male thread	UNF 9/16"-18* female thread

\* acc. to SAE J514, 37° cone

#### Hoses

Please see page 140 or the corresponding fueling nozzles for filling and venting hoses suitable for the TSA2 CNG inline breakaway coupling.

#### Fittings

Stainless steel fittings for connecting port 'B1' to the filling hose or port 'C2' to the venting hose.

Part No.	Description	Connection breakaway	Connection filling hose
<b>E80-79538</b>	Fitting	UNF 9/16"-18* female thread	UNF 9/16"-18** female thread
<b>E80-66850</b>	Fitting	UNF 9/16"-18* female thread	UNF 3/4"-16* male thread
<b>E80-65592</b>	Fitting	UNF 9/16"-18* female thread	NPT 1/4" female thread

\* acc. to SAE J514, 37° cone

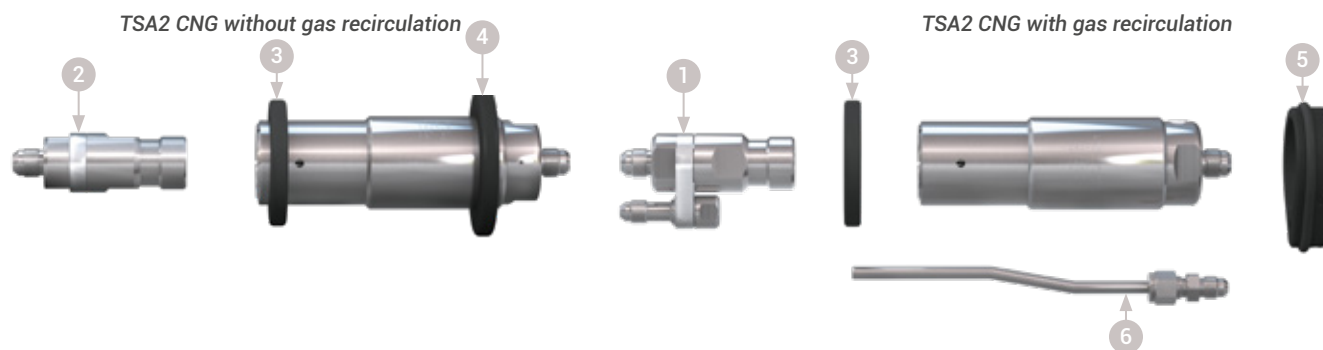
\*\* acc. to SAE J1926-1

Please see page 144 onwards for a detailed overview on all available fittings.

## » Inline breakaway coupling TSA2 CNG

### Spare parts

Various parts are available as spares for the TSA2 CNG inline breakaway coupling.



Part No.	Description
<b>W56149</b>	1 Receptacle insert for UNF 9/16"-18 male thread, 37° (B2), UNF 7/16"-20 male thread, 37° (C1)
<b>W101086</b>	1 Receptacle insert for UNF 7/16"-20 male thread, 37° (B2), UNF 7/16"-20 male thread, 37° (C1)
<b>W60006</b>	2 Receptacle insert for UNF 9/16"-18 male thread, 37° (B2)
<b>W74608</b>	2 Receptacle insert for UNF 7/16"-20 male thread, 37° (B2)
<b>B200B-119056</b>	Spare seal set for receptacle insert W56149 and W101086
<b>B200B-119054</b>	Spare seal set for receptacle insert W60006 and W74608
<b>E80-71324</b>	3 Front rubber protection
<b>E80-71325</b>	4 Rear rubber protection
<b>W150599</b>	5 Mounting flange incl. impact protection
<b>W139030</b>	6 Spare part set consisting of a gas recirculation tube and a firmly mounted fitting for UNF 7/16"-20 male thread, 37° (C2)

## » Receptacle TN1 CNG

### DESCRIPTION



#### Features

- Compatible with fueling nozzles acc. to NGV1 standard and ISO 14469 (see page 7, compatibility)
- Low-noise refueling
- Integrated self-cleaning particle filter (40 µm)
- Integrated high-flow check valve
- Sealing-friendly design
- Coding for pressure range / gas type

The WEH® TN1 CNG receptacle is designed specifically for CNG refueling. Due to the internal aerodynamic design the TN1 CNG receptacle gives low noise (no high frequency whistle) combined with maximum flow rate and fast filling. The receptacle is a very durable unit, minimizing maintenance and down-time. The type TN1 CNG also has an integrated check valve system which is designed to minimize the effect that dirt particles have on the sealing components within the receptacle. The TN1 CNG receptacle is equipped with a coding for pressure range and gas type.

#### Enhanced safety by integrating a dirt particle filter

Using an integrated particle filter avoids dirt ingress and therefore leakage from the receptacle which gives enhanced safety and reliability - essential features for the volatile nature of CNG products.



#### Application

Receptacle for CNG refueling / filling of cars and fork-lift trucks or other industrial applications, to be used with WEH® Fueling nozzles acc. to NGV1 standard and ISO 14469 (see page 7, compatibility).

Only use receptacles with ECE approval for fitment in road legal vehicles.

### TECHNICAL DATA

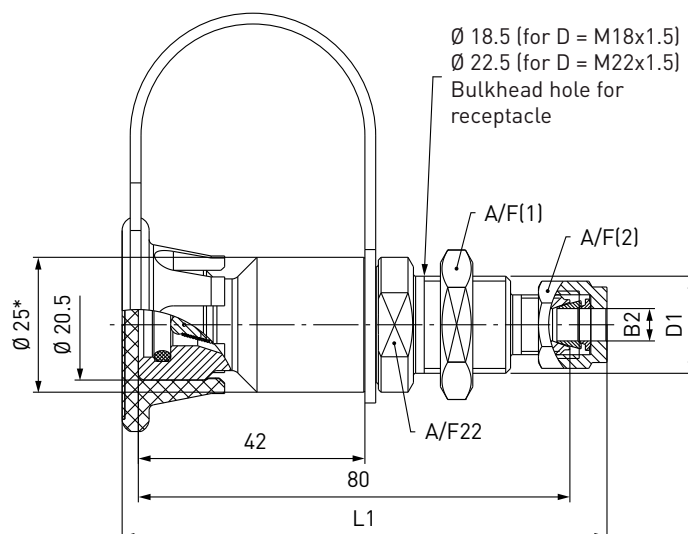
Characteristics	Basic version	Options
Nominal bore (DN)	Depending on design	On request
Pressure range	PN = 200 bar (3,000 psi)   PS = 260 bar (ECE) PN = 250 bar (3,600 psi)   PS = 315 bar	
Temperature range	-40 °F up to +248 °F (ECE) -40 °F up to +185 °F	On request
Material	Corrosion resistant	On request
Sealing material	Natural gas resistant	On request
Design	With protection cap, integrated particle filter (40 µm) and fittings (only for receptacles with tube fitting)	Without integrated particle filter
Conformity / Tests / Approvals	ECE R110	



## » Receptacle TN1 CNG

### ORDERING | WEH® TN1 CNG Receptacle with tube fitting and filter (40 µm)

approx. dimensions (mm)



Part No.	Description	DN**	Pressure (PN)	B2***	L1	D1	A/F(1)	A/F(2)
<b>C1-99331</b>	TN1 CNG (ECE)	5	3,000 psi	Tube $\varnothing 6$	90	M18x1.5	24	14
<b>C1-105789</b>	TN1 CNG (ECE)	5	3,000 psi	Tube $\varnothing 1/4"$	90	M18x1.5	24	14
<b>C1-102542-X01*</b>	TN1 CNG	5	3,600 psi	Tube $\varnothing 1/4"$	90	M18x1.5	24	14
<b>C1-106400</b>	TN1 CNG (ECE)	6	3,000 psi	Tube $\varnothing 8$	90	M18x1.5	24	16
<b>C1-103611</b>	TN1 CNG (ECE)	6	3,000 psi	Tube $\varnothing 3/8"$	90	M18x1.5	24	17.4
<b>C1-102579-X01*</b>	TN1 CNG	6	3,600 psi	Tube $\varnothing 3/8"$	90	M18x1.5	24	17.4
<b>C1-106401</b>	TN1 CNG (ECE)	6	3,000 psi	Tube $\varnothing 10$	91	M18x1.5	24	19
<b>C1-105939</b>	TN1 CNG (ECE)	6	3,000 psi	Tube $\varnothing 12$	92	M22x1.5	27	22
<b>C1-106402</b>	TN1 CNG (ECE)	6	3,000 psi	Tube $\varnothing 1/2"$	94	M22x1.5	27	22
<b>C1-102580*</b>	TN1 CNG	6	3,600 psi	Tube $\varnothing 1/2"$	94	M22x1.5	27	22

\* Different diameter ( $\varnothing 24$  mm) due to pressure range coding

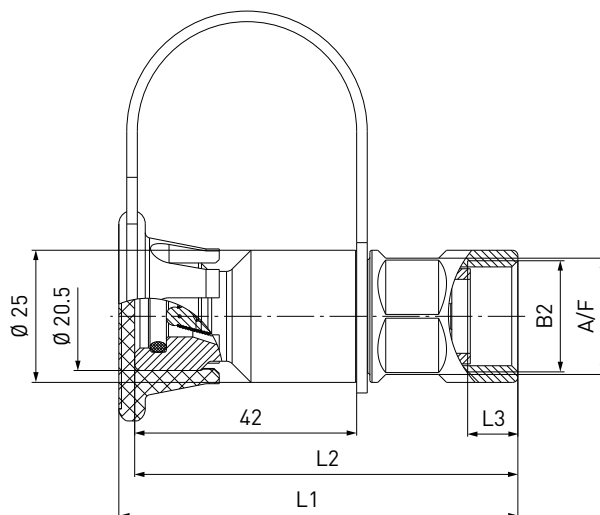
\*\* depending on inner diameter of tube

\*\*\* double ferrule fitting

## » Receptacle TN1 CNG

### ORDERING | WEH® TN1 CNG Receptacle with female thread and filter (40 µm)

approx. dimensions (mm)

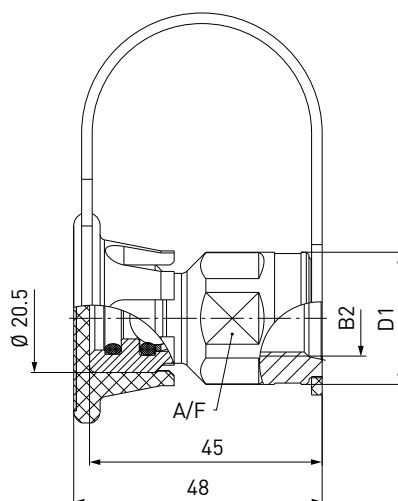


Part No.	Description	DN	Pressure (PN)	B2 (female thread)	L1	L2	L3	A/F
<b>C1-92149</b>	TN1 CNG (ECE)	5	3,000 psi	G1/2"	75.5	72.5	9.5	22
<b>C1-101953</b>	TN1 CNG (ECE)	5	3,000 psi	UNF 9/16"-18*	80	77	12.7	23

\* acc. to SAE J1926-1

### ORDERING | WEH® TN1 CNG Receptacle with female thread (without filter)

approx. dimensions (mm)



Part No.	Description	DN	Pressure (PN)	B2 (female thread)	D1	A/F
<b>C1-101122</b>	TN1 CNG (ECE)	6	3,000 psi	UNF 9/16"-18*	25	23
<b>C1-33505-X01</b>	TN1 CNG	6	3,600 psi	UNF 9/16"-18*	24	22

\* acc. to SAE J1926-1

Other connection sizes on request.

# » Receptacle TN1 CNG

## SPARE PARTS

Various parts are available as spares for the WEH® TN1 CNG Receptacle:

### Protection Cap

Protection cap with a strap to protect the receptacle from dirt ingress.



Part No.	Description
E80-68966	Protection cap

## » Fueling system TS50 CNG

### DESCRIPTION



#### Features

- Integrated WEH® TN1 CNG receptacle (NGV1) with filter
- Integrated starter cut-off micro switch (version 1 + 3)
- Gas venting via protection hose (version 1 + 2)
- Different fuel tank caps, acc. to design
- Protection against unauthorized use (version 1 + 3)
- Dirt and splash waterproof construction
- No danger of freezing

WEH offers the fueling system type TS50 CNG for retrofitting of vehicles to run on compressed natural gas. The TS50 CNG fueling system is a CNG conversion kit for quick and easy installation into the vehicle. The two housings can be preinstalled within seconds. The final installation is possible from the inside or outside of the vehicle. The type TS50 CNG is equipped with

a receptacle with filter compatible with the NGV1 profile. Version 1 and 3 have a starter cut-off micro switch. The micro switch interrupts the starter operation and prevents the vehicle from driving off during refueling. Version 1 and 2 are additionally equipped with a protection hose for gas venting. In case of a gas leakage the gas is diverted away from the connection.

The interior of the fueling system is protected by a fuel tank cap from dirt and splash water thus reducing the danger of freezing.

On request type TS50 CNG is also available without tube for protection hose for gas venting and without starter cut-off micro switch.

#### Application

Fueling system for installation in cars.

Only use fueling systems with ECE approval for fitment in road legal vehicles.

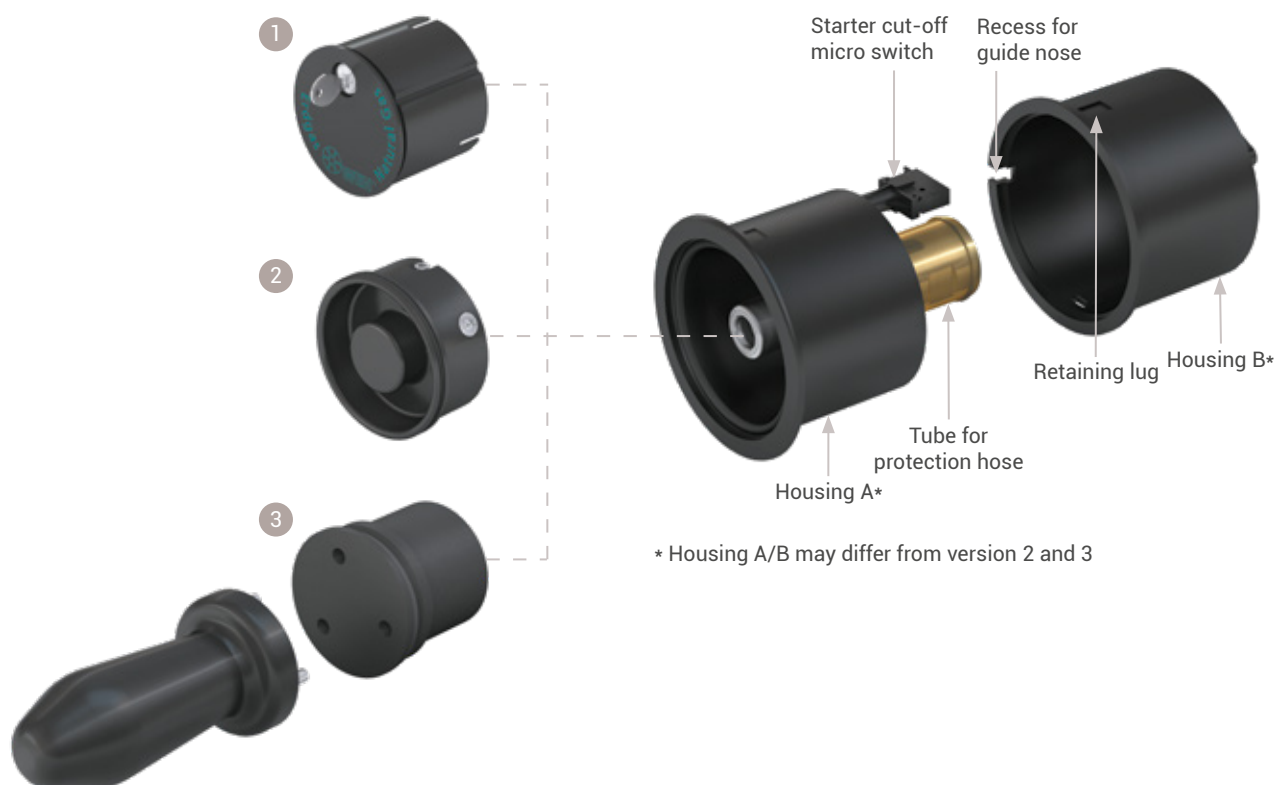
### TECHNICAL DATA

Characteristics	Basic version	Options
Nominal bore (DN)	8 mm	On request
Pressure range	PN = 200 bar (3,000 psi)   PS = 260 bar (ECE)	
Temperature range	-40 °F up to +248 °F (ECE)	On request
Material	Housing: plastic Receptacle: corrosion resistant	On request
Sealing material	Natural gas resistant	On request
Design	Incl. TN1 CNG receptacle with filter (40 µm), starter cut-off micro switch (protection type IP679), tube for protection hose for gas venting, fuel tank cap and fittings	Without tube for protection hose for gas venting Without starter cut-off micro switch
Conformity / Tests / Approvals	ECE R110 (applies to TN1 CNG)	

## » Fueling system TS50 CNG

### OVERVIEW TYPES TS50 CNG

For the TS50 CNG fueling system various designs are available:



#### 1 TS50 CNG with lockable fuel tank cap and key (version 1)



To prevent unauthorized use, the fueling system is equipped with a lockable fuel tank cap.

#### 2 TS50 CNG with cap, without lock and starter cut-off micro switch (version 2)



The TS50 CNG is also available without lock. The fuel tank cap protects the interior of the fueling system from dirt and splash water and reduces the danger of freezing.

#### 3 TS50 CNG with lockable 3-hole fuel tank cap (version 3)

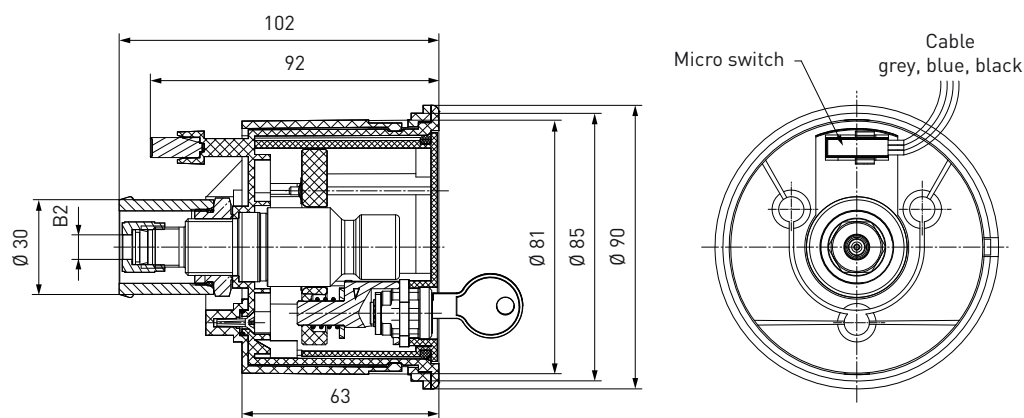


We also offer TS50 CNG with 3-hole fuel tank cap and special key to prevent unauthorized use for narrowed spaces.

## » Fueling system TS50 CNG

### ORDERING | WEH® TS50 CNG Fueling system with lockable fuel tank cap and 2 keys (version 1)

approx. dimensions (mm)



Cable: grey = N/C | blue = N/O | black = inlet port

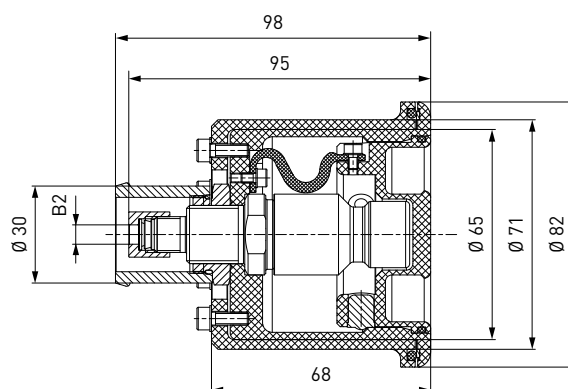


Part No.	Description	Pressure (PN)	B2
<b>C1-106406</b>	TS50 CNG (ECE)	3,000 psi	Tube Ø 6*
<b>C1-106413</b>	TS50 CNG (ECE)	3,000 psi	Tube Ø 1/4"*
<b>C1-106410</b>	TS50 CNG (ECE)	3,000 psi	Tube Ø 8*
<b>C1-106414</b>	TS50 CNG (ECE)	3,000 psi	Tube Ø 3/8"*
<b>C1-106415</b>	TS50 CNG (ECE)	3,000 psi	Tube Ø 10*

\* double ferrule fitting

### ORDERING | WEH® TS50 CNG Fueling system with fuel tank cap, without starter cut-off micro switch (version 2)

approx. dimensions (mm)



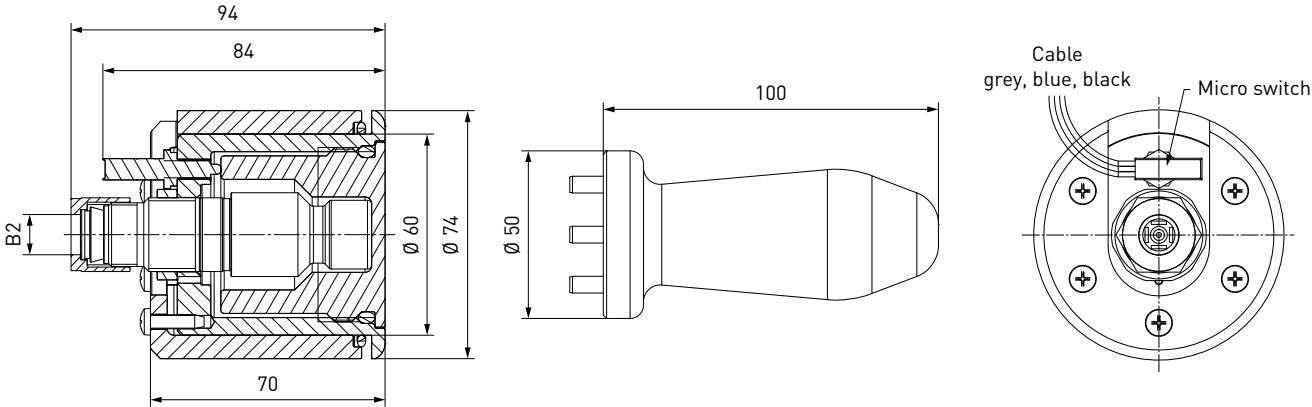
Part No.	Description	Pressure (PN)	B2
<b>C1-106416</b>	TS50 CNG (ECE)	3,000 psi	Tube Ø 6*
<b>C1-106417</b>	TS50 CNG (ECE)	3,000 psi	Tube Ø 8*
<b>C1-106418</b>	TS50 CNG (ECE)	3,000 psi	Tube Ø 10*

\* double ferrule fitting

# » Fueling system TS50 CNG

## ORDERING | WEH® TS50 CNG Fueling system with lockable 3-hole fuel tank cap (version 3)

approx. dimensions (mm)



Cable: grey = N/C | blue = N/O | black = inlet port



Part No.	Description	Pressure (PN)	B2
On request**	TS50 CNG (ECE)	3,000 psi	Tube Ø 10*
C1-106419**	TS50 CNG (ECE)	3,000 psi	Tube Ø 12*
C1-106421**	TS50 CNG (ECE)	3,000 psi	Tube Ø 1/2"*

\* double ferrule fitting  
\*\* without tube for protection hose for gas venting

## SPARE PARTS

Various parts are available as spares for the WEH® TS50 CNG Fueling system:



Part No.	Description
W6931	1 Fuel tank cap with marking incl. 2 keys (version 1)
W35528	2 Pull-out fuel tank cap (version 2)
On request	3 3-hole fuel tank cap (version 3)
W6036	4 Key for 3-hole fuel tank cap (version 3)

## » Check valve TVR1 CNG

### DESCRIPTION



#### Features

- Robust construction
- Low-noise opening and closing
- Corrosion resistant stainless steel
- High leak tightness

With the type TVR1 CNG WEH offers a high performance check valve for use with natural gas. The check valve system is designed to minimize the effect of dirt particles on the sealing components within the unit. The WEH® TVR1 CNG check valve is constructed of corrosion-resistant stainless steel achieving a very durable unit due to its robust internal structure.

#### Application

Check valve for cars (ECE approval), also suitable for installation in fueling stations.  
Only use check valves with ECE approval for fitment in road legal vehicles.

### TECHNICAL DATA

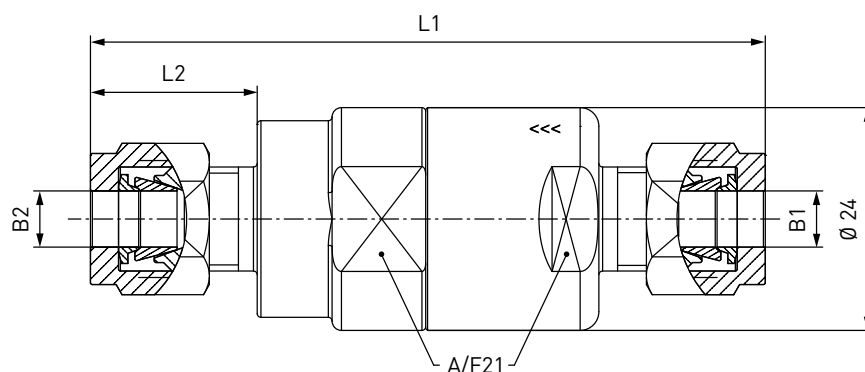
Characteristics	Basic version	Options
Nominal bore (DN)	Depending on design	On request
Pressure range	PN = 200 bar (3,000 psi)   PS = 260 bar (ECE) PN = 250 bar (3,600 psi)   PS = 315 bar	
Temperature range	-40 °F up to +248 °F (ECE) -40 °F up to +185 °F	On request
Material	Corrosion resistant stainless steel	On request
Sealing material	Natural gas resistant	On request
Design	Incl. fittings (only for check valves with tube fitting)	On request
Conformity / Tests / Approvals	ECE R110	



## » Check valve TVR1 CNG

### ORDERING | WEH® TVR1 CNG Check valve with tube fitting on both sides

approx. dimensions (mm)



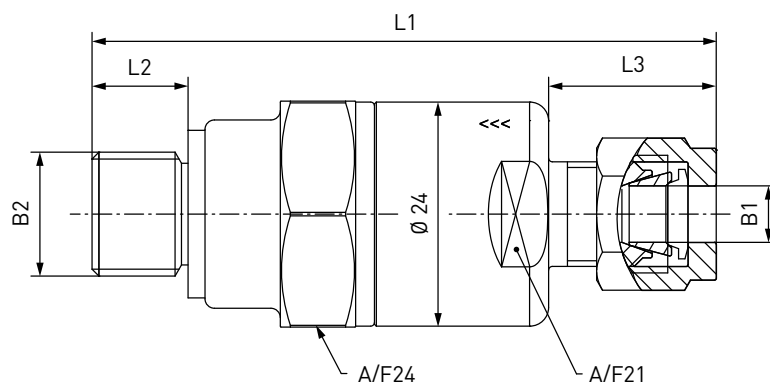
Part No.	Description	DN	Pressure (PN)	B1	B2	L1	L2
<b>C1-105917</b>	TVR1 CNG (ECE)	5	3,000 psi	Tube Ø 6*	Tube Ø 6*	72	18
<b>C1-106982-X01</b>	TVR1 CNG	5	3,600 psi	Tube Ø 6*	Tube Ø 6*	72	18
<b>C1-106455</b>	TVR1 CNG (ECE)	5	3,000 psi	Tube Ø 1/4"*	Tube Ø 1/4"*	73	18
<b>C1-102597-X01</b>	TVR1 CNG	5	3,600 psi	Tube Ø 1/4"*	Tube Ø 1/4"*	73	18
<b>C1-106451</b>	TVR1 CNG (ECE)	6	3,000 psi	Tube Ø 8*	Tube Ø 8*	75	20
<b>C1-106983-X01</b>	TVR1 CNG	6	3,600 psi	Tube Ø 8*	Tube Ø 8*	75	20
<b>C1-107710</b>	TVR1 CNG (ECE)	8	3,000 psi	Tube Ø 3/8"*	Tube Ø 3/8"*	76	20
<b>C1-102598-X01</b>	TVR1 CNG	8	3,600 psi	Tube Ø 3/8"*	Tube Ø 3/8"*	76	20
<b>C1-106452</b>	TVR1 CNG (ECE)	8	3,000 psi	Tube Ø 10*	Tube Ø 10*	77	20
<b>C1-106984</b>	TVR1 CNG	8	3,600 psi	Tube Ø 10*	Tube Ø 10*	77	20
<b>C1-106453</b>	TVR1 CNG (ECE)	8	3,000 psi	Tube Ø 12*	Tube Ø 12*	81	22
<b>C1-106985-X01</b>	TVR1 CNG	8	3,600 psi	Tube Ø 12*	Tube Ø 12*	81	22

\* double ferrule fitting

## » Check valve TVR1 CNG

### ORDERING | WEH® TVR1 CNG Check valve with tube fitting and external thread

approx. dimensions (mm)



Part No.	Description	DN	Pressure (PN)	B1	B2 (external thread)	L1	L2	L3
<b>C1-73740</b>	TVR1 CNG (ECE)	5	3,000 psi	Tube Ø 6*	G1/4"	66	10	18
<b>C1-106986</b>	TVR1 CNG	5	3,600 psi	Tube Ø 6*	G1/4"	66	10	18
<b>C1-106979</b>	TVR1 CNG (ECE)	5	3,000 psi	Tube Ø 6*	UNF 9/16"-18** SAE o-ring	66	12	18
<b>C1-106987-X01</b>	TVR1 CNG	5	3,600 psi	Tube Ø 6*	UNF 9/16"-18** SAE o-ring	66	12	18
<b>C1-106988</b>	TVR1 CNG (ECE)	5	3,000 psi	Tube Ø 8*	G1/4"	68	10	20
<b>C1-106989</b>	TVR1 CNG	5	3,600 psi	Tube Ø 8*	G1/4"	68	10	20

\* double ferrule fitting

\*\* acc. to SAE J1926-1

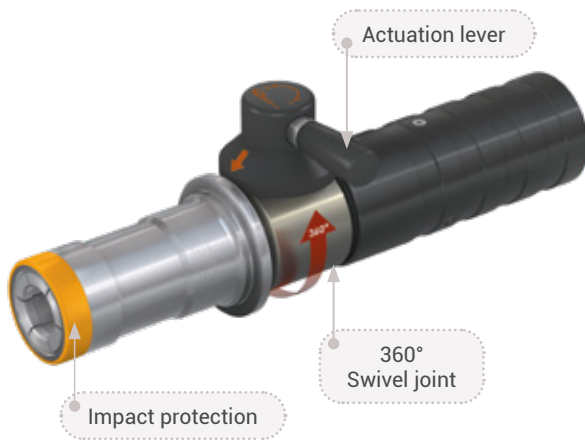
Other connection sizes on request.

## » Check valve TVR1 CNG

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## » Fueling nozzle TK26 CNG

### DESCRIPTION



#### Features

- Super light ➔ only 3400 grams
- Compatible with receptacles acc. to NGV1 standard and ISO 14469 (see page 7, compatibility)
- WEH® EASY-TURN 360° swivel joint for actuation lever
- Easy operation
- Extremely high flow rate ➔ short filling times
- Recirculation of the vented gas
- Plastic thermal protection
- WEH® Jaw locking mechanism
- Colour coded impact protection (3,000 psi black, 3,600 psi yellow)
- High-grade materials
- Coding for pressure range / gas type

The TK26 CNG fueling nozzle is very light in weight and therefore easy to operate. The integrated swivel joint is located at the actuation lever and can easily be turned into the optimal actuating position. The compact actuation lever needs less effort to actuate the nozzle.

#### Safety

The TK26 CNG offers optimum safety to the operator.

The fueling nozzle remains connected to the receptacle until the gas between inlet valve and receptacle is depressurized.

#### Application

Fueling nozzle for CNG fast filling of buses and trucks at self-service fueling stations to be used with WEH® Receptacles acc. to NGV1 standard and ISO 14469 (see page 7, compatibility).

### TECHNICAL DATA

Characteristics	Basic version	Options
Nominal bore (DN)	12 mm	On request
Pressure range	P30HD acc. to ANSI NGV1 / C200 acc. to ISO 14469 PN = 200 bar (3,000 psi)   PS = 300 bar P36HD acc. to ANSI NGV1 / C250 acc. to ISO 14469 PN = 250 bar (3,600 psi)   PS = 350 bar	
Temperature range	-40 °F up to +185 °F	On request
Material	Corrosion resistant	On request
Sealing material	Natural gas resistant	On request
Design	With plastic thermal protection and gas recirculation	On request
Weight	Approx. 7.50 lbs.	
Conformity / Tests / Approvals	In accordance with ISO 14469	

# » Fueling nozzle TK26 CNG

## ORDERING | WEH® TK26 CNG Fueling nozzle

approx. dimensions (mm)



Part No.	Description	Pressure (PN)	B1 (male thread)	C2 (male thread)
C1-70708-X01	TK26 CNG	3,000 psi	UNF 7/8"-14*	UNF 9/16"-18*
C1-102475-X01	TK26 CNG	3,600 psi	UNF 7/8"-14*	UNF 9/16"-18*

\* acc. to SAE J514, 37° cone

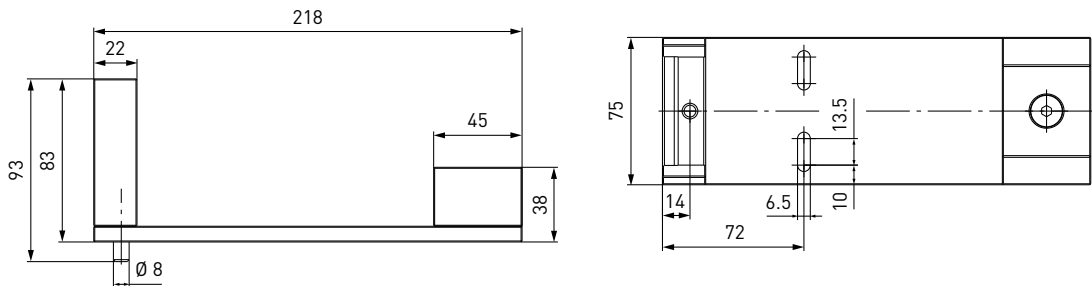
Please see page 68 onwards for fueling assemblies consisting of fueling nozzle, hose set and breakaway coupling.

## ACCESSORIES

The following accessories are available for the WEH® TK26 CNG Fueling nozzle:

### Dispenser mounting

Mounting for safe attachment of the fueling nozzle to the dispenser. Optionally with or without switch actuation.  
Design: Aluminum, stainless steel

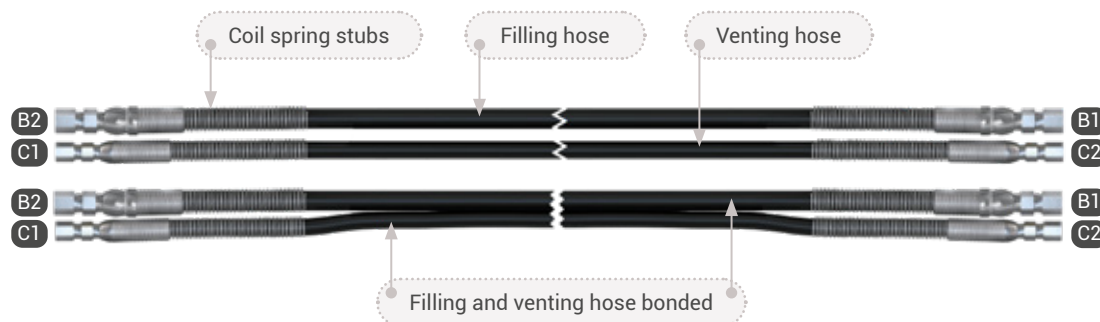


Part No.	Description
C1-94805	Dispenser mounting (switch actuated)
C1-117370	Dispenser mounting (not switch actuated)

## » Fueling nozzle TK26 CNG

### Hose sets TK26 CNG - TSA5 CNG

Filling and venting hoses for connecting fueling nozzle and TSA5 CNG breakaway coupling, complete with fittings and press-fittings supported by coil spring stubs. Available as single or twin hoses (permanently bonded).



Part No.	B1/B2 (female thread)	C1/C2 (female thread)	Hose length
<b>C1-101749</b>	UNF 7/8"-14*	UNF 9/16"-18*	3 m
<b>C1-102079</b>	UNF 7/8"-14*	UNF 9/16"-18*	4 m
<b>C1-102508</b>	UNF 7/8"-14*	UNF 9/16"-18*	5 m

\* acc. to SAE J514, 37° cone

All designs also available with permanently bonded filling and venting hose. Please contact us!

### Hose sets TK26 CNG - TSA6 CNG

Filling and venting hoses for connecting fueling nozzle / dispenser and TSA6 CNG inline breakaway coupling, complete with fittings and press-fittings supported by coil spring stubs.

Part No.	B1/B2 (female thread)	C1/C2 (female thread)	Hose length
<b>On request</b>	UNF 7/8"-14*	UNF 9/16"-18*	2.5   0.5 m
<b>On request</b>	UNF 7/8"-14*	UNF 9/16"-18*	3.5   0.5 m
<b>On request</b>	UNF 7/8"-14*	UNF 9/16"-18*	4.5   0.5 m

\* acc. to SAE J514, 37° cone

All designs also available with permanently bonded filling and venting hose. Please contact us!

## » Fueling nozzle TK26 CNG

### Fittings

Stainless steel fittings for connecting port 'B1' to the filling hose or port 'C2' to the venting hose.

Part No.	Description	Connection fueling nozzle	Connection filling hose
<b>E80-97227</b>	Fitting	UNF 9/16"-18* female thread	UNF 9/16"-18* female thread
<b>E80-79538</b>	Fitting	UNF 9/16"-18* female thread	UNF 9/16"-18 ** female thread
<b>E80-647P</b>	Fitting	UNF 9/16"-18* female thread	UNF 7/8"-14* male thread
<b>E80-66850</b>	Fitting	UNF 9/16"-18* female thread	UNF 3/4"-16* male thread
<b>E80-65592</b>	Fitting	UNF 9/16"-18* female thread	NPT 1/4" female thread
<b>E80-52705</b>	Fitting	UNF 7/8"-14* female thread	UNF 9/16"-18* male thread
<b>E80-105411</b>	Fitting	UNF 7/8"-14* female thread	UNF 7/16"-20* male thread
<b>E80-48976</b>	Fitting	UNF 7/8"-14* female thread	NPT 1/4" male thread

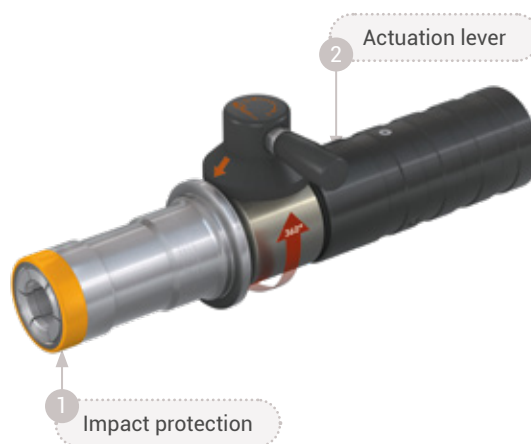
\* acc. to SAE J514, 37° cone

\*\* acc. to SAE J1926-1

Please see page 144 onwards for a detailed overview on all available fittings.

### Spare parts

Various parts are available as spares for the TK26 CNG fueling nozzle.



Part No.	Description
<b>E80-94808</b>	1 Impact protection 200 bar / 3,000 psi (black)
<b>E80-106832</b>	1 Impact protection 250 bar / 3,600 psi (yellow)
<b>W72504</b>	2 Actuation lever
<b>E99-44923</b>	Maintenance spray

## » Fueling assembly TK26 CNG



We also offer complete sets assembled and pressure tested for installation at fueling stations. The fueling assemblies consist of a fueling nozzle, a hose set and a breakaway coupling. All fueling assemblies are available with different hose lengths and can either be delivered with a type TSA5 CNG breakaway coupling directly mounted at the dispenser or a type TSA6 CNG inline breakaway coupling mounted inbetween the hoses.

### Application

Fueling assembly for CNG fast filling of buses and trucks at self-service fueling stations.

### TECHNICAL DATA

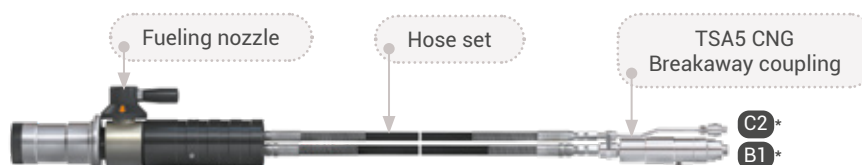
Characteristics	Basic version
Nominal bore (DN)	12 mm
Max. allowable operating pressure	PS = 345 bar (5,000 psi)
Temperature range	-40 °C up to +85 °C (-40 °F up to +185 °F)
Material	Corrosion resistant
Sealing material	Natural gas resistant
Design	TK26 CNG fueling nozzle, hose set and breakaway coupling fully assembled and pressure tested



## » Fueling assembly TK26 CNG

### ORDERING | Fueling assembly WEH® TK26 CNG with WEH® TSA5 CNG Breakaway coupling

Complete fueling assembly consisting of a TK26 CNG (200 bar / 3,000 psi) fueling nozzle, a hose set and a TSA5 CNG breakaway coupling (with 40 µm filter).



Part No.	Description	Hose length
<b>C1-101917-X01</b>	Fueling assembly with TSA5 CNG breakaway coupling	3 m
<b>C1-106459-X01</b>	Fueling assembly with TSA5 CNG breakaway coupling	4 m
<b>C1-106460-X01</b>	Fueling assembly with TSA5 CNG breakaway coupling	5 m

All designs are also available with a TK26 CNG - 250 bar (3,600 psi) fueling nozzle or with permanently bonded filling and venting hose. Please contact us!

\* For connection sizes 'B1' and 'C2' see page 78, TSA5 CNG breakaway coupling.

### ORDERING | Fueling assembly WEH® TK26 CNG with WEH® TSA6 CNG Inline breakaway coupling

Complete fueling assembly consisting of a TK26 CNG (200 bar / 3,000 psi) fueling nozzle, a hose set and a TSA6 CNG inline breakaway coupling.



Part No.	Description	Hose length
<b>C1-106464-X01</b>	Fueling assembly with TSA6 CNG inline breakaway coupling	2.5   0.5 m
<b>C1-106466-X01</b>	Fueling assembly with TSA6 CNG inline breakaway coupling	3.5   0.5 m
<b>C1-106467-X01</b>	Fueling assembly with TSA6 CNG inline breakaway coupling	4.5   0.5 m

All designs are also available with a TK26 CNG - 250 bar (3,600 psi) fueling nozzle or with permanently bonded filling and venting hose. Please contact us!

\* For connection sizes 'B1' and 'C2' see page 140, TK26 CNG hose set.

## » Fueling nozzle TK22 CNG

### DESCRIPTION



#### Features

- Compatible with receptacles acc. to NGV1 standard and ISO 14469 (see page 7, compatibility)
- Push-Pull actuation
- Extremely high flow rate
- Integrated shut-off valve
- Plastic thermal protection
- WEH® Jaw locking mechanism
- Colour coded impact protection (3,000 psi black, 3,600 psi yellow)
- High-grade materials
- Compact design
- Retrofitting of safety device for grip sleeve at any time

Type TK22 CNG is the WEH® Fueling nozzle for CNG refueling of buses and trucks. The compact design and the unique WEH® Jaw locking mechanism provide a pressure-tight connection within seconds.

The type TK22 CNG can be used wherever the system is pressurized and vented at the fueling station. Easy push-pull connection. The nozzle only has to be placed onto the receptacle and the clamping jaws close. Disconnection is effected by pulling back the grip sleeve.

#### Application

Fueling nozzle for CNG fast filling of buses and trucks to be used with WEH® Receptacles acc. to NGV1 standard and ISO 14469 (see page 7, compatibility). Operation only by specially trained service personnel. Not for self-service operation! For self-service operation we recommend our TK22 CNG with safety device for grip sleeve.



TK22 CNG with safety device for grip sleeve

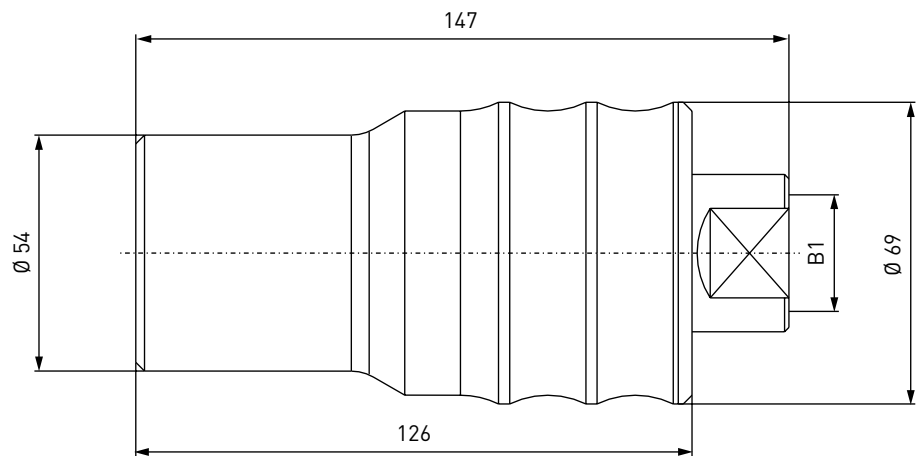
### TECHNICAL DATA

Characteristics	Basic version	Options
Nominal bore (DN)	12 mm	On request
Pressure range	P30HD acc. to ANSI NGV1 / C200 acc. to ISO 14469 PN = 200 bar (3,000 psi)   PS = 300 bar P36HD acc. to ANSI NGV1 / C250 acc. to ISO 14469 PN = 250 bar (3,600 psi)   PS = 350 bar	
Temperature range	-40 °F up to +185 °F	On request
Material	Corrosion resistant	On request
Sealing material	Natural gas resistant	On request
Design	With plastic thermal protection	On request
Weight	Approx. 3.97 lbs. (TK22 CNG) resp. approx. 4.85 lbs. (TK22 CNG with safety device for grip sleeve)	

# » Fueling nozzle TK22 CNG

ORDERING | WEH® TK22 CNG Fueling nozzle

approx. dimensions (mm)



Part No.	Description	Pressure (PN)	B1 (female thread)
C1-18890-X2-X01	TK22 CNG	3,000 psi	UNF 7/8"-14*
C1-102476-X01	TK22 CNG	3,600 psi	UNF 7/8"-14*

\* acc. to SAE J1926-1

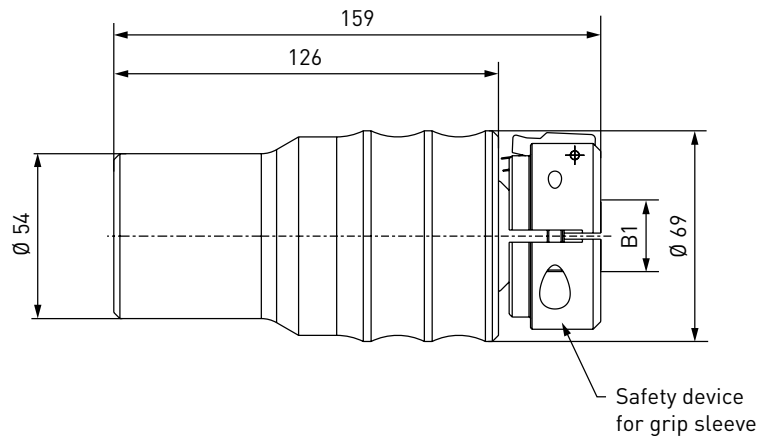
## » Fueling nozzle TK22 CNG

### ACCESSORIES

The following accessories are available for the WEH® TK22 CNG Fueling nozzle:

#### Safety device for grip sleeve

TK22 CNG fueling nozzle with safety device for grip sleeve is appropriated for self-service operation.



Part No.	Description
<b>W33337</b>	Safety device for grip sleeve for TK22 CNG

#### Filling hoses

Filling hoses for connecting fueling nozzle and dispenser, complete with fittings and press-fittings supported by coil spring stubs.



Part No.	B1/B2 (female thread)	Hose length
<b>E68-1033-3000</b>	UNF 7/8"-14*	3 m
<b>E68-1033-4000</b>	UNF 7/8"-14*	4 m
<b>E68-1033-5000</b>	UNF 7/8"-14*	5 m

\* acc. to SAE J514, 37° cone

# » Fueling nozzle TK22 CNG

## Fittings

Stainless steel fittings for connecting port 'B1' to the filling hose.

Part No.	Description	Connection fueling nozzle	Connection filling hose
W6703	Fitting	UNF 7/8"-14* male thread	UNF 7/8"-14** male thread

\* acc. to SAE J514, 37° cone  
\*\* acc. to SAE J1926-1

Please see page 144 onwards for a detailed overview on all available fittings.

## Spare parts

Various parts are available as spares for the TK22 CNG fueling nozzle.



Part No.	Description
W127951	1 Spare parts set 3,000 psi (grip sleeve incl. metal sleeve and circlip)
W127950	1 Spare parts set 3,600 psi (grip sleeve incl. yellow impact protection, metal sleeve and circlip)
E99-44923	Maintenance spray

## » Fueling nozzle TK24 CNG

### DESCRIPTION



#### Features

- Compatible with receptacles acc. to NGV1 standard and ISO 14469 (see page 7, compatibility)
- Push-Pull actuation
- Integrated shut-off valve
- Plastic thermal protection
- Version with or without gas recirculation
- Grip position at 90°
- Ergonomic design
- WEH® Jaw locking mechanism
- Colour coded impact protection (200 bar / 3,000 psi black, 250 bar / 3,600 psi yellow)
- High-grade materials

The TK24 CNG fueling nozzle combines user comfort with maximum convenience. The integrated TK22 CNG fueling nozzle features 'push-to-connect' jaw locking system which automatically moves the grip sleeve back when making a connection. The ergonomic design of the handle enables an easy connection to the receptacle. This feature can help to prevent stresses on the high pressure hose and hose damage due to chafing on the ground. Refueling starts after opening the integrated ball valve. Closing the ball valve finishes refueling and the integrated gas recirculation automatically depressurizes the system. The nozzle can then be disconnected by pulling back the grip sleeve of the TK22 CNG. Optionally type TK24 CNG is also available with integrated gas recirculation.

The extended construction of the integrated TK22 CNG fueling nozzle helps in refueling difficult-to-access receptacles. WEH® Jaws grip symmetrically, avoiding damage to the receptacle profile which could result in leakage.

#### Application

Fueling nozzle for CNG fast filling of buses and trucks (also for slowfill refueling) to be used with WEH® Receptacles acc. to NGV1 standard and ISO 14469 (see page 7, compatibility).

Operation only by specially trained service personnel. Not for self-service operation!

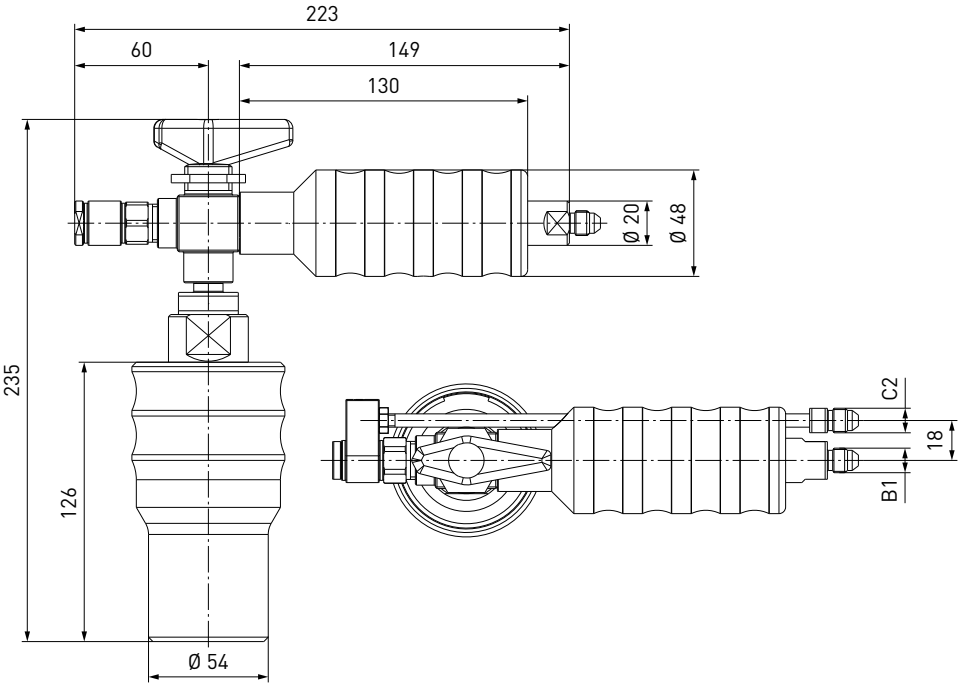
### TECHNICAL DATA

Characteristics	Basic version	Options
Nominal bore (DN)	5 mm	On request
Pressure range	P30HD acc. to ANSI NGV1 / C200 acc. to ISO 14469 PN = 200 bar (3,000 psi)   PS = 300 bar P36HD acc. to ANSI NGV1 / C250 acc. to ISO 14469 PN = 250 bar (3,600 psi)   PS = 350 bar	
Temperature range	-40 °F up to +185 °F	On request
Material	Corrosion resistant	On request
Sealing material	Natural gas resistant	On request
Design	With plastic thermal protection, integrated ball valve and gas recirculation	Without gas recirculation
Weight	Approx. 5.95 lbs. without gas recirculation resp. approx. 3.4 kg (7.50 lbs.) with gas recirculation	

# » Fueling nozzle TK24 CNG

**ORDERING** | WEH® TK24 CNG Fueling nozzle with gas recirculation

approx. dimensions (mm)



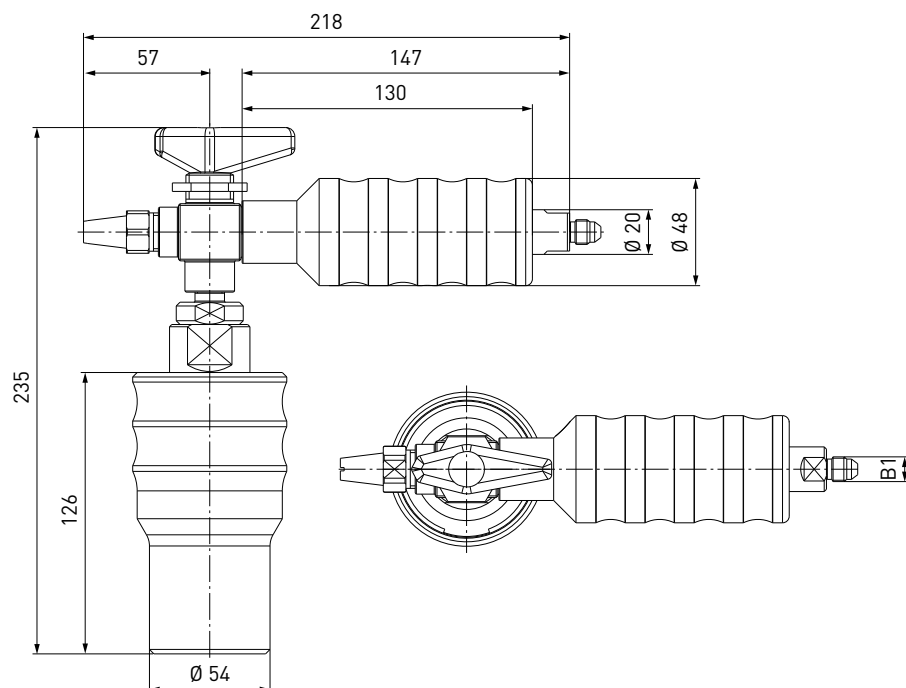
Part No.	Description	Pressure (PN)	B1 (male thread)	C2 (male thread)
C1-42414-X2-X01	TK24 CNG	3,000 psi	UNF 7/16"-20*	UNF 7/16"-20*
C1-112627-X01	TK24 CNG	3,600 psi	UNF 7/16"-20*	UNF 7/16"-20*

\* acc. to SAE J514, 37° cone

## » Fueling nozzle TK24 CNG

### ORDERING | WEH® TK24 CNG Fueling nozzle without gas recirculation

approx. dimensions (mm)



Part No.	Description	Pressure (PN)	B1 (male thread)
<b>C1-72213-X1-X01</b>	TK24 CNG	3,000 psi	UNF 7/16"-20*
<b>C1-111939</b>	TK24 CNG	3,600 psi	UNF 7/16"-20*

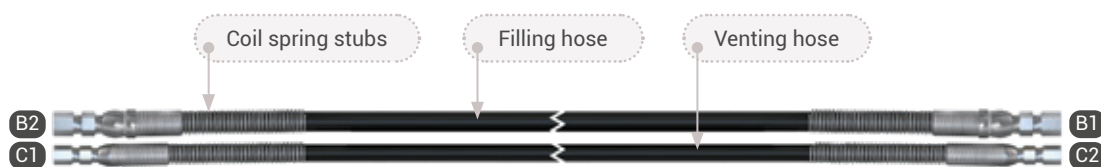
\* acc. to SAE J514, 37° cone

### ACCESSORIES

The following accessories are available for the WEH® TK24 CNG Fueling nozzle:

#### Hose sets TK24 CNG - TSA1 CNG

Filling and venting hoses for connecting fueling nozzle and TSA1 CNG breakaway coupling, complete fittings and press-fittings supported by coil spring stubs.



Part No.	B1/B2 (female thread)	C1/C2 (female thread)	Hose length
<b>C1-106385</b>	UNF 7/16"-20*	UNF 7/16"-20*	3 m
<b>C1-106386</b>	UNF 7/16"-20*	UNF 7/16"-20*	4 m
<b>C1-106387</b>	UNF 7/16"-20*	UNF 7/16"-20*	5 m

\* acc. to SAE J514, 37° cone



## » Fueling nozzle TK24 CNG

### Hose sets TK24 CNG - TSA2 CNG

Filling and venting hoses for connecting fueling nozzle / dispenser and TSA2 CNG inline breakaway coupling, complete fittings and press-fittings supported by coil spring stubs.

Bestellnummer	B1/B2 (female thread)	C1/C2 (female thread)	Hose length
<b>C1-106395</b>	UNF 7/16"-20*	UNF 7/16"-20*	2.5   0.5 m
<b>C1-106396</b>	UNF 7/16"-20*	UNF 7/16"-20*	3.5   0.5 m
<b>C1-106397</b>	UNF 7/16"-20*	UNF 7/16"-20*	4.5   0.5 m

\* acc. to SAE J514, 37° cone

### Filling hoses

Filling hoses for connecting fueling nozzle (without gas recirculation) and dispenser, complete with fittings and press-fittings supported by coil spring stubs.



Part No.	B1/B2 (female thread)	Hose length
<b>E68-1032-3000</b>	UNF 7/16"-20*	3 m
<b>E68-1032-4000</b>	UNF 7/16"-20*	4 m
<b>E68-1032-5000</b>	UNF 7/16"-20*	5 m

\* acc. to SAE J514, 37° cone

### Fittings

Stainless steel fittings for connecting port 'B1' to the filling hose or port 'C2' to the venting hose.

Part No.	Description	Connection fueling nozzle	Connection filling hose
<b>E80-648P</b>	Fitting	UNF 7/16"-20* female thread	UNF 9/16"-18* male thread

\* acc. to SAE J514, 37° cone

Please see page 144 onwards for a detailed overview on all available fittings.

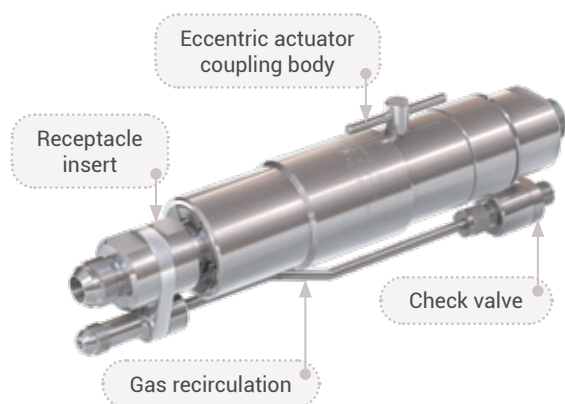
### Spare parts

Various parts are available as spares for the TK24 CNG fueling nozzle.

Part No.	Description
<b>W127951</b>	1 Spare parts set 3,000 psi (grip sleeve incl. metal sleeve and circlip)
<b>W127950</b>	1 Spare parts set 3,600 psi (grip sleeve incl. yellow impact protection, metal sleeve and circlip)
<b>E99-44923</b>	Maintenance spray

## » Breakaway coupling TSA5 CNG

### DESCRIPTION



#### Features

- Re-usable without factory reservicing
- Installation at the dispenser
- Small compact design
- Version with or without gas recirculation
- Integrated cleanable filter (40 µm); optional without filter
- Check valve at venting line
- No additional tool necessary

The type TSA5 CNG breakaway coupling offers additional safety for your bus and truck fueling station. The breakaway is installed between the dispenser and the filling/venting hose. In the event of accidental deployment, e.g. driving a vehicle from the dispenser with the nozzle remaining in the vehicle fuel port, the coupling will separate the connections between dispenser and hose sealing both ends. This protects largely the receptacle, the fueling nozzle and the dispenser against damage. The detached coupling can be easily reattached and placed back in service after having been function tested. We recommend to use breakaways with integrated filter. The filter provides clean natural gas and is easy to maintain. Of course we also offer breakaway couplings without filter.

The breakaway device consists of a coupling body, a receptacle insert and a gas recirculation with check valve. The breakaway is also available without gas recirculation.

We also offer fueling assemblies consisting of a fueling nozzle, a hose set and a breakaway coupling (for fueling assemblies see respective fueling nozzle).

#### Application

Breakaway coupling for bus and truck fueling stations for installation between the dispenser and the filling/venting hose.

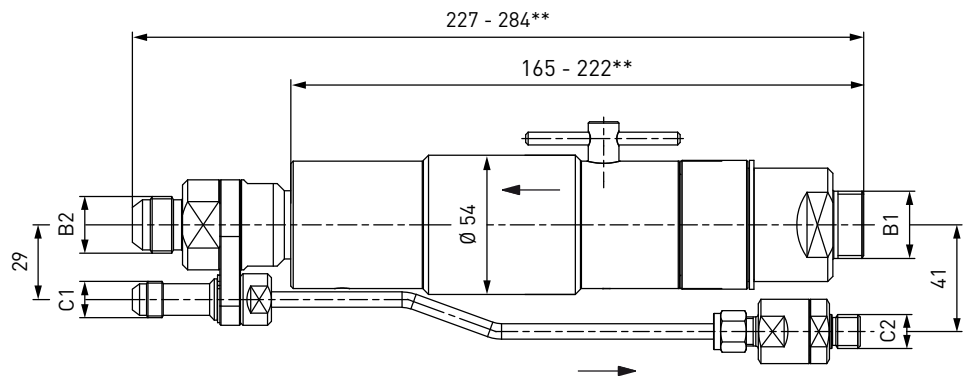
### TECHNICAL DATA

Characteristics	Basic version	Options
Nominal bore (DN)	12 mm	On request
Pressure range	PN = 200 bar (3,000 psi)   PS = 300 bar PN = 250 bar (3,600 psi)   PS = 350 bar	
Temperature range	-40 °F up to +185 °F	On request
Breakaway force	222 - 660 N	On request
Material	Corrosion resistant stainless steel, aluminum	On request
Sealing material	Natural gas resistant	On request
Design	With gas recirculation and filter (40 µm)	Without gas recirculation Without filter

# » Breakaway coupling TSA5 CNG

## ORDERING | WEH® TSA5 CNG Breakaway coupling with gas recirculation

approx. dimensions (mm)

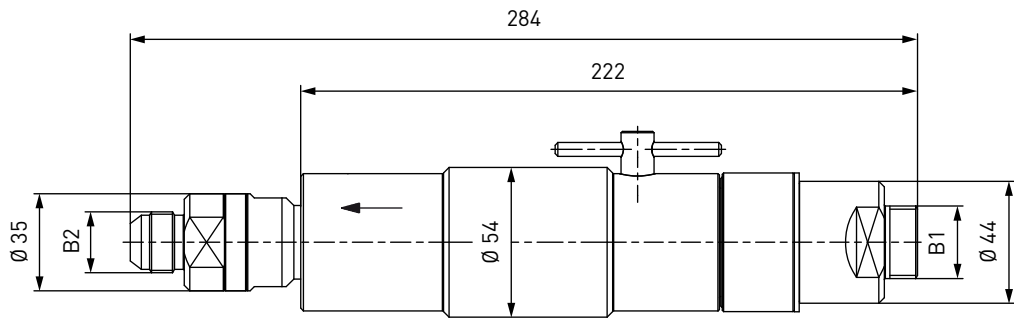


Part No.	Description	Pressure (PN)	B1 (male thread)	B2 (male thread)	C1 (male thread)	C2 (male thread)
C1-17198-X7-X01	TSA5 CNG with filter	3,000 psi	G3/4"	UNF 7/8"-14*	UNF 9/16"-18*	G1/4"
C1-102489-X01	TSA5 CNG with filter	3,600 psi	G3/4"	UNF 7/8"-14*	UNF 9/16"-18*	G1/4"

\* acc. to SAE J514, 37° cone  
 \*\* length depending on type of breakaway coupling

## ORDERING | WEH® TSA5 CNG Breakaway coupling without gas recirculation

approx. dimensions (mm)



Part No.	Description	Pressure (PN)	B1 (male thread)	B2 (male thread)
C1-18693-X2-X01	TSA5 CNG with filter	3,000 psi	G3/4"	UNF 7/8"-14*

\* acc. to SAE J514, 37° cone

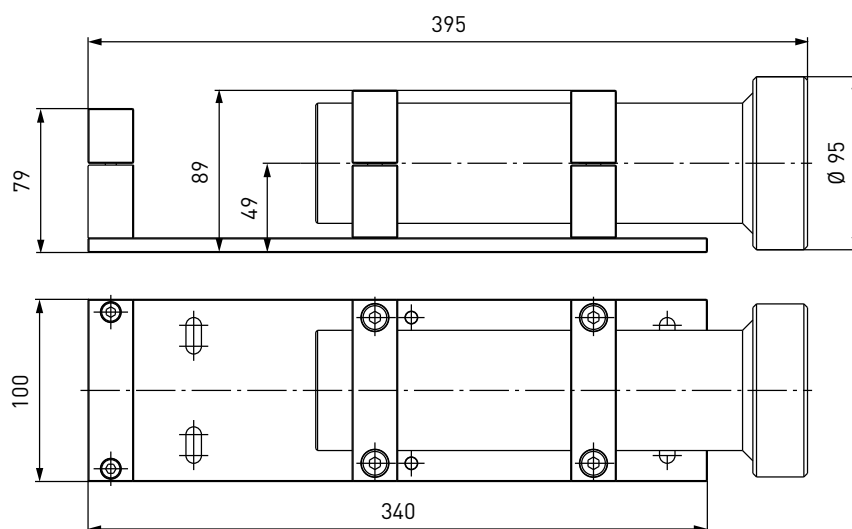
## » Breakaway coupling TSA5 CNG

### ACCESSORIES

The following accessories are available for the WEH® TSA5 CNG Breakaway coupling:

#### Dispenser mounting

The breakaway coupling can also be used with a dispenser mounting. The mounting is firmly attached to the dispenser. The integrated guide tube provides a straight pull-off force.



Part No.	Description
<b>C1-82110</b>	Dispenser mounting for TSA5 CNG

#### Hoses

Please see page 140 or the corresponding fueling nozzles for filling and venting hoses suitable for the TSA5 CNG breakaway coupling.

## » Breakaway coupling TSA5 CNG

### Fittings

Stainless steel fittings for connecting port 'B1' to the filling hose or port 'C2' to the venting hose.

Part No.	Description	Connection breakaway	Connection filling hose
<b>E80-97227</b>	Fitting	UNF 9/16"-18* female thread	UNF 9/16"-18* female thread
<b>E80-79538</b>	Fitting	UNF 9/16"-18* female thread	UNF 9/16"-18 ** female thread
<b>E80-647P</b>	Fitting	UNF 9/16"-18* female thread	UNF 7/8"-14* male thread
<b>E80-66850</b>	Fitting	UNF 9/16"-18* female thread	UNF 3/4"-16* male thread
<b>E80-65592</b>	Fitting	UNF 9/16"-18* female thread	NPT 1/4" female thread
<b>E80-52705</b>	Fitting	UNF 7/8"-14* female thread	UNF 9/16"-18* male thread
<b>E80-105411</b>	Fitting	UNF 7/8"-14* female thread	UNF 7/16"-20* male thread
<b>E80-48976</b>	Fitting	UNF 7/8"-14* female thread	NPT 1/4" male thread

\* acc. to SAE J514, 37° cone

\*\* acc. to SAE J1926-1

Please see page 144 onwards for a detailed overview on all available fittings.

### Spare parts

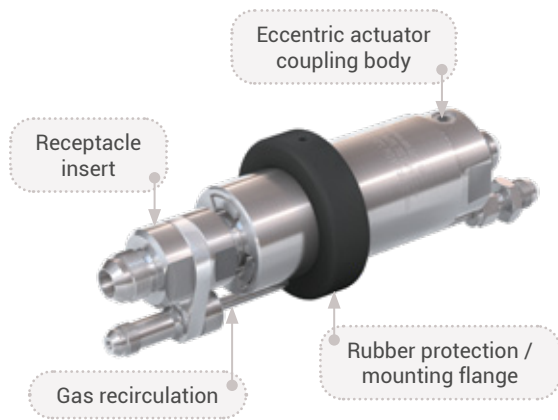
Various parts are available as spares for the TSA5 CNG breakaway coupling.



Part No.	Description
<b>W83706</b>	Receptacle insert for UNF 7/8"-14 male thread, 37° (B2), UNF 9/16"-18 male thread, 37° (C1)
<b>W106557</b>	Receptacle insert for UNF 7/8"-14 male thread, 37° (B2)
<b>B200B-119726</b>	Spare seal set for receptacle insert W83706
<b>B200B-119725</b>	Spare seal set for receptacle insert W106557
<b>E69-9062</b>	Wire filter insert 40 µm (incl. spring and back-up ring)
<b>W139034</b>	Spare part set consisting of a gas recirculation tube (length: approx. 195 mm) and a firmly mounted check valve for G1/4" male thread (C2)

## » Inline breakaway coupling TSA6 CNG

### DESCRIPTION



#### Features

- Re-usable without factory reservicing
- Installation inbetween the filling and venting hoses
- Small compact design
- Version with or without gas recirculation
- Rubber protection / mounting flange
- Eccentric actuation via an allen wrench

With type TSA6 CNG, an inline breakaway coupling which is installed inbetween the filling and venting hoses, is now also available for bus and truck fueling stations. In the event of accidental deployment, e.g. driving a vehicle from the dispenser with the nozzle remaining in the vehicle fuel port, the coupling will separate the connections between dispenser and hoses sealing both ends. This protects largely the receptacle, the fueling nozzle and the dispenser against damage. The detached coupling can be easily reattached and placed back in service after having been function tested.

The breakaway device consists of a coupling body, a receptacle insert and an optional gas recirculation.

We recommend the installation of a TSF5 CNG filter (see page 122) when using the TSA6 CNG inline breakaway coupling. The filter protects your system from dirt ingress.

We also offer cfueling assemblies consisting of a fueling nozzle, a hose set and a breakaway coupling (for fueling assemblies see respective fueling nozzle).

#### Application

Inline breakaway coupling for bus and truck fueling stations for installation inbetween the filling and venting hoses.

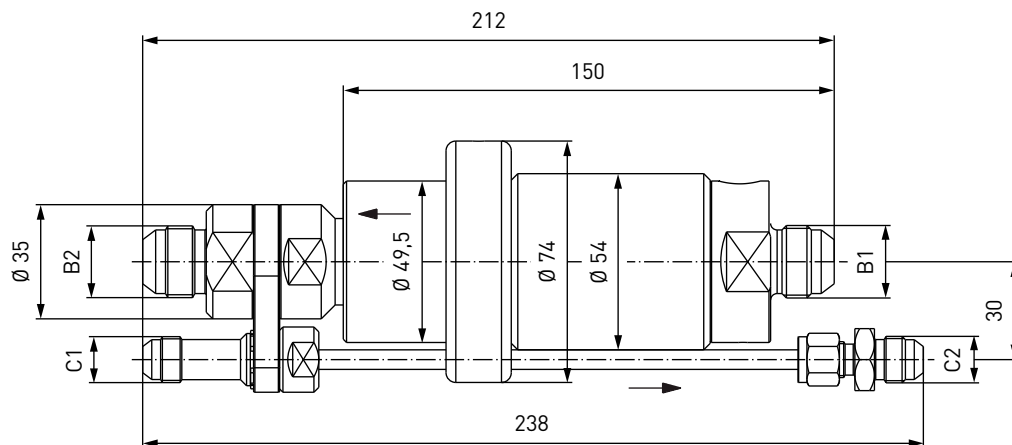
### TECHNICAL DATA

Characteristics	Basic version	Options
Nominal bore (DN)	12 mm	On request
Pressure range	PN = 200 bar (3,000 psi)   PS = 300 bar PN = 250 bar (3,600 psi)   PS = 350 bar	
Temperature range	-40 °F up to +185 °F	On request
Breakaway force	222 - 660 N	On request
Material	Corrosion resistant stainless steel, aluminum	On request
Sealing material	Natural gas resistant	On request
Design	With gas recirculation	Without gas recirculation

## » Inline breakaway coupling TSA6 CNG

**ORDERING** | WEH® TSA6 CNG Inline breakaway coupling with gas recirculation

approx. dimensions (mm)

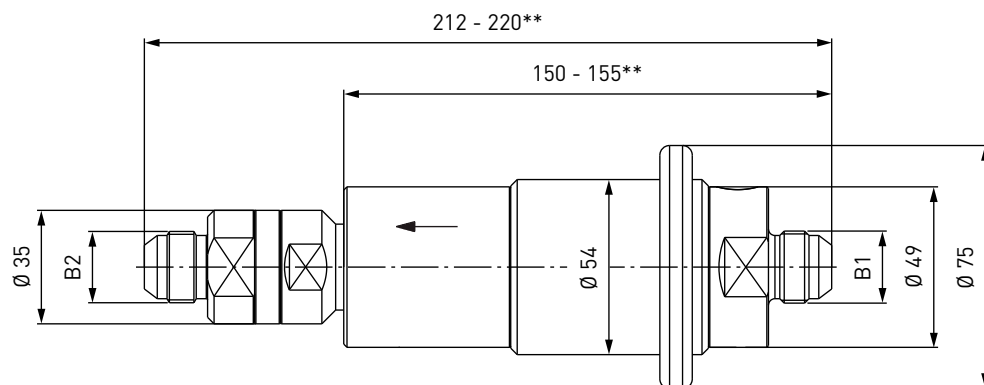


Part No.	Description	Pressure (PN)	B1/B2 (male thread)	C1/C2 (male thread)
C1-78834-X01	TSA6 CNG	3,000 psi	UNF 7/8"-14*	UNF 9/16"-18*
C1-102493-X01	TSA6 CNG	3,600 psi	UNF 7/8"-14*	UNF 9/16"-18*
C1-71057-X1-X01	TSA6 CNG	3,000 psi	UNF 7/8"-14*	UNF 7/16"-20*

\* acc. to SAE J514, 37° cone

**ORDERING** | WEH® TSA6 CNG Inline breakaway coupling without gas recirculation

approx. dimensions (mm)



Part No.	Description	Pressure (PN)	B1/B2 (male thread)
C1-76955-X01	TSA6 CNG	3,000 psi	UNF 7/8"-14*
C1-102492-X01	TSA6 CNG	3,600 psi	UNF 7/8"-14*
C1-74444-X1-X01	TSA6 CNG	3,000 psi	UN 1 1/16"-12*

\* acc. to SAE J514, 37° cone

\*\* length depending on type of breakaway coupling

## » Inline breakaway coupling TSA6 CNG

### ACCESSORIES

The following accessories are available for the WEH® TSA6 CNG Inline breakaway coupling:

#### Filter TSF5 CNG (50 µm)

For upgrading existing inline breakaways without integrated filter, we recommend the installation of a TSF5 CNG filter (see page 122). The filter protects your system from dirt ingress. The TSF5 CNG is installed as prefilter in the media inlet between inline breakaway coupling and filling hose.



Part No.	Description	DN	Pressure (PN)	B1	B2
<b>C1-105923-X01</b>	TSF5 CNG	12	3,000 psi	UNF 7/8"-14* male thread	UNF 7/8"-14* female thread

\* acc. to SAE J514, 37° cone

#### Hoses

Please see page 140 or the corresponding fueling nozzles for filling and venting hoses suitable for the TSA6 CNG inline breakaway coupling.

#### Fittings

Stainless steel fittings for connecting port 'B1' to the filling hose or port 'C2' to the venting hose.

Part No.	Description	Connection breakaway	Connection filling hose
<b>E80-97227</b>	Fitting	UNF 9/16"-18* female thread	UNF 9/16"-18* female thread
<b>E80-79538</b>	Fitting	UNF 9/16"-18* female thread	UNF 9/16"-18 ** female thread
<b>E80-647P</b>	Fitting	UNF 9/16"-18* female thread	UNF 7/8"-14* male thread
<b>E80-66850</b>	Fitting	UNF 9/16"-18* female thread	UNF 3/4"-16* male thread
<b>E80-65592</b>	Fitting	UNF 9/16"-18* female thread	NPT 1/4" female thread
<b>E80-52705</b>	Fitting	UNF 7/8"-14* female thread	UNF 9/16"-18* male thread
<b>E80-105411</b>	Fitting	UNF 7/8"-14* female thread	UNF 7/16"-20* male thread
<b>E80-48976</b>	Fitting	UNF 7/8"-14* female thread	NPT 1/4" male thread

\* acc. to SAE J514, 37° cone

\*\* acc. to SAE J1926-1

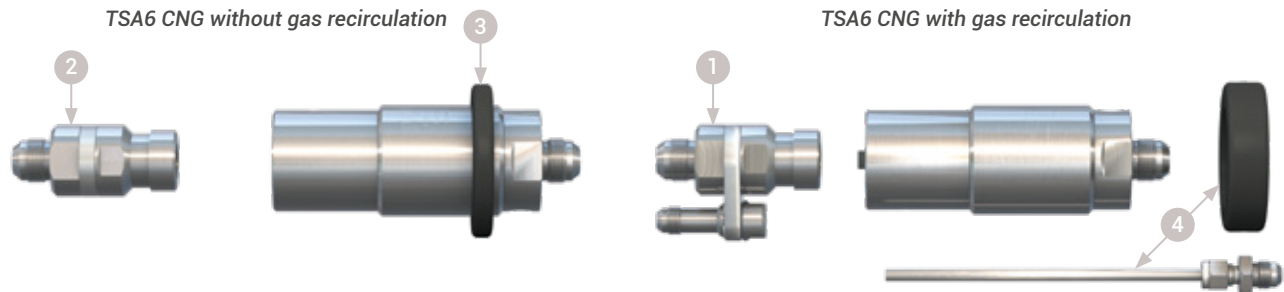
Please see page 144 onwards for a detailed overview on all available fittings.



# » Inline breakaway coupling TSA6 CNG

## Spare parts

Various parts are available as spares for the TSA6 CNG inline breakaway coupling.



Part No.	Description
W83706	1 Receptacle insert for UNF 7/8"-14 male thread, 37° (B2), UNF 9/16"-18 male thread, 37° (C1)
W71060	1 Receptacle insert for UNF 7/8"-14 male thread, 37° (B2), UNF 7/16"-20 male thread, 37° (C1)
W106557	2 Receptacle insert for UNF 7/8"-14 male thread, 37° (B2)
W74634	2 Receptacle insert for UN 1 1/16"-12 male thread, 37° (B2)
B200B-119726	Spare seal set for receptacle insert W83706 and W71060
B200B-119725	Spare seal set for receptacle insert W106557 and W74634
E80-76830	3 Rubber protection
W139031	4 Spare part set consisting of a mounting flange, gas recirculation tube and a firmly mounted fitting for UNF 9/16"-18 male thread, 37° (C2)
W139839	4 Spare part set consisting of a mounting flange, gas recirculation tube and a firmly mounted fitting for UNF 7/16"-20 male thread, 37° (C2)

## » Receptacle TN5 CNG

### DESCRIPTION



#### Features

- Compatible with fueling nozzles acc. to NGV1 standard and ISO 14469 (see page 7, compatibility)
- Low-noise refueling
- Integrated high-flow check valve
- Sealing-friendly design
- Option: integrated particle filter (50 µm)
- Coding for pressure range / gas type

The WEH® TN5 CNG receptacle is designed specifically for CNG refueling. Due to the internal aerodynamic design the TN5 CNG receptacle gives low noise (no high frequency whistle) combined with maximum flow rate and fast filling. The receptacle is a very durable unit, minimizing maintenance and down-time. The type TN5 CNG also has an integrated check valve system which is designed to minimize the effect that dirt particles have on the sealing components within the receptacle. The TN5 CNG receptacle is equipped with a coding for pressure range and gas type.

#### Application

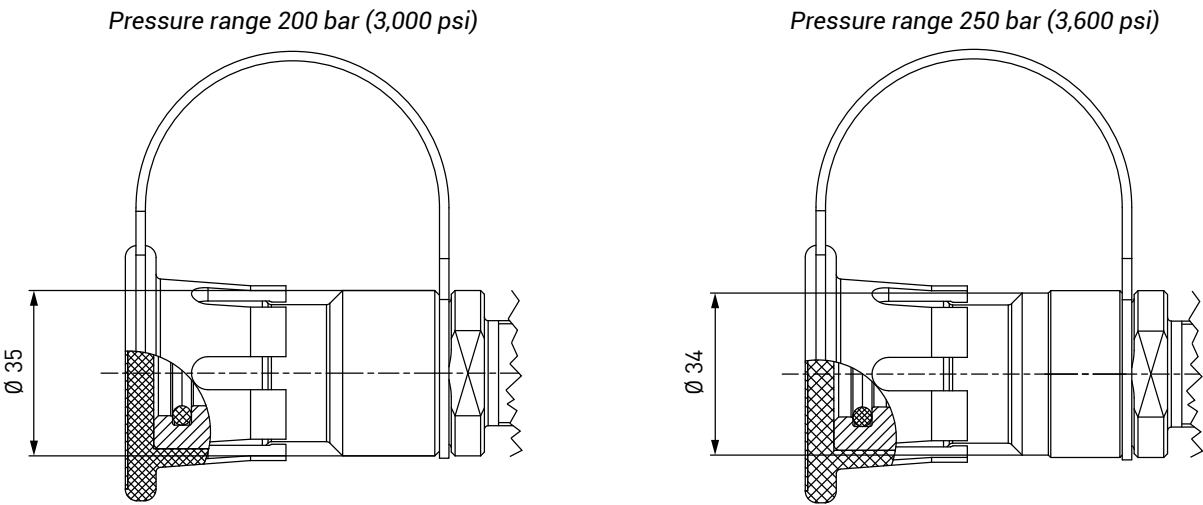
Receptacle for CNG refueling / filling of buses and trucks and fork-lift trucks or other industrial applications, to be used with WEH® Fueling nozzles acc. to NGV1 standard and ISO 14469 (see page 7, compatibility).  
Only use receptacles with ECE approval for fitment in road legal vehicles.

### TECHNICAL DATA

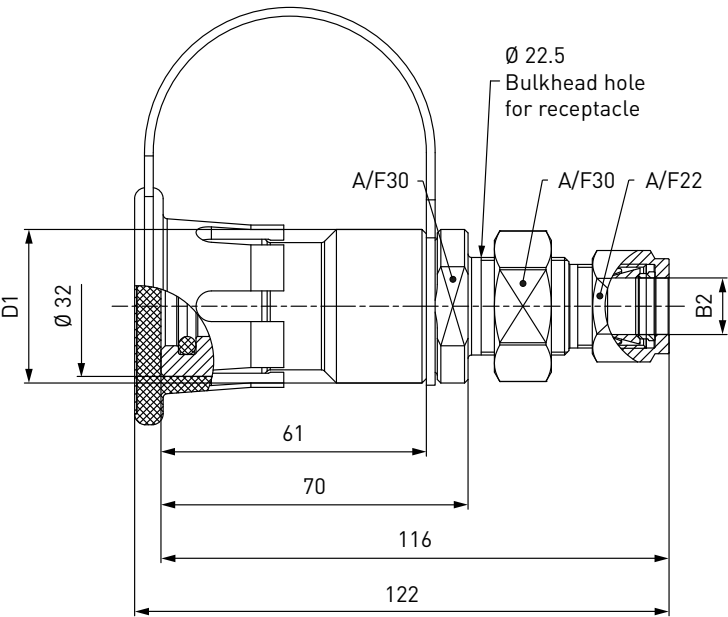
Characteristics	Basic version	Options
Nominal bore (DN)	Depending on design	On request
Pressure range	PN = 200 bar (3,000 psi)   PS = 260 bar (ECE) PN = 250 bar (3,600 psi)   PS = 260 bar (ECE) PN = 250 bar (3,600 psi)   PS = 315 bar	
Temperature range	-40 °F up to +248 °F (ECE) -40 °F up to +185 °F	On request
Material	Corrosion resistant	On request
Sealing material	Natural gas resistant	On request
Design	With protection cap (except for receptacles with ACME thread) and fittings (only for receptacles with tube fitting)	Without protection cap Integrated particle filter (40 µm)
Conformity / Tests / Approvals	ECE R110	


# » Receptacle TN5 CNG

PRESSURE RANGES 200 BAR (3,000 PSI) | 250 BAR (3,600 PSI)



ORDERING | WEH® TN5 CNG Receptacle with tube fitting and filter (50 µm)  
approx. dimensions (mm)





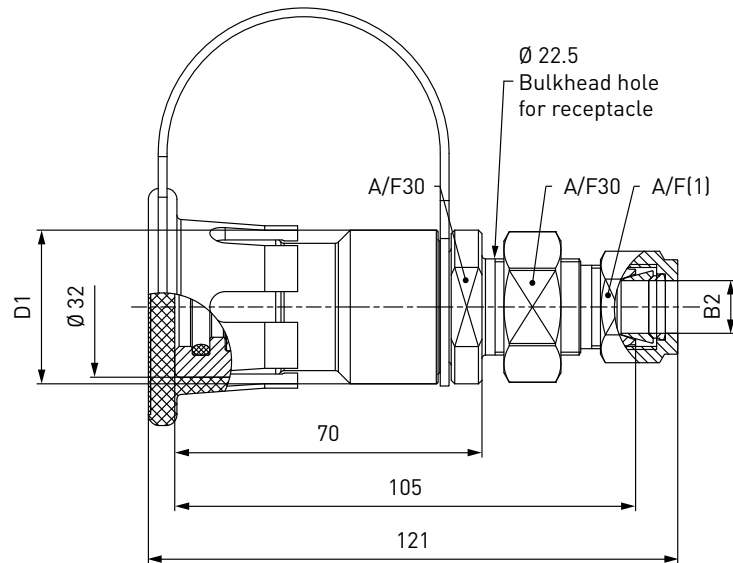
Part No.	Description	DN	Pressure (PN)	B2	D1
C1-101906	TN5 CNG (ECE)	8	3,000 psi	Tube $\varnothing 10^*$	35
C1-106903	TN5 CNG (ECE)	10	3,000 psi	Tube $\varnothing 12^*$	35
C1-106906	TN5 CNG (ECE)	10	3,600 psi	Tube $\varnothing 12^*$	34
C1-81605	TN5 CNG (ECE)	10	3,000 psi	Tube $\varnothing 1/2''^*$	35
C1-81615	TN5 CNG (ECE)	10	3,600 psi	Tube $\varnothing 1/2''^*$	34
C1-108583	TN5 CNG (ECE)	12	3,000 psi	Tube $\varnothing 16^*$	35
C1-108584	TN5 CNG (ECE)	12	3,600 psi	Tube $\varnothing 16^*$	34

\* double ferrule fitting

## » Receptacle TN5 CNG

### ORDERING | WEH® TN5 CNG Receptacle with tube fitting (without filter)

approx. dimensions (mm)

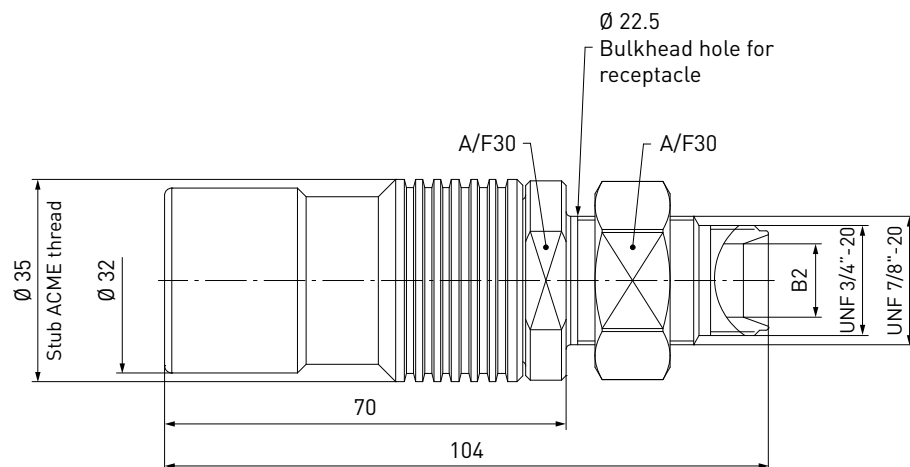


Part No.	Description	DN	Pressure (PN)	B2	D1	A/F(1)
<b>C1-49817</b>	TN5 CNG (ECE)	10	3,000 psi	Tube Ø 12*	35	22
<b>C1-105717-X01</b>	TN5 CNG	10	3,600 psi	Tube Ø 12*	34	22
<b>C1-108330</b>	TN5 CNG (ECE)	10	3,000 psi	Tube Ø 1/2"*	35	22
<b>C1-81623</b>	TN5 CNG (ECE)	10	3,600 psi	Tube Ø 1/2"*	34	22
<b>C1-35401</b>	TN5 CNG (ECE)	12	3,000 psi	Tube Ø 16*	35	25
<b>C1-33744</b>	TN5 CNG (ECE)	12	3,600 psi	Tube Ø 16*	34	25

\* double ferrule fitting

### ORDERING | WEH® TN5 CNG Receptacle with tube fitting and ACME thread and filter (50 µm)

approx. dimensions (mm)



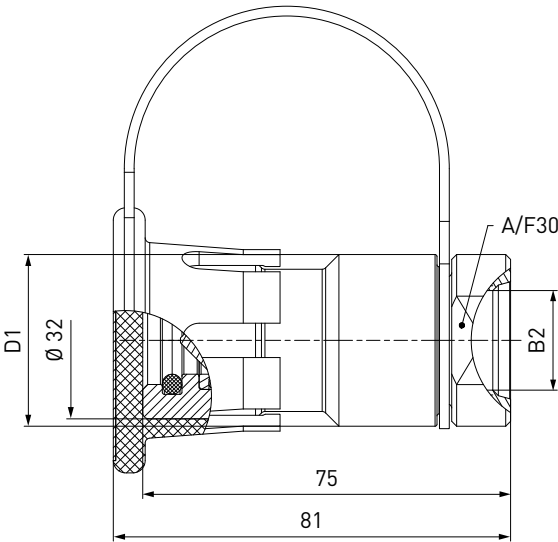
Part No.	Description	DN	Pressure (PN)	B2
<b>C1-106904</b>	TN5 CNG (ECE)	10	3,000 psi	Tube Ø 1/2"*

\* double ferrule fitting

# » Receptacle TN5 CNG

## ORDERING | WEH® TN5 CNG Receptacle with female thread (without filter)

approx. dimensions (mm)

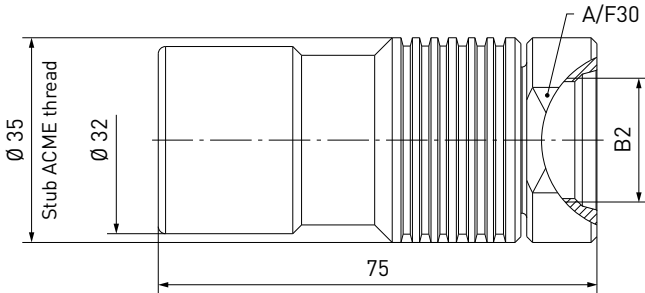


Part No.	Description	DN*	Pressure (PN)	B2 (female thread)	D1
C1-35432	TN5 CNG (ECE)	12	3,000 psi	UNF 7/8"-14**	35
C1-42194	TN5 CNG (ECE)	12	3,600 psi	UNF 7/8"-14**	34

\* depending on inner diameter of tube  
 \*\* acc. to SAE J1926-1

## ORDERING | WEH® TN5 CNG Receptacle with female thread and ACME thread (without filter)

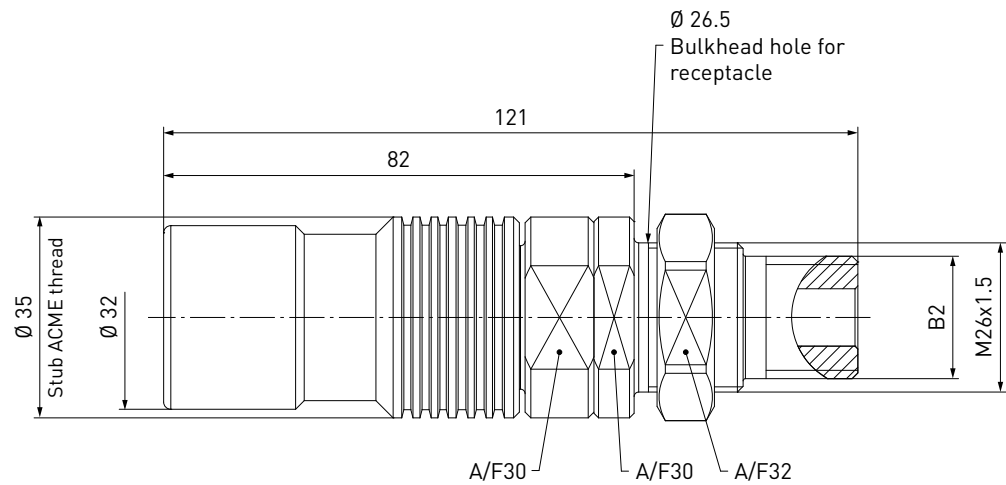
approx. dimensions (mm)



Part No.	Description	DN*	Pressure (PN)	B2 (female thread)
C1-84168	TN5 CNG (ECE)	14	3,000 psi	UNF 7/8"-14**

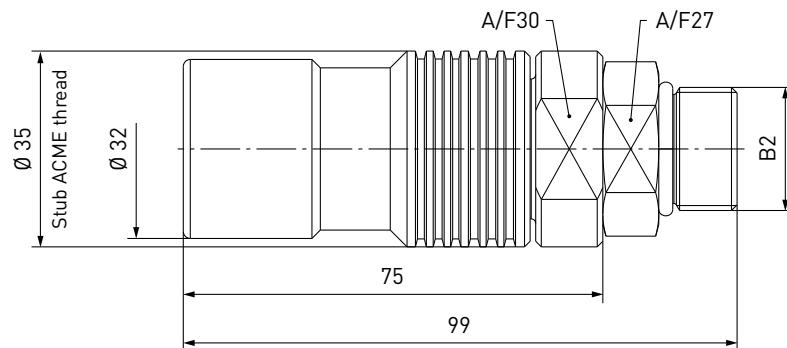
\* depending on inner diameter of tube  
 \*\* acc. to SAE J1926-1

approx. dimensions (mm)



Part No.	Description	DN	Pressure (PN)	B2 (male thread)
C1-101485	TN5 CNG (ECE)	10	3,000 psi	NPT 1/2"

approx. dimensions (mm)



Part No.	Description	DN	Pressure (PN)	B2 (male thread)
C1-84870	TN5 CNG (ECE)	10	3,000 psi	UNF 7/8"-14*

\* acc. to SAE J1926-1

Other connection sizes on request.

# » Receptacle TN5 CNG

## SPARE PARTS

Various parts are available as spares for the WEH® TN5 CNG Receptacle:

### Protection cap

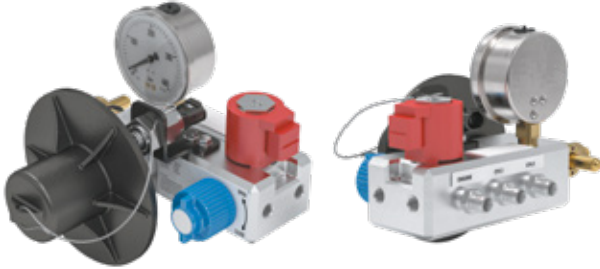
Protection cap with a strap to protect the receptacle from dirt ingress.



Part No.	Description
E80-42725	Protection cap

## » Manifold TMF20 CNG

### DESCRIPTION



#### Features

- Manual and automatic system versions
- Customized special solutions possible
- Cost effective
- Light weight
- Easy installation
- Sealing-friendly design

TMF20 CNG manifolds are complete filling units for installation in CNG systems and vehicles.

They are equipped with various high-pressure components and, depending on the version, consist of a manifold block, a WEH® TN5 CNG Receptacle, a NZS connection, a high-pressure gauge, a manual shut-off valve, a micro switch for starter cut-off, an automatic shut-off valve, a WEH® TSF2 CNG Coalescing filter, an optional pressure sensor and fittings.

#### Application

Filling unit for installation in CNG systems and vehicles for refueling of buses and trucks with fueling nozzles acc. to NGV1 standard (P30HD) and ISO 14469 (C200) or fueling nozzles acc. to NZS standard.

### TECHNICAL DATA

Characteristics	Basic version
Working Pressure WP	20 MPa
Temperature range	-40 °F up to +185 °F
Material manifold block	Aluminum or stainless steel (depending on design)
Sealing material	Natural gas resistant
Design*	Manifold block incl. WEH® TN5 CNG Receptacle with protection cap, NZS connection, high-pressure gauge, manual shut-off valve, starter cut-off micro switch, automatic shut-off valve, pressure sensor for fill level indication, WEH® TSF2 CNG Coalescing filter incl. plug and fittings.
Conformity / Tests / Approvals*	<p>TMF20 CNG is tested acc. to (depending on design):</p> <ul style="list-style-type: none"> <li>- ISO-15500-2:2016</li> <li>- ISO-15500-3:2012+A1:2016</li> <li>- ISO-15500-4:2012+A1:2016</li> <li>- ISO-15500-6:2012+A1:2016</li> <li>- ISO-15500-13:2012+A1:2016</li> <li>- JIS D 1601:1995</li> <li>- ECE R110-R00</li> </ul> <p>WEH® TN5 CNG Receptacle and WEH® TSF2 CNG Coalescing filter are approved acc. to:</p> <ul style="list-style-type: none"> <li>- TN5 CNG: ECE R110-R04</li> <li>- TSF2 CNG: ECE R110-R01</li> </ul>

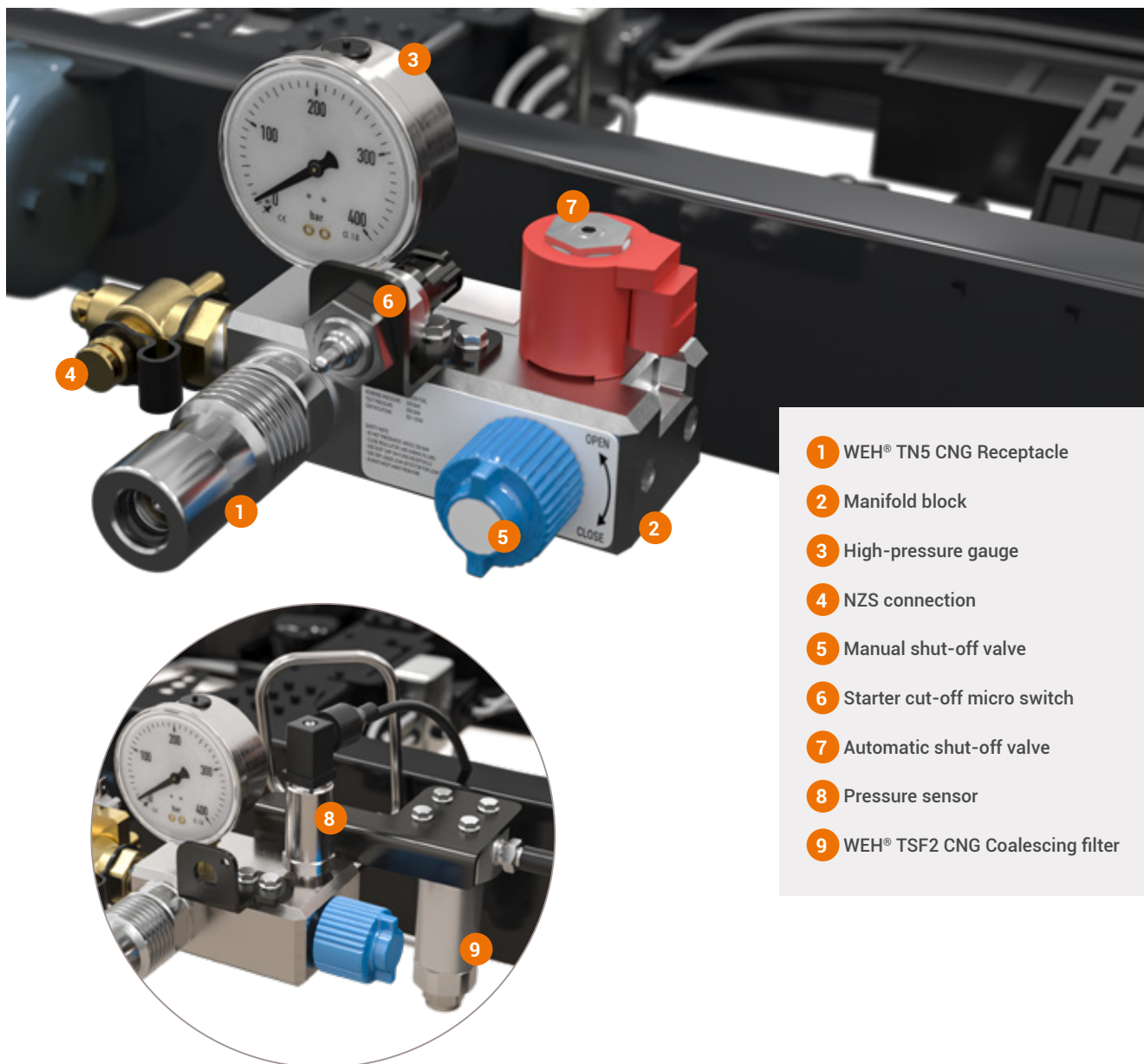
\* depending on version of the TMF20 CNG. For details please refer to the following pages.

Other designs on request



## » Manifold TMF20 CNG

### OVERVIEW



- 1 WEH® TN5 CNG Receptacle
- 2 Manifold block
- 3 High-pressure gauge
- 4 NZS connection
- 5 Manual shut-off valve
- 6 Starter cut-off micro switch
- 7 Automatic shut-off valve
- 8 Pressure sensor
- 9 WEH® TSF2 CNG Coalescing filter

Product series	NZS connection	Manual shut-off valve	Automatic shut-off valve	Micro switch	Pressure sensor	Coalescing filter
TMF20-S1 CNG	✓	✓	✓	✓		
TMF20-S2 CNG		✓	✓	✓		
TMF20-S3 CNG	✓	✓	✓	✓		
TMF20-S4 CNG		✓	✓	✓		
TMF20-S5 CNG (small filter)	✓	✓			✓	✓
TMF20-S5 CNG (large filter)	✓	✓				✓
TMF20-S6 CNG (small filter)		✓		✓	✓	✓

## » Manifold TMF20 CNG

### OVERVIEW TMF20 CNG PRODUCT SERIES WITH AUTOMATIC SHUT-OFF VALVE

TMF20-S1 CNG



TMF20-S2 CNG



TMF20-S3 CNG



TMF20-S4 CNG



Product series	Manifold block	NZS connection	Automatic shut-off valve				Micro switch
			Voltage		Electrical output		
			12 V DC	24 V DC	16 W	13 W	
TMF20-S1 CNG	Aluminum	✓	✓		✓		✓
TMF20-S2 CNG	Aluminum		✓		✓		✓
TMF20-S3 CNG	Aluminum	✓		✓		✓	✓
TMF20-S4 CNG	Aluminum			✓		✓	✓

#### Conformity / tests / approvals

The product series S1, S2, S3 and S4 of the TMF20 CNG are tested acc. to:

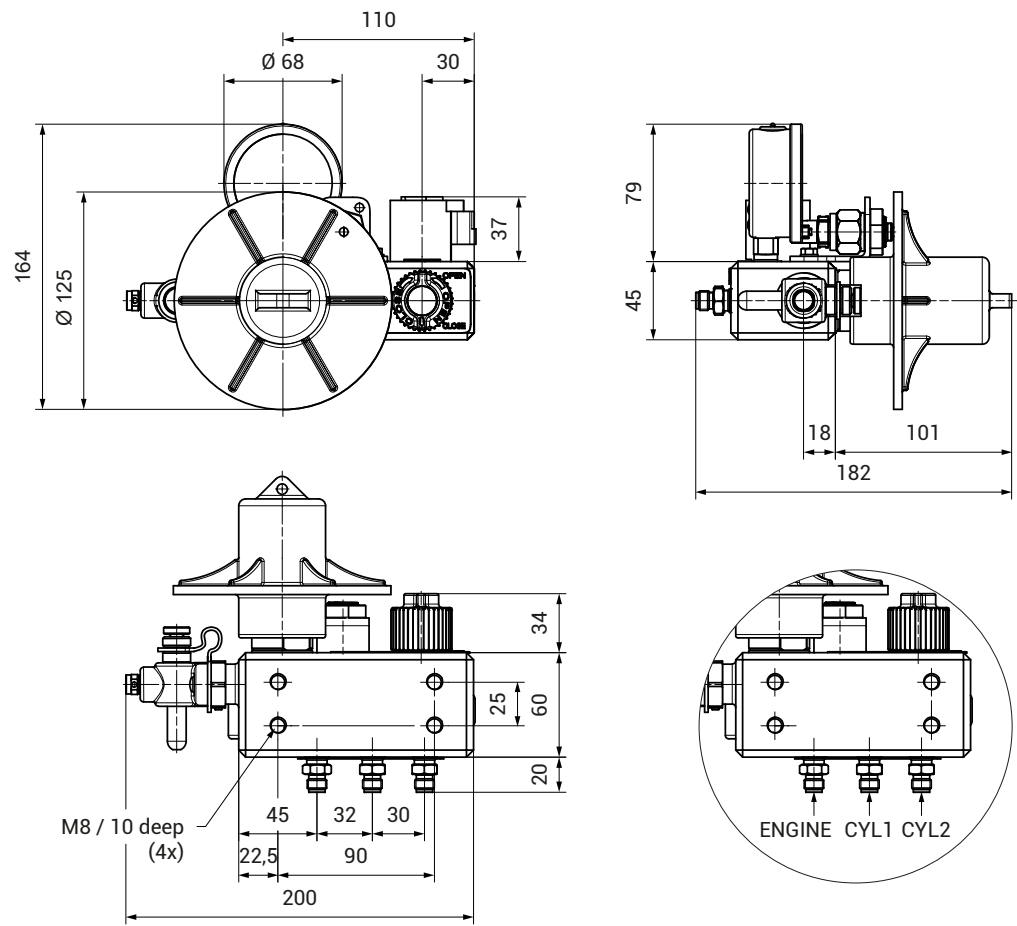
- ISO-15500-2:2016
- ISO-15500-3:2012+A1:2016
- ISO-15500-6:2012+A1:2016
- ISO-15500-13:2012+A1:2016
- JIS D 1601:1995
- ECE R110-R00

The WEH® TN5 CNG Receptacle is approved acc. to ECE R110-R04.

# » Manifold TMF20 CNG

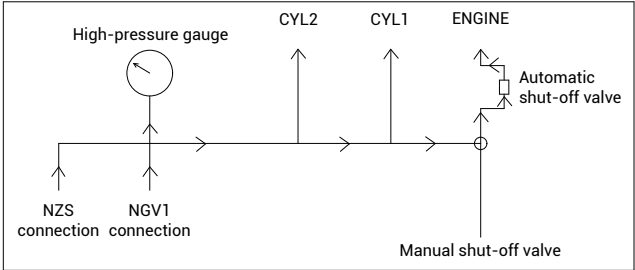
## ORDERING | Manifold TMF20-S1 CNG

approx. dimensions (mm)



Part no.	Description	Pressure (WP)	ENGINE (male thread)	CYL1 (male thread)	CYL2 (male thread)
C1-174625	TMF20-S1 CNG	2900 psi	UNF 7/16"-20	UNF 7/16"-20	UNF 7/16"-20

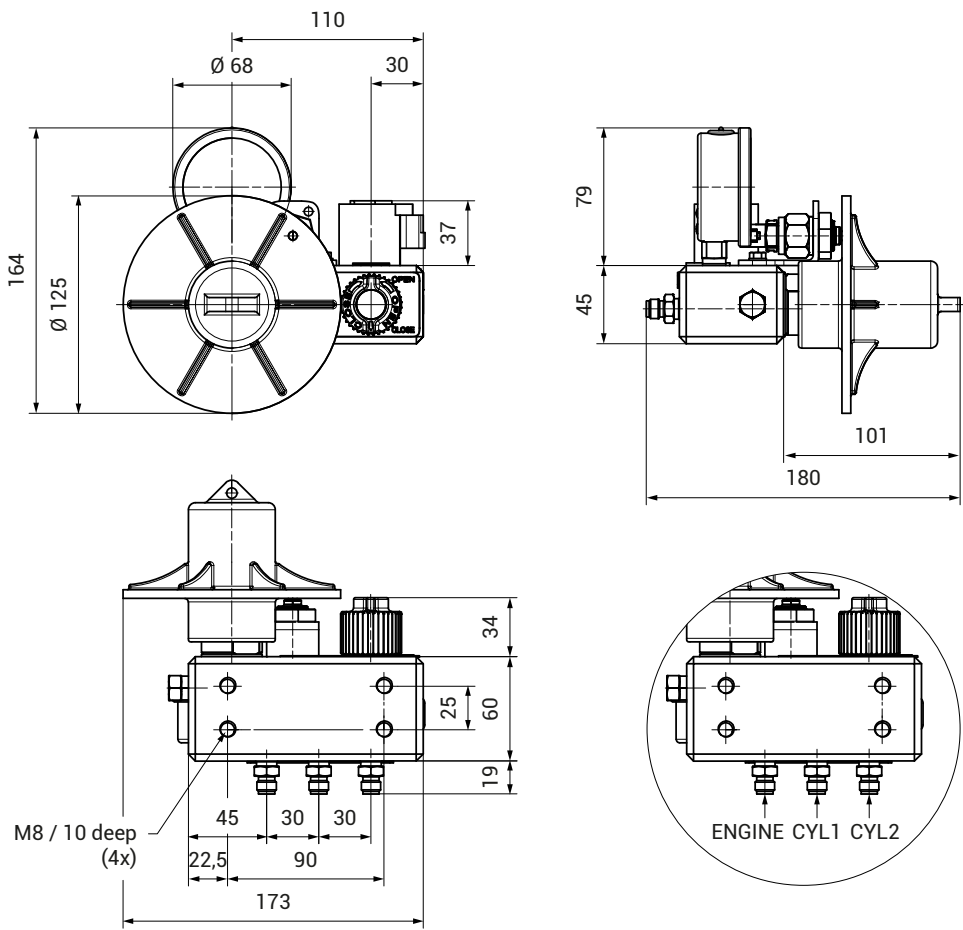
### Functional description (schematic):



# » Manifold TMF20 CNG

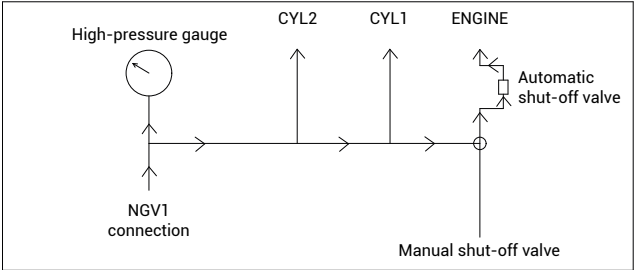
**ORDERING** | Manifold TMF20-S2 CNG

approx. dimensions (mm)



Part no.	Description	Pressure (WP)	ENGINE (male thread)	CYL1 (male thread)	CYL2 (male thread)
C1-174626	TMF20-S2 CNG	2900 psi	UNF 7/16"-20	UNF 7/16"-20	UNF 7/16"-20

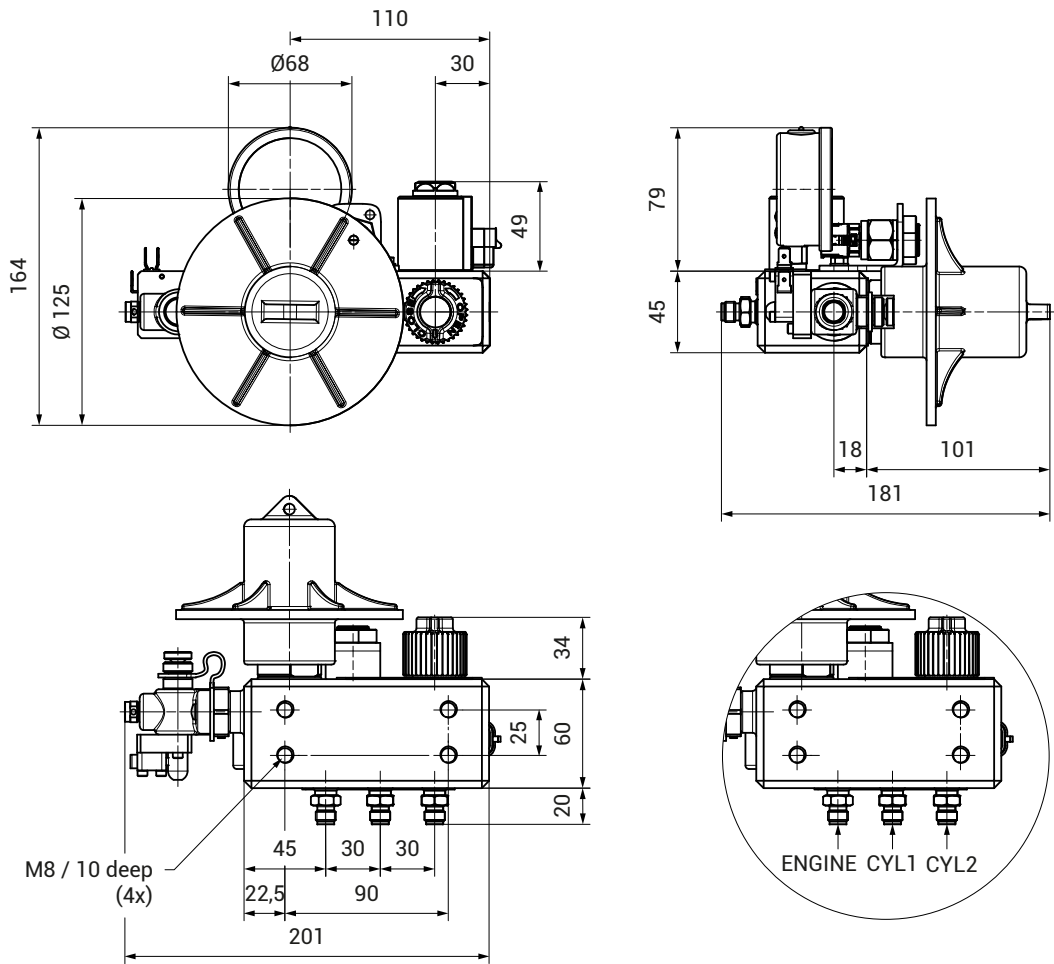
**Functional description (schematic):**



# » Manifold TMF20 CNG

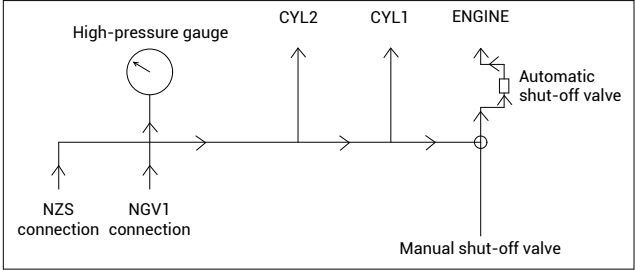
## ORDERING | Manifold TMF20-S3 CNG

approx. dimensions (mm)



Part no.	Description	Pressure (WP)	ENGINE (male thread)	CYL1 (male thread)	CYL2 (male thread)
C1-174627	TMF20-S3 CNG	2900 psi	UNF 7/16"-20	UNF 7/16"-20	UNF 7/16"-20

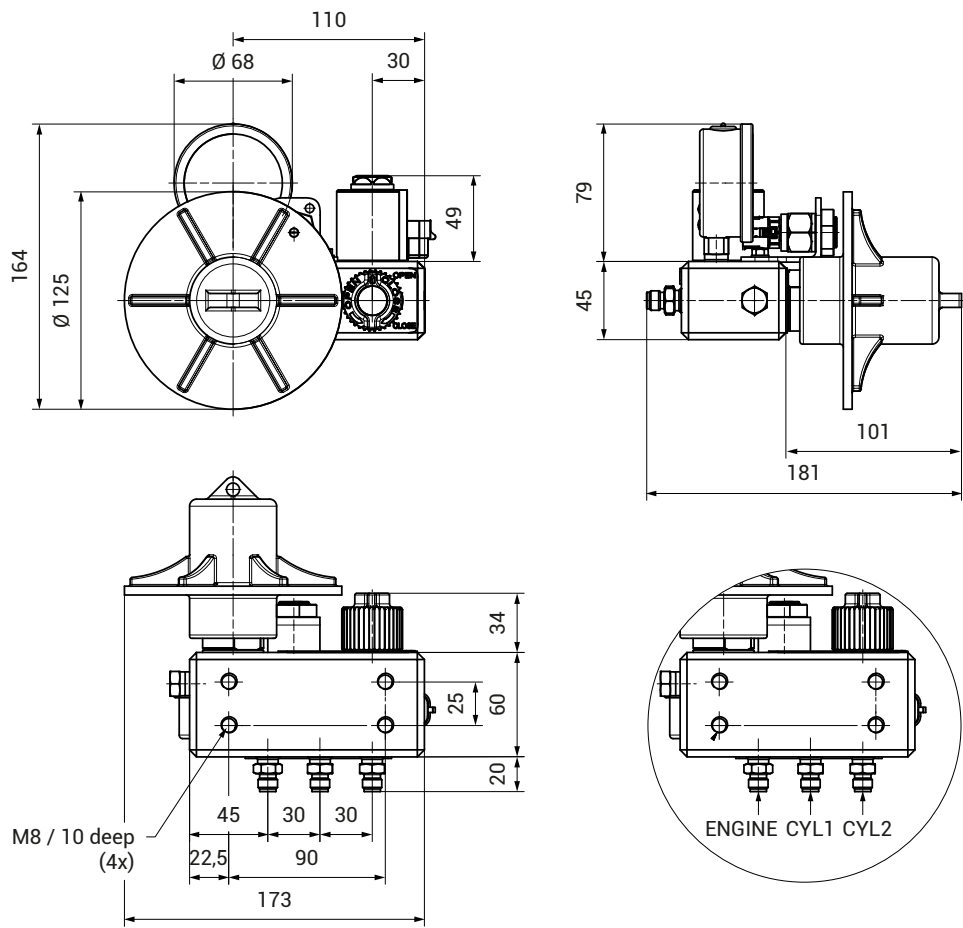
### Functional description (schematic):



# » Manifold TMF20 CNG

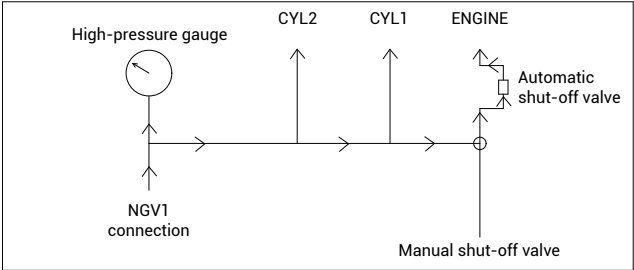
## ORDERING | Manifold TMF20-S4 CNG

approx. dimensions (mm)



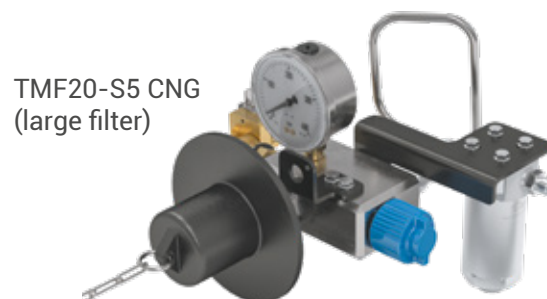
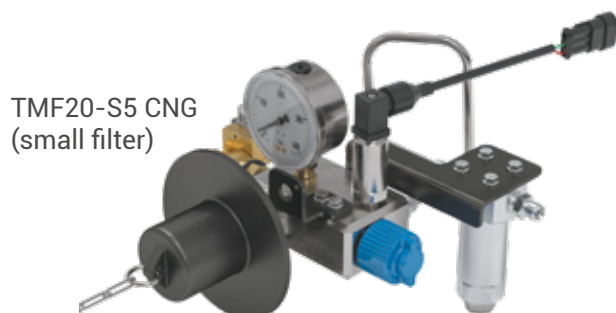
Part no.	Description	Pressure (WP)	ENGINE (male thread)	CYL1 (male thread)	CYL2 (male thread)
C1-174628	TMF20-S4 CNG	2900 psi	UNF 7/16"-20	UNF 7/16"-20	UNF 7/16"-20

### Functional description (schematic):



## » Manifold TMF20 CNG

### OVERVIEW TMF20 CNG PRODUCT SERIES WITH FILTER, WITHOUT AUTOMATIC SHUT-OFF VALVE



Product series	Manifold block	NZS connection	TSF2 CNG Coalescing filter			Micro switch	Pressure sensor
			Nominal bore (DN) (mm)	Mesh size (µm)	Filter cartridge (mm)		
TMF20-S5 CNG (small filter)	Stainless steel	✓	4	0.3 - 0.6	Ø 19.3		✓
TMF20-S5 CNG (large filter)	Stainless steel	✓	4	1.0	Ø 25.4		
TMF20-S6 CNG (small filter)	Stainless steel	✓	4	0.3 - 0.6	Ø 19.3	✓	✓

#### Conformity / tests / approvals

The product series S5 and S6 of the TMF20 CNG are tested acc. to:

- ISO-15500-2:2016
- ISO-15500-4:2012+A1:2016
- ECE R110-R00

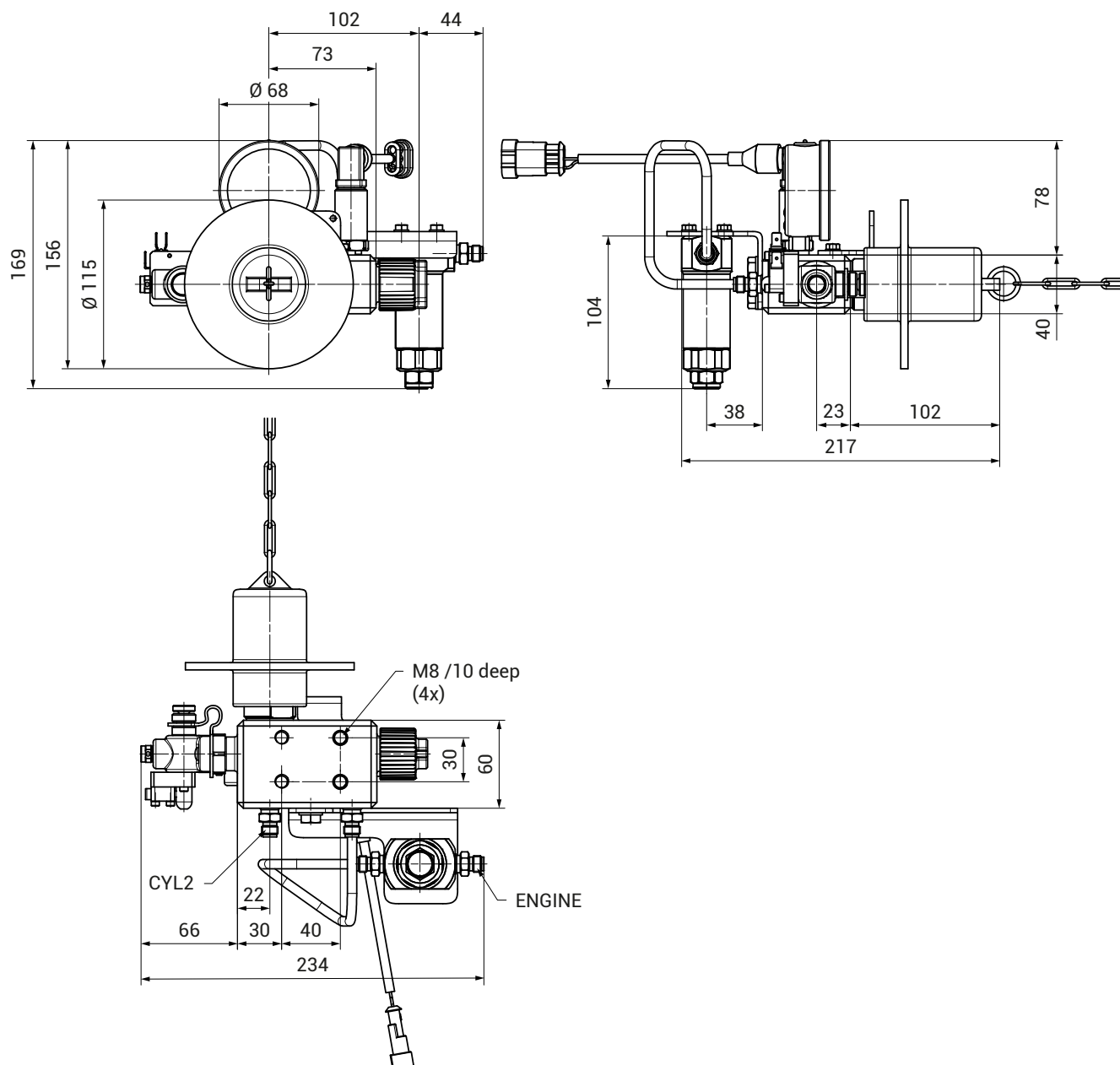
The WEH® TN5 CNG Receptacle and the WEH® TSF2 CNG Coalescing filter are approved acc. to:

- TN5 CNG: ECE R110-R04
- TSF2 CNG: ECE R110-R01

## » Manifold TMF20 CNG

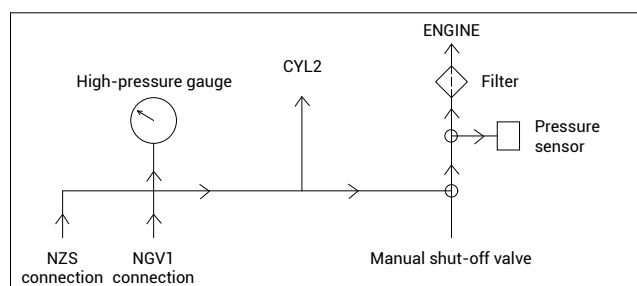
### ORDERING | Manifold TMF20-S5 CNG (small filter)

approx. dimensions (mm)



Part no.	Description	Pressure (WP)	ENGINE (male thread)	CYL2 (male thread)
<b>C1-174629</b>	TMF20-S5 CNG	2900 psi	UNF 7/16"-20	UNF 7/16"-20

#### Functional description (schematic):

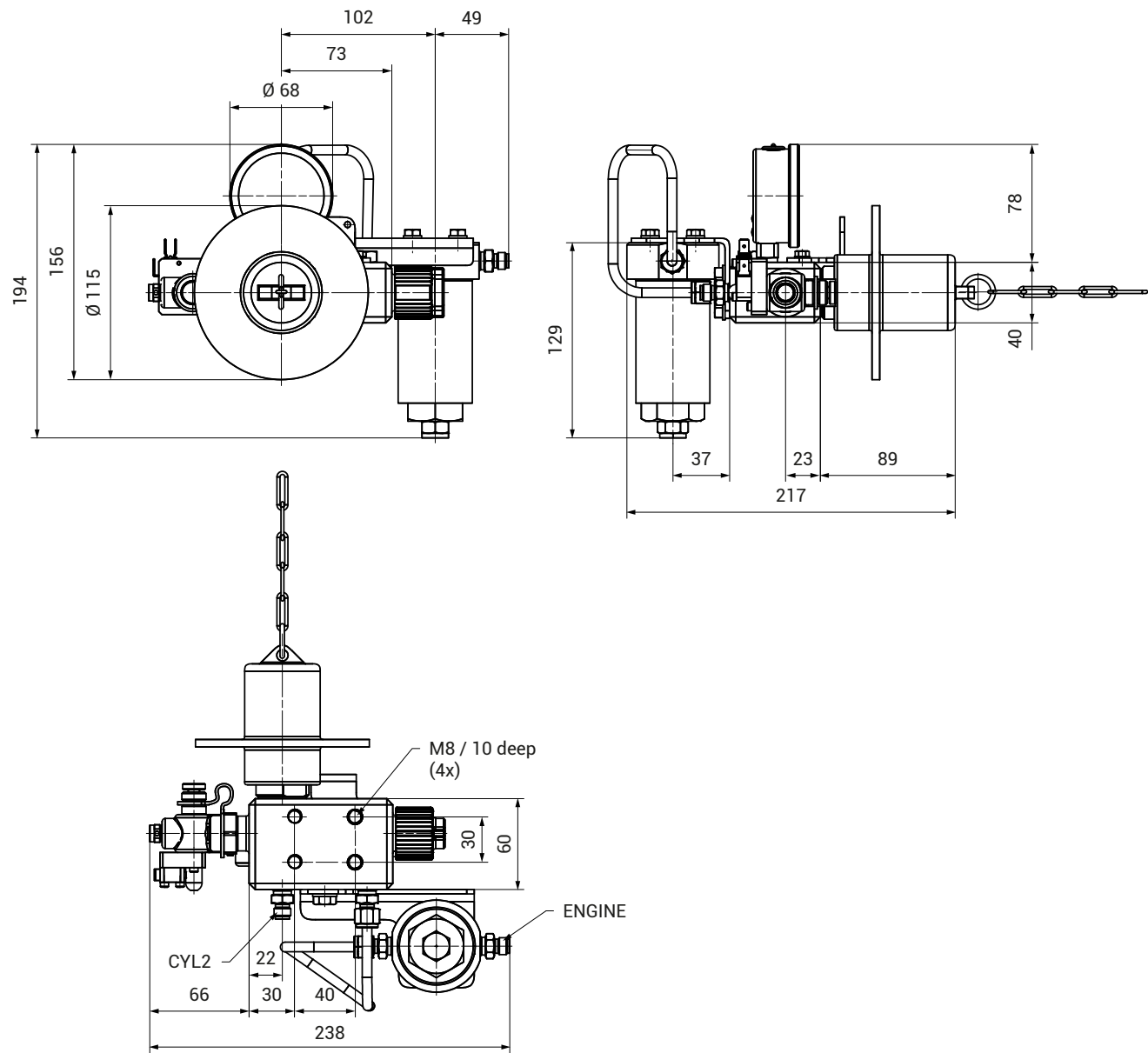




# » Manifold TMF20 CNG

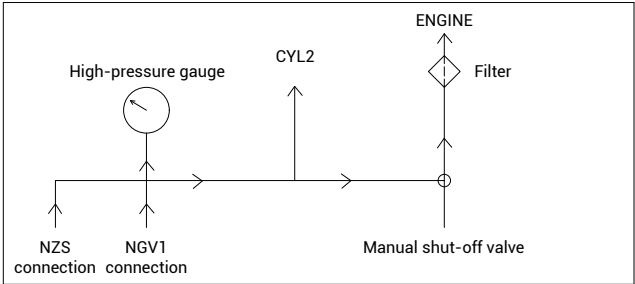
## ORDERING | Manifold TMF20-S5 CNG (large filter)

approx. dimensions (mm)



Part no.	Description	Pressure (WP)	ENGINE (male thread)	CYL2 (male thread)
C1-174630	TMF20-S5 CNG	2900 psi	UNF 7/16"-20	UNF 7/16"-20

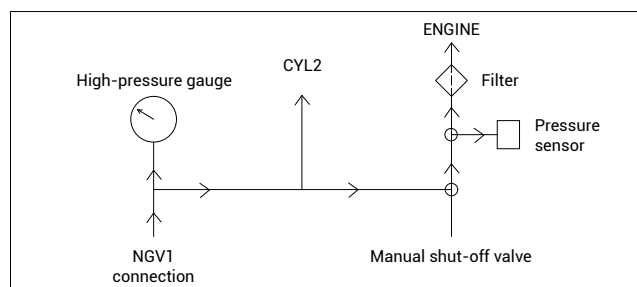
### Functional description (schematic):



approx. dimensions (mm)



**Functional description (schematic):**



## » Manifold TMF20 CNG

### SPARE PARTS

Various parts are available as spares for the TMF20 CNG manifold.

Part No.	Description
<b>C1-84168</b>	WEH® TN5 CNG Receptacle
<b>On request</b>	O-ring for receptacle
<b>175523</b>	High-pressure gauge
<b>C1-89582</b>	WEH® TSF2 CNG Coalescing filter (small)
<b>C1-82999</b>	WEH® TSF2 CNG Coalescing filter (large)
<b>E69-89541</b>	Filter cartridge (Ø 19.3 mm) for C1-89582
<b>E69-79770</b>	Filter cartridge (Ø 25.4 mm) for C1-82999
<b>E55-251A</b>	Back-up ring slotted for C1-89582
<b>E55-47144</b>	Back-up ring for C1-82999
<b>E80-93858</b>	Retaining ring for C1-82999
<b>On request</b>	O-ring for filter
<b>On request</b>	O-ring for plug

## » Fueling system TS55 CNG

### DESCRIPTION



#### Features

- Integrated WEH® TN5 CNG receptacle without filter
- Handy cap
- Dirt and splash waterproof construction
- No danger of freezing
- Option: starter cut-off switch

A WEH® Fueling system for refueling buses and trucks is also available. The TS55 CNG consists of a fully assembled housing with an integrated large receptacle and enables easy retrofitting of buses and trucks to compressed natural gas. The converted vehicle can be easily refuelled from the outside by simply removing the fuel tank cap and connecting the nozzle to the receptacle. Then refueling can start.

The integrated WEH® TN5 CNG receptacle ensures rapid filling with a high flow rate and reduced noise during refueling. The fueling system consists of two preinstalled housings for mounting into the vehicle.

#### Conversion:

When retrofitting buses and trucks to natural gas, the TS55 CNG fueling system is installed into the vehicle body panel. For this, the panel needs an appropriate aperture for installation in which the TS55 CNG fueling system can be easily inserted. The installer will find this system significantly easier than receptacle installation in the engine compartment.

#### Application

Fueling system for installation in buses and trucks.

Only use fueling systems with ECE approval for fitment in road legal vehicles.

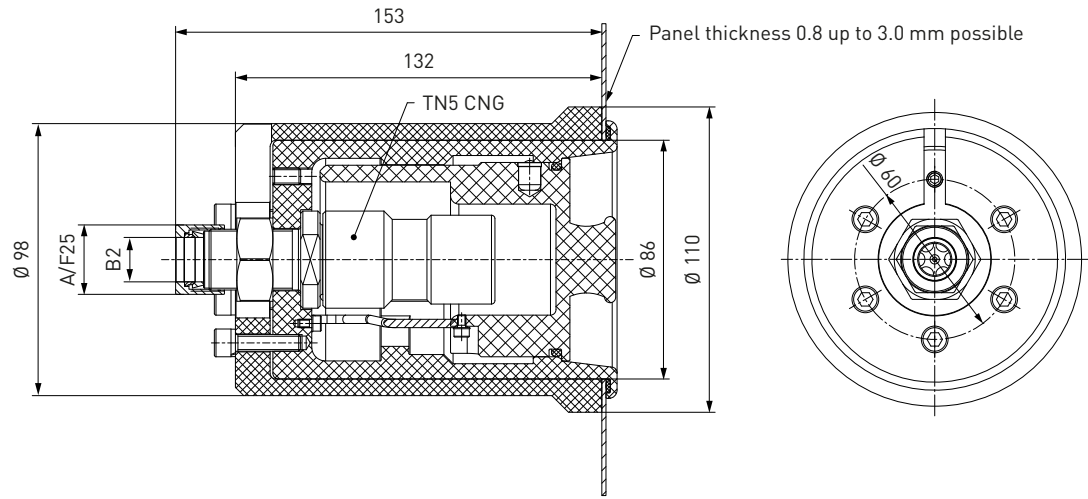
### TECHNICAL DATA

Characteristics	Basic version	Options
Nominal bore (DN)	12 mm	On request
Pressure range	PN = 200 bar (3,000 psi)   PS = 260 bar (ECE)	
Temperature range	-40 °F up to +248 °F (ECE)	On request
Material	Housing: plastic Receptacle: corrosion resistant	On request
Sealing material	Natural gas resistant	On request
Design	Incl. TN5 CNG receptacle without filter, fuel tank cap and fittings	TN5 CNG receptacle with filter With starter cut-off micro switch (protection type IP67)
Conformity / Tests / Approvals	ECE R110 (applies to TN5 CNG)	

# » Fueling system TS55 CNG

## ORDERING | WEH® TS55 CNG Fueling system

approx. dimensions (mm)



Part No.	Description	Pressure (PN)	B2
C1-62854	TS55 CNG (ECE)	3,000 psi	Tube Ø 16*
C1-62690	TS55 CNG (ECE) with starter cut-off switch	3,000 psi	Tube Ø 16*

\* double ferrule fitting

Other connection sizes and version on request.

## SPARE PARTS

Various parts are available as spares for the WEH® TS55 CNG Fueling system:



Part No.	Description
W84958	Fuel tank cap

## » Check valve TVR5 CNG

### DESCRIPTION



#### Features

- Robust construction
- Low-noise opening and closing
- Corrosion resistant stainless steel
- High leak tightness

Type TVR5 CNG is the largest of our check valves. It is most efficient and developed specifically for CNG buses and trucks. The check valve system is designed to minimize the effect of dirt particles on the sealing components within the unit. The WEH® TVR5 CNG check valve is constructed of corrosion-resistant stainless steel achieving a very durable unit due to its robust internal structure.

#### Application

Check valve for buses and trucks (ECE approval), also suitable for installation in fueling stations. Only use check valves with ECE approval for fitment in road legal vehicles.

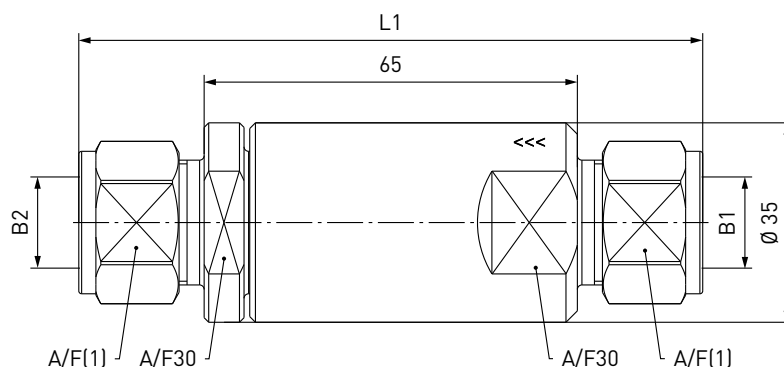
### TECHNICAL DATA

Characteristics	Basic version	Options
Nominal bore (DN)	Depending on design	On request
Pressure range	PN = 200 bar (3,000 psi)   PS = 260 bar (ECE) PN = 250 bar (3,600 psi)   PS = 315 bar	
Temperature range	-40 °F up to +248 °F (ECE) -40 °F up to +185 °F	On request
Material	Corrosion resistant stainless steel	On request
Sealing material	Natural gas resistant	On request
Design	Incl. fittings (only for check valves with tube fitting)	On request
Conformity / Tests / Approvals	ECE R110	

## » Check valve TVR5 CNG

### ORDERING | WEH® TVR5 CNG Check valve with tube fitting on both sides

approx. dimensions (mm)

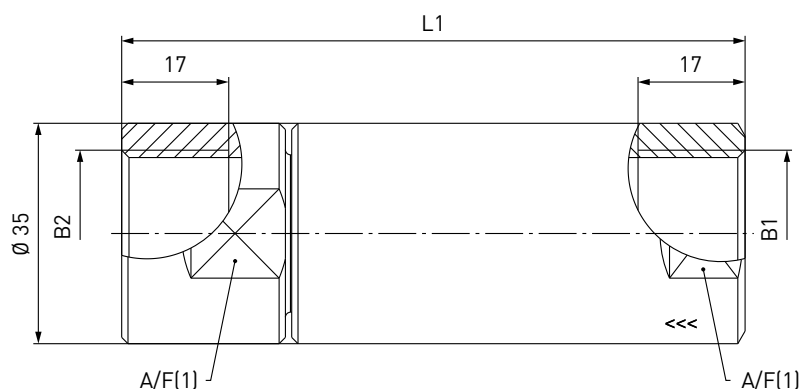


Part No.	Description	DN	Pressure (PN)	B1	B2	L1	A/F(1)
<b>C1-54787</b>	TVR5 CNG (ECE)	9	3,000 psi	Tube Ø 12*	Tube Ø 12*	110	22
<b>C1-76354-X01</b>	TVR5 CNG	9	3,600 psi	Tube Ø 12*	Tube Ø 12*	110	22
<b>C1-81616</b>	TVR5 CNG (ECE)	9	3,000 psi	Tube Ø 1/2"*	Tube Ø 1/2"*	110	22
<b>C1-41732</b>	TVR5 CNG (ECE)	12	3,000 psi	Tube Ø 16*	Tube Ø 16*	110	25
<b>C1-15506-X1-X01</b>	TVR5 CNG	12	3,600 psi	Tube Ø 16*	Tube Ø 16*	110	25

\* double ferrule fitting

### ORDERING | WEH® TVR5 CNG Check valve with female thread on both sides

approx. dimensions (mm)



Part No.	Description	DN	Pressure (PN)	B1 (female thread)	B2 (female thread)	L1	A/F(1)
<b>C1-40046-X1-X01</b>	TVR5 CNG	12	3,600 psi	G1/2"*	G1/2"*	95	30
<b>C1-41734</b>	TVR5 CNG (ECE)	12	3,000 psi	G3/4"*	G3/4"*	99	32
<b>C1-15507-X1-X01</b>	TVR5 CNG	14	3,600 psi	G3/4"*	G3/4"*	99	32

\* acc. to ISO 228-1

Other connection sizes and versions on request.

## » Filter TSF1 CNG

### DESCRIPTION



#### Features

- For CNG free of impurities
- Prefilter for fueling nozzles
- For installation between fueling nozzle and filling hose

Contaminants in the gas flow can enter the vehicle's storage tank during refueling. These dirt particles in the natural gas fuel may cause damage to the sealing components. WEH, therefore, offers CNG filter for clean natural gas. Solid particles are captured reliably.

The TSF1 CNG filter is used for fueling stations and dispensers as well as onboard CNG powered vehicles. The filter is mainly installed as prefilter in the media inlet between fueling nozzle and filling hose.

#### Application

Filter for installation as prefilter between fueling nozzle and filling hose.

Only use filters with ECE approval for fitment in road legal vehicles.

### TECHNICAL DATA

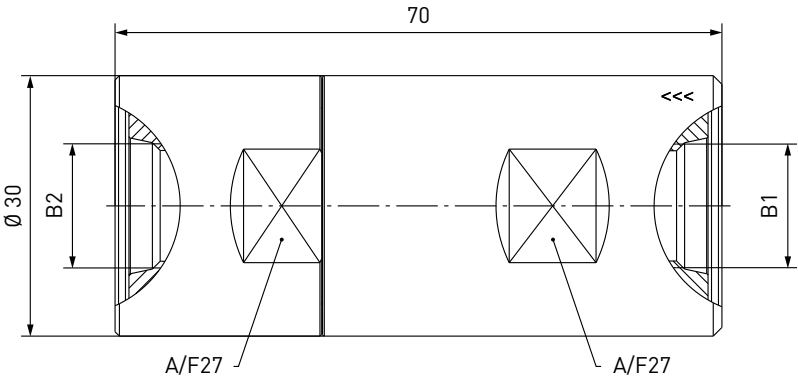
Characteristics	Basic version	Options
Nominal bore (DN)	8 mm	On request
Pressure range	PN = 200 bar (3,000 psi)   PS = 260 bar (ECE) PN = 250 bar (3,600 psi)   PS = 315 bar	
Temperature range	-40 °F up to +248 °F (ECE) -40 °F up to +185 °F	On request
Material	Corrosion resistant stainless steel	On request
Sealing material	Natural gas resistant	On request
Filter element	50 resp. 40 µm, depending on design	On request
Conformity / Tests / Approvals	ECE R110	



# » Filter TSF1 CNG

## ORDERING | WEH® TSF1 CNG Filter (50 µm) with female thread on both sides

approx. dimensions (mm)

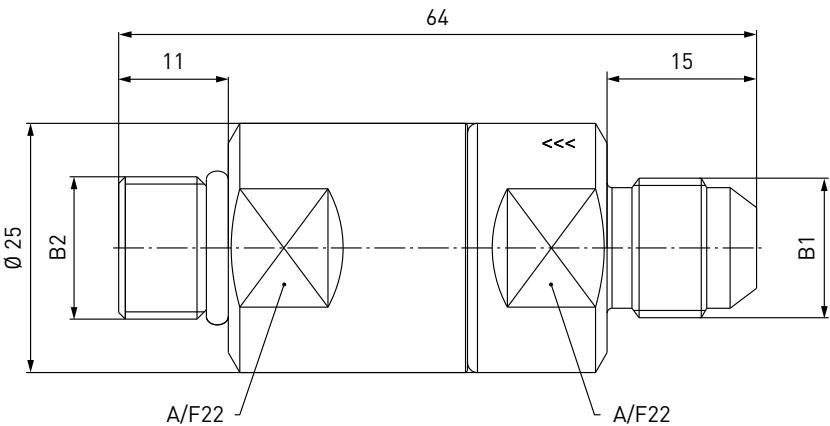


Part No.	Description	DN	Pressure (PN)	B1 (female thread)	B2 (female thread)
C1-66532**	TSF1 CNG (ECE)	8	3,000 psi	UNF 9/16"-18*	UNF 9/16"-18*

\* acc. to SAE J1926-1  
 \*\* The filter element can be removed and is re-usable after having been cleaned

## ORDERING | WEH® TSF1 CNG Filter (40 µm) with male thread on both sides

approx. dimensions (mm)



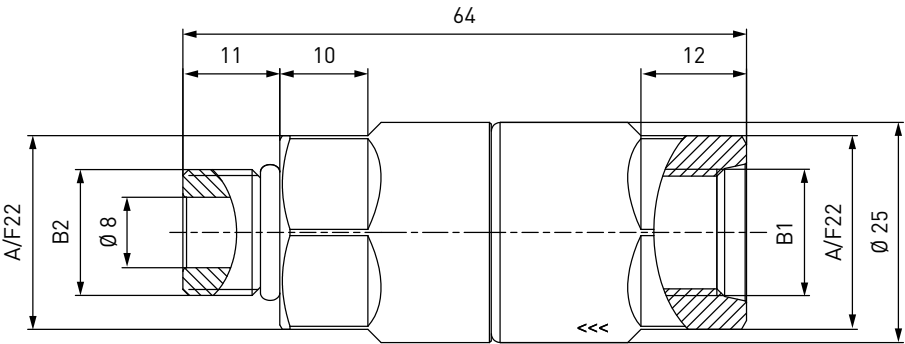
Part No.	Description	DN	Pressure (PN)	B1 (male thread)	B2 (male thread)
C1-106854-X01	TSF1 CNG	8	3,600 psi	UNF 9/16"-18*	UNF 9/16"-18**

\* acc. to SAE J514, 37° cone  
 \*\* acc. to SAE J1926-1

» Filter TSF1 CNG

ORDERING | WEH® TSF1 CNG Filter (40 µm) with female thread and male thread

approx. dimensions (mm)



Part No.	Description	DN	Pressure (PN)	B1 (female thread)	B2 (male thread)
C1-94070-X01	TSF1 CNG	8	3,600 psi	UNF 9/16"-18*	UNF 9/16"-18*
C1-100700-X01	TSF1 CNG	8	3,600 psi	UNF 9/16"-18-LH*	UNF 9/16"-18-LH*

\* acc. to SAE J1926-1

## » Filter TSF1 CNG

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### SPARE PARTS

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Various parts are available as spares for the WEH® TSF1 CNG Filter:

Part No.	Description
<b>W131848</b>	Maintenance set consisting of o-ring, filter element and back-up ring (suitable for C1-66532)

## » Filter TSF2 CNG

### DESCRIPTION



#### Features

- For CNG free of impurities
- Filter insert can be cleaned
- For installation onboard CNG vehicles and in fueling stations

Contaminants in the gas flow can enter the vehicle's storage tank during refueling. These dirt particles in the natural gas fuel may cause damage to the sealing components. WEH, therefore, offers CNG filter for clean natural gas. Solid particles are captured reliably.

The filter element can be removed and is re-usable after having been cleaned.

The TSF2 CNG filter is mainly used for fueling stations and dispensers.

#### Application

Filter for installation onboard CNG vehicles and in fueling stations.

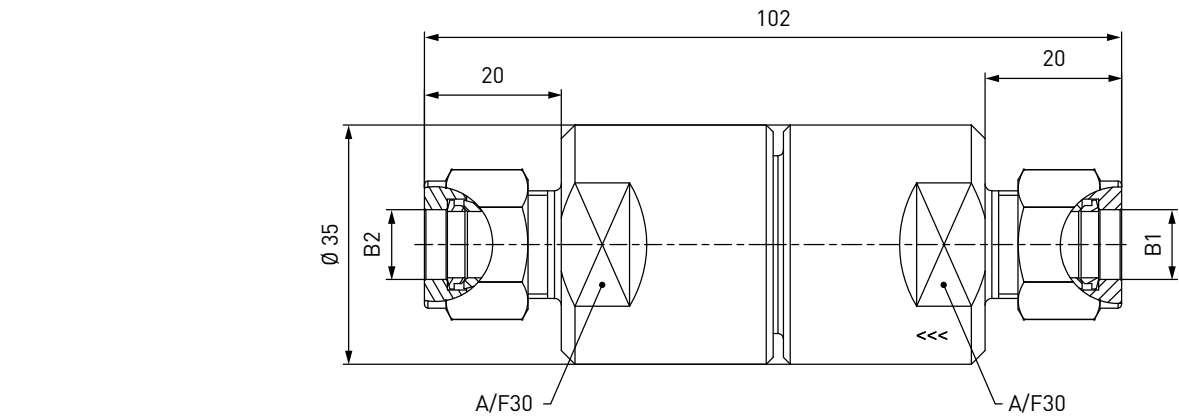
Only use filters with ECE approval for fitment in road legal vehicles.

### TECHNICAL DATA

Characteristics	Basic version	Options
Nominal bore (DN)	Depending on design	On request
Pressure range	PN = 200 bar (3,000 psi)   PS = 300 bar	
Temperature range	-40 °F up to +185 °F	On request
Material	Corrosion resistant stainless steel	On request
Sealing material	Natural gas resistant	On request
Filter element	40 µm	50 µm, others on request
Design	Incl. fittings (only for filters with tube fitting)	On request
Conformity / Tests / Approvals	ECE approval on request	

# » Filter TSF2 CNG

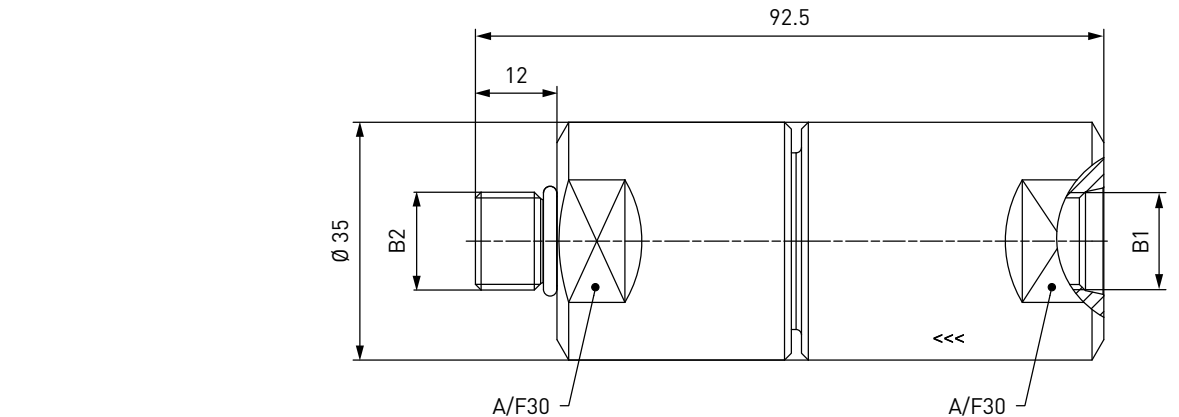
**ORDERING** | WEH® TSF2 CNG Filter (40 µm) with tube fitting on both sides  
approx. dimensions (mm)



Part No.	Description	DN	Pressure (PN)	B1	B2
C1-106736-X01	TSF2 CNG	5	3,000 psi	Tube Ø 6*	Tube Ø 6*
C1-106750	TSF2 CNG	5	3,000 psi	Tube Ø 1/4"*	Tube Ø 1/4"*
C1-106746-X01	TSF2 CNG	6	3,000 psi	Tube Ø 8*	Tube Ø 8*
C1-106751	TSF2 CNG	8	3,000 psi	Tube Ø 3/8"*	Tube Ø 3/8"*
C1-16840-X1-X01	TSF2 CNG	8	3,000 psi	Tube Ø 10*	Tube Ø 10*

\* double ferrule fitting

**ORDERING** | WEH® TSF2 CNG Filter (40 µm) with female and male thread  
approx. dimensions (mm)



Part No.	Description	DN	Pressure (PN)	B1 (female thread)	B2 (male thread)
C1-166464	TSF2 CNG	8	3,000 psi	UNF 9/16"-18*	UNF 9/16"-18*

\* acc. to SAE J1926-1

## SPARE PARTS

Various parts are available as spares for the WEH® TSF2 CNG Filter:

Part No.	Description
E69-9061	Wire filter insert 40 µm (incl. spring and o-ring)

## » Coalescing filter TSF2 CNG

### DESCRIPTION



#### Features

- Fine filter with high particle removal efficiency (efficiency of approx. 99.9% > 0.3 µm)
- For installation onboard CNG vehicles and in fueling stations
- Protection of critical components in the fuel system
- Laterally offset flow possible
- Aluminum construction
- Ease of maintenance

Clean, filtered gases are essential to guarantee the proper function of components for vehicles and fueling stations when refueling with natural gas. The WEH® TSF2 CNG coalescing filter was developed to remove particles from the gas flow. When filtering the gas flow, the coalescing filter reliably removes contaminants such as oil, water and dirt particles which are contained in the gas. This contamination is isolated by the coalescing filter. Natural gas flows through the filter, whereas contaminants such as oil, water and other aerosols coalesce, and drop into the sump of the filter, where they are separated into a drain port.

The filters are easy to maintain and can be installed onboard vehicles and in fueling stations at any time.

#### Application

Coalescing filter for installation onboard CNG vehicles and in fueling stations.

Only use filters with ECE approval for fitment in road legal vehicles.

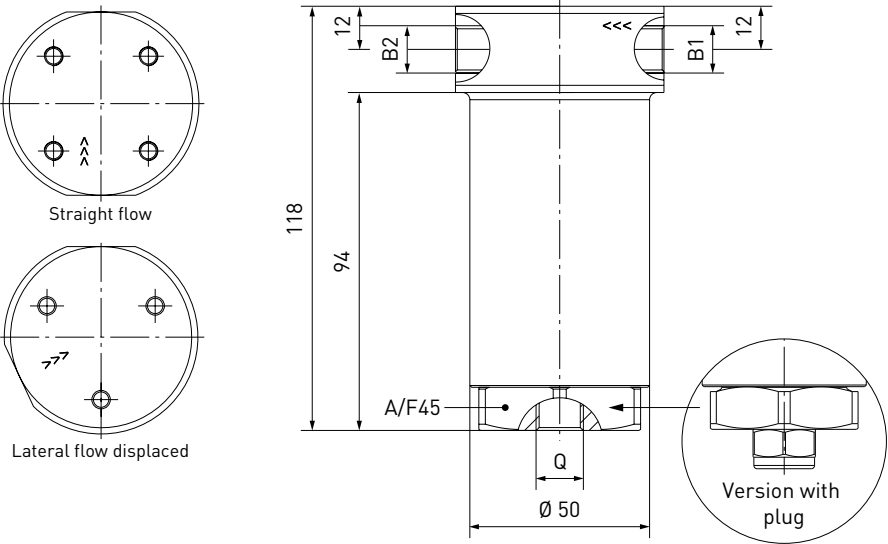
### TECHNICAL DATA

Characteristics	Basic version	Options
Nominal bore (DN)	Depending on design	On request
Pressure range	PN = 200 bar (3,000 psi)   PS = 260 bar (ECE)	
Temperature range	-40 °F up to +248 °F (ECE)	On request
Material	Corrosion resistant Housing: aluminum	On request
Sealing material	Natural gas resistant	On request
Filter element	< 1 µm	On request
Conformity / Tests / Approvals	ECE R110	

# » Coalescing filter TSF2 CNG

**ORDERING** | WEH® TSF2 CNG Coalescing filter with filter cartridge Ø 25.4 mm

approx. dimensions (mm)



Part No.	Description	DN	Pressure (PN)	B1 (female thread)	B2 (female thread)	Q (female thread)
C1-82999**	TSF2 CNG (ECE)	4	3,000 psi	NPT 1/4"	NPT 1/4"	UNF 9/16"-18*
C1-79766**	TSF2 CNG (ECE)	4	3,000 psi	UNF 9/16"-18*	UNF 9/16"-18*	UNF 9/16"-18*
C1-81722	TSF2 CNG (ECE)	4	3,000 psi	G1/4"	G1/4"	G1/4"
C1-81766	TSF2 CNG (ECE)	4	3,000 psi	G1/4"	G1/4" flow direction 115° RH	G1/4"

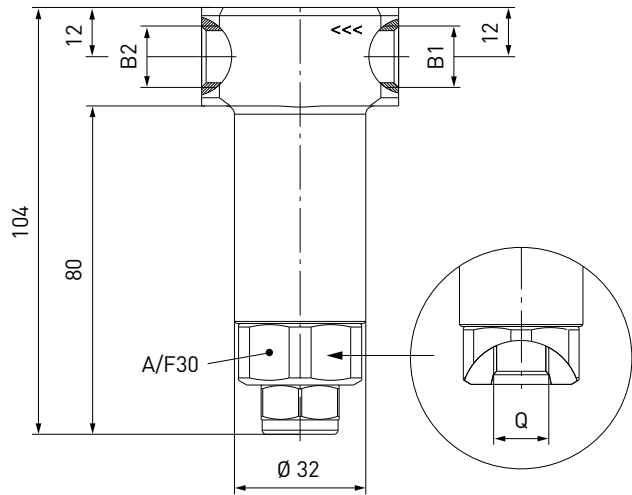
\* acc. to SAE J1926-1

\*\* incl. plug with o-ring

» Coalescing filter TSF2 CNG

ORDERING | WEH® TSF2 CNG Coalescing filter with filter cartridge Ø 19.3 mm

approx. dimensions (mm)

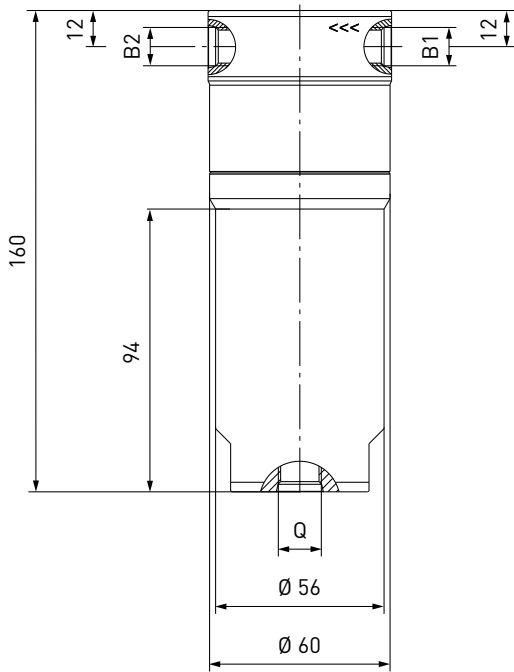


Part No.	Description	DN	Pressure (PN)	B1 (female thread)	B2 (female thread)	Q (female thread)
C1-89582**	TSF2 CNG (ECE)	4	3,000 psi	NPT 1/4"	NPT 1/4"	UNF 9/16"-18*

\* acc. to SAE J1926-1  
\*\* incl. plug with o-ring

ORDERING | WEH® TSF2 CNG Coalescing filter with filter cartridge Ø 38.0 mm

approx. dimensions (mm)



Part No.	Description	DN	Pressure (PN)	B1 (female thread)	B2 (female thread)	Q (female thread)
C1-89633	TSF2 CNG (ECE)	10	3,000 psi	UNF 9/16"-18*	UNF 9/16"-18*	UNF 9/16"-18*

\* acc. to SAE J1926-1



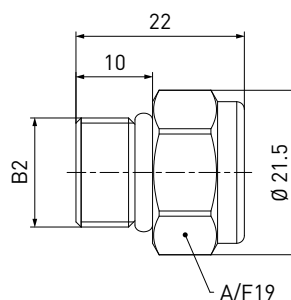
## » Coalescing filter TSF2 CNG

### ACCESSORIES

The following accessories are available for the WEH® TSF2 CNG Coalescing filter:

#### Plug

Plug with o-ring for closing the drain port 'Q' (end of the filter).  
Design: Plug incl. polyurethane o-ring



Part No.	Description	B2 (male thread)
<b>E69-93336</b>	Plug with o-ring	UNF 9/16"-18*
<b>E69-108334</b>	Plug with o-ring	G1/4"

\* acc. to SAE J1926-1

#### Filter cartridge Ø 19.3

For TSF2 CNG with filter cartridge Ø 19.3 mm  
Design: outer Ø 19.3 mm, inner Ø 12.5 mm



Part No.	Description	Length
<b>E69-89541</b>	for C1-89582	40.0 mm

#### Filter cartridge Ø 25.4

For TSF2 CNG with filter cartridge Ø 25.4 mm  
Design: outer Ø 25.4 mm, inner Ø 12.5 mm



Part No.	Description	Length
<b>E69-79770</b>	for C1-82999, C1-81766, C1-81722, C1-67454	56.0 mm

#### Filter cartridge Ø 38.0

For TSF2 CNG with filter cartridge Ø 38.0 mm  
Design: outer Ø 38.0 mm, inner Ø 22.5 mm



Part No.	Description	Length
<b>E69-89626</b>	for C1-89633	90.0 mm

## » Filter TSF4 CNG

### DESCRIPTION



#### Features

- For CNG free of impurities
- Filter insert can be cleaned
- For installation onboard CNG vehicles and in fueling stations

Contaminants in the gas flow can enter the vehicle's storage tank during refueling. These dirt particles in the natural gas fuel may cause damage to the sealing components. WEH, therefore, offers CNG filter for clean natural gas. Solid particles are captured reliably.

The filter element can be removed and is re-usable after having been cleaned.

The TSF4 CNG filter is mainly used for onboard CNG powered vehicles, but can also be used for fueling stations and dispensers.

Type TSF4 CNG round filter is available with tube fitting or female thread on both sides or male and female thread.

TSF4 CNG T-filter has been specially designed for use in CNG buses and trucks. The filter can be removed for cleaning purposes without tedious unscrewing of the media lines.



T-filter TSF4 CNG

#### Application

Filter for installation onboard CNG vehicles and in fueling stations.

Only use filters with ECE approval for fitment in road legal vehicles.

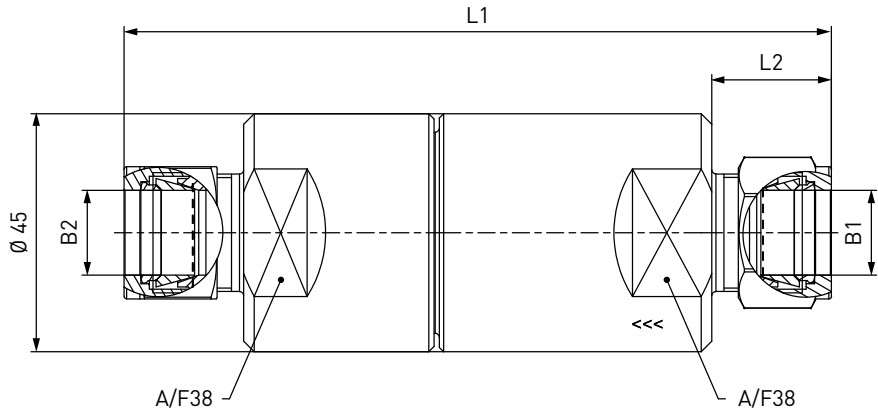
### TECHNICAL DATA

Characteristics	Basic version	Options
Nominal bore (DN)	Depending on design	On request
Pressure range	PN = 200 bar (3,000 psi)   PS = 260 bar (ECE) PN = 200 bar (3,000 psi)   PS = 300 bar	
Temperature range	-40 °F up to +248 °F (ECE) -40 °F up to +185 °F	On request
Material	Corrosion resistant stainless steel	On request
Sealing material	Natural gas resistant	On request
Filter element	40 resp. 10 µm, depending on design	On request
Design	Incl. fittings (only for filters with tube fitting)	On request
Conformity / Tests / Approvals	ECE R110	

# » Filter TSF4 CNG

## ORDERING | WEH® TSF4 CNG Round filter (40 µm) with tube fitting on both sides

approx. dimensions (mm)

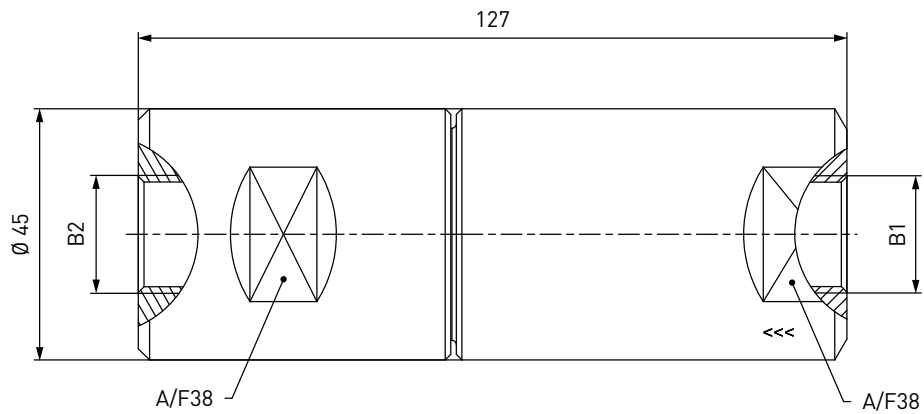


Part No.	Description	DN	Pressure (PN)	B1	B2	L1	L2
C1-106765-X01	TSF4 CNG	8	3,000 psi	Tube Ø 10*	Tube Ø 10*	129	20
C1-102742	TSF4 CNG (ECE)	10	3,000 psi	Tube Ø 12*	Tube Ø 12*	133	22
C1-32744-X01	TSF4 CNG	10	3,000 psi	Tube Ø 12*	Tube Ø 12*	133	22
C1-42476	TSF4 CNG (ECE)	12	3,000 psi	Tube Ø 16*	Tube Ø 16*	134	23
C1-16843-X01	TSF4 CNG	12	3,000 psi	Tube Ø 16*	Tube Ø 16*	134	23

\* double ferrule fitting

## ORDERING | WEH® TSF4 CNG Round filter (40 µm) with female thread on both sides

approx. dimensions (mm)

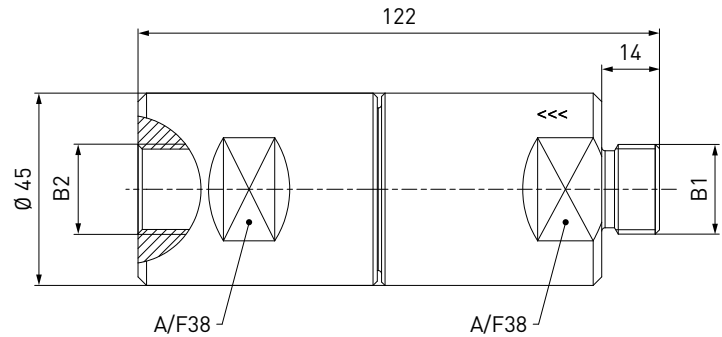


Part No.	Description	DN	Pressure (PN)	B1 (female thread)	B2 (female thread)
C1-50371-X01	TSF4 CNG	12	3,000 psi	G1/2"	G1/2"
C1-99215	TSF4 CNG (ECE)	12	3,000 psi	NPT 1/2"	NPT 1/2"

» Filter TSF4 CNG

ORDERING | WEH® TSF4 CNG Round filter (40 µm) with male and female thread

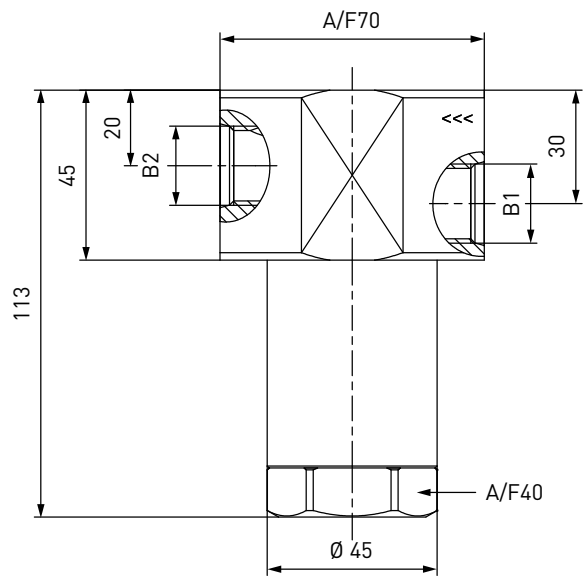
approx. dimensions (mm)



Part No.	Description	DN	Pressure (PN)	B1 (male thread)	B2 (female thread)
C1-42578-X01	TSF4 CNG	12	3,000 psi	G1/2"	G1/2"

ORDERING | WEH® TSF4 CNG T-filter (40 µm) with female thread on both sides

approx. dimensions (mm)

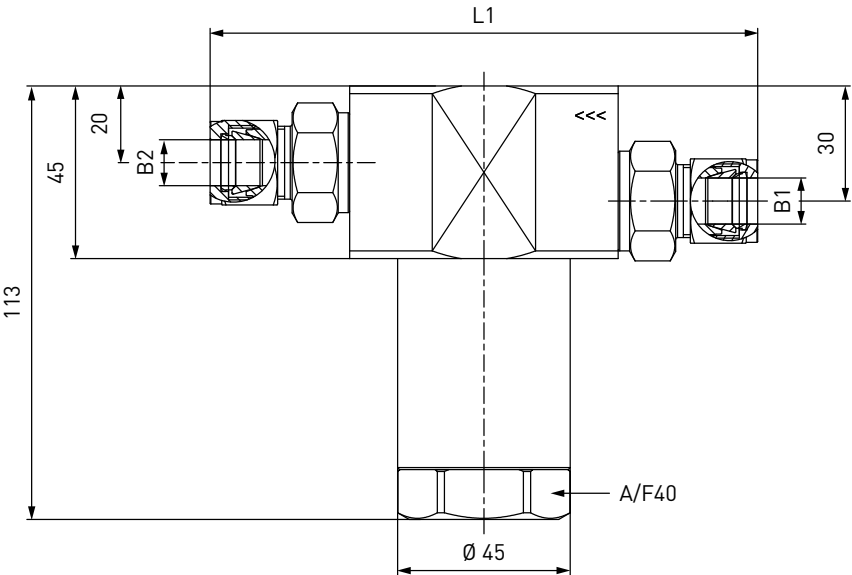


Part No.	Description	DN	Pressure (PN)	B1 (female thread)	B2 (female thread)
C1-83168	TSF4 CNG (ECE)	12	3,000 psi	G1/2"	G1/2"

# » Filter TSF4 CNG

## ORDERING | WEH® TSF4 CNG T-filter with tube fitting on both sides

approx. dimensions (mm)



Part No.	Description	Filter (µm)	DN	Pressure (PN)	B1	B2	L1
C1-106809	TSF4 CNG (ECE)	40	8	3,000 psi	Tube Ø 10*	Tube Ø 10*	140
C1-54023	TSF4 CNG (ECE)	10	8	3,000 psi	Tube Ø 10*	Tube Ø 10*	140
C1-106810	TSF4 CNG (ECE)	40	10	3,000 psi	Tube Ø 12*	Tube Ø 12*	143
C1-86825	TSF4 CNG (ECE)	10	10	3,000 psi	Tube Ø 12*	Tube Ø 12*	143
C1-106811	TSF4 CNG (ECE)	10	12	3,000 psi	Tube Ø 1/2"*	Tube Ø 1/2"*	144
C1-106812	TSF4 CNG (ECE)	40	12	3,000 psi	Tube Ø 16*	Tube Ø 16*	144
C1-51178-X01	TSF4 CNG	10	12	3,000 psi	Tube Ø 16*	Tube Ø 16*	144

\* double ferrule fitting

## SPARE PARTS

Various parts are available as spares for the WEH® TSF4 CNG Filter:

Part No.	Description
W9062	Wire filter insert 40 µm (incl. spring and o-ring)
W9063	Wire filter insert 10 µm (incl. spring and o-ring)
E51-47589	O-ring for filter insert (only T-filter)

## » Filter TSF5 CNG

### DESCRIPTION



#### Features

- For CNG free of impurities
- Filter insert can be cleaned
- Prefilter for inline breakaways
- For installation between inline breakaway and filling hose

Contaminants in the gas flow can enter the vehicle's storage tank during refueling. These dirt particles in the natural gas fuel may cause damage to the sealing components. WEH, therefore, offers CNG filter for clean natural gas. Solid particles are captured reliably.

The TSF5 CNG filter is used for fueling stations as well as for dispensers. The filter is mainly installed as prefilter in the media inlet between inline breakaway coupling and filling hose.

#### Application

Filter for installation as prefilter between inline breakaway coupling and filling hose.

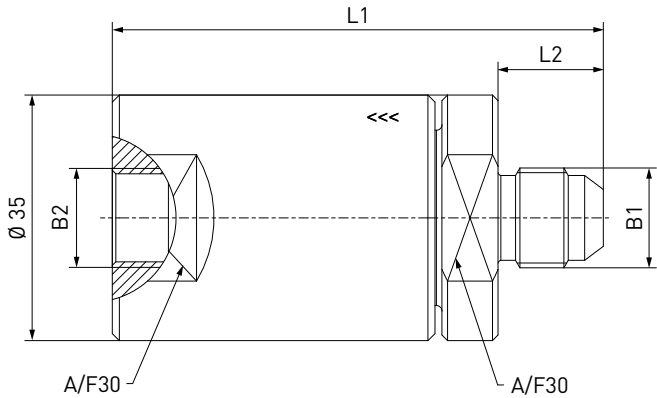
### TECHNICAL DATA

Characteristics	Basic version	Options
Nominal bore (DN)	Depending on design	On request
Pressure range	PN = 200 bar (3,000 psi)   PS = 300 bar PN = 250 bar (3,600 psi)   PS = 350 bar	
Temperature range	-40 °F up to +185 °F	On request
Material	Corrosion resistant stainless steel	On request
Sealing material	Natural gas resistant	On request
Filter element	50 µm	On request

# » Filter TSF5 CNG

## ORDERING | WEH® TSF5 CNG Filter (50 µm) with male and female thread

approx. dimensions (mm)



Part No.	Description	DN	Pressure (PN)	B1 (male thread)	B2 (female thread)	L1	L2
C1-83120-X01	TSF5 CNG	8	3,000 psi	UNF 9/16"-18*	UNF 9/16"-18*	70	15
C1-102491-X01	TSF5 CNG	8	3,600 psi	UNF 9/16"-18*	UNF 9/16"-18*	70	15
C1-105923-X01	TSF5 CNG	12	3,000 psi	UNF 7/8"-14*	UNF 7/8"-14*	75	19.5

\* acc. to SAE J514, 37° cone

## SPARE PARTS

Various parts are available as spares for the WEH® TSF5 CNG Filter:

Part No.	Description
E50-127236	O-ring
E55-247A	Back-up ring
E80-31704	Filter element

## » Defueling nozzle TK23 CNG

### DESCRIPTION



#### Features

- Push-Pull actuation
- Extremely high flow rate
- Plastic thermal protection
- WEH® Jaw locking mechanism
- High-grade materials
- Compact design
- Only suitable for special WEH® TN5 CNG Receptacles without filter

The WEH® TK23 CNG Defueling nozzle is designed specifically for discharging CNG of cylinder bundles (e.g. on trailers).

The TK23 CNG is equipped with a pin, which opens the check valve in the WEH® TN5 CNG Receptacle and releases the flow. Now the natural gas can be discharged from the cylinder bundles. Connecting and disconnecting can only occur in depressurized condition. The defueling nozzle is not equipped with an integrated shut-off valve.

The WEH® TK23 CNG is only suitable for special WEH® TN5 CNG Receptacles without filter (see accessories).

#### Application

Defueling nozzle for discharging of CNG only to be used with special WEH® TN5 CNG Receptacles without filter. Operation only by specially trained service personnel. Not for self-service operation!

**Attention:** The TK23 CNG may not be used for filling!

### TECHNICAL DATA

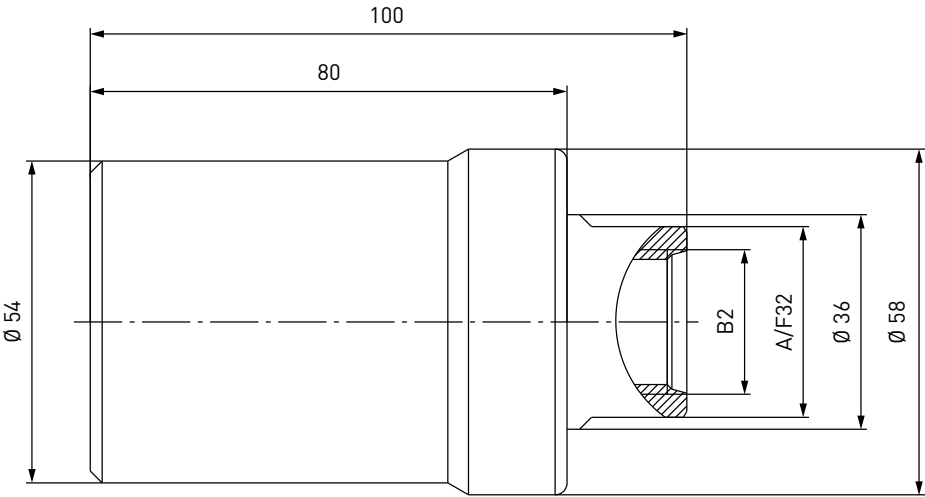
Characteristics	Basic version	Options
Nominal bore (DN)	Depending on design	On request
Pressure range	TK23 CNG: PN = 250 bar (3,600 psi)   PS = 350 bar TN5 CNG: PN = 250 bar (3,600 psi)   PS = 315 bar	
Temperature range	-40 °F up to +185 °F	On request
Material	Corrosion resistant	On request
Sealing material	Natural gas resistant	On request
Design	TK23 CNG: With plastic thermal protection TN5 CNG: Incl. fittings (only for nozzles with tube fitting)	On request
Weight	Approx. 2.20 lbs.	



# » Defueling nozzle TK23 CNG

## ORDERING | WEH® TK23 CNG Defueling nozzle

approx. dimensions (mm)



Part No.	Description	DN	Pressure (PN)	B2 (female thread)
C1-101404-X01	TK23 CNG	10	3,600 psi	UNF 7/8"-14*

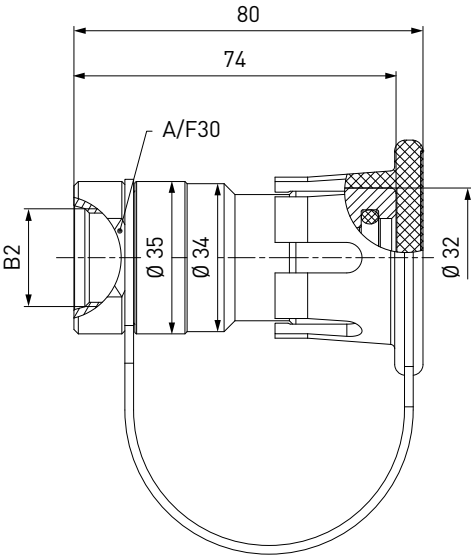
\* acc. to SAE J1926-1

## ACCESSORIES

The following accessories are available for the WEH® TK23 CNG Defueling nozzle:

### WEH® TN5 CNG Receptacle with female thread (without filter) for TK23 CNG

approx. dimensions (mm)



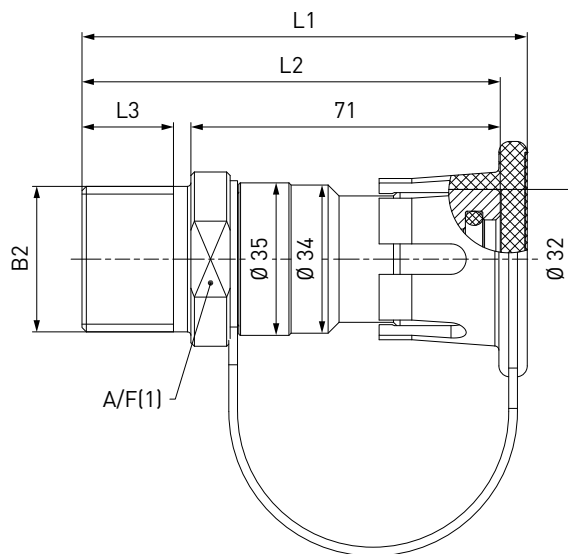
Part No.	Description	DN	Pressure (PN)	B2 (female thread)
C1-113499-X01	TN5 CNG	12	3,600 psi	UNF 7/8"-14*

\* acc. to SAE J1926-1

## » Defueling nozzle TK23 CNG

### WEH® TN5 CNG Receptacle with male thread (without filter) for TK23 CNG

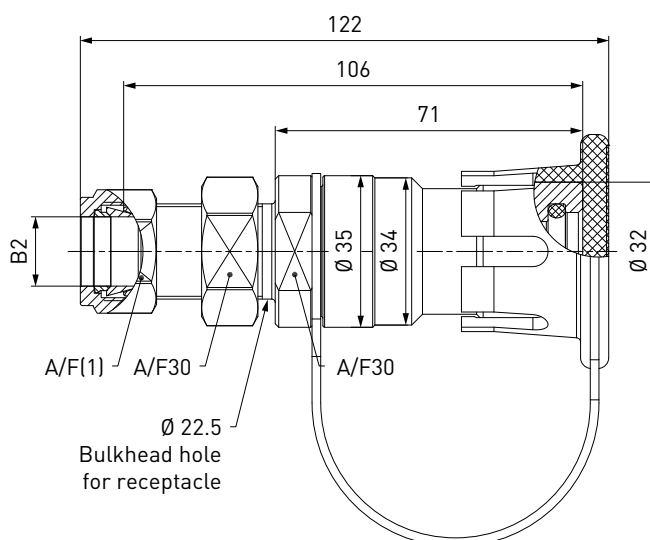
approx. dimensions (mm)



Part No.	Description	DN	Pressure (PN)	B2 (male thread)	L1	L2	L3	A/F(1)
<b>C1-101947</b>	TN5 CNG	12	3,600 psi	NPT 1/2"	97	91	16	30
<b>C1-101945-X01</b>	TN5 CNG	12	3,600 psi	NPT 1"	102	96	21	36

### WEH® TN5 CNG Receptacle with tube fitting (without filter) for TK23 CNG

approx. dimensions (mm)



Part No.	Description	DN	Pressure (PN)	B2	A/F(1)
<b>C1-132510</b>	TN5 CNG	10	3,600 psi	Tube Ø 12*	22
<b>C1-112803-X01</b>	TN5 CNG	12	3,600 psi	Tube Ø 16*	25

\* double ferrule fitting  
Incl. fittings

# » Defueling nozzle TK23 CNG

## Filling hoses

Filling hoses for connection to the defueling nozzle, complete with fittings and press-fittings supported by coil spring stubs.



Part No.	B1/B2 (female thread)	Hose length
E68-1033-3000	UNF 7/8"-14*	3 m
E68-1033-4000	UNF 7/8"-14*	4 m
E68-1033-5000	UNF 7/8"-14*	5 m

\* acc. to SAE J514, 37° cone

## Fittings

Stainless steel fittings for connecting port 'B2' of the defueling nozzle to the hose.

Part No.	Description	Connection defueling nozzle	Connection hose
W6703	Fitting	UNF 7/8"-14* male thread	UNF 7/8"-14** male thread

\* acc. to SAE J1926-1

\*\* acc. to SAE J514, 37° cone

Please see page 144 onwards for a detailed overview on all available fittings.

## Spare parts

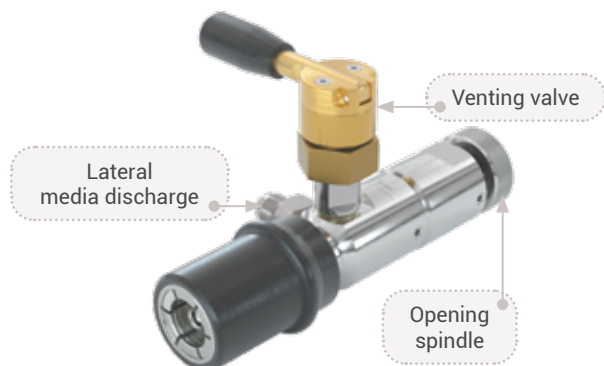
Various parts are available as spares for the TK23 CNG defueling nozzle.



Part No.	Description
W136121	1 Spare parts set TK23 CNG (sliding sleeve incl. metal sleeve and circlip)
E99-44923	Maintenance spray

## » Defueling nozzle TK6 CNG for cars

### DESCRIPTION



#### Features

- Discharge through the filling receptacle
- Opening spindle actuation
- No additional locking device required
- Version with and without venting valve
- Plastic thermal protection
- Only suitable for special WEH® TN1 CNG Receptacles without filter

Cars running on natural gas have to be serviced and checked regularly, a process involving the discharge of their pressurized fuel tanks. The WEH® TK6 CNG Defueling nozzle has been designed for this specific purpose.

The defueling nozzle is simply engaged onto the WEH® TN1 CNG Receptacle of the car and the opening spindle fully turned until the receptacle is fully open. Discharge can now take place through the lateral media discharge.

#### Application

Defueling nozzle for discharging of CNG fuel tanks of cars through the filling receptacle. Only to be used with special WEH® TN1 CNG Receptacles without filter. Please contact us!

Operation only by specially trained personnel. Not for self-service operation!

**Attention:** The TK6 CNG may not be used for filling!

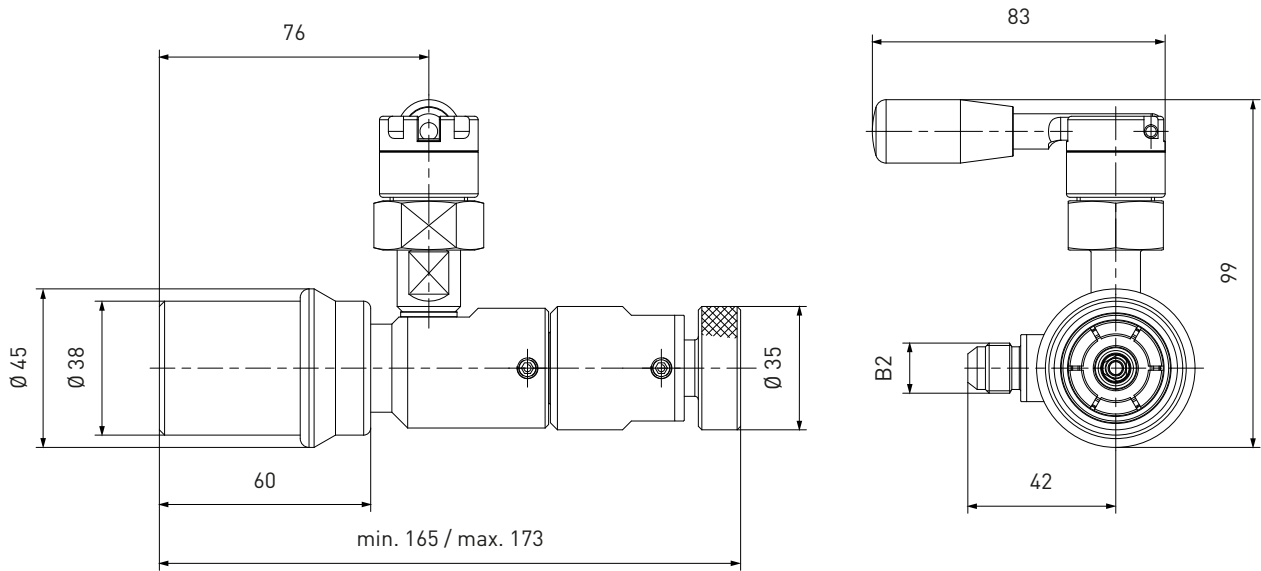
### TECHNICAL DATA

Characteristics	Basic version	Options
Nominal bore (DN)	6 mm	On request
Pressure range	PN = 250 bar (3,600 psi)   PS = 350 bar	
Temperature range	-40 °F up to +185 °F	On request
Material	Corrosion resistant	On request
Sealing material	Natural gas resistant	On request
Design	With plastic thermal protection, opening spindle and with or without venting valve	On request
Weight	Approx. 2.65 lbs.)with venting valve resp. approx. 2.20 lbs. without venting valve	

# » Defueling nozzle TK6 CNG for cars

## ORDERING | WEH® TK6 CNG Defueling nozzle with venting valve

approx. dimensions (mm)

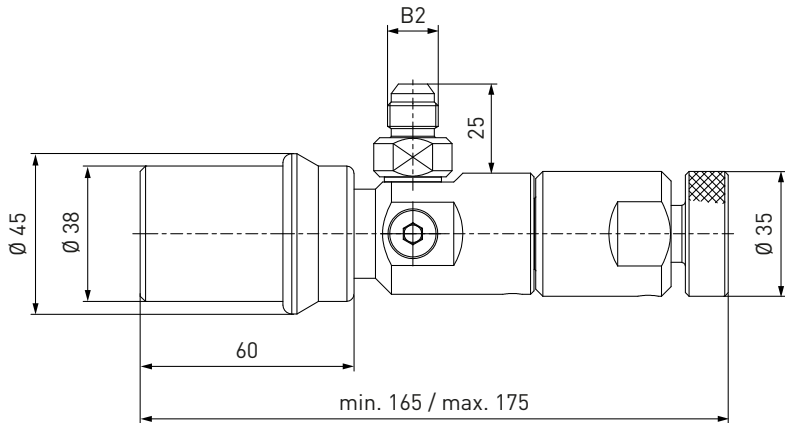


Part No.	Description	Pressure (PN)	B2 (male thread)
C1-111166-X01	TK6 CNG	3,600 psi	UNF 9/16"-18*

\* acc. to SAE J514, 37° cone

## ORDERING | WEH® TK6 CNG Defueling nozzle without venting valve

approx. dimensions (mm)



Part No.	Description	Pressure (PN)	B2 (male thread)
C1-105544-X01	TK6 CNG	3,600 psi	UNF 9/16"-18*

\* acc. to SAE J514, 37° cone

## » Defueling nozzle TK6 CNG for cars

### ACCESSORIES

The following accessories are available for the WEH® TK6 CNG Defueling nozzle:

#### Filling hoses

Filling hoses for connection to the defueling nozzle, complete with fittings and press-fittings supported by coil spring stubs.



Part No.	B1/B2 (female thread)	Hose length
E68-1031-3000	UNF 9/16"-18*	3 m
E68-1031-4000	UNF 9/16"-18*	4 m
E68-1031-5000	UNF 9/16"-18*	5 m

\* acc. to SAE J514, 37° cone

## » Defueling nozzle TK6 CNG for cars

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### Spare parts

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Various parts are available as spares for the TK6 CNG defueling nozzle.

Part No.	Description
E99-44923	Maintenance spray

## » Defueling nozzle TK21 CNG for buses and trucks

### DESCRIPTION



#### Features

- Discharge through the filling receptacle
- Opening spindle actuation
- No additional locking device required
- Plastic thermal protection
- Only suitable for WEH® TN5 CNG Receptacles without filter

Buses and trucks running on natural gas have to be serviced and checked regularly, a process involving the discharge of their pressurized fuel tanks. The WEH® TK21 CNG Defueling nozzle has been designed for this specific purpose.

The defueling nozzle is simply engaged onto the WEH® TN5 CNG Receptacle of the bus or truck and the opening spindle fully turned until the receptacle is fully open. Discharge can now take place through the lateral media discharge.

#### Application

Defueling nozzle for discharging of CNG fuel tanks of buses and trucks through the filling receptacle. Only to be used with WEH® TN5 CNG Receptacles without filter. Operation only by specially trained personnel. Not for self-service operation!

**Attention:** The TK21 CNG may not be used for filling!

### TECHNICAL DATA

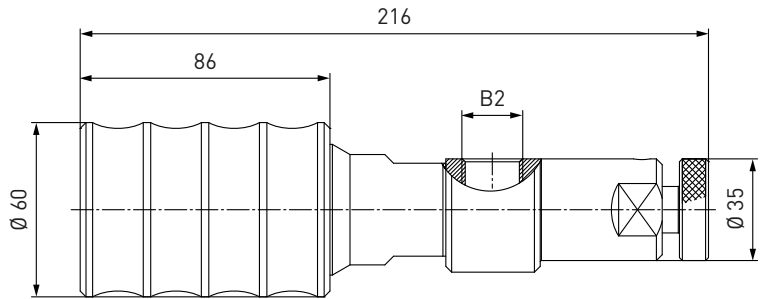
Characteristics	Basic version	Options
Nominal bore (DN)	8 mm	On request
Max. allowable operating pressure	PS = 350 bar (5,000 psi)	
Temperature range	-40 °F up to +185 °F	On request
Material	Corrosion resistant	On request
Sealing material	Natural gas resistant	On request
Design	With plastic thermal protection and opening spindle	On request
Weight	Approx. 4.63 lbs.	



# » Defueling nozzle TK21 CNG for buses and trucks

## ORDERING | WEH® TK21 CNG Defueling nozzle

approx. dimensions (mm)



Part No.	Description	Pressure (PS)	B2 (female thread)
C1-12641-X2-X01	TK21 CNG	5,000 psi	G1/2"*

\* acc. to DIN 3852-2

## ACCESSORIES

The following accessories are available for the WEH® TK21 CNG Defueling nozzle:

### Filling hoses

Filling hoses for connection to the defueling nozzle, complete with fittings and press-fittings supported by coil spring stubs.



Part No.	B1/B2 (female thread)	Hose length
E68-1033-3000	UNF 7/8"-14*	3 m
E68-1033-4000	UNF 7/8"-14*	4 m
E68-1033-5000	UNF 7/8"-14*	5 m

\* acc. to SAE J514, 37° cone

## » Defueling nozzle **TK21 CNG** for buses and trucks

### Fittings

Stainless steel fittings for connecting port 'B2' of the defueling nozzle to the hose.

Part No.	Description	Connection defueling nozzle	Connection hose
<b>W61524</b>	Fitting	G1/2"* male thread	UNF 7/8"-14** male thread

\* acc. to DIN 3852-2

\*\* acc. to SAE J514, 37° cone

Please see page 144 onwards for a detailed overview on all available fittings.

## » Defueling nozzle TK21 CNG for buses and trucks

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### Spare parts

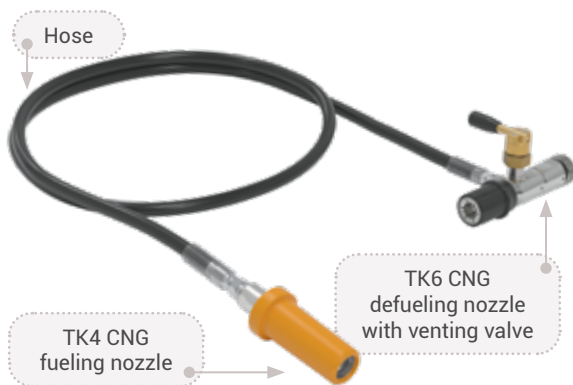
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Various parts are available as spares for the TK21 CNG defueling nozzle.

Part No.	Description
E99-44923	Maintenance spray

## » Emergency fueling set TZ21 CNG for cars

### DESCRIPTION



#### Features

- Refueling of broken down CNG cars with bi-fuelled service vehicles or mobile natural gas cylinders
- Only suitable for special WEH® TN1 CNG Receptacles (without filter)
- Consisting of WEH® TK4 CNG Fueling nozzle, WEH® TK6 CNG defueling nozzle with integrated venting valve, hose and fittings
- Colour coding (3,000 psi black, 3,600 psi yellow)

The components for conversion of the service vehicle are NOT included in this fueling set!

A bi-fuelled (CNG and petrol) vehicle is equipped with a bypass with ball valve. Its manual operation circumvents the internal check valve in front of the pressure vessel (natural gas tank). This subsequent conversion can be effected without problems by any vehicle converter. The CNG tank of the service vehicle will be refuelled at the CNG fueling station. The service vehicle running for this purpose on petrol, drives to the broken down mono-fuelled vehicle. The broken down vehicle can be refuelled locally using the WEH® TZ21 CNG emergency fueling set.

The TK6 CNG defueling nozzle is placed onto the receptacle of the service vehicle. The TK4 CNG fueling nozzle is connected to the broken down vehicle. Both vehicles are connected with a hose to each other. By rotating the opening spindle at the

TK6 CNG defueling nozzle the check valve of the WEH® TN1 CNG Receptacle opens. The ball valve at the bypass of the service

vehicle is opened slowly. At the TK4 CNG fueling nozzle the natural gas is lead into the empty tank. After refueling the ball valve at the bypass of the service vehicle is closed. The opening spindle of the TK6 CNG defueling nozzle is rotated back and the check valve of the WEH® TN1 CNG Receptacle is closed. Then the integrated venting valve at the TK6 CNG vents the TZ21 CNG emergency fueling set. The TK6 CNG defueling nozzle and the TK4 CNG fueling nozzle can be removed. Now the monofuelled CNG vehicle can drive away with a refuelled CNG tank.

#### Note

A special WEH® TN1 CNG Receptacle (without filter) has to be installed at the service vehicle for proper function. Please contact us!

#### Application

Emergency fueling set for refueling cars from a service vehicle.

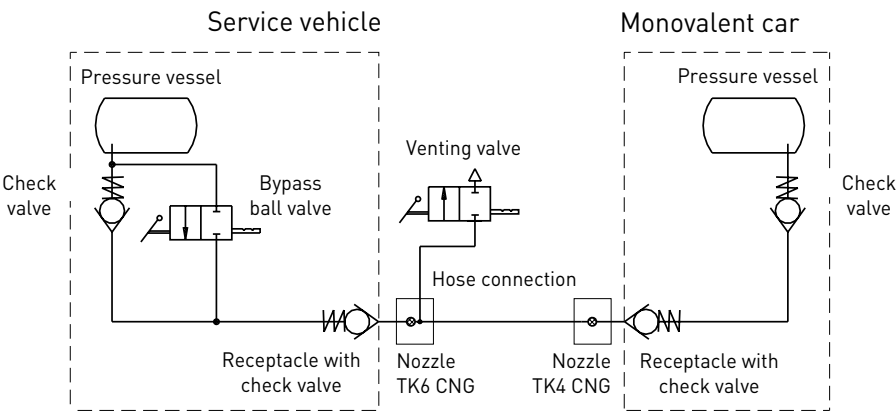
Only to be used by specially trained service personnel. Not for self-service operation!

### TECHNICAL DATA

Characteristics	Basic version	Options
Nominal bore (DN)	6 mm	
Pressure range	P30 acc. to ANSI NGV1 / B200 acc. to ISO 14469 PN = 200 bar (3,000 psi)   PS = 300 bar P36 acc. to ANSI NGV1 / B250 acc. to ISO 14469 PN = 250 bar (3,600 psi)   PS = 350 bar	
Temperature range	-40 °F up to +185 °F	On request
Material	Corrosion resistant	On request
Sealing material	Natural gas resistant	On request
Design	Consisting of TK4 CNG fueling nozzle, TK6 CNG defueling nozzle with venting valve, hose (3 m or 5 m) and fittings	On request

# » Emergency fueling set TZ21 CNG for cars

## ORDERING | WEH® TZ21 CNG Emergency fueling set



Part No.	Description	Hose length	Pressure (PN)
C1-126020	TZ21 CNG	3 m	3,000 psi
C1-126022	TZ21 CNG	3 m	3,600 psi
C1-126021	TZ21 CNG	5 m	3,000 psi
C1-126023	TZ21 CNG	5 m	3,600 psi

## ACCESSORIES

The following accessories are available for the WEH® TZ21 CNG Emergency fueling set:

### Bypass

Bypass set for installation at the service vehicle, consisting of a 2-way ball valve and a TVR1 CNG check valve.



Part No.	Description
C1-32047	Bypass set with tube Ø 6 mm

### Spare parts

Various parts are available as spares for the TZ21 CNG emergency fueling set.

Part No.	Description
W132266	Spare parts set TK4 CNG 200 bar / 3,000 psi (black sliding sleeve incl. disc and 3 screws)
W132267	Spare parts set TK4 CNG 250 bar / 3,600 psi (yellow sliding sleeve incl. disc and 3 screws)
E99-44923	Maintenance spray

## » Emergency fueling set TZ22 CNG for buses and trucks

### DESCRIPTION



#### Features

- Refueling of broken down CNG buses or trucks with bi-fuelled service vehicles
- Only suitable for WEH® TN5 CNG Receptacles (without filter)
- Consisting of WEH® TK22 CNG fueling nozzle, WEH® TK21 CNG defueling nozzle, 2-way ball valve, hose and fittings

The components for conversion of the service vehicle are NOT included in this fueling set!

A bi-fuelled (CNG and petrol) vehicle is equipped with a bypass with ball valve. Its manual operation circumvents the internal check valve in front of the pressure vessel (natural gas tank). This subsequent conversion can be effected without problems by any vehicle converter. The CNG tank of the service vehicle will be refuelled at the CNG fueling station. The service vehicle running for this purpose on petrol, drives to the broken down mono-fuelled vehicle. The broken down vehicle can be refuelled locally using the WEH® TZ22 CNG emergency fueling set.

The TK21 CNG defueling nozzle is placed onto the receptacle of the service vehicle. The TK22 CNG fueling nozzle is connected to the broken down vehicle. Both vehicles are connected with a hose to each other. By rotating the opening spindle at the TK21 CNG defueling nozzle the check valve of the WEH® TN5 CNG Receptacle opens. The ball valve at the bypass of the service vehicle is opened slowly. At the TK22 CNG fueling nozzle the natural gas is lead into the empty tank. After refueling the ball valve at the bypass of the service vehicle is closed. The opening spindle of the TK21 CNG defueling nozzle is rotated back and the check valve of the WEH® TN5 CNG Receptacle is closed. Then the system is vented by actuating the 2-way ball valve. The TK21 CNG defueling nozzle and the TK22 CNG fueling nozzle can be removed. Now the monofuelled CNG vehicle can drive away with a refuelled CNG tank.

#### Note

A WEH® TN5 CNG Receptacle (without filter) has to be installed at the service vehicle for proper function.

#### Application

Emergency fueling set for refueling buses and trucks from a service vehicle.

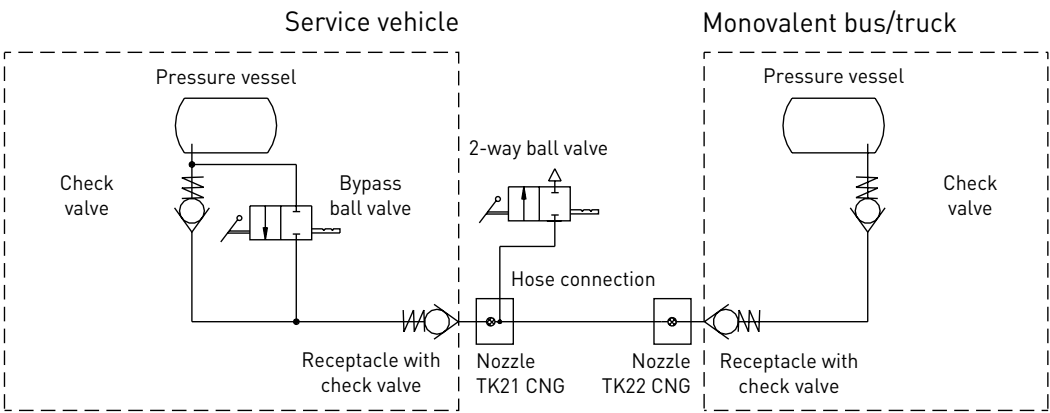
Only to be used by specially trained service personnel. Not for self-service operation!

### TECHNICAL DATA

Characteristics	Basic version	Options
Nominal bore (DN)	8 mm	
Pressure range	P30HD acc. to ANSI NGV1 / C200 acc. to ISO 14469 PN = 200 bar (3,000 psi)   PS = 300 bar	
Temperature range	-40 °F up to +185 °F	On request
Material	Corrosion resistant	On request
Sealing material	Natural gas resistant	On request
Design	Consisting of TK22 CNG fueling nozzle, TK21 CNG defueling nozzle, 2-way ball valve, hose (5 m) and fittings	On request

# » Emergency fueling set TZ22 CNG for buses and trucks

**ORDERING** | WEH® TZ22 CNG Emergency fueling set



Part No.	Description	Hose length	Pressure (PN)
C1-68558-X1-X01	TZ22 CNG	5 m	3,000 psi

## ACCESSORIES

The following accessories are available for the WEH® TZ22 CNG Emergency fueling set:

### Bypass

Bypass set for installation at the service vehicle, consisting of a 2-way ball valve and a TVR1 CNG check valve.



Part No.	Description
C1-32047	Bypass set with tube Ø 6 mm

### Spare parts

Various parts are available as spares for the TZ22 CNG emergency fueling set.

Part No.	Description
W127951	Spare parts set TK22 CNG 3,000 psi (grip sleeve incl. metal sleeve and circlip)
E99-44923	Maintenance spray

## » CNG hoses

### DESCRIPTION



#### Features

- Coil spring stubs on both sides
- Different lengths available
- Permanently bonded hoses possible
- Tailor-made according to customers' specifications

We also offer filling and venting hoses with press-fittings supported by coil spring stubs for connecting fueling nozzle and breakaway coupling or dispenser. The hoses are available with the appropriated fittings. The filling and venting hoses can be delivered in different standard sizes and also bonded permanently together.

#### Application

Filling and venting hoses for installation at the dispenser.

### TECHNICAL DATA

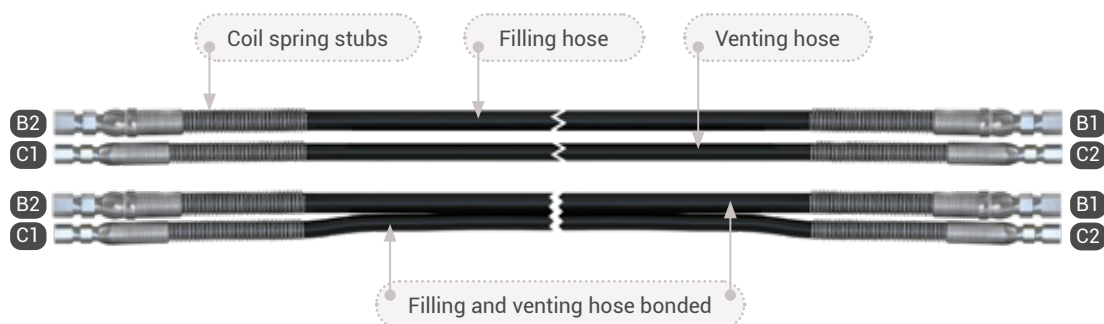
Characteristics	Basic version
Max. allowable operating pressure PS	5,000 psi
Temperature range	-40 °F up to +185 °F
Sealing material	Natural gas resistant
Conformity / Tests / Approvals	Comply to NFPA 52



## » CNG hoses

### ORDERING | Hose sets in connection with TSA1 CNG / TSA5 CNG breakaway coupling

Filling and venting hoses for connecting fueling nozzle and TSA1 CNG / TSA5 CNG breakaway coupling, complete with fittings and press-fittings supported by coil spring stubs. The designs for TK17 CNG, TK16 CNG and TK26 CNG fueling nozzles are also available with permanently bonded filling and venting hose. Please contact us!



#### Hose sets for TK17 CNG / TK16 CNG

Part No.	B1/B2 (female thread)	C1/C2 (female thread)	Hose length
<b>C1-50487</b>	UNF 9/16"-18*	UNF 7/16"-20*	3 m
<b>C1-42304</b>	UNF 9/16"-18*	UNF 7/16"-20*	4 m
<b>C1-58587</b>	UNF 9/16"-18*	UNF 7/16"-20*	5 m

\* acc. to SAE J514, 37° cone

#### Hose sets for TK10 CNG / TK24 CNG

Part No.	B1/B2 (female thread)	C1/C2 (female thread)	Hose length
<b>C1-106385</b>	UNF 7/16"-20*	UNF 7/16"-20*	3 m
<b>C1-106386</b>	UNF 7/16"-20*	UNF 7/16"-20*	4 m
<b>C1-106387</b>	UNF 7/16"-20*	UNF 7/16"-20*	5 m

\* acc. to SAE J514, 37° cone

#### Hose sets for TK26 CNG

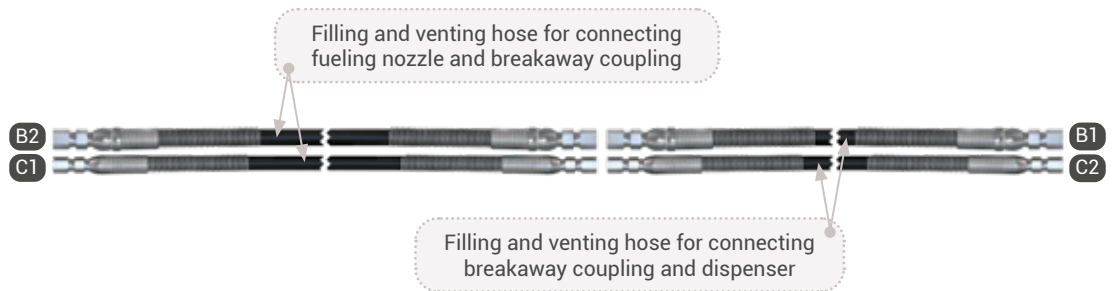
Part No.	B1/B2 (female thread)	C1/C2 (female thread)	Hose length
<b>C1-101749</b>	UNF 7/8"-14*	UNF 9/16"-18*	3 m
<b>C1-102079</b>	UNF 7/8"-14*	UNF 9/16"-18*	4 m
<b>C1-102508</b>	UNF 7/8"-14*	UNF 9/16"-18*	5 m

\* acc. to SAE J514, 37° cone

## » CNG hoses

### ORDERING | Hose sets in connection with TSA2 CNG / TSA6 CNG inline breakaway coupling

Filling and venting hoses for connecting fueling nozzle / dispenser and TSA2 CNG / TSA6 CNG inline breakaway coupling, complete with fittings and press-fittings supported by coil spring stubs.



#### Hose sets for TK17 CNG / TK16 CNG

Part No.	B1/B2 (female thread)	C1/C2 (female thread)	Hose length
<b>On request</b>	UNF 9/16"-18*	UNF 7/16"-20*	2.5   0.5 m
<b>On request</b>	UNF 9/16"-18*	UNF 7/16"-20*	3.5   0.5 m
<b>On request</b>	UNF 9/16"-18*	UNF 7/16"-20*	4.5   0.5 m

\* acc. to SAE J514, 37° cone

#### Hose sets for TK10 CNG / TK24 CNG

Part No.	B1/B2 (female thread)	C1/C2 (female thread)	Hose length
<b>C1-106395</b>	UNF 7/16"-20*	UNF 7/16"-20*	2.5   0.5 m
<b>C1-106396</b>	UNF 7/16"-20*	UNF 7/16"-20*	3.5   0.5 m
<b>C1-106397</b>	UNF 7/16"-20*	UNF 7/16"-20*	4.5   0.5 m

\* acc. to SAE J514, 37° cone

#### Hose sets for TK26 CNG

Part No.	B1/B2 (female thread)	C1/C2 (female thread)	Hose length
<b>On request</b>	UNF 7/8"-14*	UNF 9/16"-18*	2.5   0.5 m
<b>On request</b>	UNF 7/8"-14*	UNF 9/16"-18*	3.5   0.5 m
<b>On request</b>	UNF 7/8"-14*	UNF 9/16"-18*	4.5   0.5 m

\* acc. to SAE J514, 37° cone

## » CNG hoses

### ORDERING | Filling hoses

Filling hoses for connecting fueling / defueling nozzle and dispenser, complete with fittings and press-fittings supported by coil spring stubs.



#### Filling hoses for TK4 CNG / TK1 CNG / TK6 CNG

Part No.	B1/B2 (female thread)	Hose length
<b>E68-1031-3000</b>	UNF 9/16"-18*	3 m
<b>E68-1031-4000</b>	UNF 9/16"-18*	4 m
<b>E68-1031-5000</b>	UNF 9/16"-18*	5 m

\* acc. to SAE J514, 37° cone

#### Filling hoses for TK10 CNG / TK24 CNG

Part No.	B1/B2 (female thread)	Hose length
<b>E68-1032-3000</b>	UNF 7/16"-20*	3 m
<b>E68-1032-4000</b>	UNF 7/16"-20*	4 m
<b>E68-1032-5000</b>	UNF 7/16"-20*	5 m

\* acc. to SAE J514, 37° cone

#### Filling hoses for TK22 CNG / TK23 CNG / TK21 CNG

Part No.	B1/B2 (female thread)	Hose length
<b>E68-1033-3000</b>	UNF 7/8"-14*	3 m
<b>E68-1033-4000</b>	UNF 7/8"-14*	4 m
<b>E68-1033-5000</b>	UNF 7/8"-14*	5 m

\* acc. to SAE J514, 37° cone

## » Fittings

### DESCRIPTION

Stainless steel fittings for connecting fueling components.



Part No.	Description	Connection	Connection
E80-97227	Fitting	UNF 9/16"-18* female thread	UNF 9/16"-18* female thread
E80-79538	Fitting	UNF 9/16"-18* female thread	UNF 9/16"-18** female thread
E80-647P	Fitting	UNF 9/16"-18* female thread	UNF 7/8"-14* male thread
E80-66850	Fitting	UNF 9/16"-18* female thread	UNF 3/4"-16* male thread
E80-69486	Fitting	UNF 9/16"-18* female thread	NPT 3/8" male thread (60°)
E80-69485	Fitting	UNF 9/16"-18* female thread	NPT 1/2" male thread (60°)
E80-65592	Fitting	UNF 9/16"-18* female thread	NPT 1/4" female thread
E80-76299	Fitting	UNF 9/16"-18* female thread	Plug
E80-787P	Fitting	UNF 9/16"-18* male thread	UNF 9/16"-18* male thread
W6704	Fitting	UNF 9/16"-18* male thread	UNF 7/8"-14** male thread
W83033	Fitting	UNF 9/16"-18* male thread	Tube Ø 6 mm***
W41811	Fitting	UNF 9/16"-18* male thread	Tube Ø 1/4" mm***
E80-678P	Fitting	UNF 9/16"-18* male thread	G1/8" male thread
E80-32728	Fitting	UNF 9/16"-18* male thread	G1/4" male thread
E80-60018	Fitting	UNF 9/16"-18* male thread	G3/8" male thread
W61523	Fitting	UNF 9/16"-18* male thread	G1/2" male thread
E80-53226	Fitting	UNF 9/16"-18* male thread	G1/2" female thread
E48-105737	Fitting	UNF 9/16"-18* male thread	NPT 1/4" female thread
W33888	Fitting	UNF 9/16"-18* male thread	NPT 1/4" male thread
E80-761P	Fitting	UNF 9/16"-18* male thread	NPT 3/8" male thread
E80-59169	Fitting	UNF 9/16"-18* male thread	NPT 1/2" male thread
E80-32932	Fitting	UNF 9/16"-18* male thread	M24x1.5 male thread (Ermeto 24° ,S')
W65970	Fitting	UNF 9/16"-18* male thread	BSPP 1/4" male thread
E69-63131	Fitting	UNF 9/16"-18* male thread	Plug
W6702	Fitting	UNF 9/16"-18** male thread	UNF 9/16"-18* male thread
W6705	Fitting	UNF 9/16"-18** male thread	UNF 7/16"-20* male thread
W6927	Fitting	UNF 9/16"-18** male thread	UNF 7/8"-14* male thread
W48605	Fitting	UNF 9/16"-18** male thread	UNF 3/4"-16* male thread
W41812	Fitting	UNF 9/16"-18** male thread	Tube Ø 1/4" mm***
E69-124048	Fitting	UNF 9/16"-18** male thread	Tube Ø 10 mm***
W6980	Fitting	UNF 9/16"-18** male thread	G1/4" female thread
E80-713P	Fitting	UNF 9/16"-18** male thread	G1/4" male thread (30°)
E80-561P	Fitting	UNF 9/16"-18** male thread	NPT 1/4" male thread
W59695	Fitting	UNF 9/16"-18-LH** male thread	UNF 9/16"-18* male thread
E80-52705	Fitting	UNF 7/8"-14* female thread	UNF 9/16"-18* male thread
E80-105411	Fitting	UNF 7/8"-14* female thread	UNF 7/16"-20* male thread
E80-48976	Fitting	UNF 7/8"-14* female thread	NPT 1/4" male thread
E80-724P	Fitting	UNF 7/8"-14* male thread	UNF 7/8"-14* male thread
W6703	Fitting	UNF 7/8"-14* male thread	UNF 7/8"-14** male thread

## » Fittings

Part No.	Description	Connection	Connection
<b>E80-32781</b>	Fitting	UNF 7/8"-14* male thread	UNF 7/8"-20 male thread (20°)
<b>E80-72492</b>	Fitting	UNF 7/8"-14* male thread	Tube Ø 16 mm***
<b>E80-33425</b>	Fitting	UNF 7/8"-14* male thread	G1/2" female thread
<b>W61524</b>	Fitting	UNF 7/8"-14* male thread	G1/2" male thread
<b>E80-61345</b>	Fitting	UNF 7/8"-14* male thread	NPT 1/4" male thread
<b>E80-33976</b>	Fitting	UNF 7/8"-14* male thread	NPT 3/8" male thread
<b>E80-50420</b>	Fitting	UNF 7/8"-14* male thread	NPT 1/2" male thread
<b>E80-648P</b>	Fitting	UNF 7/16"-20* female thread	UNF 9/16"-18* male thread
<b>E80-32692</b>	Fitting	UNF 7/16"-20* female thread	UNF 7/16"-20* male thread
<b>E80-62138</b>	Fitting	UNF 7/16"-20* female thread	NPT 1/4" female thread
<b>E80-32691</b>	Fitting	UNF 7/16"-20* male thread	UNF 9/16"-18* female thread
<b>E80-64236</b>	Fitting	UNF 7/16"-20* male thread	UNF 7/16"-20* male thread
<b>C1-83055</b>	Fitting	UNF 7/16"-20* male thread	Tube Ø 6 mm***
<b>W88589</b>	Fitting	UNF 7/16"-20* male thread	Tube Ø 1/4" mm***
<b>E69-1162</b>	Fitting	UNF 7/16"-20* male thread	Tube Ø 3/8" mm***
<b>E80-101817</b>	Fitting	UNF 7/16"-20* male thread	G1/2" female thread
<b>W61521</b>	Fitting	UNF 7/16"-20* male thread	G1/4" male thread
<b>E80-34556</b>	Fitting	UNF 7/16"-20* male thread	G1/2" male thread
<b>E80-33659</b>	Fitting	UNF 7/16"-20* male thread	NPT 1/4" male thread
<b>E80-60511</b>	Fitting	UNF 7/16"-20* male thread	M12x1.0 male thread
<b>E69-63130</b>	Fitting	UNF 7/16"-20* male thread	Plug
<b>E80-41202</b>	Fitting	NPT 1/4" male thread	UNF 7/8"-14 female thread
<b>E80-54081</b>	Fitting	NPT 1/4" male thread	UNF 7/8"-14** male thread
<b>E80-42412</b>	Fitting	NPT 1/4" male thread	Tube Ø 6 mm***
<b>E80-69354</b>	Fitting	NPT 1/4" male thread	Tube Ø 8 mm***
<b>E26-167M</b>	Fitting	NPT 1/4" male thread	W21.8x1/14" male thread

\* acc. to SAE J514, 37° cone

\*\* acc. to SAE J1926-1

\*\*\* double ferrule fitting

## » NZ/GOST standard

### DESCRIPTION



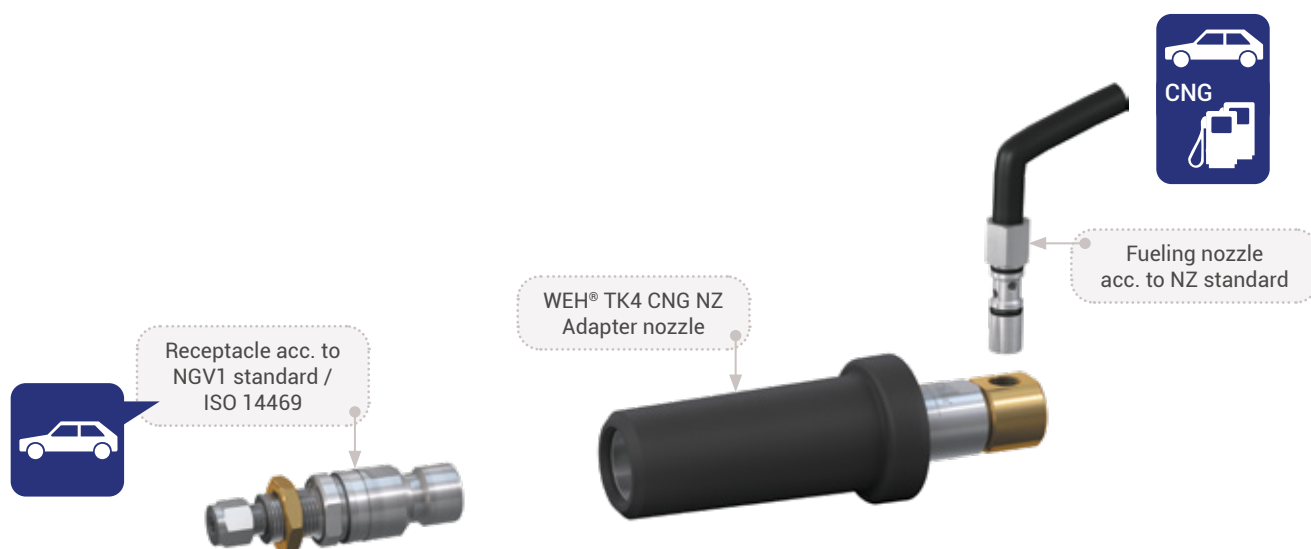
#### Features

- Push-Pull actuation
- Plastic thermal protection
- WEH® Jaw locking mechanism
- High-grade materials
- Compact design

Fueling nozzles must be adapted to country-specific standards as the NGV1 standard and the ISO 14469 are not yet used worldwide. We, therefore, adapted our WEH® TK4 CNG Fueling nozzle for refueling vehicles with NGV1 standard / ISO 14469 at fueling stations in China, South America, Southeast Asia, Russia, etc. We offer special versions for installation at fueling stations having NZ or GOST standard.

#### Application

Adaptor nozzle for CNG fast filling of cars having a NGV1 / ISO 14469 receptacle profile at car fueling stations with NZ or GOST standard. Operation only by specially trained service personnel. Not for self-service operation!



### TECHNICAL DATA

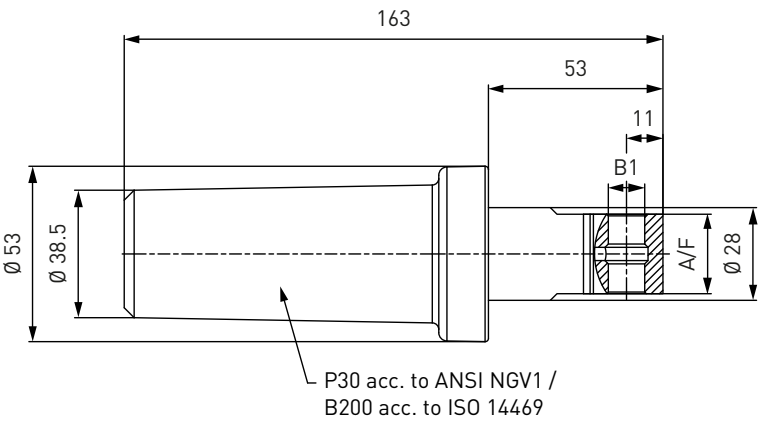
Characteristics	Basic version	Options
Pressure range	P30 acc. to ANSI NGV1 / B200 acc. to ISO 14469 PN = 200 bar (3,000 psi)   PS = 300 bar	
Temperature range	-40 °F up to +185 °F	On request
Material	Corrosion resistant	On request
Sealing material	Natural gas resistant	On request

# » NZ/GOST standard

## ORDERING | WEH® TK4 CNG NZ Adaptor nozzle

Adaptor nozzle for refueling a car having a NGV1 / ISO 14469 receptacle profile at fueling stations with a fueling nozzle acc. to NZ standard. **Not for self-service operation!**

approx. dimensions (mm)

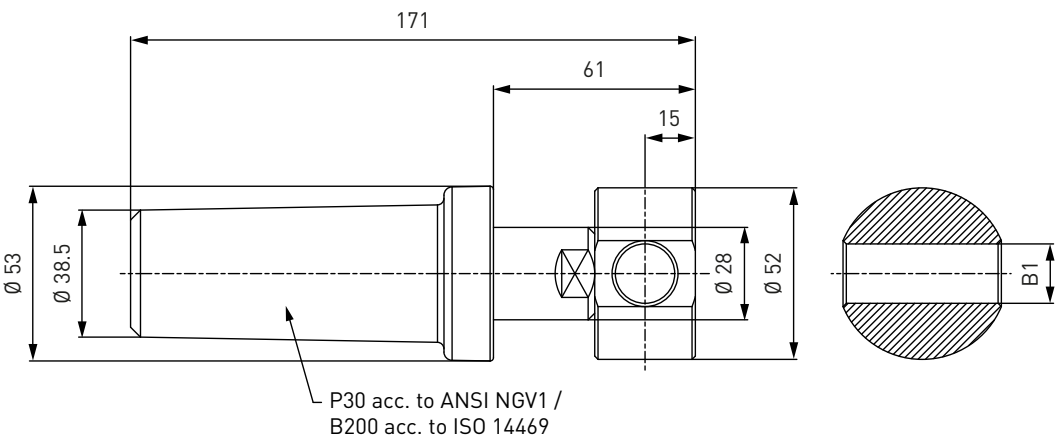


Part No.	Description	Pressure (PN)	B1	A/F
C1-126024-X01	TK4 CNG NZ	3,000 psi	NZ Ø 11.0 (e.g. Brasil, Pakistan, Bangladesh, India)	24
C1-126025-X01	TK4 CNG NZ	3,000 psi	NZ Ø 12.0 (e.g. China)	25
C1-126026-X01	TK4 CNG NZ	3,000 psi	NZ Ø 1/2" / Ø 12.7 (e.g. Argentina)	24

## ORDERING | WEH® TK4 CNG GOST Adaptor nozzle

Adaptor nozzle for refueling a car having a NGV1 / ISO 14469 receptacle profile at fueling stations with a fueling nozzle acc. to GOST standard. **Not for self-service operation!**

approx. dimensions (mm)



Part No.	Description	Pressure (PN)	B1
C1-126027-X01	TK4 CNG GOST	3,000 psi	GOST Ø 18.0 (Russia)

## » NZ/GOST standard

### DESCRIPTION



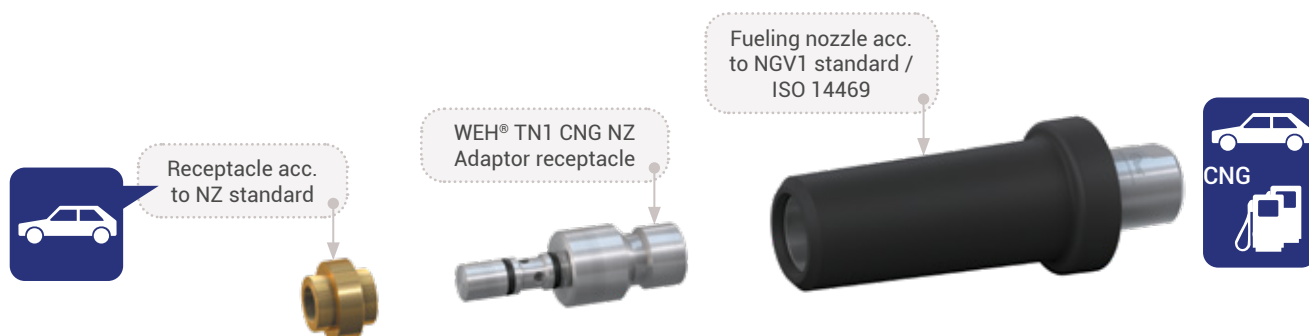
#### Features

- Compatible with NZ or GOST standard
- Sealing-friendly design

Fueling products must be adapted to country-specific standards as the NGV1 standard and the ISO 14469 are not yet used worldwide. We, therefore, adapted our WEH® TN1 CNG Receptacle for refueling vehicles with NZ or GOST standard at NGV1 / ISO 14469 fueling stations in China, South America, Southeast Asia, Russia, etc. We offer TN1 CNG adaptor receptacles for connection to the NZ or GOST receptacle of the vehicle. The adaptor receptacle can also be permanently installed.

#### Application

Adaptor receptacle for CNG refueling of cars having a NZ or GOST receptacle profile at car fueling stations with NGV1 standard / ISO 14469. Operation only by specially trained service personnel. Not for self-service operation!



### TECHNICAL DATA

Characteristics	Basic version	Options
Pressure range	PN = 200 bar (3,000 psi)   PS = 300 bar	
Temperature range	-40 °F up to +248 °F	On request
Material	Corrosion resistant	On request
Sealing material	Natural gas resistant	On request

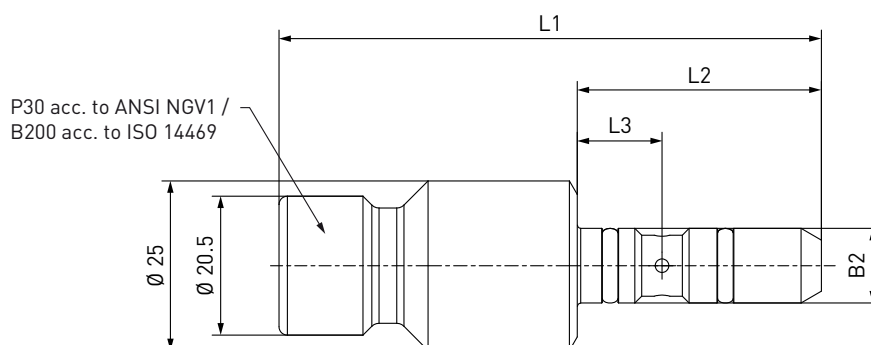


## » NZ/GOST standard

### ORDERING | WEH® TN1 CNG NZ Adaptor receptacle

Adaptor receptacle for refueling a car having a NZ receptacle profile at fueling stations with a fueling nozzle acc. to NGV1 standard / ISO 14469. **Not for self-service operation!**

approx. dimensions (mm)



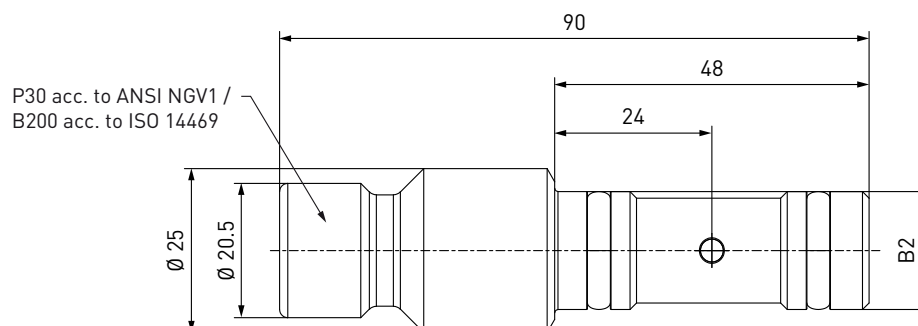
Part No.	Description	Pressure (PN)	B2	L1	L2	L3
<b>C1-67266</b>	TN1 CNG NZ	3,000 psi	NZ Ø 11.0 (e.g. Brasil, Pakistan, Bangladesh, India)	80	36	12.5
<b>C1-66731</b>	TN1 CNG NZ	3,000 psi	NZ Ø 12.0 (e.g. China)	75	34	12.5
<b>C1-61763</b>	TN1 CNG NZ	3,000 psi	NZ Ø 1/2" / Ø 12.7 (e.g. Argentina)	71	30	15
<b>C1-75326*</b>	TN1 CNG NZ	3,000 psi	NZ Ø 11.0 (e.g. Brasil, Pakistan, Bangladesh, India)	85	44	12.5
<b>C1-66634*</b>	TN1 CNG NZ	3,000 psi	NZ Ø 1/2" / Ø 12.7 (e.g. Argentina)	85	44	12.5

\* for permanent mounting with self-retaining nut

### ORDERING | WEH® TN1 CNG GOST Adaptor receptacle

Adaptor receptacle for refueling a car having a GOST receptacle profile at fueling stations with a fueling nozzle acc. to NGV1 standard / ISO 14469. **Not for self-service operation!**

approx. dimensions (mm)



Part No.	Description	Pressure (PN)	B2
<b>C1-77971</b>	TN1 CNG GOST	3,000 psi	GOST Ø 18.0 mm (Russia)

## » Buses and trucks

### DESCRIPTION



#### Features

- Push-Pull actuation
- Plastic thermal protection
- WEH® Jaw locking mechanism
- Integrated shut-off valve
- Colour coding (3,000 psi black, 3,600 psi yellow)
- High-grade materials

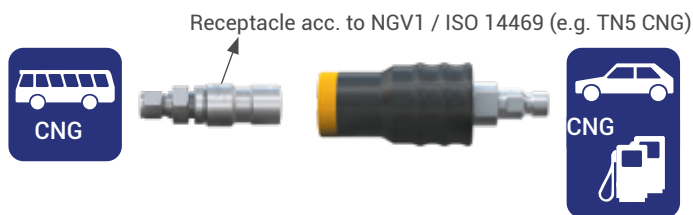
WEH has developed special adaptor nozzles for refueling of CNG buses and trucks at car fueling stations and CNG cars at bus / truck fueling stations.

#### Application

Adaptor nozzle for fast filling of CNG buses and trucks at car fueling stations or for fast filling of CNG cars at bus / truck fueling stations acc. to NGV1 Standard / ISO 14469.

Operation only by specially trained service personnel. Not for self-service operation!

#### TK22N CNG:



#### TK4-TN5 CNG:



### TECHNICAL DATA

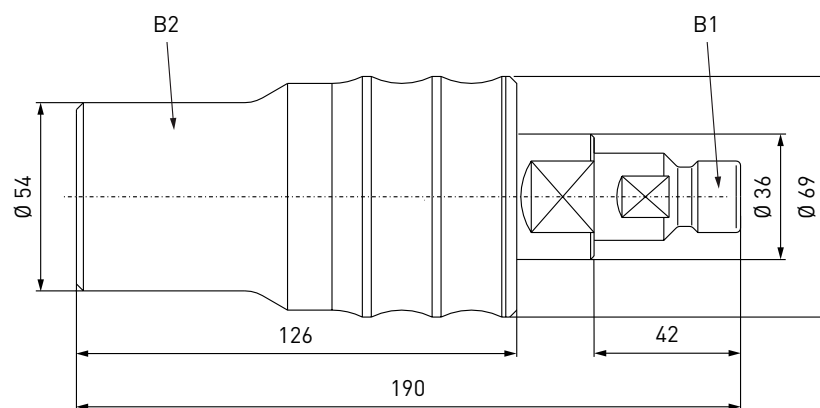
Characteristics	Basic version	Options
Pressure range	P30 acc. to ANSI NGV1 / B200 acc. to ISO 14469 or P30HD acc. to ANSI NGV1 / C200 acc. to ISO 14469 PN = 200 bar (3,000 psi)   PS = 300 bar P36 acc. to ANSI NGV1 / B250 acc. to ISO 14469 or P36HD acc. to ANSI NGV1 / C250 acc. to ISO 14469 PN = 250 bar (3,600 psi)   PS = 350 bar	
Temperature range	-40 °F up to +185 °F	On request
Material	Corrosion resistant	On request
Sealing material	Natural gas resistant	On request

## » Buses and trucks

### ORDERING | WEH® TK22N CNG Adaptor nozzle

CNG adaptor nozzle for refueling buses and trucks at car fueling stations. **Not for self-service operation!**

approx. dimensions (mm)

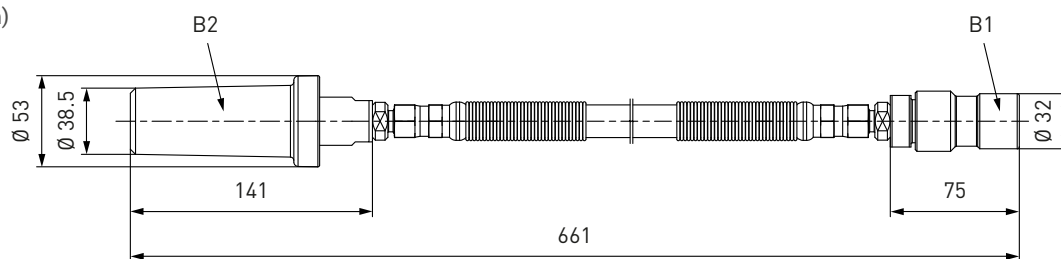


Part No.	Description	Pressure (PN)	B1	B2
<b>C1-31219-X2-X01</b>	TK22N CNG	3,000 psi	P30 acc. to ANSI NGV1 / B200 acc. to ISO 14469	P30HD acc. to ANSI NGV1 / C200 acc. to ISO 14469
<b>C1-102480-X01</b>	TK22N CNG	3,600 psi	P36 acc. to ANSI NGV1 / B250 acc. to ISO 14469	P36HD acc. to ANSI NGV1 / C250 acc. to ISO 14469

### ORDERING | WEH® TK4-TN5 CNG Adaptor nozzle

CNG adaptor nozzle for refueling cars at bus or truck fueling stations. **Not for self-service operation!**

approx. dimensions (mm)



Part No.	Description	Pressure (PN)	B1	B2
<b>C1-126038-X01</b>	TK4-TN5 CNG	3,000 psi	P30HD acc. to ANSI NGV1 / C200 acc. to ISO 14469	P30 acc. to ANSI NGV1 / B200 acc. to ISO 14469
<b>C1-126028-X01</b>	TK4-TN5 CNG	3,600 psi	P36HD acc. to ANSI NGV1 / C250 acc. to ISO 14469	P36 acc. to ANSI NGV1 / B250 acc. to ISO 14469

## » Technical appendix

### Definitions

Abbreviation	Definition	
Pressure specifications	(all pressure specifications are to be understood as overpressure, unless otherwise stated)	
PN	Nominal pressure	Nominal pressure after temperature compensation at 15 °C (59 °F)
PS	Max. allowable operating pressure	Maximum allowable operating pressure acc. to Pressure Equipment Directive 2014/68/EU, Article 2 paragraph 8
PT	Hydrostatic test pressure	Hydrostatic test pressure acc. to Pressure Equipment Directive 2014/68/EU, Annex I no. 7.4
PP	Pilot pressure	Actuation pressure for hydraulic and pneumatic components
PC	Cracking pressure	Pressure at which the check valve opens and the first indication of flow occurs
WP	Working pressure	'Working pressure' means the maximum pressure to which a component is designed to be subjected to and which is the basis for determining the strength of the component under consideration
MAWP	Max. allowable working pressure	Max. allowable operating pressure at which the weakest point of the system or the vessel (e.g. cylinder valve) can operate at a certain temperature during normal operation
Dimensions		
L1, L2, L3 ...	Length specification	
D1, D2, D3 ...	Diameter specification	
A/F(1), A/F(2) ...	Wrench size specification	
Ports		
A / X	Customer-specific port (test piece, sample, cylinder valve, handwheel respiratory protective equipment)	
B1, B2, B3 ...	Media ports	
C1, C2, C3 ...	Gas recirculation ports	
P1, P2, P3 ...	Pilot pressure ports	
MA1, MA2 ...	Measuring ports	
Q	Drain port filter	
G	Mounting bores	
Others		
DN	Nominal size (DN) acc. to Pressure Equipment Directive 2014/68/EU, whereby the largest, pressurized diameter of the media or pilot pressure connections of the WEH® Device (A, B1, B2, B3 or C1, C2, C3 and P1, P2, P3) which faces the customer's pipe system, is relevant.	
µm	Max. diameter of the filtered particle	
Kv	Is the discharge of water in m³/h at a pressure drop of 1 bar (14.5 psi), acc. to DIN/EN 60534-2	
Cv	Is the discharge of water in gallons per minute at a pressure drop of 1 psi, acc. to DIN/EN 60534-2	
IR	Infrared data interface	
ENR	Exchangeable data interface (exchangeable nozzle receiver)	

## » Technical appendix

### Definitions

Abbreviation	Definition
TS	Maximum allowable temperature acc. to Pressure Equipment Directive 2014/68/EU, Article 2 paragraph 9
Breakaway force	Is the force range, in which the breakaway releases
NC	Normally closed (initial position of shut-off valve)
NO	Normally open (initial position of shut-off valve)

### Technical explanations

Term	Definition
Temperature range	Is the temperature range in which the WEH® Product can be used. If no explicit information on medium and ambient temperature is given, this temperature range applies to both medium and environment.
Media temperature range	Is the temperature range of the medium used, which can flow through the WEH® Product (may change depending on the time of measurement).
Ambient temperature range	Is the temperature range of the environment in which the WEH® Product can be used.
Leak rate	Is the maximum external leak rate, which the WEH® Product exhibits in delivery condition.
Internal leak rate	The internal leak rate depends, among other things, on type of application, medium and pressure difference on the WEH® Product. On request it can be specified more precisely.
Max. side load	Is the max. allowable sum of all external forces that may act on the device under intended use. <b>Note:</b> External forces can affect the life time of WEH® Products and can cause damage. Tensile and transverse loads as well as vibrations and pressure impacts need to be considered, e.g. by user side measures such as on site mountings and similar. Therefore, lateral forces such as whipping hoses or other equipment must be avoided. WEH® Products should be installed in such a way, that lateral forces which could lead to leakage or damage can not occur. Special applications require a special consultation before selecting the product.
Products with pneumatic actuation	The customer has to ensure there is adequate axial movement when pneumatically actuated WEH® Products are used in automated systems, see maximum side load. Ideally the products should be mounted with a floating joint or introduced individually to prevent the possibly existing clamping jaws getting blocked or jammed in the thread of the test piece.
Sealing material	On request the WEH® Product can be adapted to customer specific applications regarding to the sealing materials used. The clarification of the media compatibility and suitability of the adapted WEH® Product for the final application is always the responsibility of the end user.
Corrosion resistant	WEH® Products are designed for use in temperate climate zones - with low levels of humidity and salinity in the air. An accelerated formation of rust or corrosion may occur at or near the sea. Therefore, reduce the inspection interval recommended for normal use and send in the WEH® Product for maintenance immediately if you notice increased soot, rust or corrosion.
Storage / life time of components	There are certain requirements for every WEH® Product. WEH® Products are generally products which may be subject to wear and fatigue during operation and depending on your individual application/use. For details - in particular regarding the corresponding minimum inspection and maintenance intervals – please refer to the respective operating instructions for the WEH® Product.

## » Technical appendix

### Further explanations

Subject	Definition
Technical data	Unless otherwise stated, the technical data in catalogs, data sheets and operating instructions are based on tests with nitrogen that are in the development phase or at the end of development. Leakage data are based on measurements with helium.
Intended use	For the intended use of WEH® Products, please refer to the respective operating instructions. The following applications are generally excluded for WEH® H <sub>2</sub> and CNG products, unless these are expressly permitted in the operating instructions: <ul style="list-style-type: none"> <li>• aerospace applications, e.g. in aircrafts</li> <li>• shipping applications</li> <li>• applications offshore and in littoral areas</li> <li>• applications within defense and weapons technology</li> </ul>
Safe product selection	Our WEH® Products are designed to be operated by qualified professional users (insofar as WEH® Products are also designed to be operated by other users in individual cases, this is explicitly stated in the corresponding operating instructions). Please note that WEH does not know your system and therefore - also due to the large number of different potential applications of WEH® Products - cannot perform tests on all potential types of application. You alone are responsible for the selection, configuration and suitability of WEH® Products, especially according to the requirements of your system. Before purchasing WEH® Products, please particularly ensure that our products are compatible with your intended use, your performance data, your material and fluids, your system concept and your system limits according to our product specifications. Please also consider your technical and legal requirements for operation, handling and maintenance. The quality and safety of WEH® Products is our highest priority. For this reason, WEH® Products may not be used outside the specifications in the relevant data sheets and product descriptions. If you are not sure whether the WEH® Product is suitable for your system and intended use, please contact us in advance. We also strongly recommend that you refrain from using third-party spare parts or a combination of WEH® Products with unsuitable third-party products. You alone are responsible for reviewing the suitability of third-party products. WEH® Products and WEH® Spare parts comply with our quality and safety standards.
Explanation on the Pressure Equipment Directive	<p>In general, WEH® Products with a maximum allowable operating pressure of more than 0.5 bar (PS) fall within the scope of application of the Pressure Equipment Directive 2014/68/EU, are generally classified as pressure accessories in accordance with Article 2 (5) of the same and are considered to be similar to piping. These WEH® Products may not be used as safety accessories. Furthermore, it is pointed out, that these WEH® Products are designed and placed on the market in accordance with the requirements of Article 4 (3) of the Pressure Equipment Directive 2014/68/EU.</p> <p>For some products a different classification and/or categorisation is required or can be conducted on request. In these cases, if legally required, a conformity assessment procedure in accordance with Annex III of the Pressure Equipment Directive 2014/68/EU can and will also be conducted and the conformity can be declared by means of an EU Declaration of Conformity in accordance with Annex IV of the Pressure Equipment Directive 2014/68/EU. In these cases, the EU Declaration of Conformity is enclosed with the product.</p>
External change management	WEH reserves the right to update, optimise and adjust its products continuously. This may result in corresponding changes of the product. Customers will be informed proactively or unsolicited by WEH only in individual cases about product updates, product optimisations and/or product adaptations that have been carried out. You are free to contact WEH at any time to request information about any product updates, product optimisations and/or product adjustments.

## » Brochure data

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This catalog was created diligently and on the basis of decades of experience.

All information/recommendations in this catalog are non-binding and are particularly subject to possible deviations or changes. For any binding information/recommendations, please refer to the verified information/recommendations in our individual orders. Particularly, due to the wide range of possible applications of WEH® Products and the unknown parameters and operating conditions linked to them, the accuracy and/or completeness of the information/recommendations in this catalog cannot be guaranteed with respect to certain individual cases. In doing so, we would like to refer once again to the information/recommendations provided in individual orders.

The application limits indicated in this catalog (e.g. for pressure, temperature, etc.) are generally theoretical values determined in a test environment. As the concrete operating conditions could differ, we cannot ensure that these values apply to a specific customer application. During the practical use, you should particularly consider that the mutual influence of operational parameters could result in changes of the maximum values. Especially, in case of any unusual operating conditions, please contact WEH before using any WEH® Products. We therefore strongly recommend that you also require any necessary binding information/recommendations to be included by us in the individual orders.

Furthermore, we point out that we cannot assume any warranty or accept any responsibility for printing errors, incomplete information or misinterpretations. Illustrations and/or images are particularly provided for illustrative purposes only and may differ in some details from the actual product. Moreover, dimensions and other technical details in this catalog are non-binding information and are provided for illustrative purposes only. The product's exact form and design result exclusively from the specific individual order. In particular, certain information/recommendations in the catalog only become integral part of the contract if they have been expressly contractually agreed.

Only the latest version of our catalog and other product related documents is valid and applicable. Please ensure that you always use the latest catalog's and documents' versions. Please feel free to contact WEH at any time and request the latest versions.

Our General Terms and Conditions and the Agreement on Protection of Know-How and Quality Assurance shall apply to deliveries and other services, unless expressly agreed otherwise. In principle, we do not accept the General Terms and Conditions of our customers or third parties. Thank you for your understanding.

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