walther präzision

WalCoDo®

WALTHER CONNECTING & DOCKING

Hydrogen Refueling System




H2
Hydrogen
0 ZERO
emissions

Hydrogen Refueling System

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General Overview Hydrogen





High pressure mono-couplings
(UP TO 1,500 BAR)



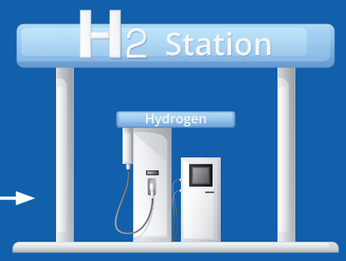


High pressure mono-couplings
(UP TO 1,500 BAR)





High pressure mono-couplings
(UP TO 1,500 BAR)







High pressure mono-couplings
(UP TO 1,500 BAR)





Applications

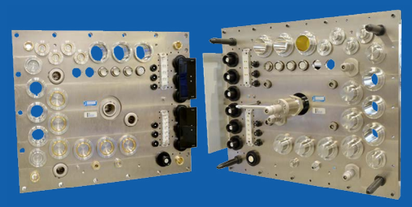
- Nozzles / Lances
- Annealing furnaces
- Burner
- Chemical industry
- Test stands
- Electrolyzers



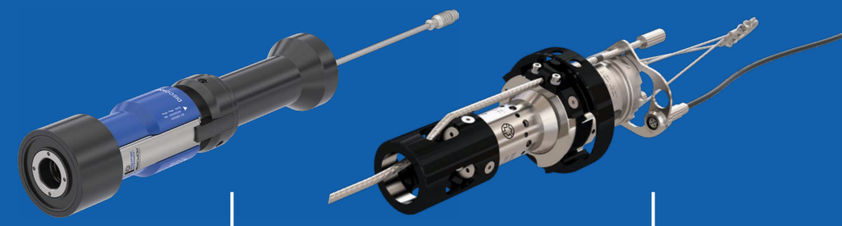
Low to high pressure mono-couplings (UP TO 1,500 BAR)



Multi-couplings, ON REQUEST



Hydrogen refueling system
for H35, H35MF & H70
based on DIN EN ISO 17268-1
& DIN EN ISO 19880-3





Mono-couplings
Hydrogen refueling system






CØ2
H2
ydrogen
fuel cell

Refueling Nozzle - Type HG-008 - 35 MPa NF

Data Sheet



Type HG-008 - 35 MPa NF | Refueling Nozzle | Technical Data

Refueling nozzle HG-008

High pressure refueling nozzle for the transfer of gaseous hydrogen, for its use in hydrogen refueling stations. Technology suitable for hydrogen gas with NWP 35 MPa (350 bar resp. 5,000 psi).
Designed in alingement with SAE J2600, SAE J2799, ISO 19880, ISO 17268 and CSA HGV 4.1; normal flow (NF).

Function	Benefits	Matching equipment
• Double locking technology • Pressure-active locking system (form fit) • IR module exchangable on-site • Ergonomic design with push-pull technology • Correctly coupled indication	• Locking before valve opens • Disconnecting under pressure safely prevented • Maintenance and service friendly = low service costs • Simple and reliable operation = high customer acceptance • Visual check „safely connected“	• Hose set • Parking station • Breakaway coupling • Service tools

Properties	Detailed information	Standard variant	Special variants
Technical features	Nominal diameter	8 mm	
	Nominal working pressure (NWP)	35 MPa (acc. to ISO 19880)	
	Maximum operating pressure (MOP)	43,75 MPa (acc. to ISO 19880)	
	Maximum allowable working pressure (MAWP)	48,13 MPa (acc. to ISO 19880)	
	Temperature range	-40 °C up to 85 °C	
	Cv-Value	0,33	
	Volume	22 cm³	
	Dead space volume	2,2 cm³	
	Mass flow	60 g/s	
	IR-Module	With ATEX / NEC certificate	see table
	Elektrical resistance (total refueling system / WALTHER components only)	< 1000 Ohm acc. to ISO 17268	
	Leakage rate	< 1 x 10^{-4} mbar*l/s (He)	
	Nozzle type	Type C acc. to SAE J2600 / ISO 17268	
Materials	Pressure bearing parts	1.4404 / 1.4980 or equivalent	
	Sealing	Suitable for hydrogen	
	Housing	POM	
	Other parts	1.4301 / 2.0966 / 2.4610 / 3.4365	
Dimensions	Length / Diameter	320 mm x Ø 75 mm (L_{total} = 550mm)	
Lubricants	For sealings	H2-suitable and inert lubricants	
Connections	High pressure line	9/16“-18 UNF; with sealing cone 60°	3/4“-16 UNF; with sealing cone 60°
	Protection hose	M40 x 1,5	
	Electrical connection for IR-Module	M12 x 1; 4 pins - axial	
	Flushing connection	No	4 mm quick connection
Certificates standards	Certificates	Manufacturer certificate EN 10204 – 3.1 Declaration of confirmity PED	
	Based on	SAE J2600, SAE J2799, ISO 17268, ISO 19880, CSA HGV 4.1	
Maintenance	Interval	2 years or 10.000 cycles	

Technical performance data apply under ideal conditions and are provided without guarantee. Any liability for the accuracy of performance data for the respective application of the Customer is excluded. The maximum permissible operating pressures specified here for the quick coupling systems apply exclusively for gaseous hydrogen in accordance to Directive 2014/68/EU. The use of other materials, other media (especially media from Group I) or other temperature ranges can lead to deviating maximum permissible operating pressures and must be requested separately at your supplier or directly at WALTHER-PRÄZISION. Please note that both the maximum permissible operating pressure of the quick coupling system and the maximum permissible operating pressure of the connection must be considered in determining the plant operating pressure. Our safety instructions must be followed. You can find the safety instructions on https://www.walther-praezision.de/en/download-center/. If you have additional questions or need further information, please consult either your supplier or WALTHER-PRÄZISION directly.

Variants Available | Refueling Nozzle | **Type HG-008 - 35 MPa NF**

Overview

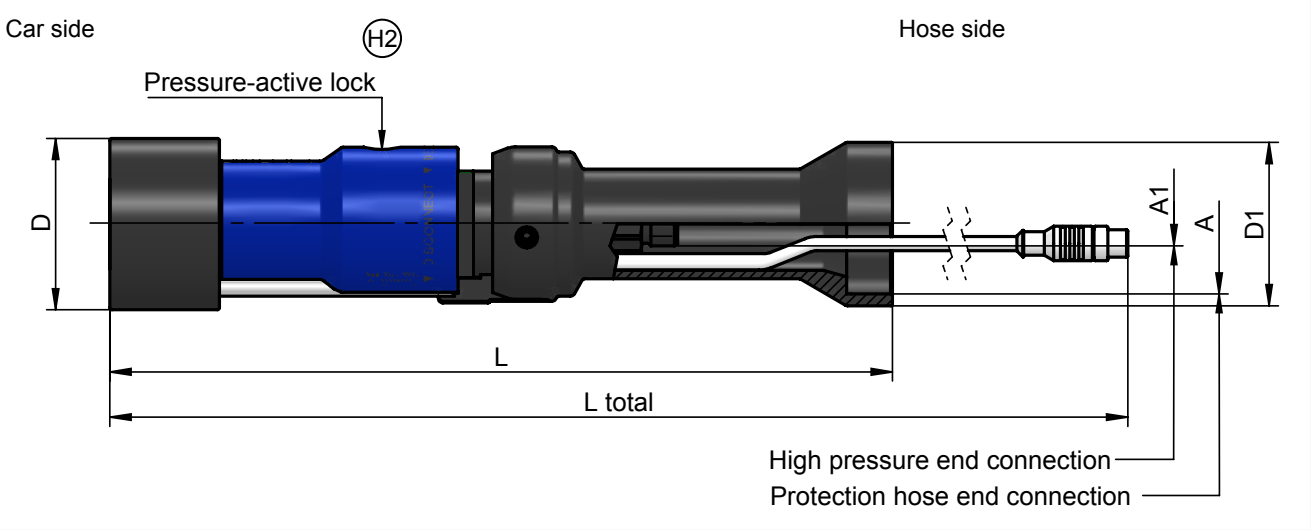


Table of products

NB	Product type	IR-Module	Flushing connection	A	A1	D / D1 [mm]	L / $L_{total(IR)}$ [mm]	NWP / MOP [MPa]	Weight [kg]	ID	Part number
8	35 MPa - NF* Refueling Nozzle (ATEX, NEC)	X	-	M40 x 1,5	9/16"-18 UNF with sealing cone 60°	75 / 60	320	35 / 43,75	1,82	227979	HG-008-0-XX002-NBAA-Y016-BB-S035
8	35 MPa - NF* Refueling Nozzle (ATEX, NEC)	X	X	M40 x 1,5	9/16"-18 UNF with sealing cone 60°	75 / 60	320 / 550	35 / 43,75	1,82	247828	HG-008-0-XX002-NBAE-Y046-BB-S035
8	35 MPa - NF* Refueling Nozzle	-	X	M40 x 1,5	9/16"-18 UNF with sealing cone 60°	65 / 60	320	35 / 43,75	1,82	247829	HG-008-0-XX002-ABAE-Y056-BB-S035
8	35 MPa - NF* Refueling Nozzle	-	X	M63 x 1,5	9/16"-18 UNF with sealing cone 60°	65 / 71,5	342	35 / 43,75	1,82	247832	HG-008-0-XX014-ABAE-Y056-BB-S035
8	35 MPa - NF* Refueling Nozzle (KTL)	X	X	M40 x 1,5	9/16"-18 UNF with sealing cone 60°	75 / 60	320 / 550	35 / 43,75	1,82	available on request	
8	35 MPa - NF* Refueling Nozzle (KTL)	X	-	M40 x 1,5	9/16"-18 UNF with sealing cone 60°	75 / 60	320 / 550	35 / 43,75	1,82	available on request	
8	35 MPa - NF* Refueling Nozzle (CCC)	X	X	M40 x 1,5	9/16"-18 UNF with sealing cone 60°	75 / 60	320 / 550	35 / 43,75	1,82	available on request	
8	35 MPa - NF* Refueling Nozzle (CCC)	X	-	M40 x 1,5	9/16"-18 UNF with sealing cone 60°	75 / 60	320 / 550	35 / 43,75	1,82	available on request	

* NF = Normal flow / HF = High flow | Standard

Type HG-008 - 35 MPa NF | Refueling Nozzle | General Information

The WALTHER-PRÄZISION high pressure refueling system of the HG series is developed for safe and fast refueling with gaseous hycxdrogen. The usual application is the refueling of hydrogen driven vehicles up to a maximum operating pressure of 43.75 MPa / 6,344 psi. The refueling nozzles are tested and verified based on SAE J2600 and ISO 17268, the worldwide standards for refueling interfaces. Since 2006 WALTHER-PRÄZISION has significantly contributed to set the standards for high pressure hydrogen technology, offering today validated systems for the mobility of the future.

Refueling Nozzle - Type HG-008 - 35 MPa HF

Data Sheet



Type HG-008 - 35 MPa HF | Refueling Nozzle | Technical Data

Refueling Nozzle HG-008

High pressure refueling nozzle for the transfer of gaseous hydrogen, for its use in hydrogen refueling stations. Technology suitable for hydrogen gas with NPW 35 MPa (350 bar resp. 5,000 psi).
Designed in alingement with SAE J2600, SAE J2799, ISO 19880, ISO 17268 and CSA HGV 4.1; high flow (HF).

Function	Benefits	Matching equipment
• Double locking technology • Pressure-active locking system (form fit) • IR module exchangable on-site • Ergonomic design with push-pull technology • Correctly coupled indication	• Locking before valve opens • Disconnecting under pressure safely prevented • Maintenance and service friendly = low service costs • Simple and reliable operation = high customer acceptance • Visual check „safely connected“	• Hose set • Parking station • Breakaway coupling • Service tools

Properties	Detailed information	Standard variant	Special variants
Technical features	Nominal diameter	8 mm	
	Nominal working pressure (NWP)	35 MPa (acc. to ISO 19880)	
	Maximum operating pressure (MOP)	43,75 MPa (acc. to ISO 19880)	
	Maximum allowable working pressure (MAWP)	48,13 MPa (acc. to ISO 19880)	
	Temperature range	-40 °C up to 85 °C	
	Cv-Value	0,68	
	Volume	22 cm³	
	Dead space volume	2,3 cm³	
	Mass flow	120 g/s	
	IR-Module	With ATEX / NEC certificate	see table
	Elektrical resistance (for complete refueling system / WALTHER components only)	< 1000 Ohm acc. to ISO 17268	
	Leakage rate	< 1 x 10^{-4} mbar*l/s (He)	
	Nozzle type	Type C acc. to SAE J2600 / ISO 17268	
Materials	Pressure bearing parts	1.4404 / 1.4980 or equivalent	
	Sealing	Suitable for hydrogen	
	Housing	POM	
	Other parts	1.4301 / 2.0966 / 2.4610 / 3.4365	
Dimensions	Length / Diameter	342 mm x Ø 75 mm (L_{total} = 550mm)	
Lubricants	For sealings	H2-suitable and inert lubricants	
Connections	High pressure line	3/4“-16 UNF; with sealing cone 60°	9/16“-18 UNF; with sealing cone 60°
	Protection hose	M63 x 1,5	
	Electrical connection for IR-Module	M12 x 1; 4 pins - axial	
	Flushing connection	No	4 mm quick connection
Certificates standards	Certificates	Manufacturer certificate EN 10204 – 3.1 Declaration of confirmity PED	
	Based on	SAE J2600, SAE J2799, ISO 17268, ISO 19880, CSA HGV 4.1	
Maintenance	Interval	2 years or 10.000 cycles	

Technical performance data apply under ideal conditions and are provided without guarantee. Any liability for the accuracy of performance data for the respective application of the Customer is excluded. The maximum permissible operating pressures specified here for the quick coupling systems apply exclusively for gaseous hydrogen in accordance to Directive 2014/68/EU. The use of other materials, other media (especially media from Group I) or other temperature ranges can lead to deviating maximum permissible operating pressures and must be requested separately at your supplier or directly at WALTHER-PRÄZISION. Please note that both the maximum permissible operating pressure of the quick coupling system and the maximum permissible operating pressure of the connection must be considered in determining the plant operating pressure. Our safety instructions must be followed. You can find the safety instructions on https://www.walther-praezision.de/en/download-center/. If you have additional questions or need further information, please consult either your supplier or WALTHER-PRÄZISION directly.

Variants available | Refueling Nozzle | **Type HG-008 - 35 MPa HF**

Overview

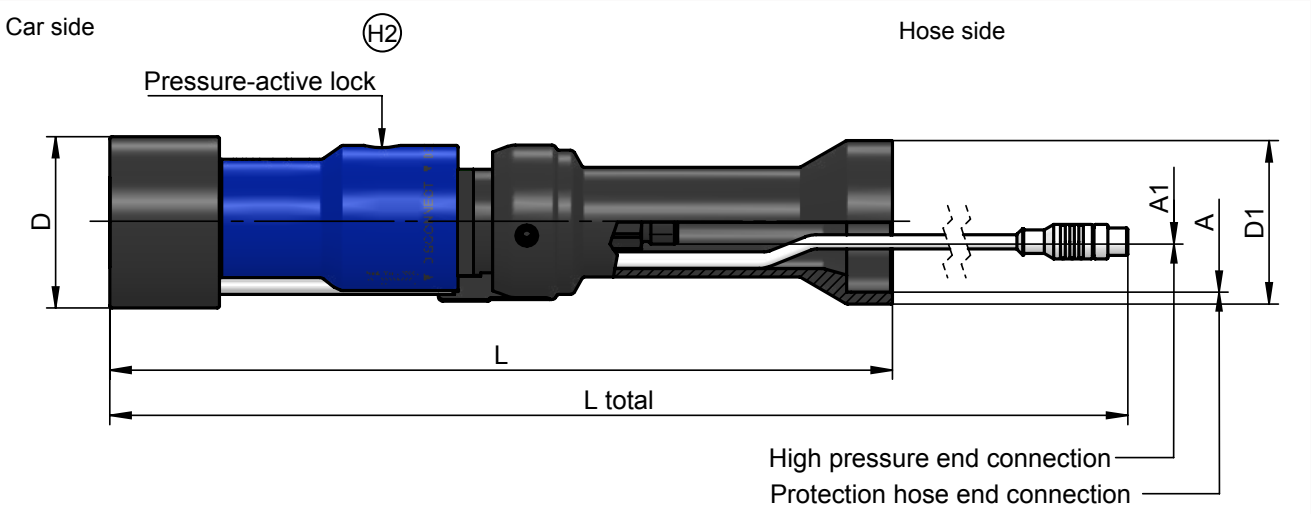


Table of products

NB	Product type	IR-Module	Flushing connection	A	A1	D / D1 [mm]	L / $L_{total(IR)}$ [mm]	NWP / MOP [MPa]	Weight [kg]	ID	Part number
8	35 MPa - HF* Refueling Nozzle (ATEX, NEC)	X	-	M63 x 1,5	3/4"-16 UNF with sealing cone 60°	75 / 71,5	342 / 550	35 / 43,75	1,82	246654	HG-008-0-XX014-ABAE-Y016-BB-THF-S035
8	35 MPa - HF* Refueling Nozzle (ATEX, NEC)	X	X	M63 x 1,5	3/4"-16 UNF with sealing cone 60°	75 / 71,5	342 / 550	35 / 43,75	1,82	246651	HG-008-0-XX014-ABAE-Y046-BB-THF-S035
8	35 MPa - HF* Refueling Nozzle	-	X	M40 x 1,5	9/16"-18 UNF with sealing cone 60°	65 / 60	320	35 / 43,75	1,82	247830	HG-008-0-XX002-ABAE-Y056-BB-THF-S035
8	35 MPa - HF* Refueling Nozzle	-	-	M63 x 1,5	3/4"-16 UNF with sealing cone 60°	65 / 71,5	342	35 / 43,75	1,82	247831	HG-008-0-XX014-ABAE-Y017-BB-THF-S035
8	35 MPa - HF* Refueling Nozzle	-	X	M63 x 1,5	3/4"-16 UNF with sealing cone 60°	65 / 71,5	342	35 / 43,75	1,82	247833	HG-008-0-XX014-ABAE-Y056-BB-THF-S035
8	35 MPa - HF* Refueling Nozzle (KTL)	X	X	M63 x 1,5	3/4"-16 UNF with sealing cone 60°	75 / 71,5	320 / 550	35 / 43,75	1,82	available on request	
8	35 MPa - HF* Refueling Nozzle (KTL)	X	-	M63 x 1,5	3/4"-18 UNF with sealing cone 60°	75 / 71,5	320 / 550	35 / 43,75	1,82	available on request	
8	35 MPa - HF* Refueling Nozzle (CCC)	X	X	M63 x 1,5	3/4"-16 UNF with sealing cone 60°	75 / 71,5	320 / 550	35 / 43,75	1,82	available on request	
8	35 MPa - HF* Refueling Nozzle (CCC)	X	-	M63 x 1,5	3/4"-16 UNF with sealing cone 60°	75 / 71,5	320 / 550	35 / 43,75	1,82	available on request	

* NF = Normal flow / HF = High flow | Standard

Type HG-008 - 35 MPa HF | Refueling Nozzle | General Information

The WALTHER-PRÄZISION high pressure refueling system of the HG series is developed for safe and fast refueling with gaseous hydrogen. The usual application is the refueling of hydrogen driven vehicles up to a maximum operating pressure of 43.75 MPa / 6,353 psi. The refueling nozzles are tested and verified based on SAE J2600 and ISO 17268, the worldwide standards for refueling interfaces. Since 2006 WALTHER-PRÄZISION has significantly contributed to set the standards for high-pressure hydrogen technology, offering today validated systems for the mobility of the future.

Refueling Nozzle - Type HG-004 - 70 MPa NF

Data Sheet



Type HG-004 - 70 MPa NF | Refueling Nozzle | Technical Data

Refueling nozzle HG-004

High pressure refueling nozzle for the transfer of gaseous hydrogen, for its use in hydrogen refueling stations. Technology suitable for hydrogen gas with NWP 70 MPa (700 bar resp. 10,000 psi) technology. Designed in alingement with SAE J2600, SAE J2799, ISO 19880, ISO 17268 and CSA HGV 4.1; normal flow (NF).

Function	Benefits	Matching equipment
• Double locking technology • Pressure-active locking system (form fit) • IR module exchangable on-site • Ergonomic design with push-pull technology • Correctly coupled indication	• Locking before valve opens • Disconnecting under pressure safely prevented • Maintenance and service friendly = low service costs • Simple and reliable operatio = high customer acceptance • Visual check „safely connected“	• Hose set • Parking station • Breakaway coupling • Service tools

Properties	Detailed information	Standard variant	Special variants
Technical features	Nominal diameter	4 mm	
	Nominal working pressure (NWP)	70 MPa (acc. to ISO 19880)	
	Maximum operating pressure (MOP)	87,5 MPa (acc. to ISO 19880)	
	Maximum allowable working pressure (MAWP)	96,25 MPa (acc. to ISO 19880)	
	Temperature range	-40 °C up to 85 °C	
	Cv-Value	0,33	
	Volume	7 cm³	
	Dead space volume	0,4 cm³	
	Mass flow	60 g/s	
	IR-Module	With ATEX / NEC certificate	see table
	Elektrical resistance (for complete refueling system / WALTHER components only)	< 1000 Ohm acc. to ISO 17268	
	Leakage rate	< 1 x 10^{-4} mbar*l/s (He)	
	Nozzle type	Type C acc. to SAE J2600 / ISO 17268	
Materials	Pressure bearing parts	1.4404 / 1.4571 / 1.4980 or equivalent	
	Sealing	Suitable for hydrogen	
	Housing	POM	
	Other parts	1.4301 / 2.0966 / 2.4610 / 3.4365	
Dimensions	Length / Diameter	320 mm x Ø 75 mm (L_{total} = 550mm)	
Lubricants	For sealings	H2-suitable and inert lubricants	
Connections	High pressure line	9/16“-18 UNF; with sealing cone 60°	
	Protection hose	M40 x 1,5	
	Electrical connection for IR-Module	M12 x 1; 4 pins - axial	
	Flushing connection	No	4 mm quick connection
Certificates standards	Certificates	Manufacturer certificate EN 10204 – 3.1 Declaration of confirmity PED	
	Based on	SAE J2600, SAE J2799, ISO 17268, ISO 19880, CSA HGV 4.1	
Maintenance	Interval	2 years or 10.000 cycles	

Technical performance data apply under ideal conditions and are provided without guarantee. Any liability for the accuracy of performance data for the respective application of the Customer is excluded. The maximum permissible operating pressures specified here for the quick coupling systems apply exclusively for gaseous hydrogen in accordance to Directive 2014/68/EU. The use of other materials, other media (especially media from Group I) or other temperature ranges can lead to deviating maximum permissible operating pressures and must be requested separately at your supplier or directly at WALTHER-PRÄZISION. Please note that both the maximum permissible operating pressure of the quick coupling system and the maximum permissible operating pressure of the connection must be considered in determining the plant operating pressure. Our safety instructions must be followed. You can find the safety instructions on https://www.walther-praezision.de/en/download-center/. If you have additional questions or need further information, please consult either your supplier or WALTHER-PRÄZISION directly.

Variants Available | Refueling Nozzle | **Type HG-004 - 70 MPa NF**

Overview

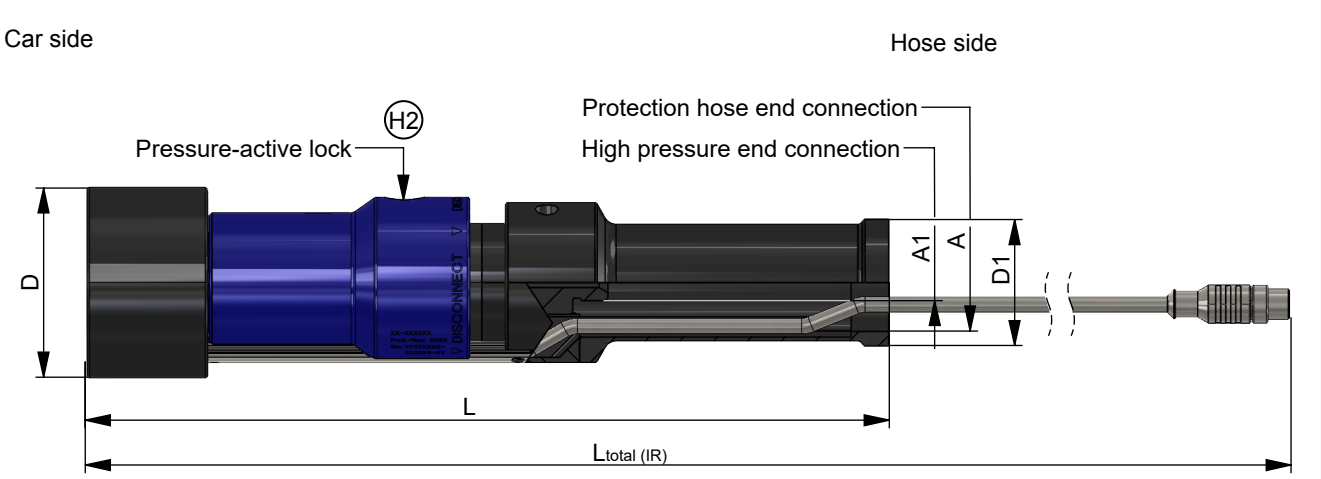


Table of products

NB	Product type	IR-Module	Flushing connection	A	A1	D / D1 [mm]	L / $L_{total(IR)}$ [mm]	NWP / MOP [MPa]	Weight [kg]	ID	Part number
4	70 MPa - NF* Refueling Nozzle (ATEX, NEC)	X	-	M40x1,5	9/16"-18 UNF with sealing cone 60°	75 / 50	320 / 550	70 / 87,5	1,82	227960	HG-004-0-XX004-AABA-Y016-BB-S070
4	70 MPa - NF* Refueling Nozzle	-	X	M40x1,5	9/16"-18 UNF with sealing cone 60°	65 / 50	320	70 / 87,5	1,82	247827	HG-004-0-XX004-AABA-Y056-BB-S070
4	70 MPa - NF* Refueling Nozzle	-	-	M40x1,5	9/16"-18 UNF with sealing cone 60°	65 / 50	320	70 / 87,5	1,82	237583	HG-004-0-XX004-NBAB-Y017-BB-S070
4	70 MPa - NF* Refueling Nozzle (ATEX, NEC)	X	X	M40x1,5	9/16"-18 UNF with sealing cone 60°	75 / 50	320 / 550	70 / 87,5	1,82	238809	HG-004-0-XX004-ABAE-Y046-BB-S070
4	70 MPa - NF* Refueling Nozzle (KTL)	X	X	M40x1,5	9/16"-18 UNF with sealing cone 60°	75 / 50	320 / 550	70 / 87,5	1,82	available on request	
4	70 MPa - NF* Refueling Nozzle (KTL)	X	-	M40x1,5	9/16"-18 UNF with sealing cone 60°	75 / 50	320 / 550	70 / 87,5	1,82	available on request	
4	70 MPa - NF* Refueling Nozzle (CCC)	X	X	M40x1,5	9/16"-18 UNF with sealing cone 60°	75 / 50	320 / 550	70 / 87,5	1,82	available on request	
4	70 MPa - NF* Refueling Nozzle (CCC)	X	-	M40x1,5	9/16"-18 UNF with sealing cone 60°	75 / 50	320 / 550	70 / 87,5	1,82	available on request	

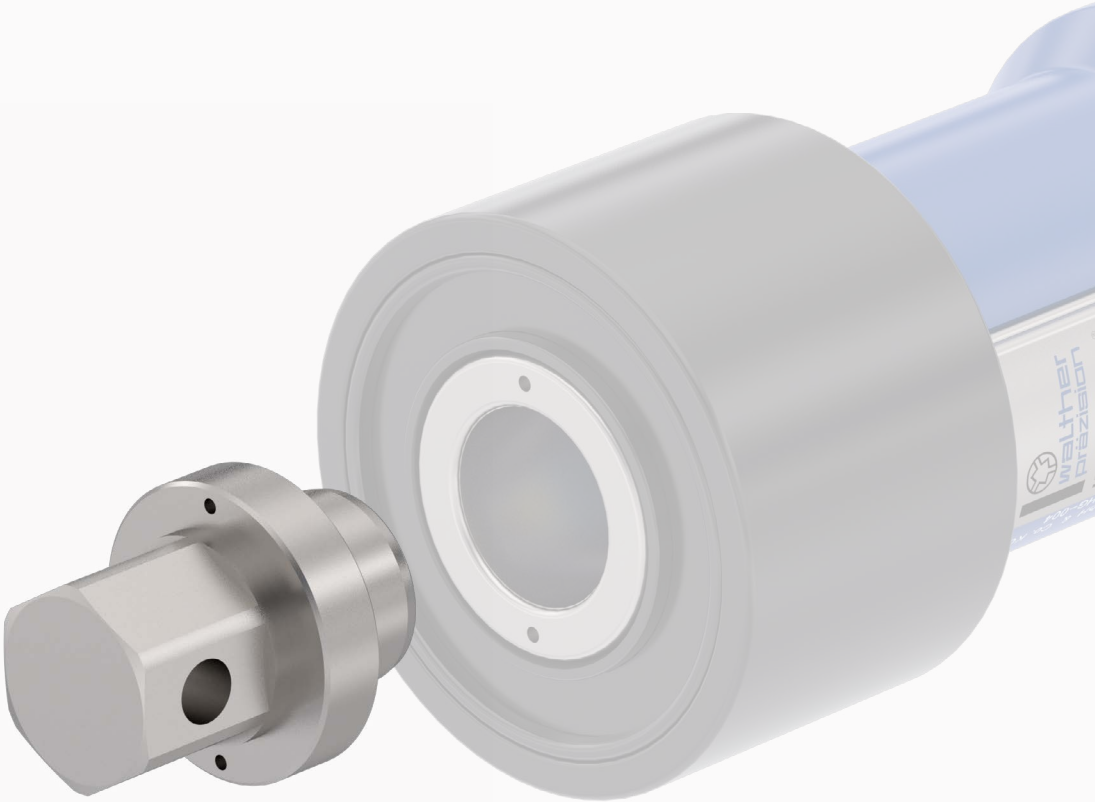
* NF = Normal flow / HF = High flow | Standard

Type HG-004 - 70 MPa NF | Refueling Nozzle | General Information

The WALTHER-PRÄZISION high pressure refueling system of the HG series is developed for safe and fast refueling with gaseous hydrogen. The usual application is the refueling of hydrogen driven vehicles up to a maximum operating pressure of 87.5 MPa / 12,688 psi. The refueling nozzles are tested and verified based on SAE J2600 and ISO 17268, the worldwide standards for refueling interfaces. Since 2006 WALTHER-PRÄZISION has significantly contributed to set the standards for high-pressure hydrogen technology, offering today validated systems for the mobility of the future.

Infrared Tool - Series HG

Data Sheet



Series HG | Infrared Tool | Data Sheet

HG-Infrared Tool (IR-Tool)

Simple tool for trained service personnel to replace the infrared module (IR-module) of a refueling nozzle for high pressure gaseous hydrogen, made of stainless steel.

Function	Benefits	Matching equipment
Facilitating the change of a damaged or defect infrared – interface with a view steps.	Quick and easy restoration of operational readiness and maintaining a high availability rating.	Refueling nozzles Series HG - 35 MPa NF* Series HG - 35 MPa HF* Series HG - 70 MPa NF*

Table of products

Product type	SW [mm]	ID	Part number
IR tool HG-004 (70 MPa)	24	247856	BM-01-100-396-0GAA-G01
IR tool HG-008 (35 MPa)	27	225206	BM-01-100-321-0GAA-G01
IR tool HG-004 and HG-008	27	247657	BM-01-100-394-0GAA-G01

The WALTHER-PRÄZISION high pressure refueling system of the HG series is developed for safe and fast refueling with gaseous hydrogen. The usual application is the refueling of hydrogen driven vehicles up to a maximum operating pressure of 87.5 MPa / 12,688 psi. The refueling systems are tested and validated according to SAE J2600 and ISO 17268, the worldwide standards for refueling interfaces. Since 2006 WALTHER-PRÄZISION has significantly contributed to set the standards for high pressure hydrogen technology, offering today validated systems for the mobility of the future.

* NF = Normal flow / HF = High flow

Breakaway Coupling - Type HG-008
35 MPa NF

Data Sheet



Type HG-008 - 35 MPa NF | Breakaway Coupling | Technical Data

Breakaway coupling HG-008

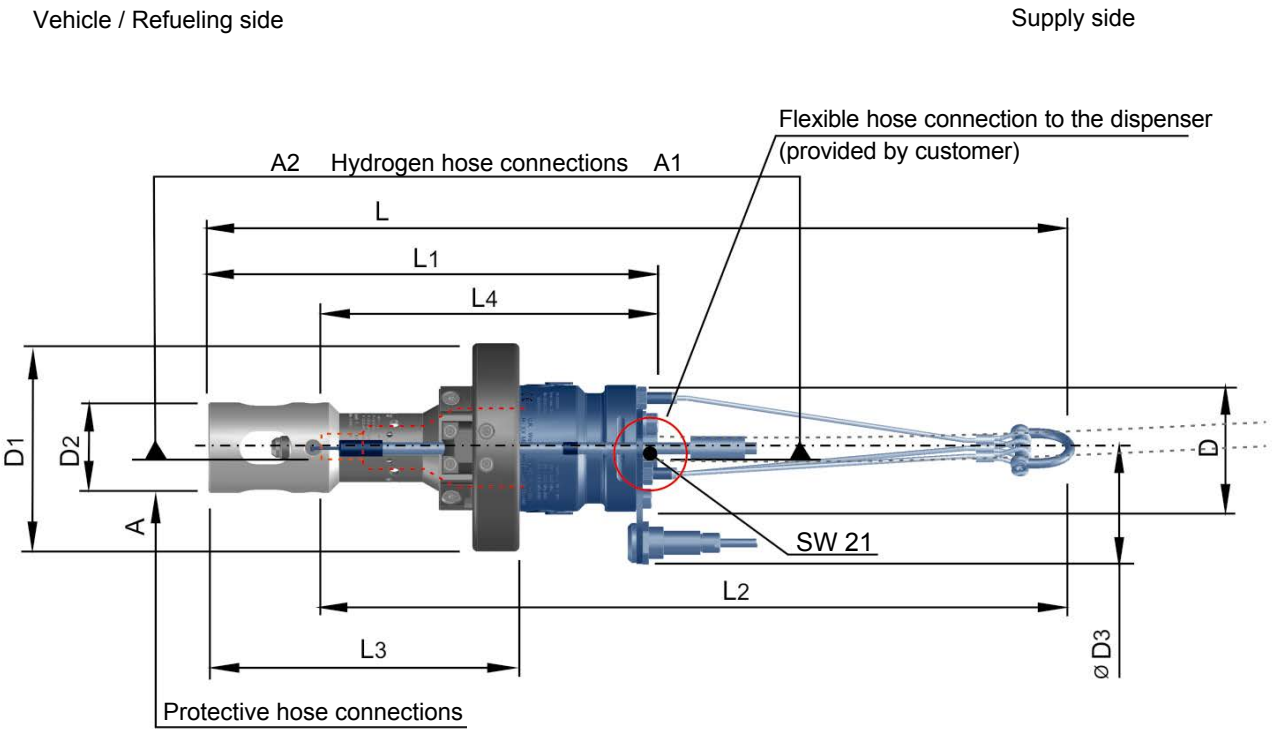
Non-destructive, pressure-balanced high pressure breakaway coupling for the transfer of gaseous hydrogen, for its use in hydrogen refueling stations. Technology suitable for hydrogen gas with NWP 35 MPa (350 bar resp. 5,000 psi).
Validated according to ISO 19880-3 and CSA HGV 4.4; normal flow (NF).

Function	Benefits	Matching equipment
• Unique system with integrated pressure compensation • Unlimited release angles in all directions due to flexible suspension • Non-destructive emergency release • After release venting of high pressure line with special tool possible • Integrated slow-break function	• Blow-back proven design for near-to pressure-neutral emergency release • Constant and fixed level of required emergency release forces • Highest level of safety while and direcly after an emergency event • Quick and easy restoring of the operational readiness on site	• Refueling nozzle • Hose set • Parking station • Service tools

Properties	Detailed information	35 MPa NF
Technical features	Nominal diameter	8 mm
	Nominal working pressure (NWP)	35 MPa (acc. to ISO 19880)
	Maximum operating pressure (MOP)	43,75 MPa (acc. to ISO 19880)
	Maximum allowable working pressure (MAWP)	48,13 MPa (acc. to ISO 19880)
	Temperature range	-40 °C up to 85 °C
	Cv-Value	0,42
	Volume	13,2 cm³
	Dead space volume	7,6 cm³
	Mass flow	60 g/s
	Leakage rate	< 1 x 10^{-4} mbar*l/s (He)
	Connection cable	Lemo connection cable
	Emergency separation force	Less than 1000 N
	Elektrical resistance (total refueling system / WALTHER components only)	< 1000 Ohm acc. to ISO 17268
Materials	Pressure bearing parts	1.4404 / 1.4980 or eqivalent
	Sealing	Suitable for hydrogen
	Housing	POM
Dimensions	Total length (connected) / Diameter	440 mm / Ø 100 mm
Lubricants	For sealings	H2-suitable and inert lubricatant
Connections	High pressure line	Inlet A1: 9/16"-18 UNF, female, 60° sealing cone Outlet A2: 9/16"-18 UNF, male, 60° sealing cone
	Protection hose	M40 x 1,5
	Electrical connection for IR-Module	4 pins; axial / internal interconnection: plug
	Flushing connection	Available on request
Certificates standards	Certificates	Manufacturer certificate EN 10204 – 3.1 Declaration of conformity PED
	Standards	Validated according to ISO 19880-3 / CSA HGV 4.4
Maintenance	Interval	2 years or 16.000 cycles

Technical performance data apply under ideal conditions and are provided without guarantee. Any liability for the accuracy of performance data for the respective application of the Customer is excluded. The maximum permissible operating pressures specified here for the quick coupling systems apply exclusively for gaseous hydroge in accordance to Directive 2014/68/EU. The use of other materials, other media (especially media from Group I) or other temperature ranges can lead to deviating maximum permissible operating pressures and must be requested separately at your supplier or directly at WALTHER-PRÄZISION. Please note that both the maximum permissible operating pressure of the quick coupling system and the maximum permissible operating pressure of the connection must be considered in determining the plant operating pressure.
Our safety instructions must be followed. You can find the safety instructions on https://www.walther-praezision.de/en/download-center/. If you have additional questions or need further information, please consult either your supplier or WALTHER-PRÄZISION directly.

Overview



Breakaway coupling complete											
NB	**Product type**	**IR-Module**	**Flushing connection**	**A**	**A1 / A2**	**D / D1/ D2 / D3** [mm]	**L / L1** [mm]	**NWP / MOP** [MPa]	**Weight** [kg]	**ID**	**Part number**
8	35 MPa - NF* Breakaway coupling set	X	-	M40 x 1,5 (female)	9/16"-18 UNF with sealing cone 60°	66 / 100 / 55 / 58	440 / 260	35 / 43,75	4,8	233434	HG-008-B-02004-ACFA-Y216-BB-S035
8	35 MPa - NF* Breakaway coupling set	X	X	M40 x 1,5 (female)	9/16"-18 UNF with sealing cone 60°	66 / 100 / 55 / 58	440 / 260	35 / 43,75	4,8	available on request	
8	35 MPa - NF* Breakaway coupling set	-	X	M40 x 1,5 (female)	9/16"-18 UNF with sealing cone 60°	66 / 100 / 55 / 58	440 / 260	35 / 43,75	4,8	available on request	
8	35 MPa - NF* Breakaway coupling set	-	-	M40 x 1,5 (female)	9/16"-18 UNF with sealing cone 60°	66 / 100 / 55 / 58	440 / 260	35 / 43,75	4,8	available on request	

Tabel 1/2

Type HG-008 - 35 MPa NF | Breakaway Coupling | Variants Available

Breakaway coupling (station side)											
NB	**Product type**	**IR-Module**	**Flushing connection**	**A**	**A1 / A2**	**D / D3** [mm]	**L2 / L4** [mm]	**NWP / MOP** [MPa]	**Weight** [kg]	**ID**	**Part number**
8	35 MPa - NF* Breakaway coupling	X	-	-	9/16-18 UNF-2B with sealing cone 60°	66 / 58	340 / 164	35 / 43,75	1,9	227754	HG-008-0-XX004-ABAA-Y216-BB-S035
8	35 MPa - NF* Breakaway coupling	X	X	-	9/16-18 UNF-2B with sealing cone 60°	66 / 58	340 / 164	35 / 43,75	1,9	available on request	
8	35 MPa - NF* Breakaway coupling	-	X	-	9/16-18 UNF-2B with sealing cone 60°	66 / 58	340 / 164	35 / 43,75	1,9	available on request	
8	35 MPa - NF* Breakaway coupling	-	-	-	9/16-18 UNF-2B with sealing cone 60°	66 / 58	340 / 164	35 / 43,75	1,9	available on request	
Breakaway nipple (car / nozzle side)											
NB	**Product type**	**IR-Module**	**Flushing connection**	**A**	**A1 / A2**	**D1/ D2** [mm]	**L3** [mm]	**NWP / MOP** [MPa]	**Weight** [kg]	**ID**	**Part number**
8	35 MPa - NF* Breakaway nipple	X	X	M40 x 1,5 (female)	9/16-18 UNF-2Bs with sealing cone 60°	100 / 55	180	35 / 43,75	2,9	227755	HG-008-2-XX002-ABAB-Y216-BB-S035

* NF = Normal flow / HF = High flow | Standard

Tabel 2/2

The WALTHER-PRÄZISION high pressure refueling system of the HG series is developed for safe and fast refueling with gaseous hydrogen. The usual application is the refueling of hydrogen driven vehicles up to a maximum operating pressure of 43.75 MPa / 6,344 psi. The breakaway couplings are tested and validated according to ISO 19880-3 and CSA HGV 4.4, the worldwide standards for refueling interfaces. Since 2006 WALTHER-PRÄZISION has significantly contributed to set the standards for high pressure hydrogen technology, offering today validated systems for the mobility of the future.

Breakaway Coupling - Type HG-008 35 MPa HF

Data Sheet



Type HG-008 - 35 MPa HF | Breakaway Coupling | Technical Data

Breakaway coupling HG-008

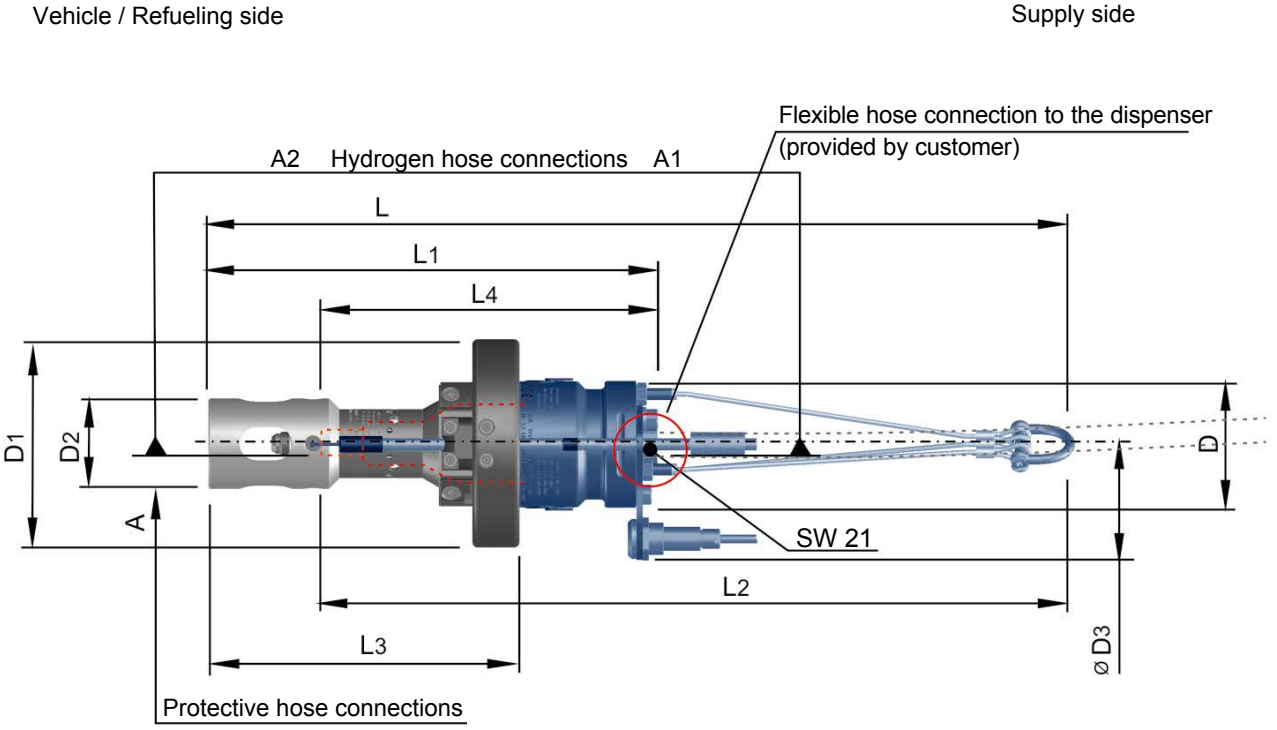
Non-destructive, pressure-balanced high pressure breakaway coupling for the transfer of gaseous hydrogen, for its use in hydrogen refueling stations. Technology suitable for hydrogen gas with NWP 35 MPa (350 bar resp. 5,000 psi).
Validated according to ISO 19880-3 and CSA HGV 4.4; high flow (HF).

Function	Benefits	Matching equipment
• Unique system with integrated pressure compensation • Unlimited release angles in all directions due to flexible suspension • Non-destructive emergency release • After release venting of high pressure line with special tool possible • Integrated slow-break function	• Blow-back proven design for near-to pressure-neutral emergency release • Constant and fixed level of required emergency release forces • Highest level of safety while and direcly after an emergency event • Quick and easy restoring of the operational readiness on site	• Refueling nozzle • Hose set • Parking station • Service tools

Properties	Detailed information	35 MPa HF
Technical features	Nominal diameter	8 mm
	Nominal working pressure (NWP)	35 MPa (acc. to ISO 19880)
	Maximum operating pressure (MOP)	43,75 MPa (acc. to ISO 19880)
	Maximum allowable working pressure (MAWP)	48,13 MPa (acc. to ISO 19880)
	Temperature range	-40 °C up to 85 °C
	Cv-Value	0,48
	Volume	13,2 cm³
	Dead space volume	7,6 cm³
	Mass flow	120 g/s
	Leakage rate	< 1 x 10^{-4} mbar*l/s (He)
	Connection cable	Lemo connection cable
	Emergency separation force	Less than 1000 N
	Elektrical resistance (total refueling system / WALTHER components only)	< 1000 Ohm acc. to ISO 17268
Materials	Pressure bearing parts	1.4404 / 1.4980 or eqivalent
	Sealing	Suitable for hydrogen
	Housing	POM
Dimensions	Total length (connected) / Diameter	440 mm / Ø 100 mm
Lubricants	For sealings	H2-suitable and inert lubricatant
Connections	High pressure lines	Inlet A1: 3/4"-16 UNF, female, 60° sealing cone Outlet A2: 3/4"-16 UNF, male, 60° sealing cone
	Protection hose	M65 x 1,5
	Electrical connection for IR-Module	4 pins; axial / internal interconnection: plug
	Flushing connection	Available on request
Certificates standards	Certificates	Manufacturer certificate EN 10204 – 3.1 Declaration of conformity PED
	Standards	Validated according to ISO 19880-3 / CSA HGV 4.4
Maintenance	Interval	2 years or 16.000 cycles

Technical performance data apply under ideal conditions and are provided without guarantee. Any liability for the accuracy of performance data for the respective application of the Customer is excluded. The maximum permissible operating pressures specified here for the quick coupling systems apply exclusively for gaseous hydroge in accordance to Directive 2014/68/EU. The use of other materials, other media (especially media from Group I) or other temperature ranges can lead to deviating maximum permissible operating pressures and must be requested separately at your supplier or directly at WALTHER-PRÄZISION. Please note that both the maximum permissible operating pressure of the quick coupling system and the maximum permissible operating pressure of the connection must be considered in determining the plant operating pressure.
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Overview



Breakaway coupling complete											
NB	**Product type**	**IR-Module**	**Flushing connec-tion**	**A**	**A1 / A2**	**D / D1/ D2 / D3** [mm]	**L / L1** [mm]	**NWP / MOP** [MPa]	**Weight** [kg]	**ID**	**Part number**
8	35 MPa - HF* Breakaway coupling set	X	-	M63 x 1,5 (female)	3/4"-16 UNF with sealing cone 60°	66 / 100 / 71,5 / 58	440 / 275	35 / 43,75	4,8	233437	HG-008-B-02021-ACFA-Y216-BB-S035-THF
8	35 MPa - HF* Breakaway coupling set	X	X	M63 x 1,5 (female)	3/4"-16 UNF with sealing cone 60°	66 / 100 / 71,5 / 58	440 / 275	35 / 43,75	4,8	available on request	
8	35 MPa - HF* Breakaway coupling set	-	X	M63 x 1,5 (female)	3/4"-16 UNF with sealing cone 60°	66 / 100 / 71,5 / 58	440 / 275	35 / 43,75	4,8	available on request	
8	35 MPa - HF* Breakaway coupling set	-	-	M63 x 1,5 (female)	3/4"-16 UNF with sealing cone 60°	66 / 100 / 71,5 / 58	440 / 275	35 / 43,75	4,8	available on request	

Tabel 1/2

Type HG-008 - 35 MPa HF | Breakaway Coupling | Variants Available

Breakaway coupling (station side)											
NB	**Product type**	**IR-Module**	**Flushing connection**	**A**	**A1 / A2**	**D / D3** [mm]	**L2 / L4** [mm]	**NWP / MOP** [MPa]	**Weight** [kg]	**ID**	**Part number**
8	35 MPa - HF* Breakaway coupling	X	-	-	3/4"-16 UNF with sealing cone 60°	66 / 116	340 / 172	35 / 43,75	1,9	240060	HG-008-0-XX014-ABAA-Y216-BB-THF-S035
8	35 MPa - HF* Breakaway coupling	X	X	-	3/4"-16 UNF with sealing cone 60°	66 / 116	340 / 172	35 / 43,75	1,9	250088	HG-008-0-XX014-ABAA-Y246-BB-THF-S035
8	35 MPa - HF* Breakaway coupling	-	X	-	3/4"-16 UNF with sealing cone 60°	66 / 116	340 / 172	35 / 43,75	1,9	available on request	
8	35 MPa - HF* Breakaway coupling	-	-	-	3/4"-16 UNF with sealing cone 60°	66 / 116	340 / 172	35 / 43,75	1,9	available on request	
Breakaway nipple (car / nozzle side)											
NB	**Product type**	**IR-Module**	**Flushing connection**	**A**	**A1 / A2**	**D1/ D2** [mm]	**L3** [mm]	**NWP / MOP** [MPa]	**Weight** [kg]	**ID**	**Part number**
8	35 MPa - HF* Breakaway nipple	X	-	M63 x 1,5 (female)	3/4"-16 UNF with sealing cone 60°	100 / 71,5	186	35 / 43,75	2,9	240056	HG-008-2-XX014-ABAB-Y216-BB-THF-S035

* NF = Normal flow / HF = High flow | Standard

Tabel 2/2

The WALTHER-PRÄZISION high pressure refueling system of the HG series is developed for safe and fast refueling with gaseous hydrogen. The usual application is the refueling of hydrogen driven vehicles up to a maximum operating pressure of 43.75 MPa / 6,344 psi. The breakaway couplings are tested and validated according to ISO 19880-3 and CSA HGV 4.4, the worldwide standards for refueling interfaces. Since 2006 WALTHER-PRÄZISION has significantly contributed to set the standards for high pressure hydrogen technology, offering today validated systems for the mobility of the future.

Breakaway Coupling - Type HG-008 70 MPa NF

Data Sheet



Type HG-008 - 70 MPa NF | Breakaway Coupling | Technical Data

Breakaway coupling HG-008

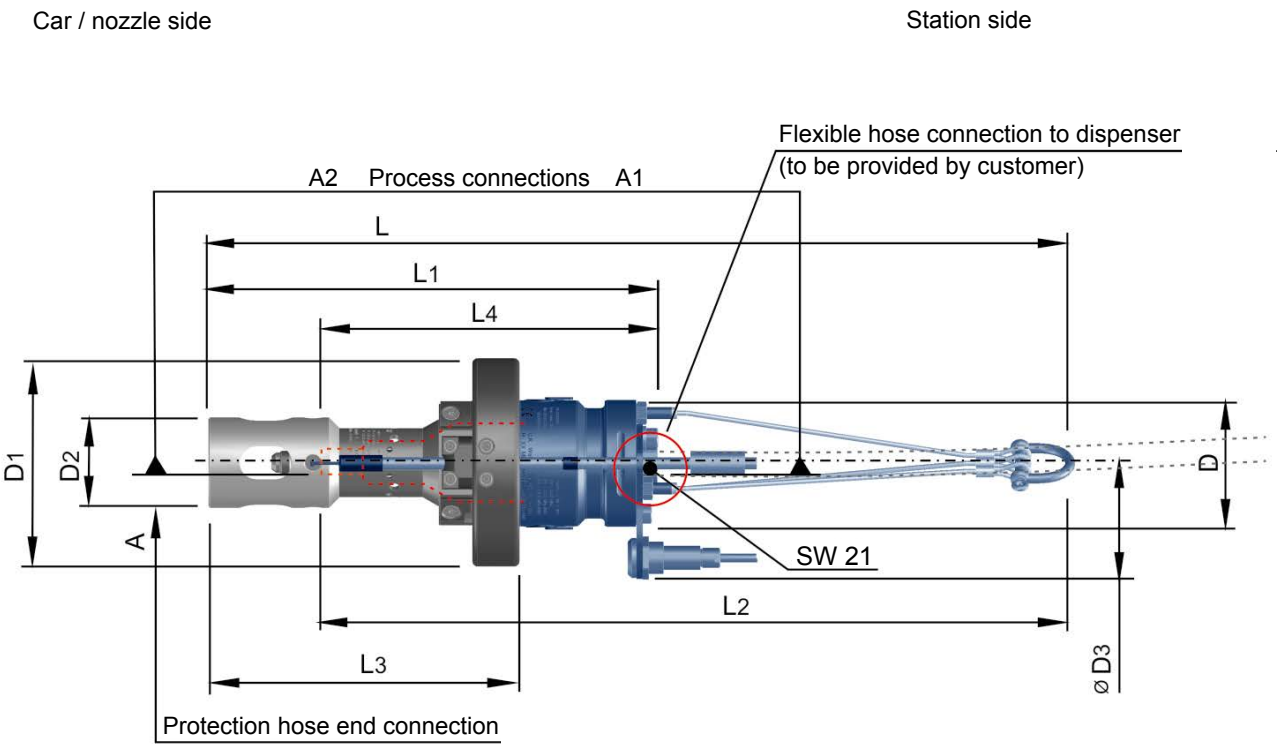
Non-destructive, pressure-balanced high pressure breakaway coupling for the transfer of gaseous hydrogen, for its use in hydrogen refueling stations. Technology suitable for hydrogen gas with NWP 70 MPa (700 bar resp. 10,000 psi).
Validated according to ISO 19880-3 and CSA HGV 4.4; normal flow (NF).

Function	Benefits	Matching equipment
• Unique system with integrated pressure compensation • Unlimited release angles in all directions due to flexible suspension • Non-destructive emergency release • After release venting of high pressure line with special tool possible • Integrated slow-break function	• Blow-back proven design for near-to pressure-neutral emergency release • Constant and fixed level of required emergency release forces • Highest level of safety while and direcly after an emergency event • Quick and easy restoring of the operational readiness on site	• Refueling nozzle • Hose set • Parking station • Service tools

Properties	Detailed information	70 MPa NF
Technical features	Nominal diameter	8 mm
	Nominal working pressure (NWP)	70 MPa (acc. to ISO 19880)
	Maximum operating pressure (MOP)	87,5 MPa (acc. to ISO 19880)
	Maximum allowable working pressure (MAWP)	96,25 MPa (acc. to ISO 19880)
	Temperature range	-40 °C up to 85 °C
	Cv-Value	0,42
	Volume	13,2 cm³
	Dead space volume	7,6 cm³
	Mass flow	60 g/s
	Leakage rate	< 1 x 10^{-4} mbar*l/s (He)
	Connection cable	Lemo connection cable
	Emergency separation force	Less than 1000 N
	Elektrical resistance (total refueling system / WALTHER components only)	< 1000 Ohm acc. to ISO 17268
Materials	Pressure bearing parts	1.4404 / 1.4980 or eqivalent
	Sealing	Suitable for hydrogen
	Housing	POM
Dimensions	Total length (connected) / Diameter	440 mm / Ø 100 mm
Lubricants	For sealings	H2-suitable and inert lubricatant
Connections	High pressure lines	Inlet A1: 9/16"-18 UNF, female, 60° sealing cone Outlet A2: 9/16"-18 UNF, male, 60° sealing cone
	Protection hose	M40 x 1,5
	Electrical connection for IR-Module	4 pins; axial / internal interconnection: plug
	Flushing connection	Available on request
Certificates standards	Certificates	Manufacturer certificate EN 10204 – 3.1 Declaration of conformity PED
	Standards	Validated according to ISO 19880-3 / CSA HGV 4.4
Maintenance	Interval	2 years or 16.000 cycles

Technical performance data apply under ideal conditions and are provided without guarantee. Any liability for the accuracy of performance data for the respective application of the Customer is excluded. The maximum permissible operating pressures specified here for the quick coupling systems apply exclusively for gaseous hydrogen in accordance to Directive 2014/68/EU. The use of other materials, other media (especially media from Group I) or other temperature ranges can lead to deviating maximum permissible operating pressures and must be requested separately at your supplier or directly at WALTHER-PRÄZISION. Please note that both the maximum permissible operating pressure of the quick coupling system and the maximum permissible operating pressure of the connection must be considered in determining the plant operating pressure.
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Overview



Breakaway coupling complete

NB	Product type	IR-Module	Flushing connection	A	A1 / A2	D / D1/ D2 / D3 [mm]	L / L1 [mm]	NWP / MOP [MPa]	Weight [kg]	ID	Part number
8	70 MPa - NF* Breakaway coupling set	X	-	M40 x 1,5 (female)	9/16"-18 UNF with sealing cone 60°	66 / 100 / 55 / 58	440 / 260	70 / 87,5	4,8	233433	HG-008-B-02000-ACFA-Y216-BB-S070
8	70 MPa - NF* Breakaway coupling set	X	X	M40 x 1,5 (female)	9/16"-18 UNF with sealing cone 60°	66 / 100 / 55 / 58	440 / 260	70 / 87,5	4,8	available on request	
8	70 MPa - NF* Breakaway coupling set	-	X	M40 x 1,5 (female)	9/16"-18 UNF with sealing cone 60°	66 / 100 / 55 / 58	440 / 260	70 / 87,5	4,8	available on request	
8	70 MPa - NF* Breakaway coupling set	-	-	M40 x 1,5 (female)	9/16"-18 UNF with sealing cone 60°	66 / 100 / 55 / 58	440 / 260	70 / 87,5	4,8	available on request	

Tabel 1/2

Type HG-008 - 70 MPa NF | Breakaway Coupling | Variants available

Breakaway coupling (station side)											
NB	**Product type**	**IR-Module**	**Flushing connection**	**A**	**A1 / A2**	**D / D3** [mm]	**L2 / L4** [mm]	**NWP / MOP** [MPa]	**Weight** [kg]	**ID**	**Part number**
8	70 MPa - NF* Breakaway coupling	X	-	-	9/16"-18 UNF with sealing cone 60° (female)	66 / 58	340 / 164	70 / 87,5	1,9	229923	HG-008-0-XX004-ACAA-Y216-BB-S070
8	70 MPa - NF* Breakaway coupling	X	X	-	9/16"-18 UNF with sealing cone 60° (female)	66 / 58	340 / 164	70 / 87,5	1,9	available on request	
8	70 MPa - NF* Breakaway coupling	-	X	-	9/16"-18 UNF with sealing cone 60° (female)	66 / 58	340 / 164	70 / 87,5	1,9	available on request	
8	70 MPa - NF* Breakaway coupling	-	-	-	9/16"-18 UNF with sealing cone 60° (female)	66 / 58	340 / 164	70 / 87,5	1,9	available on request	
Breakaway nipple (car / nozzle side)											
NB	**Product type**	**IR-Module**	**Flushing connection**	**A**	**A1 / A2**	**D1/ D2** [mm]	**L3** [mm]	**NWP / MOP** [MPa]	**Weight** [kg]	**ID**	**Part number**
8	70 MPa - NF* Breakaway nipple	X	X	M40 x 1,5 (female)	9/16"-18 UNF with sealing cone 60° (male)	100 / 55	180	70 / 87,5	2,9	229924	HG-008-2-XX002-ACAB-Y216-BB-S070

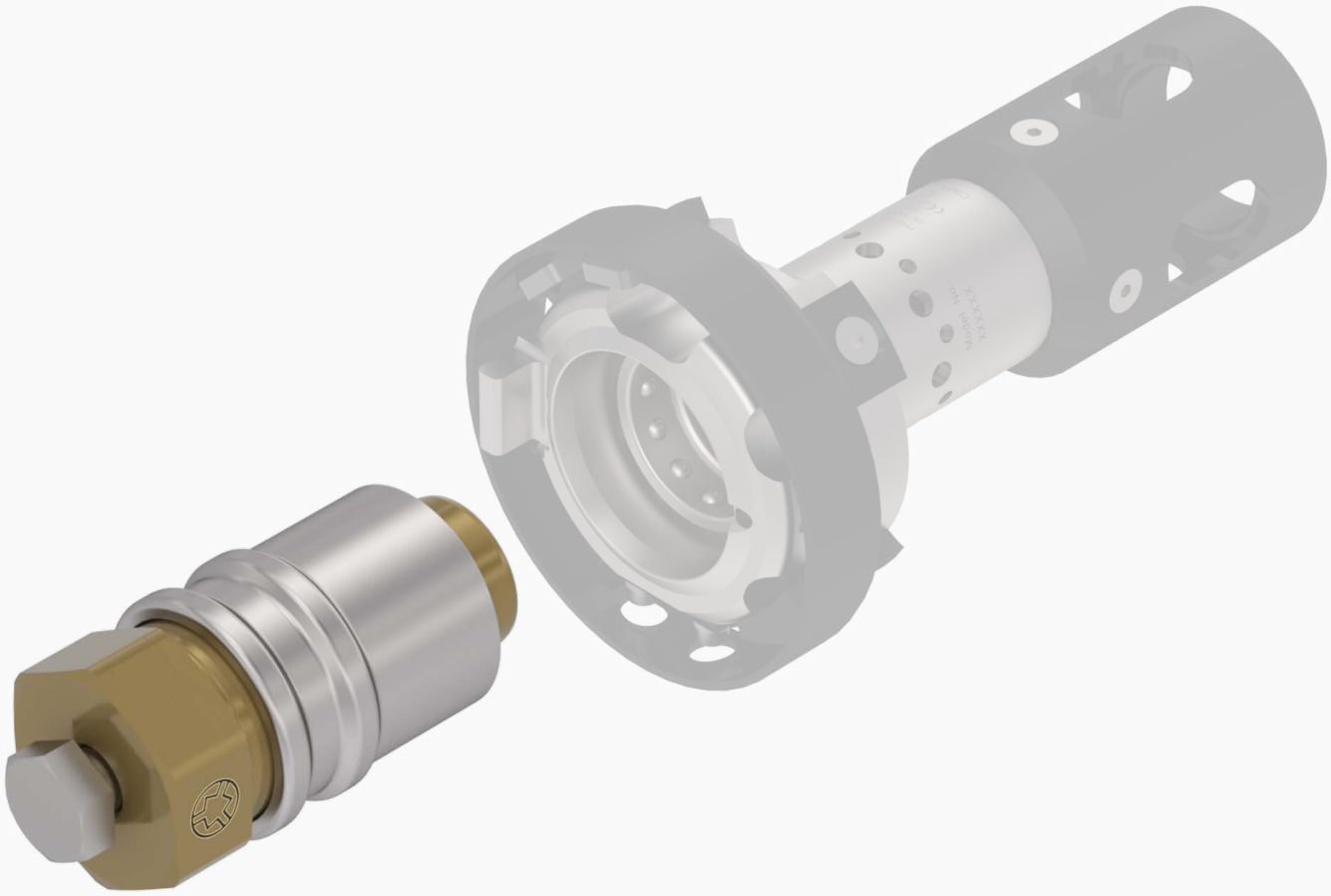
* NF = Normal flow / HF = High flow | Standard

Tabel 2/2

The WALTHER-PRÄZISION high pressure refueling system of the HG series is developed for safe and fast refueling with gaseous hydrogen. The usual application is the refueling of hydrogen driven vehicles up to a maximum operating pressure of 87.5 MPa / 12,688 psi. The breakaway couplings are tested and validated according to ISO 19880-3 and CSA HGV 4.4, the worldwide standards for refueling interfaces. Since 2006 WALTHER-PRÄZISION has significantly contributed to set the standards for high pressure hydrogen technology, offering today validated systems for the mobility of the future.

Venting Tool - Series HG

Data Sheet



Series HG | Venting Tool | Data Sheet

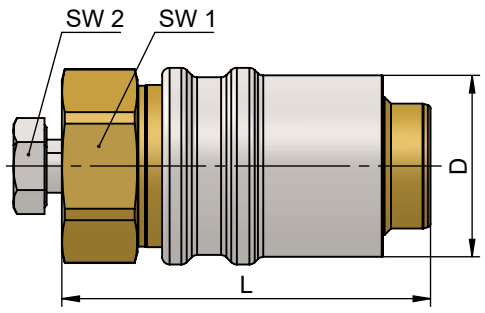
Venting tool

Venting tool for depressurizing high pressure gaseous hydrogen lines after emergency disconnection of a breakaway coupling in hydrogen refueling stations.

Function	Benefits	Matching equipment
After an emergency disconnection has been triggered, the still pressurized hose side attached to the vehicle should be vented with this venting tool.	Immediate restoration of the operational readiness of the incident causing vehicle.	Breakaway couplings Series HG - 35 MPa NF* Series HG - 35 MPa HF* Series HG - 70 MPa NF*

Part	Material
Venting housing	Stainless steel
Locking sleeve	Bronze
Hexagon screw	Stainless steel

Overview



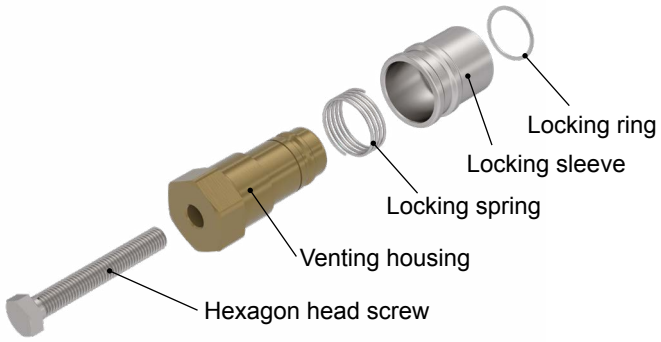


Table of products							
NB	Product type	L [mm]	D [mm]	SW 1 [mm]	SW 2 [mm]	ID	Part number
8	Venting tool	97,5	52	46	22	227964	HG-008-9-00002-AAAZ-Y216

* NF = Normal flow / HF = High flow

Hose Set - Series HG

Data Sheet



Series HG | Hose Set | Technical Data

HG-Hose set

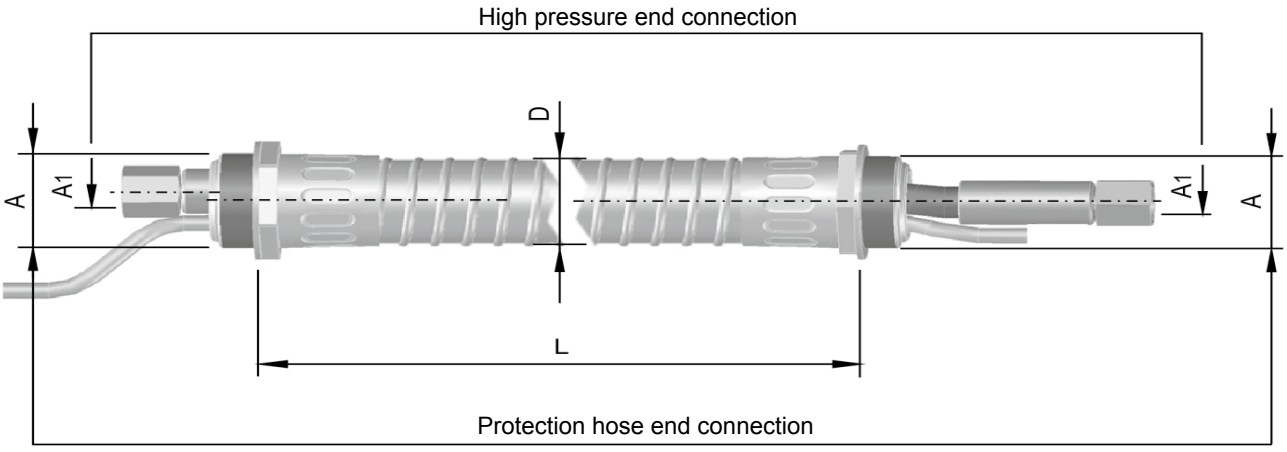
Hose set for gaseous hydrogen, for connecting a high pressure refueling nozzle with the associated breakaway coupling, for its use in hydrogen refueling stations.

Function	Benefits	Matching equipment
Connecting the breakaway coupling of a hydrogen refueling system with its nozzle, including electrical lines necessary to allow the dispenser to control the filling process.	Qualified hydrogen hoses, covered by a reliable protection hose ensure a very high standard of operational safety for both equipment and users.	Refueling nozzles Series HG - 35 MPa NF* Series HG - 35 MPa HF* Series HG - 70 MPa NF*

Properties	Detailed information	Data
Technical features	Nominal working pressure (NWP)	35 / 70 MPa acc. to ISO 19880
	Maximum operation pressure (MOP)	43,75 / 87,5 MPa
	Maximum allowable working pressure (MAWP)	48,12 / 96,25 MPa
	Electrical resistance (total refueling system / WALTHER components only)	< 1000 Ohm acc. to ISO 17268
Materials	Protection hose	PUR, electrically conductive, pricked
	High pressure hose	Stainless steel wire reinforced

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Overview



Variants Available | Hose Set | **Series HG**

Table of products										
NB	**Product type**	**IR-Interface***	**Flushing line** (4mm)	**A**	**A1**	**D (outside)** [mm]	**L (free length of hose)** [mm]	**Weight** [kg]	**ID**	**Part number**
5	35 MPa Hose set NF*	ESCHA**	-	M40x1,5	9/16“-18 UNF Type-M	Ca. 36	4,000	3,3	238527	HG-008-B-00018-SBBE-Y116-BB-S035
5	35 MPa Hose set NF*	LEMO**	x	M40x1,5	9/16“-18 UNF Type-M	Ca. 36	4,000	3,3	238528	HG-008-B-00018-SBBF-Y146-BB-S035
8	35 MPa Hose set HF*	LEMO**	x	M63x1,5	3/4“-16 UNF	Ca. 56	4,000	3,3	247129	HG-008-B-00019-SBBF-Y116-BB-THF-S035
8	35 MPa Hose set HF*	LEMO**	x	M63x1,5	3/4“-16 UNF	Ca. 56	4,000	3,3	247870	HG-008-B-00020-SBBF-Y146-BB-THF-S035
8	35 MPa Hose set HF*	LEMO**	x	M63x1,5	3/4“-16 UNF	Ca. 56	4,000	3,3	247871	HG-008-B-00020-SBBF-Y116-BB-THF-S035
8	35 MPa Hose set HF*	------	x	M63x1,5	3/4“-16 UNF	Ca. 56	4,000	3,3	247873	HG-008-B-00020-SBBF-Y156-BB-THF-S035
4	70 MPa Hose set NF*	LEMO**		M40x1,5 (noozle only)	9/16“-18 UNF Type-M	Ca. 36	2,500	2	232368	HG-004-B-00018-SFBR-Y126-BB-S070
4	70 MPa Hose set NF*	LEMO**		M40x1,5	9/16“-18 UNF Type-M	Ca. 36	4,000	3,3	237764	HG-004-B-00018-SBBA-Y116-BB-S070
4	70 MPa Hose set NF*	LEMO**		M40x1,5	9/16“-18 UNF Type-M	Ca. 36	4,000	3,3	237766	HG-004-B-00020-SBBB-Y116-BB-S070
4	70 MPa Hose set NF*	LEMO**	x	M40x1,5	9/16“-18 UNF Type-M	Ca. 36	3,000	2,5	237837	HG-004-B-00019-SBBC-Y146-BB-S070
4	70 MPa Hose set NF*	LEMO**		M40x1,5 (noozle only)	9/16“-18 UNF Type-M	Ca. 36	2,310	2	237850	HG-004-B-00020-SFBT-Y126-BB-S070
4	70 MPa Hose set NF*	------		M40x1,5	9/16“-18 UNF Type-M	Ca. 36	4,000	3,3	238277	HG-004-B-00021-SBBD-Y136-BB-S070
4	70 MPa Hose set NF*	LEMO**	x	M40x1,5	9/16“-18 UNF Type-M	Ca. 36	4,000	3,3	238885	HG-004-B-00022-SBBE-Y146-BB-S070
4	70 MPa Hose set NF*	------	x	M40x1,5	9/16“-18 UNF Type-M	Ca. 36	4,000	3,3	239301	HG-004-B-00023-SBBE-Y156-BB-S070
4	70 MPa Hose set NF*	LEMO**		M40x1,5	9/16“-18 UNF Type-M	Ca. 36	15,150	12,5	244385	HG-004-B-00025-SBBA-Y186-BB-S070
4	70 MPa Hose set NF*	LEMO**		M40x1,5	9/16“-18 UNF Type-M	Ca. 36	6,000	5	245112	HG-004-B-00021-SBBO-Y116-BB-S070
4	70 MPa Hose set NF*	LEMO**		M40x1,5	9/16“-18 UNF Type-M	Ca. 36	3,000	2,5	245312	HG-004-B-00019-SBBG-Y166-BB-S070
-	Protection hose	------	-	M40x1,5 (noozle only)	------	Ca.36	2,310		232369	HG-004-B-00019-SFBR-Y726-BB

* NF = Normal flow / HF = High flow

** Breakaway-side LEMO: 5-way double sided with emergency separation plug
Breakaway-side ESCHA: 5-way double sided, pull-only emergency plug

Series HG | Hose Set | General Information

The WALTHER-PRÄZISION high pressure refueling system of the HG series is developed for safe and fast refueling with gaseous hydrogen. The usual application is the refueling of hydrogen driven vehicles up to a maximum operating pressure of 87.5 MPa / 12,688 psi. The refueling systems are tested and validated according to SAE J2600 and ISO 17268, the worldwide standards for refueling interfaces. Since 2006 WALTHER-PRÄZISION has significantly contributed to set the standards for high-pressure hydrogen technology, offering today validated systems for the mobility of the future.

Parking station - Series HG

Data Sheet



Series HG | Parking Station | Technical Data

Parking Station

Parking station for holding a high pressure refueling nozzle for gaseous hydrogen between refueling operations, for its use in hydrogen refueling stations.

Function	Benefits	Matching equipment
Holding the hydrogen nozzle safe in place while being not in use, antiicing ventilation optionally available. • Integrated connection for purging system with dry air • High operating comfort and safe locking system • Robust mechanical actuation to detect the correct parking of the refueling nozzle • Reliable protection of the refueling nozzle with front side sealing • Multiple mounting angles possible	User-friendly removal and reinsertion of the refueling nozzle. • Natural freezing of the refueling nozzle prevented • Incorrect usage excluded, damages avoided • Simple installation of proximity switch by customer • Low service costs, penetration of air, water or other pollution prevented • Adaptable design of the dispenser	Refueling nozzles Series HG - 35 MPa NF* Series HG - 35 MPa HF* Series HG - 70 MPa NF*

Properties	Detailed information	Standard variant	Special variants
Technical features	Ventilation	Nitrogen or dry air (2 bar max.)	
	Ventilation connection	G 1/4“, female thread	
Material	Body	Plate housing stainless steel, POM-C black	Plastic
	Sealings	FKM	
Assembly	Positions	Various angles possible / on panel mounting	Embedded mounting
	Mounting plate	Included to facilitate easy assembly	
	Nozzle detection	Actuator not included in the scope of delivery	
Suitable for	WALTHER refueling nozzles	35 MPa NF / HF; 70 MPa NF	

The WALTHER-PRÄZISION high pressure refueling system of the HG series is developed for safe and fast refueling with gaseous hydrogen. The usual application is the refueling of hydrogen driven vehicles up to a maximum operating pressure of 87.5 MPa / 12,688 psi. The refueling systems are tested and validated according to SAE J2600 and ISO 17268, the worldwide standards for refueling interfaces. Since 2006 WALTHER-PRÄZISION has significantly contributed to set the standards for high-pressure hydrogen technology, offering today validated systems for the mobility of the future.

Overview

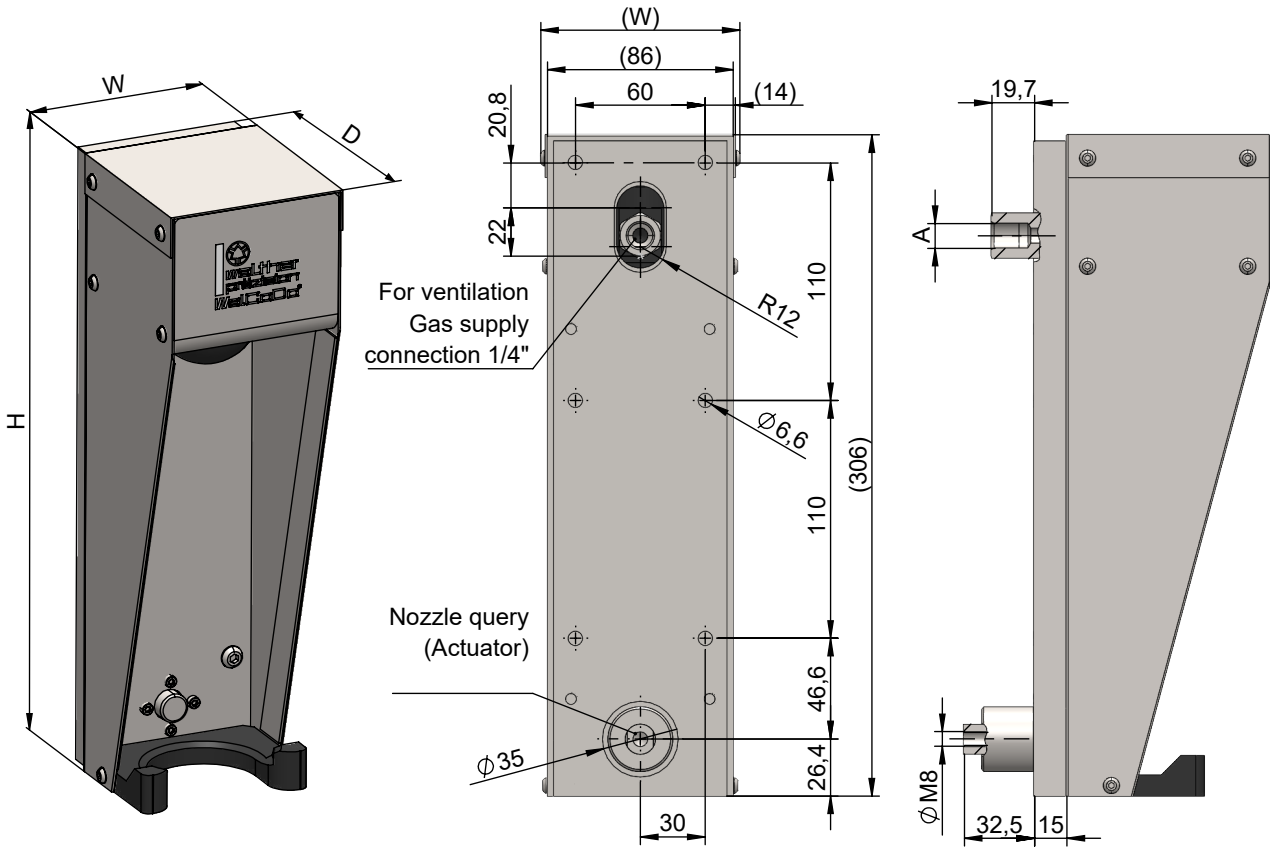
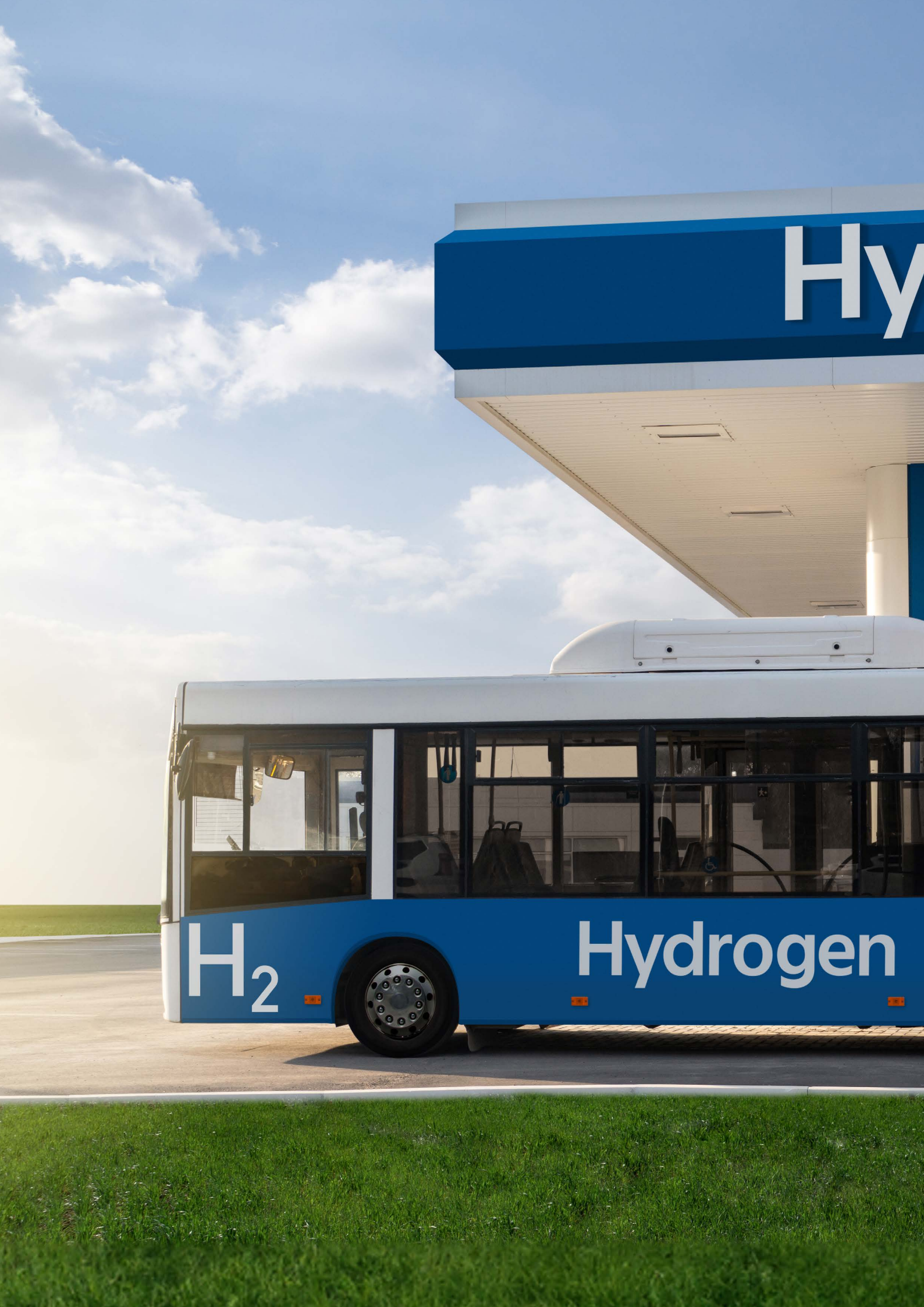


Table of products						
Product type	**A**	**W** [mm]	**H** [mm]	**D** [mm]	**ID**	**Part number**
Parking station 35 MPa - NF* / HF* 70 MPa - NF* Metal housing - on panel	G 1/4“ for gas supply	93	306	109	227963	HG-004-B-00016-AAAV-Y316-S070
Parking station 35 MPa - HF* Plastic - on panel	G 1/4“ for gas supply	available on request				
Parking station 70 MPa - NF* Plastic - build in	G 1/4“ for gas supply	available on request				

* NF = Normaler Durchfluss / HF = Hoher Durchfluss | Standard


Hy
H2
Hydrogen


ydrogen
1

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WALTHER-PRÄZISION

Schnellkupplungssysteme / Quick Coupling Systems

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