



# Data Sheet | Breakaway Coupling | HG-008 | 35 MPa NF

The WALTHER 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 an operating pressure of 87.5 MPa / 12,688 psi. The refueling nozzles are tested and validated

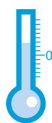
according to SAE J2600 and ISO 17268, the worldwide standards for refueling interfaces. Since 2006 WALTHER-PRÄZISION has significantly contributed to set the standards for high-pressure hydrogen technology, offering today validated systems for the mobility of the future.

## Breakaway coupling HG-008

for gaseous hydrogen according to SAE J2600, ISO 19880, ISO 17268 and HGV 4.4; normal flow (NF)



up to 35 MPa



-40° C up to 85° C

### Characteristics:

- Unique and IP protected 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

### Benefits:

- 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 directly after an emergency event
- Quick and easy restoring of the operational readiness on site

### Complementary equipment:

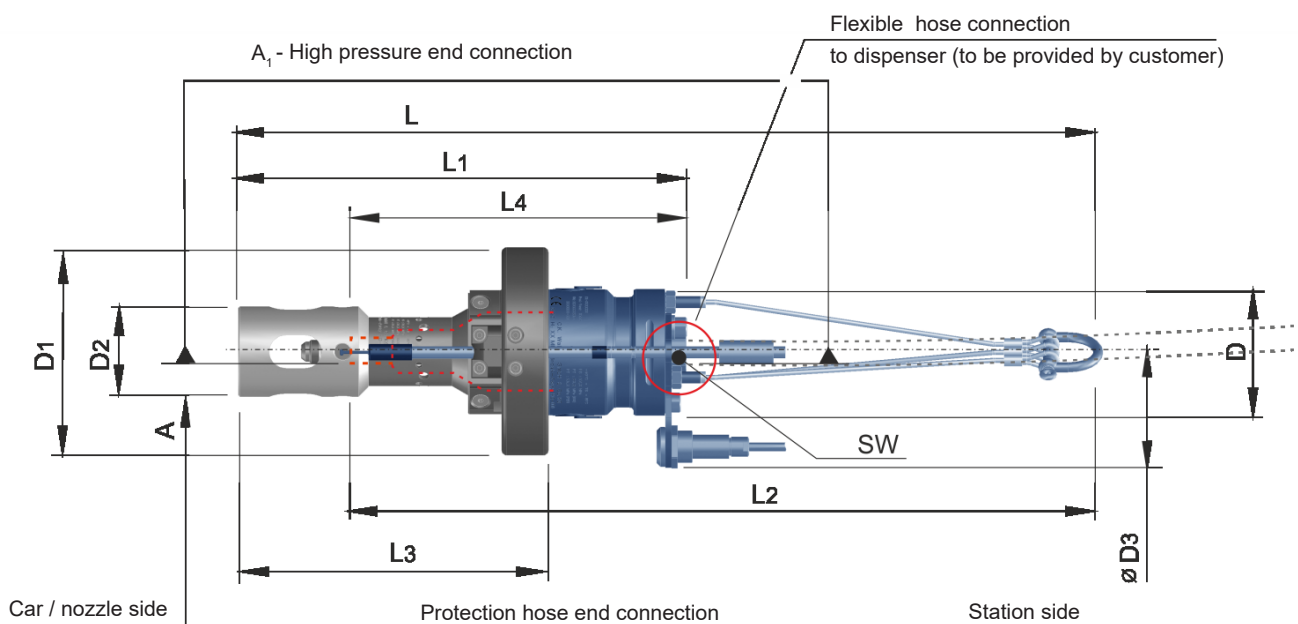
- Refueling nozzle
- Hose set
- Parking station
- Service tools



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

Properties	Detailed information	35 MPa
<b>Technical features</b>	Types	Standard / special types see „Variants available“
	Nominal diameter	8 mm
	Nominal working pressure	35 MPa (acc. to ISO 19880)
	Maximum allowable operating pressure	43,8 MPa (acc. to ISO 19880)
	Maximum allowable working pressure	48,12 MPa (acc. to ISO 19880)
	Temperature range	-40° C up to 85° C
	Cv-Value	0,4
	Volume	13,2 cm <sup>3</sup>
	Dead space volume	7,6 cm <sup>3</sup>
	Mass flow	30 g/s
	Leakage rate	0,00211 mbar*l/s
	IR-Module	Lemo connection cable
	Emergency separation force	Less than 667 N
	<b>Materials</b>	Pressure bearing parts
Sealing		Peek / NBR / HNBR / TPU
Housing		POM
<b>Dimensions</b>	Total length (connected) / Diameter	440 / Ø 127
<b>Lubricants</b>	for sealings	Barrierta L 25 DL
<b>Connections</b>	Process line	3/4"-16 UNF; 37° sealing cone
	Protection hose	M40 x 1,5
	Electrical connection for IR-Module	M12 x 1; 4 pins - axial / internal interconnection: plug
	Flushing connection	No
<b>Certificate standards</b>	Certificates	Manufacturer certificate ISO 10204 – 3.1 Declaration of conformity PED
	Standards	ISO 19880 / HGV 4.4
<b>Maintenance</b>	Interval	2 years or 8.000 cycles

## Overview





## Variants available | Breakaway Coupling | HG-008 | 35 MPa NF

Breakaway coupling complete											
NB	Product type	A	A <sub>1</sub>	SW	D / D <sub>1</sub> / D <sub>2</sub> [mm]	L / L <sub>1</sub> [mm]	Nominal / maximal pressure [MPa]	Weight [kg]	ID	Part number	Cable
8	35 MPa - NF* Breakaway coupling complete	M40 x 1,5 (female)	9/16-18 UNF with sealing cone 37°	21	66 / 127 / 55	440 / 260	35 / 43,8	4,8	233434	HG-008-B-02001-ACFA-Y216-BB-S035	LEMO
8	35 MPa - NF* Breakaway coupling complete	M40 x 1,5 (female)	7/16-20 UNF with sealing cone 37°	21	66 / 127 / 55	440 / 260	35 / 43,8	4,8	238822	HG-008-B-02010-ACFA-Y216-BB-S035	LEMO
Breakaway coupling (station side)											
NB	Product type	A	A <sub>1</sub>	SW	D / D <sub>3</sub> [mm]	L <sub>2</sub> / L <sub>4</sub> [mm]	Nominal / maximal pressure [MPa]	Weight [kg]	ID	Part number	Cable
8	35 MPa - NF* Breakaway coupling	-	9/16-18 UNF-2B Nova Swiss 3/8" with sealing cone 60°	21	66 / 116	340 / 164	35 / 43,8	1,9	227754	HG-008-0-XX004-ABAA-Y216-BB-S035	LEMO
8	35 MPa - NF* Breakaway coupling	-	9/16-18 UNF-2B with sealing cone 37°	21	66 / 116	340 / 164	35 / 43,8	1,9	229919	HG-008-0-XX008-ACAA-Y216-BB-S035	LEMO
8	35 MPa - NF* Breakaway coupling	-	7/16-20 UNF-2B with sealing cone 37°	21	66 / 116	340 / 164	35 / 43,8	1,9	238825	HG-008-0-XX011-ACAA-Y216-BB-S035	LEMO
Breakaway nipple (car / nozzle side)											
NB	Product type	A	A <sub>1</sub>	SW	D <sub>1</sub> / D <sub>2</sub> [mm]	L <sub>3</sub> [mm]	Nominal / maximal pressure [MPa]	Weight [kg]	ID	Part number	Cable
8	35 MPa - NF* Breakaway nipple	M40 x 1,5 (female)	9/16-18 UNF-2Bs with sealing cone 60°	21	127 / 55	190	35 / 43,8	2,9	227755	HG-008-2-XX002-ABAB-Y216-BB-S035	LEMO
8	35 MPa - NF* Breakaway nipple	M40 x 1,5 (female)	9/16-18 UNF-2B with sealing cone 37°	21	127 / 55	190	35 / 43,8	2,9	229920	HG-008-2-XX007-ACAA-Y216-BB-S035	LEMO
8	35 MPa - NF* Breakaway nipple	M40 x 1,5 (female)	7/16-20 UNF-2B with sealing cone 37°	21	127 / 55	190	35 / 43,8	2,9	238828	HG-008-2-XX010-ACAA-Y216-BB-S035	LEMO

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



# WALTHER-PRÄZISION

Schnellkupplungssysteme / Quick Coupling Systems

Carl Kurt Walther GmbH & Co. KG

Hausadresse / Head office:

Westfalenstrasse 2  
42781 Haan, Germany

T +49 (0) 2129 / 567-0  
F +49 (0) 2129 / 567-450

Postadresse / Postal address:

PF / P.O. Box 420444  
42404 Haan, Germany

W [www.walther-praezision.de](http://www.walther-praezision.de)  
E [info@walther-praezision.de](mailto:info@walther-praezision.de)



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# Data Sheet | Breakaway Coupling | HG-008 | 35 MPa HF

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up to 35 MPa



-40° C up to 85° C

### Characteristics:

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### Complementary equipment:

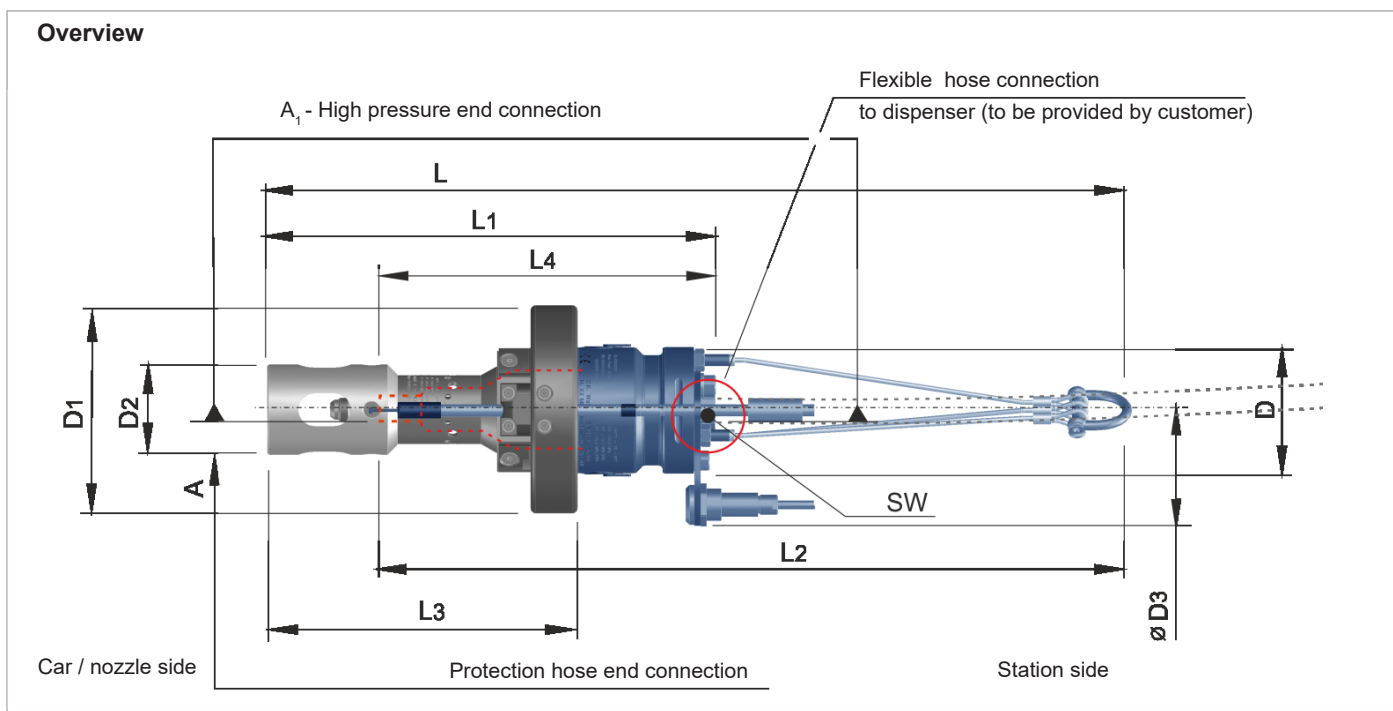
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	Temperature range	-40° C up to 85° C
	Cv-Value	0,4
	Volume	13,2 cm <sup>3</sup>
	Dead space volume	7,6 cm <sup>3</sup>
	Mass flow	120 g/s
	Leakage rate	0,00211 mbar*l/s
	IR-Module	Lemo connection cable
	Emergency separation force	Less than 667 N
<b>Materials</b>	Pressure bearing parts	1.4310 / 1.4404 / 1.4571 / 1.4980 / 2.4669
	Sealing	Peek / NBR / HNBR / TPU
	Housing	POM
<b>Dimensions</b>	Total length (connected) / Diameter	440 / Ø 127
<b>Lubricants</b>	for sealings	Barrierta L 25 DL
<b>Connections</b>	Process line	3/4"- 16 UNF; 37° sealing cone
	Protection hose	M40 x 1,5
	Electrical connection for IR-Module	M12 x 1; 4 pins - axial / internal interconnection: plug
	Flushing connection	No
<b>Certificate standards</b>	Certificates	Manufacturer certificate ISO 10204 – 3.1 Declaration of conformity PED
	Standards	ISO 19880 / HGV 4.4
<b>Maintenance</b>	Interval	2 years or 8.000 cycles

### Overview





## Variants available | Breakaway Coupling | HG-008 | 35 MPa HF

Breakaway coupling complete											
NB	Product type	A	A <sub>1</sub>	SW	D / D <sub>1</sub> / D <sub>2</sub> [mm]	L / L <sub>1</sub> [mm]	Nominal / maximal pressure [MPa]	Weight [kg]	ID	Part number	Cable
8	35 MPa - HF* Breakaway coupling complete	M40 x 1,5 (female)	9/16-18 UNF with sealing cone 37°	21	66 / 127 / 55	440 / 260	35 / 43,8	4,8	233437	HG-008-B-02001s-ACFA-Y216-BB-THF S035	LEMO
8	35 MPa - HF* Breakaway coupling complete	M40 x 1,5 (female)	3/4-16 UNF with sealing cone 37°	21	66 / 127 / 55	440 / 260	35 / 43,8	4,8	238823	HG-008-B-02020-ACFA-Y216-BB-THF S035	LEMO
Breakaway coupling (station side)											
NB	Product type	A	A <sub>1</sub>	SW	D / D <sub>3</sub> [mm]	L <sub>2</sub> / L <sub>4</sub> [mm]	Nominal / maximal pressure [MPa]	Weight [kg]	ID	Part number	Cable
8	35 MPa - HF* Breakaway coupling	-	9/16-18 UNF-2B with sealing cone 37°	21	66 / 116	340 / 164	35 / 43,8	1,9	229938	HG-008-0-XX008-ACAA-Y216-BB-THF-S035	LEMO
8	35 MPa - HF* Breakaway coupling	-	3/4-16 UNF-2B with sealing cone 37°–	21	66 / 116	340 / 164	35 / 43,8	1,9	238826	HG-008-0-XX013-ACAA-Y216-BB-THF-S035	LEMO
Breakaway nipple (car / nozzle side)											
NB	Product type	A	A <sub>1</sub>	SW	D <sub>1</sub> / D <sub>2</sub> [mm]	L <sub>3</sub> [mm]	Nominal / maximal pressure [MPa]	Weight [kg]	ID	Part number	Cable
8	35 MPa - HF* Breakaway Nipple	M40 x 1,5 (female)	9/16-18 UNF-2B with sealing cone 37°	21	127 / 55	190	35 / 43,8	2,9	229939	HG-008-2-XX007-ACAA-Y216-BB-THF-S035	LEMO
8	35 MPa - HF* Breakaway Nipple	M40 x 1,5 (female)	3/4-16 UNF-2B with sealing cone 37°	21	127 / 55	190	35 / 43,8	2,9	238829	HG-008-2-XX012-ACAA-Y216-BB-THF-S035	LEMO

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# WALTHER-PRÄZISION

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Carl Kurt Walther GmbH & Co. KG

Hausadresse / Head office:

Westfalenstrasse 2  
42781 Haan, Germany

T +49 (0) 2129 / 567-0  
F +49 (0) 2129 / 567-450

Postadresse / Postal address:

PF / P.O. Box 420444  
42404 Haan, Germany

W [www.walther-praezision.de](http://www.walther-praezision.de)  
E [info@walther-praezision.de](mailto:info@walther-praezision.de)



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