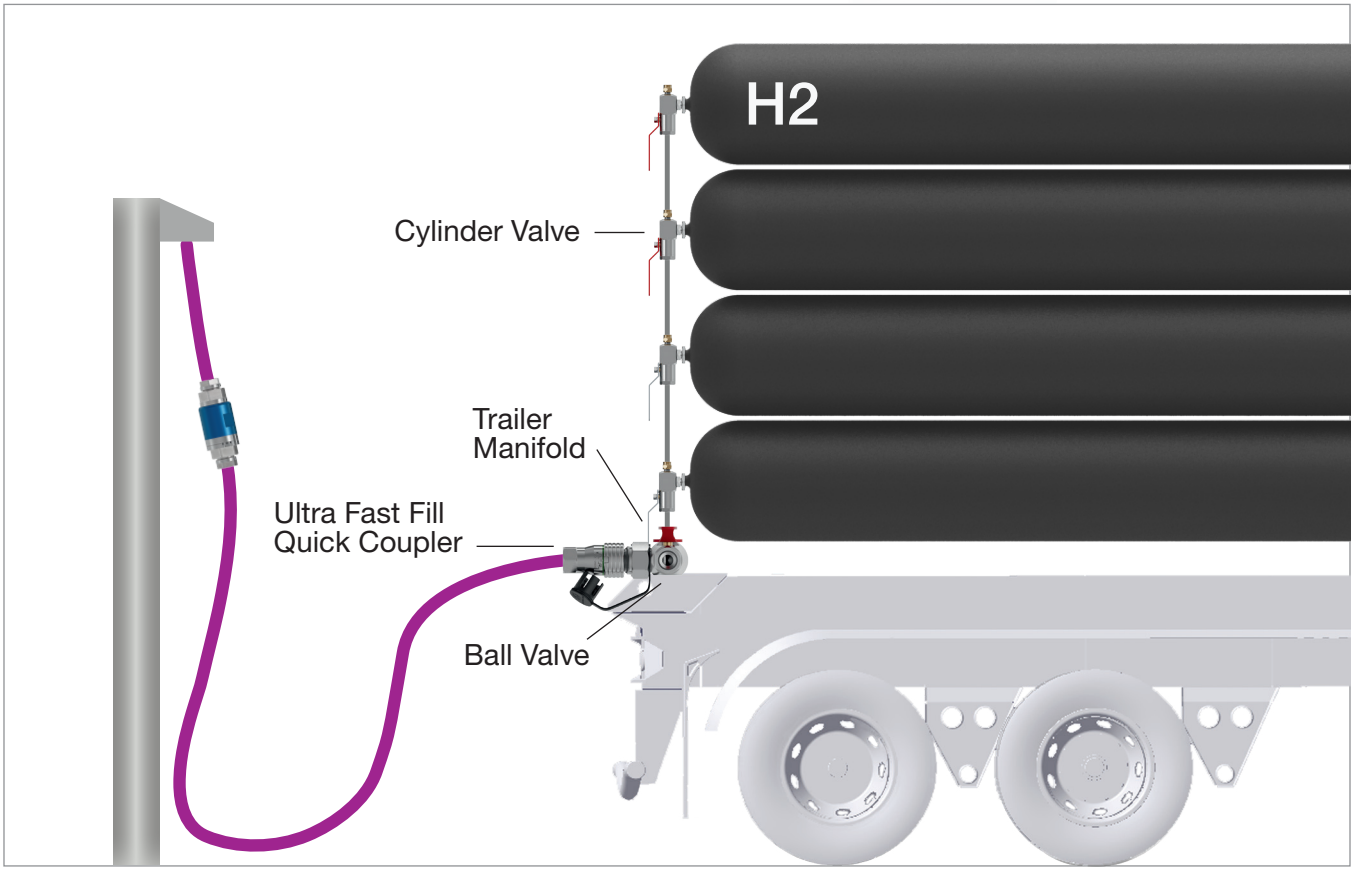
TECHNISCHE ÄNDERUNGEN VORBEHALTEN · NACHDRUCK UND KOPIEN NUR MIT UNSEREM EINVERSTÄNDNIS · *Specifications subject to change without notice · Copyright ELAFLEX HIBY*

Compressed gaseous
H2 Trailer Equipment (TPED) for up to 520 bar

For fast loading and unloading of trailers with compressed hydrogen (CH2), ELAFLEX and Oasis offer secure and proven trailer solutions: cylinder valves, ball valves, manifolds and specific hydrogen quick connect / disconnect couplings. A sophisticated full-bore design allows very high flow rates, suitable for trailers / MEGCs / pressure cyclinders with a WP of 385 bar or alternatively a WP of 520 bar.



BALL VALVES

- Anti blow-out stem for an ever safe operation
- Sophisticated 'Two-Piece' & 'Floating Ball' design to enable long service life
- All ball valves are easy to service, with spare part kits readily available

▶ **NWP 385 bar** (BV 900 Series)

- With PI marking to TPED/type approved to EN ISO 23826
- Available from 1/4" to 1"
- NWP 385 bar
- Temperature range -40 °C up to +65 °C
- Available with female BSPP, NPT, SAE, or male ORFS and tube lock end connections
- Optional lockout system to prevent valve from accidental opening
- Customised connection on request

▶ **NWP 520 bar** (BV 400 Series)

- With PI marking to TPED/type approved to EN ISO 23826
- Available in ½"
- NWP 520 bar
- Temperature range -40 °C up to +65 °C
- Available with medium pressure connections
- Optional lockout system to prevent valve from accidental opening
- Customised connection on request

900 Series TPED valve system

Optional with pneumatically controlled **actuator with ball valve**

CYLINDER VALVES

- Clear identification of open/closed position
- 360° adjustable cylinder neck adapters, no clocking of cylinders
- Anti blow-out stem for an ever safe operation
- All ball valves are easy to service, with spare part kits readily available

▶ **NWP 385 bar** (TH904)

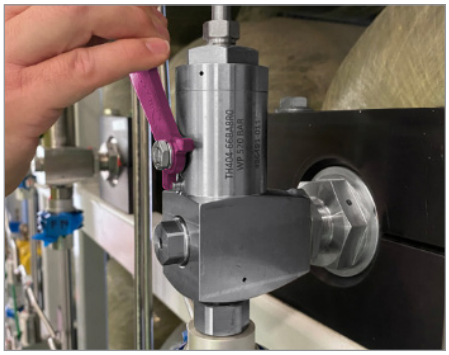
- With PI marking to TPED / type approved to EN ISO 23826
- NWP 385 bar
- Temperature range -40 °C up to +65 °C
- Available in ½"
- Available with female BSPP, NPT, SAE, or male ORFS and tube lock end connections
- Cylinder neck connections: 25E or UNF 18 adjustable adapter
- Optional lockout system to prevent valve from accidental opening
- Customised connection on request

▶ **NWP 520 bar** (TH404)

- With PI marking to TPED/type approved to EN ISO 23826
- NWP 520 bar
- Temperature range -40 °C up to +65 °C
- Available in ½"
- With optional TPRD valve
- Optional commissioning port allows the cylinder to be isolated for testing
- Available with medium pressure connections for the piping
- Cylinder neck connections: male 25E, UNF18 (1⅛"-12 UNF) and 1½"-12 UNF adjustable adapter
- Optional lockout system to prevent valve from accidental opening
- Customised connection on request

NWP 385 bar (TH904)

NWP 520 bar (TH404)



QUICK COUPLERS

For 200, 300 and 380 bar trailers (PN450)

Hydrogen HC404-H2 Quick Coupler:

- High flow ½" quick connect/disconnect coupling, alternative to screw-on connections (laboratory style)
- Specially designed for hydrogen use
- No misallignment, no mis-connection: it is either on or off
- All 316 stainless steel construction against corrosion and wear
- Temperature range -40 °C up to +85 °C and PN 450 bar
- Conform to PED 2014/68/EU
- Correct connection indicator
- Anti-leak spring loaded poppets in male and female part, no need for constant hydrogen flushing
- Hardened segment connection style increase gripping surface area to significantly reduce wear on male coupling
- Coupled/uncoupled at atmospheric pressure (0 MPa gauge) only
- Different thread connections (e.g. DKOS) available for easy retrofitting of trailers and mother/daughter station on site!

HC404-H2 Quick Coupler

Dust caps availabe for male/female quick coupler

TRAILOR MANIFOLD

- Removes additional leak points from system while increasing flow capacity
- Integrated ¾" ball valve (to header) and ¼" spare vent valve
- Incl. two loading/unloading ports

▶ NWP 385 bar (TM 908)

- With PI marking to TPED / type approved to EN ISO 23826
- NWP 385 bar
- Temperature range -40 °C up to +65 °C
- Optional lockout system to prevent valve from accidental opening
- Customised connection on request
- Pressure gauge inlet

TM 908 Trailor Manifold

TM 908 Trailer Manifold with **HC 404-H2** Hydrogen Quick Couplings

PART NUMBER BREAKDOWN

Ball Valves

BV 90 4 -6 S 4 TCDW- G000

Port Size	Port Type	Body Size	Operation Type	
			Handle	Actuator
2 = ¼"	N = NPT	4 = if port size is 2 to 4	G000 = Purple [Standard]	0124 = with N/C actuator 012M = with N/O actuator (sizes ¼" and ½")
4 = ½"	S = SAE	6 = if port size is 8	0101 = Mounting brackets	
8 = 1"	B = BSPP		H000 = Lockout kit	
	1 = 12mm tube lock		Others on request	0148 = with N/C actuator 014P = with N/O actuator (sizes 1")
	Others (ie. ORFS) on request			

BV 40 4 -6 A 4TCDW- G000

Port Size	Port Type	Handle
4 = ½"	A = ⅜" MP	G000 = Purple [Standard]
	B = 9/16" MP	0101 = Mounting brackets
	C = ¾" MP	H000 = Lockout kit
		Others on request

Cylinder Valves

TH 90 4 -6 3 B 8 2T0 G000

Port Size	Port Type	Cylinder Head Connection	Handle
4 = ½"	3 = ½" NPT female	8 = 25E adjustable adaptor	G000 = Purple [Standard]
	2 = ¾"-16 SAE female	9 = UNF 18 adjustable adaptor	H000 = Lockout kit
	7 = 12 mm tube lock		Others on request
	Others (ie. ORFS) on request		

TH 40 4 -6 6 B A 8RO G000

Port Size	Port Type	Cylinder Head Connection	Handle
4 = ½"	6 = ⅜" MP	A = 1⅛" UNF	G000 = Purple [Standard]
	2 = ½" ORB	9 = UNF 18	H000 = Lockout kit
			Others on request

Trailer Manifold

TM 90 8 -6 S 6TCDW- G000

Port Size	Port Type	Handle
8 = 1"	S = 15/16"-12 SAE female	G000 = Purple [Standard]
	N = NPT	H000 = Lockout kit
	Others (ie. ORFS) on request	

Quick Couplers

HC404 -H D XSP- MH

Male

Threads (G)	Coupling Type
D = 1 5/16"-12 Male SAE	M = Male
S = ¾"-16 Female SAE	
L = M36 x 2LH	

HC404 -H S XSP- F

Female

Threads (G)	Coupling Type
D = 1 5/16"-12 Male SAE	F = Female
S = ¾"-16 Female SAE	
N = ½"- Female NPT	
K = M30 x 2RH	

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