

For **fast flow loading and unloading** of trailers with **compressed H₂ hydrogen**, Elaflex has expanded its product range to include **Ball Valves** up to DN 25 (1"), **Cylinder Valves** up to DN 13 (½"), **Manifolds** for mobile pressure storage units (swap bodies or trailers) and **Quick Couplers** (½") to be used instead of thread connections. This **H₂ equipment allows very high flow rates**, suitable for a settlement pressure of 350 bar (35.0 MPa) or Ball Valves up to 380 bar (38,0 MPa).



900 Series TPED Valve System

Specifications for 900 Series TPED Valve System

- Easy to service, kits readily available
- Anti blow-out stem
- With PI marking to TPED/Type approved to EN ISO 23826
- NWP 385 bar
- Temperature range -40°C up to +65°C
- NPT threads to ASME B1.20.1 or BSPP threads to ISO228
- SAE threads (Straight Thread O-Ring "BOSS") to SAE J1926 or ORFS threads to SAE J1453
- Lockout system to prevent valve from accidental opening
- Customised connection on request



Ball Valve with Lockout System
to prevent accidental valve opening

BV 900 Ball Valve



- Tight tolerances
- Sophisticated 'Two-Piece' & 'Floating Ball' design to enable long service life
- Port sizes from ¼" to 1"
- Service kits available

Optional with pneumatically controlled **Actuator** with Ball Valve



TH 900 Cylinder Valve



- Clear identification of 'open/closed' position
- Available with 25E or UNF 18 adjustable adapter

TM 900 Trailer Manifold



- High Flow TPED PI marked load/unload manifold for trailers
- Two inlet ports
- Pressure gauge inlet

Specifications for Hydrogen HC404-H2 Quick Coupler

- Specially designed for hydrogen use
- 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
- High flow 1/2" quick connect/disconnect coupling, alternative to screw-on connections (laboratory style)
- Correct connection indicator
- Anti-leak spring loaded poppets in male and female part
- Hardened segment connection style increase gripping surface area to significantly reduce wear on male coupling
- Coupled/uncoupled at atmospheric pressure (0 MPa gauge) only



Dust Caps
Available for male/
female quick coupler

Part Number Breakdown

Ball Valves

BV 90

4

-6

S

4

TCDW -

G000

Port Size	Port Type	Body Size	Operation Type	
			Handle	Actuator
2 = 1/4"	N = NPT	4 = if port size is 2 to 4	G000 = Grey [Standard]	0124 = with N/C Actuator 012M = with N/O Actuator (sizes 1/4" and 1/2")
4 = 1/2"	S = SAE	6 = if port size is 8	1000 = Red	0148 = with N/C Actuator 014P = with N/O Actuator (sizes 1")
8 = 1"	B = BSPP		0101 = Mounting brackets H000 = Lockout kit	
	Others (ie. ORFS) on request			

Cylinder Valves

TH 90

4

-6

3

B

8

2T0

G000

Port Size	Port Type	Cylinder Head Connection	Handle
4 = 1/2"	3 = 1/2" NPT female	8 = 25E adjustable adaptor	G000 = Grey [Standard]
	2 = 3/4"-16 SAE female	9 = UNF 18 adjustable adaptor	1000 = Red
	Others (ie. ORFS) on request		H000 = Lockout kit

Trailer Manifold

TM 90

8

-6

S

6TCDW - G000

Port Size	Port Type	Handle
8 = 1"	S = 1 5/16"-12 SAE female	G000 = Grey [Standard]
	Others (ie. ORFS) on request	1000 = Red
		H000 = Lockout kit

Quick Couplers

HC404 - H

D

XSP -

MH

HC404 - H

S

XSP -

F

Male

Threads (G)	Coupling Type
D = 1 5/16"-12 Male SAE	M = Male
S = 3/4"-16 Female SAE	
N = 1/2"-NPT Female	

Female

Threads (G)	Coupling Type
D = 1 5/16"-12 Male SAE	F = Female
S = 3/4"-16 Female SAE	
N = 1/2"- Female NPT	