

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 (1/2"), **Manifolds** for mobile pressure storage units (swap bodies or trailers) and **Quick Couplers** (1/2") 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 380 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 1/4" 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 MOP 437,5 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

Port Size	Port Type	Body Size	Handle	Operation Type
2 = 1/4"	N = NPT	4 = if port size is 2 to 4	3000 = Grey [Standard]	0124 = with N/C Actuator
4 = 1/2"	S = SAE	6 = if port size is 8	1000 = Red	012M = with N/O Actuator (sizes 1/4" and 1/2")
8 = 1"	B = BSPP		0101 = Mounting brackets	0148 = with N/C Actuator
	Others (ie. ORFS) on request		6000 = Lockout kit	014P = with N/O Actuator (sizes 1")

Cylinder Valves

TH 90

Port Size	Port Type	Cylinder Head Connection	Handle
4 = 1/2"	3 = 1/2" NPT female	8 = 25E adjustable adaptor	3000 = Grey [Standard]
	2 = 3/4"-16 SAE female	9 = UNF 18 adjustable adaptor	1000 = Red
	Others (ie. ORFS) on request		9000 = Lockout kit

Trailer Manifold

TM 90

Port Size	Port Type	Handle
8 = 1"	S = 1 5/16"-12 SAE female	3000 = Grey [Standard]
	Others (ie. ORFS) on request	1000 = Red
		6000 = Lockout kit

Quick Couplers

HC404 - H2

Male

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

HC404 - H2

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	