

**TEESING**

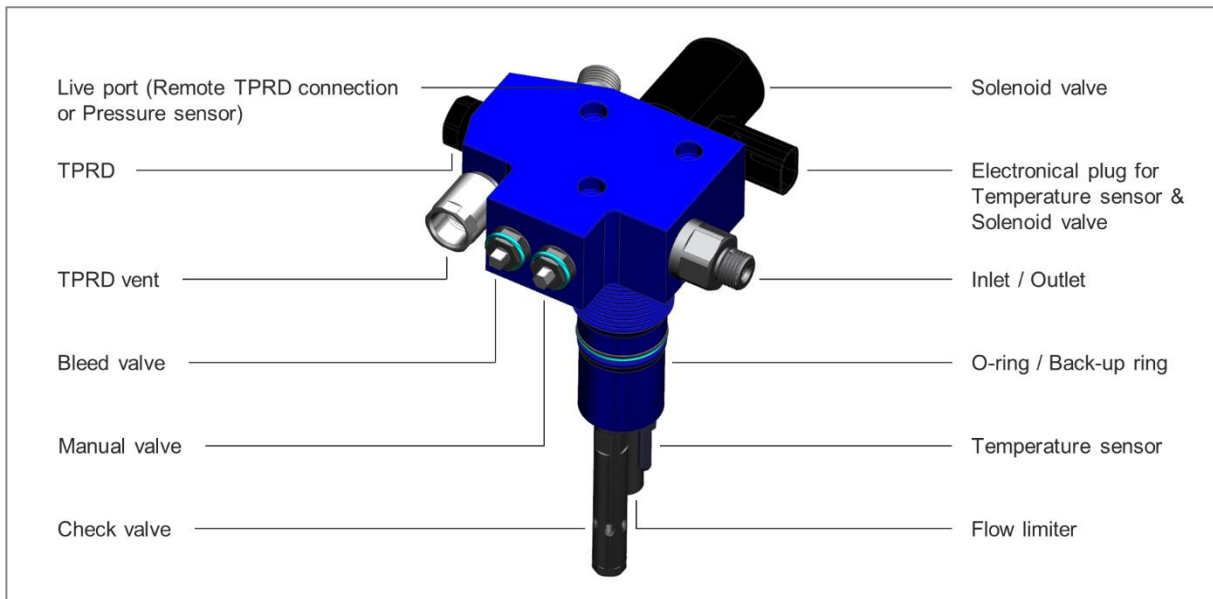
Product data sheet



## TOPAQ On Tank Valve (OTV) Assembly 2.0

Item No 024099-A

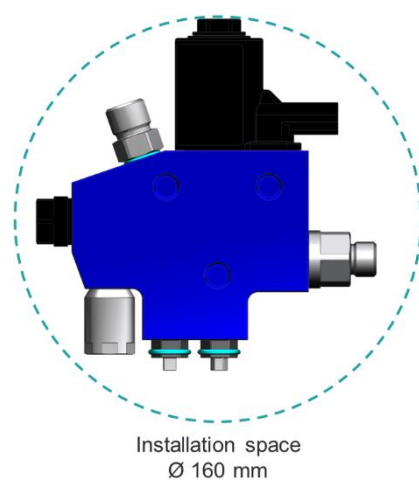
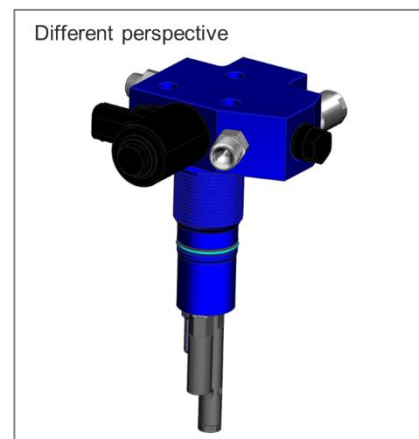
Product specification



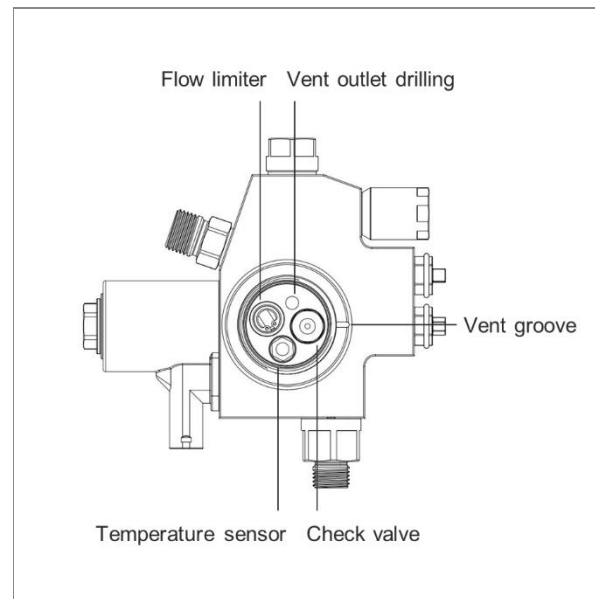
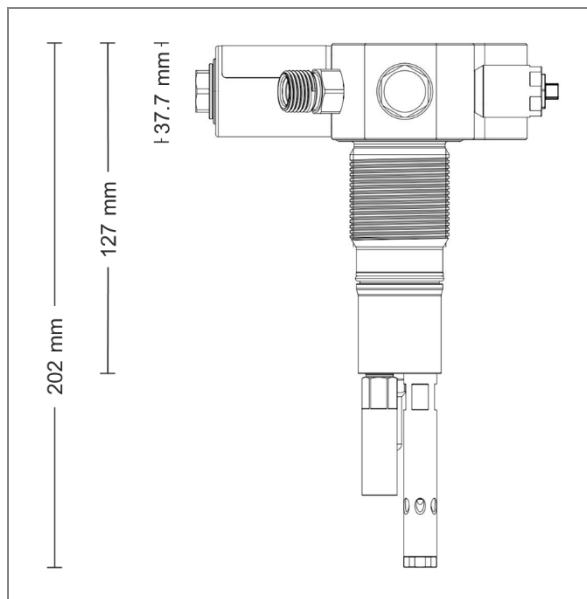
The **On Tank Valve** (OTV) 024099-A is used to ensure safe fueling and defueling processes and the storage of gas in stationary and mobile deployed H<sub>2</sub> tanks.

With its optimized modular design, it enables the compliance of individual customer requirements while simultaneously addressing relevant legal standards (UN/ECE R134, HGV 3.1).

For installing the OTV, an installation space of 160 mm is required.



## Technical features



### OTV

#### Technical data | Operating conditions

Installation space	Ø 160 mm
Height OTV (screwed in)	37.7 mm
Height OTV	202 mm
Height OTV Body	127 mm
Weight OTV	approx. 1400 g
Weight OTV Body	approx. 685 g
Tank interface	1½"-12 UNF
Material OTV Body	Aluminum, anodized
Sealing types	Metal-to-metal, O-Ring, PEEK
Operating temperature	-40 to +85 °C
Nominal working pressure	700 bar
Maximum allowed working pressure	875 bar
Proof pressure	1050 bar
Kv value (Refueling   Defueling) <sup>1)</sup>	0.18   0.10
Medium	Hydrogen (CGH2)
Leak rate (acc. UN/ECE R134)	< 10 Ncm <sup>3</sup> /h

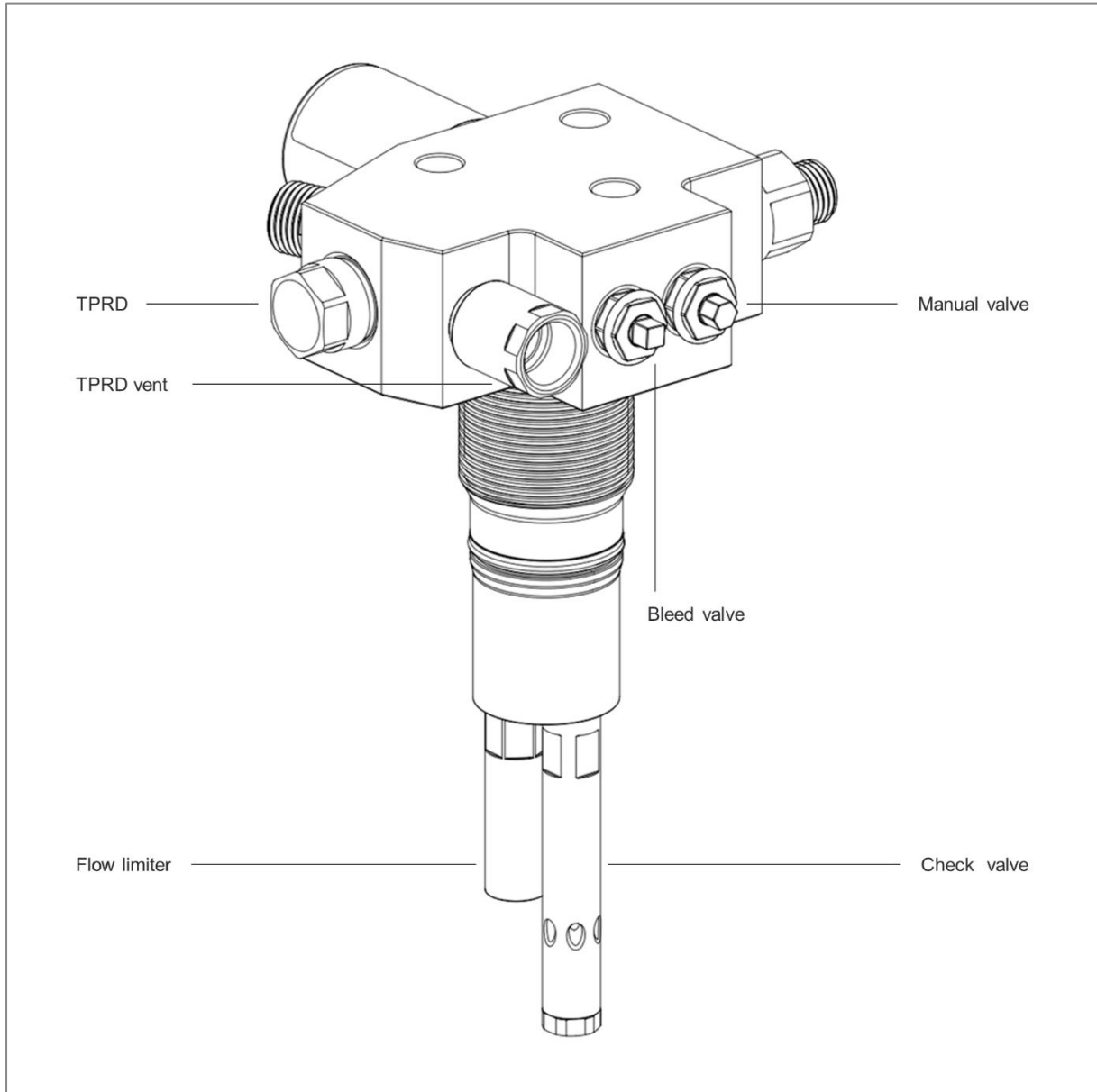
1) For flow-optimized refueling and defueling, the manual valve must be completely open.

### Attachment parts

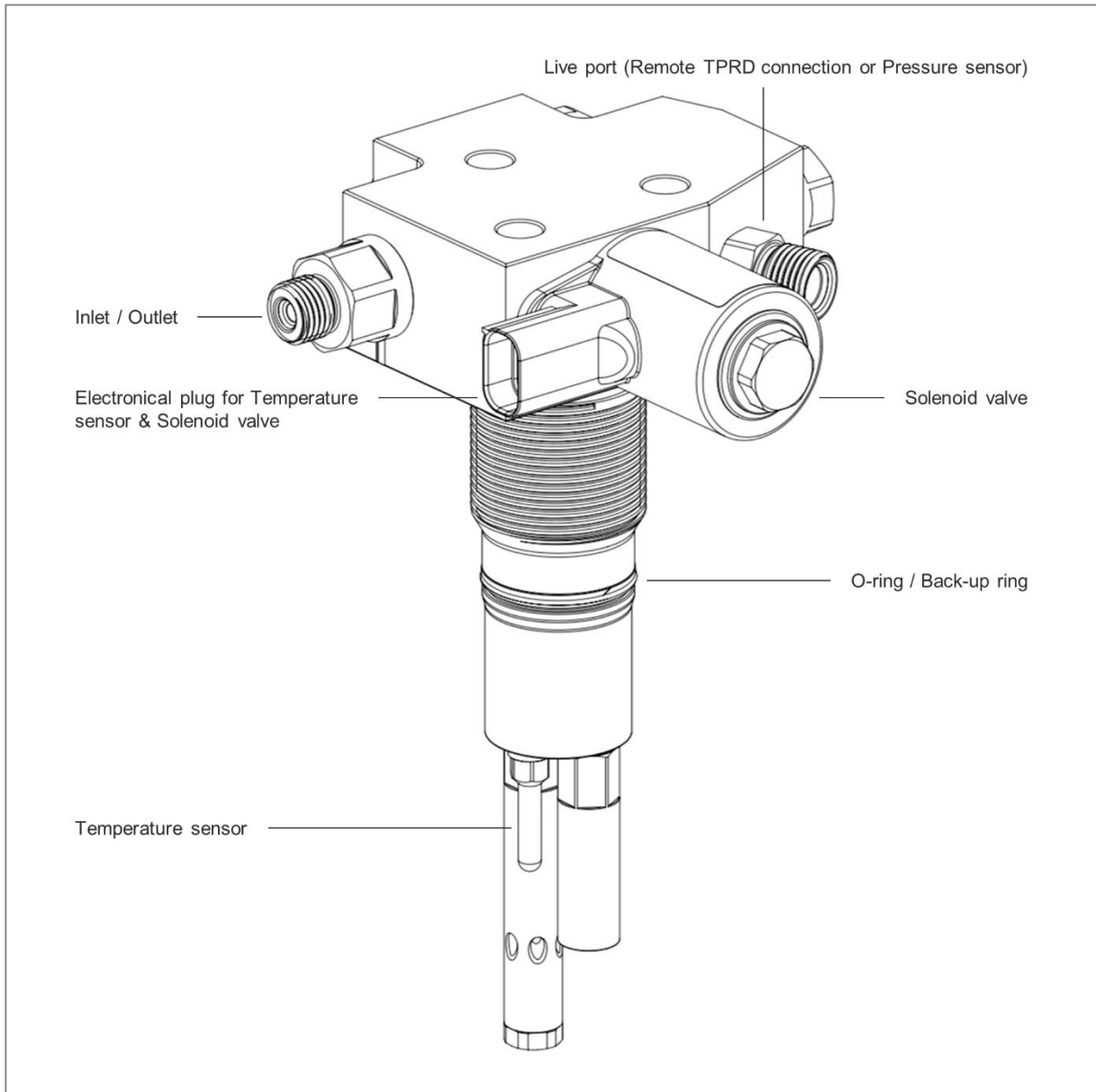
#### Technical data | Operating conditions

Solenoid valve	
Operating voltage	12 V or 24 V DC (PWM Signal)
Temperature sensor	
Temperature element	Discrete NTC Thermistor
Operating temperature	-60 to +150 °C
Thermal Pressure Relief Device (TPRD)	
Trigger temperature	110±5 °C
Min. Flow diameter	4.4 mm
Flow limiter	
Activation flow rate (@ 20 bar / RT)	2.1 – 3.4 g/s
Filter pore size (Inlet   Outlet)	10 µm
Check valve	
Cracking pressure	< 3 bar
Sealing pressure	≥ 2 bar
Manual valve   Bleed valve activated by hexagon   square	
Interfaces   Thread definitions   Ports	
Live port: Remote TPRD connection (optional Pressure sensor)	M16×1.5
Pipe connection (Inlet   Outlet)	M14×1.5
Pipe connection (TPRD vent)	M16×1.5

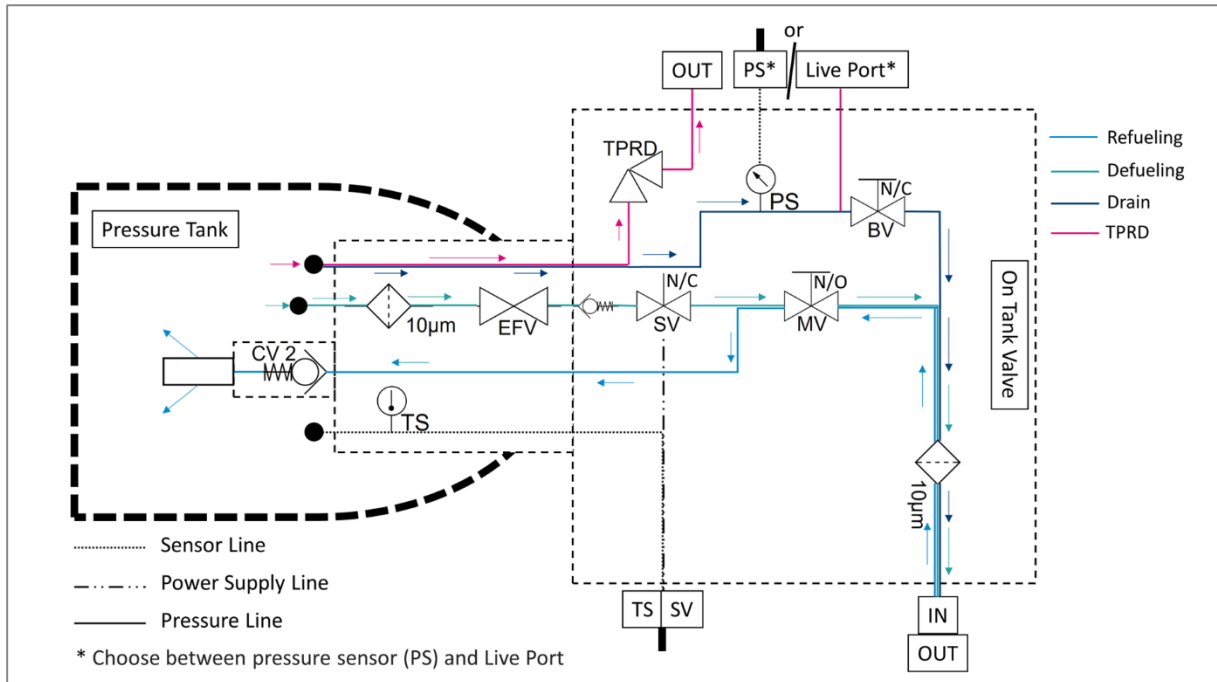
Technical features



## Technical features



Circuit diagram



## Certification & safety information

The product may only be used after installation by qualified personnel according to the corresponding installation guide. Usage for production of commercial goods is only permitted in certified countries. Otherwise, the product may only be used for testing purposes.

### Certificates

#### Europe

UN/ECE R134 Certification pending

#### Greater China (China, Taiwan, Hong Kong, Macau)

GB/T 35544-2017 Certification pending

#### North America (USA, Canada)

HGV 3.1-2022 Certification pending

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