

INNOVATIVE CUSTOMIZED SOLUTIONS



MHY100 - HIGH PRESSURE VALVE

RELIABLE AND SAFE HYDROGEN HANDLING

APPLICATIONS

HYDROGEN REFUELLING STATIONS (H35 / H70)

AUTOMATIC SHUT-OFF AND CONTROL VALVE

FLOW AND PRESSURE REGULATION UP
TO 1000 BAR

EQUIPMENT FOR H₂, INERT AND
OTHER GASES



www.m-tech-gmbh.com

MADE IN GERMANY

m-tech® BENEFITS



CONTROL VALVE

regulates pressure under extreme conditions



ZERO LEAKAGE AT 1000 BAR

bubble tight sealing in both flow directions against max. delta P



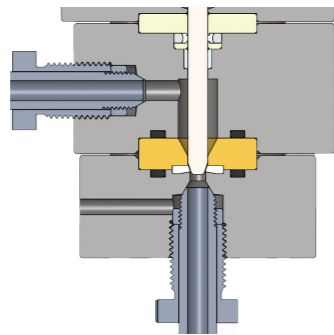
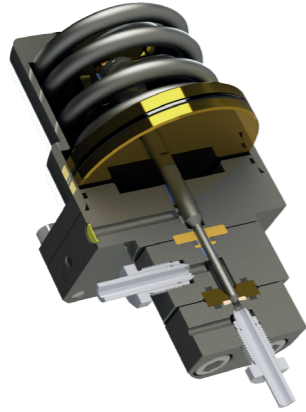
COMPACT INSTALLATION

avoids welding and reduces space requirements



SAFE VALVE AUTOMATION

quick installation of limit switches, pilot valves and electro-pneumatic positioners



HYDROGEN COMPATIBLE

materials selected for resistance to hydrogen embrittlement. Completed in 316L



BI-DIRECTIONAL OPERATION

design allows the medium to flow through the valve in both directions



CONE AND THREAD CONNECTIONS

integrated C&T connection, ideal for high pressure applications

PRODUCT OVERVIEW

MHY100 - HIGH PRESSURE VALVES PN1000



m-tech's high pressure valves are specially made for handling hydrogen in refuelling stations (H35 / H70).

FEATURES

- Optimized design for on/off and continuous control applications
- Cone & Thread for Tube size OD 3/8" MP as standard
- Adapters for NPT1/4", NPT3/8" and C&T for OD 9/16" available
- Valve is cleaned, degreased and sealed as standard

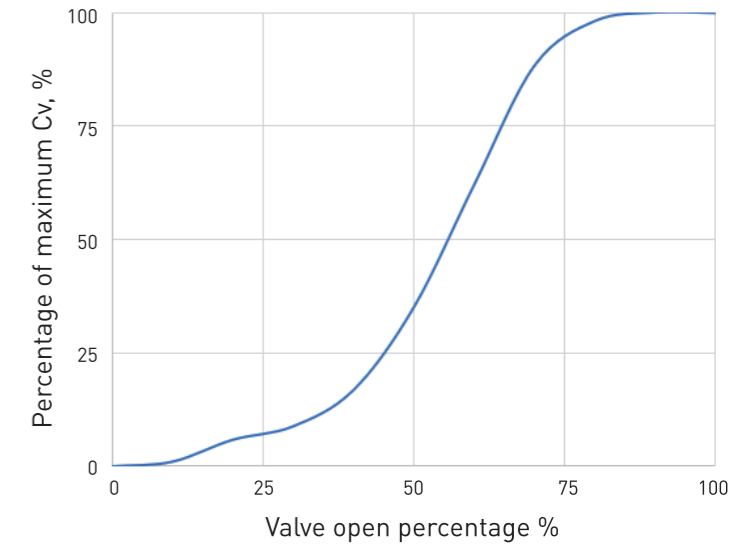


ASSEMBLY IN CLEANROOM

All our valve components are cleaned in an oxygen-friendly manner in a dedicated cleaning facility and then assembled in a special clean room, which meets the requirements of class ISO 7 according to DIN EN ISO 14644-1.

CERTIFIED / TESTED

- ATEX certification (Zone 1&2)
- H2 endurance and leakage test acc. to ISO 19880-3



CONTROL VALVES

Proportional valves are available in H2 compatible stainless steel with optimised flow characteristics. They can be paired with positioners or process controllers for an optimal performance in different processes and hazardous areas.



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YOUR CONTACT

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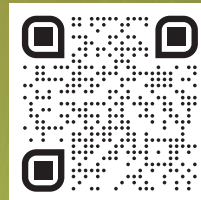
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www.m-tech-gmbh.com

m-tech®
Gas filling systems Valves
ONLINE



ALL CONFIGURATIONS AVAILABLE IN

NC (Normally Closed)
NO (Normally Open)
PR (Proportional Control)

MHY100 STANDARD CONFIGURATIONS

MHY100 01
Limit switch ATEX Zone 1 and 2 (for ON/OFF version) 02
Position feedback ATEX Zone 1 (for control version) 03
Position feedback ATEX Zone 2 (for control version) 04

