

HAWL™ ESD - HYDROMAT® ACTUATORS FOR MOST DEMANDS APPLICATIONS

Hydraulic Actuator Weight Loaded type HAWL™ with reliable ESD EMERGENCY SHUT DOWN FUNCTION

VALVE CLOSING primarily with ENERGY OF WEIGHT or WEIGHT AND ACCUMULATOR or ACCUMULATOR

HYDROMAT® Flow Control

SOLUTIONS FOR SYSTEM PROTECTION

Technical assistance in selecting of actuators

Every actuators type HAWL™ before delivery passes of testing acc. operating pressures, torques, damping characteristic, safety and functionality

Most reliable hydraulic design

More systematic – More dynamic – More flexible – More reliable - Cheaper

Standard design of electric control cabinet with control panel

Typical design of actuators HAWL™ to valve classical operating and emergency closing ESD

Application of actuators type HAWL to different type of quarter turn valves

Butterfly valve → simple application, large range of valve size up to DN 4000

Axial piston „needle“ flow control valve → without cavitation, large pressure drop, different trims...

Different type of ball and plug valve

Example of application, HAWL™ design equipped with PTM device, emergency closing in case of pipeline rupture

General characteristic:

- Valve CLOSING with energy of weight or weight and accumulator or accumulator
- Opening solutions: motor pump, compressed air, hydraulic oil
- Emergency valve opening (manual override): hydraulic hand pump
- 8 sizes depending on the torque necessary to valve closing with weight
- Simple installation on the valve due to „plug and play“ design of actuator

Application for the valve type:

- Butterfly, axial piston „needle“, plug, ball and other type of valve with quarter turn operation principle

Range of ambient temperature:

- Standard: -40/+80 °C, other on request

Activation and control, usually:

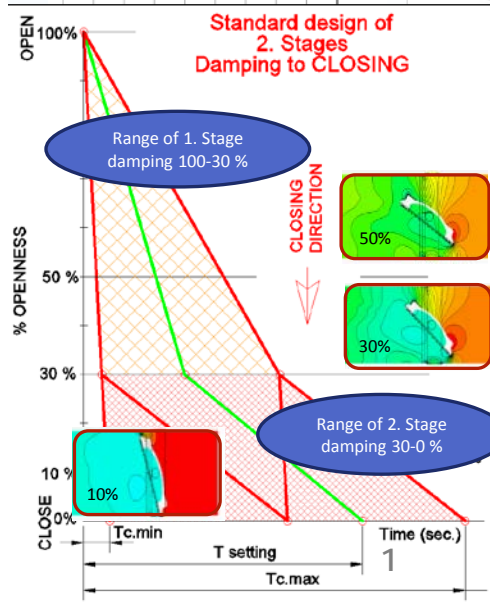
- Manual locally and remote operating from DCS
- Automatic by different type of the sensors (pressure, flow control, temperature, seismic, etc...)

Other characteristic:

- High reliability in the valve throttled position (30→0 %) at high speed closing and reliable control of transient pressure rise
- Excellent actuator to pump and system protection by water hammer
- Design for the transmission of actuating torque without additional bending of the valve shaft, additional load on the bearing and clamping
- Reliable operation, especially for ESD application in case of pipeline rupture and activation PTM Paddle Trip Mechanism
- Adjustable opening and closing time without slamming
- Without leaks in the closed position
- Sizes and pressure rating: DN 100 – 3500, PN 10 – 40

A very wide area of application for most demands situations:

- Water, hot water and steam pipelines
- Water distribution systems and water management
- Energy, Process Industry, Oil & Gas Plants



High quality making and embedded parts

Robust design and „plug and play“ concept provides:

- only torque transfer without additional bending of the valve shaft or additional loading of the valve bearings
- quick and easy installation on different valve, directly or using of intermediate flange
- simple maintenance and long service life in the harshest conditions
- most reliable high speed at the valve closing,

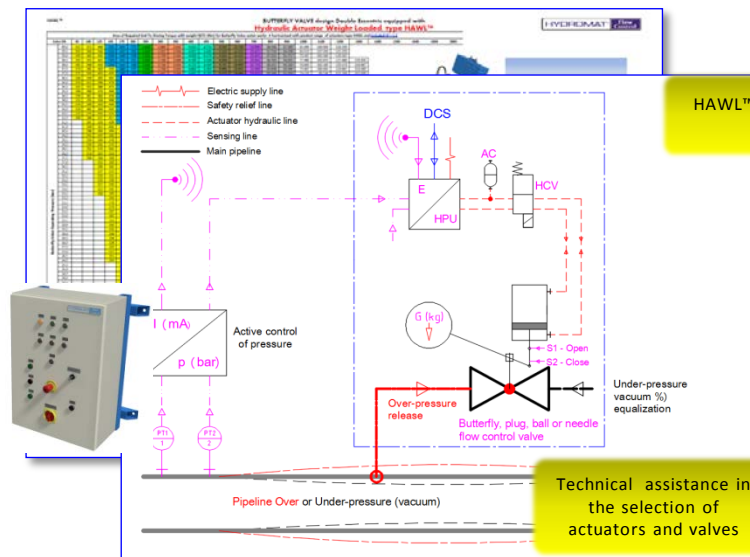
IMPORTANT:
Closing between 30% → 0% intensive throttled zone of the butterfly valve – Actuators type HAWL. ESD provides reliable control of transient pressure rise especially in the valve throttled zone

Example:
HAWL48 mounted on the double eccentric butterfly valve DN2800

HAWL™ FOV - Actuators in function of the FAST OPEN VALVE

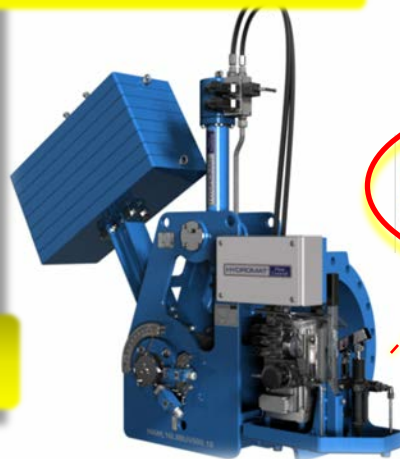
DE: Schnellöffnungs Armaturen

Main advantage: THE SYSTEM PROTECTION IN TERMS OF FAST PIPELINE SURGE RELIEF – EXTREMELY HIGH FLOW RELIEVING

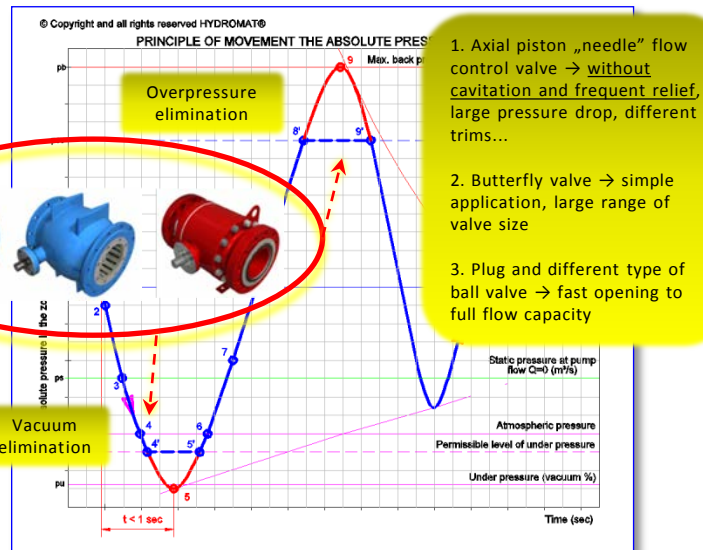


HAWL™ FOV design for fast the valve opening → HYDROMAT® surge relief system

Technical assistance in the selection of actuators and valves



More systematic – More dynamic – More flexible – More reliable - Cheaper



General characteristic:

- Fast OPENING with combined energy of weight and accumulator
- Closing solutions: motor pump, combined compressed air/hydraulic oil,
- Emergency valve closing: hydraulic hand pump
- 8 sizes depending on torque necessary to valve open
- Simple installation on the valve due to „plug and play“ design of actuator
- Design for the transmission of actuating torque without additional bending of the valve shaft and load on the bearing

Application for the valve type:

- Butterfly, axial piston „needle“, plug, ball and other type of valve with quarter turn operation principle

Range of ambient temperature:

- Standard: -20/+80 °C, other on request

Activation, usually:

- Manual locally and remote operating from DCS
- Automatic by different type of the pressure sensors to over and under pressure

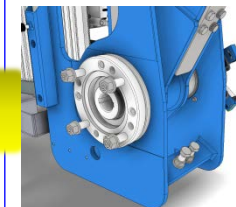
Other characteristic:

- Design for the transmission of actuating torque without additional bending of the valve shaft, additional load on the bearing and clamping
- Simple and reliable operation with fast response time
- Adjustable relief pressure
- Adjustable opening and closing time without slamming
- Without leaks in the closed position and low tolerance of set pressure
- Reliable and economical solution to prevent of water hammer
- With the valve opening appearances relief or vacuum equalization the pressure in case of over and/or under pressure, peak pressure, water hammer, etc...
- Fast response time → relief with high flow capacity provides rapidly and safety discharge
- Sizes and pressure rating: DN 100 – 2000, PN 10 – 40

A very wide area of application for most demands situations:

- Water, hot water and steam pipelines
- Water distribution systems and water management
- Energy, Process Industry, Oil & Gas Plants

Installation on the valve „plug and play“



High quality making and embedded parts

