



Isolation Service Manifold

Systematically control hydraulic distribution

Benefits

- » Meet EN machinery directives
- » Prevent system over-pressurization
- » Provide full system pressure discharge
- » Allow for full hydraulic power isolation downstream

Turning your hydraulic distribution system on and off and responding to unexpected faults in the system in a controlled manner are essential to protecting your lab personnel, test specimens, test systems and lab environment. The MTS Isolation Service Manifold (ISM) allows you to control the hydraulic fluid flow through your test system during power on, power off and in the event of a system problem or E-stop, to help you better protect your lab personnel and assets. This consistent and purposeful control of hydraulic distribution also allows you to meet the most recent European Norm (EN) machinery safety standards, including EN 13121, EN 13849-1, and EN ISO 4413.

This manifold is placed between the hydraulic power unit (HPU) and the hydraulic service manifold (HSM) to prevent system over-pressurization, provide full system pressure discharge, and allow for full hydraulic power isolation downstream of the device. It is designed to work with MTS Series 293 and 298 HSMs, and MTS Series 497 and FlexTest® controllers, and can be adapted to work with other HPUs and HSMs. It is extremely easy to set up in a new system or you may add it to an existing test system using the cabling in the current system.

be certain.

The isolation service manifold is available in three models with flow capacities of 200 lpm (50 gpm), 400 lpm (100 gpm) and 1000 lpm (250 gpm) to meet your capacity needs. Its compact design takes up very little floor space and the easy to read gages let you know the precise pressure out and in, drain pressure, and return pressure in the manifold. At hydraulic system start up, the ISM communicates directly with the system controller to eliminate the integral wind-up that can unintentionally destroy a specimen.

In the event of an unexpected system shutdown, the ISM performs a cascading sequence to bring the entire distribution system down in a controlled manner, while a redundant over-pressurization relief valve protects the test system nearest to the device. In addition to providing controlled sequences for powering on/off and responding to events, the ISM is easy to maintain. Its maintenance valve allows for efficient fluid draining that leaves just a residual coating of oil to make maintenance an

easier, cleaner experience. Safely, consistently and carefully power on or power off your hydraulic distribution system and respond to potential hydraulic distribution issues with the MTS Isolation Service Manifold.

Specifications

| MODEL | ISM02-210 | ISM02-280 | ISM04-210 | ISM04-280 | ISM10-210 | ISM10-280 |
|------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Flow Capacity | 200 lpm (50 gpm) | 200 lpm (50 gpm) | 400 lpm (100 gpm) | 400 lpm (100 gpm) | 1000 lpm (250 gpm) | 1000 lpm (250 gpm) |
| Pressure Rating | 210 bar (3000 psi) | 280 bar (4000 psi) | 210 bar (3000 psi) | 280 bar (4000 psi) | 210 bar (3000 psi) | 280 bar (4000 psi) |
| Control Voltage | 24 VDC |
| Required Control Power | 70 watts |

DIMENSIONS

| | | | | | | |
|--------|---------------------|----------------------|---------------------|----------------------|----------------------|----------------------|
| Width | 27.30 cm (10.75 in) | 27.30 cm (10.75 in) | 27.30 cm (10.75 in) | 27.30 cm (10.75 in) | 36.20 cm (14.25 in) | 48.90 cm (19.25 in) |
| Length | 42.24 cm (16.63 in) | 42.24 cm (16.63 in) | 42.24 cm (16.63 in) | 42.24 cm (16.63 in) | 60.12 cm (23.67 in) | 59.64 cm (23.48 in) |
| Height | 60.60 cm (23.86 in) | 60.60 cm (23.86 in) | 57.58 cm (22.67 in) | 58.85 cm (23.17 in) | 61.87 cm (24.36 in) | 73.30 cm (28.86 in) |
| Weight | 53.52 kg (118.0 lb) | 114.53 kg (252.5 lb) | 58.97 kg (130.0 lb) | 124.15 kg (273.7 lb) | 215.09 kg (474.2 lb) | 288.48 kg (636.0 lb) |



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ISO 9001 Certified QMS

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