

Hose System Accessories

Introduction

Customers who operate their Gas Springs in an interconnected Hose System recognize several advantages:

- **Greater force controllability:** Can easily monitor, adjust and control the pressure of the Gas Springs from outside the die.
- **Enhanced monitoring:** Allows for pressure monitor connections which can detect when the pressure is outside of the min/max point and automatically stop the press.
- **Customized force profile:** Accommodates volume tanks to reduce pressure rise of the Gas Spring System and thus improve the formability of parts.

Hyson recommends the DualSeal 24™ Hose System as our premier Hose System. It is the most robust and durable Hose System while being compact and easily routed through dies. In addition, Hyson offers several other Hose Systems including Micro24™ , O-Ring Face and EZ. Refer to the respective Hyson Hose System catalogs to select your specific Hose System, fittings and control panels.

For service parts applicable to all Hose Systems, refer to Hyson’s Service and Maintenance Catalog.

Additional accessories found in this catalog are compatible with all Hyson Hose Systems and can offer further benefits:

- **MODCP:** When applications call for multiple points of control, MODCP panels offer the ability to control pressure of each station uniquely with centralized panel.
- **CP-XM:** A control panel designed specifically for high pressure Gas Springs TNKS, TNKT, TNKB and TS Series.
- **COMPRESSION TANKS:** When Gas Springs are preferred, but pressure rise of the system needs reduced, these tanks can reduce the pressure rise typically to the 20-30% range.
- **TNKMEN:** Provides an alternative to standard hose routing to reduce fittings including expensive elbows and tees.
- **PRESSURE MONITORS:** For greatest peace of mind, Hyson pressure monitors offer the ability to connect the Gas Spring system to the press controls such that the operation is stopped should the system pressure fall outside the allowable range.

Control Panels

The Control Panel contains bleed and fill valves and a pressure gauge for charging, exhausting and reading pressure in the system. A rupture disk safety feature is also included to ensure all system pressure is exhausted keeping springs from becoming over-pressurized in the event the pressure exceeds a safe level for the system.

Control Panel

Order Number CP-N2-T-VR

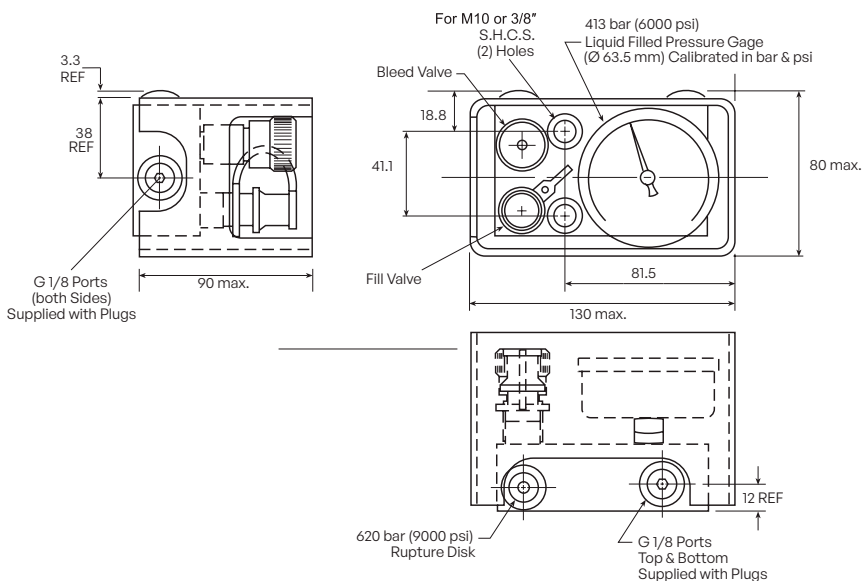
Available with Soft Seal High Flow Bleed Down Valve.

Order Number: CP-N2-T-HF

Straight Adapter and Mounting Screws are sold separately.

 Not to be used with TNKS, TNKT, TNKB and T5 Series.





Mounting Parts		
Order Number	Description	For Product Line
4022058	Straight Adapter	Micro24™
4114973-G1/8	Straight Adapter	EZ Hose (CNOMO)
503593	Straight Adapter	DualSeal 24™
ORF-1000-G1/8	Straight Adapter	O-Ring Face
CS M10-1.5X30MM	Mounting Screws - Metric	Applicable to all
CS 3/8-16X1250	Mounting Screws - English	Hyson Hose Systems

Service Parts	
Order Number	Description
1032773	Bleed Valve
11-700-8555	Fill Valve
51-700-9000-LG	Pressure Gauge
RD-XP	Rupture Disk
11-700-8520-HF	High Flow Bleed Valve

Sensor Ready Control Panel

For remote connection to a Manifold Plate.
Port available for adding a toolmind sensor (sold separately).

Order Number CP N2 T-S



All dimensions are in millimeters unless otherwise noted.

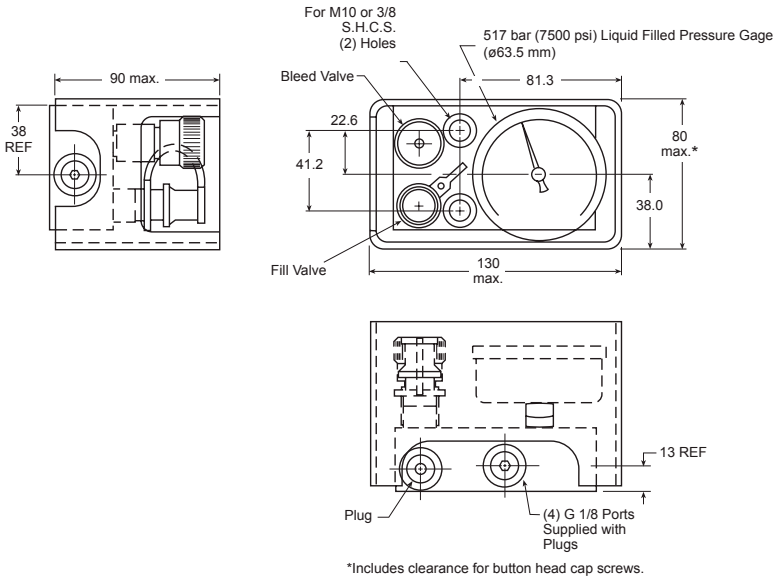
CP-XM

Order Number CP-XM

Order Number CP-XM OR

Designed for use with higher pressure operating Gas Spring systems including TNKS, TNKT, TNKB and T5 Series.

- Does not include rupture disk.
- Straight fitting and mounting screws are sold separately.



Mounting Parts		
Order Number	Description	For Product Line
4022058	Straight Adapter	Micro24™
4114973-G1/8	Straight Adapter	EZ Hose (CNOMO)
503593	Straight Adapter	DualSeal 24™
ORF-1000-G1/8	Straight Adapter	O-Ring Face
CS M10-1.5X30MM	Mounting Screws - Metric	Applicable to all Hyson Hose Systems
CS 3/8-16X1250	Mounting Screws - English	

Service Parts	
Order Number	Description
1032773	Bleed Valve
11-700-8555	Fill Valve
51-700-9000-LG	Pressure Gauge

All dimensions are in millimeters unless otherwise noted.

MODCP

Utilizing Hyson's Modular Control Panels (MODCP's), users can easily set and verify gas charging pressure on each spring or spring system individually. This feature allows die designers to vary the force in each spring while still having the benefits of a Hose System and a central panel to verify and adjust pressures. The updates include:

- More compact design compared to the original MODCP product line.
- Expanded to offer up to 10 individually controlled modules
- Visual guides to easily see which modules are On/Off.
- For additional information, reference Hyson Technical Bulletin 14-06-MODCP.
- Straight adapters and mounting screws are sold separately.

NOT to be used with TNKS, TNKT, TNKB or T5 Gas Springs.

Features

- Simple operation: each module has a two-position valve that opens to bleed and closes to isolate the modules.
- Piping flexibility: each module has three G 1/8 port locations
- Easy monitoring: each 400 bar/5800 psi gauge is easy to read.
- Mounting: flush mount either horizontally or vertically.
- Bottom guard: protects modules during use.

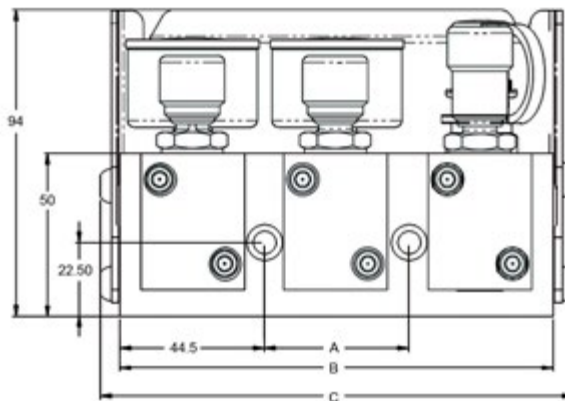


MODCP Example

MODCP Dimensional Information

Order Number	No of Modules	A mm	B mm	C mm	Weight kg
2022677-02	2	44.5	133.5	146.0	4.0
2022677-03	3	89.0	178.0	191.0	5.4
2022677-04	4	133.5	222.5	235.0	6.8
2022677-05	5	178.0	267.0	280.0	8.1
2022677-06	6	222.5	311.5	324.0	9.5
2022677-08	8	311.5	400.5	413.0	12.3
2022677-10	10	400.5	489.5	502.0	15.4

Note: Other sizes available on request.



Mounting Parts

Order Number	Description	For Product Line
4022058	Straight Adapter	Micro24™
4114973-G1/8	Straight Adapter	EZ Hose (CNOMO)
503593	Straight Adapter	DualSeal 24™
ORF-1000-G1/8	Straight Adapter	O-Ring Face
CS M10-1.5X30MM	Mounting Screws - Metric	Applicable to all Hyson Hose Systems
CS 3/8-16X1250	Mounting Screws - English	

All dimensions are in millimeters unless otherwise noted.

Micro24™ Control Panel

Order Number: 3023888 without rupture

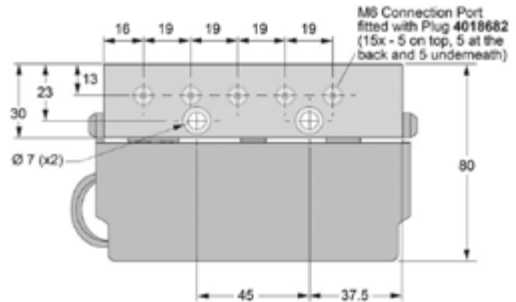
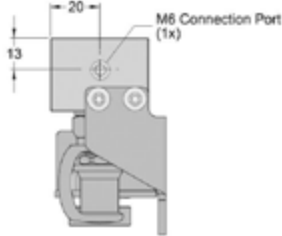
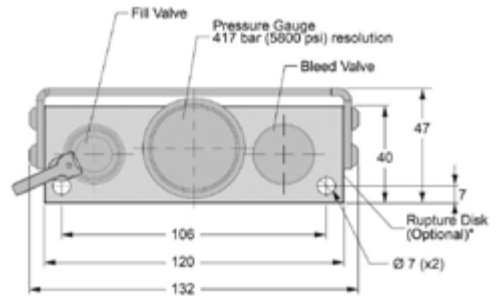
Order Number: 3123888 with rupture disk*

This compact control panel contains fifteen M6 and one G1/8 connection port.

* Rupture disks are only on model 3123888 and not recommended for use where the initial charging pressure exceeds 150 bar/2175 psi.

** Control Panel comes standard with all port plugs installed

Service Parts	
Order Number	Description
1032773	Bleed Valve
502328	Fill Valve
502351	Pressure Gauge
3025657	Rupture Disk*
4018682	M6 Port Plug**
503593	G1/8 Port Plug**



All dimensions are in millimeters unless otherwise noted.

TNKMAN® Distribution Blocks

The TNKMAN® distribution block provides an alternative to hosing self-contained Gas Springs to each other. It eliminates as many fittings as possible, including all elbow and tee fittings, often sources of leaks.

- Straight adapters and mounting screws are sold separately.

Features

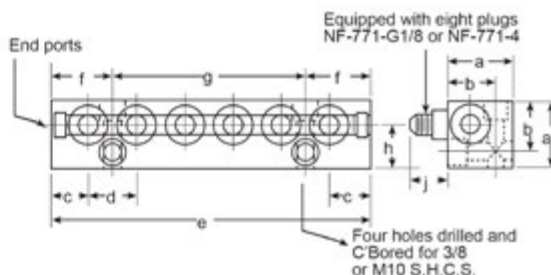
- Gas Springs can be connected outside the die.
- Two end ports can be used for additional Gas Springs or connection of a control panel and/or pressure monitor.
- Complete set of plugs included for ports not in use.



TNKMAN Order and Dimensional Information											
Order Number		Port Size	A	B	C	D	E	F	G	H	J
TNKMAN 6	mm	7/16-20	38	29	22	29	187	37	114	25	22
TNKMAN 6 G 1/8	mm	G 1/8	38	29	22	29	187	37	114	25	22
TNKMAN 12	mm	7/16-20	38	29	22	29	359	37	286	25	22
TNKMAN 12 G 1/8	mm	G 1/8	38	29	22	29	359	37	286	25	22

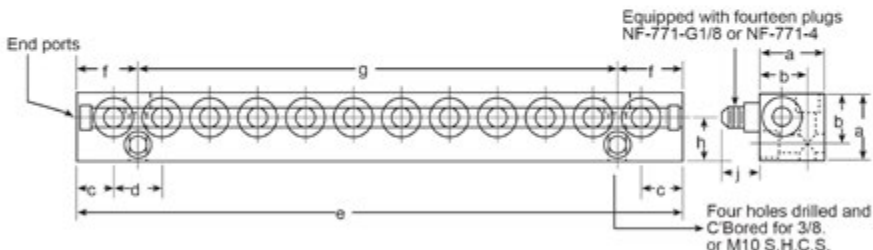
Mounting Parts		
Order Number	Port Size	Hose Type
NF-1000-4	7/16-204	JIC
ORF-1000-4		0-Ring Face
4114973-7/16		EZ/CNOMO
ORF-1000-G1/8	G 1/8	0-Ring Face
4114973-G1/8		EZ/CNOMO
503593		DualSeal 24™

TNKMAN 6



Mounting Screws		
Order Number	Description	For Product Line
CS M10-1.5X50	Mounting Screws - Metric	Applicable to all
CS 3/8-16X2.000	Mounting Screws - English	Hyson Hose Systems

TNKMAN 12



All dimensions are in millimeters unless otherwise noted.

Pressure Monitors

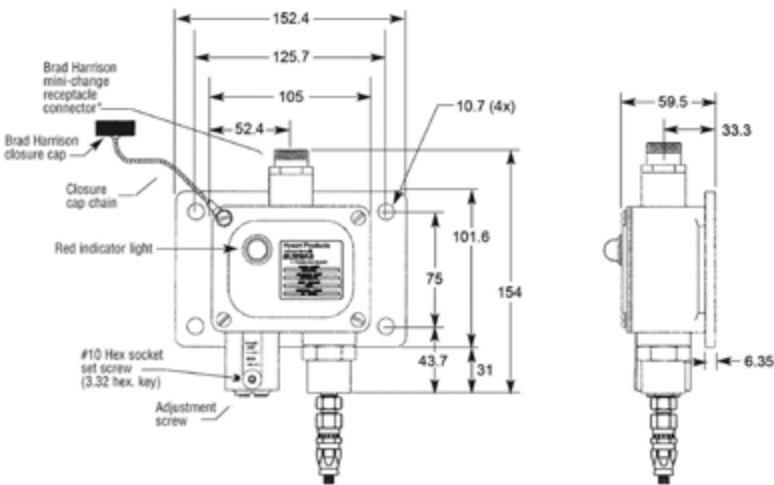
Pressure monitors connect the Gas Spring System to the press controls. If the pressure rises above or falls below preset points, the operation is interrupted, reducing the probability of damage to a tool and/or machinery.

APM-3000

- Measures 13.8 - 206 bar (200 - 3000 psi).
- Supplied with 4.5 m / 15 ft hose assembly and femal quick disconnect.
- Brad Harrison mini-charge receptacle connector.
- Easily adjusts for lower limit.



APM-5800

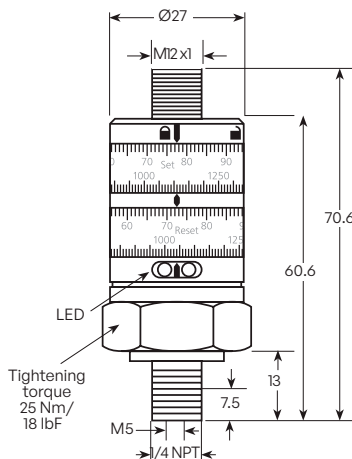


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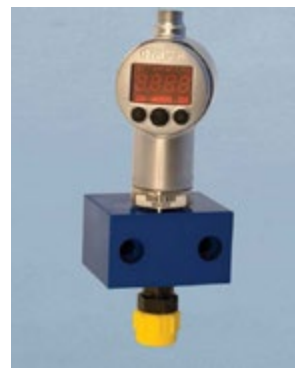
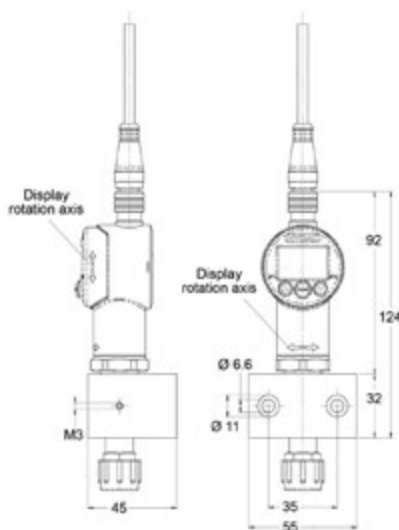
APM-5800

- Measures 0 - 400 bar (0 - 5800 psi).
- Supplied with cable and protective cover.
- 24 VDC Micro connection.
- Easily adjusts for upper and lower limit.
- Yellow screen LED indicates switching or ready for use.
- Simple set-up with dial ls that rotate quickly to select set point and reset point.



DPM-3000

- Measures 0 - 400 bar (0 - 5800 psi).
- 4-wire connection.
- Easy to read digital display.
- Easily adjusts for upper and lower limit.



Mounting Parts

Order Number	Description	For Product Line
4022058	Straight Adapter	Micro24TM
4114973-G1/8	Straight Adapter	EZ-Hose (CNOMO)
503593-G1/8	Straight Adapter	DualSeal 24TM
ORF-1000-G1/8	Straight Adapter	O-Ring Face
EVC006	Cable	All



- 1. + Current feed 9 - 35 VDC Brown
- 2. Set-point 1 White
- 3. - Current feed (0V) Blue
- 4. Set-point 2 Black

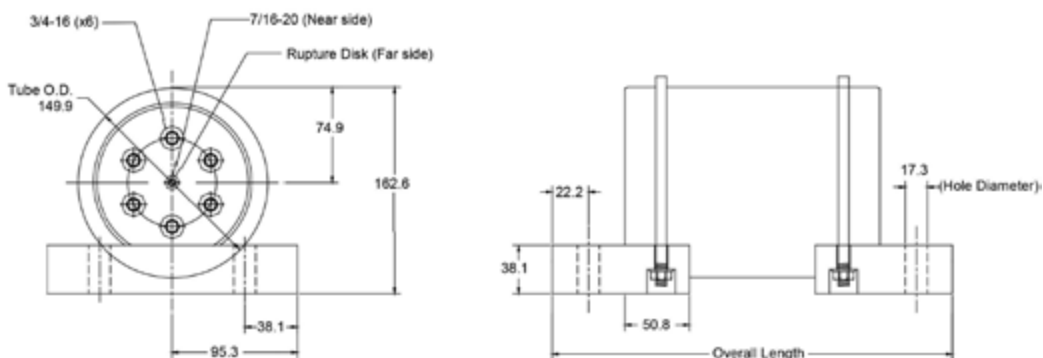
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Volume Tanks

The ST Volume Tank is designed to increase the volume and lower the pressure rise in a Gas Spring System. The compact, modular design makes it less costly than conventional welded tanks.

Features

- Engineered for 150 bar/2175 psi maximum pressure.
- Less heat build-up for long Gas Spring life.
- Rupture disk plug for added safety.
- Multiple ports on each end for increased flexibility.
- Ideal for JIC or O-Ring Face Hose Systems.



ST Volume Tank Dimensional Information				
Order Number	Standard volume		Standard Overall Length	Number of Ports on Each Face
	cm ³	in. ³	mm	
ST-50-HP	819	50	244	6 each 3/4-16 1 face 7/16-20 1 face Rupture Disk
ST-100-HP	1639	100	311	
ST-160-HP	2622	160	390	
ST-200-HP	3278	200	443	
ST-320-HP	5244	320	603	

Mounting Parts		
Order Number	Description	For Product Line
ORF-1000-4	Straight Adapter	O-Ring Face
NF-77-8-4	Port Reducer Adapter	Applies to both JIC & O-Ring Face

All dimensions are in millimeters unless otherwise noted.