

# Counterbalance / Cushion / Overload

Size **12, 16**

(Multi-Purpose)

Ports **3/4, 1**

- Interfaces with controls to monitor/maintain correct counterbalance pressure.
- Available mounted on a plate and pre-wired.
- 3/4" units furnished with DIN electrical connections.
- 1" & 1 1/4" units furnished with mini-connectors.

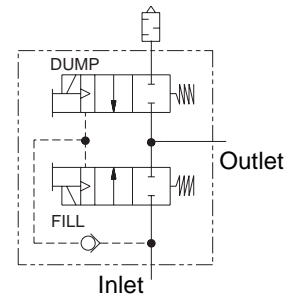
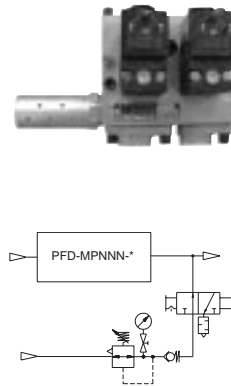
## PFD-MPNNN-N12-A-E

3/4" fill-dump.

Dimensions inches (mm)

Height	Width	Length
4.2 (107)	7.5 (191)	5.7 (145)

**NOTE:** For counterbalance applications, customer must furnish a manual circuit in parallel to this module. See circuit at right.



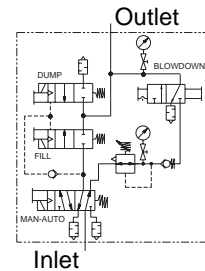
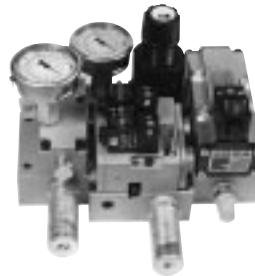
Weight lb (kg)  
6.0 (2.8)

## PFD-MPARX-N12-A-E

3/4" fill-dump with auto-manual select and parallel manual circuit.

Dimensions inches (mm)

Height	Width	Length
7.1 (181)	10.0 (254)	11.7 (298)



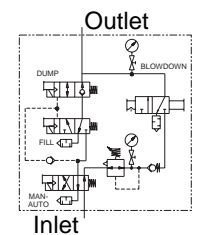
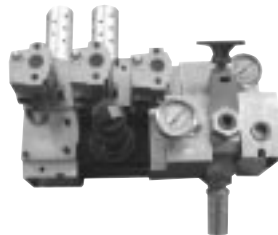
Weight lb (kg)  
20.0 (9.1)

## PFD-MSARX-N16-A-E

1" fill-dump with auto-manual select and parallel manual circuit.

Dimensions inches (mm)

Height	Width	Length
8.3 (211)	15.4 (392)	12.1 (308)



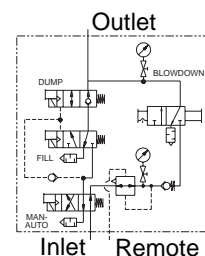
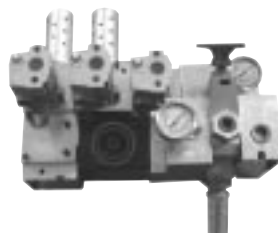
Weight lb (kg)  
45.0 (20.5)

## PFD-MSAR1X-N16-A-E

1" fill-dump with auto-manual select and parallel remote manual adjustment circuit.

Dimensions inches (mm)

Height	Width	Length
8.3 (211)	15.4 (392)	12.1 (308)



Weight lb (kg)  
45.0 (20.5)

**NOTE:** Other units for remote operation available – consult ROSS.



# Counterbalance / Cushion / Overload

Size **20**

(Multi-Purpose)

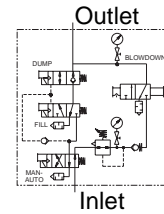
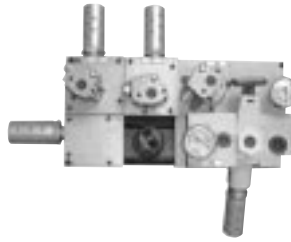
Ports **1-1/4**

## PFD-MSARX-N20-A-E

1-1/4" fill-dump with auto-select and parallel manual circuit.

Dimensions inches (mm)

Height	Width	Length
10.4 (184)	26.5 (387)	19.2 (82)



Weight lb (kg)  
87.0 (39.5)

### Counterbalance/Cushion Accessory Kits

**PFD-KITC-12:** (For size 12 units) Kit includes electrical junction box (608F94) with twenty terminals, transducer (with integral pressure switch / digital gauge), 5-meter transducer cord with connector and three 2-meter cords with lights and cord grips. Transducer and electrical box available separately – see page 16.

**PFD-KITC-16:** (For size 16 & 20 units) Same as size 12 kit, but with three 2-meter cords with mini-connectors and cord grips.

# Hydraulic Overload

Size **4**

(Specific Purpose)

Ports **1/4**

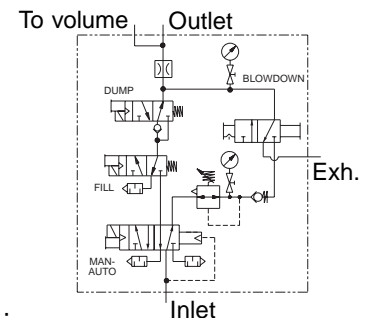
- Provides precise air pressure control signal to an air-over-oil hydraulic overload system.
- Optimizes system response.
- Includes electrical cords with mini connectors.
- Also includes a volume chamber (shipped loose).

## PFD-HSARX-N04-A-E

1/4" fill-dump solenoid circuit with manual/auto selector valve and blow-down.

Dimensions inches (mm)

Height	Width	Length
7.1 (181)	11.7 (298)	7.8 (199)



Weight lb (kg)  
19.0 (8.7)

**PFD-KITC-04:** Kit includes junction box with twenty terminals, single function transducer, 5-meter transducer cord with connector, and three 2-meter mini-connector cords. Transducer and electrical box available separately – see page 16.

## When ordering PFD units (pgs11-13), specify:

Port Thread Type:

**N** = NPT

**B** = BSPP

**S** = SAE<sup>1</sup>

Mounting:

**P** = mounted on a plate and pre-wired:

**Voltage** (for units with solenoid valves):

**E** = 100-110 volts 50 Hz; 100-120 volts 60 Hz; 48 volts d.c.

**W** = 24 volts d.c.; 48 volts 60 Hz

PFD-MSARX-PN12-A-E

<sup>1</sup>Consult ROSS for availability.

# Cushion Module

Size **20**

with Butterfly Control (Specific Purpose)

Inlet  
Port **1-1/4**

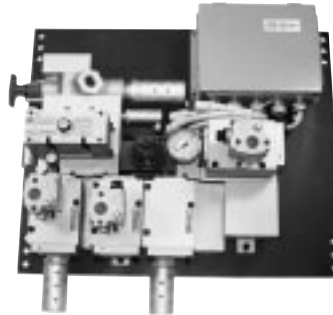
- Butterfly operator valve included.
- Available mounted on a plate and pre-wired.

## PFD-USMRR-N20-A-E

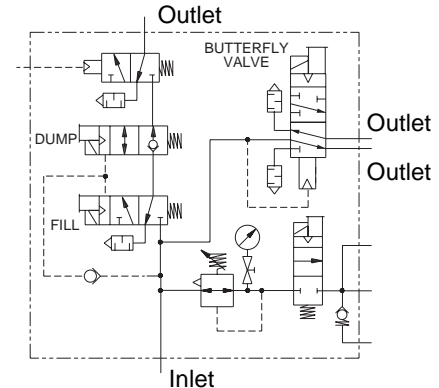
1-1/4" fill-dump solenoid circuit, butterfly operator valve and remote Blow-down.

Dimensions inches (mm)

Height	Width	Length
11.9 (303)	23.5 (597)	21.1 (536)



Shown with mounting plate and pre-wired. (Option P – PFD-USMRR-PN20-A-E)



## Accessory Kit (PFD-KITB):

Kit includes electrical junction box, twenty terminals, transducer (with integral pressure switch / digital gauge), four solenoid cords with cord grips, and 5-meter transducer cord with connector. Transducer and electrical box available separately – see page 16.

**Note:** When ordering with option P (pre-mounted and pre-wired), order transducer and cord separately. See page 16.

Weight lb (kg)  
164.0 (74.4)