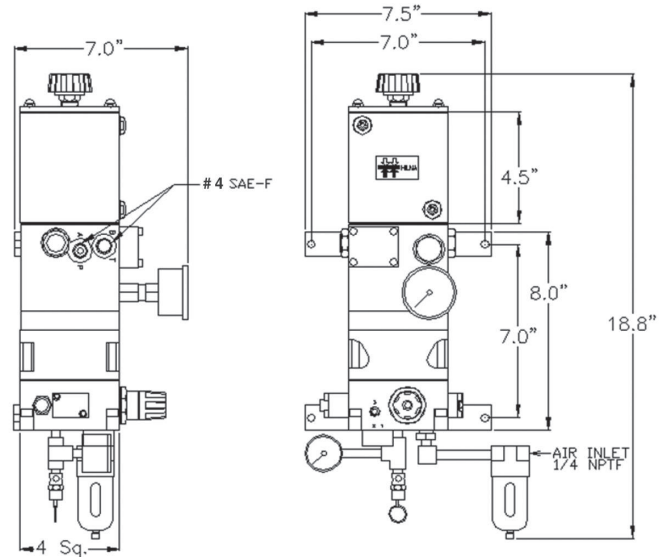
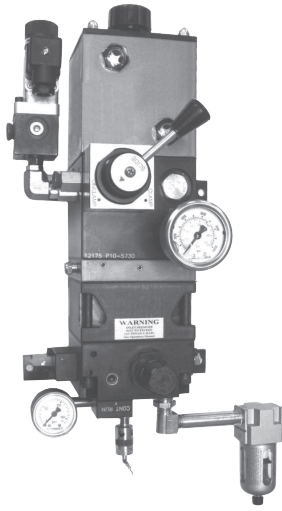


Compact air/oil power unit for hydraulic die clamping of small systems



ROEMHELD
HILMA ■ STARK



Application:

These air powered hydraulic units are suitable for small, low volume hydraulic die clamp and lift systems.

Description:

This family of compact, single stage pumps are configured with standard modular components. The proper combination of hydraulic and electrical controls provide hydraulic power source to suit small single circuit systems.

The unit is supplied with a compact air filter and regulator.

Advantages:

- ◆ compact design
- ◆ oil level sight gauges
- ◆ pressure switch for press safety circuit
- ◆ vertical mounting

Specials available include:

- larger reservoirs
- horizontal mounting

Technical data

| | | |
|-----------------------------|-------------|---------|
| Max. clamping pressure | psi | 5,800 |
| Flow rate (average) | (cu in/min) | 60 |
| Reservoir capacity (usable) | (cu in) | 60 (30) |
| air/oil ratio | 3.2 | 75 to 1 |
| Air requirement (minimum) | psi | 80 |
| Oil ports | SAE | #4 |
| Air inlet | NPT | 3/8" |

Solenoid data

| | | | |
|------------|------------------------|-----|-----|
| Voltage | HCR-PA-21510-60 | VAC | 110 |
| | HCR-PA-21610-60 | VDC | 24 |
| Duty cycle | continuous | | |

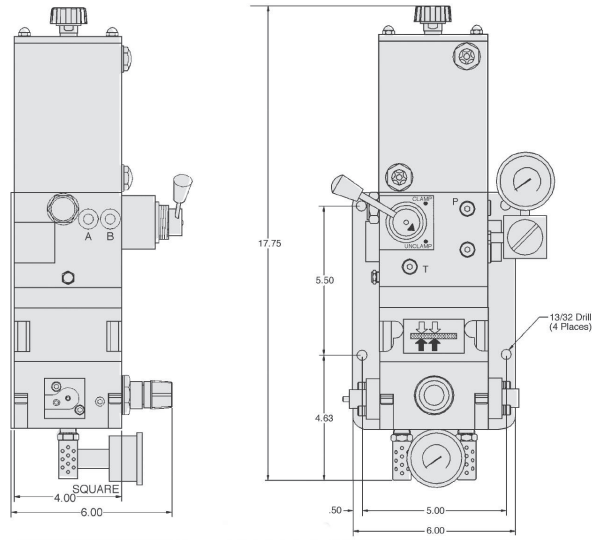
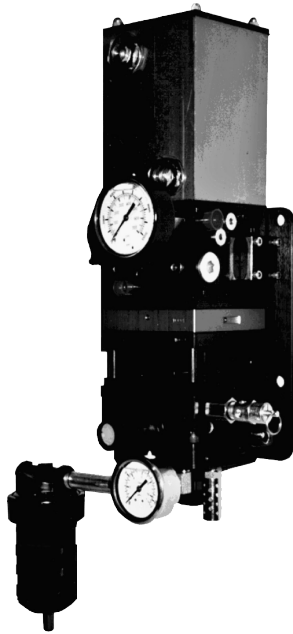
Pressure Switch

| | | |
|-------------------------------|-----|--------------|
| Adjustable pressure settings | psi | 750 to 5,800 |
| Average pressure differential | | |
| at 1,450 psi | psi | 350 ± 73 |
| at 7,250 psi | psi | 750 ± 116 |
| Switch NO/NC | VAC | 5A at 250 |
| Contact rating | VDC | 3A at 30 |

| Part No. | Valve | Pressure Switch |
|---|-------|-----------------|
| HCR-PA-21100-60 use w/remote valves | none | none |
| HCR-PA-21210-60 Manual, 3 pos., 4-way valve | 1 | 1 |
| HCR-PA-21510-60 110 VAC Solenoid 2 pos., 4-way N/O valve | 1 | 1 |
| HCR-PA-21610-60 24 VDC Solenoid 2 pos., 4-way N/O valve | 1 | 1 |



Air/oil power unit for hydraulic die clamping



Application:

These air powered hydraulic units have been developed for the small to mid-sized hydraulic die clamp and lifter systems.

Description:

This family of compact, two stage pumps are assembled from standard modular components. The proper combination of hydraulic and electrical controls provide a hydraulic power source to suit most needs.

Power Unit is supplied with air filter/regulator.

Advantages:

- ◇ compact design
- ◇ oil level sight glasses
- ◇ horizontal or vertical mounting
- ◇ pressure switch for press safety circuit (see chart at right)

Specials available include:

- larger reservoirs
- fluid level switch
- horizontal mounting

Technical data

| | | | |
|---------------------------|--------------------|-------------|----------|
| Max. clamping pressure | | psi | 5,800 |
| Flow rate | | (cu in/min) | 150 |
| Reservoir usable capacity | | (cu in) | 40 |
| Suction filter | HCR-U.HF101 | micron | 25 |
| air/oil ratio, stage 1 | | | 20 to 1 |
| air/oil ratio, stage 2 | | | 100 to 1 |
| Air requirement | | psi | 60 |
| Oil ports | | SAE | #4 |
| Air inlet | | NPT | 3/8" |

Solenoid data

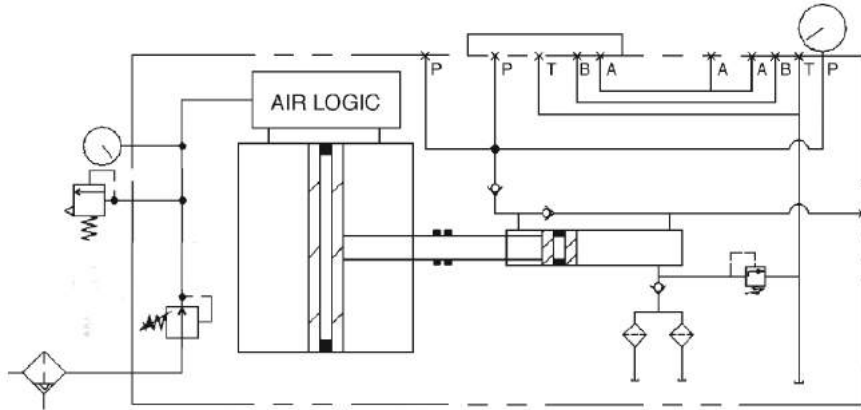
| | | | |
|------------|---------------------|------------|-----|
| Voltage | HCR-PA-11510 | VAC | 110 |
| | HCR-PA-11610 | VDC | 24 |
| Current | | ohms | 0.2 |
| Duty cycle | | continuous | |

Pressure Switch

| | | | |
|-------------------------------|--|-----|--------------|
| Adjustable pressure settings | | psi | 750 to 5,800 |
| Average pressure differential | | | |
| at 1,450 psi | | psi | 350 ± 73 |
| at 7,250 psi | | psi | 750 ± 116 |
| Switch NO/NC | | VAC | 5A at 250 |
| Contact rating | | VDC | 3A at 30 |

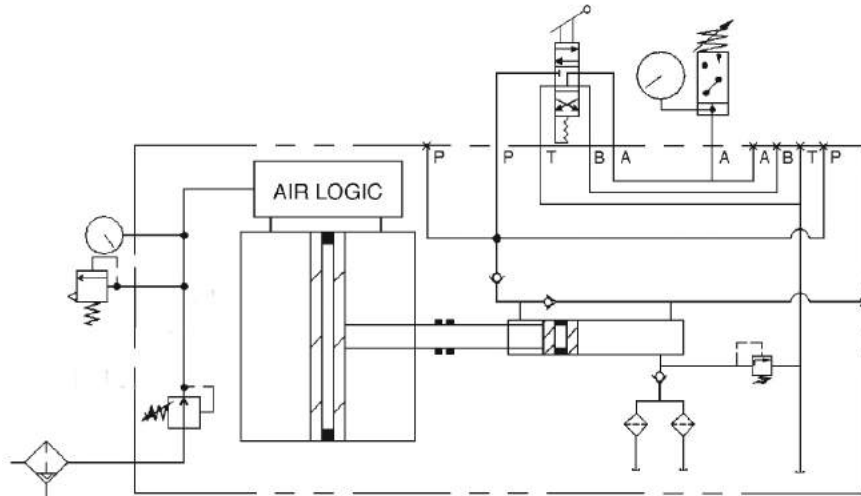
| Part No. | Valve | Pressure Switch |
|--|-------|-----------------|
| HCR-PA-11100 use w/remote valves | none | none |
| HCR-PA-11210 Manual, 3 pos., 4-way valve | 1 | 1 |
| HCR-PA-11510 110 VAC Solenoid 2 pos., 4-way valve | 1 | 1 |
| HCR-PA-11610 24 VDC Solenoid 2 pos., 4-way valve | 1 | 1 |

**Air/oil power unit
for use with hydraulic die clamping**



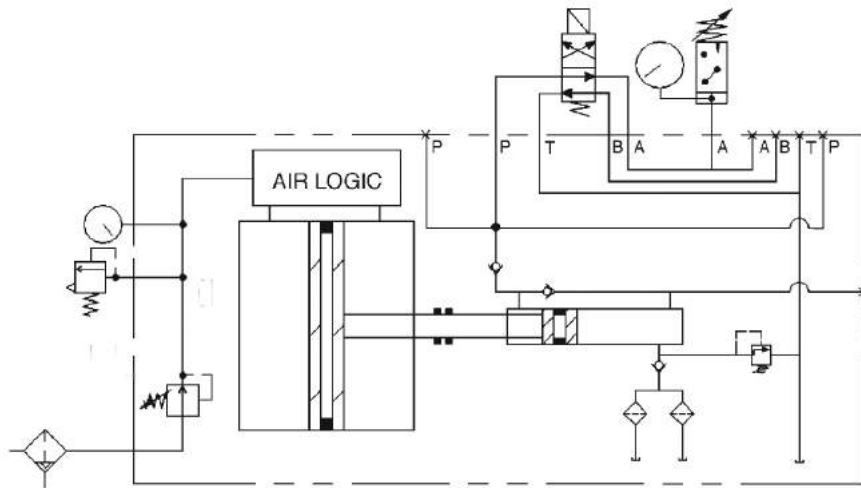
HCR-PA-11100

Power Unit with blanking plate to use with remote valve package.



HCR-PA-11210

Power Unit with a 3 position valve and pressure switch.



HCR-PA-11510

Power Unit with a 2 position/4-way 110 VAC solenoid valve and pressure switch.