

ZK5 UNLOADER VALVE

ZK5.0	2.1 - 2.9	GPM @ 1450 - 2900 PSI
ZK5.1	2.9 - 4.2	GPM @ 1450 - 2900 PSI
ZK5.2	4.2 - 6.6	GPM @ 1450 - 2900 PSI
ZK5.3	6.6 - 10.8	GPM @ 1450 - 2900 PSI



- Features all stainless and brass internal parts.
- No external moving parts or springs.
- Unique balance nozzle principle: Eliminates high pressure in all lines while unit is in bypass mode. Eliminates pressure peaks normally generated by conventionally designed unloaders.
- Unique unbalanced piston design permits precise pressure adjustment.
- Mounts in discharge line; flow-through design.
- Convenient bypass location.
- Dual gauge ports.

General Pump recommends using a safety relief device in conjunction with this unloader valve when installed on a positive displacement pump. General Pump is not liable and assumes no responsibility for this valve when used in a customer's high pressure system.

SPECIFICATIONS

Part Number	ZK5.0	ZK5.1	ZK5.2	ZK5.3
Maximum Volume	2.1-2.9 GPM	2.9-4.2 GPM	4.2-6.6 GPM	6.6-10.8 GPM
Maximum Discharge Pressure	1450-2900 PSI	1450-2900 PSI	1450-2900 PSI	1450-2900 PSI
Max. Temperature	165°F	165°F	165°F	165°F
Port Sizes:				
Inlet	3/8 in. NPT-F	3/8 in. NPT-F	3/8 in. NPT-F	3/8 in. NPT-F
Bypass	3/4 in. NPT-M	3/4 in. NPT-M	3/4 in. NPT-M	3/4 in. NPT-M
Outlet	3/8 in. NPT-M	3/8 in. NPT-M	3/8 in. NPT-M	3/8 in. NPT-M
Dimensions	6.31 x 4.00 x 2.75 in.			
Weight	2.3 lb.	2.3 lb.	2.3 lb.	2.3 lb.

PARTS LIST

ZK5 Unloader Valve

NO.	PART NO.	DESCRIPTION	KIT NO.	QTY.
1.	94737400	Spring	58, 60	1
2.	36300866	Valve	58, 60	1
3.	36303066	Control Rod	60	1
4.	36303466	Seat Insert	58, 60	1
5.	36303270	Piston	58, 60	1
6.	94743000	Spring	58, 60	1
7.	36303170	Spring Plate	60	1
8.	90357200	O-Ring	58	1
10.	98204100	Caps		2
11.	36302841	Unloader Body		1
12.	36300164	Pressure Adjusting Screw		1
13.	92256000	Nut		1
14.	90382300	O-Ring		1
15.		Nozzle		1
	10007666	ZK5.0 , Ø2.0 mm		
	10007766	ZK5.1 , Ø2.5 mm		
	10016266	ZK5.2 , Ø2.75 mm		
	10016366	ZK5.3 , Ø3.0 mm		
16.	90383300	O-Ring	58	1
17.		Nipple		1
	10007870	ZK5.0 , 3/8 BSPP, Ø3.0 mm		
	10007870	ZK5.1 , 3/8 BSPP, Ø3.0 mm		
	10016070	ZK5.2 , 3/8 BSPP, Ø3.25 mm		
	10016170	ZK5.3 , 3/8 BSPP, Ø3.5 mm		
18.	90384500	O-Ring	58	1
19.	36302970	Rod Guide		1
20.	92772200	Compression Rings	58, 60	4
21.	90050900	Retaining Ring	58, 60	1
22.	90385900	O-Ring	58, 60	1
23.	92192500	Nut	58, 60	1
24.	36305070	Valve Seat	60	1
25.	36303570	Ring Nut	58, 60	1

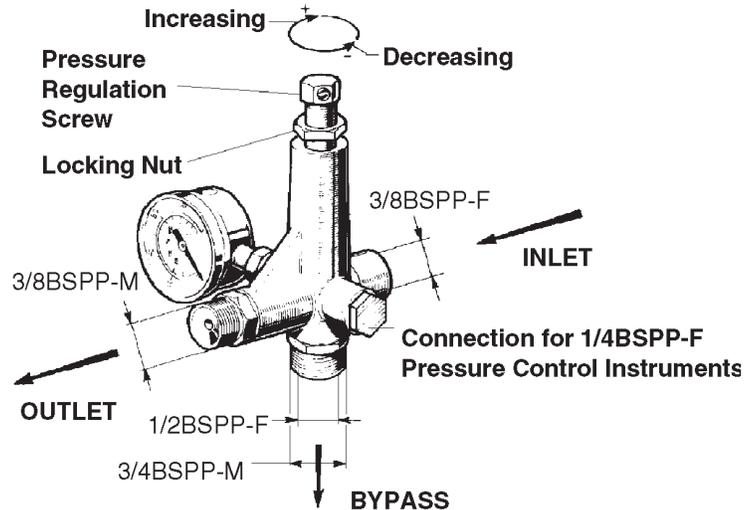
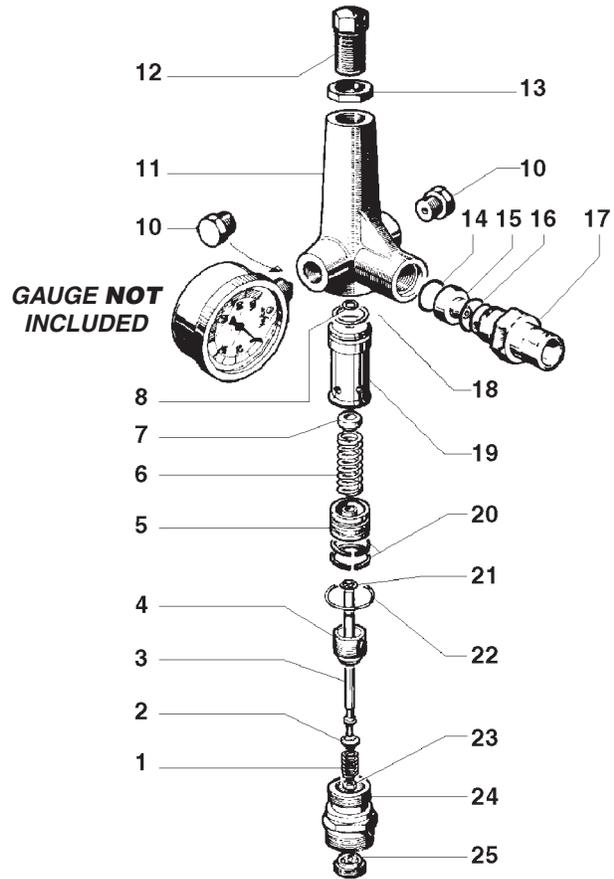
Repair Kits

Repair Kit 58

Includes No.'s: 1, 2, 4, 5, 6, 8, 16, 18, 20, 21, 22, 23, 25

Repair Kit 60

Includes No.'s: 1, 2, 3, 4, 5, 6, 7, 20, 21, 22, 23, 24, 25



INSTALLATION

Select an unloader appropriate for the pressure and flow of your system (see specification chart). This unloading valve is a flow-through design and should be mounted on the discharge line of the pump in any position (horizontal or vertical) which allows easy access to the adjusting bolt. A pressure gauge should be installed on either side of the body of the unloader to accurately read pressure during adjustment.

Minimum 5% bypass is required for proper operation.