Ruelco

AR-1
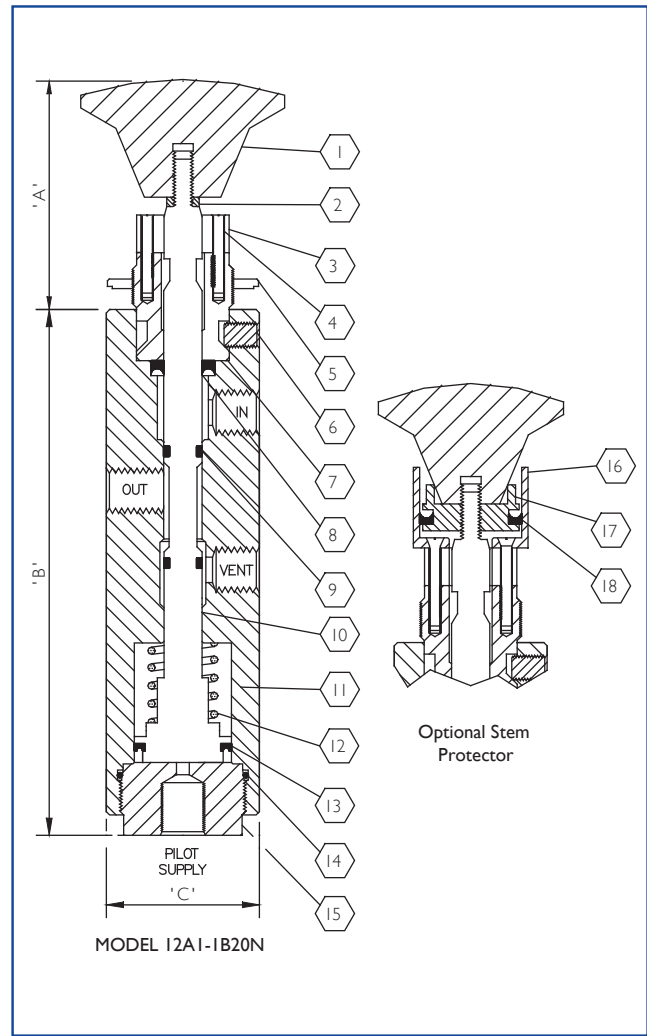## Automatic Reset Relay Model 12A1
FEATURES

- 316 Stainless steel construction (models to N.A.C.E. MR0175 available).
- Easy to close with pilot signal pressures as high as 100 psi.
- Large Cv factor assures fast system response
- Viton and nitril seals are utilized for dependability.
- Design minimizes malfunctions due to supply system debris. Inconel X-750 springs assures dependability in corrosive environments.

GENERAL DESCRIPTION:

The Ruelco "AR-1" relay is a multi-pressure control valve for production control and safety systems. It functions as an automatic reset, pilot operated, normally closed, block and bleed valve.

MODEL 12A1-1B20N

Optional Stem Protector

Parts List For AR-1 Relay

ITEM	QTY.	DESCRIPTION	MATERIAL	PART No.
1A	1	Black Knob	Phenolic	Z0-200-001
1B	–	Red Knob	Phenolic	Z0-200-002
1C	–	Green Knob	Phenolic	Z0-200-003
2	1	Lock Nut	316 St. Stl.	T6-08K-0F3
3	1	Detent Replacement	Black Delrin	10-034-000
4	2	Screw	316 St. Stl.	T3-632-0G3
5	1	Panel Mount Nut	316 St. Stl.	10-006-000
6	3	Set Screw	316 St. Stl.	T1-08K-0C3
7	1	Mounting Head	316 St. Stl.	10-007-000
8*	1	Head Seal	Nitril	NU-204-70H
9*	2	Shaft Seal	Viton	V0-009-90T
10	1	Shaft Assembly	316 St. Stl.	14-023-000
11	1	Body	316 St. Stl.	10-020-000
12A	1	20 PSI. Spring	Inconel X-750	10-024-000
12B	–	30 PSI. Spring	Inconel X-750	10-017-000
13*	1	Piston Seal	Nitril	NU-209-70H
14*	1	Base Seal	Viton	V0-025-75H
15	1	Base	316 St. Stl.	14-021-000
16	1	Stem Protector Housing	Black Delrin	10-015-000
17	1	Seal Washer	Black Delrin	10-016-000
18#	1	Stem Protector Seal	Nitril	NU-210-70H
19	–	Repair Kit w/o Stem Protector	* Items	14-013-0A0
20	–	Repair Kit w/ Stem Protector	* & # Items	14-026-000

Specifications PSI. (Bar)

Valve Body Max. W.P.	150 (10.3)
Optional Max. W.P.	250 (17.2)
Ambient Temperature Range	-20° To 250° F
	-20° To 122° C
Minimum Pilot Signal Pressure to Hold Relay Open	27 (1.9) With 20 PSI Spring
	35 (2.4) With 30 PSI Spring
Cv Factor	1.7

Dimensions Inch (MM)

"A" (Closed/ Open)	2.36/2.73 (60/69.3)
"B"	5.18 (132)
"C"	1.5 (38.1)
Port Size	1/4" NPT
Panel Mount Hole	1.0 (25.4)
Max. Panel Thickness	.18 (4.6)
Weight	2.5 lbs (1.14 Kg)

Ordering Code:

12A1 X 1 X X X X

- BASE MODEL NUMBER
- Standard Corrosive Service - (-)
- N.A.C.E. Option - N
- Black Knob - B
- Red Knob - R
- Green Knob - G
- 0 - Without Panel Mount Nut
- N - With Panel Mount Nut
- 0 - Without Stem Protector
- P - With Stem Protector
- 2 - 20 Psi. Closing Spring
- 3 - 30 Psi. Closing Spring