



INDUSTRIAL FLUID POWER COMPONENTS  
AND SYSTEMS

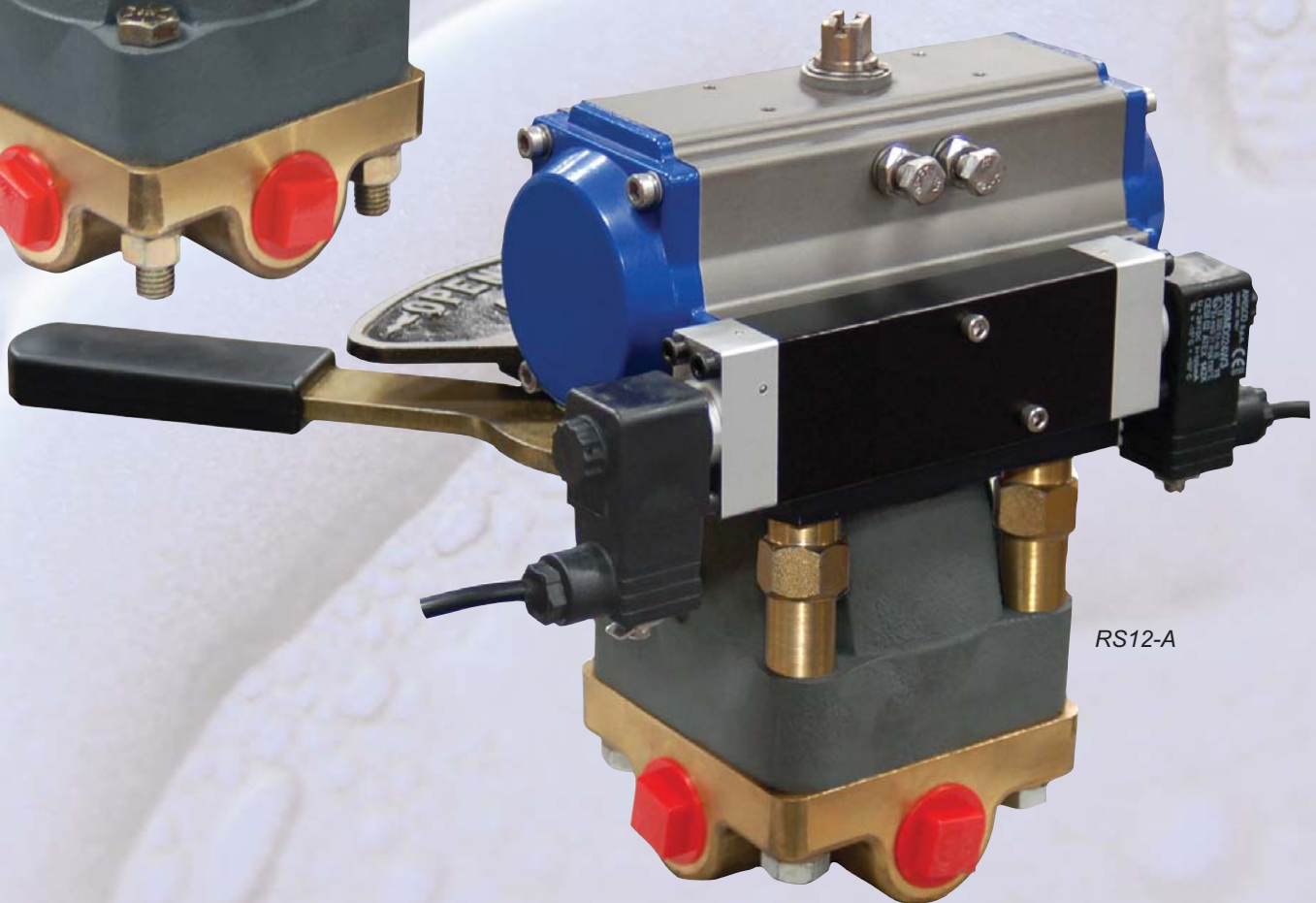


**RS SERIES**

## Rotor Shear™ Zero Leakage Rotary Valves



RS12-M



RS12-A



## RS Series

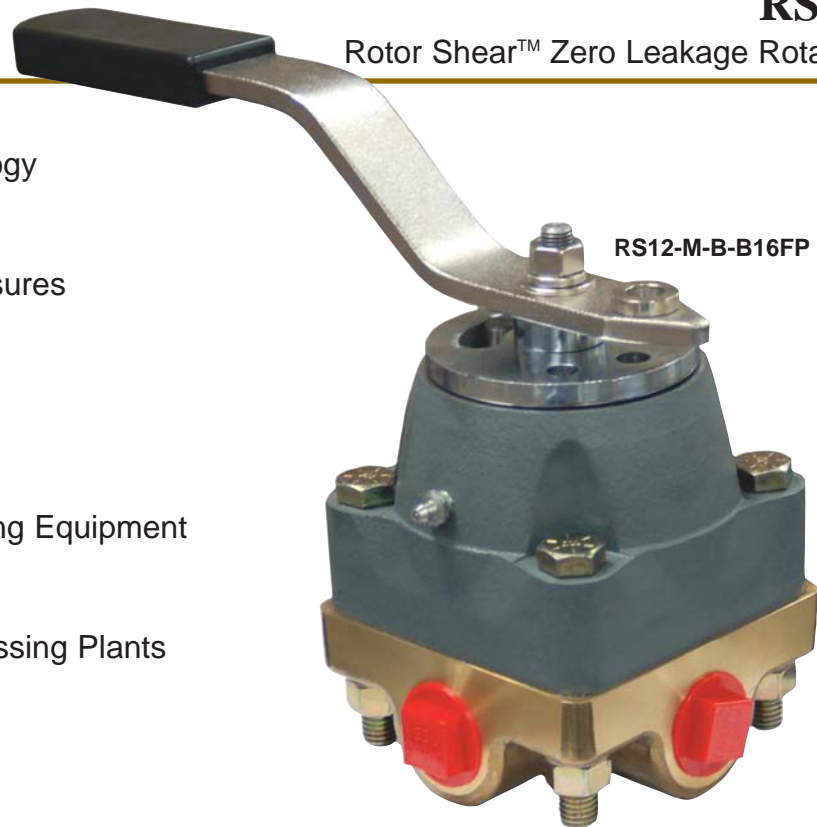
Rotor Shear™ Zero Leakage Rotary Valves

### Standard Features

- Original Rotor Shear™ Technology
- High Velocity Flow
- Tolerates Contaminates
- Low Handle Load at High Pressures
- Spring Return Option
- Low Pressure Drop

### Applications

- Land-Based and Offshore Drilling Equipment
- Steel Mills
- Nitrogen Charging Panels
- Refineries and Chemical Processing Plants
- Power Generation Facilities



### Specifications

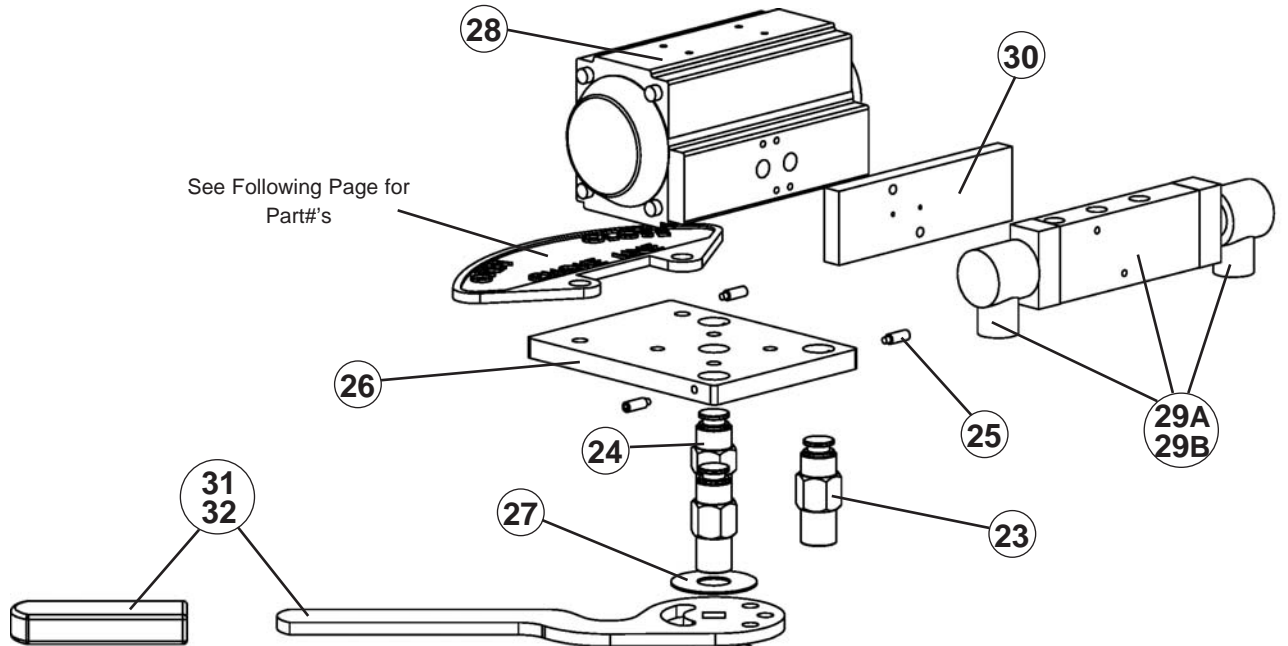
- **Working Pressure:** 3,000 psi (207 bar)  
Hydraulic Oil or Lubricated Water
- **Flow Capacity:** 75 gpm (284 l/min)
- **Back Pressure:** Must not exceed 250 psi (17.2 bar) at return port for satisfactory operation
- **Pressure Drop:** 14 psi (0.96 bar) at 20 ft/sec
- **Proof Pressure:** 1-1/2 times working pressure except at return port
- **Burst Pressure:** 2-1/2 times working pressure except at return port
- **Media Temperature Range:** -40° to +250°F (-40° to +121°C)

### Materials

- **Rotor:** Stainless Steel
- **Pressure Seals:** Stainless Steel
- **Shaft:** Stainless Steel
- **Body:** Bronze
- **Housing:** Ductile Iron
- **Standard O-ring:** Buna N
- **Weight:** 21.5 lbs (9.8 kg)

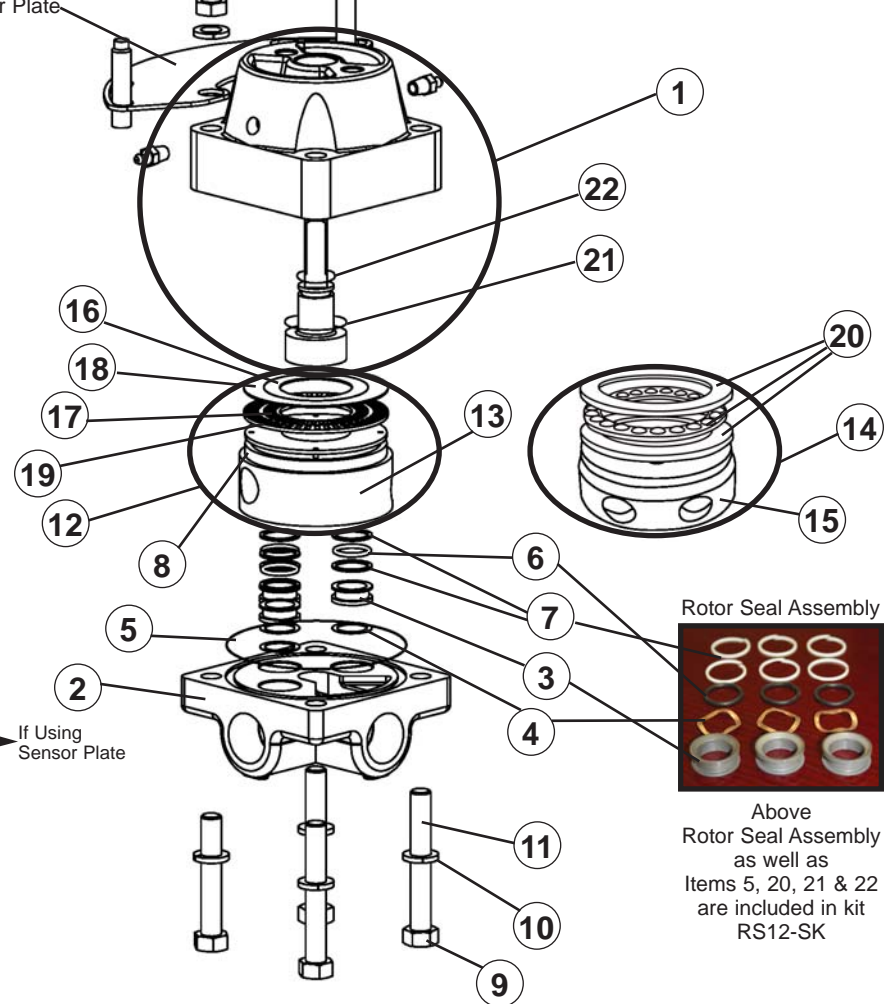


## RS 12A - Parts



No.	Part Number	Description	Qty
1	RS12-A	Actuated Housing Assembly	1
2	RS12B-16FP	1" NPT Base	1
3	RS12-SS	Rotor Seal 3000 psi	3
4	RS12-WW	Wave Washer	3
5	243B70	O'Ring RS12B	1
6	117B70	O'Ring RS12SS	3
7	117ST	TFE Back Up RSS12	3
8	339B70	O'Ring H Rotor	1
9	1/2-13NUT	GR8 Zinc	1
10	1/2LCKWASHER	GR8 Zinc	4
11	1/2-13x3.5HHCS	GR8 Zinc PL	4
12	RS12-BH	Blocked H Rotor (Assembly)	1
13	RS12-BR-H	Blocked H Rotor (Rotor Only)	1
14	RS12-BB	Blocked B Rotor (Assembly)	1
15	RS12-BR-B	Blocked B Rotor (Rotor Only)	1
16	AS-4565	Washer (Inner)	1
17	NTB-4565	Needle Bearing (Inner)	1
18	AS-6590	Washer (Outer)	1
19	NTB-6590	Needle Bearing (Outer)	1
20	51113	Roller Bearing	1
21	212B70	O'Ring Shaft	1
22	115B70	O'Ring Shaft	1
23	RS12-MS	Mounting Stud	2/3
24	RS12-MSS	Mounting Stud Short	1
25	1/4-20x1/3	Full Dog Plated	3
26	RS12-AMP	A32DA Mounting Plate	1
27	RS12-NW	Nylon Washer	1
28	A32DA	Pneumatic Actuator	1
29A	SVXN-604-543SF	Expl. Proof Sol. Valve w/ 24 DC coils	1
29B	SVAXN-604-543SF	Expl. Proof Sol. Valve w/ Atex coils	1
30	DA32-OP	Orifice Plate	1
31	RS12-AHDL	Actuated Handle w/ Grip	1
32	RS12-MHDL	Manual Handle w/ Grip	1

Sensor Plate



Rotor Seal Assembly



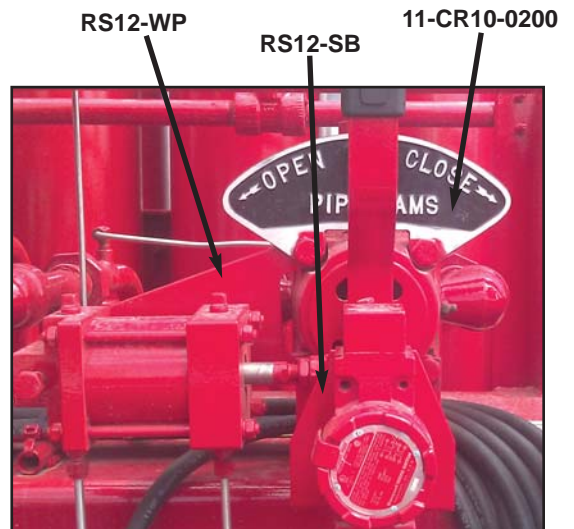
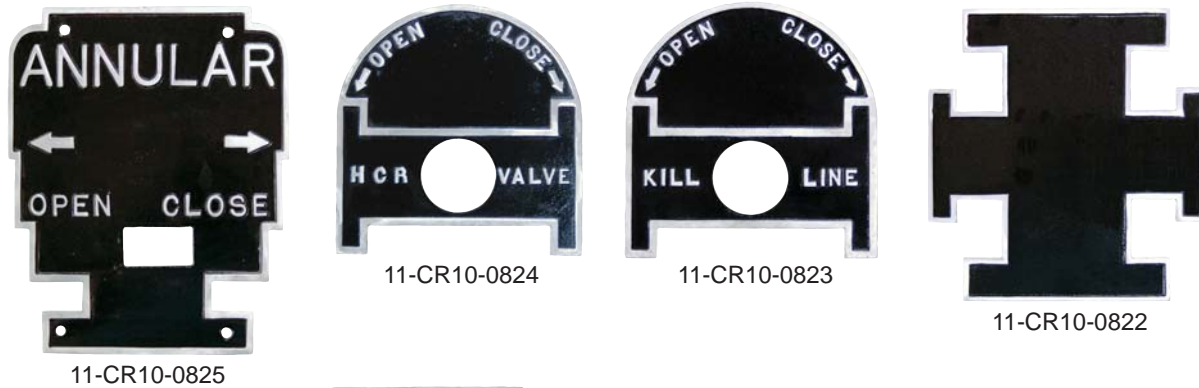
Above Rotor Seal Assembly as well as Items 5, 20, 21 & 22 are included in kit RS12-SK

**Parts/ Accessories**

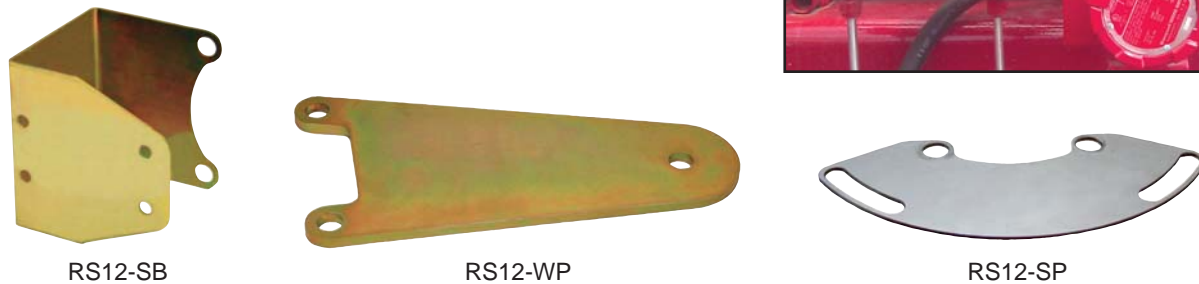
**CRESCENT MOON PLATES**



**NAMEPLATES**

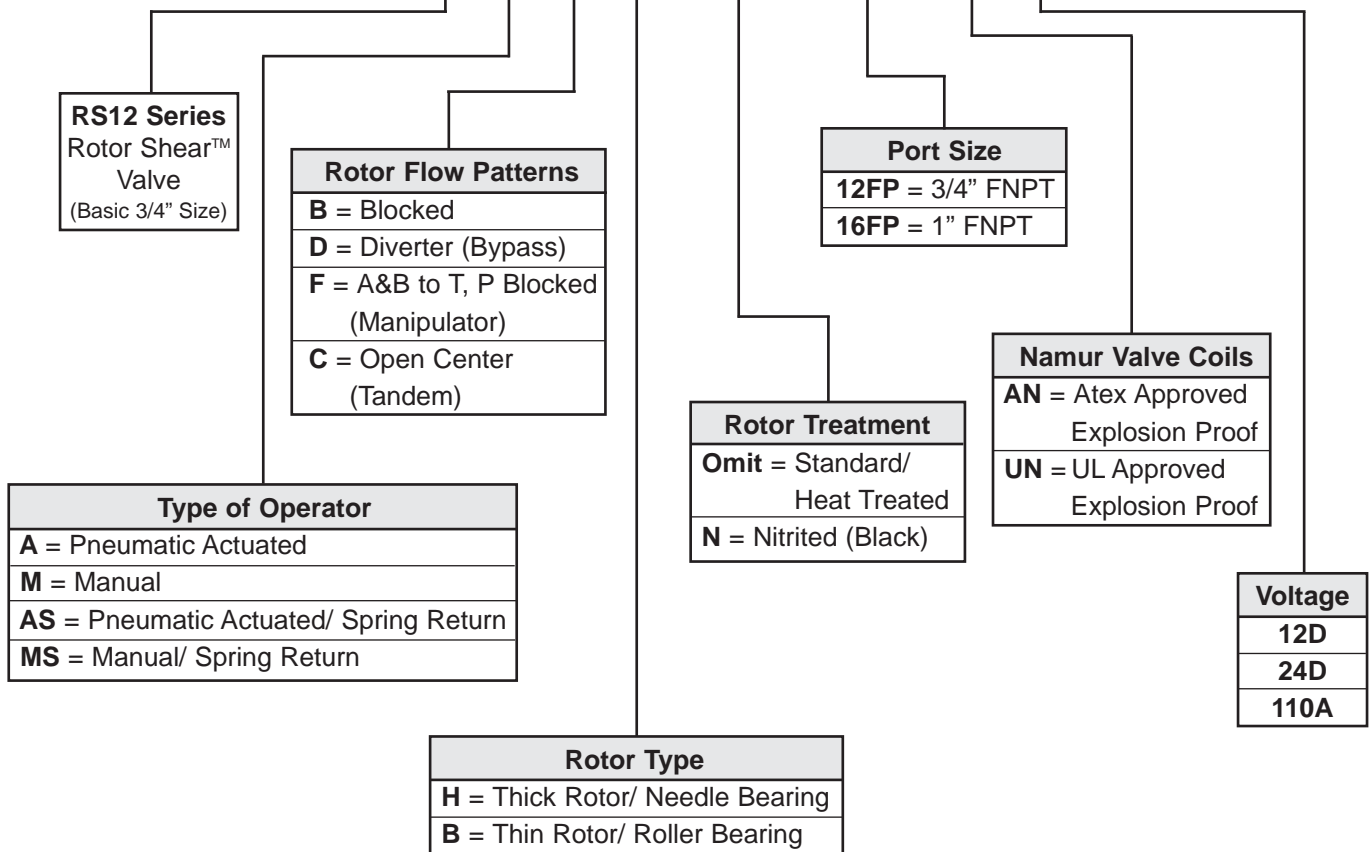


**SWITCH BRACKETS, WING PLATES, SENSOR PLATES**



**Ordering Information**

**RS12 M - B - B - OMIT - 16FP - AN 24D**



**H Type Rotor**



**B Type Rotor**

