

# RP SERIES

## 200 psi Mill-type Cylinder

Delivering superior long-term performance and value

**Designed and engineered  
for severe-service applications**

**Bore Size: 2" to 20"**

**Piston rod diameter: 5/8" to 5 1/2"**

- Heavy duty construction with steel flanged end caps and heavy wall tubing for continuous 200 psi service
- Extra-long heavy duty rod bushing with dual wipers
- 4 wrench flats on piston rod + option to accept LDT
- Made-to-order stroke lengths
- Reduce design and development costs

# Series Design & Materials

## Temperature Ratings

Low Temperature	-54C to 60C
Standard Temperature	-50C to 105C
High Temperature	-29C to 205C

**Seals** | Standard seals are suitable for water glycol or standard mineral oil; High temp seals available as an option

**Barrel** | Seamless steel tubing, honed & polished to minimize friction

**Barrel Seal**  
Nitrite "O" Ring

**Head**  
Machined steel

**Rod Seal** | PTFE - Low friction and long service life; Allows a fine film of oil to pass ensuring the necessary lubrication of the secondary seal; Geometry designed to vent pressure from the reverse side - to reduce possibility of pressure trap between seals.

**Cap** | Machined steel

**Cap Screw** | Grade 8

**High Strength Nylon Wear Ring (2X)**  
BZ-PTFE for high temp version

**Metallic Rod Scraper**  
(Standard) Rugged scraper deflects contamination away from the rod seals for long service life

**Gland Bushing**  
Cartridge-type AL - bronze

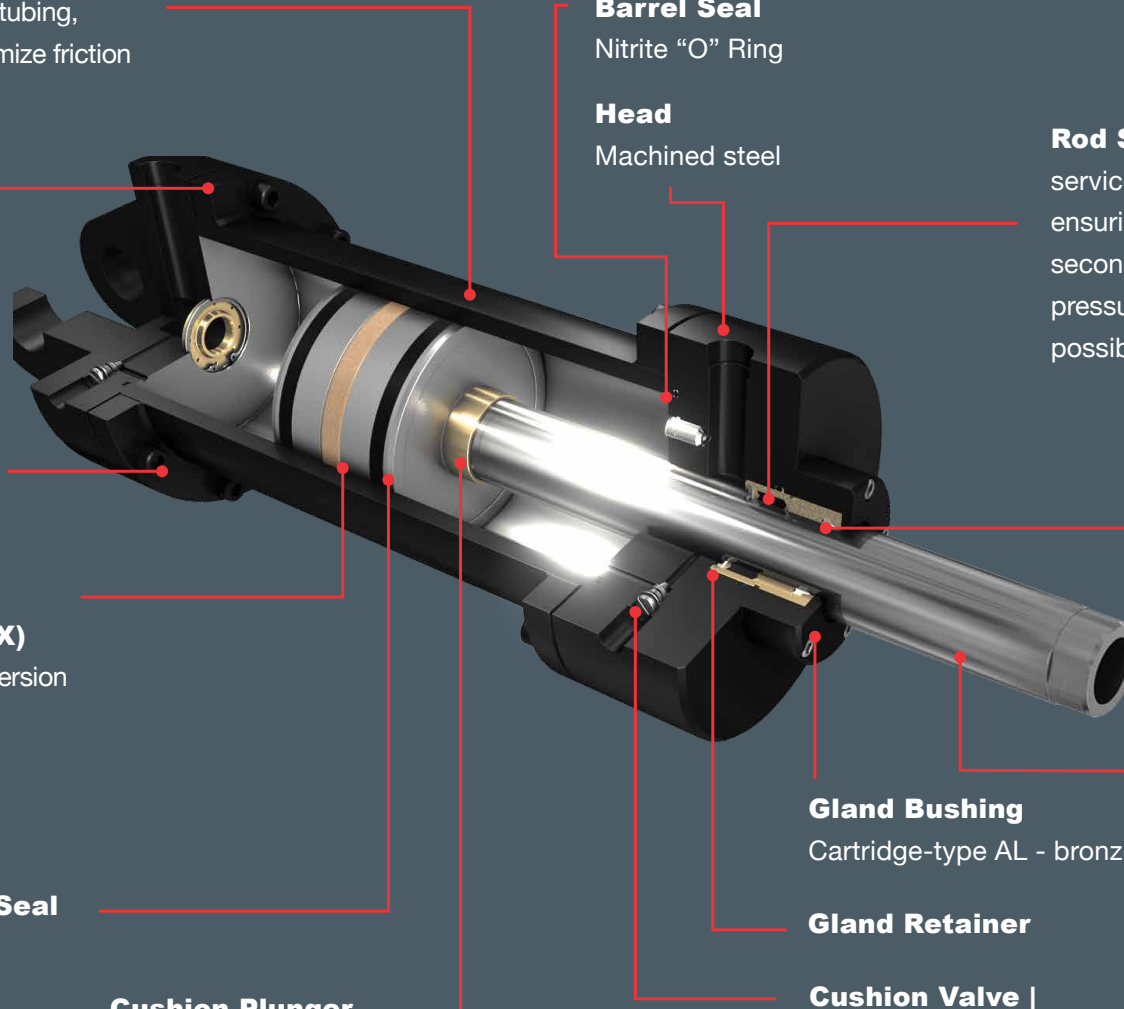
**Piston Rod**  
Steel SAE 1045 Ground, hard chrome-plated & polished 17 - 4 PH; stainless steel available as an option

**Gland Retainer**

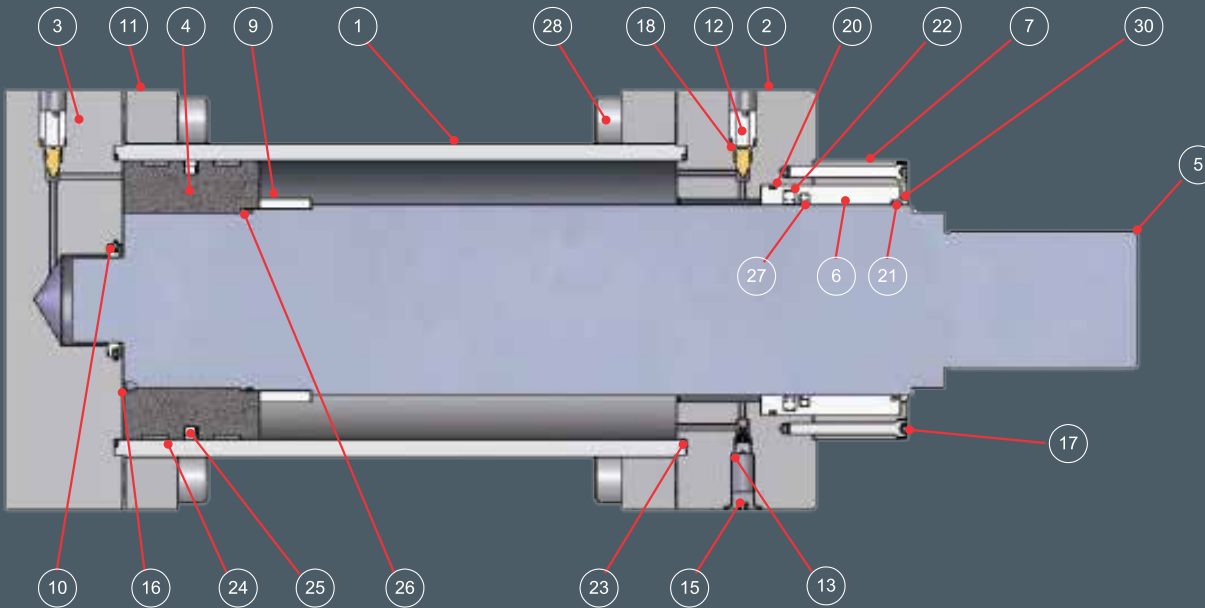
**Cushion Valve** | Fully retained for safety

**High Load Piston Seal**

**Cushion Plunger**  
Floating cushion plunger provides maximum cushioning effect combined with a quick start for optimum performance



# Spare Parts List



Item Number	Description	Quantity
1	Cylinder Barrel	1
2	Cylinder Head	1
3	Cylinder Cap	1
4	Piston	1
5	Piston Rod	1
6	Gland Bushing	1
7	Gland Retainer	1
9	Cushion Plunger	1
10	Cushion Bushing	1
11	Flange	2
12	Cushion Needle Valve Retainer	2
13	Check Valve	1
15	Check Valve Retainer	1
16	Piston Lock Pin	1
17	SHCS	*
18	Cushion Needle Valve	2
20	Gland O-ring with Backup	1
21	Teflon Bronze Wiper	1
22	Primary Rod Seal	1
23	Barrel O-ring	2
24	Piston Wear Band	2
25	Piston Seal	1
26	Piston-to-Rod O-ring	1
22	Secondary Rod Seal	1
26	SHCS	*
30	Metallic Rod Wiper	1

\*Varies with Bore size. Contact your local Cowan office for more information

## SERIES

RP

## BORE SIZE

H - 4" P - 10"  
K - 5" R - 12"  
L - 6" S - 14"  
M - 7" T - 16"  
N - 8"

## ROD DIAMETER

J - 2" R - 5"  
K - 2 1/2" S - 5 1/2"  
L - 3" W - 7"  
M - 3 1/2" X - 8"  
N - 4" V - 9"  
P - 4 1/2" Y - 10"

## ROD THREAD STYLE

N2 - Intermediate Male  
M2 - Intermediate Male Metric\*

\*Contact Cowan for size

## CUSHIONS

5C - Adjustable both ends  
6C - Adjustable head end  
7C - Adjustable cap end  
8 - None

## CUSHIONS POS

Omit if non Cushion  
CXX

XX denotes position  
ex: 23 = Pos 2 head  
Pos 3 Cap

## DOUBLE ROD DIA

Omit if not required

DJ2 - 2" DR2 - 5"  
DK2 - 2 1/2" DS2 - 5 1/2"  
DL2 - 3" DW2 - 7"  
DM2 - 3 1/2" DX2 - 8"  
DN2 - 4" DV2 - 9"  
DP2 - 4 1/2" DY2 - 10"

## 2ND ROD THREAD STYLE

RN2 - 2nd Rod: Intermediate Male  
RM2 - 2nd Rod: Intermediate Male  
Metric\*

\*Contact Cowan for size

## PORTS

GXX - SAE Code 62 flange  
FXX - SAE Code 61 flange  
SXX - SAE  
NXX - NPT  
BXX - BSPP  
MXX - ISO

XX denotes position  
ex: 12 = Pos 1 head,  
Pos 2 Cap

## SEALS

N - Standard Seals  
F - High Temp  
L - Low Temp  
E - EPDM

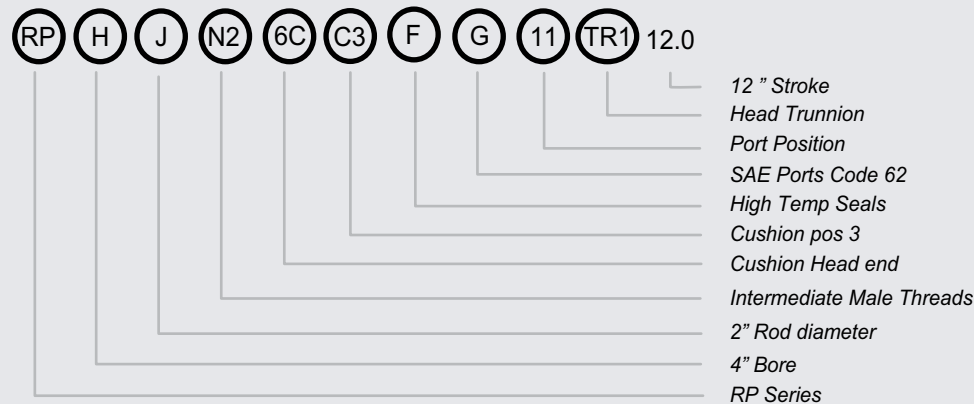
## MOUNTINGS

PR1 Cap Fixed Clevis (with Clevis pin)  
PR3 Male Clevis (with pivot pin)  
SR2 Side lugs  
TR1 Head Trunnion  
TR2 Cap Trunnion  
TR4 Intermediate Trunnion  
SRB Spherical Bearing  
X0 No mount

## OPTIONS

Please consult the factory for additional option codes

## EXAMPLE



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