



420 Series Open Circuit Piston Pumps

Product Overview

Open Circuit Axial Piston Pumps

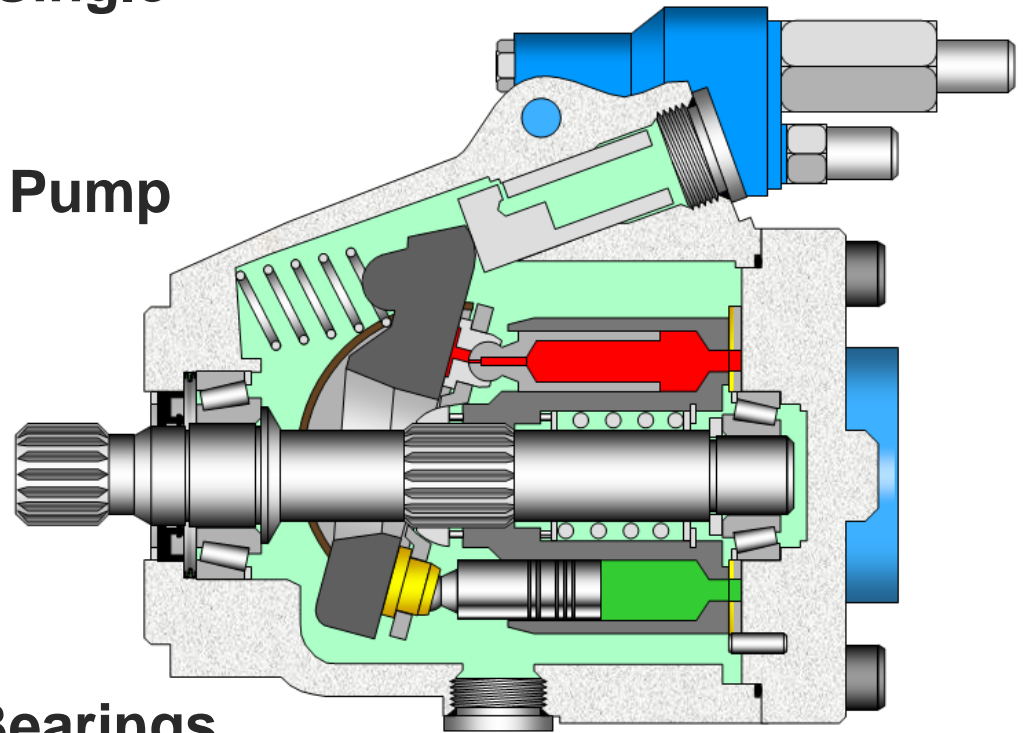


For Mobile Applications



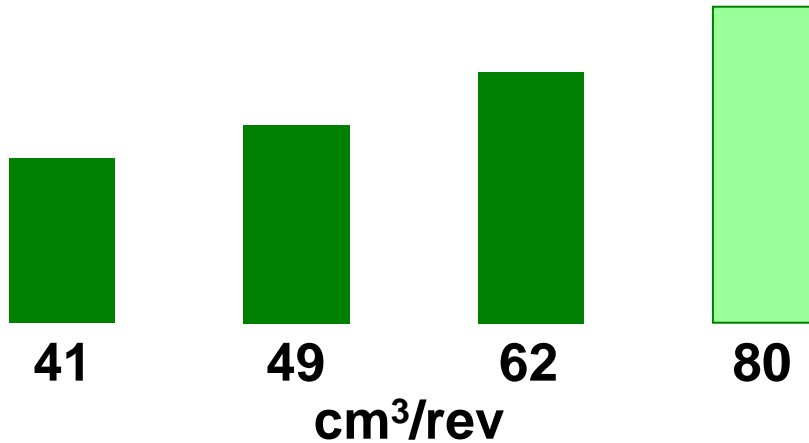
Design Details

- ◆ Simple Swashplate and Single Stroking Piston design
- ◆ Compensator from PVM Pump Series
- ◆ Two-piece Structure - Single Split Line
- ◆ O-ring Joint Sealing
- ◆ Reliable Cradle Swash Bearings
- ◆ Serviceable Valve Plate
- ◆ Simple, Reversible End Cover

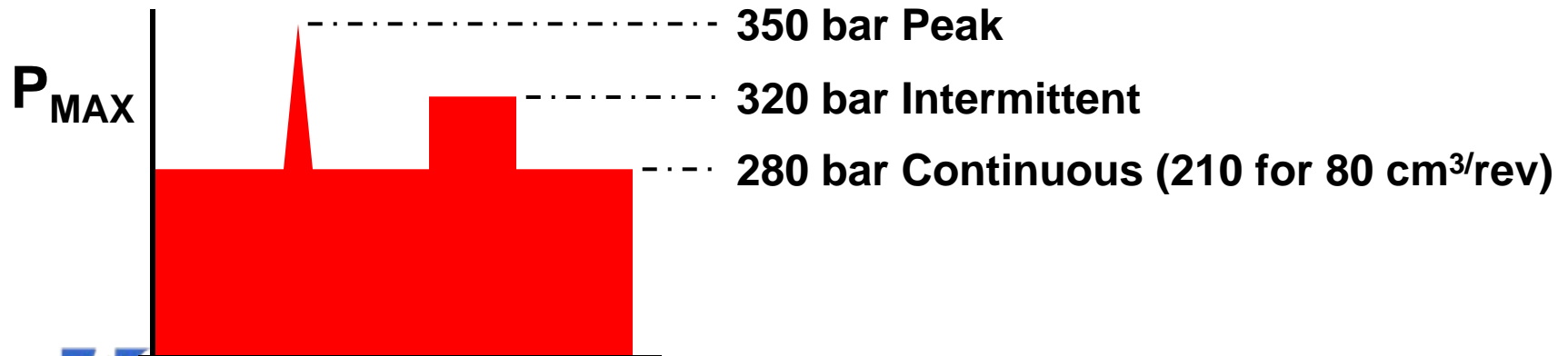


Basic Performance Ratings

DISPLACEMENTS



PRESSURE RATINGS



Performance Ratings



	ADU041	ADU049	ADU062	ADU080
SPEED CAPABILITY AT 1.0 bar abs INLET				
Rated	2650	2650	2600	2200
Standby	3600	3600	3600	3600
Minimum	600	600	600	600
MAX SPEEDS WITH VARYING INLET CONDITIONS				
1.5 bar abs	2850	2850	2800	2400
1.0 bar abs	2650	2650	2600	2200
0.85 bar abs	2450	2450	2400	2000

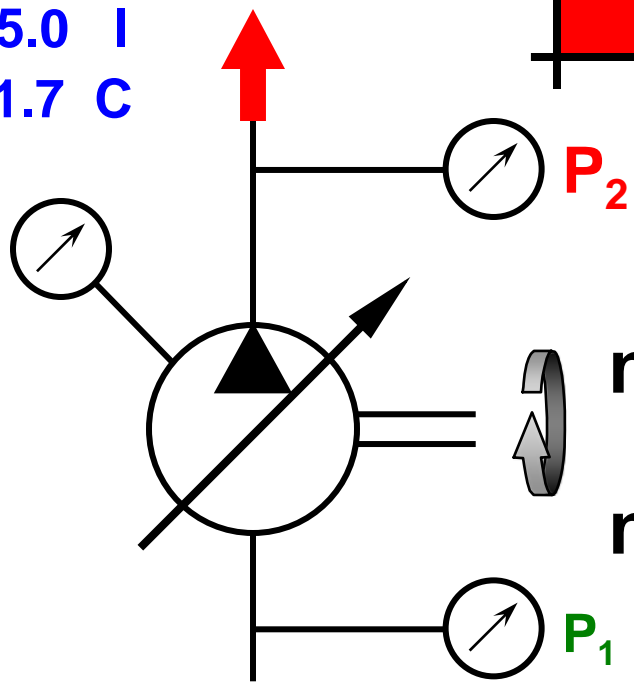
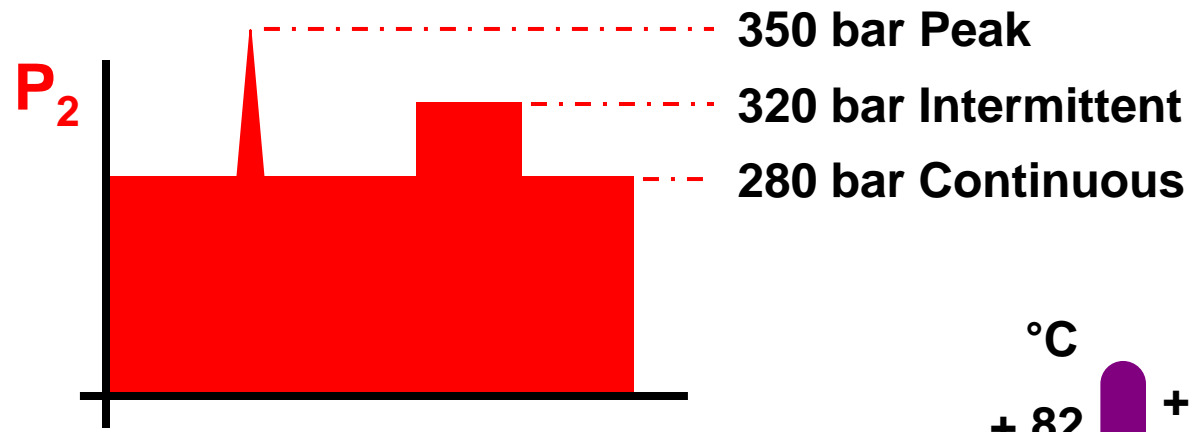
Performance Ratings



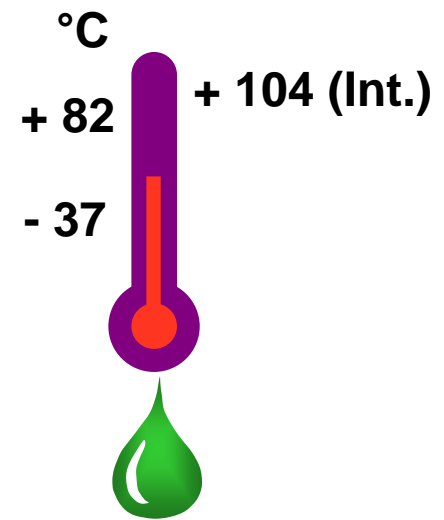
	ADU041	ADU049	ADU062	ADU080
DYNAMIC RESPONSE (msec)				
Response (off stroke)	20	20	25	30
Recovery (on stroke)	75	75	90	100
Load Sense Recovery	90	90	115	120
STANDBY POWER LOSS (kW)				
	.98	.98	1.1	1.3
DRY WEIGHT (kg)				
	22	22	23	24

Performance Ratings

P_3 MAX
 (bar)
 6.0 P
 5.0 I
 1.7 C



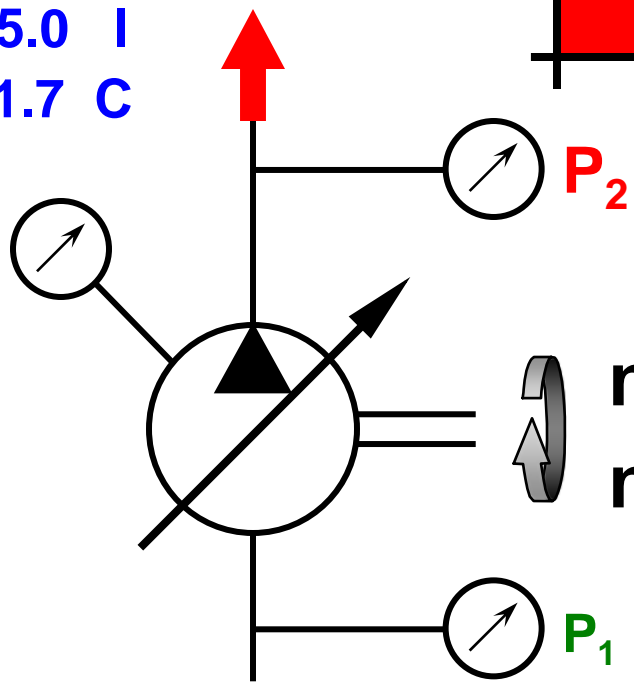
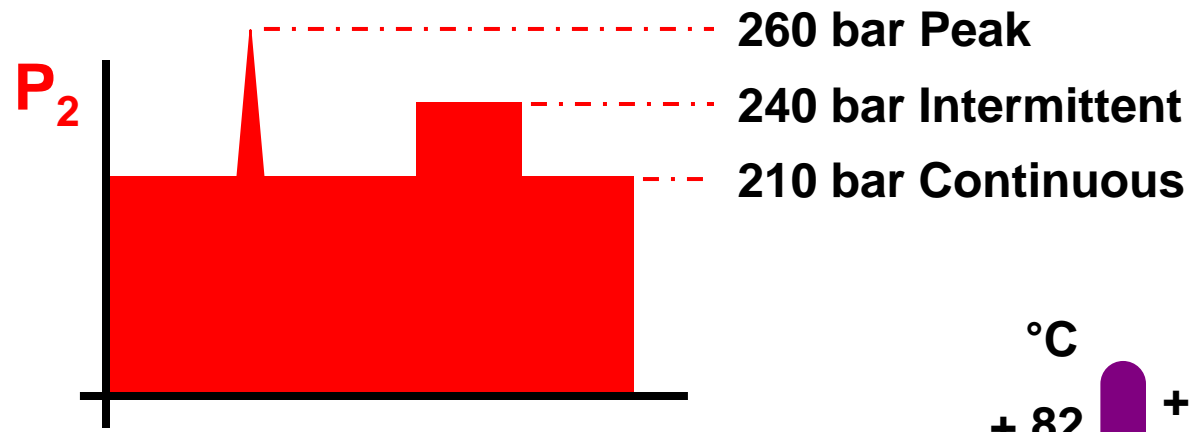
$n_{Max} = 2600$ r/min 62cc
 2650 r/min 41, 49cc
 $n_{MIN} = 600$ r/min
 $P_1 = 0.85 - 4.5$ bar (abs)



20 / 18 / 13
 HM / HV
 16 - 40 cSt

Performance Ratings - ADU080

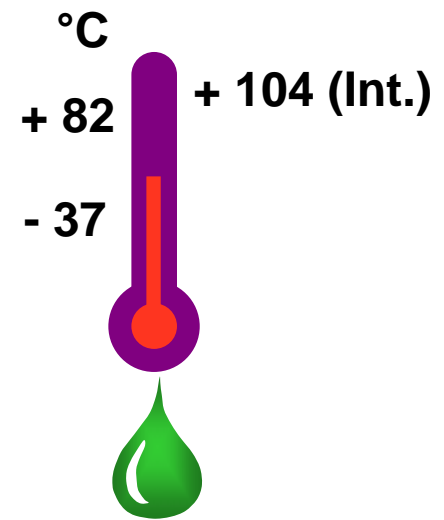
P_3 MAX
 (bar)
 6.0 P
 5.0 I
 1.7 C



$n_{MAX} = 2200$ r/min (@ Q_{MAX})

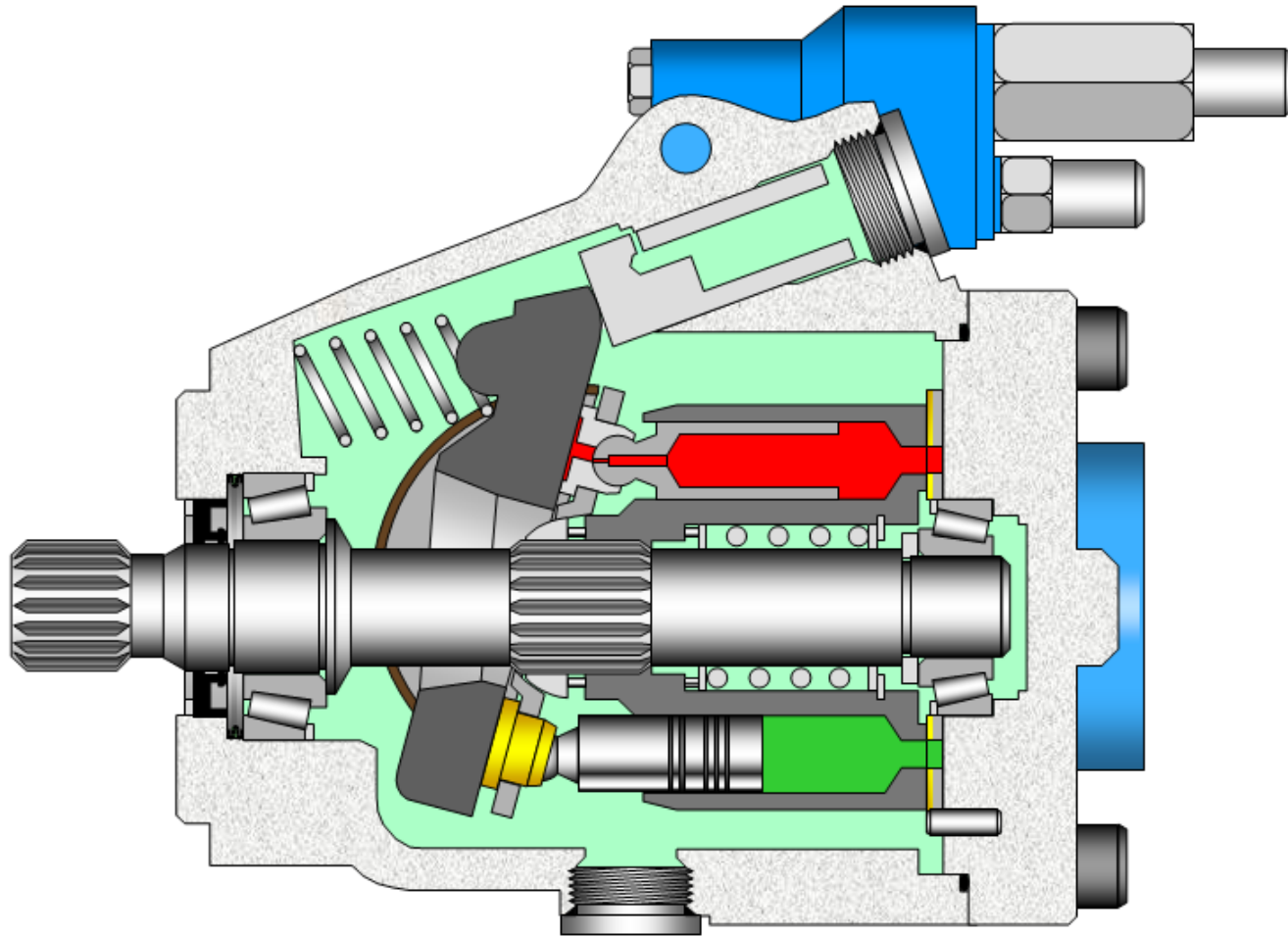
$n_{MIN} = 600$ r/min

$P_1 = 0.85 - 4.5$ bar (abs)

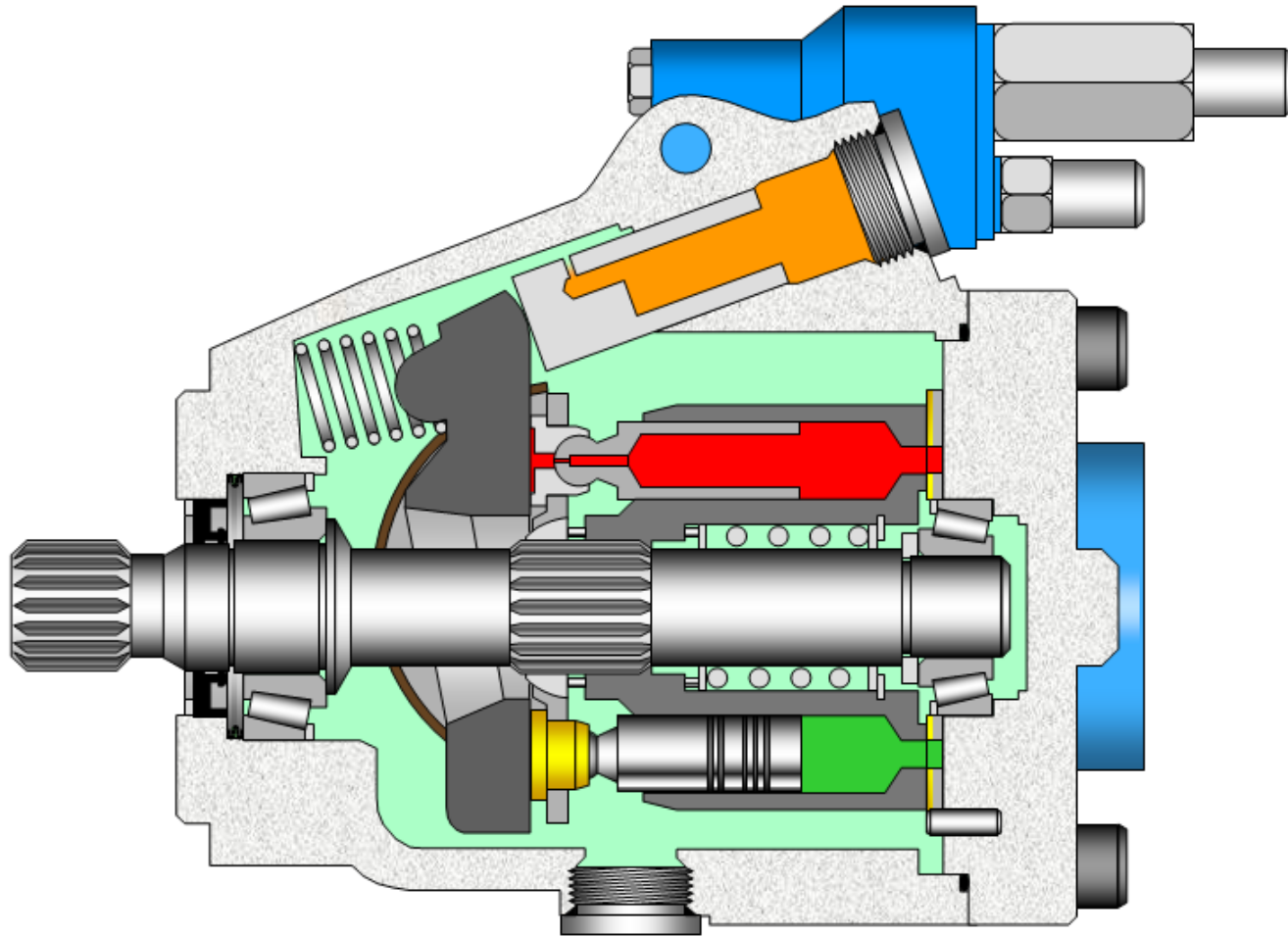


20 / 18 / 13
 HM / HV
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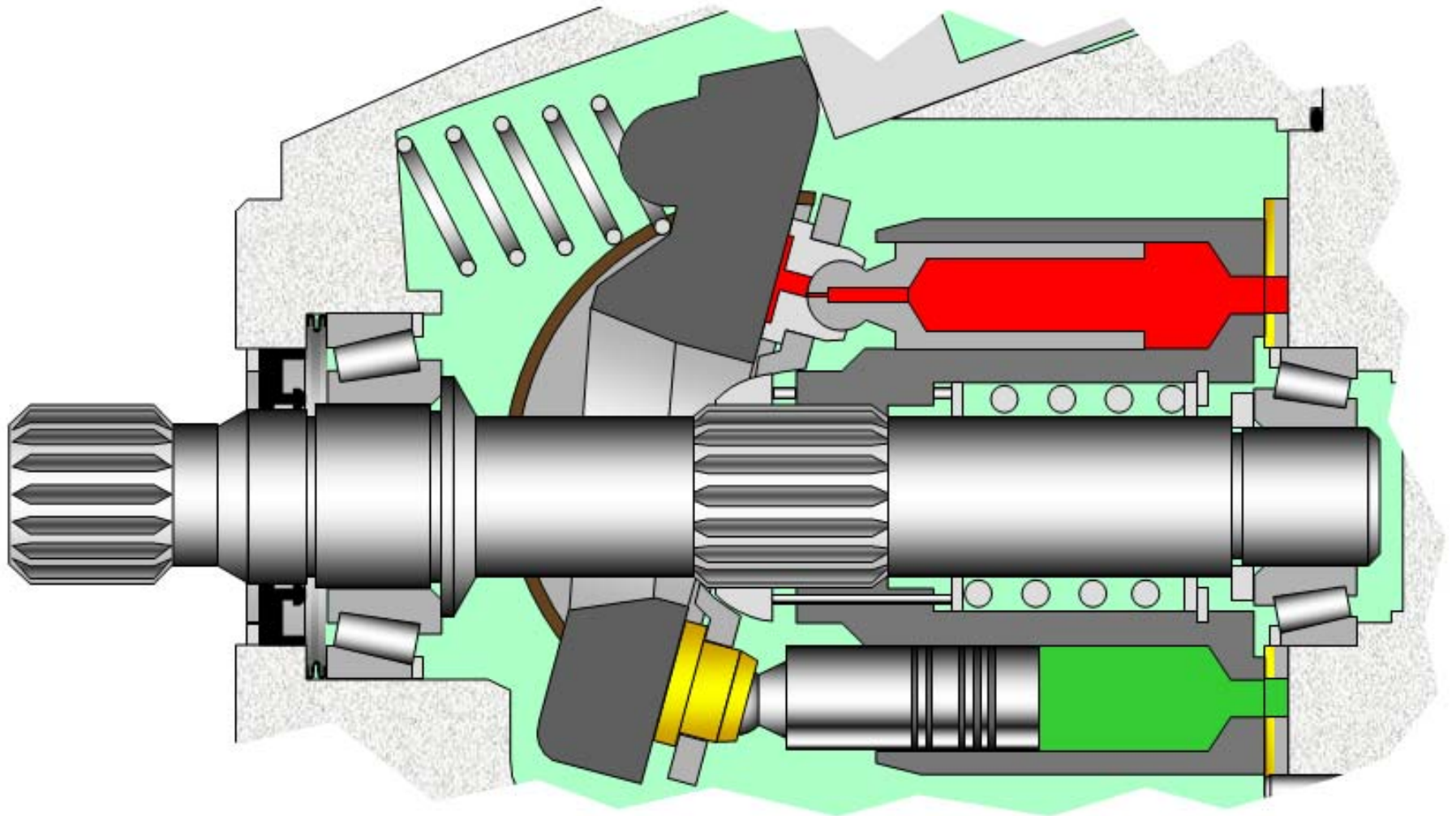
Pump Assembly



Pump Assembly

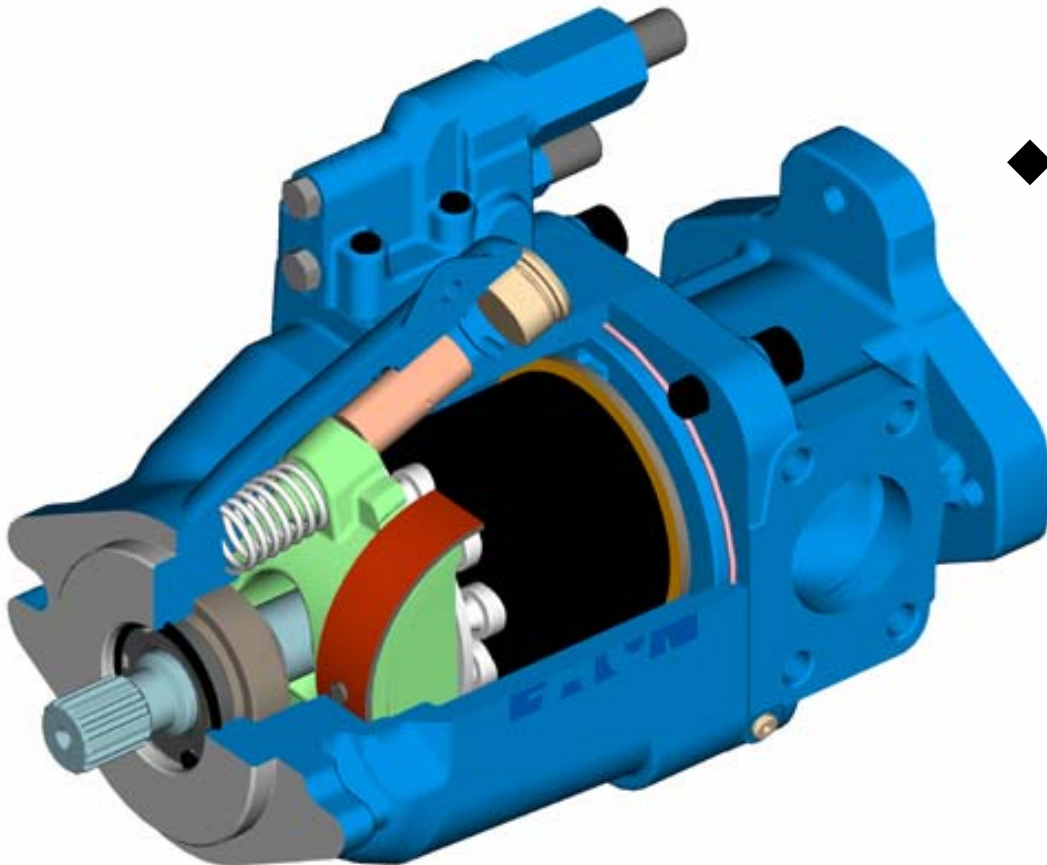


Rotating Group



Through Drive & Port Options

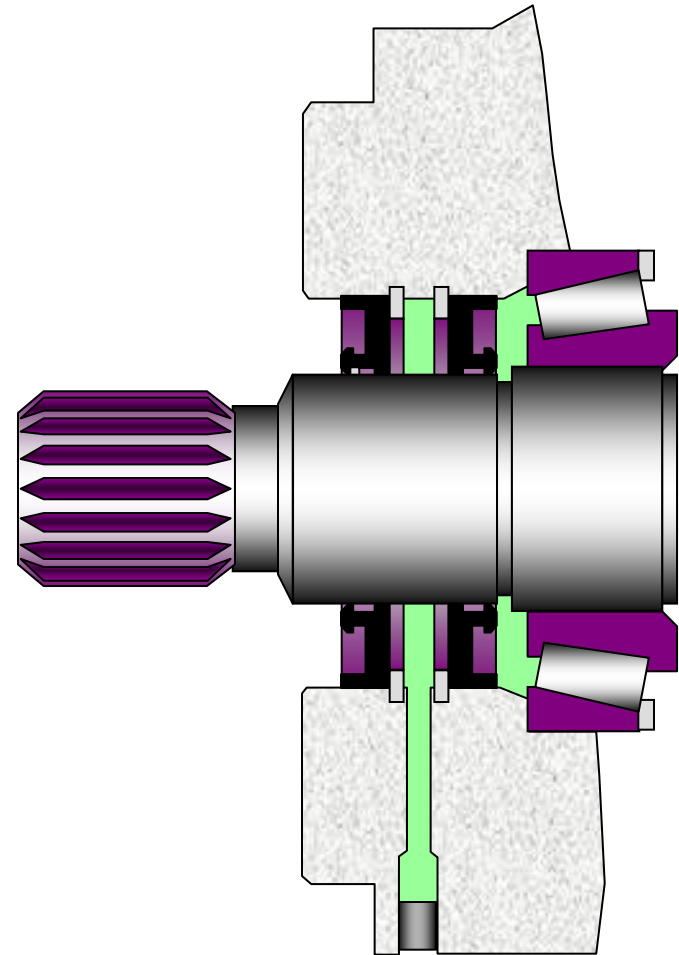
- ◆ SAE “A” and “B” Thru Drive (Full Torque on 41 & 49 cm³/rev, up to 250 bar with 62 cm³/rev)



- ◆ End Ported and Side Ported Options

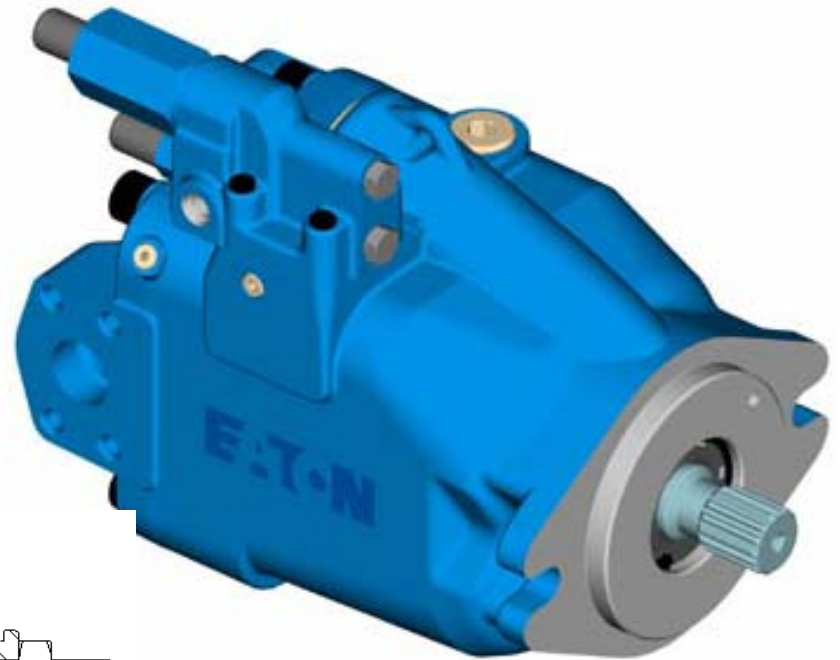
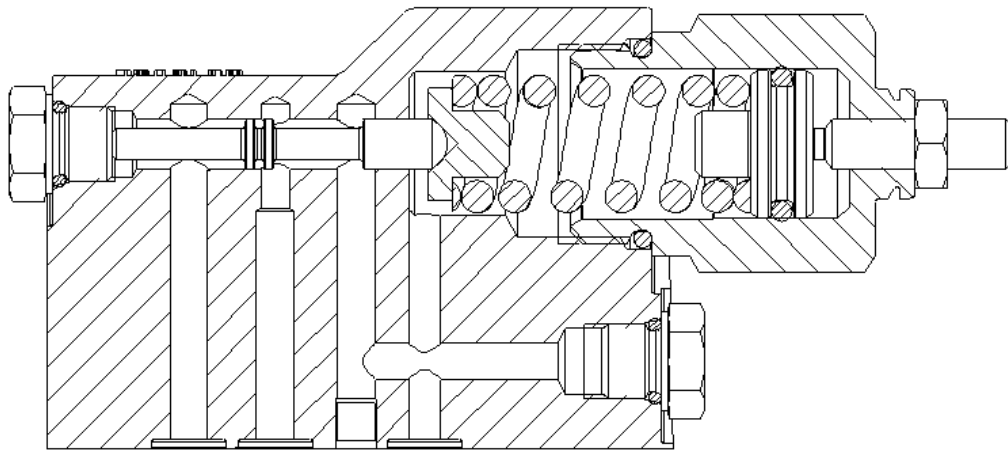
Shaft Seals

- ◆ **Polyacrylate shaft seal standard**
- ◆ **Single or double Viton seal options.**
- ◆ **Nitrile (Buna N) is also available.**

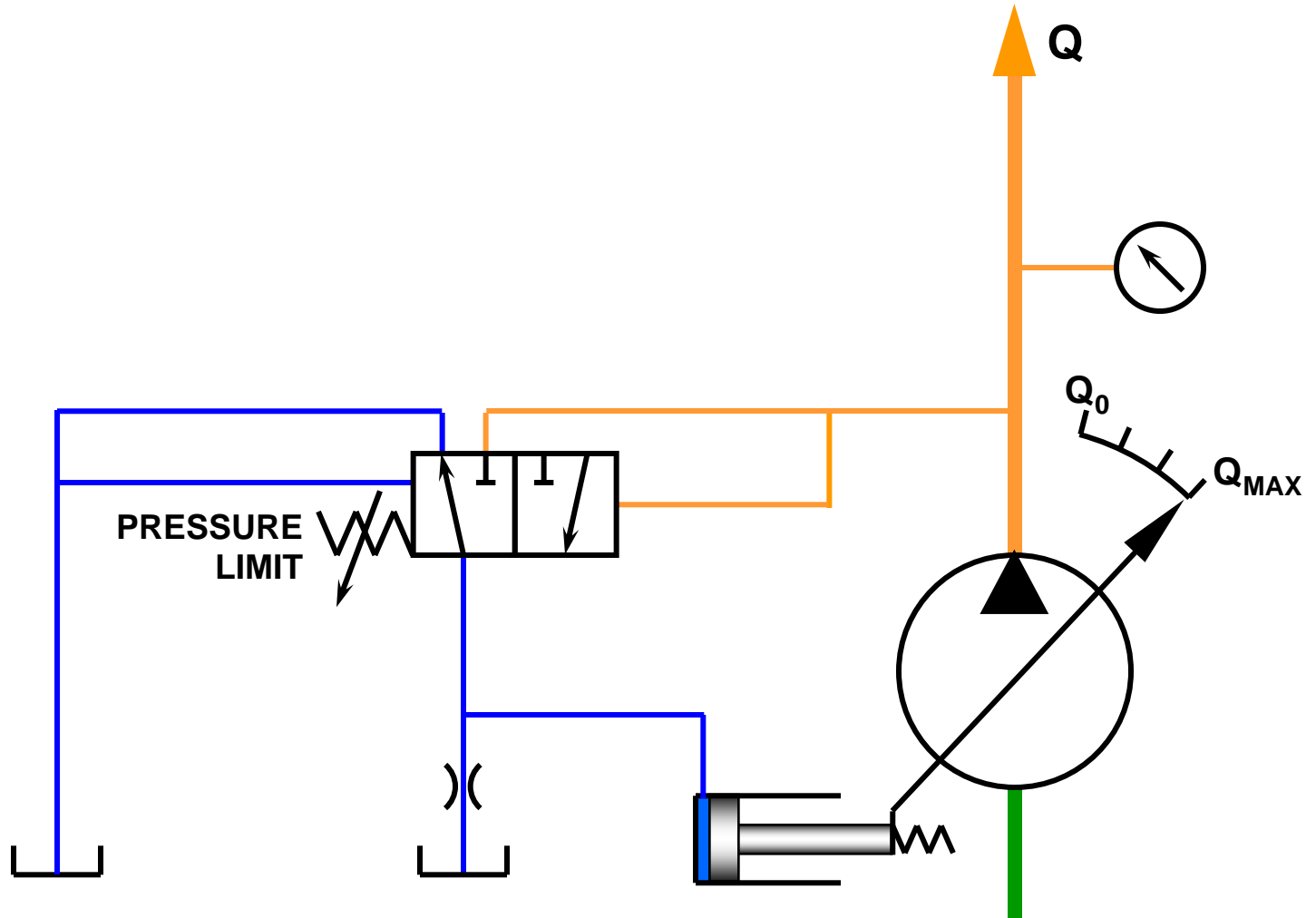


Control Options

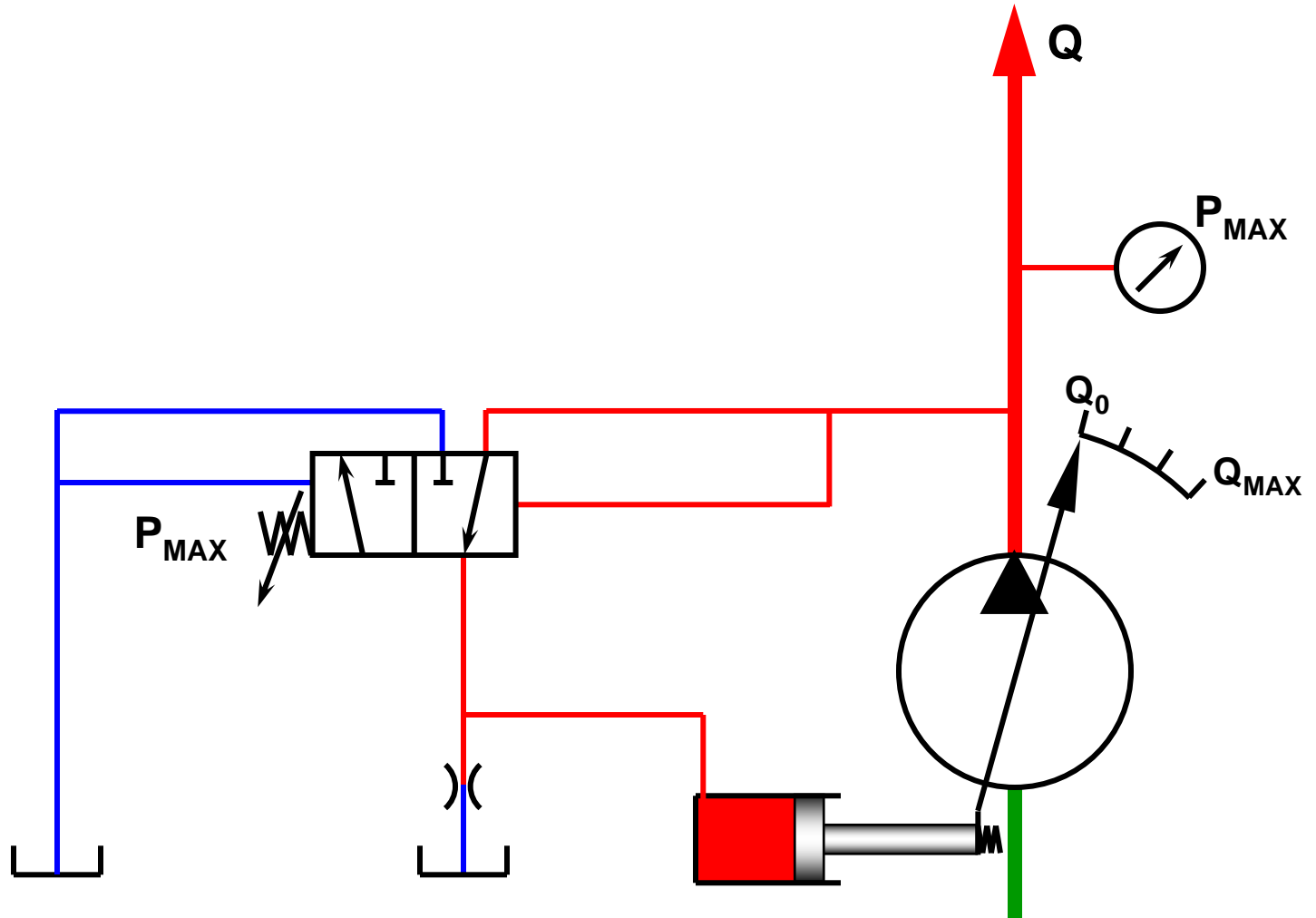
◆ Pressure Compensator



Pressure Compensator

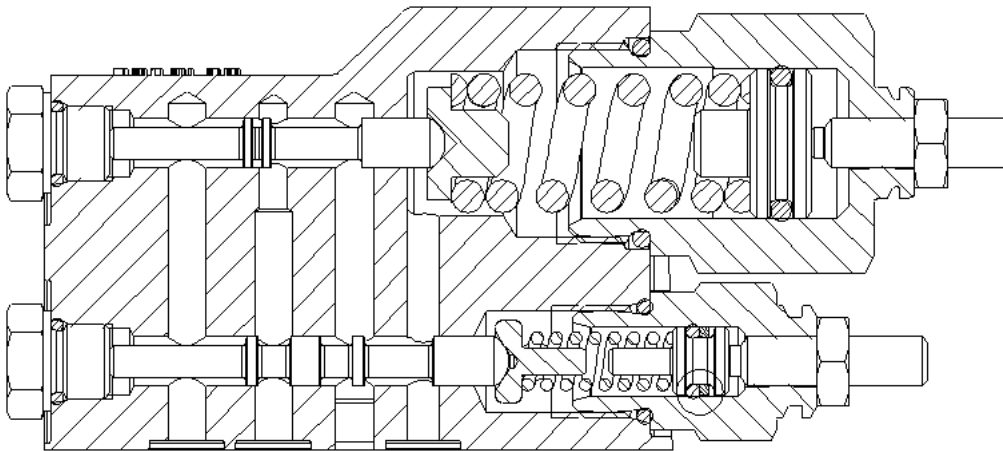


Pressure Compensator

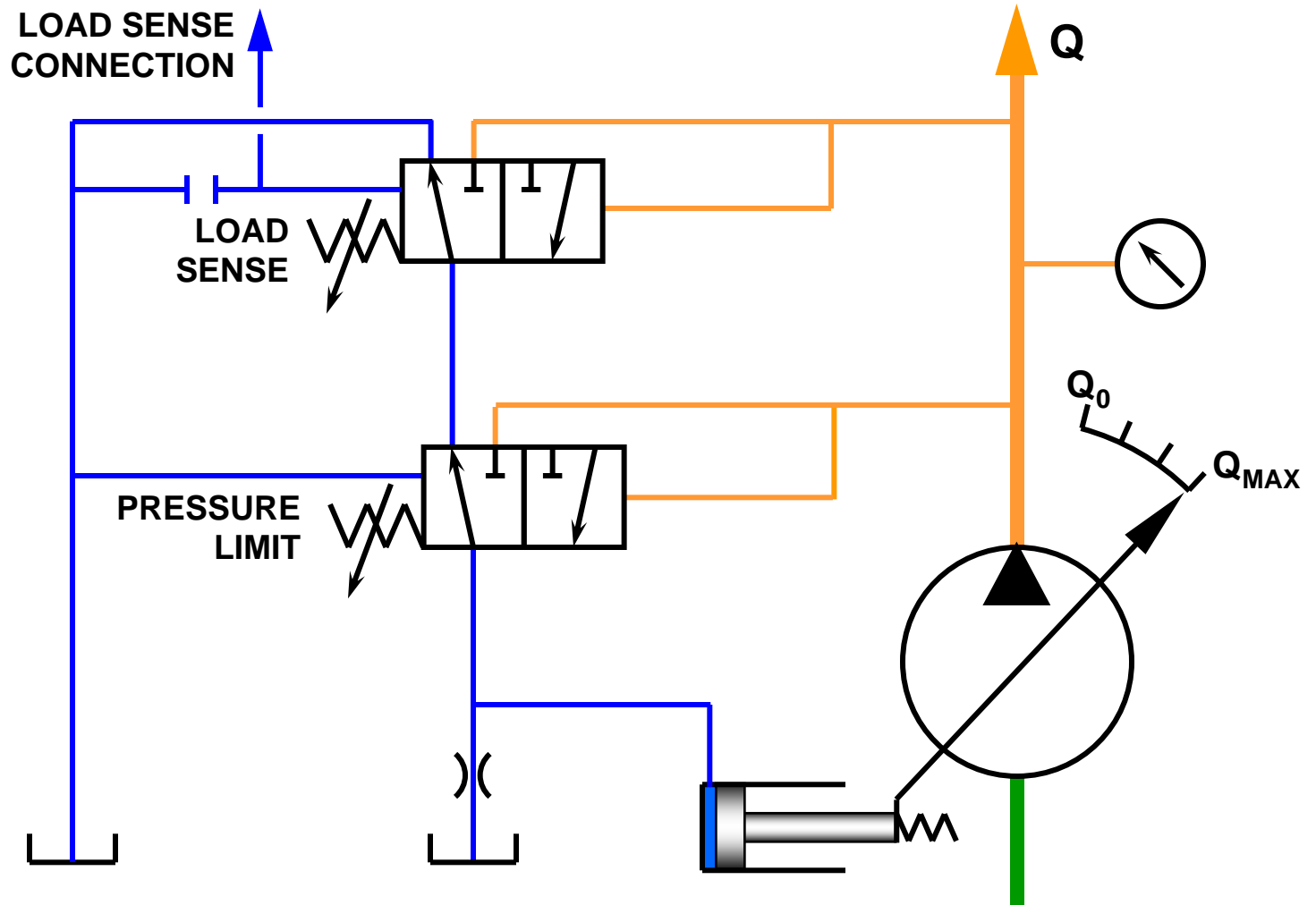


Control Options

- ◆ Pressure and Flow
Compensator for Load
Sensing Circuits

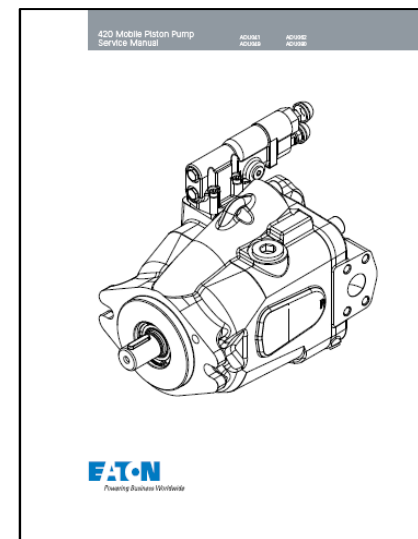


Load Sensing



Product Literature

- Technical Manual
 - E-PUPI-TM003-E3
- Service Manual
 - E-PUPI-TP002-E3



Technical Support

- Technical Support Group
 - (888) 258-0222 option 4
 - FPGproductsupport@eaton.com
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