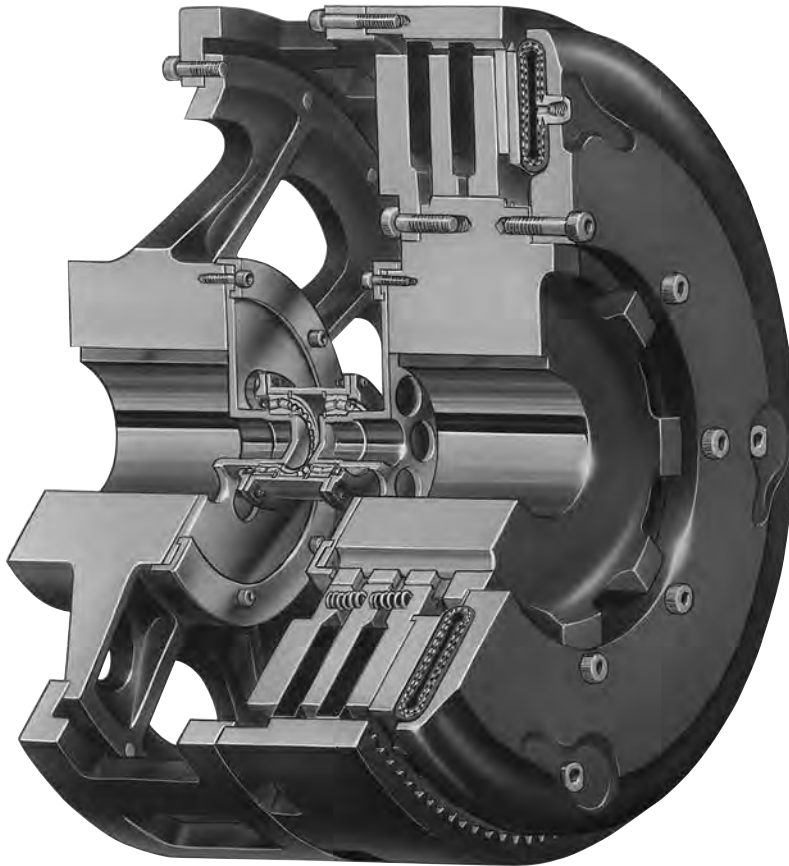


Standard Vent Clutches

Grinding Mill Clutches

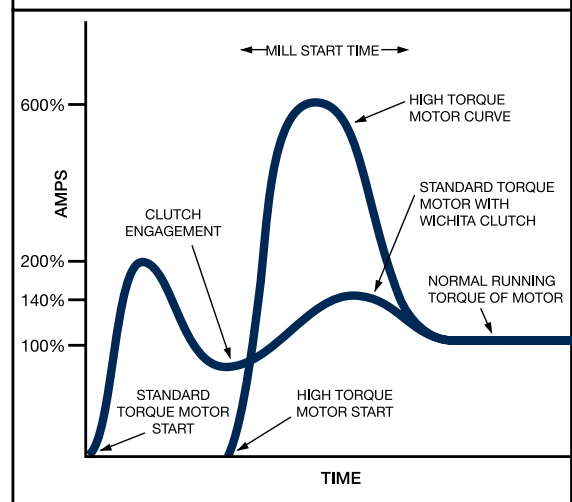
- Designed for heavy duty applications
- Quick, smooth starting
- High heat dissipation for jogging and inching



Wichita Grinding Mill Clutches are specially designed to provide quick, smooth starts with limited current surge for heavy duty grinding mills. The clutch is adaptable to remote control allowing centralized operation through simple air or electric circuits.

- No adjustment or lubricitation
- Eliminates need for special high torque motors
- Torque capacity not affected by centrifugal force
- High heat dissipation for jogging and inching
- New high coefficient, high energy absorbing friction material standard for grinding mill applications

Standard Torque Motor with Wichita Clutch vs. High Torque Motor



Standard Vent Clutches

Grinding Mill Clutches Specifications

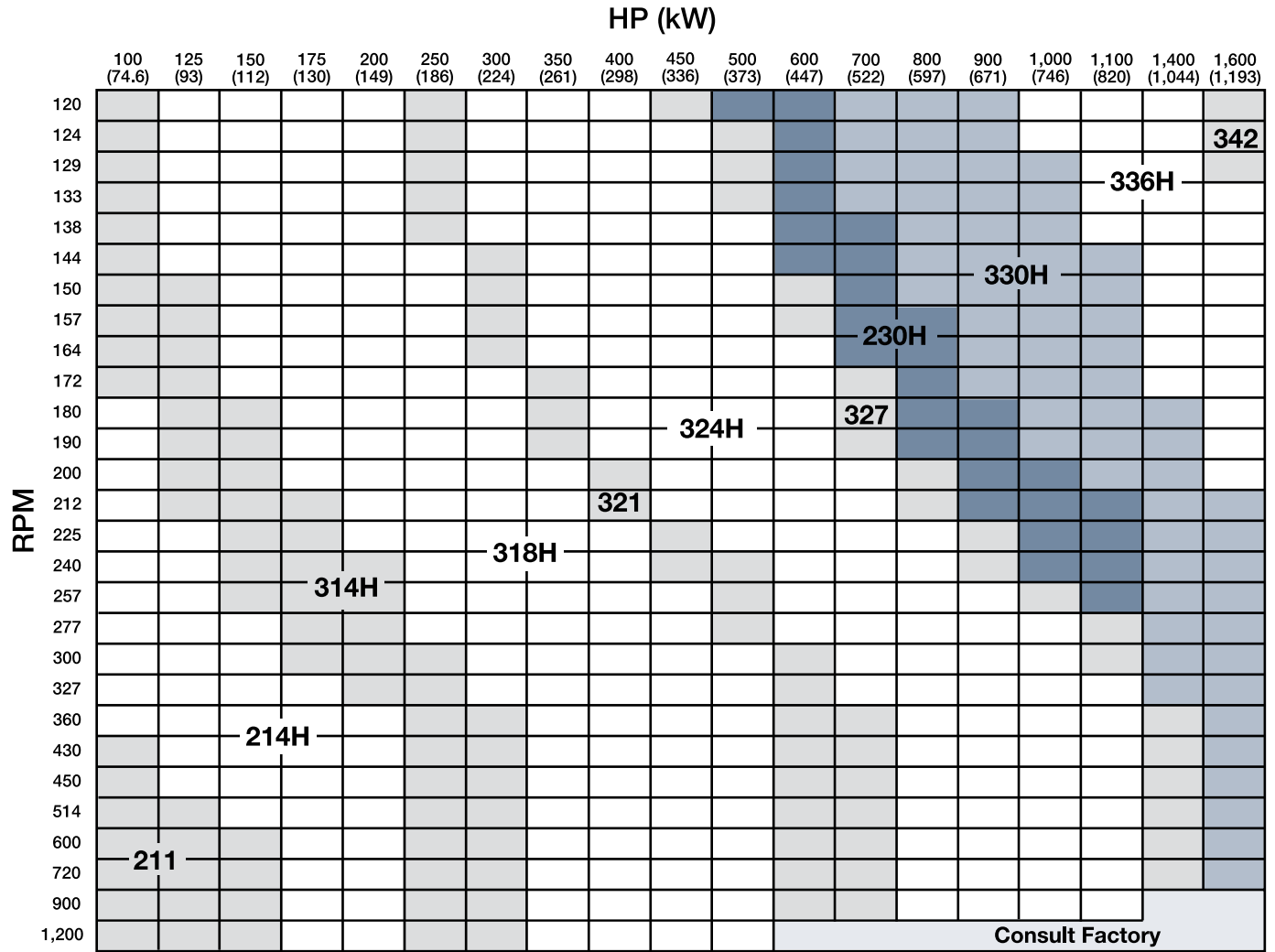
| Technical | | | | | | Capacity | | | | |
|--------------------|------------|---------------------|--|--------------------------------|-----------------|----------------------------------|--|----------------------|------------------------------------|-----------------------------------|
| Model Size ATD- | Air Supply | Total Weight lb. | Total WR ² lb.ft. ² | Driving Adapter Ring & Disc | | Diameter Friction Disc-in. | Max. Speed (RPM) For 6000 FPM @ Fric Disc O.D. | HP per 100 RPM | Lining Area in. ² | Rated Torq. in.lbs. 100 PSI |
| | | | | Wt. | WR ² | | | | | |
| 211-X GMC | 5/8"-18 | 130 | 24 | 57 | 16 | 11 | 2,100 | 18 | 228 | 42,294 |
| 214H-X GMC | 5/8"-18 | 333 | 111 | 152 | 58 | 14 | 1,640 | 40 | 336 | 95,228 |
| 314H-X GMC | 5/8"-18 | 385 | 132 | 190 | 75 | 14 | 1,640 | 60 | 504 | 142,842 |
| 318H-X GMC | 1"-14 | 727 | 333 | 356 | 220 | 18 | 1,275 | 120 | 792 | 299,250 |
| 321-X GMC | 1"-14 | 980 | 663 | 500 | 280 | 21 | 1,100 | 150 | 1,086 | 349,790 |
| 324H-X GMC | 1"-14 | 1,350 | 970 | 590 | 600 | 24 | 950 | 270 | 1,722 | 613,130 |
| 327-X GMC | 1"-14 | 1,580 | 1,130 | 675 | 540 | 27 | 850 | 300 | 2,190 | 688,275 |
| 230H-X GMC | 1"-14 | 2,126 | 2,046 | 1,036 | 1,150 | 30 | 760 | 380 | 1,664 | 869,820 |
| 330H-X GMC | 1"-14 | 2,600 | 2,100 | 1,125 | 1,250 | 30 | 760 | 570 | 2,496 | 1,304,730 |
| 430H-X GMC | 1"-14 | 3,578 | 2,980 | 1,497 | 1,148 | 30 | 760 | 760 | 3,328 | 1,739,640 |
| 336H-X GMC | 1"-14 | 3,550 | 4,650 | 1,510 | 2,215 | 36 | 640 | 885 | 3,450 | 2,134,650 |
| 342-X GMC | 1-1/2"-12 | 4,815 | 10,505 | 2,315 | 6,130 | 42 | 540 | 1,275 | 4,212 | 2,898,070 |
| 248-X GMC | 1-1/2"-12 | 6,580 | 16,275 | 2,825 | 9,523 | 48 | 475 | 1,600 | 4,020 | 3,730,650 |
| 348-X GMC | 1-1/2"-12 | 7,540 | 18,470 | 3,274 | 9,700 | 48 | 475 | 2,400 | 6,030 | 5,595,975 |
| 448-X GMC | 1-1/2"-12 | | | | | 48 | 475 | 3,200 | 8,040 | 7,461,300 |
| 260-X GMC | 1-1/2"-12 | 10,600 | 37,300 | 5,750 | 23,600 | 60 | 380 | 3,470 | 7,240 | 7,913,500 |
| 360-X GMC | 1-1/2"-12 | 13,390 | 47,850 | 5,900 | 27,550 | 60 | 380 | 5,200 | 10,850 | 11,870,250 |
| 460-X GMC | 1-1/2"-12 | 16,860 | 57,705 | 7,500 | 33,238 | 60 | 380 | 6,940 | 14,480 | 15,827,000 |
| 560-X GMC | 1-1/2"-12 | 20,050 | 78,642 | 8,300 | 28,512 | 60 | 380 | 8,675 | 18,100 | 19,783,750 |
| 372-X GMC | 1-1/2"-12 | | | | | 72 | 300 | 7,758 | 14,460 | 18,573,450 |
| 472-X GMC | 1-1/2"-12 | | | | | 72 | 300 | 10,344 | 19,280 | 24,764,600 |
| 572-X GMC | 1-1/2"-12 | | | | | 72 | 300 | 12,930 | 24,100 | 30,955,750 |

E

Standard Vent Clutches

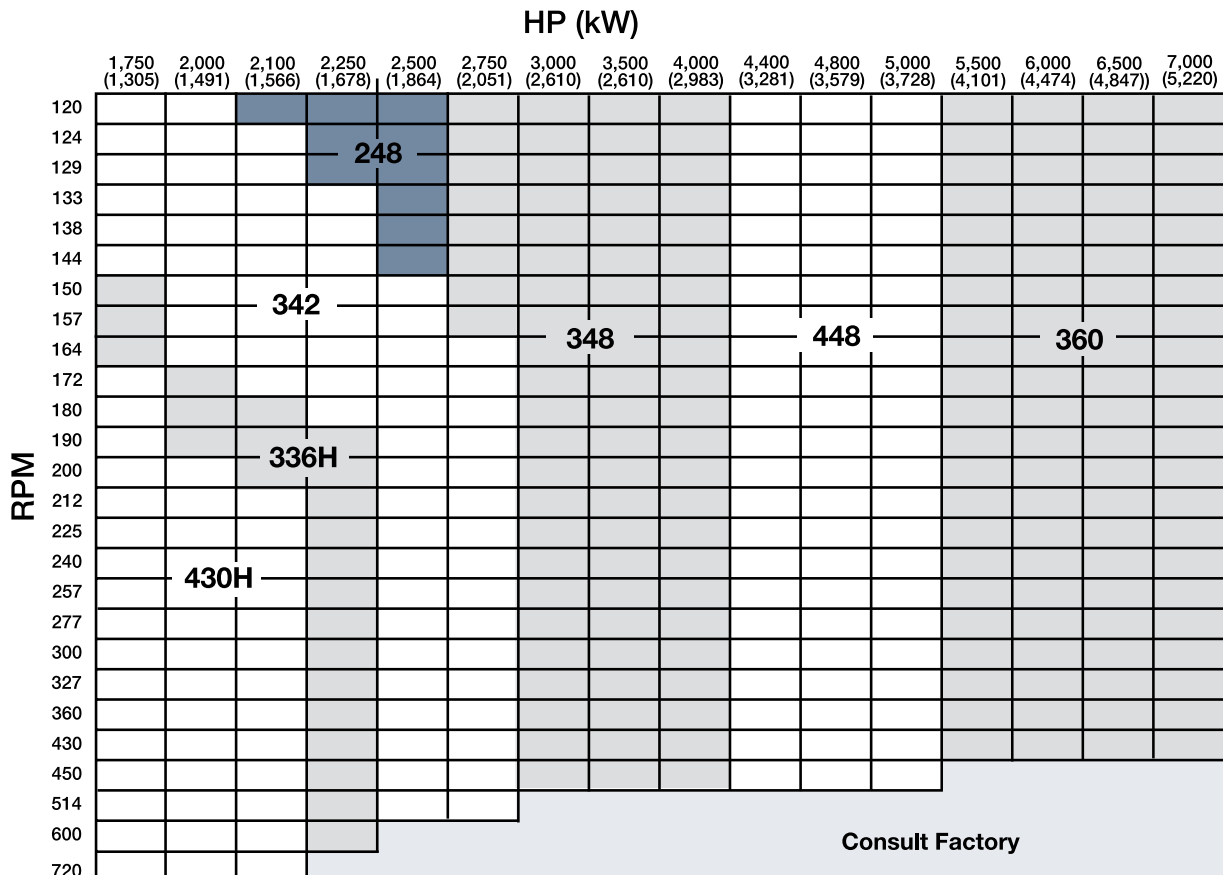
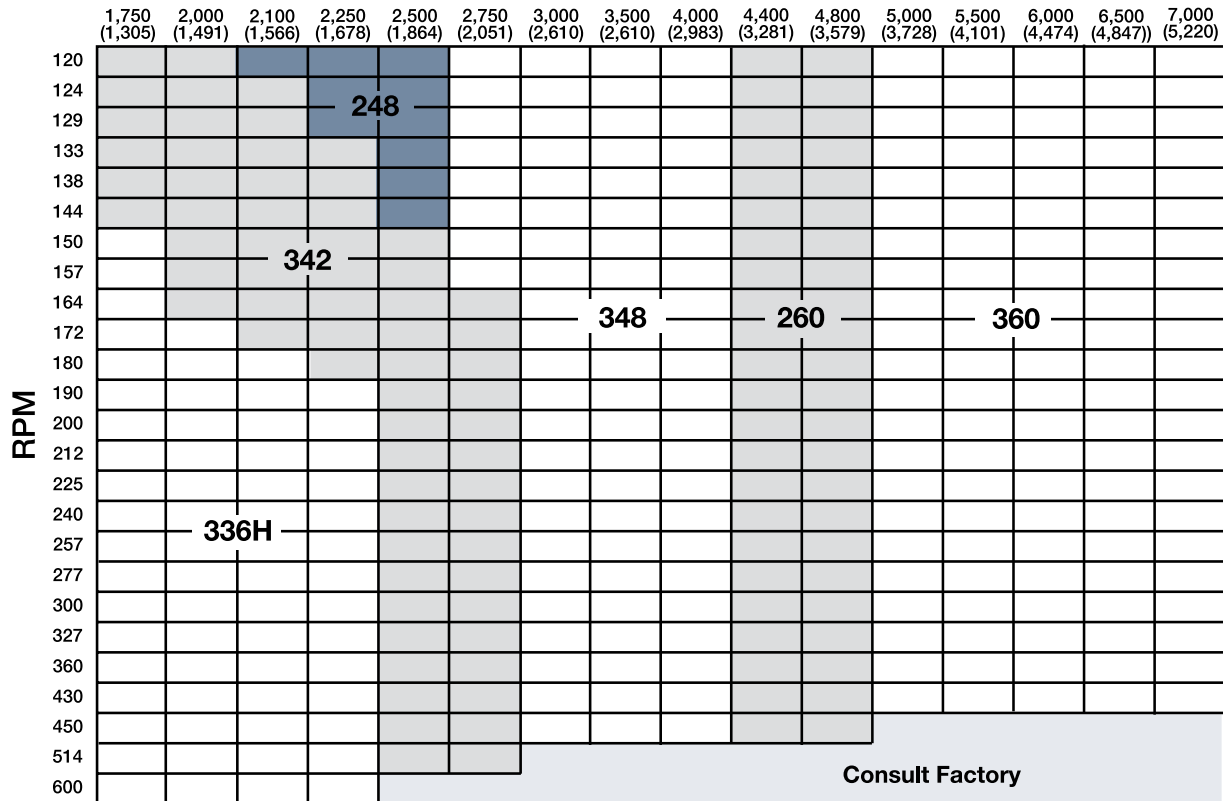
Grinding Mill Quick Selection Chart

Please visit www.wichitaclutch.com/selectnet



Standard Vent Clutches

Grinding Mill Quick Selection Chart

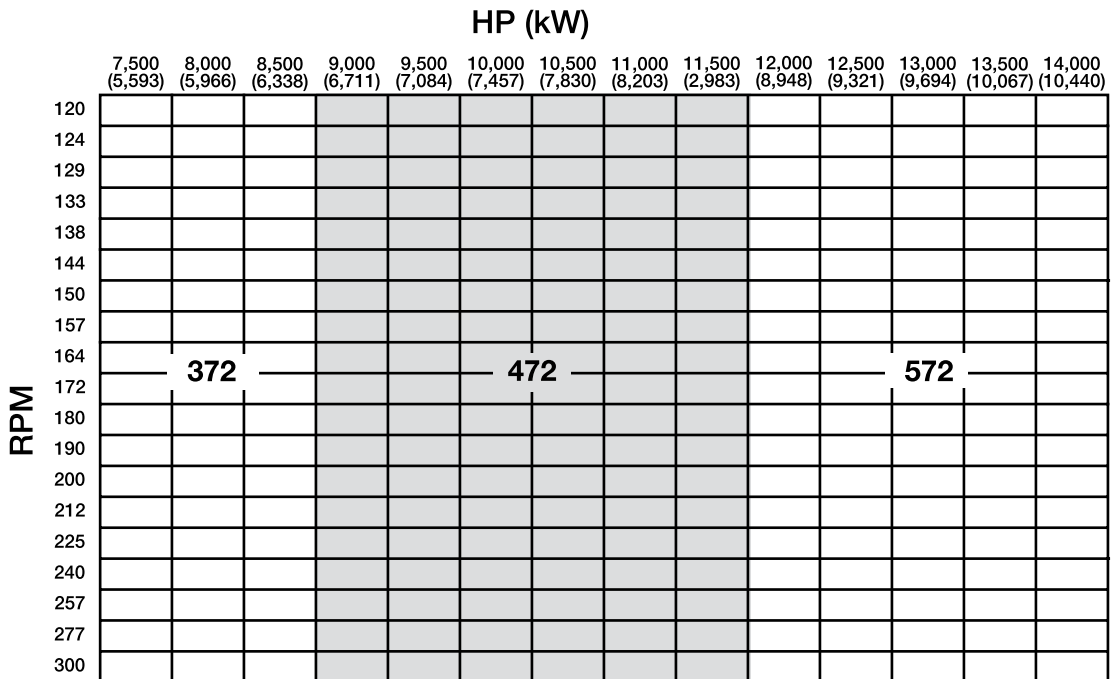
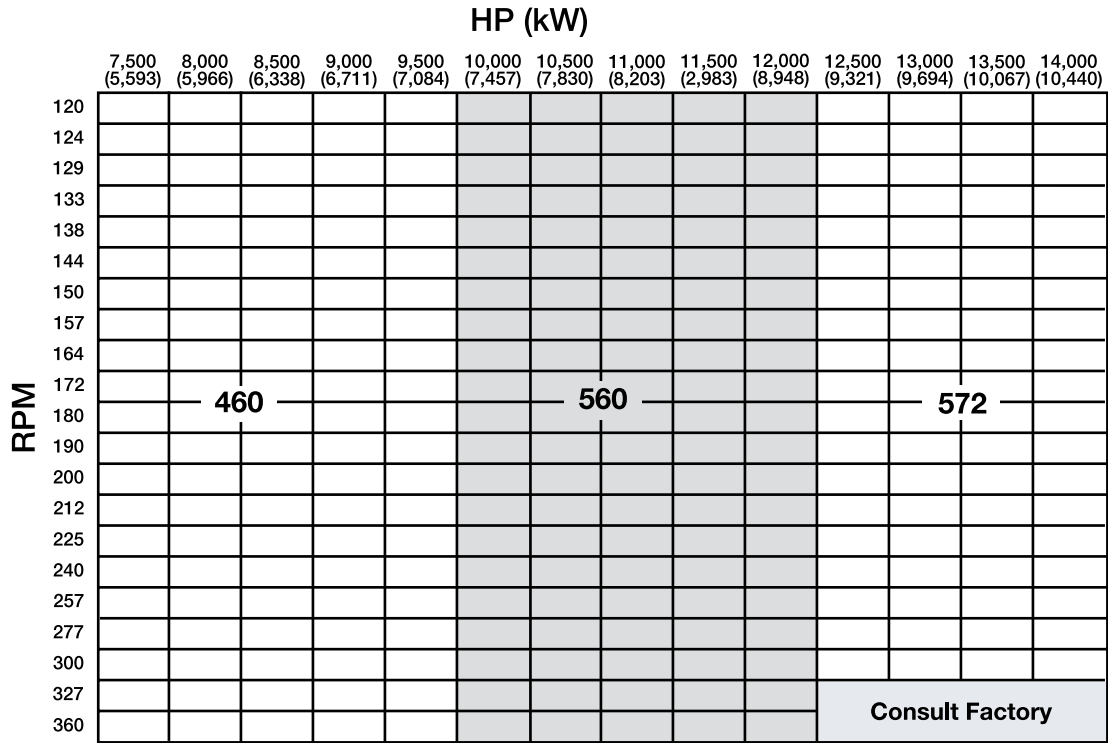


E

Standard Vent Clutches

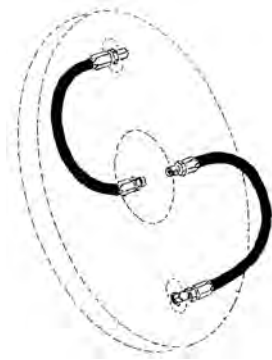
Grinding Mill Quick Selection Chart

Please visit www.wichitaclutch.com/selectnet



Standard Vent Clutches

Air Hose Kits



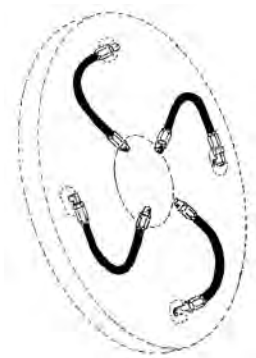
| Model | Part Number |
|-------|--|
| 8" | 8-908-812-200-3 8-908-821-200-4 QRV 8-911-813-200-3 HS |
| 11" | 8-911-812-200-4 8-911-821-200-5 QRV 8-911-813-200-3 HS |
| 14" | 8-914-812-201-5 8-914-821-202-5 QRV 8-914-813-204-3 HS |



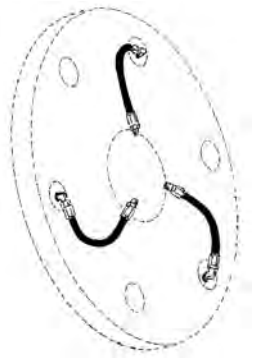
| Model | Part Number |
|---------|--|
| 18" | 8-918-812-301-5 8-918-821-300-5 QRV 8-918-815-301-3 HS |
| 21"/18H | 8-921-812-301-5 8-921-821-302-5 QRV 8-921-812-300-5 HS |
| 24" | 8-924-812-300-5 8-924-821-302-5 QRV |
| 27"/24H | 8-927-812-300-5 8-927-821-301-5 QRV 8-927-812-302-5 HS |



| Model | Part Number |
|-------|--|
| 30" | 8-930-815-201-5 |
| 30"H | 8-931-821-200-5 QRV 8-931-812-200-5 HS |
| 36" | 8-936-815-200-5 8-936-821-200-5 QRV 8-936-815-201-5 HS |
| 42" | 8-942-815-200-5 8-942-821-200-5 QRV |
| 48" | 8-948-815-200-5 8-948-821-200-5 QRV |



| Model | Part Number |
|-------|---------------------|
| 30"H | 8-931-821-400-5 QRV |



| Model | Part Number |
|-------|--|
| 60" | 8-960-812-300-5 8-960-834-300-5 QRV |

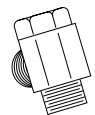
1 Spud Hose Kits

| Model | Part Number |
|-------|--------------------|
| 18" | 8-918-815-101-3 HS |
| 21" | 8-921-815-101-3 HS |

Air hose kits contain all necessary parts (fittings, hoses and extensions) to completely plumb the clutch.

Optional Quick Release Valves can replace elbows on most units (see page 144).

Roto-couplings (see page 144).



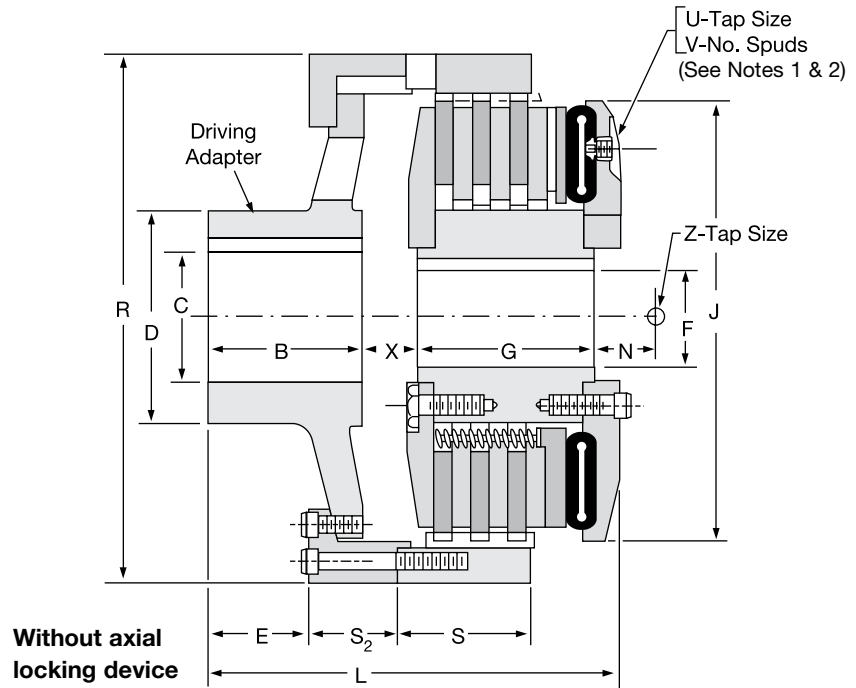
Standard Vent Clutches

Grinding Mill Clutches

Driving Adapters

The driving adapter is designed to allow the clutch to be used in a shaft-to-shaft or through-shaft coupling arrangement.

The quick-change feature, using a driving elbow piece between the driving adapter and the clutch driving ring, enables replacement of any wearing clutch part without disturbing either shaft.



Dimensions: inches (Consult factory for drawing before final layout.)

| Model Size | B | C* Max. Bore Rect. Key | C1* Max. Bore Rect. Key | D | E | F* Max. Bore Rect. Key | G | J | L | L ₁ |
|------------|-------|------------------------------|-------------------------------|-------|-------|------------------------------|-------|-------|-------|----------------|
| 211 GMC | 3.00 | 3.00 | — | 5.00 | 2.00 | 3.00 | 4.25 | 11.94 | 10.00 | — |
| 214H GMC | 3.25 | 4.13 | — | 6.25 | 2.13 | 3.38 | 5.75 | 16.31 | 11.88 | — |
| 314H GMC | 3.25 | 4.13 | — | 6.25 | 2.13 | 3.38 | 7.18 | 16.31 | 13.38 | — |
| 318H GMC | 6.00 | 4.00 | — | 6.00 | 4.38 | 4.00 | 7.31 | 21.31 | 17.43 | — |
| 321 GMC | 6.00 | 6.50 | — | 9.00 | 4.00 | 5.38 | 8.63 | 21.31 | 20.50 | — |
| 324H GMC | 7.31 | 7.50 | — | 10.00 | 5.56 | 5.38 | 8.43 | 27.00 | 21.56 | — |
| 327 GMC | 7.31 | 7.63 | — | 11.50 | 5.56 | 7.00 | 9.00 | 27.00 | 20.94 | — |
| 230H GMC | 8.75 | 9.38 | 9.38 | 14.00 | 6.50 | 7.00 | 7.88 | 32.38 | 22.63 | 24.43 |
| 330H GMC | 8.75 | 9.38 | 9.38 | 14.00 | 6.50 | 7.00 | 10.88 | 32.38 | 25.25 | 26.94 |
| 336H GMC | 10.00 | 9.38 | 9.38 | 14.00 | 7.88 | 8.00 | 12.88 | 38.25 | 26.75 | 34.75 |
| 342 GMC | 10.00 | 12.00 | 12.00 | 18.00 | 7.43 | 10.00 | 11.88 | 44.13 | 27.63 | 34.50 |
| 248 GMC | 13.63 | 15.00 | 13.25 | 20.00 | 10.13 | 12.00 | 10.88 | 52.38 | 29.63 | 36.88 |
| 348 GMC | 13.63 | 15.00 | 13.25 | 20.00 | 10.13 | 12.00 | 13.63 | 52.38 | 32.13 | 39.50 |
| 260 GMC | 16.25 | 18.00 | 15.00 | 24.00 | 12.25 | 14.00 | 16.25 | 61.50 | 40.00 | 42.50 |
| 360 GMC | 16.25 | 18.00 | 15.00 | 24.00 | 12.25 | 14.00 | 20.00 | 61.50 | 43.75 | 46.25 |
| 460 GMC | 16.25 | 18.00 | 15.00 | 24.00 | 12.25 | 14.00 | 23.50 | 61.50 | 47.13 | 49.63 |
| 560 GMC | 20.25 | 17.00 | 17.00 | 30.00 | 16.25 | 17.00 | 27.00 | 61.50 | — | 57.20 |

* Maximum bore uses rectangular key, contact Wichita Engineering.

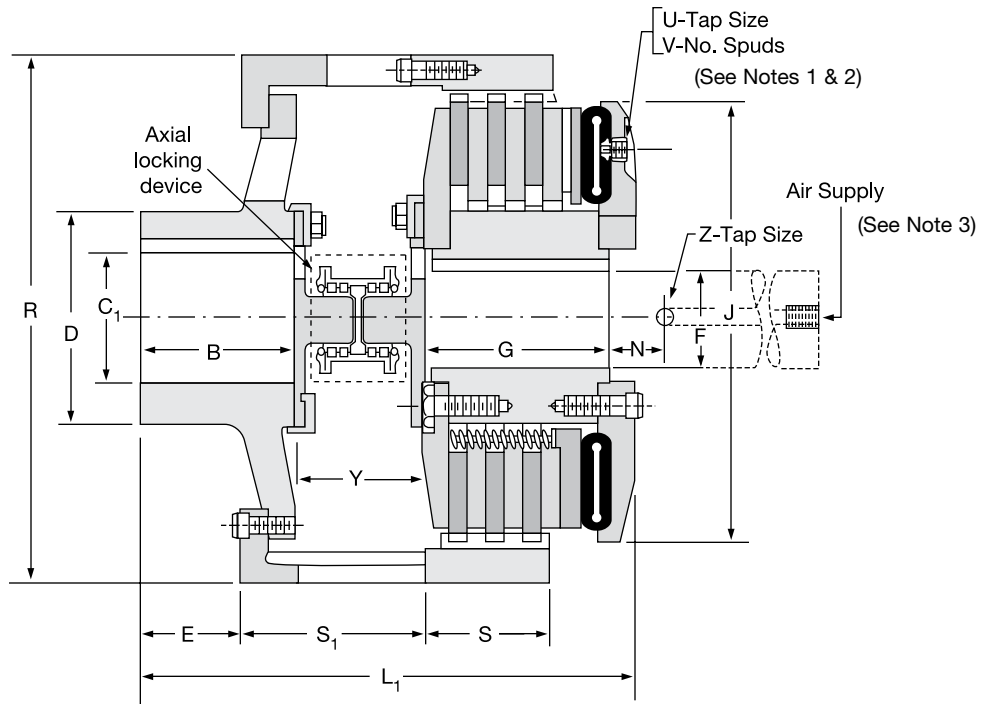
Note: For mounting, use socket head capscrews conforming to the ASTM-574-97a.

Standard Vent Clutches

Grinding Mill Clutches

With axial locking device

The axial locking device is an optional feature offered by Wichita. This device prevents damage to the mill motor bearings during motor start-up by axially locking the armature to magnetic center.



Notes:

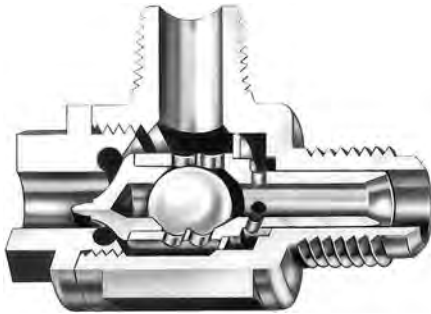
1. Air Hose Kits, page 141.
2. Quick Release Valves, page 144.
3. Roto-couplings, page 144.

| Model Size | ATD- | N | R | S | S ₁ | S ₂ | U tap size | V spuds | X | Y | Z tap size | Air Supply |
|------------|------|------|-------|-------|----------------|----------------|------------|---------|------|-------|------------|------------|
| 211 GMC | | 2.25 | 13.63 | N/A | — | 5.38 | 1/2" NPT | 2 | 1.62 | — | 1/2" NPT | 5/8"-18 |
| 214H GMC | | 2.25 | 17.50 | 3.25 | — | 3.13 | 1/2" NPT | 2 | 2.13 | — | 1/2" NPT | 5/8"-18 |
| 314H GMC | | 2.25 | 17.50 | 4.75 | — | 3.13 | 1/2" NPT | 2 | 2.13 | — | 1/2" NPT | 5/8"-18 |
| 318H GMC | | 2.43 | 22.00 | 5.88 | — | 3.50 | 1/2" NPT | 3 | 3.06 | — | 1/2" NPT | 1"-14 |
| 321 GMC | | 2.38 | 25.00 | 6.25 | — | 6.25 | 1/2" NPT | 3 | 4.75 | — | 1/2" NPT | 1"-14 |
| 324H GMC | | 2.75 | 28.00 | 6.25 | — | 5.50 | 1/2" NPT | 3 | 4.50 | — | 1/2" NPT | 1"-14 |
| 327 GMC | | 2.38 | 31.00 | 6.50 | — | 4.63 | 1/2" NPT | 3 | 3.75 | — | 1/2" NPT | 1"-14 |
| 230H GMC | | 2.75 | 34.00 | 5.63 | 5.75 | 5.75 | 1/2" NPT | 4 | 4.25 | 5.00 | 1/2" NPT | 1"-14 |
| 330H GMC | | 2.88 | 34.00 | 8.13 | 7.43 | 5.75 | 1/2" NPT | 4 | 4.25 | 5.00 | 1/2" NPT | 1"-14 |
| 336H GMC | | 2.88 | 41.00 | 9.13 | 12.13 | 4.00 | 1/2" NPT | 4 | 2.50 | 10.00 | 1/2" NPT | 1"-14 |
| 342 GMC | | 3.50 | 49.25 | 9.63 | 12.69 | 5.69 | 1/2" NPT | 4 | 3.50 | 10.00 | 1/2" NPT | 1-1/2"-12 |
| 248 GMC | | 3.75 | 56.00 | 7.38 | 13.25 | 6.13 | 1/2" NPT | 4 | 2.75 | 10.00 | 1/2" NPT | 1-1/2"-12 |
| 348 GMC | | 3.50 | 56.00 | 9.88 | 13.38 | 6.13 | 1/2" NPT | 4 | 2.75 | 10.00 | 1/2" NPT | 1-1/2"-12 |
| 260 GMC | | 2.00 | 66.75 | 9.00 | 14.00 | 11.50 | 1/2" NPT | 6 | 7.50 | 10.00 | 1/2" NPT | 1-1/2"-12 |
| 360 GMC | | 2.00 | 66.75 | 13.00 | 14.00 | 11.50 | 1/2" NPT | 6 | 7.50 | 10.00 | 1/2" NPT | 1-1/2"-12 |
| 460 GMC | | 2.00 | 66.75 | 16.50 | 14.00 | 11.50 | 1/2" NPT | 6 | 7.50 | 10.00 | 1/2" NPT | 1-1/2"-12 |
| 560 GMC | | 4.0 | 74.25 | 20.13 | 14.60 | — | 1/2" NPT | 6 | — | 10.00 | 1/2" NPT | 1-1/2"-12 |

Standard Vent Clutches

Grinding Mill Clutches

Quick Release Valve



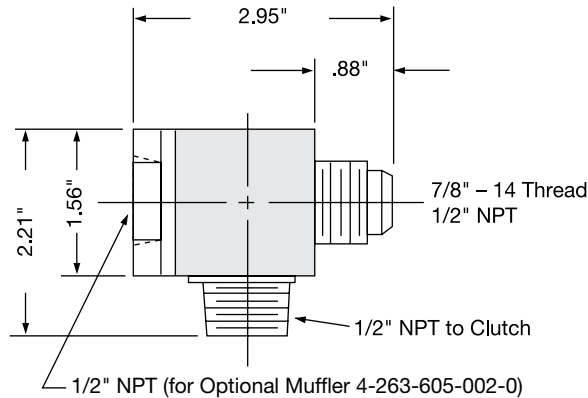
8-263-610-011-1 7/8" - 14 Thread
8-263-610-021-1 1/2" NPT

The Wichita Springless Quick Release Valve discharges twice as fast as any other valve tested in our laboratory and is four to five times faster than some common makes of valves.

This valve will close and seal with less than 20 lbs. pressure. Most others require 25 to 30 lbs. to definitely seal. In actual tests, the Wichita Valve made many hundreds of thousands of engagements and disengagements before the slightest leak occurred, or any parts needed replacement. Other valves which were tested required major replacement in fewer than 20,000 cycles.

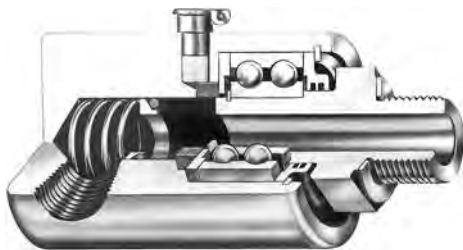
Quality Material

- Body and Cap: High strength aluminum alloy
- Stem: Molded nylon
- Check Valve: Nylon ball
- "O" Ring: Neoprene



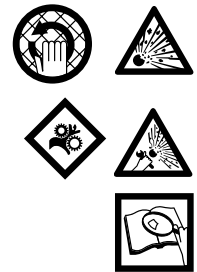
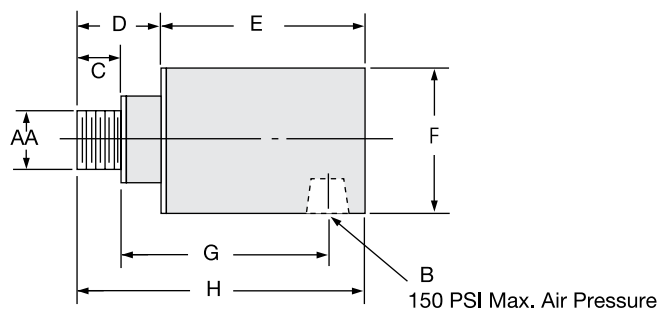
Standard thread arrangement of 1/2" size. 1/2" pipe thread on the tube connection and choice of 1/2" pipe thread, or standard 7/8-14NF thread for flared fitting thread on inlet connection. (Fits standard No. 10 high-pressure hose fitting.)

Roto-Couplings



The Wichita Roto-coupling is a device to connect, or couple, a non-rotating air, gas, or fluid line to a rotating shaft.

- Long life, no maintenance
- Felt seal eliminates bearing contamination
- Fast, easy installation



Dimensions: inches

| Wichita Part No. | AA | B | C | D | E | F | G | H | Max. RPM |
|------------------|--------------|------------|------|-------|-------|-------|------|--------|----------|
| 8-240-701-003-1 | 5/8-18NF | 1/4" NPT | .40 | 1.046 | 2.250 | 1.500 | 2.13 | 3.297 | 3,500 |
| 8-240-705-001-1 | 1"-14 NF | 1/2" NPT | .75 | 1.250 | 3.188 | 2.500 | 3.00 | 4.438 | 3,500 |
| 8-240-708-001-1 | 1"-14 NF | 3/4" NPT | .75 | 1.313 | 4.688 | 2.875 | 3.69 | 5.440 | 3,500 |
| 8-240-710-002-1 | 1-1/2"-12 NF | 1" NPT | 1.13 | 1.937 | 4.875 | 3.250 | 3.44 | 6.812 | 2,500 |
| 8-240-712-001-1 | 2"-12 NF | 1-1/2" NPT | 1.13 | 2.813 | 5.250 | 4.250 | 5.38 | 8.062 | 2,500 |
| 8-240-714-001-3 | 2" NPT | 2" NPT | 1.50 | 3.000 | 7.062 | 4.625 | 7.00 | 10.062 | 1,000 |
| 8-240-716-000-3 | 2-1/2" NPT | 2-1/2" NPT | 1.88 | 3.250 | 9.375 | 7.000 | 7.75 | 12.625 | 750 |