



# CONSOLIDATED BILL OF MATERIALS (BOM) FOR STANDARD 2-SERIES GEAR PUMPS



## Models 2R & 2F Mag-Drive, Close-Coupled

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| <b>Liquiflo</b><br><b>Chemical Processing Pumps™</b> | <b>2-Series Gear Pumps</b><br><b>BOM: MAG-DRIVE, CC Models 2R &amp; 2F</b> |
|------------------------------------------------------|----------------------------------------------------------------------------|

| Part Description                                                                                                  | Drwg. Item # | 316 Stainless Steel Construction |                     |                     |             |
|-------------------------------------------------------------------------------------------------------------------|--------------|----------------------------------|---------------------|---------------------|-------------|
|                                                                                                                   |              | Code                             | Material            | 2R                  | 2F          |
| <b>Position 3 – Basic Material &amp; Port Type (Housings, Containment Can, Wave Springs, Pins &amp; Hardware)</b> |              |                                  |                     |                     |             |
| Center Housing, 1/4" NPT                                                                                          | 2            | S                                | 316 SS              | 200011              | 200011      |
| Center Housing, 1/4" BSPT                                                                                         | 2            | X                                | 316 SS              | 200009              | 200009      |
| Front Housing                                                                                                     | 8            | S, X                             | 316 SS              | 200012              | 200012      |
| Rear Housing (End Cap)                                                                                            | 12           | S, X                             | 316 SS              | 212026              | 212026      |
| Containment Can                                                                                                   | 11           | S, X                             | 316 SS              | 205011              | 205011      |
| Wave Spring                                                                                                       | 17           | S, X                             | 316 SS              | 207028 (2)          | 207028 (2)  |
| Pin, Housing Alignment                                                                                            | 20           | S, X                             | 316 SS              | 207038 (2)          | 207038 (2)  |
| Bolt, Housing (#10-32 x 2-1/8 SHCS)                                                                               | 7            | S, X                             | 18-8 SS             | 620842 (4)          | 620842 (4)  |
| Lockwasher, Housing (#10)                                                                                         | 21           | S, X                             | 18-8 SS             | 5018 (4)            | 5018 (4)    |
| Bolt, Front Housing (#10-32 x 1/2 SHCS)                                                                           | 4            | S, X                             | 18-8 SS             | 620823 (4)          | 620823 (4)  |
| Lockwasher, Front Housing (#10)                                                                                   | 22           | S, X                             | 18-8 SS             | 5018 (4)            | 5018 (4)    |
| Bolt, Mounting (1/4-20 x 1/2 SHCS) <sup>1</sup>                                                                   | 16           | S, X                             | 18-8 SS             | S314008 (4)         | S314008 (4) |
| Lockwasher, Mounting (1/4) <sup>1</sup>                                                                           | 23           | S, X                             | 18-8 SS             | 863701 (4)          | 863701 (4)  |
| <b>Position 4 – Drive Gear (Drive Gear-Shaft Assembly)</b>                                                        |              |                                  |                     |                     |             |
| Drive Gear-Shaft, Uncoated                                                                                        | 15           | 1 (Pos. 8 = 0)                   | Alloy-C – 316 SS    | 206091              | 206083      |
| Drive Gear-Shaft, CO-Coated                                                                                       | 15           | 1 (Pos. 8 = 1)                   | Alloy-C – 316 SS/CO | 206094              | 206086      |
| Drive Gear-Shaft, TC-Coated                                                                                       | 15           | 1 (Pos. 8 = 2)                   | Alloy-C – 316 SS/TC | 206092              | 206084      |
| Drive Gear-Shaft, Uncoated                                                                                        | 15           | 6 (Pos. 8 = 0)                   | 316 SS – 316 SS     | 206087              | 206079      |
| Drive Gear-Shaft, CO-Coated                                                                                       | 15           | 6 (Pos. 8 = 1)                   | 316 SS – 316 SS/CO  | 206090              | 206082      |
| Drive Gear-Shaft, TC-Coated                                                                                       | 15           | 6 (Pos. 8 = 2)                   | 316 SS – 316 SS/TC  | 206088              | 206080      |
| <b>Position 5 – Idler Gear (Idler Gear-Shaft Assembly)</b>                                                        |              |                                  |                     |                     |             |
| Idler Gear-Shaft, Uncoated                                                                                        | 1            | 1 (Pos. 8 = 0)                   | Alloy-C – 316 SS    | 206067              | 206051      |
| Idler Gear-Shaft, CO-Coated                                                                                       | 1            | 1 (Pos. 8 = 1)                   | Alloy-C – 316 SS/CO | 206070              | 206054      |
| Idler Gear-Shaft, TC-Coated                                                                                       | 1            | 1 (Pos. 8 = 2)                   | Alloy-C – 316 SS/TC | 206068              | 206052      |
| Idler Gear-Shaft, Uncoated                                                                                        | 1            | 6 (Pos. 8 = 0)                   | 316 SS – 316 SS     | 206063              | 206047      |
| Idler Gear-Shaft, CO-Coated                                                                                       | 1            | 6 (Pos. 8 = 1)                   | 316 SS – 316 SS/CO  | 206066              | 206050      |
| Idler Gear-Shaft, TC-Coated                                                                                       | 1            | 6 (Pos. 8 = 2)                   | 316 SS – 316 SS/TC  | 206064              | 206048      |
| Idler Gear-Shaft, Uncoated                                                                                        | 1            | P (Pos. 8 = 0)                   | PEEK – 316 SS       | 206071              | 206055      |
| Idler Gear-Shaft, CO-Coated                                                                                       | 1            | P (Pos. 8 = 1)                   | PEEK – 316 SS/CO    | 206074              | 206058      |
| Idler Gear-Shaft, TC-Coated                                                                                       | 1            | P (Pos. 8 = 2)                   | PEEK – 316 SS/TC    | 206072              | 206056      |
| <b>Position 6 – Bearing-Wear Plate Combination</b>                                                                |              |                                  |                     |                     |             |
| Bearing-Wear Plate                                                                                                | 3            | E                                | Carbon 60           | 204022 (4)          | 204020 (4)  |
| Bearing-Wear Plate                                                                                                | 3            | P                                | PEEK                | 204023 (4)          | 204021 (4)  |
| <b>Position 7 – Outer Magnet Bore (Mounting Bracket &amp; Adapter)</b>                                            |              |                                  |                     |                     |             |
| Bracket – 1/2" (NEMA 48C)                                                                                         | 14           | 0                                | Cast Iron/Epoxy     | 442200              | 442200      |
| Bracket – 14 mm (IEC 71 – B14 Face)                                                                               | 14           | 1                                | Cast Iron/Epoxy     | 442201              | 442201      |
| Bracket – 5/8" (NEMA 56C/56HC)                                                                                    | 14           | 2                                | Cast Iron/Epoxy     | 442200              | 442200      |
| Adapter Plate (NEMA 56C/56HC)                                                                                     | 18           | 2                                | CS/Epoxy            | 442203              | 442203      |
| Bolt, Adapter (3/8-16 x 1 HHCS)                                                                                   | 19           | 2                                | 18-8 SS             | 620825 (4)          | 620825 (4)  |
| Lockwasher, Adapter (3/8)                                                                                         | 24           | 2                                | 18-8 SS             | S1004 (4)           | S1004 (4)   |
| <b>Position 8 – Shafts</b>                                                                                        |              |                                  |                     |                     |             |
| Shafts, Uncoated                                                                                                  | –            | 0                                | 316 SS              | See Positions 4 & 5 |             |
| Shafts, CO-Coated                                                                                                 | –            | 1                                | 316 SS/CO           | See Positions 4 & 5 |             |
| Shafts, TC-Coated                                                                                                 | –            | 2                                | 316 SS/TC           | See Positions 4 & 5 |             |

1 - For NEMA motor frames.

|                                               |                                                                            |
|-----------------------------------------------|----------------------------------------------------------------------------|
| <b>Liquiflo</b><br>Chemical Processing Pumps™ | <b>2-Series Gear Pumps</b><br>BOM: <b>MAG-DRIVE, CC Models 2R &amp; 2F</b> |
|-----------------------------------------------|----------------------------------------------------------------------------|

| Part Description                       | Drwg. Item # | 316 Stainless Steel Construction |             |                        |            |
|----------------------------------------|--------------|----------------------------------|-------------|------------------------|------------|
|                                        |              | Code                             | Material    | 2R                     | 2F         |
| <b>Position 9 – O-Rings</b>            |              |                                  |             |                        |            |
| O-ring, Housing (2-028)                | 5            | 0                                | Teflon      | 207015 (2)             | 207015 (2) |
| O-ring, Containment Can (2-033)        | 13           | 0                                | Teflon      | 341102                 | 341102     |
| O-ring, Housing (2-028)                | 5            | V                                | Viton       | 207016 (2)             | 207016 (2) |
| O-ring, Containment Can (2-033)        | 13           | V                                | Viton       | 341108                 | 341108     |
| O-ring, Housing (2-028)                | 5            | K                                | Kalrez      | 207020 (2)             | 207020 (2) |
| O-ring, Containment Can (2-033)        | 13           | K                                | Kalrez      | 341109                 | 341109     |
| <b>Position 10 – Magnetic Coupling</b> |              |                                  |             |                        |            |
| Inner Magnet, MCT – 5/16" Square Bore  | 10           | T                                | 316 SS/SmCo | 208013                 | 208013     |
| Outer Magnet, MCT – 1/2" Bore          | 9            | T (Pos. 7 = 0)                   | CS/SmCo     | SOMCT-4                | SOMCT-4    |
| Outer Magnet, MCT – 14 mm Bore         | 9            | T (Pos. 7 = 1)                   | CS/SmCo     | SOMCT-71               | SOMCT-71   |
| Outer Magnet, MCT – 5/8" Bore          | 9            | T (Pos. 7 = 2)                   | CS/SmCo     | SOMCT-5                | SOMCT-5    |
| Inner Magnet, MCX – 5/16" Square Bore  | 10           | X                                | 316 SS/SmCo | 208014                 | 208014     |
| Outer Magnet, MCX – 1/2" Bore          | 9            | X (Pos. 7 = 0)                   | CS/SmCo     | SOMCX-4                | SOMCX-4    |
| Outer Magnet, MCX – 14 mm Bore         | 9            | X (Pos. 7 = 1)                   | CS/SmCo     | SOMCX-71               | SOMCX-71   |
| Outer Magnet, MCX – 5/8" Bore          | 9            | X (Pos. 7 = 2)                   | CS/SmCo     | SOMCX-5                | SOMCX-5    |
| <b>Suffix – Trim Option</b>            |              |                                  |             |                        |            |
| Temperature Trim (Gears & Bearings)    | –            | -8(T) <sup>2</sup>               | –           | <b>Consult Factory</b> |            |

2 - T = Application Temperature in °F (e.g., -8(300) = Temperature Trim at 300°F).

### Meaning of Abbreviated Terms:

| Term         | Meaning                           | Notes                                                                 |
|--------------|-----------------------------------|-----------------------------------------------------------------------|
| <b>BSPT</b>  | British Standard Pipe Threads     | Type of threaded port                                                 |
| <b>CC</b>    | Close-Coupled                     | Method of pump-motor coupling                                         |
| <b>CO</b>    | Chrome Oxide                      | Shaft coating material                                                |
| <b>CS</b>    | Carbon Steel                      | Outer magnet and adapter structural material                          |
| <b>Drwg.</b> | Drawing (Item #)                  | See exploded view reference drawing                                   |
| <b>HHCS</b>  | Hex Head Cap Screw                | Type of bolt                                                          |
| <b>NPT</b>   | National Pipe Threads             | Type of threaded port                                                 |
| <b>PEEK</b>  | Poly-Ether-Ether-Ketone (plastic) | Bearing Grade PEEK; material option for gears and bearing-wear plates |
| <b>Pos.</b>  | Position (#)                      | Position number of model code                                         |
| <b>SHCS</b>  | Socket Head Cap Screw             | Type of bolt                                                          |
| <b>SmCo</b>  | Samarium Cobalt                   | Inner and outer magnet material                                       |
| <b>SS</b>    | Stainless Steel                   | e.g., 316 SS, 18-8 SS                                                 |
| <b>TC</b>    | Tungsten Carbide                  | Shaft coating material                                                |
| <b>#</b>     | Number                            | e.g., Item #, Position #, Part #, etc.                                |

**Exploded View Reference Drawing:**

**Models 2R & 2F – MAG-DRIVE, Close-Coupled**

