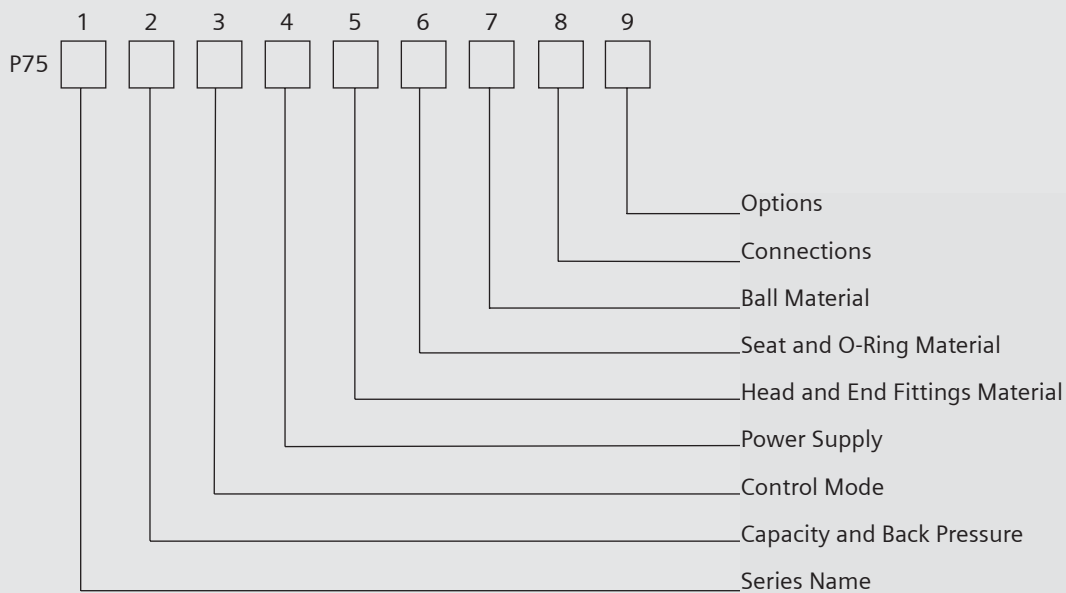


# Wallace & Tiernan® Liquid Feed Systems

## Premia® 75 Solenoid Metering Pumps Selection Guide

**SIEMENS**

### Selection Code



### Selection 1 - Series Name

| Series  | Position Code |
|---------|---------------|
| MONO    | MO            |
| ECONO   | EC            |
| MINI    | MI            |
| MINI-DC | MD            |
| MEGA    | ME            |
| MICRO   | MP            |

## Selection 2 - Capacity and Back Pressure

| MONO Series (MO)                 |          |      |                    |     |
|----------------------------------|----------|------|--------------------|-----|
| Capacity, nominal l/h and US gph |          |      |                    |     |
| Model                            | Capacity |      | Max. Back Pressure |     |
|                                  | L/H      | GPH  | BAR                | PSI |
| L1                               | 0.9      | 0.25 | 5.6                | 80  |
| L2                               | 1.9      | 0.50 | 5.6                | 80  |
| L3                               | 3.5      | 1.0  | 5.6                | 80  |
| L4                               | 4.7      | 1.25 | 5.6                | 80  |

| Mini-DC Series (MD)              |          |      |                    |     |
|----------------------------------|----------|------|--------------------|-----|
| Capacity, nominal l/h and US gph |          |      |                    |     |
| Model                            | Capacity |      | Max. Back Pressure |     |
|                                  | L/H      | GPH  | BAR                | PSI |
| H1                               | 0.9      | 0.25 | 10                 | 150 |
| H2                               | 1.9      | 0.50 | 10                 | 150 |
| M4                               | 3.8      | 1.0  | 7                  | 100 |
| M7                               | 7        | 1.85 | 7                  | 100 |

| ECONO Series (EC)                |          |      |                    |     |
|----------------------------------|----------|------|--------------------|-----|
| Capacity, nominal l/h and US gph |          |      |                    |     |
| Model                            | Capacity |      | Max. Back Pressure |     |
|                                  | L/H      | GPH  | BAR                | PSI |
| H0                               | 0.9      | 0.25 | 17                 | 250 |
| H1                               | 0.9      | 0.25 | 10                 | 150 |
| H2                               | 1.9      | 0.5  | 10                 | 150 |
| M3                               | 3.8      | 1.0  | 7                  | 100 |
| M5                               | 4.7      | 1.25 | 7                  | 100 |
| L1                               | 0.9      | 0.25 | 5.6                | 80  |
| L2                               | 1.9      | 0.5  | 5.6                | 80  |
| L3                               | 3.8      | 1.0  | 5.6                | 80  |
| L5                               | 4.7      | 1.25 | 5.6                | 80  |
| M4                               | 7.6      | 2.0  | 3.3                | 50  |

| MEGA Series (ME)                 |          |      |                    |     |
|----------------------------------|----------|------|--------------------|-----|
| Capacity, nominal l/h and US gph |          |      |                    |     |
| Model                            | Capacity |      | Max. Back Pressure |     |
|                                  | L/H      | GPH  | BAR                | PSI |
| 00                               | 0.5      | 0.13 | 21                 | 300 |
| 01                               | 0.8      | 0.21 | 17                 | 250 |
| 02                               | 1.9      | 0.5  | 17                 | 250 |
| 03                               | 3.2      | 0.85 | 17                 | 250 |
| 06                               | 6.4      | 1.7  | 17                 | 250 |
| H1                               | 0.9      | 0.25 | 10                 | 150 |
| H2                               | 1.9      | 0.5  | 10                 | 150 |
| H3                               | 3.4      | 0.9  | 10                 | 150 |
| H7                               | 6.6      | 1.75 | 10                 | 150 |
| 10                               | 9.5      | 2.5  | 10                 | 150 |
| 12                               | 11.9     | 3.15 | 10                 | 150 |
| M2                               | 1.9      | 0.5  | 7                  | 100 |
| M3                               | 2.3      | 0.6  | 7                  | 100 |
| M4                               | 3.8      | 1.0  | 7                  | 100 |
| M7                               | 7.0      | 1.85 | 7                  | 100 |
| 19                               | 18.9     | 5    | 7                  | 100 |
| 30                               | 30.3     | 8    | 3.3                | 50  |
| 38                               | 37.9     | 10   | 2.4                | 35  |
| 79                               | 94.6     | 25   | 2                  | 30  |

| Mini Series (MI)                 |          |      |                    |     |
|----------------------------------|----------|------|--------------------|-----|
| Capacity, nominal l/h and US gph |          |      |                    |     |
| Model                            | Capacity |      | Max. Back Pressure |     |
|                                  | L/H      | GPH  | BAR                | PSI |
| 00                               | 0.5      | 0.13 | 21                 | 300 |
| 01                               | 0.8      | 0.21 | 17                 | 250 |
| 02                               | 1.9      | 0.5  | 17                 | 250 |
| 03                               | 3.2      | 0.85 | 17                 | 250 |
| 04                               | 6.4      | 1.7  | 17                 | 250 |
| H1                               | 0.9      | 0.25 | 10                 | 150 |
| H2                               | 1.9      | 0.5  | 10                 | 150 |
| H3                               | 3.4      | 0.9  | 10                 | 150 |
| H4                               | 6.6      | 1.75 | 10                 | 150 |
| H5                               | 9.5      | 2.5  | 10                 | 150 |
| H6                               | 11.9     | 3.15 | 10                 | 150 |
| M2                               | 1.9      | 0.5  | 7                  | 100 |
| M3                               | 2.3      | 0.6  | 7                  | 100 |
| M4                               | 3.8      | 1.0  | 7                  | 100 |
| M7                               | 7.0      | 1.58 | 7                  | 100 |
| M8                               | 18.9     | 5    | 7                  | 100 |
| N7                               | 30.3     | 8    | 3.3                | 50  |
| P7                               | 37.9     | 10   | 2.4                | 35  |
| Q8                               | 94.6     | 25   | 2                  | 30  |

| Micro Series (MP)                |          |      |                    |     |
|----------------------------------|----------|------|--------------------|-----|
| Capacity, nominal l/h and US gph |          |      |                    |     |
| Model                            | Capacity |      | Max. Back Pressure |     |
|                                  | L/H      | GPH  | BAR                | PSI |
| 00                               | 0.5      | 0.13 | 21                 | 300 |
| 01                               | 0.8      | 0.21 | 17                 | 250 |
| 02                               | 1.9      | 0.5  | 17                 | 250 |
| 03                               | 3.2      | 0.85 | 17                 | 250 |
| 06                               | 6.4      | 1.7  | 17                 | 250 |
| H1                               | 0.9      | 0.25 | 10                 | 120 |
| H2                               | 1.9      | 0.5  | 10                 | 120 |
| H3                               | 3.4      | 0.9  | 10                 | 120 |
| H7                               | 6.6      | 1.75 | 10                 | 120 |
| 10                               | 9.5      | 2.5  | 10                 | 120 |
| 12                               | 11.9     | 3.15 | 10                 | 120 |
| M2                               | 1.9      | 0.5  | 7                  | 100 |
| M3                               | 2.3      | 0.6  | 7                  | 100 |
| M4                               | 3.8      | 1.0  | 7                  | 100 |
| M7                               | 7.0      | 1.85 | 7                  | 100 |
| 19                               | 18.9     | 5    | 7                  | 100 |
| 30                               | 30.3     | 8    | 3.3                | 50  |
| 38                               | 37.9     | 10   | 2.4                | 35  |
| 79                               | 79.5     | 20   | 1.3                | 20  |

### Selection 3 - Control Mode

| Control Mode                                       | Mono | Econo | Mini | Mega | Micro (1) |
|--|------|-------|------|------|-----------|
| Manual, Stroke Length Control only                 | S    |       |      |      |           |
| Manual, Stroke Length and Stroke Frequency Control |      | D     | D    | D    | X         |
| External, Pulse Input                              | I    | I     |      |      |           |
| External, Pulse Input and Stop                     |      |       |      | P    | X         |
| External, 4-20 mA Input and Stop                   |      |       |      | M    | X         |
| Power Relay  |      |       |      |      | R         |
| External Stop                                      | E    | E     |      |      |           |

1. Manual Stroke Length and Stroke Frequency Control, External Pulse Input with Stop and External 4-20 mA Input (direct and inverse) with Stop are standard with Micro Series.

### Selection 4 - Power Supply

| Power Supply   | Position Code |
|--|---------------|
| 115 VAC, 50/60 Hz with line cord and US plug         | A             |
| 115 VAC, 50/60 Hz with UK line cord                  | B             |
| 115 VAC, 50/60 Hz with line cord and Euro plug       | C             |
| 115 VAC, 50/60 Hz with conduit connections           | D             |
| 230 VAC, 50/60 Hz with line cord and US plug         | E             |
| 230 VAC, 50/60 Hz with UK line cord                  | F             |
| 230 VAC, 50/60 Hz with line cord and Euro plug       | G             |
| 240 VAC, 50/60 Hz with line cord and Australian plug | H             |
| 230 VAC, 50/60 Hz with conduit connections           | I             |
| 12 VDC arrangements                                  | X             |

### Selection 5 - Head and End Fittings Material

| Head and End Fittings Material | Back Pressure, maximum |     | Position Code |
|--------------------------------|------------------------|-----|---------------|
|                                | Bar                    | PSI |               |
| PVDF                           | 21                     | 300 | K             |
| 316 SS                         | 21                     | 300 | A             |
| GFPPPL                         | 21                     | 300 | P             |
| PVC (1)                        | 10                     | 150 | V             |
| SAN / PVC                      | 7                      | 100 | S             |

1. Select position code V for standard and auto degassing PVC heads. For auto degassing arrangements select position code 9 in selection 8.

Note: Maximum capacity on auto degassing head is 1.83 gph. Available only with Viton® seats and o-rings and Ceramic balls.

## Selection 6 - Seats and O-Ring Material

| Seats and O-Ring Material     | Back Pressure, maximum |     | Position Code |
|-------------------------------|------------------------|-----|---------------|
|                               | Bar                    | PSI |               |
| TFE (double ball valves)      | 21                     | 300 | T             |
| Hypalon® (single ball valves) | 10                     | 150 | H             |
| Viton® (single ball valves)   | 10                     | 150 | V             |

## Selection 7 - Ball Material

| Ball Material | Position Code |
|---------------|---------------|
| Ceramic       | C             |
| TFE           | T             |
| 316 SS        | S             |
| Hastelloy® C  | H             |

## Selection 8 - Connections

| Connections        | Tubing / Pipe Size        | Capacity Range            |               | Viscosity CPS | Position Code |   |
|--------------------|---------------------------|---------------------------|---------------|---------------|---------------|---|
|                    |                           | LPH                       | GPH           |               |               |   |
| Inch Tubing        | 3/16" X 5/16" - Suction   | < = 2.20                  | < = 0.58      | 300           | J             |   |
|                    | 1/4" x 3/8" - Discharge   |                           |               |               |               |   |
|                    | For Auto Degasifying Head | < = 6.94                  | < = 1.83      | 300           | 9             |   |
|                    | 1/4" x 3/8"               | 0.79 - 6.94               | 0.20 - 1.83   | 1000          | 1             |   |
|                    | 3/8" x 1/2"               | 0.79 - 6.94               | 0.20 - 1.83   | 1000          | A             |   |
|                    | 3/8" x 1/2"               | 6.31 - 37.85              | 1.66 - 10.0   | 1000 (1)      | 3             |   |
|                    | 1/2" x 3/4"               | 37.85 - 78.85             | 10.01 - 20.83 | 1000 (2)      | B             |   |
|                    | 3/8" x 1/2"               | < 3.15                    | < = 0.83      | 1000 (3)      | D             |   |
|                    | 1/2" x 3/4"               | < 3.15                    | < = 0.83      | 1000 (3)      | E             |   |
|                    | 1/2" x 3/4" - Suction     | < = 6.94                  | < = 1.83      | > 3000        | 5             |   |
|                    | 3/8" x 1/2" - Discharge   |                           |               |               |               |   |
|                    | 1/2" x 3/4" - Suction     | 6.94 - 78.85              | 1.83 - 20.83  | > 3000        | 7             |   |
|                    | 1/2" FNPT - Discharge     | 1/2" x 3/4"               | 78.85         | 20.83         | > 1000        | K |
|                    | Metric Tubing (4)         | For Auto Degasifying Head | < = 6.94      | < = 1.83      | 300           | T |
| 6mm ID x 10mm OD   |                           | 0.49 - 6.94               | 0.13 - 1.83   | 1000 (1)      | U             |   |
| 6mm ID x 12mm OD   |                           | 0.49 - 6.94               | 0.13 - 1.83   | 1000 (1)      | Y             |   |
| 10mm ID x 16 mm OD |                           | 6.31 - 37.85              | 1.66 - 10.0   | 1000 (1)      | W             |   |
| 12mm ID x 19mm OD  |                           | 78.85                     | 20.83         | 1000 (1)      | V             |   |
| Pipe               | 1/4" FNPT                 | 0.79 - 6.94               | 0.20 - 1.83   | 1000          | 2             |   |
|                    | 1/4" FNPT                 | 6.31 - 37.85              | 1.66 - 10.0   | 1000 (1)      | 4             |   |
|                    | 1/4" FNPT                 | 37.85 - 78.85             | 10.01 - 20.83 | 1000 (2)      | C             |   |
|                    | 1/2" FNPT                 | < = 3.15                  | < = 0.83      | 1000 (3)      | G             |   |
|                    | 1/4" FNPT                 | < = 6.94                  | < = 1.83      | > 3000        | 6             |   |
|                    | 1/2" FNPT                 | 6.94 - 78.85              | 1.83 - 20.83  | > 3000        | 8             |   |

1. For viscosity in the range of 1000 to 3000 cP and capacity < = 3.33gph select position code 3 or 4 with 316 SS balls.
2. For capacities > 10 gph and viscosity > 1000 cP, select position code 7 or 8.
3. 316 SS heads and spring loaded SS balls only.
4. Tubing not supplied with pump, tubing available as an accessory. Metric tubing available subject to material selection and pressure rating.

## Selection 9 - Options, Consult Factory

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