



# SOTERA<sup>®</sup>

## SYSTEMS

### 1/2" Air Operated Double Diaphragm Pump Technical Specifications

#### 1/2" MODEL DESCRIPTION INFORMATION

SP100 - 05X - XX - XXX - X

##### PORT SIZE

##### FLUID CONNECTION

N - 1/2"-14 NPTF-1  
B - Rp 1/2" (BSPP)

##### DRIVE MATERIAL OF CONSTRUCTION

P - Polypropylene  
C - Groundable Nylon

##### WET-END MATERIAL OF CONSTRUCTION

P - Polypropylene  
D - Groundable Acetal  
F - PVDF

##### DIAPHRAGM

S - Santoprene<sup>®</sup>  
H - Hytre<sup>™</sup>  
T - PTFE with Santoprene<sup>®</sup> Backer

##### BALLS

S - Santoprene<sup>®</sup>  
H - Hytre<sup>™</sup>  
T - PTFE

##### SEATS

S - Santoprene<sup>®</sup>  
H - Hytre<sup>™</sup>  
P - PP (with PTFE seal)  
F - PVDF (with PTFE seal)  
D - Acetal (with PTFE seal)

##### OPTIONS

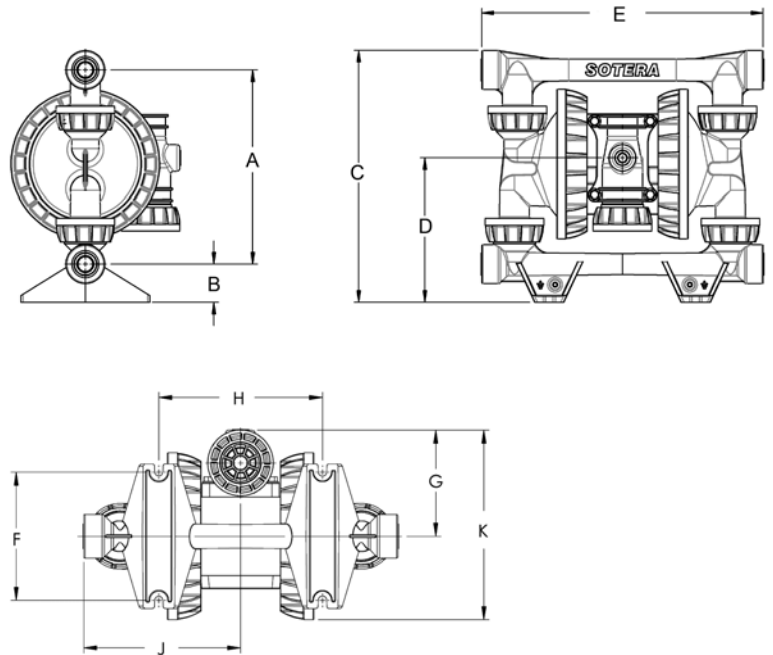
##### FLUID SECTION SERVICE KIT

##### DIAPHRAGM

##### BALLS

##### SEATS

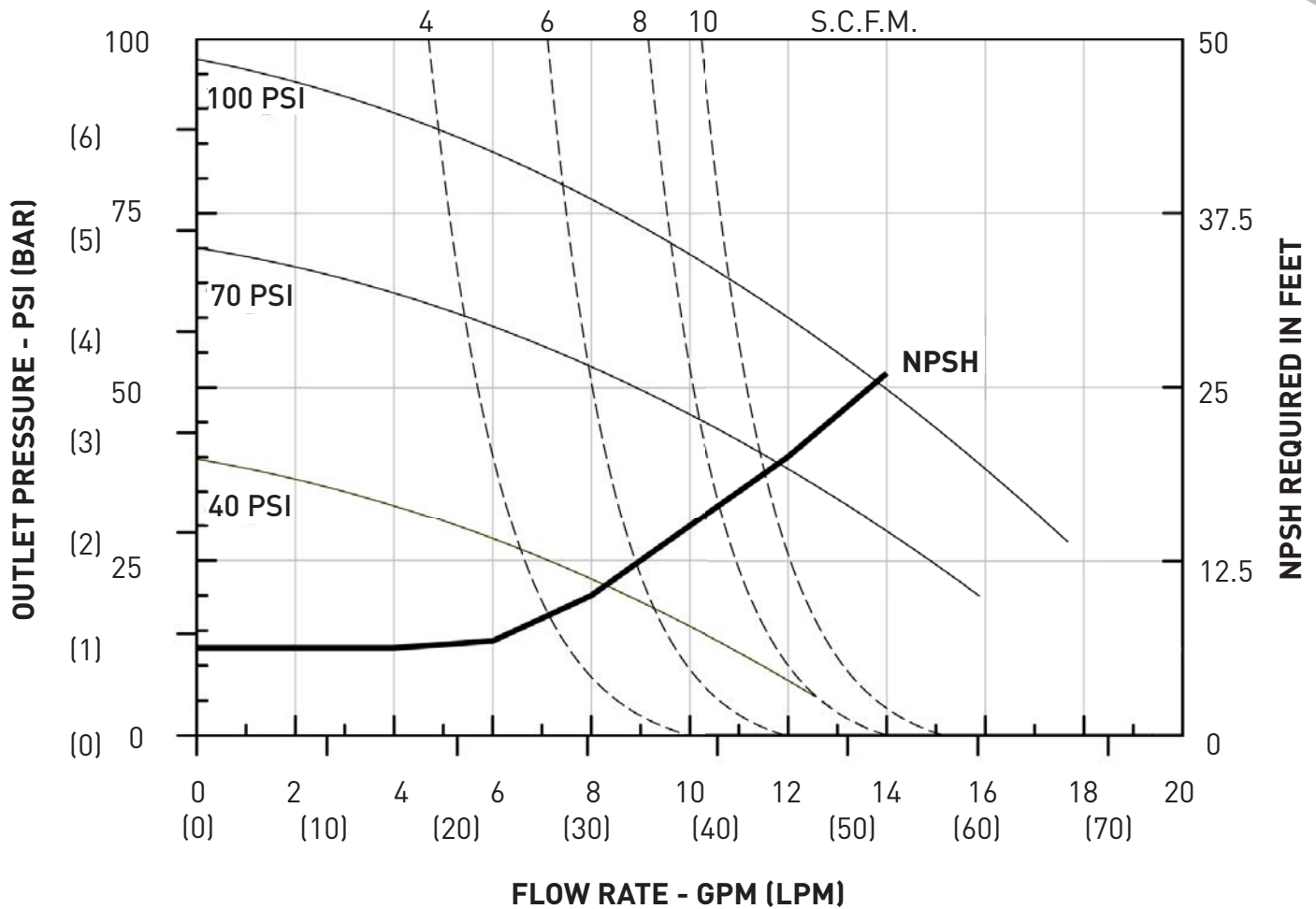
KIT  
S10 X X X



#### Dimensions

|   |        |            |
|---|--------|------------|
| A | 8.245" | 209.42 mm  |
| B | 1.625" | 41.28 mm   |
| C | 10.70" | 271.78 mm  |
| D | 6.123" | 155.524 mm |
| E | 12.00" | 304.80 mm  |
| F | 4.875" | 123.825 mm |
| G | 4.031" | 102.387 mm |
| H | 6.250" | 158.75 mm  |
| J | 6.00"  | 152.40 mm  |
| K | 7.206" | 183.032 mm |

## SP100-05X-XX-XXX



### Product Specs

|                                   |  |
|-----------------------------------|--|
| Pump Type                         | Non-Metallic Air Operated Double Diaphragm |
| Models                            | See Model Description Chart                |
| Construction Materials            | See Model Description Chart                |
| Maximum Air Inlet Pressure        | 100 PSIG (6.9 BAR)                         |
| Maximum Material Inlet Pressure   | 10 PSIG (0.69 BAR)                         |
| Maximum Outlet Pressure           | 100 PSIG (6.9 BAR)                         |
| Air Consumption (at 40 PSI)       | 0.65 cfm/gallon (approx.)                  |
| Air Connection                    | 1/4" NPT                                   |
| Maximum Flow Rate (flooded inlet) | 17.5 GPM (66.23 LPM)                       |
| Displacement/Cycle at 100 PSIG    | 0.036 Gal. (0.14 L)                        |
| Maximum Particle Size             | 3/32" diameter (2.4 mm)                    |
| Maximum Temp Limits               |  |
| Acetal                            | -10° to 180°F (-12° to 82°C)               |
| HYTREL®                           | -20° to 150°F (-29° to 66°C)               |
| PVDF                              | 10° to 200°F (-12° to 93°C)                |
| Polypropylene                     | 35° to 175°F (2° to 79°C)                  |
| Santoprene®                       | -40° to 225°F (-40° to 107°C)              |
| PTFE                              | 40° to 225°F (4° to 107°C)                 |

### Dimensions

|                                |  |
|--------------------------------|--|
| Box Dimensions                 | 11 3/4" (H) x 14 1/4" (W) x 9 1/8" (D) |
| Polypropylene Pump Weight      | 5.7 lbs. (2.6 Kg.)                     |
| PVDF Pump Weight               | 7.2 lbs. (3.3 Kg.)                     |
| Groundable Acetal Pump Weight  | 6.8 lbs. (3.1 Kg.)                     |
| Polypropylene (Box Weight)     | 7.2 lbs. (3.3 Kg.)                     |
| PVDF (Box Weight)              | 8.7 lbs. (4.0 Kg.)                     |
| Groundable Acetal (Box Weight) | 8.3 lbs. (3.8 Kg.)                     |
| Noise Level                    | 75.0 db (A) (at 70 PSI, 60 cpm)        |

### Accessories

| Part #    | Description        | Contents   |
|-----------|--------------------|--|
| KITS10WMA | Wall Mount Bracket | Steel bracket for wall mount applications of the SP100 Air Operated Diaphragm Pump |
| KITS10FRH | Filter/Regulator   | Air line filter, regulator, and hose   |
| KITS05MUF | Muffler            | Muffler for air exhaust  |
| KITS10WCH | Assembly Wrench    | Special service tool for use on fluid cap rings                                    |