# Fact Sheet FSL-PRO M

The professional filling system for companies where to-the-gram weighing and safe packaging even of flammable, foaming or corrosive liquids as well as gentle dosing are of importance. This semi-automatic machine reliably fills your already palletized containers. With a multi-interval scale you also achieve exact weighing results for large measuring ranges.

**More information** High performance with a wide range of solutions and options.

| Specifications    | Facts  | Details<br>Manual control possible  |  |  |  |
|-------------------|--|---|--|--|--|
| Weighing terminal | iS50 Industrial Weighing Terminal                            |   |  |  |  |
| EC type approval  | DE-15-MI006-PTB003   |   |  |  |  |
| Valves            | Above-surface valve  | A = with nozzle DN25, L=300 mm, product con-<br>nection G 1 ¼", used for canisters, drums |  |  |  |
|                   |  | B = with nozzle DN40, L=300 mm, product connection G 1 $\frac{1}{4}$ ", used for drums    |  |  |  |
|                   |  | D = without nozzle DN25, product connection G 1 $\frac{1}{4}$ ", used for pails           |  |  |  |
|                   |  | E = without nozzle DN50, product connection G 2", used for pails                          |  |  |  |
|                   |  | F = project valve   |  |  |  |
|                   | Below-bunghole valve   | A = with nozzle DN25, L=300 mm, product con-<br>nection G 1 ¼", used for canisters, drums |  |  |  |
|                   |  | B = with nozzle DN40, L=300 mm, product con-<br>nection G 1 ¼", used for drums            |  |  |  |
|                   |  | F = project valve   |  |  |  |
|                   | Below-surface valve  | A = with nozzle DN25, L=300 mm, product con-<br>nection G 1 ¼", used for canisters, drums |  |  |  |
|                   |  | B = with nozzle DN40, L=300 mm, product connection G 1 $\frac{1}{4}$ ", used for drums    |  |  |  |
|                   |  | C = with nozzle DN40, L=1,200 mm, product connection G 2", used for drums                 |  |  |  |
|                   |  | F = project valve   |  |  |  |
| Valve material    | 1.4404/1.4571  |   |  |  |  |
| Seal              | PTFE   |   |  |  |  |
| Actuator          | Hood: Anod.alum.   |   |  |  |  |
| Load receptors    | Platform scale 1500 x 1250 mm                                |   |  |  |  |
|                   | Single-range:  | 600 kg, e=200 g   |  |  |  |
|                   |  | 1,500 kg, e=500 g   |  |  |  |
|                   | Dual division:   | 600/1,500 kg, e=200/500 g   |  |  |  |
|                   | Pallet scale 840 x 600 mm                                    |   |  |  |  |
|                   | Single-range:  | 600 kg, e=200 g   |  |  |  |
|                   |  | 1,500 kg, e=500 g   |  |  |  |
|                   | Low profile platform scale 1500 x 1250 mm<br>1 drive-on ramp |   |  |  |  |
|                   | Single-range:  | 600 kg, e=200 g   |  |  |  |
|                   |  | 1,500 kg, e=500 g   |  |  |  |
|                   | Dual division:   | 600/1,500 kg, e=200/500 g   |  |  |  |
| EX                | EX zone 2  | ATEX II 3 G   |  |  |  |
|                   | EX zone 1  | ATEX II 2 G   |  |  |  |

| Filling process               | Above-surface        |  |
|-------------------------------|----------------------|--|
|                               | Below-surface        |  |
|                               | Below-bunghole       |  |
| Container                     | Canister             |  |
|                               | Pail                 |  |
|                               | Drum                 |  |
| Dosing                        | 2-stage              | coarse and fine  |
| Base height adjust-<br>ment   | manually: Crank      | Canisters, pails   |
|                               | pneumatic            | Drum   |
| Frame                         | Stainless steel      | 1.4301   |
| Options                       | Facts                | Details  |
| Drop catcher                  | mechanical           | Drip scoop with product return to container incl. wiper ring   |
|                               | pneumatic            | pneumatically operated drop catcher with dis-<br>posable drip scoop and position monitoring, in-<br>ternal pneumatics connection   |
| Aspiration hood               |                      | Aspiration hood with viewing window and hose connection  |
| Quick change filling<br>valve | Above-surface valve  | A = with nozzle DN25, L=300 mm, product connection G 1 $\frac{1}{4}$ ", used for canisters, drums  |
|                               |                      | B = with nozzle DN40, L=300 mm, product connection G 1 $\frac{1}{4}$ ", used for drums   |
|                               |                      | D = without nozzle DN25, product connection G 1 ¼", used for pails   |
|                               |                      | E = without nozzle DN50, product connection G 2", used for pails   |
|                               |                      | F = project valve  |
|                               | Below-bunghole valve | A = with nozzle DN25, L=300 mm, product connection G 1 $\frac{1}{4}$ ", used for canisters, drums  |
|                               |                      | B = with nozzle DN40, L=300 mm, product con-<br>nection G 1 ¼", used for drums   |
|                               |                      | F = project valve  |
|                               | Below-surface valve  | A = with nozzle DN25, L=300 mm, product con-<br>nection G 1 ¼", used for canisters, drums  |
|                               |                      | B = with nozzle DN40, L=300 mm, product con-<br>nection G 1 $\frac{1}{4}$ ", used for drums  |
|                               |                      | C = with nozzle DN40, L=1200 mm, product con-<br>nection G 2", used for drums  |
|                               |                      | F = project valve  |
| Valve rack                    | as a simple rack     | non-corrosive valve rack for 3 shuttle valves with a max. nozzle length of 1,200 mm  |
|                               | with encoding        | non-corrosive valve rack for 3 shuttle valves with<br>a max. nozzle length of 1,200 mm with filling<br>monitoring  |
|                               | with cleaning        | non-corrosive valve rack for 3 shuttle valves with<br>a max. nozzle length of 1,200 mm with laterally<br>installed cleaning funnel for a shuttle valve with a<br>nozzle length of 1,200 mm |

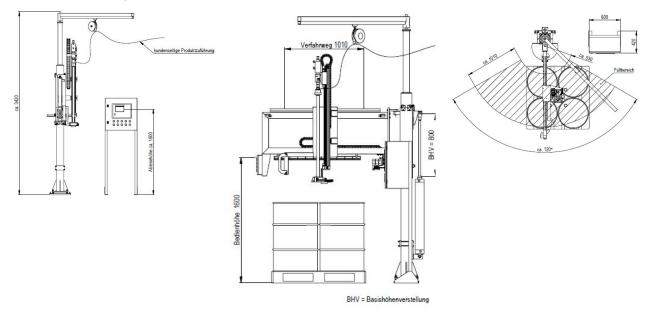
| Valve cleaning               | CIP   | Valve cleaning funnel integrated in system for<br>valve cleaning during process, for nozzle length<br>of max. 300 mm<br>manual actuator to open the shuttle valve for<br>cleaning |  |  |  |
|------------------------------|---|---|--|--|--|
|                              | Cleaning of valves outside the system                                     |   |  |  |  |
| Height adjustment            | automatic/ electric   | Extra option for standard base height adjustment  |  |  |  |
| Overfill protection          | optical   | Overfill protection with sensor above bunghole  |  |  |  |
| Inerting                     |   | Gassing of container interior with nitrogen or a different inert gas  |  |  |  |
| Filling valve                | heated  |   |  |  |  |
| Grounding clamp              | without monitoring  |   |  |  |  |
|                              | with monitoring   | Monitoring of ground clamp change after con-<br>tainer change   |  |  |  |
| abeling with variable data   |   | applied manually  |  |  |  |
| Closing system               | Lid push-in   | Pails   |  |  |  |
|                              | Lid roll-in   | Pails   |  |  |  |
|                              | Clinching   | Drums   |  |  |  |
|                              | Manual capping  | Canisters, drums  |  |  |  |
|                              | Sealing caps  | Canisters   |  |  |  |
| Pump                         |   | Based on customer requirement mounting and<br>integration of a pump for stationary or portable<br>use, supplied with product hoses and desired<br>couplings. Power supply 400 VA  |  |  |  |
| Pump control                 |   | Control of customer-provided pump via digital signals 24 V or analog 4-20 mA  |  |  |  |
| Signal exchange with PPS     |   | Signal exchange, digital potential-free, release/<br>ready or Profibus/Profinet   |  |  |  |
| Roller conveyor              | non-powered   | before, on top of and after the load receptor   |  |  |  |
| Second scale                 | for parallel working  | Platform scale  |  |  |  |
|                              | Swivel arm extension for swivel range cover-<br>ing any bunghole position | Pallet scale  |  |  |  |
|                              |   | Low profile platform scale  |  |  |  |
| Product hose suspen-<br>sion |   | Pivotable boom made of stainless steel with<br>guide rail and rollers. Strain relief with connect-<br>ing bracket attached to guide rollers                                       |  |  |  |
| Container balancer           |   | Canisters and pails   |  |  |  |

## Info graphics

### Symbols

| Ġ                 | <b>○</b><br>IP65     | STAINLESS<br>Steel |                   |       | ex zone<br>1 | EX ZONE<br><b>2</b> |
|-------------------|----------------------|--------------------|-------------------|-------|--------------|---------------------|
| Time sav-<br>ings | IP65 pro-<br>tection | Stainless<br>steel | Modular<br>design | Scale | Ex zone 1    | Ex zone 2           |

### **Dimensional drawings**



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