

PureFeed® DP-4



Designed specifically for pharmaceutical processes, the PureFeed® DP-4 is a highly innovative gravimetric feeder that can accurately meter dry pharmaceutical, nutraceutical, and even cosmetic powders at feed rates as low as 20 grams per hour.

A key feature of the PureFeed® DP-4 is an innovative, speed controlled, inert ceramic scraper feed disc (patent pending). Positioned at the base of a cylindrical, electropolished stainless steel material storage chamber, the disc rotates to precisely discharge tiny amounts of material, continuously and pulsation free over a 20 to 2,000 gram per hour feed rate range. Also, since the feed disc separates the material supply from the discharge point, there is no compaction and no chance of flooding.

MATERIAL CONSTRUCTION:

Contact materials-

- 316 L stainless steel, ZrO₂, Al₂O₃, PTFE, EPDM, Silicone.

Non-contact materials-

- 304 and 316 L stainless steel.

SURFACE FINISHES:

- 32 microinch (0.8 micro-meter) Ra finish for contact and non-contact areas. Smoother finishes optionally available.

FEED RATES:

- 20 g/hr to 2,000 g/hr (theoretical).

PARTICLE SIZE:

- 3 µm – 250 µm.

CERAMIC SCRAPER FEED DISC:

- Pulsation free zirconium oxide ceramic scraper feed disc is resistant to wear and unaffected by aggressive cleaning agents, and high temperatures.

HOPPERS:

- Integrated 1.3 L capacity.
- Dust tight 360 degree band clamp mounting.

MOTOR SPECIFICATIONS:

- Maintenance free, electronic DC-motor with a three-stage planetary reduction gearbox.
- Gearbox ratio 1:159.
- 48 VDC.
- Explosion proof (available, consult sales staff).

ELECTRICAL REQUIREMENTS:

- 240 VAC, 50/60 Hz, 4 amp.

MOUNTING CONFIGURATIONS:

- The DP-4 comes equipped with a flange for mounting the drive and weighing unit to a vertical surface.

WEIGH MODULE SPECIFICATIONS:

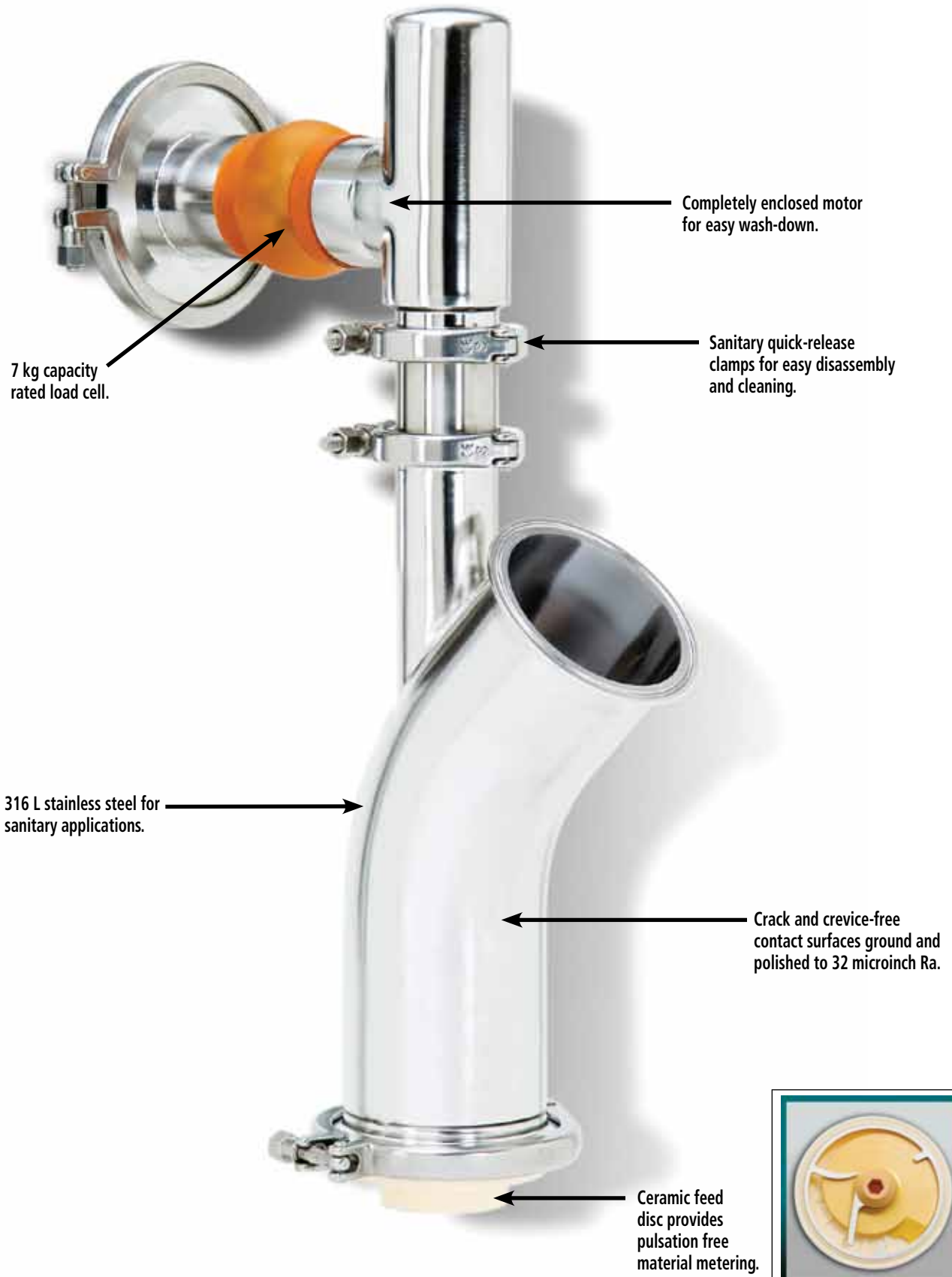
- Integrated platform load cell.
- Weigh modules available in 7 kg capacity.

PERFORMANCE:

- Gravimetric accuracies of ±0.25 to 1% of feed rate setpoint typical at 2 sigma and feed rates from 100 to 2,000 g/hr.

NOTE: Laboratory testing to determine specific material feeding accuracy is recommended and available from Schenck AccuRate.

PureFeed® DP-4 Disc Feeder



Steps for easy disassembly



1 A sanitary quick release clamp allows you to disconnect the feed unit.



2 After clamp-release, the feed unit is easily removed.



3 Place the feed unit on a flat surface where the clamp at the base of the feeder can be released.



4 The bottom plate and ceramic feed disc are easily removed for cleaning and maintenance.



5 Disconnect the sanitary quick release clamp for drive shaft access.



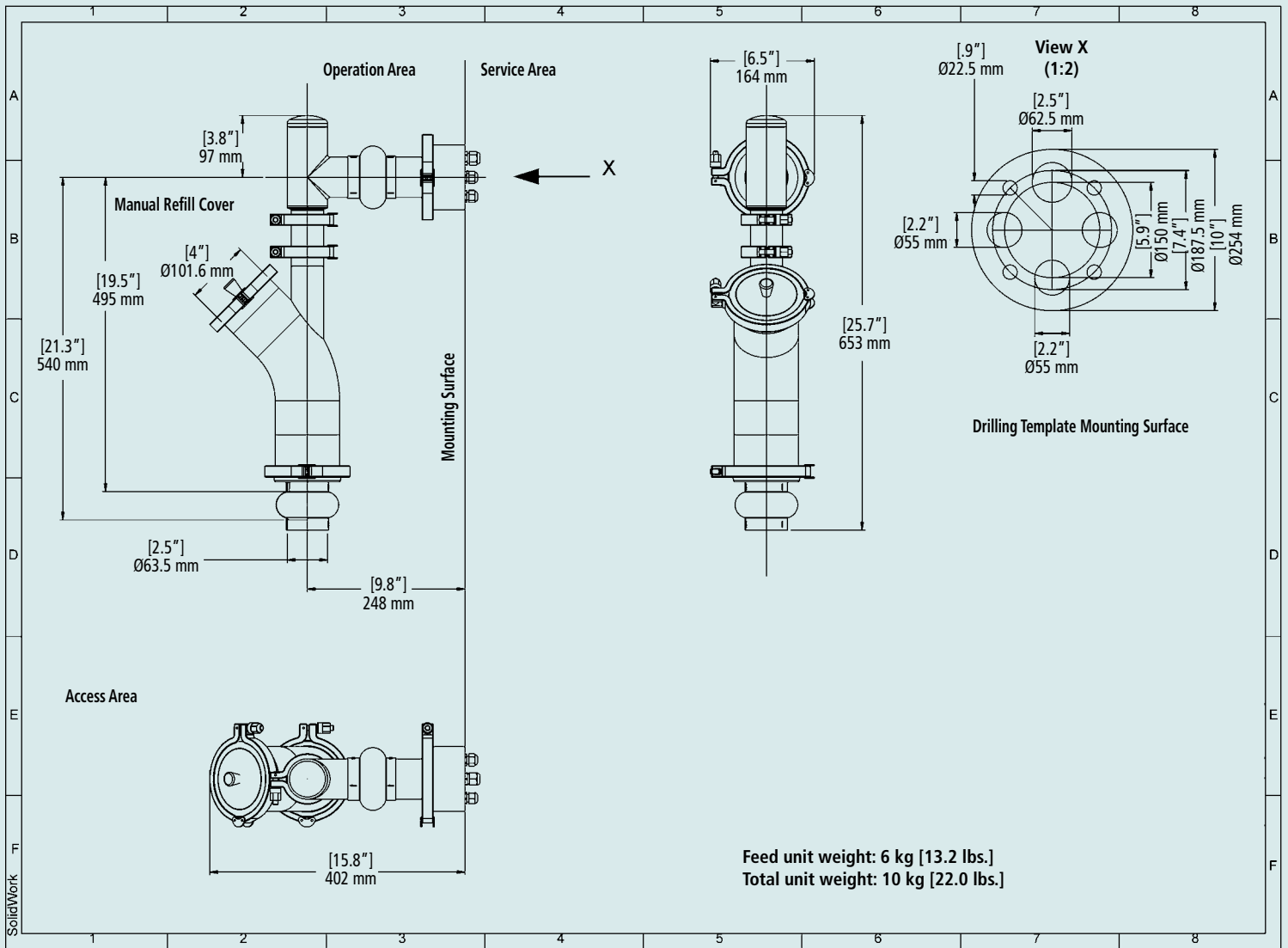
6 The drive shaft is easily removed.



The PureFeed® DP-4 feeder uses minimal components, making disassembly quick and easy for routine maintenance and product changeover.

FEATURES:

- Sanitary quick release clamps make disassembly easy for cleaning and maintenance.
- Low dose feeder with precise accuracy.
- Minimal component parts.
- Pulsation free ceramic scraper feed disc.
- Handles temperatures from -10° - 40° C (14° F - 104° F).
- Dust tight feed unit for sanitary applications.



TECHNICAL DATA

Volumetric flow rate	.04 l/hr. – 4 l/hr. (.001 to .14 cu. ft./hr.), grav. min .02 kg/hr. (.04 lbs./hr.)
Accuracy	±0.25 to 1% (2 sigma, 60 sec. sample) @ 100 - 2,000 g/hr
Accuracy	± 1 g/h (2 sigma, 60 sec. sample) @ 20 - 100 g/h
Bulk density	.1 – 1.4 kg/l (6.3 – 87.4 lbs./cu.ft.)
Gross bin volume	Approximately 1.3 l (.05 cu.ft.), manual filling
Grain size	3 µm – 250 µm
Bulk solid temperature	-10° - 40° C (14° - 104° F)
Ambient temperature	-10° - 40° C (14° - 104° F)
Explosion protection	Available, consult sales staff
Stainless steel components in contact with the bulk solids	316 L, 32 microinch (0.8 micro-meter) Ra finish (material certificates upon request)
Ceramic components in contact with the bulk solids	ZrO2 /Al2O3 (material certificates upon request)
Plastic components in contact with the bulk solids	PTFE, EPDM, Silicon
Electrical requirements	240 VAC, 50/60 Hz, 4 amps
Load cell	Rated capacity 7 kg, mechanical overload protection device

Schenck AccuRate

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