



FOR TANK DIA. UP TO **20ft.**  
(6.0 m)

CHEMICAL PROCESSING TANKS  
MIXING TANKS • PHARMACEUTICAL  
VESSELS • DRUMS AND KEGS  
FOOD PROCESSING TANKS  
BREWERY TANKS



TANK DIA. UP TO 20 FT. (6 M)  
INTRODUCTION



# SUPERIOR TANK CLEANING IN SANITARY AND CHEMICAL ENVIRONMENTS

EFFECTIVE SPRAY IN A VARIETY OF MATERIALS AND SPRAY COVERAGES








Offered in a variety of sanitary and chemical-resistant configurations, these nozzles are built to efficiently clean and rinse. With numerous spray coverage options and varying impact ratings, these compact TankJet nozzles are powerful and effective solutions for medium-sized tanks and vessels.







## QUICK REFERENCE GUIDE

| Model   | Cleaning Power   | Max. Tank Diameter ft. (m) | Operating Principle                  | Flow Rate Range gpm (lpm)   | Operating Pressure psi (bar) | Spray Coverage  | Max. Temperature °F (°C) | Materials  | Page Number |
|---|------------------|----------------------------|--------------------------------------|-----------------------------|------------------------------|---|--------------------------|--|-------------|
| <b>TankJet®<br/>27500 &amp;<br/>27500-R</b><br>  | Medium impact    | 15 to 20<br>(4.3 to 6.0)   | Fluid-driven<br>reactionary<br>force | 9.0 to 224<br>(34 to 850)   | 10.0 to 50<br>(0.7 to 3.4)   | 180° up/down,<br>270° up/down,<br>360°                            | 200 (93)                 | PTFE fluoropolymer resin   | D4          |
| <b>TankJet<br/>28500 &amp;<br/>28500-R</b><br>   | Medium impact    | 18 (5.5)                   | Fluid-driven<br>reactionary<br>force | 9.0 to 78<br>(34 to 295)    | 10.0 to 50<br>(0.7 to 3.4)   | 180° up/down,<br>270° up/down,<br>360°                            | 200 (93)                 | Body, saucer & spacer –<br>PTFE fluoropolymer resin<br>Locking pin – 316 stainless steel   | D6          |
| <b>TankJet<br/>12900</b>  | Rinsing          | 18 (5.5)                   | Fixed<br>stationary                  | 72 to 385<br>(280 to 1470)  | 20 to 50<br>(1.4 to 3.4)     | 360° and custom<br>spray angles                                   | 212 (100)                | Brass or<br>316 stainless steel  | D8          |
| <b>TankJet<br/>AA090</b>  | High<br>impact   | 16 (4.9)                   | Motor-driven                         | 1.5 to 7.3<br>(5.7 to 28)   | 100 to 500<br>(6.9 to 34.5)  | 360°  | 200 (93)                 | Seals – Carbon-filled<br>PTFE fluoropolymer resin<br>All other metallurgy –<br>316 stainless steel                                     | D10         |
| <b>TankJet<br/>D26984 &amp;<br/>D40159</b><br>   | Rinsing          | 10 to 16<br>(3.0 to 4.9)   | Fluid-driven<br>constant<br>speed    | 3.2 to 19.8<br>(12.0 to 75) | 30 to 90<br>(2.1 to 6.2)     | 65° down,<br>120° down,<br>180° up/down,<br>260° up/down,<br>360° | 160 (70)                 | Stainless Steel – 303 or 316 stainless<br>steel body with PTFE sleeve and washer<br>PVDF – PVDF body with PTFE washer<br>and PE sleeve | D14         |
| <b>TankJet<br/>D41800E</b><br>  | Rinsing          | 10 to 16<br>(3.0 to 4.9)   | Fluid-driven<br>constant<br>speed    | 3.0 to 22.8<br>(11 to 86)   | 30 to 90<br>(2.1 to 6.2)     | 360°  | 265 (130)                | 303 or 316L stainless steel  | D16         |
| <b>TankJet<br/>D41990</b><br>  | Rinsing          | 6.5 to 16<br>(2.0 to 4.9)  | Fluid-driven<br>reactionary<br>force | 2.4 to 37<br>(9.0 to 141)   | 15.0 to 60<br>(1.0 to 4.1)   | 180° up/down,<br>360°   | 265 (130)                | 316L stainless steel   | D18         |
| <b>TankJet 9<br/>B &amp; C</b>  | Rinsing          | 12 to 16<br>(3.7 to 4.9)   | Fluid-driven<br>reactionary<br>force | 5.0 to 38<br>(18.9 to 144)  | 10.0 to 120<br>(0.7 to 8.3)  | 360   | 190 (88)                 | Bearings – Carbon-filled<br>PTFE fluoropolymer<br>All other metallurgy –<br>316 stainless steel  | D20         |
| <b>TankJet<br/>63225</b><br>   | Rinsing          | 13 (4.0)                   | Fixed<br>stationary                  | 22 to 51<br>(83 to 192)     | 15.0 to 40<br>(1.0 to 2.8)   | 360°  | 400 (204)                | 316L stainless steel   | D22         |
| <b>TankJet<br/>14 &amp; 19</b>  | Medium<br>impact | 12 (3.7)                   | Fluid-driven<br>turbine              | 10.0 to 30<br>(38 to 114)   | 50 to 200<br>(3.4 to 13.8)   | 180° up/down,<br>270° down,<br>360°                               | 250 (121)                | Stainless steel and PTFE   | D26         |



**TANKJET 27500 AND 27500-R TANK CLEANING NOZZLE FEATURES AND BENEFITS**

- With rotation driven by the reactionary force of the cleaning liquid, these rotating nozzles provide excellent cleaning and rinsing and are especially well-suited to clean-in-place (CIP) systems
- Spray angles range from 180° to 360° and can be used to clean specific areas or the entire tank interior
- Made of corrosion- and chemical-resistant PTFE fluoropolymer resin, both models offer peak performance when used with debris-free liquid and deliver greater impact than static spray balls
- The rotating spray heads on 27500-R nozzles can be easily removed from the body for inspection and maintenance
- 27500-R nozzles with 1/2 in. and 3/4 in. inlet connections are also available in carbon-filled PTFE for improved thermal characteristics and higher mechanical strength
- ATEX-certified versions available



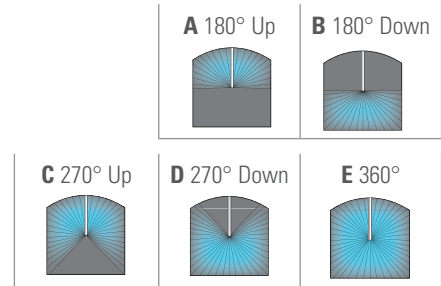
TankJet 27500 tank cleaning nozzle



TankJet 27500-R tank cleaning nozzle



**SPRAY COVERAGE**



**MOUNTING OPTIONS**

|            |   |   |
|------------|---|---|
| Vertical   | ↑ | ↓ |
| Horizontal | ← | → |
| 45° Up     | ↖ | ↗ |
| 45° Down   | ↘ | ↙ |

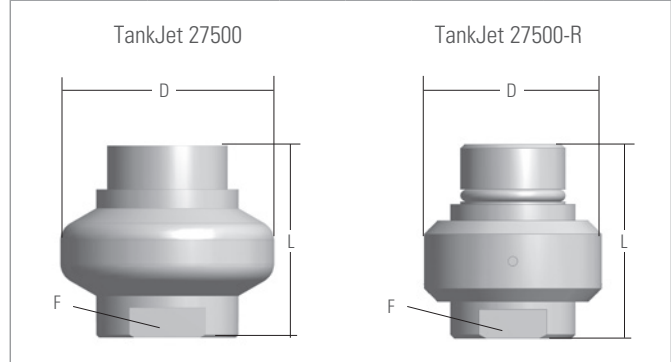
**SPECIFICATIONS**

| TankJet Tank Cleaning Nozzle | 27500   | 27500-R                          |
|------------------------------|---|----------------------------------|
| Max. tank diameter:          | 15 to 20 ft. (4.3 to 6.0 m)                                       | 15 to 20 ft. (4.3 to 6.0 m)      |
| Operating principle:         | Fluid-driven reactionary force                                    | Fluid-driven reactionary force   |
| Flow rate:                   | 9.0 to 224 gpm (34 to 850 lpm)                                    | 9.0 to 224 gpm (34 to 850 lpm)   |
| Operating pressure:          | 10.0 to 50 psi (0.7 to 3.4 bar)                                   | 10.0 to 50 psi (0.7 to 3.4 bar)  |
| Max. temperature:            | 200°F (93°C)  | 200°F (93°C)                     |
| Materials:                   | PTFE fluoropolymer resin or CTEF                                  | PTFE fluoropolymer resin or CTEF |
| Inlet connection:            | 3/4" to 2" NPT or BSPT (F)  | 3/4" or 1" NPT or BSPT (F)       |
| Optional accessories:        | Strainers, recommended mesh size: 100 (150 micron)<br>See page G2 |                                  |

For lances, mounting kits, adapters and more, see page G6

**DIMENSIONS AND WEIGHT**

| Model          | Inlet Conn. in. | D (Dia.) in. (mm) | L in. (mm)  | F (Flats) in. (mm) |
|----------------|-----------------|-------------------|-------------|--------------------|
| 27500, 27500-R | 3/4             | 2.25 (57.2)       | 2.63 (66.6) | 1.31 (33.3)        |
| 27500, 27500-R | 1               | 2.75 (69.8)       | 3 (76.2)    | 1.63 (41.5)        |
| 27500          | 2               | 4.88 (123.8)      | 4.38 (111)  | 2.75 (69.8)        |

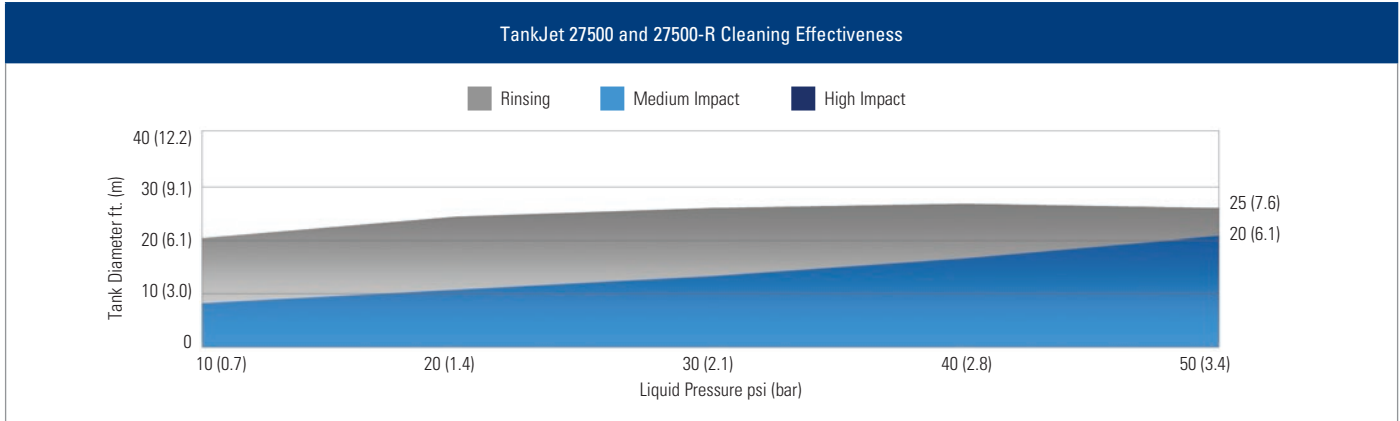


Additional sizes available:  
Page C16 – 3 in. conn.  
Page E4 – 3/8 and 1/2 in. conn.

**IDEAL FOR CLEANING:**

- Broke chests
- Chemical tanks
- PCB washers
- Pharmaceutical tanks
- Process tanks

**PERFORMANCE DATA**



| Model |         | Inlet Conn. | Capacity Size | Orifice Dia. in. (mm) | Liquid Flow Capacity gpm (lpm) |                  |                  |                  |                  | Max. Tank Dia. ft. (m) |
|-------|---------|-------------|---------------|-----------------------|--------------------------------|------------------|------------------|------------------|------------------|------------------------|
| 27500 | 27500-R |             |               |                       | 10 psi (0.7 bar)               | 20 psi (1.4 bar) | 30 psi (2.1 bar) | 40 psi (2.8 bar) | 50 psi (3.4 bar) |                        |
| •     | •       | 3/4         | 18            | 0.094 (2.4)           | 9.0 (34)                       | 12.7 (48)        | 15.6 (59)        | 18 (68)          | 20 (76)          | 15 (4.3)               |
| •     | •       |             | 32            | 0.156 (4.0)           | 16.0 (61)                      | 23 (89)          | 28 (103)         | 32 (126)         | 36 (136)         | 15 (4.3)               |
| •     | •       |             | 46            | 0.234 (6.0)           | 23 (87)                        | 33 (130)         | 40 (148)         | 46 (182)         | 51 (196)         | 15 (4.3)               |
| •     | •       | 1           | 50            | 0.156 (4.0)           | 25 (95)                        | 35 (140)         | 43 (161)         | 50 (197)         | 56 (215)         | 18 (5.5)               |
| •     | •       |             | 70            | 0.219 (5.6)           | 35 (133)                       | 49 (195)         | 61 (225)         | 70 (275)         | 78 (300)         | 18 (5.5)               |
| •     | •       |             | 90            | 0.297 (7.5)           | 45 (172)                       | 64 (250)         | 78 (290)         | 90 (355)         | 101 (385)        | 18 (5.5)               |
| •     | •       | 2           | 100           | 0.234 (6.0)           | 50 (191)                       | 71 (280)         | 87 (320)         | 100 (395)        | 112 (425)        | 20 (6.0)               |
| •     | •       |             | 125           | 0.266 (6.7)           | 63 (240)                       | 88 (350)         | 108 (400)        | 125 (495)        | 140 (530)        | 20 (6.0)               |
| •     | •       |             | 150           | 0.313 (7.9)           | 75 (285)                       | 106 (420)        | 130 (480)        | 150 (590)        | 168 (640)        | 20 (6.0)               |
| •     | •       |             | 175           | 0.375 (9.5)           | 88 (335)                       | 124 (490)        | 152 (560)        | 175 (690)        | 196 (745)        | 20 (6.0)               |
| •     | •       |             | 200           | 0.422 (10.7)          | 100 (380)                      | 141 (560)        | 173 (645)        | 200 (790)        | 224 (850)        | 20 (6.0)               |

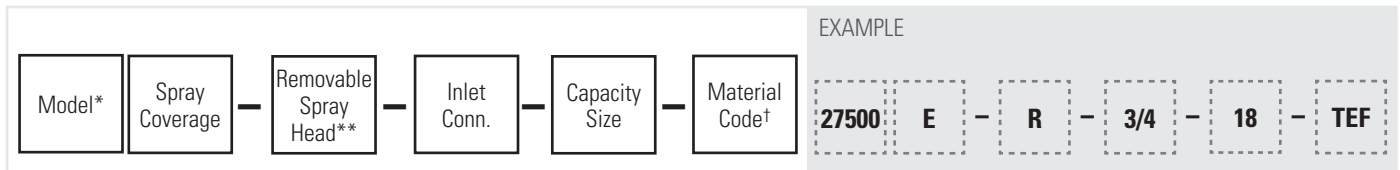
Suggested optimum operating range: 20 to 40 psi (1.5 to 2.8 bar).

**ADDITIONAL SIZES AVAILABLE**

**Page C16 – 3 in. conn.**  
**Page E4 – 3/8 and 1/2 in. conn.**

**ORDERING INFORMATION**

**TANKJET 27500 AND 27500-R TANK CLEANING NOZZLES**



\*Add B prior to the nozzle type for BSPT connections.  
 \*\*Leave blank for standard version.  
 †Indicate CTEF for carbon-filled PTFE on 3/4 in. inlet connections for 27500-R.

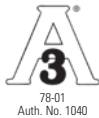


**TANKJET 28500 & 28500-R  
TANK CLEANING NOZZLE  
FEATURES AND BENEFITS**

- Rotating nozzles for use with sanitary tubing resist harsh chemicals and provide excellent cleaning and more impact than static spray balls
- 28500-R nozzles conform to 3-A Sanitary Standard 78 for spray cleaning devices to remain in place (does not apply to horizontal mounting)
- Well-suited for clean-in-place systems; no motor source is needed as the reactionary force of the cleaning liquid rotates the spray head
- Threadless, tapered design promotes self-draining to prevent build-up on nozzle
- 28500-R rotating spray head is easily removable from the body for inspection and maintenance

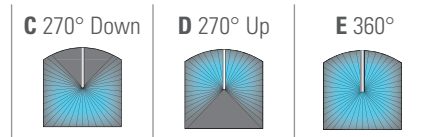
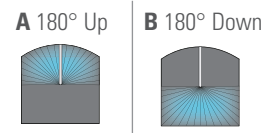


TankJet 28500-R tank cleaning nozzle



This unit meets the requirements of 3-A Sanitary Standard 78. Spray cleaning devices intended to remain in place.

**SPRAY COVERAGE**



| MOUNTING OPTIONS |     |
|------------------|-----|
| Vertical         | ↑ ↓ |
| Horizontal       | ← → |
| 45° Up           | ↗ ↘ |
| 45° Down         | ↙ ↚ |

**SPECIFICATIONS**

| TankJet 28500 & 28500-R Tank Cleaning Nozzles |   |
|---|---|
| Max. tank diameter:                           | 18 ft. (5.5 m)  |
| Operating principle:                          | Fluid-driven reactionary force  |
| Flow rate:                                    | 9.0 to 78.3 gpm (34 to 296 lpm)   |
| Operating pressure:                           | 10.0 to 50 psi (0.7 to 3.4 bar)   |
| Max. temperature:                             | 200°F (93°C)  |
| Materials:                                    | Body, saucer & spacer – PTFE fluoropolymer resin<br>Locking pin – 316 stainless steel |
| Inlet connection:                             | 3/4", 1", 1-1/2", DN20, DN25 and DN40 sanitary tubing                                 |
| Optional accessories:                         | Strainers, recommended mesh size: 100 (150 micron)<br>See page G2                     |

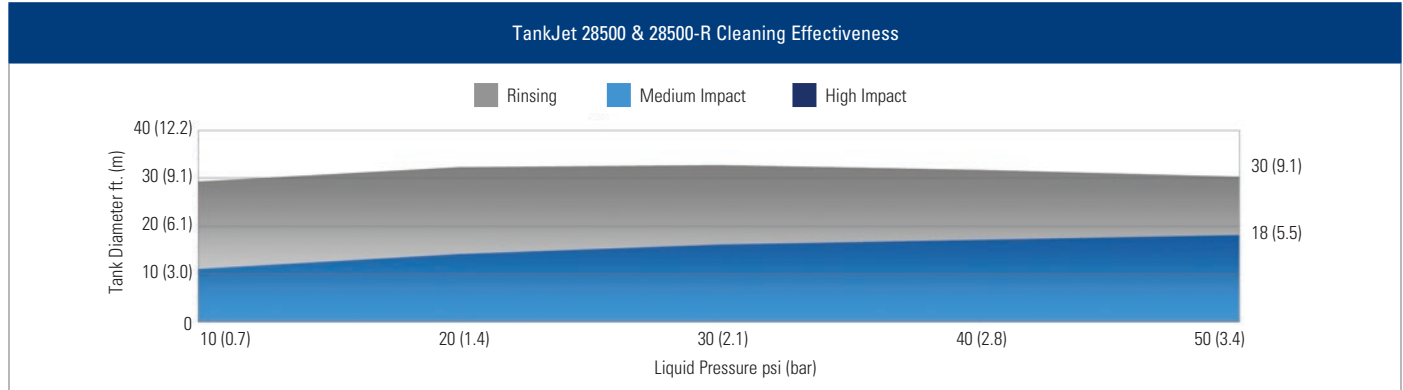
**IDEAL FOR CLEANING:**

- Chemical tanks
- Dairy vats
- Food processing tanks
- Pharmaceutical vessels

For lances, mounting kits, adapters and more, see page G6



## PERFORMANCE DATA



| Nozzle 28500  |               | Orifice Dia.<br>in. (mm) | Liquid Flow Capacity gpm (lpm) |                  |                  |                  |                  |
|---------------|---------------|--------------------------|--------------------------------|------------------|------------------|------------------|------------------|
| Nozzle Inlet  | Capacity Size |                          | 10 psi (0.7 bar)               | 20 psi (1.4 bar) | 30 psi (2.1 bar) | 40 psi (2.7 bar) | 50 psi (3.4 bar) |
| 3/4 or DN20   | 18            | 0.089 (2.3)              | 9.0 (34)                       | 12.7 (48)        | 15.6 (59)        | 18.0 (68)        | 20.0 (76)        |
|               | 23            | 0.110 (2.8)              | 11.5 (44)                      | 16.3 (62)        | 19.9 (75)        | 23.0 (87)        | 26.0 (98)        |
|               | 32            | 0.154 (3.9)              | 16.0 (61)                      | 22.6 (86)        | 27.7 (105)       | 32.0 (121)       | 35.8 (136)       |
|               | 46            | 0.257 (6.5)              | 23.0 (87)                      | 32.5 (123)       | 39.8 (151)       | 46.0 (174)       | 51.4 (195)       |
| 1 or DN25     | 33            | 0.152 (3.9)              | 16.5 (62)                      | 23.0 (87)        | 29.0 (110)       | 33.0 (125)       | 37.0 (140)       |
|               | 50            | 0.209 (5.3)              | 25.0 (95)                      | 35.4 (134)       | 43.3 (164)       | 50.0 (189)       | 55.9 (212)       |
|               | 70            | 0.266 (6.8)              | 35.0 (132)                     | 49.5 (187)       | 60.6 (229)       | 70.0 (265)       | 78.3 (296)       |
| 1-1/2 or DN40 | 52            | 0.201 (5.1)              | 27.0 (102)                     | 37.0 (140)       | 46.0 (174)       | 53.0 (201)       | 59.0 (223)       |
|               | 70            | 0.266 (6.8)              | 35.0 (132)                     | 49.5 (187)       | 60.6 (229)       | 70.0 (265)       | 78.3 (296)       |

## DIMENSIONS AND WEIGHTS

| TankJet 28500 & 28500-R Tank Cleaning Nozzles | Model   | Inlet Conn. Size/Type in. | Inlet Dia.  | W in. (mm)   | L in. (mm)   | A in. (mm)  |
|---|---------|---------------------------|-------------|--------------|--------------|-------------|
|   | 28500   | 3/4                       | 0.76 in.    | 3.31 (84.1)  | 2.63 (66.8)  | 0.38 (9.5)  |
|   |         | DN20                      | 22.2 mm     |              |              |             |
|   |         | 1                         | 1.02 in.    | 3.82 (97.0)  | 2.88 (73.2)  | 0.50 (12.7) |
|   |         | DN25                      | 28.2 mm     |              |              |             |
|   | 28500-R | 1-1/2                     | 1.52 in.    | 4.32 (109.7) | 4.38 (111.3) | 0.75 (19.1) |
|   |         | DN40                      | 40.2 mm     |              |              |             |
|   |         | 3/4                       | 0.76 in.    | 2.25 (57.2)  | 3.69 (93.7)  | 1.43 (36.3) |
|   |         | DN20                      | 22.2 mm     |              |              |             |
| 28500-R                                       | 1       | 1.02 in.                  | 2.75 (69.9) | 4.13 (104.9) | 1.50 (38.1)  |             |
|   | DN25    | 28.2 mm                   |             |              |              |             |
| 28500-R                                       | 1-1/2   | 1.52 in.                  | 3.63 (92.2) | 5.38 (136.7) | 1.75 (44.5)  |             |
|   | DN40    | 40.2 mm                   |             |              |              |             |

Min. tank opening size is 2.5 to 4.5 in. (64 to 114 mm) depending on capacity size.

## ORDERING INFORMATION

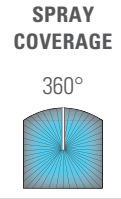
### TANKJET 28500 AND 28500-R TANK CLEANING NOZZLES

|       |                |                       |                       |               |               |                              |
|-------|----------------|-----------------------|-----------------------|---------------|---------------|------------------------------|
| Model | Spray Coverage | Removable Spray Head* | Inlet Conn. Size/Type | Capacity Size | Material Code | EXAMPLE                      |
|       |                |                       |                       |               |               | 28500 E - R - 3/4 - 23 - TEF |

\* Leave blank for standard version

**TANKJET 12900 TANK CLEANING NOZZLE  
FEATURES AND BENEFITS**

- Stationary cluster nozzle offers extra-large flow capacity for robust and reliable tank cleaning
- Equipped with 13 FullJet® nozzles to provide high-capacity cleaning
- No moving parts; stationary nozzles prevent debris from blocking rotation so cleaning is simple and reliable
- Can be specially designed for a wide range of coverages, such as changing individual nozzles to plugs to meet specific coverage needs
- To rinse deeper tanks, Model 12900-2 is equipped with 12 FullJet® nozzles and a 1-1/2 in. bottom outlet connection which can be used with a pipe extension and a TankJet 6353 nozzle assembly
- Special materials available on request



**MOUNTING OPTIONS**

|            |     |
|------------|-----|
| Vertical   | ↑ ↓ |
| Horizontal | ← → |
| 45° Up     | ↗ ↘ |
| 45° Down   | ↙ ↚ |



TankJet 12900-1 tank cleaning nozzle

**SPECIFICATIONS**

| TankJet 12900 Tank Cleaning Nozzle |   |
|------------------------------------|---|
| Max. tank diameter:                | 18 ft. (5.5 m)  |
| Operating principle:               | Fixed stationary  |
| Flow rate:                         | 72 to 385 gpm (280 to 1470 lpm)   |
| Operating pressure:                | 20 to 50 psi (1.4 to 3.4 bar)   |
| Max. temperature:                  | 212°F (100°C)   |
| Materials:                         | Brass or 316 stainless steel (316SS)  |
| Inlet connection:                  | 3" NPT or BSPT (F)  |
| Body outlet:                       | 1/2", 3/4" and 1"   |
| Optional accessories:              | Strainers, recommended mesh size: 16 to 100 (1190 to 150 micron). See page G2 |

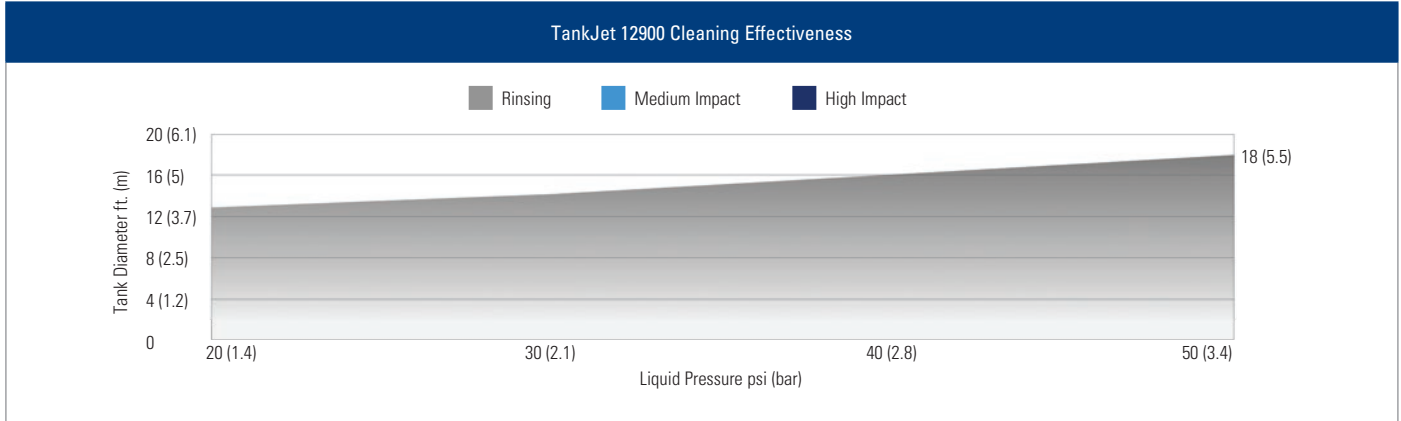
**IDEAL FOR CLEANING:**

- Chemical tanks
- Pulp chests
- Process tanks
- Tanker trucks

For lances, mounting kits, adapters and more, see page G6



PERFORMANCE DATA



| Model 12900-1 | FullJet® Nozzle |             | Max. Free Passage in. (mm) | Liquid Flow Capacity, gpm (lpm) |                  |                  |                  |                  |
|---------------|-----------------|-------------|----------------------------|---------------------------------|------------------|------------------|------------------|------------------|
|               | Body Outlet     | Nozzle Size |                            | Capacity Size                   | 20 psi (1.4 bar) | 30 psi (2.1 bar) | 40 psi (2.8 bar) | 50 psi (3.4 bar) |
|               | 1/2             | 1/2HH       | 40                         | 0.141 (3.6)                     | 72 (280)         | 86 (320)         | 99 (390)         | 109 (415)        |
|               | 3/4             | 3/4HH       | 7                          | 0.203 (5.2)                     | 148 (580)        | 180 (660)        | 205 (800)        | 225 (860)        |
|               | 1               | 1HH         | 12                         | 0.250 (6.4)                     | 252 (1000)       | 306 (1130)       | 350 (1370)       | 385 (1470)       |

Contact your local spray expert for 12900-2 flow rate data.

DIMENSIONS AND WEIGHTS

| TankJet 12900 Tank Cleaning Nozzle | Model   | Body Outlet | L in. (mm) | W in. (mm) | Min. Tank Opening in. (mm) | Weight lbs. (kg) |
|------------------------------------|---------|-------------|------------|------------|----------------------------|------------------|
|                                    | 12900-1 | 1/2         | 6.53 (166) | 7.5 (191)  | 10 (254)                   | 13.7 (6.2)       |
|                                    |         | 3/4         | 6.84 (174) | 8.25 (210) | 10 (254)                   | 15.3 (6.9)       |
|                                    |         | 1           | 7.22 (183) | 9 (229)    | 10 (254)                   | 18.1 (8.2)       |

ORDERING INFORMATION

TANKJET 12900-1 TANK CLEANING NOZZLE

| TANK CLEANER |             |               |   |  |  | NOZZLE       |                 |               |   |  | EXAMPLE |   |     |   |       |   |       |   |       |   |
|--------------|-------------|---------------|---|--|--|--------------|-----------------|---------------|---|--|---------|---|-----|---|-------|---|-------|---|-------|---|
| Model        | Body Outlet | Material Code | + |  |  | Nozzle Size* | Material Code** | Capacity Size | - |  | 12900-1 | - | 3/4 | - | 316SS | + | 3/4HH | - | 316SS | 7 |

\*Add B prior to the nozzle type for BSPT connections.

\*\*Leave blank when ordering brass. Specify 316SS for Stainless Steel Type 316 (DIN 1.4571).

**TANKJET AA090 TANK CLEANER  
FEATURES AND BENEFITS**

- Versatile, high-impact tank cleaner provides efficient, consistent, reliable cleaning with virtually no maintenance
- Lightweight units can be installed permanently or easily moved from tank to tank
- Unit is constructed using corrosion-resistant materials with the motor positioned outside the tank away from harmful caustics for trouble-free operation and long service life
- Component and configuration options allow easy customization to meet the needs a variety of cleaning operations. Choices include:
  - Variable speed, CE-approved air (AG), electric (E), or explosion-proof (E-EP) electric motors
  - Shaft lengths from 1 ft. (0.3 m) up to 10 ft. (3 m)
  - Three nozzle capacity sizes
  - Optional adjustable flange for precise positioning of turret in tank
- Flange mounting options include: three-prong (standard), ASME® raised face, and sanitary tri-clamp

**SPECIFICATIONS**

| TankJet AA090 Tank Cleaner |  |
|----------------------------|--|
| Max. tank diameter:        | 16 ft. (4.9 m)   |
| Operating principle:       | Motor-driven   |
| Flow rate:                 | 1.5 to 7.3 gpm (5.7 to 28 lpm)                                       |
| Operating pressure:        | 100 to 500 psi (6.9 to 34.5 bar)                                     |
| Max. temperature:          | 200°F (93°C)   |
| Materials:                 | 316 stainless steel and carbon filled PTFE fluoropolymer resin seals |
| Inlet connection:          | 1" NPT or BSPT (F)   |
| Motor options:             | Air, electric, explosion-proof electric                              |
| Optional accessories:      | Strainers, recommended mesh size: 100 (150 micron)<br>See page G2    |



**HI**  
HIGH  
IMPACT

**SPRAY  
COVERAGE**

360°



**MOUNTING  
OPTIONS**

|            |   |   |
|------------|---|---|
| Vertical   | ↑ | ↓ |
| Horizontal | ← | → |
| 45° Up     | ↖ | ↗ |
| 45° Down   | ↙ | ↘ |

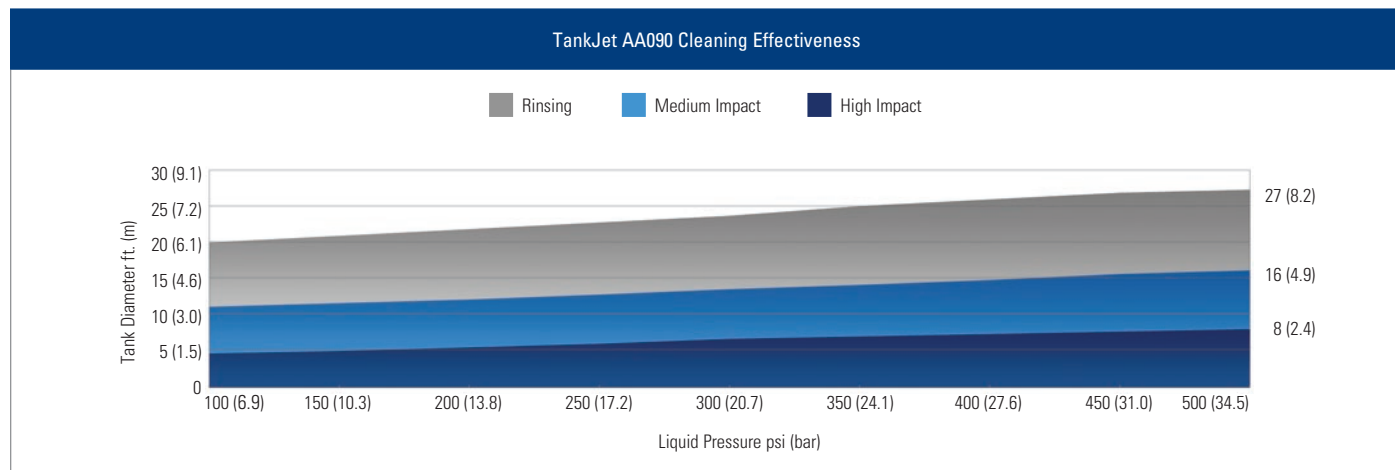


**IDEAL FOR CLEANING:**

- Drums
- Totes
- Process tanks

For lances, mounting kits, adapters and more,  
see page G6

**PERFORMANCE DATA**



| Model | Nozzle Size | Total Flow of Equal Capacity, gpm (lpm)*<br>Liquid Inlet Pressure |                    |                    |                    |                    |
|-------|-------------|---|--------------------|--------------------|--------------------|--------------------|
|       |             | 100 psi (6.9 bar)   | 200 psi (13.8 bar) | 300 psi (20.7 bar) | 400 psi (27.6 bar) | 500 psi (34.5 bar) |
| AA090 | W0005       | 1.5 (5.7)   | 2.0 (7.6)          | 2.4 (9.1)          | 2.8 (10.6)         | 3.2 (12.1)         |
|       | W0010       | 2.7 (10.2)  | 3.7 (14.0)         | 4.5 (17.0)         | 5.1 (19.3)         | 5.8 (22.0)         |
|       | W0014       | 3.5 (13.2)  | 4.7 (17.8)         | 5.8 (22.0)         | 6.6 (25.0)         | 7.3 (28.0)         |

\*Note: Flow rates tabulated above include pressure drop through unit.

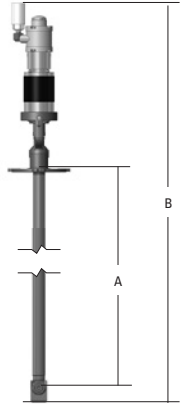
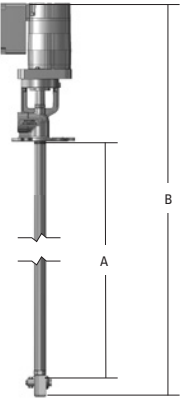
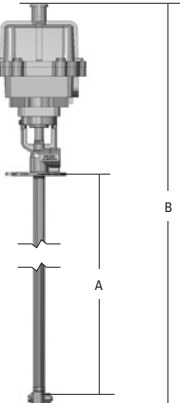
**AIR MOTOR (AG)  
CYCLE TIME DATA**

| Air Pressure<br>psi (bar) | Air<br>Consumption<br>scfm (l/sec) | Approx.<br>Speed<br>(rpm) | Approx. Time for<br>One Complete Cycle<br>(min.) |           |            |  |
|---------------------------|------------------------------------|---------------------------|--|-----------|------------|--|
|                           |                                    |                           | Liquid Pressure, psi (bar)                       |           |            |  |
|                           |                                    | 100 (6.9)                 | 500 (34.5)                                       | 100 (6.9) | 500 (34.5) |  |
| 6 (0.41)                  | 2.3 (65)                           | 5.6                       | 6.3  | 5.5       | 4.9        |  |
| 8 (0.55)                  | 3.2 (91)                           | 8.7                       | 9.2  | 3.6       | 3.4        |  |
| 10 (0.68)                 | 4 (113)                            | 10.7                      | 11.6   | 2.9       | 2.7        |  |

**ELECTRIC (E) & EXPLOSION-PROOF (E-EP) MOTORS  
CYCLE TIME DATA**

| Motor Type      | AC Frequency | Speed (rpm) | Current (amps) | Power (watts) | Approx. Time for One Complete Cycle (min.) |
|-----------------|--------------|-------------|----------------|---------------|--|
| Electric        | 50 Hz.       | 3.1         | .39            | 41            | 11   |
|                 | 60 Hz.       | 3.8         | .33            | 34            | 9  |
| Explosion-Proof | 50 Hz.       | 0.8         | 0.3            | 33            | 44   |
|                 | 60 Hz.       | 1.0         | 0.3            | 28            | 35   |

**DIMENSIONS AND WEIGHTS**

| TankJet AA090   | Tank Cleaner | A<br>Extension Length<br>ft. (m) | B<br>Overall Length<br>in. (m) | Weight<br>lbs. (kg)* |
|---|--------------|----------------------------------|--------------------------------|----------------------|
| AA090AG<br>tank cleaner with<br>air motor<br>                                | AA090AG      | 1.5 (0.5)                        | 35 (0.8)                       | 12.5 (5.7)           |
|   | AA090AG      | 3 (0.9)                          | 53 (1.3)                       | 14 (6.4)             |
|   | AA090AG      | 4 (1.2)                          | 65 (1.6)                       | 15.5 (7)             |
|   | AA090AG      | 6 (1.8)                          | 89 (2.2)                       | 18.5 (8.4)           |
| AA090E<br>tank cleaner with<br>electric motor<br>                           | AA090E       | 1.5 (0.5)                        | 29.6 (0.7)                     | 12.5 (5.7)           |
|   | AA090E       | 3 (0.9)                          | 47.6 (1.2)                     | 14 (6.4)             |
|   | AA090E       | 4 (1.2)                          | 59.6 (1.5)                     | 15.5 (7)             |
|   | AA090E       | 6 (1.8)                          | 83.6 (2.1)                     | 18.5 (8.4)           |
| AA090E-EP<br>tank cleaner<br>with electric<br>explosion-proof<br>motor<br> | AA090E-EP    | 1.5 (0.5)                        | 32.6 (0.8)                     | 20 (9.1)             |
|   | AA090E-EP    | 3 (0.9)                          | 50.6 (1.3)                     | 21.5 (10)            |
|   | AA090E-EP    | 4 (1.2)                          | 62.6 (1.6)                     | 23 (10.5)            |
|   | AA090E-EP    | 6 (1.8)                          | 86.6 (2.2)                     | 26 (11.8)            |

\*Add additional weight from the flange options' chart if not using the standard flange.



**DIMENSIONS AND WEIGHTS**

| TankJet AA090 Spray Head | Min. Tank Opening in. (m) | A in. (mm) | B in. (mm) | C in. (mm) |
|--------------------------|---------------------------|------------|------------|------------|
|                          | 2.3 (59)                  | 1.1 (29)   | 0.73 (18)  | 2.0 (51)   |

**FLANGE OPTIONS**

| Flange Type                   | Size | Sales Code | Net Weight lbs. (kg)* |
|-------------------------------|------|------------|-----------------------|
| Three-Prong (std.)            | —    | —          | —                     |
| ASME® 150# Raised Face Flange | 3    | 3F         | 10.5 (4.8)            |
|                               | 4    | 4F         | 15.5 (7.0)            |
|                               | 6    | 6F         | 24.5 (11.1)           |
| Sanitary Tri-Clamp Flange     | 3    | 3SF*       | —                     |
|                               | 4    | 4SF        | 0.25 (0.1)            |
|                               | 6    | 6SF        | 3.0 (1.4)             |

\*Add additional weight to tank cleaner if not using the standard flange.

**ORDERING INFORMATION**

**TANKJET AA090 TANK CLEANER**

| TANK CLEANER       |                    |        |                  | NOZZLE           |                            | EXAMPLE                   |
|--------------------|--------------------|--------|------------------|------------------|----------------------------|---------------------------|
| Model <sup>1</sup> | Motor <sup>2</sup> | Flange | -EP <sup>3</sup> | Extension Length | + Nozzle Size <sup>4</sup> | AA090 E 6F -EP - 3 + W005 |

<sup>1</sup>Add B after AA in the tank cleaner model for BSPT connections.

<sup>2</sup>Motor: Specify AG for air, E for electric.

<sup>3</sup>Add -EP for explosion-proof, leave blank for standard version.

<sup>4</sup>Add B prior to nozzle size for BSPT connections.

**TANKJET D26984 AND D40159  
TANK CLEANING NOZZLE  
FEATURES AND BENEFITS**

- Driven by the flow of the cleaning liquid, three flat sprays mounted in a rotating spray head rotate at a near-constant speed of 2 to 30 rpm over a wide range of fluid pressures and deliver as much as four times the impact of conventional rotating nozzles
- Slow, controlled rotation provides extended dwell time on tank surface making these nozzles ideal for cleaning, sanitizing and foaming applications
- Sanitary tubing and wall mounting options available upon request
- ATEX-certified versions available upon request



For lances, mounting kits, adapters and more, see page G6

D26984 & D40159 stainless steel tank cleaning nozzle



D26984 & D40159 PVDF tank cleaning nozzle



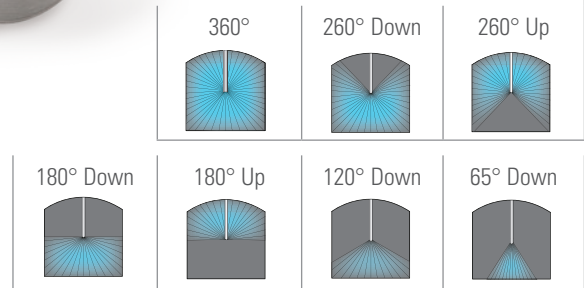
**SPECIFICATIONS**

| TJ D26984 and D40159 Tank Cleaning Nozzles | Stainless Steel   | PVDF  |
|--|---|---|
| Max. tank diameter:                        | 16 ft. (4.9 m)  | 16 ft. (4.9 m)                                  |
| Operating principle:                       | Fluid-driven constant speed   | Fluid-driven constant speed                     |
| Flow rate:                                 | 3.2 to 19.5 gpm (12.0 to 74 lpm)  | 3.2 to 19.5 gpm (12.0 to 74 lpm)                |
| Operating pressure:                        | 30 to 90 psi (2.1 to 6.2 bar)   | 30 to 90 psi (2.1 to 6.2 bar)                   |
| Max. temperature:                          | 160°F (70°C)  | 160°F (70°C)                                    |
| Materials:                                 | Stainless Steel – 303 or 316 stainless steel body with PTFE sleeve and washer | PVDF – PVDF body with PTFE washer and PE sleeve |
| Inlet connection:                          | 1/2" NPT or BSPT  | 3/8" and 1/2" NPT or BSPT                       |
| Optional accessories:                      | Strainers, recommended mesh size: 200 (74 micron)<br>See page G2              |   |

**IDEAL FOR CLEANING:**

- Chemical processing tanks
- Food processing tanks
- Dry powder tanks
- Mixing tanks
- Pharmaceutical

**SPRAY COVERAGE**

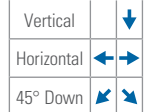


**STRAINER OPTION**



See page G2 for specifications.

**MOUNTING OPTIONS**



**SPRAY COVERAGE**

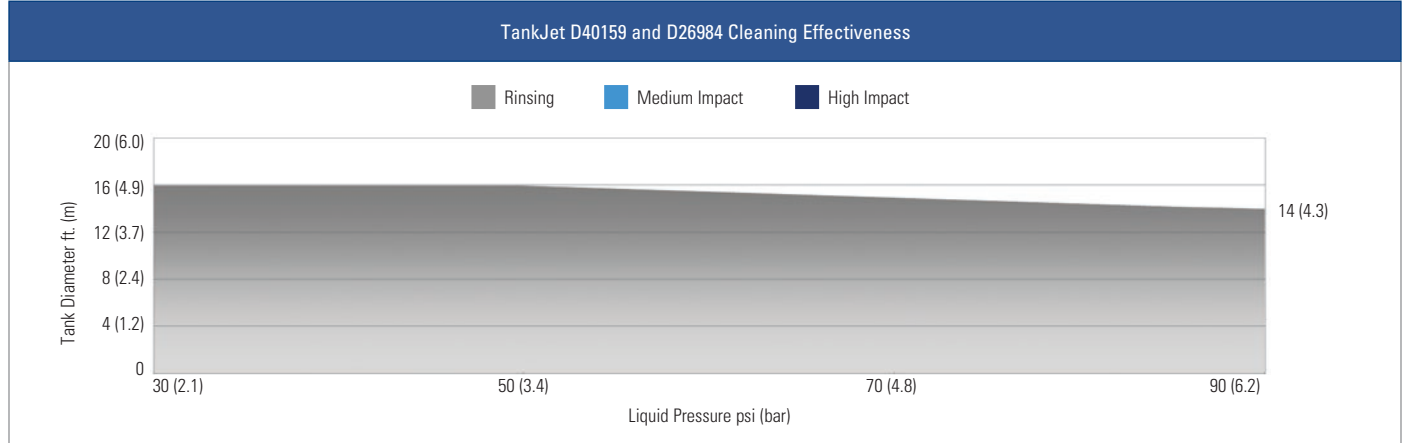
| Nozzle Model | Capacity Size | 360° | 260° Down | 260° Up** | 180° Down | 180° Up** | 120° Down | 65° Down |
|--------------|---------------|------|-----------|-----------|-----------|-----------|-----------|----------|
| D40159       | 3.2           |      | •         | •         | •         | •         | •         |          |
|              | 4.5           |      | •         | •         | •         | •         | •         |          |
|              | 9.9           |      | •         | •         | •         | •         | •         | •        |
|              | 13.6          |      | •         | •         | •         | •         | •         | •        |
| D26984       | All           | •    |           |           |           |           |           |          |

Note: D40159-SS, -316SS not available in 3.2 capacity.

\*\*Add "A" to the D40159 part number for upward spray toward inlet.



PERFORMANCE DATA



| Model  |        | Inlet Conn. Size in. | Capacity Size | Liquid Flow Capacity gpm (lpm) |                  |                  |                  |
|--------|--------|----------------------|---------------|--------------------------------|------------------|------------------|------------------|
| D40159 | D26984 |                      |               | 30 psi (2.1 bar)               | 50 psi (3.4 bar) | 70 psi (4.8 bar) | 90 psi (6.2 bar) |
|        | •      | 3/8                  | 3.2           | 3.2 (12.1)                     | 3.8 (14.5)       | 4.4 (16.9)       | 5 (19.1)         |
|        | •      |                      | 4.5           | 3.8 (14.4)                     | 4.7 (17.9)       | 5.5 (21)         | 6.3 (24)         |
| •      | •      | 1/2                  | 3.2           | 3.2 (12.1)                     | 3.8 (14.5)       | 4.4 (16.9)       | 5 (19.1)         |
| •      | •      |                      | 4.5           | 3.8 (14.4)                     | 4.7 (17.9)       | 5.5 (21)         | 6.3 (24)         |
| •      | •      |                      | 9.9           | 8.4 (32)                       | 10.6 (40)        | 12.5 (48)        | 14.4 (55)        |
| •      | •      |                      | 13.6          | 11.3 (43)                      | 14.5 (55)        | 17.3 (66)        | 19.8 (75)        |

DIMENSIONS AND WEIGHTS

| Tank Cleaning Nozzles | Model  | Material | L in. (mm) | A in. (mm) | B in. (mm) | Min. Tank Opening in. (mm) | Net Weight lbs. (kg) |
|-----------------------|--------|----------|------------|------------|------------|----------------------------|----------------------|
|                       | D40159 | PVDF     | 5.75 (146) | 1.94 (49)  | 1.92 (49)  | 2.25 (56)                  | 0.43 (0.19)          |
|                       | D26984 |          |            |            |            |                            |                      |
|                       | D40159 | SS       | 5.75 (146) | 2 (50)     | 1.6 (41)   | 2.25 (56)                  | 1.62 (0.73)          |
|                       | D26984 |          |            |            |            |                            |                      |

ORDERING INFORMATION

D40159 TANK CLEANING NOZZLE

Model - Inlet Conn. Size\* - Material Code\*\* - Capacity Size - Spray Coverage - Spray Direction†

EXAMPLE: **D40159** - **3/8** - **PVDF** - **3.2** - **260** - **A**

D26984 TANK CLEANING NOZZLE

Model - Inlet Conn. Size\* - Material Code\*\* - Capacity Size


EXAMPLE: **D26984** - **3/8** - **PVDF** - **3.2**

\*Add B prior to the inlet connection for BSPT connections.

\*\*Material: Specify PVDF for chemical-resistant material. Specify SS for Stainless Steel Type 303 (DIN 1.4305). Specify 316SS for Stainless Steel Type 316 (DIN 1.4571).

†Add "A" to the D40159 part number for upward spray toward inlet.

**TANKJET D41800E TANK CLEANING NOZZLE  
FEATURES AND BENEFITS**

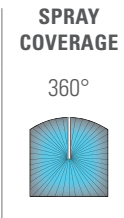
- Compact, constant-speed nozzles provide up to four times the impact of conventional rotating nozzles
- Rotating head with three flat sprays is driven by the flow of the cleaning liquid
- Rotates at nearly constant speed over a wide range of fluid pressures
- Slow, controlled rotation provides more dwell time on tank surface, making it perfect for cleaning, sanitizing and foaming applications
- Patented self-flushing water bearing design eliminates internal bearings and races
- ATEX-certified versions available upon request 
- Choice of threaded or sanitary pin
- TankJet D41800-3A nozzles conform to 3-A Sanitary Standard 78 for spray cleaning devices to remain in place
- All stainless steel construction provides maximum chemical and wear resistance

**SPECIFICATIONS**

| TankJet D41800E Tank Cleaning Nozzle |  |
|--------------------------------------|--|
| Max. tank diameter:                  | 16 ft. (4.9 m)   |
| Operating principle:                 | Fluid-driven constant speed                                      |
| Flow rate:                           | 3.0 to 22.8 gpm (11.0 to 86 lpm)                                 |
| Operating pressure:                  | 30 to 90 psi (2.1 to 6.2 bar)                                    |
| Max. temperature:                    | 265°F (130°C)  |
| Materials:                           | 303 stainless steel or 316L stainless steel                      |
| Rotation speed:                      | 2 to 30 rpm  |
| Inlet connection:                    | 3/8" NPT or BSPT (F), DN19                                       |
| Optional accessories:                | Strainers, recommended mesh size: 200 (74 micron)<br>See page G2 |

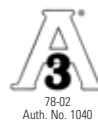


TankJet D41800E constant speed tank cleaning nozzle



**MOUNTING OPTIONS**

|            |   |   |
|------------|---|---|
| Vertical   | ↑ | ↓ |
| Horizontal | ← | → |
| 45° Up     | ↖ | ↗ |
| 45° Down   | ↘ | ↙ |



This unit meets the requirements of 3-A Sanitary Standard 78. Spray cleaning devices intended to remain in place.

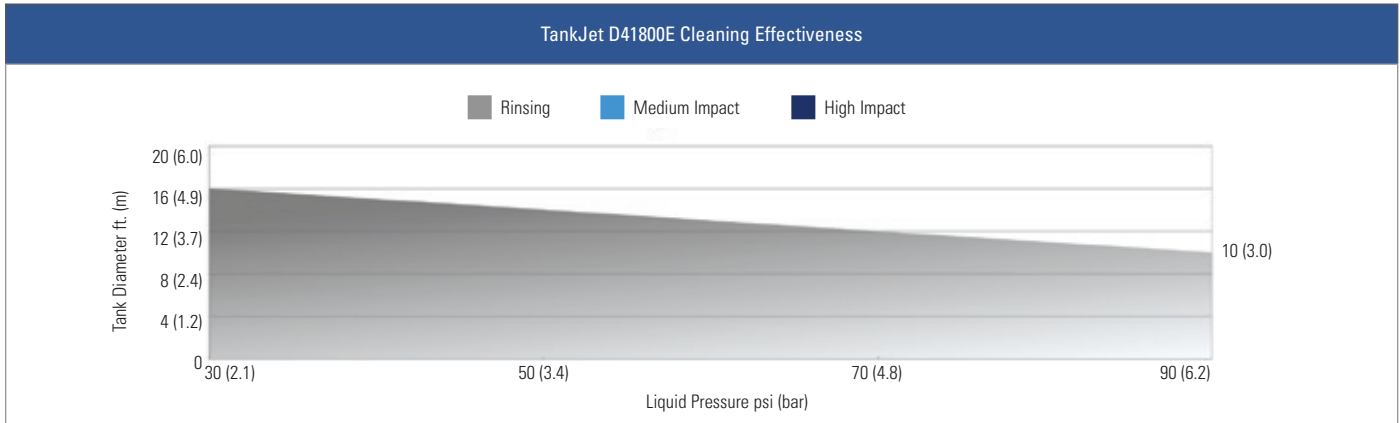
**IDEAL FOR CLEANING:**

- Chemical processing tanks
- Dry powder tanks
- Food processing tanks
- Mixing tanks
- Pharmaceutical tanks

For lances, mounting kits, adapters and more, see page G6



PERFORMANCE DATA



| Model   | Inlet Conn. Size/Type | Capacity Size | Liquid Flow Capacity gpm (lpm) |                  |                  |                  |
|---------|-----------------------|---------------|--------------------------------|------------------|------------------|------------------|
|         |                       |               | 30 psi (2.1 bar)               | 50 psi (3.4 bar) | 70 psi (4.8 bar) | 90 psi (6.2 bar) |
| D41800E | 3/8                   | 3.2           | 3.0 (11)                       | 3.7 (14)         | 4.4 (17)         | 5.0 (19)         |
|         |                       | 4.5           | 4.1 (15)                       | 5.2 (20)         | 6.2 (23)         | 7.1 (27)         |
|         |                       | 9.9           | 8.6 (33)                       | 10.9 (41)        | 13.0 (49)        | 14.9 (56)        |
|         |                       | 13.6          | 12.4 (47)                      | 15.6 (59)        | 18.5 (70)        | 21.1 (80)        |
|         | DN19                  | 3.2           | 4.0 (15)                       | 5.1 (19)         | 6.1 (23)         | 7.0 (26)         |
|         |                       | 4.5           | 4.6 (17)                       | 5.8 (22)         | 6.9 (26)         | 7.9 (30)         |
|         |                       | 9.9           | 9.2 (35)                       | 11.6 (44)        | 13.8 (52)        | 15.8 (60)        |
|         |                       | 13.6          | 13.4 (51)                      | 16.8 (64)        | 20.0 (76)        | 22.8 (86)        |

DIMENSIONS AND WEIGHTS

| D41800E Tank Cleaning Nozzle | Model      | Inlet Conn. | L in. (mm) | A in. (mm) | B in. (mm)  | C in. (mm)  | Pin Length in. (mm) | Min. Tank Opening in. (mm) | Weight lbs. (kg) |
|------------------------------|------------|-------------|------------|------------|-------------|-------------|---------------------|----------------------------|------------------|
|                              | D41800E    | 3/8"        | 3.1 (78)   | 1.2 (30)   | 0.84 (21.2) | -           | -                   | 1.25 (31)                  | 0.28 (0.13)      |
|                              |            | DN19        | 3.8 (97)   | 1.2 (30)   | 0.85 (21.6) | 0.76 (19.2) | 1.5 (38)            | 1.6 (40)                   | 0.29 (0.13)      |
|                              | D41800E-3A | DN19        | 4.1 (104)  | 1.2 (30)   | 0.85 (21.6) | 0.76 (19.2) | 1.5 (38)            | 1.6 (40)                   | 0.29 (0.13)      |

ORDERING INFORMATION

TANKJET D41800E TANK CLEANING NOZZLE

|       |              |                 |               |                        |
|-------|--------------|-----------------|---------------|------------------------|
| Model | Inlet Conn.* | Material Code** | Capacity Size | EXAMPLE                |
|       |              |                 |               | D41800E - 3/8 - SS 9.9 |

TANKJET D41800E-3A TANK CLEANING NOZZLE

|       |                        |                 |               |             |                              |
|-------|------------------------|-----------------|---------------|-------------|------------------------------|
| Model | Inlet Conn. Size/Type* | Material Code** | Capacity Size | 3A Version† | EXAMPLE                      |
|       |                        |                 |               |             | D41800E - 19 - 316L 9.9 - 3A |

\*Add B prior to the inlet connection for BSPT connections.

\*\* Materials: Specify SS for Stainless Steel Type 303 (DIN1.4305). Specify 316L for Stainless Steel Type 316L (DIN1.4404).

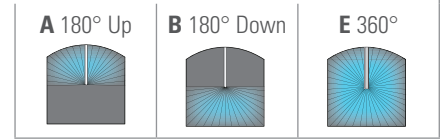
†Leave blank for standard version.

**TANKJET D41990 TANK CLEANING NOZZLE  
FEATURES AND BENEFITS**

- Low-pressure, low-volume rinsing of small tanks and containers
- Fluid-driven reactionary force nozzle – no motor source needed to drive spray head
- Micro-size nozzle fits into very small tank openings – as small as 1 in. (25 mm)
- All 316L stainless steel construction for long wear life and corrosion resistance
- Suitable for high-temperature applications up to 265°F (130°C)
- ATEX-certified versions available upon request



**SPRAY COVERAGE**



**MOUNTING OPTIONS**

|            |   |   |
|------------|---|---|
| Vertical   | ↑ | ↓ |
| Horizontal | ← | → |
| 45° Up     | ↖ | ↗ |
| 45° Down   | ↙ | ↘ |



TankJet D41990A tank cleaning nozzle, see page E10



TankJet D41990 tank cleaning nozzle

**SPECIFICATIONS**

| TankJet D41990A Tank Cleaning Nozzle |  |
|--------------------------------------|--|
| Max. tank diameter:                  | 16 ft. (4.9 m)   |
| Operating principle:                 | Fluid-driven reactionary force                                   |
| Flow rate:                           | 7.5 to 37 gpm (29 to 141 lpm)                                    |
| Operating pressure:                  | 15.0 to 60 psi (1 to 4 bar)                                      |
| Max. temperature:                    | 265°F (130°C)  |
| Materials:                           | 316L stainless steel   |
| Inlet connection:                    | 3/8", 1/2", 3/4" NPT or BSPT (F), CIP 182 or 192                 |
| Optional accessories:                | Strainers, recommended mesh size: 200 (74 micron)<br>See page G2 |

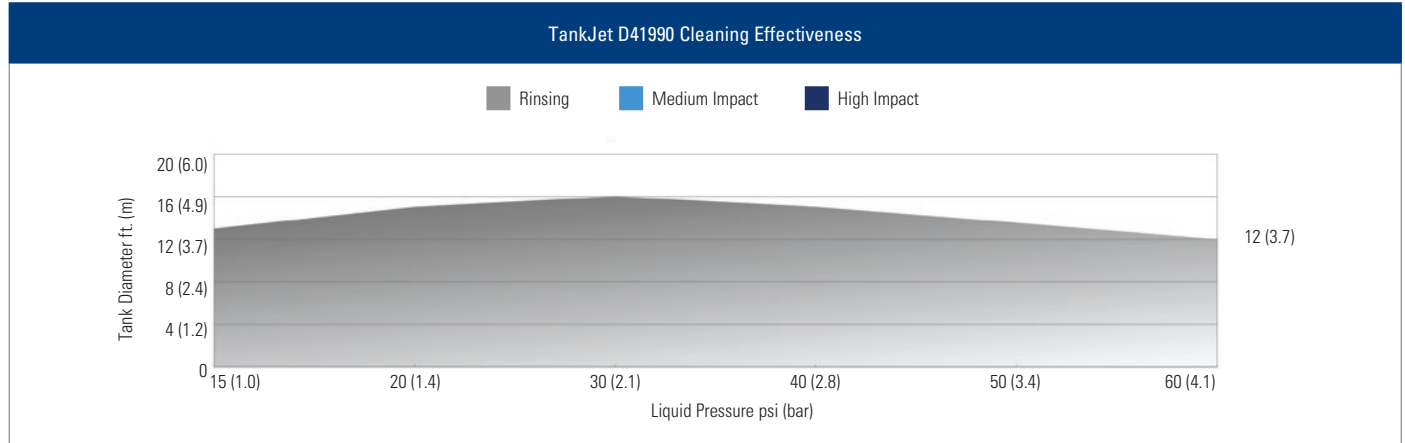
**IDEAL FOR CLEANING:**

- Chemical tanks
- Beverage tanks
- Canisters
- Food tanks
- Keg/drum
- Tote/container

**ADDITIONAL SIZES AVAILABLE**  
For D41990 up to 6.5 ft. see page E10



PERFORMANCE DATA



| Inlet Conn. Size/Type | Capacity Size | Capacity, gpm (lpm) |                  |                  |                  |                  |                  |
|-----------------------|---------------|---------------------|------------------|------------------|------------------|------------------|------------------|
|                       |               | 15 psi (1.0 bar)    | 20 psi (1.4 bar) | 30 psi (2.1 bar) | 40 psi (2.8 bar) | 50 psi (3.4 bar) | 60 psi (4.1 bar) |
| 1/2" CIP192           | 13.6          | 7.5 (29)            | 8.8 (33)         | 10.5 (40)        | 12 (45)          | 13.1 (49)        | 14.2 (54)        |
|                       | 15            | 9 (34)              | 10.5 (40)        | 12.6 (48)        | 14.4 (55)        | 15.8 (60)        | 17.2 (65.1)      |
|                       | 21            | 12.8 (49)           | 15 (57)          | 18 (68)          | 21 (78)          | 23 (95)          | 25 (93)          |
|                       | 24            | 13.6 (52)           | 16 (61)          | 19.4 (74)        | 22(85)           | 25 (93)          | 27 (101)         |
| 3/4" CIP192           | 32            | 20 (76)             | 23 (88)          | 28 (105)         | 32 (120)         | 34 (130)         | 37 (141)         |

DIMENSIONS AND WEIGHTS

| TankJet D41990 Tank Cleaning Nozzle | Inlet Conn. Size* | L in (mm) | A in (mm) | B in (mm) | C in (mm)   | Pin Length in (mm) | Min. Tank Opening in (mm) | Weight lbs. (kg) |
|-------------------------------------|-------------------|-----------|-----------|-----------|-------------|--------------------|---------------------------|------------------|
|                                     | 1/2", 3/4"        | 4.4 (111) | 1.3 (34)  | 1.2 (31)  | -           | -                  | 1.5 (38)                  | 0.8 (0.36)       |
|                                     | CIP192            | 4.4 (111) | 1.3 (34)  | 1.2 (31)  | 0.76 (19.2) | 3.9 (98)           | 3.87 (99)                 | 0.8 (0.36)       |

\*Additional sizes available: See page E10 – 3/8 in. and CIP182 conn.

ORDERING INFORMATION

TANKJET D41990 TANK CLEANING NOZZLE

|       |                |                        |               |               |
|-------|----------------|------------------------|---------------|---------------|
| Model | Spray Coverage | Inlet Conn. Size/Type* | Material Code | Capacity Size |
|-------|----------------|------------------------|---------------|---------------|

EXAMPLE

|        |   |   |   |     |   |      |   |    |
|--------|---|---|---|-----|---|------|---|----|
| D41990 | - | E | - | 1/2 | - | 316L | - | 21 |
|--------|---|---|---|-----|---|------|---|----|

Add B prior to the inlet connection size/type for BSPT connections.

**TANKJET 9 TANK CLEANING NOZZLES  
FEATURES AND BENEFITS**

- Multiple flat spray nozzles are mounted in a rotating spray head that is driven by the flow of the cleaning liquid
- Simple and reliable, with no ball bearings, tank cleaners operate effectively in any position, vertical or horizontal
- Well-suited to clean-in-place and sanitary applications, chemical distribution and passivation
- Offered in three versions for medium-size tanks:
  - TankJet 9-A features two flat side sprays, each covering 175°, see page E14
  - The TankJet 9-B and 9-C versions each have six flat sprays and provide coverage of the entire tank

TankJet 9-A tank cleaning nozzle, see page E14



TankJet 9-B tank cleaning nozzle



TankJet 9-C tank cleaning nozzle



**R**  
RINSING

**SPRAY COVERAGE**  
TJ9-B, TJ9-C  
360°

**MOUNTING OPTIONS**

|            |   |   |
|------------|---|---|
| Vertical   | ↑ | ↓ |
| Horizontal | ← | → |
| 45° Up     | ↖ | ↗ |
| 45° Down   | ↘ | ↙ |

**SPECIFICATIONS**

| Tank Cleaning Nozzle  | TJ9-B   | TJ9-C   |
|-----------------------|---|---|
| Max. tank diameter:   | 12 ft. (3.7 m)  | 16 ft. (4.9 m)  |
| Operating principle:  | Fluid-driven reactionary force  | Fluid-driven reactionary force  |
| Flow rate:            | 5 to 17 gpm (18.9 to 64 lpm)  | 12 to 38 gpm (45 to 144 lpm)  |
| Operating pressure:   | 10 to 120 psi (0.7 to 8.3 bar)  | 10 to 120 psi (0.7 to 8.3 bar)  |
| Max. temperature:     | 190°F (88°C)  | 190°F (88°C)  |
| Materials:            | Bearings – Carbon-filled PTFE fluoropolymer<br>All other metallurgy – 316 stainless steel | Bearings – Carbon-filled PTFE fluoropolymer<br>All other metallurgy – 316 stainless steel |
| Inlet connection:     | 1/2" NPT or BSPT (F)  | 3/4" NPT or BSPT (F)  |
| Optional accessories: | Strainers, recommended mesh size: 20 (840 micron)<br>See page G2                          |   |

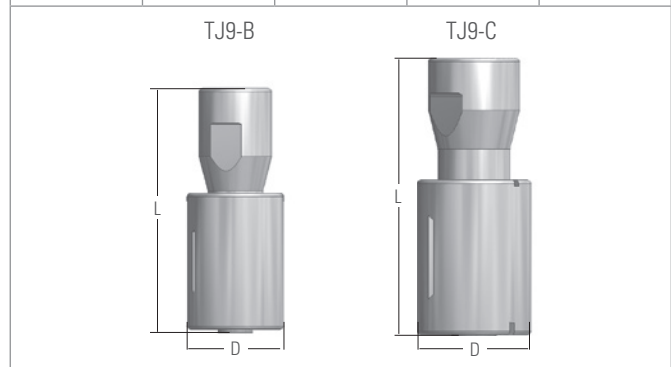
For lances, mounting kits, adapters and more, see page G6

**IDEAL FOR CLEANING:**

- Brewery tanks
- Chemical containers
- Drums and kegs
- Food processing tanks
- Pharmaceutical tanks
- Wine barrels and vats

**DIMENSIONS AND WEIGHTS**

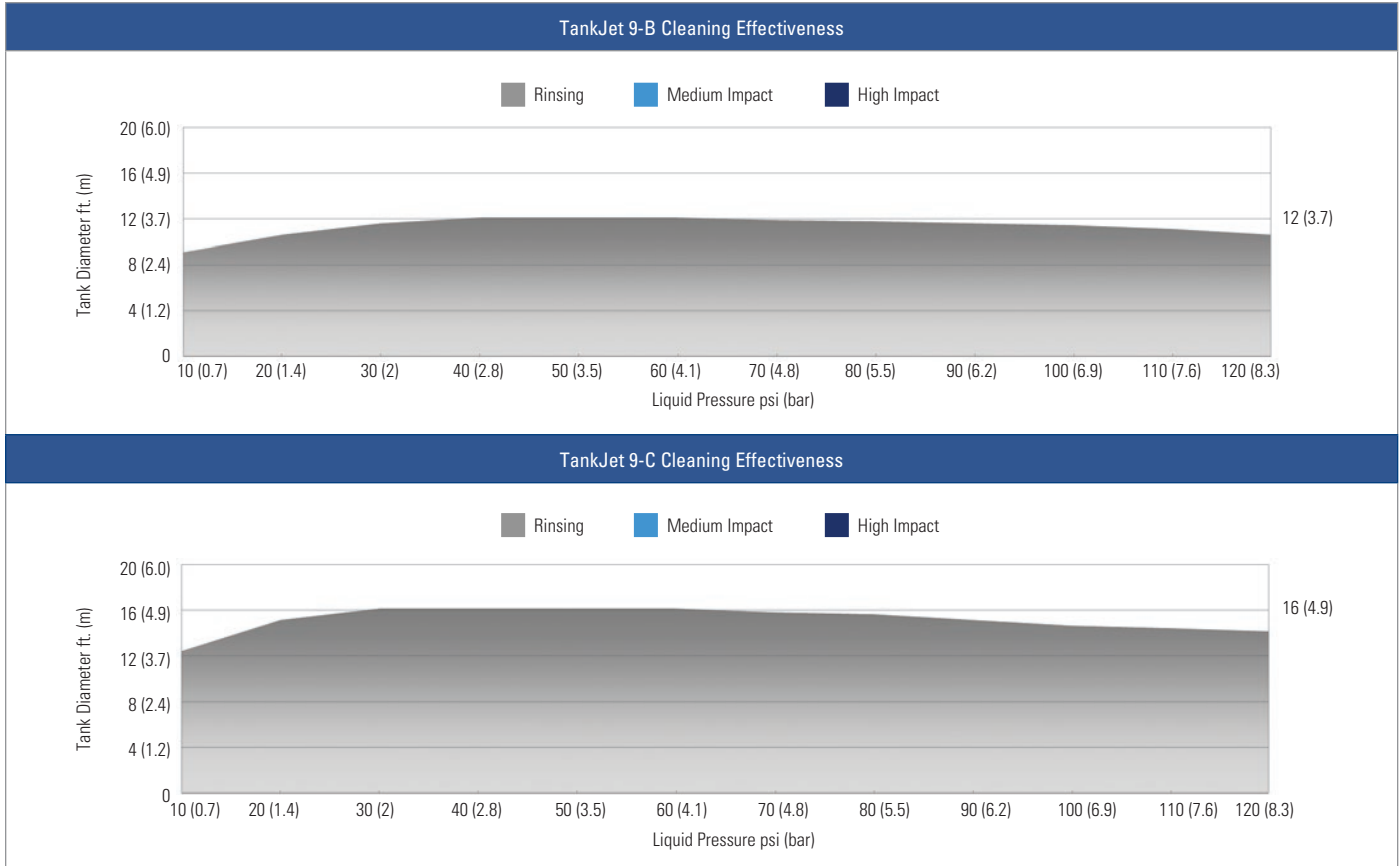
| Nozzle | L in. (mm) | D (Dia.) in. (mm) | Min. tank opening in. (mm) | Weight lbs. (kg) |
|--------|------------|-------------------|----------------------------|------------------|
| TJ9-B  | 3.5 (88)   | 1.38 (35)         | 1.5 (38)                   | .58 (.26)        |
| TJ9-C  | 4 (102)    | 1.63 (42)         | 1.75 (44)                  | .96 (.44)        |



Additional sizes available: See page E12 – 3/8 in. conn.



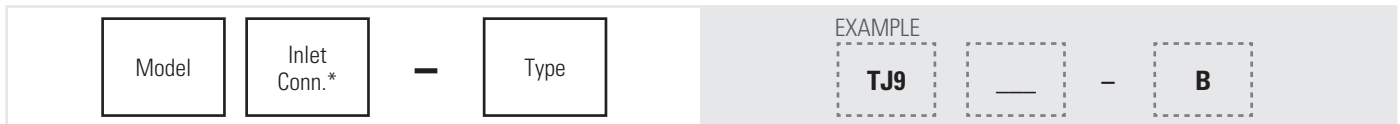
**PERFORMANCE DATA**



| Model | Type | Liquid Flow Capacity gpm (lpm) |                  |                  |                  |                  |                   |                   |                   |
|-------|------|--------------------------------|------------------|------------------|------------------|------------------|-------------------|-------------------|-------------------|
|       |      | 10 psi (0.7 bar)               | 30 psi (2.1 bar) | 50 psi (3.5 bar) | 70 psi (4.8 bar) | 90 psi (6.2 bar) | 100 psi (6.9 bar) | 110 psi (7.6 bar) | 120 psi (8.3 bar) |
| TJ9   | B    | 5.0 (18.9)                     | 8.0 (30)         | 11.0 (42)        | 13.0 (49)        | 14.0 (53)        | 15.0 (57)         | 16.0 (61)         | 17.0 (64)         |
|       | C    | 12.0 (45)                      | 20 (76)          | 25 (95)          | 30 (114)         | 33 (123)         | 35 (133)          | 37 (140)          | 38 (144)          |

**ADDITIONAL SIZES AVAILABLE**  
**TankJet 9-A see page E14**

**ORDERING INFORMATION**  
 TANKJET 9-B AND 9-C TANK CLEANING NOZZLE



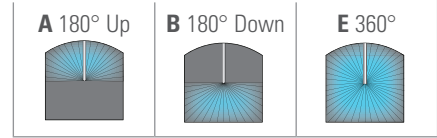
\* Leave blank for NPT connection or insert B for BSPT connection.

**TANKJET 63225 & 63225-3A SPRAY BALL FEATURES AND BENEFITS**

- Stationary spray balls are ideal for sanitary rinsing and low-pressure washing, offering a low-cost way to handle easy-to-remove residues
- Wrap-around retaining clip is supplied with each spray ball
- Because there are no moving parts spray balls are well-suited to clean-in-place (CIP) installations
- 63225-3A sanitary spray balls have a polished 32Ra interior and exterior surface finish with a threadless, self-draining design that prevents buildup
- Choice of 180° or 360° spray coverage, with custom drilling available for both spray pattern and flow rate on model 63225-3A spray balls
- Can be installed in any position
- 316L stainless steel construction permits use with a wide array of chemicals



**SPRAY COVERAGE**



**MOUNTING OPTIONS**

|            |   |   |
|------------|---|---|
| Vertical   | ↑ | ↓ |
| Horizontal | ← | → |
| 45° Up     | ↖ | ↗ |
| 45° Down   | ↘ | ↙ |

TankJet 63225-3A spray balls



**SPECIFICATIONS**

| TankJet 63225 & 63225-3A Spray Balls |  |
|--------------------------------------|--|
| Max. tank diameter:                  | 13 ft. (4 m)   |
| Operating principle:                 | Stationary   |
| Flow rate:                           | 22 to 51 gpm (83 to 192 lpm)   |
| Operating pressure:                  | 15 to 40 psi (1.0 to 2.8 bar)  |
| Max. temperature:                    | 400°F (204°C)  |
| Materials:                           | 316L stainless steel   |
| Inlet tube size:                     | TankJet 63225: 3/4", 1"<br>TankJet 63225-3A: 3/4", 1", 1-1/2"                |
| Optional accessories:                | Strainers, recommended mesh size: 16 to 50 (1190 to 297 micron). See page G2 |



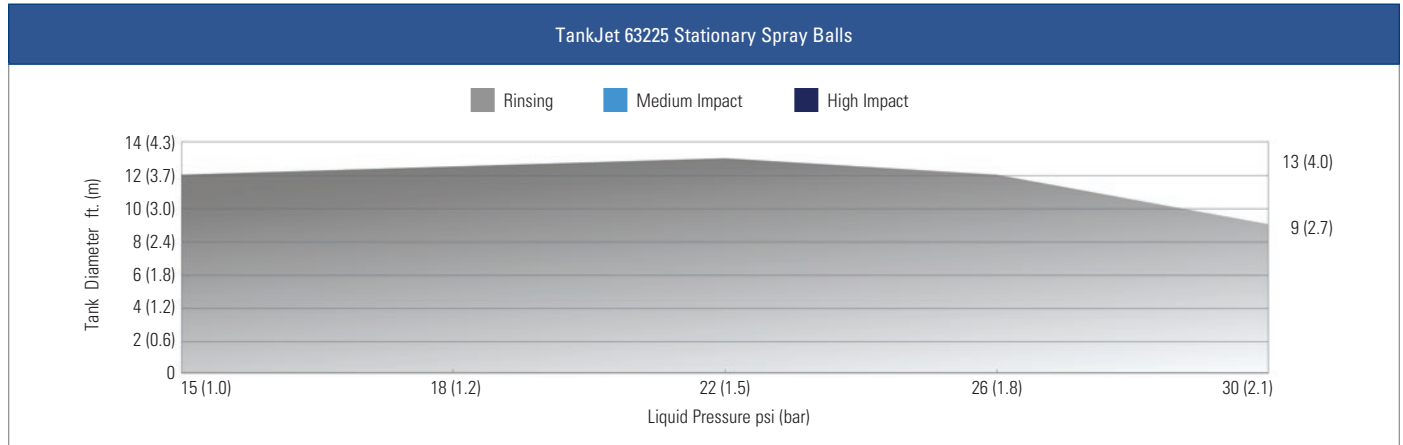
This unit meets the requirements of 3-A Sanitary Standard 78. Spray cleaning devices intended to remain in place.

**IDEAL FOR CLEANING:**

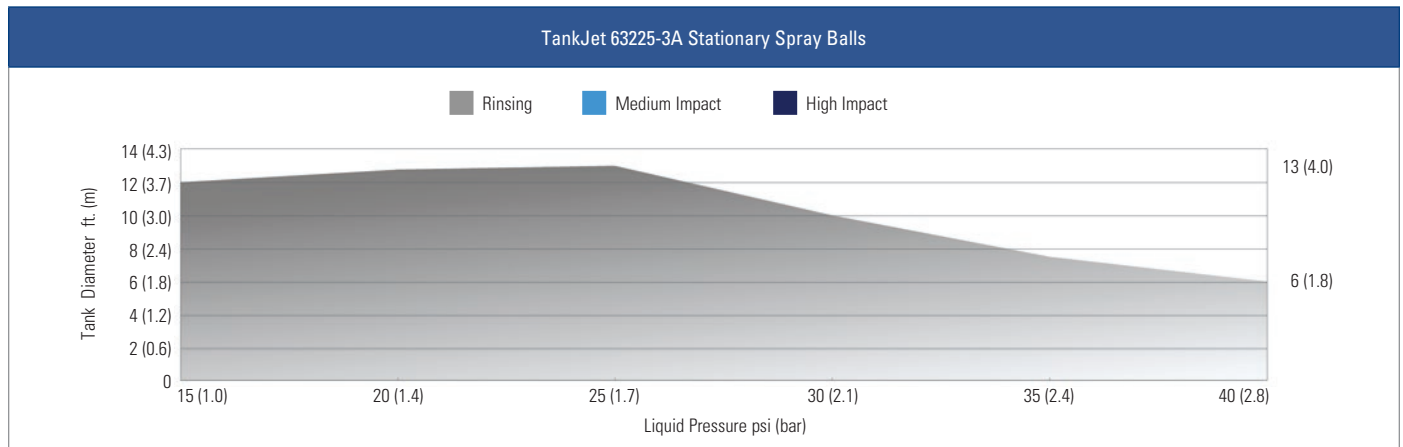
- Chemical processing tanks
- Food processing vats and tanks
- Pharmaceutical vessels

For lances, mounting kits, adapters and more, see page G6

PERFORMANCE DATA



| Model 63225         |               | Liquid Flow Capacity gpm (lpm) |                  |                  | Max. Tank Dia. ft. (m) |
|---------------------|---------------|--------------------------------|------------------|------------------|------------------------|
| Inlet Tube Size in. | Capacity Size | 15 psi (1.0 bar)               | 22 psi (1.5 bar) | 30 psi (2.1 bar) |                        |
| 3/4                 | 22            | 22 (83)                        | 27 (102)         | 31 (117)         | 10 (3.0)               |
| 1                   | 32            | 32 (121)                       | 39 (148)         | 45 (170)         | 13 (4.0)               |



| Model 63225-3A  |               |               | Liquid Flow Capacity gpm (lpm) |                  |                  | Max. Tank Dia. ft. (m) |
|-----------------|---------------|---------------|--------------------------------|------------------|------------------|------------------------|
| Inlet Tube Size | Ball Diameter | Capacity Size | 15 psi (1.0 bar)               | 25 psi (1.7 bar) | 40 psi (2.8 bar) |                        |
| 3/4             | 1.5           | 40            | 31 (115)                       | 40 (151)         | 51 (192)         | 10 (3.0)               |
| 1               | 2             |               |                                |                  |                  | 13 (4.0)               |
| 1-1/2           | 2.5           |               |                                |                  |                  | 13 (4.0)               |
| 1-1/2           | 2.5           |               |                                |                  |                  | 13 (4.0)               |
| 1-1/2           | 3             |               |                                |                  |                  | 13 (4.0)               |
| 1-1/2           | 4             |               |                                |                  |                  | 13 (4.0)               |



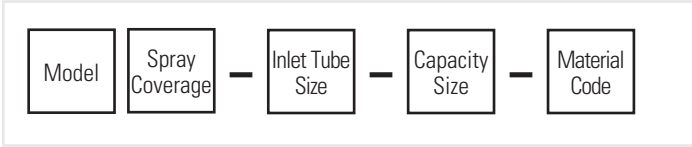
**DIMENSIONS AND WEIGHTS**

| TankJet 63225 & 63225-3A Spray Balls  | Tank Cleaner          | A<br>tube size<br>in. | B<br>(Dia.)<br>in. (mm) | C<br>Length<br>in. (mm) | D<br>in. (mm) | E<br>in. (mm) | F (Pin dia)<br>in. (mm) |
|---|-----------------------|-----------------------|-------------------------|-------------------------|---------------|---------------|-------------------------|
|  <p>63225</p>      | 63225_*-3/4-22-316L   | 3/4                   | 2 (51)                  | 3.64 (93)               | .51 (13)      | 1.25 (31.8)   | .13 (3.3)               |
|   | 63225_*-1-32-316L     | 1                     | 2.5 (64)                | 4.40 (112)              | .51 (13)      | 1.56 (39.6)   | .13 (3.3)               |
|  <p>63225-3A</p> | 63225_*-.75-1.5-40-3A | 3/4                   | 1.5 (38.1)              | 2.53 (64.3)             | .33 (9.5)     | .25 (6.4)     | .14 (3.6)               |
|   | 63225_*-1-2-40-3A     | 1                     | 2 (50.8)                | 3.31 (84.1)             | .33 (9.5)     | .33 (9.5)     | .14 (3.6)               |
|   | 63225_*-1.5-2.5-40-3A | 1- 1/2                | 2.5 (63.5)              | 4.25 (108)              | .25 (6.4)     | .75 (19.1)    | .20 (5.2)               |
|   | 63225_*-1.5-3-40-3A   | 1- 1/2                | 3 (76.2)                | 4.78 (121.4)            | .25 (6.4)     | .75 (19.1)    | .20 (5.2)               |
|   | 63225_*-1.5-4-40-3A   | 1- 1/2                | 4 (101.6)               | 5.75 (146)              | .25 (6.4)     | .75 (19.1)    | .20 (5.2)               |
|   | 63225_*-1.5-4-40-3A   | 1- 1/2                | 4 (101.6)               | 5.75 (146)              | .25 (6.4)     | .75 (19.1)    | .20 (5.2)               |

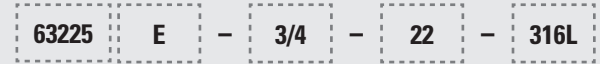
\* Available in A, B or E spray coverage.

**ORDERING INFORMATION**

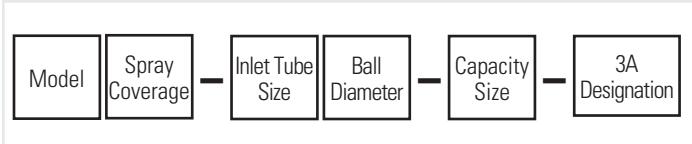
**63225 TANK CLEANING SPRAY BALLS**



EXAMPLE



**63225-3A TANK CLEANING SPRAY BALLS**



EXAMPLE



**TANKJET 14 AND 19  
TANK CLEANING NOZZLE  
FEATURES AND BENEFITS**

- Slim design is ideal for cleaning tanks with small openings
- Sleek design helps prevent residue buildup and simplifies maintenance
- Carefully drilled solid stream orifices are strategically placed to provide four different spray coverages
- Fluid-driven unit rotates at a slow speed of 3 to 15 rpm for increased dwell time on tank surface compared to free spinning units
- Suitable for CIP or portable installations and easily passes through a 2 in. sch 40 pipe
- A 6 in. extension is available for TJ19 for kegs, drums, & barrels
- See case study on page E16



TankJet 14 tank cleaner



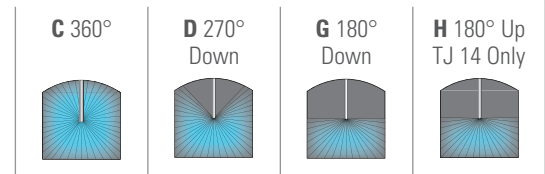
TankJet 19 tank cleaner



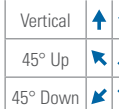
**SPECIFICATIONS**

| Tank Cleaning Nozzles | TankJet 14   | TankJet 19                               |
|-----------------------|--|--|
| Max. tank diameter:   | 12 ft. (3.7 m)   | 12 ft. (3.7 m)                           |
| Operating principle:  | Fluid-driven turbine   | Fluid-driven turbine                     |
| Flow rate:            | 13.0 to 34 gpm (49 to 129 lpm)                                   | 10.0 to 30 gpm (38 to 114 lpm)           |
| Operating pressure:   | 50 to 200 psi (3.4 to 13.8 bar)                                  | 50 to 200 psi (3.4 to 13.8 bar)          |
| Max. temperature:     | 250°F (121°C)  | 250°F (121°C)                            |
| Materials:            | Stainless steel and PTFE   | Stainless steel and PTFE                 |
| Rotation speed:       | 3.0 to 15.0 rpm  | 3.0 to 15.0 rpm                          |
| Inlet connection:     | 3/4" NPT or BSPT (F), 1" sanitary flange                         | 3/4" NPT or BSPT (F), 1" sanitary flange |
| Optional accessories: | Strainers, recommended mesh size: 20 (840 micron)<br>See page G2 |  |

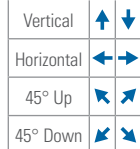
**SPRAY COVERAGE**



**TJ-14 MOUNTING OPTIONS**



**TJ-19 MOUNTING OPTIONS**

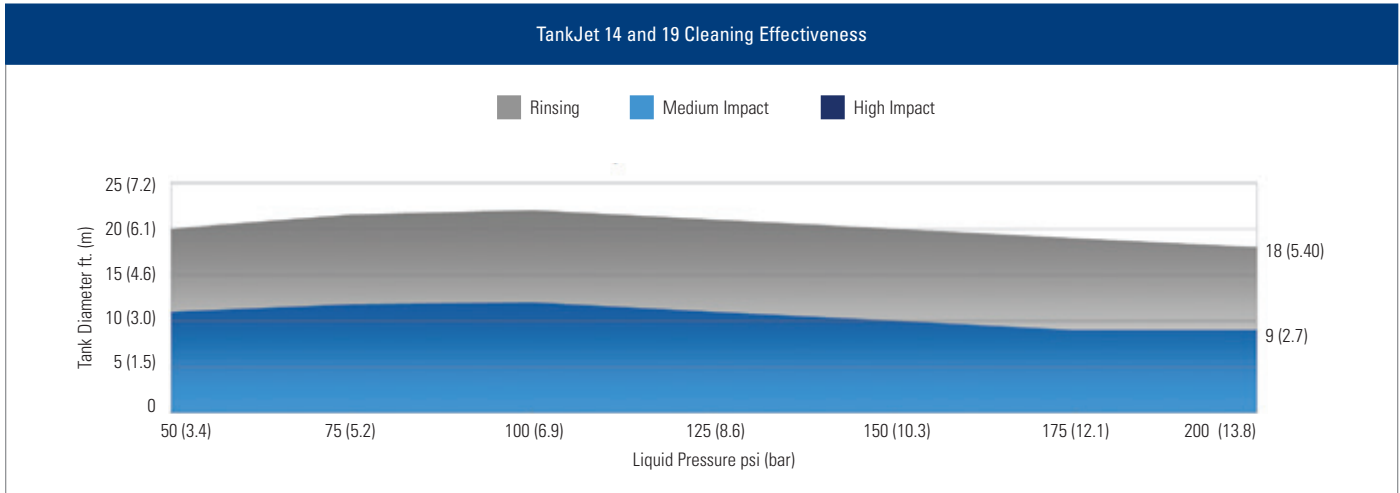


**IDEAL FOR CLEANING:**

- Chemical mixers/blenders
- Drums and kegs
- Food processing tanks
- Pharmaceutical tanks
- Tablet coating machines



PERFORMANCE DATA

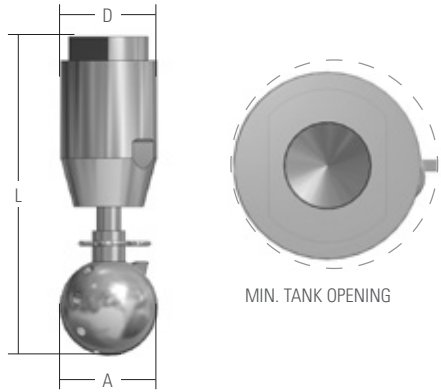
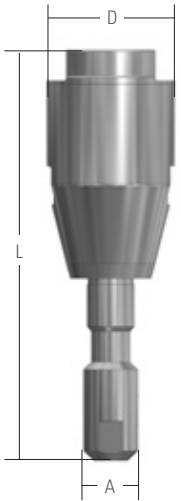


| Model | Spray Coverage | Liquid Flow Capacity gpm (lpm) |                  |                  |                   |                   |                   |                    |                    |                    |
|-------|----------------|--------------------------------|------------------|------------------|-------------------|-------------------|-------------------|--------------------|--------------------|--------------------|
|       |                | 50 psi (3.4 bar)               | 70 psi (4.8 bar) | 90 psi (6.2 bar) | 100 psi (6.9 bar) | 120 psi (8.3 bar) | 140 psi (9.7 bar) | 160 psi (11.0 bar) | 180 psi (12.4 bar) | 200 psi (13.8 bar) |
| TJ14  | D              | 13.0 (49)                      | 16.0 (61)        | 18.0 (68)        | 19.5 (74)         | 21 (79)           | 23 (87)           | 25 (93)            | 27 (100)           | 28 (106)           |
|       | G, H           | 16.0 (61)                      | 18.5 (70)        | 21 (79)          | 23 (87)           | 24 (91)           | 26 (98)           | 28 (106)           | 30 (114)           | 32 (121)           |
|       | C              | 17.0 (64)                      | 19.5 (74)        | 22 (83)          | 25 (93)           | 26 (98)           | 28 (104)          | 30 (112)           | 32 (121)           | 34 (129)           |
| TJ19  | G              | 12 (45)                        | 14 (53)          | 16.5 (62)        | 17.5 (66)         | 19 (72)           | 21 (79)           | 23 (85)            | 24 (91)            | 26 (98)            |
|       | D              | 16 (61)                        | 18 (68)          | 20 (76)          | 21 (79)           | 23 (85)           | 24 (91)           | 26 (98)            | 28 (104)           | 29 (108)           |
|       | C              | 17 (64)                        | 19 (72)          | 21 (79)          | 22 (83)           | 24 (91)           | 26 (97)           | 27.5 (104)         | 29 (110)           | 30 (114)           |

For lances, mounting kits, adapters and more, see page G6



**DIMENSIONS AND WEIGHTS**

| TankJet Cleaning Nozzle  | Model  | Inlet Conn.     | L in. (mm)  | A in. (mm) | D (Dia.) in. (mm) | Min. Tank Opening in. (mm) | Weight lbs. (kg) |
|--|--------|-----------------|-------------|------------|-------------------|----------------------------|------------------|
|   | TJ14   | Threaded        | 6.56 (167)  | 1.95 (49)  | 1.97 (50)         | 2 (51)                     | 2.25 (1)         |
|  |        | Sanitary flange | 7.56 (192)  | 1.95 (49)  | 1.97 (50)         | 2 (51)                     | 2.5 (1.1)        |
|  | TJ19   | Threaded        | 6.65 (169)  | 0.84 (21)  | 1.97 (50)         | 2 (51)                     | 2 (.9)           |
|  |        | Sanitary flange | 12.65 (321) | 0.84 (21)  | 1.97 (50)         | 2 (51)                     | 2.3 (1.0)        |
|  | TJ19-6 | Threaded        | 6.65 (169)  | 0.84 (21)  | 1.97 (50)         | 2 (51)                     | 2 (.9)           |
|  |        | Sanitary flange | 13.65 (347) | 0.84 (21)  | 1.97 (50)         | 2 (51)                     |                  |

\* 7/8 in. (22 mm) probe available for smaller keg or drum bungholes

**ORDERING INFORMATION**

**TANKJET 14 AND 19 TANK CLEANING NOZZLES**

|       |              |   |                |         |
|-------|--------------|---|----------------|---------|
| Model | Inlet Conn.* | — | Spray Coverage | EXAMPLE |
| TJ19  | —            | — | C              |         |

\* Leave blank for NPT connection. Insert B for BSPT connection or SF for sanitary flange.