



# ADV Vertical Centrifugal Pumps



*We Make The Difference*

# Line Introduction



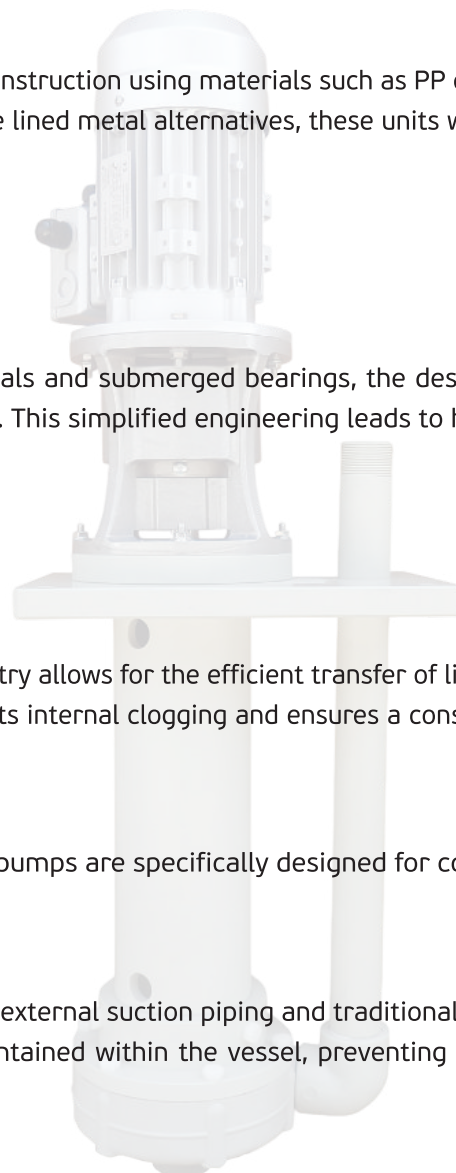
**ADV Vertical Centrifugal Pumps** represents a high-performance solution for handling aggressive chemicals in demanding industrial environments. These vertical centrifugal pumps are specifically engineered for in-tank installation, offering a compact and leak-proof design.

Manufactured from high-grade thermoplastics, such as PP or PVDF, they ensure total immunity to corrosion from acids, alkalis and salts.

To meet diverse industrial requirements, these pumps feature a modular construction with customizable column lengths ranging from 250 mm to 2000 mm, ensuring a perfect fit for various tank depths.

## Main Advantages

- **High Corrosion Resistance:** The solid thermoplastic construction using materials such as PP or PVDF ensures the pump is entirely immune to chemical attacks. Unlike lined metal alternatives, these units will never rust or degrade when handling aggressive acids or alkalis.
- **Design** with coupling and open impeller.
- **Maintenance Efficiency:** By removing mechanical seals and submerged bearings, the design significantly reduces the need for spare parts and regular servicing. This simplified engineering leads to higher reliability and lower long-term operating costs.
- **Motor removable** even with pump installed.
- **Solid Handling Capabilities:** The open impeller geometry allows for the efficient transfer of liquids containing suspended solids, crystals or sludge. This design prevents internal clogging and ensures a consistent flow even in "dirty" industrial processes.
- **Heavy-Duty Performance:** ADV Vertical Centrifugal pumps are specifically designed for continuous use in demanding industrial environments.
- **Leak-Proof Safety:** The in-tank installation eliminates external suction piping and traditional seals below the liquid level. This ensures that all chemicals remain contained within the vessel, preventing hazardous spills and protecting the working environment.



## Technical Data

- Flow rates: from 6 to 78 m<sup>3</sup>/h
- Head: up to 45 m
- Viscosity: up to 500 cps
- Maximum operating temperature: PP: 60°C , PVDF: 90°C
- Three-phase Motors from 0,75 HP to 20 HP - 50 / 60 Hz
- Single phase Motors from 0,75 HP kW to 3 HP - 50 / 60 Hz
- Upon request the pump can be supplied with flanges PN10
- Available Lengths: from 250 mm to 2000 mm

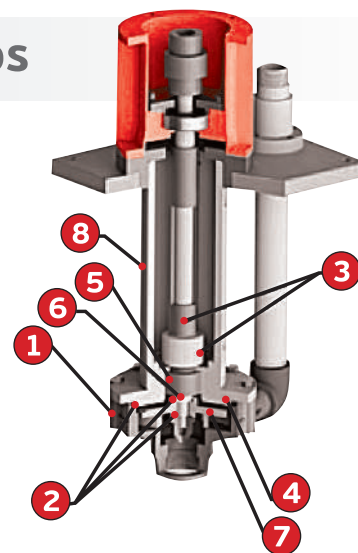


## Design of Vertical Centrifugal Pumps

ADV Vertical Centrifugal Pumps consists of a solid pump casing and a column fitted to the base plate supporting the lantern that in turn supports the electric motor.

The direct-drive motor is connected by a flexible coupling on the pump shaft. The open impeller is fitted to the other end of the shaft that is supported by a radial bearing.

This pump's special design allows the motor to be stripped without the need to disconnect the pump from the system.



| POS | Description          | Material                       |
|-----|----------------------|--------------------------------|
| 1   | Pump Head            | PP or PVDF                     |
| 2   | O-Ring               | EPDM or VITON                  |
| 3   | Shaft Covering Guide | PP or PVDF                     |
| 4   | Cover                | PP or PVDF                     |
| 5   | Bushing              | PTFEC                          |
| 6   | Wear Bushing         | Al <sub>2</sub> O <sub>3</sub> |
| 7   | Impeller             | PP or PVDF                     |
| 8   | Column               | PP or PVDF                     |

## Application sectors

Chemical Industry, Galvanic & Electronic Industry, Water Treatment Industry



CHEMICAL INDUSTRY



WATER AND SLUDGE TREATMENT



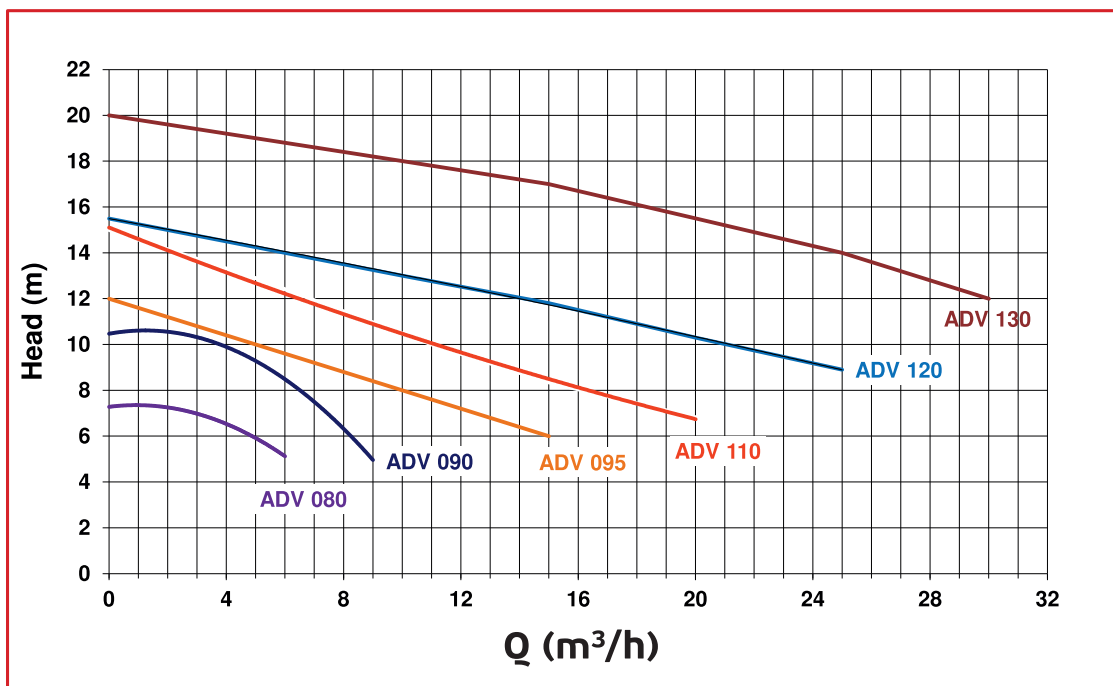
GALVANIC AND ELECTRONIC INDUSTRY

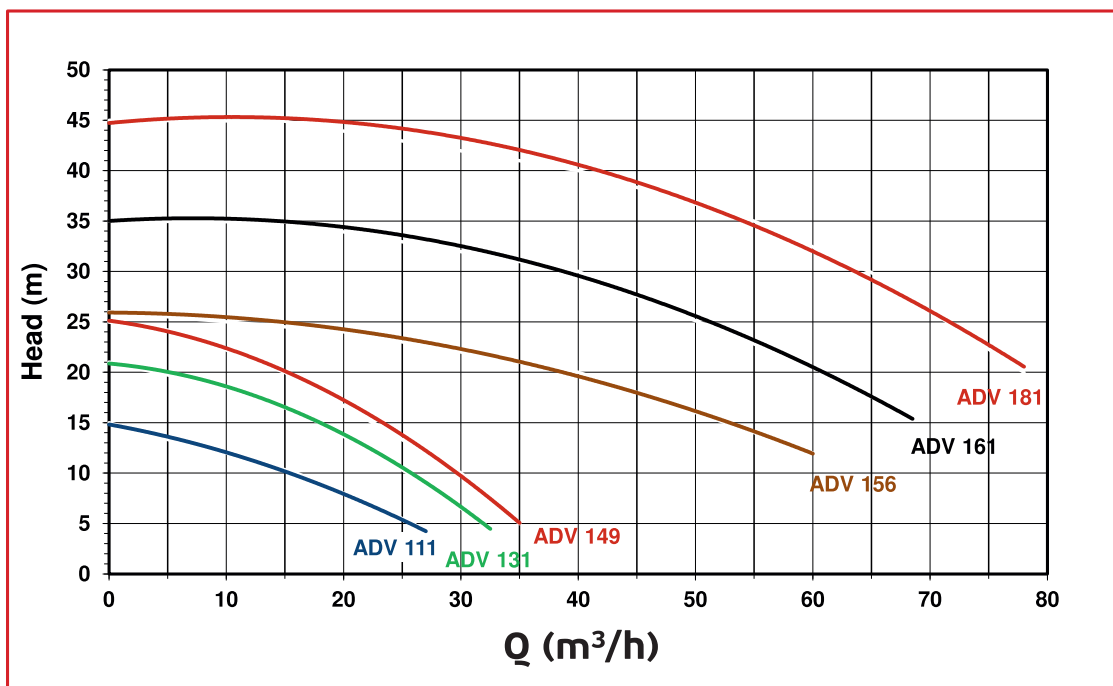
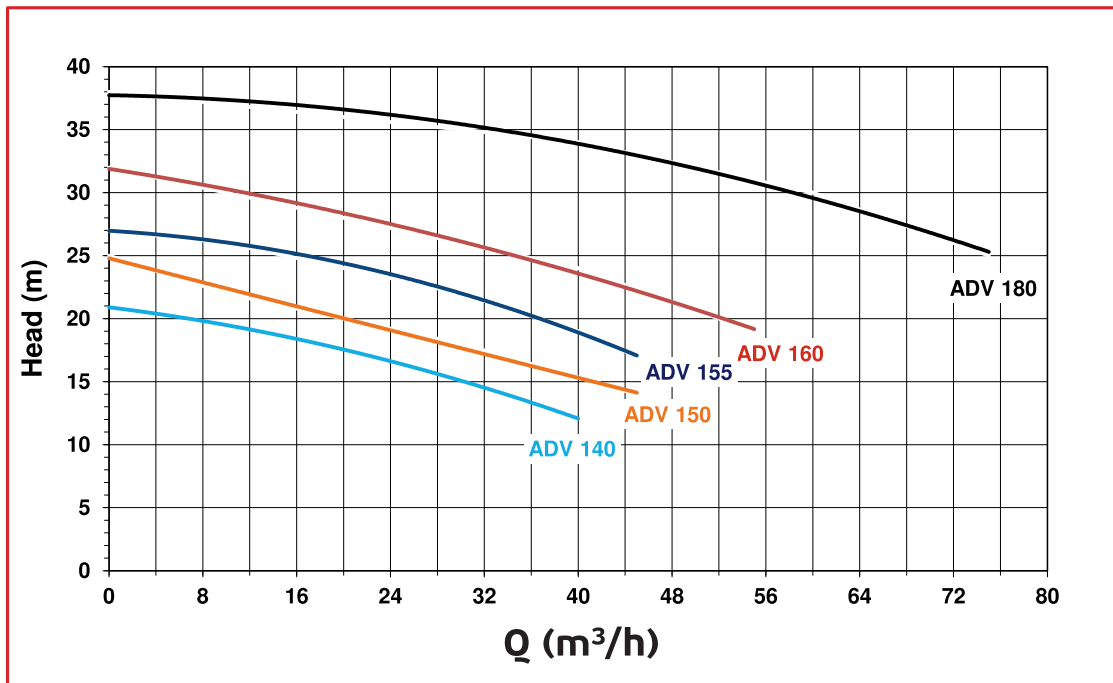
# Pump Models



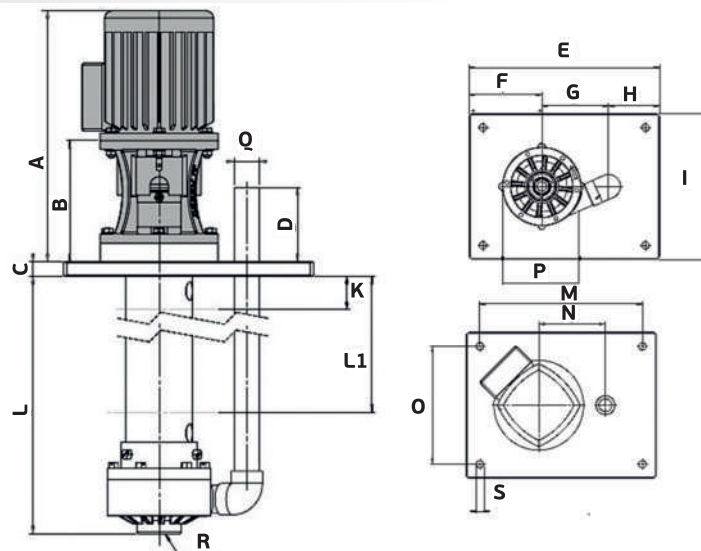
| Models  | Motor     |      |           | Length (mm)             | Max. Capacity (m <sup>3</sup> /h) | Max. Head (m) | Material  | Suction Connection | Discharge Connection | Solids Passing (mm) |
|---------|-----------|------|-----------|-------------------------|-----------------------------------|---------------|-----------|--------------------|----------------------|---------------------|
|         | HP        | Rpm  | Size      |                         |                                   |               |           |                    |                      |                     |
| ADV 080 | 0.5       | 2900 | 71        | 250 - 500 - 800         | 6                                 | 7.5           | PP / PVDF | 1 1/2" BSP M       | 1" BSP M             | 7                   |
| ADV 090 | 0.75      | 2900 | 71        | 250 - 500 - 800         | 9                                 | 10.5          | PP / PVDF | 1 1/2" BSP M       | 1" BSP M             | 10                  |
| ADV 095 | 1         | 2900 | 80        | 500 - 800 - 1000 - 1250 | 15                                | 12            | PP / PVDF | 2" BSP M           | 1 1/2" BSP M         | 6                   |
| ADV 110 | 1.5       | 2900 | 80        | 500 - 800 - 1000 - 1250 | 20                                | 15            | PP / PVDF | 2" BSP M           | 1 1/2" BSP M         | 6                   |
| ADV 111 | 2 / 3     | 2900 | 90        | 1500 - 1750 - 2000      | 27                                | 15            | PP / PVDF | 2" BSP M           | 1 1/2" BSP M         | 6                   |
| ADV 120 | 2         | 2900 | 90        | 500 - 800 - 1000 - 1250 | 25                                | 15            | PP / PVDF | 2" BSP M           | 1 1/2" BSP M         | 6                   |
| ADV 130 | 3         | 2900 | 90        | 500 - 800 - 1000 - 1250 | 30                                | 20            | PP / PVDF | 2" BSP M           | 1 1/2" BSP M         | 6                   |
| ADV 131 | 4 / 5.5   | 2900 | 100 / 112 | 1500 - 1750 - 2000      | 32                                | 21.7          | PP / PVDF | 2" BSP M           | 1 1/2" BSP M         | 6                   |
| ADV 140 | 4         | 2900 | 100       | 500 - 800 - 1000 - 1250 | 40                                | 21            | PP / PVDF | 2" BSP M           | 1 1/2" BSP M         | 12                  |
| ADV 149 | 5.5 / 7.5 | 2900 | 112 / 132 | 1500 - 1750 - 2000      | 35                                | 25            | PP / PVDF | 2" BSP M           | 1 1/2" BSP M         | 9                   |
| ADV 150 | 5.5       | 2900 | 112       | 500 - 800 - 1000 - 1250 | 45                                | 24            | PP / PVDF | 2 1/2" BSP F       | 2" BSP M             | 2                   |
| ADV 155 | 7.5       | 2900 | 132       | 500 - 800 - 1000 - 1250 | 45                                | 27            | PP / PVDF | 2 1/2" BSP F       | 2" BSP M             | 2                   |
| ADV 156 | 10 / 15   | 2900 | 132       | 1500 - 1750 - 2000      | 60                                | 26            | PP / PVDF | 2 1/2" BSP F       | 2" BSP M             | 2                   |
| ADV 160 | 10        | 2900 | 132       | 500 - 800 - 1000 - 1250 | 55                                | 32            | PP / PVDF | 2 1/2" BSP F       | 2" BSP M             | 9                   |
| ADV 161 | 15        | 2900 | 132       | 1500 - 1750 - 2000      | 68                                | 35            | PP / PVDF | 2 1/2" BSP F       | 2" BSP M             | 9                   |
| ADV 180 | 15        | 2900 | 132       | 500 - 800 - 1000 - 1250 | 75                                | 38            | PP / PVDF | 2 1/2" BSP F       | 2" BSP M             | 11                  |
| ADV 181 | 20        | 2900 | 160       | 1500 - 1750 - 2000      | 78                                | 45            | PP / PVDF | 2 1/2" BSP F       | 2" BSP M             | 11                  |

# Performances

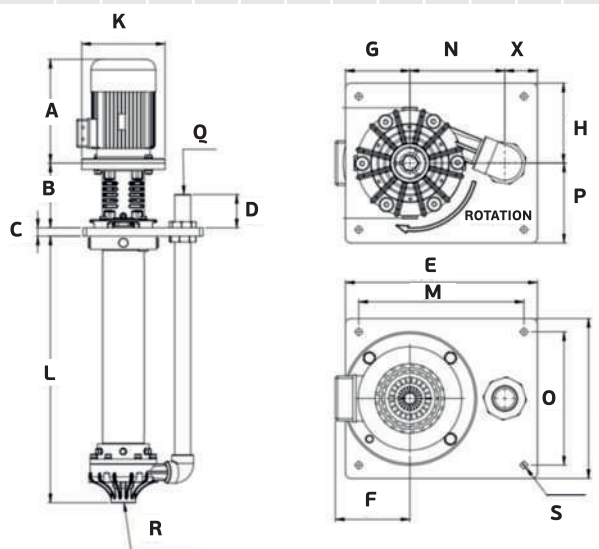




# Dimensions



| Models  | Dimensions (mm) |     |     |                   |    |     |     |     |     |    |     |    |     |     |     |      |      |     |     |     |      |     |          |          |
|---------|-----------------|-----|-----|-------------------|----|-----|-----|-----|-----|----|-----|----|-----|-----|-----|------|------|-----|-----|-----|------|-----|----------|----------|
|         | Motor Size      | A   | B   | L                 | C  | D   | E   | F   | G   | H  | I   | K  | L1  |     |     |      |      | M   | N   | O   | P    | S   | Q        | R        |
|         |                 |     |     |                   |    |     |     |     |     |    |     |    | 250 | 500 | 800 | 1000 | 1250 |     |     |     |      |     |          |          |
| ADV 080 | 71              | 340 | 164 | 250-500-800       | 20 | 100 | 340 | 130 | 119 | 91 | 260 | 45 | 100 | 350 | 650 | -    | -    | 290 | 119 | 210 | Φ140 | Φ13 | 1" M     | 1 1/2" F |
| ADV 090 | 71              | 340 | 164 | 250-500-800       | 20 | 100 | 340 | 130 | 119 | 91 | 260 | 45 | 100 | 350 | 650 | -    | -    | 290 | 119 | 210 | Φ140 | Φ13 | 1" M     | 1 1/2" F |
| ADV 095 | 80              | 419 | 210 | 500-800-1000-1250 | 25 | 125 | 360 | 135 | 165 | 60 | 300 | 50 | -   | 250 | 550 | 750  | 1000 | 310 | 165 | 250 | Φ203 | Φ13 | 1 1/2" M | 2" F     |
| ADV 110 | 80              | 419 | 210 | 500-800-1000-1250 | 25 | 125 | 360 | 135 | 165 | 60 | 300 | 50 | -   | 250 | 550 | 750  | 1000 | 310 | 165 | 250 | Φ203 | Φ13 | 1 1/2" M | 2" F     |
| ADV 120 | 90              | 446 | 220 | 500-800-1000-1250 | 25 | 125 | 360 | 135 | 165 | 60 | 300 | 50 | -   | 250 | 550 | 750  | 1000 | 310 | 165 | 250 | Φ203 | Φ13 | 1 1/2" M | 2" F     |
| ADV 130 | 90              | 487 | 220 | 500-800-1000-1250 | 25 | 125 | 360 | 135 | 165 | 60 | 300 | 50 | -   | 250 | 550 | 750  | 1000 | 310 | 165 | 250 | Φ203 | Φ13 | 1 1/2" M | 2" F     |
| ADV 140 | 100             | 507 | 235 | 500-800-1000-1250 | 25 | 120 | 360 | 135 | 165 | 60 | 300 | 50 | -   | 250 | 550 | 750  | 1000 | 310 | 165 | 250 | Φ203 | Φ13 | 1 1/2" M | 2" F     |
| ADV 150 | 112             | 532 | 233 | 500-800-1000-1250 | 25 | 132 | 480 | 170 | 165 | 95 | 380 | 50 | -   | 300 | 600 | 800  | 1050 | 430 | 215 | 330 | Φ275 | Φ13 | 2" M     | 2 1/2" F |
| ADV 155 | 132             | 682 | 303 | 500-800-1000-1250 | 25 | 130 | 480 | 170 | 215 | 95 | 380 | 50 | -   | 300 | 600 | 800  | 1050 | 430 | 215 | 330 | Φ275 | Φ13 | 2" M     | 2 1/2" F |
| ADV 160 | 132             | 702 | 303 | 500-800-1000-1250 | 25 | 130 | 480 | 170 | 215 | 95 | 380 | 50 | -   | 300 | 600 | 800  | 1050 | 430 | 215 | 330 | Φ275 | Φ13 | 2" M     | 2 1/2" F |
| ADV 180 | 132             | 752 | 303 | 500-800-1000-1250 | 25 | 130 | 480 | 170 | 215 | 95 | 380 | 50 | -   | 300 | 600 | 800  | 1050 | 430 | 215 | 330 | Φ275 | Φ13 | 2" M     | 2 1/2" F |



| Models  | Dimensions (mm) |         |     |    |     |     |         |     |     |     |     |                |     |     |     |     |     |     |          |          |
|---------|-----------------|---------|-----|----|-----|-----|---------|-----|-----|-----|-----|----------------|-----|-----|-----|-----|-----|-----|----------|----------|
|         | Motor Size      | A       | B   | C  | D   | E   | F       | G   | H   | I   | K   | L              | M   | N   | O   | P   | S   | X   | Q        | R        |
| ADV 111 | 90              | 260     | 194 | 25 | 100 | 360 | 140     | 121 | 150 | 300 | 200 | 1500-1750-2000 | 310 | 178 | 250 | 150 | Φ12 | 61  | 1 1/2" M | 2" F     |
| ADV 131 | 100/112         | 326/335 | 194 | 25 | 100 | 360 | 147/174 | 121 | 150 | 300 | 250 | 1500-1750-2000 | 310 | 178 | 250 | 150 | Φ12 | 61  | 1 1/2" M | 2" F     |
| ADV 149 | 112/132         | 335/356 | 194 | 25 | 100 | 360 | 174/187 | 121 | 150 | 300 | 250 | 1500-1750-2000 | 310 | 178 | 250 | 150 | Φ12 | 61  | 1 1/2" M | 2" F     |
| ADV 156 | 132             | 356     | 315 | 30 | 61  | 630 | 187     | 228 | 250 | 500 | 300 | 1500-1750-2000 | 580 | 252 | 450 | 250 | Φ15 | 150 | 2" M     | 2 1/2" F |
| ADV 161 | 132             | 356     | 315 | 30 | 61  | 630 | 187     | 228 | 250 | 500 | 300 | 1500-1750-2000 | 580 | 252 | 450 | 250 | Φ15 | 150 | 2" M     | 2 1/2" F |
| ADV 181 | 160             | 500     | 315 | 30 | 61  | 630 | 265     | 228 | 250 | 500 | 350 | 1500-1750-2000 | 580 | 252 | 450 | 250 | Φ15 | 150 | 2" M     | 2 1/2" F |



*We Make The Difference*

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