## STEEL MANDRE PIGS



## LIGHT **CLEANING**

Pg. 2-2 to 2-12



## **MODERATE CLEANING**

Pg. 2-13 to 2-25



## **AGGRESSIVE CLEANING**

Pg. 2-26 to 2-30



### **BATCHING**

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## **DISPLACEMENT**

Pg. 2-43 to 2-47

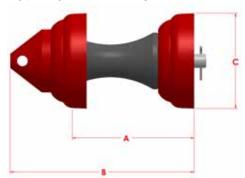
## 

UC2 2-4" (51-102mm)

The Series UC2 pig is another great example of how Apache provides the pipeline industry with tools that get the job done.

Let's face it, during the contruction phase, it can be a messy business, so it's important that the pipeline interior be kept clean throughout the process. Apache developed the Series UC just for this purpose. The Series UC is primarily used for light cleaning during the construction phase and can be used in all phases of pipeline cleaning.

At times it's necessary to clean a line more rigorously, which requires additional cups. With this in mind, the Series UC is available in three versions. The two-cup design of the UC2 pig provides a basic level of light cleaning capability. With each additional cup, the Series UC pig cleans more rigorously. Therefore, the UC3 three-cup and UC4 four-cup design pigs are progressively more effective cleaning tools. They are used to lightly clean pipelines, and are typically used for longer distances.



Size	Α	В	С	Weight	Part #
2"	3.00	4.375	2.125	1.0	70-3802-02
3"	4.250	6.500	3.375	2.0	70-3802-03
4"	5.500	8.250	4.375	3.0	70-3802-04

### Features & Benefits:

- Every Series UC pig is equipped with Apache Series C cups. As with all of Apache products, the Series C cup was specifically developed to perform, efficiently and reliably. To enhance durability, it's made from Reliathane, Apache's special blend of wear-resistant polyurethane.
- The large wearing surface of the cup promotes longer life, while product pressure holds the cutting edge firmly against the pipe wall.

Designed to negotiate 1.5D bends, the Series UC2 pig moves reliably through piping systems.

- CARVER discs.
- Aluminum gauge plates in standard styles.
- Three (UC3) and four cup (UC4) configurations.
- Magnets can be used to either collect ferrous and other construction debris, or they can be used to provide a change in magnetic field required by non-intrusive pig signaler detection devices.

## LIGHT CLEANING

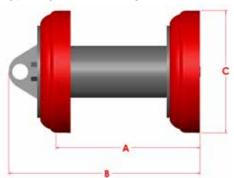
## UC2

6-14" (152-356mm)

The Series UC2 pig is another great example of how Apache provides the pipeline industry with tools that get the job done.

Let's face it, during the contruction phase, it can be a messy business, so it's important that the pipeline interior be kept clean throughout the process. Apache developed the Series UC just for this purpose. The Series UC is primarily used for light cleaning during the construction phase and can be used in all phases of pipeline cleaning.

At times it's necessary to clean a line more rigorously, which requires additional cups. With this in mind, the Series UC is available in three versions. The two-cup design of the UC2 pig provides a basic level of light cleaning capability. With each additional cup, the Series UC pig cleans more rigorously. Therefore, the UC3 three-cup and UC4 four-cup design pigs are progressively more effective cleaning tools. They are used to lightly clean pipelines, and are typically used for longer distances.



Size	Α	В	С	Weight	Part #
6"	7.750	11.750	6.375	11	70-3802-06
8"	10.125	14.000	8.500	20	70-3802-08
10"	12.500	16.750	10.625	35	70-3802-10
12"	15.000	19.000	12.500	46	70-3802-12
14"	17.375	21.000	13.875	54	70-3802-14

### Features & Benefits:

- Every Series UC pig is equipped with Apache Series C cups. As with all of Apache products, the Series C cup
  was specifically developed to perform, efficiently and reliably. To enhance durability, it's made from Reliathane,
  Apache's special blend of wear-resistant polyurethane.
- The large wearing surface of the cup promotes longer life, while product pressure holds the cutting edge firmly against the pipe wall.

Designed to negotiate 1.5D bends, the Series UC2 pig moves reliably through piping systems.

- CARVER discs.
- UT Mandrel to accommodate electronic tracking equipment.
- Aluminum gauge plates in standard styles.
- Three (UC3) and four cup (UC4) configurations.
- Magnets can be used to either collect ferrous and other construction debris, or they can be used to provide a change in magnetic field required by non-intrusive pig signaler detection devices.

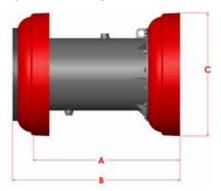
## UC2

16-48" (406-1219mm)

The Series UC2 pig is another great example of how Apache provides the pipeline industry with tools that get the job done.

Let's face it, during the contruction phase, it can be a messy business, so it's important that the pipeline interior be kept clean throughout the process. Apache developed the Series UC just for this purpose. The Series UC is primarily used for light cleaning during the construction phase and can be used in all phases of pipeline cleaning.

At times it's necessary to clean a line more rigorously, which requires additional cups. With this in mind, the Series UC is available in three versions. The two-cup design of the UC2 pig provides a basic level of light cleaning capability. With each additional cup, the Series UC pig cleans more rigorously. Therefore, the UC3 three-cup and UC4 four-cup design pigs are progressively more powerful cleaning tools. They are used to lightly clean pipelines, and are typically used for longer distances.



Size	Α	В	С	Weight	Part #
16"	17.875	21.125	16.000	83	70-3802-16
20"	22.625	26.375	19.875	134	70-3802-20
22"	24.750	28.875	21.875	153	70-3802-22
24"	27.375	31.500	23.875	197	70-3802-24
30"	33.750	38.875	29.875	307	70-3802-30
36"	40.125	45.750	36.000	472	70-3802-36
42"	46.750	52.750	42.125	685	70-3802-42
48"	51.000	57.500	48.500	849	70-3802-48

#### Features & Benefits:

- Every Series UC pig is equipped with Apache Series C cups. As with all of Apache products, the Series C cup was specifically developed to perform, efficiently and reliably. To enhance durability, it's made from Reliathane, Apache's special blend of wear-resistant polyurethane.
- The large wearing surface of the cup promotes longer life, while product pressure holds the cutting edge firmly against the pipe wall.
- Every Apache UC2 16"- 48" pig is manufactured with by-pass ports. These ports feature threaded plugs that can be removed, should by-pass be required. By removing by-pass plugs, a portion of product flow is redirected through these openings. The debris is suspended in the turbulent flow and transferred ahead of the pig.
- Standard bumper noses cushion the pig and help to protect in-line auxiliary equipment, preventing damage.

Designed to negotiate 1.5D bends, the UC2 Series pig moves reliably through piping systems.

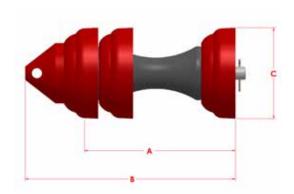
- CARVER discs.
- Rattlers.
- Transmitter housing to accommodate electronic tracking equipment.
- Aluminum gauge plates in slotted or standard styles.
- Magnets can be used to either collect ferrous and other construction debris, or they can be used to provide a change in magnetic field required by non-intrusive pig signaler detection devices.
- Three (UC3) and four cup (UC4) configurations.

UC3 2-4" (51-102mm)

The Series UC3 pig is another great example of how Apache provides the pipeline industry with tools that get the job done.

Let's face it, during the contruction phase, it can be a messy business, so it's important that the pipeline interior be kept clean throughout the process. Apache developed the Series UC just for this purpose. The Series UC is primarily used for light cleaning during the construction phase and can be used in all phases of pipeline cleaning.

At times it's necessary to clean a line more rigorously, which requires additional cups. With this in mind, the Series UC is available in three versions. The two-cup design of the UC2 pig provides a basic level of light cleaning capability. With each additional cup, the Series UC pig cleans more rigorously. Therefore, the UC3 three-cup and UC4 four-cup design pigs are progressively more powerful cleaning tools. They are used to lightly clean pipelines, and are typically used for longer distances.



Size	Α	В	С	Weight	Part #
2"	3.875	5.250	2.125	1.0	70-3803-02
3"	5.625	7.825	3.375	2.0	70-3803-03
4"	7.000	9.750	4.375	3.0	70-3803-04

#### Features & Benefits:

- Every Series UC pig is equipped with Apache Series C cups. As with all of Apache products, the Series C cup was specifically developed to perform, efficiently and reliably. To enhance durability, it's made from Reliathane, Apache's special blend of wear-resistant polyurethane.
- The large wearing surface of the cup promotes longer life, while product pressure holds the cutting edge firmly against the pipe wall.

Designed to negotiate minimum 1.5D and greater bends, the UC3 pig moves reliably through piping systems.

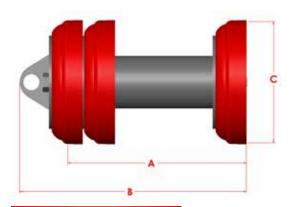
- CARVER discs.
- Aluminum gauge plates in standard styles.
- Magnets can be used to either collect ferrous and other construction debris, or they can be used to provide a change in magnetic field required by non-intrusive pig signaler detection devices.
- Two (UC2) and four cup (UC4) configurations.

## UC3 6-14" (152-356mm)

The Series UC3 pig is another great example of how Apache provides the pipeline industry with tools that get the job done.

Let's face it, during the contruction phase, it can be a messy business, so it's important that the pipeline interior be kept clean throughout the process. Apache developed the Series UC just for this purpose. The Series UC is primarily used for light cleaning during the construction phase and can be used in all phases of pipeline cleaning.

At times it's necessary to clean a line more rigorously, which requires additional cups. With this in mind, the Series UC is available in three versions. The two-cup design of the UC2 pig provides a basic level of light cleaning capability. With each additional cup, the Series UC pig cleans more rigorously. Therefore, the UC3 three-cup and UC4 four-cup design pigs are progressively more powerful cleaning tools. They are used to lightly clean pipelines, and are typically used for longer distances.



Size	Α	В	С	Weight	Part #
6"	9.875	13.750	6.375	15	70-3803-06
8"	11.375	15.250	8.500	26	70-3803-08
10"	15.250	19.500	10.625	47	70-3803-10
12"	18.250	22.750	12.500	64	70-3803-12
14"	21.250	25.875	13.875	75	70-3803-14

### Features & Benefits:

- Every Series UC pig is equipped with Apache Series C cups. As with all of Apache products, the Series C cup was specifically developed to perform, efficiently and reliably. To enhance durability, it's made from Reliathane, Apache's special blend of wear-resistant polyurethane.
- The large wearing surface of the cup promotes longer life, while product pressure holds the cutting edge firmly against the pipe wall.

Designed to negotiate minimum 1.5D and greater bends, the UC3 pig moves reliably through piping systems.

- CARVER discs.
- UT Mandrel to accommodate electronic tracking equipment.
- Aluminum gauge plates in standard styles.
- Magnets can be used to either collect ferrous and other construction debris, or they can be used to provide a change in magnetic field required by non-intrusive pig signaler detection devices.
- Two (UC2) and four cup (UC4) configurations.

# LIGHT CLEANING

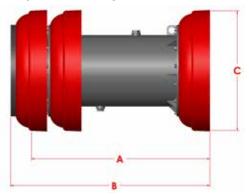
## UC3

16-48" (406-1219mm)

The Series UC3 pig is another great example of how Apache provides the pipeline industry with tools that get the job done.

Let's face it, during the contruction phase, it can be a messy business, so it's important that the pipeline interior be kept clean throughout the process. Apache developed the Series UC just for this purpose. The Series UC is primarily used for light cleaning during the construction phase and can be used in all phases of pipeline cleaning.

At times it's necessary to clean a line more rigorously, which requires additional cups. With this in mind, the Series UC is available in three versions. The two-cup design of the UC2 pig provides a basic level of light cleaning capability. With each additional cup, the Series UC pig cleans more rigorously. Therefore, the UC3 three-cup and UC4 four-cup design pigs are progressively more powerful cleaning tools. They are used to lightly clean pipelines, and are typically used for longer distances.



Size	Α	В	С	Weight	Part #
16"	22.500	25.875	16.000	115	70-3803-16
20"	28.500	32.375	19.875	187	70-3803-20
22"	31.375	35.500	21.875	215	70-3803-22
24"	34.375	38.250	23.875	269	70-3803-24
30"	42.125	47.125	29.875	426	70-3803-30
36"	49.250	54.750	36.000	644	70-3803-36
42"	56.500	62.500	42.125	942	70-3803-42
48"	61.625	68.125	48.500	1141	70-3803-48

#### Features & Benefits:

- Every Series UC pig is equipped with Apache Series C cups. As with all of Apache products, the Series C cup
  was specifically developed to perform, efficiently and reliably. To enhance durability, it's made from Reliathane,
  Apache's special blend of wear-resistant polyurethane.
- The large wearing surface of the cup promotes longer life, while product pressure holds the cutting edge firmly against the pipe wall.
- Every Apache UC3 16"- 48" pig is manufactured with by-pass ports. These ports feature threaded plugs that can be removed, should by-pass be required. By removing by-pass plugs, a portion of product flow is redirected through these openings. The debris is suspended in the turbulent flow and transferred ahead of the pig.
- Standard bumper noses cushion the pig and help to protect in-line auxiliary equipment, preventing damage.

Designed to negotiate minimum 1.5D and greater bends, the UC3 pig moves reliably through piping systems.

### Options Available:

- CARVER discs.
- Rattlers.
- Transmitter housing to accommodate electronic tracking equipment.
- · Aluminum gauge plates in slotted or standard styles.
- Magnets can be used to either collect ferrous and other construction debris, or they can be used to provide a change in magnetic field required by non-intrusive pig signaler detection devices.
- Two (UC2) and four cup (UC4) configurations.

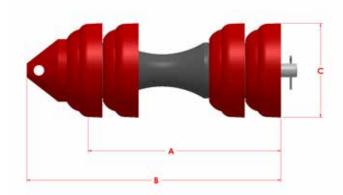
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UC4 2-4" (51-102mm)

The Series UC4 pig is another great example of how Apache provides the pipeline industry with tools that get the job done.

Let's face it, during the contruction phase, it can be a messy business, so it's important that the pipeline interior be kept clean throughout the process. Apache developed the Series UC just for this purpose. The Series UC is primarily used for light cleaning during the construction phase and can be used in all phases of pipeline cleaning.

At times it's necessary to clean a line more rigorously, which requires additional cups. With this in mind, the Series UC is available in three versions. The two-cup design of the UC2 pig provides a basic level of light cleaning capability. With each additional cup, the Series UC pig cleans more rigorously. Therefore, the UC3 three-cup and UC4 four-cup design pigs are progressively more powerful cleaning tools. They are used to lightly clean pipelines, and are typically used for longer distances.



Size	А	В	С	Weight	Part #
2"	4.750	6.125	2.125	1.0	70-3804-02
3"	6.875	9.125	3.375	2.0	70-3804-03
4"	8.375	11.125	4.375	3.0	70-3804-04

### Features & Benefits:

- Every Series UC pig is equipped with Apache Series C cups. As with all of Apache products, the Series C cup was specifically developed to perform, efficiently and reliably. To enhance durability, it's made from Reliathane, Apache's special blend of wear-resistant polyurethane.
- The large wearing surface of the cup promotes longer life, while product pressure holds the cutting edge firmly against the pipe wall.

Designed to negotiate minimum 1.5D and greater bends, the UC4 pig moves reliably through piping systems.

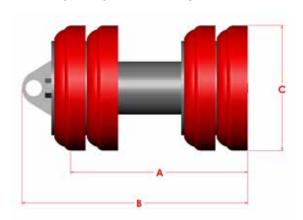
- CARVER discs.
- Aluminum gauge plates in standard styles.
- Magnets can be used to either collect ferrous and other construction debris, or they can be used to provide a change in magnetic field required by non-intrusive pig signaler detection devices.
- Two (UC2) and three cup (UC3) configurations.

UC4 6-14" (152-356mm)

The Series UC4 pig is another great example of how Apache provides the pipeline industry with tools that get the job done.

Let's face it, during the contruction phase, it can be a messy business, so it's important that the pipeline interior be kept clean throughout the process. Apache developed the Series UC just for this purpose. The Series UC is primarily used for light cleaning during the construction phase and can be used in all phases of pipeline cleaning.

At times it's necessary to clean a line more rigorously, which requires additional cups. With this in mind, the Series UC is available in three versions. The two-cup design of the UC2 pig provides a basic level of light cleaning capability. With each additional cup, the Series UC pig cleans more rigorously. Therefore, the UC3 three-cup and UC4 four-cup design pigs are progressively more powerful cleaning tools. They are used to lightly clean pipelines, and are typically used for longer distances.



Size	А	В	С	Weight	Part #
6"	8.875	12.750	6.375	18	70-3804-06
8"	12.000	15.750	8.500	32	70-3804-08
10"	14.500	18.750	10.625	56	70-3804-10
12"	18.125	22.500	12.500	78	70-3804-12
14"	21.125	25.750	13.875	91	70-3804-14

#### Features & Benefits:

- Every Series UC pig is equipped with Apache Series C cups. As with all of Apache products, the Series C cup was specifically developed to perform, efficiently and reliably. To enhance durability, it's made from Reliathane, Apache's special blend of wear-resistant polyurethane.
- The large wearing surface of the cup promotes longer life, while product pressure holds the cutting edge firmly against the pipe wall.

Designed to negotiate minimum 1.5D and greater bends, the UC4 pig moves reliably through piping systems.

- CARVER discs.
- UT Mandrel to accommodate electronic tracking equipment.
- Aluminum gauge plates in standard styles.
- Magnets can be used to either collect ferrous and other construction debris, or they can be used to provide a change in magnetic field required by non-intrusive pig signaler detection devices.
- Two (UC2) and three cup (UC3) configurations.

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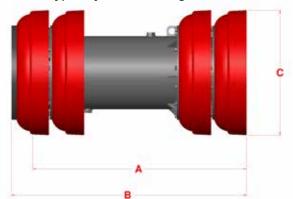
# UC4

16-48" (406-1219mm)

The Series UC4 pig is another great example of how Apache provides the pipeline industry with tools that get the job done.

Let's face it, during the contruction phase, it can be a messy business, so it's important that the pipeline interior be kept clean throughout the process. Apache developed the Series UC just for this purpose. The Series UC is primarily used for light cleaning during the construction phase and can be used in all phases of pipeline cleaning.

At times it's necessary to clean a line more rigorously, which requires additional cups. With this in mind, the Series UC is available in three versions. The two-cup design of the UC2 pig provides a basic level of light cleaning capability. With each additional cup, the Series UC pig cleans more rigorously. Therefore, the UC3 three-cup and UC4 four-cup design pigs are progressively more powerful cleaning tools. They are used to lightly clean pipelines, and are typically used for longer distances.



Size	А	В	С	Weight	Part #
16"	27.375	30.625	16.000	148	70-3804-16
20"	34.625	38.375	19.875	240	70-3804-20
22"	37.875	42.000	21.875	277	70-3804-22
24"	40.875	45.000	23.875	342	70-3804-24
30"	50.500	55.500	29.875	544	70-3804-30
36"	58.250	63.750	36.000	815	70-3804-36
42"	66.125	72.125	42.125	1198	70-3804-42
48"	72.375	78.875	48.500	1432	70-3804-48

### Features & Benefits:

- Every Series UC pig is equipped with Apache Series C cups. As with all of Apache products, the Series C cup was specifically developed to perform, efficiently and reliably. To enhance durability, it's made from Reliathane, Apache's special blend of wear-resistant polyurethane.
- The large wearing surface of the cup promotes longer life, while product pressure holds the cutting edge firmly against the pipe wall.
- Every Apache UC4 16"- 48" pig is manufactured with by-pass ports. These ports feature threaded plugs that can be removed, should by-pass be required. By removing by-pass plugs, a portion of product flow is redirected through these openings. The debris is suspended in the turbulent flow and transferred ahead of the pig.
- Standard bumper noses cushion the pig and help to protect in-line auxiliary equipment, preventing damage.

Designed to negotiate minimum 1.5D and greater bends, the UC4 pig moves reliably through piping systems.

- CARVER discs.
- Rattlers.
- Transmitter housing to accommodate electronic tracking equipment.
- Aluminum gauge plates in slotted or standard styles.
- Magnets can be used to either collect ferrous and other construction debris, or they can be used to provide a change in magnetic field required by non-intrusive pig signaler detection devices.
- Two (UC2) and three cup (UC3) configurations.

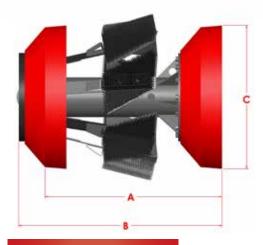
# MODERATE CLEANING

## UM2X

16-48" (406-1219mm)

The Series UM2X with block brush provides light cleaning during the construction phase, as well as regular pipeline operations.

How is this possible? The answer lies in the three versions of the UMX. While the two-cup design of the UM2X pig efficiently cleans and scrapes pipelines, the UM3X three-cup and UM4X four-cup design pigs. They are both used to gently clean pipelines. They are typically used for longer distance operations.



Size	А	В	С	Weight	Part #
16"	22.000	25.000	15.875	104	60-5142-16
20"	27.250	30.875	20.000	165	60-5142-20
22"	29.125	31.500	22.000	212	60-5142-22
24"	29.500	33.875	24.000	230	60-5142-24
30"	39.750	44.875	29.875	388	60-5142-30
36"	45.750	52.250	36.000	551	60-5142-36
42"	54.125	61.375	42.125	763	60-5142-42
48"	60.375	68.625	48.125	937	60-5142-48

#### Features & Benefits:

- Given that anomalies are a fairly common feature of a pipeline scheduled for maintenance, it's reassuring that pigs mounted with conical cups can traverse pipeline anomalies without damaging essential inline auxiliary equipment.
- Every Series UM pig is equipped with Apache Series M cups. As with all of Apache products, the Series M cup was especially
  developed to perform efficiently and reliably. To maximize durability, it's made from Reliathane, Apache's special blend of
  wear-resistant polyurethane.
- Every Apache UM2X 16"- 48" pig is manufactured with by-pass ports. These ports feature threaded plugs that can be
  removed, should by-pass be required. By removing the by-pass plugs, a portion of product flow is redirected through these
  openings. The debris is suspended in the turbulent flow and transferred ahead of the pig.
- Standard bumper noses cushion the pig and in-line auxiliary equipment, preventing damage.

Designed to negotiate 1.5D bends, the Series UM2X pig moves reliably through piping systems.

- Circular flange brushes or block brushes in the following types and trim materials:
  - 1. Trim types flat wire or pencil.
  - 2. Trim material carbon steel, stainless steel, plastic or tin-coated.
- Aluminum or steel gauging plates in slotted or standard styles.
- Transmitter housing to accommodate electronic tracking equipment.
- Magnets can be used to either collect ferrous and other construction debris, or they can be used to provide a change in magnetic field required by non-intrusive pig signaler detection devices.
- Urethane Plow Blades Designed to replace a XB block brush, the 3-Rib urethane removes paraffin wax and similar deposits
  from the pipe wall that normally collect and cram between the bristles of a block brush. Our plow blade profile performs
  a similar function to the 3-Rib, but is used primarily for pipe sizes 16" 18". Both blade types are also excellent tools for
  removing debris in non-metallic or internally coated pipe without damaging the pipe wall coating.
- · Rattlers.

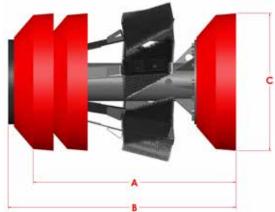
## MODERATE EANING

# UM3X

16-48" (406-1219mm)

The Series UM3X with block brush provides moderate cleaning during the construction phase, as well as regular pipeline operations.

How is this possible? The answer lies in the three versions of the UMX. While the two-cup design of the UM2X pig efficiently cleans and scrapes pipelines, the UM3X three-cup and UM4X four-cup design pigs each provide a positive seal between dissimilar fluids. They are both used to gently clean pipelines. They are typically used for longer distance operations.



	Size	Α	В	С	Weight	Part #
	16"	26.000	29.000	15.875	129	60-5143-16
	20"	33.250	36.875	20.000	212	60-5143-20
,	22"	35.875	39.750	22.000	268	60-5143-22
	24"	36.500	40.875	24.000	301	60-5143-24
	30"	48.500	53.625	29.875	502	60-5143-30
	36"	55.125	61.750	36.000	716	60-5143-36
	42"	66.250	73.500	42.125	1015	60-5143-42
	48"	74.625	83.000	48.125	1244	60-5143-48

#### Features & Benefits:

- Given that anomalies are a fairly common feature of a pipeline scheduled for maintenance, it's reassuring that pigs mounted with conical cups can traverse pipeline anomalies without damaging essential inline auxiliary equipment.
- Every Series UM pig is equipped with Apache Series M cups. As with all of Apache products, the Series M cup was especially developed to perform efficiently and reliably. To maximize durability, it's made from Reliathane, Apache's special blend of wear-resistant polyurethane.
- Every Apache UM3X 16"- 48" pig is manufactured with by-pass ports. These ports feature threaded plugs that can be removed, should by-pass be required. By removing the by-pass plugs, a portion of product flow is redirected through these openings. The debris is suspended in the turbulent flow and transferred ahead of the pig.
- Standard bumper noses cushion the pig and in-line auxiliary equipment, preventing damage.

Designed to negotiate 1.5D bends, the Series UM3X pig moves reliably through piping systems.

- Circular flange brushes or block brushes in the following types and trim materials:
  - 1. Trim types flat wire or pencil.
  - 2. Trim material carbon steel, stainless steel, plastic or tin-coated.
- Aluminum or steel gauging plates in slotted or standard styles.
- Transmitter housing to accommodate electronic tracking equipment.
- Magnets can be used to either collect ferrous and other construction debris, or they can be used to provide a change in magnetic field required by non-intrusive pig signaler detection devices.
- Urethane Plow Blades Designed to replace a XB block brush, the 3-Rib urethane removes paraffin wax and similar deposits from the pipe wall that normally collect and cram between the bristles of a block brush. Our plow blade profile performs a similar function to the 3-Rib, but is used primarily for pipe sizes 16" - 18". Both blade types are also excellent tools for removing debris in non-metallic or internally coated pipe without damaging the pipe wall coating.
- Rattlers.

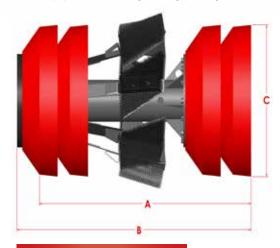
## EANING MODERATE

# UM4X

16-48" (406-1219mm)

The Series UM4X with block brush provides moderate cleaning during the construction phase, as well as regular pipeline operations.

How is this possible? The answer lies in the three versions of the UMX. While the two-cup design of the UM2X pig efficiently cleans and scrapes pipelines, the UM3X three-cup and UM4X four-cup design pigs are used to gently clean pipelines. They are typically used for longer distance operations.



Size	А	В	С	Weight	Part #
16"	30.000	33.125	15.875	154	60-5144-16
20"	39.250	42.875	20.000	257	60-5144-20
22"	42.500	46.375	22.000	324	60-5144-22
24"	43.500	47.875	24.000	372	60-5144-24
30"	57.250	62.375	29.875	613	60-5144-30
36"	64.625	71.125	36.000	879	60-5144-36
42"	78.500	85.750	42.125	1264	60-5144-42
48"	88.875	97.250	48.125	1550	60-5144-48

### Features & Benefits:

- Given that anomalies are a fairly common feature of a pipeline scheduled for maintenance, it's reassuring that pigs mounted with conical cups can traverse pipeline anomalies without damaging essential inline auxiliary equipment.
- Every Series UM pig is equipped with Apache Series M cups. As with all of Apache products, the Series M cup was especially developed to perform efficiently and reliably. To maximize durability, it's made from Reliathane, Apache's special blend of wear-resistant polyurethane.
- Every Apache UM4X 16"- 48" pig is manufactured with by-pass ports. These ports feature threaded plugs that can be removed, should by-pass be required. By removing the by-pass plugs, a portion of product flow is redirected through these openings. The debris is suspended in the turbulent flow and transferred ahead of the pig.
- Standard bumper noses cushion the pig and in-line auxiliary equipment, preventing damage.

Designed to negotiate 1.5D bends, the Series UM4X pig moves reliably through piping systems.

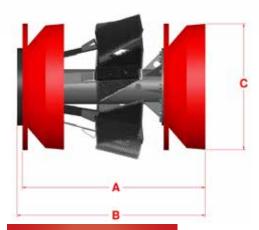
- Circular flange brushes or block brushes in the following types and trim materials:
  - 1. Trim types flat wire or pencil.
  - 2. Trim material carbon steel, stainless steel, plastic or tin-coated.
- Aluminum or steel gauging plates in slotted or standard styles.
- Transmitter housing to accommodate electronic tracking equipment.
- Magnets can be used to either collect ferrous and other construction debris, or they can be used to provide a change in magnetic field required by non-intrusive pig signaler detection devices.
- Urethane Plow Blades Designed to replace a XB block brush, the 3-Rib urethane removes paraffin wax and similar deposits from the pipe wall that normally collect and cram between the bristles of a block brush. Our plow blade profile performs a similar function to the 3-Rib, but is used primarily for pipe sizes 16" - 18". Both blade types are also excellent tools for removing debris in non-metallic or internally coated pipe without damaging the pipe wall coating.
- Rattlers.

## MODERATE EANING

## **DMDX**

16-48" (406-1219mm)

Looking for more effective cleaning and sealing capacity? Then look no further than the Series DMDX. Every DMDX is equipped with two sealing discs and two Series M Cups. What sets the DMDX apart is that it features brushes that further enhance cleaning performance. These multiple sealing components provide a bigger surface area. As a result, its sealing capacity, scraping capability, and overall cleaning ability is greatly improved.



Size	А	В	С	Weight	Part #
16"	25.500	26.500	15.875	115	60-6900-16
20"	31.500	32.500	20.000	187	60-6900-20
22"	33.875	34.875	22.000	236	60-6900-22
24"	34.875	35.875	24.000	264	60-6900-24
30"	46.000	47.125	29.875	444	60-6900-30
36"	53.625	55.000	36.000	653	60-6900-36
42"	62.875	64.375	42.125	912	60-6900-42
48"	70.500	72.125	48.125	1106	60-6900-48

#### Features & Benefits:

- The DMDX pig is configured to offer a sealing arrangement that is used to separate dissimilar fluids, and to moderately scrape pipelines during longer distance operations.
- Given that anomalies are a fairly common feature of a pipeline scheduled for maintenance, it's reassuring that pigs mounted with conical cups can traverse pipeline anomalies without damaging essential inline auxiliary equipment.
- Every Series DMDX pig is equipped with Apache Series M cups. As with all of Apache products, the Series M cup was especially developed to perform efficiently and reliably. To maximize durability, it's made from Reliathane, Apache's special blend of wear-resistant polyurethane.
- The large wearing surface of the cup promotes longer life, while product pressure holds the cutting edge firmly against the pipe wall.
- Every Apache DMDX 16"- 48" pig is manufactured with by-pass ports. These ports feature threaded plugs that can be removed, should by-pass be required. By removing the by-pass plugs, a portion of product flow is redirected through these openings. The debris is suspended in the turbulent flow and transferred ahead of the pig.
- Standard bumper noses cushion the pig and help to protect in-line auxiliary equipment, preventing damage.

Designed to negotiate 1.5D bends, the DMDX pig moves reliably through piping systems.

### Options Available:

- Circular flange brushes or block brushes in the following types and trim materials:
  - 1. Trim types flat wire or pencil.
  - 2. Trim material carbon steel, stainless steel, plastic or tin-coated.
- Aluminum or steel gauging plates in slotted or standard styles.
- Transmitter housing to accommodate electronic tracking equipment.
- Magnets can be used to either collect ferrous and other construction debris, or they can be used to provide a change in magnetic field required by non-intrusive pig signaler detection devices.
- Urethane Plow Blades Designed to replace a XB block brush, the 3-Rib urethane removes paraffin wax and similar deposits from the pipe wall that normally collect and cram between the bristles of a block brush. Our plow blade profile performs a similar function to the 3-Rib, but is used primarily for pipe sizes 16" - 18". Both blade types are also excellent tools for removing debris in non-metallic or internally coated pipe without damaging the pipe wall coating.
- Rattlers.

world class world wide

## EANING MODERATE

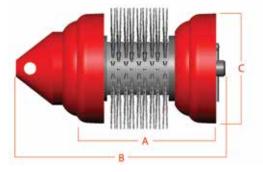
## SC2R

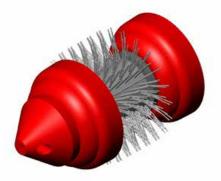
3-4" (76-102mm)

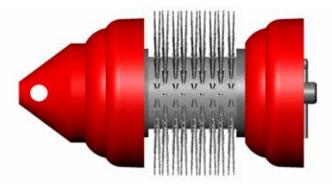
As the saying goes, "good things come in small packages." Apache developed the Series SC2R pig to give smaller gathering lines a moderate cleaning.

The result? The line is free of debris and flow rates improve. With the cleaning capability of the pitPRO™ steel brush and ability to negotiate sharp bends, the Series SCR is an extremely efficient cleaning tool.

Size	А	В	С	Weight	Part #
3"	5.750	7.750	3.375	3.0	60-3075-03
4"	5.875	8.375	4.375	5.0	60-3075-04







#### Features & Benefits:

- The SC2R pig features two cups and pitPRO™ stainless steel brush.
- Every Series SCR pig is equipped with Apache Series C cups. As with all of Apache products, the Series C cup was specifically developed to perform, efficiently and reliably. To enhance durability, it's made from Reliathane, Apache's special blend of wear-resistant polyurethane.
- The large wearing surface of the cup promotes longer life, while product pressure holds the cutting edge firmly against the pipe wall.

Designed to negotiate 1.5D bends, the Series SC2R pig moves reliably through piping systems.

### Options Available:

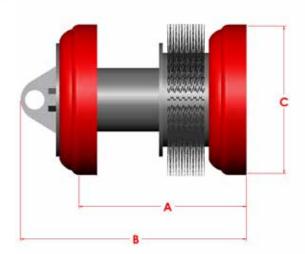
Aluminum Mandrel.

## EANING MODERATE

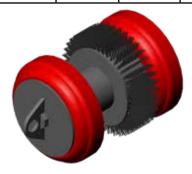
## SC2R

6-14" (152-356mm)

The Series SC2R is one powerful cleaning tool. Apache developed the Series SCR pig to deliver a moderate cleaning capability to clean all types of pipelines. The result? The line is free of debris and flow rates improve. With the scrubbing capability of the sturdy pitPRO™ or circular flange brush, the Series SCR provides outstanding cleaning ability.



Size	Α	В	С	Weight	Part #
6"	7.750	11.000	6.375	13	60-3075-06
8"	10.000	13.500	8.500	23	60-3075-08
10"	11.875	16.000	10.625	38	60-3075-10
12"	14.625	19.125	12.750	53	60-3075-12
14"	17.125	21.750	13.875	62	60-3075-14



#### Features & Benefits:

- The SC2R pig features two cups and one circular flange brush.
- Every Series SC2R pig is equipped with Apache Series C cups. As with all of Apache products, the Series C cup was specifically developed to perform, efficiently and reliably. To enhance durability, it's made from Reliathane, Apache's special blend of wear-resistant polyurethane.
- The large wearing surface of the cup promotes longer life, while product pressure holds the cutting edge firmly against the pipe wall.
- To use a Series SC2R pig for different applications, elements and brushes can simply be added or reconfigured.

Designed to negotiate 1.5D bends, the Series SC2R pig moves reliably through piping systems.

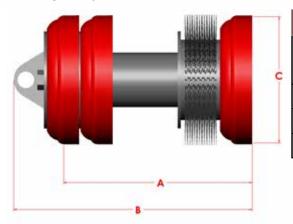
- Circular flange brushes in the following types and trim materials:
  - 1. Trim types flat wire or pencil.
  - 2. Trim material carbon steel, stainless steel or plastic.
- UT Mandrel to accommodate electronic tracking equipment.
- Aluminum gauge plates in slotted or standard styles.
- Magnets can be used to either collect ferrous and other construction debris, or they can be used to provide a change in magnetic field required by non-intrusive pig signaler detection devices.
- Three (SC3R) and four cup (SC4R) configurations.

## LEANING MODERATE

# SC3R

6-14" (152-356mm)

The Series SC3R is one powerful cleaning tool. Apache developed the Series SC3R pig to deliver a moderate cleaning capability to clean all types of pipelines. The result? The line is free of debris and flow rates improve. With the scrubbing capability of the sturdy pitPRO™ or circular flange brush, the Series SCR provides outstanding cleaning ability.



Size	А	В	С	Weight	Part #
6"	7.750	11.000	6.375	15	60-3076-06
8"	10.750	14.125	8.500	28	60-3076-08
10"	12.625	16.750	10.625	48	60-3076-10
12"	15.500	20.000	12.750	69	60-3076-12
14"	17.500	22.125	13.875	79	60-3076-14



#### Features & Benefits:

- The SC3R pig features three cups and one circular flange brush.
- Every Series SC3R pig is equipped with Apache Series C cups. As with all of Apache products, the Series C cup was specifically developed to perform efficiently and reliably. To enhance durability, it's made from Reliathane, Apache's special blend of wear-resistant polyurethane.
- The large wearing surface of the cup promotes longer life, while product pressure holds the cutting edge firmly against the pipe wall.
- To use a Series SC3R pig for different applications, elements and brushes can simply be added or reconfigured.

Designed to negotiate minimum 3D and greater bends, the SC3R pig moves reliably through piping systems.

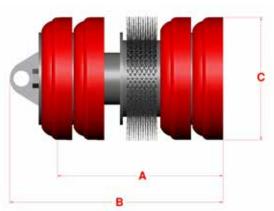
- Circular flange brushes in the following types and trim materials:
  - 1. Trim types flat wire or pencil.
  - 2. Trim material carbon steel, stainless steel or plastic.
- UT Mandrel to accommodate electronic tracking equipment.
- Aluminum gauge plates in slotted or standard styles.
- Magnets can be used to either collect ferrous and other construction debris, or they can be used to provide a change in magnetic field required by non-intrusive pig signaler detection devices.
- Two (SC2R) and four cup (SC4R) configurations.

## LEANING MODERATE

# SC4R

6-14" (152-356mm)

The Series SC4R is one powerful cleaning tool. Apache developed the Series SC4R pig to deliver a moderate cleaning capability to clean all types of pipelines. The result? The line is free of debris and flow rates improve. With the scrubbing capability of the sturdy pitPRO™ or circular flange brush, the Series SCR provides outstanding cleaning ability.



	Size	А	В	С	Weight	Part #
	6"	8.750	12.000	6.375	19	60-3077-06
	8"	10.875	14.375	8.500	33	60-3077-08
	10"	13.875	18.000	10.625	60	60-3077-10
	12"	16.875	21.375	12.750	84	60-3077-12
Ī	14"	18.375	23.000	13.875	97	60-3077-14



#### eatures & Benefits:

- The SC4R pig features four cups and one circular flange brush.
- Every Series SC4R pig is equipped with Apache Series C cups. As with all of Apache products, the Series C cup was specifically developed to perform efficiently and reliably. To enhance durability, it's made from Reliathane, Apache's special blend of wear-resistant polyurethane.
- The large wearing surface of the cup promotes longer life, while product pressure holds the cutting edge firmly against the pipe wall.
- To use a Series SC4R pig for different applications, elements and brushes can simply be added or reconfigured.

Designed to negotiate minimum 3D and greater bends, the SC4R pig moves reliably through piping systems.

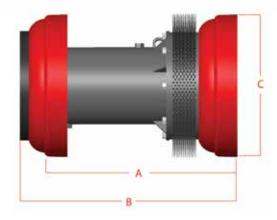
- Circular flange brushes in the following types and trim materials:
  - 1. Trim types flat wire or pencil.
  - 2. Trim material carbon steel, stainless steel or plastic.
- UT Mandrel to accommodate electronic tracking equipment.
- Aluminum gauge plates in slotted or standard styles.
- Magnets can be used to either collect ferrous and other construction debris, or they can be used to provide a change in magnetic field required by non-intrusive pig signaler detection devices.
- Two (SC2R) and three cup (SC3R) configurations.

## EANING MODERATE

## SC2R

16-48" (406-1219mm)

The Series SC2R is one powerful cleaning tool. Apache developed the Series SC2R pig to deliver a moderate cleaning capability to clean all types of pipelines. The result? The line is free of debris and flow rates improve. With the scrubbing capability of a circular flange brush, the Series SC2R provides outstanding cleaning ability.



Size	А	В	С	Weight	Part #
16"	21.000	24.250	16.000	95	60-3075-16
20"	25.875	29.625	19.875	152	60-3075-20
22"	28.000	32.125	21.875	175	60-3075-22
24"	30.500	34.625	23.875	222	60-3075-24
30"	37.000	42.125	29.875	337	60-3075-30
36"	43.500	49.000	36.000	530	60-3075-36
42"	50.000	56.000	42.125	767	60-3075-42
48"	54.250	60.750	48.500	944	60-3075-48

#### Features & Benefits:

- The SC2R pig features two cups and one circular flange brush.
- Every Series SC2R pig is equipped with Apache Series C cups. As with all of Apache products, the Series C cup was specifically developed to perform efficiently and reliably. To enhance durability, it's made from Reliathane, Apache's special blend of wear-resistant polyurethane.
- The large wearing surface of the cup promotes longer life, while product pressure holds the cutting edge firmly against the pipe wall.
- Every Apache SC2R 16"- 48" pig is manufactured with by-pass ports. These ports feature threaded plugs that can be removed, should by-pass be required. By removing the by-pass plugs, a portion of product flow is redirected through these openings. The debris is suspended in the turbulent flow and transferred ahead of the

Designed to negotiate 1.5D bends, the Series SC2R pig moves reliably through piping systems.

- Circular flange brushes or block brushes in the following types and trim materials:
  - 1. Trim types flat wire or pencil.
  - 2. Trim material carbon steel, stainless steel, plastic, or tin-coated.
- Transmitter housing to accommodate electronic tracking equipment.
- Aluminum gauge plates in slotted or standard styles.
- Three- (SC3R) and four-cup (SC4R) configurations.
- Magnets can be used to either collect ferrous and other construction debris, or they can be used to provide a change in magnetic field required by non-intrusive pig signaler detection devices.
- Rattlers.

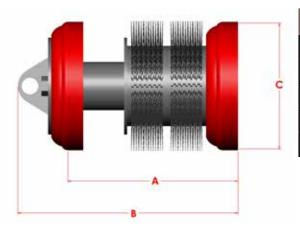
## EANING MODERATE

## DC2R

6-14" (152-356mm)

If your pipeline is in need of a good cleaning, the Series DC2R provides efficient cleaning capability. The DC2R pig features two Series C Cups and two circular brushes. These multiple sealing components create a positive seal, while simultaneously providing a bigger surface area. As a result, its sealing capacity and overall cleaning ability are greatly improved.

When product flows more freely through the pipeline, less energy is required to pump it, reducing operating costs. It also reduces maintenance and repair costs down the road. Thanks to Series DC2R, it's easy to keep your pipeline debris-free.



Size	А	В	С	Weight	Part #
6"	7.500	10.875	6.375	14	60-3082-06
8"	10.875	14.375	8.500	26	60-3082-08
10"	12.250	16.375	10.625	41	60-3082-10
12"	14.875	19.375	12.750	61	60-3082-12
14"	16.875	21.500	13.875	71	60-3082-14



#### Features & Benefits:

- Every Series DC2R pig is equipped with Apache Series C cups. As with all of Apache products, the Series C cup was specifically developed to perform efficiently and reliably.
- To maximize durability, it's made from Reliathane, Apache's special blend of wear-resistant polyurethane.
- To use a Series DC2R pig for different applications, elements and brushes can simply be added or reconfigured.

Designed to negotiate minimum 3D and greater bends, the DC2R pig moves reliably through piping systems.

- Circular flange brushes in the following types and trim materials:
  - 1. Trim types flat wire or pencil.
  - 2. Trim material carbon steel, stainless steel or plastic.
- UT Mandrel to accommodate electronic tracking equipment.
- Aluminum gauge plates in slotted or standard styles.
- Magnets can be used to either collect ferrous and other construction debris, or they can be used to provide a change in magnetic field required by non-intrusive pig signaler detection devices.
- Three (DC3R) and four cup (DC4R) configuration.

# MODERATE CLEANING

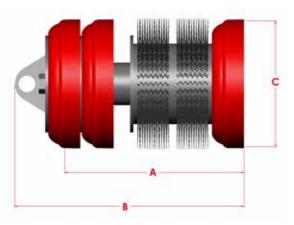
## DC3R

6-14" (152-356mm)

If your pipeline is in need of a good cleaning, the Series DC3R provides efficient cleaning capability.

The DC3R pig features three Series C Cups and two circular brushes. These multiple sealing components create a positive seal between dissimilar fluids, while simultaneously providing a bigger surface area. As a result, its sealing capacity and overall cleaning ability are greatly improved.

When product flows more freely through the pipeline, less energy is required to pump it, reducing production costs. It also reduces maintenance and repair costs down the road. Thanks to Series DCR, it's easy to keep your pipeline debris-free.



Size	А	В	С	Weight	Part #
6"	9.125	12.375	6.375	18	60-3083-06
8"	12.125	15.500	8.500	32	60-3083-08
10"	15.000	19.125	10.625	53	60-3083-10
12"	16.750	21.250	12.750	77	60-3083-12
14"	18.250	22.875	13.875	89	60-3083-14



### Features & Benefits:

- Every Series DC3R pig is equipped with Apache Series C cups. As with all of Apache products, the Series C cup
  was specifically developed to perform efficiently and reliably. To enhance durability, it's made from Reliathane,
  Apache's special blend of wear-resistant polyurethane.
- To use a Series DC3R pig for different applications, elements and brushes can simply be added or reconfigured.

Designed to negotiate minimum 3D and greater bends, the DC3R pig moves reliably through piping systems.

### Options Available:

- Circular flange brushes in the following types and trim materials:
  - 1. Trim types flat wire or pencil.
  - 2. Trim material carbon steel, stainless steel or plastic.
- UT Mandrel to accommodate electronic tracking equipment.
- Aluminum gauge plates in slotted or standard styles.
- Magnets can be used to either collect ferrous and other construction debris, or they can be used to provide a change in magnetic field required by non-intrusive pig signaler detection devices.
- Two (DC2R) and four cup (DC4R) configurations.

Ph: 780.416.4850

## EANING MODERATE

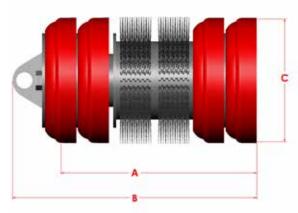
# DC4R

6-14" (152-356mm)

If your pipeline is in need of a good cleaning, the Series DC4R provides efficient cleaning capability.

The DC4R pig features four Series C Cups and two circular brushes. These multiple sealing components create a positive seal between dissimilar fluids, while simultaneously providing a bigger surface area. As a result, its sealing capacity and overall cleaning ability are greatly improved.

When product flows more freely through the pipeline, less energy is required to pump it, reducing production costs. It also reduces maintenance and repair costs down the road. Thanks to Series DCR, it's easy to keep your pipeline debris-free.



Size	А	В	С	Weight	Part #
6"	9.625	12.875	6.375	21	60-3084-06
8"	12.250	15.750	8.500	37	60-3084-08
10"	15.250	19.500	10.625	65	60-3084-10
12"	18.625	23.125	12.750	94	60-3084-12
14"	20.125	24.750	13.875	106	60-3084-14



#### Features & Benefits:

- Every Series DC4R pig is equipped with Apache Series C cups. As with all of Apache products, the Series C cup was specifically developed to perform efficiently and reliably. To enhance durability, it's made from Reliathane, Apache's special blend of wear-resistant polyurethane.
- To use a Series DC4R pig for different applications, elements and brushes can simply be added or reconfigured.

Designed to negotiate minimum 3D and greater bends, the DC4R pig moves reliably through piping systems.

- Circular flange brushes in the following types and trim materials:
  - 1. Trim types flat wire or pencil.
  - 2. Trim material carbon steel, stainless steel or plastic.
- UT Mandrel to accommodate electronic tracking equipment.
- Aluminum gauge plates in slotted or standard styles.
- Magnets can be used to either collect ferrous and other construction debris, or they can be used to provide a change in magnetic field required by non-intrusive pig signaler detection devices.
- Two (DC2R) and three cup (DC3R) configurations.

## EANING MODERATE

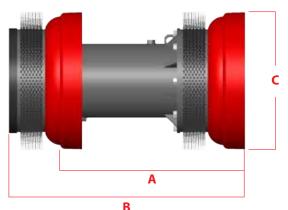
## DC2R

16-48" (406-1219mm)

If your pipeline is in need of a good cleaning, the Series DC2R provides efficient moderate cleaning capability.

The DC2R pig features two Series C Cups and two circular brushes. These multiple sealing components create a positive seal between dissimilar fluids, while simultaneously providing a bigger surface area. As a result, its sealing capacity and overall cleaning ability are greatly improved.

When product flows more freely through the pipeline, less energy is required to pump it, reducing production costs. It also reduces maintenance and repair costs down the road. Thanks to Series DC2R, it's easy to keep your pipeline debris-free.



Size	А	В	С	Weight	Part #
16"	21.000	27.500	16.000	109	60-3082-16
20"	25.875	32.875	19.875	172	60-3082-20
22"	28.000	35.375	21.875	202	60-3082-22
24"	30.500	38.000	23.875	249	60-3082-24
30"	37.000	45.375	29.875	379	60-3082-30
36"	43.500	52.250	36.000	599	60-3082-36
42"	50.000	59.250	42.125	859	60-3082-42
48"	54.250	64.000	48.500	1046	60-3082-48

### Features & Benefits:

- Every Series DC2R pig is equipped with Apache Series C cups. As with all of Apache products, the Series C cup was specifically developed to perform efficiently and reliably. To enhance durability, it's made from Reliathane, Apache's special blend of wear-resistant polyurethane.
- Every Apache DC2R 16"- 48" pig is manufactured with by-pass ports. These ports feature threaded plugs that can be removed, should by-pass be required. By removing the by-pass plugs, a portion of product flow is redirected through these openings. The debris is suspended in the turbulent flow and transferred ahead of the pig.

Designed to negotiate 1.5D bends, the Series DC2R pig moves reliably through piping systems.

### Options Available:

- Circular flange brushes or block brushes in the following types and trim materials:
  - 1. Trim types flat wire or pencil.
  - 2. Trim material carbon steel, stainless steel, plastic, or tin-coated.
- Transmitter housing to accommodate electronic tracking equipment.
- Aluminum gauge plates in slotted or standard styles.
- Magnets can be used to either collect ferrous and other construction debris, or they can be used to provide a change in magnetic field required by non-intrusive pig signaler detection devices.
- Rattlers.

2-23

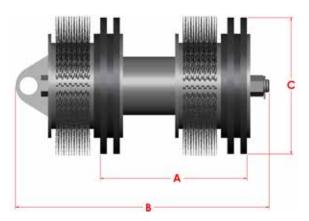
## MODERATE LEANING

## **EDR**

6-14" (152-356mm)

Every newly constructed pipeline requires hydrostatic testing, but before that can take place, the line must be very clean. If you're in search of a pig that provides moderate cleaning capability, Apache offers the EDR.

Equipped with sturdy circular flange brushes that forcefully scrub away residue and debris, the primary function of the EDR is to moderately clean the line before testing, leaving it in a pristine condition, ready for assessment.



Size	А	В	С	Weight	Part #
6"	7.875	15.750	6.375	18	60-7150-06
8"	10.250	18.250	8.375	31	60-7150-08
10"	11.250	19.750	10.500	51	60-7150-10
12"	14.125	22.750	12.500	71	60-7150-12
14"	16.625	25.250	13.875	80	60-7150-14

### Features & Benefits:

- The Series EDR is extremely effective, providing a thorough and deep clean.
- With repeated use, sealing discs can experience wear and tear. The EDR pig can still reverse direction without compromising its sealing capabilities.
- To maximize durability, all discs are made from Reliathane, Apache's special blend of wear-resistant polyurethane.

Designed to negotiate 1.5D bends, the EDR pig moves reliably through piping systems.

- Circular flange brushes in the following types and trim materials:
  - 1. Trim types flat wire or pencil.
  - 2. Trim material carbon steel, stainless steel or plastic.
- UT Mandrel to accommodate electronic tracking equipment.
- CARVER discs.
- Aluminum gauge plates in slotted or standard styles.
- Magnets can be used to either collect ferrous and other construction debris, or they can be used to provide a change in magnetic field required by non-intrusive pig signaler detection devices.

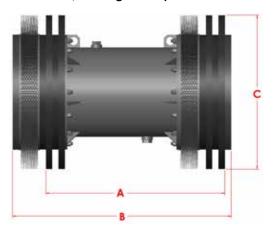
# MODERATE CLEANING

## **EDR**

16-48" (406-1219mm)

Every newly constructed pipeline requires hydrostatic testing, but before that can take place, the line must be very clean. If you're in search of a pig that provides excellent cleaning capability, Apache offers the EDR.

Equipped with sturdy brushes that forcefully scrub away residue and debris, the primary function of the EDR is to clean the line, leaving it in a pristine condition.



Size	А	В	С	Weight	Part #
16"	19.000	25.000	15.875	132	60-7150-16
18"	21.500	27.500	17.875	165	60-7150-18
20"	24.375	30.500	20.000	217	60-7150-20
22"	26.375	32.250	22.000	248	60-7150-22
24"	28.250	34.500	24.125	303	60-7150-24
30"	33.375	40.250	30.250	468	60-7150-30
36"	40.125	47.000	36.500	776	60-7150-36
42"	47.250	55.250	42.125	1093	60-7150-42
48"	53.250	62.000	48.875	1381	60-7150-48

#### Features & Benefits:

- The Series EDR is extremely effective, providing a thorough and deep clean.
- With repeated use, sealing discs can experience wear and tear. The EDR pig can still reverse direction without compromising its sealing capabilities.
- To maximize durability, all discs are made from Reliathane, Apache's special blend of wear-resistant polyurethane.
- Every Apache EDR 16"- 48" pig is manufactured with by-pass ports. These ports feature threaded plugs that can be removed, should by-pass be required. By removing the by-pass plugs, a portion of product flow is redirected through these openings. The debris is suspended in the turbulent flow and transferred ahead of the pig.

Designed to negotiate 1.5D bends, the EDR pig moves reliably through piping systems.

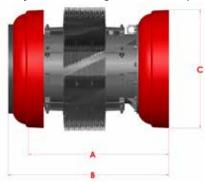
- Circular flange brushes or block brushes in the following types and trim materials:
  - 1. Trim types flat wire or pencil.
  - 2. Trim material carbon steel, stainless steel, plastic, or tin-coated.
- Transmitter housing to accommodate electronic tracking equipment.
- CARVER discs.
- Aluminum gauge plates in slotted or standard styles.
- Magnets can be used to either collect ferrous and other construction debris, or they can be used to provide a change in magnetic field required by non-intrusive pig signaler detection devices.

## UC2X

16-48" (406-1219mm)

The Series UC2X with block brush provides aggressive cleaning during the construction phase as well as regular pipeline operations. Let's face it, when a pipeline is being constructed, it's a messy business, so it's important that the pipeline interior be kept clean throughout the process. Apache developed the Series just for this purpose.

At times it's necessary to clean a line more rigorously, which requires additional cups. Bearing this in mind, the Series UCX is available in three versions. The two-cup design of the UC2X pig provides a basic level of aggressive cleaning capability. With each additional cup, the Series UCX pig cleans more rigorously. Therefore, the UC3X three-cup and UC4X four-cup design pigs are progressively more powerful cleaning tools. They are used to aggressively clean and scrape pipelines, and are typically used for longer distance operations.



Size	А	В	С	Weight	Part #
16"	18.875	22.000	16.000	118	60-3522-16
20"	24.500	28.375	19.875	187	60-3522-20
22"	26.750	30.875	21.875	210	60-3522-22
24"	28.375	32.500	23.875	269	60-3522-24
30"	33.750	38.875	29.875	391	60-3522-30
36"	40.125	45.750	36.000	572	60-3522-36
42"	46.750	52.750	42.125	819	60-3522-42
48"	51.000	57.500	48.500	987	60-3522-48

#### Features & Benefits:

- Every Series UCX pig is equipped with Apache Series C cups. As with all of Apache products, the Series C cup was specifically developed to perform efficiently and reliably. To enhance durability, it's made from Reliathane, Apache's special blend of wear-resistant polyurethane.
- The large wearing surface of the cup promotes longer life, while product pressure holds the cutting edge firmly against the
- The UC2X is manufactured with block brushes that are available in a variety of trim options.
- Every Apache UC2X 16"- 48" pig is manufactured with by-pass ports. These ports feature threaded plugs that can be removed, should by-pass be required. By removing the by-pass plugs, a portion of product flow is redirected through these openings. The debris is suspended in the turbulent flow and transferred ahead of the pig.
- Standard bumper noses cushion the pig and help to protect in-line auxiliary equipment, preventing damage.

Designed to negotiate minimum 3D and greater bends, the UC2X pig moves reliably through piping systems.

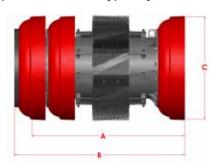
- CARVER discs.
- Transmitter housing to accommodate electronic tracking equipment.
- Circular flange brushes or block brushes in the following types and trim materials:
  - 1. Trim types flat wire or pencil.
  - 2. Trim material carbon steel, stainless steel, plastic, or tin-coated.
- Aluminum gauge plates in slotted or standard styles.
- Magnets can be used to either collect ferrous and other construction debris, or they can be used to provide a change in magnetic field required by non-intrusive pig signaler detection devices.
- Urethane Plow Blades Designed to replace a XB block brush, the 3-Rib urethane removes paraffin wax and similar deposits from the pipe wall that normally collect and cram between the bristles of a block brush. Our plow blade profile performs a similar function to the 3-Rib, but is used primarily for pipe sizes 16" - 18". Both blade types are also excellent tools for removing debris in non-metallic or internally coated pipe without damaging the pipe wall coating.
- Three (UC3X) and four cup (UC4X configurations.

## UC3X

16-48" (406-1219mm)

The Series UC3X with block brush provides aggressive cleaning during the construction phase as well as regular pipeline operations. Let's face it, when a pipeline is being constructed, it's a messy business, so it's important that the pipeline interior be kept clean throughout the process. Apache developed the Series UCX just for this purpose.

At times it's necessary to clean a line more rigorously, which requires additional cups. Bearing this in mind, the Series UCX is available in three versions. The two-cup design of the UC2X pig provides a basic level of aggressive cleaning capability. With each additional cup, the Series UCX pig cleans more rigorously. Therefore, the UC3X three-cup and UC4X four-cup design pigs are progressively more powerful cleaning tools. They are used to aggressively clean and scrape pipelines, and are typically used for longer distance operations.



Size	А	В	С	Weight	Part #
16"	23.500	26.875	16.000	150	60-3523-16
20"	30.500	34.500	19.875	240	60-3523-20
22"	33.375	37.500	21.875	276	60-3523-22
24"	35.125	39.250	23.875	341	60-3523-24
30"	42.125	47.125	29.875	509	60-3523-30
36"	49.250	54.750	36.000	743	60-3523-36
42"	56.500	62.500	42.125	1058	60-3523-42
48"	61.750	68.125	48.500	1292	60-3523-48

#### Features & Benefits:

- Every Series UCX pig is equipped with Apache Series C cups. As with all of Apache products, the Series C cup was specifically developed to perform efficiently and reliably. To enhance durability, it's made from Reliathane, Apache's special blend of wear-resistant polyurethane.
- The large wearing surface of the cup promotes longer life, while product pressure holds the cutting edge firmly against the pipe wall.
- The UC3X is manufactured with block brushes that are available in a variety of trim options.
- Every Apache UC3X 16"- 48" pig is manufactured with by-pass ports. These ports feature threaded plugs that can be removed, should by-pass be required. By removing the by-pass plugs, a portion of product flow is redirected through these openings. The debris is suspended in the turbulent flow and transferred ahead of the pig.
- Standard bumper noses cushion the pig and help to protect in-line auxiliary equipment, preventing damage.

Designed to negotiate minimum 3D and greater bends, the UC3X pig moves reliably through piping systems.

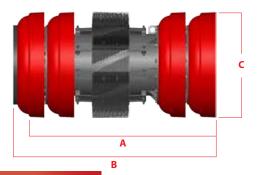
- CARVER discs.
- Rattlers.
- Transmitter housing to accommodate electronic tracking equipment.
- Circular flange brushes or block brushes in the following types and trim materials:
  - 1. Trim types flat wire or pencil.
  - 2. Trim material carbon steel, stainless steel, plastic, or tin-coated.
- Aluminum gauge plates in slotted or standard styles.
- Magnets can be used to either collect ferrous and other construction debris, or they can be used to provide a change in magnetic field required by non-intrusive pig signaler detection devices.
- Urethane Plow Blades Designed to replace a XB block brush, the 3-Rib urethane removes paraffin wax and similar deposits from the pipe wall that normally collect and cram between the bristles of a block brush. Our plow blade profile performs a similar function to the 3-Rib, but is used primarily for pipe sizes 16" - 18". Both blade types are also excellent tools for removing debris in non-metallic or internally coated pipe without damaging the pipe wall coating.
- Two (UC2X) and four cup (UC4X) configurations.

## UC4X

16-48" (406-1219mm)

The Series UC4X with block brush provides aggressive cleaning during the construction phase as well as regular pipeline operations. Let's face it, when a pipeline is being constructed, it's a messy business, so it's important that the pipeline interior be kept clean throughout the process. Apache developed the Series UCX just for this purpose.

At times it's necessary to clean a line more rigorously, which requires additional cups. Bearing this in mind, the Series UCX is available in three versions. The two-cup design of the UC2X pig provides a basic level of aggressive cleaning capability. With each additional cup, the Series UCX pig cleans more rigorously. Therefore, the UC3X threecup and UC4X four-cup design pigs are progressively more powerful cleaning tools. They are used to aggressively clean and scrape pipelines, and are typically used for longer distance operations.



Size	А	В	С	Weight	Part #
16"	29.250	32.500	16.000	184	60-3524-16
20"	36.625	40.500	19.875	295	60-3524-20
22"	39.875	44.000	21.875	340	60-3524-22
24"	41.875	46.000	23.875	414	60-3524-24
30"	50.500	55.500	29.875	614	60-3524-30
36"	58.250	63.750	36.000	900	60-3524-36
42"	66.125	72.125	42.125	1328	60-3524-42
48"	72.325	78.875	48.500	1588	60-3524-48

#### Features & Benefits:

- Every Series UCX pig is equipped with Apache Series C cups. As with all of Apache products, the Series C cup was specifically developed to perform efficiently and reliably. To maximize durability, it's made from Reliathane, Apache's special blend of wear-resistant polyurethane.
- The large wearing surface of the cup promotes longer life, while product pressure holds the cutting edge firmly against the pipe wall.
- The UC4X is manufactured with block brushes that are available in a variety of trim options.
- Every Apache UC4X 16"- 48" pig is manufactured with by-pass ports. These ports feature threaded plugs that can be removed, should by-pass be required. By removing the by-pass plugs, a portion of product flow is redirected through these openings. The debris is suspended in the turbulent flow and transferred ahead of the pig.
- Standard bumper noses cushion the pig and help to protect in-line auxiliary equipment, preventing damage.

Designed to negotiate minimum 3D and greater bends, the UC4X pig moves reliably through piping systems.

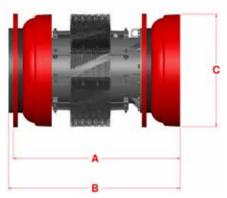
- CARVER discs.
- Rattlers.
- Transmitter housing to accommodate electronic tracking equipment.
- Circular flange brushes or block brushes in the following types and trim materials:
  - 1. Trim types flat wire or pencil.
  - 2. Trim material carbon steel, stainless steel, plastic, or tin-coated.
- Aluminum gauge plates in slotted or standard styles.
- Magnets can be used to either collect ferrous and other construction debris, or they can be used to provide a change in magnetic field required by non-intrusive pig signaler detection devices.
- Two (UC2X) and three cup (UC3X) configurations.
- Urethane Plow Blades Designed to replace a XB block brush, the 3-Rib urethane removes paraffin wax and similar deposits from the pipe wall that normally collect and cram between the bristles of a block brush. Our plow blade profile performs a similar function to the 3-Rib, but is used primarily for pipe sizes 16" - 18". Both blade types are also excellent tools for removing debris in non-metallic or internally coated pipe without damaging the pipe wall coating.

## **DCDX**

16-48" (406-1219mm)

Aggressive, effective cleaning is the name of the game for the Series DCDX pig.

The DCDX pig features two sealing discs, two Series C Cups and block brushes. These multiple sealing components create a positive seal, while simultaneously providing a larger sealing surface area. As a result, its sealing capacity, scraping capability, and overall cleaning ability is greatly improved. It is used to aggressively clean pipelines, and is typically used for longer distance operations.



Size	А	В	С	Weight	Part #
16"	24.000	25.000	16.000	132	60-3700-16
20"	30.875	31.875	19.875	212	60-3700-20
22"	33.375	34.375	21.875	246	60-3700-22
24"	35.500	36.500	23.875	307	60-3700-24
30"	42.250	43.375	29.875	459	60-3700-30
36"	49.875	51.250	36.000	682	60-3700-36
42"	57.875	58.750	42.125	999	60-3700-42
48"	62.750	64.500	48.500	1207	60-3700-48

#### Features & Benefits:

- Every Series DCDX pig is equipped with Apache Series C cups. As with all of Apache products, the Series C cup was
  specifically developed to perform efficiently and reliably. To enhance durability, it's made from Reliathane, Apache's
  special blend of wear-resistant polyurethane.
- The large wearing surface of the cup promotes longer life, while product pressure holds the cutting edge firmly against the pipe wall.
- The DCDX is manufactured with block brushes that are available in a variety of trim options.
- Every Apache DCDX 16"- 48" pig is manufactured with by-pass ports. These ports feature threaded plugs that can be
  removed, should by-pass be required. By removing the by-pass plugs, a portion of product flow is redirected through
  these openings. The debris is suspended in the turbulent flow and transferred ahead of the pig.
- Standard bumper noses cushion the pig and help to protect in-line auxiliary equipment, preventing damage.

Designed to negotiate minimum 3D and greater bends, the DCDX pig moves reliably through piping systems.

- Circular flange brushes or block brushes in the following types and trim materials:
  - 1. Trim types flat wire or pencil.
  - 2. Trim material carbon steel, stainless steel, plastic, or tin-coated.
- Transmitter housing to accommodate electronic tracking equipment.
- CARVER discs.
- Aluminum gauge plates in slotted or standard styles.
- Magnets can be used to either collect ferrous and other construction debris, or they can be used to provide a change in magnetic field required by non-intrusive pig signaler detection devices.
- Rattlers.
- Urethane Plow Blades Designed to replace a XB block brush, the 3-Rib urethane removes paraffin wax and similar deposits from the pipe wall that normally collect and cram between the bristles of a block brush. Our plow blade profile performs a similar function to the 3-Rib, but is used primarily for pipe sizes 16" 18". Both blade types are also excellent tools for removing debris in non-metallic or internally coated pipe without damaging the pipe wall coating.

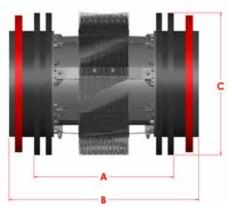
## LEANING AGGRESSIVE CL

## EDX

16-48" (406-1219mm)

Every newly constructed pipeline requires hydrostatic testing, but before that can take place, the line must be immaculate. To achieve this level of cleanliness, Apache offers the rugged EDX, a seriously aggressive cleaning pig.

Equipped with sturdy block brushes that forcefully scrub away residue and debris, the primary function of the EDX is to aggressively clean the line before testing, leaving it in a pristine condition, ready for assessment.



Size	Α	В	С	Weight	Part #
16"	18.000	25.250	15.875	157	60-7228-16
18"	20.500	27.750	17.875	194	60-7228-18
20"	23.000	31.000	20.000	252	60-7228-20
22"	26.250	34.250	22.000	283	60-7228-22
24"	26.750	35.250	24.125	355	60-7228-24
30"	29.750	39.500	30.250	530	60-7228-30
36"	35.250	47.000	36.500	812	60-7228-36
42"	42.250	55.250	42.125	1209	60-7228-42
48"	46.500	61.750	48.875	1511	60-7228-48

#### Features & Benefits:

- The EDX pig is a very economical four-sealing, two-guide disc bi-directional pig. It not only provides a solid seal, its tough, spring-loaded brushes mean that it meticulously cleans line interiors, leaving them free of scale and debris. To enhance versatility, the EDX is manufactured with block brushes that are available in a variety of trim options.
- The pig's durable guide discs center the sealing discs in the line, forming a quadruple seal that virtually eliminates product by-pass.
- Standard bumper noses cushion the pig and help to protect in-line auxiliary equipment, preventing damage.
- To maximize durability, all discs are made from Reliathane, Apache's special blend of wear-resistant polyurethane.
- Every Apache EDX 16"- 48" pig is manufactured with by-pass ports. These ports feature threaded plugs that can be removed, should by-pass be required. By removing the by-pass plugs, a portion of product flow is redirected through these openings. The debris is suspended in the turbulent flow and transferred ahead of the pig.

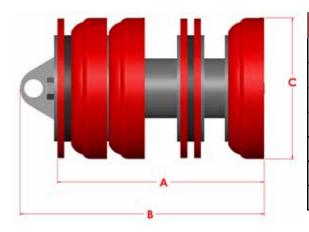
Designed to negotiate minimum 3D and greater bends, the EDX pig moves reliably through piping systems.

- Circular flange brushes or block brushes in the following types and trim materials:
  - 1. Trim types flat wire or pencil.
  - 2. Trim material carbon steel, stainless steel, plastic, or tin-coated.
- Transmitter housing to accommodate electronic tracking equipment.
- CARVER discs.
- Aluminum gauge plates in slotted or standard styles.
- Magnets can be used to either collect ferrous and other construction debris, or they can be used to provide a change in magnetic field required by non-intrusive pig signaler detection devices.
- Urethane Plow Blades Designed to replace a XB block brush, the 3-Rib urethane removes paraffin wax and similar deposits from the pipe wall that normally collect and cram between the bristles of a block brush. Our plow blade profile performs a similar function to the 3-Rib, but is used primarily for pipe sizes 16" - 18". Both blade types are also excellent tools for removing debris in non-metallic or internally coated pipe without damaging the pipe wall coating.

XF 3-14" (76-356mm)

The Series XF is primarily used for batching dissimilar fluids.

With its standard three cup-three sealing disc design, the XF pig provides a positive seal between fluid interfaces for efficient batching and separating. It is typically used for longer distance operations.



Size	А	В	С	Weight	Part #
3"	7.625	9.000	3.375	3.0	70-6786-03
4"	8.250	9.000	4.375	6.0	70-6786-04
6"	10.250	12.500	6.375	18	70-6786-06
8"	12.000	14.375	8.500	33	70-6786-08
10"	15.125	18.000	10.625	58	70-6786-10
12"	18.125	20.875	12.750	82	70-6786-12
14"	20.750	23.500	13.875	92	70-6786-14

#### Features & Benefits:

- Every Series XF pig is equipped with Apache Series C cups. As with all of Apache products, the Series C cup and discs were specifically developed to perform efficiently and reliably.
- To maximize durability, all discs are made from Reliathane, Apache's special blend of wear-resistant polyurethane.
- The large wearing surface of the cup promotes longer life, while product pressure holds the cutting edge firmly against the pipe wall.

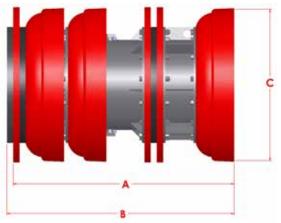
Designed to negotiate minimum 3D and greater bends, the XF pig moves reliably through piping systems.

- Circular flange brushes in the following types and trim materials:
  - 1. Trim types flat wire or pencil.
  - 2. Trim material carbon steel, stainless steel or plastic.
- UT Mandrel to accommodate electronic tracking equipment.
- CARVER discs.
- Aluminum gauge plates in standard styles.
- Magnets can be used to either collect ferrous and other construction debris, or they can be used to provide a change in magnetic field required by non-intrusive pig signaler detection devices.

XF 16-48" (406-1219mm)

The Series XF is primarily used for batching dissimilar fluids.

With its standard three cup-three sealing disc design, the XF pig provides a positive seal between fluid interfaces for efficient batching and separating. It is typically used for longer distance operations.



	Size	Α	В	С	Weight	Part #
	16"	23.375	24.375	16.000	140	70-6786-16
	18"	27.625	28.625	17.875	174	70-6786-18
7 7	20"	30.000	31.000	19.875	231	70-6786-20
	22"	32.500	33.500	21.875	267	70-6786-22
	24"	35.500	36.500	23.875	359	70-6786-24
	30"	45.375	46.500	29.875	541	70-6786-30
	36"	53.500	54.875	36.000	823	70-6786-36
	42"	62.125	63.625	42.125	1252	70-6786-42
	48"	72.000	73.625	48.500	1519	70-6786-48

### Features & Benefits:

- Every Series XF pig is equipped with Apache Series C cups. As with all of Apache products, the Series C cup and discs were specifically developed to perform efficiently and reliably. To enhance durability, it's made from Reliathane, Apache's special blend of wear-resistant polyurethane.
- Plus, the large wearing surface of the cup promotes longer life, while product pressure holds the cutting edge firmly against the pipe wall.
- Every Apache XF 16"- 48" pig is manufactured with by-pass ports. These ports feature threaded plugs that can be removed, should by-pass be required. By removing the by-pass plugs, a portion of product flow is redirected through these openings. The debris is suspended in the turbulent flow and transferred ahead of the pig.
- Standard bumper noses cushion the pig and help to protect in-line auxiliary equipment, preventing damage.

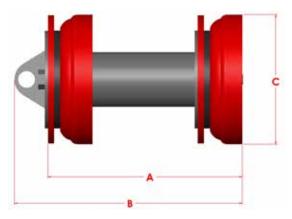
Designed to negotiate minimum 3D and greater bends, the XF pig moves reliably through piping systems.

- Circular flange brushes or block brushes in the following types and trim materials:
  - 1. Trim types flat wire or pencil.
  - 2. Trim material carbon steel, stainless steel, plastic, or tin-coated.
- Transmitter housing to accommodate electronic tracking equipment.
- CARVER discs.
- Aluminum gauge plates in slotted or standard styles.
- Magnets can be used to either collect ferrous and other construction debris, or they can be used to provide a change in magnetic field required by non-intrusive pig signaler detection devices.
- Rattlers.



Effective batching and separating capability is the name of the game for the Series DCD pig.

Every pig in the series is equipped with two sealing discs and two Apache Series C Cups. These multiple sealing components create a positive seal between dissimilar fluids, while simultaneously providing a larger sealing surface area. As a result, its sealing capacity, and overall batching and separating capability is greatly improved.



Size	Α	В	С	Weight	Part #
3"	4.875	6.500	3.375	2.0	70-6830-03
4"	6.250	8.250	4.375	4.0	70-6830-04
6"	9.375	12.250	6.375	12	70-6830-06
8"	11.875	14.500	8.500	23	70-6830-08
10"	14.875	17.750	10.625	39	70-6830-10
12"	18.125	20.875	12.750	56	70-6830-12
14"	20.750	23.500	13.875	65	70-6830-14

### Features & Benefits:

- Every Series DCD pig is equipped with Apache Series C cups. As with all of Apache products, the Series C cup and discs were specifically developed to perform efficiently and reliably.
- To maximize durability, all discs are made from Reliathane, Apache's special blend of wear-resistant polyurethane.
- The DCD pig is configured to offer a sealing arrangement that is used to separate dissimilar fluids during longer distance operations.

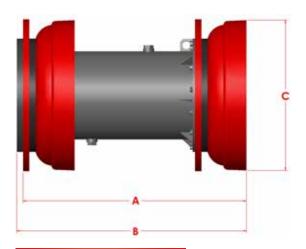
Designed to negotiate 1.5D bends, the Series DCD pig moves reliably through piping systems.

- UT Mandrel to accommodate electronic tracking equipment.
- CARVER discs.
- Aluminum gauge plates in standard styles.
- Magnets can be used to either collect ferrous and other construction debris, or they can be used to provide a change in magnetic field required by non-intrusive pig signaler detection devices.



Effective batching and separating capability is the name of the game for the Series DCD pig.

Every pig in the series is equipped with two sealing discs and two Series C Cups. These multiple sealing components create a positive seal between dissimilar fluids, while simultaneously providing a bigger surface area. As a result, its sealing capacity, and overall batching and separating capability is greatly improved.



Size	Α	В	С	Weight	Part #
16"	23.125	24.125	16.000	97	70-6830-16
20"	28.875	29.875	19.875	159	70-6830-20
22"	31.375	32.375	21.875	183	70-6830-22
24"	34.500	35.500	23.875	234	70-6830-24
30"	42.250	43.375	29.875	376	70-6830-30
36"	49.875	51.250	36.000	583	70-6830-36
42"	57.250	58.750	42.125	865	70-6830-42
48"	62.750	64.500	48.500	1077	70-6830-48

#### Features & Benefits:

- The DCD pig is configured to offer a sealing arrangement that is used to separate dissimilar fluids, and to lightly scrape pipelines during longer distance operations.
- Every Apache DCD 16"- 48" pig is manufactured with by-pass ports. These ports feature threaded plugs that can be removed, should by-pass be required. By removing the by-pass plugs, a portion of product flow is redirected through these openings. The debris is suspended in the turbulent flow and transferred ahead of the pig.
- Standard bumper noses cushion the pig and help to protect in-line auxiliary equipment, preventing damage.

Designed to negotiate 1.5D bends, the Series DCD pig moves reliably through piping systems.

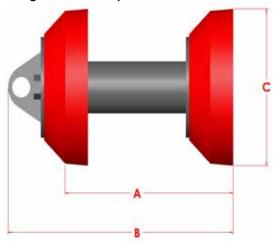
- Circular flange brushes or block brushes in the following types and trim materials:
  - 1. Trim types flat wire or pencil.
  - 2. Trim material carbon steel, stainless steel, plastic, or tin-coated.
- Transmitter housing to accommodate electronic tracking equipment.
- CARVER discs.
- Aluminum gauge plates in slotted or standard styles.
- Magnets can be used to either collect ferrous and other construction debris, or they can be used to provide a change in magnetic field required by non-intrusive pig signaler detection devices.
- Rattlers.

# UM2

3-14" (76-356mm)

Primarily used to batch dissimilar fluids, the Series UM2 conical cup pig is also very effective for pipelines in need of light cleaning.

How is this possible? The answer lies in the three versions of the Series UM. The two-cup design of the UM2 pig provides a positive seal between fluid interfaces for efficient batching. The UM3 three-cup and UM4 four-cup design pigs are both used to gently clean pipelines and for batching and separation operations. They are typically used for longer distance operations.



Size	А	В	С	Weight	Part #
3"	4.625	6.625	3.375	2.0	70-5802-03
4"	5.875	8.000	4.375	3.0	70-5802-04
6"	8.250	11.625	6.500	10	70-5802-06
8"	10.500	14.125	8.375	15	70-5802-08
10"	12.750	17.125	10.500	27	70-5802-10
12"	15.125	19.625	12.500	39	70-5802-12
14"	17.500	22.125	14.000	48	70-5802-14

#### Features & Benefits:

- Given that anomalies are a fairly common feature of a pipeline scheduled for maintenance, it's reassuring that pigs mounted with conical cups can traverse pipeline anomalies of up to 20% without damaging essential inline auxiliary equipment.
- Every Series UM pig is equipped with Apache Series M cups. As with all of Apache products, the Series M cup was especially developed to perform efficiently and reliably. To maximize durability, it's made from Reliathane, Apache's special blend of wear-resistant polyurethane.

Designed to negotiate 1.5D bends, the Series UM2 pig moves reliably through piping systems.

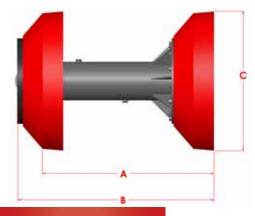
- Circular flange brushes in the following types and trim materials:
  - 1. Trim types flat wire or pencil.
  - 2. Trim material carbon steel, stainless steel or plastic.
- Aluminum or steel gauging plates in slotted or standard styles.
- UT Mandrel to accommodate electronic tracking equipment.
- Magnets can be used to either collect ferrous and other construction debris, or they can be used to provide a change in magnetic field required by non-intrusive pig signaler detection devices.

## UM2

16-48" (406-1219mm)

Primarily used to batch dissimilar fluids, the Series UM2 is also very effective for pipelines in need of light cleaning.

How is this possible? The answer lies in the three versions of the Series UM. The two-cup design of the UM2 pig provides a positive seal between fluid interfaces for efficient batching. The UM3 three-cup and UM4 four-cup design pigs are both used to gently clean pipelines and for batching and separation operations. They are typically used for longer distance operations.



Size	Α	В	С	Weight	Part #
16"	21.000	24.000	15.875	63	70-5802-16
20"	23.750	27.375	20.000	98	70-5802-20
22"	27.625	31.625	22.000	137	70-5802-22
24"	29.500	33.875	24.000	161	70-5802-24
30"	36.750	41.875	29.875	273	70-5802-30
36"	45.750	52.250	36.000	421	70-5802-36
42"	54.125	61.375	42.125	614	70-5802-42
48"	60.375	68.625	48.125	754	70-5802-48

## Features & Benefits:

- Given that anomalies are a fairly common feature of a pipeline scheduled for maintenance, it's reassuring that pigs mounted with conical cups can traverse pipeline anomalies of up to 20% without damaging essential inline auxiliary equipment.
- Every Series UM pig is equipped with Apache Series M cups. As with all of Apache products, the Series M cup was especially developed to perform efficiently and reliably. To maximize durability, it's made from Reliathane, Apache's special blend of wear-resistant polyurethane.
- Every Apache UM2 16"- 48" pig is manufactured with by-pass ports. These ports feature threaded plugs that can be removed, should by-pass be required. By removing the by-pass plugs, a portion of product flow is redirected through these openings. The debris is suspended in the turbulent flow and transferred ahead of the pig.
- Standard bumper noses cushion the pig and in-line auxiliary equipment, preventing damage.

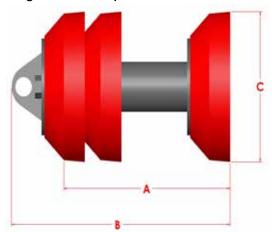
Designed to negotiate 1.5D bends, the Series UM2 pig moves reliably through piping systems.

- Circular flange brushes or block brushes in the following types and trim materials:
  - 1. Trim types flat wire or pencil.
  - 2. Trim material carbon steel, stainless steel, plastic or tin-coated.
- Transmitter housing to accommodate electronic tracking equipment.
- Magnets can be used to either collect ferrous and other construction debris, or they can be used to provide a change in magnetic field required by non-intrusive pig signaler detection devices.
- **CARVER Discs**
- **Rattlers**

## UM3 3-14" (76-356mm)

Primarily used to batch dissimilar fluids, the Series UM3 is also very effective for pipelines in need of light cleaning.

How is this possible? The answer lies in the three versions of the Series UM. The two-cup design of the UM2 pig provides a positive seal between fluid interfaces for efficient batching. The UM3 three-cup and UM4 four-cup design pigs are both used to gently clean pipelines and for batching and separation operations. They are typically used for longer distance operations.



Size	А	В	С	Weight	Part #
3"	4.875	6.750	3.375	3.0	70-5803-03
4"	6.125	8.625	4.375	4.0	70-5803-04
6"	9.250	12.625	6.500	13	70-5803-06
8"	12.000	15.625	8.375	20	70-5803-08
10"	14.875	19.250	10.500	36	70-5803-10
12"	16.625	21.250	12.500	52	70-5803-12
14"	19.500	24.250	14.000	64	70-5803-14

### Features & Benefits:

- Given that anomalies are a fairly common feature of a pipeline scheduled for maintenance, it's reassuring that pigs mounted with conical cups can traverse pipeline anomalies of up to 20% without damaging essential inline auxiliary equipment.
- Every Series UM pig is equipped with Apache Series M cups. As with all of Apache products, the Series M cup was especially developed to perform efficiently and reliably. To maximize durability, it's made from Reliathane, Apache's special blend of wear-resistant polyurethane.

Designed to negotiate 1.5D bends, the Series UM3 pig moves reliably through piping systems.

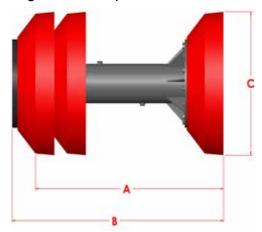
- Circular flange brushes in the following types and trim materials:
  - 1. Trim types flat wire or pencil.
  - 2. Trim material carbon steel, stainless steel or plastic.
- Aluminum or steel gauging plates in slotted or standard styles.
- UT Mandrel to accommodate electronic tracking equipment.
- Magnets can be used to either collect ferrous and other construction debris, or they can be used to provide a change in magnetic field required by non-intrusive pig signaler detection devices.

## UM3

16-48" (406-1219mm)

Primarily used to batch dissimilar fluids, the Series UM3 is also very effective for pipelines in need of light cleaning.

How is this possible? The answer lies in the three versions of the Series UM. The two-cup design of the UM2 pig provides a positive seal between fluid interfaces for efficient batching. The UM3 three-cup and UM4 four-cup design pigs are both used to gently clean pipelines and for batching and separation operations. They are typically used for longer distance operations.



Size	А	В	С	Weight	Part #
16"	25.000	28.000	15.875	89	70-5803-16
20"	29.750	33.375	20.000	145	70-5803-20
22"	34.375	38.250	22.000	197	70-5803-22
24"	36.500	40.875	24.000	231	70-5803-24
30"	45.500	50.625	29.875	385	70-5803-30
36"	55.125	61.750	36.000	586	70-5803-36
42"	66.250	73.500	42.125	860	70-5803-42
48"	74.625	83.000	48.125	1061	70-5803-48

### Features & Benefits:

- Given that anomalies are a fairly common feature of a pipeline scheduled for maintenance, it's reassuring that pigs mounted with conical cups can traverse pipeline anomalies of up to 20% without damaging essential inline auxiliary equipment.
- Every Series UM pig is equipped with Apache Series M cups. As with all of Apache products, the Series M cup was especially developed to perform efficiently and reliably. To maximize durability, it's made from Reliathane, Apache's special blend of wear-resistant polyurethane.
- Every Apache UM3 16"- 48" pig is manufactured with by-pass ports. These ports feature threaded plugs that can be removed, should by-pass be required. By removing the by-pass plugs, a portion of product flow is redirected through these openings. The debris is suspended in the turbulent flow and transferred ahead of the pig.
- Standard bumper noses cushion the pig and in-line auxiliary equipment, preventing damage.

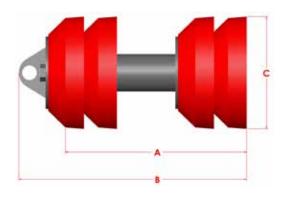
Designed to negotiate 1.5D bends, the Series UM3 pig moves reliably through piping systems.

- Circular flange brushes or block brushes in the following types and trim materials:
  - 1. Trim types flat wire or pencil.
  - 2. Trim material carbon steel, stainless steel, plastic or tin-coated.
- Aluminum or steel gauging plates in slotted or standard styles.
- Transmitter housing to accommodate electronic tracking equipment.
- Magnets can be used to either collect ferrous and other construction debris, or they can be used to provide a change in magnetic field required by non-intrusive pig signaler detection devices.
- **CARVER Discs**
- Rattlers

## UM4 3-14" (76-356mm)

Primarily used to batch dissimilar fluids, the Series UM4 is also very effective for separating fluids and looking after pipelines in need of light cleaning.

How is this possible? The answer lies in the three versions of the Series UM. The two-cup design of the UM2 pig provides a positive seal between fluid interfaces for efficient batching. The UM3 three-cup and UM4 four-cup design pigs are both used to gently clean pipelines and for batching and separation operations. They are typically used for longer distance operations.



Size	А	В	С	Weight	Part #
3"	6.000	8.000	3.375	3.0	70-5804-03
4"	7.000	9.500	4.375	5.0	70-5804-04
6"	10.250	13.625	6.500	15	70-5804-06
8"	13.500	17.125	8.375	25	70-5804-08
10"	17.000	21.250	10.500	45	70-5804-10
12"	18.750	23.750	12.500	65	70-5804-12
14"	21.625	26.375	14.000	81	70-5804-14

### Features & Benefits:

- Given that anomalies are a fairly common feature of a pipeline scheduled for maintenance, it's reassuring that pigs mounted with conical cups can traverse pipeline anomalies of up to 20% without damaging essential inline auxiliary equipment.
- Every Series UM pig is equipped with Apache Series M cups. As with all of Apache products, the Series M cup was especially developed to perform efficiently and reliably. To maximize durability, it's made from Reliathane, Apache's special blend of wear-resistant polyurethane.

Designed to negotiate 1.5D bends, the Series UM4 pig moves reliably through piping systems.

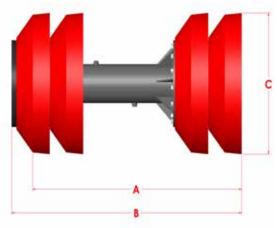
- Circular flange brushes in the following types and trim materials:
  - 1. Trim types flat wire or pencil.
  - 2. Trim material carbon steel, stainless steel or plastic.
- Aluminum or steel gauging plates in slotted or standard styles.
- UT Mandrel to accommodate electronic tracking equipment.
- Magnets can be used to either collect ferrous and other construction debris, or they can be used to provide a change in magnetic field required by non-intrusive pig signaler detection devices.

# UM4

16-48" (406-1219mm)

Primarily used to batch dissimilar fluids, the Series UM4 is also very effective for separating fluids and looking after pipelines in need of light cleaning.

How is this possible? The answer lies in the three versions of the Series UM. The two-cup design of the UM2 pig provides a positive seal between fluid interfaces for efficient batching. The UM3 three-cup and UM4 four-cup design pigs are both used to gently clean pipelines and for batching and separation operations. They are typically used for longer distance operations.



Size	А	В	С	Weight	Part #
16"	29.000	32.125	15.875	115	70-5804-16
20"	35.750	39.375	20.000	191	70-5804-20
22"	41.000	44.875	22.000	257	70-5804-22
24"	43.500	47.875	24.000	301	70-5804-24
30"	54.250	59.375	29.875	498	70-5804-30
36"	64.625	71.125	36.000	751	70-5804-36
42"	78.500	85.750	42.125	1118	70-5804-42
48"	84.875	93.250	48.125	1338	70-5804-48

#### Features & Benefits:

- Given that anomalies are a fairly common feature of a pipeline scheduled for maintenance, it's reassuring that pigs mounted with conical cups can traverse pipeline anomalies of up to 20% without damaging essential inline auxiliary equipment.
- Every Series UM pig is equipped with Apache Series M cups. As with all of Apache products, the Series M cup was especially developed to perform efficiently and reliably. To maximize durability, it's made from Reliathane, Apache's special blend of wear-resistant polyurethane.
- Every Apache UM4 16"- 48" pig is manufactured with by-pass ports. These ports feature threaded plugs that can be removed, should by-pass be required. By removing the by-pass plugs, a portion of product flow is redirected through these openings. The debris is suspended in the turbulent flow and transferred ahead of the pig.
- Standard bumper noses cushion the pig and in-line auxiliary equipment, preventing damage.

Designed to negotiate 1.5D bends, the Series UM4 pig moves reliably through piping systems.

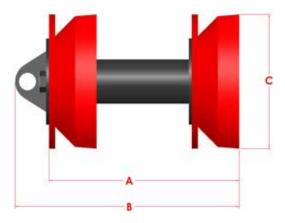
- Circular flange brushes or block brushes in the following types and trim materials:
  - 1. Trim types flat wire or pencil.
  - 2. Trim material carbon steel, stainless steel, plastic, or tin-coated.
- Aluminum or steel gauging plates in slotted or standard styles.
- Transmitter housing to accommodate electronic tracking equipment.
- Magnets can be used to either collect ferrous and other construction debris, or they can be used to provide a change in magnetic field required by non-intrusive pig signaler detection devices.
- **CARVER Discs**
- Rattlers

## BATCHING



Looking for more effective cleaning and sealing capacity? Then look no further than the Series DMD.

Every pig in the series is equipped with two sealing discs and two Series M Cups. These multiple sealing components create a positive seal between dissimilar fluids, while simultaneously providing a bigger surface area. As a result, its sealing capacity, scraping capability, and overall cleaning ability is greatly improved.



Size	А	В	С	Weight	Part #
3"	5.625	7.000	3.375	2.0	70-6850-03
4"	7.250	8.875	4.375	3.0	70-6850-04
6"	10.125	12.375	6.500	11	70-6850-06
8"	11.875	14.125	8.375	20	70-6850-08
10"	15.500	18.125	10.500	31	70-6850-10
12"	18.125	20.875	12.500	46	70-6850-12
14"	20.500	23.250	14.000	52	70-6850-14

## Features & Benefits:

- The DMD pig is configured to offer a sealing arrangement that is used to separate dissimilar fluids, and to lightly scrape pipelines during longer distance operations.
- Given that anomalies are a fairly common feature of a pipeline scheduled for maintenance, it's reassuring that
  pigs mounted with conical cups can traverse pipeline anomalies of up to 20% without damaging essential inline
  auxiliary equipment.
- Every Series DMD pig is equipped with Apache Series M cups. As with all of Apache products, the Series M cup
  was especially developed to perform efficiently and reliably. To maximize durability, it's made from Reliathane,
  Apache's special blend of wear-resistant polyurethane.
- To use a Series DMD pig for different applications, cups can simply be added or reconfigured.

Designed to negotiate 1.5D bends, the Series DMD pig moves reliably through piping systems.

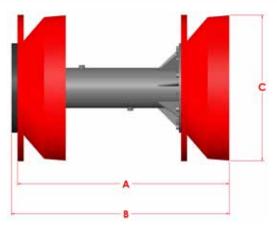
- Circular flange brushes in the following types and trim materials:
  - 1. Trim types flat wire or pencil.
  - 2. Trim material carbon steel, stainless steel or plastic.
- Aluminum or steel gauging plates in slotted or standard styles.
- UT Mandrel to accommodate electronic tracking equipment.
- Magnets can be used to either collect ferrous and other construction debris, or they can be used to provide a change in magnetic field required by non-intrusive pig signaler detection devices.
- CARVER Discs



16-48" (406-1219mm)

Looking for more effective cleaning and sealing capacity? Then look no further than the Series DMD.

Every pig in the series is equipped with two sealing discs and two Series M Cups. These multiple sealing components create a positive seal between dissimilar fluids, while simultaneously providing a bigger surface area. As a result, its sealing capacity, scraping capability, and overall cleaning ability is greatly improved.



Size	Α	В	С	Weight	Part #
16"	24.500	25.500	15.875	75	70-6850-16
20"	28.000	29.000	20.000	122	70-6850-20
22"	32.375	33.375	22.000	163	70-6850-22
24"	34.875	35.875	24.000	196	70-6850-24
30"	43.000	44.125	29.875	328	70-6850-30
36"	53.625	55.000	36.000	520	70-6850-36
42"	62.875	64.375	42.125	755	70-6850-42
48"	70.500	72.125	48.125	962	70-6850-48

### Features & Benefits:

- The DMD pig is configured to offer a sealing arrangement that is used to separate dissimilar fluids, and to lightly scrape pipelines during longer distance operations.
- Given that anomalies are a fairly common feature of a pipeline scheduled for maintenance, it's reassuring that pigs mounted with conical cups can traverse pipeline anomalies of up to 20% without damaging essential inline auxiliary equipment.
- Every Series DMD pig is equipped with Apache Series M cups. As with all of Apache products, the Series M cup was especially developed to perform efficiently and reliably. To maximize durability, it's made from Reliathane, Apache's special blend of wear-resistant polyurethane.
- Every Apache DMD 16"- 48" pig is manufactured with by-pass ports. These ports feature threaded plugs that can be removed, should by-pass be required. By removing the by-pass plugs, a portion of product flow is redirected through these openings. The debris is suspended in the turbulent flow and transferred ahead of the pig.
- Standard bumper noses cushion the pig and in-line auxiliary equipment, preventing damage.
- To use a Series DMD pig for different applications, cups can simply be added or reconfigured

Designed to negotiate 1.5D bends, the Series DMD pig moves reliably through piping systems.

- Circular flange brushes or block brushes in the following types and trim materials:
  - 1. Trim types flat wire or pencil.
  - 2. Trim material carbon steel, stainless steel, plastic, or tin-coated.
- Aluminum or steel gauging plates in slotted or standard styles.
- Transmitter housing to accommodate electronic tracking equipment.
- Magnets can be used to either collect ferrous and other construction debris, or they can be used to provide a change in magnetic field required by non-intrusive pig signaler detection devices.
- **CARVER Discs**
- Rattlers

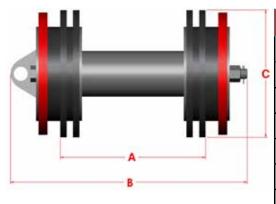
## DISPLACEMENT

ED

3-14" (76-356mm)

The Series ED pig is an extremely hardworking pig. With its bi-directional design, it can travel in either direction.

When it comes to displacing air and water during hydrostatic testing carried out during construction, the ED pig gets the job done, quickly and efficiently.



Size	Α	В	С	Weight	Part #
3"	3.000	6.875	3.375	2.0	70-7056-03
4"	4.375	9.000	4.375	4.0	70-7056-04
6"	6.000	13.000	6.375	14	70-7056-06
8"	7.5000	15.250	8.375	26	70-7056-08
10"	10.500	18.750	10.500	44	70-7056-10
12"	12.250	23.250	12.500	72	70-7056-12
14"	14.500	23.500	13.875	77	70-7056-14

#### Features & Benefits:

- By using the ED pig comprised of four sealing discs and two guide discs, it provides an effective seal that's
  critical when separating dissimilar fluids or dewatering during hydrostatic testing.
- With repeated use, sealing discs can experience wear and tear. The ED pig will still reverse direction, without compromising its sealing capabilities.
- To maximize durability, all discs are made from Reliathane, Apache's special blend of wear-resistant polyurethane.

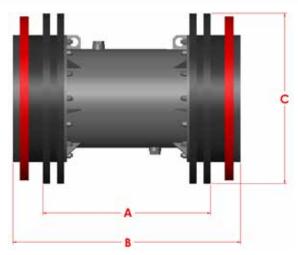
Designed to negotiate 1.5D bends, the ED pig moves reliably through piping systems.

- Circular flange brushes in the following types and trim materials:
  - 1. Trim types flat wire or pencil.
  - 2. Trim material carbon steel, stainless steel or plastic.
- UT Mandrel to accommodate electronic tracking equipment.
- Aluminum gauge plates in slotted or standard styles.
- CARVER discs.
- Magnets can be used to either collect ferrous and other construction debris, or they can be used to provide a change in magnetic field required by non-intrusive pig signaler detection devices.

16-48" (406-1219mm)

The Series ED pig is an extremely hardworking pig. With its bi-directional design, it can travel in either direction.

When it comes to displacing air and water during pressure testing carried out during construction, the ED pig gets the job done, quickly and efficiently.



Size	А	В	С	Weight	Part #
16"	15.000	22.250	15.875	118	70-7056-16
18"	17.000	24.250	17.875	142	70-7056-18
20"	19.250	27.250	20.000	191	70-7056-20
22"	21.500	30.250	22.000	215	70-7056-22
24"	23.750	32.250	24.125	277	70-7056-24
30"	29.750	38.500	30.250	442	70-7056-30
36"	35.250	47.000	36.500	704	70-7056-36
42"	41.250	55.250	42.125	1075	70-7056-42
48"	46.500	60.000	48.875	1360	70-7056-48

#### Features & Benefits:

- By using the ED pig in conjunction with four sealing discs and two guide discs, it provides an effective seal that's critical when separating dissimilar fluids or dewatering during hydrostatic testing.
- With repeated use, sealing discs can experience wear and tear. The ED pig can still reverse direction without compromising its sealing capabilities.
- To maximize durability, all discs are made from Reliathane, Apache's special blend of wear-resistant polyurethane.
- Standard bumper noses cushion the pig and help to protect in-line auxiliary equipment, preventing damage.
- Every Apache ED 16"- 48" pig is manufactured with by-pass ports. These ports feature threaded plugs that can be removed, should by-pass be required. By removing the by-pass plugs, a portion of product flow is redirected through these openings. The debris is suspended in the turbulent flow and transferred ahead of the pig.

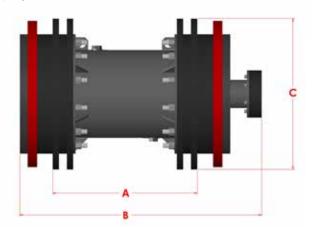
Designed to negotiate 1.5D bends, the ED pig moves reliably through piping systems.

- Circular flange brushes or block brushes in the following types and trim materials:
  - 1. Trim types flat wire or pencil.
  - 2. Trim material carbon steel, stainless steel, plastic, or tin-coated.
- Aluminum gauge plates in slotted or standard styles.
- Transmitter housing to accommodate electronic tracking equipment.
- CARVER discs.
- Magnets can be used to either collect ferrous and other construction debris, or they can be used to provide a change in magnetic field required by non-intrusive pig signaler detection devices.

## MDK

16-48" (406-1219mm)

The rugged MDK pig was specifically developed for use during the testing stage of mainline pipeline construction projects.



Size	А	В	С	Weight	Part #
16"	15.000	28.250	15.875	161	70-7776-16
20"	19.250	34.750	20.000	264	70-7776-20
24"	23.750	38.500	24.000	372	70-7776-24
30"	29.750	48.875	30.250	632	70-7776-30
36"	35.250	52.500	36.500	816	70-7776-36
42"	41.250	65.500	42.125	1208	70-7776-42
48"	46.500	72.750	48.875	1500	70-7776-48

#### Features & Benefits:

- The MDK pig features an inner and outer mandrel. Because the inner mandrel withstands the punishing battering inflicted during the construction process, and the exterior disc carrying the outer mandrel remains untouched, the MDK dual mandrel is preferred by mainline contractors, every pig is equipped with a durable guide disc at each end. These discs center the sealing discs in the line, which allows the four sealing discs in the center to form a quadruple seal during displacement.
- Standard bumper noses cushion the pig and help to protect in-line auxiliary equipment, preventing damage.
- To maximize durability, all discs are made from Reliathane, Apache's special blend of wear-resistant polyurethane.
- Every Apache MDK 16"- 48" pig is manufactured with by-pass ports. These ports feature threaded plugs that can be removed, should by-pass be required.

Designed to negotiate 1.5D bends, the MDK pig moves reliably through piping systems.

- Circular flange brushes or block brushes in the following types and trim materials (not available for testing):
  - 1. Trim types flat wire or pencil.
  - 2. Trim material carbon steel, stainless steel, plastic, or tin-coated.
- Transmitter housing to accommodate electronic tracking equipment.
- CARVER discs.
- Aluminum gauge plates in slotted or standard styles.
- Magnets can be used to either collect ferrous and other construction debris, or they can be used to provide a change in magnetic field required by non-intrusive pig signaler detection devices.

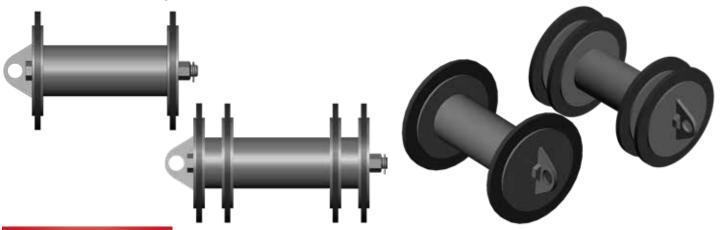
# **MD2 & MD4**

3-14" (76-356mm)

Versatile, economic and efficient. That sums up the MD pigs.

Its primary function is to displace water during the hydrostatic testing stage of construction. The operator simply fills the line with liquid, displacing the liquid without removing the pig.

With its bi-directional design, it can travel in either direction.



#### Features & Benefits:

- Every MD Series pig, up to 14", features a through-bolt mandrel design, complete with a pull hook. Typically, the longer the intended pig run is, the more discs are required. For maximum versatility, the pig can be fitted with two or four discs, depending on the application.
- To maximize durability, all discs are made from Reliathane, Apache's special blend of wear-resistant polyurethane.
- With repeated use, sealing discs can experience wear and tear. The MD pig can still reverse direction without compromising its sealing capabilities.
- Standard bumper noses cushion the pig and help to protect in-line auxiliary equipment, preventing damage.
- The MD Series is available in either the standard MD2 or the heavy duty MD4 design.

Designed to negotiate 1.5D bends, the MD2 and MD4 pigs move reliably through piping systems.

- UT Mandrel to accommodate electronic tracking equipment.
- CARVER discs.
- Aluminum gauge plates in slotted or standard styles.
- Magnets can be used to either collect ferrous and other construction debris, or they can be used to provide a change in magnetic field required by non-intrusive pig signaler detection devices.

# DISPLACEMENT

# **MD2 & MD4**

16-48" (406-1219mm)

Versatile, economic and efficient. That's the MD pig.

Designed especially for medium to long pigging runs, its primary function is to displace water during the hydrostatic testing stage of construction. For example, the operator simply fills the line with liquid, displacing the liquid without removing the pig.



### Features & Benefits:

- Every MD Series pig, up to 14", features a through-bolt mandrel design, complete with a pull hook. Typically, the longer the intended pig run is, the more discs are required. To address this, every MD Series pig larger than 16" is equipped with either two or four discs, and bolted to a rugged steel mandrel.
- To maximize durability, all discs are made from Reliathane, Apache's special blend of wear-resistant polyurethane.
- With repeated use, sealing discs can experience wear and tear. The MD pig can still reverse direction without compromising its sealing capabilities.
- Every Apache MD2 16"- 48" pig is manufactured with by-pass ports. These ports feature threaded plugs that can be removed, should by-pass be required. By removing the by-pass plugs, a portion of product flow is redirected through these openings. The debris is suspended in the turbulent flow and transferred ahead of the pig.
- Standard bumper noses cushion the pig and help to protect in-line auxiliary equipment, preventing damage.
- The MD Series is available in either the standard MD2 or the heavy duty MD4 design.

Designed to negotiate 1.5D bends, the MD2 and MD4 pigs move reliably through piping systems.

- Transmitter housing to accommodate electronic tracking equipment.
- CARVER discs.
- Custom-made gauging plates in aluminum, steel, slotted or standard style.
- Magnets can be used to either collect ferrous and other construction debris, or they can be used to provide a change in magnetic field required by non-intrusive pig signaler detection devices.