



BR 28m · Pigs DIN and ANSI Version



Applications

Pigs used for cleaning pipes handling gases and fluids in single-pig and dual-pig pig systems according to DIN 2430:

- **Nominal size DN 50 to 200 and NPS2 to 8**
- **Temperatures -10 °C to +200 °C (14 °F to 392 °F)**

The different types of pigs, developed, designed and produced by PFEIFFER, meet the special requirements and high standards laid down for modern pigging plants by the chemical industry:

- High cleaning performance without any additional rinsing process
- Long service life
- Resistant to chemicals even with corrosive media
- Pigs maintain a constant and even run inside bends and valves
- Bi-directional operation mode, i.e. the pig is symmetric, therefore can be used in both directions
- A magnet in core of the pig allows use in automated systems

The above listed requirements mean that only a special pig construction proven in use over many years can be used:

- Two distinctive sealing lips and a formed middle part enable it to run without any problems in bends
- Sealing lip diameter approx. 4% larger than the pipe diameter for a much higher scrape performance
- Several magnetic versions filled with a powder, ensuring no risk of magnet discharge
- Special pigs suitable for corrosive media made from highly resistant materials, i.e. HDPE, PTFE

Versions

The different types of design can be divided into two major groups:

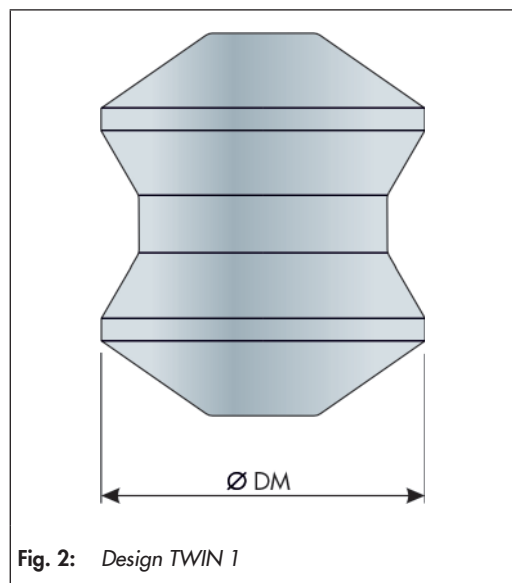
- Pigs produced with solid elastomer body, with two sealing lips and a distinctive formed middle part. They are oversized by up to 4% in relation to the inside diameter of the pigging pipeline and are the best choice for most applications, regarding cost-effectiveness, cleaning performance, service life and performance.
- Pigs made of various special materials, and in special designs, e.g.
 - Several parts, screwed together
 - With changeable lips
 - Materials of high resistance



Fig. 1: Pig variants

Pig TWIN 1

- **Version:**
 - Solid elastomer-pig
 - Cold cast



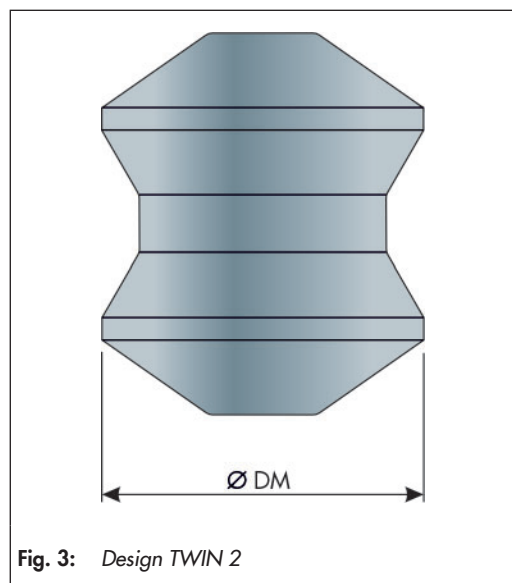
- **The pig has the following features:**
 - High running performance
 - Optionally with powder filling

Table 1: Design TWIN 1

Nominal Size		Pig piping diameter (DM)	Tension [%]	Material		Magnet		
DN	NPS			Material	Hardness [Shore A]	Without magnet	Rod-magnet	Powder-filling
50	2	54.5	appr. 4	VMQ	appr. 50	yes	yes	yes
				PU		yes	yes	no
80	3	82.5	appr. 4	VMQ	appr. 50	yes	yes	yes
				PU		yes	yes	no
100	4	107.1	appr. 4	VMQ	appr. 50	yes	yes	yes
				PU		yes	yes	no
125	5	131.7	appr. 4	VMQ	appr. 50	yes	yes	yes
				PU		yes	yes	no
150	6	159.3	appr. 4	VMQ	appr. 50	yes	yes	yes
				PU		yes	yes	no
200	8	206.5	appr. 4	VMQ	appr. 50	yes	yes	yes
				PU		yes	yes	no

Pig TWIN 2

- **Version:**
 - Solid elastomer pig
 - Vulcanised



- **The pig has the following features:**
 - High scraping performance
 - Optionally with powder filling
 - Universal types

Table 2: Design TWIN 2

Nominal Size		Pig piping diameter (DM)	Tension [%]	Material		Magnet		
DN	NPS			Material	Hardness [Shore A]	Without magnet	Rod-magnet	Powder-filling
50	2	54.5	appr. 4	VMQ	appr. 50	yes	yes	yes
				EPDM	appr. 50	yes	yes	yes
				FKM*	appr. 70	yes	yes	no
				other		yes	yes	yes
80	3	82.5	appr. 4	VMQ	appr. 50	yes	yes	yes
				PU	appr. 50	yes	yes	yes
				FKM*	appr. 70	yes	yes	no
				other		yes	yes	yes
100	4	107.1	appr. 4	VMQ	appr. 50	yes	yes	yes
				PU	appr. 50	yes	yes	yes
				FKM*	appr. 70	yes	yes	no
				other		yes	yes	yes
125	5	131.7	appr. 4	VMQ	appr. 50	yes	yes	yes
				PU	appr. 50	yes	yes	yes
				FKM*	appr. 70	yes	yes	no
				other		yes	yes	yes
150	6	159.3	appr. 4	VMQ	appr. 50	yes	yes	yes
				PU	appr. 50	yes	yes	yes
				FKM*	appr. 70	yes	yes	no
				other		yes	yes	yes
200	8	206.5	appr. 4	VMQ	appr. 50	yes	yes	yes
				PU	appr. 50	yes	yes	yes
				FKM*	appr. 70	yes	yes	no
				other		yes	yes	yes

* Special precautions are necessary on using FKM due to its hardness grade.

Pig TWIN 3

- **Version:**
 - Lip Pigs
 - High level of resistance

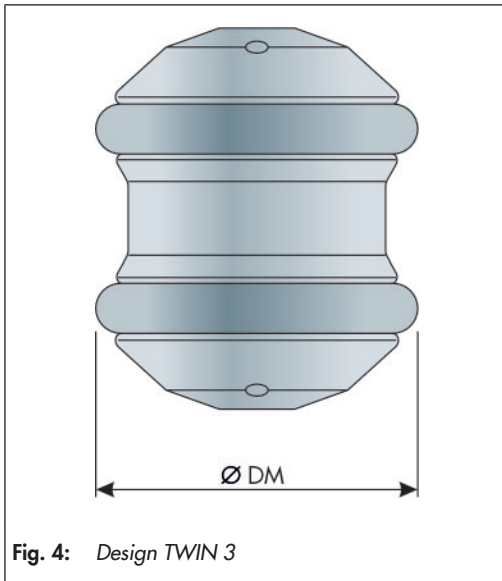


Fig. 4: Design TWIN 3

- **The pig has the following features:**
 - Screwed pig body, preferably manufactured in HDPE for weight reasons
 - Exchangeable sealing strips with a casing of PTFE or HDPE. HDPE is more wear-resistant due to its high hardness grade. However, the more residue is achieved.
 - Suitable for solvents and other highly aggressive media.
 - Exchangable sealing strips.
 - A number of alternative materials for the main body and sealing strips are available.
 - This type of pig requires an absolute flawless pigging pipeline, as the smallest fault in design of the pipeline, can lead to damage or destroy the very sensitive sealing strips.

Table 3: Design TWIN 3

Nominal size		Pig piping-diameter (DM)	Tension [%]	Material		Magnet	
DN	NPS			Main body	Lips	Without magnet	Rod-magnet
50	2	54.5	appr. 4	HDPE	TFM / VMQ	yes	yes
				TFM	HDPE	yes	yes
80	3	82.5	appr. 4	HDPE	TFM / VMQ	yes	yes
				TFM	HDPE	yes	yes
100	4	107.1	appr. 4	HDPE	TFM / VMQ	yes	yes
				TFM	HDPE	yes	yes
125	5	131.7	appr. 4	HDPE	TFM / VMQ	yes	yes
				TFM	HDPE	yes	yes
150	6	159.3	appr. 4	HDPE	TFM / VMQ	yes	yes
				TFM	HDPE	yes	yes
200	8	206.5	appr. 4	HDPE	TFM / VMQ	yes	yes
				TFM	HDPE	yes	yes

Pig TWIN 5

- **Version:**
 - Exchangable lips

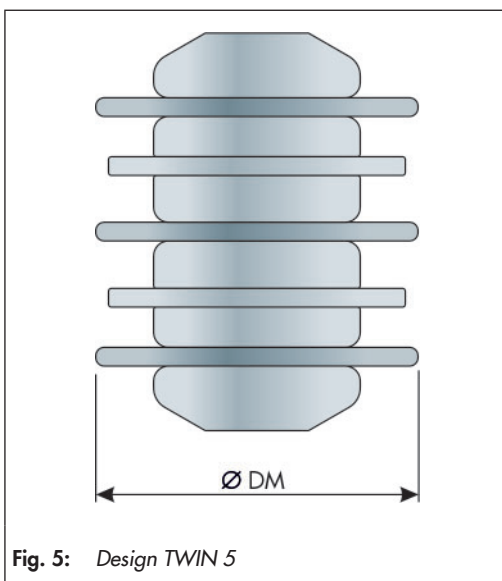


Fig. 5: Design TWIN 5

- **The pig has the following features:**
 - Good cleaning performance at high temperature margins
 - More residue compared with TWIN 1 - 3
 - Exchangable lips

Table 4: Design TWIN 5

Nominal size		Pig piping-diameter (DM)	Tension [%]	Material		Magnet	
DN	NPS			Main body	Lips	Without magnet	Rod-magnet
50	2	54.5	appr. 5	PA	NBR	yes	yes
				HDPE	Viton	yes	yes
80	3	82.5	appr. 5	PA	NBR	yes	yes
				HDPE	Viton	yes	yes
100	4	107.1	appr. 5	PA	NBR	yes	yes
				HDPE	Viton	yes	yes
125	5	131.7	appr. 5	PA	NBR	yes	yes
				HDPE	Viton	yes	yes
150	6	159.3	appr. 5	PA	NBR	yes	yes
				HDPE	Viton	yes	yes
200	8	206.5	appr. 5	PA	NBR	yes	yes
				HDPE	Viton	yes	yes

Dimensions and Weights:

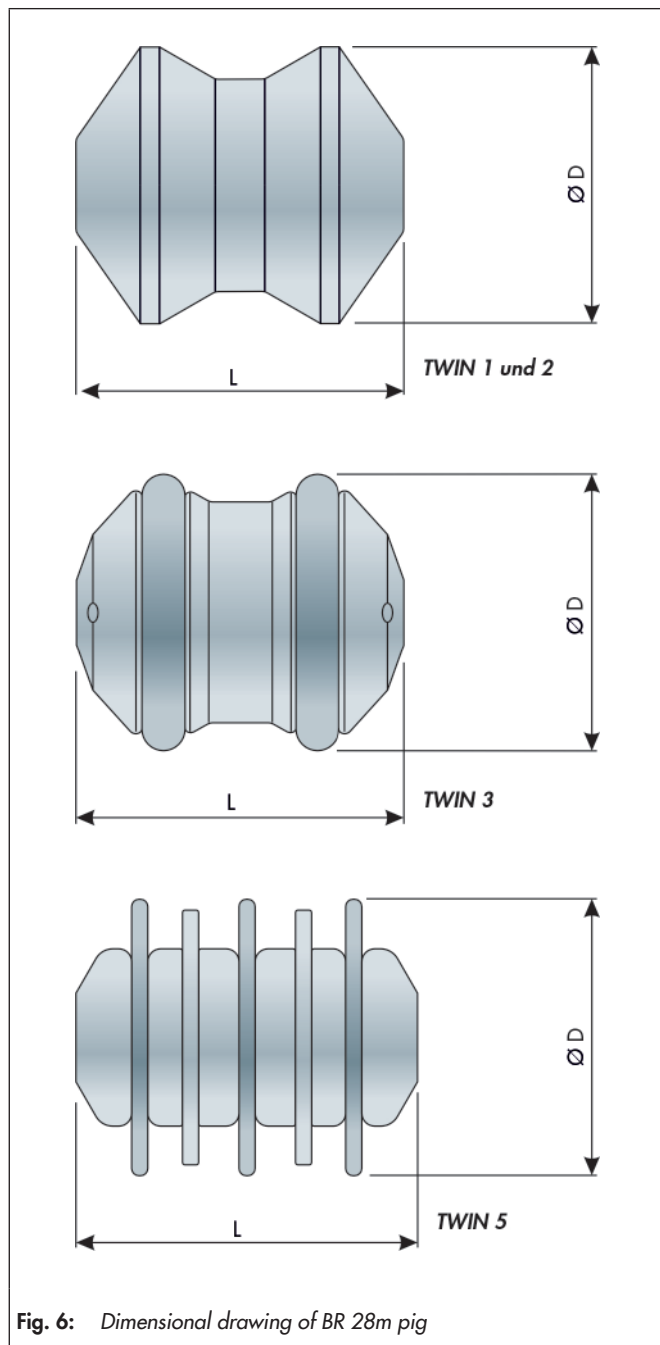


Table 5: Dimensiond in mm und wights in kg

Nominal size	DN	50	80	100	125	150	200
	NPS	2	3	4	5	6	8
D	TWIN 1	57	86	112	-	166	212
	TWIN 2	57	86	112	-	166	-
	TWIN 3	56	85	110	135.5	165	215
	TWIN 5	58	88	113	-	171	-
L ¹⁾		68	102	128	163	212	268
Weight in kg ²⁾	TWIN 1	0.25	0.68	1.3	-	4.5	8.3
	TWIN 2	0.25	0.62	1.2	-	4	-
	TWIN 3	0.2	0.52	1.2	1.64	3.37	4.9
	TWIN 5	0.3	0.7	1.4	-	5	-

¹⁾ Length specifications only for TWIN 1, TWIN 2 and TWIN 5 pigs. Refer to mounting and operating instructions ► EB 28m for TWIN 3 pig.

²⁾ Weights depending on material

Selection and sizing of pig

1. Determine the required nominal diameter.
2. Selection of pig-type in accordance with the Tables 1 to 4

Ordering text

Pigs BR 28m: TWIN ...
 Nominal size: DN
 Selection of material:
 Others:

Associated documents

Associated Mounting and Operating Instructions ► EB 28m

i Info

All relevant details regarding the version ordered, which deviate from the specified version in this technical description data, can be taken if required, from the corresponding order confirm.