

GEMÜ Code 28

EPDM diaphragm

Features

- Low signs of wear and optimized setting behaviour
- Greatly reduced adhesive behaviour (no adhesion on the valve seat) of the diaphragm
- Simple and defined mounting thanks to the threaded pin that is vulcanised in place with integrated screw-in stop
- Approvals according to Belgaqua Hydrocheck & UBA BWGL



Description

The GEMÜ code 28 diaphragm is a one-piece, sulphur-cured EPDM diaphragm developed for use in drinking water and water treatment applications. There is no fabric layer to ensure compliance with the applicable valid drinking water regulations. The diaphragm displays reduced setting behaviour and signs of wear, which enables high switching cycles and therefore an increased service life.

Technical specifications

- **Media temperature :** -10 to 85 °C
- **Sterilization temperature:** Not sterilizable
- **Diaphragm material:** EPDM
- **Diaphragm sizes:** 10 | 20 | 25 | 40 | 50 | 80 | 100
- **Vacuum:** up to 70 mbar (absolute)

Technical data depends on the respective configuration

Product comparison

			
		GEMÜ Code 29	GEMÜ Code 28
Media temperature	-10 Up to 100 °C	-10 Up to 85 °C	
Diaphragm materials			
EPDM	●	●	
Diaphragm sizes			
10	●	●	
20	●	●	
25	●	●	
40	●	●	
50	●	●	
65	●	-	
80	●	●	
100	●	●	
125	●	-	
150	●	-	
200	●	-	
Conformities			
Belgaqua	-	●	
BSE/TSE	●	●	
UBA BWGL ¹⁾	-	●	

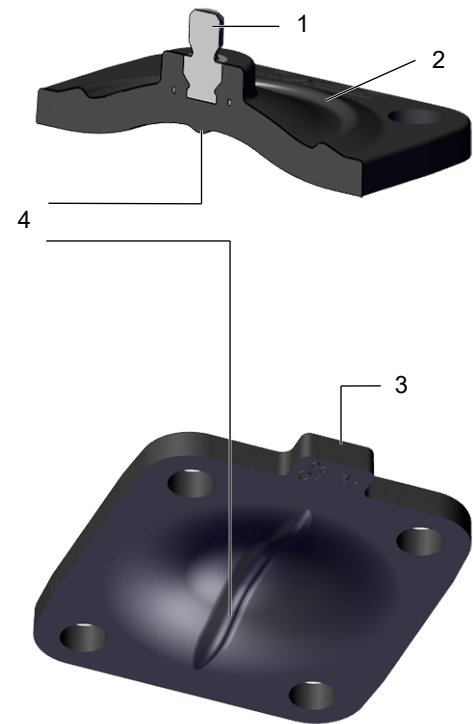
Each application must be analysed before the selection of the diaphragm material. Since the most varied operating conditions often prevail within a plant at different locations, it can be necessary to use different valves and materials. In particular, the chemical properties and the temperature of the working media often lead to different interactions. The suitability of the materials used must therefore always be examined individually with regard to the current resistance list or checked by an authorised specialist. Only this procedure guarantees that the application will operate safely and economically for a longer period. Diaphragms are wearing parts. They need to be regularly inspected and replaced otherwise malfunctions can occur, possibly resulting in hazardous situations.

Please note: The maintenance intervals for inspecting and replacing diaphragms are application-dependent. In order to determine a suitable maintenance interval, the maintenance history and the stresses placed on the parts due to frequent cycle duties must be taken into account.

1) Evaluation criteria for plastics and other organic materials that come into contact with drinking water

Product description

Construction



Item	Name
1	Threaded pin vulcanized in place with integrated screw-in stop
2	Additional sealing bead for optimum external sealing
3	Tab
4	Sealing bead for reliable sealing on the valve weir

GEMÜ CONEXO

The interaction of valve components that are equipped with RFID chips and an associated IT infrastructure actively increase process reliability.



Thanks to serialization, every valve and every relevant valve component such as the body, actuator or diaphragm, and even automation components, can be clearly traced and read using the CONEXO pen RFID reader. The CONEXO app, which can be installed on mobile devices, not only facilitates and improves the "installation qualification" process, but also makes the maintenance process much more transparent and easier to document. The app actively guides the maintenance technician through the maintenance schedule and directly provides him with all the information assigned to the valve, such as test reports, testing documentation and maintenance histories. The CONEXO portal acts as a central element, helping to collect, manage and process all data.

For further information on GEMÜ CONEXO please visit:

www.gemu-group.com/conexo

Ordering

GEMÜ Conexo must be ordered separately with the ordering option "CONEXO".

For electronic identification purposes, each replaceable component contained in the product you have purchased is equipped with an RFID chip (1). Where you can find the RFID chip differs from product to product.

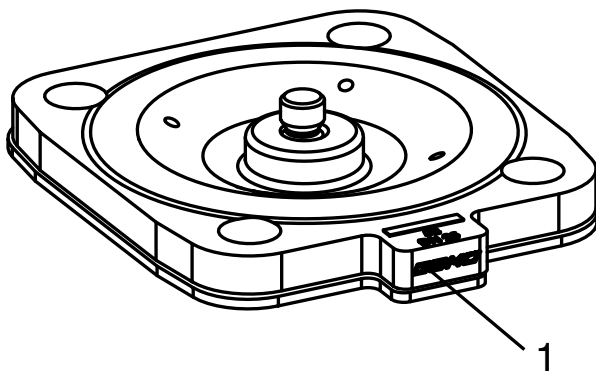


Fig. 1: Diaphragm RFID chip

Order data

The order data provide an overview of standard configurations.

Please check the availability before ordering. Other configurations available on request.

Order codes

1 Type	Code
Diaphragm size 10 to 100, without diaphragm size 20 and 65	
Diaphragm	600
Diaphragm size 20	
Diaphragm	R690
2 Diaphragm size	Code
Diaphragm size 10	10
Diaphragm size 20	20
Diaphragm size 25	25
Diaphragm size 40	40
Diaphragm size 50	50
Diaphragm size 80	80
Diaphragm size 100	100
3 Replacement diaphragm	Code
Replacement diaphragms	M

4 Diaphragm material	Code
EPDM	28
5 Packaging unit	Code
Without	
6 Type of design	Code
Without	
Media-wetted parts cleaned for high purity media and packed in plastic bag	0104
7 Special version	Code
Without	
8 CONEXO	Code
Without	
Integrated RFID chip for electronic identification and traceability	C

Order example

Ordering option	Code	Description
1 Type	600	Diaphragm
2 Diaphragm size	10	Diaphragm size 10
3 Replacement diaphragm	M	Replacement diaphragms
4 Diaphragm material	28	EPDM
5 Packaging unit		Without
6 Type of design		Without
7 Special version		Without
8 CONEXO		Without

Technical data

Medium

Working medium: Corrosive, inert, gaseous and liquid media which have no negative impact on the physical and chemical properties of the diaphragm material.

Temperature

Media temperature: -10 – 85 °C

Storage temperature: -10 °C – 25 °C (preferably 15 °C) must be observed

Pressure

Operating pressure: max. 10 bar (dependent on the diaphragm valve used)

Vacuum: Can be used up to a vacuum of 70 mbar (absolute)

Product conformity

BSE/TSE: The product conforms to EMA/410/01 revision 3 and is free of animal substances

German Federal Environmental Agency evaluation criteria (UBA-BWGL): Testing as per evaluation criteria for plastics and other organic materials that come into contact with drinking water; issue 2022-03-07 (Cold and hot water (23–60 °C))

Belgaqua: The product is approved for contact with drinking water and water for water supply according to HYDROCHECK procedure.

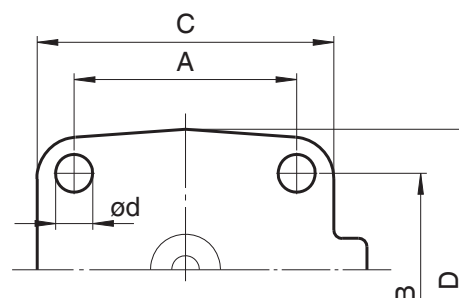
Unused components: Natural or synthetic latex
Asbestos
PVC

Mechanical data

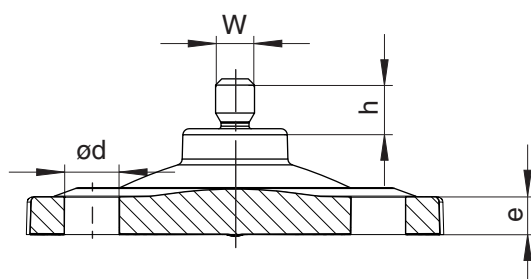
Service life: Max. recommended service life, 8 years
The service life is the sum of the storage life and operating life.
Note the Technical Information "Service life, storage and marking of GEMÜ diaphragms".

Dimensions

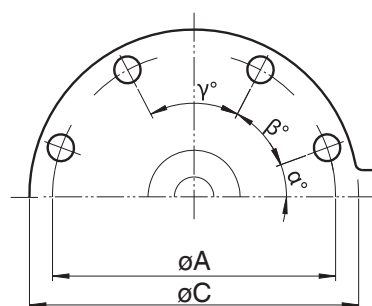
EPDM diaphragm



MG 10 to 80



MG 10 to 100



MG 100

MG	DN	NPS	A	B	C	D	ød	e	h	W	α	β	γ	n
10	10 - 20	3/8" - 3/4"	39.0	44.0	48.0	53.0	5.2	5.0	9.0	M4	-	-	-	4
20	15 - 25	1/2", 3/4", 1"	44.5	40.0	61.5	57.0	6.4	-	9.0	5/32"	-	-	-	4
25	15 - 25	1/2" - 1"	54.0	46.0	72.0	67.0	9.0	6.0	8.0	1/4"	-	-	-	4
40	32 - 40	1 1/4" - 1 1/2"	70.0	65.0	100.0	90.0	11.0	7.0	8.0	1/4"	-	-	-	4
50	50	2"	82.0	78.0	124.0	106.0	12.7	7.0	7.0	1/4"	-	-	-	4
80	80	3"	127.0	114.0	186.0	156.0	18.0	7.0	8.0	5/16"	-	-	-	4
100	100	4"	196.2	-	230.0	-	13.0	10.0	9.0	5/16"	28.0°	42.0°	40.0°	8

Dimensions in mm

n = number of bolt holes

The thread of the diaphragm pin "W" corresponds to Whitworth standard.



GEMÜ Gebr. Müller Apparatebau GmbH & Co. KG
Fritz-Müller-Straße 6-8, 74653 Ingelfingen-Criesbach, Germany
Phone +49 (0) 7940 1230 · info@gemue.de
www.gemu-group.com