

GEMÜ Code 5Y

PTFE/EPDM diaphragm



Features

- Fabric reinforced EPDM backing
- Excellent long-term tightness and vacuum compatibility thanks to improved geometry
- Extremely long service life
- Leak detection holes in the EPDM backing
- Easy-to-read identification
- Simple and defined mounting thanks to the threaded pin that is sintered in place with integrated screw-in stop (MG 25)

Description

The GEMÜ code 5Y diaphragm has a two-piece design and comprises a PTFE face and a peroxide cured EPDM backing. In order to optimize the entire system in turn, both the PTFE face and the diaphragm backing are compounded for GEMÜ and manufactured within the GEMÜ Group.

Technical specifications

- **Media temperature :** -10 to 100 °C
- **Sterilization temperature:** max. 150 °C
- **Diaphragm materials:** PTFE/EPDM
- **Diaphragm sizes:** 25
- **Conformities:** BSE/TSE I FDA I Ozone resistance I Reg. (EU) No. 10/2011 I Regulation (EC) No. 1935/2004 I USP

Technical data depends on the respective configuration



Product description

Construction



Item	Name
1	Threaded pin sintered in place with integrated screw-in stop
2	Sealing bead for optimal external sealing
3	Tab
4	Additional sealing lip for optimal external sealing
5	PTFE face
6	Sealing bead for reliable sealing on the valve weir
7	EPDM backing

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	600
2 Diaphragm size	Code
Diaphragm size 25	25
3 Replacement diaphragm	Code
Replacement diaphragm	M
4 Diaphragm material	Code
PTFE/EPDM two-piece for lining bodies	5Y
5 Packaging unit	Code
Without	

6 Type of design	Code
Without	
Media wetted area cleaned to ensure suitability for paint applications, parts sealed in plastic bag	0101
Media wetted parts cleaned for high purity media and packed in plastic bag	0104
7 Special version	Code
Without	
8 CONEXO	Code
Without	

Order example

Ordering option	Code	Description
1 Type	600	Diaphragm
2 Diaphragm size	25	Diaphragm size 25
3 Replacement diaphragm	M	Replacement diaphragm
4 Diaphragm material	5Y	PTFE/EPDM two-piece for lining bodies
5 Packaging unit		Without
6 Type of design		Without
7 Special version		Without
8 CONEXO		Without

Technical data

Medium

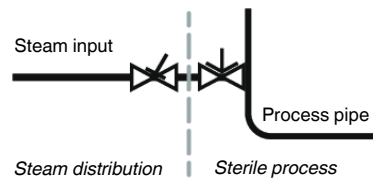
Working medium: Corrosive, inert, gaseous and liquid media which have no negative impact on the physical and chemical properties of the diaphragm material.

Temperature

Media temperature: -10 – 100 °C

Sterilization temperature: max. 150 °C ¹⁾, no time limit per cycle ²⁾

- 1) The sterilization temperature is only valid for steam (saturated steam) or superheated water.
- 2) PTFE diaphragms can also be used as steam barriers; however, this will reduce their service life. This also applies to PTFE diaphragms exposed to high temperature fluctuations. The maintenance cycles must be adapted accordingly. GEMÜ 555 and 505 globe valves are particularly suitable for use in the area of steam generation and distribution. The following valve arrangement for interfaces between steam pipes and process pipes has proven itself over time: A globe valve for shutting off steam pipes and a diaphragm valve as an interface to the process pipes.



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 compliance

Food: Regulation (EC) No. 1935/2004
Regulation (EC) No. 10/2011
FDA 21 CFR 177.1550
USP Class VI Title 87
USP Class VI Title 88 (50 °C and 121 °C)

Ozone resistance: Diaphragm material is resistant to a maximum concentration of ozone of 0.2 mg/l (dissolved in water)

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

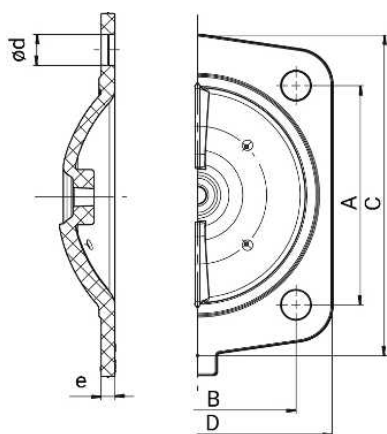
Unused components:	Asbestos
	Natural or synthetic latex
	PVC
	2-Mercaptobenzothiazole
	Benzophenone
	Bis(2-ethylhexyl) phthalate (DEHP)
	Bis(n-butyl) phthalate (DnBP, DBP)
	Bisphenol A (BPA)
	Butyl benzyl phthalate (BBP)
	Diethyl phthalate (DEP)
	Diisodecyl phthalate (DIDP)
	Diisononyl phthalate (DINP)
	Dimethyl phthalate (DMP)
	Di-n-octyl phthalate (DNOP)
	N-Nitrosamine

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 backing

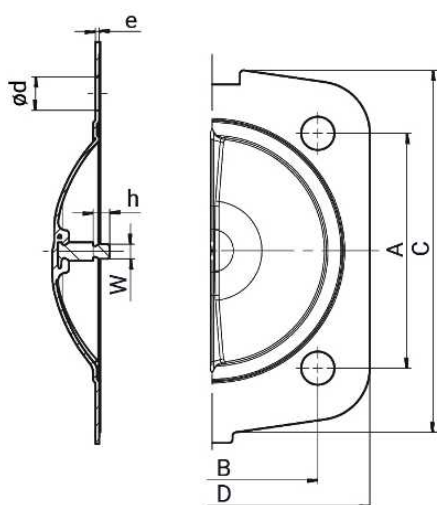


MG	DN	NPS	A	B	C	D	ød	e	α	β	γ	n
25	15 - 25	1/2" - 1"	54.0	46.0	72.0	67.0	9.0	6.0	-	-	-	4

Dimensions in mm

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

PTFE face



MG	DN	NPS	A	B	C	D	ød	e	h	W	α	β	γ	n
25	15 - 25	1/2" - 1"	54.0	46.0	80.0	75.0	9.0	1.5	6.0	1/4"	-	-	-	4

Dimensions in mm

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