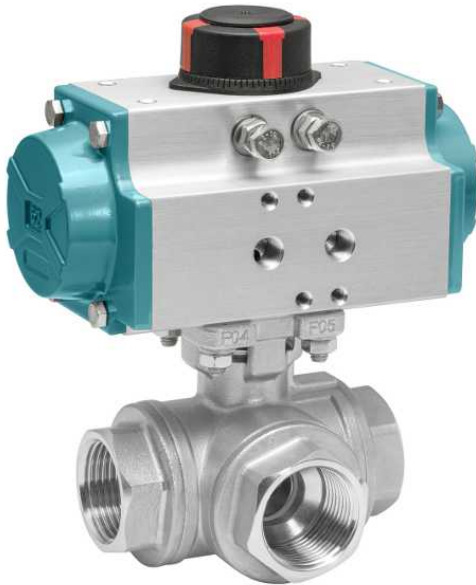


GEMÜ B47

Pneumatically operated 3/2-way ball valve



Features

- With T- or L-ball selectable
- Operating times variably adjustable
- Available in different thread variants
- Compact design
- Suitable for vacuum applications
- Antistatic unit

Description

The 3/2-way metal ball valve GEMÜ B47 is pneumatically operated. The seat seal is made of PTFE.

Technical specifications

- **Media temperature:** -40 to 180 °C
- **Ambient temperature:** -40 to 60 °C
- **Operating pressure :** 0 up to 40 bar
- **Nominal sizes:** DN 8 to 50
- **Body configurations:** Multi-port bodies
- **Ball configurations:** L-port | T-port
- **Connection types:** Thread
- **Connection standards:** DIN | NPT
- **Body materials:** 1.4408, investment casting material
- **Seal materials:** PTFE
- **Conformities:** ATEX

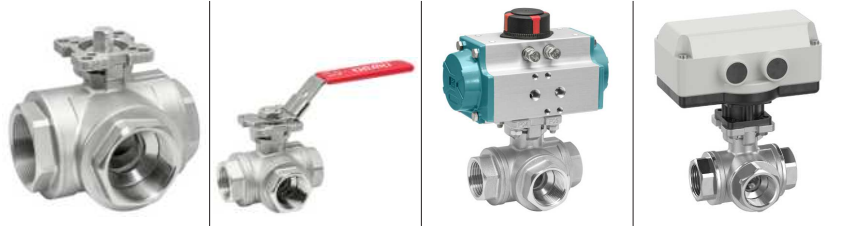
Technical data depends on the respective configuration



webcode: GW-B47



Product line

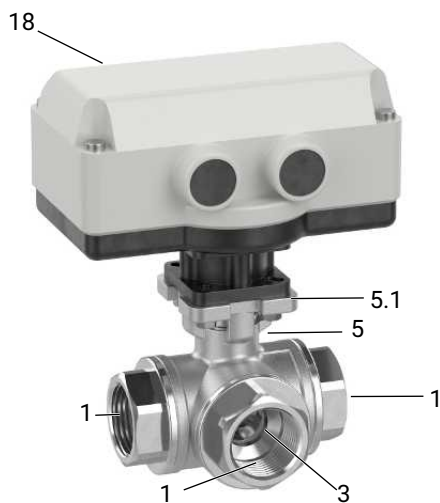
				
	GEMÜ BB07	GEMÜ B27	GEMÜ B47	GEMÜ B57
Operation				
With bare shaft	●	-	-	-
Manual	-	●	-	-
Pneumatic	-	-	●	-
Motorized	-	-	-	●
Nominal sizes	DN 8 to 50	DN 8 to 50	DN 8 to 50	DN 8 to 50
Media temperature	-40 to 180 °C	-40 to 180 °C	-40 to 180 °C	-40 to 180 °C
Operating pressure	0 to 40 bar	0 to 40 bar	0 to 40 bar	0 to 40 bar
Connection types				
Thread	●	●	●	●

Comparison of actuator applications

			
	GEMÜ ADA/ASR	GEMÜ DR/SC	GEMÜ GDR/GSR/ GDL/GSL
Industrial sectors			
Chemical processes	●	●	●
Surface finishing	●	●	●
Water treatment	●	●	●
Mechanical engineering	●	●	●
Power generation and environmental systems	●	●	●
Food processing technology	●	●	●
Semiconductor	●	●	●
Medical systems	●	●	●
Pharmaceutical industry	●	●	●

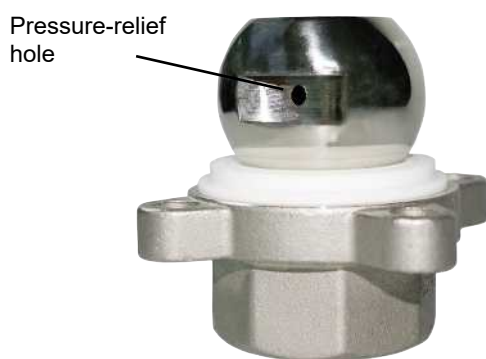
Product description

Construction

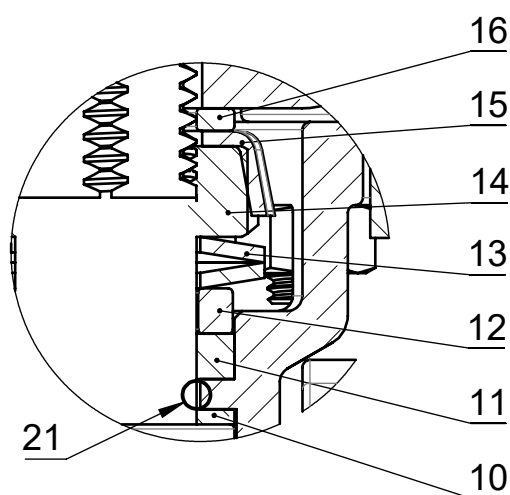


Item	Name	Materials
5	Ball valve body	1.4408 / CF8M
1	Pipe connections	1.4408 / CF8M
5.1	Mounting flange ISO 5211	1.4408 / CF8M
18	Pneumatic actuator	Aluminium
3	Seal	PTFE

Pressure-relief hole



The spindle seal system



Item	Name	Material
10	Seal	PTFE
11	V-ring	PTFE
12	Stainless steel sleeve	SS304-1.4301
13	Spring washer	SS304-1.4301
14	Spindle nut	A2 70
15	Cap	SS304-1.4301
16	Washer	SS304-1.4301
21	O-ring (spindle seal)	FKM

Long service life due to triple spindle seal

- Conical spindle seal:

The seal **10** arranged at an angle of 45° effectively prevents the leakage of media when operating the spindle

- O-ring:

Stabilising spindle seal **21** with low wear and long service life

- Pretensioned self-adjusting spindle seal:

The spindle packing consists of several V-rings **11**, a spring washer **13** and a stainless steel sleeve **12**. The spring washer **13** is pretensioned via the spindle nut **14**. The pretension force is distributed to the V-rings **11** via the stainless steel sleeve **12**, thereby preventing the leakage of media. The pretension provides low maintenance and reliable spindle sealing even after a long service life.

Actuator assignment

GEMÜ type GDR/GSR

DN	Double acting	Code	Single acting	Code
8	GDR0050 F03/05 S11	HR05AW	-	-
10	GDR0050 F03/05 S11	HR05AW	-	-
15	GDR0050 F03/05 S11	HR05AW	-	-
20	GDR0050 F03/05 S11	HR05AW	-	-
25	GDR0050 F03/05 S11	HR05AW	GSR0115 SC5F07/10 S17	GR11SE
32	GDR0065 F05/07 S14	HR06AP	GSR0115 SC5F07/10 S17	GR11SE
40	GDR0075 F05/07 S14	HR07AP	GSR0115 SC5F07/10 S17	GR11SE
50	GDR0075 F05/07 S14	HR07AP	GSR0115 SC5F07/10 S17	GR11SE

GEMÜ type ADA/ASR

DN	Double acting	Code	Single acting	Code
8	ADA0020U F04 S14S11A	BU02AA	ASR0020US08F04 S14S11A	AU02FA
10	ADA0020U F04 S14S11A	BU02AA	ASR0020US08F04 S14S11A	AU02FA
15	ADA0020U F04 S14S11A	BU02AA	ASR0040US14F04 S14S11A	AU04KA
20	ADA0020U F04 S14S11A	BU02AA	ASR0040US14F04 S14S11A	AU04KA
25	ADA0080U F05/07S17S14A	BU08AC	ASR0080US14F05/07S17S14A	AU08KC
32	ADA0080U F05/07S17S14A	BU08AC	ASR0080US14F05/07S17S14A	AU08KC
40	ADA0080U F05/07S17S14A	BU08AC	ASR0200US14F07/10S17S14A	AU20KE
50	ADA0080U F05/07S17S14A	BU08AC	ASR0200US14F07/10S17S14A	AU20KE

GEMÜ type DR/SC

DN	Double acting	Code	Single acting	Code
8	DR0015U F04 S11	DU01AO	SC0030U 6F04 S11	SU03KO
10	DR0015U F04 S11	DU01AO	SC0030U 6F04 S11	SU03KO
15	DR0015U F04 S11	DU01AO	SC0100U 6F05/07S17D11	SU15KC
20	DR0015U F04 S11	DU01AO	SC0100U 6F05/07S17D11	SU15KC
25	DR0060U F05/07 S17	DU06AC	SC0100U 6F05/07S17D11	SU15KC
32	DR0060U F05/07 S17	DU06AC	SC0100U 6F05/07S17D11	SU15KC
40	DR0060U F05/07 S17	DU06AC	SC0100U 6F05/07S17D11	SU15KC
50	DR0060U F05/07 S17	DU06AC	SC0220U 6F07/10 S22	SU22KD

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:

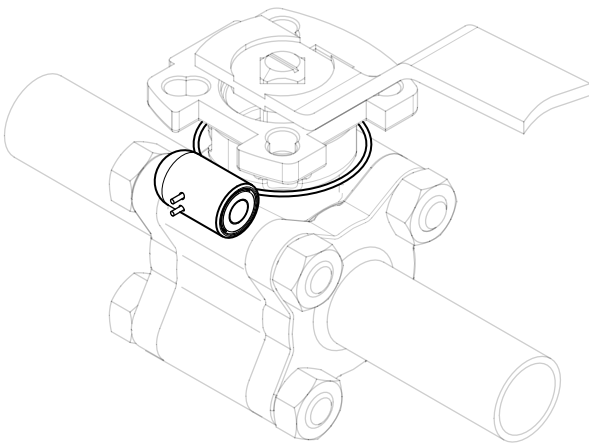
www.gemu-group.com/conexo

Ordering

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

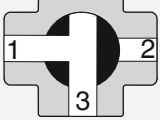
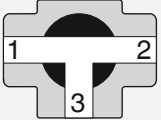
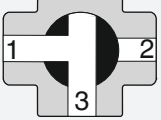
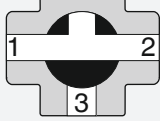
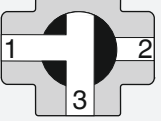
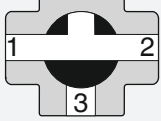
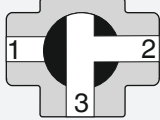
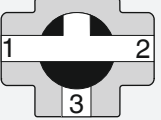
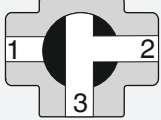
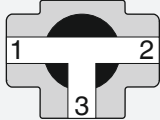
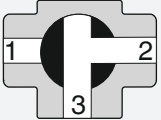
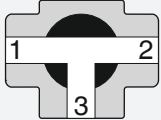
Installing the RFID chip

In the corresponding design with CONEXO, this product has an RFID chip for electronic identification purposes. The position of the RFID chip can be seen below.

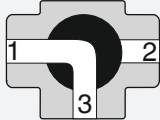
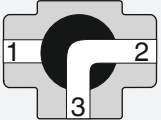
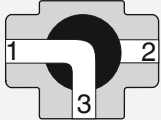
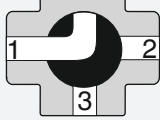
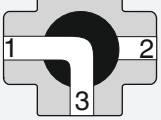
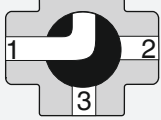


Port positions

T-port

	CLOSED end position	OPEN end position	Condition as supplied to customer: CLOSED
Delivery condition			
Code T			
Optional port positions, can be user adjusted			
Code 2			
Code 3			
Code 4			

L-port

	CLOSED end position	OPEN end position	Condition as supplied to customer: CLOSED
Delivery condition			
Code L			
Optional port positions, can be user adjusted			
Code 6			

Application

- Heating systems
- Beverage industry
- Foodstuff industry
- Chemical industry
- Drinking water installations
- Processing industry
- HVAC

Order data

The order data provide an overview of standard configurations.

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

Products ordered with **bold marked ordering options** are so-called preferred series. Depending on the nominal size, these are available more quickly.

Order codes

1 Type	Code
Ball valve, metal, pneumatically operated, multi-port, thread, aluminium double piston actuator, low-maintenance spindle seal and blow-out proof shaft, with anti-static unit	B47
2 DN	Code
DN 8	8
DN 10	10
DN 15	15
DN 20	20
DN 25	25
DN 32	32
DN 40	40
DN 50	50
3 Body/ball configuration	Code
Multi-port design, T-port, end position "Open", connection 1 and 3 open, T-port, end position "Closed", connection 1 and 2 open (for port position, see datasheet)	2
Multi-port design, T-port, end position "Open", connection 1 and 2 open, T-port, end position "Closed", connection 2 and 3 open (for port position, see datasheet)	3
Multi-port design, T-port, end position "Open", connection 2 and 3 open, T-port, end position "Closed", connection 1, 2 and 3 open (for port position, see datasheet)	4
Multi-port design, L-port, end position "Open", connection 1 and 3 open, L-port, end position "Closed", connection 1 open (for port position, see datasheet)	6
Multi-port design, L-port, standard end position "Open", connection 2 and 3 open, L-port, standard end position "Closed", connection 1 and 3 open (for port position, see datasheet)	L
Multi-port design, T-port, standard end position "Open", connection 1, 2 and 3 open, T-port, standard end position "Closed", connection 1 and 3 open (for port position, see datasheet)	T
4 Connection type	Code
Threaded socket DIN ISO 228	1
NPT female thread	31

5 Ball valve material	Code
1.4408/CF8M (body, connection), 1.4401/SS316 (ball, shaft)	37
6 Seal material	Code
PTFE FKM O-ring	5
7 Control function	Code
Normally closed (NC)	1
Normally open (NO)	2
Double acting (DA)	3
8 Actuator version	Code
Actuator GEMÜ GDR	
Actuator, pneumatic, DA – at 6 bar, 20.6 Nm GDR0050 F03/05 S11 2.5–8.0 bar	HR05AW
Actuator, pneumatic, DA – at 6 bar, 38.8 Nm GDR0065 F05/07 S14 2.5–8.0 bar	HR06AP
Actuator, pneumatic, DA – at 6 bar, 67.1 Nm GDR0075 F05/07 S14 2.5–8.0 bar	HR07AP
Actuator GEMÜ GSR	
Actuator, pneumatic, SA – at 0°, 97.3 Nm GSR0115 SC5F07/10 S17 4.5–8.0 bar	GR11SE
Actuator GEMÜ ADA	
Actuator, pneumatic, DA – at 6 bar, 19.5 Nm, 3.0–10 bar ADA0020U F04 S14S11	BU02AA
Actuator, pneumatic, DA – at 6 bar, 77.0 Nm, 3.0–10 bar ADA0080U F05 07S17S14	BU08AC
Actuator GEMÜ ASR	
Actuator, pneumatic, SA – at 0°, 9.0 Nm, 5.5–8.0 bar ASR0020US08F04 S14S11	AU02FA
Actuator, pneumatic, SA – at 0°, 17.0 Nm, 5.5–8.0 bar ASR0040US14F04 S14S11	AU04KA
Actuator, pneumatic, SA – at 0°, 30.0 Nm, 5.5–8.0 bar ASR0080US14F05 07S17S14	AU08KC
Actuator, pneumatic, SA – at 0°, 73.0 Nm, 5.5–8.0 bar ASR0200US14F07 10S17S14	AU20KE
Actuator GEMÜ DR	
Actuator, pneumatic, DA – at 6 bar, 19.9 Nm, 2.5–8.0 bar DR0015U F04/S11	DU01AO
Actuator, pneumatic, DA – at 6 bar, 69.8 Nm, 2.5–8.0 bar DR0060U F05/07 S17	DU06AC

8 Actuator version	Code
Actuator GEMÜ SC	
Actuator, pneumatic, SA – at 0°, 13.3 Nm, 5.5–8.0 bar SC0030U 6F04/S11	SU03KO
Actuator, pneumatic, SA – at 0°, 60.8 Nm, 5.5–8.0 bar SC0150U 6F05/07 S17	SU15KC
Actuator, pneumatic, SA – at 0°, 98.4 Nm, 5.5–8.0 bar SC0220U 6F07/10 S22	SU22KD

9 Actuator particulars	Code
General industrial version (version A/DR/DL/D3/D4/SC/SO/S3/S4), aluminium housing, 25–35 µm anodised coating, aluminium end caps, powder-coated, C-steel shaft + ENP, A2 screws	0

10 Type of design	Code
Standard	

10 Type of design	Code
Thermal separation between actuator and valve body by mounting kit, mounting kit and mounting parts in stainless steel	5227

11 Special version	Code
Without	
Special version for oxygen Maximum temperature for medium: 100 °C, Operating pressure limited in accordance with product label data Media-wetted materials cleaned, and grease and seal tested in accordance with DIN EN 1797/ISO 21010	O
Explosion protection	X

12 CONEXO	Code
Without	
Integrated RFID chip for electronic identification and traceability	C

Order example

1 Type	B47	Ball valve, metal, pneumatically operated, multi-port, thread, aluminium double piston actuator, low-maintenance spindle seal and blow-out proof shaft, with anti-static unit
2 DN	15	DN 15
3 Body/ball configuration	T	Multi-port design, T-port, standard end position "Open", connection 1, 2 and 3 open, T-port, standard end position "Closed", connection 1 and 3 open (for port position, see datasheet)
4 Connection type	1	Threaded socket DIN ISO 228
5 Ball valve material	37	1.4408/CF8M (body, connection), 1.4401/SS316 (ball, shaft)
6 Seal material	5	PTFE FKM O-ring
7 Control function	1	Normally closed (NC)
8 Actuator version	BU02AA	Actuator, pneumatic, DA – at 6 bar, 19.5 Nm, 3.0–10 bar ADA0020U F04 S14S11
9 Actuator particulars	0	General industrial version (version A/DR/DL/D3/D4/SC/SO/S3/S4), aluminium housing, 25–35 µm anodised coating, aluminium end caps, powder-coated, C-steel shaft + ENP, A2 screws
10 Type of design		Standard
11 Special version		Without
12 CONEXO		Without

Technical data

Medium

Working medium: Corrosive, inert, gaseous and liquid media and steam which have no negative impact on the physical and chemical properties of the body and seal material.
For special version for oxygen (code O): Only gaseous oxygen.

Temperature

Media temperature: -40 – 180 °C
For media temperatures > 100 °C, we recommend using a mounting kit with adapter between the ball valve and the actuator.
For the medium gaseous oxygen (special version code O): Media temperature max. 100 °C.

Ambient temperature: -40 – 60 °C
For ATEX versions, the ambient temperature specifications in the "Supplement acc. to ATEX" and the specifications on the ATEX-marking on the product apply.

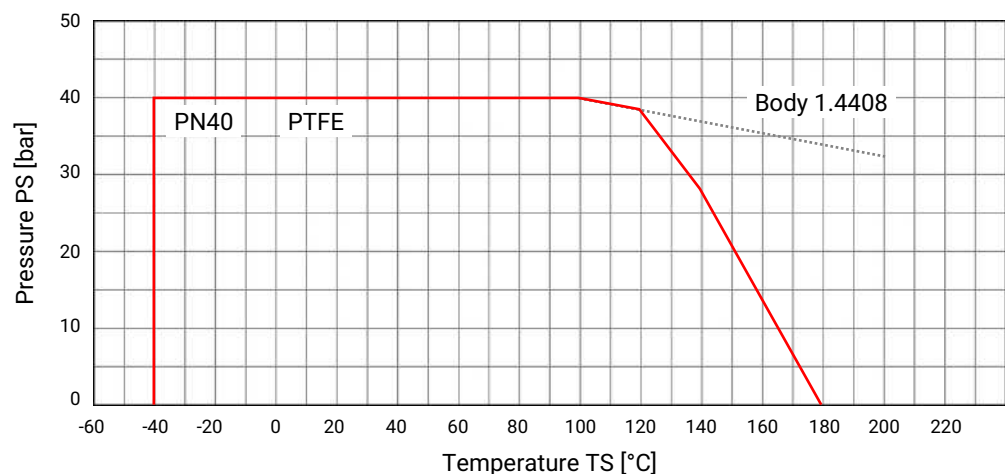
Storage temperature: 0 – 40 °C

Pressure

Operating pressure: 0 – 40 bar
For the medium gaseous oxygen (special version code O): Operating pressure limited in accordance with product label data.

Vacuum: Can be used up to a vacuum of 50 mbar (absolute)
These values apply to room temperature and air. The values may deviate for other media and other temperatures.

Pressure/temperature diagram:



Pressure/temperature data in accordance with diagram refers to static operating conditions. Strongly fluctuating or fast-changing parameters can lead to a reduction of the service life. Special applications must be talked through with your technical contact person in advance.

Leakage rate: Leakage rate according to ANSI FCI70 – B16.104
Leakage rate according to EN12266, 6 bar air, leakage rate A

Kv values:

DN	NPS	Kv value	
		T-port	L-port
8	1/4"	5.0	3.4
10	3/8"	5.8	3.5
15	1/2"	11.0	6.7
20	3/4"	21.0	12.0
25	1"	34.0	18.0
32	1¼"	59.0	27.5
40	1½"	70.0	35.6
50	2"	71.5	45.7

Kv values in m³/h

Control pressure: 6 up to 8 bar**Product conformity****Machinery Directive:** 2006/42/EC**Pressure Equipment Directive:** 2014/68/EU**Oxygen:** Testing of the seal material based on DIN EN 1797 and ISO 21010:2017 (special version code O)

Explosion protection: ATEX (2014/34/EU), order code Special version X

The product's ATEX marking is dependent on the respective product configuration with valve body and actuator. This can be found in the document "GEMÜ operating conditions and explosion protection markings for the ball valves with special function X" and the ATEX marking on the product.

Mechanical data**Torques:**

DN	NPS	Torques
8	1/4"	8.0
10	3/8"	8.0
15	1/2"	10.0
20	3/4"	13.0
25	1"	19.0
32	1¼"	29.0
40	1½"	51.0
50	2"	62.0

Torques in Nm

A safety factor of 1.2 is included

With dry, non-lubricating media the breakaway torque may be increased.

Valid for clean, non-particulate and oil-free media (water, alcohol, etc.), gas or saturated steam (clean and wet). PTFE seal.

Weight:

Body

DN	NPS	Weight
8	1/4"	0.55
10	3/8"	0.55
15	1/2"	0.55
20	3/4"	0.85
25	1"	1.20
32	1¼"	2.20
40	1½"	3.40
50	2"	4.63

Weights in kg

Actuator type GDR/GSR

Type	GDR Double acting	GSR Single acting
0050	1.05	1.22
0065	1.50	1.80
0075	2.55	3.20
0115	8.20	11,00

Weights in kg

Actuator type ADA/ASR

Type	ADA Double acting	ASR Single acting
0020U	1.4	1.5
0040U	2.1	2.3
0080U	3.0	3.7
0200U	5.6	7.3

Weights in kg

Actuator DR/SC

Type	DR double acting	SC single acting
0015U	1.0	1.1
0030U	1.6	1.7
0060U	2.7	3.1
0100U	3.7	4.3
0220U	8.0	9.3

Weights in kg

90° travel:

GEMÜ GDR/GSR: ±5° adjustable (85° - 95°)

GEMÜ ADA /ASR: ±5° adjustable (85° - 95°)

GEMÜ DR /SC: 20° adjustable (75° - 95°)

Dimensions

Actuator dimensions

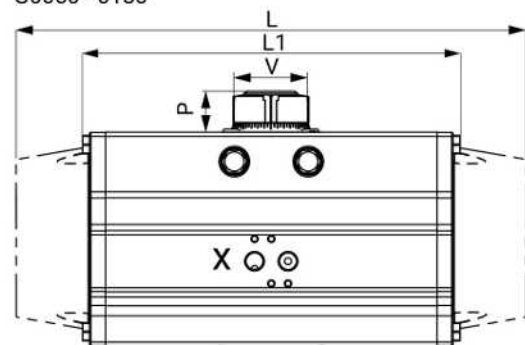
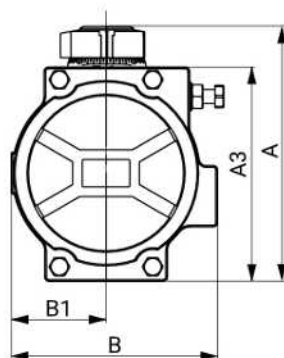
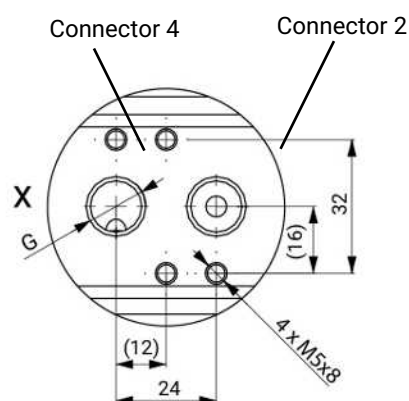
Note on actuator mounting:

Standard mounting orientation – actuator positioned in-line with piping

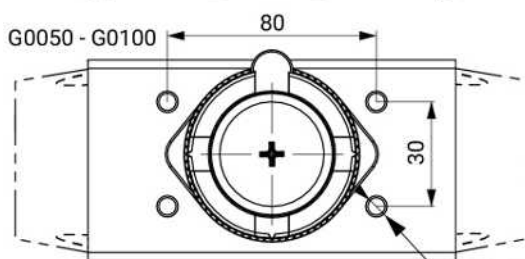
Only with flanged connections the actuator is mounted across the piping

Actuator type GDR/GSR

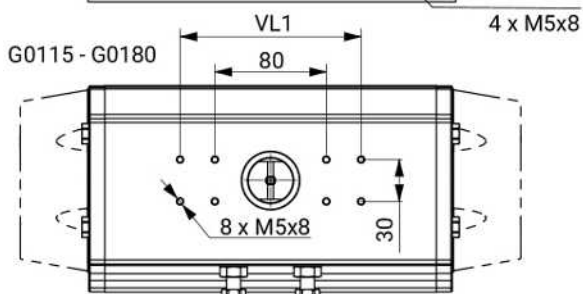
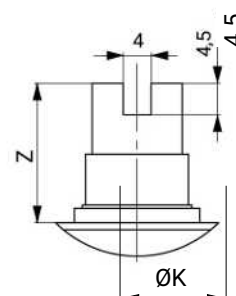
G0050 - 0180



G0050 - G0100



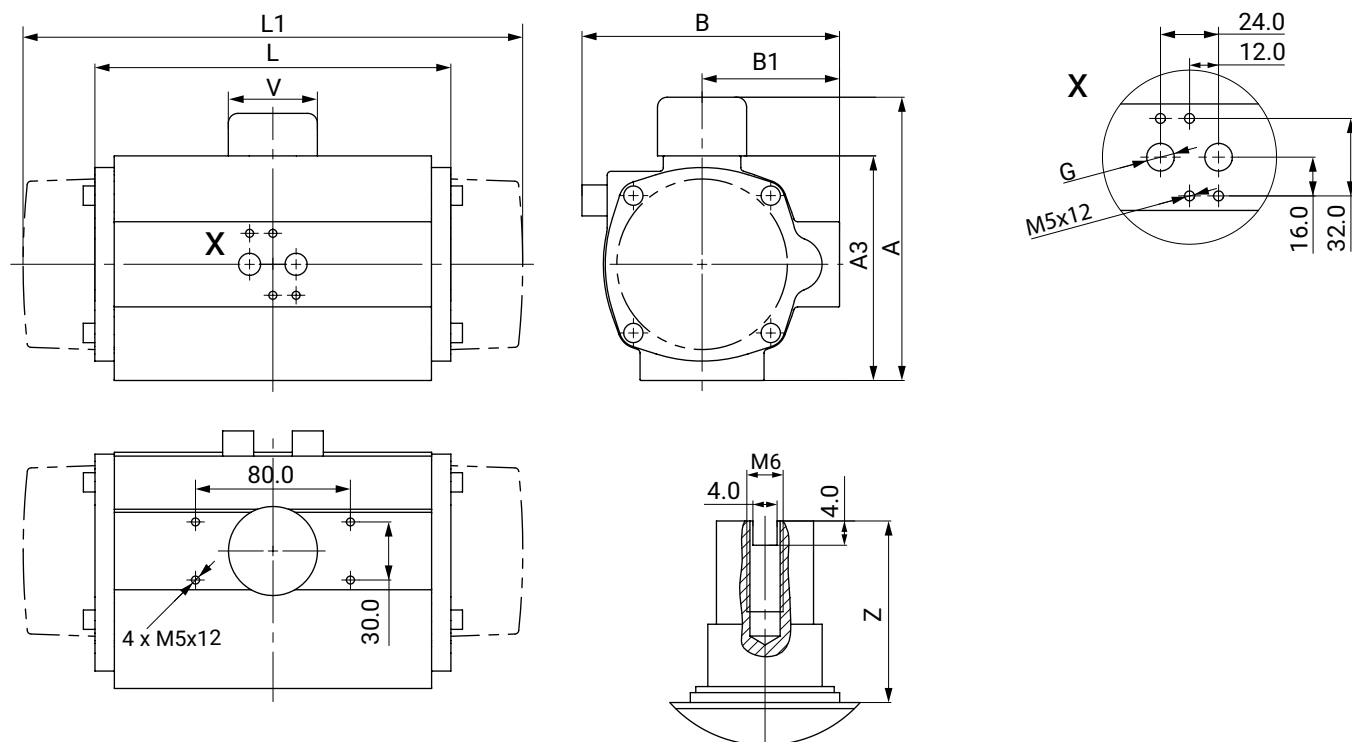
G0115 - G0180



Type	A	A3	B	B1	V	G	P	VL	Z	L	VL1
G0050	92.00	70.00	71.00	30.00	40.00	G1/8"	22.00	80.00	20.00	142.00	-
G0065	102.50	80.50	80.50	35.50	40.00	G1/8"	22.00	80.00	20.00	162.00	-
G0075	119.00	97.00	94.50	42.00	40.00	G1/8"	22.00	80.00	20.00	208.00	-
G0115	174.00	142.00	137.00	64.00	65.00	G1/4"	32.00	80.00	30.00	337.00	130.00

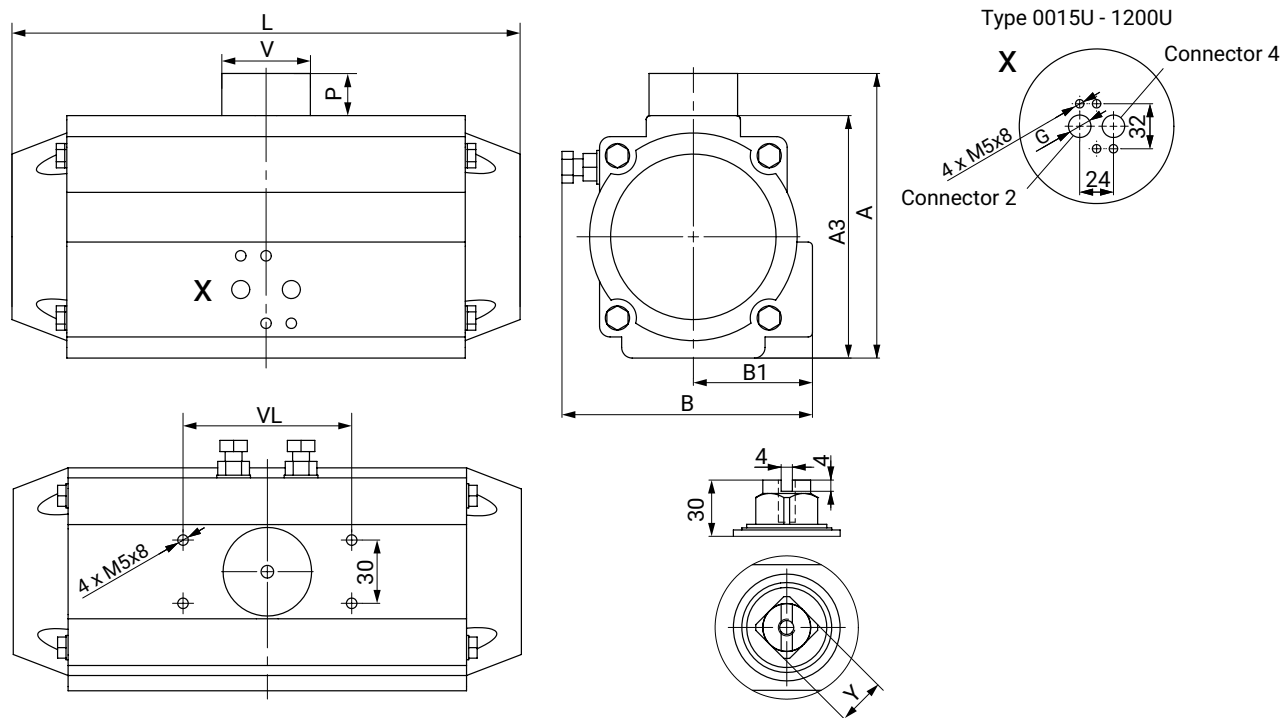
Dimensions in mm

Actuator type ADA/ASR



Type	A	A3	B	B1	G	L	L1	V	Z
0020U	96.0	66.0	76.0	48.0	G1/4"	145.0	163.0	40.0	30.0
0040U	115.0	85.0	91.0	56.0	G1/4"	158.0	195.0	40.0	30.0
0080U	137.0	107.0	111.0	66.0	G1/4"	177.0	217.0	40.0	30.0
0200U	165.0	135.0	135.5	78.0	G1/4"	225.0	299.0	40.0	30.0

Dimensions in mm

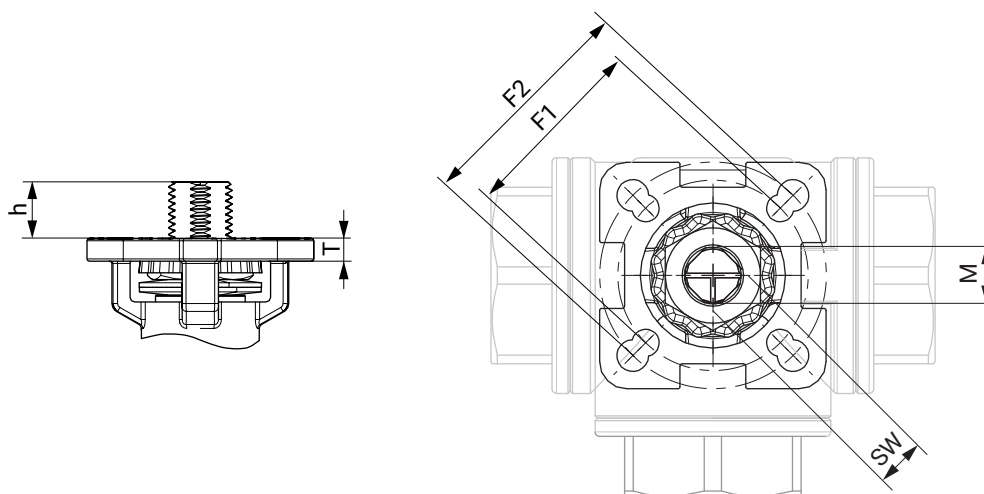
Actuator type DR/SC**Actuator dimensions**

Type	A	A3	B	B1	V	VL	G	P	L	Y
0015U	89.0	69.0	72.0	43.0	42.0	80.0	G1/8"	20.0	136.0	11.0
0030U	105.0	85.0	84.5	48.5	42.0	80.0	G1/8"	20.0	153.5	11.0
0060U	122.0	102.0	93.0	50.5	42.0	80.0	G1/8"	20.0	203.5	17.0
0100U	135.0	115.0	106.0	56.5	42.0	80.0	G1/8"	20.0	241.0	17.0
0150U	147.0	127.0	118.5	63.0	42.0	80.0	G1/4"	20.0	259.0	17.0
0220U	175.0	145.0	136.0	72.0	58.0	80.0	G1/4"	30.0	304.0	27.0

Dimensions in mm

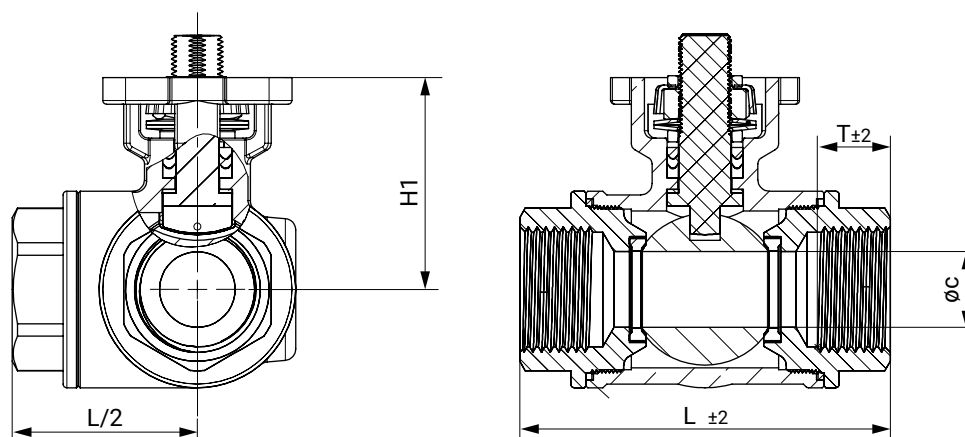
Body dimensions

Actuator flange



DN	G	F1	ISO 5211	F2	ISO 5211	SW	h	T	M
8	1/4"	36.0	F03	42.0	F04	9.0	9.0	6.5	M12
10	3/8"	36.0	F03	42.0	F04	9.0	9.0	6.5	M12
15	1/2"	36.0	F03	42.0	F04	9.0	9.0	6.5	M12
20	3/4"	36.0	F03	42.0	F04	9.0	8.5	6.0	M12
25	1"	42.0	F04	50.0	F05	11.0	11.5	7.0	M14
32	1 1/4"	42.0	F04	50.0	F05	11.0	11.5	7.0	M14
40	1 1/2"	50.0	F05	70.0	F07	14.0	14.0	8.5	M18
50	2"	50.0	F05	70.0	F07	14.0	14.0	8.5	M18

Dimensions in mm

Body dimensions**Threaded socket (connection code 1, 31)**

DN	G	$\varnothing c$	H1	L	T
8	1/4"	12.0	40.9	74.0	14.6
10	3/8"	12.0	43.0	74.0	14.6
15	1/2"	12.0	43.0	74.0	14.7
20	3/4"	15.0	45.0	86.0	16.7
25	1"	20.0	56.0	98.0	19.9
32	1 1/4"	25.0	62.0	118.0	21.9
40	1 1/2"	32.0	74.0	130.0	22.4
50	2"	38.0	78.0	149.0	26.9

Dimensions in mm

Add-on components



GEMÜ 4221

Combi switchbox with integrated 3/2-way pilot valve

The GEMÜ 4221 combi switchbox with integrated 3/2-way pilot valve for pneumatically operated quarter turn actuators uses a microprocessor controlled intelligent position sensor and an analogue travel sensor system. Electrical activation and position feedback is provided via 24 V DC signals or via fieldbus (AS-Interface, DeviceNet).



GEMÜ LSC

Limit switch box for quarter turn actuators

The GEMÜ LSC limit switch box is suitable for mounting to manually and pneumatically operated quarter turn valves. It is also fitted with an optical position indicator for visual confirmation of position.



GEMÜ LSF

Inductive dual sensor for quarter turn valves

The GEMÜ LSF inductive dual sensor is suitable for mounting to manually and pneumatically operated quarter turn valves. It is also fitted with an optical position indicator for visual confirmation of position.



GEMÜ 1435 ePos

Intelligent electro-pneumatic positioner

The GEMÜ 1435 ePos digital electro-pneumatic positioner is used to control pneumatically operated process valves with single acting or double acting linear or quarter turn actuators, and detects the position of the valve using an external travel sensor. It has a robust aluminium housing with protected operating keys and an LCD display which allows the product to be individually adapted to the control task. The travel times can be set using integrated throttles. Connection and mounting to NAMUR is also possible. Therefore, the GEMÜ 1435 ePos is an optimal solution for control tasks with high requirements, especially in applications with harsh environmental conditions.



GEMÜ 1436 cPos

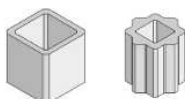
Intelligent positioner and integrated process controller

The GEMÜ 1436 cPos digital electro-pneumatic positioner has an optional integrated process controller to control pneumatically operated process valves with single acting or double acting linear or quarter turn actuators. When using the optional process controller, the signals from the sensors (e.g. flow, level, pressure, temperature) are detected and the media adjusted according to the specified set value. GEMÜ 1436 cPos has a robust aluminium housing with protected operating keys and an LCD display which allows the product to be individually adapted to complex control tasks. With additional equipment, the positioner can be used directly in fieldbus environments.

**GEMÜ 1436 eco cPos****Intelligent electro-pneumatic positioner**

The GEMÜ 1436 eco cPos digital electro-pneumatic positioner is used to control pneumatically operated process valves with single acting linear or quarter turn actuators. The positioner, travel sensor, switching valves and status LEDs are integrated into the robust and compact housing. Due to factory preconfiguration, this product does not require a display with operating keys. The pneumatic and electrical connections are arranged in one mounting direction to save space and enable easy access. All these features make this positioner a cost-effective solution for control tasks with basic requirements.

Accessories

GEMÜ ADH**Mounting sleeve**

The mounting sleeve accessories are available in the square and star geometry designs. These are used for the shaft and hub support for quarter turn actuators. Both sleeves have an internal square drive (please observe stated measurement dimensions here). The sleeve material is sintered metal and they are chemically nickel plated with a surface of 25 µm.

**GEMÜ 2022****Throttle valve**

GEMÜ 2022 is a throttle valve made of metal and/or plastic. Various connection versions and designs are available.

**GEMÜ 8500****Electrically operated pilot solenoid valve**

The GEMÜ 8500 servo assisted 3/2 or 5/2-way pilot solenoid valve is indirectly controlled. The body is made of aluminium. The plastic encapsulated solenoid actuator is detachable. The piston valve has a soft elastomer seal.

**GEMÜ 8500DRN****Throttle plate**

Throttle plates can be used to continuously adjust the travel times of pneumatic quarter turn actuators in both the "OPEN" and "CLOSED" directions independently of one another. They are installed between the NAMUR valve and the quarter turn actuator.

**GEMÜ 1751****Silencer**

Damping of vent hole or suction noises and coarse filtering of the suction air for pneumatic applications

Certificates

Certificate	Standard	Item number
3.1 Material	EN 10204	88333336



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