

Construction

The 4/2 way compact indirectly controlled valve with aluminium body, piston slide valve and detachable coil encapsulated in plastic has got a T-ring piston slide valve with soft seal. It is servo assisted. The electrical connection is made via a plug to DIN EN 175301-803 form A.

Features

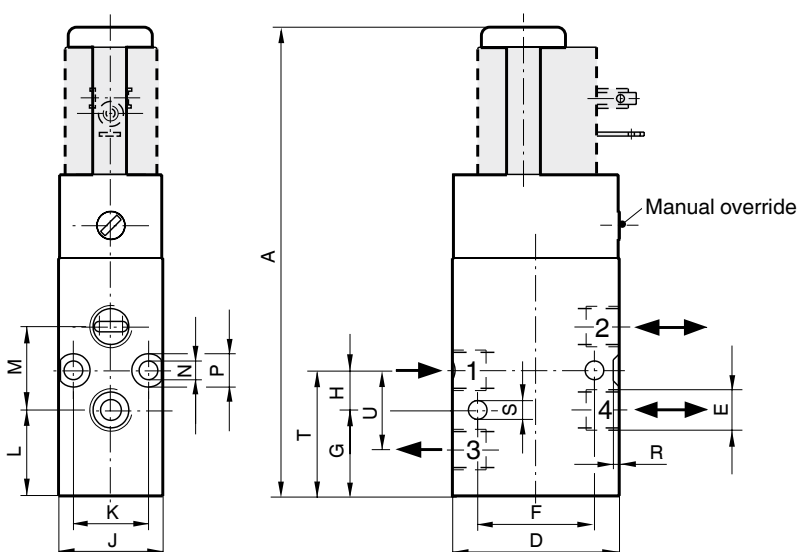
- Filtered, lubricated or oil-free compressed air is a suitable working medium
- The valve is suitable for the control of double acting pneumatic cylinders and diaphragm actuators or other pneumatic actuators
- In order to achieve the maximum possible reliability and service life it is advisable to prepare the working medium using a lubricator and filter regulator

Advantages

- Optional mounting position
- Standard manual override
- Battery mounting with common air inlet is possible
- The coil can be replaced without removing the valve body from the pipeline
- Technically advanced and proven construction



Body dimensions GEMÜ 8505 [mm]



| DN | A | D | E | F | G | H | J | K |
|----|-------|----|-------|----|------|------|------|----|
| 4 | 112.5 | 40 | G 1/8 | 28 | 20.5 | 9.5 | 25 | 18 |
| 7 | 127.5 | 55 | G 1/4 | 32 | 28.5 | 12.0 | 30 | 23 |
| | L | M | ØN | ØP | R | ØS | T | U |
| 4 | 20.5 | 20 | 4,5 | 8 | 2 | 4,5 | 30.0 | 19 |
| 7 | 28.5 | 24 | 4,5 | - | - | 5,5 | 40.5 | 29 |

Technical data

Working medium

Filtered, lubricated or unlubricated compressed air which has no negative impact on the physical and chemical properties of the body and seal material.

Perm. temp. of working medium -10 °C to +50 °C
Min. differential pressure ΔP 1 bar

Protection class

IP 65 Ex version upon request

Rating

Continuously rated

Switching time

DN 4 approx. 20 ms

DN 7 approx. 27 ms

Power consumption

A.C. operation:

DN 4 (solenoid 3052) 8.5 VA
DN 7 (solenoid 3033) 4.9 VA

D.C. operation:

DN 4 (solenoid 3052) 4.8 W
DN 7 (solenoid 3033) 2.7 W

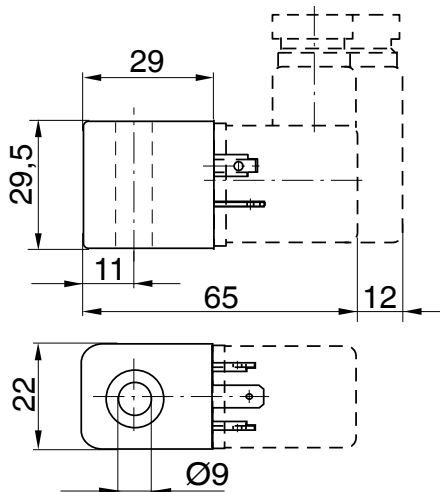
| Nominal size | Plug size | Operating pressure | K_V value | Weight |
|--------------|----------------------|--------------------|---------------------|--------|
| DN | DIN EN 175301-803 | [bar] | [m ³ /h] | [kg] |
| 4 | Design B (GEMÜ 3052) | 1.5 - 10 | 0.70 | 0.30 |
| 7 | Design A (GEMÜ 3033) | 1.0 - 10 | 1.40 | 0.39 |

Wiring note:

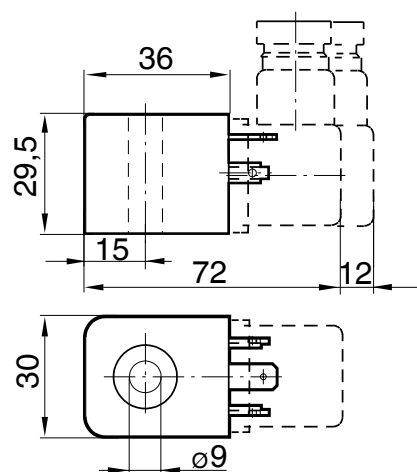
Special wiring on request. When using electronic switches and additional wiring, carefully design out any potential residual currents upon installation.

Operating solenoids with plug to DIN EN 175301-803, Designs A and B

DN 4 / 3052 / Design B



DN 7 / 3033 / Design A



| Solenoid order no. | Power consumption | | Protection class |
|--------------------|-------------------|-----------------|------------------|
| | 24 V DC | 24 V AC (50 Hz) | |
| 3033 (design A) | 2.7 W | 4.9 VA | IP 65 |
| 3052 (design B) | 4.8 W | 8.5 VA | |

Order data

| Body configuration | Code |
|--------------------|------|
| Multi-way | M |

| Supply voltage | Code |
|----------------|------|
| 24 V | 24 |
| 110 V | 110 |
| 230 V | 230 |

| Connection | Code |
|------------------------------|------|
| Threaded sockets DIN ISO 228 | 1 |

| Valve body material | Code |
|---------------------|------|
| Aluminium (Al) | 14 |

| Mains frequency | Code |
|-----------------|------|
| 50 Hz | 50 |
| DC | DC |

| Seal material | Code |
|----------------|------|
| Perbunan (NBR) | 2 |

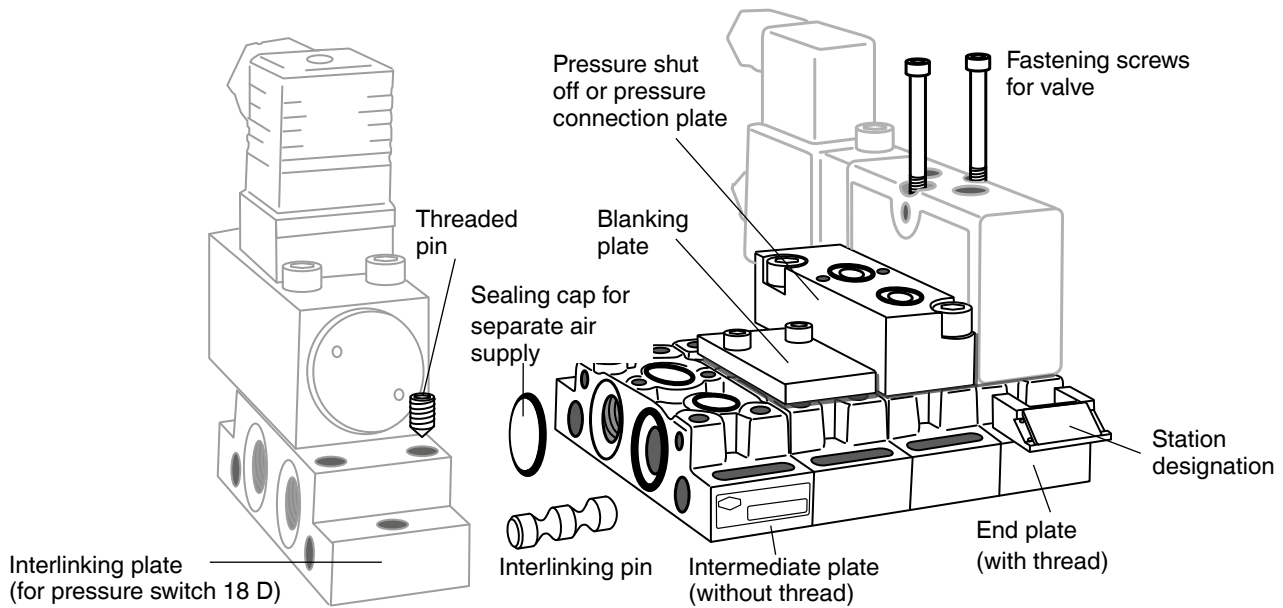
| Operating/Reset | Code |
|-----------------------|------|
| Solenoid / Air spring | 1 |

Voltage / Frequency availability

| | | |
|---|-----------------------------|-------|
| AC voltage | 24 V AC, 110 V AC, 230 V AC | 50 Hz |
| DC voltage | 24 V DC, 110 V DC | - |
| Further voltages and ex-solenoids upon request. | | |

| Order example | 8505 | 4 | M | 1 | 14 | 2 | 1 | 230 | 50 |
|----------------------------|------|---|---|---|----|---|---|-----|----|
| Type | 8505 | | | | | | | | |
| Nominal size | | 4 | | | | | | | |
| Body configuration (code) | | | M | | | | | | |
| Connection (code) | | | | 1 | | | | | |
| Valve body material (code) | | | | | 14 | | | | |
| Seal material (code) | | | | | | 2 | | | |
| Operating/Reset (code) | | | | | | | 1 | | |
| Voltage (code) | | | | | | | | 230 | |
| Frequency (code) | | | | | | | | | 50 |

Interlinking system



Parameters (interlinking without valves)

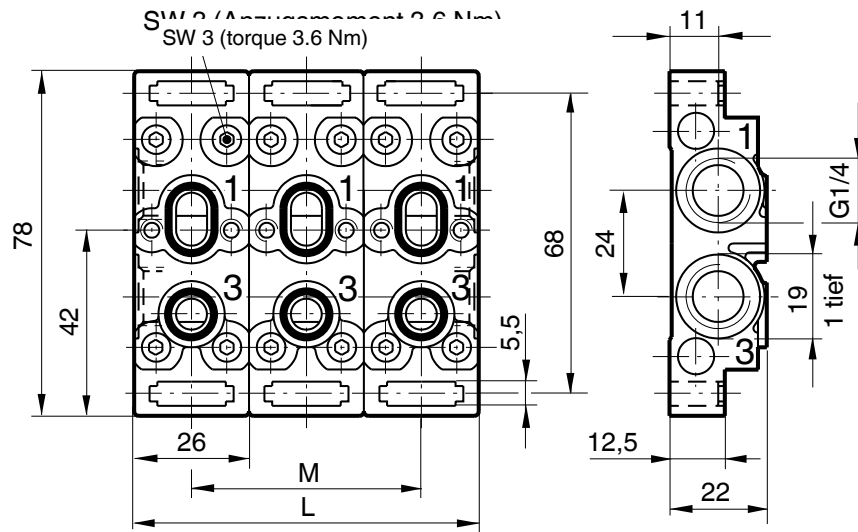
| Designation | DN 4 | | DN 7 | |
|--|------------|-----------|------------|-----------|
| | Weight [g] | Order no. | Weight [g] | Order no. |
| End plate complete (with thread) | 100 | 0559984 | 160 | 0559986 |
| Intermediate plate complete (without thread) | 100 | 0559985 | 160 | 0559987 |
| Interlinking plate complete (for pressure switch 18D) | 100 | 0540937 | 180 | 0540909 |
| Pressure shut-off plate complete (for valve mounting when pressure is applied) | 80 | 0541502 | 160 | 0541461 |
| Pressure connection plate complete (for separate air supply) | 80 | 0541505 | 160 | 0542940 |
| Interlinking for 2 valves | 180 | 2629202 | 320 | 2629402 |
| Interlinking for 3 valves | 280 | 2629203 | 490 | 2629403 |
| Interlinking for 4 valves | 370 | 2629204 | 650 | 2629404 |
| Interlinking for 5 valves | 470 | 2629205 | 820 | 2629405 |
| Interlinking for 6 valves | 560 | 2629206 | 980 | 2629406 |
| Interlinking for 7 valves | 660 | 2629207 | 1150 | 2629407 |
| Interlinking for 8 valves | 750 | 2629208 | 1320 | 2629408 |
| Interlinking for 9 valves | 850 | 2629209 | 1480 | 2629409 |
| Interlinking for 10 valves | 940 | 2629210 | 1650 | 2629410 |
| Interlinking for 11 valves | 1040 | 2629211 | 1810 | 2629411 |
| Interlinking for 12 valves | 1130 | 2629212 | 1980 | 2629412 |
| Blanking plate complete | 10 | 0540038 | 20 | 0540527 |
| Threaded plug | 10 | 0565449 | 20 | 0701192 |
| Seal for threaded plug | - | 0660835 | - | 0700835 |
| Sealing plug (for separate air supply) | - | 0540594 | - | 0540526 |

The interlinking plates are available as single plates (unassembled) and as multiple interlinking plates (assembled). Fastening screws for valves are included with the interlinking plates. Single rail for pressure supply upon request

| Order example | Order no.. |
|--|----------------|
| a) Interlinking for 3 valves (assembled) | 2629403 |
| b) 2 end plates. 2x | 0559986 |
| 1 intermediate plate (unassembled) | 0559987 |

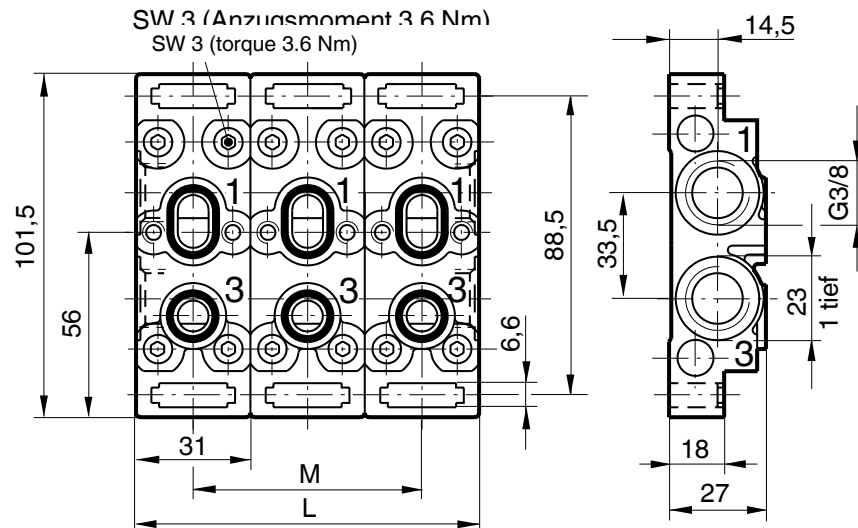
Dimensions [mm]

Interlinking system DN 4



| Order no. | for n-valves | L | M | Order no. | for n-valves | L | M |
|-----------|--------------|-----|-----|-----------|--------------|-----|-----|
| 0559984 | 1 | 26 | - | 2629207 | 7 | 182 | 156 |
| 0559985 | 1 | 26 | - | 2629208 | 8 | 208 | 182 |
| 2629202 | 2 | 52 | 26 | 2629209 | 9 | 234 | 208 |
| 2629203 | 3 | 78 | 52 | 2629210 | 10 | 260 | 234 |
| 2629204 | 4 | 104 | 78 | 2629211 | 11 | 286 | 260 |
| 2629205 | 5 | 130 | 104 | 2629212 | 12 | 312 | 286 |
| 2629206 | 6 | 156 | 130 | | | | |

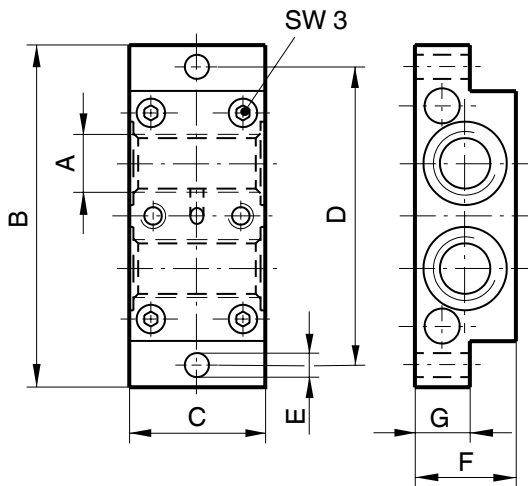
Interlinking system DN 7



| Order no. | for n-valves | L | M | Order no. | for n-valves | L | M |
|-----------|--------------|-----|-----|-----------|--------------|-----|-----|
| 0559986 | 1 | 31 | - | 2629407 | 7 | 217 | 186 |
| 0559987 | 1 | 31 | - | 2629408 | 8 | 248 | 217 |
| 2629402 | 2 | 62 | 31 | 2629409 | 9 | 279 | 248 |
| 2629403 | 3 | 93 | 62 | 2629410 | 10 | 310 | 279 |
| 2629404 | 4 | 124 | 93 | 2629411 | 11 | 341 | 310 |
| 2629405 | 5 | 155 | 124 | 2629412 | 12 | 372 | 341 |
| 2629406 | 6 | 186 | 155 | | | | |

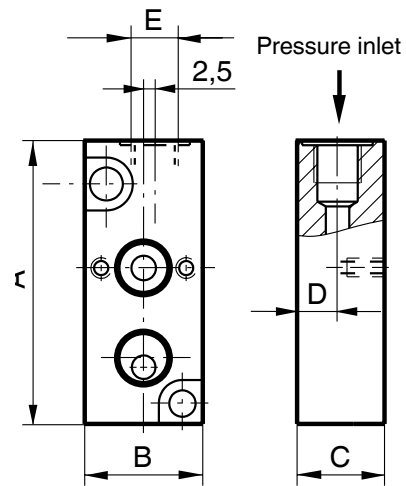
Dimensions [mm]

Pressure connection plate 18D



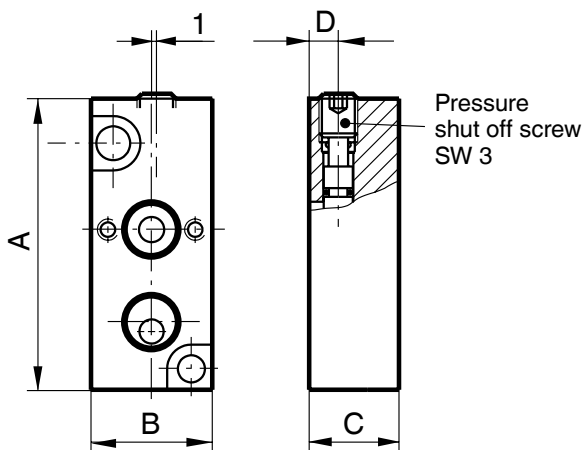
| Order no. | A | B | C | D | E | F | G |
|-----------|-------|-----|----|----|-----|----|------|
| 0540937 | G 1/4 | 78 | 31 | 68 | 5.5 | 23 | 12.5 |
| 0540909 | G 3/8 | 101 | 31 | 88 | 7.0 | 28 | 18.0 |

Pressure connection plate



| Order no. | DN | A | B | C | D | E |
|-----------|----|------|----|------|------|-------|
| 0541505 | 4 | 60.0 | 25 | 18,5 | 8.5 | G 1/8 |
| 0542940 | 7 | 77.5 | 30 | 24,0 | 12.0 | G 1/4 |

Pressure shut-off plate



| Order no. | DN | A | B | C | D |
|-----------|----|------|----|------|----|
| 0541502 | 4 | 60.0 | 25 | 18.5 | 6 |
| 0541461 | 7 | 77.5 | 30 | 24.0 | 12 |

Further pilot valves, metal



GEMÜ 8303
3/2-way metal pilot valve,
directly controlled,
brass or stainless steel,
DN 2 (1.0 - 10 bar)

GEMÜ 8357
3/2-way metal pilot valve,
servo assisted,
aluminium
DN 6 (1.0 - 10 bar)



GEMÜ 8506
3/2 and 5/2 metal pilot valve,
servo assisted,
aluminium
DN 6 (2.0 - 8.0 bar)

For further metal solenoid valves, accessories and other products, please see our Product Range catalogue and Price List. Contact GEMÜ.

GEMÜ® VALVES, MEASUREMENT
AND CONTROL SYSTEMS

