



Baureihe 24 - Type 24

2/2 - Wege Magnetventil
2/2 - Way solenoid valve

Standardtype

Ventil in Ruhestellung geschlossen - (NC). Der erregte Magnet öffnet eine Vorsteuerbohrung und hebt direkt oder unterstützt von der Druckdifferenz den Kolben vom Hauptsitz. Das Ventil schließt durch Federkraft.

Standard type

Valve normally closed - NC. When energised, the solenoid will open/free the pilot chamber and the valve will open directly or servo assisted by pressure of the flow medium. The valve closes by spring power.

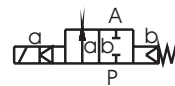
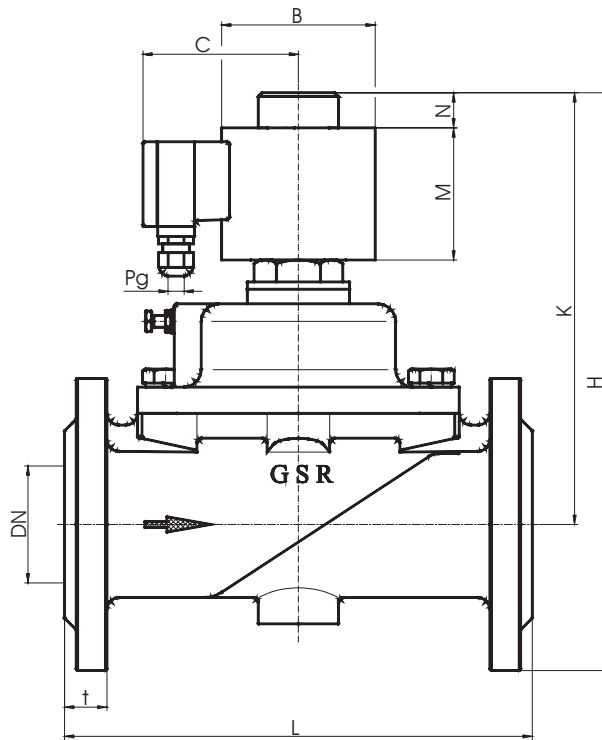


| | | | |
|----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| Steuerungsart: Type of control: | Zwangsgesteuert Force pilot operated | Metall. Innenteile: Metallic internals: | Messing und Edelstahl 1.4104 Brass and stainless steel (AISI 430F) |
| Konstruktion: Construction: | Kolbensitzventil Piston design | Dichtung: Sealing: | NBR NBR |
| Anschluß: Connection: | Flansch DN15-DN300 Flanges DN15-DN300 | Einbaulage: Installation: | nur mit stehendem Magneten actuator only in upright position |
| Druck: Pressure: | 0-40 bar (s. Tabelle) 0-40 bar (see table) | Anschlußspannung: Supply voltage: | AC: 24,42,110,230V 50/60Hz DC: 24,110,205V= |
| Durchflußmedium: Medium: | neutrale, gasförmige u. flüssige Medien neutral, gaseous and liquid fluids | Spannungstoleranz: Voltage tolerance: | +5% / -10% +5% / -10% |
| Viskosität: Viscosity: | 22mm ² /s 22mm ² /s | Leistungsaufnahme: Power-consumption: | 1322/3322 = 30 Watt 4242/5242 = 46 Watt 4272/5272 = 100 Watt 4352/5352 = 150 Watt 4402/5402 = 250 Watt |
| Mediumtemperatur: Medium temperature: | -10 bis +80°C -10 up to +80°C | | |
| Umgebungstemperatur: Ambient temperature: | +35°C +35°C | | |
| Ventilgehäuse: Body material: | ./04../.. = GG-25 / Cast iron ./05../.. = GS-C25 / Cast steel ./08../.. = Edelstahl - 1.4581/ Stainless steel (AISI 316Ti) ab DN65 Edelstahl 1.4408/ up to DN65 Stainless steel (AISI 316L) | Schutzart: Protection class: | IP65 nach DIN 40050 IP65 according to DIN 40050 |
| | | Einschaltdauer: Duty factor: | 100% ED - VDE 0580 100% ED - VDE 0580 |
| | | Kabelanschluß: Cable connection: | Gerätestecker DIN 43650 oder Klemmkasten DIN 43650 - plug or terminal box |

Die Kv-Werte in der Tabelle gelten jeweils für das größte angegebene Magnetsystem!*
In each case, the flow-rate in the table are for the biggest mentioned solenoid system!*

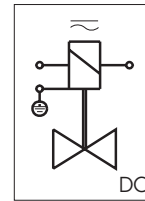
| DN | Sitz Orifice Ømm | Kv-Wert Flow-rate m ³ /h | Standardtype Standard type | max. Druck bei Magnettype max. pressure regarding solenoid type | | | | |
|-----|------------------------|-------------------------------------------|-------------------------------|--------------------------------------------------------------------|-------|-------|-------|-------|
| | | | | .322 | .242 | .272 | .352 | .402 |
| 15 | 15 | 5,0 | .2401/0.01/.... | 0-40* | - | - | - | - |
| 20 | 20 | 11,0 | .2402/0.01/.... | 0-25 | 0-40* | - | - | - |
| 25 | 25 | 13,0 | .2403/0.01/.... | 0-25 | 0-40* | - | - | - |
| 32 | 32 | 28,0 | .2404/0.01/.... | 0-10 | 0-25 | 0-40* | - | - |
| 40 | 40 | 30,0 | .2405/0.01/.... | 0-10 | 0-25 | 0-40* | - | - |
| 50 | 50 | 46,0 | .2406/0.01/.... | - | 0-25 | 0-40* | - | - |
| 65 | 65 | 75,0 | .2407/0.01/.... | - | 0-16 | 0-40* | - | - |
| 80 | 80 | 97,0 | .2408/0.01/.... | - | 0-16 | 0-25 | 0-40* | - |
| 100 | 100 | 143,0 | .2409/0.01/.... | - | - | 0-16 | 0-40* | - |
| 125 | 125 | 240,0 | .2410/0.01/.... | - | - | 0-16 | 0-40* | - |
| 150 | 150 | 370,0 | .2411/0.01/.... | - | - | - | 0-16 | 0-40* |
| 200 | 200 | 625,0 | .2412/0.01/.... | - | - | - | - | 0-40* |
| 250 | 250 | 950,0 | .2413/0.01/.... | - | - | - | - | 0-16* |
| 300 | 300 | 1400,0 | .2414/0.01/.... | - | - | - | - | 0-10* |

Maßzeichnung Standardausführung
Dimensional drawing of standard type

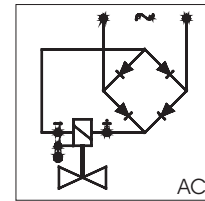


Schaltfunktion/Function:
in Ruhestellung gesperrt -
NC. Normally closed - NC.

Anschlußplan / Connection diagram



Für Gleichspannung.
For DC.



Mit vorgeschaltetem Gleichrichter
für Wechselspannung.
With rectifier for AC connection.

Erdung oder Schutzschaltung nach Vorschrift des zuständigen EVU.
Grounding or earthing of the protective circuit in accordance with
regulations of the responsible electric supply company.

Absicherung entsprechend der Stromaufnahme vorsehen.
Appropriate protection according to the power-consumption.

| Magnet Solen. | .322 | | | | | .242 | | | | | | .272 | | | | | |
|---------------|-------|-------|-------|------|------|-------|-------|------|------|-------|-------|------|------|------|-------|-------|------|
| Type | 2401 | 2402 | 2403 | 2404 | 2405 | 2402 | 2403 | 2404 | 2405 | 2406 | 2407 | 2408 | 2404 | 2405 | 2406 | 2407 | 2408 |
| DN | 15 | 20 | 25 | 32 | 40 | 20 | 25 | 32 | 40 | 50 | 65 | 80 | 32 | 40 | 50 | 65 | 80 |
| B | Ø63 | Ø63 | Ø63 | Ø63 | Ø77 | Ø77 | Ø77 | Ø77 | Ø77 | Ø77 | Ø77 | Ø77 | Ø105 | Ø105 | Ø105 | Ø105 | Ø105 |
| C | 76 | 76 | 76 | 76 | 76 | 82 | 82 | 82 | 82 | 82 | 82 | 82 | 95 | 95 | 95 | 95 | 95 |
| H | 211,5 | 233,5 | 238,5 | 264 | 269 | 257,5 | 262,5 | 288 | 293 | 306,5 | 362,5 | 415 | 313 | 318 | 334,5 | 402,5 | 445 |
| K | 164 | 181 | 181 | 194 | 194 | 205 | 205 | 218 | 218 | 224 | 270 | 315 | 243 | 243 | 252 | 310 | 345 |
| L | 130 | 150 | 160 | 180 | 200 | 150 | 160 | 180 | 200 | 230 | 290 | 310 | 180 | 200 | 230 | 290 | 310 |
| M | 59 | 59 | 59 | 59 | 59 | 70 | 70 | 70 | 70 | 70 | 70 | 70 | 90 | 90 | 90 | 90 | 90 |
| N | 16 | 16 | 16 | 16 | 16 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 25 | 25 | 25 | 25 | 25 |
| t | 14 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 18 | 18 | 20 | 16 | 16 | 18 | 18 | 20 |
| Pg | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 |
| kg | 5,0 | 5,5 | 6,0 | 8,5 | 10,5 | 7,5 | 8,5 | 11,0 | 13,0 | 14,0 | 35,0 | 44,0 | 13,0 | 16,0 | 21,0 | 38,0 | 47,0 |

| Magnet Solen. | .272 | | | .352 | | | | .402 | | | |
|---------------|------|------|------|------|------|------|-------|-------|------|-------|-------|
| Type | 2409 | 2410 | 2408 | 2409 | 2410 | 2411 | 2412 | 2411 | 2412 | 2413 | 2414 |
| DN | 100 | 125 | 80 | 100 | 125 | 150 | 200 | 150 | 200 | 250 | 300 |
| B | Ø105 | Ø105 | Ø145 | Ø145 | Ø145 | Ø145 | Ø145 | - | - | - | - |
| C | 95 | 95 | 120 | 120 | 120 | 120 | 120 | - | - | - | - |
| H | 510 | 480 | 580 | 670 | 545 | 590 | 630 | 743,5 | 830 | 922,5 | 980 |
| K | 400 | 355 | 480 | 560 | 420 | 450 | 460 | 600 | 660 | 720 | 750 |
| L | 350 | 400 | 310 | 350 | 400 | 480 | 600 | 480 | 600 | 730 | 850 |
| M | 90 | 90 | 145 | 145 | 145 | 145 | 145 | 293 | 293 | 293 | 293 |
| N | 25 | 25 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| t | 22 | 24 | 20 | 22 | 24 | 26 | 28 | 26 | 26 | 34 | 38 |
| Pg | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 |
| kg | 63,0 | 80,0 | 39,0 | 60,0 | 87,0 | 95,0 | 108,0 | 140 | 158 | 235,0 | 320,0 |

Alle Angaben sind freibleibend
und unverbindlich /
All technical specifications are
without obligation!

Weitere Ventilausführungen
Stromlos geöffnet / Non energised open= NO
Dichtung / Sealing= FKM,EPDM,PTFE
Andere Durchflußmedien und Viskositäten
Varying medium and viscosity ranges
Abweichende Temperaturen und Drücke
Varying temperature and pressure ranges
Stellungsanzeiger (Endschalter, ab DN20)= EH
Position indicator (reed contact, from DN20)=EH
Ex-Schutz / Explosion proof= Ex II 2G EEx em II T4
Grundmengeneinstellung= GM
Base of volume adjustable = GM

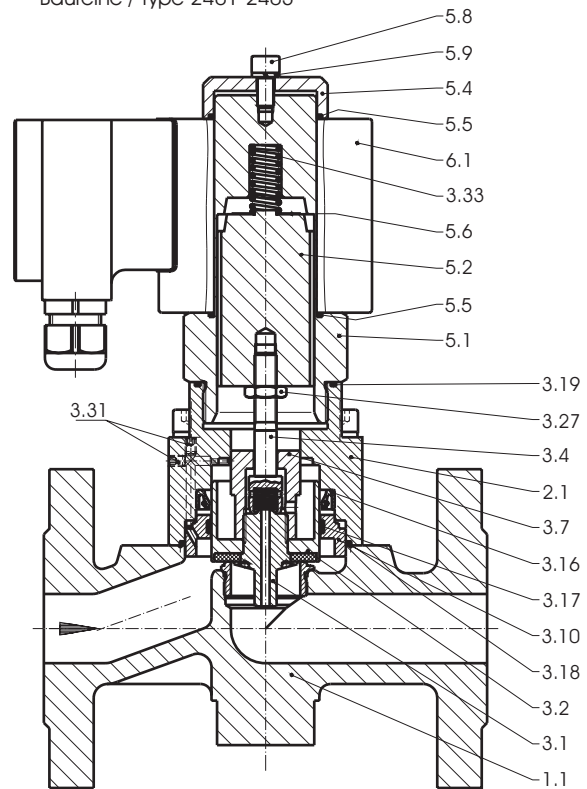
Valve options
Handbetätigung / Manual operation= HA
Regulierbare Schließdämpfung= SR(DN32-DN100 seriemäßig)
Variable close muting= SR (DN32-DN100 standard)
Öl- und fettfrei= OF
Free of oil and grease= OF (for oxygen applications)
Buntmetallfrei= BF
Free of non-ferrous metal=BF
Temperaturausführung bis +180°C= TH
Design for high temperature up to +180°C=TH

Stückliste - Parts list

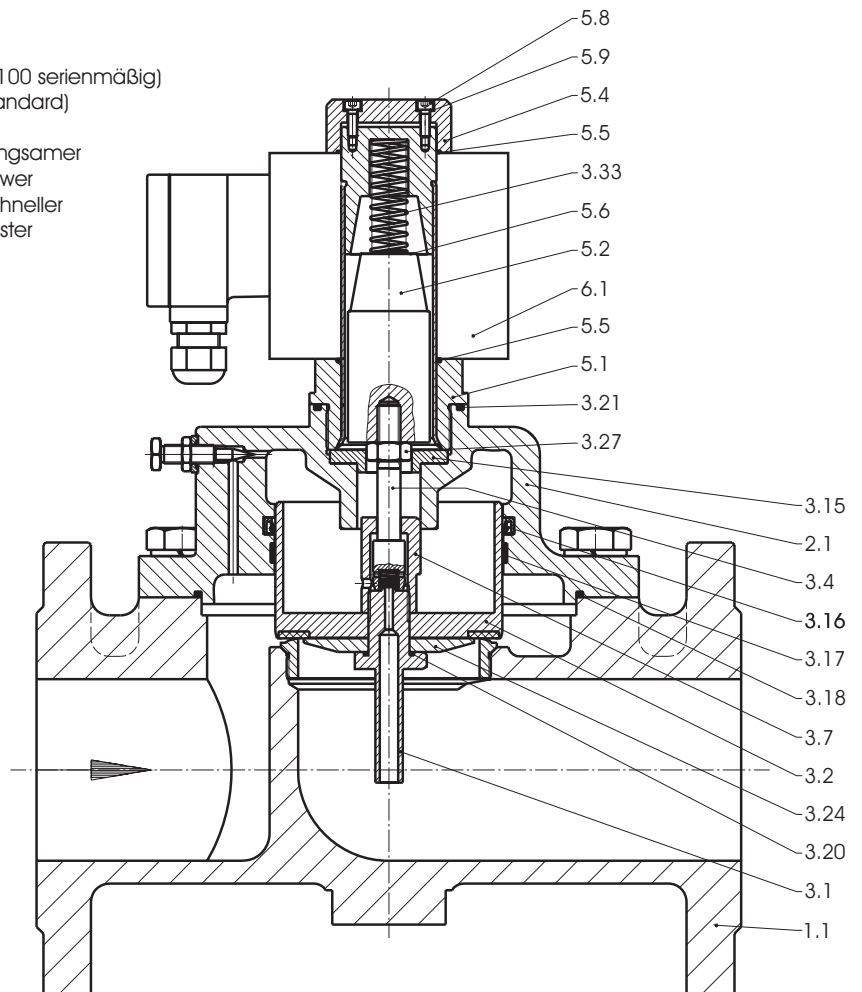
- K1.1 Armatur / Valve body
- K2.1 Deckel / Bonnet
- *K3.1 Vorsteuersitz / Pilot seat
- *K3.2 Ventilkolben komplett / Valve piston complete
- *K3.4 Vorsteuerspindel / Pilot spindle
- *K3.7 Überwurfmutter / Union nut
- K3.10 Führungring / Guide ring
- K3.13 Dämpfungsschraube / Damping screw
- K3.14 Scheibe / Disk
- K3.15 Scheibe / Disk
- *K3.16 Nutring / U-cup seal
- *K3.17 Führungsband / Piston ring
- *K3.18 O-Ring / O-ring
- *K3.19 O-Ring / O-ring
- *K3.20 O-Ring / O-ring
- *K3.21 O-Ring / O-ring
- *K3.23 O-Ring / O-ring
- *K3.24 Scheibe / Disk
- K3.27 6-kt. Mutter / Hexagon nut
- K3.28 6-kt. Mutter / Hexagon nut
- K3.31 Gewindestift / Grub screw
- *K3.33 Feder / Spring
- K5.1 Magnethülse / Solenoid tube
- K5.2 Magnetanker / Solenoid plunger
- K5.4 Druckstück / Pressure piece
- K5.5 O-Ring / O-ring
- K5.6 Scheibe / Disk
- K5.8 Zylinderschraube / Cylinder screw
- K5.9 Scheibe / Disk
- K6.1 Magnetspule / Solenoid

* = Bestandteil des Ersatzteilpäckchens
(je nach Ausführung freibleibend)
* = Part of the service-set. (These specifications are without obligation).

Baureihe / Type 2401-2403

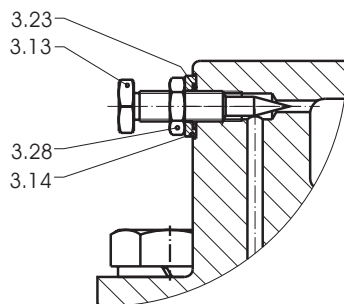


Baureihe / Type 2404 - 2409



Regulierbare Schließdämpfung - SR (von DN32-DN100 serienmäßig)
Adjustable close muting - SR (from DN32-DN100 standard)

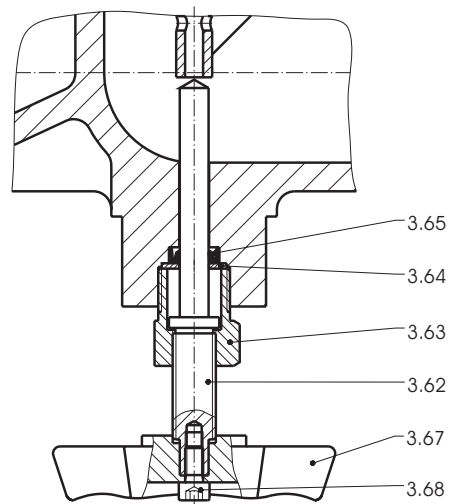
Schraube nach rechts drehen : Ventil schließt langsamer
Screw to the right site : Valve closes- slower
Schraube nach links drehen : Ventil schließt schneller
Screw to the left site : Valve closes - faster



Handbetätigung - HA
Manual operation - HA

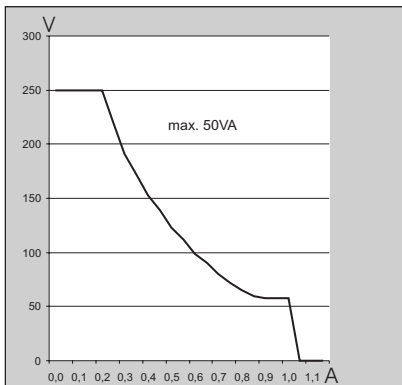
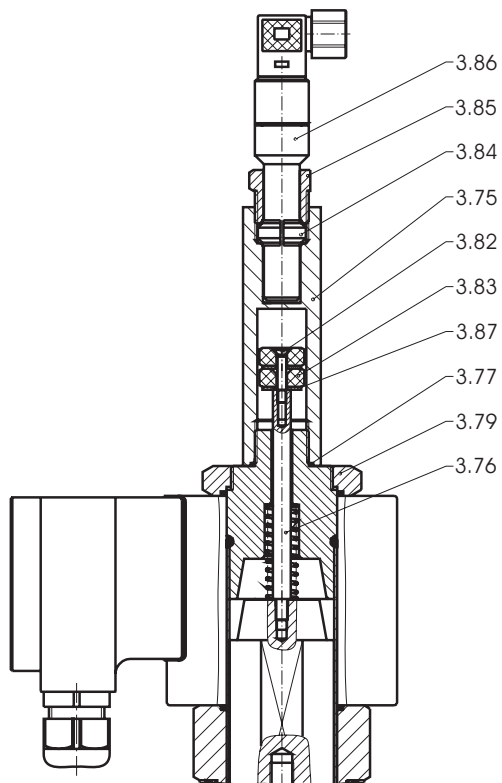
Ventiloptionen / Optional extras

- K3.62 Spindel / Spindle
- K3.63 Verschraubung / Screw joint
- K3.64 Scheibe / Disk
- K3.65 Nutring / U-cup ring
- K3.67 Handrad / Handwheel
- K3.68 Zylinderschraube / Cyl.-screw



Stellungsanzeiger - EH (ab DN20)
Position indicator - EH (from DN20)

- K3.75 Zwischenverschraubung / Screw joint
- K3.76 Spindel / Spindle
- K3.77 O-Ring / O-ring
- K3.79 Befestigungsmutter / Union nut
- K3.82 Senkschraube / Screw
- K3.83 Permanentmagnet / Permanent magnet
- K3.84 Klemmring / Clamp ring
- K3.85 Verschraubung / Screw joint
- K3.86 Endscharter / Position indicator
- K3.87 Scheibe / Disk



Schaltleistungsdiagramm
Braking capacity-graph

Anschlußplan
Connection plan

Endschalter / Position indicator

