

GS 3 series, DN 15 up to DN 250

Fast and high resolution motor valve for control and switching of neutral through to highly aggressive media in process engineering, chemical industries and for plant equipment.

- Space saving wafer type construction
- Lowest possible weight (especially in larger sizes)
- Low operation noise level (quiet operation)
- Control of high differential pressures with small actuators
- Fast stroking speed
- Small dead band
- Smooth start and slow down
- Metal body



Technical Information of the Valve

| | | | |
|--|--|--|---------------------------------------|
| Design | flangeless design for flanges acc. EN 1092-1 Form B or ASME B16.5 RF further versions see data sheet 8038-GS3 | | |
| Nominal size | DN 15 up to DN 250 | | |
| Nominal pressure acc. EN 1333 | PN 40 (fits also to PN 10-25) PN 100 PN 16 | DN 15 - DN 150 DN 15 - DN 80 DN 200 - DN 250 | |
| Nominal pressure acc. ANSI | ANSI 150 ANSI 300 ANSI 600 | DN 15 - DN 250 DN 15 - DN 150 DN 15 - DN 80 | |
| Nominal pressure acc. JIS for flanges with raised face | 10K 20K | DN 15 - DN 50 DN 15 - DN 40 | |
| Media temperature | Versions from -60°C up to +350°C | | |
| Rangeability | 40 : 1 | | |
| Leakage | Disc pair Carbon-stainless steel | Disc pair SFC | Disc pair STN 2 |
| % of Kvs IEC 60534-4 EN 12266-1 | < 0,0001 IV-S1 D | < 0,0005 IV-S1 E | < 0,001 IV E |
| Specific leakage rate shaft and body sealing | ISO FE-BH-CC3-SSA0-t(-40°C/+350°C)-PN40-ISO 15848-1 | | |
| Applications acc. PED 2014/68/EU | stainless steel or carbon steel body body made of Alloy C-276 | | up to category II up to category I |

* With DN15 with reduction of less than 25%, different leakage rates possible.
K_{vs}-values see data sheet 8001.

Fluid temperature

| Rating | PN40 | PN 16 | PN 100 | ANSI 150 | ANSI 300 | ANSI 600 |
|------------------------------------|------|-------|--------|----------|----------|----------|
| Body material cpl. stainless steel | | | | | | |
| Tmin [°C] | -60 | -60 | -60 | -29 | -29 | -29 |
| Tmax [°C] | 350 | 350 | 350 | 350 | 350 | 350 |
| Body material carbon steel | | | | | | |
| Tmin [°C] | -60 | -60 | -10 | -20 | -20 | -20 |
| Tmax [°C] | 350 | 350 | 350 | 350 | 350 | 350 |
| Body material Alloy C-276 | | | | | | |
| Tmin [°C] | -60 | -60 | -60 | -29 | -29 | -29 |
| Tmax [°C] | 350 | 350 | 350 | 350 | 350 | 350 |

Materials

| Stainless steel version | |
|-------------------------|--|
| Valve body | stainless steel, 1.4408 |
| Bodycover | stainless steel, 1.4404 or 316L |
| Valve stem | stainless steel 1.4571, roller burnished |
| coupling ring | Stainless steel 1.4581 |
| Packing tube | Stainless steel 1.4408 |
| Packing | PTFE carbon filled (spring 1.4310) |
| Body seal | Graphite with stainless steel foil |
| Fixed disc | stainless steel coated STN2-disc STN3-disc |
| Sliding disc | special carbon material SFC-disc (max. +300°C) STN2-disc STN3-disc |

| carbon steel version | |
|----------------------|--|
| Valve body | carbon steel, 1.0619 |
| Bodycover | stainless steel, 1.4404 or 316L |
| Valve stem | stainless steel 1.4571, roller burnished |
| coupling ring | Stainless steel 1.4581 |
| Packing tube | Stainless steel 1.4408 |
| Packing | PTFE carbon filled (spring 1.4310) |
| Body seal | Graphite with stainless steel foil |
| Fixed disc | stainless steel coated STN2-disc STN3-disc |
| Sliding disc | special carbon material SFC-disc (max. +300°C) STN2-disc STN3-disc |

| Version in Alloy C-276 | |
|------------------------|--|
| Valve body | Alloy C-276, 2.4819 |
| Bodycover | Alloy C-276, 2.4819 |
| Valve stem | Alloy C-276, 2.4819 |
| coupling ring | Alloy C-276, 2.4819 |
| Packing tube | Alloy C-276, 2.4819 |
| Packing | PTFE carbon filled (spring Alloy C4, 2.4610) |
| Body seal | Pure graphite |
| Fixed disc | Alloy C-276, 2.4819 STN3-disc |
| Sliding disc | special carbon material STN3-disc |

| For all versions | |
|------------------|----------------------------------|
| Coupling | zinc die-cast or stainless steel |
| Mounting parts | stainless steel |

Limitations for valves made of Alloy C-276

Additionally to the limitations of the pressure rating valves made of Alloy C-276 are limited to applications of the category I of the PED 2014/68/EU

| | | maximum admissible operating pressure in bar for application of category I of the pressure equipment directive 2014/68/EU | | | | |
|----------------|---------|---|------|------|------|------|
| | | DN15 | DN25 | DN40 | DN50 | DN80 |
| Fluid groupe 1 | gaseous | X | X | 25 | 20 | 12,5 |
| | liquid | X | X | 50 | 40 | 25 |
| Fluid groupe 2 | gaseous | X | X | X | X | X |
| | liquid | X | X | X | X | X |

X = no limitation

Technical Information of the Actuator

| | |
|--|---|
| Driving force | 2,0 kN / 5,0 kN |
| Power connections | 24 V AC/DC 100 - 240 V 50/60Hz |
| Ambient temperature | Standard: -10°C up to +60°C Low temperature version: -40°C up to +60°C |
| Storage Temperature | Standard: -30°C up to +80°C (+60°C with Fail-Safe protection) Low temperature version: -40°C up to +80°C (+60°C with Fail-Safe protection) |
| Mounting position | choice horizontal or vertical actuator only |
| Protection class (EN 60529) | IP 67 |
| Max. power consumption | 40 Watt |
| Stroking speed | 2,0 kN-version: 0,75 s/mm up to 250 s/mm (standard 1,5 s/mm) 5,0 kN-version: 2 s/mm up to 250 s/mm (standard 4 s/mm) |
| Stroking speed of the Fail-Safe protection | 2,0 kN-version: 0,75 s/mm up to 4 s/mm 5,0 kN-version: 2 s/mm up to 4 s/mm |
| Set point range | adjustable 0(4) - 20 mA, 0(2) - 10 V optional binary input signal (24V DC) |
| Feed back | adjustable 0(4) - 20 mA, 0(2) - 10 V |
| cycles (Fail-Safe) | 500.000 |
| life-time (Fail-Safe) | 10 years |
| duty cycle | 100% |
| Self Monitoring | monitoring of the driving power, set point, actuator temperature, temperature of the electronic etc. |
| Diagnostic function | storage of motor and total service life, temperature- and way classes |
| Valve adaptation | automatic stroke adjustment to suit valve limits |
| additional inputs | binary input |
| additonal outputs | 2 alarm outputs |

Stroking Times

| DN | Stroke | Stroking time (sec.) for the complete stroke at a stroking speed of | | | | |
|-----------|--------|---|--------|-----------------------|-------------------------------------|-----------------------|
| | | 0,75 s/mm | 1 s/mm | 1,5 s/mm | 2 s/mm | 4 s/mm |
| 15 - 40 | 6,25 | 4,7 | 6,3 | 9,4 | 12,5 | 25,0 |
| 50 - 80 | 8,25 | 6,2 | 8,3 | 12,4 | 16,5 | 33,0 |
| 100 - 250 | 8,75 | 6,6 | 8,8 | 13,1 | 17,5 | 35,0 |
| | | | | Standard 2kN-actuator | min. stroking time for 5kN-actuator | Standard 5kN-actuator |

Options

| | |
|------------------------------------|---|
| 2 additional stroke limit switches | free adjustable volt free contacts (open/close) |
| Fail safe protection | Mounted in own body at actuator Safety position freely selectable |
| Communication software | with communication link, for parametrization and diagnosis of the actuator |
| Bluetoothmodul BT-1 | Wireless connection to DeviceConfig configuration software (upgrade option) |

Actuator with fail-safe protection (Option)

- Safety function at power failure
- Power supply via high performance capacitors
- Safety position open, closed or in every other position selectable
- Automatic monitoring of the charge condition of the capacitors



Admissible differential pressures
(For temperatures of up to 120°C with PN-rating
up to 38°C with ANSI-rating)

For temperatures of 120°C (PN)
or 38°C (ANSI) and above:
obey application limits !

| DN | driving force: 2kN | | driving force: 5kN | |
|------|---|---------------------|---|---------------------|
| | max. differential pressure (bar) | | | |
| | disc - pair carbon/SFC stainless steel coated | disc - pair STN2 | disc - pair carbon/SFC stainless steel coated | disc - pair STN2 |
| 15** | 102,1 | 102,1 | 102,1 | 102,1 |
| 20 | 102,1 | 101,9 | 102,1 | 102,1 |
| 25** | 88 (102,1)* | 76,1 | 88 (102,1)* | 88 (102,1)* |
| 32 | 102,1 | 56,6 | 102,1 | 102,1 |
| 40** | 84 | 38,9 | 88 (100)* | 72,6 |
| 50** | 55,1 | 23,2 | 100 | 59,9 |
| 65 | 46,4 | 19 | 80 | 49,1 |
| 80** | 29,5 | 11,5 | 48 | 29,7 |
| 100 | 18,8 | 7,1 | 33 | 18,4 |
| 125 | 12,8 | 4,8 | 23 | 12,3 |
| 150 | 9,5 | 3,5 | 16 | 9,1 |
| 200 | 5,5 | - | 14,3 | - |
| 250 | 3,4 | - | 8,8 | - |

*: figures in brackets for bodys made of carbon steel

** Size available in Alloy C-276 version

| | Upper limits for admissible pressures in bar | | | | | |
|-----------------------------------|--|------|-------|---------|----------|----------|
| | PN16 | PN40 | PN100 | ANSI150 | ANSI 300 | ANSI 600 |
| P max. carbon steel / Alloy C-276 | 16 | 40 | 100 | 19,6 | 51,1 | 102,1 |
| P max. stainless steel | | | | 19,0 | 49,6 | 99,3 |

Application limitations for GS3 valves in stainless steel

These pressure must not be exceeded for GS-valves from the GS3-series made of stainless steel, even though the actuator power might allow it.

PN40

| DN | Sliding unit: carbon/SFC - stainless steel, coated | | | | | | Sliding unit: STN2 | | | | | |
|-----------------|---|-------|-------|-------|-------|-------|---|-------|-------|-------|-------|-------|
| | max. admissible pressures for GS3-valves in stainless steel | | | | | | max. admissible pressures for GS3-valves in stainless steel | | | | | |
| | 100°C | 150°C | 200°C | 250°C | 300°C | 350°C | 100°C | 150°C | 200°C | 250°C | 300°C | 350°C |
| 15-32 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 37 |
| 50 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| 65 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 37 | 32 |
| 80 | 40 | 40 | 40 | 40 | 40 | 40 | 36 | 34 | 33 | 26 | 22 | 19 |
| 100 | 33 | 33 | 33 | 33 | 33 | 33 | 32 | 31 | 30 | 24 | 20 | 17 |
| 125 | 23 | 23 | 23 | 23 | 23 | 23 | 21 | 21 | 19 | 16 | 13 | 11 |
| 150 | 16 | 16 | 16 | 16 | 16 | 16 | 15 | 15 | 14 | 11 | 9 | 8 |
| 200 (only PN16) | 16 | 16 | 15 | 13 | 12 | 11 | - | - | - | - | - | - |
| 250 (only PN16) | 10 | 9 | 9 | 8 | 7 | 6 | - | - | - | - | - | - |

Limitation for SFC-sliding discs: 300°C

PN100

| DN | Sliding unit: carbon/SFC - stainless steel, coated | | | | | | Sliding unit: STN2 | | | | | |
|----|---|-------|-------|-------|-------|-------|---|-------|-------|-------|-------|-------|
| | max. admissible pressures for GS3-valves in stainless steel | | | | | | max. admissible pressures for GS3-valves in stainless steel | | | | | |
| | 100°C | 150°C | 200°C | 250°C | 300°C | 350°C | 100°C | 150°C | 200°C | 250°C | 300°C | 350°C |
| 15 | 100 | 100 | 100 | 93 | 84 | 79 | 100 | 100 | 100 | 93 | 84 | 79 |
| 20 | 100 | 100 | 89 | 81 | 73 | 68 | 100 | 100 | 89 | 81 | 73 | 68 |
| 25 | 88 | 81 | 70 | 63 | 57 | 54 | 88 | 81 | 70 | 63 | 57 | 54 |
| 32 | 100 | 93 | 80 | 73 | 65 | 62 | 100 | 93 | 80 | 73 | 65 | 60 |
| 40 | 88 | 81 | 70 | 63 | 57 | 54 | 72 | 69 | 65 | 53 | 43 | 37 |
| 50 | 100 | 100 | 100 | 100 | 100 | 94 | 77 | 73 | 70 | 56 | 46 | 40 |
| 65 | 80 | 80 | 80 | 79 | 71 | 67 | 62 | 59 | 56 | 45 | 37 | 32 |
| 80 | 48 | 48 | 48 | 48 | 48 | 44 | 36 | 34 | 33 | 26 | 22 | 19 |

Limitation for SFC-sliding discs: 300°C

ANSI150

| DN | Sliding unit: carbon/SFC - stainless steel, coated | | | | | | | | Sliding unit: STN2 | | | | | | | |
|--------|---|------|-------|-------|-------|-------|-------|-------|---|------|-------|-------|-------|-------|-------|-------|
| | max. admissible pressures for GS3-valves in stainless steel | | | | | | | | max. admissible pressures for GS3-valves in stainless steel | | | | | | | |
| | 38°C | 50°C | 100°C | 150°C | 200°C | 250°C | 300°C | 350°C | 38°C | 50°C | 100°C | 150°C | 200°C | 250°C | 300°C | 350°C |
| 15-125 | 19,0 | 18,4 | 16,2 | 14,8 | 13,7 | 12,1 | 10,2 | 8,4 | 19,0 | 18,4 | 16,2 | 14,8 | 13,7 | 12,1 | 10,2 | 8,4 |
| 150 | 16,0 | 16,0 | 16,0 | 14,8 | 13,7 | 12,1 | 10,2 | 8,4 | 16,2 | 16,2 | 16,2 | 14,8 | 13,7 | 11,8 | 9,7 | 8,4 |
| 200 | 16,0 | 16,0 | 16,0 | 14,8 | 13,7 | 12,1 | 10,2 | 8,4 | - | - | - | - | - | - | - | - |
| 250 | 10,4 | 10,4 | 10,4 | 9,9 | 9,4 | 8,4 | 7,4 | 6,8 | - | - | - | - | - | - | - | - |

Limitation for SFC-sliding discs: 300°C

ANSI300

| DN | Sliding unit: carbon/SFC - stainless steel, coated | | | | | | | | Sliding unit: STN2 | | | | | | | |
|-------|---|------|-------|-------|-------|-------|-------|-------|---|------|-------|-------|-------|-------|-------|-------|
| | max. admissible pressures for GS3-valves in stainless steel | | | | | | | | max. admissible pressures for GS3-valves in stainless steel | | | | | | | |
| | 38°C | 50°C | 100°C | 150°C | 200°C | 250°C | 300°C | 350°C | 38°C | 50°C | 100°C | 150°C | 200°C | 250°C | 300°C | 350°C |
| 15-65 | 49,6 | 48,1 | 42,2 | 38,5 | 35,7 | 33,4 | 31,6 | 30,3 | 49,6 | 48,1 | 42,2 | 38,5 | 35,7 | 33,4 | 31,6 | 30,3 |
| 80 | 48,0 | 48,0 | 42,2 | 38,5 | 35,7 | 33,4 | 31,6 | 30,3 | 36,6 | 36,6 | 36,6 | 34,8 | 33,0 | 26,8 | 22,0 | 19,0 |
| 100 | 33,0 | 33,0 | 33,0 | 33,0 | 33,0 | 33,0 | 31,6 | 30,3 | 33,0 | 33,0 | 33,0 | 31,7 | 30,1 | 24,4 | 20,1 | 17,3 |
| 125 | 23,0 | 23,0 | 23,0 | 23,0 | 23,0 | 23,0 | 23,0 | 23,0 | 22,0 | 22,0 | 22,0 | 21,0 | 19,9 | 16,1 | 13,2 | 11,5 |
| 150 | 16,0 | 16,0 | 16,0 | 16,0 | 16,0 | 16,0 | 16,0 | 16,0 | 16,0 | 16,0 | 16,0 | 15,4 | 14,6 | 11,8 | 9,7 | 8,4 |

Limitation for SFC-sliding discs: 300°C

ANSI600

| DN | Sliding unit: carbon/SFC - stainless steel, coated | | | | | | | | Sliding unit: STN2 | | | | | | | |
|-------|---|------|-------|-------|-------|-------|-------|-------|---|------|-------|-------|-------|-------|-------|-------|
| | max. admissible pressures for GS3-valves in stainless steel | | | | | | | | max. admissible pressures for GS3-valves in stainless steel | | | | | | | |
| | 38°C | 50°C | 100°C | 150°C | 200°C | 250°C | 300°C | 350°C | 38°C | 50°C | 100°C | 150°C | 200°C | 250°C | 300°C | 350°C |
| 15-20 | 99,3 | 96,2 | 84,4 | 77,0 | 71,3 | 66,8 | 63,2 | 60,7 | 99,3 | 96,2 | 84,4 | 77,0 | 71,3 | 66,8 | 63,2 | 60,7 |
| 25 | 88,0 | 88,0 | 84,4 | 77,0 | 70,1 | 63,7 | 57,3 | 54,2 | 88,0 | 88,0 | 84,4 | 77,0 | 70,1 | 63,7 | 57,3 | 54,2 |
| 32 | 99,3 | 96,2 | 84,4 | 77,0 | 71,3 | 66,8 | 63,2 | 60,7 | 99,3 | 96,2 | 84,4 | 77,0 | 71,3 | 66,8 | 63,2 | 60,2 |
| 40 | 88,0 | 88,0 | 84,4 | 77,0 | 70,1 | 63,7 | 57,3 | 54,2 | 72,5 | 72,5 | 72,5 | 69,0 | 65,5 | 53,1 | 43,6 | 37,7 |
| 50 | 99,3 | 96,2 | 84,4 | 77,0 | 71,3 | 66,8 | 63,2 | 60,7 | 77,7 | 77,7 | 77,7 | 73,9 | 70,2 | 56,9 | 46,7 | 40,4 |
| 65 | 80,0 | 80,0 | 80,0 | 77,0 | 71,3 | 66,8 | 63,2 | 60,7 | 62,5 | 62,5 | 41,7 | 59,5 | 56,4 | 45,8 | 37,6 | 32,5 |
| 80 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 44,5 | 36,6 | 36,6 | 36,6 | 34,8 | 33,0 | 26,8 | 22,0 | 19,0 |

Limitation for SFC-sliding discs: 300°C

Application limitations for GS3 valves in carbon steel

These pressure must not be exceeded for GS-valves from the GS3-series made of carbon steel, even though the actuator power might allow it.

PN40

| DN | Sliding unit: carbon/SFC - stainless steel, coated | | | | | | Sliding unit: STN2 | | | | | |
|-----------------|--|-------|-------|-------|-------|-------|--|-------|-------|-------|-------|-------|
| | max. admissible pressures for GS3-valves in carbon steel | | | | | | max. admissible pressures for GS3-valves in carbon steel | | | | | |
| | 100°C | 150°C | 200°C | 250°C | 300°C | 350°C | 100°C | 150°C | 200°C | 250°C | 300°C | 350°C |
| 15-50 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| 65 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 37 | 32 | 32 |
| 80 | 40 | 40 | 40 | 40 | 40 | 40 | 36 | 34 | 33 | 26 | 22 | 19 |
| 100 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 31 | 30 | 24 | 20 | 17 |
| 125 | 23 | 23 | 23 | 23 | 23 | 23 | 22 | 21 | 19 | 16 | 13 | 11 |
| 150 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 15 | 14 | 11 | 9 | 8 |
| 200 (nur PN 16) | 16 | 16 | 15 | 13 | 12 | 11 | - | - | - | - | - | - |
| 250 (nur PN 16) | 10 | 9 | 9 | 8 | 7 | 6 | - | - | - | - | - | - |

Limitation for SFC-sliding discs: 300°C

PN100

| DN | Sliding unit: carbon/SFC - stainless steel, coated | | | | | | Sliding unit: STN2 | | | | | |
|---------|--|-------|-------|-------|-------|-------|--|-------|-------|-------|-------|-------|
| | max. admissible pressures for GS3-valves in carbon steel | | | | | | max. admissible pressures for GS3-valves in carbon steel | | | | | |
| | 100°C | 150°C | 200°C | 250°C | 300°C | 350°C | 100°C | 150°C | 200°C | 250°C | 300°C | 350°C |
| 15 - 20 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 25 | 100 | 100 | 100 | 100 | 94 | 87 | 100 | 100 | 100 | 100 | 94 | 87 |
| 32 | 100 | 100 | 100 | 100 | 100 | 99 | 100 | 100 | 100 | 84 | 69 | 60 |
| 40 | 100 | 100 | 100 | 100 | 94 | 87 | 72 | 69 | 65 | 53 | 43 | 37 |
| 50 | 100 | 100 | 100 | 100 | 100 | 94 | 77 | 73 | 70 | 56 | 46 | 40 |
| 65 | 80 | 80 | 80 | 80 | 80 | 76 | 62 | 59 | 56 | 45 | 37 | 32 |
| 80 | 48 | 48 | 48 | 48 | 48 | 44 | 36 | 34 | 33 | 26 | 22 | 19 |

Limitation for SFC-sliding discs: 300°C

ANSI150

| DN | Sliding unit: carbon/SFC - stainless steel, coated | | | | | | | | Sliding unit: STN2 | | | | | | | |
|--------|--|------|-------|-------|-------|-------|-------|-------|--|------|-------|-------|-------|-------|-------|-------|
| | max. admissible pressures for GS3-valves in carbon steel | | | | | | | | max. admissible pressures for GS3-valves in carbon steel | | | | | | | |
| | 38°C | 50°C | 100°C | 150°C | 200°C | 250°C | 300°C | 350°C | 38°C | 50°C | 100°C | 150°C | 200°C | 250°C | 300°C | 350°C |
| 15-125 | 19,6 | 19,2 | 17,7 | 15,8 | 13,8 | 12,1 | 10,2 | 8,4 | 19,6 | 19,2 | 17,7 | 15,8 | 13,8 | 12,1 | 10,2 | 8,4 |
| 150 | 16,0 | 16,0 | 16,0 | 15,8 | 13,8 | 12,1 | 10,2 | 8,4 | 16,2 | 16,2 | 16,2 | 15,4 | 13,8 | 11,8 | 9,7 | 8,0 |
| 200 | 16,0 | 16,0 | 16,0 | 15,8 | 13,8 | 12,1 | 10,2 | 8,4 | - | - | - | - | - | - | - | - |
| 250 | 10,5 | 10,5 | 10,5 | 9,9 | 9,4 | 8,4 | 7,4 | 6,0 | - | - | - | - | - | - | - | - |

Limitation for SFC-sliding discs: 300°C

ANSI300

| DN | Sliding unit: carbon/SFC - stainless steel, coated | | | | | | | | Sliding unit: STN2 | | | | | | | |
|-------|--|------|-------|-------|-------|-------|-------|-------|--|------|-------|-------|-------|-------|-------|-------|
| | max. admissible pressures for GS3-valves in carbon steel | | | | | | | | max. admissible pressures for GS3-valves in carbon steel | | | | | | | |
| | 38°C | 50°C | 100°C | 150°C | 200°C | 250°C | 300°C | 350°C | 38°C | 50°C | 100°C | 150°C | 200°C | 250°C | 300°C | 350°C |
| 15-50 | 51,1 | 50,1 | 46,6 | 45,1 | 43,8 | 41,9 | 39,8 | 37,6 | 51,1 | 50,1 | 46,6 | 45,1 | 43,8 | 41,9 | 39,8 | 37,6 |
| 65 | 51,1 | 50,1 | 46,6 | 45,1 | 43,8 | 41,9 | 39,8 | 37,6 | 41,7 | 41,7 | 41,7 | 39,7 | 37,6 | 33,5 | 37,6 | 33,0 |
| 80 | 48,0 | 48,0 | 46,6 | 45,1 | 43,8 | 41,9 | 39,8 | 37,6 | 36,6 | 36,6 | 36,6 | 34,8 | 33,0 | 26,8 | 22,0 | 19,0 |
| 100 | 33,0 | 33,0 | 33,0 | 33,0 | 33,0 | 33,0 | 33,0 | 33,0 | 33,0 | 33,0 | 33,0 | 31,7 | 30,1 | 24,4 | 20,0 | 17,5 |
| 125 | 23,0 | 23,0 | 23,0 | 23,0 | 23,0 | 23,0 | 23,0 | 23,0 | 22,1 | 22,1 | 22,1 | 21,0 | 19,9 | 16,1 | 13,2 | 11,5 |
| 150 | 16,0 | 16,0 | 16,0 | 16,0 | 16,0 | 16,0 | 16,0 | 16,0 | 16,0 | 16,0 | 16,0 | 15,4 | 14,6 | 11,8 | 9,7 | 8,4 |

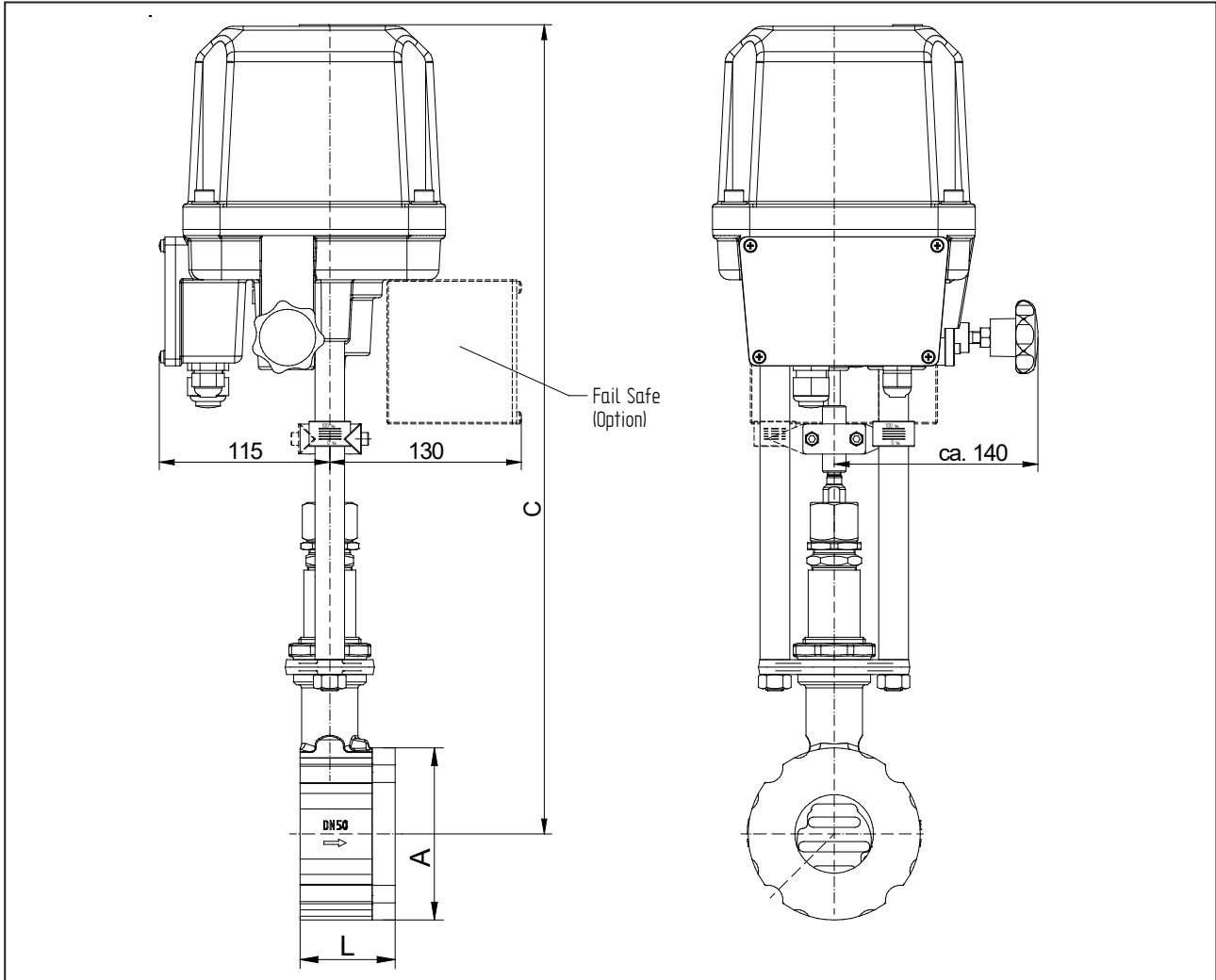
Limitation for SFC-sliding discs: 300°C

ANSI600

| DN | Sliding unit: carbon/SFC - stainless steel, coated | | | | | | | | Sliding unit: STN2 | | | | | | | |
|-------|--|-------|-------|-------|-------|-------|-------|-------|--|-------|-------|-------|-------|-------|-------|-------|
| | max. admissible pressures for GS3-valves in carbon steel | | | | | | | | max. admissible pressures for GS3-valves in carbon steel | | | | | | | |
| | 38°C | 50°C | 100°C | 150°C | 200°C | 250°C | 300°C | 350°C | 38°C | 50°C | 100°C | 150°C | 200°C | 250°C | 300°C | 350°C |
| 15-25 | 102,1 | 100,2 | 93,2 | 90,2 | 87,6 | 83,9 | 79,6 | 75,1 | 102,1 | 100,2 | 93,2 | 90,2 | 87,6 | 83,9 | 79,6 | 75,1 |
| 32 | 102,1 | 100,2 | 93,2 | 90,2 | 87,6 | 83,9 | 79,6 | 75,1 | 102,1 | 100,2 | 93,2 | 90,2 | 87,6 | 83,9 | 69,6 | 60,0 |
| 40 | 100,0 | 100,0 | 93,2 | 90,2 | 87,6 | 83,9 | 79,6 | 75,1 | 72,5 | 72,5 | 72,5 | 69,0 | 65,5 | 53,1 | 43,6 | 37,0 |
| 50 | 100,0 | 100,0 | 93,2 | 90,2 | 87,6 | 83,9 | 79,6 | 75,1 | 77,7 | 77,7 | 77,7 | 73,9 | 70,2 | 56,9 | 46,7 | 40,0 |
| 65 | 80,0 | 80,0 | 80,0 | 80,0 | 80,0 | 80,0 | 79,6 | 75,1 | 62,5 | 62,5 | 62,5 | 59,5 | 56,4 | 45,8 | 37,6 | 32,0 |
| 80 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 44,0 | 36,6 | 36,6 | 36,6 | 36,8 | 33,0 | 26,8 | 22,0 | 19,0 |

Limitation for SFC-sliding discs: 300°C

Dimensions and Weights



| DN | ØA | C | | L | Stroke | weight 2kN-Actuator kg | | weight 5kN-Actuator kg | |
|-----|-----|-----|-----|----|--------|---------------------------|----------------|---------------------------|----------------|
| | | 2kN | 5kN | | | without Fail-Save | with Fail-Save | without Fail-Save | with Fail-Save |
| 15 | 64 | 522 | 554 | 56 | 6 | 10,8 | 12,6 | 11,7 | 13,5 |
| 20 | 72 | 527 | 559 | 56 | 6 | 11,0 | 12,8 | 11,9 | 13,7 |
| 25 | 82 | 532 | 564 | 56 | 6 | 11,5 | 13,3 | 12,4 | 14,2 |
| 32 | 89 | 542 | 574 | 56 | 6 | 11,8 | 13,6 | 12,7 | 14,5 |
| 40 | 99 | 547 | 579 | 56 | 6 | 12,2 | 14,0 | 13,1 | 14,9 |
| 50 | 116 | 552 | 584 | 64 | 8 | 13,8 | 15,6 | 14,7 | 16,5 |
| 65 | 138 | 562 | 594 | 68 | 8 | 15,7 | 17,5 | 16,6 | 18,4 |
| 80 | 153 | 567 | 599 | 70 | 8 | 16,8 | 18,6 | 17,7 | 19,5 |
| 100 | 184 | 582 | 614 | 75 | 8,5 | 20,2 | 22,0 | 21,1 | 22,9 |
| 125 | 212 | 592 | 624 | 80 | 8,5 | 24,4 | 26,2 | 25,3 | 27,1 |
| 150 | 242 | 612 | 644 | 80 | 8,5 | 28,1 | 29,9 | 29,0 | 30,8 |
| 200 | 302 | 642 | 674 | 93 | 8,5 | 45,0 | 46,8 | 45,9 | 47,7 |
| 250 | 360 | 667 | 699 | 96 | 8,5 | 50,2 | 52,0 | 51,1 | 52,9 |

Dimensions in mm