

Manual Control Valve 8050/51 SCHUBERT & SALZER

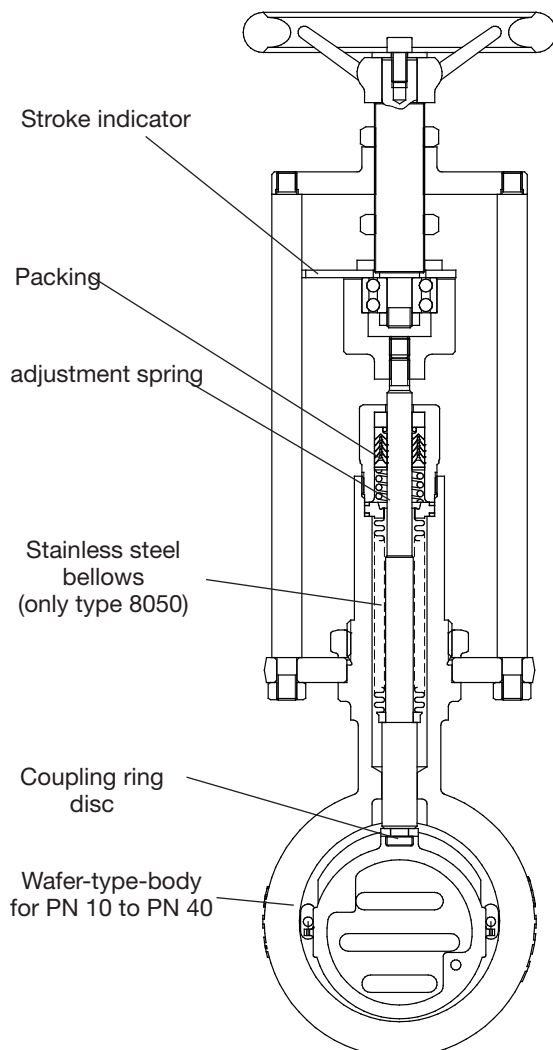
GS 1 series DN 15 up to DN 150

Manual control valve for neutral through to highly aggressive media.

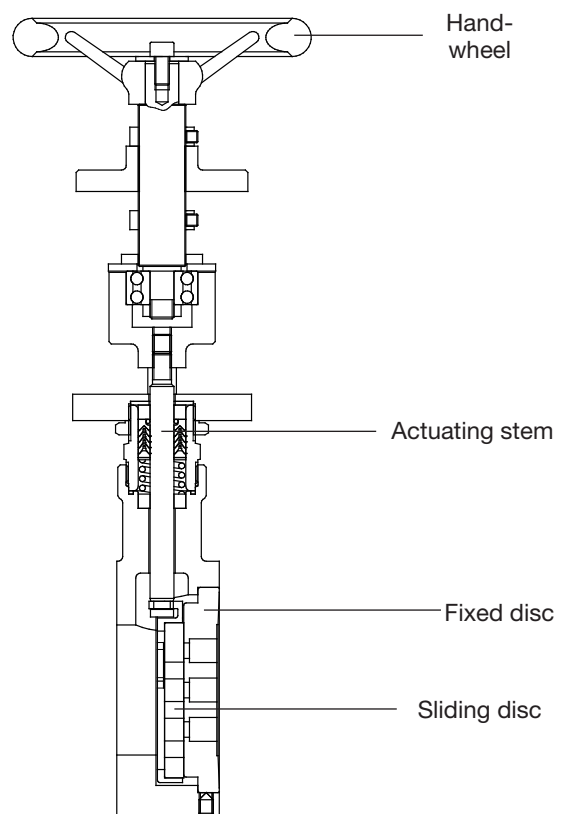
- Precise control by hand
- Lowest possible weight (especially in larger sizes)
- High Kvs-values
- Low leakage rate
- Simple handling of high pressure differences



**Type 8050
(long design)**



**Type 8051
(short design)**



Manual Control Valve 8050/51



DN 15 up to DN 150

Technical Information

| | | | |
|--|--|---|--|
| Body design | Flangeless, wafer-type construction dimensions to DIN EN 558-1 series 20 | | |
| Nominal sizes | DN 15 up to DN 150 Type 8050 DN 15 up to DN 125 Type 8051 | | |
| Nominal pressure | PN 40 acc. DIN 2401 also for flanges PN 10 up to PN 25 | | |
| Media temperature | Body carbon steel Body stainless steel Body (short) | -10°C up to +350°C -60°C up to +350°C (+300°C for SFC) up to +230°C | |
| Leakage % of Kvs IEC 60534-4 EN 12266-1 | Disc pair Carbon-stainless steel < 0,0001 IV-S1 E | Disc pair SFC < 0,0005 IV-S1 F | Disc pair STN 2 < 0,001 IV F |
| Marking ATEX non electric | II 2G Ex h IIC T6...T1 X Gb II 2D Ex h IIIC 85°C...530°C X Db | | |
| Specific leakage rate shaft and body sealing | ISO FE-BH-CC3-SSA0-t(-40°C/+350°C)-PN40-ISO 15848-1 | | |

* With DN15 with reduction of less than 25%, different leakage rates possible.

K_{vs}-values see data sheet 8001.

Admissible Differential Pressure (For temperatures of up to 120°C)

**For temperatures of 120°C and above:
obey application limits !**

| DN | carbon/SFC-stainless steel | STN2 |
|-----|-----------------------------|------|
| | max. differential pressures | |
| | bar | bar |
| 15 | 40 | 40 |
| 20 | 40 | 40 |
| 25 | 40 | 40 |
| 32 | 40 | 40 |
| 40 | 40 | 27 |
| 50 | 40 | 40 |
| 65 | 40 | 38 |
| 80 | 40 | 22 |
| 100 | 25 | 13,5 |
| 125 | 16,5 | 8,9 |
| 150 | 16 | 11 |

Applications limits for GS1-Valves

PN 40

| DN | Sliding unit: carbon/SFC - stainless steel, coated max. admissible pressures for GS1-valves | | | | | | Sliding unit: carbon - STN2 max. admissible pressures for GS1-valves | | | | | |
|---------|--|-------|-------|-------|-------|-------|---|-------|-------|-------|-------|-------|
| | 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 - 25 | 40 | 36 | 31 | 28 | 26 | 24 | 40 | 36 | 31 | 28 | 26 | 24 |
| 32 | 40 | 36 | 31 | 28 | 26 | 24 | 40 | 36 | 31 | 28 | 25 | 22 |
| 40 | 40 | 36 | 31 | 28 | 26 | 24 | 27 | 26 | 24 | 19,5 | 16 | 14 |
| 50 | 40 | 36 | 31 | 28 | 26 | 24 | 40 | 36 | 31 | 28 | 26 | 24 |
| 65 | 40 | 36 | 31 | 28 | 26 | 24 | 38 | 36 | 31 | 28 | 23 | 19,5 |
| 80 | 40 | 36 | 31 | 28 | 26 | 24 | 22 | 21 | 20 | 16 | 13 | 11,5 |
| 100 | 25 | 24 | 22 | 19 | 16 | 14,5 | 13,5 | 12,5 | 12,0 | 9,8 | 8,1 | 7,0 |
| 125 | 16,5 | 15,5 | 15 | 12,5 | 10,5 | 9,5 | 8,9 | 8,4 | 8,0 | 6,5 | 5,3 | 4,6 |
| 150 | 16 | 16 | 16 | 16 | 13 | 11,5 | 11 | 10,5 | 9,8 | 7,9 | 6,5 | 5,6 |

Limitation for SFC-sliding discs: 300°C

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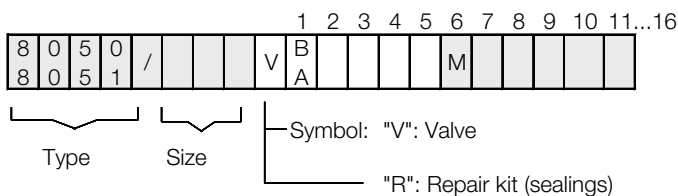


DN 15 up to DN 150

Materials

| | | |
|------------------------|--|------------------------|
| Body | Carbon steel 1.0619 | Stainless steel 1.4408 |
| Packing | PTFE (Carbon filled), spring 1.4310 | |
| Actuating stem | Stainless steel 1.4571, roller burnished | |
| Bellows | Stainless steel 1.4571 | |
| Fixed disc | Stainless steel 1.4581, coated | STN2-disc |
| Sliding disc | Special carbon material | SFC-disc |
| Coupling ring for disc | Stainless steel 1.4581 | |
| Handwheel | Aluminium | |

Ordering Number System



1 - 5 : Please quote all 5 sections.
6 - 16: Quote only if required.

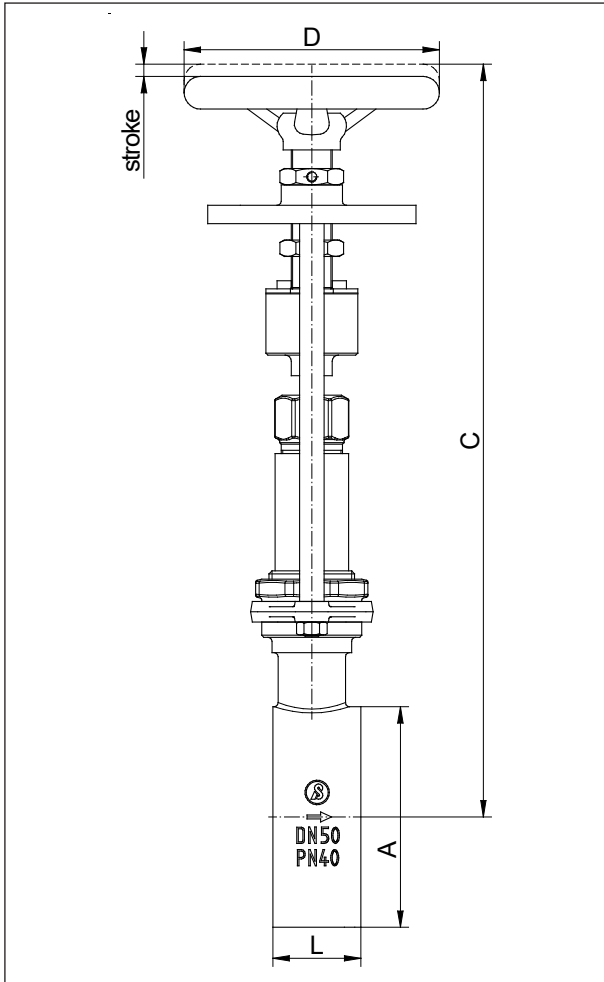
| 1. Type | | 2. Connection | | 3. Body material | | 4. | | 5. Actuator | | 6. Special versions | |
|---------|--|-----------------|--|------------------|------------------------|-----------------|--------------------------------|----------------|-------------------|---------------------|------------------|
| A | GS manual valve type 8051 (short design) | 0 | Flangeless design acc. DIN 2632-2635 (PN10-PN40) | 0 | Carbon steel 1.0619 | - | without significance | 5 | manually operated | M | Special versions |
| B | GS manual valve type 8050 (long design) | | | 1 | stainless steel 1.4408 | | | | | | |
| 7. | | 8. Stem sealing | | 9. Moving disc | | 10. Fixed plate | | 11. Kvs-values | | 12. Characteristic | |
| - | without significance | - | PTFE-packing self adjusting (standard) | - | Carbon material | - | Stainless steel 1.4571, coated | - | 100% (Stand.) | - | linear |
| | | 1 | additional bellows 1.4571 | 9 | STN2-disc | 1 | STN2-plate | A | red. to 63% | 1 | equal percentage |
| | | | | S | SFC-disc | | | 1 | red. to 40% | | |
| | | | | | | | | 2 | red. to 25% | | |
| | | | | | | | | 3 | red. to 16% | | |
| | | | | | | | | 4 | red. to 10% | | |
| | | | | | | | | 5 | red. to 6,3% | | |
| | | | | | | | | 6 | red. to 2,5% | | |
| | | | | | | | | 7 | red. to 1% | | |
| | | | | | | | | 8 | red. to 20% | | |
| | | | | | | | | 9 | red. to 12% | | |
| | | | | | | | | | red. to 2% | | |
| | | | | | | | | | red. to 0,4% | | |

Ordering Example: 8050/125VB00 - 5M - 1:
 GS manual control valve (long design), DN 125, PN 10/40, C-steel 1.0570, Actuator manual operating, additional stainless steel bellows 1.4571

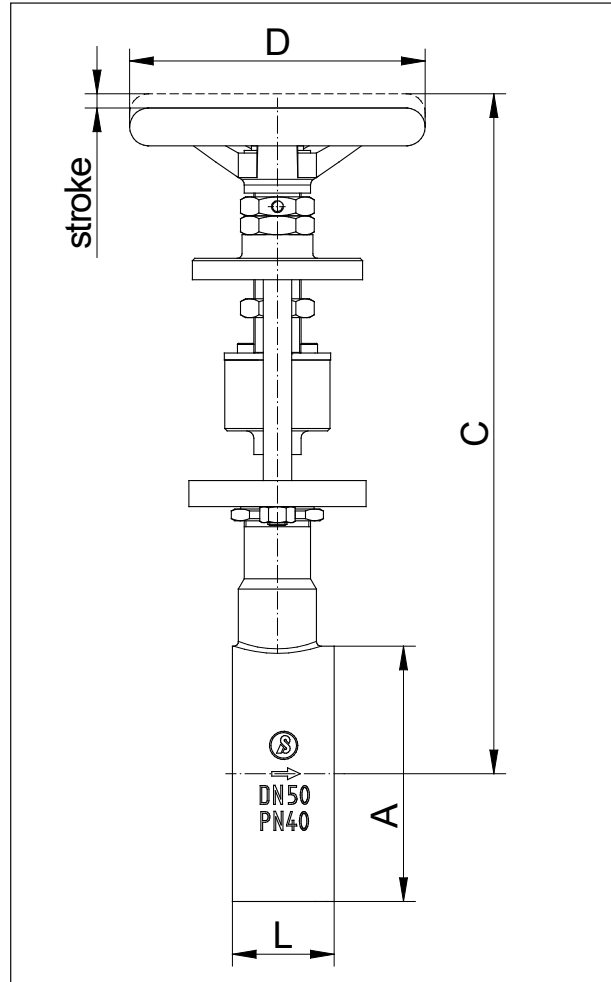
Manual Control Valve 8050/51

DN 15 up to DN 150

Dimensions and Weights



Type 8050



Type 8051

| DN | A | C max | | D | L | Weight in kg | | Stroke |
|-----|-----|-------|------|-----|----|--------------|------|--------|
| | | 8050 | 8051 | | | 8050 | 8051 | |
| 15 | 53 | 332 | 240 | 125 | 33 | 3,5 | 2,8 | 6 |
| 20 | 62 | 337 | 245 | 125 | 33 | 3,6 | 2,9 | 6 |
| 25 | 72 | 342 | 250 | 125 | 33 | 3,7 | 3 | 6 |
| 32 | 82 | 344 | 255 | 125 | 33 | 3,8 | 3,1 | 6 |
| 40 | 92 | 347 | 260 | 125 | 33 | 3,9 | 3,2 | 6 |
| 50 | 108 | 362 | 285 | 125 | 43 | 5 | 4,3 | 8 |
| 65 | 127 | 372 | 295 | 125 | 46 | 5,5 | 4,8 | 8 |
| 80 | 142 | 377 | 300 | 125 | 46 | 6,2 | 5,5 | 8 |
| 100 | 164 | 392 | 315 | 125 | 52 | 7,4 | 6,7 | 8,5 |
| 125 | 194 | 407 | 330 | 125 | 56 | 9,4 | 8,7 | 8,5 |
| 150 | 219 | 422 | - | 125 | 56 | 11,2 | - | 8,5 |

Dimensions in mm