

DN 10 up to 80 mm; Plastic; 2/2 way



Advantages/Benefits



- ▶ Integrated pilot valves, position feed-back and limit switches available



- ▶ Customized system solutions with Burkert valves & sensors



- ▶ With ASI-bus interface
- ▶ Ex - Namur valves as pilots available

Design/Function

The ball valve family type 2657...59 is designed for any kind of application in the process industry. The ball valve consists of two variable modules, the valve body and the actuator.

This two-piece valve body is available in PVC, PP and PVDF plastic material.

The quarter turn for opening the valve can be done by a hand lever, by a pneumatic actuator or by a compact high performance electric actuator, depending on the application and on the kind of control of the process.

Its modular concept allows to build up a ball valve for any degree of automation and any kind of application in the process industry.

A system can be completed with pilot valves for the operation of the pneumatic actuator, a compact position feedback, a Control Head, optional with ASI-bus, for ON/OFF control functions.

An Easy Link can be built up with any kind of sensor. The electric motor actuator has a standard signal input (4...20 mA) to be connected and controlled directly by a PLC.

Applications

Fluids

- Neutral gases and liquids
- Ultra-pure fluids
- Highly aggressive fluids
- Slightly contaminated liquids

Applications

- Drinking water distribution
- Water treatment / ozoning systems
- Slow processes / tank farming in beverage and pharmaceutical industry
- Shut-off armatures in chemical and dyeing industry
- Textile machines
- Cleaning machines
- Galvanic and etching processes

bürkert
Easy Fluid Control Systems

An optional variety of modules for your choice



Electric Actuator

Actuator sizes:

- 0: 10/12 Nm
- 1: 25 Nm

Signals:

- On / Off
- 4 - 20 mA

Electric Position Feedback 1062

Versions:

- Mechanical limit switches
 - Silver contact
 - Gold contact
- Inductive limit switches
 - 2-wire
 - 3-wire
 - Namur EEx-i



Pneumatic Actuator T

Actuator sizes [mm]:

- E: ϕ 63
- G: ϕ 100

Actuator material:

- PA (Polyamide)

Control functions:

- I: double acting
- A: normally closed by spring (only size G)

Modules to be
ball valve system for
Pre-assembly
easy to integrate into



Valve Body with Hand Lever

Body configuration:

- 2/2 way

Valve sizes [mm]

Port connections [inch]:

- 10.0 3/8"
- 15.0 1/2"
- 20.0 3/4"
- 25.0 1"
- 32.0 1 1/4"
- 40.0 1 1/2"
- 50.0 2"
- 65.0 2 1/2"
- 80.0 3"
- 80.0 4"

Materials and connections:

- PVC
 - True union (acc. to DIN / ISO)
 - (acc. to ANSI)
 - (acc. to JIS)
- PP
 - Weld ends
- PVDF
 - Weld ends



Type 2050



Pilot Valve Type 6519 Namur

Functions:

- 3/2 way
- 5/2 way

Materials:

- Brass
- Stainless Steel



TOP CONTROL

Version:

- On/Off Control head



combined to a
the process industry.
led system,
production facilities.



Valve Body with Adapter

Body configuration:

- 2/2 way

Valve sizes [mm]

Port connections [inch]:

- 10.0 3/8"
- 15.0 1/2"
- 20.0 3/4"
- 25.0 1"
- 32.0 1 1/4"
- 40.0 1 1/2"
- 50.0 2"
- 65.0 2 1/2"
- 80.0 3"
- 80.0 4"

Materials and connections:

- PVC
 - True union (acc. to DIN / ISO)
 - (acc. to ANSI)
 - (acc. to JIS)
- PP
 - Weld ends
- PVDF
 - Weld ends

Technical data (valve body)

Thermoplastic body version

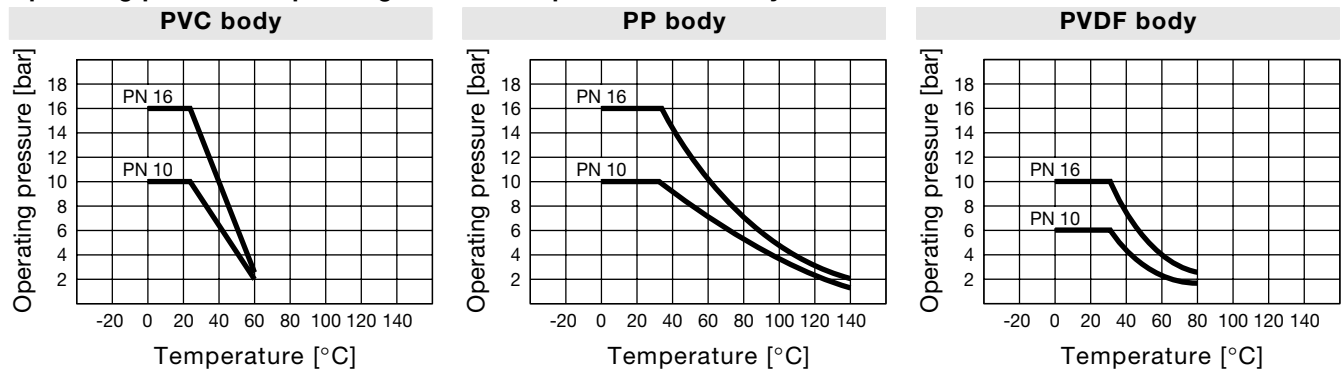
- independent of flow direction
- ideal flow characteristics due to full bore
- long service life through ball seating joints made of PTFE
- double sided fixed ball against flow-out
- maintenance-free due to floating ball and double stem sealing
- low weight
- radial installation and removal

Operating data (valve bodies)

| | | | |
|--------------------|----------------|--------------------------|------------------------------|
| Pressure range | 0 up to 16 bar | Fluids | Neutral gases and fluids |
| Port connections | | | Ultrapure water |
| PVC | True union | | Highly aggressive fluids |
| PP / PVDF | Weld ends | | Slightly contaminated fluids |
| Orifice | DN 10 - DN 80 | Viscosity | max. 40 mm ² /s |
| Ball seating joint | PTFE | Medium temperature | |
| Seals | | PVC | 0° up to +60°C |
| PVC / PP | EPDM | PP | 0° up to +80°C |
| PVDF | FPM | PVDF | 0° up to +120°C |
| | | Max. ambient temperature | 0° up to +60°C |

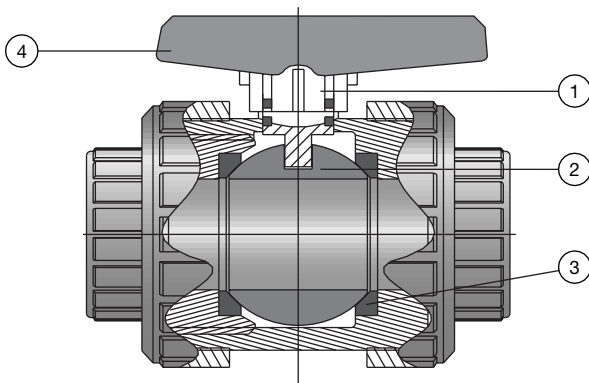
Operating data (valve bodies)

Operating pressure depending on fluid temperature and body material:

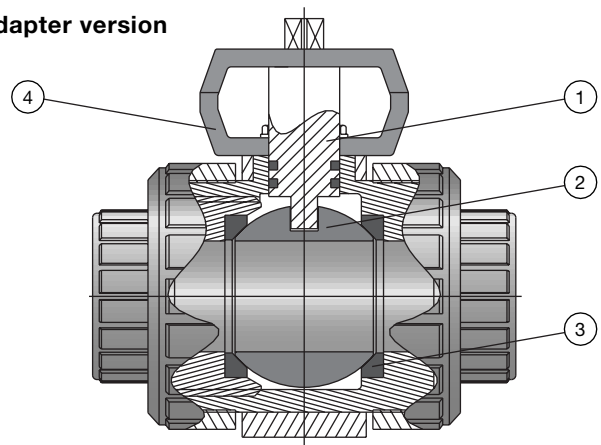


Materials (valve bodies)

Hand lever version



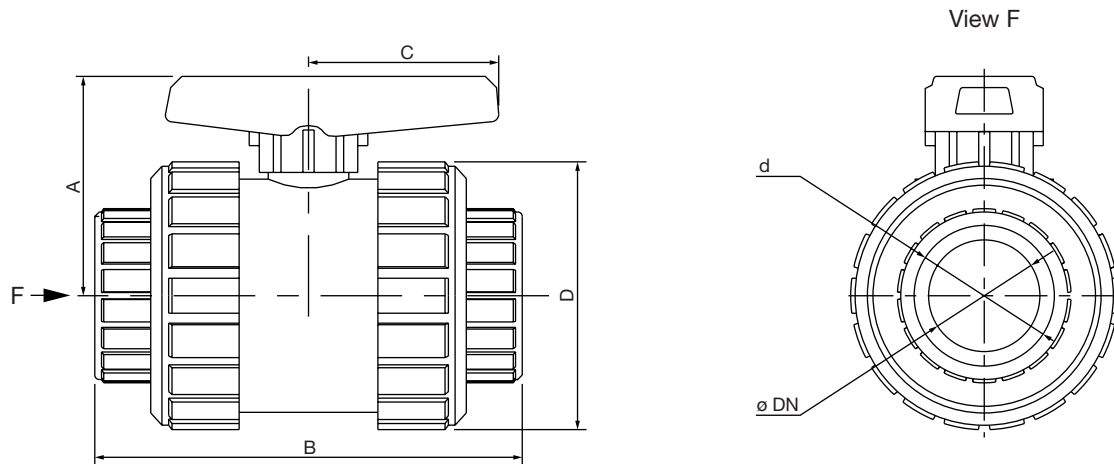
Adapter version



| | 1. Stem | 2. Ball | 3. Gaskets | 4. Hand wheel |
|-----------|---------|---------|------------|---------------|
| PVC body | PVC | PVC | PTFE | ABS |
| PP body | PP | PP | PTFE | PPGF |
| PVDF body | PVDF | PVDF | PTFE | PPGF |

| | 1. Stem | 2. Ball | 3. Gaskets | 4. Coupler |
|-----------|---------|---------|------------|------------|
| PVC body | PVC | PVC | PTFE | PVC |
| PP body | PP | PP | PTFE | PP |
| PVDF body | PVDF | PVDF | PTFE | PP |

Dimensions [mm] (actuator - manual operation)



| Inner diameter DN | Port connection | Outer diameter | | | Measurements | | | | | | | | | | | |
|----------------------|-----------------|-----------------|--------------|-------------|--------------|------------|--------------|-------------|------------|--------------|-------------|------------|--------------|-------------|------------|--------------|
| | | d | | | A | | | B | | | C | | | D | | |
| | | DIN/ISO [mm] | ASTM [mm] | JIS [mm] | PVC [mm] | PP [mm] | PVDF [mm] | PVC [mm] | PP [mm] | PVDF [mm] | PVC [mm] | PP [mm] | PVDF [mm] | PVC [mm] | PP [mm] | PVDF [mm] |
| 10.0 | 3/8" | 15.0 | 17.2 | 18.4 | 46.0 | 48.0 | 48.0 | 100.2 | 96.0 | 96.0 | 42.0 | 39.5 | 39.5 | 53.0 | 51.8 | 51.8 |
| 15.0 | 1/2" | 20.0 | 21.3 | 22.4 | 46.0 | 48.0 | 48.0 | 100.2 | 96.0 | 96.0 | 42.0 | 42.5 | 42.5 | 53.0 | 51.8 | 51.8 |
| 20.0 | 3/4" | 25.0 | 26.7 | 26.5 | 55.0 | 54.0 | 54.0 | 115.0 | 111.0 | 111.0 | 54.5 | 51.0 | 51.0 | 63.0 | 61.7 | 61.7 |
| 25.0 | 1" | 32.0 | 33.4 | 32.6 | 58.0 | 57.0 | 57.0 | 125.0 | 120.0 | 120.0 | 54.5 | 55.0 | 55.0 | 70.5 | 68.4 | 68.4 |
| 32.0 | 1 1/4" | 40.0 | 42.2 | 38.6 | 71.0 | 77.0 | 77.0 | 143.0 | 138.0 | 138.0 | 65.0 | 62.5 | 62.5 | 85.5 | 83.0 | 83.0 |
| 40.0 | 1 1/2" | 50.0 | 48.3 | 48.7 | 89.0 | 88.0 | 88.0 | 167.0 | 161.0 | 161.0 | 74.0 | 72.3 | 72.3 | 100.5 | 98.6 | 98.6 |
| 50.0 | 2" | 63.0 | 60.3 | 60.8 | 97.0 | 95.5 | 95.5 | 197.0 | 190.0 | 190.0 | 86.0 | 84.0 | 84.0 | 118.0 | 115.2 | 115.2 |
| 65.0 | 2 1/2" | 75.0 | 73.0 | 89.6 | 127.0 | 129.0 | 129.0 | 237.0 | 229.0 | 229.0 | 111.0 | 122.5 | 122.5 | 150.0 | 149.0 | 149.0 |
| 80.0 | 3" | 90.0 | 88.9 | 114.7 | 160.0 | 158.0 | 158.0 | 293.0 | 254.0 | 254.0 | 133.5 | 135.0 | 135.0 | 188.0 | 185.5 | 185.5 |
| 80.0 | 4" | 110.0 | 114.3 | - | 160.0 | 158.0 | 158.0 | 301.0 | 254.0 | 254.0 | 133.5 | 135.0 | 135.0 | 188.0 | 198.0 | 198.0 |

Specifications / Ordering chart (actuator - manual operation)

| Orifice DN | Port connection ø | | Kv-value | PVC body | | | PP body | | | PVDF body | | |
|---------------|-------------------|--------|----------|----------------|--------|------------------|----------------|--------|------------------|----------------|--------|------------------|
| | | | | Pressure range | Weight | Item No. | Pressure range | Weight | Item No. | Pressure range | Weight | Item No. |
| [mm] | [mm] | [inch] | [m³/h] | [bar] | [kg] | | [bar] | [kg] | | [bar] | [kg] | |
| 10.0 | 16.0 | 3/8" | 16.0 | PN 16 | 0.19 | 432 391 K | PN 10 | 0.14 | 432 401 N | PN 16 | 0.24 | 432 381 R |
| 15.0 | 20.0 | 1/2" | 16.0 | PN 16 | 0.19 | 432 392 L | PN 10 | 0.14 | 432 402 P | PN 16 | 0.24 | 432 382 J |
| 20.0 | 25.0 | 3/4" | 30.0 | PN 16 | 0.29 | 432 393 M | PN 10 | 0.21 | 432 403 Q | PN 16 | 0.36 | 432 383 K |
| 25.0 | 32.0 | 1" | 40.0 | PN 16 | 0.37 | 432 394 N | PN 10 | 0.27 | 432 404 R | PN 16 | 0.46 | 432 384 L |
| 32.0 | 40.0 | 1 1/4" | 75.0 | PN 16 | 0.61 | 432 395 P | PN 10 | 0.44 | 432 405 J | PN 16 | 0.75 | 432 385 M |
| 40.0 | 50.0 | 1 1/2" | 110.0 | PN 16 | 0.95 | 432 396 Q | PN 10 | 0.68 | 432 406 K | PN 16 | 1.18 | 432 386 N |
| 50.0 | 63.0 | 2" | 204.0 | PN 16 | 1.38 | 432 397 R | PN 10 | 0.99 | 432 407 L | PN 16 | 1.74 | 432 387 P |
| 65.0 | 75.0 | 2 1/2" | 318.0 | PN 16 | 2.82 | 432 398 S | PN 10 | 2.02 | 432 408 V | PN 16 | 3.49 | 432 388 Y |
| 80.0 | 90.0 | 3" | 444.0 | PN 10 | 5.39 | 432 399 T | PN 6 | 3.86 | 432 409 W | PN 10 | 6.67 | 432 389 Z |
| 80.0 | 110.0 | 4" | 444.0 | PN 10 | 5.39 | 432 400 Z | PN 6 | 3.86 | 432 410 J | PN 10 | 6.67 | 432 390 W |

Operating data (actuator - pneumatic operation)



Control function of actuator

A: single acting with spring force closed



I: double acting no spring



Size \varnothing 63 mm with control function I, \varnothing 100 mm with control function A and I

Control medium Neutral gases and air

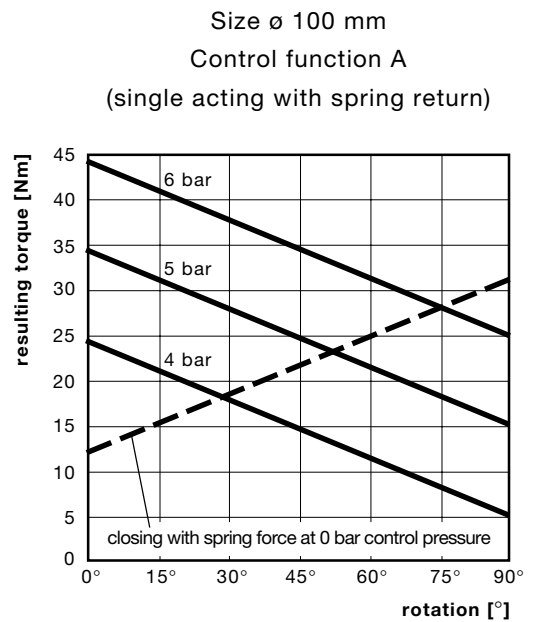
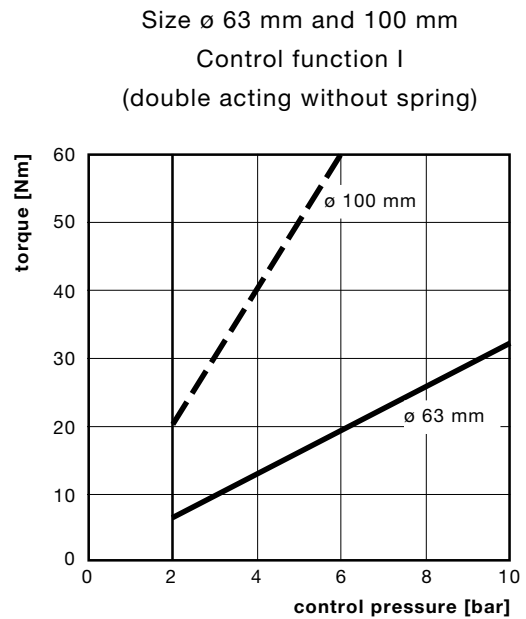
Control pressure (of actuator alone)
size \varnothing 63 mm 2 up to 10 bar
size \varnothing 100 mm 2 up to 6 bar

Rotation $90^\circ \pm 3^\circ$

Ambient temp. 0° up to $+60^\circ\text{C}$

Response time 1 up to 3.5 s

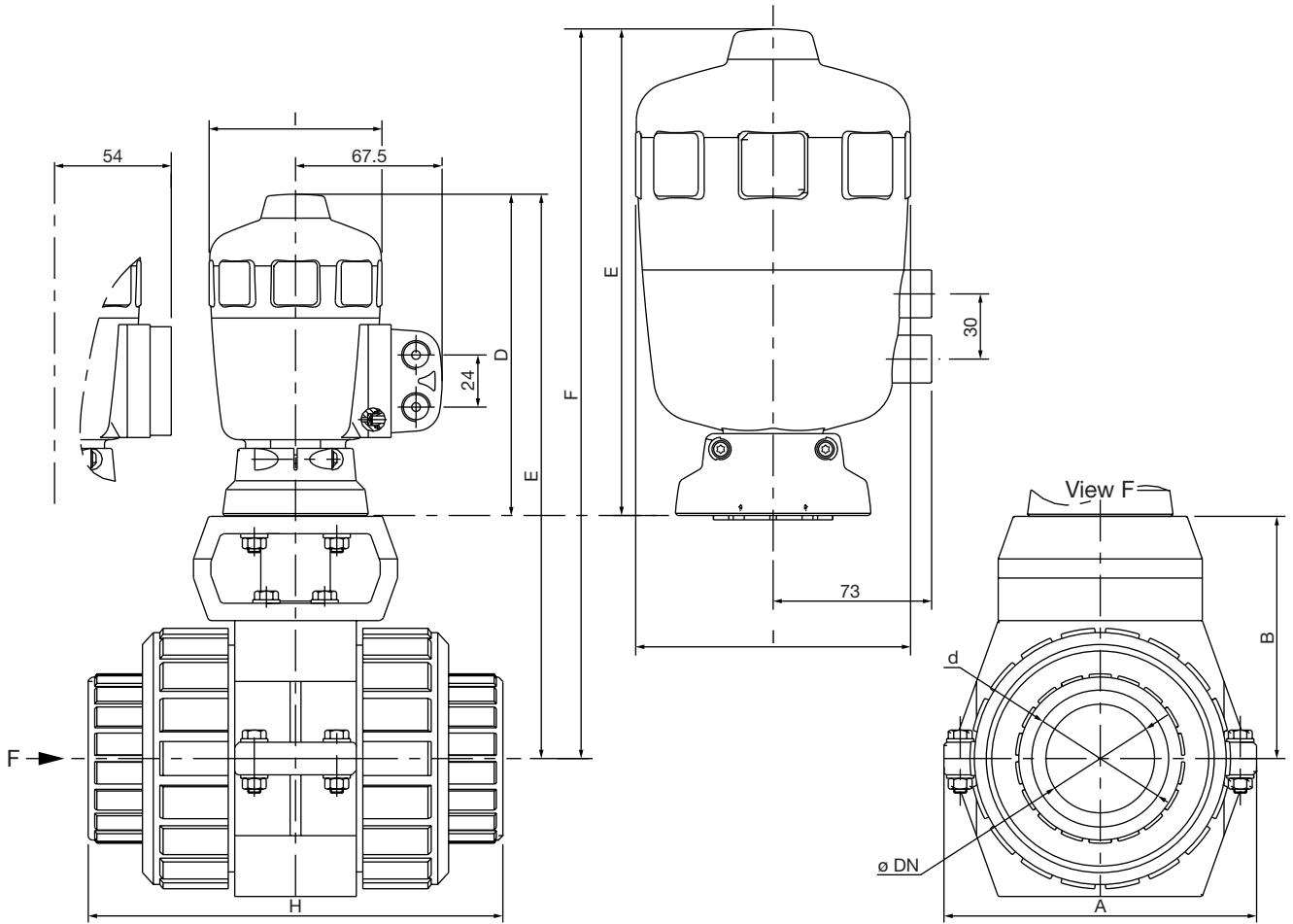
Flange interface for assembly 5211 Flange F04, F05 and F07 acc. to DIN 3337 and ISO



Materials (actuator - pneumatic operation)

| | |
|----------------|--|
| Flange | PA6 GF30 (Polyamid, glass-fiber reinforced) |
| Internal parts | POM and PBT |
| Rotary shaft | Stainless Steel 1.4308 |
| Seals | NBR |
| Service ports | Brass (size \varnothing 63 mm) SS (size \varnothing 100 mm) |

Dimensions [mm] (actuator - pneumatic operation)



| Inner diameter DN | Port connection | Outer diameter | | | Measurements | | | | | | | | | | | | | |
|----------------------|-----------------|-----------------|--------------|-------------|--------------|------------|--------------|-------------|------------|--------------|-------|-------------|------------|--------------|-------------|------------|--------------|-------|
| | | d | | | A | | | B | | | D | E | | | H | | | I |
| | | DIN/ISO [mm] | ASTM [mm] | JIS [mm] | PVC [mm] | PP [mm] | PVDF [mm] | PVC [mm] | PP [mm] | PVDF [mm] | [mm] | PVC [mm] | PP [mm] | PVDF [mm] | PVC [mm] | PP [mm] | PVDF [mm] | [mm] |
| 10.0 | 3/8" | 16.0 | 17.2 | 18.4 | 113.0 | 111.0 | 111.0 | 71.0 | 70.0 | 70.0 | 148.0 | 219.0 | 218.0 | 218.0 | 100.0 | 96.0 | 96.0 | 80.0 |
| 15.0 | 1/2" | 20.0 | 21.3 | 22.4 | 113.0 | 111.0 | 111.0 | 71.0 | 70.0 | 70.0 | 148.0 | 219.0 | 218.0 | 218.0 | 100.0 | 96.0 | 96.0 | 80.0 |
| 20.0 | 3/4" | 25.0 | 26.7 | 26.5 | 113.0 | 111.0 | 111.0 | 78.0 | 77.0 | 77.0 | 148.0 | 226.0 | 225.0 | 225.0 | 115.0 | 111.0 | 111.0 | 80.0 |
| 25.0 | 1" | 32.0 | 33.4 | 32.6 | 113.0 | 111.0 | 111.0 | 81.0 | 80.0 | 80.0 | 148.0 | 229.0 | 228.0 | 228.0 | 125.0 | 120.0 | 120.0 | 80.0 |
| 32.0 | 1 1/4" | 40.0 | 42.2 | 38.6 | 144.0 | 141.0 | 141.0 | 99.0 | 98.0 | 98.0 | 148.0 | 247.0 | 246.0 | 246.0 | 143.0 | 138.0 | 138.0 | 80.0 |
| 32.0 | 1 1/4" | 40.0 | 42.2 | 38.6 | 144.0 | 141.0 | 141.0 | 99.0 | 98.0 | 98.0 | 224.0 | 323.0 | 322.0 | 322.0 | 143.0 | 138.0 | 138.0 | 127.0 |
| 40.0 | 1 1/2" | 50.0 | 48.3 | 48.7 | 144.0 | 141.0 | 141.0 | 104.0 | 103.0 | 103.0 | 148.0 | 252.0 | 251.0 | 251.0 | 167.0 | 161.0 | 161.0 | 80.0 |
| 40.0 | 1 1/2" | 50.0 | 48.3 | 48.7 | 144.0 | 141.0 | 141.0 | 104.0 | 103.0 | 103.0 | 224.0 | 328.0 | 327.0 | 327.0 | 167.0 | 161.0 | 161.0 | 127.0 |
| 50.0 | 2" | 63.0 | 60.3 | 60.8 | 144.0 | 141.0 | 141.0 | 112.0 | 111.0 | 111.0 | 148.0 | 260.0 | 259.0 | 259.0 | 197.0 | 190.0 | 190.0 | 80.0 |
| 50.0 | 2" | 63.0 | 60.3 | 60.8 | 144.0 | 141.0 | 141.0 | 112.0 | 111.0 | 111.0 | 224.0 | 336.0 | 335.0 | 335.0 | 197.0 | 190.0 | 190.0 | 127.0 |
| 65.0 | 2 1/2" | 75.0 | 73.0 | 89.6 | 204.0 | 201.0 | 201.0 | 157.0 | 156.0 | 156.0 | 224.0 | 381.0 | 380.0 | 380.0 | 237.0 | 229.0 | 229.0 | 127.0 |
| 80.0 | 3" | 90.0 | 88.9 | 114.7 | 204.0 | 201.0 | 201.0 | 172.0 | 171.0 | 171.0 | 224.0 | 396.0 | 395.0 | 395.0 | 293.0 | 254.0 | 254.0 | 127.0 |
| 80.0 | 4" | 110.0 | 114.3 | - | 204.0 | 201.0 | 201.0 | 172.0 | 171.0 | 171.0 | 224.0 | 396.0 | 395.0 | 395.0 | 301.0 | 254.0 | 254.0 | 127.0 |

Specifications / Ordering chart (actuator - pneumatic operation)

| Control function | Orifice DN [mm] | Port connection ø | | Actuator size ø [mm] | Control pressure min./max. [bar] | Kv-value [m³/h] | PVC body | | | PP body | | | PVDF body | | |
|------------------|--------------------|-------------------|--------|-------------------------|-------------------------------------|--------------------|-------------------------|----------------|-----------|-------------------------|----------------|-----------|-------------------------|----------------|-----------|
| | | [mm] | [inch] | | | | Pressure range [bar] | Weight [kg] | Item No. | Pressure range [bar] | Weight [kg] | Item No. | Pressure range [bar] | Weight [kg] | Item No. |
| A | 10.0 | 16.0 | 3/8" | 100 | 4 - 6 | 16.0 | PN 16 | 3.50 | 432 440 Y | PN 10 | 3.38 | 432 457 M | PN 16 | 3.48 | 432 421 H |
| A | 15.0 | 20.0 | 1/2" | 100 | 4 - 6 | 16.0 | PN 16 | 3.50 | 432 441 M | PN 10 | 3.38 | 432 458 W | PN 16 | 3.48 | 432 422 A |
| A | 20.0 | 25.0 | 3/4" | 100 | 4 - 6 | 30.0 | PN 16 | 3.58 | 432 442 N | PN 10 | 3.46 | 432 459 X | PN 16 | 3.62 | 432 423 B |
| A | 25.0 | 32.0 | 1" | 100 | 4 - 6 | 40.0 | PN 16 | 3.64 | 432 443 P | PN 10 | 3.50 | 432 460 U | PN 16 | 3.72 | 432 424 C |
| A | 32.0 | 40.0 | 1 1/4" | 100 | 4 - 6 | 75.0 | PN 16 | 4.20 | 432 444 Q | PN 10 | 4.00 | 432 461 R | PN 16 | 3.78 | 432 425 D |
| A | 40.0 | 50.0 | 1 1/2" | 100 | 4 - 6 | 110.0 | PN 16 | 4.56 | 432 445 R | PN 10 | 4.20 | 432 462 J | PN 16 | 4.70 | 432 426 E |
| A | 50.0 | 63.0 | 2" | 100 | 4 - 6 | 204.0 | PN 16 | 5.10 | 432 446 J | PN 10 | 4.58 | 432 463 K | PN 16 | 5.37 | 432 427 F |
| I | 10.0 | 16.0 | 3/8" | 63 | 2 - 10 | 16.0 | PN 16 | 1.15 | 432 430 N | PN 10 | 1.03 | 432 447 K | PN 16 | 1.13 | 432 411 F |
| I | 15.0 | 20.0 | 1/2" | 63 | 2 - 10 | 16.0 | PN 16 | 1.15 | 432 431 B | PN 10 | 1.03 | 432 448 U | PN 16 | 1.13 | 432 412 G |
| I | 20.0 | 25.0 | 3/4" | 63 | 2 - 10 | 30.0 | PN 16 | 1.23 | 432 432 C | PN 10 | 1.11 | 432 449 V | PN 16 | 1.27 | 432 413 H |
| I | 25.0 | 32.0 | 1" | 63 | 2 - 10 | 40.0 | PN 16 | 1.29 | 432 433 D | PN 10 | 1.15 | 432 450 S | PN 16 | 1.37 | 432 414 A |
| I | 32.0 | 40.0 | 1 1/4" | 63 | 2 - 10 | 75.0 | PN 16 | 1.85 | 432 434 E | PN 10 | 1.65 | 432 451 P | PN 16 | 1.43 | 432 415 B |
| I | 40.0 | 50.0 | 1 1/2" | 63 | 2 - 10 | 110.0 | PN 16 | 2.21 | 432 435 F | PN 10 | 1.85 | 432 452 Q | PN 16 | 2.35 | 432 416 C |
| I | 50.0 | 63.0 | 2" | 63 | 2 - 10 | 204.0 | PN 16 | 2.75 | 432 436 G | PN 10 | 2.23 | 432 453 R | PN 16 | 3.02 | 432 417 D |
| I | 65.0 | 75.0 | 2 1/2" | 100 | 4 - 6 | 318.0 | PN 16 | 6.30 | 432 437 H | PN 10 | 5.35 | 432 454 J | PN 16 | 6.92 | 432 418 N |
| I | 80.0 | 90.0 | 3" | 100 | 4 - 6 | 444.0 | PN 10 | 8.50 | 432 438 J | PN 6 | 7.02 | 432 455 K | PN 10 | 9.82 | 432 419 P |
| I | 80.0 | 110.0 | 4" | 100 | 4 - 6 | 444.0 | PN 6 | 8.50 | 432 439 K | PN 6 | 7.02 | 432 456 L | PN 10 | 9.82 | 432 420 L |

Ordering chart for Namur pilot valve type 6519

5/2 / 3/2 way, DN 6, G 1/4, PN 2 - 8 bar, PA body:

Type 6519 Namur with standard cable plug type 2508

| Material port connection | Ex approval | Item No. Voltage | | | |
|--------------------------|-------------|------------------|-----------|-----------|-----------|
| | | 24/DC | 24/50-60 | 110/50-60 | 230/50-60 |
| MS (nickel-plated) | - | 131 421 B | 131 422 C | 131 423 D | 131 424 E |
| SS | - | 131 425 F | 131 426 G | 131 427 H | 131 428 J |

Type 6519 Namur Ex with moulded-in cable

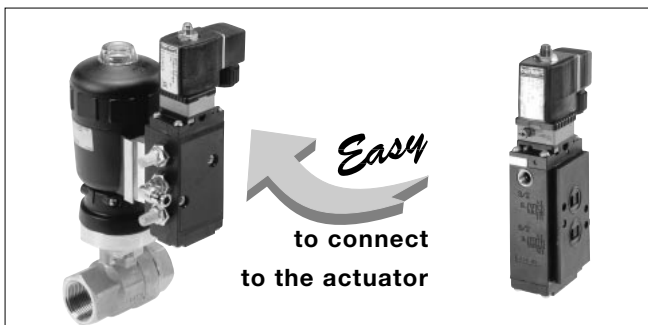
| Material port connection | Ex-approval | Item No. Voltage | | | |
|--------------------------|-------------|------------------|-----------|-----------|---|
| | | 024/UC | 110/UC | 230/UC | - |
| MS (nickel-plated) | EEx-m-II T5 | 131 627 R | 131 628 S | 131 629 T | - |
| SS | EEx-m-II T5 | 131 631 M | 131 632 N | 131 633 P | - |
| MS (nickel-plated) | EEx-m-II T6 | 425 725 J | 426 026 A | 426 027 B | - |
| SS | EEx-m-II T6 | 431 442 M | 431 443 N | 431 444 P | - |

For other versions, please see data sheets 6519 Namur and 6519 Namur Ex

Adapter plate for NAMUR pilot valve:

| Description | Material | Item No. |
|-----------------------|----------|-----------|
| for actuator ø 63 mm | PA | 427 405 M |
| for actuator ø 100 mm | Brass | 637 114 J |
| for actuator ø 100 mm | SS | 634 275 G |

6519 Namur pilot valves for powered actuator



Type 6519 Namur with cable plug type 2508, form A; DN 6; PN 2-8 bar



Type 6519 Namur Ex with terminal box, DN 6; PN 2-8 bar



Type 6519 Namur Ex with moulded-in cable, DN 6; PN 2-8 bar

Operating data (actuator - electric operation)

| Actuator type | Operating voltage with tolerance $\pm 10\%$ [V] | Power required [W] | Torque [Nm] | Duty cycles [%] | Full rotation time [s/90°] | with / without Input signal [mA] |
|---------------|---|-----------------------|----------------|--------------------|-------------------------------|--|
| 3011 | 24 DC | 7 | 12 | 100 | 10 | 4...20 |
| | 230/50 AC | 12 | 10 | 70 | 10 | 4...20 |
| 3001 | 24 DC | 20 | 25 | 100 | 7 | 4...20 |
| | 110/50 AC | 55 | 25 | 50 | 7 | - |
| | 230/50 AC | 55 | 25 | 50 | 7 | 4...20 |

| | |
|------------------------|---|
| Rotation | $90^\circ \pm 3^\circ$ |
| Ambient temp. | -10° up to $+50^\circ\text{C}$ |
| Limit switch | Changeover switch, single-pole |
| Electrical connection | Cable plug for cable $\varnothing 6 - 7 \text{ mm}$ acc. to DIN 43650 A |
| Rating | IP65 |
| Signals | |
| Control signal | 4...20 mA |
| Impedance signal input | R input: $< 50 \Omega$ |
| Accuracy | Linearity: $< \pm 1,5\%$ Hysteresis: $< \pm 1,5\%$ |
| Flange interface | F05 acc. to ISO 5211 |
| Installation | as required, preferably with solenoid system upright |

Materials (actuator - electric operation)

Housing: Polycarbonate

Options (actuator - electric operation)

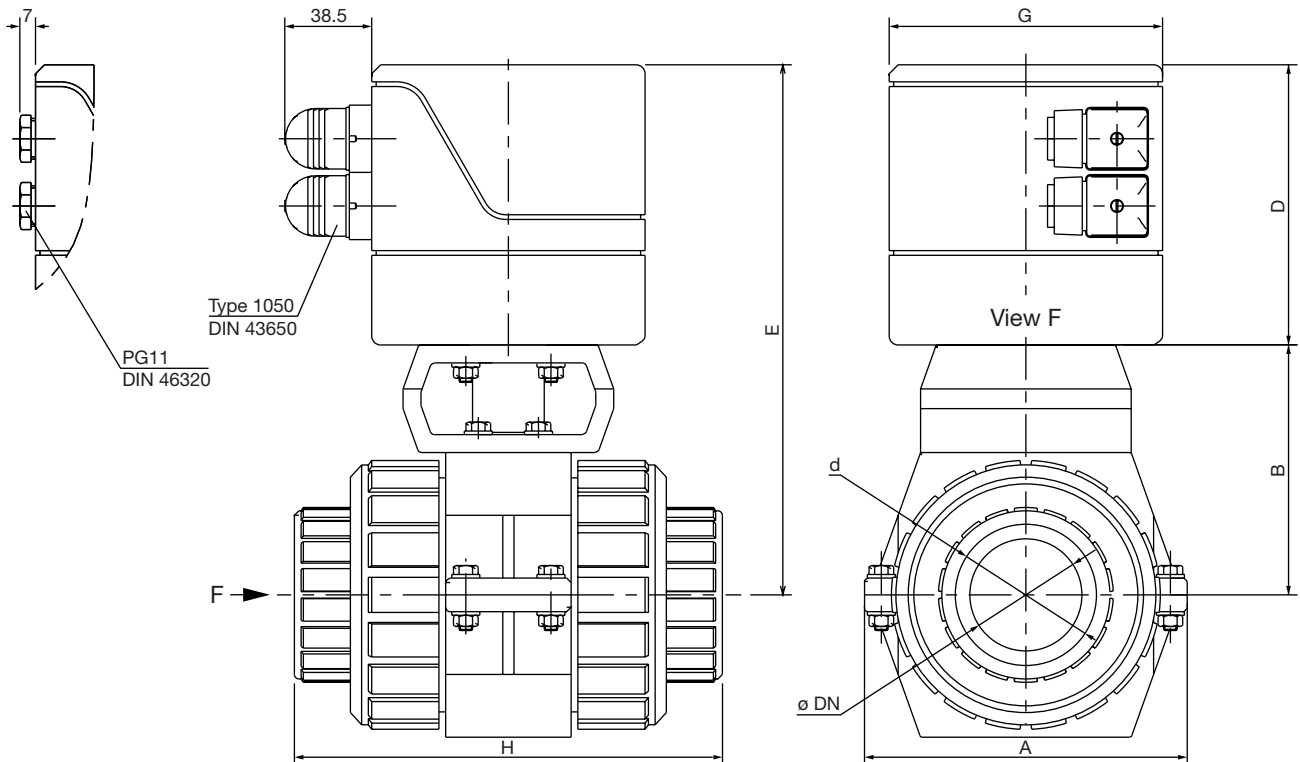
For motors 3001 with 110/50 and 230/50:

- Drive torque limiter
- Safety positions - closing at power breakdown
- opening at power breakdown

For all motors:

- Electrical feed back signal
- Electronic control of drive torque
- Standard signal 0 – 10 V

Dimensions [mm] (actuator - electric operation)



| Inner diameter DN | Port conn. | Outer diameter | | | Actuator type | Measurements | | | | | | | | | | | | |
|----------------------|------------|----------------|-------|-------|---------------|--------------|------------|-------|------------|-------|------------|---------|------------|---------|------------|---------|------------|-------|
| | | d | | | | A | | B | | D | | E | | G | | H | | |
| | | DIN/ISO | ASTM | JIS | | PVC | PP PVDF | PVC | PP PVDF | PVC | PP PVDF | PVC | PP PVDF | PVC | PP PVDF | PVC | PP PVDF | |
| | | [mm] | [mm] | [mm] | | [mm] | [mm] | [mm] | [mm] | [mm] | Standard | 4..20mA | Standard | 4..20mA | Standard | 4..20mA | [mm] | [mm] |
| 10.0 | 3/8" | 16.0 | 17.2 | 18.4 | 3011 | 113.0 | 111.0 | 71.0 | 70.0 | 125.0 | - | 196.0 | - | 195.0 | - | 122x102 | 100.0 | 96.0 |
| 15.0 | 1/2" | 20.0 | 21.3 | 22.4 | 3011 | 113.0 | 111.0 | 71.0 | 70.0 | 125.0 | - | 196.0 | - | 195.0 | - | 122x102 | 100.0 | 96.0 |
| 20.0 | 3/4" | 25.0 | 26.7 | 26.5 | 3011 | 113.0 | 111.0 | 78.0 | 77.0 | 125.0 | - | 203.0 | - | 202.0 | - | 122x102 | 115.0 | 111.0 |
| 25.0 | 1" | 32.0 | 33.4 | 32.6 | 3011 | 113.0 | 111.0 | 81.0 | 80.0 | 125.0 | - | 206.0 | - | 205.0 | - | 122x102 | 125.0 | 120.0 |
| 32.0 | 1 1/4" | 40.0 | 42.2 | 38.6 | 3011 | 144.0 | 141.0 | 99.0 | 98.0 | 125.0 | - | 224.0 | - | 223.0 | - | 122x102 | 143.0 | 138.0 |
| 40.0 | 1 1/2" | 50.0 | 48.3 | 48.7 | 3011 | 144.0 | 141.0 | 104.0 | 103.0 | 125.0 | - | 229.0 | - | 228.0 | - | 122x102 | 167.0 | 161.0 |
| 50.0 | 2" | 63.0 | 60.3 | 60.8 | 3011 | 144.0 | 141.0 | 112.0 | 111.0 | 125.0 | - | 237.0 | - | 236.0 | - | 122x102 | 197.0 | 190.0 |
| 65.0 | 2 1/2" | 75.0 | 73.0 | 89.6 | 3001 | 204.0 | 201.0 | 157.0 | 156.0 | 135.0 | 185.0 | 292.0 | 342.0 | 291.0 | 341.0 | 122x122 | 237.0 | 229.0 |
| 80.0 | 3" | 90.0 | 88.9 | 114.7 | 3001 | 204.0 | 201.0 | 172.0 | 171.0 | 135.0 | 185.0 | 307.0 | 357.0 | 306.0 | 356.0 | 122x122 | 293.0 | 254.0 |
| 80.0 | 4" | 110.0 | 114.3 | - | 3001 | 204.0 | 201.0 | 172.0 | 171.0 | 135.0 | 185.0 | 307.0 | 357.0 | 306.0 | 356.0 | 122x122 | 301.0 | 254.0 |

Specifications / Ordering chart (actuator - electric operation)

| Orifice DN | Port connection ø | | Voltage | | Actuator type | Kv- value | PVC body | | | PP body | | | PVDF body | | |
|---------------|-------------------|--------|---------------------------|------------------------------------|------------------|--------------|-------------------|--------|-----------|-------------------|--------|-----------|-------------------|--------|-----------|
| | | | without norm signal | with norm signal 4...20mA | | | Pressure range | Weight | Item No. | Pressure range | Weight | Item No. | Pressure range | Weight | Item No. |
| [mm] | [mm] | [inch] | | | | | [bar] | [kg] | | [bar] | [kg] | | [bar] | [kg] | |
| 10.0 | 16.0 | 3/8" | 24 V DC | - | 3011 | 16.0 | PN 16 | 2.20 | 432 524 G | PN 10 | 2.08 | 432 584 D | PN 16 | 2.18 | 432 464 L |
| 10.0 | 16.0 | 3/8" | 230 V 50 Hz | - | 3011 | 16.0 | PN 16 | 2.20 | 432 526 A | PN 10 | 2.08 | 432 586 F | PN 16 | 2.18 | 432 466 N |
| 10.0 | 16.0 | 3/8" | - | 24 V DC | 3011 | 16.0 | PN 16 | 2.20 | 432 527 B | PN 10 | 2.08 | 432 587 G | PN 16 | 2.18 | 432 467 P |
| 10.0 | 16.0 | 3/8" | - | 230 V 50 Hz | 3011 | 16.0 | PN 16 | 2.20 | 432 529 M | PN 10 | 2.08 | 432 589 J | PN 16 | 2.18 | 432 469 Z |
| 15.0 | 20.0 | 1/2" | 24 V DC | - | 3011 | 16.0 | PN 16 | 2.20 | 432 530 J | PN 10 | 2.08 | 432 590 P | PN 16 | 2.18 | 432 470 W |
| 15.0 | 20.0 | 1/2" | 230 V 50 Hz | - | 3011 | 16.0 | PN 16 | 2.20 | 432 532 G | PN 10 | 2.08 | 432 592 D | PN 16 | 2.18 | 432 472 L |
| 15.0 | 20.0 | 1/2" | - | 24 V DC | 3011 | 16.0 | PN 16 | 2.20 | 432 533 H | PN 10 | 2.08 | 432 593 E | PN 16 | 2.18 | 432 473 M |
| 15.0 | 20.0 | 1/2" | - | 230 V 50 Hz | 3011 | 16.0 | PN 16 | 2.20 | 432 535 B | PN 10 | 2.08 | 432 595 G | PN 16 | 2.18 | 432 475 P |
| 20.0 | 25.0 | 3/4" | 24 V DC | - | 3011 | 30.0 | PN 16 | 2.28 | 432 536 C | PN 10 | 2.16 | 432 596 H | PN 16 | 2.32 | 432 476 Q |
| 20.0 | 25.0 | 3/4" | 230 V 50 Hz | - | 3011 | 30.0 | PN 16 | 2.28 | 432 538 N | PN 10 | 2.16 | 432 598 K | PN 16 | 2.32 | 432 478 S |
| 20.0 | 25.0 | 3/4" | - | 24 V DC | 3011 | 30.0 | PN 16 | 2.28 | 432 539 P | PN 10 | 2.16 | 432 599 L | PN 16 | 2.32 | 432 479 T |
| 20.0 | 25.0 | 3/4" | - | 230 V 50 Hz | 3011 | 30.0 | PN 16 | 2.28 | 432 541 R | PN 10 | 2.16 | 432 601 W | PN 16 | 2.32 | 432 481 E |
| 25.0 | 32.0 | 1" | 24 V DC | - | 3011 | 40.0 | PN 16 | 2.34 | 432 542 J | PN 10 | 2.20 | 432 602 X | PN 16 | 2.42 | 432 482 F |
| 25.0 | 32.0 | 1" | 230 V 50 Hz | - | 3011 | 40.0 | PN 16 | 2.34 | 432 544 L | PN 10 | 2.20 | 432 604 Z | PN 16 | 2.42 | 432 484 H |
| 25.0 | 32.0 | 1" | - | 24 V DC | 3011 | 40.0 | PN 16 | 2.34 | 432 545 M | PN 10 | 2.20 | 432 605 S | PN 16 | 2.42 | 432 485 A |
| 25.0 | 32.0 | 1" | - | 230 V 50 Hz | 3011 | 40.0 | PN 16 | 2.34 | 432 547 P | PN 10 | 2.20 | 432 607 U | PN 16 | 2.42 | 432 487 C |
| 32.0 | 40.0 | 1 1/4" | 24 V DC | - | 3011 | 75.0 | PN 16 | 2.90 | 432 548 Y | PN 10 | 2.70 | 432 608 D | PN 16 | 2.48 | 432 488 M |
| 32.0 | 40.0 | 1 1/4" | 230 V 50 Hz | - | 3011 | 75.0 | PN 16 | 2.90 | 432 550 W | PN 10 | 2.70 | 432 610 S | PN 16 | 2.48 | 432 490 K |
| 32.0 | 40.0 | 1 1/4" | - | 24 V DC | 3011 | 75.0 | PN 16 | 2.90 | 432 551 K | PN 10 | 2.70 | 432 611 P | PN 16 | 2.48 | 432 491 G |
| 32.0 | 40.0 | 1 1/4" | - | 230 V 50 Hz | 3011 | 75.0 | PN 16 | 2.90 | 432 553 M | PN 10 | 2.70 | 432 613 R | PN 16 | 2.48 | 432 493 A |
| 40.0 | 50.0 | 1 1/2" | 24 V DC | - | 3011 | 110.0 | PN 16 | 3.26 | 432 554 N | PN 10 | 2.90 | 432 614 J | PN 16 | 3.40 | 432 494 B |
| 40.0 | 50.0 | 1 1/2" | 230 V 50 Hz | - | 3011 | 110.0 | PN 16 | 3.26 | 432 556 Q | PN 10 | 2.90 | 432 616 L | PN 16 | 3.40 | 432 495 D |
| 40.0 | 50.0 | 1 1/2" | - | 24 V DC | 3011 | 110.0 | PN 16 | 3.26 | 432 557 R | PN 10 | 2.90 | 432 617 M | PN 16 | 3.40 | 432 497 E |
| 40.0 | 50.0 | 1 1/2" | - | 230 V 50 Hz | 3011 | 110.0 | PN 16 | 3.26 | 432 559 T | PN 10 | 2.90 | 432 619 X | PN 16 | 3.40 | 432 499 Q |
| 50.0 | 63.0 | 2" | 240 V DC | - | 3011 | 110.0 | PN 16 | 3.80 | 432 560 Y | PN 10 | 3.28 | 432 620 U | PN 16 | 4.07 | 432 500 V |
| 50.0 | 63.0 | 2" | 230 V 50 Hz | - | 3011 | 110.0 | PN 16 | 3.80 | 432 562 N | PN 10 | 3.28 | 432 622 J | PN 16 | 4.07 | 432 502 K |
| 50.0 | 63.0 | 2" | - | 24 V DC | 3011 | 110.0 | PN 16 | 3.80 | 432 563 P | PN 10 | 3.28 | 432 623 K | PN 16 | 4.07 | 432 503 L |
| 50.0 | 63.0 | 2" | - | 230 V 50 Hz | 3011 | 110.0 | PN 16 | 3.80 | 432 565 R | PN 10 | 3.28 | 432 625 M | PN 16 | 4.07 | 432 505 N |
| 65.0 | 75.0 | 2 1/2" | 24 V DC | - | 3001 | 318.0 | PN 16 | 7.70 | 432 566 J | PN 10 | 6.75 | 432 626 N | PN 16 | 8.32 | 432 506 P |
| 65.0 | 75.0 | 2 1/2" | 110 V 50 Hz | - | 3001 | 318.0 | PN 16 | 7.70 | 432 567 K | PN 10 | 6.75 | 432 627 P | PN 16 | 8.32 | 432 507 Q |
| 65.0 | 75.0 | 2 1/2" | 230 V 50 Hz | - | 3001 | 318.0 | PN 16 | 7.70 | 432 568 U | PN 10 | 6.75 | 432 628 Y | PN 16 | 8.32 | 432 508 Z |
| 65.0 | 75.0 | 2 1/2" | - | 24 V DC | 3001 | 318.0 | PN 16 | 7.70 | 432 569 V | PN 10 | 6.75 | 432 629 Z | PN 16 | 8.32 | 432 509 S |
| 65.0 | 75.0 | 2 1/2" | - | 230 V 50 Hz | 3001 | 318.0 | PN 16 | 7.70 | 432 571 P | PN 10 | 6.75 | 432 631 K | PN 16 | 8.32 | 432 511 B |
| 80.0 | 90.0 | 3" | 24 V DC | - | 3001 | 444.0 | PN 10 | 9.90 | 432 572 Q | PN 6 | 8.42 | 432 632 L | PN 10 | 11.22 | 432 512 C |
| 80.0 | 90.0 | 3" | 110 V 50 Hz | - | 3001 | 444.0 | PN 10 | 9.90 | 432 573 R | PN 6 | 8.42 | 432 633 M | PN 10 | 11.22 | 432 513 D |
| 80.0 | 90.0 | 3" | 230 V 50 Hz | - | 3001 | 444.0 | PN 10 | 9.90 | 432 574 J | PN 6 | 8.42 | 432 634 N | PN 10 | 11.22 | 432 514 E |
| 80.0 | 90.0 | 3" | - | 24 V DC | 3001 | 444.0 | PN 10 | 9.90 | 432 575 K | PN 6 | 8.42 | 432 635 P | PN 10 | 11.22 | 432 515 F |
| 80.0 | 90.0 | 3" | - | 230 V 50 Hz | 3001 | 444.0 | PN 10 | 9.90 | 432 577 M | PN 6 | 8.42 | 432 637 R | PN 10 | 11.22 | 432 517 H |
| 80.0 | 110.0 | 4" | 24 V DC | - | 3001 | 444.0 | PN 6 | 9.90 | 432 578 Y | PN 6 | 8.42 | 432 638 S | PN 10 | 11.22 | 432 518 J |
| 80.0 | 110.0 | 4" | 110 V 50 Hz | - | 3001 | 444.0 | PN 6 | 9.90 | 432 579 X | PN 6 | 8.42 | 432 639 T | PN 10 | 11.22 | 432 519 K |
| 80.0 | 110.0 | 4" | 230 V 50 Hz | - | 3001 | 444.0 | PN 6 | 9.90 | 432 580 M | PN 6 | 8.42 | 432 640 G | PN 10 | 11.22 | 432 520 Q |
| 80.0 | 110.0 | 4" | - | 24 V DC | 3001 | 444.0 | PN 6 | 9.90 | 432 581 A | PN 6 | 8.42 | 432 641 V | PN 10 | 11.22 | 432 521 D |
| 80.0 | 110.0 | 4" | - | 230 V 50 Hz | 3001 | 444.0 | PN 6 | 9.90 | 432 583 C | PN 6 | 8.42 | 432 643 X | PN 10 | 11.22 | 432 523 F |

Optional system modules

Sensors



For flow, level, analysis, pressure and temperature

- Sensor - only with frequency / PT100 signal
- Transmitter
- Switch
- Batch

Data sheets type 80XX, 81XX, 82XX, 83XX, 84XX

Customized System Solutions

Customized System Solutions

Valve Program



Sensor Program



Accessories & Pneumatics



Burkert offers a wide range
of system solutions

- Flow Control
- Analytical Control
- Temperature Control
- Level Control
- Pressure Control



Please contact us for
more informations.