

Series CC04



AVENTICS Series CC04 Check-choke valves

The AVENTICS Series CC check-choke valves are designed for nominal flows from 70 to 1950 l/min. The different versions are available with a push-in fitting or internal thread.

- $Q_n = 70 \text{ l/min} \dots 1950 \text{ l/min}$



Product overview

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Check-choke valve, Series CC04

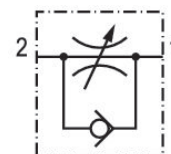
: 2 > 1

Type: Exhaust Air Throttling

Compressed air connection type 1: Push-in fitting

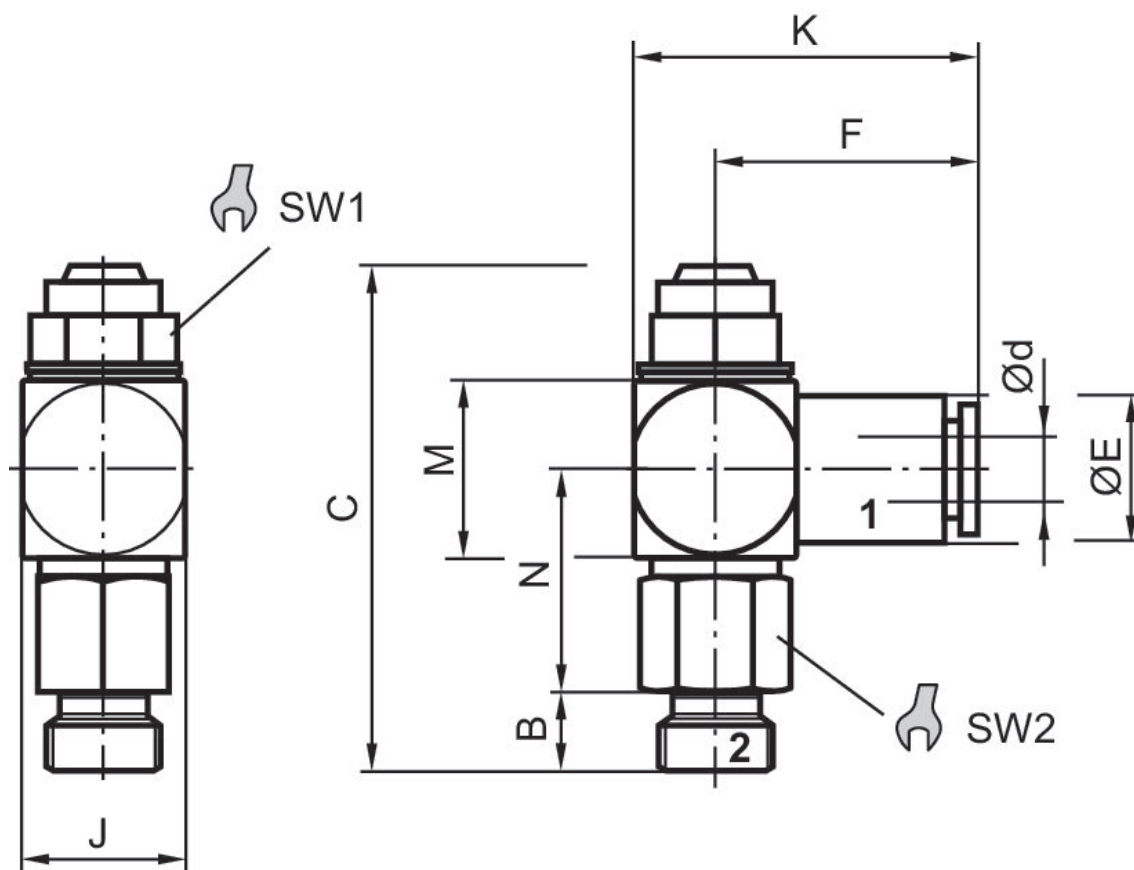
Ambient temperature min./max.: -10 °C ... 70 °C

Working pressure min./max.: 0.5 bar ... 10 bar



| Compressed air connection 1 | Compressed air connection type 1 | Compressed air connection 2 | Compressed air connection type 2 | Throttle bore [mm] | Nominal flow Qn 2 to 1 [l/min] | Part No. |
|-----------------------------|----------------------------------|-----------------------------|----------------------------------|--------------------|--------------------------------|------------|
| Ø 4 | Push-in fitting | M7 | External thread | 1.5 | 85 | 2540104070 |
| Ø 6 | Push-in fitting | M7 | External thread | 1.5 | 85 | 2540106070 |

Dimensions



| Part No. | Port 1 | Port 2 | B | C | Ød | ØE | F | J | K |
|------------|--------|--------|---|----|----|----|------|----|------|
| 2540104070 | Ø 4 | M7 | 5 | 31 | 4 | 9 | 16 | 11 | 21 |
| 2540106070 | Ø 6 | M7 | 5 | 31 | 6 | 11 | 16.5 | 11 | 21.5 |

| Part No. | M | N | SW1 | SW2 |
|------------|----|------|-----|-----|
| 2540104070 | 11 | 13.5 | 8 | 10 |
| 2540106070 | 11 | 13.5 | 8 | 10 |

Check-choke valve, Series CC04

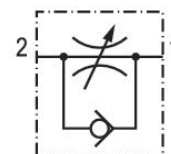
: 2 > 1

Type: Exhaust Air Throttling

Compressed air connection type 1: Push-in fitting

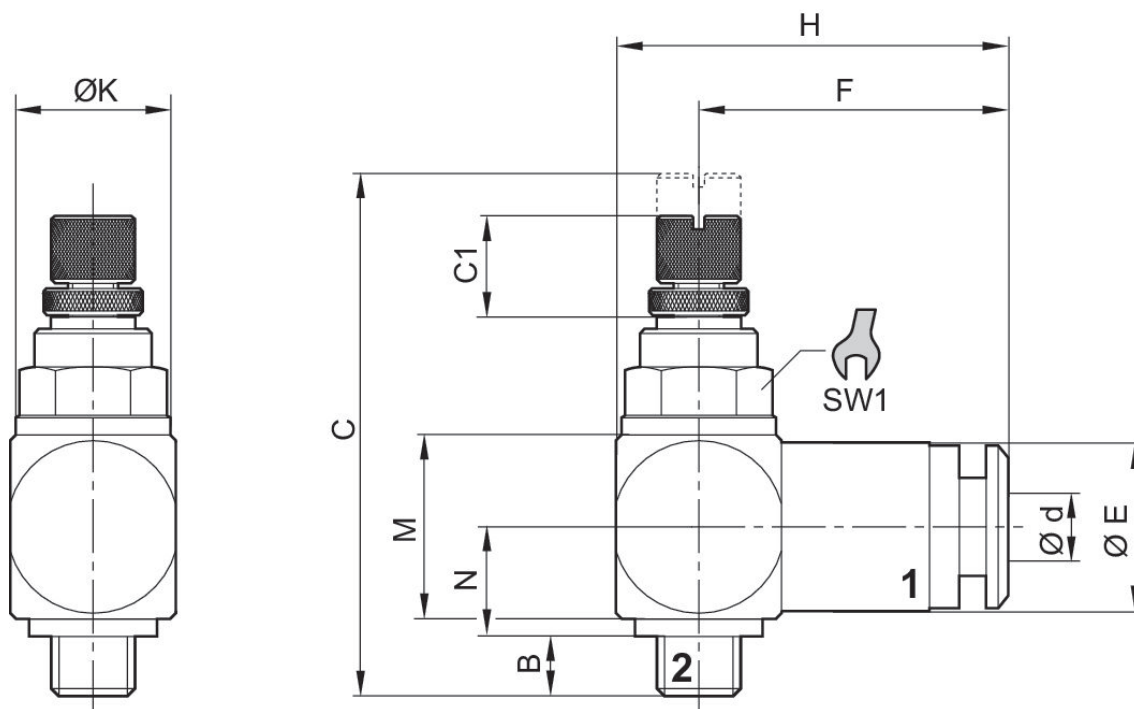
Ambient temperature min./max.: -10 °C ... 70 °C

Working pressure min./max.: 0.5 bar ... 10 bar



| Compressed air connection 1 | Compressed air connection type 1 | Compressed air connection 2 | Compressed air connection type 2 | Throttle bore [mm] | Nominal flow Qn 2 to 1 [l/min] | Part No. |
|-----------------------------|----------------------------------|-----------------------------|----------------------------------|--------------------|--------------------------------|------------|
| Ø 4 | Push-in fitting | M5 | External thread | 1.5 | 85 | 0821200128 |
| Ø 6 | Push-in fitting | M5 | External thread | 1.5 | 85 | 0821200129 |

Dimensions



Throttle setting via knurled bolt

| Part No. | Port 1 | Port 2 | B | C | C1 | Ød | ØE | F | H |
|------------|--------------|--------|-----|------|----|-------------|-------------|----|----|
| 0821200128 | $\text{Ø} 4$ | M5 | 3.5 | 30.5 | 6 | 4 | 10 | 19 | 24 |
| 0821200129 | $\text{Ø} 6$ | M5 | 3.5 | 30.5 | 6 | 6 | 12 | 20 | 25 |

| Part No. | K | M | N | SW1 |
|------------|----|----|-----|-----|
| 0821200128 | 10 | 11 | 6.5 | 8 |
| 0821200129 | 10 | 11 | 6.5 | 8 |

Check-choke valve, Series CC04

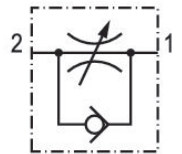
: 2 > 1

Type: Exhaust Air Throttling

Compressed air connection type 1: Push-in fitting

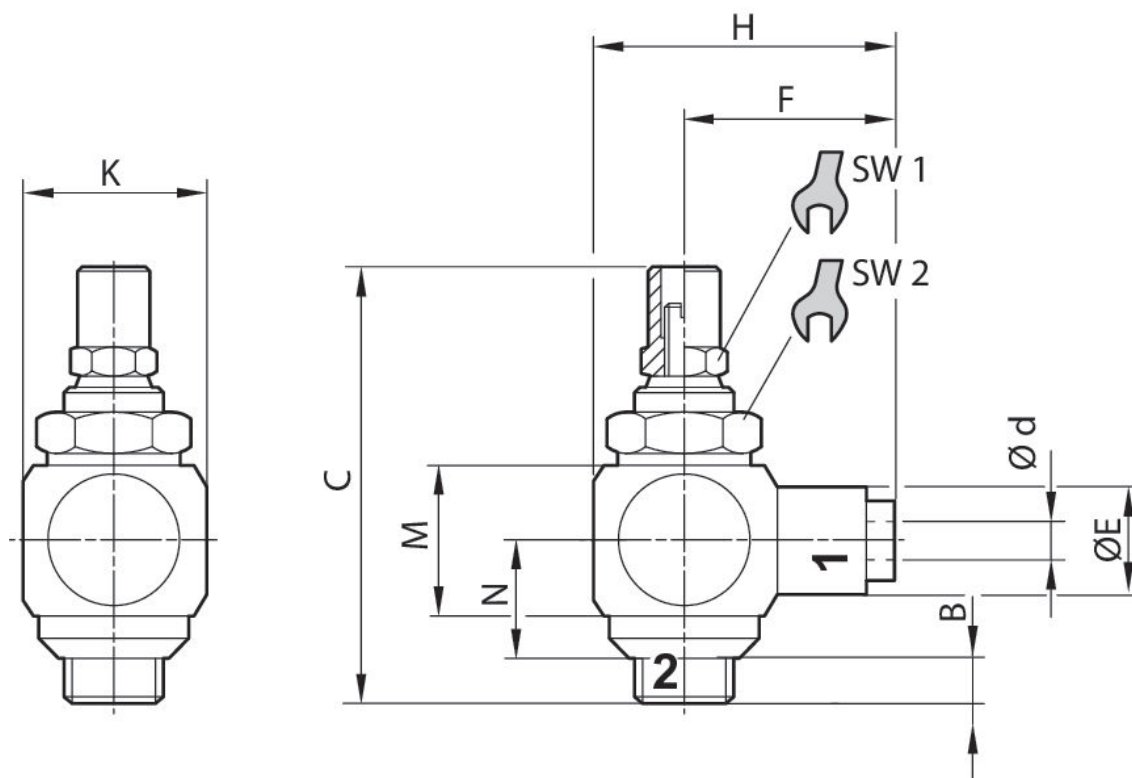
Ambient temperature min./max.: -10 °C ... 70 °C

Working pressure min./max.: 0.5 bar ... 10 bar



| Compressed air connection 1 | Compressed air connection type 1 | Compressed air connection 2 | Compressed air connection type 2 | Throttle bore [mm] | Nominal flow Q _n 2 to 1 [l/min] | Part No. |
|-----------------------------|----------------------------------|-----------------------------|----------------------------------|--------------------|--|------------|
| Ø 4 | Push-in fitting | G 1/8 | External thread | 3 | 360 | 0821200192 |
| Ø 6 | Push-in fitting | G 1/8 | External thread | 3 | 360 | 0821200194 |
| Ø 6 | Push-in fitting | G 1/4 | External thread | 4.5 | 540 | 0821200196 |

Dimensions



1) Valve body with ID mark for inlet throttling 2) Plastic seal

| Part No. | Port 1 | Port 2 | B | C | Ød | ØE | F | H | K |
|------------|--------|--------|-----|------|----|----|------|------|----|
| 0821200192 | Ø 4 | G 1/8 | 6.5 | 45 | 4 | 11 | 23 | 30.5 | 10 |
| 0821200194 | Ø 6 | G 1/8 | 6.5 | 45 | 6 | 13 | 23 | 30.5 | 10 |
| 0821200196 | Ø 6 | G 1/4 | 9 | 51.5 | 6 | 13 | 25.5 | 35.5 | 20 |

| Part No. | M | N | SW1 | SW2 |
|------------|----|------|-----|-----|
| 0821200192 | 16 | 9.5 | 7 | 13 |
| 0821200194 | 16 | 9.5 | 7 | 13 |
| 0821200196 | 16 | 10.5 | 10 | 16 |

Check-choke valve, Series CC04

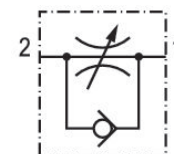
: 2 > 1

Type: Exhaust Air Throttling

Compressed air connection type 1: Push-in fitting

Ambient temperature min./max.: -10 °C ... 70 °C

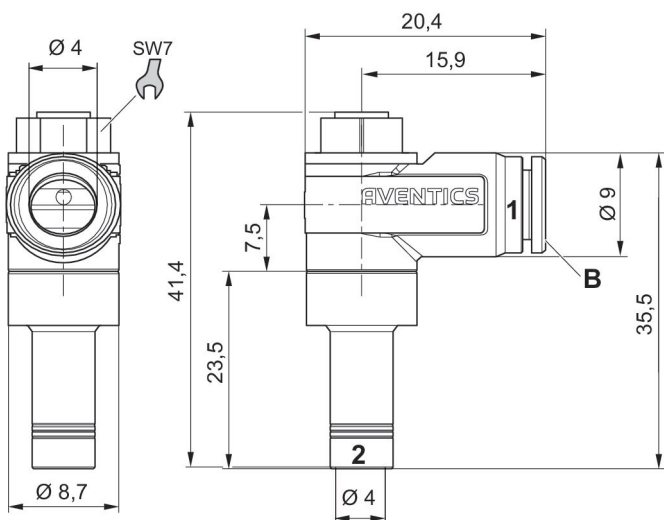
Working pressure min./max.: 0.5 bar ... 10 bar



| Compressed air connection 1 | Compressed air connection type 1 | Compressed air connection 2 | Compressed air connection type 2 | Throttle bore [mm] | Nominal flow Qn 2 to 1 [l/min] | Part No. |
|-----------------------------|----------------------------------|-----------------------------|----------------------------------|--------------------|--------------------------------|------------|
| Ø 4 | Push-in fitting | Ø 4 | pin bushing | 2 | 95 | R412007408 |
| Ø 6 | Push-in fitting | Ø 6 | pin bushing | 2 | 95 | R412007409 |
| Ø 6 | Push-in fitting | Ø 6 | pin bushing | 3.5 | 360 | R412007400 |
| Ø 8 | Push-in fitting | Ø 8 | pin bushing | 3.5 | 360 | R412007401 |
| Ø 10 | Push-in fitting | Ø 10 | pin bushing | 4.5 | 540 | R412007402 |

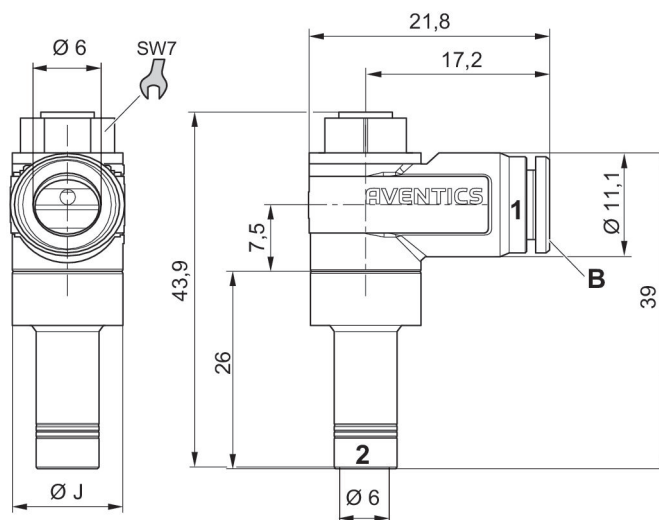
R412007408

Dimensions in mm



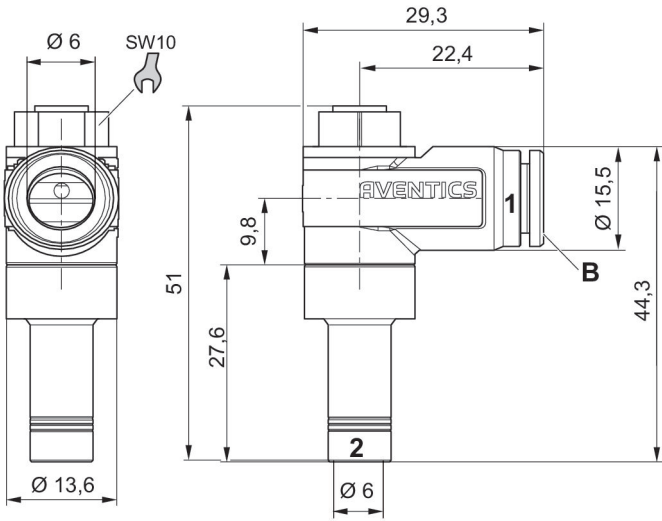
R412007409

Dimensions in mm



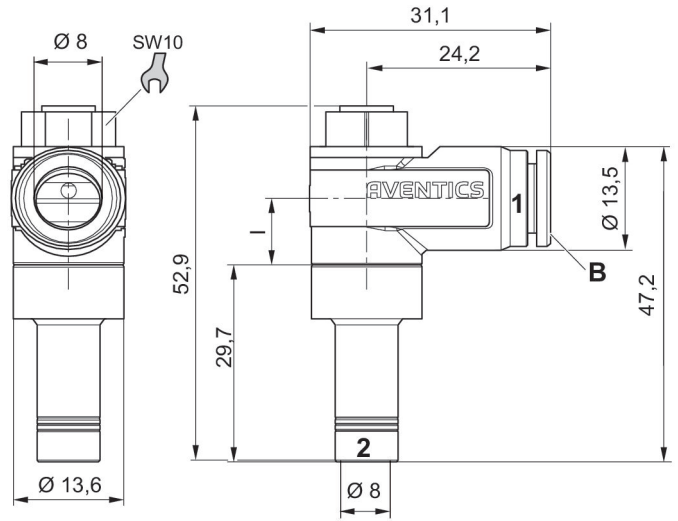
R412007400

Dimensions in mm



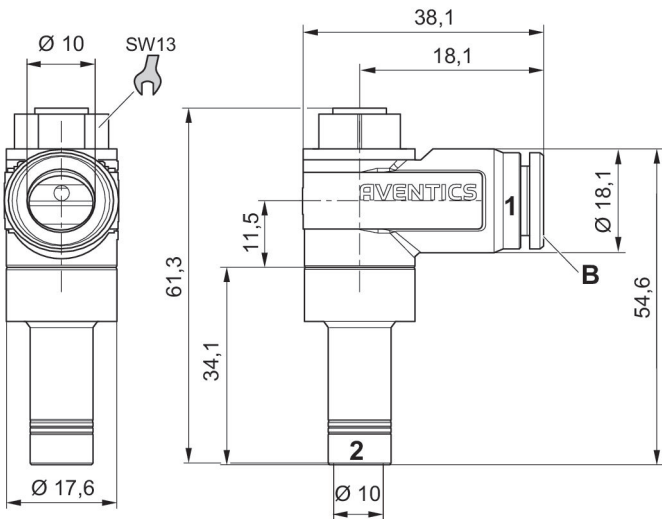
R412007401

Dimensions in mm



R412007402

Dimensions in mm



Check-choke valve, Series CC04

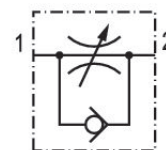
: 1 > 2

Type: Inlet-Side Throttling

Compressed air connection type 1: Push-in fitting

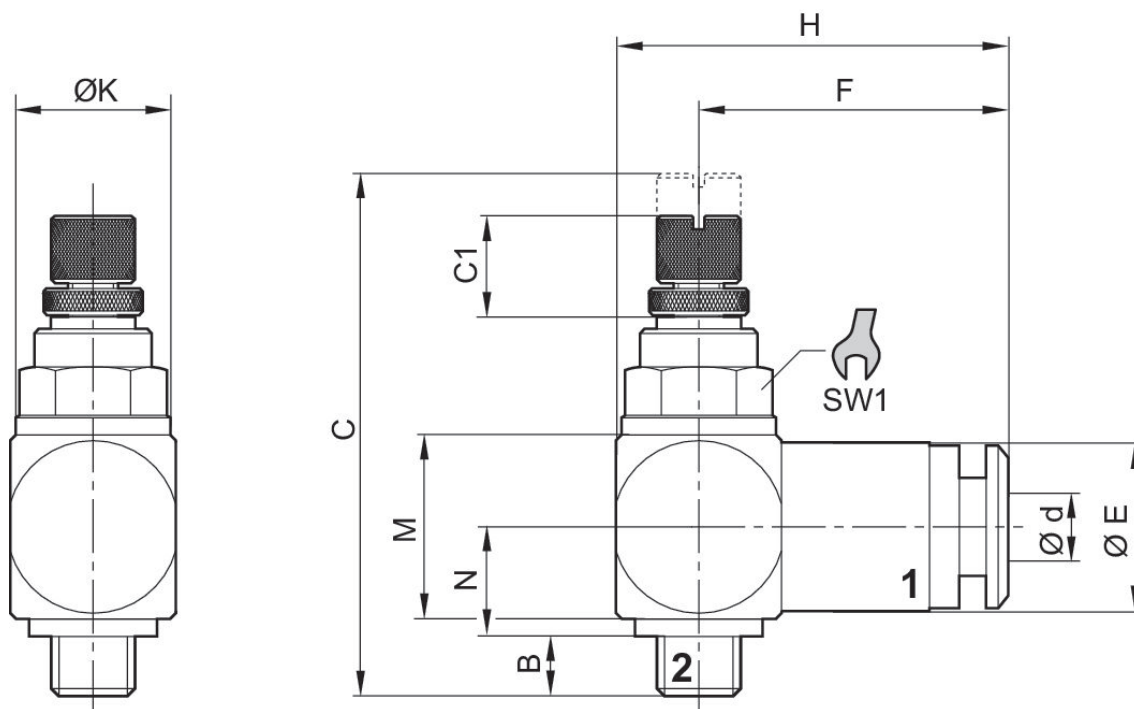
Ambient temperature min./max.: -10 °C ... 70 °C

Working pressure min./max.: 0.5 bar ... 10 bar



| Compressed air connection 1 | Compressed air connection type 1 | Compressed air connection 2 | Compressed air connection type 2 | Throttle bore [mm] | Nominal flow Q _n 1 to 2 [l/min] | Part No. |
|-----------------------------|----------------------------------|-----------------------------|----------------------------------|--------------------|--|------------|
| Ø 4 | Push-in fitting | M5 | External thread | 1.5 | 85 | 0821200149 |
| Ø 6 | Push-in fitting | M5 | External thread | 1.5 | 85 | 0821200234 |

Dimensions



Throttle setting via knurled bolt

| Part No. | Port 1 | Port 2 | B | C | C1 | Ød | ØE | F | H |
|------------|--------------|--------|-----|------|----|-------------|-------------|----|----|
| 0821200149 | $\text{Ø} 4$ | M5 | 3.5 | 30.5 | 6 | 4 | 10 | 19 | 24 |
| 0821200234 | $\text{Ø} 6$ | M5 | 3.5 | 30.5 | 6 | 6 | 12 | 20 | 25 |

| Part No. | K | M | N | SW1 |
|------------|----|----|-----|-----|
| 0821200149 | 10 | 11 | 6.5 | 8 |
| 0821200234 | 10 | 11 | 6.5 | 8 |

Check-choke valve, Series CC04

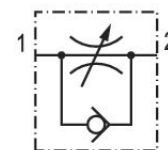
: 1 > 2

Type: Inlet-Side Throttling

Compressed air connection type 1: Push-in fitting

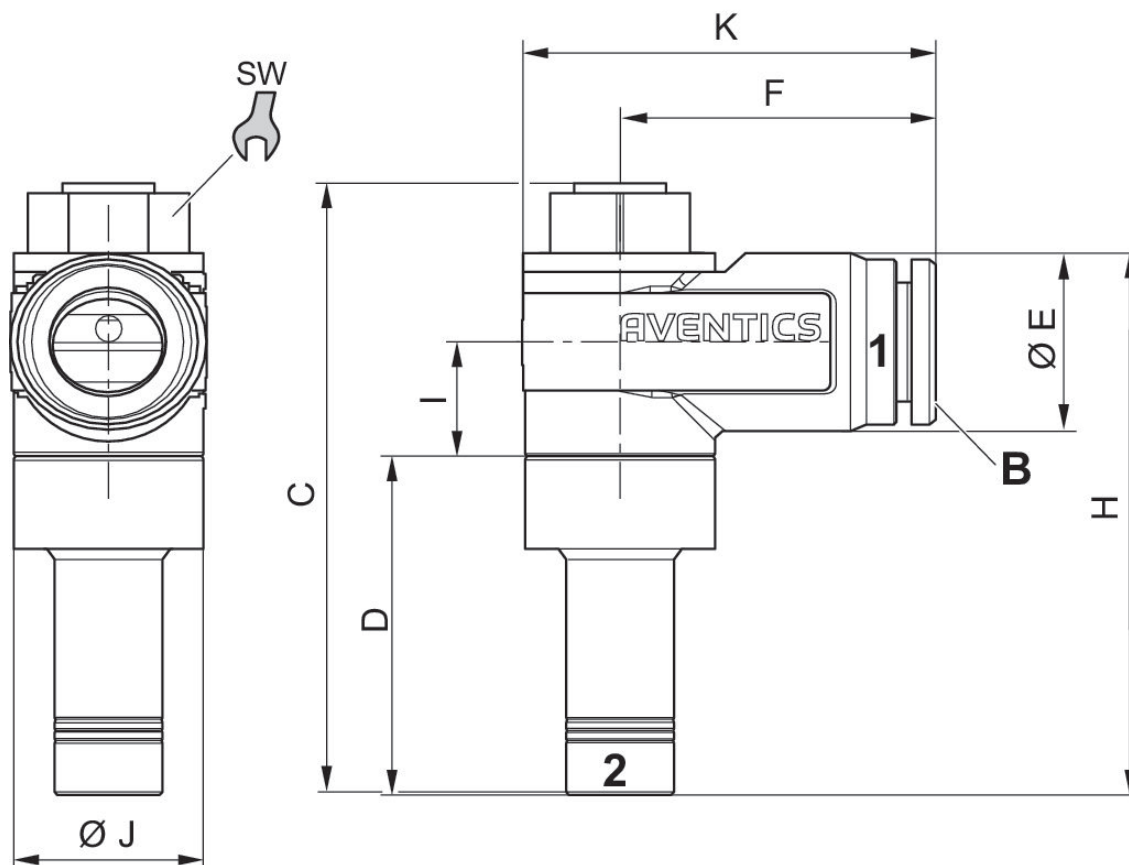
Ambient temperature min./max.: -10 °C ... 70 °C

Working pressure min./max.: 0.5 bar ... 10 bar



| Compressed air connection 1 | Compressed air connection type 1 | Compressed air connection 2 | Compressed air connection type 2 | Throttle bore [mm] | Nominal flow Q _n 1 to 2 [l/min] | Part No. |
|-----------------------------|----------------------------------|-----------------------------|----------------------------------|--------------------|--|------------|
| Ø 4 | Push-in fitting | Ø 4 | pin bushing | 2 | 95 | R412007410 |
| Ø 6 | Push-in fitting | Ø 6 | pin bushing | 2 | 95 | R412007411 |
| Ø 6 | Push-in fitting | Ø 6 | pin bushing | 3.5 | 360 | R412007404 |
| Ø 8 | Push-in fitting | Ø 8 | pin bushing | 3.5 | 360 | R412007405 |
| Ø 10 | Push-in fitting | Ø 10 | pin bushing | 4.5 | 540 | R412007406 |

Dimensions



| Part No. | Port 1 | Port 2 | C | D | ØE | F | H | I | ØJ |
|------------|--------|--------|------|------|------|------|------|------|------|
| R412007410 | Ø 4 | Ø 4 | 41,4 | 23,5 | 9 | 15,9 | 35,5 | 7,5 | 8,7 |
| R412007411 | Ø 6 | Ø 6 | 43,9 | 26 | 11,1 | 17,2 | 39 | 7,5 | 8,7 |
| R412007404 | Ø 6 | Ø 6 | 51 | 27,6 | 15,5 | 22,4 | 44,3 | 9,8 | 13,6 |
| R412007405 | Ø 8 | Ø 8 | 52,9 | 29,7 | 13,5 | 24,2 | 47,2 | 9,8 | 13,6 |
| R412007406 | Ø 10 | Ø 10 | 61,3 | 34,1 | 18,1 | 18,1 | 54,6 | 11,5 | 17,6 |

| Part No. | K | SW |
|------------|------|----|
| R412007410 | 20,4 | 7 |
| R412007411 | 21,8 | 7 |
| R412007404 | 29,3 | 10 |
| R412007405 | 31,1 | 10 |
| R412007406 | 38,1 | 13 |

Check-choke valve, Series CC04

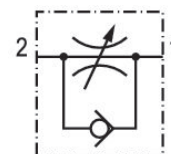
: 2 > 1

Type: Exhaust Air Throttling

Compressed air connection type 1: Push-in fitting

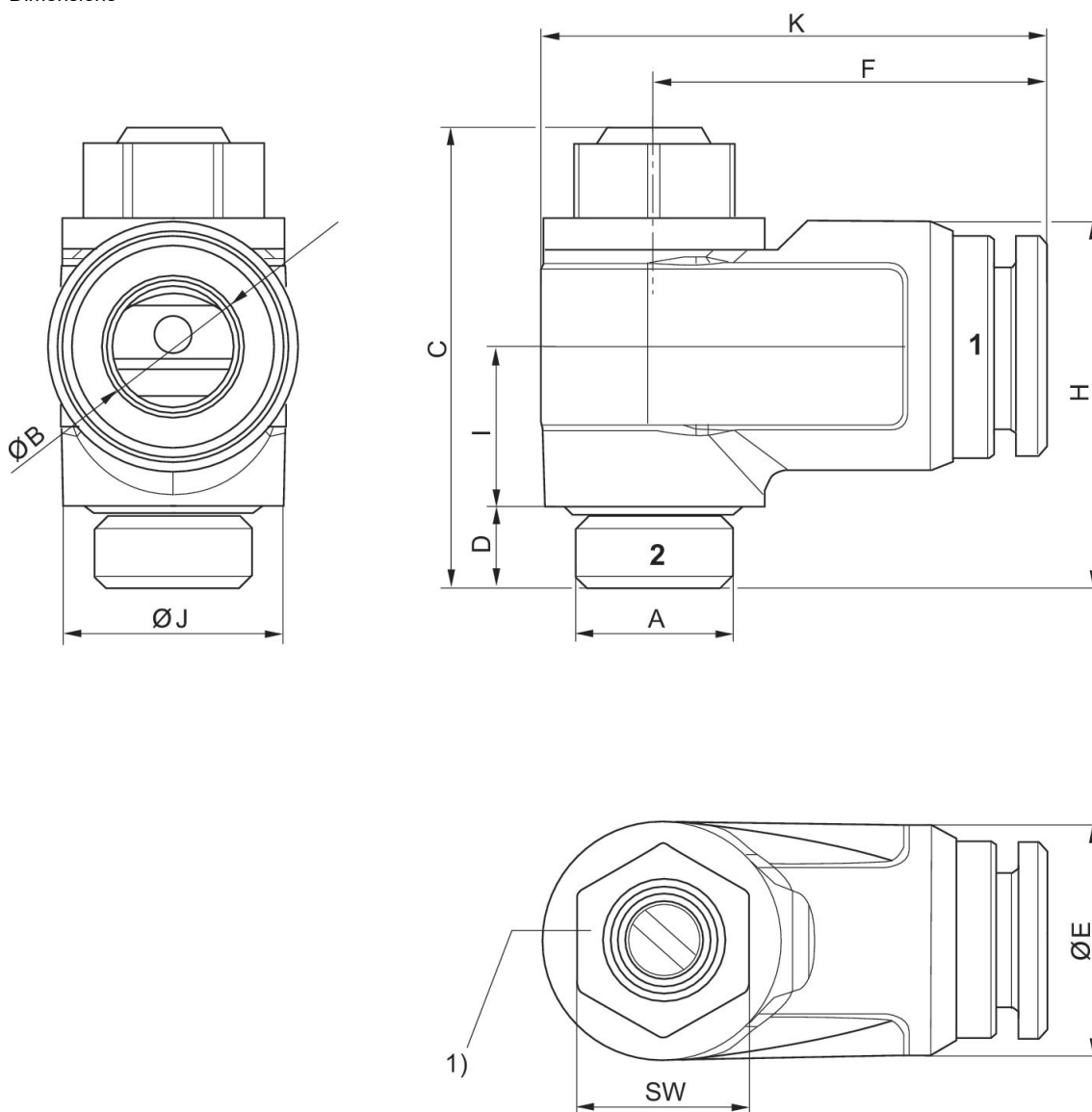
Ambient temperature min./max.: -10 °C ... 60 °C

Working pressure min./max.: 0.5 bar ... 10 bar



| Compressed air connection 1 | Compressed air connection type 1 | Compressed air connection 2 | Compressed air connection type 2 | Throttle bore [mm] | Nominal flow Qn 2 to 1 [l/min] | Part No. |
|-----------------------------|----------------------------------|-----------------------------|----------------------------------|--------------------|--------------------------------|------------|
| Ø 4 | Push-in fitting | M5 | External thread | 2 | 70 | R412010564 |
| Ø 4 | Push-in fitting | G 1/8 | External thread | 3.5 | 150 | R412010568 |
| Ø 6 | Push-in fitting | M5 | External thread | 2 | 110 | R412010565 |
| Ø 6 | Push-in fitting | G 1/8 | External thread | 3.5 | 390 | R412010569 |
| Ø 6 | Push-in fitting | G 1/4 | External thread | 4.5 | 390 | R412010571 |
| Ø 8 | Push-in fitting | G 1/8 | External thread | 3.5 | 470 | R412010570 |
| Ø 8 | Push-in fitting | G 1/4 | External thread | 4.5 | 490 | R412010572 |
| Ø 8 | Push-in fitting | G 3/8 | External thread | 6.6 | 860 | R412010574 |
| Ø 10 | Push-in fitting | G 1/4 | External thread | 4.5 | 520 | R412010573 |
| Ø 10 | Push-in fitting | G 3/8 | External thread | 6.6 | 900 | R412010575 |
| Ø 10 | Push-in fitting | G 1/2 | External thread | 6.6 | 1530 | R412010577 |
| Ø 12 | Push-in fitting | G 3/8 | External thread | 6.6 | 960 | R412010576 |
| Ø 12 | Push-in fitting | G 1/2 | External thread | 6.6 | 1850 | R412010578 |

Dimensions



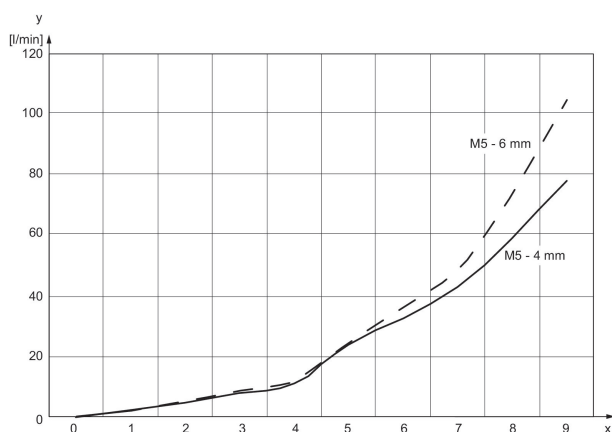
1) Recommended tightening torque M_A : M 5: 1.1 Nm -0.2 G 1/8: 3.0 Nm -0.3 G 1/4: 6.0 Nm -0.6 G 3/8: 8.0 Nm -1.0 G 1/2: 10.0 Nm -1.0

| Part No. | Port 1 | Port 2 | $\varnothing B$ | C | D | $\varnothing E$ | F | K | H |
|------------|------------------|--------|-----------------|------|-----|-----------------|------|------|------|
| R412010564 | $\varnothing 4$ | M5 | 4 | 21.8 | 4 | 9 | 15.9 | 20.4 | 12 |
| R412010565 | $\varnothing 4$ | G 1/8 | 6 | 21.8 | 4 | 11.1 | 17.2 | 21.8 | 13 |
| R412010568 | $\varnothing 6$ | M5 | 4 | 28.5 | 5.5 | 11.5 | 21.9 | 28.8 | 21 |
| R412010569 | $\varnothing 6$ | G 1/8 | 6 | 28.5 | 5.5 | 13.5 | 22.4 | 29.3 | 21.7 |
| R412010570 | $\varnothing 6$ | G 1/4 | 8 | 28.5 | 5.5 | 15.5 | 24.2 | 31.1 | 22.7 |
| R412010571 | $\varnothing 8$ | G 1/8 | 6 | 33.6 | 6.5 | 13 | 24.3 | 33.5 | 25.3 |
| R412010572 | $\varnothing 8$ | G 1/4 | 8 | 33.6 | 6.5 | 15.5 | 26.6 | 35.5 | 25.3 |
| R412010573 | $\varnothing 8$ | G 1/4 | 10 | 33.6 | 6.5 | 18.1 | 29.2 | 38.1 | 26.7 |
| R412010574 | $\varnothing 10$ | G 3/8 | 8 | 40.8 | 7 | 15.6 | 28.2 | 40.6 | 23.6 |
| R412010575 | $\varnothing 10$ | G 3/8 | 10 | 40.8 | 7 | 19 | 32 | 43.3 | 33.5 |
| R412010576 | $\varnothing 10$ | G 3/8 | 12 | 40.8 | 7 | 22.1 | 34.2 | 45.4 | 35.6 |
| R412010577 | $\varnothing 12$ | G 1/2 | 10 | 47.8 | 8.3 | 19.2 | 34 | 47.7 | 41.1 |
| R412010578 | $\varnothing 12$ | G 1/2 | 12 | 47.8 | 8.3 | 22 | 36.1 | 49.8 | 43.9 |

| Part No. | l | Ø J | SW |
|------------|------|------|----|
| R412010564 | 7.5 | 8.7 | 7 |
| R412010565 | 7.5 | 8.7 | 7 |
| R412010568 | 9.8 | 13.6 | 10 |
| R412010569 | 9.8 | 13.6 | 10 |
| R412010570 | 9.8 | 13.6 | 10 |
| R412010571 | 12.8 | 17.6 | 13 |
| R412010572 | 11.5 | 17.6 | 13 |
| R412010573 | 11.5 | 17.6 | 13 |
| R412010574 | 15.8 | 22.2 | 16 |
| R412010575 | 16.4 | 22.2 | 16 |
| R412010576 | 17.8 | 22.2 | 16 |
| R412010577 | 20.3 | 26.6 | 18 |
| R412010578 | 21.5 | 26.6 | 18 |

Flow diagram

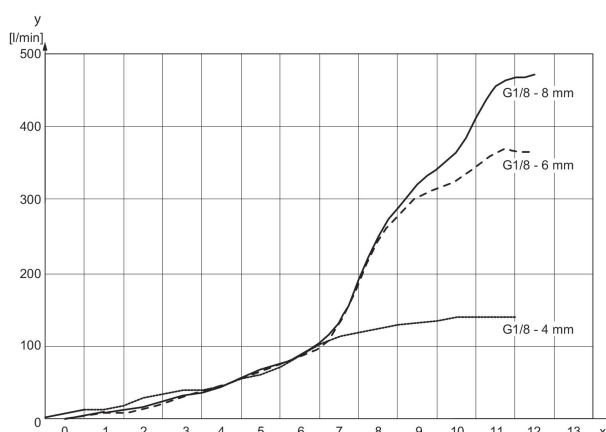
M5



x = rotations of the throttle screw y = flow rate Qn

Flow diagram

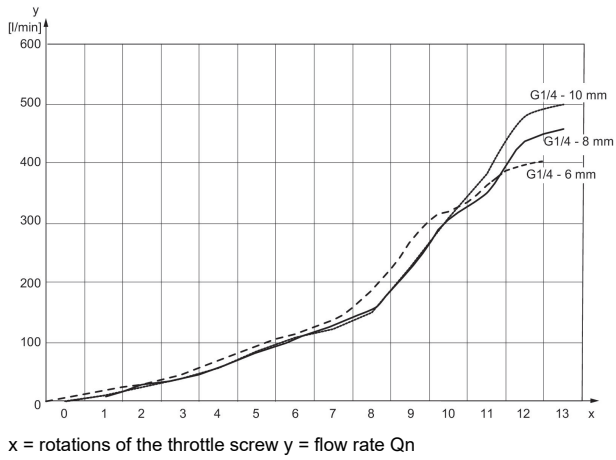
G 1/8



x = rotations of the throttle screw y = flow rate Qn

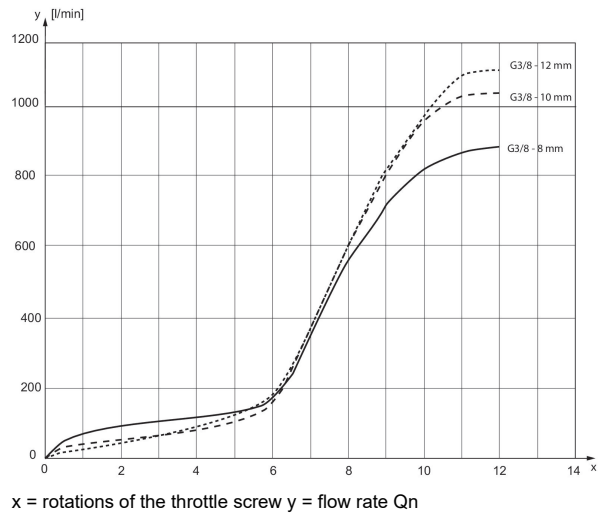
Flow diagram

G 1/4



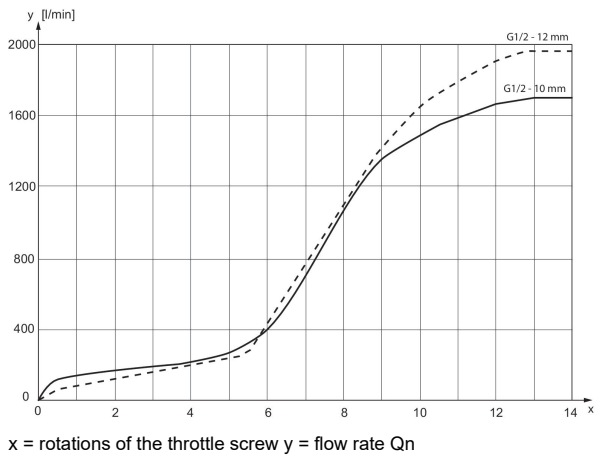
Flow diagram

G 3/8



Flow diagram

G 1/2



Check-choke valve, Series CC04

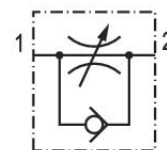
: 1 > 2

Type: Inlet-Side Throttling

Compressed air connection type 1: Push-in fitting

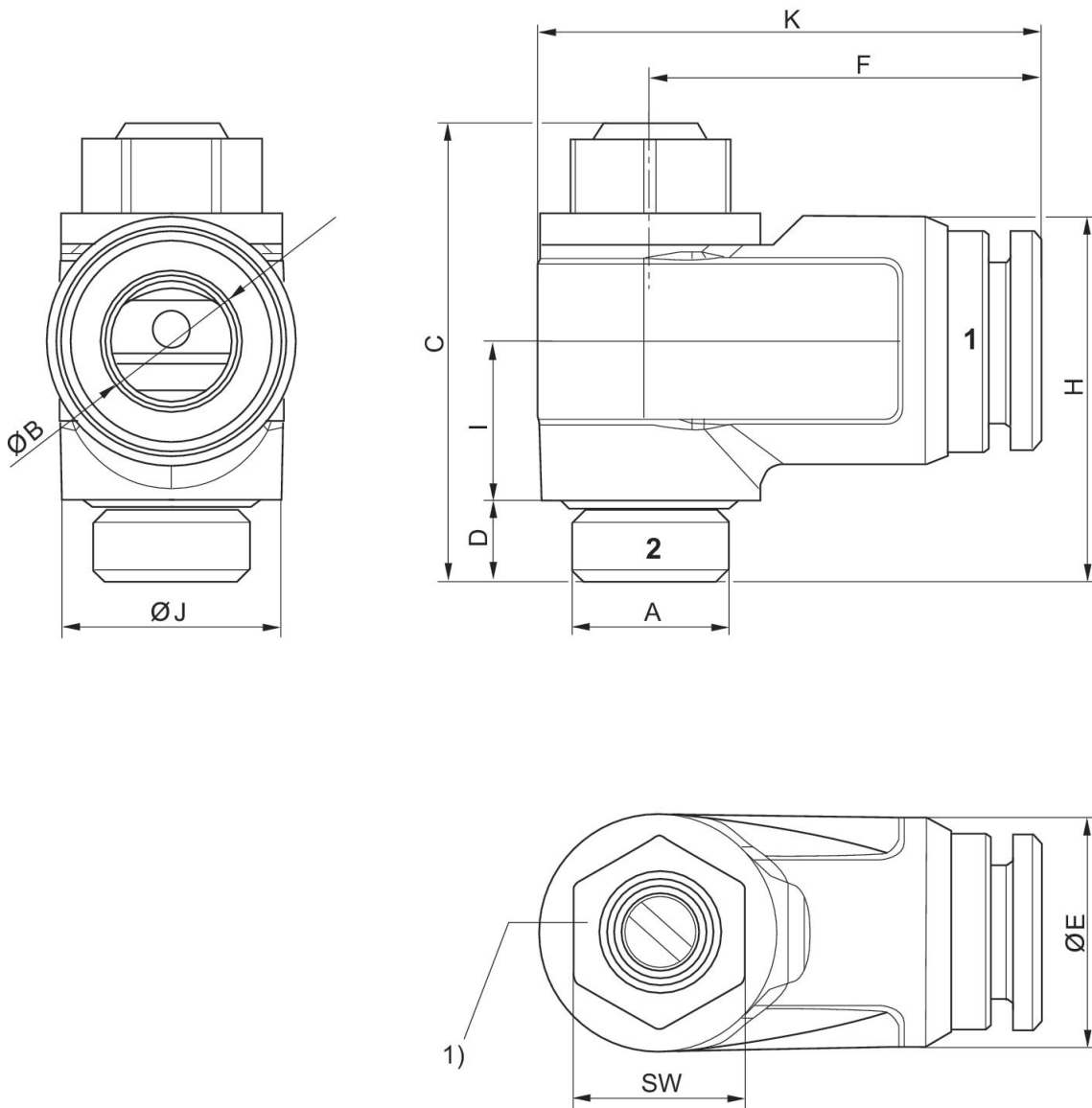
Ambient temperature min./max.: -10 °C ... 60 °C

Working pressure min./max.: 0.5 bar ... 10 bar



| Compressed air connection 1 | Compressed air connection type 1 | Compressed air connection 2 | Compressed air connection type 2 | Throttle bore [mm] | Nominal flow Q _n 1 to 2 [l/min] | Part No. |
|-----------------------------|----------------------------------|-----------------------------|----------------------------------|--------------------|--|------------|
| Ø 4 | Push-in fitting | M5 | External thread | 2 | 70 | R412010581 |
| Ø 4 | Push-in fitting | G 1/8 | External thread | 3.5 | 150 | R412010585 |
| Ø 6 | Push-in fitting | M5 | External thread | 2 | 110 | R412010582 |
| Ø 6 | Push-in fitting | G 1/8 | External thread | 3.5 | 390 | R412010586 |
| Ø 6 | Push-in fitting | G 1/4 | External thread | 4.5 | 390 | R412010588 |
| Ø 8 | Push-in fitting | G 1/8 | External thread | 3.5 | 470 | R412010587 |
| Ø 8 | Push-in fitting | G 1/4 | External thread | 4.5 | 490 | R412010589 |
| Ø 8 | Push-in fitting | G 3/8 | External thread | 6.6 | 870 | R412010591 |
| Ø 10 | Push-in fitting | G 1/4 | External thread | 4.5 | 520 | R412010590 |
| Ø 10 | Push-in fitting | G 3/8 | External thread | 6.6 | 1130 | R412010592 |
| Ø 10 | Push-in fitting | G 1/2 | External thread | 6.6 | 1670 | R412010594 |
| Ø 12 | Push-in fitting | G 3/8 | External thread | 6.6 | 1210 | R412010593 |
| Ø 12 | Push-in fitting | G 1/2 | External thread | 6.6 | 1950 | R412010595 |

Dimensions



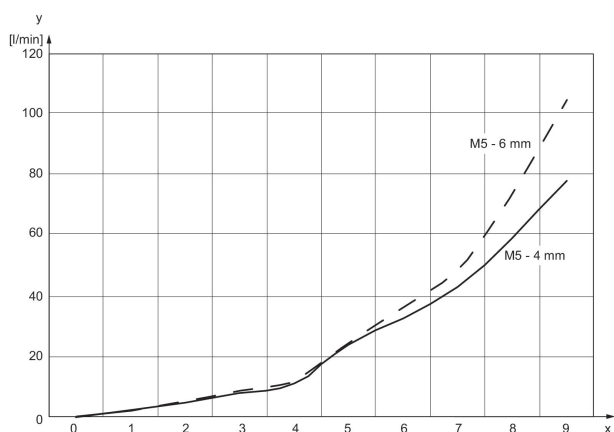
1) Recommended tightening torque M_A : M 5: 1.1 Nm -0.2 G 1/8: 3.0 Nm -0.3 G 1/4: 6.0 Nm -0.6 G 3/8: 8.0 Nm -1.0 G 1/2: 10.0 Nm -1.0

| Part No. | Port 1 | Port 2 | $\varnothing B$ | C | D | $\varnothing E$ | F | K | H |
|------------|------------------|--------|-----------------|------|-----|-----------------|------|------|------|
| R412010581 | $\varnothing 4$ | M5 | 4 | 21.8 | 4 | 9 | 15.9 | 20.4 | 12 |
| R412010582 | $\varnothing 6$ | M5 | 6 | 21.8 | 4 | 11.1 | 17.2 | 21.8 | 13 |
| R412010585 | $\varnothing 4$ | G 1/8 | 4 | 28.5 | 5.5 | 11.5 | 21.9 | 28.8 | 21 |
| R412010586 | $\varnothing 6$ | G 1/8 | 6 | 28.5 | 5.5 | 13.5 | 22.4 | 29.3 | 21.7 |
| R412010587 | $\varnothing 8$ | G 1/8 | 8 | 28.5 | 5.5 | 15.5 | 24.2 | 31.1 | 22.7 |
| R412010588 | $\varnothing 6$ | G 1/4 | 6 | 33.6 | 6.5 | 13 | 24.3 | 33.5 | 25.3 |
| R412010589 | $\varnothing 8$ | G 1/4 | 8 | 33.6 | 6.5 | 15.5 | 26.6 | 35.5 | 25.3 |
| R412010590 | $\varnothing 10$ | G 1/4 | 10 | 33.6 | 6.5 | 18.1 | 29.2 | 38.1 | 26.7 |
| R412010591 | $\varnothing 8$ | G 3/8 | 8 | 40.8 | 7 | 15.6 | 28.2 | 40.6 | 23.6 |
| R412010592 | $\varnothing 10$ | G 3/8 | 10 | 40.8 | 7 | 19 | 32 | 43.3 | 33.5 |
| R412010593 | $\varnothing 12$ | G 3/8 | 12 | 40.8 | 7 | 22.1 | 34.2 | 45.4 | 35.6 |
| R412010594 | $\varnothing 10$ | G 1/2 | 10 | 47.8 | 8.3 | 19.2 | 34 | 47.7 | 41.4 |
| R412010595 | $\varnothing 12$ | G 1/2 | 12 | 47.8 | 8.3 | 22 | 36.1 | 49.8 | 43.9 |

| Part No. | l | Ø J | SW |
|------------|------|------|----|
| R412010581 | 7.5 | 8.7 | 7 |
| R412010582 | 7.5 | 8.7 | 7 |
| R412010585 | 9.8 | 13.6 | 10 |
| R412010586 | 9.8 | 13.6 | 10 |
| R412010587 | 9.8 | 13.6 | 10 |
| R412010588 | 12.8 | 17.6 | 13 |
| R412010589 | 11.5 | 17.6 | 13 |
| R412010590 | 11.5 | 17.6 | 13 |
| R412010591 | 15.8 | 22.2 | 16 |
| R412010592 | 16.4 | 22.2 | 16 |
| R412010593 | 17.8 | 22.2 | 16 |
| R412010594 | 20.3 | 26.6 | 18 |
| R412010595 | 21.5 | 26.6 | 18 |

Flow diagram

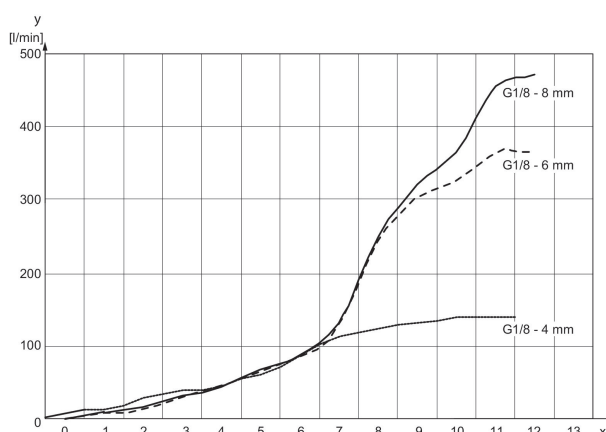
M5



x = rotations of the throttle screw y = flow rate Qn

Flow diagram

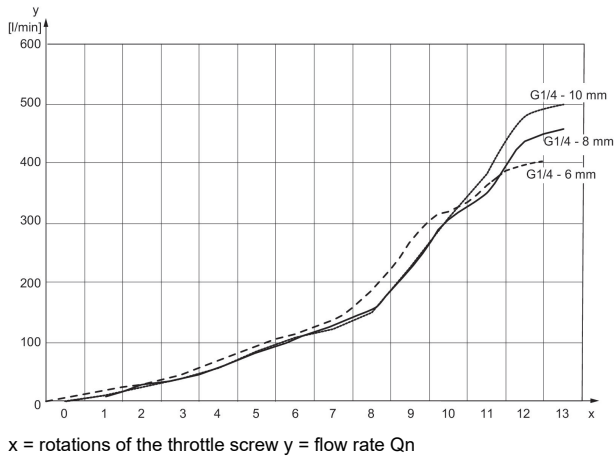
G 1/8



x = rotations of the throttle screw y = flow rate Qn

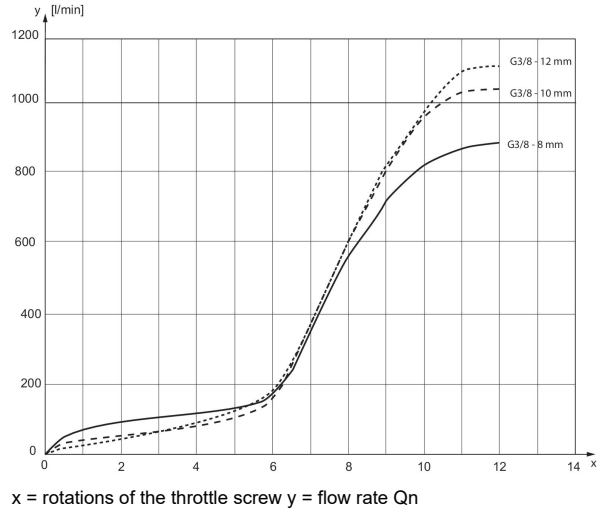
Flow diagram

G 1/4



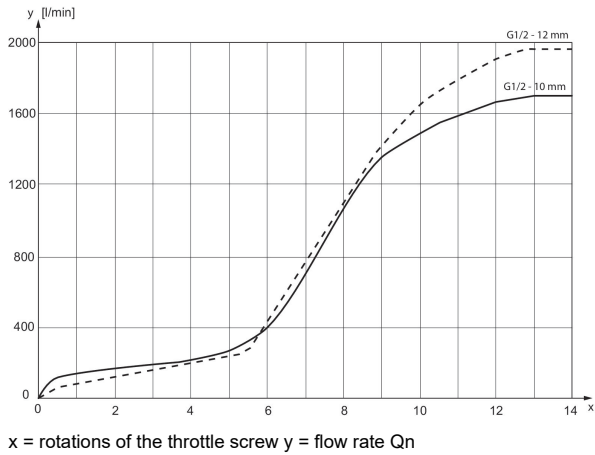
Flow diagram

G 3/8



Flow diagram





G 1/2



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control valves



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