Rexroth
Bosch Group

Preparation of compressed air → Maintenance units and components

Series NL1

Brochure

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Accessories

Preparation of compressed air → Maintenance units and components

Series NL1

	Panel nut, Series NL2-W06	**68**
	Pressure gauges, Series PG1-SNL ► For panel installation ► Background color: Black ► Scale color: Green / White ► Viewing window: Polystyrene	**68**

Maintenance unit, 2-part, Series NL1-ACD

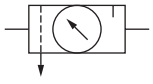
► G 1/8 - G 1/4 ► filter porosity: 5 µm ► with pressure gauge ► ATEX certified

00106889

ATEX	II 2G2D X
Maintenance Unit	2-in-1, Can be assembled into blocks
Parts	Filter pressure regulator, Micro oil-mist lubricator
Regulator type	Diaphragm-type pressure regulator
Regulator function	with relieving air exhaust
Pressure supply	single
Installation location	vertical
Nominal flow Qn	600 l/min
Ambient temperature min./max.	-10 °C / +60 °C
Medium temperature min./max.	-10 °C / +60 °C
Working pressure min./max.	1.5 bar / 16 bar
Adjustment range min./max.	0.5 bar / 10 bar
Medium	Compressed air
Filter element	exchangeable
Filter reservoir volume	16 cm³
Condensate drain	See table below
Type of filling	Manual oil filling
Oil type	HLP 32 (DIN 51 524 - ISO VG 32) HLP 68 (DIN 51 524 - ISO VG 68)
Lubricator reservoir volume	35 cm³
Materials:	
Housing	Die cast zinc
Seal	Acrylonitrile Butadiene Rubber
Filter insert	Polyethylene

Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- Oil dosing at 1000 l/min [drops/min]: 10-20
- Max. particle count as per ISO 8573-4 at the outlet: 5 mg/m³

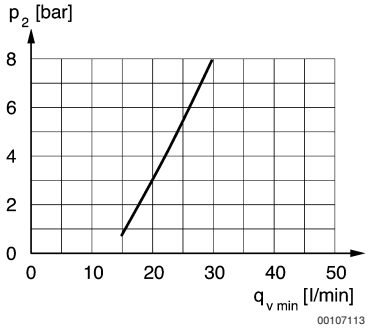
	Port	Condensate drain	Weight	Note	Part No.
			[kg]		
	G 1/8	semi-automatic, open without pressure	0.564	1)	**0821300727**
	G 1/8	semi-automatic, open without pressure	0.645	2)	**0821300728**
	G 1/8	fully automatic, open without pressure	0.617	1)	0821300729
	G 1/4	semi-automatic, open without pressure	0.564	1)	**0821300730**
	G 1/4	semi-automatic, open without pressure	0.645	2)	**0821300731**
	G 1/4	fully automatic, open without pressure	0.617	1)	**0821300732**

nominal flow Qn with secondary pressure 6 bar at Δp = 1 bar
Metal protective guard can be retrofitted for all polycarbonate reservoirs
1) Reservoir: Polycarbonate
2) Reservoir: Die cast zinc

Maintenance unit, 2-part, Series NL1-ACD

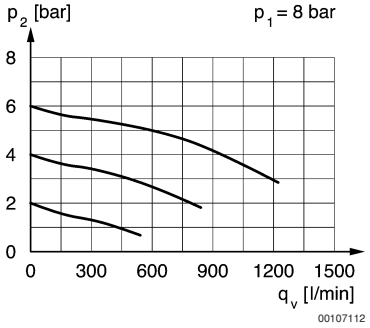
► G 1/8 - G 1/4 ► filter porosity: 5 µm ► with pressure gauge ► ATEX certified

minimum flow rate curve (flow rate necessary for the correct functioning of the lubricator)



p2 = secondary pressure; qvmin. = min. nominal flow

Flow rate characteristic

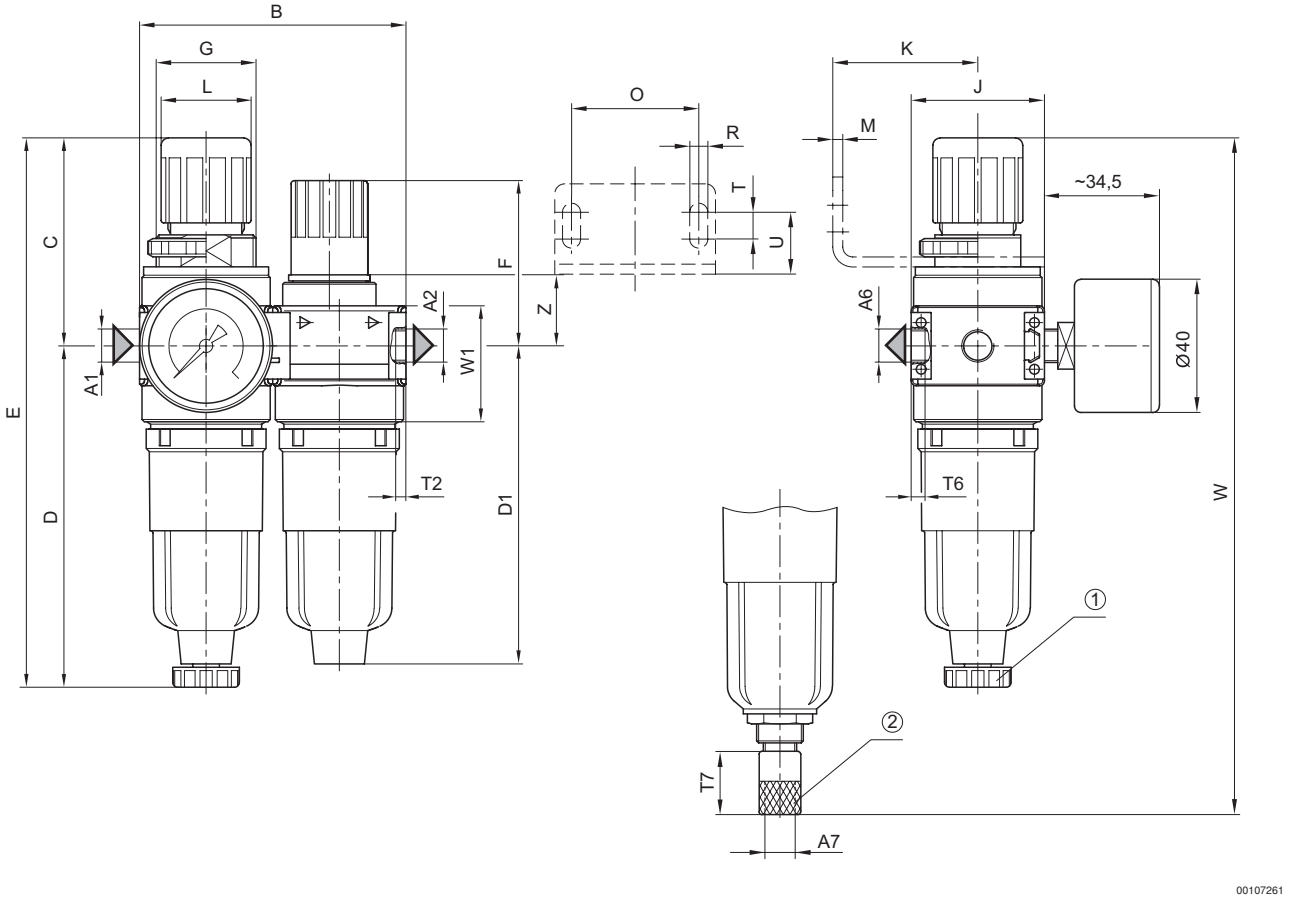


p1 = working pressure; p2 = secondary pressure; qv = nominal flow

Maintenance unit, 2-part, Series NL1-ACD

► G 1/8 - G 1/4 ► filter porosity: 5 µm ► with pressure gauge ► ATEX certified

Dimensions



1) Semi-automatic condensate drain
2) fully automatic condensate drain

A1	A2	A6	A7	B	C	D	D1	E	F	G	J	K	L
G 1/8	G 1/8	G 1/8	G 1/8	80	62.5	102.5	95.5	165	50	M30x1,5	40	43.5	27
G 1/4	G 1/4	G 1/8	G 1/8	80	62.5	102.5	95.5	165	50	M30x1,5	40	43.5	27

A1	M	O	R	T	T2	T6	T7	U	W	W1	Z		
G 1/8	3	38	5.4	8	8	6	8.5	18.5	203	35	24.5		
G 1/4	3	38	5.4	8	8	6	8.5	18.5	203	35	24.5		

Maintenance unit, 3-part, Series NL1-ACT

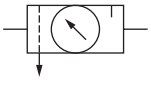
► G 1/8 - G 1/4 ► filter porosity: 5 µm ► with pressure gauge ► ATEX certified

00106890

ATEX	II 2G2D X
Maintenance Unit	3-part, Can be assembled into blocks
Parts	Pressure controller, Filter, Micro oil-mist lubricator
Regulator type	Diaphragm-type pressure regulator
Regulator function	with relieving air exhaust
Pressure supply	single
Installation location	vertical
Nominal flow Qn	450 l/min
Ambient temperature min./max.	-10 °C / +60 °C
Medium temperature min./max.	-10 °C / +60 °C
Working pressure min./max.	1.5 bar / 16 bar
Adjustment range min./max.	0.5 bar / 10 bar
Medium	Compressed air
Filter element	exchangeable
Filter reservoir volume	16 cm³
Condensate drain	See table below
Type of filling	Manual oil filling
Oil type	HLP 32 (DIN 51 524 - ISO VG 32) HLP 68 (DIN 51 524 - ISO VG 68)
Lubricator reservoir volume	35 cm³
Materials:	
Housing	Die cast zinc
Seal	Acrylonitrile Butadiene Rubber
Filter insert	Polyethylene

Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- Oil dosing at 1000 l/min [drops/min]: 10-20
- Max. particle count as per ISO 8573-4 at the outlet: 5 mg/m³

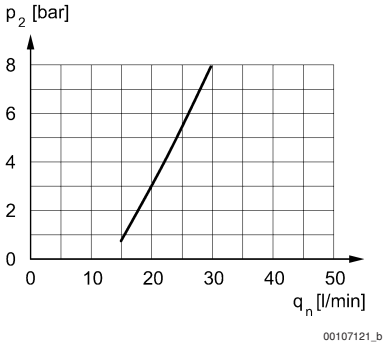
	Port	Condensate drain	Weight	Note	Part No.
			[kg]		
	G 1/8	semi-automatic, open without pressure	0.734	1)	**0821300721**
	G 1/8	semi-automatic, open without pressure	0.815	2)	0821300722
	G 1/8	fully automatic, open without pressure	0.787	1)	0821300723
	G 1/4	semi-automatic, open without pressure	0.734	1)	**0821300724**
	G 1/4	semi-automatic, open without pressure	0.815	2)	0821300725
	G 1/4	fully automatic, open without pressure	0.787	1)	0821300726

nominal flow Qn with secondary pressure 6 bar at Δp = 1 bar
Metal protective guard can be retrofitted for all polycarbonate reservoirs
1) Reservoir: Polycarbonate
2) Reservoir: Die cast zinc

Maintenance unit, 3-part, Series NL1-ACT

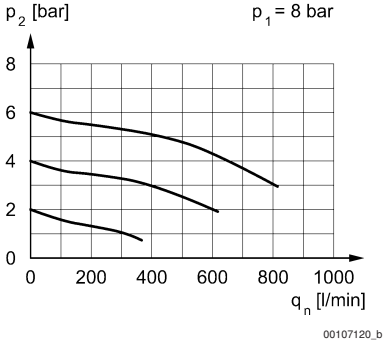
► G 1/8 - G 1/4 ► filter porosity: 5 µm ► with pressure gauge ► ATEX certified

minimum flow rate curve (flow rate necessary for the correct functioning of the lubricator)



p2 = secondary pressure
qn = nominal flow

Flow rate characteristic

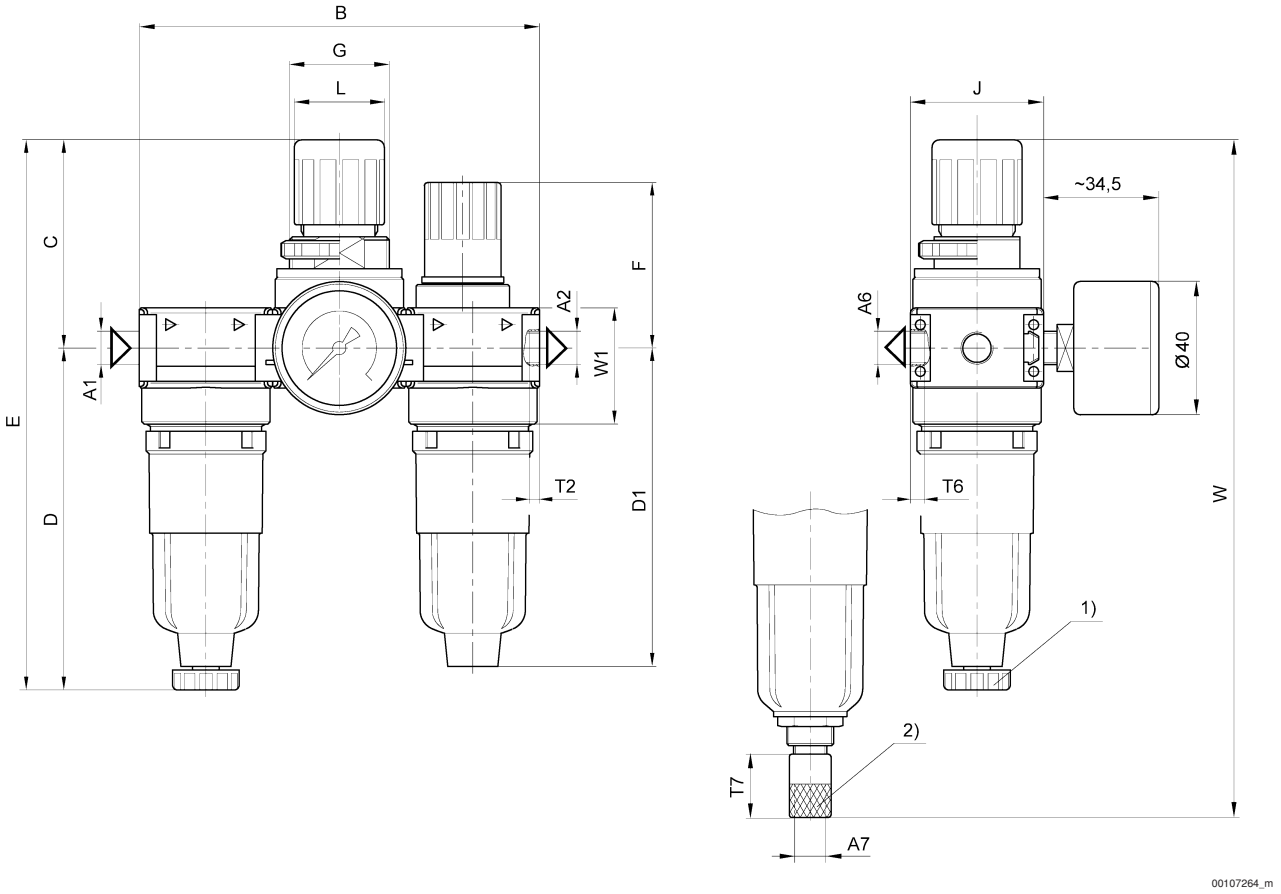


p1 = working pressure; p2 = secondary pressure; qn = nominal flow

Maintenance unit, 3-part, Series NL1-ACT

► G 1/8 - G 1/4 ► filter porosity: 5 µm ► with pressure gauge ► ATEX certified

Dimensions



1) Semi-automatic condensate drain
2) fully automatic condensate drain

A1	A2	A5	A6	A7	B	C	D	D1	E	F	G	J	L
G 1/8	G 1/8	G 1/8	G 1/8	G 1/8	120	65.5	102.5	95.5	168	50	M30x1,5	40	27
G 1/4	G 1/4	G 1/8	G 1/8	G 1/8	120	65.5	102.5	95.5	168	50	M30x1,5	40	27

A1	M	T2	T6	T7	W	W1							
G 1/8	3	8	6	8.5	206	35							
G 1/4	3	8	6	8.5	206	35							

Pressure regulator, Series NL1-RGS

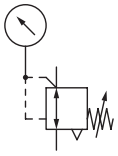
► G 1/8 - G 1/4 ► Qn=600 l/min ► Activation: mechanical ► ATEX certified

00107353

ATEX	II 2G2D X
Regulator type	Diaphragm-type pressure regulator, Can be assembled into blocks
Function	with relieving air exhaust
Installation location	Any
Pressure supply	single
Ambient temperature min./max.	-10 °C / +60 °C
Medium temperature min./max.	-10 °C / +60 °C
Working pressure min./max.	0.5 bar / 16 bar
Adjustment range min./max.	See table below
Medium	Compressed air
Materials:	
Housing	Die cast zinc
Seal	Acrylonitrile Butadiene Rubber

Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- lockable regulator head
- Recommended pre-filtering: 5 µm

		Port	Qn	Adjustment range min. - max..	Weight	Part No.
			[l/min]	[bar]	[kg]	
		G 1/8	600	0.1 - 3	0.294	**0821302728**
		G 1/8		0.2 - 6		**0821302729**
		G 1/8		0.5 - 10		**0821302730**
		G 1/4		0.1 - 3		**0821302734**
		G 1/4		0.2 - 6		**0821302735**
		G 1/4		0.5 - 10		**0821302736**
	-	G 1/8	600	0.1 - 3	0.24	**0821302725**
		G 1/8		0.2 - 6		**0821302726**
		G 1/8		0.5 - 10		**0821302727**
		G 1/4		0.1 - 3		**0821302731**
		G 1/4		0.2 - 6		**0821302732**
		G 1/4		0.5 - 10		**0821302733**

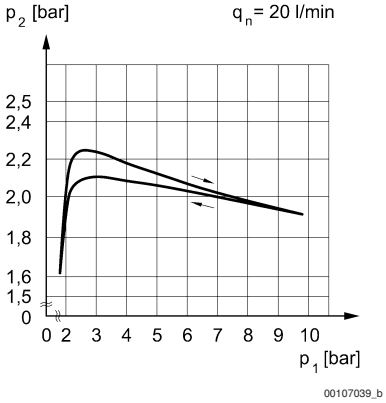
nominal flow Qn with secondary pressure 6 bar at Δp = 1 bar

Preparation of compressed air → Maintenance units and components

Pressure regulator, Series NL1-RGS

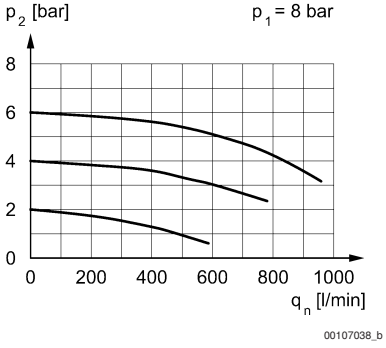
► G 1/8 - G 1/4 ► Qn=600 l/min ► Activation: mechanical ► ATEX certified

Pressure characteristics curve



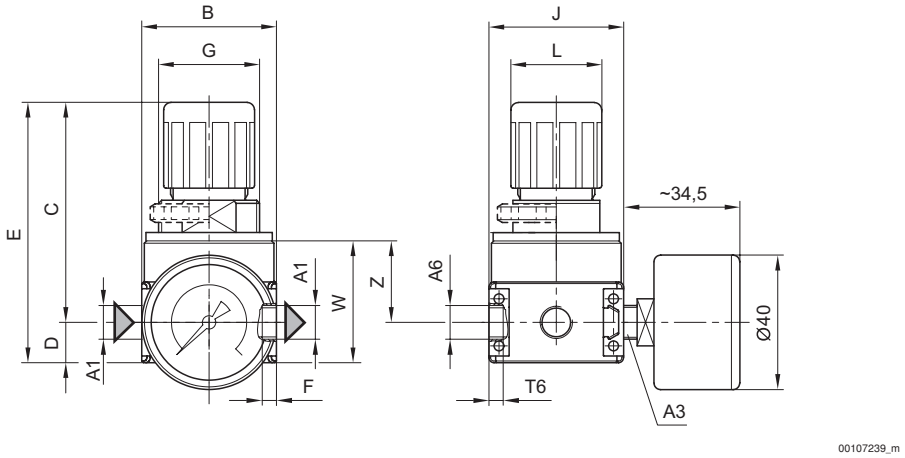
p1 = working pressure; p2 = secondary pressure; qn = nominal flow

Flow rate characteristic (setting range p2: 0.5 - 10 bar)



p1 = working pressure; p2 = secondary pressure; qn = nominal flow

Dimensions



Pressure regulator, Series NL1-RGS

► G 1/8 - G 1/4 ► Qn=600 l/min ► Activation: mechanical ► ATEX certified

A1	A2	A3	A6	B	C	D	E	G	J	L	T2	T6	W
G 1/8	G 1/8	G 1/8	G 1/8	40	65.5	12	77.5	M30x1,5	40	27	8	6	36.5
G 1/4	G 1/4	G 1/8	G 1/8	40	65.5	12	77.5	M30x1,5	40	27	8	6	36.5

A1	Z												
G 1/8	24.5												
G 1/4	24.5												

Pressure regulator, Series NL1-RGS

► G 1/4 ► Qn=1000 l/min ► with continuous pressure supply ► ATEX certified

00106878

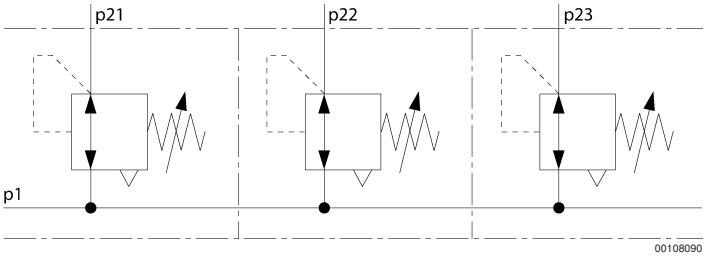
ATEX	II 2G2D X
Regulator type	Diaphragm-type pressure regulator, Can be assembled into blocks
Function	with relieving air exhaust
Installation location	Any
Pressure supply	double
Ambient temperature min./max.	-10°C / +60°C
Medium temperature min./max.	-10°C / +60°C
Working pressure min./max.	0.5 bar / 16 bar
Adjustment range min./max.	See table below
Medium	Compressed air
Materials:	
Housing	Die cast zinc

Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- Recommended pre-filtering: 5 µm

	Port	Qn	Adjustment range min. - max..	Weight	Part No.
		[l/min]	[bar]	[kg]	
	G 1/4	1000	0.1 - 3	0.26	**0821300711**
			0.2 - 6		**0821300712**
			0.5 - 10		**0821300713**
nominal flow Qn with secondary pressure 6 bar at Δp = 1 bar lockable regulator head					

Application example

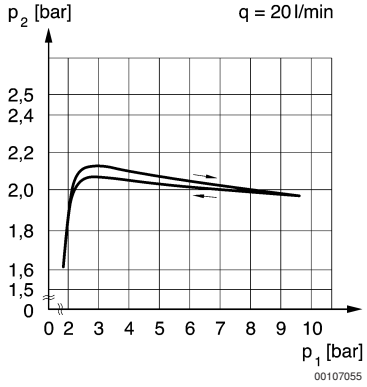


00108090

Pressure regulator, Series NL1-RGS

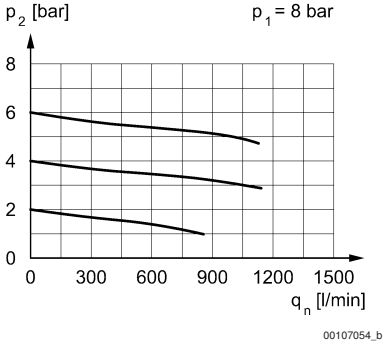
► G 1/4 ► Qn=1000 l/min ► with continuous pressure supply ► ATEX certified

Pressure characteristics curve



p1 = working pressure; p2 = secondary pressure; q = flow rate

Flow rate characteristic (setting range p2: 0.5 - 10 bar)

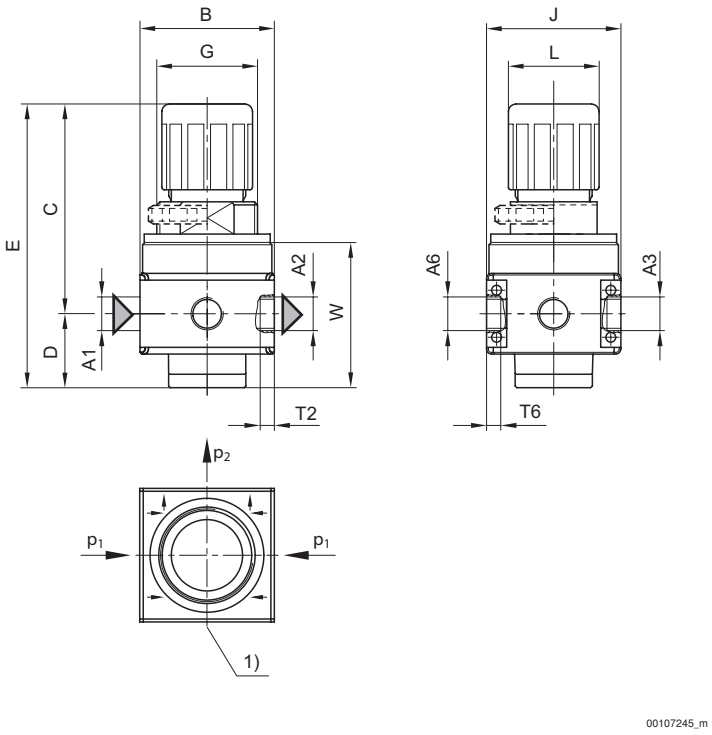


p1 = working pressure; p2 = secondary pressure; qn = nominal flow

Pressure regulator, Series NL1-RGS

► G 1/4 ► Qn=1000 l/min ► with continuous pressure supply ► ATEX certified

Dimensions



1) pressure gauge connection
p1 = working pressure
p2 = secondary pressure

A1	A2	A3	A6	B	C	D	E	G	J	K	L	M	T2
G 1/4	G 1/4	G 1/8	G 1/4	40	62.5	22	84.5	M30x1,5	40	43.5	27	3	8

A1	T6	W											
G 1/4	6	45.5											

Pressure regulator, Series NL1-RGS

► G 1/4 ► Qn=1000 l/min ► Activation: mechanical ► cold-resistant ► ATEX certified

00129369

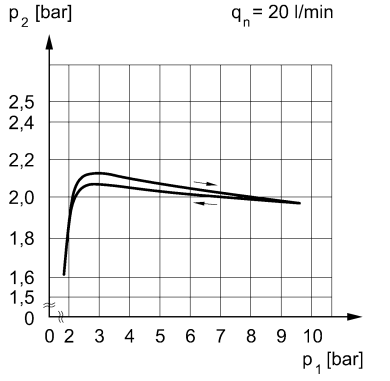
ATEX	II 2G2D X
Regulator type	Diaphragm-type pressure regulator, Can be assembled into blocks
Regulator function	with relieving air exhaust
Installation location	Any
Pressure supply	single
Ambient temperature min./max.	-30 °C / +50 °C
Medium temperature min./max.	-30 °C / +50 °C
Working pressure min./max.	0.5 bar / 16 bar
Adjustment range min./max.	0.5 bar / 10 bar
Medium	Compressed air
Materials:	
Housing	Die cast zinc
Seal	Chloroprene rubber

Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- Recommended pre-filtering: 5 µm

	Port	Qn	Weight	Part No.
		[l/min]	[kg]	
	G 1/4	1000	0.26	**R412007620**
nominal flow Qn with secondary pressure 6 bar at Δp = 1 bar				

Pressure characteristics curve



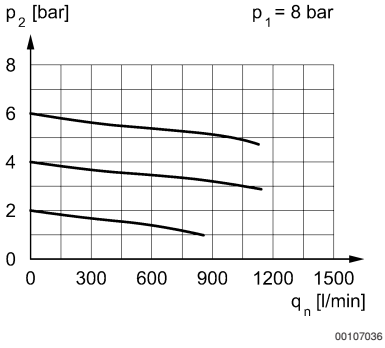
00107037

p1 = working pressure; p2 = secondary pressure; qn = nominal flow

Pressure regulator, Series NL1-RGS

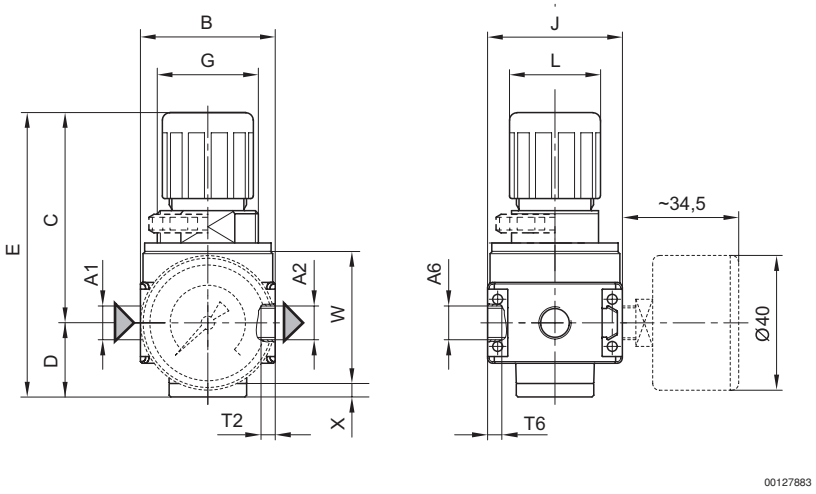
► G 1/4 ► Qn=1000 l/min ► Activation: mechanical ► cold-resistant ► ATEX certified

Flow rate characteristic (setting range p2: 0.5 - 10 bar)



p1 = working pressure; p2 = secondary pressure; qn = nominal flow

Dimensions



A1	A2	A6	B	C	D	E	G	J	K	L	M	O	R
G 1/4	G 1/4	G 1/8	40	62.5	22	84.5	M30x1,5	40	43.5	27	3	38	5.4

A1	T	T2	T6	U	W	X							
G 1/4	8	8	6	18.5	39.5	4							

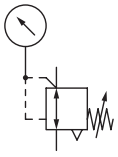
Pressure regulator, Series NL1-RGS

► G 1/8 - G 1/4 ► Qn=1000 l/min ► Activation: mechanical ► ATEX certified

ATEX	II 2G2D X
Regulator type	Diaphragm-type pressure regulator, Can be assembled into blocks
Function	with relieving air exhaust
Installation location	Any
Pressure supply	single
Ambient temperature min./max.	-10 °C / +60 °C
Medium temperature min./max.	-10 °C / +60 °C
Working pressure min./max.	0.5 bar / 16 bar
Adjustment range min./max.	See table below
Medium	Compressed air
Materials:	
Housing	Die cast zinc
Seal	Acrylonitrile Butadiene Rubber

Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- Recommended pre-filtering: 5 µm

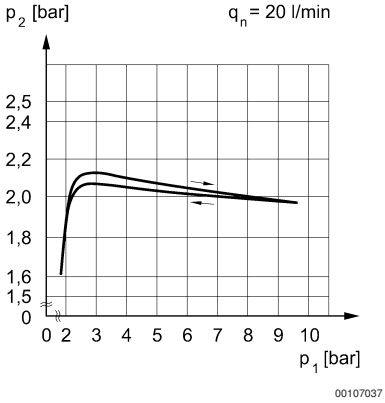
		Port	Qn	Adjustment range min. - max..	Weight	Part No.
			[l/min]	[bar]	[kg]	
		G 1/8	1000	0.1 - 3	0.314	**0821302708**
		G 1/8		0.2 - 6		**0821302709**
		G 1/8		0.5 - 10		**0821302710**
		G 1/4		0.1 - 3		**0821302714**
		G 1/4		0.2 - 6		**0821302715**
		G 1/4		0.5 - 10		**0821302716**
	-	G 1/8	1000	0.1 - 3	0.26	**0821302705**
		G 1/8		0.2 - 6		**0821302706**
		G 1/8		0.5 - 10		**0821302707**
		G 1/4		0.1 - 3		**0821302711**
		G 1/4		0.2 - 6		**0821302712**
		G 1/4		0.5 - 10		**0821302713**

nominal flow Qn with secondary pressure 6 bar at Δp = 1 bar

Pressure regulator, Series NL1-RGS

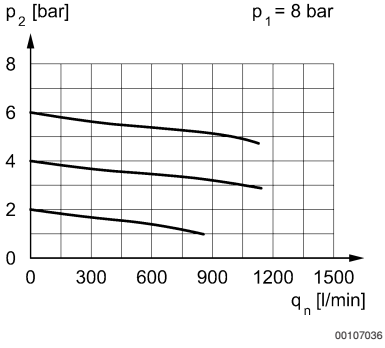
► G 1/8 - G 1/4 ► Qn=1000 l/min ► Activation: mechanical ► ATEX certified

Pressure characteristics curve



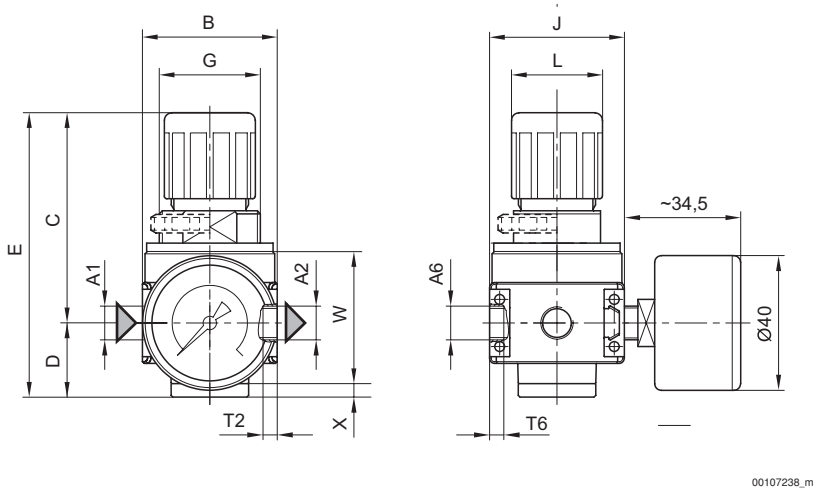
p1 = working pressure; p2 = secondary pressure; qn = nominal flow

Flow rate characteristic (setting range p2: 0.5 - 10 bar)



p1 = working pressure; p2 = secondary pressure; qn = nominal flow

Dimensions



Pressure regulator, Series NL1-RGS

► G 1/8 - G 1/4 ► Qn=1000 l/min ► Activation: mechanical ► ATEX certified

A1	A2	A6	B	C	D	E	G	J	K	L	M	O	R
G 1/8	G 1/8	G 1/8	40	62.5	22	84.5	M30x1,5	40	43.5	27	3	38	5.4
G 1/4	G 1/4	G 1/8	40	62.5	22	84.5	M30x1,5	40	43.5	27	3	38	5.4

A1	T	T2	T6	U	W	X							
G 1/8	8	8	6	18.5	39.5	4							
G 1/4	8	8	6	18.5	39.5	4							

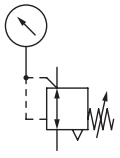
Pressure regulator, Series NL1-RGS

► G 1/8 - G 1/4 ► Qn=1000 l/min ► Activation: mechanical ► with pressure gauge in hand wheel ► ATEX certified

ATEX	II 2G2D X
Regulator type	Diaphragm-type pressure regulator, Can be assembled into blocks
Function	with relieving air exhaust
Installation location	Any
Pressure supply	single
Ambient temperature min./max.	-10°C / +60°C
Medium temperature min./max.	-10°C / +60°C
Working pressure min./max.	0.5 bar / 16 bar
Adjustment range min./max.	See table below
Medium	Compressed air
Materials:	
Housing	Die cast zinc
Seal	Acrylonitrile Butadiene Rubber

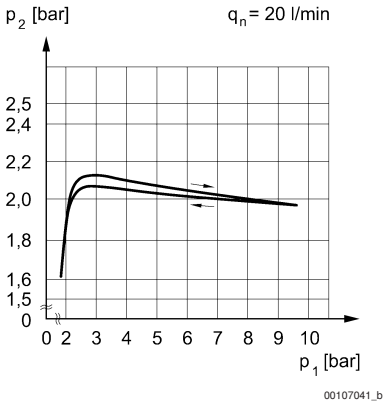
Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- Recommended pre-filtering: 5 µm

	Port	Qn	Adjustment range min. - max..	Weight	Part No.
		[l/min]	[bar]	[kg]	
	G 1/8	1000	0.1 - 3	0.35	**0821300663**
	G 1/8		0.2 - 6		**0821300664**
	G 1/8		0.5 - 10		**0821300665**
	G 1/4		0.1 - 3		**0821300666**
	G 1/4		0.2 - 6		**0821300667**
	G 1/4		0.5 - 10		**0821300668**

nominal flow Qn with secondary pressure 6 bar at Δp = 1 bar

Pressure characteristics curve

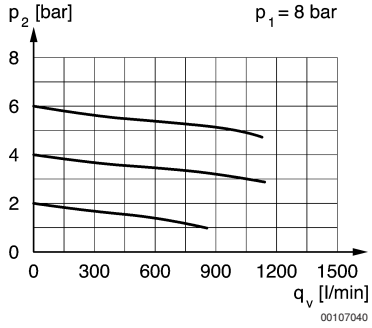


p1 = working pressure; p2 = secondary pressure; qn = nominal flow

Pressure regulator, Series NL1-RGS

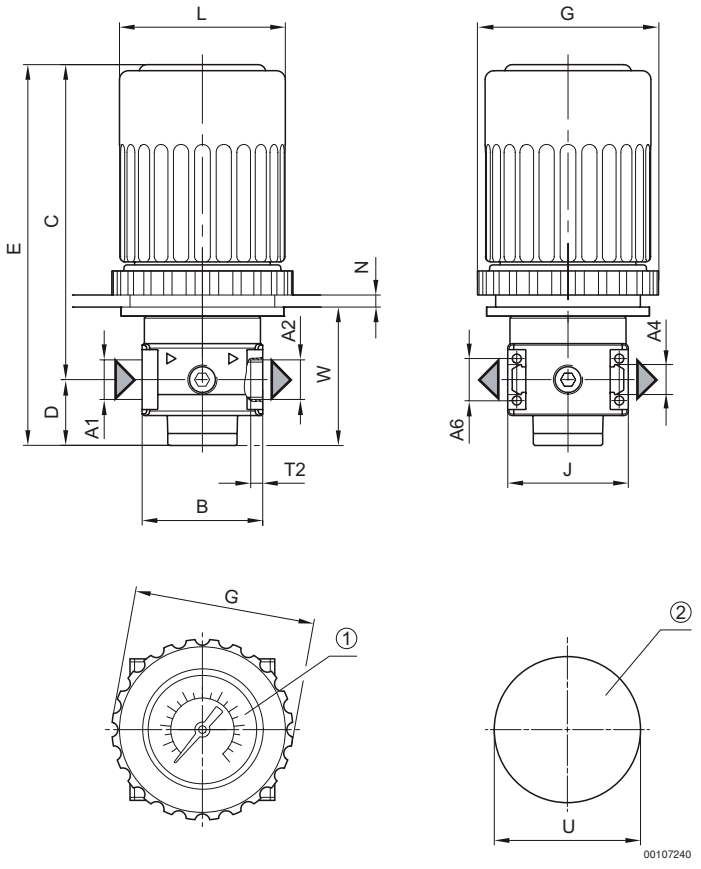
► G 1/8 - G 1/4 ► Qn=1000 l/min ► Activation: mechanical ► with pressure gauge in hand wheel ► ATEX certified

Flow rate characteristic (setting range p2: 0.5 - 10 bar)



p1 = working pressure; p2 = secondary pressure; qn = nominal flow

Dimensions



1) pressure gauge Ø 40
2) opening for control panel assembly
Panel nut included in scope of delivery

A1	A2	B	C	D	E	G	J	L	N	T2	U	W	
G 1/8	G 1/8	40	102	22	124	60	40	54	4	8	48.5	43	
G 1/4	G 1/4	40	102	22	124	60	40	54	4	8	48.5	43	

Preparation of compressed air → Maintenance units and components

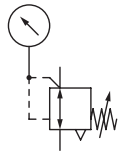
Pressure regulator, Series NL1-RGS

► G 1/4 ► Qn=1000 l/min ► Activation: mechanical ► with continuous pressure supply ► with pressure gauge in hand wheel ► ATEX certified

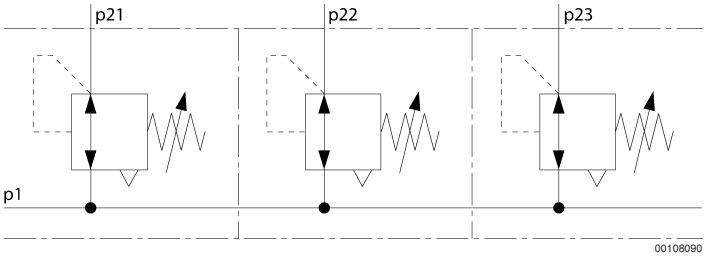
ATEX	II 2G2D X
Regulator type	Diaphragm-type pressure regulator, Can be assembled into blocks
Function	with relieving air exhaust
Installation location	Any
Pressure supply	single
Ambient temperature min./max.	-10°C / +50°C
Medium temperature min./max.	-10°C / +50°C
Working pressure min./max.	0.5 bar / 16 bar
Medium	Compressed air
Materials:	
Housing	Die cast zinc
Seal	Nitrile rubber

Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- Recommended pre-filtering: 5 µm

	Port	Qn	Adjustment range min. - max..	Weight	Part No.
		[l/min]	[bar]	[kg]	
	G 1/4	1000	0.2 - 6	0.35	**0821302743**
nominal flow Qn with secondary pressure 6 bar at Δp = 1 bar					

Application example



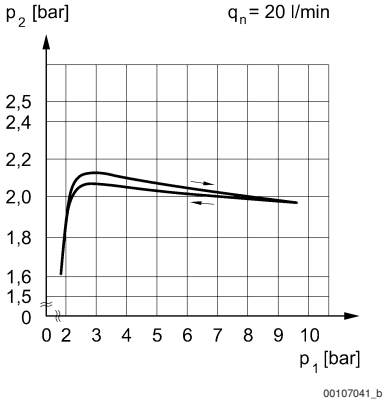
p1 = working pressure
p21; p22; p23 = secondary pressure

Preparation of compressed air → Maintenance units and components

Pressure regulator, Series NL1-RGS

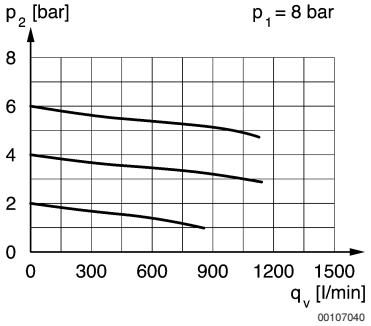
► G 1/4 ► Qn=1000 l/min ► Activation: mechanical ► with continuous pressure supply ► with pressure gauge in hand wheel ► ATEX certified

Pressure characteristics curve



p1 = working pressure; p2 = secondary pressure; qn = nominal flow

Flow rate characteristic (setting range p2: 0.5 - 6 bar)



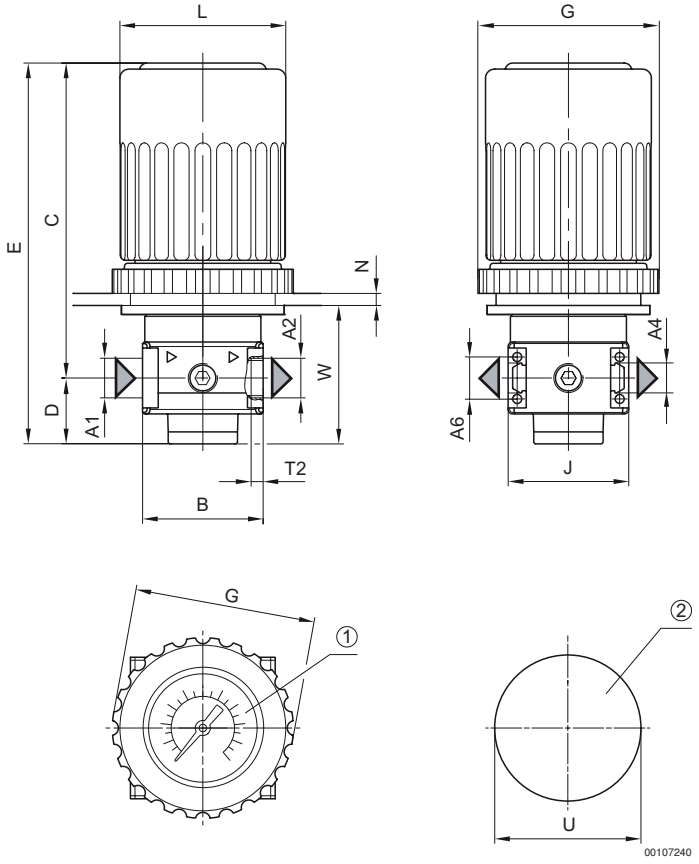
p1 = working pressure; p2 = secondary pressure; qn = nominal flow

Preparation of compressed air → Maintenance units and components

Pressure regulator, Series NL1-RGS

► G 1/4 ► Qn=1000 l/min ► Activation: mechanical ► with continuous pressure supply ► with pressure gauge in hand wheel ► ATEX certified

Dimensions



1) pressure gauge Ø 25
2) opening for control panel assembly
Panel nut included in scope of delivery

A1	A2	A4	A6	B	C	D	E	G	J	L	N	T2	U
G 1/4	G 1/4	G 1/8	G 1/4	40	90	22	112	40	40	33.6	4	8	31.5

A1	W
G 1/4	43

Filter pressure regulator, Series NL1-FRE

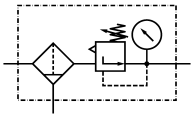
► G 1/8 - G 1/4 ► filter porosity: 5 µm ► ATEX certified

00108134

ATEX	II 2G2D X
Maintenance Unit	1-in-1, Can be assembled into blocks
Parts	Pressure controller, Filter
Regulator type	Diaphragm-type pressure regulator
Regulator function	with relieving air exhaust
Pressure supply	single
Installation location	vertical
Nominal flow Qn	950 l/min
Ambient temperature min./max.	-10 °C / +60 °C
Medium temperature min./max.	-10 °C / +60 °C
Working pressure min./max.	1.5 bar / 16 bar
Adjustment range min./max.	0.5 bar / 10 bar
Medium	Compressed air
Filter element	exchangeable
Filter reservoir volume	16 cm^3
Condensate drain	See table below
Materials:	
Housing	Die cast zinc
Seal	Acrylonitrile Butadiene Rubber
Filter insert	Polyethylene

Technical Remarks

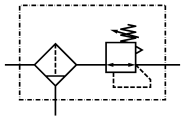
- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- lockable regulator head
- Max. particle count as per ISO 8573-4 at the outlet: 5 mg/m^3

		Port	Condensate drain	Weight [kg]	Note	Part No.
		G 1/8	semi-automatic, open without pressure	0.334	1)	**0821300750**
		G 1/8	semi-automatic, open without pressure	0.383	2)	**0821300751**
		G 1/8	fully automatic, open without pressure	0.387	1)	**0821300752**
		G 1/4	semi-automatic, open without pressure	0.334	1)	**0821300756**
		G 1/4	semi-automatic, open without pressure	0.383	2)	**0821300757**
		G 1/4	fully automatic, open without pressure	0.387	1)	**0821300758**

nominal flow Qn with secondary pressure 6 bar at Δp = 1 bar
Metal protective guard can be retrofitted for all polycarbonate reservoirs
1) Reservoir: Polycarbonate
2) Reservoir: Die cast zinc

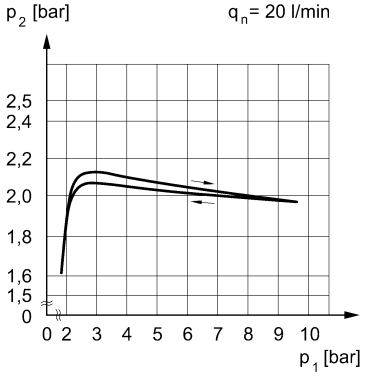
Filter pressure regulator, Series NL1-FRE

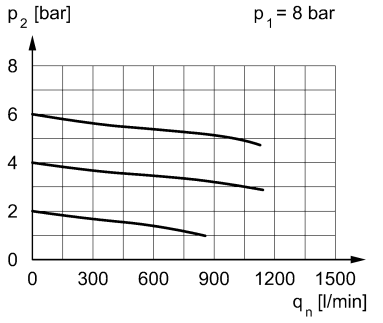
► G 1/8 - G 1/4 ► filter porosity: 5 µm ► ATEX certified

		Port	Condensate drain	Weight	Note	Part No.
				[kg]		
	-	G 1/8	semi-automatic, open without pressure	0.334	1)	**0821300753**
		G 1/8	semi-automatic, open without pressure	0.383	2)	0821300754
		G 1/8	fully automatic, open without pressure	0.387	1)	**0821300755**
		G 1/4	semi-automatic, open without pressure	0.334	1)	**0821300759**
		G 1/4	semi-automatic, open without pressure	0.383	2)	**0821300760**
		G 1/4	fully automatic, open without pressure	0.387	1)	**0821300761**

nominal flow Qn with secondary pressure 6 bar at Δp = 1 bar
Metal protective guard can be retrofitted for all polycarbonate reservoirs
1) Reservoir: Polycarbonate
2) Reservoir: Die cast zinc

Pressure characteristics curve, flow characteristics





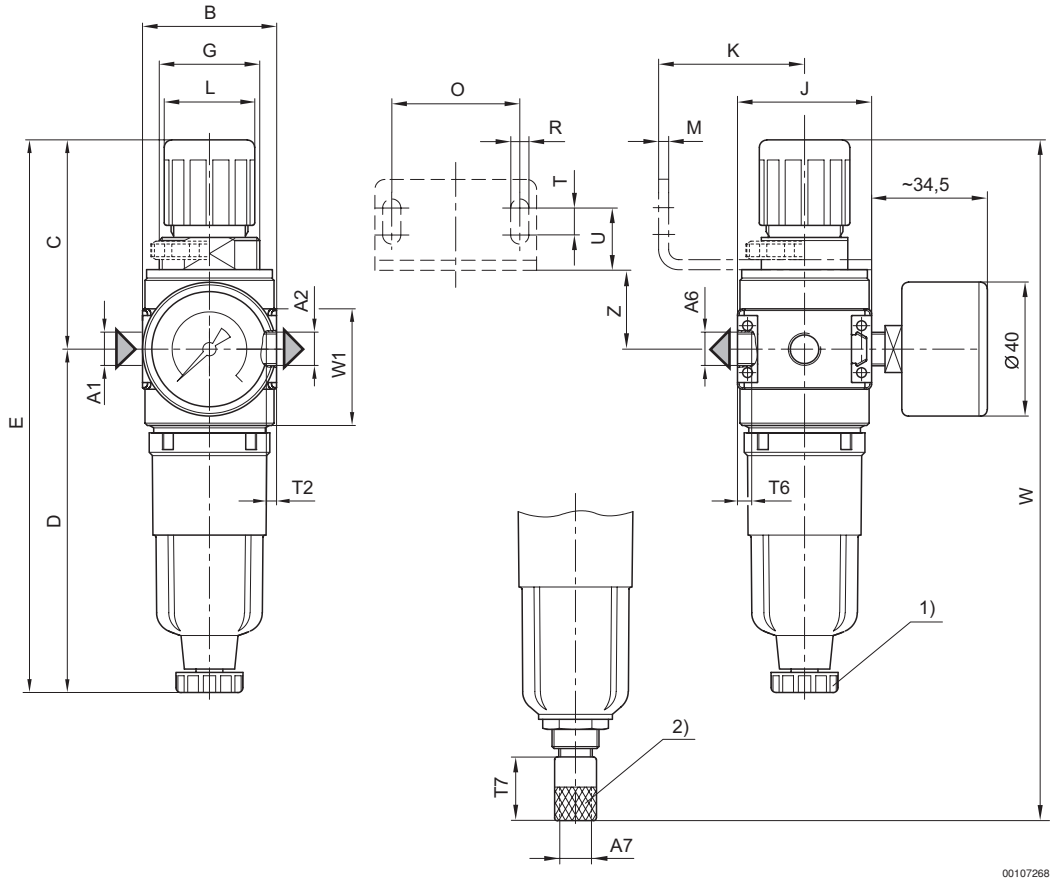
00112009

p1 = working pressure; p2 = secondary pressure; qn = nominal flow

Filter pressure regulator, Series NL1-FRE

► G 1/8 - G 1/4 ► filter porosity: 5 µm ► ATEX certified

Dimensions



1) Semi-automatic condensate drain
2) fully automatic condensate drain

A1	A2	A3	A6	A7	B	C	D	E	G	J	K	L	M
G 1/8	G 1/8	G 1/8	G 1/8	G 1/8	40	62.5	102.5	165	M30x1,5	40	43.5	27	3
G 1/4	G 1/4	G 1/8	G 1/8	G 1/8	40	62.5	102.5	165	M30x1,5	40	43.5	27	3

A1	O	R	T	T2	T6	T7	U	W	W1	Z			
G 1/8	38	5.4	8	8	6	8.5	18.5	203	44	24.5			
G 1/4	38	5.4	8	8	6	8.5	18.5	203	44	24.5			

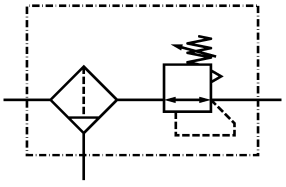
Filter pressure regulator, Series NL1-FRE

► G 1/8 - G 1/4 ► filter porosity: 5 µm ► cold-resistant

00106884

ATEX	II 2G2D X
Maintenance Unit	2-in-1, Can be assembled into blocks
Parts	Pressure controller, Filter
Regulator type	Diaphragm-type pressure regulator
Regulator function	with relieving air exhaust
Pressure supply	single
Installation location	vertical
Nominal flow Qn	950 l/min
Ambient temperature min./max.	-30 °C / +50 °C
Medium temperature min./max.	-30 °C / +50 °C
Working pressure min./max.	1.5 bar / 16 bar
Adjustment range min./max.	0.5 bar / 10 bar
Medium	Compressed air
Filter element	exchangeable
Filter reservoir volume	16 cm³
Condensate drain	semi-automatic, open without pressure
Materials:	
Housing	Die cast zinc
Reservoir	Polycarbonate
Filter insert	Polyethylene

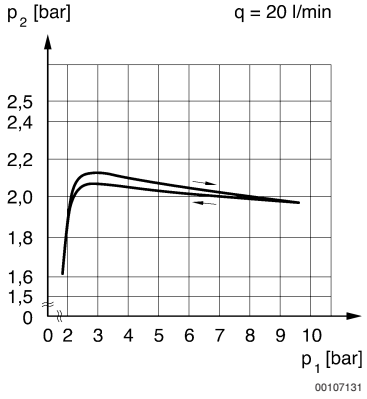
Technical Remarks
■ The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
■ Max. particle count as per ISO 8573-4 at the outlet: 5 mg/m³

	Port	Weight [kg]	Part No.
	G 1/8	0.334	R412007618
	G 1/4		R412007619
Reservoir: Polycarbonate Metal protective guard can be retrofitted for all polycarbonate reservoirs nominal flow Qn with secondary pressure 6 bar at Δp = 1 bar			

Filter pressure regulator, Series NL1-FRE

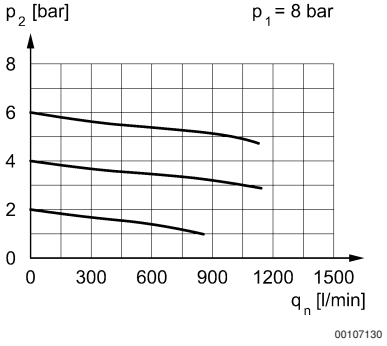
► G 1/8 - G 1/4 ► filter porosity: 5 µm ► cold-resistant

Pressure characteristics curve



p1 = working pressure; p2 = secondary pressure; q = flow rate

Flow rate characteristic

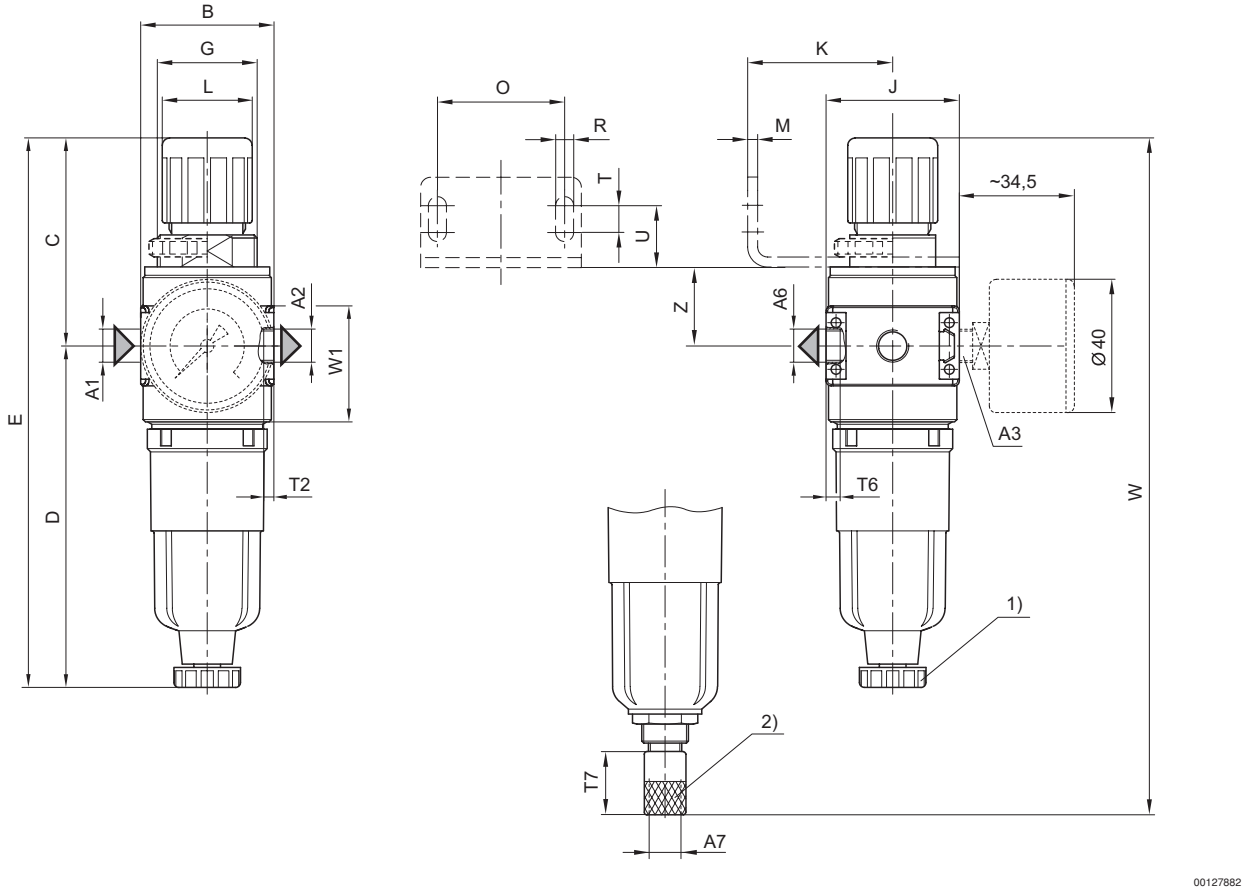


p1 = working pressure; p2 = secondary pressure; qn = nominal flow

Filter pressure regulator, Series NL1-FRE

► G 1/8 - G 1/4 ► filter porosity: 5 µm ► cold-resistant

Dimensions



1) Semi-automatic condensate drain
2) fully automatic condensate drain

A1	A2	A3	A6	A7	B	C	D	E	G	J	K	L	M
G 1/8	G 1/8	G 1/8	G 1/8	G 1/8	40	62.5	102.5	165	M30x1,5	40	43.5	27	3
G 1/4	G 1/4	G 1/8	G 1/8	G 1/8	40	62.5	102.5	165	M30x1,5	40	43.5	27	3

A1	O	R	T	T2	T6	T7	U	W	W1	Z			
G 1/8	38	5.4	8	8	6	8.5	18.5	203	44	24.5			
G 1/4	38	5.4	8	8	6	8.5	18.5	203	44	24.5			

Filter, Series NL1-FLS

► G 1/8 - G 1/4 ► filter porosity: 5 µm ► ATEX certified

00106882

ATEX	II 2G2D X
Version	Standard filter, Can be assembled into blocks
Installation location	vertical
Ambient temperature min./max.	-10 °C / +60 °C
Medium temperature min./max.	-10 °C / +60 °C
Working pressure min./max.	1.5 bar / 16 bar
Medium	Compressed air
Filter element	exchangeable
filter porosity	5 μm
Filter reservoir volume	16 cm³
Materials:	
Housing	Die cast zinc
Seals	Acrylonitrile Butadiene Rubber
Filter insert	Polyethylene

Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- Max. particle count as per ISO 8573-4 at the outlet: 5 mg/m³
- solid impurities in the compressed air at the outlet as per ISO 8573-1: class 6

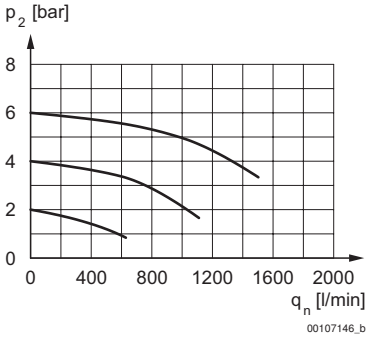
	Port	Qn	Condensate drain	Reservoir	Weight	Part No.
		[l/min]			[kg]	
	G 1/8	1000	semi-automatic, open without pressure	Polycarbonate	0.334	**0821303710**
	G 1/8		semi-automatic, open without pressure	Die cast zinc	0.259	0821303711
	G 1/8		fully automatic, open without pressure	Polycarbonate	0.263	**0821303712**
	G 1/4		semi-automatic, open without pressure	Polycarbonate	0.21	**0821303713**
	G 1/4		semi-automatic, open without pressure	Die cast zinc	0.259	**0821303714**
	G 1/4		fully automatic, open without pressure	Polycarbonate	0.263	**0821303715**

nominal flow Qn with secondary pressure 6 bar at Δp = 1 bar
Metal protective guard can be retrofitted for all polycarbonate reservoirs

Filter, Series NL1-FLS

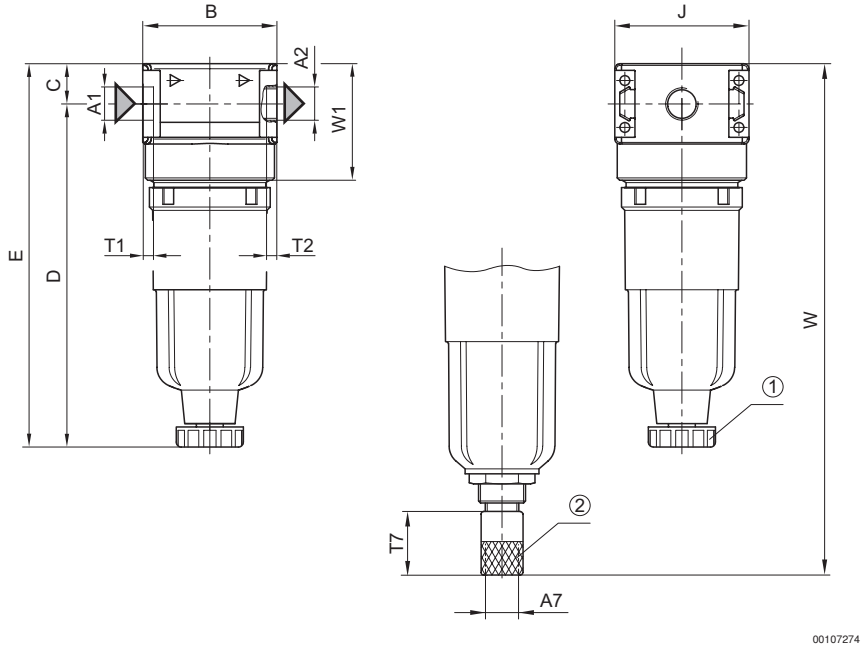
► G 1/8 - G 1/4 ► filter porosity: 5 µm ► ATEX certified

Flow rate characteristic



p2 = secondary pressure
qn = nominal flow

Dimensions



1) Semi-automatic condensate drain
2) fully automatic condensate drain

Part No.	A1	A2	A7	B	C	D	E	J	T1	T2	T7	W
0821303710	G 1/8	G 1/8	G 1/8	40	12.3	102.5	114.8	40	8	8	8.5	153
0821303711	G 1/8	G 1/8	G 1/8	40	12.3	102.5	114.8	40	8	8	8.5	153
0821303712	G 1/8	G 1/8	G 1/8	40	12.3	102.5	114.8	40	8	8	8.5	153
0821303713	G 1/4	G 1/4	G 1/8	40	12.3	102.5	114.8	40	8	8	8.5	153
0821303714	G 1/4	G 1/4	G 1/8	40	12.3	102.5	114.8	40	8	8	8.5	153
0821303715	G 1/4	G 1/4	G 1/8	40	12.3	102.5	114.8	40	8	8	8.5	153

Part No.	W1											
0821303710	35.1											
0821303711	35.1											

Part numbers marked in bold are available from the central warehouse in Germany, see the shopping basket for more detailed information

Filter, Series NL1-FLS

► G 1/8 - G 1/4 ► filter porosity: 5 µm ► ATEX certified

Part No.	W1											
0821303712	35.1											
0821303713	35.1											
0821303714	35.1											
0821303715	35.1											

Preparation of compressed air → Maintenance units and components

Microfilter, Series NL1-FLC

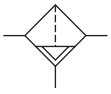
► G 1/8 - G 1/4 ► filter porosity: 0.01 µm ► ATEX certified

00108151

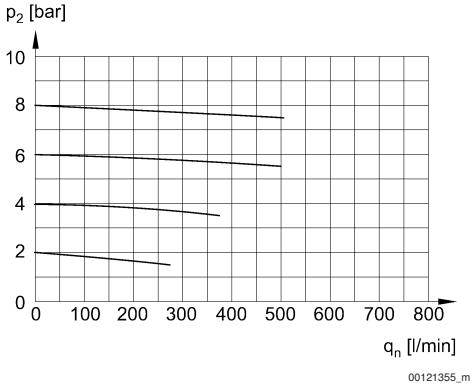
ATEX	II 2G2D T4 X
Version	Microfilter, Can be assembled into blocks
Installation location	vertical
Ambient temperature min./max.	-10°C / +60°C
Medium temperature min./max.	-10°C / +60°C
Working pressure min./max.	1.5 bar / 16 bar
Medium	Compressed air
Filter element	exchangeable
filter porosity	0.01 μm
Filter reservoir volume	16 cm³
Materials:	
Housing	Die cast zinc
Seals	Acrylonitrile Butadiene Rubber
Reservoir	Polycarbonate
Filter insert	Borosilicate glass fiber

Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- Residual oil content: 0.01 mg/m³
- Recommended pre-filtering: 5 μm
- solid impurities in the compressed air at the outlet as per ISO 8573-1: class 1

	Port	Qn	Condensate drain	Reservoir	
		[l/min]			
	G 1/8	170	semi-automatic, open without pressure	Polycarbonate	
	G 1/4	450	semi-automatic, open without pressure		
	G 1/8	170	fully automatic, open without pressure		
Nominal flow Qn at 6 bar and Δp = 0.1 bar.					

Flow rate characteristic G1/8



00121355_m

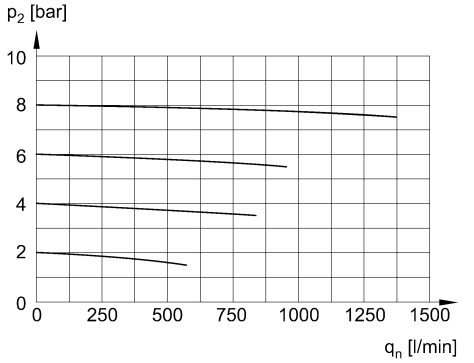
p2 = secondary pressure
qn = nominal flow

Part numbers marked in bold are available from the central warehouse in Germany, see the shopping basket for more detailed information

Microfilter, Series NL1-FLC

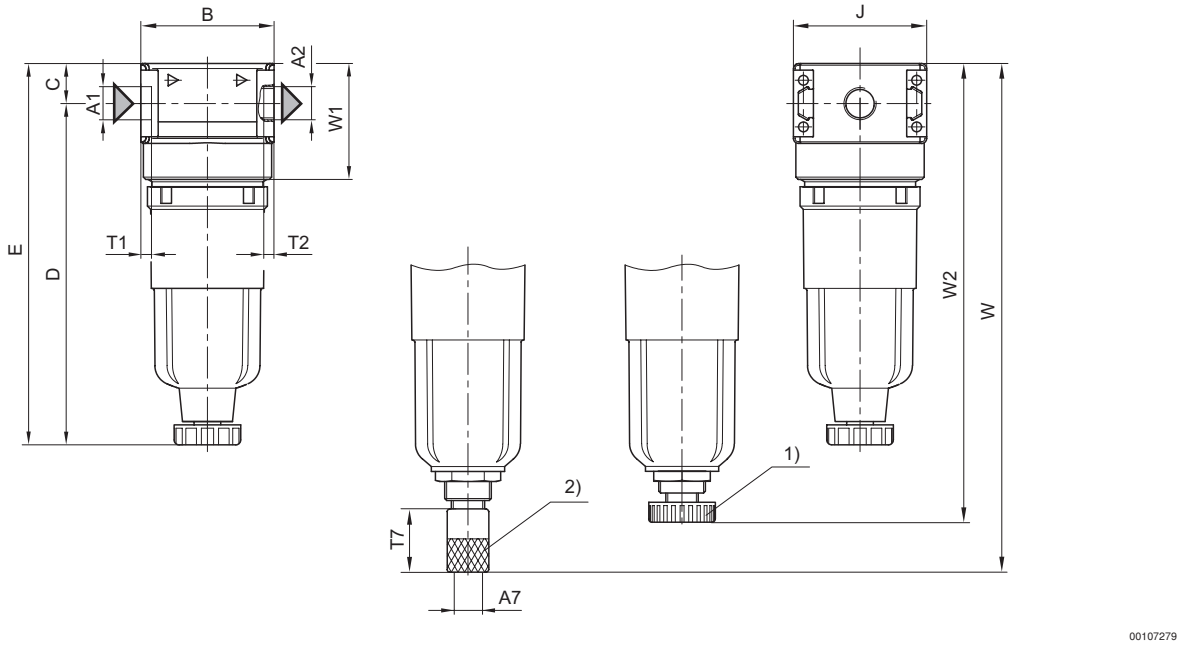
► G 1/8 - G 1/4 ► filter porosity: 0.01 µm ► ATEX certified

Flow rate characteristic G1/4



p2 = secondary pressure
qn = nominal flow

Dimensions



1) Semi-automatic condensate drain
2) fully automatic condensate drain

Active carbon filter, Series NL1-FLA

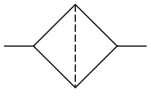
► G 1/8 - G 1/4 ► ATEX certified

00108148

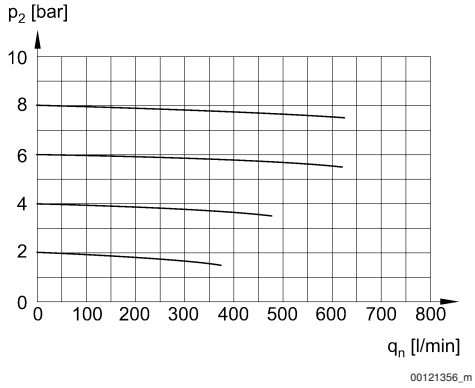
ATEX	II 2G2D X
Version	Active carbon filter, Can be assembled into blocks
Installation location	vertical
Ambient temperature min./max.	-10 °C / +60 °C
Medium temperature min./max.	-10 °C / +60 °C
Working pressure min./max.	0.5 bar / 16 bar
Medium	Compressed air
Filter element	exchangeable
Filter reservoir volume	16 cm³
Materials:	
Housing	Die cast zinc
Seals	Acrylonitrile Butadiene Rubber
Reservoir	Polycarbonate
Filter insert	Active carbon

Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- Recommended pre-filtering: 0.01 µm
- max. residual oil content at the outlet: 0.005 mg/m³
- solid impurities in the compressed air at the outlet as per ISO 8573-1: class 1

	Port	Qn	Reservoir	Weight	Part No.
		[l/min]		[kg]	
	G 1/8	310	Polycarbonate	0.19	**0821303720**
	G 1/4	380		0.21	**0821303721**
Nominal flow Qn at 6 bar and Δp = 0.1 bar. Metal protective guard can be retrofitted for all polycarbonate reservoirs					

Flow rate characteristic G1/8

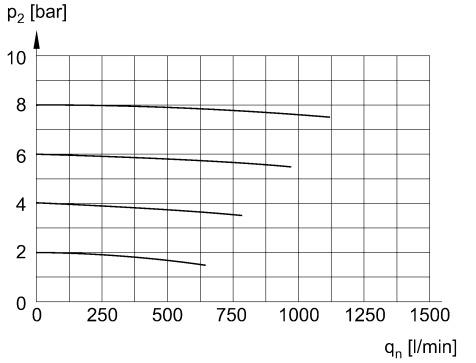


p2 = secondary pressure
qn = nominal flow

Active carbon filter, Series NL1-FLA

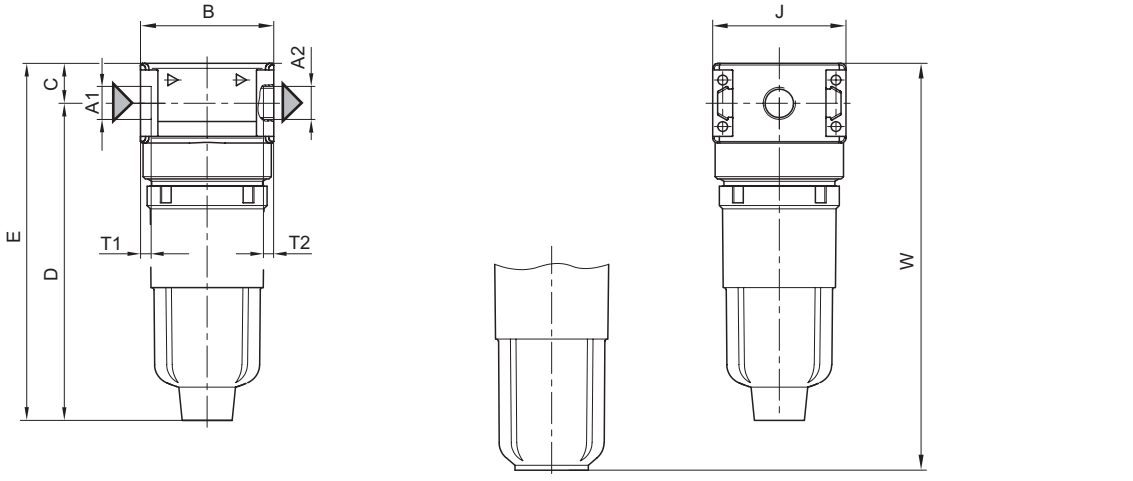
► G 1/8 - G 1/4 ► ATEX certified

Flow rate characteristic G1/4



p2 = secondary pressure
qn = nominal flow

Dimensions



Part No.	A1	A2	B	C	D	E	J	T1	T2	W		
0821303720	G 1/8	G 1/8	40	12.3	95.5	108	40	8	8	–		
0821303721	G 1/4	G 1/4	40	12.3	–	–	40	8	8	123		

Preparation of compressed air → Maintenance units and components

Micro oil-mist lubricator, Series NL1-LBM

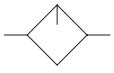
► G 1/8 - G 1/4 ► ATEX certified

00106885

ATEX	II 2G2D X
Version	Micro oil-mist lubricator, Can be assembled into blocks
Installation location	vertical
Ambient temperature min./max.	-10°C / +60°C
Medium temperature min./max.	-10°C / +60°C
Working pressure min./max.	0.5 bar / 16 bar
Medium	Compressed air
Lubricator reservoir volume	35 cm^3
Type of filling	Manual oil filling
Oil type	HLP 32 (DIN 51 524 - ISO VG 32) HLP 68 (DIN 51 524 - ISO VG 68)
Materials:	
Housing	Die cast zinc
Seal	Acrylonitrile Butadiene Rubber

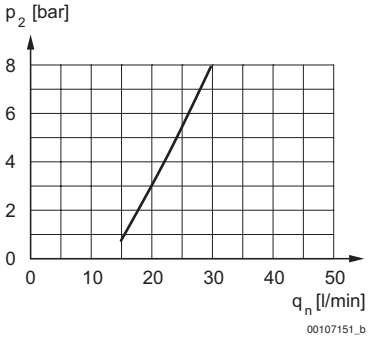
Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- only approx. 10% of the preset drip quantity enters the compressed air system
- oil filling not possible during operation
- Oil dosing at 1000 l/min [drops/min]: 10-20

	Port	Qn [l/min]	Reservoir	Weight [kg]	Part No.
	G 1/8	1000	Polycarbonate	0.23	**0821301702**
	G 1/8		Die cast zinc	0.262	0821301703
	G 1/4		Polycarbonate	0.23	**0821301704**
	G 1/4		Die cast zinc	0.262	**0821301705**

nominal flow Qn with secondary pressure 6 bar at Δp = 1 bar
Metal protective guard can be retrofitted for all polycarbonate reservoirs

minimum flow rate curve (flow rate necessary for the correct functioning of the lubricator)

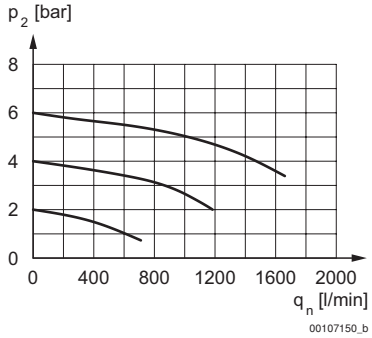


p2 = secondary pressure; qnmin. = min. nominal flow

Micro oil-mist lubricator, Series NL1-LBM

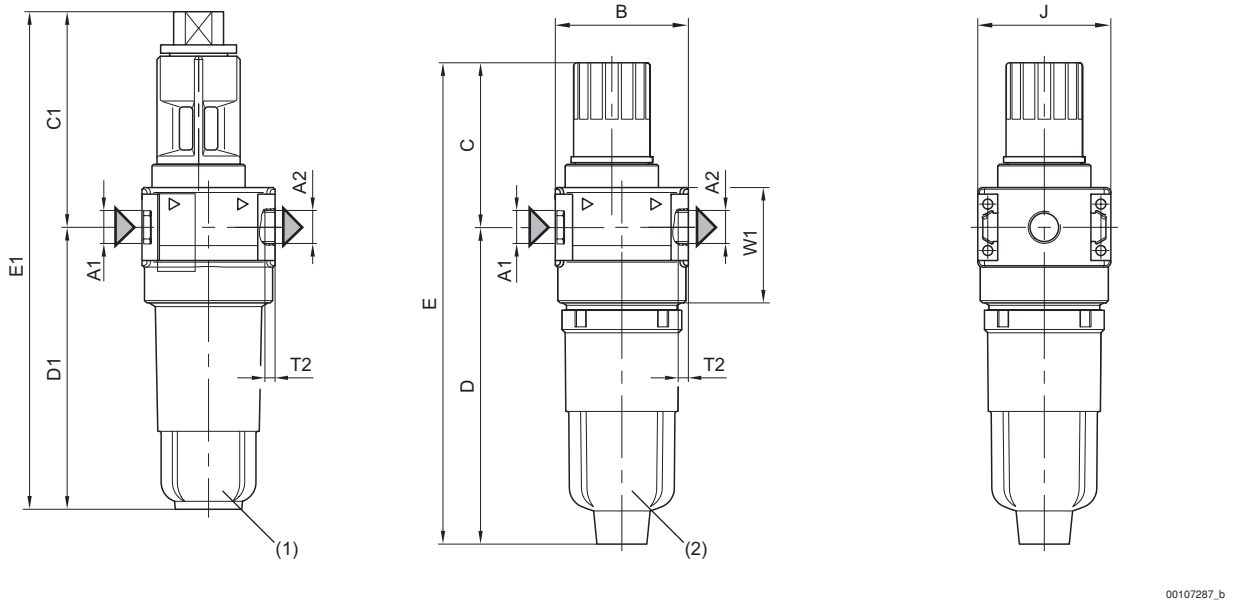
► G 1/8 - G 1/4 ► ATEX certified

Flow rate characteristic



p2 = secondary pressure
qn = nominal flow

Dimensions



1) Metal reservoir
2) PC reservoir

A1	A2	B	C	C1	D	D1	E	E1	J	T2	W1		
G 1/8	G 1/8	40	50	65	95.5	85	145.5	150	40	8	35		
G 1/4	G 1/4	40	50	65	95.5	85	145.5	150	40	8	35		

Filling unit, electrically operated, Series NL1-SSU

► G 1/4 ► pipe connection ► Electr. connection: Plug, ISO 6952, form B ► ATEX optional

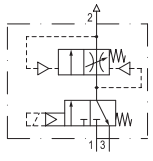
00106867

Parts	Filling valve, 3/2-way valve, electrically operated
Version	Poppet valve, Can be assembled into blocks Protected against polarity reversal
Pilot	internal
Sealing principle	soft sealing
Working pressure min./max.	2.5 bar / 10 bar
Ambient temperature min./max.	-10 °C / +60 °C
Medium temperature min./max.	-10 °C / +60 °C
Medium	Compressed air
Max. particle size	5 µm
Protection class,with Plug	IP 65
Duty cycle	100 %
Materials:	
Housing	Die cast zinc
Seals	Acrylonitrile butadiene styrene

Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- Builds up pressure slowly in the pneumatic systems, i.e. prevents a sudden pressure build-up during a restart after a mains pressure failure or avoids emergency OFF switching. This also avoids dangerous, jerky cylinder movements.
- ATEX optional: The ATEX ID depends on the selected ATEX coil.

Operating voltage			Power consumption	Switch-on power	Holding power
DC	AC 50 Hz	AC 60 Hz	DC	AC 50 Hz	AC 50 Hz
			W	VA	VA
24 V	-	-	4.8	-	-
-	230 V	230 V	-	11.8	8.5

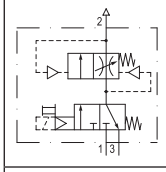
		Port	Exhaust	Operating voltage			Qn		Weight	Note	Part No.
				DC	AC 50 Hz	AC 60 Hz	1►2	2►3			
								[l/min]	[kg]		
	-	G 1/4	G 1/4	24 V	-	-	2000	800	0.88	1)	0821300796
				-	230 V	230 V			0.88	1)	0821300797
				-	-	-			0.85	1); 2); 3); 4)	0821300798

nominal flow Qn with secondary pressure 6 bar at Δp = 1 bar
1) adjustable filling
2) pilot valve without coil
3) Manual override: with detent
4) ATEX optional

Preparation of compressed air → Maintenance units and components

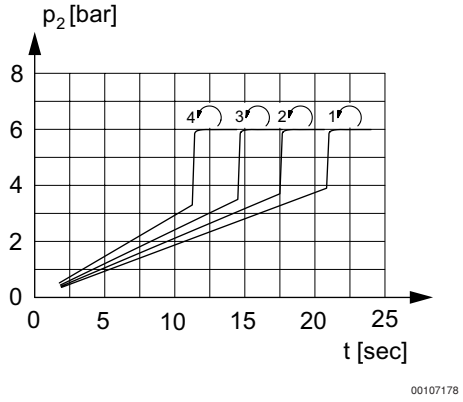
Filling unit, electrically operated, Series NL1-SSU

► G 1/4 ► pipe connection ► Electr. connection: Plug, ISO 6952, form B ► ATEX optional

		Port	Exhaust	Operating voltage			Qn		Weight	Note	Part No.
				DC	AC 50 Hz	AC 60 Hz	1►2	2►3			
								[l/min]	[kg]		
		G 1/4	G 1/4	-	-	-	2000	800	0.85	1); 2); 4)	0821300799

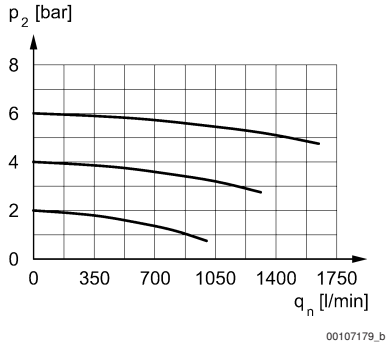
nominal flow Qn with secondary pressure 6 bar at Δp = 1 bar
1) adjustable filling
2) pilot valve without coil
3) Manual override: with detent
4) ATEX optional

Secondary pressure while filling



adjustable filling
p2 = secondary pressure
t = filling time

Flow rate characteristic

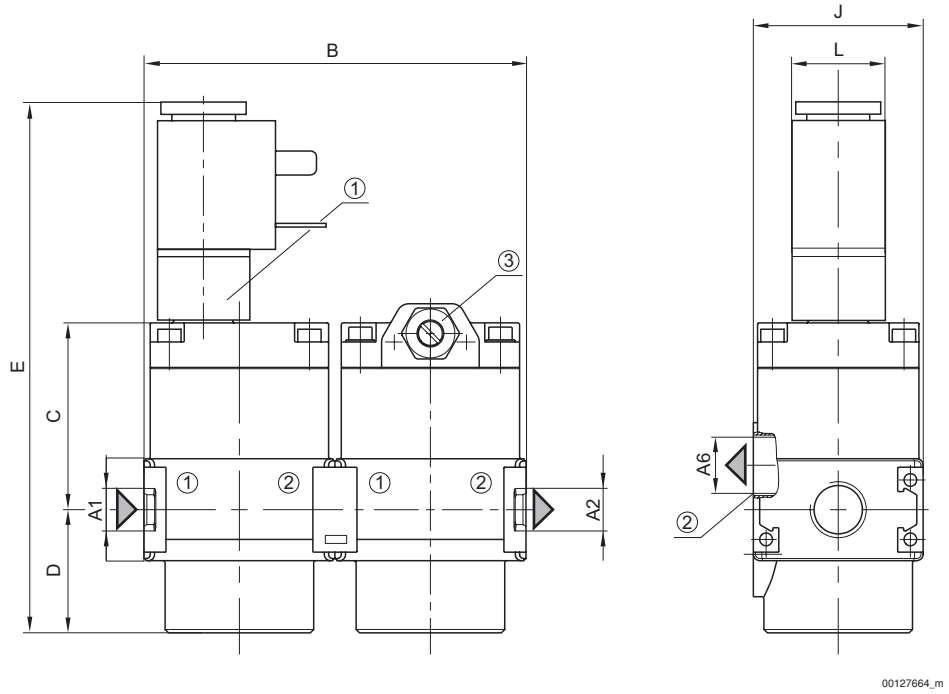


p2 = secondary pressure
qn = nominal flow

Filling unit, electrically operated, Series NL1-SSU

► G 1/4 ► pipe connection ► Electr. connection: Plug, ISO 6952, form B ► ATEX optional

Dimensions



1) electrically operated
2) exhaust
3) Adjustment screw for filling time

A1	A2	A6	B	C	D	J	L	L1	W				
G 1/4	G 1/4	G 1/4	90	44.5	29	40	22	22	89.5				

Filling unit, pneumatically operated, Series NL1-SSU

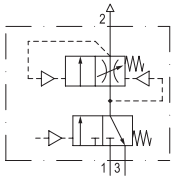
► G 1/4 ► pipe connection ► ATEX certified

00127665

ATEX	II 2G2D X
Parts	Filling valve, 3/2-way valve, pneumatically operated
Version	Poppet valve, Can be assembled into blocks
Sealing principle	soft sealing
Working pressure min./max.	2.5 bar / 10 bar
Ambient temperature min./max.	-10 °C / +60 °C
Medium temperature min./max.	-10 °C / +60 °C
Medium	Compressed air
Max. particle size	5 µm
Materials:	
Housing	Die cast zinc
Seals	Acrylonitrile Butadiene Rubber

Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- Builds up pressure slowly in the pneumatic systems, i.e. prevents a sudden pressure build-up during a restart after a mains pressure failure or avoids emergency OFF switching. This also avoids dangerous, jerky cylinder movements.

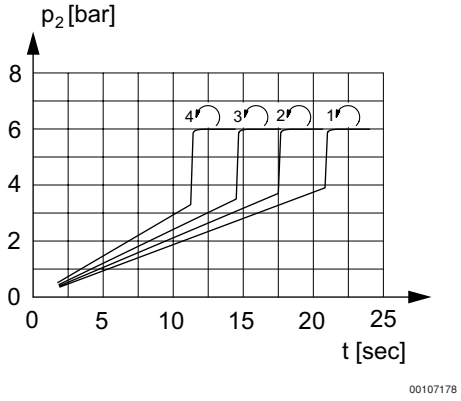
	Port	Exhaust	Qn		Control pressure min./max.	Weight	Part No.
			1►2	2►3			
			[l/min]		[bar]	[kg]	
	G 1/4	G 1/4	2000	800	2.5 / 16	0.83	0821300795

nominal flow Qn with secondary pressure 6 bar at Δp = 1 bar

Filling unit, pneumatically operated, Series NL1-SSU

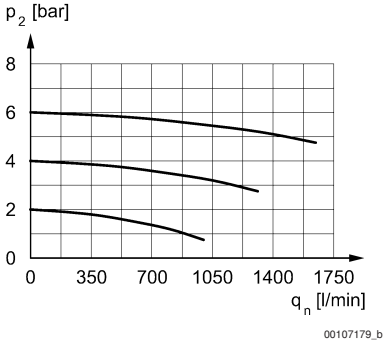
► G 1/4 ► pipe connection ► ATEX certified

Secondary pressure while filling



adjustable filling
p2 = secondary pressure
t = filling time

Flow rate characteristic

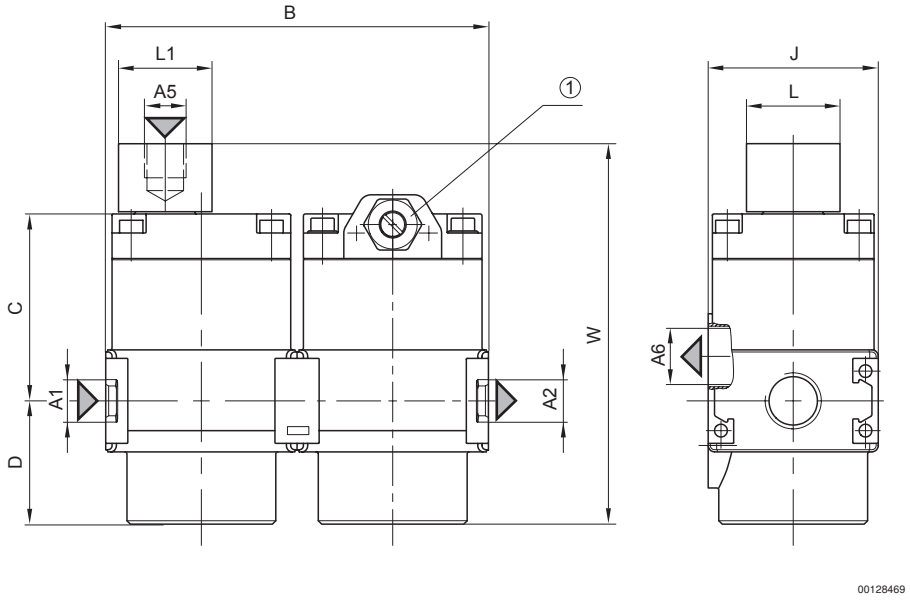


p2 = secondary pressure
qn = nominal flow

Filling unit, pneumatically operated, Series NL1-SSU

► G 1/4 ► pipe connection ► ATEX certified

Dimensions



A5 = pilot connection
1) Adjustment screw for filling time
A6 = ventilation port

Part No.	A1	A2	A5	A6	B	C	D	J	L	L1	W	
0821300795	G 1/4	G 1/8	G1/8	G 1/4	90	44.5	29	40	22	22	89.5	

3/2-shut-off valve, mechanically operated, Series NL1-BAV

► G 1/8 - G 1/4 ► ATEX certified

00106858

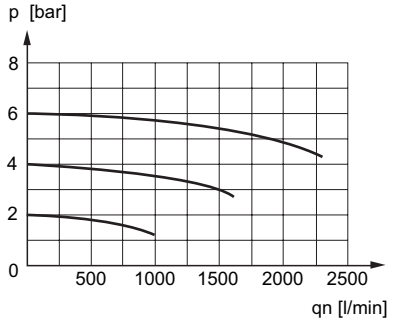
ATEX	II 2G2D X
Version	Ball valve with padlock lockable
Actuating element	rotary switch
Sealing principle	metal/metal sealing
Working pressure min./max.	0 bar / 16 bar
Ambient temperature min./max.	-10 °C / +60 °C
Medium temperature min./max.	-10 °C / +60 °C
Medium	Compressed air

Materials:	
Housing	Die cast zinc
Seals	Acrylonitrile Butadiene Rubber
Actuating element	Polyoxymethylene

Technical Remarks
■ The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.

	Port	Exhaust	Qn		Weight	Part No.
			1►2	**2►3**		
			[l/min]		**[kg]**	
	G 1/8 G 1/4	G 1/4	1800	70	0.246	0821300772 0821300773
nominal flow Qn with secondary pressure 6 bar at Δp = 1 bar						

Flow rate characteristic

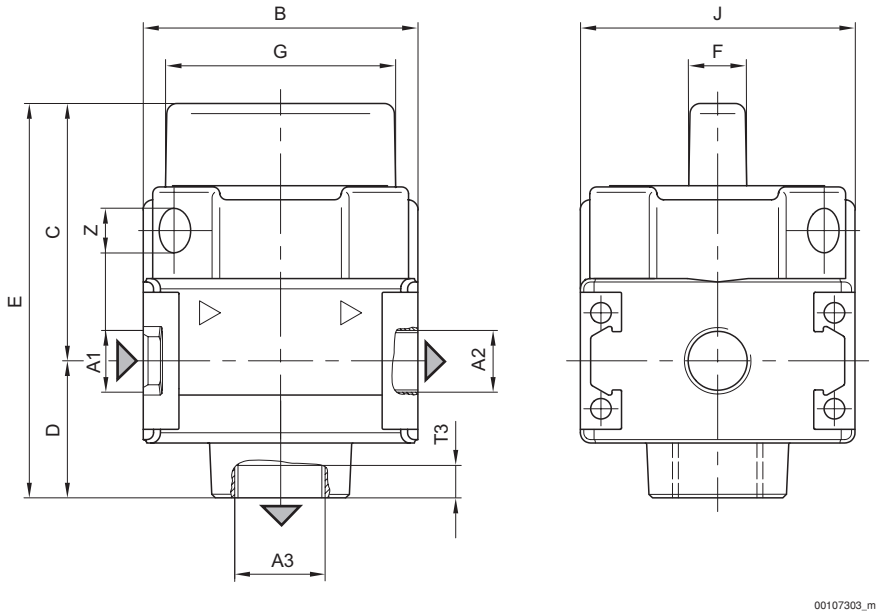


00127884

3/2-shut-off valve, mechanically operated, Series NL1-BAV

► G 1/8 - G 1/4 ► ATEX certified

Dimensions



A3 = ventilation port

A1	A2	A3	B	C	D	E	F	G	J	T3	Z		
G 1/8	G 1/8	G 1/4	40	37.6	20	57.6	8	33.5	40	10	6.5		
G 1/4	G 1/4	G 1/4	40	37.6	20	57.6	8	33.5	40	10	6.5		

Preparation of compressed air → Maintenance units and components

3/2-way valve, electrically operated, Series NL1-SOV

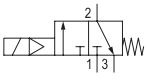
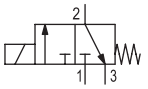
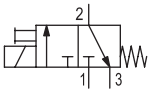
► G 1/4 ► pipe connection ► Electr. connection: Plug, ISO 6952, form B ► ATEX optional

00106964_2

Version	Poppet valve, Can be assembled into blocks Protected against polarity reversal
Pilot	internal
Sealing principle	soft sealing
Working pressure min./max.	2.5 bar / 10 bar
Ambient temperature min./max.	-10 °C / +60 °C
Medium temperature min./max.	-10 °C / +60 °C
Medium	Compressed air
Max. particle size	5 µm
Protection class,with Plug	IP 65
Duty cycle	100 %
Materials:	
Housing	Die cast zinc
Seals	Acrylonitrile butadiene styrene

Technical Remarks
■ The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
■ ATEX optional: The ATEX ID depends on the selected ATEX coil.

Operating voltage			Power consumption	Switch-on power	Holding power
DC	AC 50 Hz	AC 60 Hz	DC	AC 50 Hz	AC 50 Hz
			W	VA	VA
24 V	-	-	4.8	-	-
-	230 V	230 V	-	11.8	8.5

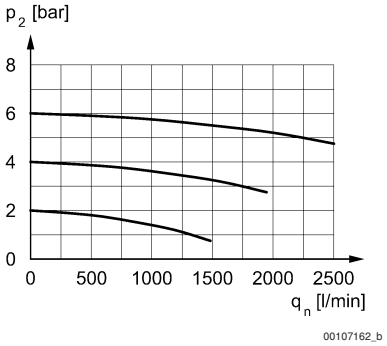
		Port	Exhaust	Operating voltage			Qn		Weight	Note	Part No.
				DC	AC 50 Hz	AC 60 Hz	1►2	2►3			
							[l/min]		[kg]		
	-	G 1/4	G 1/4	24 V -	- 230 V	- 230 V	2200	800	0.45	-	0821300776 0821300777
	-	G 1/4	G 1/4	-	-	-	2200	800	0.42	1); 3)	0821300778
		G 1/4	G 1/4	-	-	-	2200	800	0.42	1); 2); 3)	0821300779

nominal flow Qn with secondary pressure 6 bar at Δp = 1 bar
1) pilot valve without coil
2) Manual override: with detent
3) ATEX optional

3/2-way valve, electrically operated, Series NL1-SOV

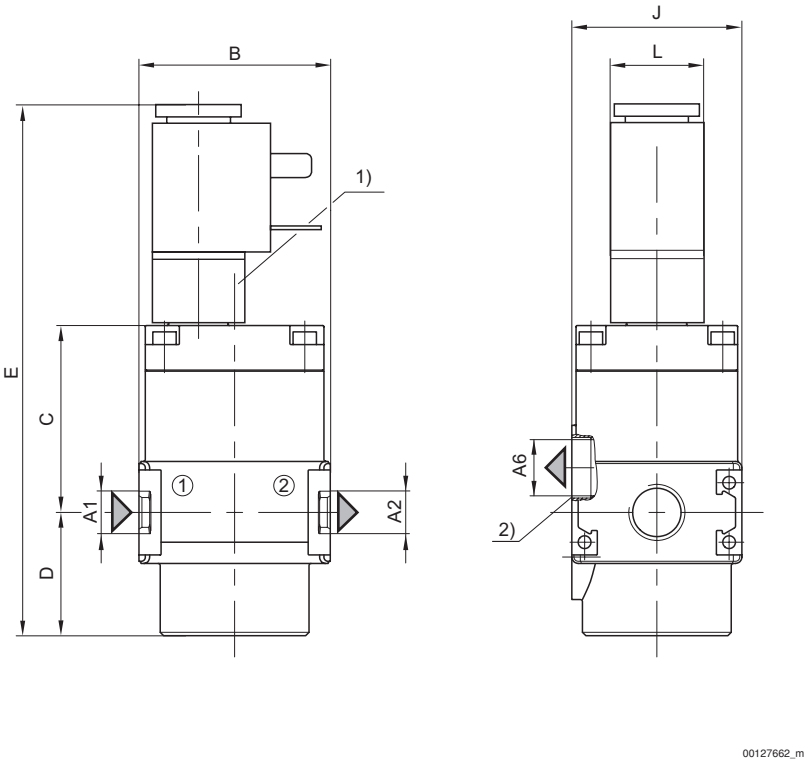
► G 1/4 ► pipe connection ► Electr. connection: Plug, ISO 6952, form B ► ATEX optional

Flow rate characteristic



p2 = secondary pressure
qn = nominal flow

Dimensions



1) electrically operated
2) Port 3 (Exhaust)

A1	A2	A6	B	C	D	E	J	L					
G 1/4	G 1/4	G 1/4	45	44.5	29	124.5	40	22					

3/2-way valve, electrically operated, Series NL1-SOV

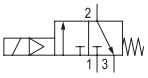
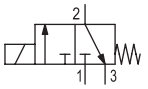
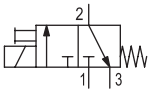
► G 1/4 ► pipe connection ► Electr. connection: Plug, ISO 6952, form B ► with continuous pressure supply ► ATEX optional

300672f1

Version	Poppet valve, Can be assembled into blocks Protected against polarity reversal
Pilot	internal
Sealing principle	soft sealing
Working pressure min./max.	2.5 bar / 10 bar
Ambient temperature min./max.	-10 °C / +60 °C
Medium temperature min./max.	-10 °C / +60 °C
Medium	Compressed air
Max. particle size	5 µm
Protection class,with Plug	IP 65
Duty cycle	100 %
Materials:	
Housing	Die cast zinc
Seals	Acrylonitrile butadiene styrene

Technical Remarks
■ The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
■ ATEX optional: The ATEX ID depends on the selected ATEX coil.

Operating voltage			Power consumption	Switch-on power	Holding power
DC	AC 50 Hz	AC 60 Hz	DC	AC 50 Hz	AC 50 Hz
			W	VA	VA
24 V	-	-	4.8	-	-
-	230 V	230 V	-	11.8	8.5

		Port	Exhaust	Operating voltage			Qn		Weight	Note	Part No.
				DC	AC 50 Hz	AC 60 Hz	1►2	2►3			
							[l/min]		[kg]		
	-	G 1/4	G 1/4	24 V -	- 230 V	- 230 V	2000	800	0.45	-	0821300673 0821300674
	-	G 1/4	G 1/4	-	-	-	2000	800	0.42	1); 3)	0821300675
		G 1/4	G 1/4	-	-	-	2000	800	0.42	1); 2); 3)	0821300676

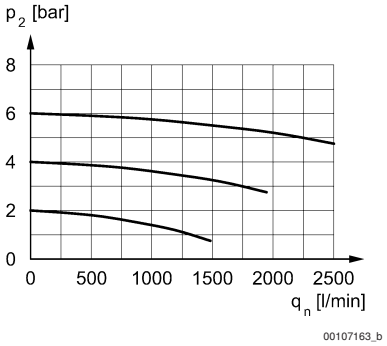
nominal flow Qn with secondary pressure 6 bar at Δp = 1 bar
1) pilot valve without coil
2) Manual override: with detent
3) ATEX optional

Preparation of compressed air → Maintenance units and components

3/2-way valve, electrically operated, Series NL1-SOV

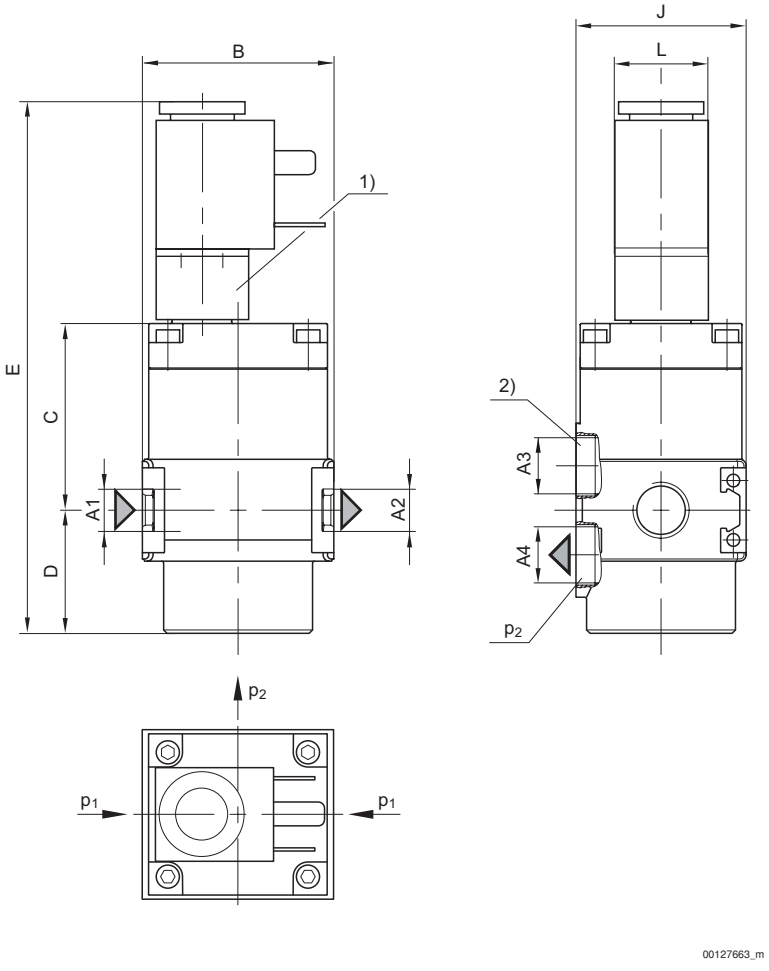
► G 1/4 ► pipe connection ► Electr. connection: Plug, ISO 6952, form B ► with continuous pressure supply ► ATEX optional

Flow rate characteristic



p2 = secondary pressure
qn = nominal flow

Dimensions



1) electrically operated
p1 = working pressure
p2 = secondary pressure
2) Port 3 (Exhaust)

3/2-way valve, electrically operated, Series NL1-SOV

► G 1/4 ► pipe connection ► Electr. connection: Plug, ISO 6952, form B ► with continuous pressure supply ► ATEX optional

A1	A2	A3	A4	A6	B	C	D	E	J	L			
G 1/4	G 1/4	G 1/4	G 1/4	G 1/4	45	44.5	29	124.5	40	22			

3/2-way valve, pneumatically operated, Series NL1-SOV

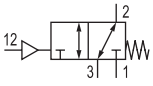
► G 1/4 ► pipe connection ► ATEX certified

00106864

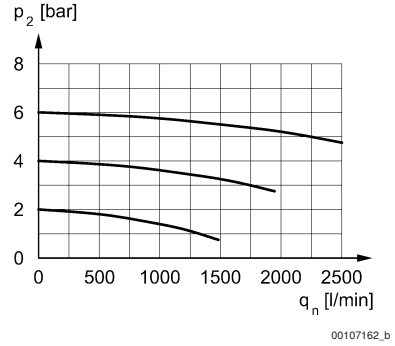
ATEX	II 2G2D X
Version	Poppet valve, Can be assembled into blocks
Sealing principle	soft sealing
Working pressure min./max.	2.5 bar / 10 bar
Ambient temperature min./max.	-10 °C / +60 °C
Medium temperature min./max.	-10 °C / +60 °C
Medium	Compressed air
Max. particle size	5 μm
Materials:	
Housing	Die cast zinc
Seals	Acrylonitrile Butadiene Rubber

Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.

	Port	Exhaust	Qn		Control pressure min./max.	Weight	Part No.
			1►2	2►3			
			[l/min]		[bar]	[kg]	
	G 1/4	G 1/4	2200	800	2.5 / 16	0.4	0821300775
nominal flow Qn with secondary pressure 6 bar at Δp = 1 bar							

Flow rate characteristic



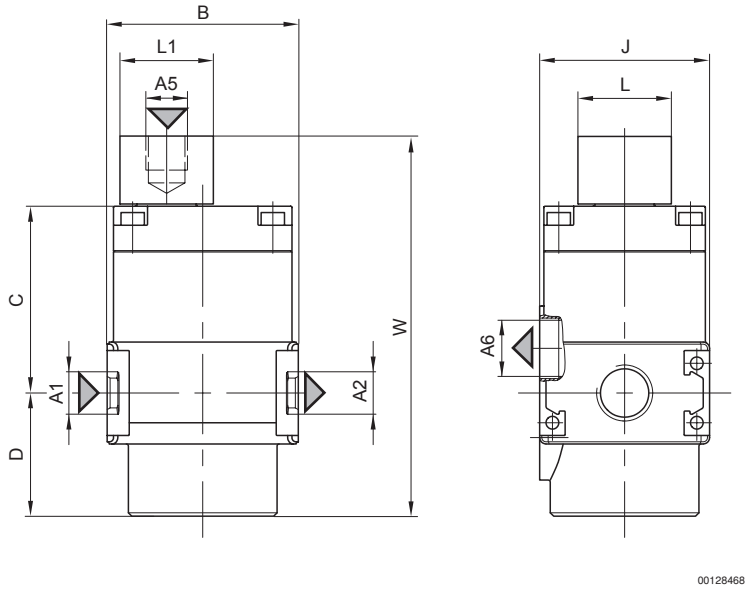
00107162_b

p2 = secondary pressure
qn = nominal flow

3/2-way valve, pneumatically operated, Series NL1-SOV

► G 1/4 ► pipe connection ► ATEX certified

Dimensions



A5 = pilot connection
A6 = ventilation port

Part No.	A1	A2	A5	A6	B	C	D	J	L	L1	W	
0821300775	G 1/4	G 1/4	G 1/8	G 1/4	45	44.5	29	40	22	22	89.5	

3/2-way valve, pneumatically operated, Series NL1-SOV

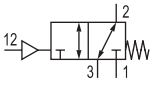
► G 1/4 ► pipe connection ► with continuous pressure supply ► ATEX certified

00106021_1

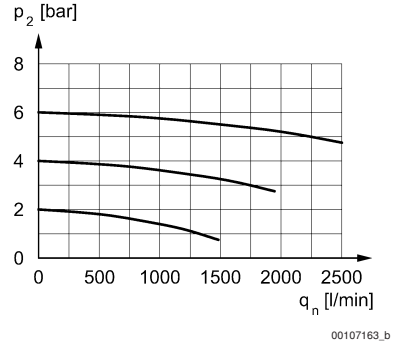
ATEX	II 2G2D X
Version	Poppet valve, Can be assembled into blocks
Sealing principle	soft sealing
Working pressure min./max.	2.5 bar / 10 bar
Ambient temperature min./max.	-10 °C / +60 °C
Medium temperature min./max.	-10 °C / +60 °C
Medium	Compressed air
Max. particle size	5 μm
Materials:	
Housing	Die cast zinc
Seals	Acrylonitrile Butadiene Rubber

Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.

	Port	Exhaust	Qn		Control pressure min./max.	Weight	Part No.
			1►2	2►3			
			[l/min]		[bar]	[kg]	
	G 1/4	G 1/4	2200	800	2.5 / 16	0.4	0821300672
nominal flow Qn with secondary pressure 6 bar at Δp = 1 bar							

Flow rate characteristic



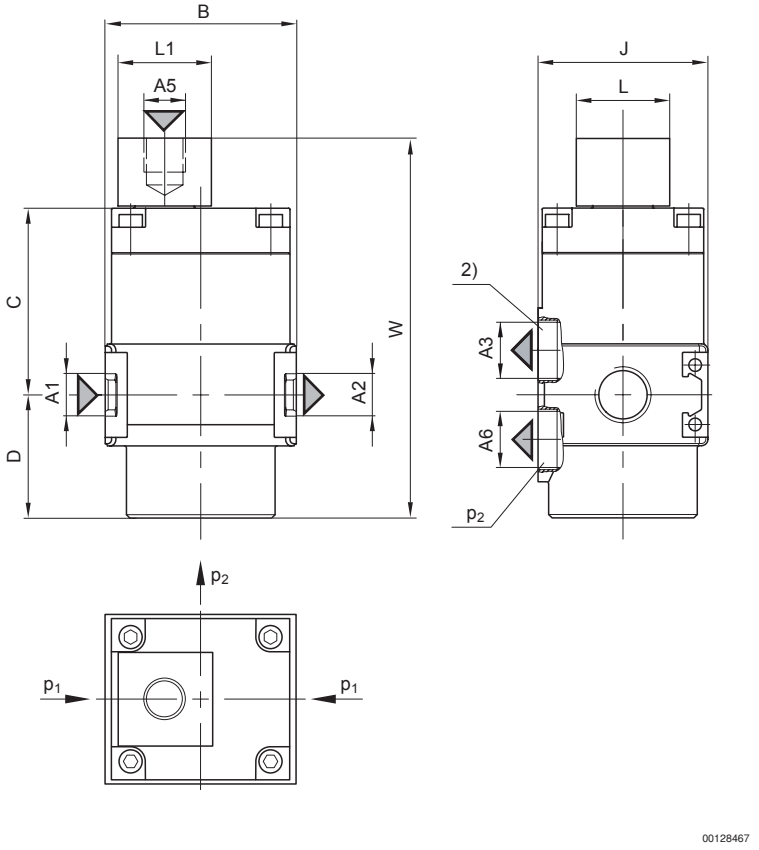
00107163_b

p2 = secondary pressure
qn = nominal flow

3/2-way valve, pneumatically operated, Series NL1-SOV

► G 1/4 ► pipe connection ► with continuous pressure supply ► ATEX certified

Dimensions



A5 = pilot connection
p1 = working pressure
p2 = secondary pressure
2) A6 = ventilation port

Part No.	A1	A2	A3	A5	A6	B	C	D	J	L	L1	W
0821300672	G 1/4	G 1/4	G 1/4	G 1/8	G 1/4	45	44.5	29	40	22	22	89.5

Filling valve, pneumatically operated, Series NL1-SSV

► G 1/4 ► pipe connection ► adjustable filling time ► ATEX certified

00106869

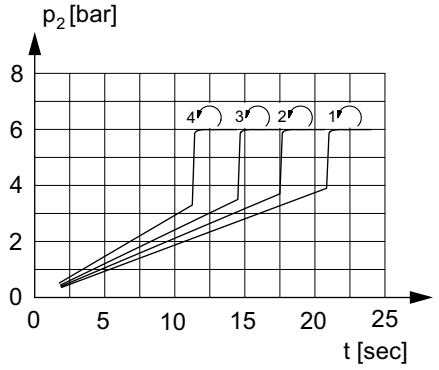
ATEX	II 2G2D X
Version	Poppet valve, Can be assembled into blocks
Sealing principle	soft sealing
Working pressure min./max.	2.5 bar / 16 bar
Ambient temperature min./max.	-10 °C / +60 °C
Medium temperature min./max.	-10 °C / +60 °C
Medium	Compressed air
Max. particle size	5 µm
Materials:	
Housing	Die cast zinc
Seals	Acrylonitrile Butadiene Rubber

Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- Builds up pressure slowly in the pneumatic systems, i.e. prevents a sudden pressure build-up during a restart after a mains pressure failure or avoids emergency OFF switching. This also avoids dangerous, jerky cylinder movements.

	Port	Qn	Weight	Part No.
		[l/min]	[kg]	
	G 1/4	2200	0.43	0821300774
nominal flow Qn with secondary pressure 6 bar at Δp = 1 bar				

Secondary pressure while filling



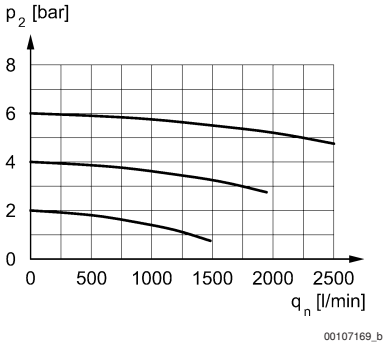
00107178

adjustable filling
p2 = secondary pressure
t = filling time

Filling valve, pneumatically operated, Series NL1-SSV

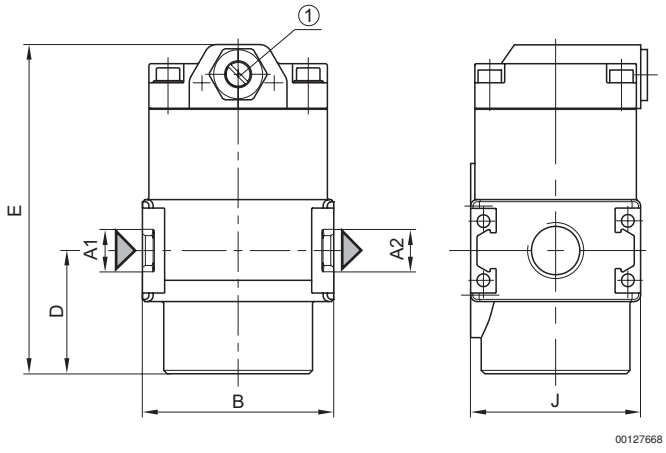
► G 1/4 ► pipe connection ► adjustable filling time ► ATEX certified

Flow rate characteristic



p2 = secondary pressure
qn = nominal flow

Dimensions



1) Adjustment screw for filling time

Part No.	A1	A2	B	D	E	J						
0821300774	G 1/4	G 1/4	45	29	77.5	40						

Preparation of compressed air → Maintenance units and components

Distributor, Series NL1-DIL

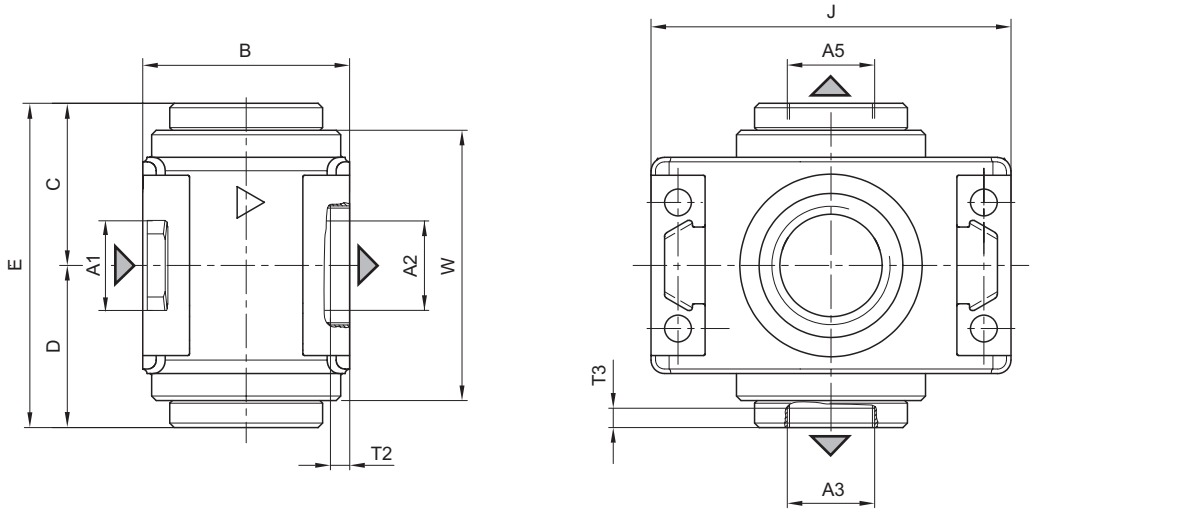
► G 1/4 ► Distributor 2x ► Narrow distributor ► ATEX certified

00106888

ATEX	II 2G2D X
Version	Narrow distributor, Can be assembled into blocks
Installation location	Any
Ambient temperature min./max.	-10 °C / +60 °C
Medium temperature min./max.	-10 °C / +60 °C
Working pressure min./max.	0 bar / 16 bar
Medium	Compressed air
Materials:	
Housing	Die cast zinc

	Port	Qn			Weight	Part No.
		1►2	1►3	1►5		
		[l/min]			[kg]	
	G 1/4	2700	1300	1300	0.09	**0821300771**
nominal flow Qn with secondary pressure 6 bar at Δp = 1 bar						

Dimensions



00107307

A1	A2	A3	A5	B	C	D	E	J	T2	T3	W		
G 1/4	G 1/4	G 1/8	G 1/8	23	18	20	40	40	6	8	30		

Series NL1
Accessories

Reservoir, Series NL1/AS1-CLS/-CLP/-CLC
► For filter, filter pressure regulator and microfilters

Version	Reservoir
Ambient temperature min./max.	-10°C / +50°C
Medium temperature min./max.	-10°C / +50°C
Working pressure min./max.	1.5 bar - 16 bar
Medium	Compressed air
Filter reservoir volume	16 cm^3
Materials:	
Seal	Acrylonitrile Butadiene Rubber

Condensate drain	Reservoir	Weight [kg]	Fig.	Part No.
semi-automatic, open without pressure	Die cast zinc	0.153	Fig. 1	**1827009640**
	Polycarbonate	0.085	Fig. 2	**1827009639**
fully automatic, open without pressure	Polycarbonate	0.115	Fig. 3	1827009642

Fig. 1

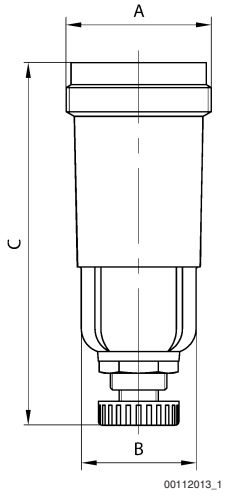
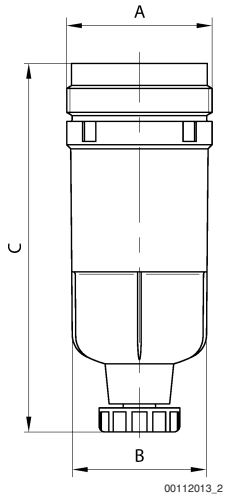
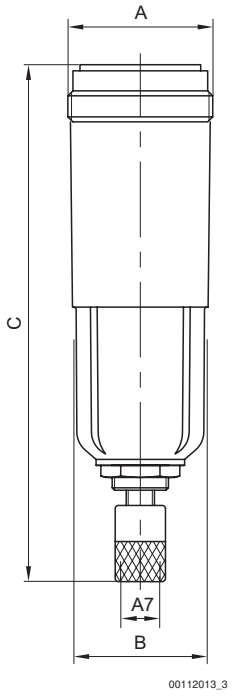


Fig. 2



Series NL1
Accessories

Fig. 3



Part No.	A	B	C									
1827009640	M36x1,5	34	90.5									
1827009639	M36x1,5	34	92									
1827009642	M36x1,5	34	131.5									

Reservoir, Series NL1/AS1-CBM/-CLA/-CBM
► for active carbon filter and lubricator

Version	Reservoir
Ambient temperature min./max.	-10 °C / +50 °C
Medium temperature min./max.	-10 °C / +50 °C
Working pressure min./max.	16 bar
Medium	Compressed air Oil
Filter reservoir volume	16 cm^3
Materials:	
Seal	Acrylonitrile Butadiene Rubber

Series NL1
Accessories

Reservoir	Weight	Fig.	Part No.
	[kg]		
Polycarbonate	0.07	Fig. 1	**1827009333**
	0.06	Fig. 2	**1827009637**

Fig. 1

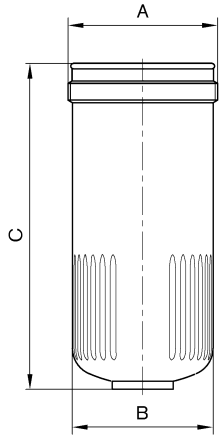
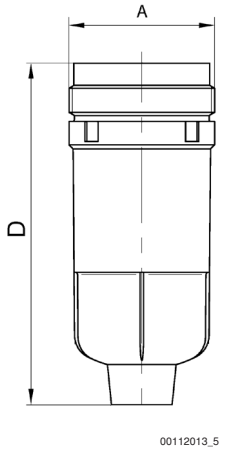


Fig. 2



Part No.	A	B	C	D								
1827009333	M36x1,5	30	100	—								
1827009637	M36x1,5	—	—	85								

Reservoir, Series NL1/AS1-CBM
► for lubricator

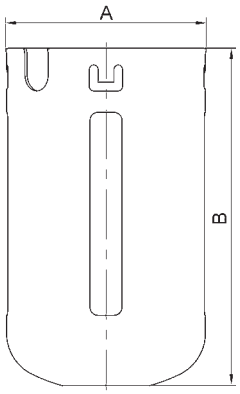
Version	Reservoir
Ambient temperature min./max.	-10°C / +50°C
Medium temperature min./max.	-10°C / +50°C
Working pressure min./max.	16 bar
Medium	Compressed air Oil
Filter reservoir volume	16 cm^3
Materials:	
Seal	Acrylonitrile Butadiene Rubber

Reservoir	Weight	Part No.
	[kg]	
Die cast zinc	0.125	1827009638

Series NL1
Accessories

Protective guard
► series NL1 ► Filter, Lubricator

00106886

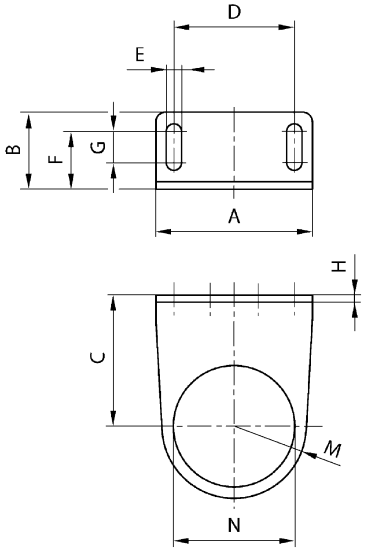


00107324

Part No.	A	B	Material	Weight [kg]							
1820507004	37	63	Steel	0.03							
Can be retrofitted for PC reservoir											

Mounting bracket
► NL1/NL2-MBR-...-W02

00106891



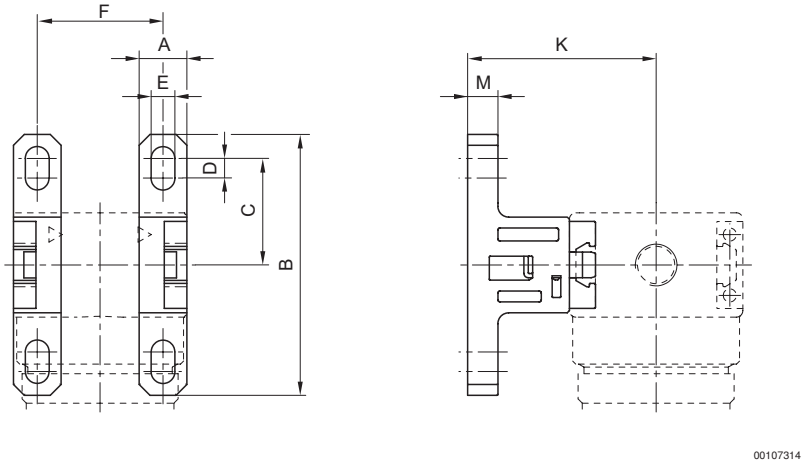
00108144

Part No.	A	B	C	D	E	F	G	H	J	K	L	M
1821331013	48	27	43.5	38	5.4	18.5	8	3	–	–	–	20

Series NL1
Accessories

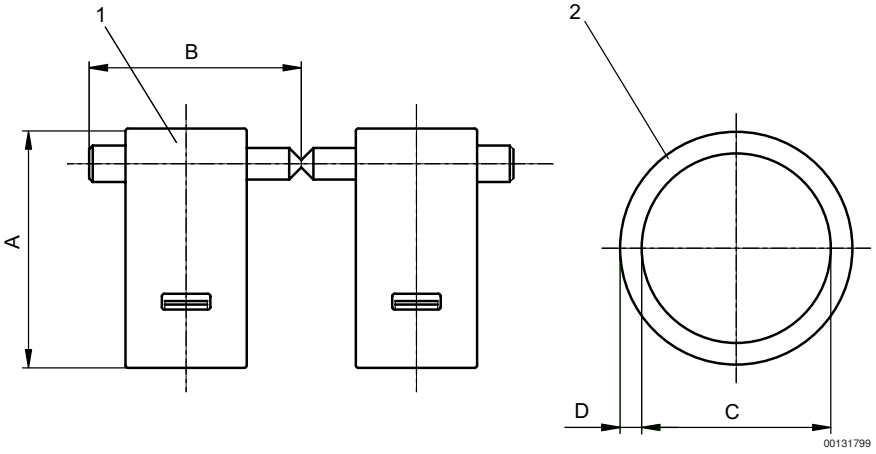
Part No.	N	Material	Surface	Weight [kg]						
1821331013	30.5	Steel	galvanized	0.065						

Mounting bracket
► **NL1-MBR-...-W05**



Part No.	A	B	C	D	E	F	K	M	Material	Weight [kg]	
1821336024	11	60	24.5	4.5	5.5	29	43.5	7	Polyamide	0.02	

Block assembly kit, Series NL1-W04



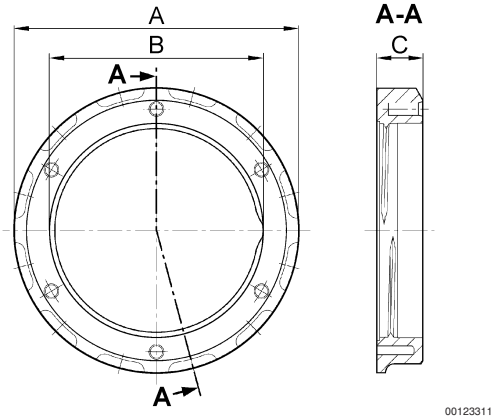
1) coupling clamp 2) O-ring

Preparation of compressed air → Maintenance units and components

Series NL1
Accessories

Part No.	A	B	C	D	Material	Weight [kg]					
1827009636	19.7	17.5	15.6	1.78	Polyamide	0.02					

Panel nut, Series NL2-W06



material: polyamide

Part No.	usage Series	A	B	C	Material	Weight [kg]			
1829234070	NL2	35	M30x1,5	5.5	Brass	0.013			
1829234073	NL2	37.5	M30x1,5	7.5	Plastic	0.006			

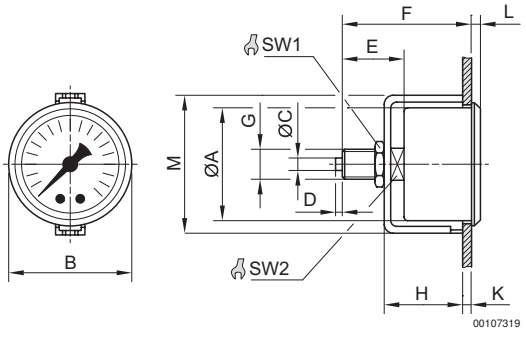
Pressure gauges, Series PG1-SNL
► For panel installation ► Background color: Black ► Scale color: Green / White ► Viewing window: Polystyrene

Version	Bourdon tube pressure gauge
Standardization	EN 837-1
Main scale unit (outside)	bar
Secondary scale unit (inside)	psi
Ambient temperature min./max.	-40 °C / +60 °C
Medium	Compressed air
Pointer color	White
Main scale color (outside)	Green
Secondary scale color (inside)	White
Class	1,6
Materials:	
Housing	Steel
Thread	Brass
Front ring	Steel, chrome-plated
Viewing window	Polystyrene

Series NL1
Accessories

	Compressed air connection	Nominal diameter	Application	Display range	Operating pressure	Scale value	Weight	Part No.
		[mm]	[bar]	[bar]	[bar]		[kg]	
	G 1/8	40	-0.8 - 0	-1 - 0	-1 / 0	0.1	0.097	**1827231040**
	G 1/8	40	0 - 2	0 - 2.5	0 / 2.5	0.1	0.097	**1827231042**
	G 1/8	40	0 - 4	0 - 6	0 / 6	0.2	0.097	**1827231041**
	G 1/8	40	0 - 8	0 - 10	0 / 10	0.5	0.097	**1827231030**
	G 1/8	40	0 - 12	0 - 16	0 / 16	0.5	0.097	**1827231031**
	G 1/4	50	0 - 2	0 - 2.5	0 / 2.5	0.1	0.148	**1827231032**
	G 1/4	63	0 - 2	0 - 2.5	0 / 2.5	0.1	0.19	**1827231036**
	G 1/4	50	0 - 4	0 - 6	0 / 6	0.2	0.148	**1827231033**
	G 1/4	63	0 - 4	0 - 6	0 / 6	0.2	0.19	**1827231037**
	G 1/4	50	0 - 8	0 - 10	0 / 10	0.5	0.148	**1827231034**
	G 1/4	63	0 - 8	0 - 10	0 / 10	0.5	0.19	**1827231038**
	G 1/4	50	0 - 12	0 - 16	0 / 16	0.5	0.148	**1827231035**
	G 1/4	63	0 - 12	0 - 16	0 / 16	0.5	0.19	**1827231039**
Mounting: with U-clip								

Dimensions



Compressed air connection G	Nominal diameter	Ø A	B	C	D	E	F	H	K	L	M	SW1
G 1/8	40	40	43	–	–	25.5	49	32	4	4	49	17
G 1/4	50	50	54	5	3	29.5	51.5	34.5	3	4.5	61	17
G 1/4	63	63	62	5	3	27	53	36.3	4.2	5.5	75	17

Compressed air connection G	SW2												
G 1/8	14												
G 1/4	14												
G 1/4	14												

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Bosch Group

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