

**PNEUMATIC  
GROUP**

**AIR PREPARATION UNITS  
3/8" NPT & 1/2" NPT  
SERIES**

**airfit**comfort



**HOERBIGER**  
**ORIGA**

		Port size	max. Q* (l/min)	Recommended flow (l/min)*	Type	Page No.
Air preparation units		3/8" NPT	1900	850	<b>CFRL-3/8-US</b>	59-60
		1/2" NPT	2000	1900	<b>CFRL-1/2-US</b>	
		3/8" NPT	1900	850	<b>CKL-3/8-US</b>	61-62
		1/2" NPT	1950	1900	<b>CKL-1/2-US</b>	
Filter-regulator		3/8" NPT	3000	850	<b>CK-3/8-US</b>	63-64
		1/2" NPT	3300	1900	<b>CK-1/2-US</b>	
Filter-water separator		3/8" NPT	4500	850	<b>CF-3/8-US</b>	65-66
		1/2" NPT	5000	1900	<b>CF-1/2-US</b>	
Special filter for air dryers		3/8" NPT	-	850	<b>CFD-3/8-US</b>	65-66
		1/2" NPT	-	1900	<b>CFD-1/2-US</b>	
Pressure regulating valve		3/8" NPT	4200	850	<b>CR-3/8-US</b>	67-68
		1/2" NPT	5700	1900	<b>CR-1/2-US</b>	
Oil mist lubricator		3/8" NPT	5000	850	<b>CL-3/8-US</b>	69-70
		1/2" NPT	5300	1900	<b>CL-1/2-US</b>	
Pressure regulating valve w/throughp1		3/8" NPT			<b>CR-3/8-T-US</b>	71-72
Pressure regulating valve w/pressure limiter		3/8" NPT			<b>CR-3/8-L-US, CR-3/8-L-SO-US</b>	73
		1/2" NPT			<b>CR-1/2-L-US, CR-1/2-L-SO-US</b>	
3/2 way shut-off valve		3/8" NPT	7500	850	<b>CDV-3/8-US</b>	74
		1/2" NPT	7500	1900	<b>CDV-1/2-US</b>	
Soft-start valve		3/8" NPT	3500	850	<b>CDA-3/8-US</b>	75-76
		1/2" NPT	3700	1900	<b>CDA-1/2-US</b>	
Stop valve		3/8" NPT	2500	850	<b>CDR-3/8P-US, CDR-3/8BE-US</b>	77-78
		1/2" NPT	2900	1900	<b>CDR-1/2P-US, CDR-1/2E-US</b>	
Pilot operated pressure regulator valve		3/8" NPT	-	850	<b>CRV-10/15-US</b>	79-80
		1/2" NPT	-	1900	<b>CRV-10/15-US</b>	
Porting block kit						81
Bowl guard kit						82

\*at  $p_1 = 6.3 \text{ bar}$  and  $\Delta p = 1 \text{ bar}$  bzw. bei  $p_1 = 10 \text{ bar}$  auf  $p_2 = 6.3 \text{ bar}$ ,  $\Delta p = 1 \text{ bar}$   
see individual data sheets.

The right to introduce technical modifications is reserved

Characteristics		Pressures quoted as gauge pressure	
System		Air preparation unit comprising filter-water-separator, diaphragm-type pressure regulating valve and oil mist lubricator *)	
Type		CFRL-3/8-US	CFRL-1/2-US
Port size		3/8" NPT	1/2" NPT
Max. condensate capacity	cm <sup>3</sup>	57	
Condensate drainage		Standard: manual, semiautomatic with pressure relief fully automatic (float type)	
Max. oil capacity	cm <sup>3</sup>	112	
Oil refilling		Standard: manual - also during operation	
Installation		Vertical	
Medium and ambient temperatures	$\vartheta_{\min}$ $\vartheta_{\max}$	°C °C	0 +50 at 10 bar (further temperatures on request)
Weight (mass)	kg	1.85	
<b>Pneumatic Characteristic<sup>1)</sup></b>			
Operating pressure range - inlet pressure	$p_{1\min}$	bar	0
	$p_{1\max}$	bar	16
Operating pressure range - outlet pressure	$p_{2\min}$	bar	0.5 on request
	$p_{2\max}$	bar	8      0.5      0.5 <sup>3)</sup> 4      10
Recommended flow <sup>2)</sup>	$Q_n$	l/min	<b>850</b>
		m <sup>3</sup> /h	<b>51</b>
Maximum flow <sup>4)</sup>	$Q_{\max}$	l/min	1900
		m <sup>3</sup> /h	114      2000 120

1) For further characteristics see pages 71-72

2) at 6 bar and 25 m/s

3) By the use of special springs, the outlet pressure can be precisely regulated in the specified  $p_2$  range

4) at  $p_1 = 10$  bar and  $p_2 = 6.3$  bar,  $\Delta p = 1$  bar

\*) Use only recommended oils with viscosity VG32 to ISO 3448 (32 mm<sup>2</sup>/s at 40°C) or HOERBIGER special oil, Order No.: KY 8766

# Air Preparation Unit

## 3/8" NPT, 1/2" NPT

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CFRL..-US. 

Air preparation unit comprising:

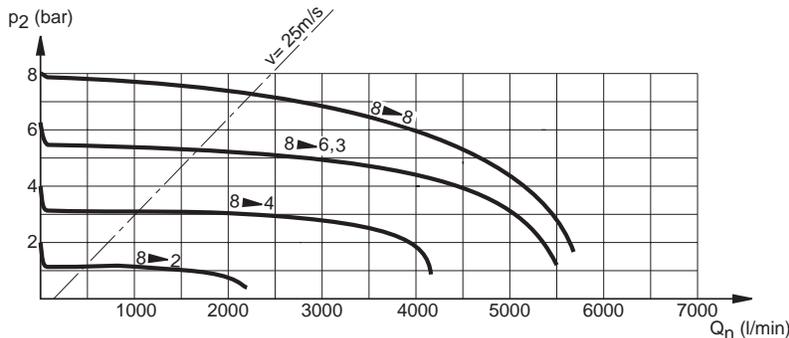
Filter-water-separator  
Diaphragm-type pressure regulating valve  
Oil mist lubricator  
Gauge  
Mounting bracket

- Easy and quick installation of mounting kit
- Suitable for direct wall mounting
- Modern design



### Flow Characteristics

Type: CFRL-1/2-US

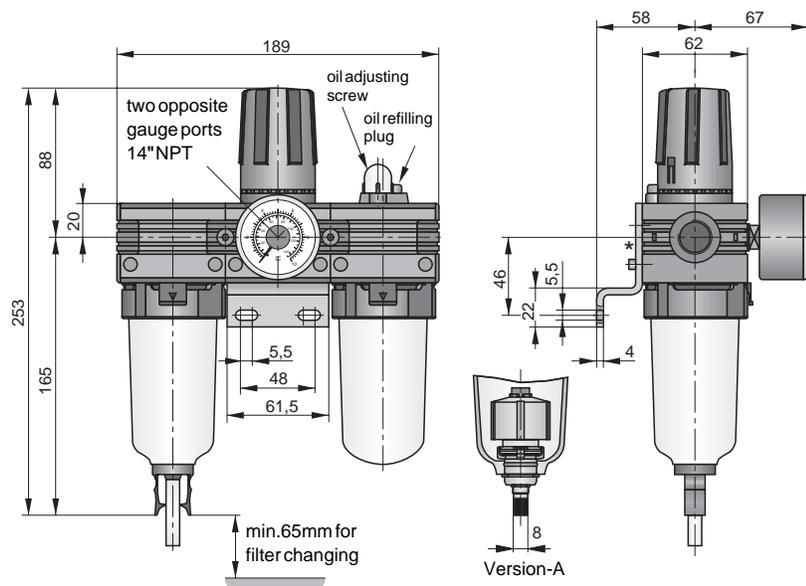


For single units see pages 63-73  
For air preparation units see pages 59-62

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## Dimensions (mm)

Type: CFRL-1/2-US



\*) On delivery the plug screw is not assembled.

## Accessories

**Bowl guard kit**  
For further details see page 82



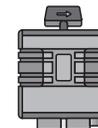
Order No.: PL 17680

**Porting block kit**  
to provide unlubricated air.  
For further details see page 81



Order No.: PL 17746, PL 17731

**3/2 way shut-off valve**



Order No.: PB 56849-N000  
PB 56949-N000

## Order Instructions

Description	Port size	Type	Order No.
Basic model	3/8" NPT	CFRL-3/8-US	PB 58249-N000
Basic model	1/2" NPT	CFRL-1/2-US	PB 58349-N000
With semiautomatic drainage	3/8" NPT	CFRL-3/8-H-US	PB 58249-N001
With semiautomatic drainage	1/2" NPT	CFRL-1/2-H-US	PB 58349-N001
With automatic drainage	3/8" NPT	CFRL-3/8-A-US	PB 58249-N002
With automatic drainage	1/2" NPT	CFRL-1/2-A-US	PB 58349-N002
With metal bowl	3/8" NPT	CFRL-3/8-D-US	PB 58249-N003
With metal bowl	1/2" NPT	CFRL-1/2-D-US	PB 58349-N003
With metal bowl (sight glass)	3/8" NPT	CFRL-3/8-E-US	PB 58249-N004
With metal bowl (sight glass)	1/2" NPT	CFRL-1/2-E-US	PB 58349-N004
With metal bowl and automatic drainage	3/8" NPT	CFRL-3/8-AD-US	PB 58249-N005
With metal bowl and automatic drainage	1/2" NPT	CFRL-1/2-AD-US	PB 58349-N005
With metal bowl (sight glass) and automatic drainage	3/8" NPT	CFRL-3/8-AE-US	PB 58249-N006
With metal bowl (sight glass) and automatic drainage	1/2" NPT	CFRL-1/2-AE-US	PB 58349-N006

## Accessories

Description	Order No.
Bowl guard kit	PL 17680
Porting block kit 3/8" NPT	PL 17746
Porting block kit 1/2" NPT	PL 17731
Regulator spring for operating pressure 4 bar	PL 17748
Regulator spring for operating pressure 10 bar	PL 17705
3/2 way shut-off valve (spool type) CDV-3/8-XS-US / CDV-1/2-XS-US	PB 56849-N000, PB 56949-N000
Coupling kit	PL 17608
Solvent resistant sight glass	PL 07233
Adapter kit 3/4" NPT	PL 17682

\* All products available in metric ports

# Air Preparation Unit

## 3/8" NPT, 1/2" NPT

airfit comfort

CKL...-US



Characteristics		Pressures quoted as gauge pressure	
System		Air preparation unit comprising filter-regulator and oil mist lubricator *)	
Type		CKL-3/8-US	CKL-1/2-US
Port size		3/8" NPT	1/2" NPT
Max. condensate capacity	cm <sup>3</sup>	57	
Condensate drainage		Standard: manual, semiautomatic with pressure relief fully automatic (float type)	
Max. oil capacity	cm <sup>3</sup>	112	
Oil refilling		Standard: manual - also during operation	
Installation		Vertical	
Medium and ambient temperatures	$\vartheta_{\min}$ $\vartheta_{\max}$	°C °C	0 +50 at 10 bar (further temperatures on request)
Weight (mass)	kg	1.5	
<b>Pneumatic Characteristic<sup>1)</sup></b>			
Operating pressure range - inlet pressure	$p_{1 \min}$	bar	0
	$p_{1 \max}$	bar	16
Operating pressure range - outlet pressure	$p_{2 \min}$	bar	0.5 on request
	$p_{2 \max}$	bar	0.5 0.5 <sup>3)</sup> 8 10
Recommended flow <sup>2)</sup>	$Q_n$	l/min m <sup>3</sup> /h	<b>850</b> <b>51</b> <b>1900</b> <b>114</b>
Maximum flow <sup>4)</sup>	$Q_{\max}$	l/min m <sup>3</sup> /h	1900 114      1950 117

Air preparation unit comprising:

Filter-water-separator  
Oil mist lubricator  
Gauge  
Mounting bracket

- Easy and quick installation of mounting kit
- Suitable for direct wall mounting
- Modern design

1) For further characteristics see page 73

2) at 6 bar and 25 m/s

3) By the use of special springs, the outlet pressure can be precisely regulated in the specified  $p_2$  range

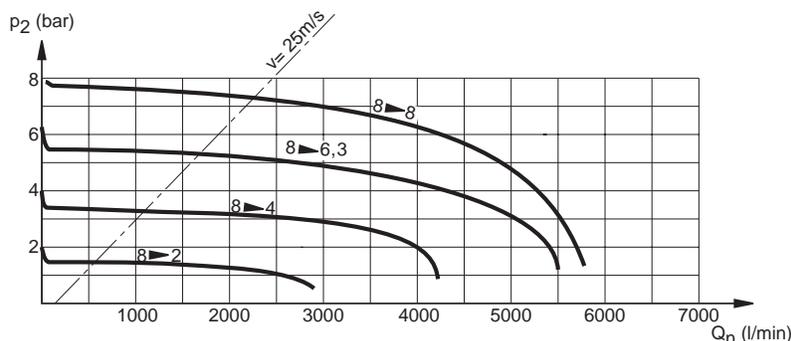
4) at  $p_1 = 10$  bar and  $p_2 = 6.3$  bar,  $\Delta p = 1$  bar

\*) Use only recommended oils with viscosity VG32 to ISO 3448 (32 mm<sup>2</sup>/s at 40°C) or HOERBIGER special oil, Order No.: KY 8766

The right to introduce technical modifications is reserved

### Flow Characteristics

Type: CKL-1/2-US

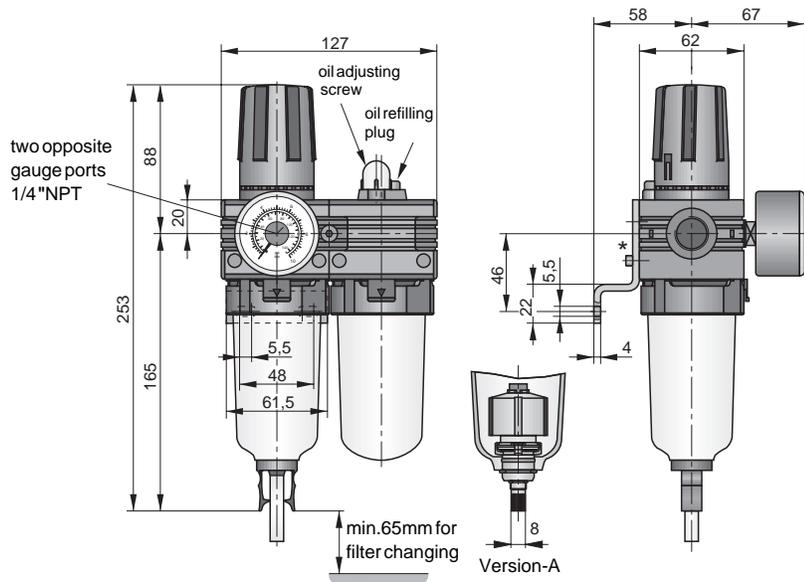


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For single units see pages 63-73  
For air preparation units see pages 59-62

## Dimensions (mm)

Type: CKL-1/2-US



\*) On delivery the plug screw is not assembled.

## Accessories

**Bowl guard kit**  
For further details see page 82



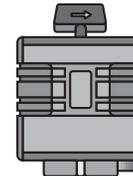
Order No.: PL 17680

**Porting block kit**  
to provide unlubricated air.  
For further details see page 81



Order No.: PL 17746, PL 17731

**3/2 way shut-off valve**



Order No.: PB 56849-N000  
PB 56949-N000

## Order Instructions

Description	Port size	Type	Order No.
Basic model	3/8" NPT	CKL-3/8-US	PB 58549-N000
Basic model	1/2" NPT	CKL-1/2-US	PB 58649-N000
With semiautomatic drainage	3/8" NPT	CKL-3/8-H-US	PB 58549-N001
With semiautomatic drainage	1/2" NPT	CKL-1/2-H-US	PB58649-N001
With automatic drainage	3/8" NPT	CKL-3/8-A-US	PB 58549-N002
With automatic drainage	1/2" NPT	CKL-1/2-A-US	PB 58649-N002
With metal bowl	3/8" NPT	CKL-3/8-D-US	PB 58549-N003
With metal bowl	1/2" NPT	CKL-1/2-D-US	PB 58649-N003
With metal bowl (sight glass)	3/8" NPT	CKL-3/8-E-US	PB 58549-N004
With metal bowl (sight glass)	1/2" NPT	CKL-1/2-E-US	PB 58649-N004
With metal bowl and automatic drainage	3/8" NPT	CKL-3/8-AD-US	PB 58549-N005
With metal bowl and automatic drainage	1/2" NPT	CKL-1/2-AD-US	PB 58649-N005
With metal bowl (sight glass) and automatic drainage	3/8" NPT	CKL-3/8-AE-US	PB 58549N-006
With metal bowl (sight glass) and automatic drainage	1/2" NPT	CKL-1/2-AE-US	PB 58649-N006

## Accessories

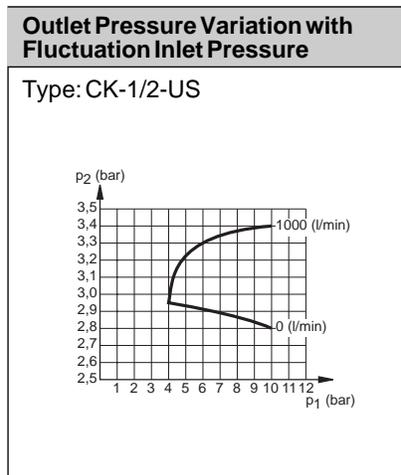
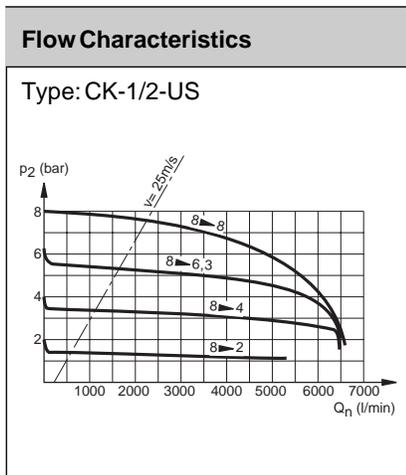
Description	Order No.
Bowl guard kit	PL 17680
Porting block kit 3/8" NPT	PL 17746
Porting block kit 1/2" NPT	PL 17731
Regulator spring for operating pressure 4 bar	PL 17748
Regulator spring for operating pressure 10 bar	PL17705
3/2 way shut-off valve (spool type) CDV-3/8-XS-US / CDV-1/2-XS-US	PB 56849-N000, PB 56949-N000
Coupling kit	PL 17608
Solvent resistant sight glass	PL 07233
Adapter kit 3/4" NPT	PL 17682

\* All products available in metric ports

The right to introduce technical modifications is reserved

Characteristics		Pressures quoted as gauge pressure	
System		Cyclone system with filter element, combined with diaphragm-type pressure regulating valve (spring loaded) with flow compensation and secondary pressure relief	
Type		<b>CK-3/8-US</b>	<b>CK-1/2-US</b>
Port size		<b>3/8" NPT</b>	<b>1/2" NPT</b>
Pore size of filter element	µm	Standard: 30 (white) 5 (yellow)	
Max. condensate capacity	cm <sup>3</sup>	57	
Condensate drainage		Standard: manual semiautomatic with pressure relief or fully automatic (float-type)	
Installation		Vertical	
Medium and ambient temperatures	$\vartheta_{\min}$ $\vartheta_{\max}$	°C °C	0 +50 at 10 bar (further temperatures on request)
Weight (mass)	kg	0.75	
<b>Pneumatic Characteristic</b>			
Operating pressure range - inlet pressure	$p_{1\min}$ $p_{1\max}$	bar bar	0 16
Operating pressure range - outlet pressure	$p_{2\min}$ $p_{2\max}$	bar bar	0.5 on request 8      0.5      0.5 <sup>2)</sup> 4      10
Min. pressure difference	$p_1 - p_2$	bar	0.2
Hysteresis $p_1=10/p_2=0$		bar	0.9
Hysteresis $p_1=10/p_2=8$		bar	0.7
Recommended flow <sup>1)</sup>	$Q_n$	l/min m <sup>3</sup> /h	<b>850</b> <b>51</b> <b>1900</b> <b>114</b>
Maximum flow <sup>3)</sup>	$Q_{\max}$	l/min m <sup>3</sup> /h	3000 180      3300 198
Degree of moisture separation at recommended flow	$\eta$	%	95      95

- <sup>1)</sup> at  $p_2 = 6$  bar and 25 m/s
- <sup>2)</sup> By the use of special springs, the outlet pressure can be precisely regulated in the specified  $p_2$  range
- <sup>3)</sup> at  $p_1 = 10$  bar and  $p_2 = 6.3$  bar,  $\Delta p = 1$  bar



# Filter-Regulator

## 3/8" NPT, 1/2" NPT

Pressure regulating valve with filter-water-separator

Degree of moisture separation 95%

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CK...-US



Filter-regulator with flow compensation and secondary pressure relief, hand wheel lockable

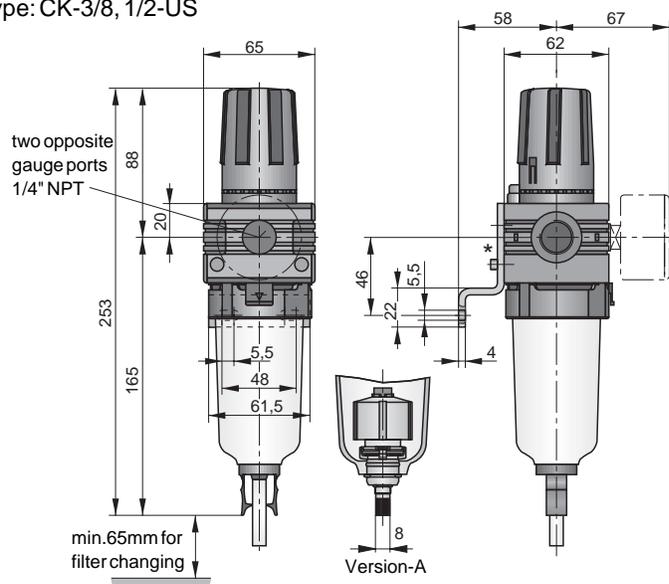
- Easy and quick installation of mounting kit
- Suitable for direct wall mounting
- Modern design

For single units see pages 63-73  
For air preparation units see pages 59-62

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## Dimensions (mm)

Type: CK-3/8, 1/2-US



\*) On delivery the plug screw is not assembled.

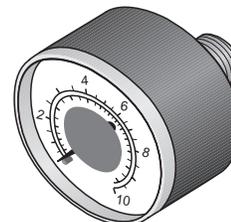
## Accessories

**Bowl guard kit**  
For further details see page 82



Order No.: PL 17680

**Gauge**



Order No.: KG 8012-00 (Pg 22-23)

## Order Instructions

Description	Port size	Type	Order No.
Basic model (30 µm)	3/8" NPT	CK-3/8-US	PB 55849-N000
Basic model (30 µm)	1/2" NPT	CK-1/2-US	PB 55949-N000
With filter element 5 µm	3/8" NPT	CK-3/8-5-US	PB 55849-N016
With filter element 5 µm	1/2" NPT	CK-1/2-5-US	PB 55949-N016
With semiautomatic drainage	3/8" NPT	CK-3/8-H-US	PB 55849-N001
With semiautomatic drainage	1/2" NPT	CK-1/2-H-US	PB 55949-N001
With automatic drainage	3/8" NPT	CK-3/8-A-US	PB 55849-N002
With automatic drainage	1/2" NPT	CK-1/2-A-US	PB 55949-N002
With metal bowl	3/8" NPT	CK-3/8-D-US	PB 55849-N003
With metal bowl	1/2" NPT	CK-1/2-D-US	PB 55949-N003
With metal bowl (sight glass)	3/8" NPT	CK-3/8-E-US	PB 55849-N004
With metal bowl (sight glass)	1/2" NPT	CK-1/2-E-US	PB 55949-N004
With metal bowl and automatic drainage	3/8" NPT	CK-3/8-AD-US	PB 55849-N005
With metal bowl and automatic drainage	1/2" NPT	CK-1/2-AD-US	PB 55949-N005
With metal bowl (sight glass) and automatic drainage	3/8" NPT	CK-3/8-AE-US	PB 55849-N006
With metal bowl (sight glass) and automatic drainage	1/2" NPT	CK-1/2-AE-US	PB 55949-N006

## Accessories

Description	Order No.
Bowl guard kit	PL 17680
Gauge Ø 50, 0-10 bar, 1/4" NPT	KG 8012-00
Mounting kit	PL 17518
Porting block kit 3/8" NPT	PL 17746
Porting block kit 1/2" NPT	PL 17731
Regulator spring for operating pressure 4 bar	PL 17748
Regulator spring for operating pressure 10 bar	PL 17705
3/2 way shut-off valve (spool type) CDV-3/8-XS-US / CDV-1/2-XS-US	PB 56849-N000, PB 56949-N000
Coupling kit	PL 17608
Solvent resistant sight glass	PL 07233
Adapter kit 3/4" NPT	PL 17682

\* All products available in metric ports

Characteristics			Pressures quoted as gauge pressure			
System			Cyclone system and filter element		Dust filter	
Type			CF-3/8-US	CF-1/2-US	CFD-3/8-US	CFD-1/2-US
Port size			3/8" NPT	1/2" NPT	3/8" NPT	1/2" NPT
Max. condensate capacity		cm <sup>3</sup>	57			
Pore size of filter element		μm	Standard: 30: white 5: yellow		Standard: 1	
Condensate drainage			Standard: manual, semiautomatic with pressure relief or fully automatic		manual	
Installation			Vertical			
Medium and ambient temperatures	$\vartheta_{\min}$ $\vartheta_{\max}$	°C °C	0 +50 at 10 bar		(further temperatures on request)	
Weight (mass)		kg	0.55			
<b>Pneumatic Characteristic</b>						
Operating pressure range	$p_{\min}$ $p_{\max}$	bar bar	0 16			
Recommended flow <sup>1)</sup>	$Q_n$	l/min m <sup>3</sup> /h	<b>850</b> <b>51</b>	<b>1900</b> <b>114</b>	<b>850</b> <b>51</b>	<b>1900</b> <b>114</b>
Maximum Flow <sup>2)</sup>	$Q_{\max}$	l/min m <sup>3</sup> /h	4500 270	5000 300	4130 248	4820 289
Degree of moisture separation at recommended flow	$\eta$	%	95		only solid particles >99% related to 1 μm	

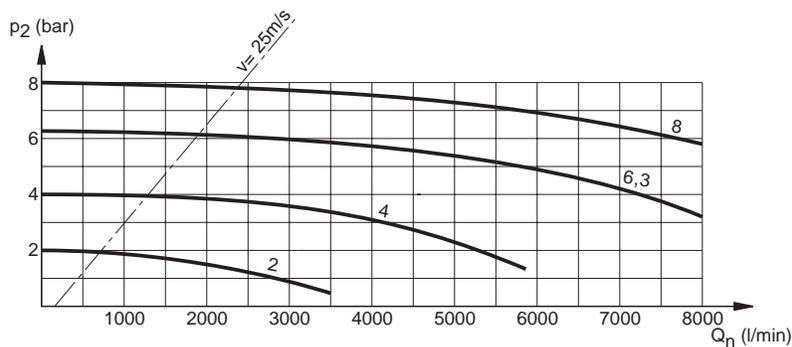
<sup>1)</sup> at 6 bar and 25 m/s

<sup>2)</sup> at  $p_1 = 6.3$  bar,  $\Delta p = 1$  bar

The right to introduce technical modifications is reserved

### Flow Characteristics

Type: CF-1/2-US



For single units see pages 63-73

For accessories see pages 81-82

For air preparation units see page 59-62

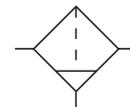
# Filter-Water-Separator, Dust Filter

## 3/8" NPT, 1/2" NPT

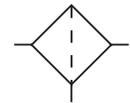
Degree of moisture separation 95%

**airfit** comfort

CF



CFD



**CF:**

Filter-water-separator with cyclone system and filter element.

**CFD:**

Dust filter with large filter surface for long service life. For compressed air systems with air dryers.

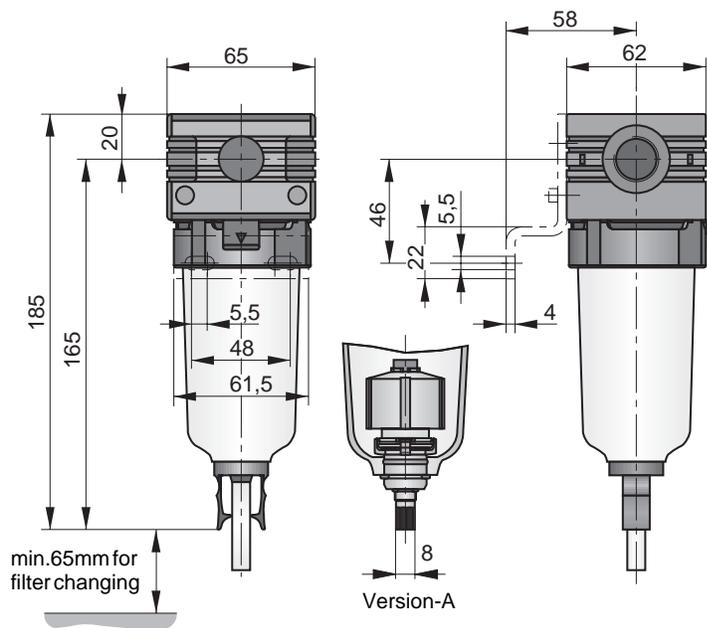
- Easy and quick installation of mounting kit
- Suitable for direct wall mounting
- Modern design



**HOERBIGER**  
**ORIGA**

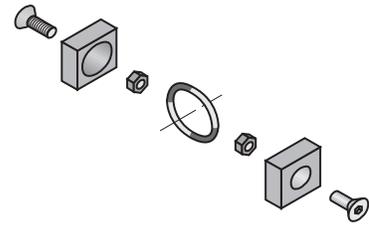
## Dimensions (mm)

Type: CF-3/8-US, CF-1/2-US



## Accessories

### Coupling kit



Order No.: PL 17608

### Bowl guard kit

For further details see page 82



Order No.: PL 17680

## Order Instructions

Description	Port size	Type	Order No.
Basic model (30 µm)	3/8" NPT	CF-3/8-US	PB 55249-N000
Basic model (30 µm)	1/2" NPT	CF-1/2-US	PB 55349-N000
With filter element 5 µm	3/8" NPT	CF-3/8-5-US	PB 55249-N016
With filter element 5 µm	1/2" NPT	CF-1/2-5-US	PB 55349-N016
With semiautomatic drainage	3/8" NPT	CF-3/8-H-US	PB 55249-N001
With semiautomatic drainage	1/2" NPT	CF-1/2-H-US	PB 55349-N001
With automatic drainage	3/8" NPT	CF-3/8-A-US	PB 55249-N002
With automatic drainage	1/2" NPT	CF-1/2-A-US	PB 55349-N002
With metal bowl	3/8" NPT	CF-3/8-D-US	PB 55249-N003
With metal bowl	1/2" NPT	CF-1/2-D-US	PB 55349-N003
With metal bowl (sight glass)	3/8" NPT	CF-3/8-E-US	PB 55249-N004
With metal bowl (sight glass)	1/2" NPT	CF-1/2-E-US	PB 55349-N004
With metal bowl and automatic drainage	3/8" NPT	CF-3/8-AD-US	PB 55249-N005
With metal bowl and automatischer Kondensatentleerung	1/2" NPT	CF-1/2-AD-US	PB 55349-N005
With metal bowl (sight glass) and automatic drainage	3/8" NPT	CF-3/8-AE-US	PB 55249-N006
With metal bowl (sight glass) and automatic drainage	1/2" NPT	CF-1/2-AE-US	PB 55349-N006
With filter element 1 µm	3/8" NPT	CFD-3/8-1-US	PB 55249-N070
With filter element 1 µm	1/2" NPT	CFD-1/2-1-US	PB 55349-N070

## Accessories

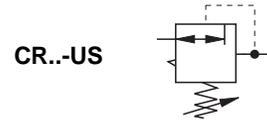
Description	Order No.
Bowl guard kit	PL17680
Mounting kit	PL 17518
Coupling kit	PL 17608
Porting block kit 3/8" NPT	PL 17746
Porting block kit 1/2" NPT	PL 17731
3/2 way shut-off valve (spool type) CDV-3/8-XS-US / CDV-1/2-XS-US	PB 56849-N000, PB 56949-N000
Adapter kt 3/4" NPT	PL 17682

\* All products available in metric ports

# Pressure Regulating Valve

3/8" NPT, 1/2" NPT

airfit comfort



Characteristics		Pressures quoted as gauge pressure	
System		Diaphragm-type pressure regulating valve (spring loaded) with flow compensation and secondary pressure relief	
Type		CR-3/8-US	CR-1/2-US
Port size		3/8" NPT	1/2" NPT
Installation		In any position	
Medium and ambient temperatures	$\vartheta_{\min}$ $\vartheta_{\max}$	°C °C	0 +60 (further temperatures on request)
Weight (mass)		kg	0.55
<b>Pneumatic Characteristic</b>			
Operating pressure range - inlet pressure	$p_{1 \min}$ $p_{1 \max}$	bar bar	0 16
Operating pressure range - outlet pressure	$p_{2 \min}$ $p_{2 \max}$	bar bar	0.5 on request 8      0.5      0.5 <sup>2)</sup> 4      10
Min. pressure difference	$p_1 - p_2$	bar	0.2
Hysteresis $p_1=10/p_2=0$		bar	0.9
Hysteresis $p_1=10/p_2=8$		bar	0.7
Recommended flow <sup>1)</sup>	$Q_n$	l/min m <sup>3</sup> /h	<b>850</b> <b>51</b> <b>1900</b> <b>114</b>
Maximum flow <sup>3)</sup>	$Q_{\max}$	l/min m <sup>3</sup> /h	4200 252      5700 342

<sup>1)</sup> at  $p_2 = 6$  bar and 25 m/s

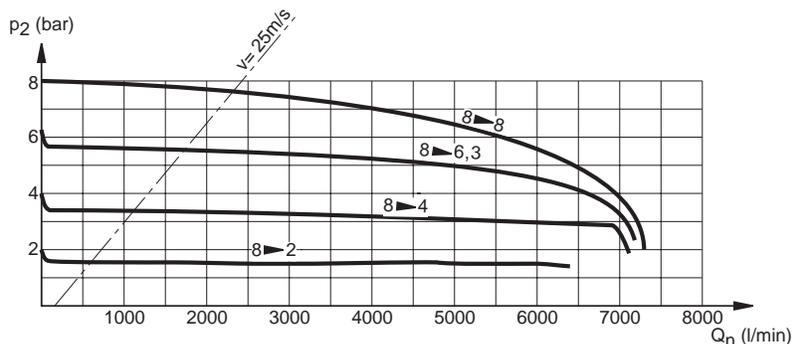
<sup>2)</sup> By the use of special springs, the outlet pressure can be precisely regulated in the specified  $p_2$  range

<sup>3)</sup> at  $p_1 = 10$  bar and  $p_2 = 6.3$  bar,  $\Delta p = 1$  bar

The right to introduce technical modifications is reserved

## Flow Characteristics

Type: CR-1/2-US



Diaphragm-type pressure regulating valve (spring loaded) flow compensation and with secondary pressure relief, handwheel lockable



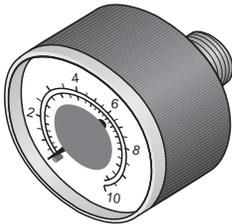
- Easy and quick installation of mounting kit
- Suitable for direct wall mounting
- Modern design

For single units see pages 63-73  
For accessories see pages 81-82  
For air preparation units see page 59-62

**HOERBIGER**  
**ORIGA**

**Accessories**

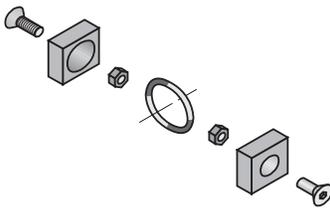
**Gauge**  
 Ø50, 0-10 bar, 1/4" NPT



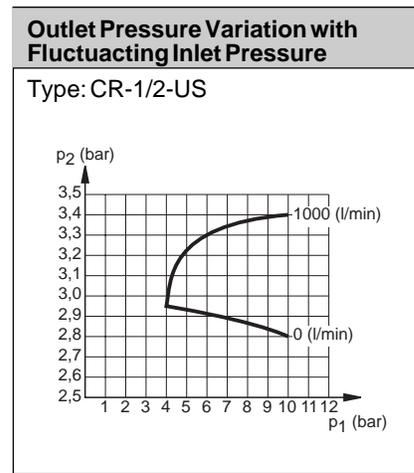
**Order No.: KG 8011** (Pages 22-23)

**Accessories**

**Coupling kit**  
 for connecting 2 single units

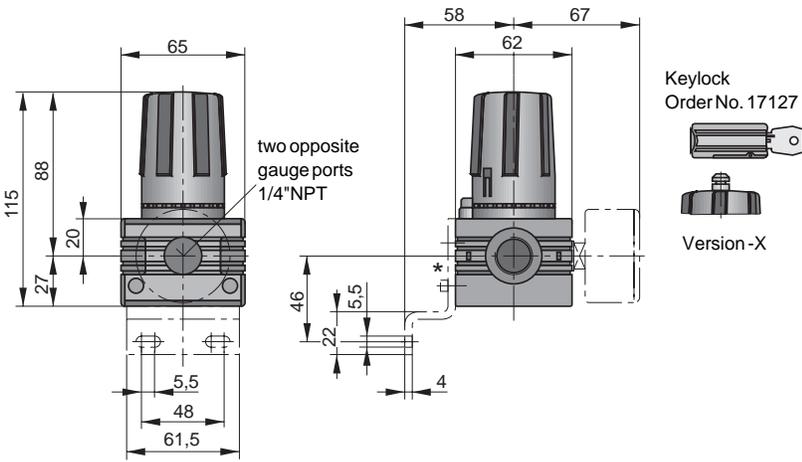


**Order No.: PL 17608**



**Dimensions (mm)**

Type: CR-1/2-US



\*) On delivery the plug screw is not assembled.

**Order Instructions**

Description	Port size	Type	Order No.
Basic model	3/8" NPT	CR-3/8-US	PB 55549-N000
	1/2" NPT	CR-1/2-US	PB 55649-N000
With adapter for keylock	3/8" NPT	CR-3/8-X-US	PB 55549-N006
	1/2" NPT	CR-1/2-X-US	PB 55649-N006

**Accessories**

Description	Order No.
Gauge Ø50, 0-10 bar, 1/4" NPT	KG 8012-00
Mounting kit	PL 17518
Coupling kit	PL 17608
Porting block kit 3/8" NPT	PL 17746
Porting block kit 1/2" NPT	PL 17731
Keylock	PL 17127
Regulator spring for operating pressure 4 bar	PL 17748
Regulator spring for operating pressure 10bar	PL 17705
3/2 way shut-off valve CDV-3/8-XS-US / CDV-1/2-XS-US, spool type	PB 56849-N000, PB 56949-N000
Adapter kit 3/4" NPT	PL 17682

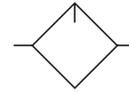
\* All products available in metric ports

# Oil Mist Lubricator

## 3/8" NPT, 1/2" NPT

airfit comfort

CL-US



Characteristics		Pressures quoted as gauge pressure	
System		Oil mist lubricator with flow compensation	
Type		<b>CL-3/8-US</b>	<b>CL-1/2-US</b>
Port size		<b>3/8" NPT</b>	<b>1/2" NPT</b>
Oil/air ratio		Degressive (number of drops per minute remains constant)	
Max. oil capacity	cm <sup>3</sup>	112	
Oil refilling*)		Standard: manual - also during operation	
Installation		Vertical	
Medium and ambient temperatures	$\vartheta_{\min}$ $\vartheta_{\max}$	°C °C	0 +50 at 10 bar (further temperatures on request)
Weight (mass)	kg	0.55	
Pneumatic Characteristic			
Operating pressure range	$p_{\min}$	bar	0
	$p_{\max}$	bar	16
Recommended flow <sup>1)</sup>	$Q_n$	l/min m <sup>3</sup> /h	<b>850</b> <b>51</b>
			<b>1900</b> <b>114</b>
Maximum Flow <sup>2)</sup>	$Q_{\max}$	l/min m <sup>3</sup> /h	5000 300
			5300 318
Recommended operating range	$Q_n$	l/min m <sup>3</sup> /h	33-833 2-50
			33-2000 2-120

<sup>1)</sup> at 6 bar and 25 m/s

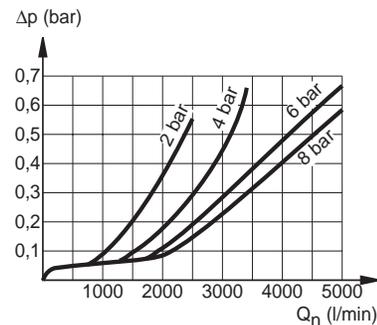
<sup>2)</sup> at  $p_1 = 6,3$  bar,  $\Delta p = 1$  bar

\*) Use only recommended oils with viscosity VG32 to ISO 3448 (32 mm<sup>2</sup>/s at 40°C) or HOERBIGER special oil, Order No.: KY 8766

The right to introduce technical modifications is reserved

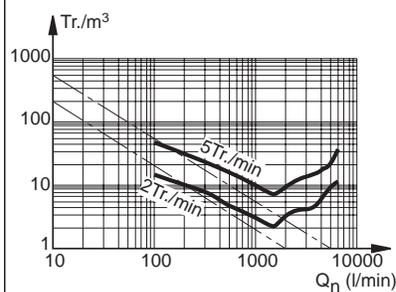
### Flow Characteristics

Type: CL-1/2-US



### Oil/Air Ratio

Type: CL-1/2-US



Oil mist lubricator with flow compensation (number of drops per minute is constant)

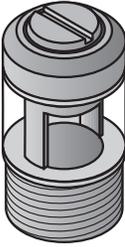
- Easy and quick installation of mounting kit
- Suitable for direct wall mounting
- Modern design

For single units see pages 63-73  
 For accessories see pages 81-82  
 For air preparation units see page 59-62

**HOERBIGER**  
**ORIGA**

**Accessories**

**Solvent resistant sight glass**



**Order No.: PL 07233**

**Accessories**

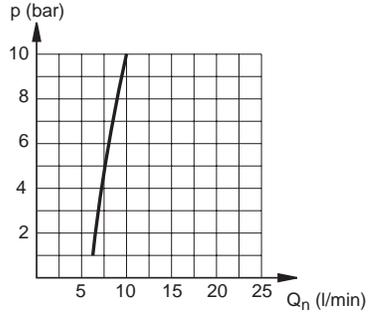
**Bowl Guard Kit**  
For further details see page 82



**Order No.: PL 17680**

**Min. Operating Conditions**

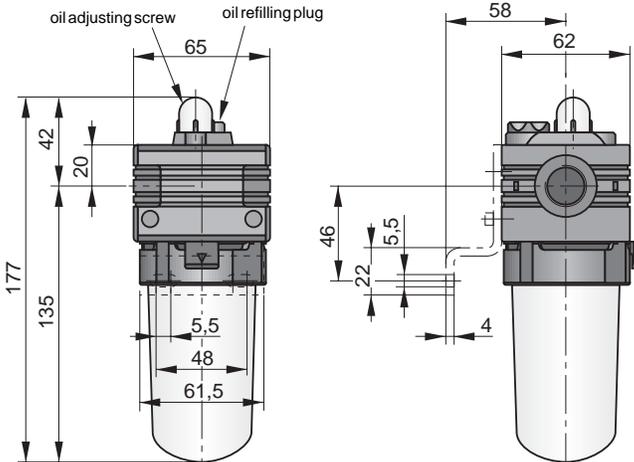
Type: CL-1/2-US



Flow rate $Q_n$ (l/min)	Pressure $p$ (bar)
5	1
10	10

**Dimensions (mm)**

Type: CL-1/2-US



**Order Instructions**

Description	Port size	Type	Order No.
Basic model	3/8" NPT	CL-3/8-US	PB 56249-N000
Basic model	1/2" NPT	CL-1/2-US	PB 56349-N000
With metal bowl	3/8" NPT	CL-3/8-D-US	PB 56249-N003
With metal bowl	1/2" NPT	CL-1/2-D-US	PB 56349-N003
With metal bowl (sight glass)	3/8" NPT	CL-3/8-E-US	PB 56249-N004
With metal bowl (sight glass)	1/2" NPT	CL-1/2-E-US	PB 56349-N004

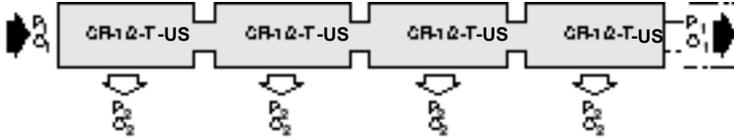
**Accessories**

Description	Bestell-Nr.
Bowl guard kit	PL17680
Mounting kit	PL 17518
Coupling kit	PL 17608
Porting block kit 3/8" NPT	PL 17746
Porting block kit 1/2" NPT	PL 17731
Solvent resistant sight glass	PL 07233
3/2-way shut-off valve CDV-3/8-XS-US / CDV-1/2-XS-US, spool type	PB 56849-N000, PB 56949-N000
Adaptersatz 3/4" NPT	PL 17682

Characteristics		Pressures quoted as gauge pressure	
System			Diaphragm-type pressure regulating valve (spring loaded) with flow compensation and secondary pressure relief
Type			<b>CR-3/8-T-US</b>
Port size			3/8" NPT
Installation			In any position
Medium and ambient temperatures	$\vartheta_{\min}$ $\vartheta_{\max}$	°C °C	0 +60 (further temperatures on request)
Weight (mass)		kg	0.55
<b>Pneumatic Characteristic</b>			
Operating pressure range - inlet pressure	$p_{1\min}$ $p_{1\max}$	bar bar	0 16
Operating pressure range - outlet pressure	$p_{2\min}$ $p_{2\max}$	bar bar	0.5 on request 8      0.5      0.5 <sup>1)</sup> 4      10
Min. pressure difference	$p_1 - p_2$	bar	0.2
Hysteresis $p_1=10/p_2=0$		bar	0.9
Hysteresis $p_1=10/p_2=8$		bar	0.7

<sup>1)</sup> By the use of special springs, the outlet pressure can be precisely regulated in the specified  $p_2$  range

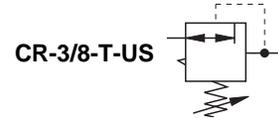
#### Installation Instructions for Battery Mounting



# Pressure Regulating Valve

with through  $p_1$  supply port  
3/8" NPT

airfit comfort



The right to introduce technical modifications is reserved

Diaphragm-type pressure regulating valve (spring loaded) flow compensation and with secondary pressure relief, handwheel lockable

- With through  $p_1$  supply port
- Infinitely expandable
- Controlled
- Easy and quick installation of mounting kit
- Suitable for direct wall mounting
- Modern design

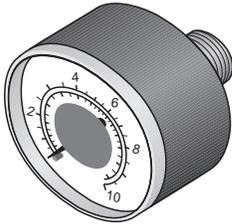


For single units see pages 63-73  
For air preparation units see pages 59-62

**HOERBIGER**  
**ORIGA**

**Accessories**

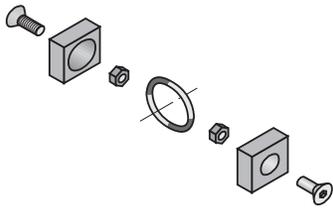
**Gauge**  
 Ø 50, 0-10 bar, 1/4" NPT



**Order No.:** KG 8012-00 (Pg 22-23)

**Accessories**

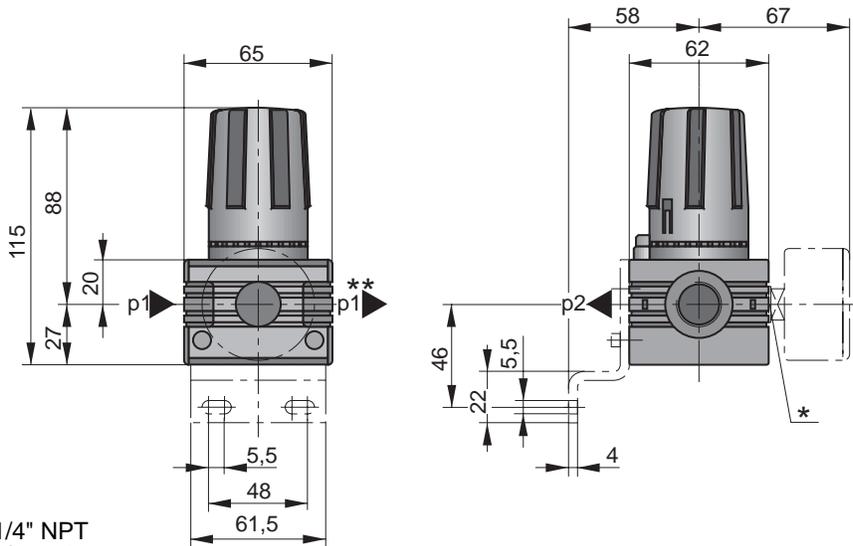
**Coupling kit**  
 for connecting 2 single units



**Order No.:** PL 17608

**Dimensions (mm)**

Type: CR-3/8-T-US



\* Gauge connection 1/4" NPT  
 \*\* with through p<sub>1</sub> supply port

**Order Instructions**

Description	Port size	Type	Order No.
Pressure regulating valve	p <sub>1</sub> -1/2" NPT, through p <sub>2</sub> -3/8" NPT, outlet	CR-1/2-T 3/8-US	PB 55649-N101

**Accessories**

Description	Order No.
Gauge Ø 50, 0-10 bar, 1/4" NPT	KG 8012-00
Gauge, Ø 50, 0-10 bar, 1/4" NPT, bottom connection	KZ 8821
Mounting kit	PL 17518
Coupling kit	PL 17608
Porting block kit 3/8" NPT	PL 17746
Porting block kit 1/2" NPT	PL 17731
Regulator spring for operating pressure 4 bar	PL 17748
Regulator spring for operating pressure 10bar	PL 17705
3/2-Wege-Absperrventil (spool type) CDV-3/8-XS-US	PB 56849-N000
Adapter kit 3/4" NPT	PL 17682

\* All products available in metric ports

Characteristics		Pressures quoted as gauge pressure		
System			Specially designed pressure regulating valve with maximal pressure limiter, easily adjustable by customer.	
Regulator spring		bar	8 (standard)	4
Operating pressure range - outlet pressure	$p_{2\min}$ $p_{2\max}$	bar bar	0.5 2 – 7.5 (0.5 – 6.2)	0.5 1.5 – 4
<b>For further technical data and information, please refer to the data sheet of the standard pressure regulator CR-..., pages 67-68</b>				

### Installation Instructions

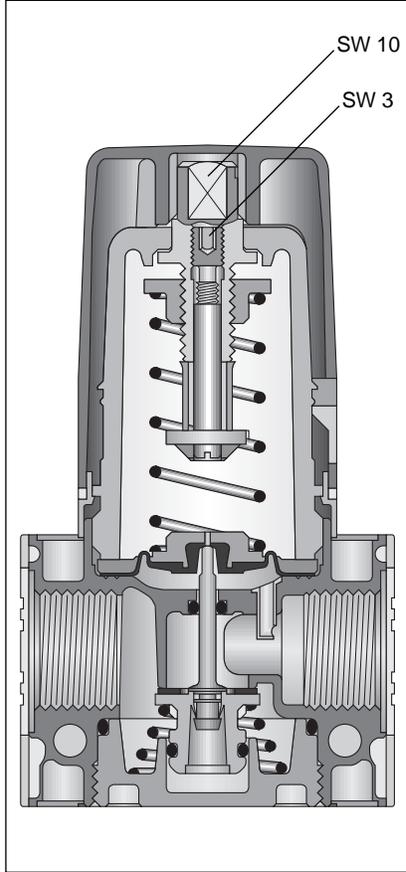
This pressure regulating valve was specially designed to allow the customer to limit the maximal pressure of his system. The handwheel is not assembled on delivery, and can only be mounted after the pressure has been set and tested. The pressure limit cannot be changed without disassembly of the handwheel.

#### Pressure adjustment:

After the unit is installed and air pressure is applied, maximum pressure can be set with a spanner size 10. When the pressure is set correctly, keep the spanner in place and use an Allan key size 3 to turn the adjustment screw clockwise until it is fixed. Once the screw is fixed, do not tighten it unnecessarily. Lower the pressure with the spanner, and then raise it to the set limit. Once the maximal pressure is set ok, the handwheel can be snapped into position. Push the handwheel over the bell and gently turn it left and right, so that the square part of the pressure adjustment system falls into place. Next, push the wheel further down, until it snaps into place. The wheel is now locked in position and the pressure can be adjusted in the set range.

**Please note the installation instructions that are included with delivery of each of our air preparation units.**

### Function

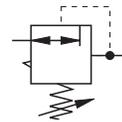


# Pressure Regulating Valve

with customer adjustable maximal pressure limiter "airfix"  
3/8" NPT, 1/2" NPT

**airfit** comfort

CR-3/8-L-US  
CR-1/2-L-US



Patented

The right to introduce technical modifications is reserved

Order Instructions			
Description	Port size	Type	Order No.
Pressure regulating valve with pressure limiter "AIRFIX" – Standard version	3/8" NPT	CR-3/8-L-US	PB 55549-N005
	1/2" NPT	CR-1/2-L-US	PB 55649-N005
– Option: $p_2$ 0.5 – 6.2 bar	3/8" NPT	CR-3/8-L-SO-US	PB 55549-N028
	1/2" NPT	CR-1/2-L-SO-US	PB 55649-N028
Accessories			
Regulator spring 4 bar			PL 17748
Adapter kit 3/4" NPT			PL 17682

\* All products available in metric ports

Diaphragm-type pressure regulating valve (spring loaded) flow compensation and with secondary pressure relief, handwheel lockable



- Easy and quick installation of mounting kit
- Suitable for direct wall mounting
- Modern design

For single units see pages 63-73  
For air preparation units see pages 59-62



Characteristics		Pressures quoted as gauge pressure		
System			3/2 way valve (spool type)	
Mounting			direct assembly to any unit from the airfit comfort series, with coupling kit PL 17608	
Type			<b>CDV-3/8-XS-US</b>	<b>CDV-1/2-XS-US</b>
Port size			<b>3/8" NPT</b>	<b>1/2" NPT</b>
Installation			In any position	
Medium and ambient temperatures	$\vartheta_{\min}$ $\vartheta_{\max}$	$^{\circ}\text{C}$ $^{\circ}\text{C}$	0 +60 at 10 bar (further temperatures on request)	
Weight (mass)		kg	0.4	
<b>Pneumatic Characteristic</b>				
Operating pressure range	$p_{1\min}$ $p_{1\max}$	bar bar	0 16	
Recommended flow <sup>1)</sup>	$Q_n$	l/min m <sup>3</sup> /h	<b>850</b> <b>51</b>	<b>1900</b> <b>114</b>
Maximum flow <sup>3)</sup>	$Q_{\max}$	l/min m <sup>3</sup> /h	7500 450	7500 450

<sup>1)</sup> at  $p_2 = 6.3$  bar and 25 m/s

<sup>2)</sup> at  $p_2 = 6.3$  bar and  $\Delta p = 1$  bar

Dimensions (mm)	
Type: CDV-3/8, 1/2	

Bestellangaben			
Description	Port size	Type	Order No.
3/2 way shut-off valve	3/8" NPT	<b>CDV-3/8-XS-US</b>	<b>PB 56849-N000</b>
3/2 way shut-off valve	1/2" NPT	<b>CDV-1/2-XS-US</b>	<b>PB 56949-N000</b>

Accessories	
Description	Order No.
Coupling kit	<b>PL 17608</b>
Adaptor set 3/4" NPT	<b>PL 17681</b>

Accessories	
Key, codeable by customer	
<b>Order No.: KG 9017</b>	

\* All products available in metric ports

# 3/2 Way Shut-off Valve

## 3/8" NPT - 1/2" NPT

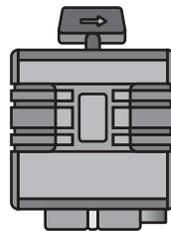
Spool type

Actuation: slide

**airfit** comfort



- Spool type valve
- 4-fold lockable
- Colour coded optical position indicator
- Controlled exhaust
- Arrow symbol indicates flow direction



**HOERBIGER**  
**ORIGA**

Characteristics		Pressures quoted as gauge pressure	
System		switches	Poppet valve with integral, adjustable throttle*) for slow pressure build-up (e.g. after emergency shutdown). At 0.5 x operating pressure the valve to full flow.
Type		CDA-3/8-US	CDA-1/2-US
Port size		3/8" NPT	1/2" NPT
Installation			In any position - direct assembly to air preparation units series AIRFIT-comfort
Medium and ambient temperatures	$\vartheta_{\min}$ $\vartheta_{\max}$	bar bar	0 (further temperatures +60 on request)
Weight (mass)		kg	0.60
Pneumatic Characteristics			
Operating pressure range	$p_{\min}$ $p_{\max}$	bar bar	2 16
Recommended flow <sup>1)</sup>	$Q_n$	l/min m <sup>3</sup> /h	<b>850</b> <b>51</b>
Maximum flow <sup>2)</sup>	$Q_{\max}$	l/min m <sup>3</sup> /h	3500 210

<sup>1)</sup> at  $p_2 = 6.3$  bar and 25 m/s

<sup>2)</sup> at  $p_1 = 6.3$  bar and  $\Delta p = 1$  bar

**\*) Note:**

During the start-phase no components in the system should consume any air (build-up only).

**Flow time in start phase with adjustment screw fully open and 6.3 bar: 1.5 s/l**

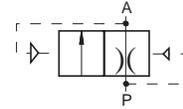
# Soft Start Valve

## 3/8" NPT, 1/2" NPT

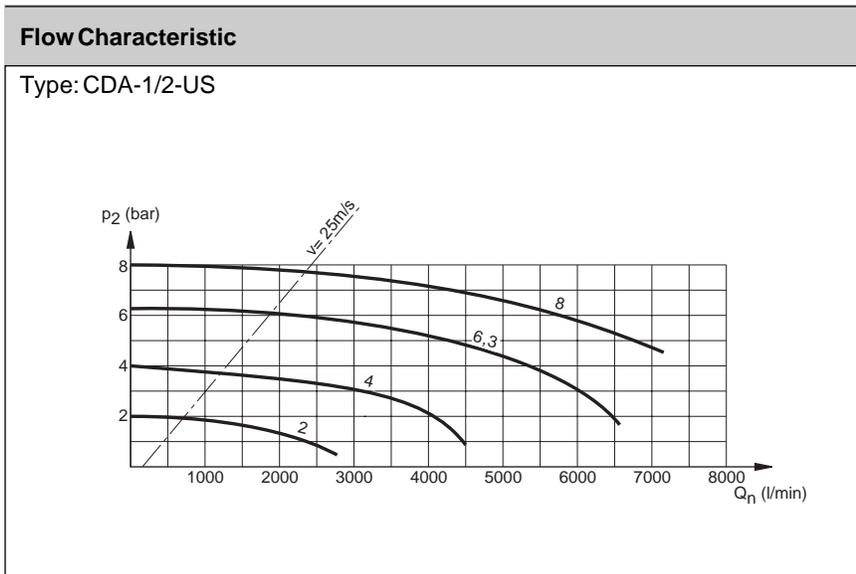
(Pressure build-up valve)

**airfit**comfort

CDA-3/8  
CDA-1/2



The right to introduce technical modifications is reserved



Safety valve for slow pressure build-up in pneumatic circuits.

It prevents uncontrolled movements of the pneumatic components under the impact of full operating pressure.

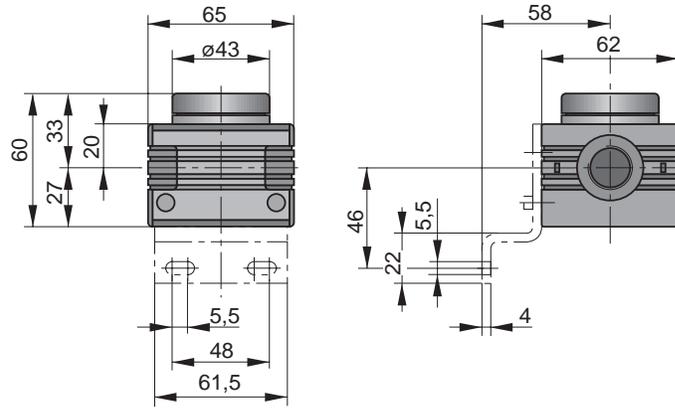


- Easy and quick installation of mounting kit
- Suitable for direct wall mounting
- Modern design

**HOERBIGER**  
**ORIGA**

## Dimensions (mm)

Type: CDA-1/2-US



## Order Instructions

Description	Portsize	Type	Order No.
Soft start valve	3/8" NPT	CDA-3/8-US	PB 57249-N100
Soft start valve	1/2" NPT	CDA-1/2-US	PB 57349-N100

## Accessories

Description	Order No.
Mounting kit	PL 17518
Coupling kit	PL 17608
Adapter kit 3/4" NPT	PL 17682

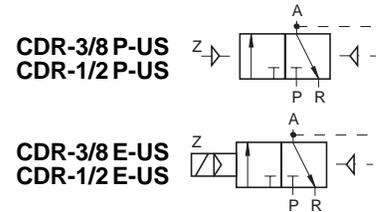
\* All products available in metric ports

# Stop Valve

## 3/8" NPT, 1/2" NPT

Actuation: **Pneumatic**  
**Electrical**

**airfit**comfort



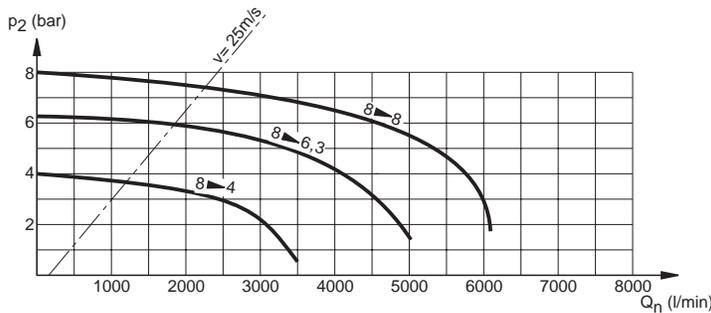
Characteristics		Pressures quoted as gauge pressure				
System			3/2 way poppet valve with pneumatic or electrical actuation and integrated exhaust silencer			
Type			CDR-3/8 P-US	CDR-1/2 P-US	CDR-3/8 E-US	CDR-1/2 E-US
Actuation			Pneumatic		electrical	
Port size			3/8" NPT	1/2" NPT	3/8" NPT	1/2" NPT
Installation			In any position - direct assembly to the soft start valve CDA or to air preparation units series AIRFIT comfort			
Medium and ambient temperatures	$\vartheta_{\min}$ $\vartheta_{\max}$	°C °C	0 +60 (further temperatures on request)			
Weight (mass)		kg	0.7		0.8	
Pneumatic Characteristic						
Operating pressure range	$p_{\min}$ $p_{\max}$	bar bar	2 16			
Recommended flow <sup>1)</sup>	$Q_n$	l/min m <sup>3</sup> /h	<b>850</b> <b>51</b>	<b>1900</b> <b>114</b>	<b>850</b> <b>51</b>	<b>1900</b> <b>114</b>
Maximum flow <sup>2)</sup>	$Q_{\max}$	l/min m <sup>3</sup> /h	2500 150	2900 174	2500 150	2900 174

<sup>1)</sup> at  $p_2 = 6,3$  bar and 25 m/s

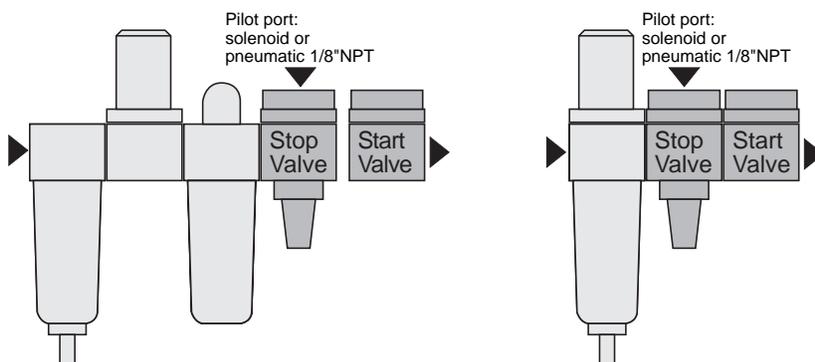
<sup>2)</sup> at  $p_1 = 6.3$  bar,  $\Delta p = 1$  bar

### Flow Characteristic

Type: CDR-1/2-US



### Assembly Instructions



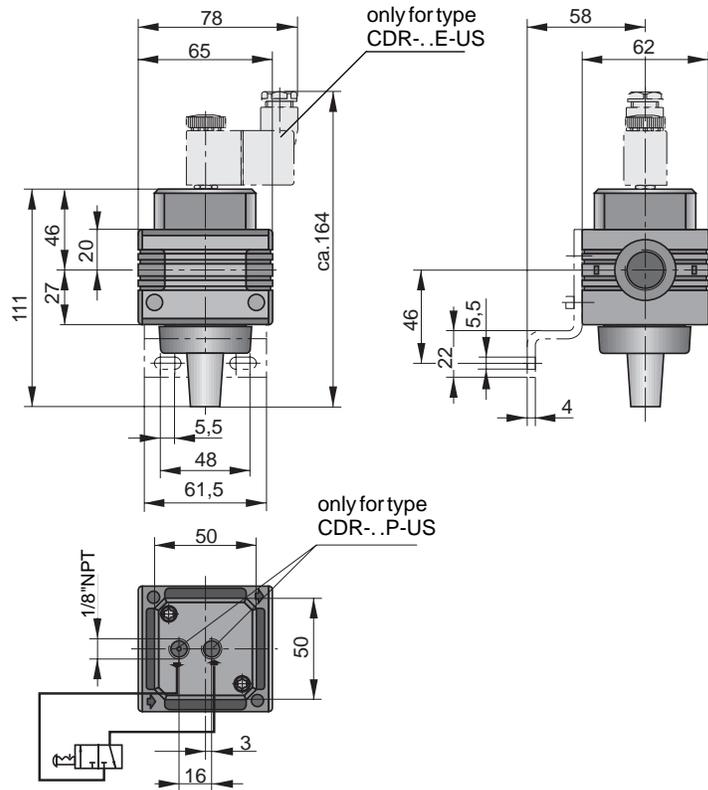
The stop valve is used in conjunction with the soft start valve for exhausting pneumatic circuits.



- Easy and quick installation of mounting kit
- Suitable for direct wall mounting
- Modern design

**HOERBIGER**  
**ORIGA**

Actuation: pneumatic, electrical,  
 Type: CDR-3/8 P-US, CDR-1/2 P-US  
 Type: CDR-3/8 E-US, CDR-1/2 E-US



**Order Instructions**

Description	Actuation	Symbol	Nominal voltage	Port size	Type	Order No.
Stop Valve	Pneumatic			3/8" NPT	<b>CDR-3/8 P-US</b>	<b>PB 57249-N200</b>
				1/2" NPT	<b>CDR-1/2 P-US</b>	<b>PB 57349-N200</b>
	Electrical		24 V DC	3/8" NPT	<b>CDR-3/8 E-US</b>	<b>PB 57249-N201</b>
				1/2" NPT	<b>CDR-1/2 E-US</b>	<b>PB 57349-N201</b>
			230 V/50 Hz	3/8" NPT	<b>CDR-3/8 E-US</b>	<b>PB 57249-N204</b>
				1/2" NPT	<b>CDR-1/2 E-US</b>	<b>PB 57349-N204</b>

**Accessories**

Description	Order No.
Mounting kit	<b>PL 17518</b>
Coupling kit	<b>PL 17608</b>
Adapter kit 3/4" NPT	<b>PL 17682</b>

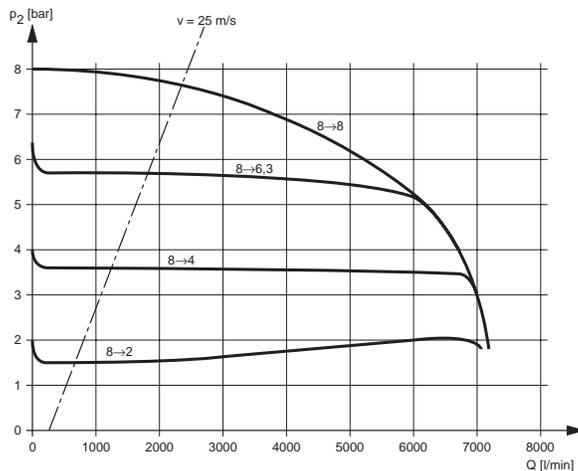
\* All products available in metric ports

Characteristics		Pressures quoted as gauge pressure	
System		Pilot operated piston-type pressure regulator with secondary pressure relief and flow compensation -suitable for remote control	
Type		<b>CRV-3/8-US</b>	<b>CRV-1/2-US</b>
Port size		<b>3/8" NPT</b>	<b>1/2" NPT</b>
Installation		In any position	
Medium and ambient temperatures	$\vartheta_{\min}$ $\vartheta_{\max}$	°C °C	0 +60 (further temperatures on request)
Weight (mass)		kg	0,5      0,5
<b>Pneumatic Characteristic</b>			
Operating pressure range - inlet pressure	$p_{1\min}$	bar	0
	$p_{1\max}$	bar	16
Operating pressure range - outlet pressure	$p_{2\min}$	bar	0,5
	$p_{2\max}$	bar	8
Min. pressure difference	$p_1 - p_2$	bar	0,2
Hysteresis $p_1=10/p_2=0$		bar	0,3
Hysteresis $p_1=10/p_2=8$		bar	0,3
Recommended flow <sup>1)</sup>	$Q_n$	l/min m <sup>3</sup> /h	<b>850</b> <b>51</b> <b>1900</b> <b>114</b>
Maximum flow <sup>2)</sup>	Q	l/min m <sup>3</sup> /h	5300      7200 318      432
Own air usage			Low
Recommended pilot pressure regulating valve			SR-1/4-US

<sup>1)</sup> at  $p_2 = 6$  bar and 25 m/s

<sup>2)</sup> at  $p_1 = 10$  bar and  $p_2 = 6,3$  bar and  $\Delta p = 1$  bar

### Flow Characteristics Type: CRV-1/2-US



Pilot operated piston-type pressure regulator with secondary pressure relief and flow compensation -suitable for remote control.



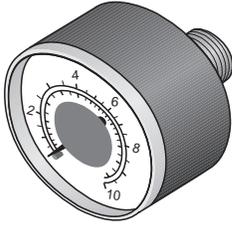
- modern design
- bracket ready to fit
- ready for direct wall mounting



For filter-water-separator see pages 65-66  
For pilot pressure regulating valve see pages 39-40

**Accessories**

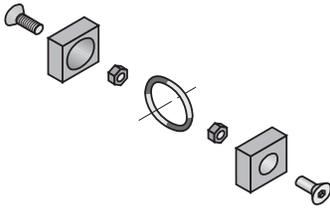
**Gauge**  
 Ø 50, 0-10 bar, 1/4" NPT



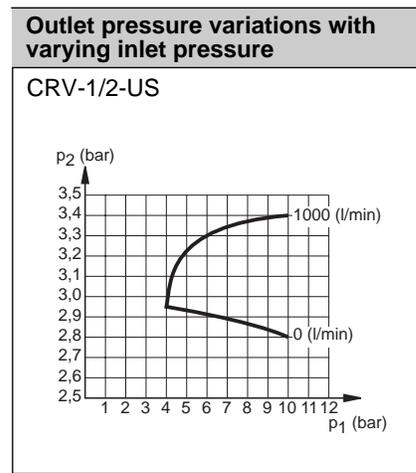
**Order No.: KG 8011** (Pages 22-23)

**Accessories**

**Coupling kit**  
 for connecting 2 single units

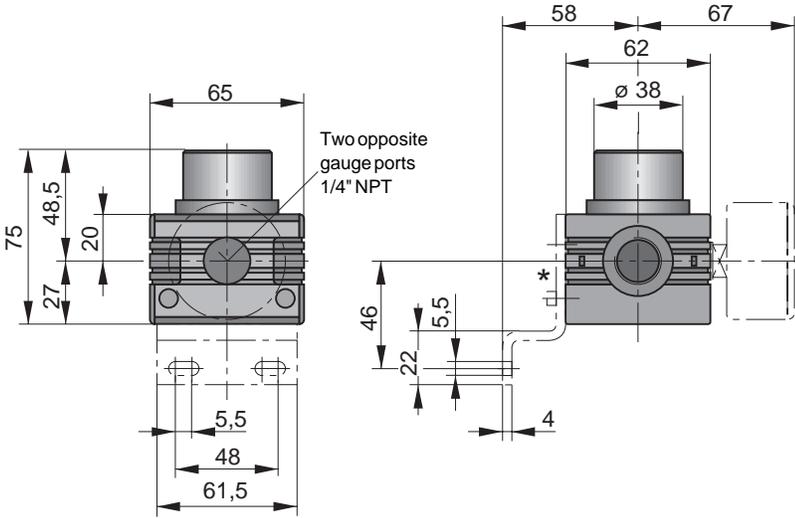


**Order No.: PL 17608**



**Dimensions (mm)**

Type: CRV-1/2-US



\* ) On delivery the plug is not assembled.

**Order Instructions**

Description	Port size	Type	Order No.
Basic model	3/8" NPT	CRV-3/8-US	PB 55549-N070
	1/2" NPT	CRV-1/2-US	PB 55649-N070
actuation without own air consumption - for actuation by an electronic regulator	3/8" NPT	CRV-3/8-SO-US	PB 55549-N071
	1/2" NPT	CRV-1/2-SO-US	PB 55649-N071

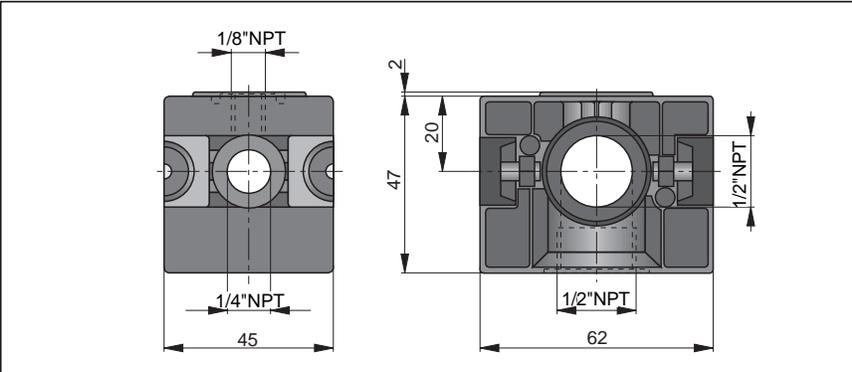
**Accessories**

Description	Bestell-Nr.
Gauge, Ø 50, 0-10 bar, 1/4" NPT	KG 8011
Mounting kit	PL 17518
Coupling kit	PL 17608
Porting block kit 3/8" NPT	PL 17746
Porting block kit 1/2" NPT	PL 17731
Keylock complete	PL 17127
3/2 way shut-off valve (spool type valve) CDV-3/8-XS-US / CDV-1/2-XS-US	PB 56849-N000, PB 56949-N000
Adaptor set 3/4" NPT	PL 17682

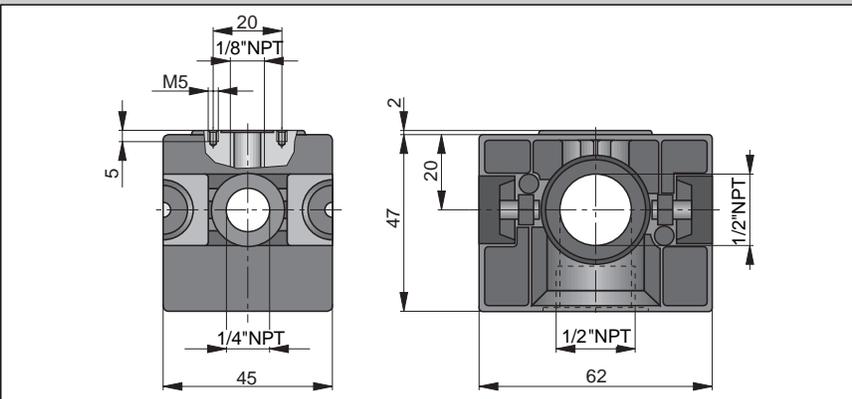
### Characteristics

Installation	Between 2 units of the aifit comfort series
Mounting	Directly flangeable with coupling kit supplied
Material	Zinc - black lackiert

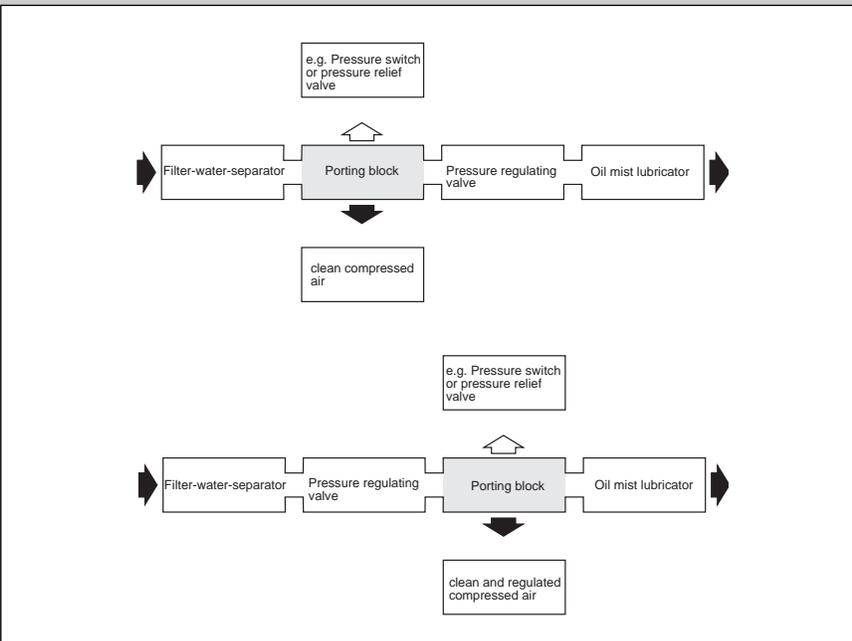
### Dimensions (mm) Type PL 17746



### Dimensions (mm) Type PL 17731



### Installation Instructions



Order Instructions: PL 17746 3/8" NPT  
 PL 17731 1/2" NPT

# Porting Block Kit

## 1/2" NPT

To provide unlubricated air  
 e.g. for air gun



Porting block kit comprising:

- 1 Porting block
- 2 Cones
- 1 O-Ring
- 2 Nuts
- 2 Screws
- 1 Plug screw 1/8" NPT

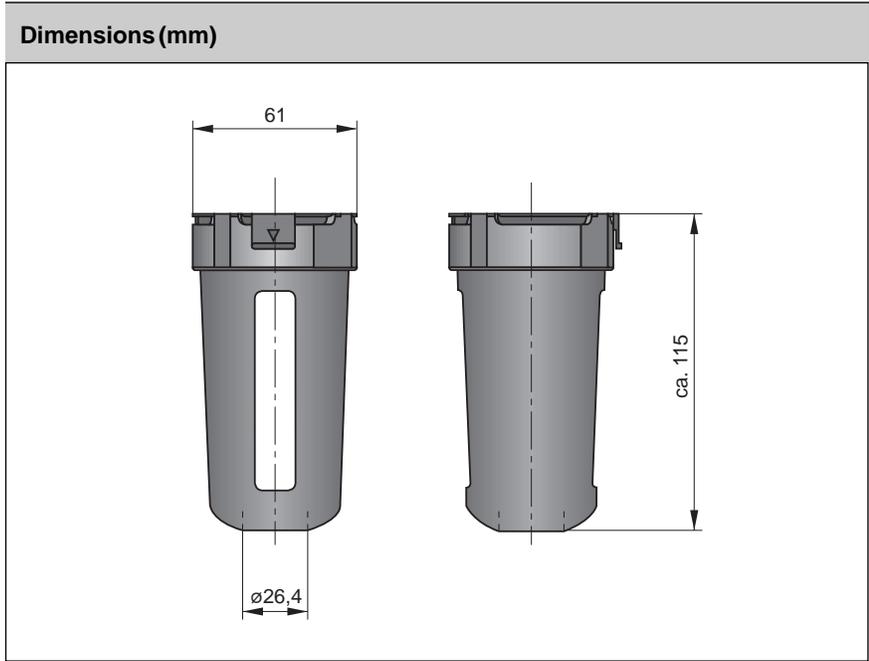


The right to introduce technical modifications is reserved

Characteristics	
Mounting	With snap mounting
Material	Zinc diecasting, polymer (POM)

# Bowl Guard Kit

airfit comfort



Dimension Table and Order Instructions	
Port size	Order No.
3/8" NPT, 1/2" NPT	PL 17680

\* All products available in metric ports

The right to introduce technical modifications is reserved

Just click, easy assembly with bayonet fitting

The bowl guard protects the plastic bowl against external damage.

Assembly instructions:  
The bowl guard kit consists of 3 parts.  
Please read the assembly instructions included with delivery.

