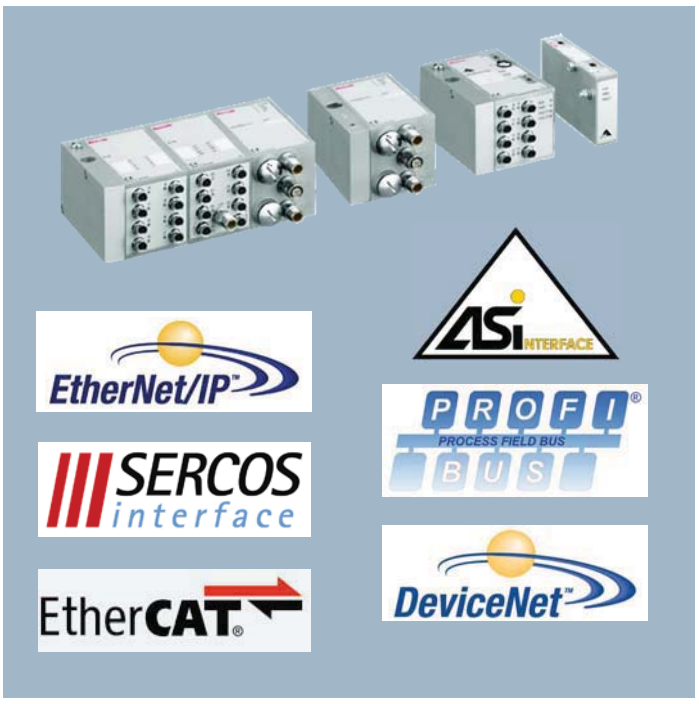
The Drive & Control Company

Rexroth
Bosch Group

Series HF Plug-in Valves
Pneumatic Directional Control



Series HF Plug-in Valves

The highly modular HF valve family with uniform interface, can be integrated in a wide variety of automation concepts and can be actuated with the same electrical connection for all sizes. The range enables use of multiple plugs and connections for all common fieldbuses with and without I/O signal processing. Base plates with robust parallel plug connectors facilitate easy conversion and/or expansion of a valve unit, and plug-in valves available in 2x3/2, 5/2, 5/3 make it easy to exchange valve functions. Low wattage power consumption valves optimize energy conservation. Valve manifolds can drive up to 24 coils with 25-pin D-sub plug, or up to 32 coils with 44-pin D-Sub high-density plug or B-Design fieldbus connection. Separate manifold exhaust connections enable double pressure operation and lateral blocking discs allow multiple pressure zones.

Series HF02-LG Valves

- Up to 16 valves per manifold
- Expansion in increments of 1
- High 1.4 Cv flow rate in 20 mm width valve
- Internal/external pilot control can be directly adjusted on the left end plate
- Pneumatic and electric connections face forward
- Aluminum end plates with polymer valves and bases

Series HF03-LG Valves

- Up to 32 valves per manifold
- Expansion in increments of 1
- High 0.7 Cv flow rate in 16 mm width valve
- Internal/external pilot versions via separate end plates
- Pneumatic and electric connections face forward
- Optimized weight with polymer end plates, valves, and bases
- Vertically stacked pressure regulator and inline port vacuum ejectors available

Series HF04 & HF04-XF Valves

- Up to 24 valves (HF04) and 32 valves (HF04-XF)per manifold
- Expansion in increments of 2
- High 0.4 Cv flow rate in 11.3 mm width valve
- Internal/external pilot versions via separate end plates
- Side or bottom workng port connections (HF04-XF)
- Aluminum end plates with polymer valves and bases
- Vertically stacked pressure regulator available

How to Order:

Our on-line configurator allows you to design custom valve manifolds while preventing the selection of unavailable configurations. Provides part number and CAD drawing immediately.

Go to: www.boschrexroth-us-us.com/brp Select: “Find our latest on-line configurators here”

Contents

HF02-LG **4**
Valve terminal systems 5
Valves 20

HF03-LG **32**
Valve terminal systems 33
Valves 53

HF04 **65**
Valve terminal systems 66
Valves 90

HF04-XF **102**
Valve terminal systems 103

Accessories **118**

For Series HF02-LG

Valve terminal systems

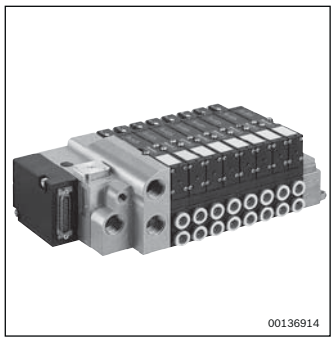
	Valve terminal system, Series HF02-LG ▶ Qn Max. = 1400 l/min ▶ Multipole ▶ Electr. connection: D-Sub plug, 25-pin, on the side / D-Sub plug, 44-pin, on the side	**5**
	Valve terminal system, Series HF02-LG ▶ Qn Max. = 1400 l/min ▶ Direct field bus connection (BDC) ▶ B-design	**7**
	Valve terminal system, Series HF02-LG ▶ Qn Max. = 1400 l/min ▶ Optional field bus connection with I/O function (CMS) ▶ B-design	**9**
	Valve terminal system, Series HF02-LG ▶ Qn Max. = 1400 l/min ▶ Connection with diagnostics (DDL) ▶ B-design	**11**
	Valve terminal system, Series HF02-LG ▶ Qn Max. = 1400 l/min ▶ Connection with diagnostics, optionally with I/O function (DDL) ▶ B-design	**13**
	Valve terminal system, Series HF02-LG ▶ Qn Max. = 1400 l/min ▶ Field bus connection with AS i ▶ B-design	**15**

Valves

	2x3/2-way valve, Series HF02 ▶ Qn = 1400 l/min ▶ Plate connection ▶ Manual override: with detent	**20**
	2x3/2-way valve, Series HF02 ▶ Qn = 1400 l/min ▶ Plate connection ▶ Manual override: without detent	**22**
	5/2-way valve, Series HF02 ▶ Qn = 1400 l/min ▶ Plate connection ▶ Can be assembled into blocks ▶ Manual override: with detent ▶ Single solenoid, double solenoid	**24**
	5/2-way valve, Series HF02 ▶ Qn = 1400 l/min ▶ Plate connection ▶ Manual override: without detent ▶ Single solenoid, double solenoid	**26**
	5/3-way valve, Series HF02 ▶ Qn = 1400 l/min ▶ Plate connection ▶ Manual override: with detent	**28**
	5/3-way valve, Series HF02 ▶ Qn = 1400 l/min ▶ Plate connection ▶ Manual override: without detent	**30**

Valve terminal system, Series HF02-LG

▶ Qn Max. = 1400 l/min ▶ Multipole ▶ Electr. connection: D-Sub plug, 25-pin, on the side/D-Sub plug, 44-pin, on the side



Blocking principle	Single base plate principle
Working pressure min./max.	-0.9 bar / 10 bar
Control pressure min./max.	2.5 bar / 10 bar
Ambient temperature min./max.	+0°C / +50°C
Medium temperature min./max.	+0°C / +50°C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Protection class: 2000, with electrical connector/ plug	IP 65
Max. number of valve positions	12 (25-pin), 16 (44-pin)
Max. number of solenoid coils	16 (25-pin), 32 (44-pin)
DC operating voltage	24 V
Voltage tolerance DC	-15% / +20%

Materials:	
End plate	Aluminum
Plug box	Polyamide
Subbase	Polyamide

An example configuration is illustrated. The delivered product may thus deviate from the illustration.

Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter “Technical information.”
- See the following pages on the series for technical data for individual components.
- For technical data for electronics (link structures), see the Chapter “Control systems/bus connections.”
- For push-in fittings, only use plug accessories made of plastic (polyamide) from our catalog.

Configurable product

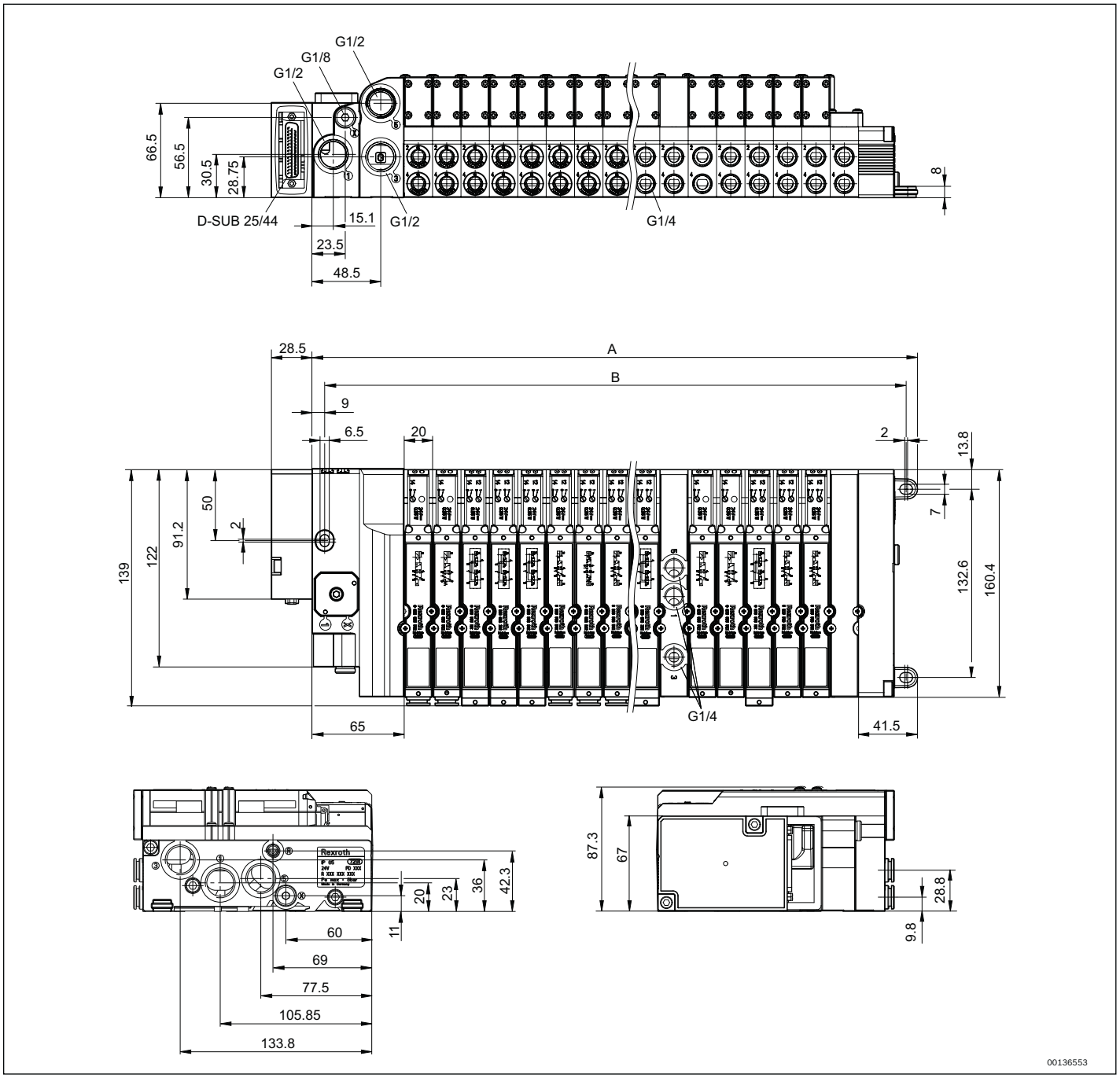
This product is configurable. Please use our Internet configurator at www.boschrexroth-us.com/pneumatics or contact the nearest Bosch Rexroth sales office.

Valve terminal system, Series HF02-LG

▶ Qn Max. = 1400 l/min ▶ Multipole ▶ Electr. connection: D-Sub plug, 25-pin, on the side/D-Sub plug, 44-pin, on the side

---

Dimensions



n	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
A	126.5	146.5	166.5	186.5	206.5	226.5	246.5	266.5	286.5	306.5	326.5	346.5	366.5	386.5	406.5	426.5
B	109.5	129.5	149.5	169.5	189.5	209.5	229.5	249.5	269.5	289.5	309.5	329.5	349.5	369.5	389.5	409.5

n = number of base plates

Valve terminal system, Series HF02-LG

▶ Qn Max. = 1400 l/min ▶ Direct field bus connection (BDC) ▶ B-design

Version	Field bus

Blocking principle	Single base plate principle
Working pressure min./max.	-0.9 bar / 10 bar
Control pressure min./max.	2.5 bar / 10 bar
Ambient temperature min./max.	+0°C / +50°C
Medium temperature min./max.	+0°C / +50°C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Protection class: 2000, with plug	IP 65
Number of valve positions	16
Number of solenoid coils	32
Supported field bus protocols	Profibus DP DeviceNet CANopen CANopen sb SERCOS III
Operational voltage electronics	24 V DC
Electronics voltage tolerance	-15% / +20%

Materials:

End plate	Aluminum
Subbase	Polyamide

An example configuration is illustrated. The delivered product may thus deviate from the illustration.

Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter “Technical information.”
- See the following pages on the series for technical data for individual components.
- For technical data for electronics (link structures), see the Chapter “Control systems/bus connections.”
- For push-in fittings, only use plug accessories made of plastic (polyamide) from our catalog.

Configurable product

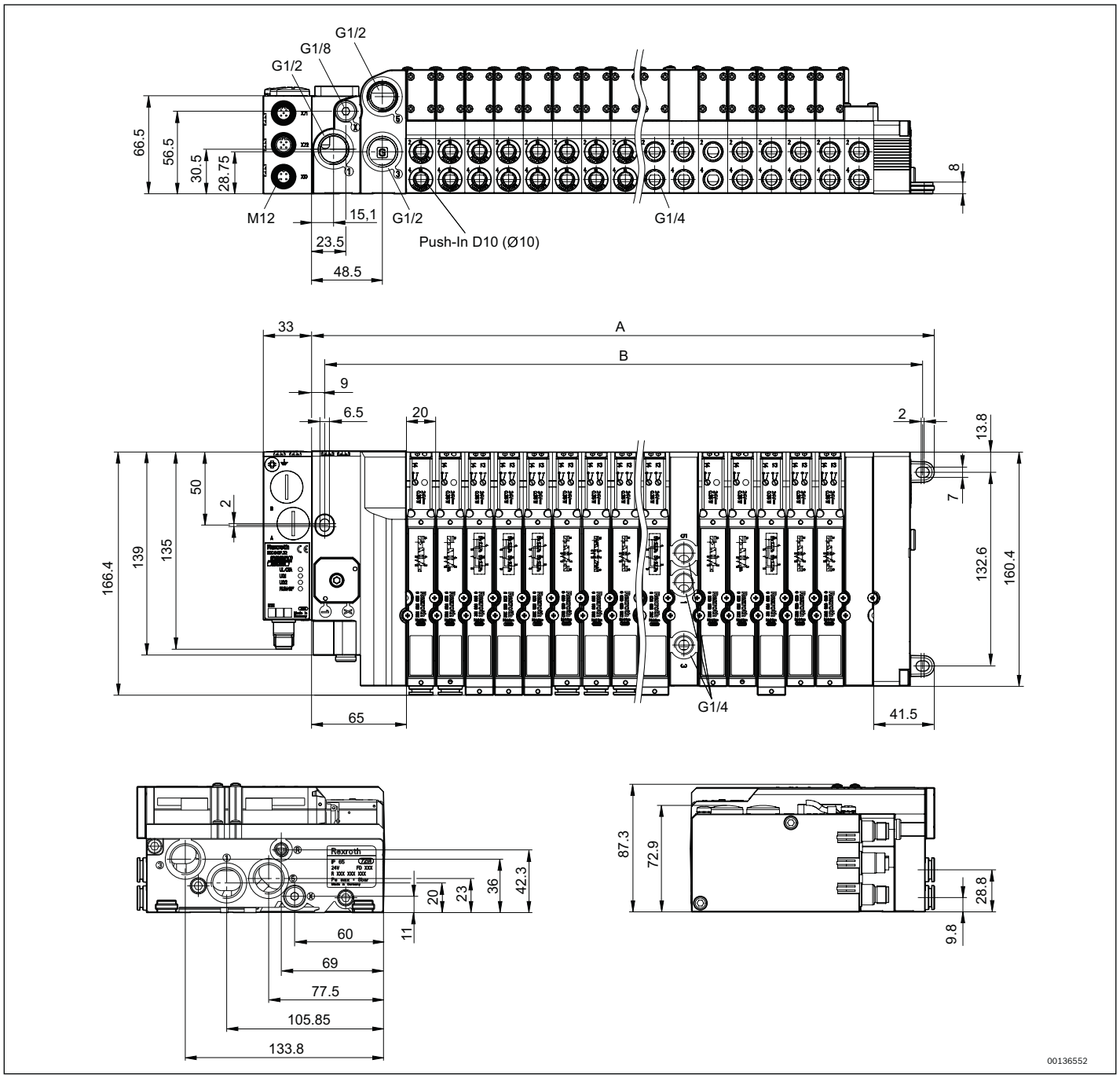
This product is configurable. Please use our Internet configurator at www.boschrexroth-us.com/pneumatics or contact the nearest Bosch Rexroth sales office.

Valve terminal system, Series HF02-LG

▶ Qn Max. = 1400 l/min ▶ Direct field bus connection (BDC) ▶ B-design

---

Dimensions



n	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
A	126.5	146.5	166.5	186.5	206.5	226.5	246.5	266.5	286.5	306.5	326.5	346.5	366.5	386.5	406.5	426.5
B	109.5	129.5	149.5	169.5	189.5	209.5	229.5	249.5	269.5	289.5	309.5	329.5	349.5	369.5	389.5	409.5

n = number of base plates

Valve terminal system, Series HF02-LG

▶ Qn Max. = 1400 l/min ▶ Optional field bus connection with I/O function (CMS) ▶ B-design

Version	Field bus

Blocking principle	Single base plate principle
Working pressure min./max.	-0.9 bar / 10 bar
Control pressure min./max.	2.5 bar / 10 bar
Ambient temperature min./max.	+0°C / +50°C
Medium temperature min./max.	+0°C / +50°C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Protection class: 2000, with plug	IP 65
Number of valve positions	16
Number of solenoid coils	32
Supported field bus protocols:	Profibus DP DeviceNet CANopen INTERBUS-S ETHERNET IP
Operational voltage electronics	24 V DC
Electronics voltage tolerance	-15% / +20%

Materials:

End plate	Aluminum
Subbase	Polyamide

An example configuration is illustrated. The delivered product may thus deviate from the illustration.

Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter “Technical information.”
- See the following pages on the series for technical data for individual components.
- For technical data for electronics (link structures), see the Chapter “Control systems/bus connections.”
- For push-in fittings, only use plug accessories made of plastic (polyamide) from our catalog.

Configurable product

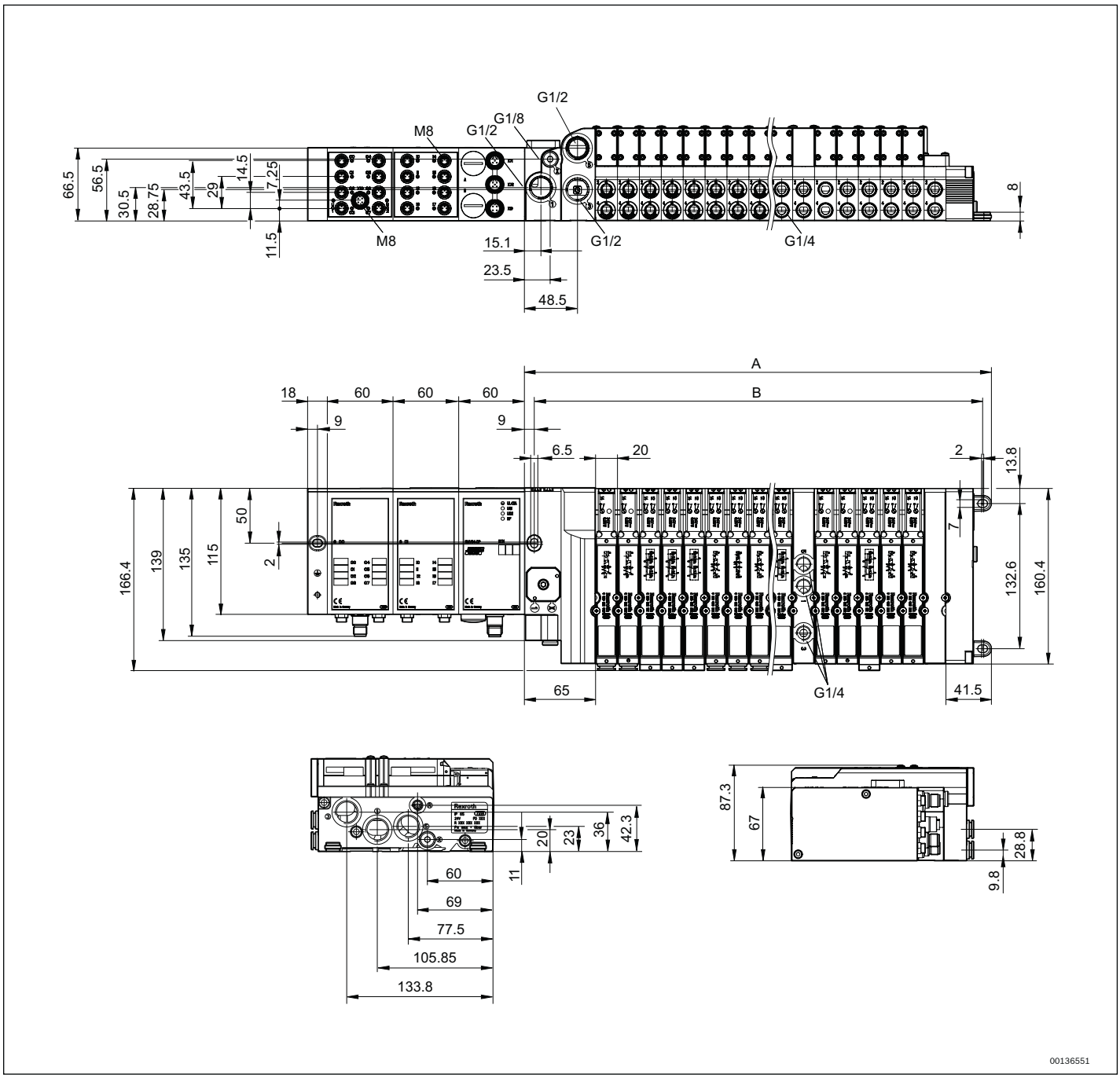
This product is configurable. Please use our Internet configurator at www.boschrexroth-us.com/pneumatics or contact the nearest Bosch Rexroth sales office.

Valve terminal system, Series HF02-LG

▶ Qn Max. = 1400 l/min ▶ Optional field bus connection with I/O function (CMS) ▶ B-design

---

Dimensions



n	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
A	126.5	146.5	166.5	186.5	206.5	226.5	246.5	266.5	286.5	306.5	326.5	346.5	366.5	386.5	406.5	426.5
B	109.5	129.5	149.5	169.5	189.5	209.5	229.5	249.5	269.5	289.5	309.5	329.5	349.5	369.5	389.5	409.5

n = number of base plates

Valve terminal system, Series HF02-LG

▶ Qn Max. = 1400 l/min ▶ Connection with diagnostics (DDL) ▶ B-design

Version	Link structure DDL
Blocking principle	Single base plate principle
Working pressure min./max.	-0.9 bar / 10 bar
Control pressure min./max.	2.5 bar / 10 bar
Ambient temperature min./max.	+0°C / +50°C
Medium temperature min./max.	+0°C / +50°C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Protection class: 2000, with plug	IP 65
Number of valve positions	16
Number of solenoid coils	32
Operational voltage electronics	24 V DC
Electronics voltage tolerance	-15% / +20%

Materials:	
End plate	Aluminum
Subbase	Polyamide

An example configuration is illustrated. The delivered product may thus deviate from the illustration.

Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter “Technical information.”
- See the following pages on the series for technical data for individual components.
- For technical data for electronics (link structures), see the Chapter “Control systems/bus connections.”
- For push-in fittings, only use plug accessories made of plastic (polyamide) from our catalog.

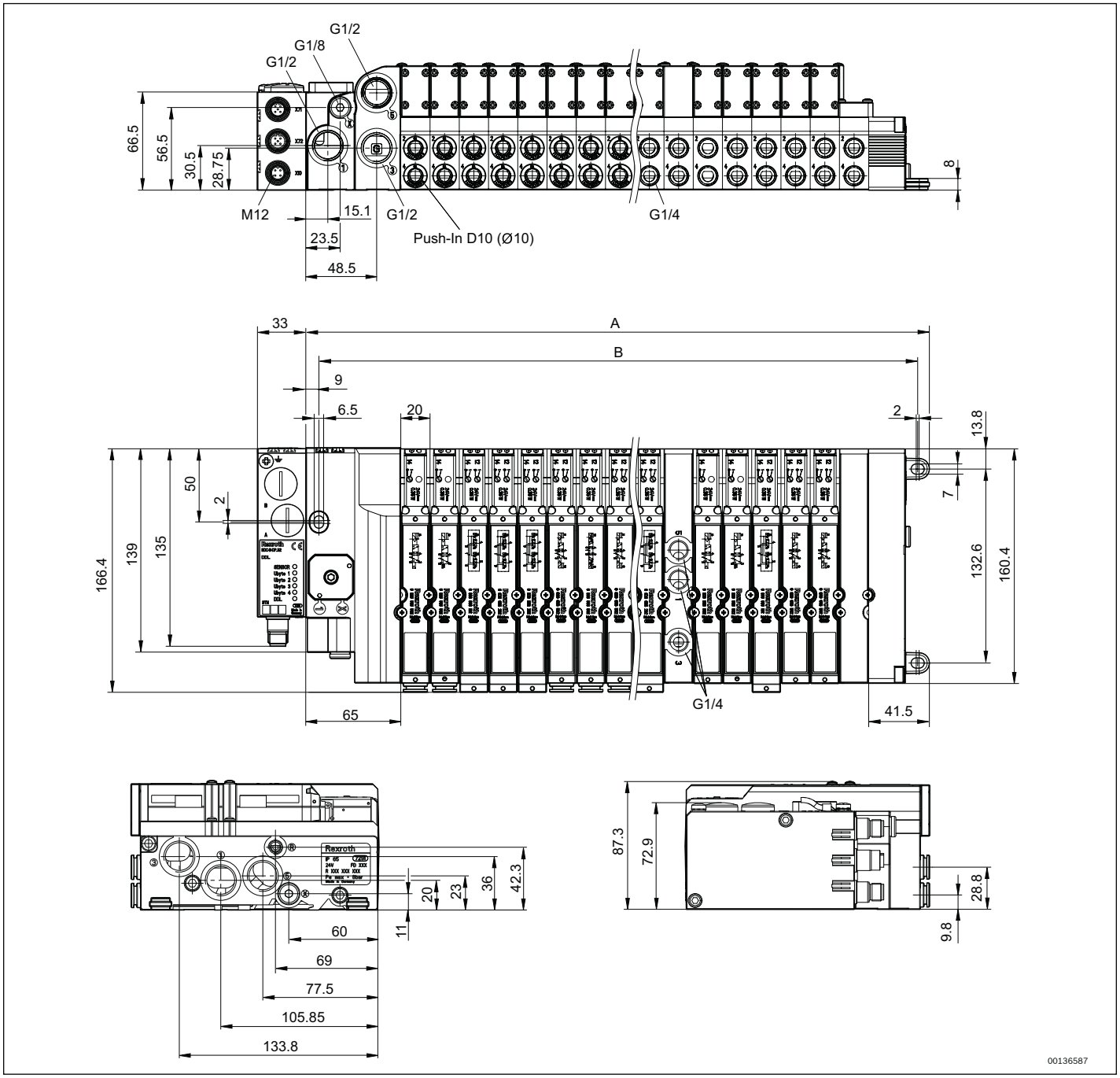
Configurable product

This product is configurable. Please use our Internet configurator at www.boschrexroth-us.com/pneumatics or contact the nearest Bosch Rexroth sales office.

Valve terminal system, Series HF02-LG

▶ Qn Max. = 1400 l/min ▶ Connection with diagnostics (DDL) ▶ B-design

Dimensions



n	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
A	126.5	146.5	166.5	186.5	206.5	226.5	246.5	266.5	286.5	306.5	326.5	346.5	366.5	386.5	406.5	426.5
B	109.5	129.5	149.5	169.5	189.5	209.5	229.5	249.5	269.5	289.5	309.5	329.5	349.5	369.5	389.5	409.5

n = number of base plates

Valve terminal system, Series HF02-LG

▶ Qn Max. = 1400 l/min ▶ Connection with diagnostics, optionally with I/O function (DDL) ▶ B-design

Version	Link structure DDL
Blocking principle	Single base plate principle
Working pressure min./max.	-0.9 bar / 10 bar
Control pressure min./max.	2.5 bar / 10 bar
Ambient temperature min./max.	+0°C / +50°C
Medium temperature min./max.	+0°C / +50°C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Protection class: 2000, with plug	IP 65
Number of valve positions	12
Number of solenoid coils	24
Operational voltage electronics	24 V DC
Electronics voltage tolerance	-15% / +20%

Materials:	
End plate	Aluminum
Subbase	Polyamide

An example configuration is illustrated. The delivered product may thus deviate from the illustration.

Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter “Technical information.”
- See the following pages on the series for technical data for individual components.
- For technical data for electronics (link structures), see the Chapter “Control systems/bus connections.”
- For push-in fittings, only use plug accessories made of plastic (polyamide) from our catalog.

Configurable product

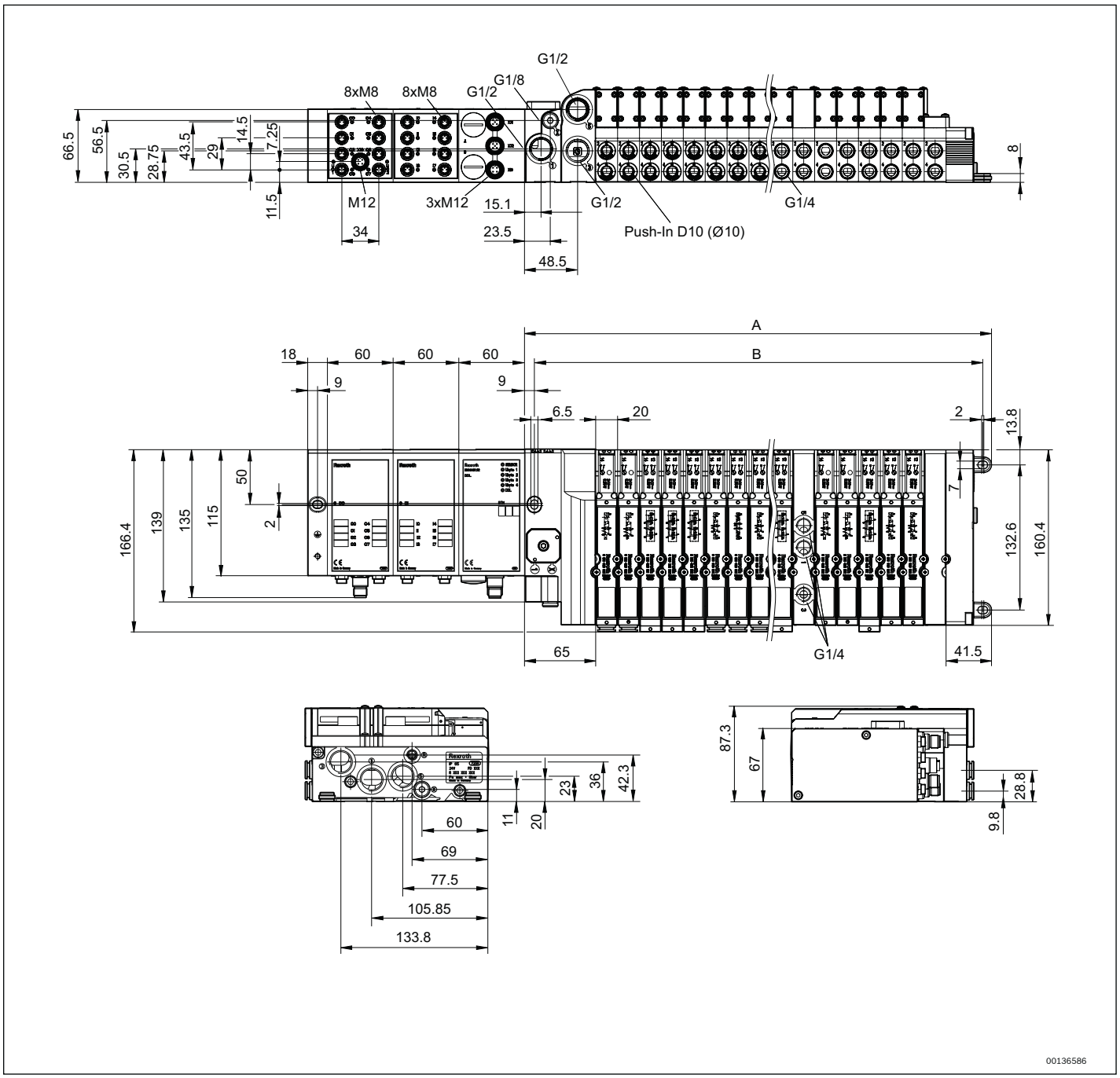
This product is configurable. Please use our Internet configurator at www.boschrexroth-us.com/pneumatics or contact the nearest Bosch Rexroth sales office.

Valve terminal system, Series HF02-LG

▶ Qn Max. = 1400 l/min ▶ Connection with diagnostics, optionally with I/O function (DDL) ▶ B-design

---

Dimensions



n	1	2	3	4	5	6	7	8	9	10	11	12
A	126.5	146.5	166.5	186.5	206.5	226.5	246.5	266.5	286.5	306.5	326.5	346.5
B	109.5	129.5	149.5	169.5	189.5	209.5	229.5	249.5	269.5	289.5	309.5	329.5

n = number of base plates

Valve terminal system, Series HF02-LG

▶ Qn Max. = 1400 l/min ▶ Field bus connection with AS i ▶ B-design

Version	Field bus AS i

Blocking principle	Single base plate principle
Working pressure min./max.	-0.9 bar / 10 bar
Control pressure min./max.	2.5 bar / 10 bar
Ambient temperature min./max.	+0°C / +50°C
Medium temperature min./max.	+0°C / +50°C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Protection class: 2000, with plug	IP 65
Number of valve positions	4.8
Number of solenoid coils	4.8
Supported field bus protocols:	AS-i
Operational voltage electronics	24 V DC
Electronics voltage tolerance	-15% / +20%
Power supply connection	Black AS-i flat cable
Communication port	Yellow AS-i flat cable

Materials:	
End plate	Aluminum
Subbase	Polyamide

An example configuration is illustrated. The delivered product may thus deviate from the illustration.

Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter “Technical information.”
- See the following pages on the series for technical data for individual components.
- For technical data for electronics (link structures), see the Chapter “Control systems/bus connections.”
- For push-in fittings, only use plug accessories made of plastic (polyamide) from our catalog.

Configurable product

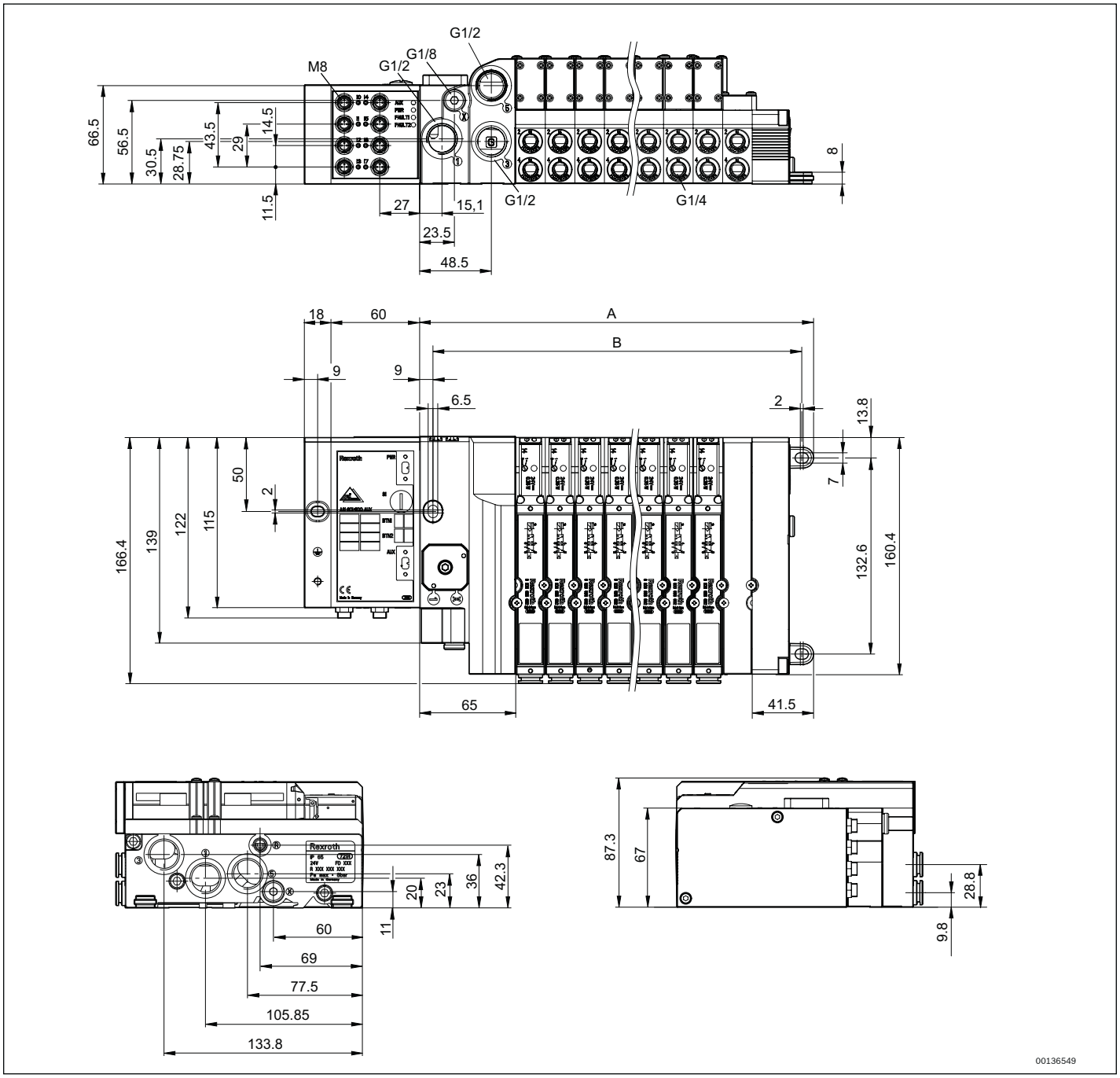
This product is configurable. Please use our Internet configurator at www.boschrexroth-us.com/pneumatics or contact the nearest Bosch Rexroth sales office.

Valve terminal system, Series HF02-LG

▶ Qn Max. = 1400 l/min ▶ Field bus connection with AS i ▶ B-design

---

Dimensions, 8DI/8DO-AUX



n	1	2	3	4	5	6	7	8
A	126.5	146.5	166.5	186.5	206.5	226.5	246.5	266.5
B	109.5	129.5	149.5	169.5	189.5	209.5	229.5	249.5

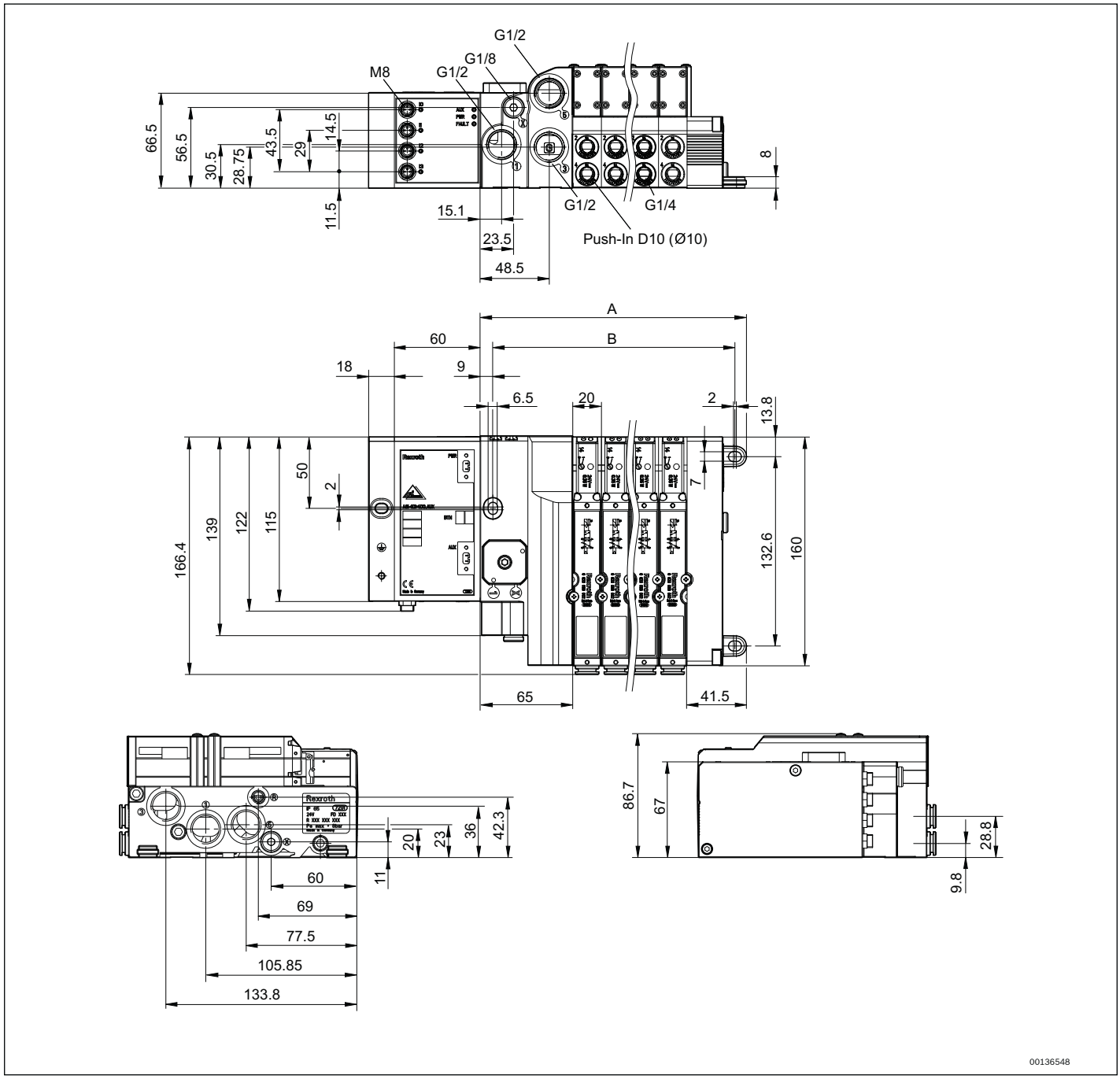
n = number of base plates

Valve terminal system, Series HF02-LG

▶ Qn Max. = 1400 l/min ▶ Field bus connection with AS i ▶ B-design

---

Dimensions, 4DI/4DO-AUX



n	1	2	3	4
A	126.5	146.5	166.5	186.5
B	109.5	129.5	149.5	169.5

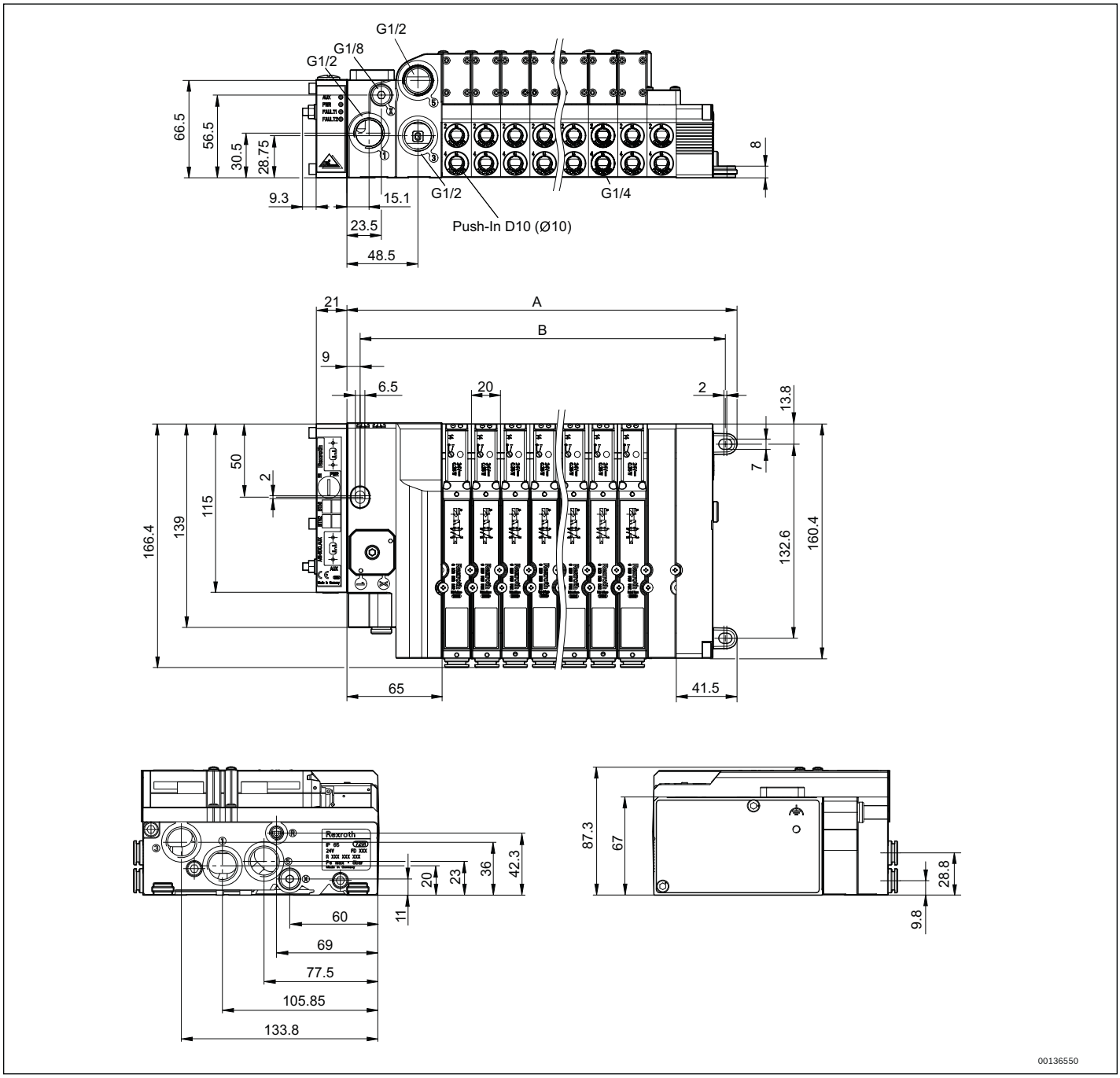
n = number of base plates

Valve terminal system, Series HF02-LG

▶ Qn Max. = 1400 l/min ▶ Field bus connection with AS i ▶ B-design

---

Dimensions, 8DO-AUX



n	1	2	3	4	5	6	7	8
A	126.5	146.5	166.5	186.5	206.5	226.5	246.5	266.5
B	109.5	129.5	149.5	169.5	189.5	209.5	229.5	249.5

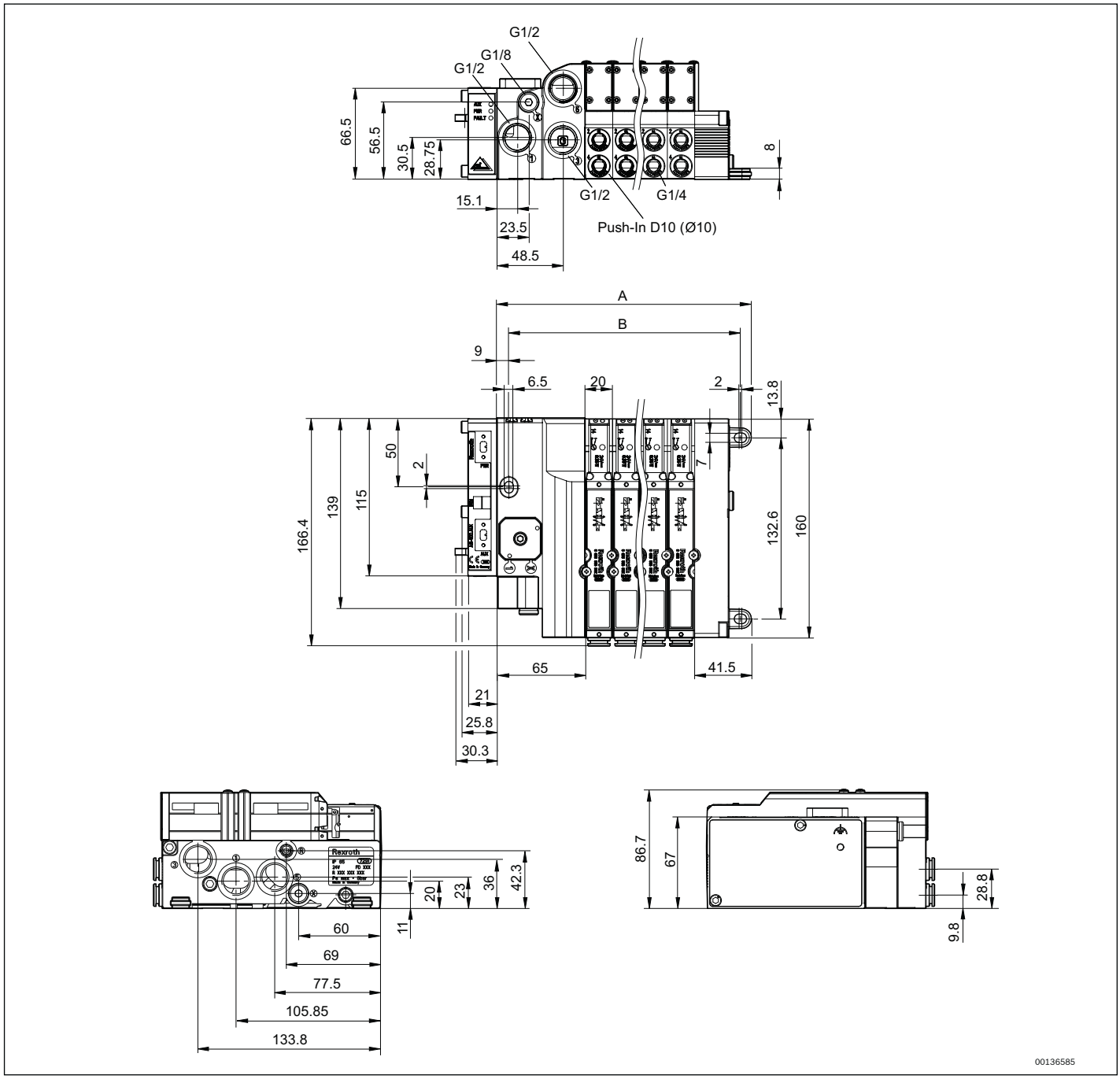
n = number of base plates

Valve terminal system, Series HF02-LG

▶ Qn Max. = 1400 l/min ▶ Field bus connection with AS i ▶ B-design

---

Dimensions, 4DO-AUX



n	1	2	3	4
A	126.5	146.5	166.5	186.5
B	109.5	129.5	149.5	169.5

n = number of base plates

2x3/2-way valve, for Series HF02-LG

▶ Qn = 1400 l/min ▶ Plate connection ▶ Manual override: with detent

Certificates	UR (Underwriters Laboratories)

Version	Spool valve, zero overlap
Pilot	External, internal
Sealing principle	Soft sealing
Blocking principle	Single base plate principle
Working pressure min./max.	-0.9 bar / 10 bar
Control pressure min./max.	–– / 10 bar
Ambient temperature min./max.	+0°C / +50°C
Medium temperature min./max.	+0°C / +50°C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Protection class with electrical connector/plug	IP 65
Protective circuit	Z-diode Protected against polarity reversal
Status display LED	Yellow
Duty cycle	100%
Switch-on time	20 ms
Switch-off time	33 ms
Generic emission standard in accordance with	EN 50081-1
Generic immunity standard in accordance with	EN 50082-2
Mounting screw	Cross recessed DIN EN ISO 4757-Z2
Mounting screw tightening torque	1.3 Nm

Materials:	
Housing	Polyamide
Seals	Acrylonitrile butadiene rubber; Hydrogenated acrylonitrile butadiene rubber

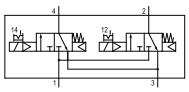
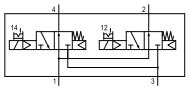
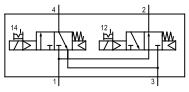
Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter “Technical information.”
- The pilot type (external/internal) is not implemented in the valve, but in the end plate of the valve terminal system.
- The UR certification refers to the pilot valve.

Operating voltage	Voltage tolerance	Power consumption
DC	DC	DC
		W
24 V	-15% / +20%	0.35

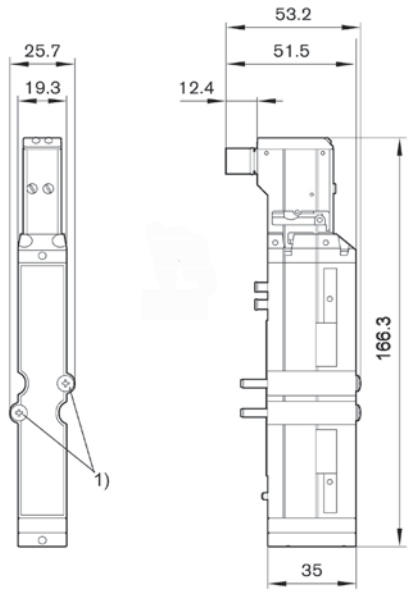
2x3/2-way valve, for Series HF02-LG

▶ Qn = 1400 l/min ▶ Plate connection ▶ Manual override: with detent

		MO	Operating voltage	Flow conductance		Flow rate value	Weight	Part No.
			DC	b	C	Qn		
					[l/(s*bar)]	[l/min]	[kg]	
	NC/NC		24 V	0.4	352	1400	0.144	**0820056101**
	NO/NO		24 V	0.4	352	1400	0.144	**0820056201**
	NC/NO		24 V	0.4	352	1400	0.144	**0820056301**

MO = Manual override
With collective pilot air exhaust
Nominal flow Qn at 6 bar and Δp = 1 bar

Dimensions



1) Mounting screw: X-slot DIN EN ISO 4757-Z2
tightening torque for mounting screw [Nm]: 1.3

Part numbers in bold are more readily available.

2x3/2-way valve, for Series HF02-LG

▶ Qn = 1400 l/min ▶ Plate connection ▶ Manual override: without detent

Certificates	UR (Underwriters Laboratories)

Version	Spool valve, zero overlap
Pilot	External, internal
Sealing principle	Soft sealing
Blocking principle	Single base plate principle
Working pressure min./max.	-0.9 bar / 10 bar
Control pressure min./max.	–– / 10 bar
Ambient temperature min./max.	+0°C / +50°C
Medium temperature min./max.	+0°C / +50°C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Protection class with electrical connector/plug	IP 65
Protective circuit	Z-diode Protected against polarity reversal
Status display LED	Yellow
Duty cycle	100%
Switch-on time	20 ms
Switch-off time	33 ms
Generic emission standard in accordance with	EN 50081-1
Generic immunity standard in accordance with	EN 50082-2
Mounting screw	Cross recessed DIN EN ISO 4757-Z2
Mounting screw tightening torque	1.3 Nm

Materials:	
Housing	Polyamide
Seals	Acrylonitrile butadiene rubber; Hydrogenated acrylonitrile butadiene rubber

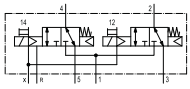
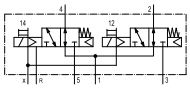
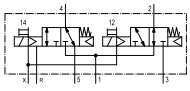
Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter “Technical information.”
- The pilot type (external/internal) is not implemented in the valve, but in the end plate of the valve terminal system.
- The UR certification refers to the pilot valve.

Operating voltage	Voltage tolerance	Power consumption
DC	DC	DC
		W
24 V	-15% / +20%	0.35

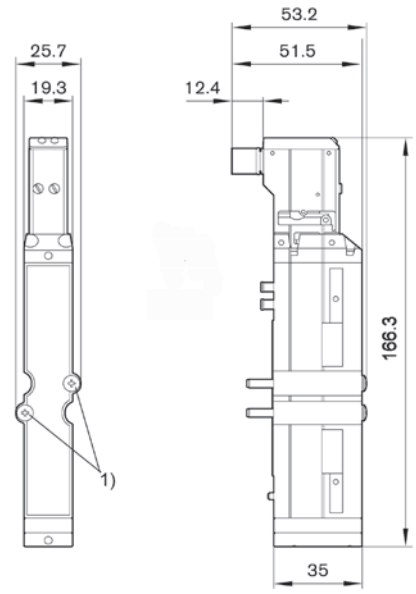
2x3/2-way valve, for Series HF02-LG

▶ Qn = 1400 l/min ▶ Plate connection ▶ Manual override: without detent

		MO	Operating voltage	Flow conductance		Flow rate value	Weight	Part No.
			DC	b	C	Qn		
					[l/(s*bar)]	[l/min]	[kg]	
	NC/NC		24 V	0.4	352	1400	0.144	**0820056102**
	NO/NO		24 V	0.4	352	1400	0.144	**0820056202**
	NC/NO		24 V	0.4	352	1400	0.144	0820056302

MO = Manual override
With collective pilot air exhaust
Nominal flow Qn at 6 bar and Δp = 1 bar

Dimensions



1) Mounting screw: X-slot DIN EN ISO 4757-Z2
tightening torque for mounting screw [Nm]: 1.3

Part numbers in bold are more readily available.

5/2-way valve, for Series HF02-LG

▶ Qn = 1400 l/min ▶ Plate connection ▶ Can be assembled into blocks ▶ Manual override: with detent ▶ Single solenoid, double solenoid

Certificates	UR (Underwriters Laboratories)

Version	Spool valve, zero overlap
Pilot	External, internal
Sealing principle	Soft sealing
Blocking principle	Single base plate principle
Working pressure min./max.	-0.9 bar / 10 bar
Control pressure min./max.	2.5 bar / 10 bar
Ambient temperature min./max.	+0°C / +50°C
Medium temperature min./max.	+0°C / +50°C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Protection class with electrical connector/plug	IP 65
Protective circuit	Z-diode Protected against polarity reversal
Status display LED	Yellow
Duty cycle	100%
Generic emission standard in accordance with	EN 50081-1
Generic immunity standard in accordance with	EN 50082-2
Mounting screw	Cross recessed DIN EN ISO 4757-Z2
Mounting screw tightening torque	1.3 Nm

Materials:	
Housing	Polyamide
Seals	Acrylonitrile butadiene rubber; Hydrogenated acrylonitrile butadiene rubber

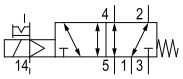
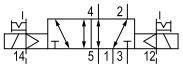
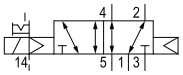
Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter “Technical information.”
- The pilot type (external/internal) is not implemented in the valve, but in the end plate of the valve terminal system.
- The UR certification refers to the pilot valve.

Operating voltage	Voltage tolerance	Power consumption
DC	DC	DC
		W
24 V	-15% / +20%	0.35

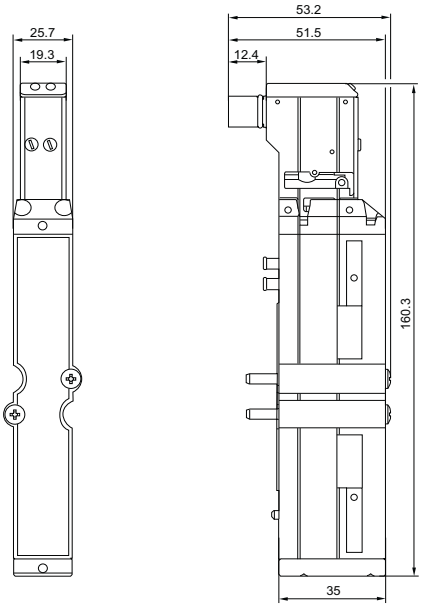
5/2-way valve, for Series HF02-LG

▶ Qn = 1400 l/min ▶ plate connection ▶ Can be assembled into blocks ▶ Manual override: with detent ▶ Single solenoid, double solenoid

	MO	Operating voltage	Flow conductance		Flow rate value	Switch-on time	Switch-off time	Weight	Part No.
		DC	b	C	Qn				
				[l/(s*bar)]	[l/min]	[ms]	[ms]	[kg]	
		24 V	0.38	368	1400	13	40	0.144	**0820056051**
		24 V	0.38	368	1400	13	15	0.144	**0820056501**
		24 V	0.38	368	1400	19	30	0.144	**0820056001**

MO = Manual override
With collective pilot air exhaust
Nominal flow Qn at 6 bar and Δp = 1 bar

Dimensions



1) Mounting screw: X-slot DIN EN ISO 4757-Z2
tightening torque for mounting screw [Nm]: 1.3

Part numbers in bold are more readily available.

5/2-way valve, for Series HF02-LG

▶ Qn = 1400 l/min ▶ Plate connection ▶ Manual override: without detent ▶ Single solenoid, double solenoid

Certificates	UR (Underwriters Laboratories)

Version	Spool valve, zero overlap
Pilot	External, internal
Sealing principle	Soft sealing
Blocking principle	Single base plate principle
Working pressure min./max.	-0.9 bar / 10 bar
Control pressure min./max.	2.5 bar / 10 bar
Ambient temperature min./max.	+0°C / +50°C
Medium temperature min./max.	+0°C / +50°C
Medium	Compressed air
Protection class with electrical connector/plug	IP 65
Protective circuit	Z-diode Protected against polarity reversal
Status display LED	Yellow
Duty cycle	100%
Generic emission standard in accordance with	EN 50081-1
Generic immunity standard in accordance with	EN 50082-2
Mounting screw	Cross recessed DIN EN ISO 4757-Z2
Mounting screw tightening torque	1.3 Nm

Materials:	
Housing	Polyamide
Seals	Acrylonitrile butadiene rubber; Hydrogenated acrylonitrile butadiene rubber

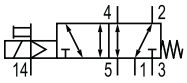
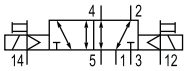
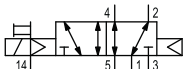
Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter “Technical information.”
- The pilot type (external/internal) is not implemented in the valve, but in the end plate of the valve terminal system.
- The UR certification refers to the pilot valve.

Operating voltage	Voltage tolerance	Power consumption
DC	DC	DC
		W
24 V	-15% / +20%	0.35

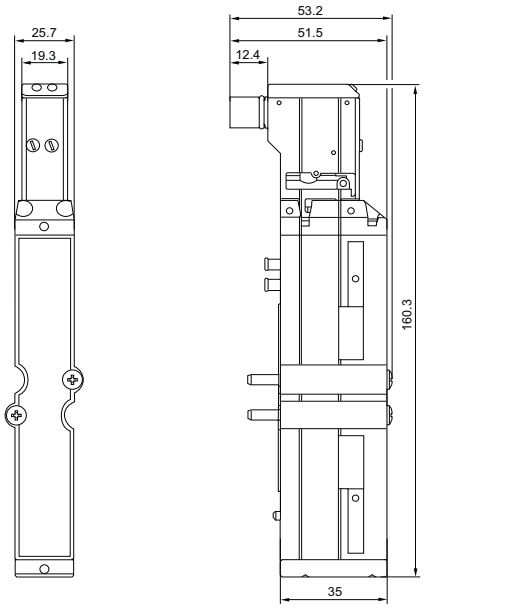
5/2-way valve, for Series HF02-LG

▶ Qn = 1400 l/min ▶ plate connection ▶ Manual override: without detent ▶ Single solenoid, double solenoid

	MO	Operating voltage	Flow conductance		Flow rate value	Switch-on time	Switch-off time	Weight	Part No.
		DC	b	C	Qn				
				[l/(s*bar)]	[l/min]	[ms]	[ms]	[kg]	
		24 V	0.38	368	1400	13	40	0.144	**0820056052**
		24 V	0.38	368	1400	13	15	0.144	**0820056502**
		24 V	0.38	368	1400	19	30	0.144	0820056002

MO = Manual override
With collective pilot air exhaust
Nominal flow Qn at 6 bar and Δp = 1 bar

Dimensions



1) Mounting screw: X-slot DIN EN ISO 4757-Z2
tightening torque for mounting screw [Nm]: 1.3

Part numbers in bold are more readily available.

5/3-way valve, for Series HF02-LG

▶ Qn = 1400 l/min ▶ Plate connection ▶ Manual override: with detent

Certificates	UR (Underwriters Laboratories)

Version	Spool valve, zero overlap
Pilot	External, internal
Sealing principle	Soft sealing
Blocking principle	Single base plate principle
Working pressure min./max.	-0.9 bar / 10 bar
Control pressure min./max.	2.5 bar / 10 bar
Ambient temperature min./max.	+0°C / +50°C
Medium temperature min./max.	+0°C / +50°C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Protection class with electrical connector/plug	IP 65
Protective circuit	Z-diode Protected against polarity reversal
Status display LED	Yellow
Duty cycle	100%
Generic emission standard in accordance with	EN 50081-1
Generic immunity standard in accordance with	EN 50082-2
Mounting screw	Cross recessed DIN EN ISO 4757-Z2
Mounting screw tightening torque	1.3 Nm

Materials:	
Housing	Polyamide
Seals	Acrylonitrile butadiene rubber; Hydrogenated acrylonitrile butadiene rubber

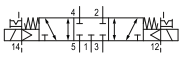
Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter “Technical information.”
- The pilot type (external/internal) is not implemented in the valve, but in the end plate of the valve terminal system.
- The UR certification refers to the pilot valve.

Operating voltage	Voltage tolerance	Power consumption
DC	DC	DC
		W
24 V	-15% / +20%	0.35

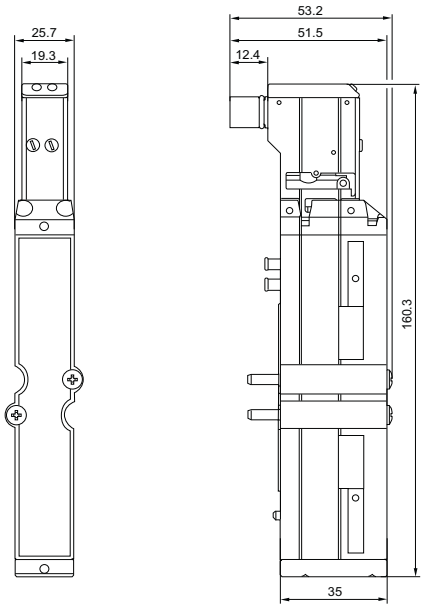
5/3-way valve, for Series HF02-LG

▶ Qn = 1400 l/min ▶ plate connection ▶ Manual override: with detent

	MO	Operating voltage	Flow conductance		Flow rate value	Switch-on time	Switch-off time	Weight	Part No.
		DC	b	C	Qn				
				[l/(s*bar)]	[l/min]	[ms]	[ms]	[kg]	
		24 V	0.4	352	1400	14	15	0.144	**0820056601**

MO = Manual override
With collective pilot air exhaust
Nominal flow Qn at 6 bar and Δp = 1 bar

Dimensions



1) Mounting screw: X-slot DIN EN ISO 4757-Z2
tightening torque for mounting screw [Nm]: 1.3

Part numbers in bold are more readily available.

5/3-way valve, for Series HF02-LG

▶ Qn = 1400 l/min ▶ Plate connection ▶ Manual override: without detent

Certificates	UR (Underwriters Laboratories)

Version	Spool valve, zero overlap
Pilot	External, internal
Sealing principle	Soft sealing
Blocking principle	Single base plate principle
Working pressure min./max.	-0.9 bar / 10 bar
Control pressure min./max.	2.5 bar / 10 bar
Ambient temperature min./max.	+0°C / +50°C
Medium temperature min./max.	+0°C / +50°C
Medium	Compressed air
Protection class with electrical connector/plug	IP 65
Protective circuit	Z-diode Protected against polarity reversal
Status display LED	Yellow
Duty cycle	100%
Generic emission standard in accordance with	EN 50081-1
Generic immunity standard in accordance with	EN 50082-2
Mounting screw	Cross recessed DIN EN ISO 4757-Z2
Mounting screw tightening torque	1.3 Nm

Materials:	
Housing	Polyamide
Seals	Acrylonitrile butadiene rubber; Hydrogenated acrylonitrile butadiene rubber

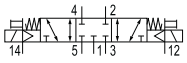
Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter “Technical information.”
- The pilot type (external/internal) is not implemented in the valve, but in the end plate of the valve terminal system.
- The UR certification refers to the pilot valve.

Operating voltage	Voltage tolerance	Power consumption
DC	DC	DC
		W
24 V	-15% / +20%	0.35

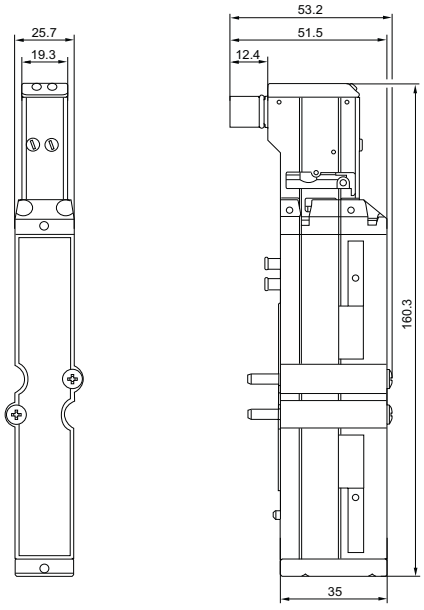
5/3-way valve, for Series HF02-LG

▶ Qn = 1400 l/min ▶ plate connection ▶ Manual override: with detent

	MO	Operating voltage	Flow conductance		Flow rate value	Switch-on time	Switch-off time	Weight	Part No.
		DC	b	C	Qn				
				[l/(s*bar)]	[l/min]	[ms]	[ms]	[kg]	
		24 V	0.4	352	1400	14	15	0.144	**0820056602**

MO = Manual override
With collective pilot air exhaust
Nominal flow Qn at 6 bar and Δp = 1 bar

Dimensions



1) Mounting screw: X-slot DIN EN ISO 4757-Z2
tightening torque for mounting screw [Nm]: 1.3

Part numbers in bold are more readily available.

For Series HF03-LG

Valve terminal system, configurable with push-in fitting Ø8 mm or 1/4” (inch) or thread connection G1/8 or 1/8 NPTF

	Valve terminal system, Series HF03-LG ▶ Qn Max. = 700 l/min ▶ Multipole ▶ Electr. connection: D-Sub plug, 25-pin, on the side / D-Sub plug, 44-pin, on the side	**33**
	Valve terminal system, Series HF03-LG ▶ Qn Max. = 700 l/min ▶ Direct field bus connection (BDC) ▶ B-design	**36**
	Valve terminal system, Series HF03-LG ▶ Qn Max. = 700 l/min ▶ Field bus connection with I/O functionality (CMS) ▶ B-design	**39**
	Valve terminal system, Series HF03-LG ▶ Qn Max. = 700 l/min ▶ Connection with diagnostics (DDL) ▶ B-design	**42**
	Valve terminal system, Series HF03-LG ▶ Qn Max. = 700 l/min ▶ Connection with diagnostics, optionally with I/O function (DDL) ▶ B-design	**45**
	Valve terminal system, Series HF03-LG ▶ Qn Max. = 700 l/min ▶ Field bus connection with AS i ▶ B-design	**48**

Valves

	2x3/2-way valve, Series HF03, HF03-LG, CL03 ▶ Qn = 850 l/min ▶ Plate connection ▶ Manual override: with detent	**53**
	2x3/2-way valve, Series HF03, HF03-LG, CL03 ▶ Qn = 850 l/min ▶ Plate connection ▶ Manual override: without detent	**55**
	5/2-way valve, Series HF03, HF03-LG, CL03 ▶ Qn = 850 l/min ▶ Plate connection ▶ Manual override: with detent ▶ Single solenoid, double solenoid	**57**
	5/2-way valve, Series HF03, HF03-LG, CL03 ▶ Qn = 850 l/min ▶ Plate connection ▶ Manual override: without detent ▶ Single solenoid, double solenoid	**59**
	5/3-way valve, Series HF03, HF03-LG, CL03 ▶ Qn = 850 l/min ▶ Plate connection ▶ Manual override: with detent	**61**
	5/3-way valve, Series HF03, HF03-LG, CL03 ▶ Qn = 850 l/min ▶ Plate connection ▶ Manual override: without detent	**63**

Valve terminal system, Series HF03-LG

▶ Qn Max. = 700 l/min ▶ Multipole ▶ Electr. connection: D-Sub plug, 25-pin, on the side/D-Sub plug, 44-pin, on the side

Blocking principle	Single base plate principle
Working pressure min./max.	2.5 bar / 10 bar
Ambient temperature min./max.	+0°C / +50°C
Medium temperature min./max.	+0°C / +50°C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Protection class: 2000, with electrical connector/ plug	IP 65
Max. number of valve positions	24 (25-pin), 32 (44-pin)
DC operating voltage	24 V
Voltage tolerance DC	-15% / +20%

An example configuration is illustrated. The delivered product may thus deviate from the illustration.

Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter “Technical information.”
- See the following pages on the series for technical data for individual components.
- The flow of the individual valves depends on the base plate, so here the flow is 700 l/min.
- For push-in fittings, only use plug accessories made of plastic (polyamide) from our catalog.

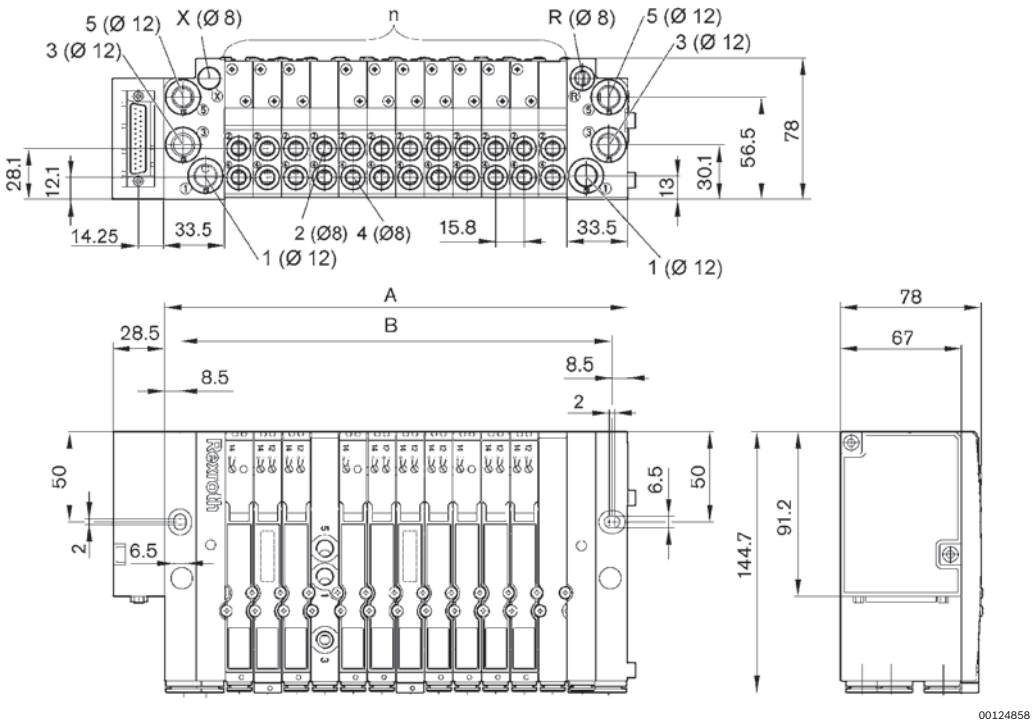
Configurable product

This product is configurable. Please use our Internet configurator at www.boschrexroth-us.com/pneumatics or contact the nearest Bosch Rexroth sales office.

Valve terminal system, Series HF03-LG

▶ Qn Max. = 700 l/min ▶ Multipole ▶ Electr. connection: D-Sub plug, 25-pin, on the side/D-Sub plug, 44-pin, on the side

Dimensions in mm



1 = plug-in connection Ø 12 mm or 1/2”
2 and 4 = plug-in connection Ø 8 mm or threaded connection G1/8 or 1/8 NPTF
3 and 5 = plug-in connection Ø 12 mm or 1/2”
R = restricted pilot exhaust, plug-in connection Ø 8 mm or 1/4”
X = external pilot control, plug-in connection Ø 8 mm or 1/4”, connection X plugged with internal pilot control
An example configuration is illustrated. The delivered product may thus deviate from the illustration.

n	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
A	82.8	98.6	114.4	130.2	146	161.8	177.6	193.4	209.2	225	240.8	256.6	272.4	288.2	304	319.8
B	65.8	81.6	97.4	113.2	129	144.8	160.6	176.4	192.2	208	223.8	239.6	255.4	271.2	287	302.8

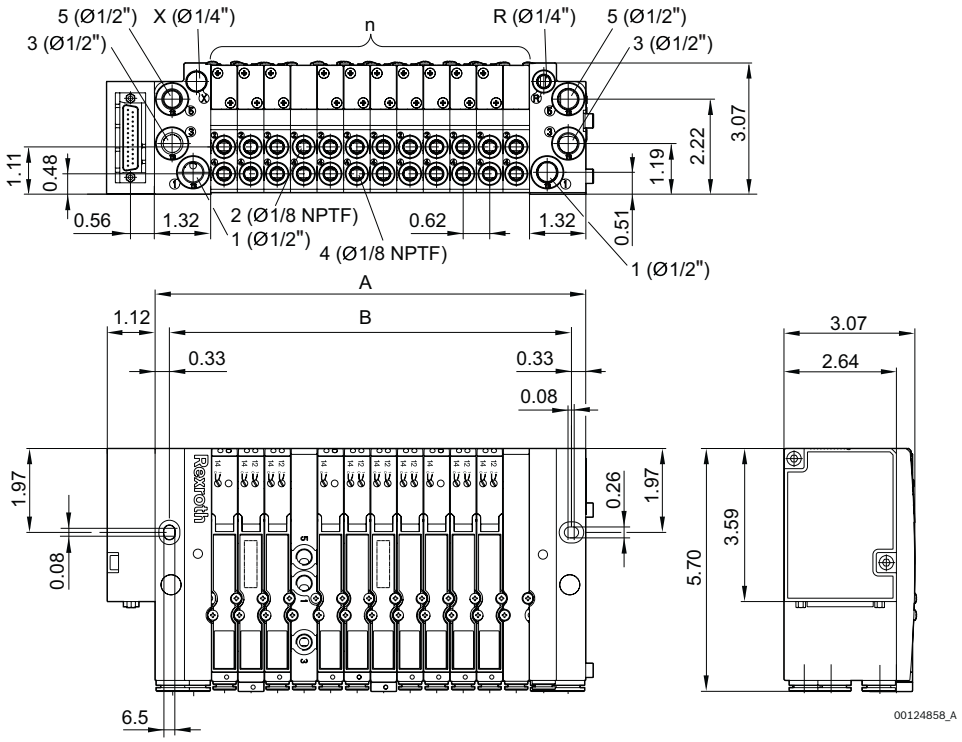
n	17	18	19	20	21	22	23	24
A	335.6	351.4	367.2	383	398.8	414.6	430.4	446.2
B	318.6	334.4	350.2	366	381.8	397.6	413.4	429.2

n = number of subbases

Valve terminal system, Series HF03-LG

▶ Qn Max. = 700 l/min ▶ Multipole ▶ Electr. connection: D-Sub plug, 25-pin, on the side/D-Sub plug, 44-pin, on the side

Dimensions in inches



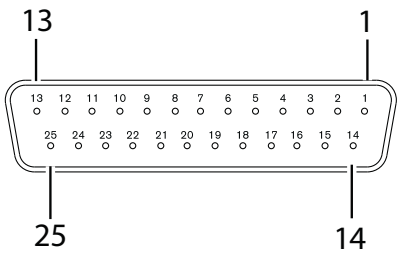
1 = plug-in connection Ø 12 mm or 1/2”
2 and 4 = plug-in connection Ø 8 mm or threaded connection G1/8 or 1/8 NPTF
3 and 5 = plug-in connection Ø 12 mm or 1/2”
R = restricted pilot exhaust, plug-in connection Ø 8 mm or 1/4”
X = external pilot control, plug-in connection Ø 8 mm or 1/4”, connection X plugged with internal pilot control
An example configuration is illustrated. The delivered product may thus deviate from the illustration.

n	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
A	3.26	3.88	4.5	5.13	5.75	6.37	6.99	7.61	8.24	8.86	9.48	10.1	10.72	11.35	11.97	12.59
B	2.59	3.21	3.83	4.46	5.08	5.7	6.32	6.94	7.57	8.19	8.81	9.43	10.06	10.68	11.3	11.92

n	17	18	19	20	21	22	23	24
A	13.21	13.83	14.46	15.08	15.7	16.32	16.94	17.57
B	12.54	13.17	13.79	14.41	15.03	15.65	16.28	16.9

n = number of subbases

PIN assignment and cable colors



Valve terminal system, Series HF03-LG

▶ Qn Max. = 700 l/min ▶ Direct field bus connection (BDC) ▶ B-design

Version	Field bus
Blocking principle	Single base plate principle
Working pressure min./max.	2.5 bar / 10 bar
Ambient temperature min./max.	+0°C / +50°C
Medium temperature min./max.	+0°C / +50°C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Protection class, with plug	IP 65
Number of valve positions	32
Number of solenoid coils	32
Supported field bus protocols:	Profibus DP DeviceNet CANopen CANopen sb
Operational voltage electronics	24 V DC
Electronics voltage tolerance	-15% / +20%

An example configuration is illustrated. The delivered product may thus deviate from the illustration.

Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter “Technical information.”
- See the following pages on the series for technical data for individual components.
- For technical data for electronics (link structures), see the Chapter “Control systems/bus connections.”
- The flow of the individual valves depends on the base plate, so here the flow is 700 l/min.
- For push-in fittings, only use plug accessories made of plastic (polyamide) from our catalog.

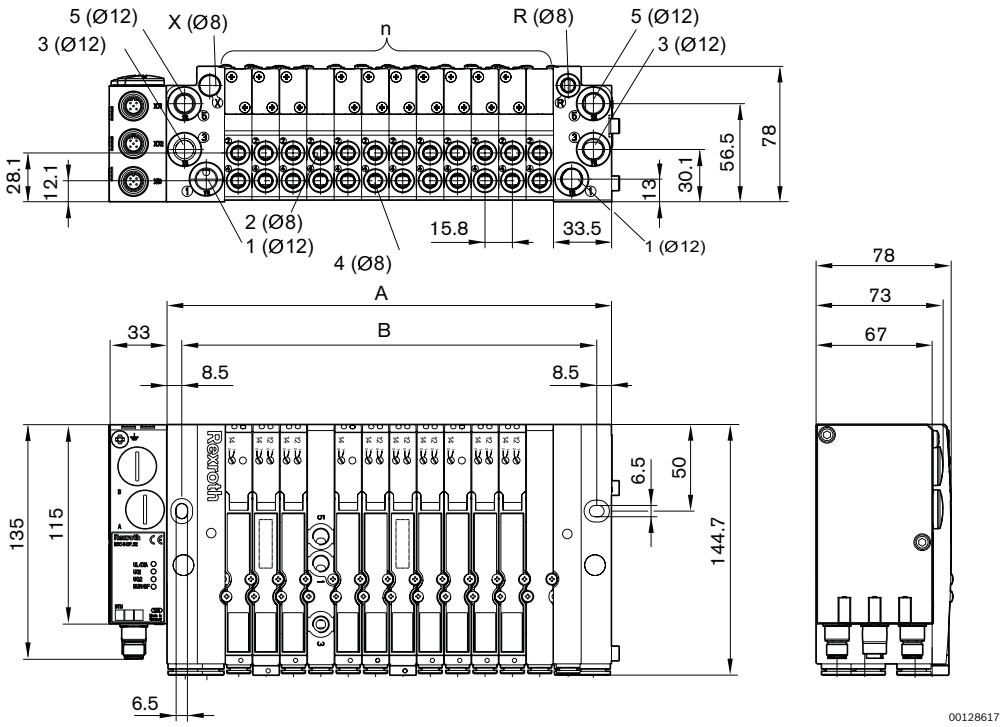
Configurable product

This product is configurable. Please use our Internet configurator at www.boschrexroth-us.com/pneumatics or contact the nearest Bosch Rexroth sales office.

Valve terminal system, Series HF03-LG

▶ Qn Max. = 700 l/min ▶ Direct field bus connection (BDC) ▶ B-design

Dimensions in mm



1 = plug-in connection Ø 12 mm or plug-in connection 1/2”
2 and 4 = plug-in connection Ø 8 mm or threaded connection G1/8 or 1/8 NPTF
3 and 5 = plug-in connection Ø 12 mm or plug-in connection 1/2”
R = restricted pilot exhaust, plug-in connection Ø 8 mm or plug-in connection 1/4”
X = external pilot control, plug-in connection Ø 8 mm or plug-in connection 1/4”, connection X plugged with internal pilot control
An example configuration is illustrated. The delivered product may thus deviate from the illustration.

n	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
A	82.8	98.6	114.4	130.2	146	161.8	177.6	193.4	209.2	225	240.8	256.6	272.4	288.2	304	319.8
B	65.8	81.6	97.4	113.2	129	144.8	160.6	176.4	192.2	208	223.8	239.6	255.4	271.2	287	302.8

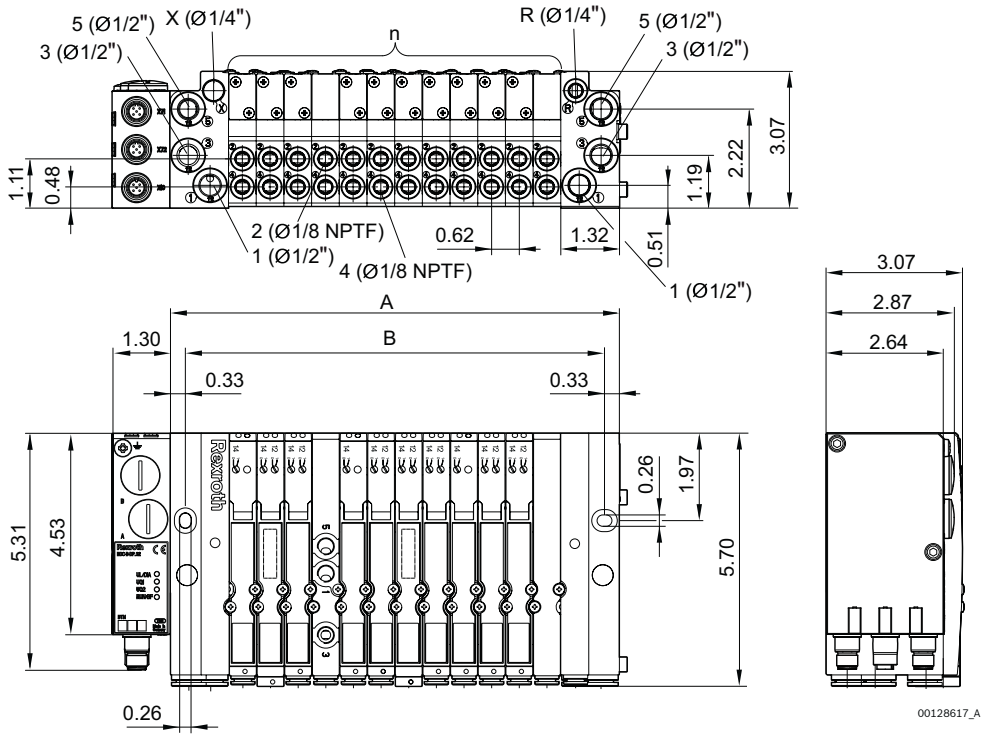
n	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
A	335.6	351.4	367.2	383	398.8	414.6	430.4	446.2	462	477.8	493.6	509.4	525.2	541	556.8	572.6
B	318.6	334.4	350.2	366	381.8	397.6	413.4	429.2	445	460.8	476.6	492.4	508.2	524	539.8	555.6

n = number of subbases

Valve terminal system, Series HF03-LG

▶ Qn Max. = 700 l/min ▶ Direct field bus connection (BDC) ▶ B-design

Dimensions in inches



1 = plug-in connection Ø 12 mm or plug-in connection 1/2”
2 and 4 = plug-in connection Ø 8 mm or threaded connection G1/8 or 1/8 NPTF
3 and 5 = plug-in connection Ø 12 mm or plug-in connection 1/2”
R = restricted pilot exhaust, plug-in connection Ø 8 mm or plug-in connection 1/4”
X = external pilot control, plug-in connection Ø 8 mm or plug-in connection 1/4”, connection X plugged with internal pilot control
An example configuration is illustrated. The delivered product may thus deviate from the illustration.

n	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
A	3.26	3.88	4.5	5.13	5.75	6.37	6.99	7.61	8.24	8.86	9.48	10.1	10.72	11.35	11.97	12.59
B	2.59	3.21	3.83	4.46	5.08	5.7	6.32	6.94	7.57	8.19	8.81	9.43	10.06	10.68	11.3	11.92

n	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
A	13.21	13.83	14.46	15.08	15.7	16.32	16.94	17.57	18.19	18.81	19.43	20.06	20.68	21.3	21.92	22.54
B	12.54	13.17	13.79	14.41	15.03	15.65	16.28	16.9	17.52	18.14	18.76	19.39	20.01	20.63	21.25	21.87

n = number of subbases

Valve terminal system, Series HF03-LG

▶ Qn Max. = 700 l/min ▶ Field bus connection with I/O functionality (CMS) ▶ B-design

Version	Field bus
Blocking principle	Plate principle
Working pressure min./max.	2.5 bar / 10 bar
Ambient temperature min./max.	+0°C / +50°C
Medium temperature min./max.	+0°C / +50°C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Protection class, with plug	IP 65
Number of valve positions	32
Supported field bus protocols:	Profibus DP DeviceNet CANopen INTERBUS-S
Operational voltage electronics	24 V DC
Electronics voltage tolerance	-15% / +20%

An example configuration is illustrated. The delivered product may thus deviate from the illustration.

Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter “Technical information.”
- See the following pages on the series for technical data for individual components.
- For technical data for electronics (link structures), see the Chapter “Control systems/bus connections.”
- The flow of the individual valves depends on the base plate, so here the flow is 700 l/min.
- For push-in fittings, only use plug accessories made of plastic (polyamide) from our catalog.

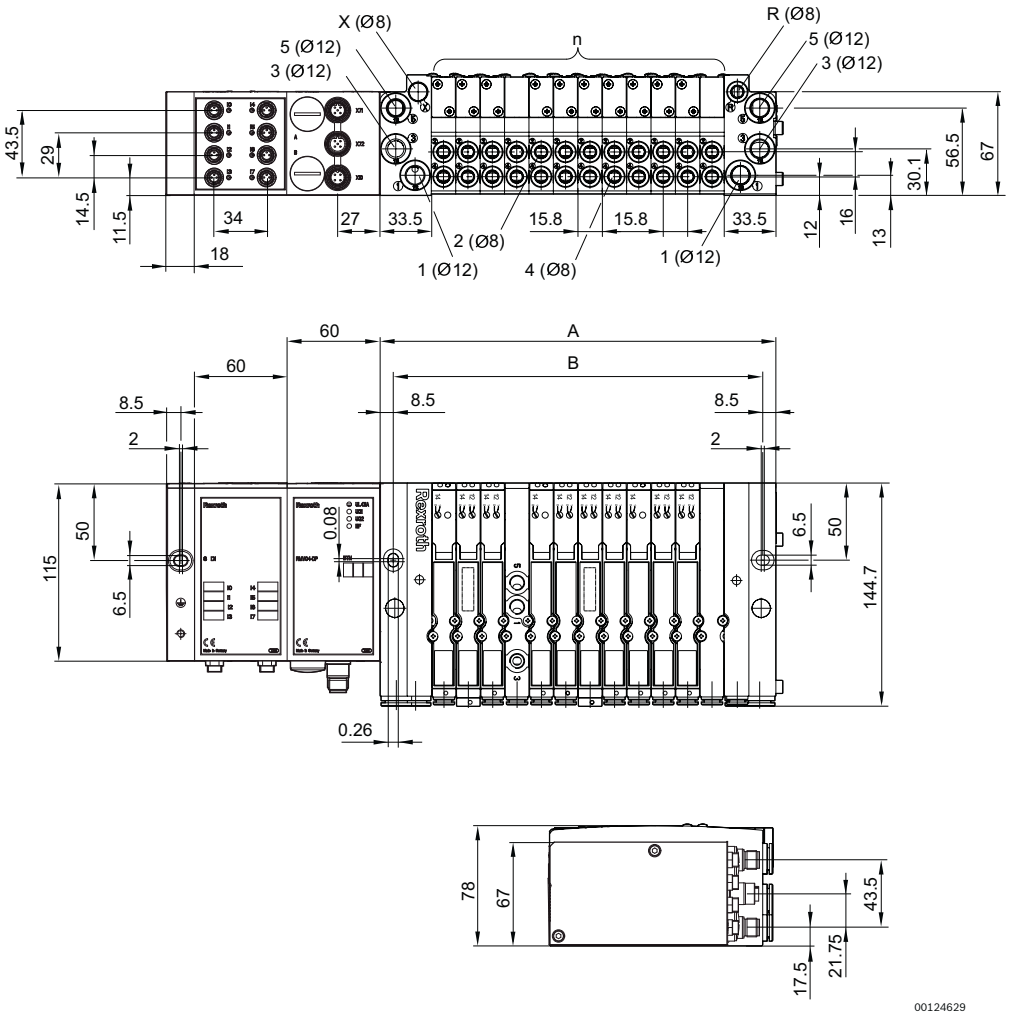
Configurable product

This product is configurable. Please use our Internet configurator at www.boschrexroth-us.com/pneumatics or contact the nearest Bosch Rexroth sales office.

Valve terminal system, Series HF03-LG

▶ Qn Max. = 700 l/min ▶ Field bus connection with I/O functionality (CMS) ▶ B-design

Dimensions in mm



1 = plug-in connection Ø 12 mm or plug-in connection 1/2”
2 and 4 = plug-in connection Ø 8 mm or threaded connection G1/8 or 1/8 NPTF
3 and 5 = plug-in connection Ø 12 mm or plug-in connection 1/2”
R = restricted pilot exhaust, plug-in connection Ø 8 mm or plug-in connection 1/4”
X = external pilot control, plug-in connection Ø 8 mm or plug-in connection 1/4”, connection X plugged with internal pilot control
An example configuration is illustrated. The delivered product may thus deviate from the illustration.

n	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
A	82.8	98.6	114.4	130.2	146	161.8	177.6	193.4	209.2	225	240.8	256.6	272.4	288.2	304	319.8
B	65.8	81.6	97.4	113.2	129	144.8	160.6	176.4	192.2	208	223.8	239.6	255.4	271.2	287	302.8

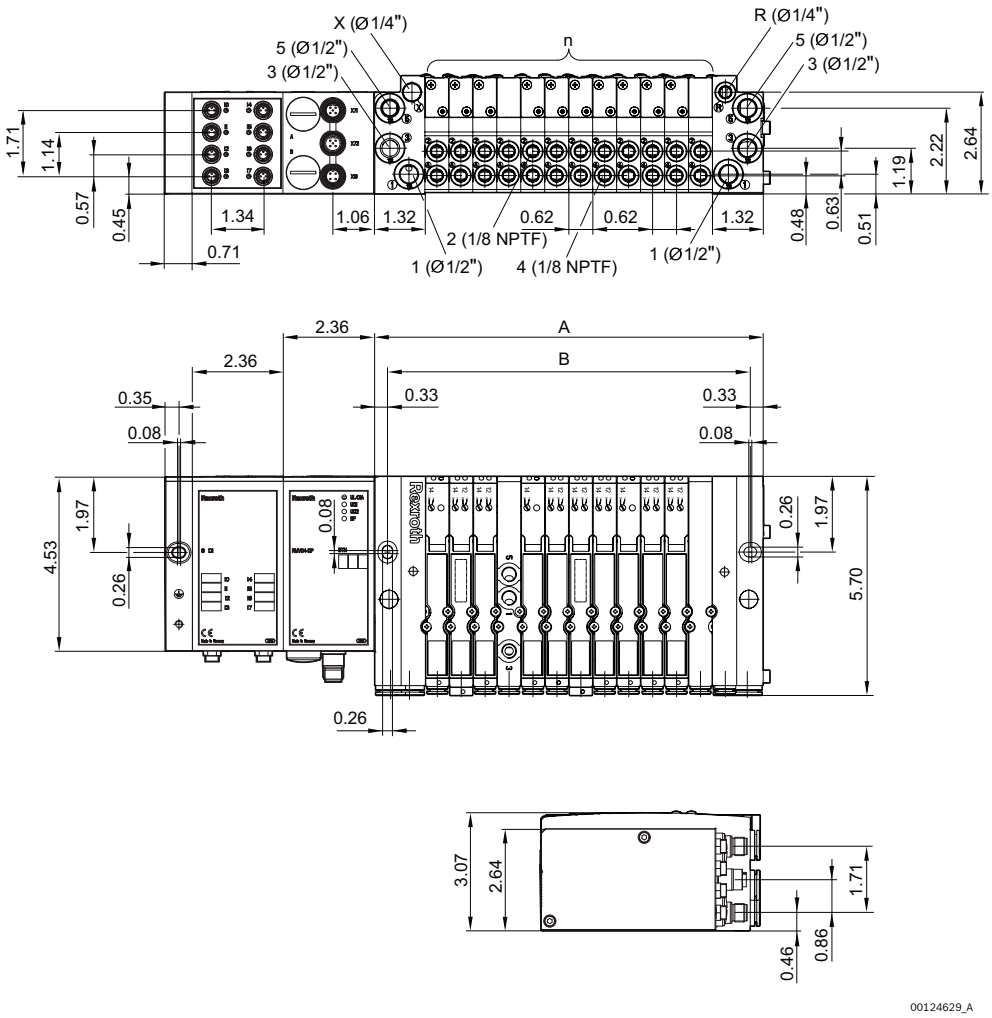
n	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
A	335.6	351.4	367.2	383	398.8	414.6	430.4	446.2	462	477.8	493.6	509.4	525.2	541	556.8	572.6
B	318.6	334.4	350.2	366	381.8	397.6	413.4	429.2	445	460.8	476.6	492.4	508.2	524	539.8	555.6

n = number of subbases

Valve terminal system, Series HF03-LG

▶ Qn Max. = 700 l/min ▶ Field bus connection with I/O functionality (CMS) ▶ B-design

Dimensions in inches



1 = plug-in connection Ø 12 mm or plug-in connection 1/2”
2 and 4 = plug-in connection Ø 8 mm or threaded connection G1/8 or 1/8 NPTF
3 and 5 = plug-in connection Ø 12 mm or plug-in connection 1/2”
R = restricted pilot exhaust, plug-in connection Ø 8 mm or plug-in connection 1/4”
X = external pilot control, plug-in connection Ø 8 mm or plug-in connection 1/4”, connection X plugged with internal pilot control
An example configuration is illustrated. The delivered product may thus deviate from the illustration.

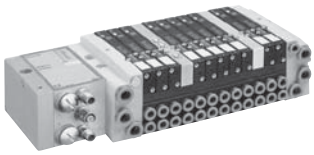
n	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
A	3.26	3.88	4.5	5.13	5.75	6.37	6.99	7.61	8.24	8.86	9.48	10.1	10.72	11.35	11.97	12.59
B	2.59	3.21	3.83	4.46	5.08	5.7	6.32	6.94	7.57	8.19	8.81	9.43	10.06	10.68	11.3	11.92

n	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
A	13.21	13.83	14.46	15.08	15.7	16.32	16.94	17.57	18.19	18.81	19.43	20.06	20.68	21.3	21.92	22.54
B	12.54	13.17	13.79	14.41	15.03	15.65	16.28	16.9	17.52	18.14	18.76	19.39	20.01	20.63	21.25	21.87

n = number of subbases

Valve terminal system, Series HF03-LG

▶ Qn Max. = 700 l/min ▶ Connection with diagnostics (DDL) ▶ B-design



Version	Link structure DDL
Blocking principle	Single base plate principle
Working pressure min./max.	2.5 bar / 10 bar
Ambient temperature min./max.	+0°C / +50°C
Medium temperature min./max.	+0°C / +50°C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Protection class, with plug	IP 65
Number of valve positions	32
Number of solenoid coils	32
Operational voltage electronics	24 V DC
Electronics voltage tolerance	-15% / +20%

An example configuration is illustrated. The delivered product may thus deviate from the illustration.

Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter “Technical information.”
- See the following pages on the series for technical data for individual components.
- For technical data for electronics (link structures), see the Chapter “Control systems/bus connections.”
- The flow of the individual valves depends on the base plate, so here the flow is 700 l/min.
- For push-in fittings, only use plug accessories made of plastic (polyamide) from our catalog.

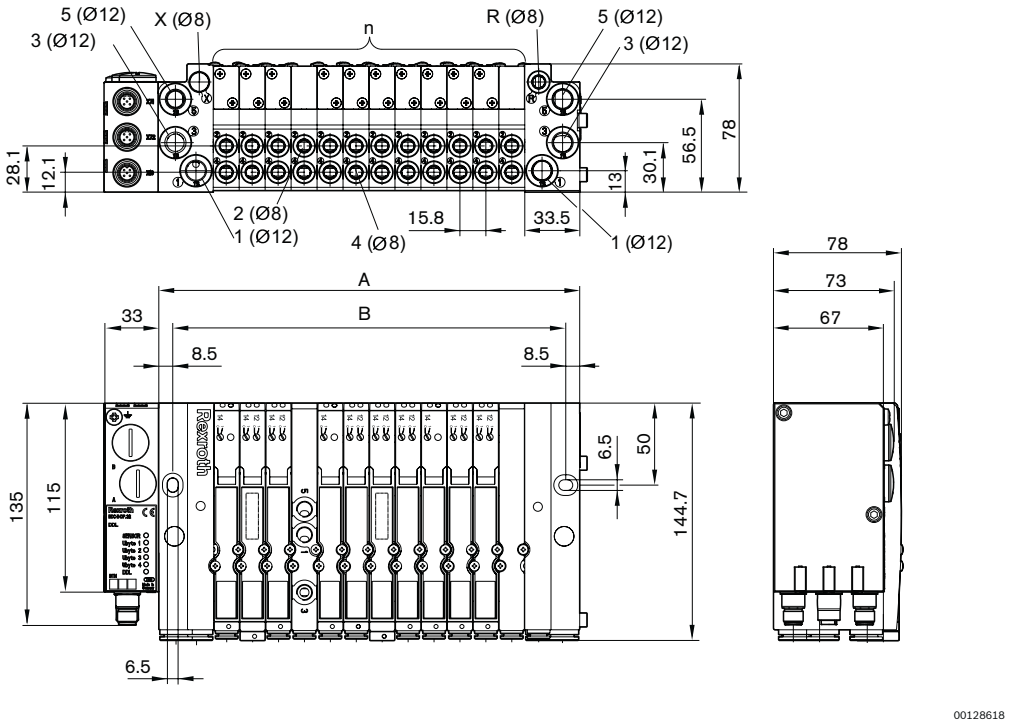
Configurable product

This product is configurable. Please use our Internet configurator at www.boschrexroth-us.com/pneumatics or contact the nearest Bosch Rexroth sales office.

Valve terminal system, Series HF03-LG

▶ Qn Max. = 700 l/min ▶ Connection with diagnostics (DDL) ▶ B-design

Dimensions in mm



1 = plug-in connection Ø 12 mm or plug-in connection 1/2”
2 and 4 = plug-in connection Ø 8 mm or threaded connection G1/8 or 1/8 NPTF
3 and 5 = plug-in connection Ø 12 mm or plug-in connection 1/2”
R = restricted pilot exhaust, plug-in connection Ø 8 mm or plug-in connection 1/4”
X = external pilot control, plug-in connection Ø 8 mm or plug-in connection 1/4”, connection X plugged with internal pilot control
An example configuration is illustrated. The delivered product may thus deviate from the illustration.

n	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
A	82.8	98.6	114.4	130.2	146	161.8	177.6	193.4	209.2	225	240.8	256.6	272.4	288.2	304	319.8
B	65.8	81.6	97.4	113.2	129	144.8	160.6	176.4	192.2	208	223.8	239.6	255.4	271.2	287	302.8

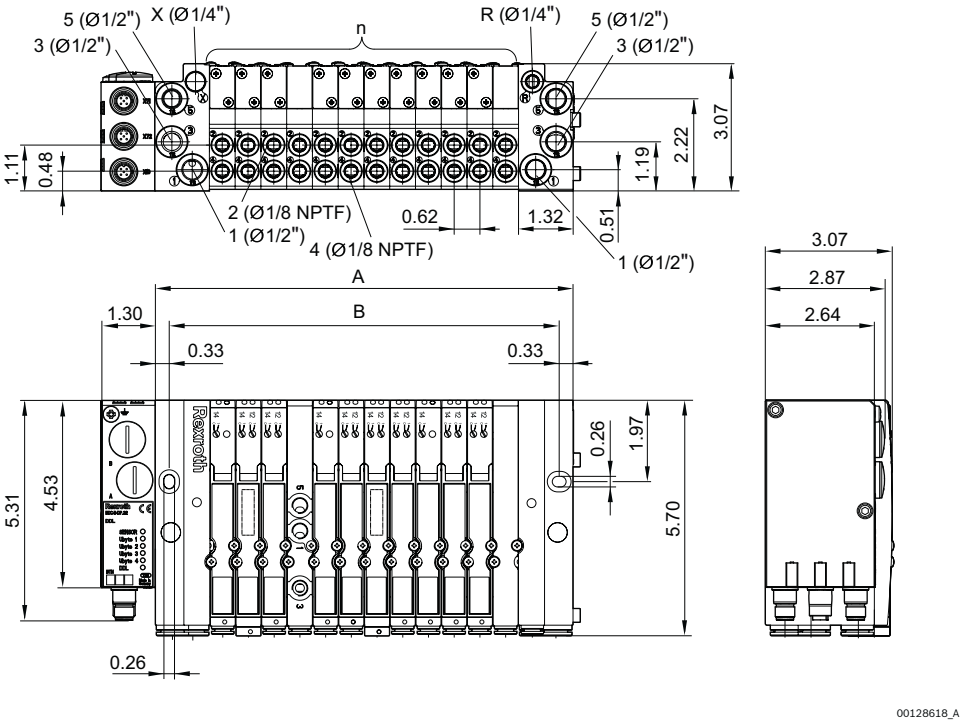
n	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
A	335.6	351.4	367.2	383	398.8	414.6	430.4	446.2	462	477.8	493.6	509.4	525.2	541	556.8	572.6
B	318.6	334.4	350.2	366	381.8	397.6	413.4	429.2	445	460.8	476.6	492.4	508.2	524	539.8	555.6

n = number of subbases

Valve terminal system, Series HF03-LG

▶ Qn Max. = 700 l/min ▶ Connection with diagnostics (DDL) ▶ B-design

Dimensions in inches



1 = plug-in connection Ø 12 mm or plug-in connection 1/2”
2 and 4 = plug-in connection Ø 8 mm or threaded connection G1/8 or 1/8 NPTF
3 and 5 = plug-in connection Ø 12 mm or plug-in connection 1/2”
R = restricted pilot exhaust, plug-in connection Ø 8 mm or plug-in connection 1/4”
X = external pilot control, plug-in connection Ø 8 mm or plug-in connection 1/4”, connection X plugged with internal pilot control
An example configuration is illustrated. The delivered product may thus deviate from the illustration.

n	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
A	3.26	3.88	4.5	5.13	5.75	6.37	6.99	7.61	8.24	8.86	9.48	10.1	10.72	11.35	11.97	12.59
B	2.59	3.21	3.83	4.46	5.08	5.7	6.32	6.94	7.57	8.19	8.81	9.43	10.06	10.68	11.3	11.92

n	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
A	13.21	13.83	14.46	15.08	15.7	16.32	16.94	17.57	18.19	18.81	19.43	20.06	20.68	21.3	21.92	22.54
B	12.54	13.17	13.79	14.41	15.03	15.65	16.28	16.9	17.52	18.14	18.76	19.39	20.01	20.63	21.25	21.87

n = number of subbases

Valve terminal system, Series HF03-LG

▶ Qn Max. = 700 l/min ▶ Connection with diagnostics, optionally with I/O function (DDL) ▶ B-design

Version	Link structure DDL
Blocking principle	Plate principle
Working pressure min./max.	2.5 bar / 10 bar
Ambient temperature min./max.	+0°C / +50°C
Medium temperature min./max.	+0°C / +50°C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Protection class, with plug	IP 65
Number of valve positions	24
Operational voltage electronics	24 V DC
Electronics voltage tolerance	-15% / +20%

An example configuration is illustrated. The delivered product may thus deviate from the illustration.

Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter “Technical information.”
- See the following pages on the series for technical data for individual components.
- For technical data for electronics (link structures), see the Chapter “Control systems/bus connections.”
- The flow of the individual valves depends on the base plate, so here the flow is 700 l/min.
- For push-in fittings, only use plug accessories made of plastic (polyamide) from our catalog.

Configurable product

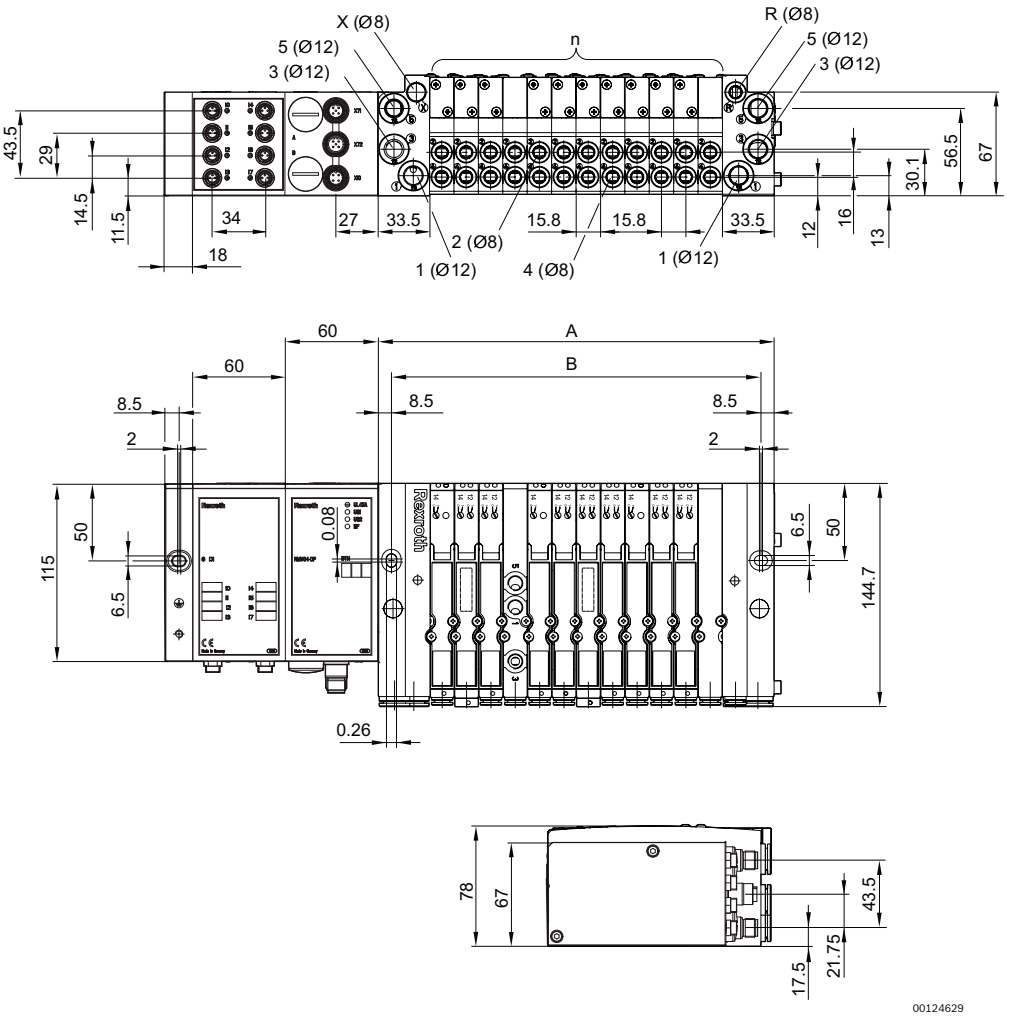
This product is configurable. Please use our Internet configurator at www.boschrexroth-us.com/pneumatics or contact the nearest Bosch Rexroth sales office.

Valve terminal system, Series HF03-LG

▶ Qn Max. = 700 l/min ▶ Connection with diagnostics, optionally with I/O function (DDL) ▶ B-design

---

Dimensions in mm



1 = plug-in connection Ø 12 mm or plug-in connection 1/2”
2 and 4 = plug-in connection Ø 8 mm or threaded connection G1/8 or 1/8 NPTF
3 and 5 = plug-in connection Ø 12 mm or plug-in connection 1/2”
R = restricted pilot exhaust, plug-in connection Ø 8 mm or plug-in connection 1/4”
X = external pilot control, plug-in connection Ø 8 mm or plug-in connection 1/4”, connection X plugged with internal pilot control
An example configuration is illustrated. The delivered product may thus deviate from the illustration.

n	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
A	82.8	98.6	114.4	130.2	146	161.8	177.6	193.4	209.2	225	240.8	256.6	272.4	288.2	304	319.8
B	65.8	81.6	97.4	113.2	129	144.8	160.6	176.4	192.2	208	223.8	239.6	255.4	271.2	287	302.8

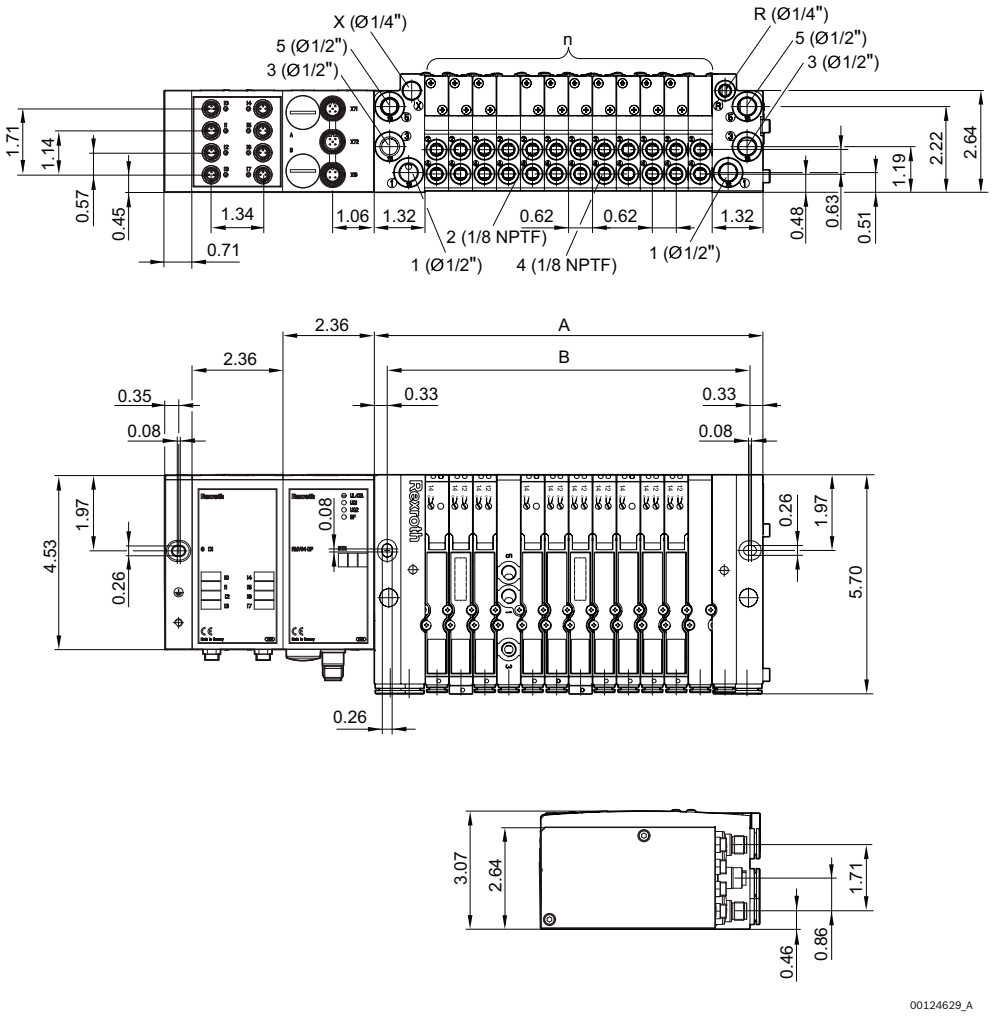
n	17	18	19	20	21	22	23	24
A	335.6	351.4	367.2	383	398.8	414.6	430.4	446.2
B	318.6	334.4	350.2	366	381.8	397.6	413.4	429.2

n = number of subbases

Valve terminal system, Series HF03-LG

▶ Qn Max. = 700 l/min ▶ Connection with diagnostics, optionally with I/O function (DDL) ▶ B-design

Dimensions in inches



1 = plug-in connection Ø 12 mm or plug-in connection 1/2”
2 and 4 = plug-in connection Ø 8 mm or threaded connection G1/8 or 1/8 NPTF
3 and 5 = plug-in connection Ø 12 mm or plug-in connection 1/2”
R = restricted pilot exhaust, plug-in connection Ø 8 mm or plug-in connection 1/4”
X = external pilot control, plug-in connection Ø 8 mm or plug-in connection 1/4”, connection X plugged with internal pilot control
An example configuration is illustrated. The delivered product may thus deviate from the illustration.

n	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
A	3.26	3.88	4.5	5.13	5.75	6.37	6.99	7.61	8.24	8.86	9.48	10.1	10.72	11.35	11.97	12.59
B	2.59	3.21	3.83	4.46	5.08	5.7	6.32	6.94	7.57	8.19	8.81	9.43	10.06	10.68	11.3	11.92

n	17	18	19	20	21	22	23	24
A	13.21	13.83	14.46	15.08	15.7	16.32	16.94	17.57
B	12.54	13.17	13.79	14.41	15.03	15.65	16.28	16.9

n = number of subbases

Valve terminal system, Series HF03-LG

▶ Qn Max. = 700 l/min ▶ Field bus connection with AS i ▶ B-design

Version	Field bus
Blocking principle	Plate principle
Working pressure min./max.	2.5 bar / 10 bar
Ambient temperature min./max.	+0°C / +50°C
Medium temperature min./max.	+0°C / +50°C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Protection class, with plug	IP 65
Number of valve positions	8
Supported field bus protocols:	AS-i
Operational voltage electronics	24 V DC
Electronics voltage tolerance	-15% / +20%
Power supply connection	Black AS-i flat cable
Communication port	Yellow AS-i flat cable

An example configuration is illustrated. The delivered product may thus deviate from the illustration.

Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter “Technical information.”
- See the following pages on the series for technical data for individual components.
- For technical data for electronics (link structures), see the Chapter “Control systems/bus connections.”
- The flow of the individual valves depends on the base plate, so here the flow is 700 l/min.
- For push-in fittings, only use plug accessories made of plastic (polyamide) from our catalog.

Configurable product

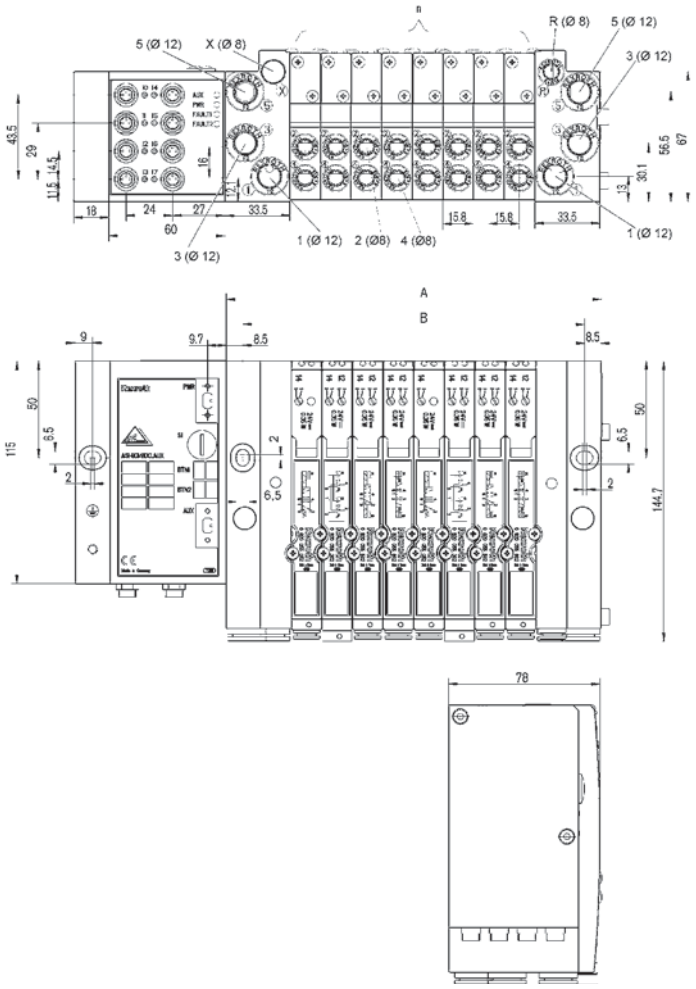
This product is configurable. Please use our Internet configurator at www.boschrexroth-us.com/pneumatics or contact the nearest Bosch Rexroth sales office.

Valve terminal system, Series HF03-LG

▶ Qn Max. = 700 l/min ▶ Field bus connection with AS i ▶ B-design

---

Dimensions in mm, 8DI/8DO-AUX, 4DI/4DO-AUX



1 = plug-in connection Ø 12 mm or plug-in connection 1/2”
2 and 4 = plug-in connection Ø 8 mm or threaded connection G1/8 or 1/8 NPTF
3 and 5 = plug-in connection Ø 12 mm or plug-in connection 1/2”
R = restricted pilot exhaust, plug-in connection Ø 8 mm or plug-in connection 1/4”
X = external pilot control, plug-in connection Ø 8 mm or plug-in connection 1/4”, connection X plugged with internal pilot control
An example configuration is illustrated. The delivered product may thus deviate from the illustration.

n	1	2	3	4	5	6	7	8
A	82.8	98.6	114.4	130.2	146	161.8	177.6	193.4
B	65.8	81.6	97.4	113.2	129	144.8	160.6	176.4

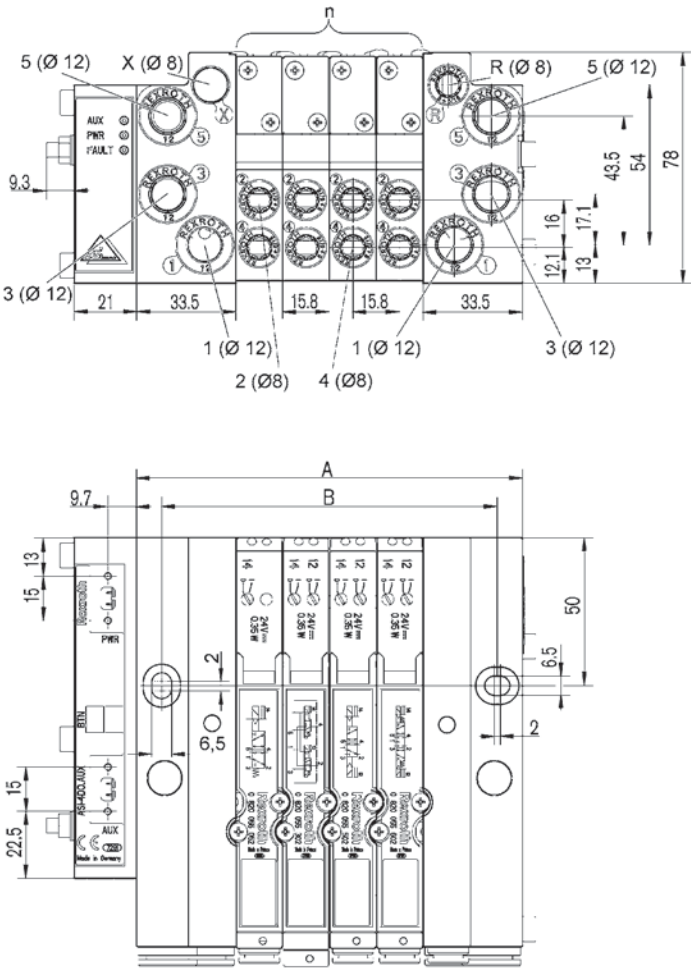
n = number of subbases

Valve terminal system, Series HF03-LG

▶ Qn Max. = 700 l/min ▶ Field bus connection with AS i ▶ B-design

---

Dimensions in mm, 8DO-AUX, 4DO-AUX



1 = plug-in connection Ø 12 mm or plug-in connection 1/2”
2 and 4 = plug-in connection Ø 8 mm or threaded connection G1/8 or 1/8 NPTF
3 and 5 = plug-in connection Ø 12 mm or plug-in connection 1/2”
R = restricted pilot exhaust, plug-in connection Ø 8 mm or plug-in connection 1/4”
X = external pilot control, plug-in connection Ø 8 mm or plug-in connection 1/4”, connection X plugged with internal pilot control
An example configuration is illustrated. The delivered product may thus deviate from the illustration.

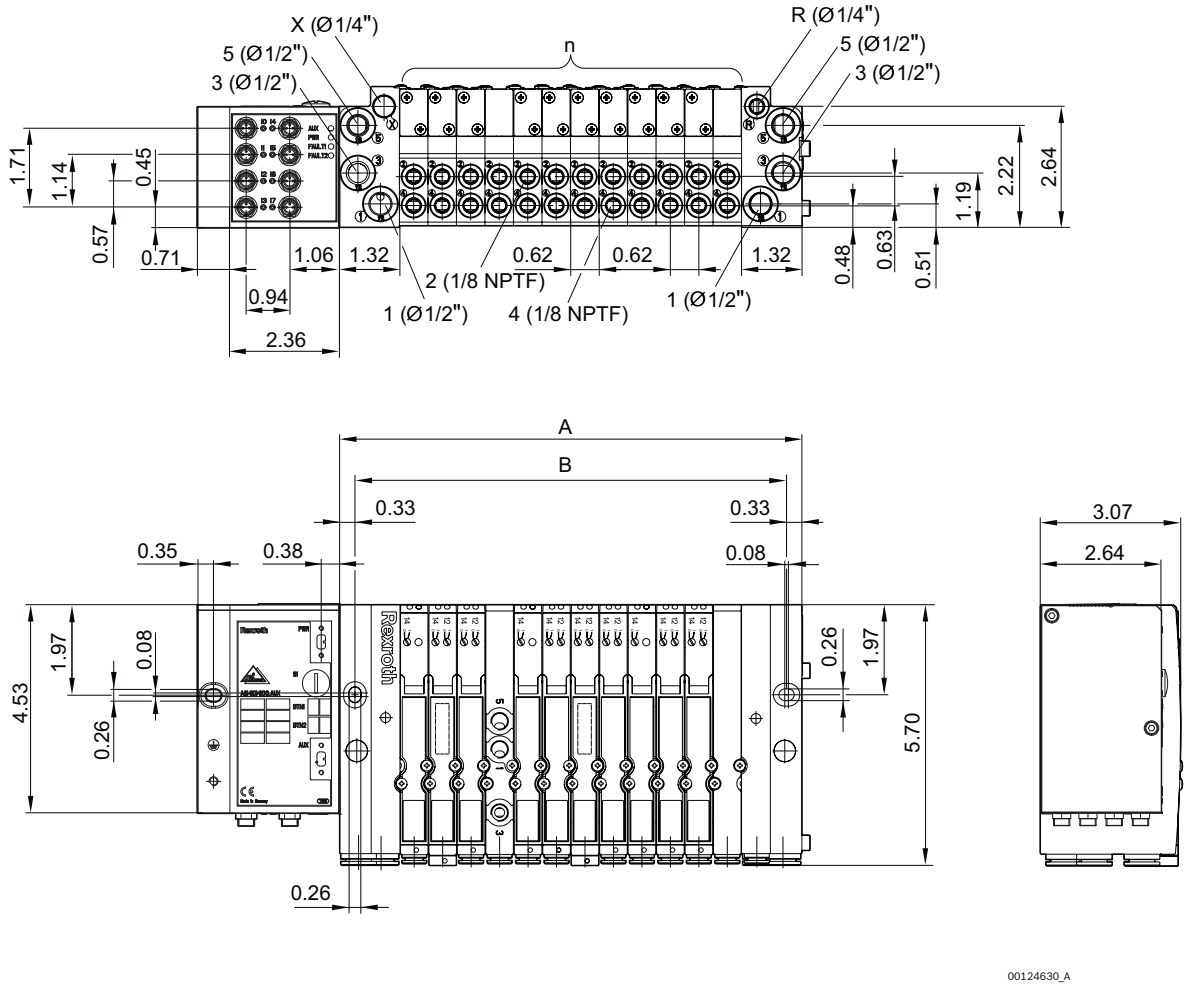
n	1	2	3	4
A	82.8	98.6	114.4	130.2
B	65.8	81.6	97.4	113.2

n = number of subbases

Valve terminal system, Series HF03-LG

▶ Qn Max. = 700 l/min ▶ Field bus connection with AS i ▶ B-design

Dimensions in inches, 8DI/8DO-AUX, 4DI/4DO-AUX



1 = plug-in connection Ø 12 mm or plug-in connection 1/2”
2 and 4 = plug-in connection Ø 8 mm or threaded connection G1/8 or 1/8 NPTF
3 and 5 = plug-in connection Ø 12 mm or plug-in connection 1/2”
R = restricted pilot exhaust, plug-in connection Ø 8 mm or plug-in connection 1/4”
X = external pilot control, plug-in connection Ø 8 mm or plug-in connection 1/4”, connection X plugged with internal pilot control
An example configuration is illustrated. The delivered product may thus deviate from the illustration.

n	1	2	3	4	5	6	7	8
A	3.26	3.88	4.5	5.13	5.75	6.37	6.99	7.61
B	2.59	3.21	3.83	4.46	5.08	5.7	6.32	6.94

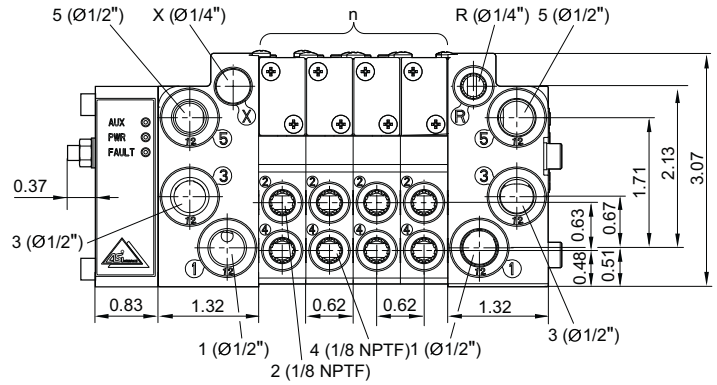
n = number of subbases

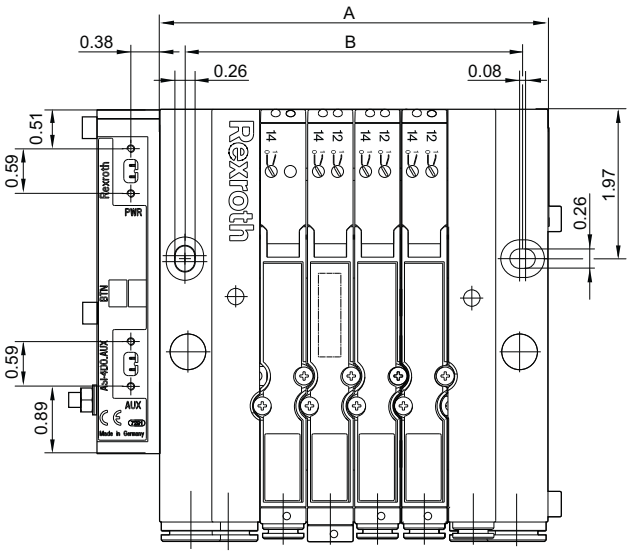
Valve terminal system, Series HF03-LG

▶ Qn Max. = 700 l/min ▶ Field bus connection with AS i ▶ B-design

---

Dimensions in inches, 8DO-AUX, 4DO-AUX





00124631_A

1 = plug-in connection Ø 12 mm or plug-in connection 1/2”
2 and 4 = plug-in connection Ø 8 mm or threaded connection G1/8 or 1/8 NPTF
3 and 5 = plug-in connection Ø 12 mm or plug-in connection 1/2”
R = restricted pilot exhaust, plug-in connection Ø 8 mm or plug-in connection 1/4”
X = external pilot control, plug-in connection Ø 8 mm or plug-in connection 1/4”, connection X plugged with internal pilot control
An example configuration is illustrated. The delivered product may thus deviate from the illustration.

n	1	2	3	4
A	3.26	3.88	4.5	5.13
B	2.59	3.21	3.83	4.46

n = number of subbases

2x3/2-way valve, for Series HF03-LG

▶ Qn = 850 l/min ▶ Plate connection ▶ Manual override: with detent

Certificates	UR (Underwriters Laboratories)

Version	Spool valve, zero overlap
Pilot	External, internal
Sealing principle	Soft sealing
Blocking principle	Single base plate principle
Working pressure min./max.	-0.9 bar / 10 bar
Control pressure min./max.	2.5 bar / 10 bar
Ambient temperature min./max.	+0°C / +50°C
Medium temperature min./max.	+0°C / +50°C
Medium	Compressed air
Protection class with electrical connector/plug	IP 65
Protective circuit	Z-diode Protected against polarity reversal
Status display LED	Yellow
Duty cycle	100%
Switch-on time	16 ms
Switch-off time	25 ms
Generic emission standard in accordance with	EN 50081-1
Generic immunity standard in accordance with	EN 50082-2
Mounting screw	Cross recessed DIN EN ISO 4757-Z1
Mounting screw tightening torque	1.3 Nm

Materials:	
Housing	Polyamide, fiber glass reinforced
Seals	Acrylonitrile butadiene rubber

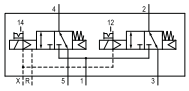
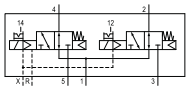
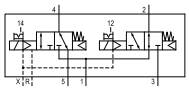
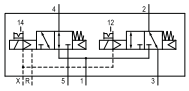
Technical Remarks

- ▶ The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- ▶ The oil content of air pressure must remain constant during the life cycle.
- ▶ Use only the approved oils from Bosch Rexroth, see chapter “Technical information.”
- ▶ The pilot type (external/internal) is not implemented in the valve, but in the end plate of the valve terminal system.
- ▶ The UR certification refers to the pilot valve.

Operating voltage	Voltage tolerance	Power consumption
DC	DC	DC
		W
24 V	-15% / +20%	0.35

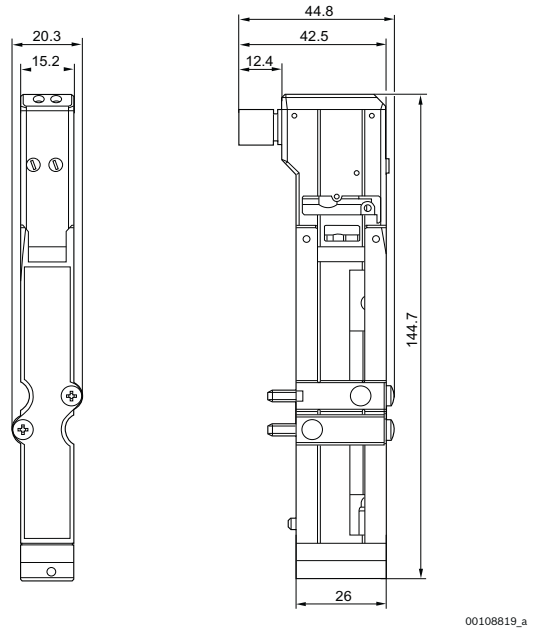
2x3/2-way valve, for Series HF03-LG

▶ Qn = 850 l/min ▶ Plate connection ▶ Manual override: with detent

		MO	Operating voltage	Flow conductance		Flow rate value	Weight	Part No.
			DC	b	C	Qn		
					[l/(s*bar)]	[l/min]	[kg]	
	NC/NC		24 V	0.22	178	850	0.082	**0820055101**
	NO/NO		24 V	0.22	178	850	0.082	**0820055201**
	NC/NO		24 V	0.22	178	850	0.082	**0820055301**
	NO/NC		24 V	0.22	178	850	0.082	**0820055311**

MO = Manual override
With collective pilot air exhaust
Nominal flow Qn at 6 bar and Δp = 1 bar

Dimensions



1) Mounting screw: X-slot DIN EN ISO 4757-Z1
tightening torque for mounting screw [Nm]: 1.3

Part numbers in bold are more readily available.

2x3/2-way valve, for Series HF03-LG

▶ Qn = 850 l/min ▶ Plate connection ▶ Manual override: without detent

Certificates	UR (Underwriters Laboratories)

Version	Spool valve, zero overlap
Pilot	External, internal
Sealing principle	Soft sealing
Blocking principle	Single base plate principle
Working pressure min./max.	-0.9 bar / 10 bar
Control pressure min./max.	2.5 bar / 10 bar
Ambient temperature min./max.	+0°C / +50°C
Medium temperature min./max.	+0°C / +50°C
Medium	Compressed air
Protection class with electrical connector/plug	IP 65
Protective circuit	Z-diode Protected against polarity reversal
Status display LED	Yellow
Duty cycle	100%
Switch-on time	16 ms
Switch-off time	25 ms
Generic emission standard in accordance with	EN 50081-1
Generic immunity standard in accordance with	EN 50082-2
Mounting screw	Cross recessed DIN EN ISO 4757-Z1
Mounting screw tightening torque	1.3 Nm

Materials:	
Housing	Polyamide, fiber glass reinforced
Seals	Acrylonitrile butadiene rubber

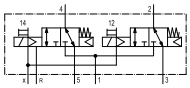
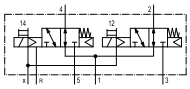
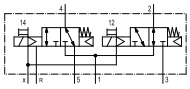
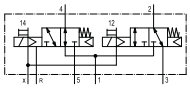
Technical Remarks

- ▶ The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- ▶ The oil content of air pressure must remain constant during the life cycle.
- ▶ Use only the approved oils from Bosch Rexroth, see chapter “Technical information.”
- ▶ The pilot type (external/internal) is not implemented in the valve, but in the end plate of the valve terminal system.
- ▶ The UR certification refers to the pilot valve.

Operating voltage	Voltage tolerance	Power consumption
DC	**DC**	**DC**
		W
24 V	-15% / +20%	0.35

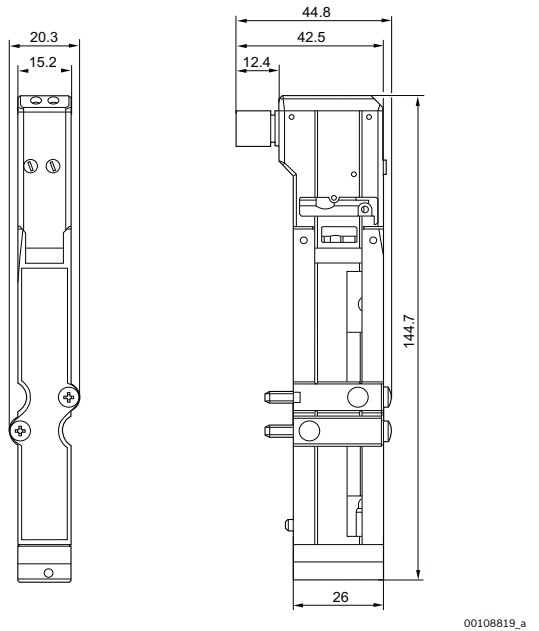
2x3/2-way valve, for Series HF03-LG

▶ Qn = 850 l/min ▶ Plate connection ▶ Manual override: without detent

		MO	Operating voltage	Flow conductance		Flow rate value	Weight	Part No.
			DC	b	C	Qn		
					[l/(s*bar)]	[l/min]	[kg]	
	NC/NC		24 V	0.22	178	850	0.082	**0820055102**
	NO/NO		24 V	0.22	178	850	0.082	**0820055202**
	NC/NO		24 V	0.22	178	850	0.082	**0820055302**
	NO/NC		24 V	0.22	178	850	0.082	**0820055312**

MO = Manual override
With collective pilot air exhaust
Nominal flow Qn at 6 bar and Δp = 1 bar

Dimensions



1) Mounting screw: X-slot DIN EN ISO 4757-Z1
tightening torque for mounting screw [Nm]: 1.3

Part numbers in bold are more readily available.

5/2-way valve, for Series HF03-LG

▶ Qn = 850 l/min ▶ Plate connection ▶ Manual override: with detent ▶ Single solenoid, double solenoid

Certificates	UR (Underwriters Laboratories)

Version	Spool valve, zero overlap
Pilot	External, internal
Sealing principle	Soft sealing
Blocking principle	Single base plate principle
Working pressure min./max.	-0.9 bar / 10 bar
Control pressure min./max.	2.5 bar / 10 bar
Ambient temperature min./max.	+0°C / +50°C
Medium temperature min./max.	+0°C / +50°C
Medium	Compressed air
Max. particle size	5 µm
Protection class with electrical connector/plug	IP 65
Protective circuit	Z-diode Protected against polarity reversal
Status display LED	Yellow
Duty cycle	100%
Generic emission standard in accordance with	EN 50081-1
Generic immunity standard in accordance with	EN 50082-2
Mounting screw	Cross recessed DIN EN ISO 4757-Z1
Mounting screw tightening torque	1.3 Nm

Materials:	
Housing	Polyamide, fiber glass reinforced
Seals	Acrylonitrile butadiene rubber

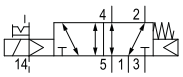
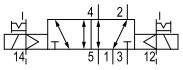
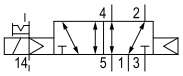
Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter “Technical information.”
- The pilot type (external/internal) is not implemented in the valve, but in the end plate of the valve terminal system.
- The UR certification refers to the pilot valve.

Operating voltage	Voltage tolerance	Power consumption
DC	**DC**	**DC**
		W
24 V	-15% / +20%	0.35

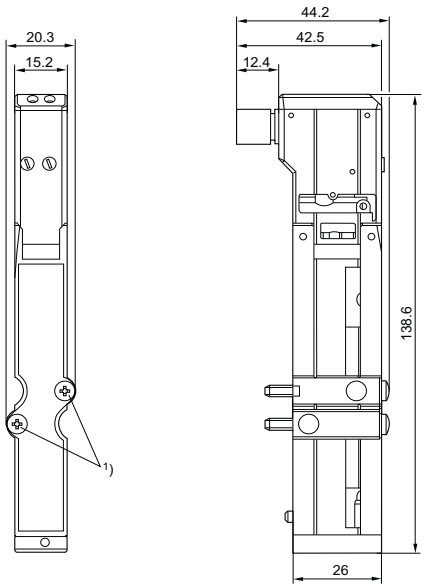
5/2-way valve, for Series HF03-LG

▶ Qn = 850 l/min ▶ Plate connection ▶ Manual override: with detent ▶ Single solenoid, double solenoid

	MO	Operating voltage	Flow conductance		Flow rate value	Switch-on time	Switch-off time	Weight	Part No.
		DC	b	C	Qn				
				[l/(s*bar)]	[l/min]	[ms]	[ms]	[kg]	
		24 V	0.22	179	850	16	23	0.082	**0820055051**
		24 V	0.22	178	850	13	15	0.082	**0820055501**
		24 V	0.22	179	850	15	23	0.082	**0820055001**

MO = Manual override
With collective pilot air exhaust
Nominal flow Qn at 6 bar and Δp = 1 bar

Dimensions



1) Mounting screw: X-slot DIN EN ISO 4757-Z1
tightening torque for mounting screw [Nm]: 1.3

Part numbers in bold are more readily available.

5/2-way valve, for Series HF03-LG

▶ Qn = 850 l/min ▶ Plate connection ▶ Manual override: without detent ▶ Single solenoid, double solenoid

Certificates	UR (Underwriters Laboratories)

Version	Spool valve, zero overlap
Pilot	External, internal
Sealing principle	Soft sealing
Blocking principle	Single base plate principle
Working pressure min./max.	-0.9 bar / 10 bar
Control pressure min./max.	2.5 bar / 10 bar
Ambient temperature min./max.	+0°C / +50°C
Medium temperature min./max.	+0°C / +50°C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 mg/m^3 – 5 mg/m^3
Protection class with electrical connector/plug	IP 65
Protective circuit	Z-diode Protected against polarity reversal
Status display LED	Yellow
Duty cycle	100%
Generic emission standard in accordance with	EN 50081-1
Generic immunity standard in accordance with	EN 50082-2
Mounting screw	Cross recessed DIN EN ISO 4757-Z1
Mounting screw tightening torque	1.3 Nm

Materials:	
Housing	Polyamide, fiber glass reinforced
Seals	Acrylonitrile butadiene rubber

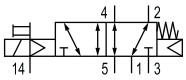
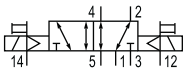
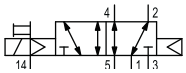
Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter “Technical information.”
- The pilot type (external/internal) is not implemented in the valve, but in the end plate of the valve terminal system.
- The UR certification refers to the pilot valve.

Operating voltage	Voltage tolerance	Power consumption
DC	DC	DC
		W
24 V	-15% / +20%	0.35

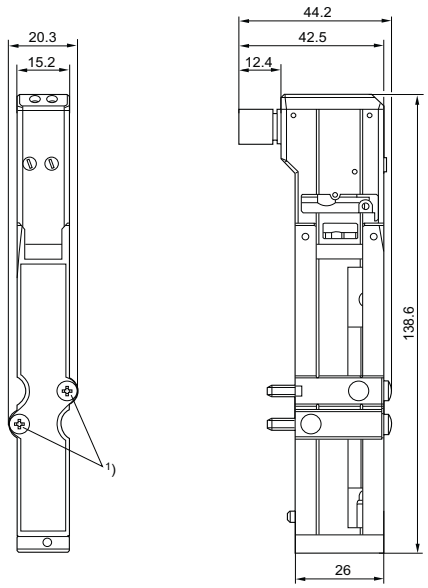
5/2-way valve, for Series HF03-LG

▶ Qn = 850 l/min ▶ Plate connection ▶ Manual override: without detent ▶ Single solenoid, double solenoid

	MO	Operating voltage	Flow conductance		Flow rate value	Switch-on time	Switch-off time	Weight	Part No.
		DC	b	C	Qn				
				[l/(s*bar)]	[l/min]	[ms]	[ms]	[kg]	
		24 V	0.22	179	850	16	23	0.082	**0820055052**
		24 V	0.22	178	850	13	15	0.082	**0820055502**
		24 V	0.22	179	850	15	23	0.082	**0820055002**

MO = Manual override
With collective pilot air exhaust
Nominal flow Qn at 6 bar and Δp = 1 bar

Dimensions



1) Mounting screw: X-slot DIN EN ISO 4757-Z1
tightening torque for mounting screw [Nm]: 1.3

00108820

Part numbers in bold are more readily available.

5/3-way valve, for Series HF03-LG

▶ Qn = 850 l/min ▶ Plate connection ▶ Manual override: with detent

Certificates	UR (Underwriters Laboratories)

Version	Spool valve, zero overlap
Pilot	External, internal
Sealing principle	Soft sealing
Blocking principle	Single base plate principle
Working pressure min./max.	-0.9 bar / 10 bar
Control pressure min./max.	2.5 bar / 10 bar
Ambient temperature min./max.	+0°C / +50°C
Medium temperature min./max.	+0°C / +50°C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 mg/m^3 – 5 mg/m^3
Protection class with electrical connector/plug	IP 65
Protective circuit	Z-diode Protected against polarity reversal
Status display LED	Yellow
Duty cycle	100%
Switch-on time	14 ms
Switch-off time	15 ms
Generic emission standard in accordance with	EN 50081-1
Generic immunity standard in accordance with	EN 50082-2
Mounting screw	Cross recessed DIN EN ISO 4757-Z1
Mounting screw tightening torque	1.3 Nm

Materials:	
Housing	Polyamide, fiber glass reinforced
Seals	Acrylonitrile butadiene rubber

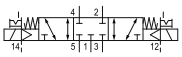
Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter “Technical information.”
- The pilot type (external/internal) is not implemented in the valve, but in the end plate of the valve terminal system.
- The UR certification refers to the pilot valve.

Operating voltage	Voltage tolerance	Power consumption
DC	DC	DC
		W
24 V	-15% / +20%	0.35

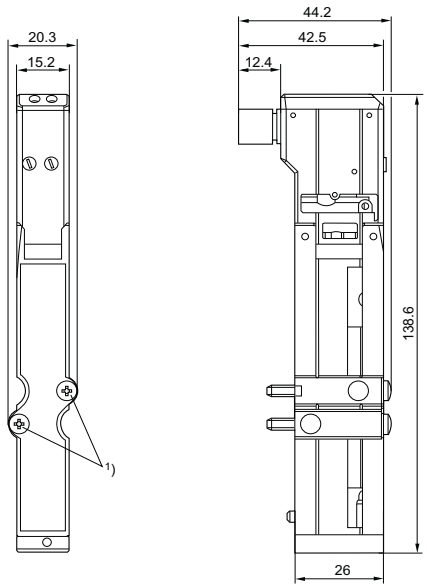
5/3-way valve, for Series HF03-LG

▶ Qn = 850 l/min ▶ Plate connection ▶ Manual override: with detent

	MO	Operating voltage	Flow rate value	Weight	Part No.
		DC	Qn		
			[l/min]	[kg]	
		24 V	850	0.082	**0820055601**

MO = Manual override
With collective pilot air exhaust
Nominal flow Qn at 6 bar and Δp = 1 bar

Dimensions



1) Mounting screw: X-slot DIN EN ISO 4757-Z1
tightening torque for mounting screw [Nm]: 1.3

Part numbers in bold are more readily available.

5/3-way valve, for Series HF03-LG

▶ Qn = 850 l/min ▶ Plate connection ▶ Manual override: without detent

Certificates	UR (Underwriters Laboratories)

Version	Spool valve, zero overlap
Pilot	External, internal
Sealing principle	Soft sealing
Blocking principle	Single base plate principle
Working pressure min./max.	-0.9 bar / 10 bar
Control pressure min./max.	2.5 bar / 10 bar
Ambient temperature min./max.	+0°C / +50°C
Medium temperature min./max.	+0°C / +50°C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 mg/m^3 – 5 mg/m^3
Protection class with electrical connector/plug	IP 65
Protective circuit	Z-diode Protected against polarity reversal
Status display LED	Yellow
Duty cycle	100%
Switch-on time	14 ms
Switch-off time	15 ms
Generic emission standard in accordance with	EN 50081-1
Generic immunity standard in accordance with	EN 50082-2
Mounting screw	Cross recessed DIN EN ISO 4757-Z1
Mounting screw tightening torque	1.3 Nm

Materials:	
Housing	Polyamide, fiber glass reinforced
Seals	Acrylonitrile butadiene rubber

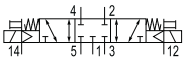
Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter “Technical information.”
- The pilot type (external/internal) is not implemented in the valve, but in the end plate of the valve terminal system.
- The UR certification refers to the pilot valve.

Operating voltage	Voltage tolerance	Power consumption
DC	DC	DC
		W
24 V	-15% / +20%	0.35

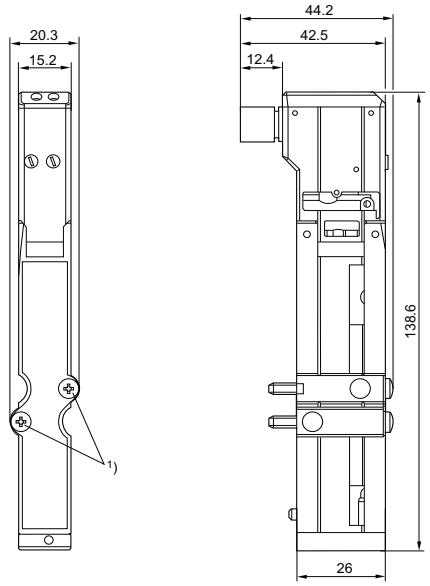
5/3-way valve, for Series HF03-LG

▶ Qn = 850 l/min ▶ Plate connection ▶ Manual override: without detent

	MO	Operating voltage	Flow rate value	Weight	Part No.
		DC	Qn		
			[l/min]	[kg]	
		24 V	850	0.082	**0820055602**

MO = Manual override
With collective pilot air exhaust
Nominal flow Qn at 6 bar and Δp = 1 bar

Dimensions



1) Mounting screw: X-slot DIN EN ISO 4757-Z1
tightening torque for mounting screw [Nm]: 1.3

Part numbers in bold are more readily available.

For Series HF04 and HF04-XF

Valve terminal system, configurable with push-in fitting Ø6 mm or 1/4” (inch) or thread connection M7 or 10-32 UNF

	Valve terminal system, Series HF04 ▶ Qn Max. = 400 l/min ▶ Multipole ▶ Electr. connection: D-Sub plug, 25-pin, on the side	**66**
	Valve terminal system, Series HF04 ▶ Qn Max. = 400 l/min ▶ Direct field bus connection (BDC) ▶ B-design	**69**
	Valve terminal system, Series HF04 ▶ Qn Max. = 400 l/min ▶ Optional field bus connection with I/O function (CMS) ▶ B-design	**72**
	Valve terminal system, Series HF04 ▶ Qn Max. = 400 l/min ▶ Connection with diagnostics (DDL) ▶ B-design	**75**
	Valve terminal system, Series HF04 ▶ Qn Max. = 400 l/min ▶ Connection with diagnostics, optionally with I/O function (DDL) ▶ B-design	**78**
	Valve terminal system, Series HF04 ▶ Qn Max. = 400 l/min ▶ Field bus connection with AS i ▶ B-design	**81**

Valves

	2x3/2-way valve, Series HF04 and HF04-XF ▶ Qn = 400 l/min ▶ Plate connection ▶ Manual override: with detent	**90**
	2x3/2-way valve, Series HF04 and HF04-XF ▶ Qn = 400 l/min ▶ Plate connection ▶ Manual override: without detent	**92**
	5/2-way valve, Series HF04 and HF04-XF ▶ Qn = 400 l/min ▶ Plate connection ▶ Manual override: with detent ▶ Single solenoid, double solenoid	**94**
	5/2-way valve, Series HF04 and HF04-XF ▶ Qn = 400 l/min ▶ Plate connection ▶ Manual override: without detent ▶ Single solenoid, double solenoid	**96**
	5/3-way valve, Series HF04 and HF04-XF ▶ Qn = 400 l/min ▶ Plate connection ▶ Manual override: with detent	**98**
	5/3-way valve, Series HF04 and HF04-XF ▶ Qn = 400 l/min ▶ Plate connection ▶ Manual override: without detent	**100**

Valve terminal system, Series HF04

▶ Qn Max. = 400 l/min ▶ Multipole ▶ Electr. connection: D-Sub plug, 25-pin, on the side

Blocking principle	Double base plate principle
Working pressure min./max.	-0.9 bar / 10 bar
Control pressure min./max.	3 bar / 8 bar
Ambient temperature min./max.	-5°C / +50°C
Medium temperature min./max.	+0°C / +50°C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Protection class: 2000, with electrical connector/ plug	IP 65
Number of valve positions	24
Number of solenoid coils	24
DC operating voltage	24 V
Voltage tolerance DC	-10% / +10%

An example configuration is illustrated. The delivered product may thus deviate from the illustration.

Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter “Technical information.”
- See the following pages on the series for technical data for individual components.
- For push-in fittings, only use plug accessories made of plastic (polyamide) from our catalog.

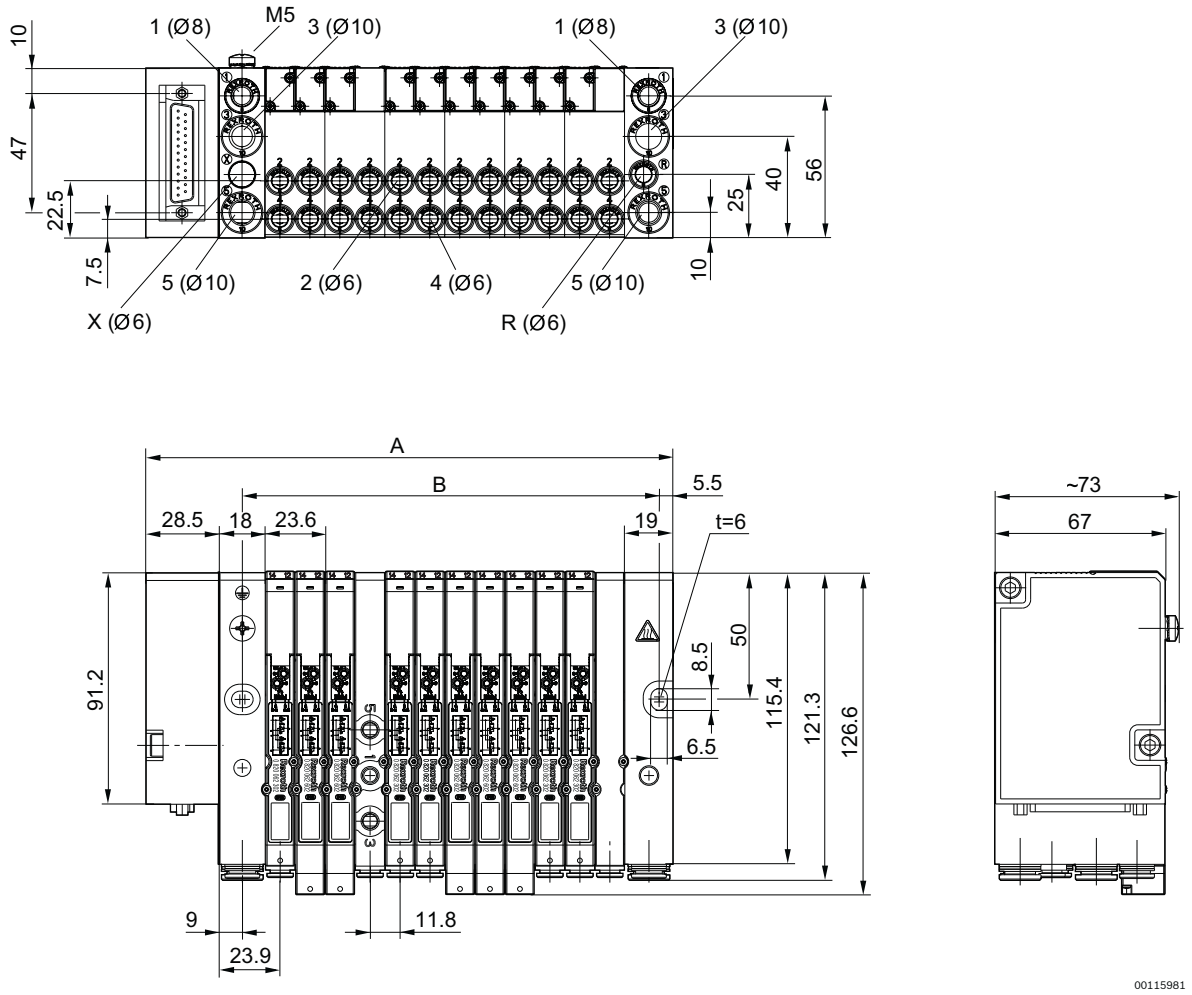
Configurable product

This product is configurable. Please use our Internet configurator at www.boschrexroth-us.com/pneumatics or contact the nearest Bosch Rexroth sales office.

Valve terminal system, Series HF04

▶ Qn Max. = 400 l/min ▶ Multipole ▶ Electr. connection: D-Sub plug, 25-pin, on the side

Dimensions in mm



1 = plug-in connection Ø 8 mm or plug-in connection 3/8” (inch)
2 and 4 = plug-in connections Ø 6 mm or thread connections M7 (inch)
3 and 5 = plug-in connections Ø 10 mm or plug-in connections 3/8” (inch)
R = collected pilot exhaust, plug-in connection Ø 6 mm or plug-in connection 1/4” (inch)
X = external pilot, plug-in connection Ø 6 mm or plug-in connection 1/4” (inch), connection X plugged with internal pilot control
An example configuration is illustrated. The delivered product may thus deviate from the illustration.

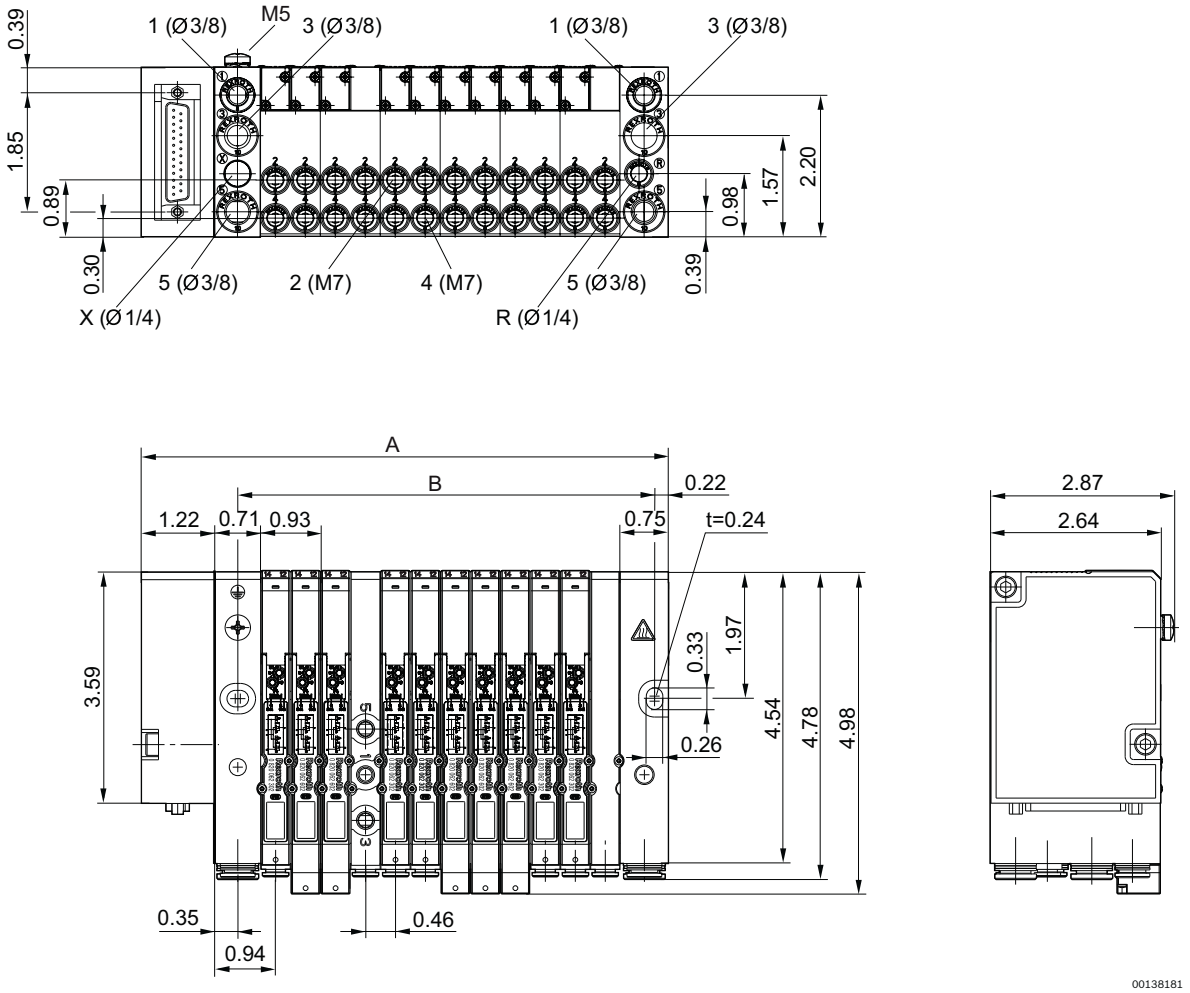
n	1	2	3	4	5	6	7	8	9	10	11	12
A	60.6	84.2	107.8	131.4	155	178.6	202	225.8	249.4	273	296.6	320
B	46.1	69.7	93.3	116.9	140.5	164.1	187.7	211.3	234.9	258.5	282	305.7

n = number of double subplates

Valve terminal system, Series HF04

▶ Qn Max. = 400 l/min ▶ Multipole ▶ Electr. connection: D-Sub plug, 25-pin, on the side

Dimensions in inches



1 = plug-in connection Ø 8 mm or plug-in connection 3/8” (inch)
2 and 4 = plug-in connections Ø 6 mm or thread connections M7 (inch)
3 and 5 = plug-in connections Ø 10 mm or plug-in connections 3/8” (inch)
R = collected pilot exhaust, plug-in connection Ø 6 mm or plug-in connection 1/4” (inch)
X = external pilot, plug-in connection Ø 6 mm or plug-in connection 1/4” (inch), connection X plugged with internal pilot control
An example configuration is illustrated. The delivered product may thus deviate from the illustration.

n	1	2	3	4	5	6	7	8	9	10	11	12
A	2.39	3.31	4.24	5.17	6.1	7.03	7.95	8.89	9.82	10.75	11.68	12.6
B	1.81	2.74	3.67	4.6	5.53	6.46	7.39	8.32	9.25	10.18	11.1	12.04

n = number of double subplates

Valve terminal system, Series HF04

▶ Qn Max. = 400 l/min ▶ Direct field bus connection (BDC) ▶ B-design

Version	Field bus
Blocking principle	Double base plate principle
Working pressure min./max.	-0.9 bar / 10 bar
Control pressure min./max.	3 bar / 8 bar
Ambient temperature min./max.	-5°C / +50°C
Medium temperature min./max.	+0°C / +50°C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Protection class, with plug	IP 65
Number of valve positions	24
Number of solenoid coils	24
Operational voltage electronics	24 V DC
Electronics voltage tolerance	-10% / +10%

An example configuration is illustrated. The delivered product may thus deviate from the illustration.

Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter “Technical information.”
- See the following pages on the series for technical data for individual components.
- For technical data for electronics (link structures), see the Chapter “Control systems/bus connections.”
- For push-in fittings, only use plug accessories made of plastic (polyamide) from our catalog.

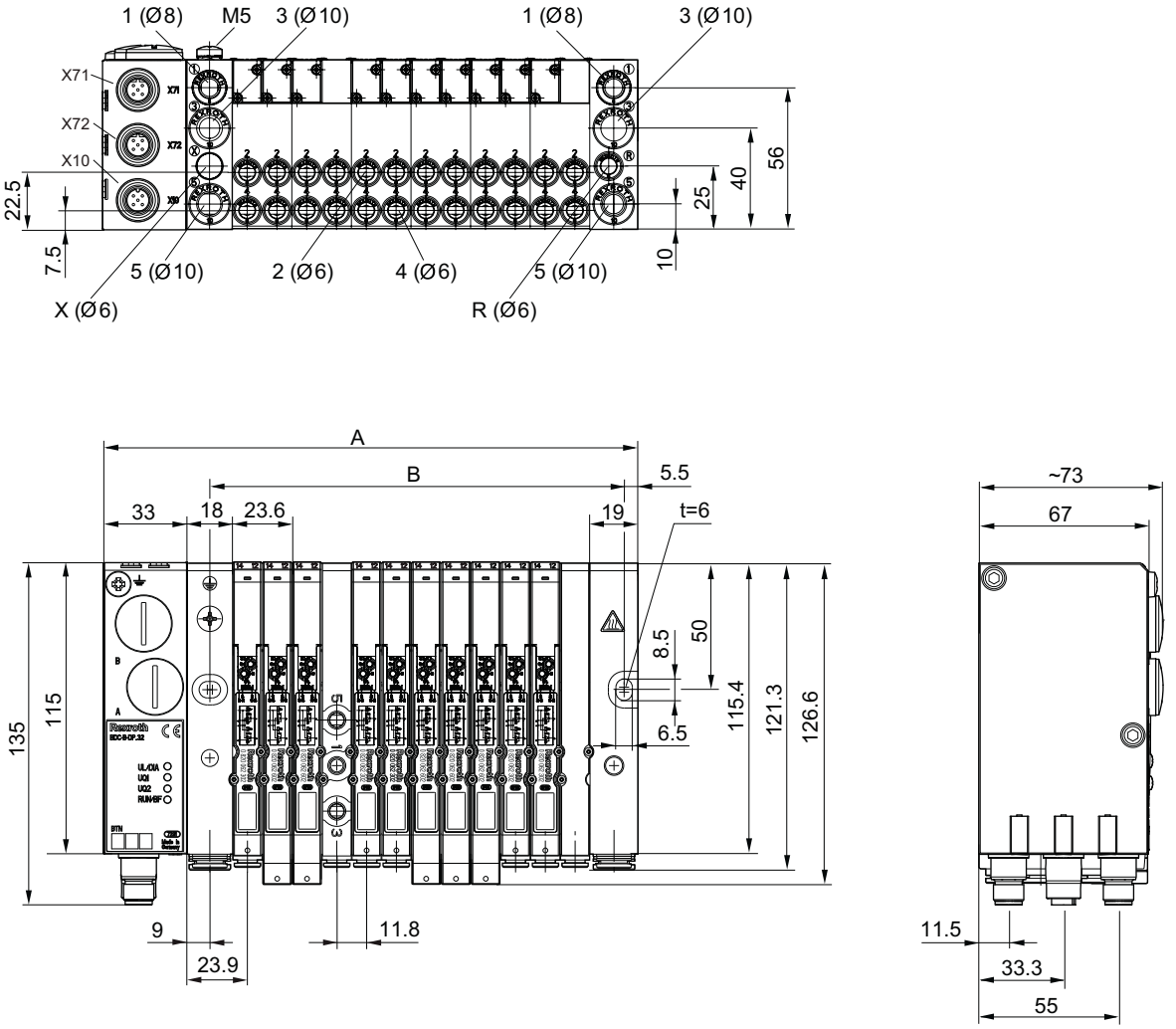
Configurable product

This product is configurable. Please use our Internet configurator at www.boschrexroth-us.com/pneumatics or contact the nearest Bosch Rexroth sales office.

Valve terminal system, Series HF04

▶ Qn Max. = 400 l/min ▶ Direct field bus connection (BDC) ▶ B-design

Dimensions in mm



1 = plug-in connection Ø 8 mm or plug-in connection 3/8” (inch)
2 and 4 = plug-in connections Ø 6 mm or thread connections M7 (inch)
3 and 5 = plug-in connections Ø 10 mm or plug-in connections 3/8” (inch)
R = collected pilot exhaust, plug-in connection Ø 6 mm or plug-in connection 1/4” (inch)
X = external pilot, plug-in connection Ø 6 mm or plug-in connection 1/4” (inch), connection X plugged with internal pilot control
An example configuration is illustrated. The delivered product may thus deviate from the illustration.

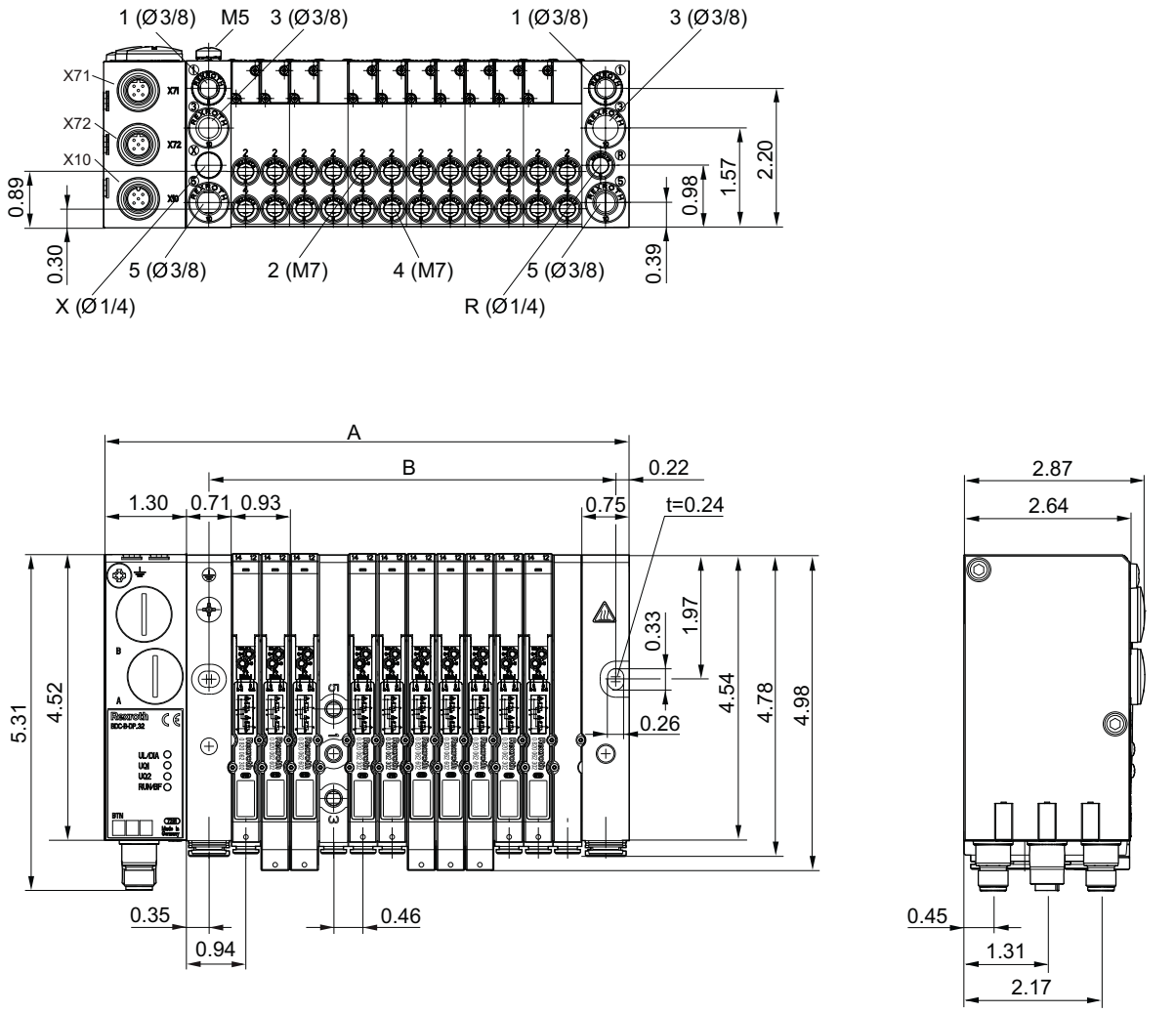
n	1	2	3	4	5	6	7	8	9	10	11	12
A	93.6	117.2	140.8	164.4	188	211.6	235.2	258.8	282.4	306	329.6	353.2
B	46.1	69.7	93.3	116.9	140.5	164.1	187.7	211.3	234.9	258.5	282.1	305.7

n = number of double subplates

Valve terminal system, Series HF04

▶ Qn Max. = 400 l/min ▶ Direct field bus connection (BDC) ▶ B-design

Dimensions in inches



1 = plug-in connection Ø 8 mm or plug-in connection 3/8” (inch)
2 and 4 = plug-in connections Ø 6 mm or thread connections M7 (inch)
3 and 5 = plug-in connections Ø 10 mm or plug-in connections 3/8” (inch)
R = collected pilot exhaust, plug-in connection Ø 6 mm or plug-in connection 1/4” (inch)
X = external pilot, plug-in connection Ø 6 mm or plug-in connection 1/4” (inch), connection X plugged with internal pilot control
An example configuration is illustrated. The delivered product may thus deviate from the illustration.

n	1	2	3	4	5	6	7	8	9	10	11	12				
A	3.69	4.61	5.54	6.47	7.4	8.33	9.26	10.19	11.12	12.05	12.98	13.91				
B	1.81	2.74	3.67	4.6	5.53	6.46	7.39	8.32	9.25	10.18	11.11	12.04				

n = number of double subplates

Valve terminal system, Series HF04

▶ Qn Max. = 400 l/min ▶ Optional field bus connection with I/O function (CMS) ▶ B-design

Version	Field bus CMS
Blocking principle	Double base plate principle
Working pressure min./max.	-0.9 bar / 10 bar
Control pressure min./max.	3 bar / 8 bar
Ambient temperature min./max.	-5°C / +50°C
Medium temperature min./max.	+0°C / +50°C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Protection class, with plug	IP 65
Number of valve positions	24
Number of solenoid coils	24
Operational voltage electronics	24 V DC
Electronics voltage tolerance	-10% / +10%

An example configuration is illustrated. The delivered product may thus deviate from the illustration.

Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter “Technical information.”
- See the following pages on the series for technical data for individual components.
- For technical data for electronics (link structures), see the Chapter “Control systems/bus connections.”
- For push-in fittings, only use plug accessories made of plastic (polyamide) from our catalog.

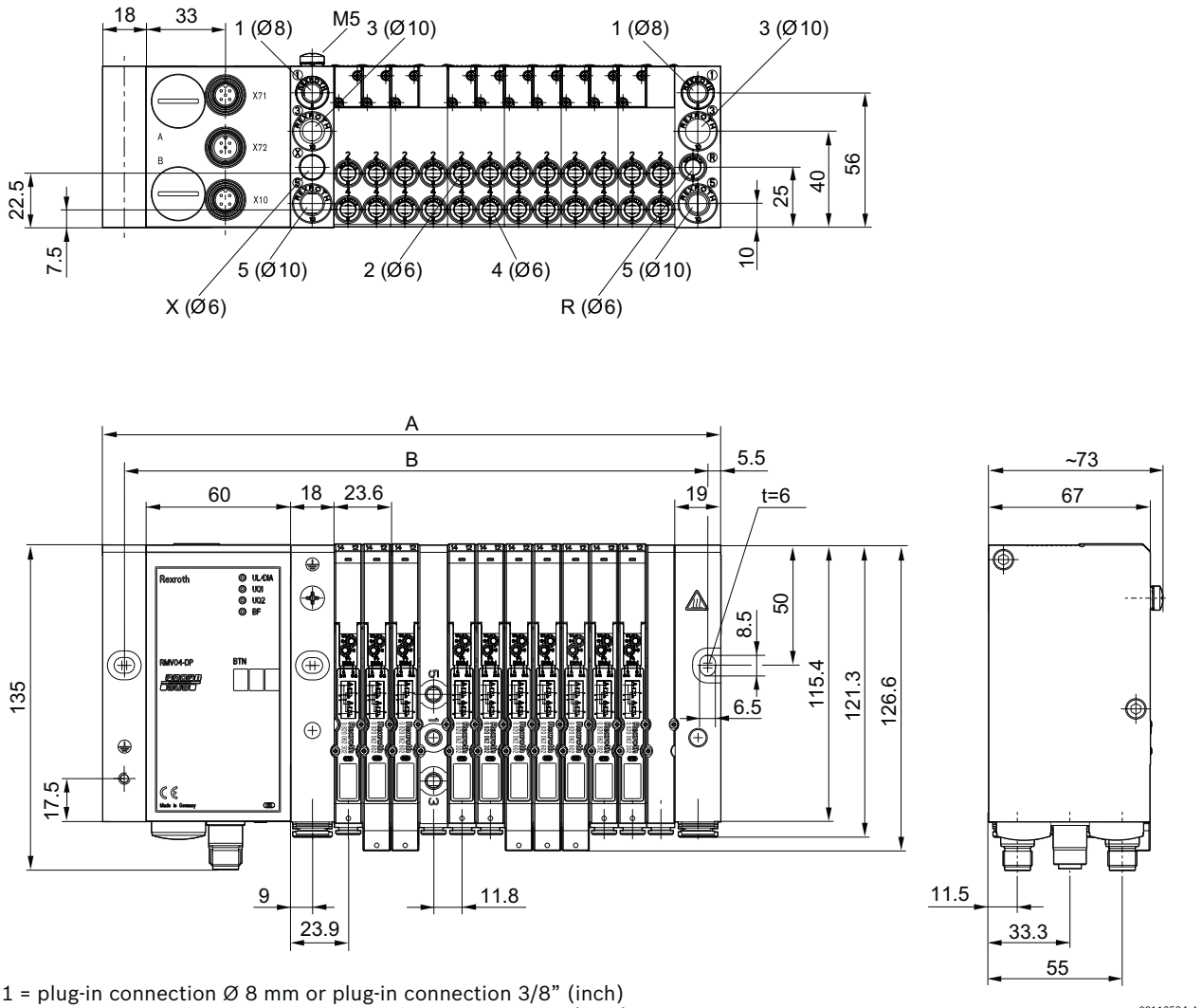
Configurable product

This product is configurable. Please use our Internet configurator at www.boschrexroth-us.com/pneumatics or contact the nearest Bosch Rexroth sales office.

Valve terminal system, Series HF04

▶ Qn Max. = 400 l/min ▶ Optional field bus connection with I/O function (CMS) ▶ B-design

Dimensions in mm



1 = plug-in connection Ø 8 mm or plug-in connection 3/8” (inch)
2 and 4 = plug-in connections Ø 6 mm or thread connections M7 (inch)
3 and 5 = plug-in connections Ø 10 mm or plug-in connections 3/8” (inch)
R = collected pilot exhaust, plug-in connection Ø 6 mm or plug-in connection 1/4” (inch)
X = external pilot, plug-in connection Ø 6 mm or plug-in connection 1/4” (inch), connection X plugged with internal pilot control
An example configuration is illustrated. The delivered product may thus deviate from the illustration.

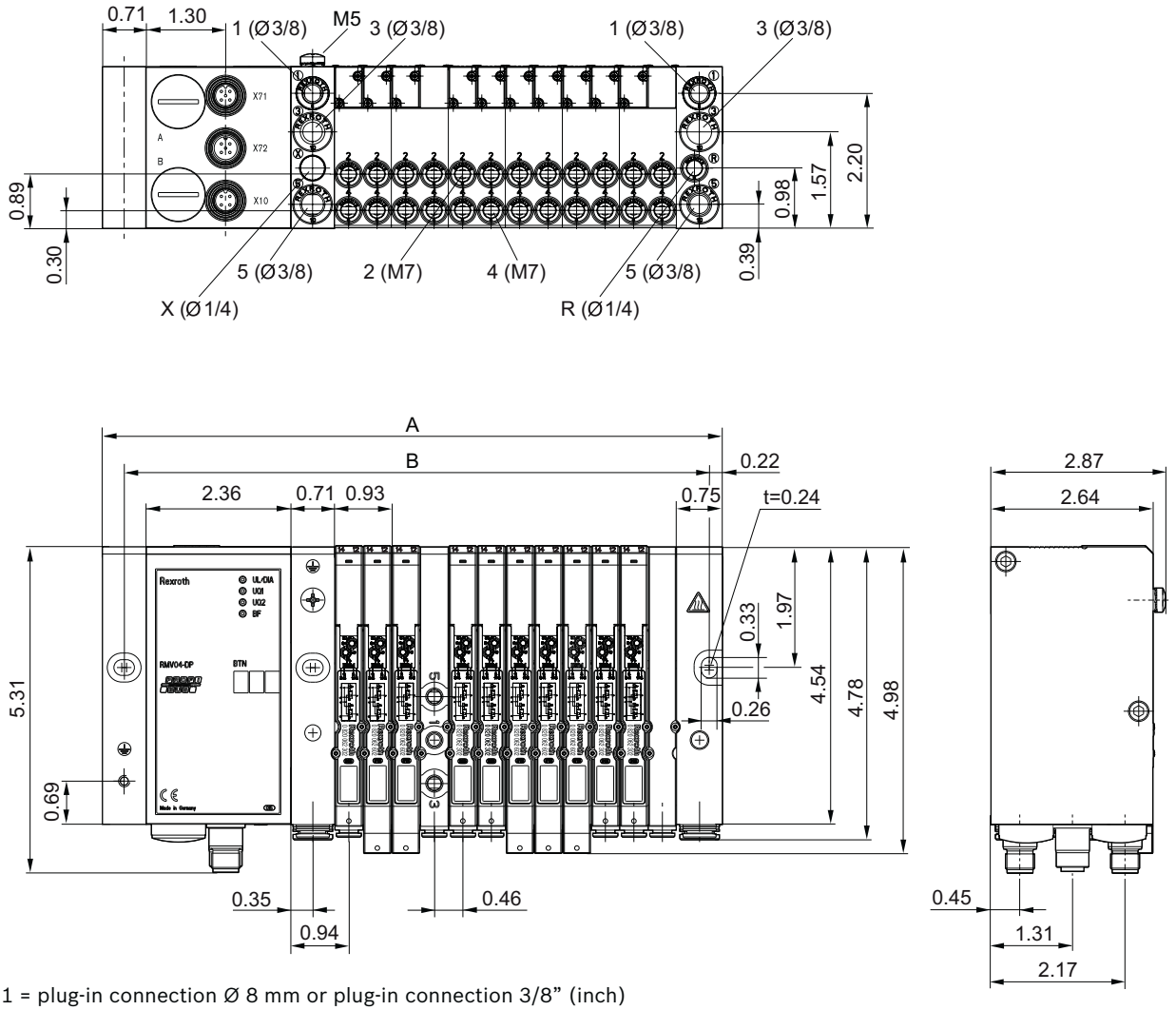
n	1	2	3	4	5	6	7	8	9	10	11	12
A	138.6	162.2	185.8	209.4	233	256.6	280.2	303.8	327.4	351	374.6	398.2
B	124.1	147.7	171.3	194.9	218.5	242.1	265.7	289.3	312.9	336.5	360.1	383.7

n = number of double subplates

Valve terminal system, Series HF04

▶ Qn Max. = 400 l/min ▶ Optional field bus connection with I/O functionality (CMS) ▶ B-design

Dimensions in inches



1 = plug-in connection Ø 8 mm or plug-in connection 3/8” (inch)
2 and 4 = plug-in connections Ø 6 mm or thread connections M7 (inch)
3 and 5 = plug-in connections Ø 10 mm or plug-in connections 3/8” (inch)
R = collected pilot exhaust, plug-in connection Ø 6 mm or plug-in connection 1/4” (inch)
X = external pilot, plug-in connection Ø 6 mm or plug-in connection 1/4” (inch), connection X plugged with internal pilot control
An example configuration is illustrated. The delivered product may thus deviate from the illustration.

n	1	2	3	4	5	6	7	8	9	10	11	12
A	5.46	6.39	7.31	8.24	9.17	10.1	11.03	11.96	12.89	13.82	14.75	15.68
B	4.89	5.81	6.74	7.67	8.6	9.53	10.46	11.39	12.32	13.25	14.18	15.11

n = number of double subplates

Valve terminal system, Series HF04

▶ Qn Max. = 400 l/min ▶ Connection with diagnostics (DDL) ▶ B-design

Version	Link structure DDL
Blocking principle	Double base plate principle
Working pressure min./max.	-0.9 bar / 10 bar
Control pressure min./max.	3 bar / 8 bar
Ambient temperature min./max.	-5°C / +50°C
Medium temperature min./max.	+0°C / +50°C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Protection class, with plug	IP 65
Number of valve positions	24
Number of solenoid coils	24
Operational voltage electronics	24 V DC
Electronics voltage tolerance	-10% / +10%

An example configuration is illustrated. The delivered product may thus deviate from the illustration.

Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter “Technical information.”
- See the following pages on the series for technical data for individual components.
- For technical data for electronics (link structures), see the Chapter “Control systems/bus connections.”
- For push-in fittings, only use plug accessories made of plastic (polyamide) from our catalog.

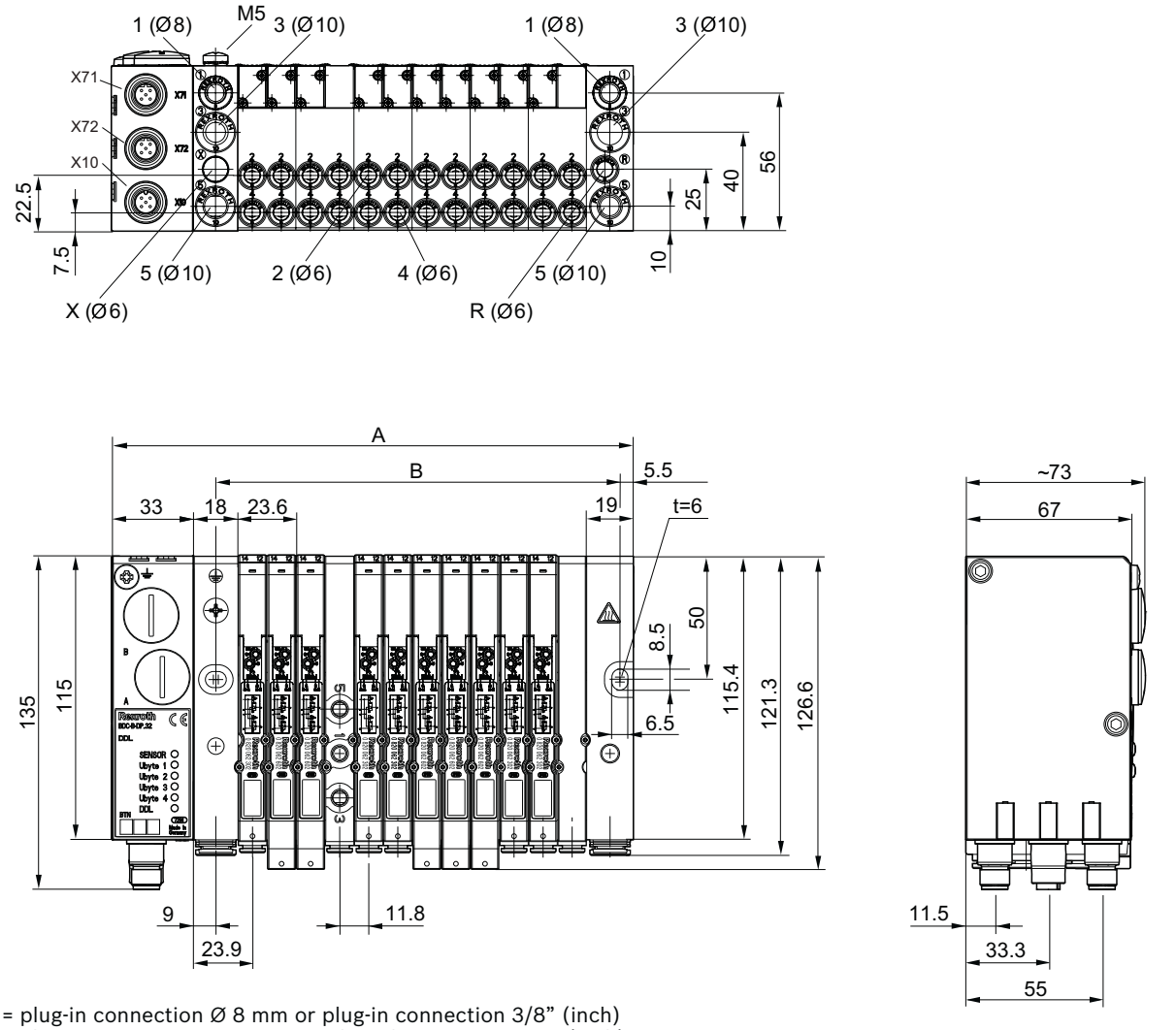
Configurable product

This product is configurable. Please use our Internet configurator at www.boschrexroth-us.com/pneumatics or contact the nearest Bosch Rexroth sales office.

Valve terminal system, Series HF04

▶ Qn Max. = 400 l/min ▶ Connection with diagnostics (DDL) ▶ B-design

Dimensions in mm



1 = plug-in connection Ø 8 mm or plug-in connection 3/8” (inch)
2 and 4 = plug-in connections Ø 6 mm or thread connections M7 (inch)
3 and 5 = plug-in connections Ø 10 mm or plug-in connections 3/8” (inch)
R = collected pilot exhaust, plug-in connection Ø 6 mm or plug-in connection 1/4” (inch)
X = external pilot, plug-in connection Ø 6 mm or plug-in connection 1/4” (inch), connection X plugged with internal pilot control
An example configuration is illustrated. The delivered product may thus deviate from the illustration.

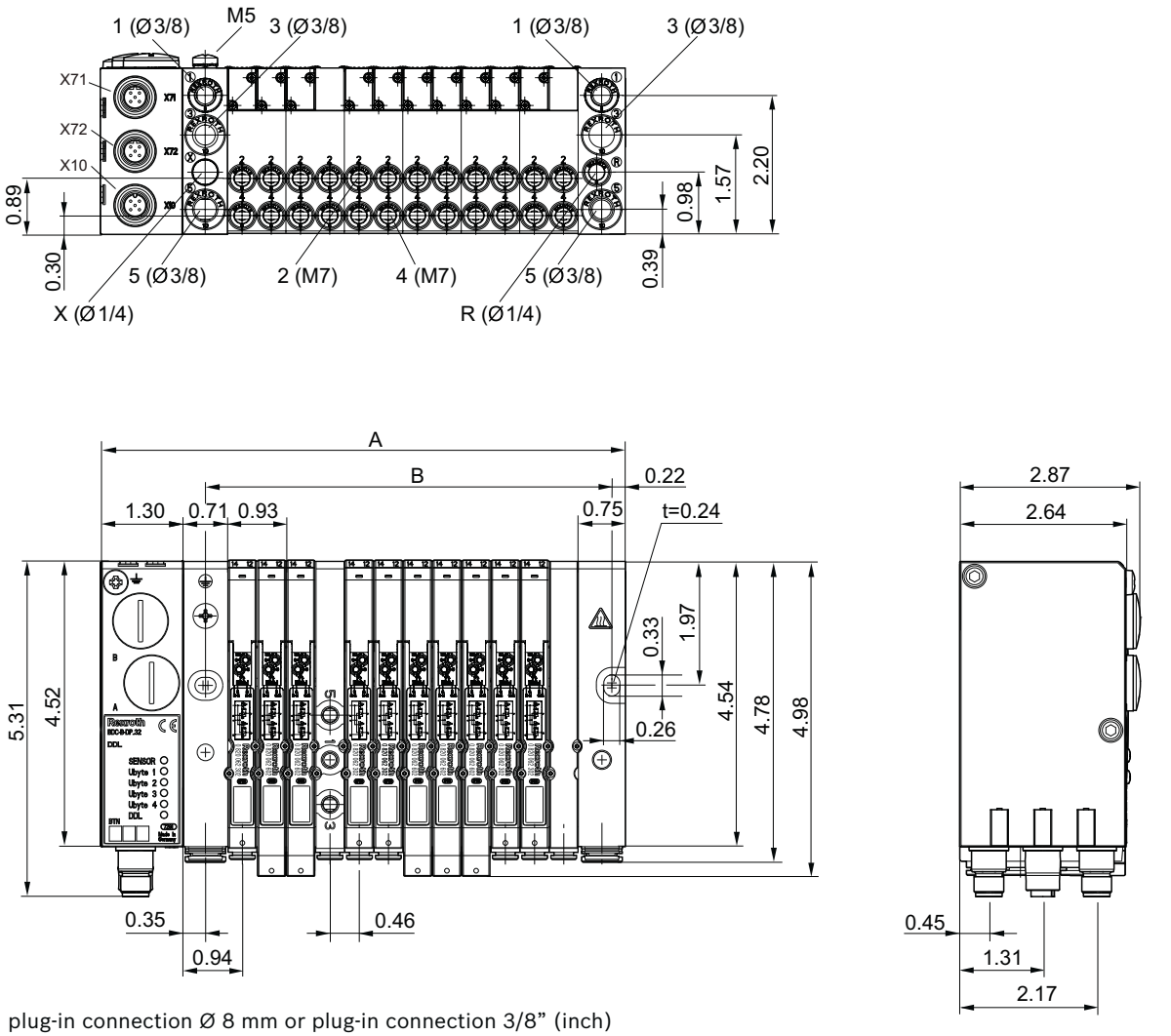
n	1	2	3	4	5	6	7	8	9	10	11	12
A	93.6	117.2	140.8	164.4	188	211.6	235.2	258.8	282.4	306	329.6	353.2
B	46.1	69.7	93.3	116.9	140.5	164.1	187.7	211.3	234.9	258.5	282.1	305.7

n = number of double subplates

Valve terminal system, Series HF04

▶ Qn Max. = 400 l/min ▶ Connection with diagnostics (DDL) ▶ B-design

Dimensions in inches



1 = plug-in connection Ø 8 mm or plug-in connection 3/8” (inch)
2 and 4 = plug-in connections Ø 6 mm or thread connections M7 (inch)
3 and 5 = plug-in connections Ø 10 mm or plug-in connections 3/8” (inch)
R = collected pilot exhaust, plug-in connection Ø 6 mm or plug-in connection 1/4” (inch)
X = external pilot, plug-in connection Ø 6 mm or plug-in connection 1/4” (inch), connection X plugged with internal pilot control
An example configuration is illustrated. The delivered product may thus deviate from the illustration.

n	1	2	3	4	5	6	7	8	9	10	11	12
A	3.69	4.61	5.54	6.47	7.4	8.33	9.26	10.19	11.12	12.05	12.98	13.91
B	1.81	2.74	3.67	4.6	5.53	6.46	7.39	8.32	9.25	10.18	11.11	12.04

n = number of double subplates

Valve terminal system, Series HF04

▶ Qn Max. = 400 l/min ▶ Connection with diagnostics, optionally with I/O function (DDL) ▶ B-design

Version	Link structure DDL
Blocking principle	Double base plate principle
Working pressure min./max.	-0.9 bar / 10 bar
Control pressure min./max.	3 bar / 8 bar
Ambient temperature min./max.	-5°C / +50°C
Medium temperature min./max.	+0°C / +50°C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Protection class, with plug	IP 65
Number of valve positions	24
Number of solenoid coils	24
Operational voltage electronics	24 V DC
Electronics voltage tolerance	-10% / +10%

An example configuration is illustrated. The delivered product may thus deviate from the illustration.

Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter “Technical information.”
- See the following pages on the series for technical data for individual components.
- For technical data for electronics (link structures), see the Chapter “Control systems/bus connections.”
- For push-in fittings, only use plug accessories made of plastic (polyamide) from our catalog.

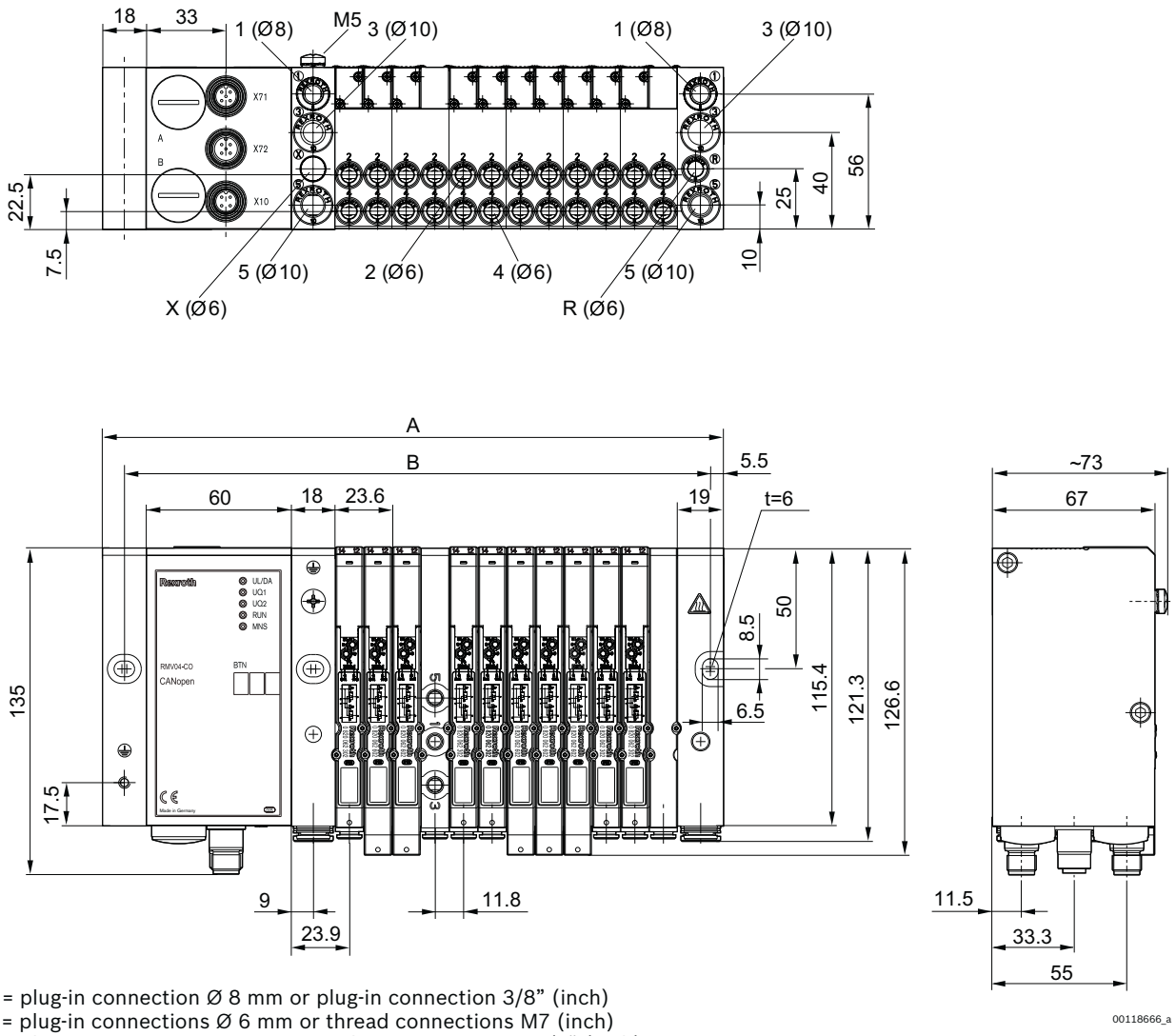
Configurable product

This product is configurable. Please use our Internet configurator at www.boschrexroth-us.com/pneumatics or contact the nearest Bosch Rexroth sales office.

Valve terminal system, Series HF04

▶ Qn Max. = 400 l/min ▶ Connection with diagnostics, optionally with I/O function (DDL) ▶ B-design

Dimensions in mm



1 = plug-in connection Ø 8 mm or plug-in connection 3/8” (inch)
2 and 4 = plug-in connections Ø 6 mm or thread connections M7 (inch)
3 and 5 = plug-in connections Ø 10 mm or plug-in connections 3/8” (inch)
R = collected pilot exhaust, plug-in connection Ø 6 mm or plug-in connection 1/4” (inch)
X = external pilot, plug-in connection Ø 6 mm or plug-in connection 1/4” (inch), connection X plugged with internal pilot control
An example configuration is illustrated. The delivered product may thus deviate from the illustration.

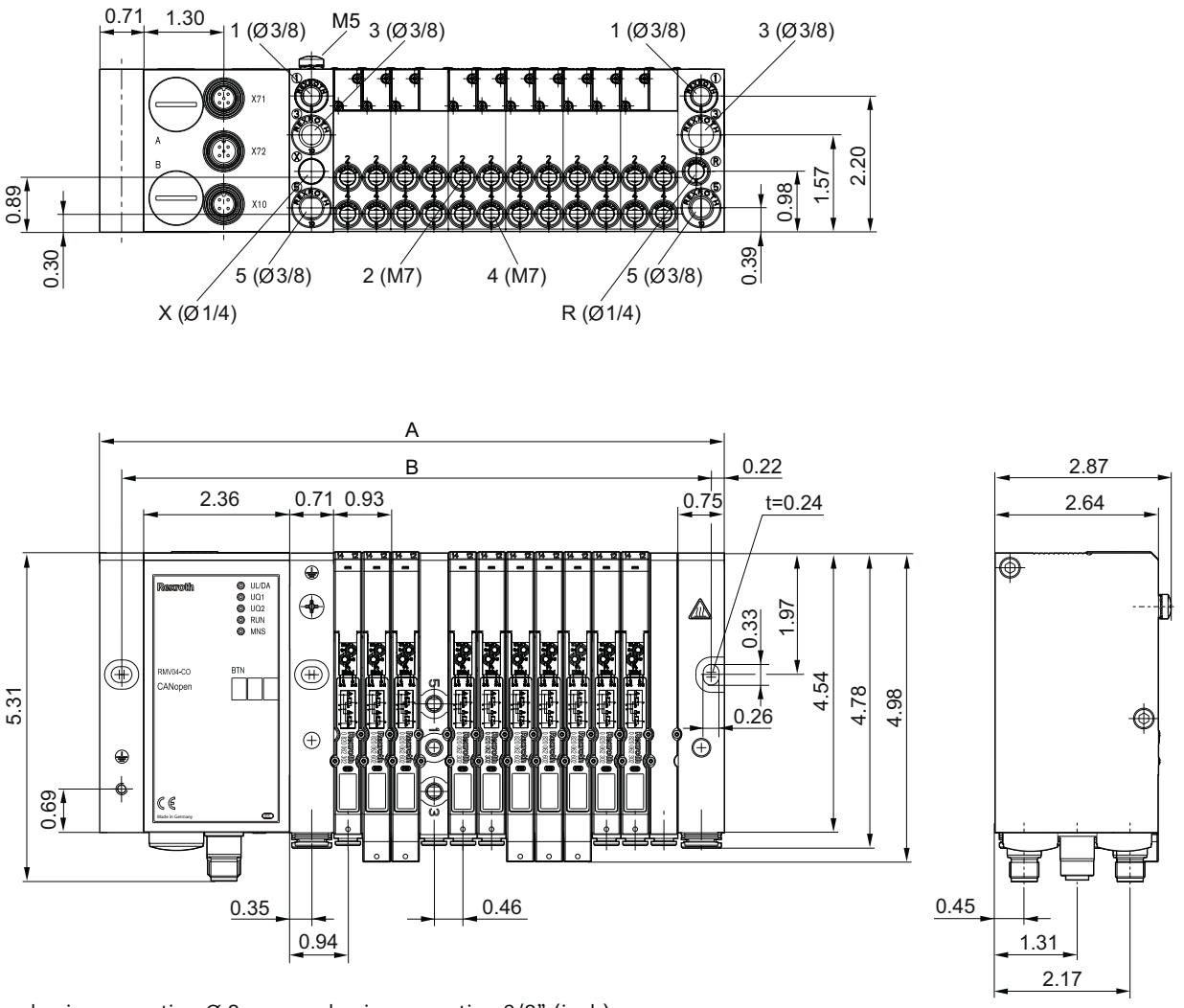
n	1	2	3	4	5	6	7	8	9	10	11	12
A	138.6	162.2	185.8	209.4	233	256.6	280.2	303.8	327.4	351	374.6	398.2
B	124.1	147.7	171.3	194.9	218.5	242.1	265.7	289.3	312.9	336.5	360.1	383.7

n = number of double subplates

Valve terminal system, Series HF04

▶ Qn Max. = 400 l/min ▶ Connection with diagnostics, optionally with I/O function (DDL) ▶ B-design

Dimensions in inches



1 = plug-in connection Ø 8 mm or plug-in connection 3/8” (inch)
2 and 4 = plug-in connections Ø 6 mm or thread connections M7 (inch)
3 and 5 = plug-in connections Ø 10 mm or plug-in connections 3/8” (inch)
R = collected pilot exhaust, plug-in connection Ø 6 mm or plug-in connection 1/4” (inch)
X = external pilot, plug-in connection Ø 6 mm or plug-in connection 1/4” (inch), connection X plugged with internal pilot control
An example configuration is illustrated. The delivered product may thus deviate from the illustration.

n	1	2	3	4	5	6	7	8	9	10	11	12
A	5.46	6.39	7.31	8.24	9.17	10.1	11.03	11.96	12.89	13.82	14.75	15.68
B	4.89	5.81	6.74	7.67	8.6	9.53	10.46	11.39	12.32	13.25	14.18	15.11

n = number of double subplates

Valve terminal system, Series HF04

▶ Qn Max. = 400 l/min ▶ Field bus connection with AS i ▶ B-design

Version	Field bus BDC
Blocking principle	Double base plate principle
Working pressure min./max.	-0.9 bar / 10 bar
Control pressure min./max.	3 bar / 8 bar
Ambient temperature min./max.	-5°C / +50°C
Medium temperature min./max.	+0°C / +50°C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Protection class, with plug	IP 65
Number of valve positions	4, 8
Number of solenoid coils	4, 8
Supported field bus protocols:	AS-i
Operational voltage electronics	24 V DC
Electronics voltage tolerance	-10% / +10%
Power supply connection	Black AS-i flat cable
Communication port	Yellow AS-i flat cable

An example configuration is illustrated. The delivered product may thus deviate from the illustration.

Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter “Technical information.”
- See the following pages on the series for technical data for individual components.
- For technical data for electronics (link structures), see the Chapter “Control systems/bus connections.”
- For push-in fittings, only use plug accessories made of plastic (polyamide) from our catalog.

Configurable product

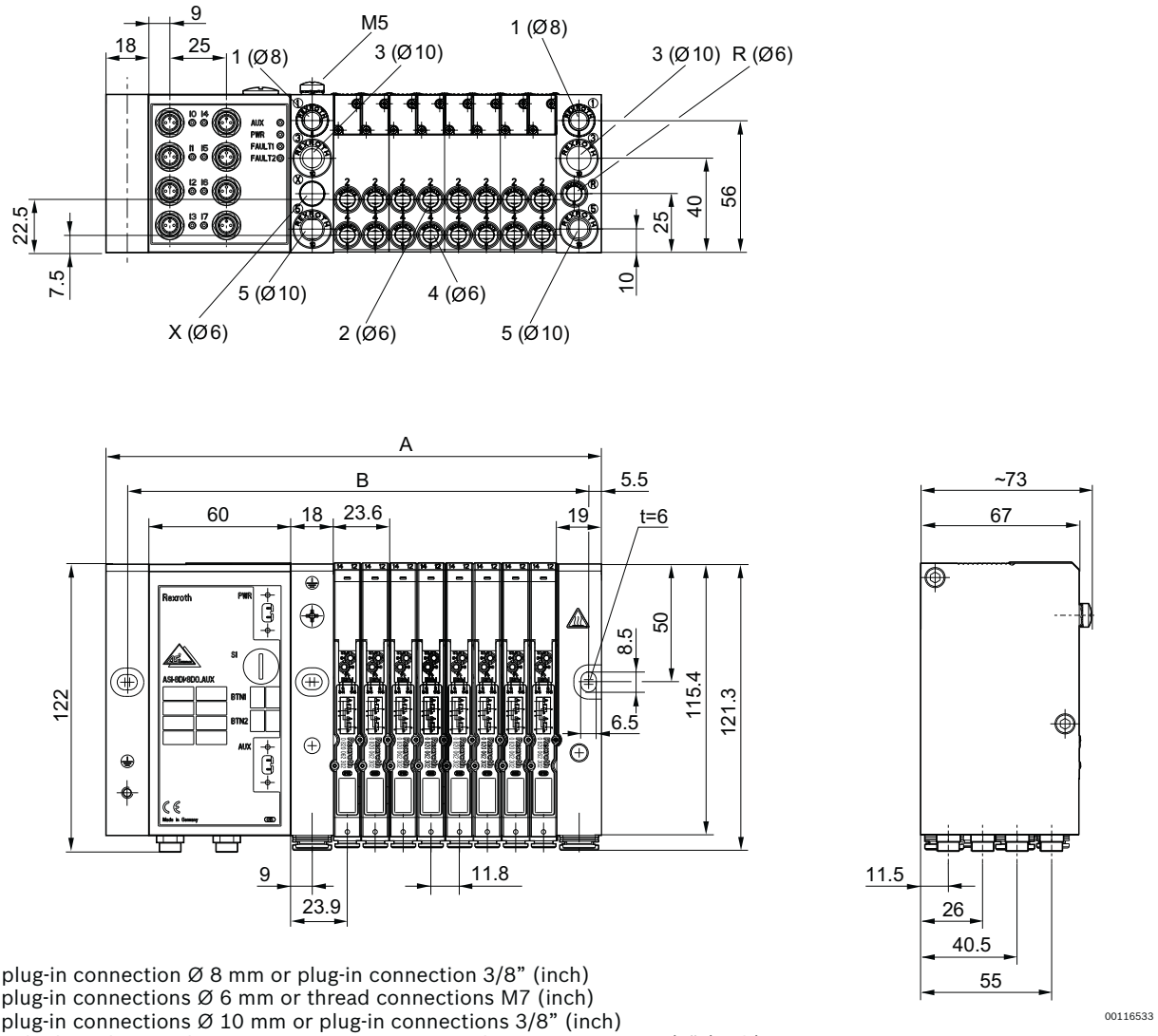
This product is configurable. Please use our Internet configurator at www.boschrexroth-us.com/pneumatics or contact the nearest Bosch Rexroth sales office.

Valve terminal system, Series HF04

▶ Qn Max. = 400 l/min ▶ Field bus connection with AS i ▶ B-design

---

Dimensions in mm, 8DI/8DO-AUX



1 = plug-in connection Ø 8 mm or plug-in connection 3/8” (inch)
2 and 4 = plug-in connections Ø 6 mm or thread connections M7 (inch)
3 and 5 = plug-in connections Ø 10 mm or plug-in connections 3/8” (inch)
R = collected pilot exhaust, plug-in connection Ø 6 mm or plug-in connection 1/4” (inch)
X = external pilot, plug-in connection Ø 6 mm or plug-in connection 1/4” (inch), connection X plugged with internal pilot control
Max. 4 double subbases possible, max. 8 valves
An example configuration is illustrated. The delivered product may thus deviate from the illustration.

n	1	2	3	4
A	138.6	162.2	185.8	209.4
B	124.1	147.7	171.3	194.9

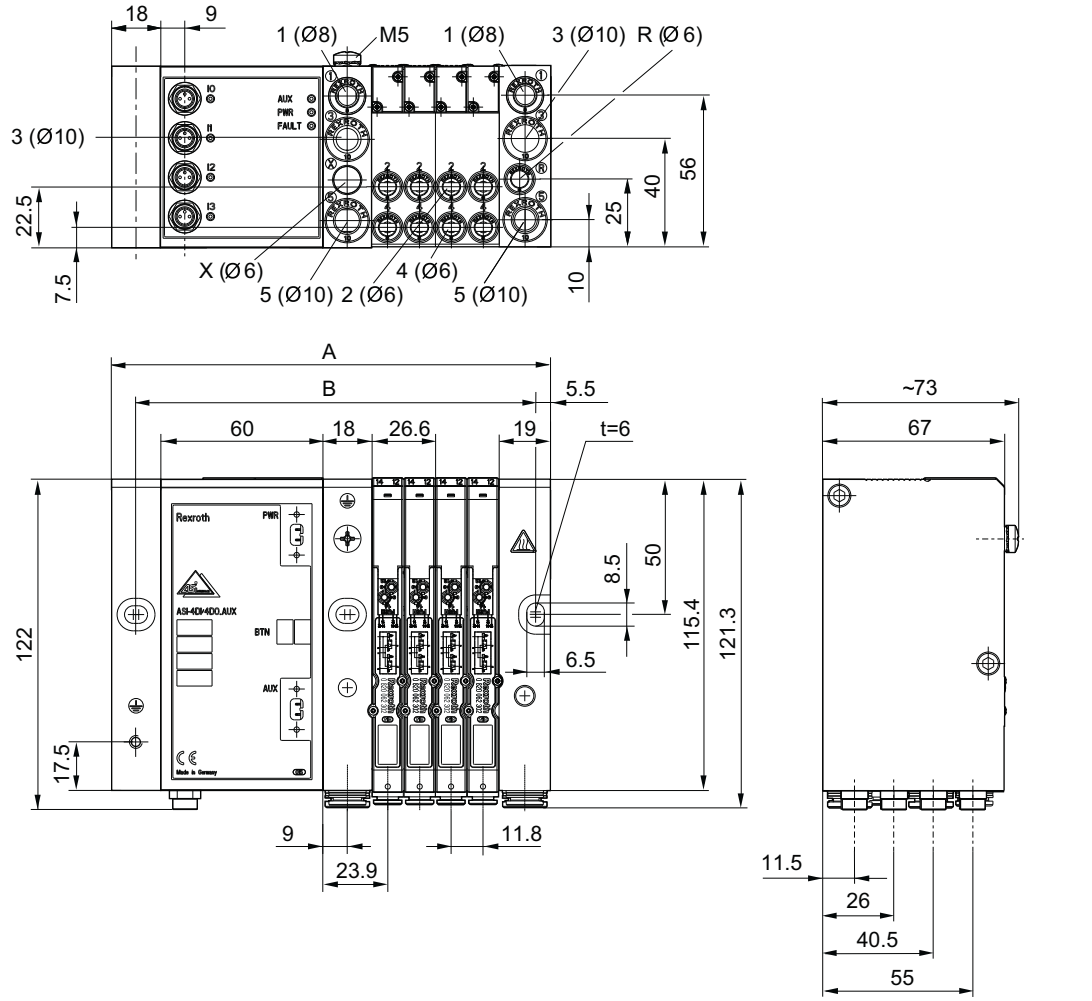
n = number of double subplates

Valve terminal system, Series HF04

▶ Qn Max. = 400 l/min ▶ Field bus connection with AS i ▶ B-design

---

Dimensions in mm, 4DI/4DO-AUX



1 = plug-in connection Ø 8 mm or plug-in connection 3/8” (inch)
2 and 4 = plug-in connections Ø 6 mm or thread connections M7 (inch)
3 and 5 = plug-in connections Ø 10 mm or plug-in connections 3/8” (inch)
R = collected pilot exhaust, plug-in connection Ø 6 mm or plug-in connection 1/4” (inch)
X = external pilot, plug-in connection Ø 6 mm or plug-in connection 1/4” (inch), connection X plugged with internal pilot control
Max. 2 double subbases possible, max. 4 valves
An example configuration is illustrated. The delivered product may thus deviate from the illustration.

n	1	2
A	138.6	162.2
B	124.1	147.7

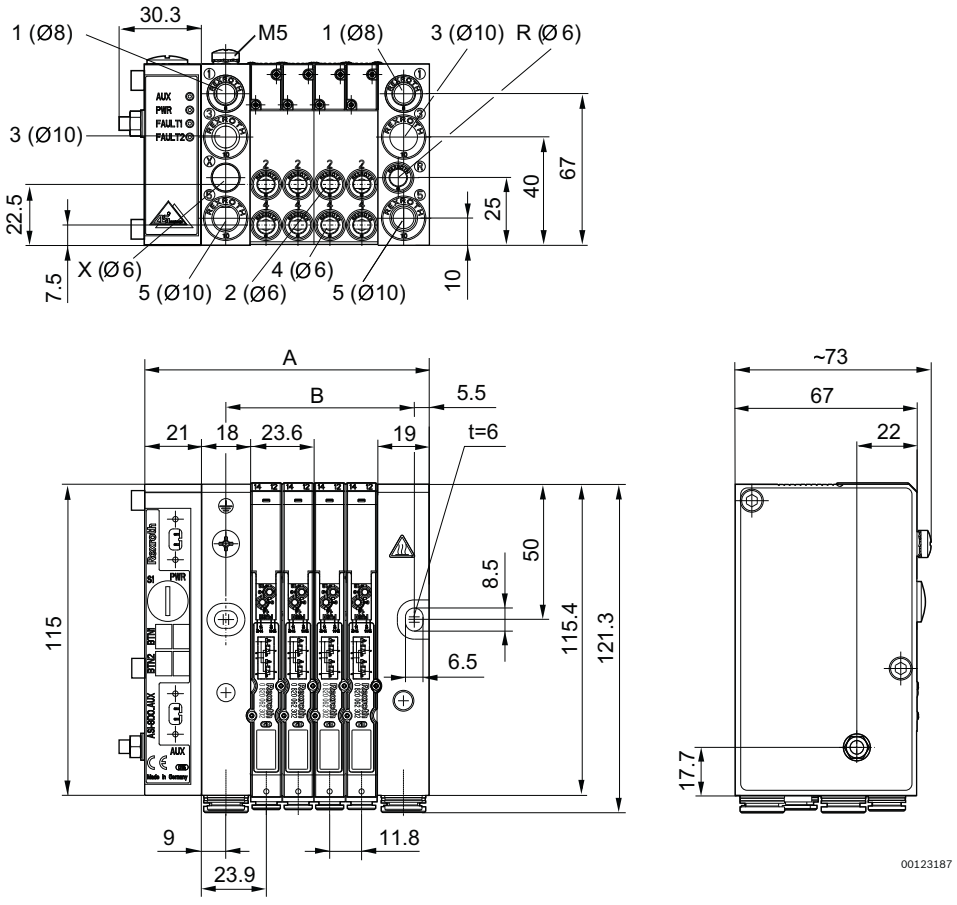
n = number of double subplates

Valve terminal system, Series HF04

▶ Qn Max. = 400 l/min ▶ Field bus connection with AS i ▶ B-design

---

Dimensions in mm, 8DO-AUX



1 = plug-in connection Ø 8 mm or plug-in connection 3/8” (inch)
2 and 4 = plug-in connections Ø 6 mm or thread connections M7 (inch)
3 and 5 = plug-in connections Ø 10 mm or plug-in connections 3/8” (inch)
R = collected pilot exhaust, plug-in connection Ø 6 mm or plug-in connection 1/4” (inch)
X = external pilot, plug-in connection Ø 6 mm or plug-in connection 1/4” (inch), connection X plugged with internal pilot control
Max. 4 double subbases possible, max. 8 valves
An example configuration is illustrated. The delivered product may thus deviate from the illustration.

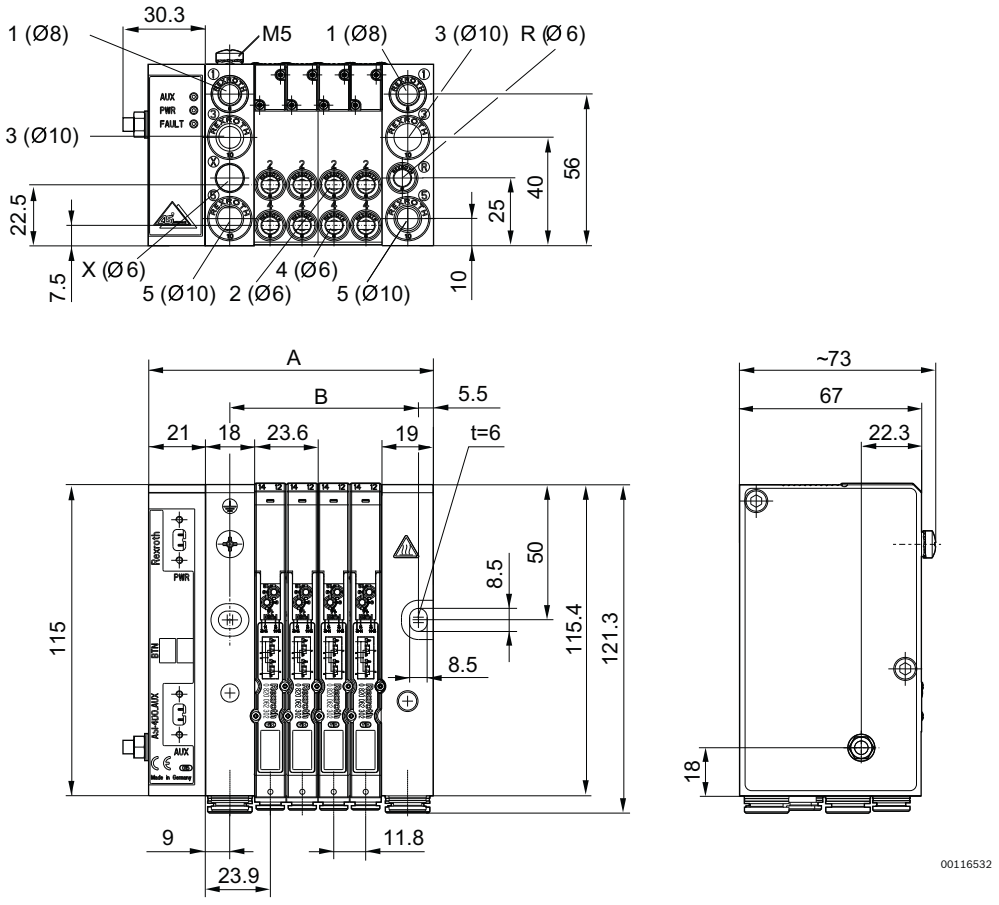
n	1	2	3	4
A	81.6	105.2	128.8	152.4
B	46.1	69.7	93.3	116.9

n = number of double subplates

Valve terminal system, Series HF04

▶ Qn Max. = 400 l/min ▶ Field bus connection with AS i ▶ B-design

Dimensions in mm, 4DO-AUX



1 = plug-in connection Ø 8 mm or plug-in connection 3/8” (inch)
2 and 4 = plug-in connections Ø 6 mm or thread connections M7 (inch)
3 and 5 = plug-in connections Ø 10 mm or plug-in connections 3/8” (inch)
R = collected pilot exhaust, plug-in connection Ø 6 mm or plug-in connection 1/4” (inch)
X = external pilot, plug-in connection Ø 6 mm or plug-in connection 1/4” (inch), connection X plugged with internal pilot control
Max. 2 double subbases possible, max. 4 valves
An example configuration is illustrated. The delivered product may thus deviate from the illustration.

n	1	2
A	81.6	105.2
B	46.1	69.7

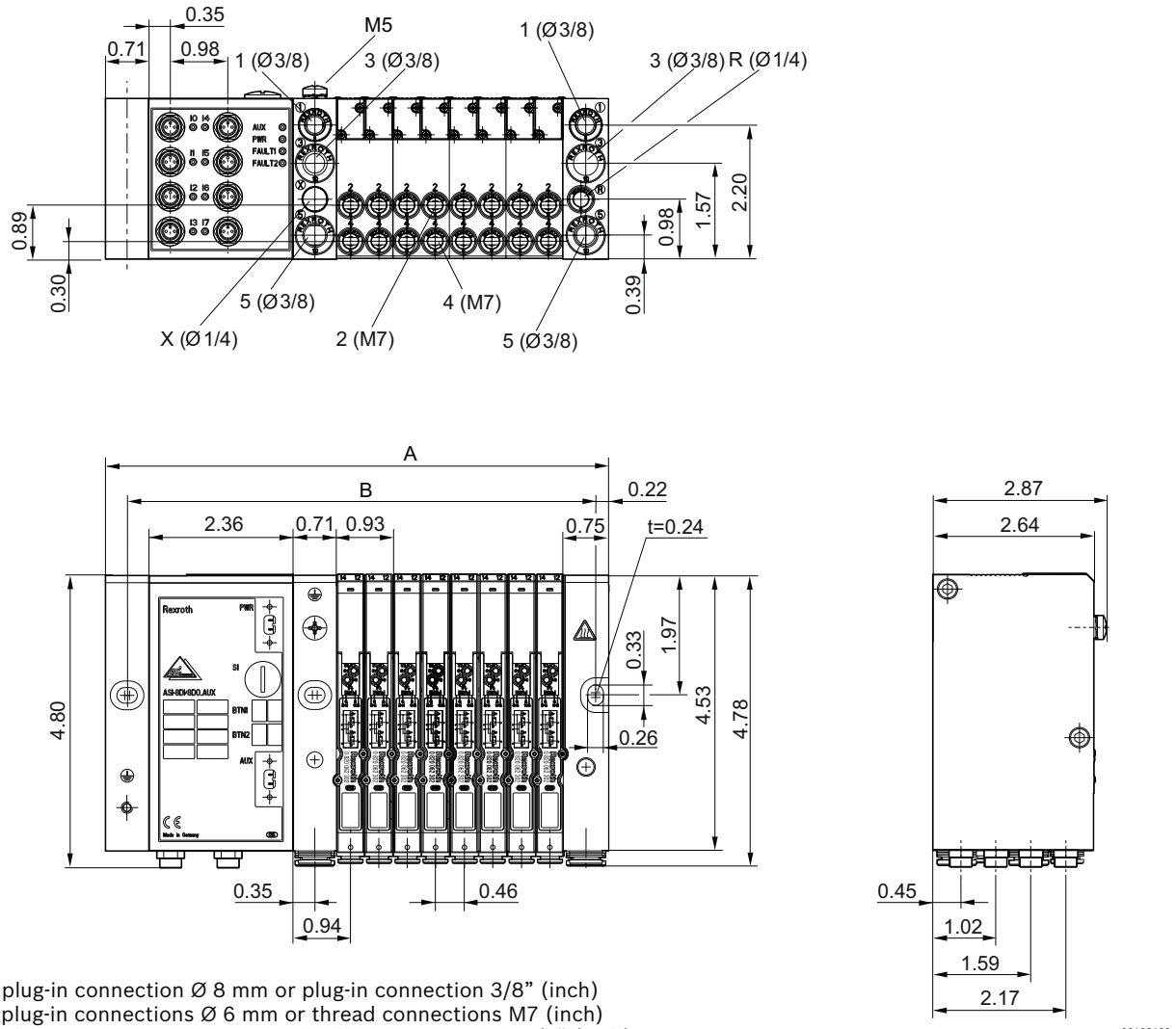
n = number of double subplates

Valve terminal system, Series HF04

▶ Qn Max. = 400 l/min ▶ Field bus connection with AS i ▶ B-design

---

Dimensions in inches, 8DI/8DO-AUX



1 = plug-in connection Ø 8 mm or plug-in connection 3/8” (inch)
2 and 4 = plug-in connections Ø 6 mm or thread connections M7 (inch)
3 and 5 = plug-in connections Ø 10 mm or plug-in connections 3/8” (inch)
R = collected pilot exhaust, plug-in connection Ø 6 mm or plug-in connection 1/4” (inch)
X = external pilot, plug-in connection Ø 6 mm or plug-in connection 1/4” (inch), connection X plugged with internal pilot control
Max. 4 double subbases possible, max. 8 valves
An example configuration is illustrated. The delivered product may thus deviate from the illustration.

n	1	2	3	4
A	5.46	6.39	7.31	8.24
B	4.89	5.81	6.74	7.67

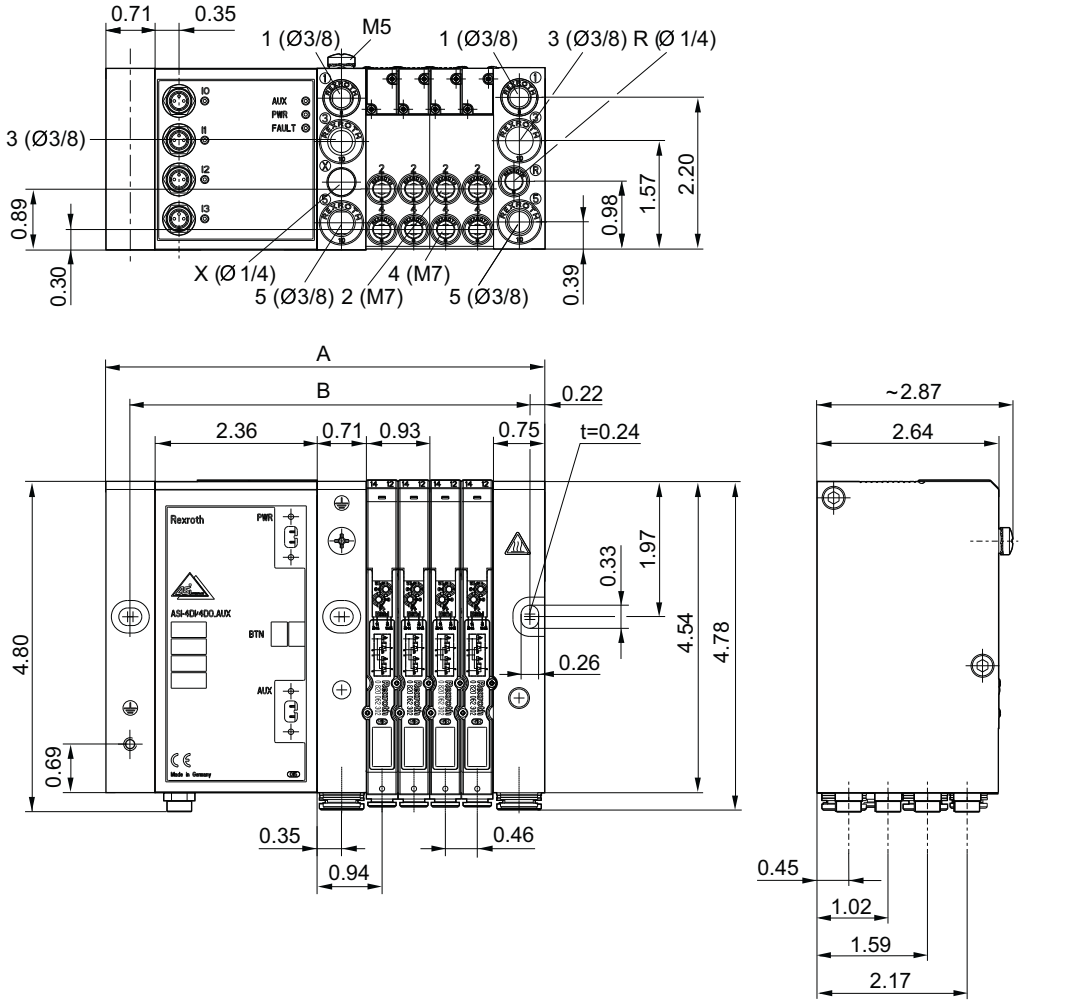
n = number of double subplates

Valve terminal system, Series HF04

▶ Qn Max. = 400 l/min ▶ Field bus connection with AS i ▶ B-design

---

Dimensions in inches, 4DI/4DO-AUX



1 = plug-in connection Ø 8 mm or plug-in connection 3/8” (inch)
2 and 4 = plug-in connections Ø 6 mm or thread connections M7 (inch)
3 and 5 = plug-in connections Ø 10 mm or plug-in connections 3/8” (inch)
R = collected pilot exhaust, plug-in connection Ø 6 mm or plug-in connection 1/4” (inch)
X = external pilot, plug-in connection Ø 6 mm or plug-in connection 1/4” (inch), connection X plugged with internal pilot control
Max. 2 double subbases possible, max. 4 valves
An example configuration is illustrated. The delivered product may thus deviate from the illustration.

n	1	2
A	5.46	6.39
B	4.89	5.81

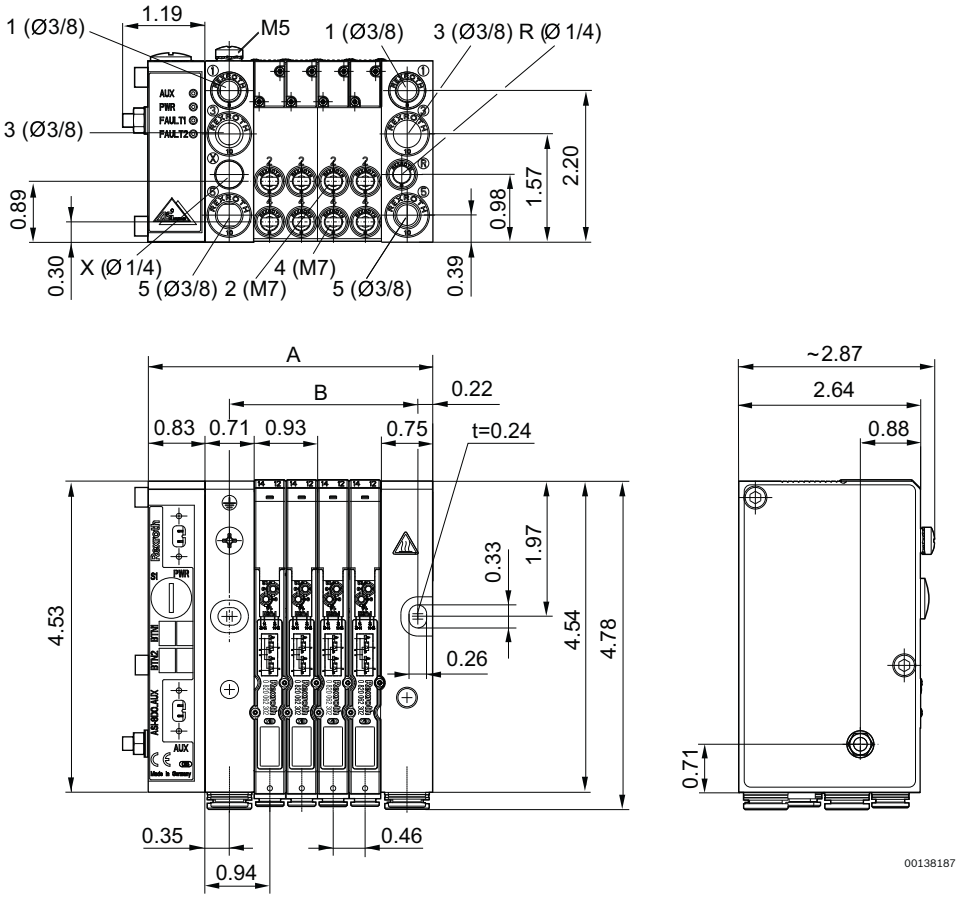
n = number of double subplates

Valve terminal system, Series HF04

▶ Qn Max. = 400 l/min ▶ Field bus connection with AS i ▶ B-design

---

Dimensions in Inches, 8DO-AUX



1 = plug-in connection Ø 8 mm or plug-in connection 3/8” (inch)
2 and 4 = plug-in connections Ø 6 mm or thread connections M7 (inch)
3 and 5 = plug-in connections Ø 10 mm or plug-in connections 3/8” (inch)
R = collected pilot exhaust, plug-in connection Ø 6 mm or plug-in connection 1/4” (inch)
X = external pilot, plug-in connection Ø 6 mm or plug-in connection 1/4” (inch), connection X plugged with internal pilot control
Max. 2 double subbases possible, max. 8 valves
An example configuration is illustrated. 4he delivered product may thus deviate from the illustration.

n	1	2
A	3.21	4.14
B	1.81	2.74

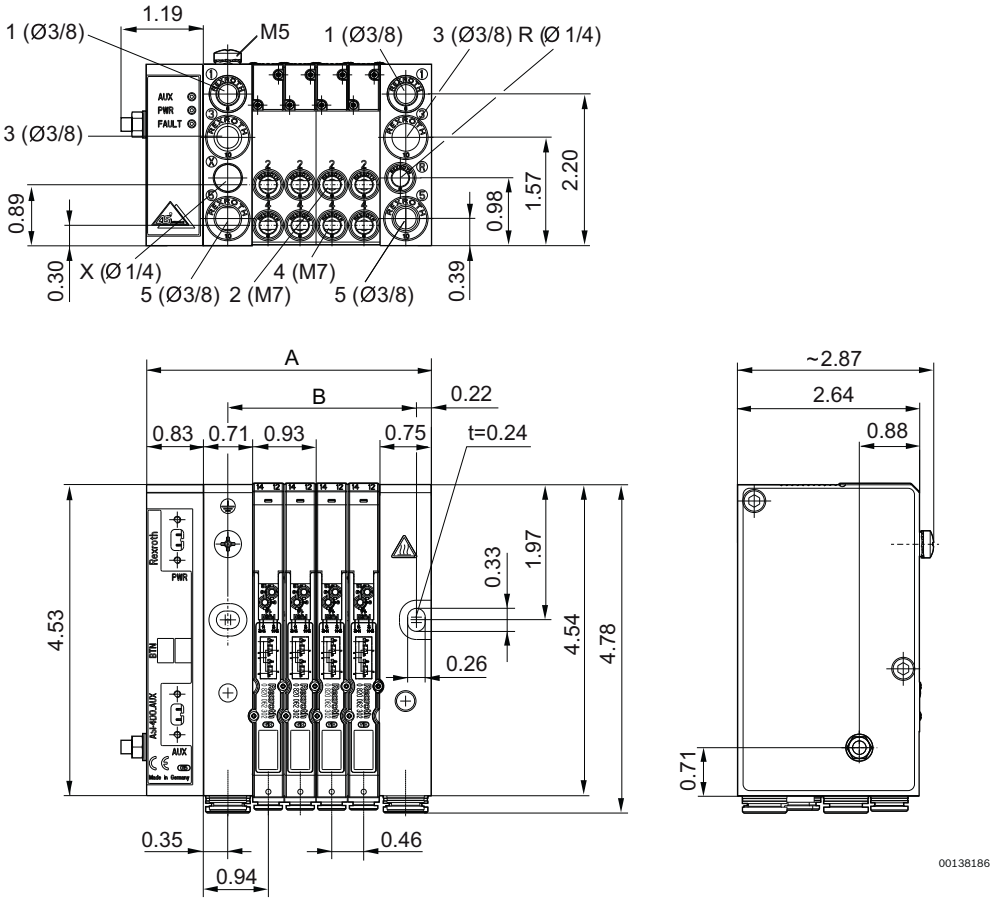
n = number of double subplates

Valve terminal system, Series HF04

▶ Qn Max. = 400 l/min ▶ Field bus connection with AS i ▶ B-design

---

Dimensions in inches, 4DO-AUX



1 = plug-in connection Ø 8 mm or plug-in connection 3/8” (inch)
2 and 4 = plug-in connections Ø 6 mm or thread connections M7 (inch)
3 and 5 = plug-in connections Ø 10 mm or plug-in connections 3/8” (inch)
R = collected pilot exhaust, plug-in connection Ø 6 mm or plug-in connection 1/4” (inch)
X = external pilot, plug-in connection Ø 6 mm or plug-in connection 1/4” (inch), connection X plugged with internal pilot control
Max. 2 double subbases possible, max. 4 valves
An example configuration is illustrated. The delivered product may thus deviate from the illustration.

n	1	2
A	3.21	4.14
B	1.81	2.74

n = number of double subplates

2x3/2-way valve, for Series HF04 and HF04-XF

▶ Qn = 400 l/min ▶ Plate connection ▶ Manual override: with detent

Version	Spool valve, zero overlap
Pilot	External, internal
Sealing principle	Soft sealing
Blocking principle	Double base plate principle
Working pressure min./max.	-0.9 bar / 8 bar
Control pressure min./max.	3 bar / 8 bar
Ambient temperature min./max.	-5°C / +50°C
Medium temperature min./max.	+0°C / +50°C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Protection class with electrical connector/plug	IP 65
Protective circuit	Z-diode Protected against polarity reversal
Status display LED	Yellow
Duty cycle	100%
Switch-on time	13 ms
Switch-off time	20 ms
Generic emission standard in accordance with	EN 50081-1
Generic immunity standard in accordance with	EN 50082-2
Mounting screw	Cross recessed DIN EN ISO 4757-Z0
Mounting screw tightening torque	0.25 Nm

Materials:	
Housing	Polyamide
Seals	Acrylonitrile butadiene rubber, Polyurethane

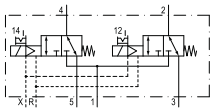
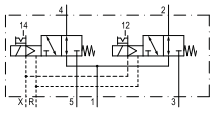
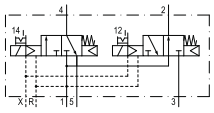
Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter “Technical information.”
- The pilot type (external/internal) is not implemented in the valve, but in the end plate of the valve terminal system.

Operating voltage	Voltage tolerance	Power consumption
DC	DC	DC
		W
24 V	-10% / +10%	0.55

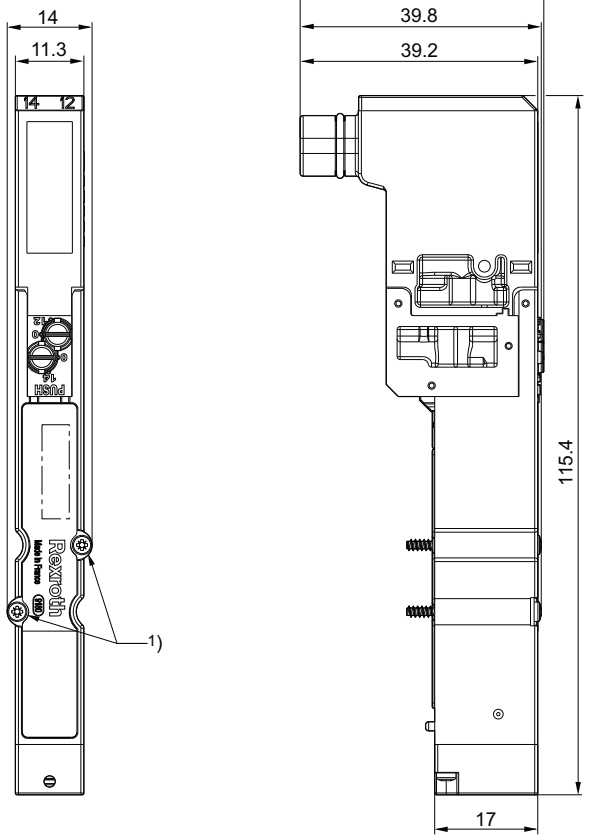
2x3/2-way valve, for Series HF04 and HF04-XF

▶ Qn = 400 l/min ▶ Plate connection ▶ Manual override: with detent

		MO	Operating voltage	Flow rate value	Weight	Part No.
			DC	Qn		
				[l/min]	[kg]	
	NC/NC		24 V	400	0.048	**0820062101**
	NO/NO		24 V	400	0.048	**0820062201**
	NC/NO		24 V	400	0.048	**0820062301**

MO = Manual override
With collective pilot air exhaust
Nominal flow Qn at 6 bar and Δp = 1 bar

Dimensions



1) Mounting screw: X-slot DIN EN ISO 4757-Z0
tightening torque for mounting screw [Nm]: 0.25

Part numbers in bold are more readily available.

2x3/2-way valve, for Series HF04 and HF04-XF

▶ Qn = 400 l/min ▶ Plate connection ▶ Manual override: without detent

Version	Spool valve, zero overlap
Pilot	External, internal
Sealing principle	Soft sealing
Blocking principle	Double base plate principle
Working pressure min./max.	-0.9 bar / 8 bar
Control pressure min./max.	3 bar / 8 bar
Ambient temperature min./max.	-5°C / +50°C
Medium temperature min./max.	+0°C / +50°C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Protection class with electrical connector/plug	IP 65
Protective circuit	Z-diode Protected against polarity reversal
Status display LED	Yellow
Duty cycle	100%
Switch-on time	13 ms
Switch-off time	20 ms
Generic emission standard in accordance with	EN 50081-1
Generic immunity standard in accordance with	EN 50082-2
Mounting screw	Cross recessed DIN EN ISO 4757-Z0
Mounting screw tightening torque	0.25 Nm

Materials:	
Housing	Polyamide
Seals	Acrylonitrile butadiene rubber, Polyurethane

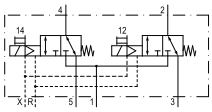
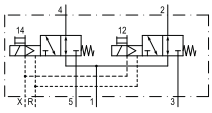
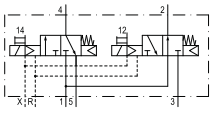
Technical Remarks

- ▶ The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- ▶ The oil content of air pressure must remain constant during the life cycle.
- ▶ Use only the approved oils from Bosch Rexroth, see chapter “Technical information.”
- ▶ The pilot type (external/internal) is not implemented in the valve, but in the end plate of the valve terminal system.

Operating voltage	Voltage tolerance	Power consumption
DC	DC	DC
		W
24 V	-10% / +10%	0.55

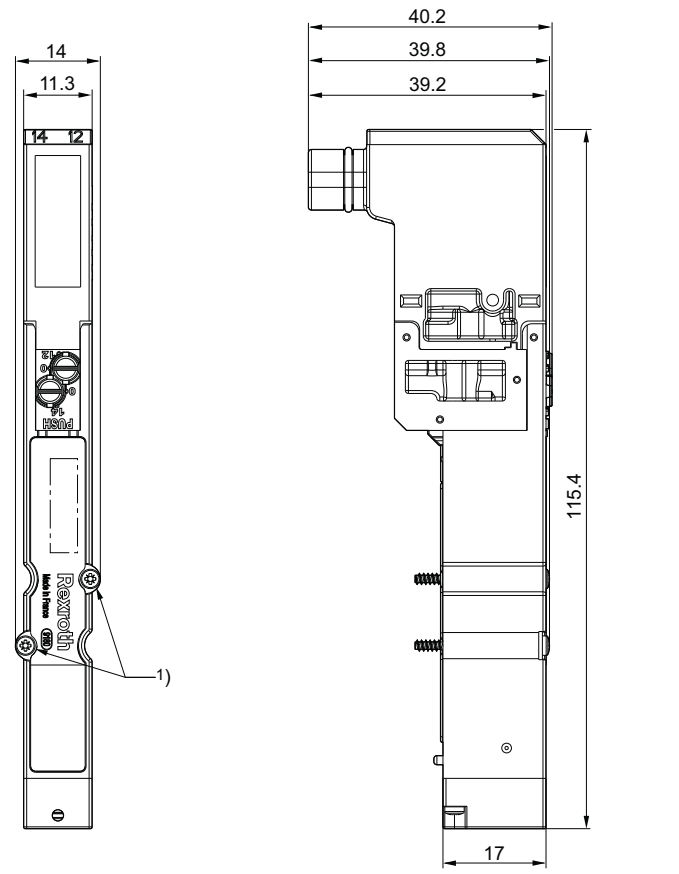
2x3/2-way valve, for Series HF04 and HF04-XF

▶ Qn = 400 l/min ▶ Plate connection ▶ Manual override: without detent

		MO	Operating voltage	Flow rate value	Weight	Part No.
			DC	Qn		
				[l/min]	[kg]	
	NC/NC		24 V	400	0.048	**0820062102**
	NO/NO		24 V	400	0.048	**0820062202**
	NC/NO		24 V	400	0.048	0820062302

MO = Manual override
Nominal flow Qn at 6 bar and Δp = 1 bar

Dimensions



1) Mounting screw: X-slot DIN EN ISO 4757-Z0
tightening torque for mounting screw [Nm]: 0.25

Part numbers in bold are more readily available.

5/2-way valve, for Series HF04 and HF04-XF

▶ Qn = 400 l/min ▶ Plate connection ▶ Manual override: with detent ▶ Single solenoid, double solenoid

Version	Spool valve, zero overlap
Pilot	External, internal
Sealing principle	Soft sealing
Blocking principle	Double base plate principle
Working pressure min./max.	-0.9 bar / 8 bar
Control pressure min./max.	3 bar / 8 bar
Ambient temperature min./max.	-5°C / +50°C
Medium temperature min./max.	+0°C / +50°C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 mg/m^3 - 5 mg/m^3
Protection class with electrical connector/plug	IP 65
Protective circuit	Z-diode Protected against polarity reversal
Status display LED	Yellow
Duty cycle	100%
Generic emission standard in accordance with	EN 50081-1
Generic immunity standard in accordance with	EN 50082-2
Mounting screw	Cross recessed DIN EN ISO 4757-Z0
Mounting screw tightening torque	0.25 Nm

Materials:	
Housing	Polyamide
Seals	Acrylonitrile butadiene rubber, Polyurethane

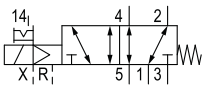
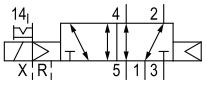
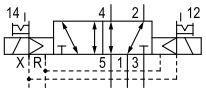
Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter “Technical information.”
- The pilot type (external/internal) is not implemented in the valve, but in the end plate of the valve terminal system.

Operating voltage	Voltage tolerance	Power consumption
DC	DC	DC
		W
24 V	-10% / +10%	0.55

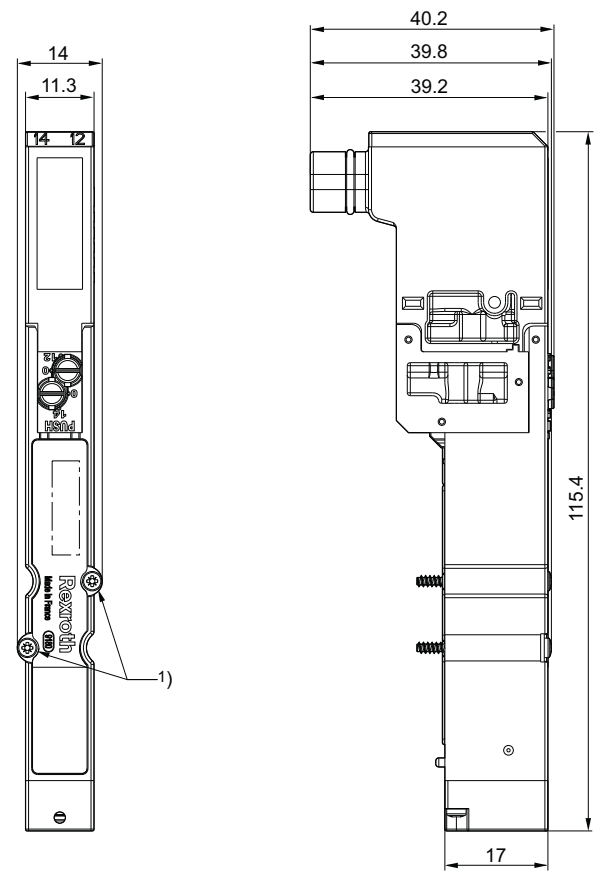
5/2-way valve, for Series HF04 and HF04-XF

▶ Qn = 400 l/min ▶ Plate connection ▶ Manual override: with detent ▶ Single solenoid, double solenoid

	MO	Operating voltage	Flow rate value	Switch-on time	Switch-off time	Weight	Part No.
		DC	Qn				
			[l/min]	[ms]	[ms]	[kg]	
		24 V	400	9	28	0.048	**0820062051**
		24 V	400	16	18	0.048	**0820062001**
		24 V	400	7	8	0.048	**0820062501**

MO = Manual override
Nominal flow Qn at 6 bar and Δp = 1 bar

Dimensions



1) Mounting screw: X-slot DIN EN ISO 4757-Z0
tightening torque for mounting screw [Nm]: 0.25

Part numbers in bold are more readily available.

5/2-way valve, for Series HF04 and HF04-XF

▶ Qn = 400 l/min ▶ Plate connection ▶ Manual override: without detent ▶ Single solenoid, double solenoid

Version	Spool valve, zero overlap
Pilot	External, internal
Sealing principle	Soft sealing
Blocking principle	Double base plate principle
Working pressure min./max.	-0.9 bar / 8 bar
Control pressure min./max.	3 bar / 8 bar
Ambient temperature min./max.	-5°C / +50°C
Medium temperature min./max.	+0°C / +50°C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Protection class with electrical connector/plug	IP 65
Protective circuit	Z-diode Protected against polarity reversal
Status display LED	Yellow
Duty cycle	100%
Generic emission standard in accordance with	EN 50081-1
Generic immunity standard in accordance with	EN 50082-2
Mounting screw	Cross recessed DIN EN ISO 4757-Z0
Mounting screw tightening torque	0.25 Nm

Materials:	
Housing	Polyamide
Seals	Acrylonitrile butadiene rubber, Polyurethane

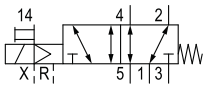
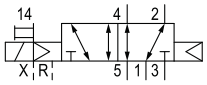
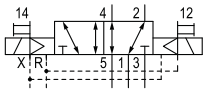
Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter “Technical information.”
- The pilot type (external/internal) is not implemented in the valve, but in the end plate of the valve terminal system.

Operating voltage	Voltage tolerance	Power consumption
DC	DC	DC
		W
24 V	-10% / +10%	0.55

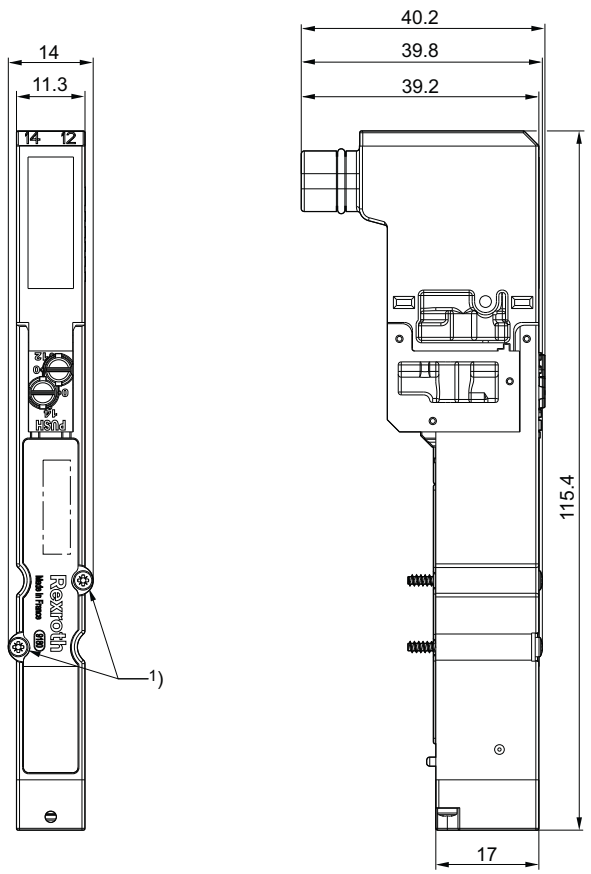
5/2-way valve, for Series HF04 and HF04-XF

▶ Qn = 400 l/min ▶ Plate connection ▶ Manual override: without detent ▶ Single solenoid, double solenoid

	MO	Operating voltage	Flow rate value	Switch-on time	Switch-off time	Weight	Part No.
		DC	Qn				
			[l/min]	[ms]	[ms]	[kg]	
		24 V	400	9	28	0.048	**0820062052**
		24 V	400	16	18	0.048	0820062002
		24 V	400	7	8	0.048	**0820062502**

MO = Manual override
Nominal flow Qn at 6 bar and Δp = 1 bar

Dimensions



1) Mounting screw: X-slot DIN EN ISO 4757-Z0
tightening torque for mounting screw [Nm]: 0.25

Part numbers in bold are more readily available.

5/3-way valve, for Series HF04 and HF04-XF

▶ Qn = 400 l/min ▶ Plate connection ▶ Manual override: with detent

Version	Spool valve, zero overlap
Pilot	External, internal
Sealing principle	Soft sealing
Blocking principle	Double base plate principle
Working pressure min./max.	-0.9 bar / 8 bar
Control pressure min./max.	3 bar / 8 bar
Ambient temperature min./max.	-5°C / +50°C
Medium temperature min./max.	+0°C / +50°C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Protection class with electrical connector/plug	IP 65
Protective circuit	Z-diode Protected against polarity reversal
Status display LED	Yellow
Duty cycle	100%
Switch-on time	8 ms
Switch-off time	10 ms
Generic emission standard in accordance with	EN 50081-1
Generic immunity standard in accordance with	EN 50082-2
Mounting screw	Cross recessed DIN EN ISO 4757-Z0
Mounting screw tightening torque	0.25 Nm

Materials:	
Housing	Polyamide
Seals	Acrylonitrile butadiene rubber, Polyurethane

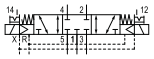
Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter “Technical information.”
- The pilot type (external/internal) is not implemented in the valve, but in the end plate of the valve terminal system.

Operating voltage	Voltage tolerance	Power consumption
DC	DC	DC
		W
24 V	-10% / +10%	0.55

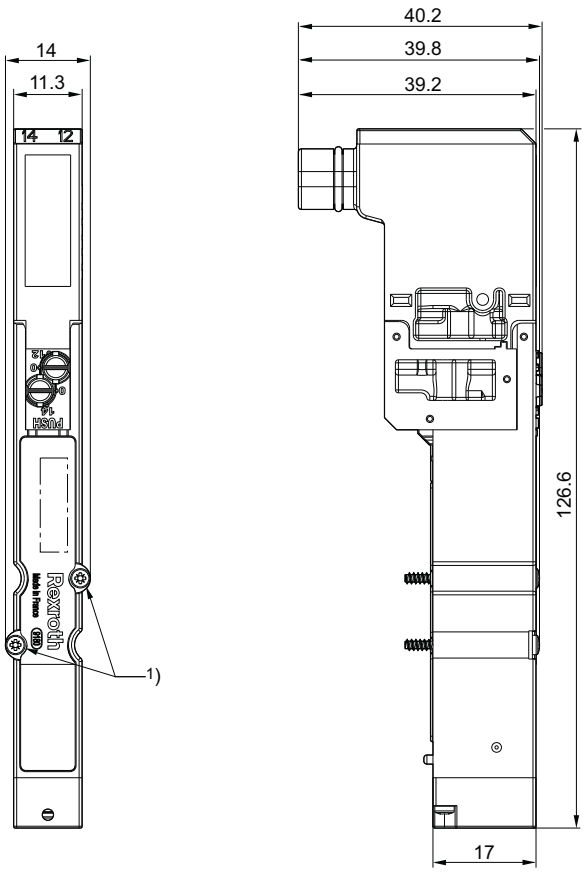
5/3-way valve, for Series HF04 and HF04-XF

▶ Qn = 400 l/min ▶ Plate connection ▶ Manual override: with detent

	MO	Operating voltage	Flow rate value	Weight	Part No.
		DC	Qn		
			[l/min]	[kg]	
		24 V	400	0.048	**0820062601**

MO = Manual override
Nominal flow Qn at 6 bar and Δp = 1 bar

Dimensions



1) Mounting screw: X-slot DIN EN ISO 4757-Z0
tightening torque for mounting screw [Nm]: 0.25

Part numbers in bold are more readily available.

5/3-way valve, for Series HF04 and HF04-XF

▶ Qn = 400 l/min ▶ Plate connection ▶ Manual override: without detent

Version	Spool valve, zero overlap
Pilot	External, internal
Sealing principle	Soft sealing
Blocking principle	Double base plate principle
Working pressure min./max.	-0.9 bar / 8 bar
Control pressure min./max.	3 bar / 8 bar
Ambient temperature min./max.	-5°C / +50°C
Medium temperature min./max.	+0°C / +50°C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Protection class with electrical connector/plug	IP 65
Protective circuit	Z-diode Protected against polarity reversal
Status display LED	Yellow
Duty cycle	100%
Switch-on time	8 ms
Switch-off time	10 ms
Generic emission standard in accordance with	EN 50081-1
Generic immunity standard in accordance with	EN 50082-2
Mounting screw	Cross recessed DIN EN ISO 4757-Z0
Mounting screw tightening torque	0.25 Nm

Materials:	
Housing	Polyamide
Seals	Acrylonitrile butadiene rubber, Polyurethane

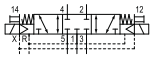
Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter “Technical information.”
- The pilot type (external/internal) is not implemented in the valve, but in the end plate of the valve terminal system.

Operating voltage	Voltage tolerance	Power consumption
DC	DC	DC
		W
24 V	-10% / +10%	0.55

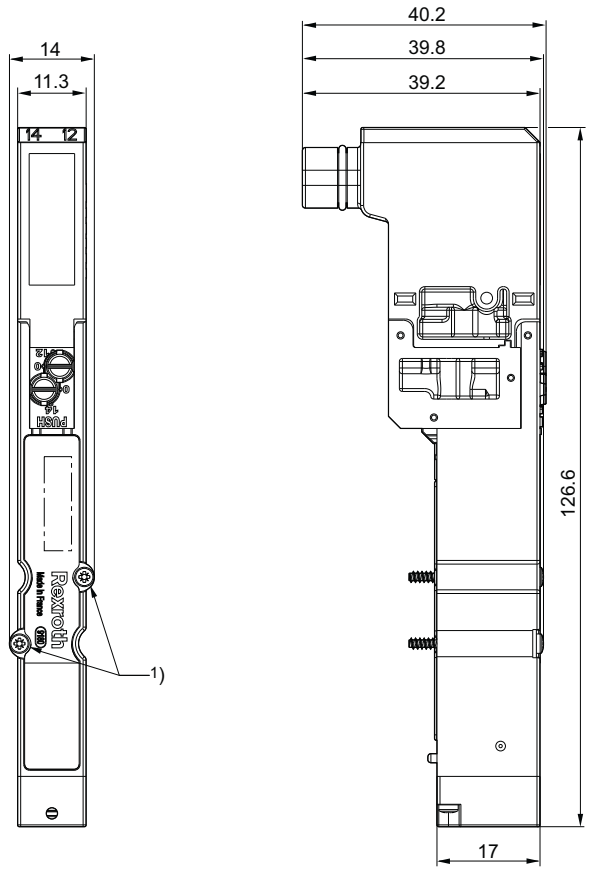
5/3-way valve, for Series HF04 and HF04-XF

▶ Qn = 400 l/min ▶ Plate connection ▶ Manual override: without detent

	MO	Operating voltage	Flow rate value	Weight	Part No.
		DC	Qn		
			[l/min]	[kg]	
		24 V	400	0.048	**0820062602**

MO = Manual override
Nominal flow Qn at 6 bar and Δp = 1 bar

Dimensions



1) Mounting screw: X-slot DIN EN ISO 4757-Z0
tightening torque for mounting screw [Nm]: 0.25

Part numbers in bold are more readily available.

Series HF04-XF

Valve terminal systems

	Valve terminal system, Series HF04-XF ▶ Qn Max. = 400 l/min ▶ Multipole ▶ Electr. connection: D-Sub plug, 25-pin, on the side/D-Sub plug, 44-pin, on the side	**103**
	Valve terminal system, Series HF04-XF ▶ Qn Max. = 400 l/min ▶ Direct field bus connection (BDC) ▶ B-design	**105**
	Valve terminal system, Series HF04-XF ▶ Qn Max. = 400 l/min ▶ Optional field bus connection with I/O function (CMS) ▶ B-design	**107**
	Valve terminal system, Series HF04-XF ▶ Qn Max. = 400 l/min ▶ Connection with diagnostics (DDL) ▶ B-design	**109**
	Valve terminal system, Series HF04-XF ▶ Qn Max. = 400 l/min ▶ Connection with diagnostics, optionally with I/O function (DDL) ▶ B-design	**111**
	Valve terminal system, Series HF04-XF ▶ Qn Max. = 400 l/min ▶ Field bus connection with AS i ▶ B-design	**113**

Valves - See pages 90 to 101 for individual valve pages.

Valve terminal system, Series HF04-XF

▶ Qn Max. = 400 l/min ▶ Multipole ▶ Electr. connection: D-Sub plug, 25-pin, on the side/D-Sub plug, 44-pin, on the side

Blocking principle	Double base plate principle
Working pressure min./max.	-0.9 bar / 10 bar
Control pressure min./max.	3 bar / 8 bar
Ambient temperature min./max.	-5°C / +50°C
Medium temperature min./max.	+0°C / +50°C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Protection class: 2000, with electrical connector/ plug	IP 65
Max. number of valve positions	24 (25-pin), 32 (44-pin)
Max. number of solenoid coils	24 (25-pin), 32 (44-pin)
DC operating voltage	24 V
Voltage tolerance DC	-10% / +10%

Materials:	
End plate	Aluminum
Plug box	Polyamide
Subbase	Polyamide

An example configuration is illustrated. The delivered product may thus deviate from the illustration.

Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter “Technical information.”
- See the following pages on the series for technical data for individual components.
- Ports 2 and 4 can be ordered mounted only horizontally or mounted only vertically. Combinations can be made individually after delivery.
- For push-in fittings, only use plug accessories made of plastic (polyamide) from our catalog.

Configurable product

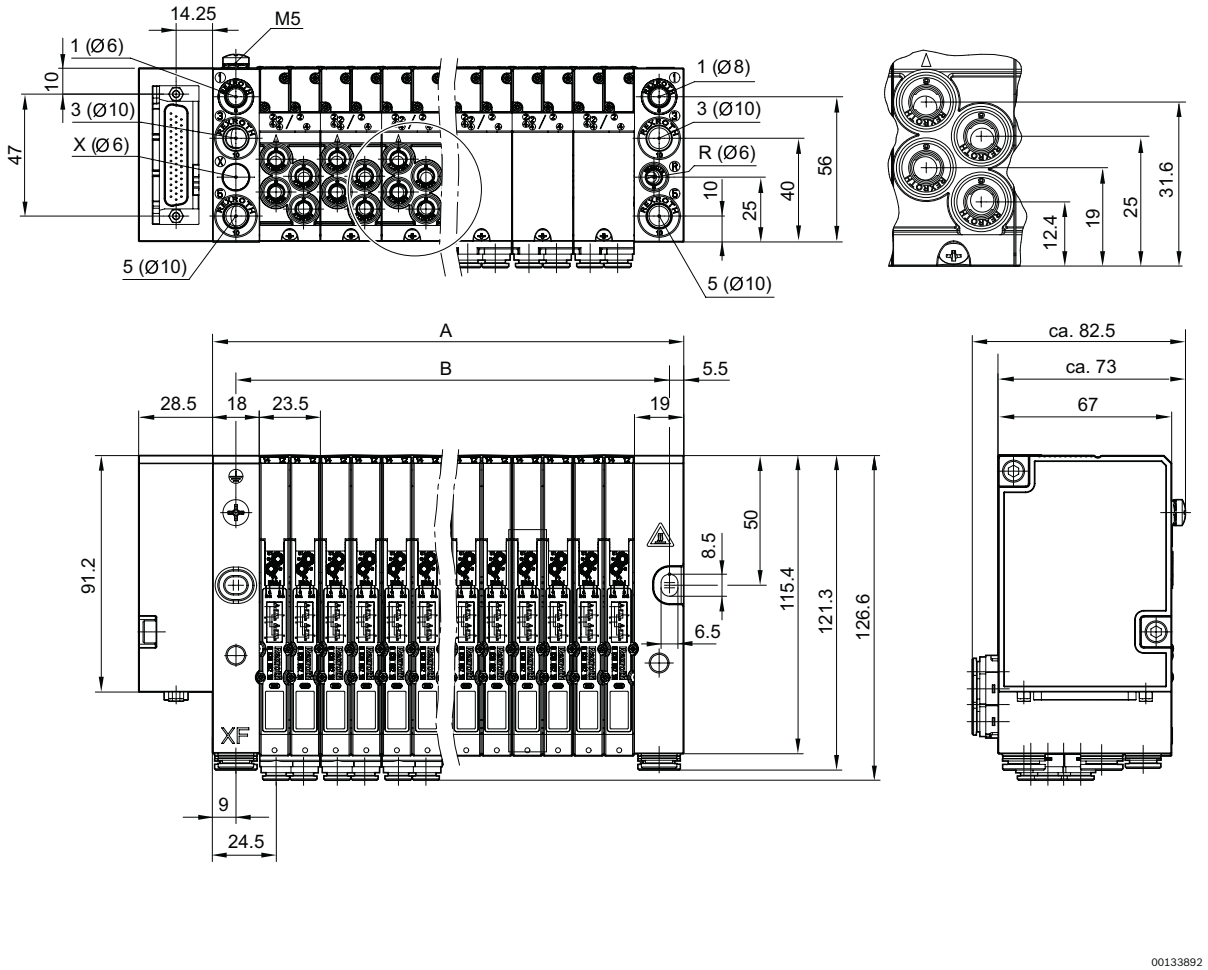
This product is configurable. Please use our Internet configurator at www.boschrexroth-us.com/pneumatics or contact the nearest Bosch Rexroth sales office.

Valve terminal system, Series HF04-XF

▶ Qn Max. = 400 l/min ▶ Multipole ▶ Electr. connection: D-Sub plug, 25-pin, on the side/D-Sub plug, 44-pin, on the side

---

Dimensions



1 = plug-in connection Ø 8 mm or plug-in connection 3/8” (inch)
2 and 4 = plug-in connections Ø 6 mm or thread connections M7 (inch)
3 and 5 = plug-in connections Ø 10 mm or plug-in connections 3/8” (inch)
R = collected pilot exhaust, plug-in connection Ø 6 mm or plug-in connection 1/4” (inch)
X = external pilot, plug-in connection Ø 6 mm or plug-in connection 1/4” (inch), connection X plugged with internal pilot control
An example configuration is illustrated. The delivered product may thus deviate from the illustration.

n	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
A	60.6	84.2	107.8	131.4	155	178.6	202.2	225.8	249.4	273	296.6	320.2	343.8	367.4	391	414.6
B	46.1	69.7	93.3	116.9	140.5	164.1	187.7	211.3	234.9	258.5	282.1	305.7	329.3	352.9	376.5	400.1

n = number of double subplates

Valve terminal system, Series HF04-XF

▶ Qn Max. = 400 l/min ▶ Direct field bus connection (BDC) ▶ B-design

Version	Field bus
Blocking principle	Double base plate principle
Working pressure min./max.	-0.9 bar / 10 bar
Control pressure min./max.	3 bar / 8 bar
Ambient temperature min./max.	-5°C / +50°C
Medium temperature min./max.	+0°C / +50°C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Protection class: with plug	IP 65
Number of valve positions	32
Number of solenoid coils	32
Supported field bus protocols:	Profibus DP DeviceNet CANopen CANopen sb SERCOS III
Operational voltage electronics	24 V DC
Electronics voltage tolerance	-10% / +10%

Materials:	
End plate	Aluminum
Subbase	Polyamide

An example configuration is illustrated. The delivered product may thus deviate from the illustration.

Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter “Technical information.”
- See the following pages on the series for technical data for individual components.
- For technical data for electronics (link structures), see the Chaper “Control systems/bus connections.”
- Ports 2 and 4 can be ordered mounted only horizontally or mounted only vertically. Combinations can be made individually after delivery.
- For push-in fittings, only use plug accessories made of plastic (polyamide) from our catalog.

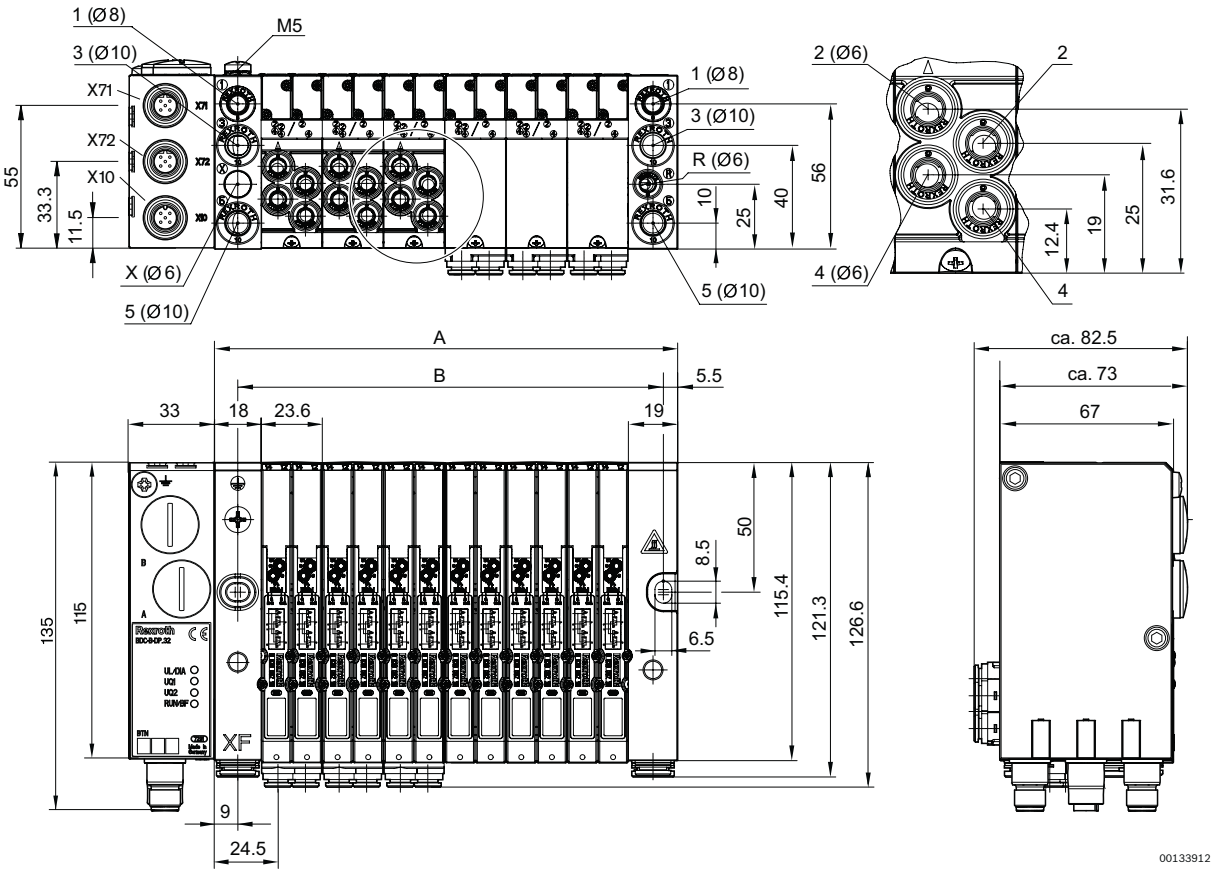
Configurable product

This product is configurable. Please use our Internet configurator at www.boschrexroth-us.com/pneumatics or contact the nearest Bosch Rexroth sales office.

Valve terminal system, Series HF04-XF

▶ Qn Max. = 400 l/min ▶ Direct field bus connection (BDC) ▶ B-design

Dimensions



1 = plug-in connection Ø 8 mm or plug-in connection 3/8” (inch)
2 and 4 = plug-in connections Ø 6 mm or thread connections M7 (inch)
3 and 5 = plug-in connections Ø 10 mm or plug-in connections 3/8” (inch)
R = collected pilot exhaust, plug-in connection Ø 6 mm or plug-in connection 1/4” (inch)
X = external pilot, plug-in connection Ø 6 mm or plug-in connection 1/4” (inch), connection X plugged with internal pilot control
An example configuration is illustrated. The delivered product may thus deviate from the illustration.

n	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
A	60.6	84.2	107.8	131.4	155	178.6	202.2	225.8	249.4	273	296.6	320.2	343.8	367.4	391	414.6
B	46.1	69.7	93.3	116.9	140.5	164.1	187.7	211.3	234.9	258.5	282.1	305.7	329.3	352.9	376.5	400.1

n = number of double subplates

Valve terminal system, Series HF04-XF

▶ Qn Max. = 400 l/min ▶ Optional field bus connection with I/O function (CMS) ▶ B-design

Version	Field bus
Blocking principle	Double base plate principle
Working pressure min./max.	-0.9 bar / 10 bar
Control pressure min./max.	3 bar / 8 bar
Ambient temperature min./max.	-5°C / +50°C
Medium temperature min./max.	+0°C / +50°C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Protection class: with plug	IP 65
Number of valve positions	24, 32
Number of solenoid coils	24, 32
Supported field bus protocols:	Profibus DP DeviceNet CANopen INTERBUS-S
Operational voltage electronics	24 V DC
Electronics voltage tolerance	-10% / +10%

Materials:

End plate	Aluminum
Subbase	Polyamide

An example configuration is illustrated. The delivered product may thus deviate from the illustration.

Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter “Technical information.”
- See the following pages on the series for technical data for individual components.
- For technical data for electronics (link structures), see the Chaper “Control systems/bus connections.”
- Ports 2 and 4 can be ordered mounted only horizontally or mounted only vertically. Combinations can be made individually after delivery.
- For push-in fittings, only use plug accessories made of plastic (polyamide) from our catalog.

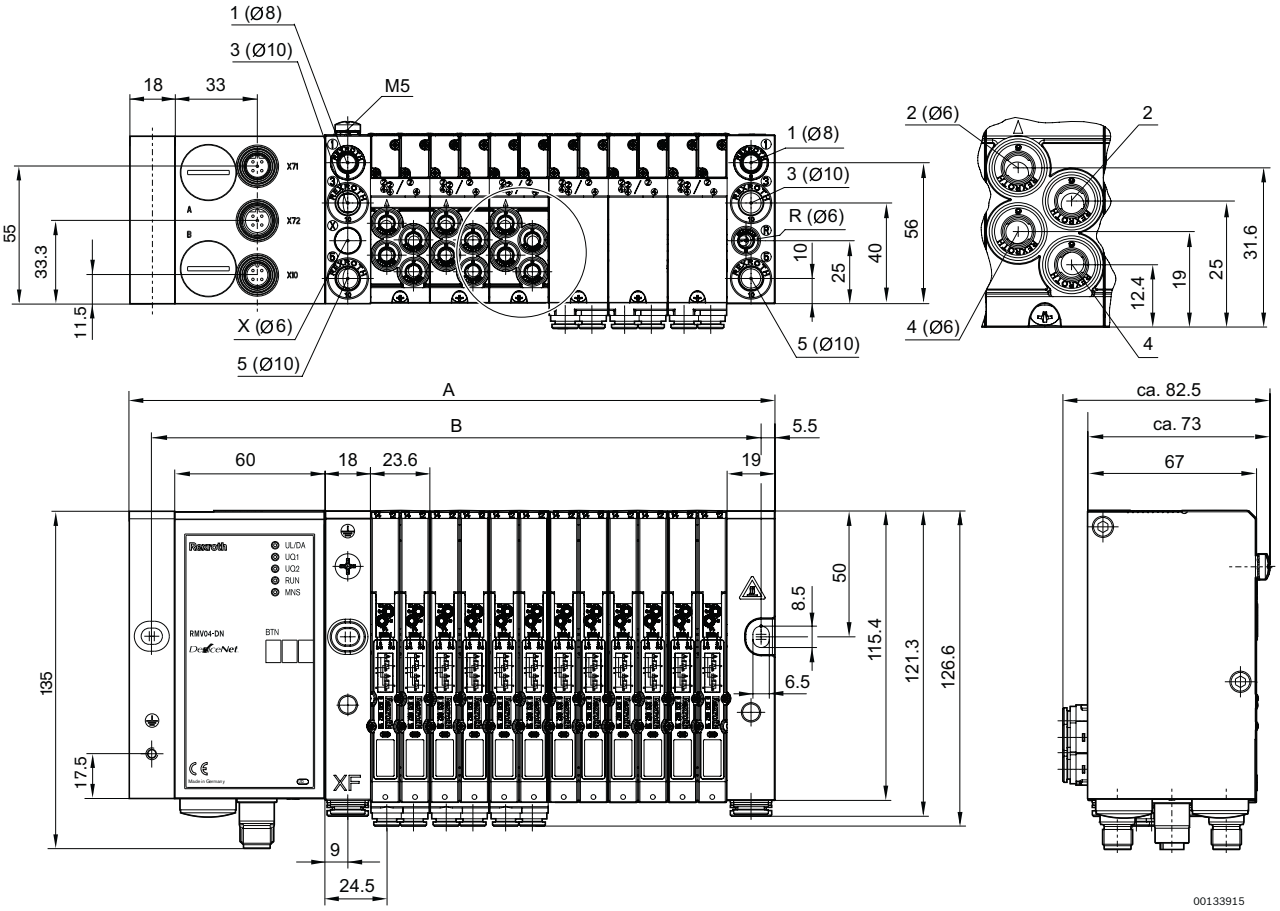
Configurable product

This product is configurable. Please use our Internet configurator at www.boschrexroth-us.com/pneumatics or contact the nearest Bosch Rexroth sales office.

Valve terminal system, Series HF04-XF

▶ Qn Max. = 400 l/min ▶ Optional field bus connection with I/O function (CMS) ▶ B-design

Dimensions



1 = plug-in connection Ø 8 mm or plug-in connection 3/8” (inch)
2 and 4 = plug-in connections Ø 6 mm or thread connections M7 (inch)
3 and 5 = plug-in connections Ø 10 mm or plug-in connections 3/8” (inch)
R = collected pilot exhaust, plug-in connection Ø 6 mm or plug-in connection 1/4” (inch)
X = external pilot, plug-in connection Ø 6 mm or plug-in connection 1/4” (inch), connection X plugged with internal pilot control
An example configuration is illustrated. The delivered product may thus deviate from the illustration.

n	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
A	138.6	162.2	185.8	209.4	233	256.6	280.2	303.8	327.4	351	374.6	398.2	421.8	445.4	469	492.6
B	124.1	147.7	171.3	194.9	218.5	242.1	265.7	289.3	312.9	336.5	360.1	383.7	407.3	430.9	454.5	478.1

n = number of double subplates

Valve terminal system, Series HF04-XF

▶ Qn Max. = 400 l/min ▶ Connection with diagnostics (DDL) ▶ B-design

Version	Link structure DDL

Blocking principle	Double base plate principle
Working pressure min./max.	-0.9 bar / 10 bar
Control pressure min./max.	3 bar / 8 bar
Ambient temperature min./max.	-5°C / +50°C
Medium temperature min./max.	+0°C / +50°C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Protection class: with plug	IP 65
Number of valve positions	32
Number of solenoid coils	32
Operational voltage electronics	24 V DC
Electronics voltage tolerance	-10% / +10%

Materials:	
End plate	Aluminum
Subbase	Polyamide

An example configuration is illustrated. The delivered product may thus deviate from the illustration.

Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter “Technical information.”
- See the following pages on the series for technical data for individual components.
- For technical data for electronics (link structures), see the Chaper “Control systems/bus connections.”
- Ports 2 and 4 can be ordered mounted only horizontally or mounted only vertically. Combinations can be made individually after delivery.
- For push-in fittings, only use plug accessories made of plastic (polyamide) from our catalog.

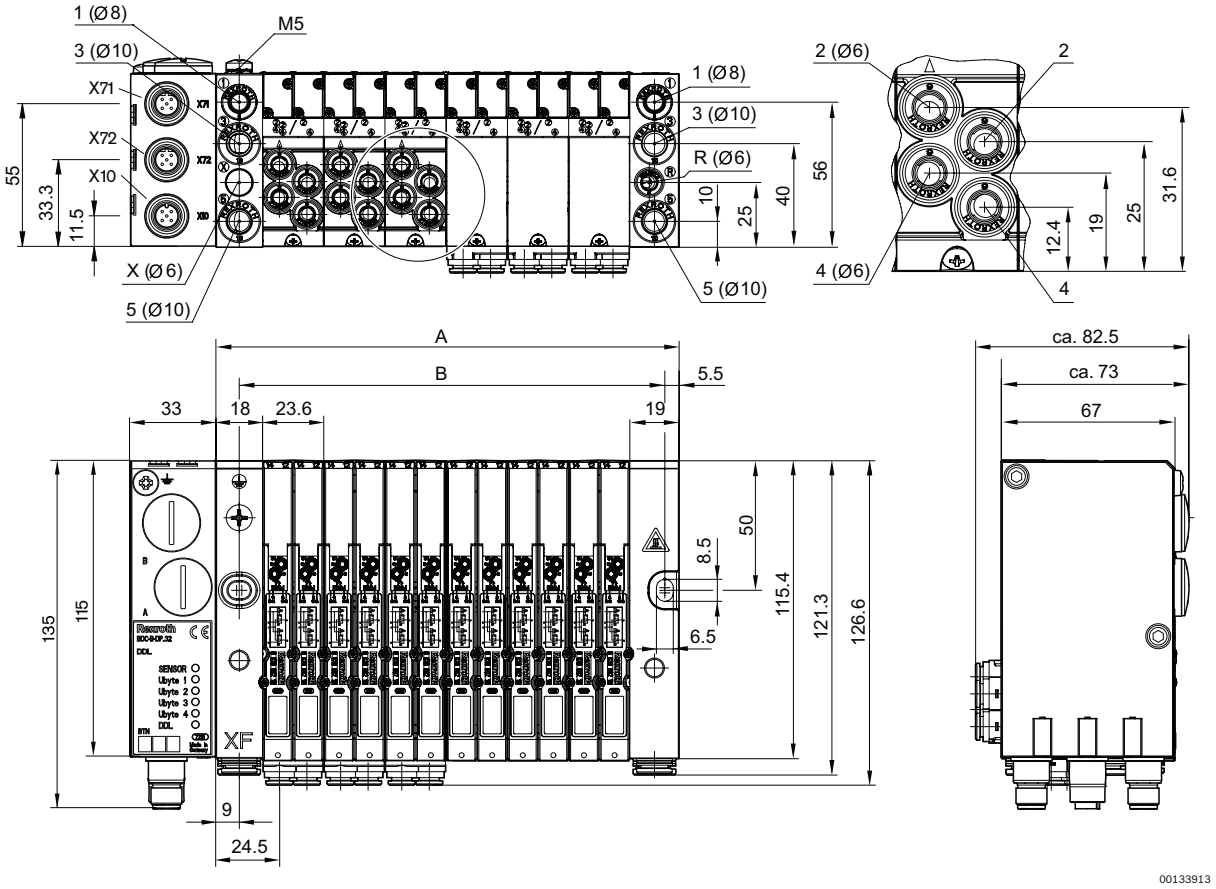
Configurable product

This product is configurable. Please use our Internet configurator at www.boschrexroth-us.com/pneumatics or contact the nearest Bosch Rexroth sales office.

Valve terminal system, Series HF04-XF

▶ Qn Max. = 400 l/min ▶ Connection with diagnostics (DDL) ▶ B-design

Dimensions



1 = plug-in connection Ø 8 mm or plug-in connection 3/8” (inch)
2 and 4 = plug-in connections Ø 6 mm or thread connections M7 (inch)
3 and 5 = plug-in connections Ø 10 mm or plug-in connections 3/8” (inch)
R = collected pilot exhaust, plug-in connection Ø 6 mm or plug-in connection 1/4” (inch)
X = external pilot, plug-in connection Ø 6 mm or plug-in connection 1/4” (inch), connection X plugged with internal pilot control
An example configuration is illustrated. The delivered product may thus deviate from the illustration.

n	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
A	60.6	84.2	107.8	131.4	155	178.6	202.2	225.8	249.4	273	296.6	320.2	343.8	367.4	391	414.6
B	46.1	69.7	93.3	116.9	140.5	164.1	187.7	211.3	234.9	258.5	282.1	305.7	329.3	352.9	376.5	400.1

n = number of double subplates

Valve terminal system, Series HF04-XF

▶ Qn Max. = 400 l/min ▶ Connection with diagnostics, optionally with I/O function (DDL) ▶ B-design

Version	Link structure DDL
Blocking principle	Double base plate principle
Working pressure min./max.	-0.9 bar / 10 bar
Control pressure min./max.	3 bar / 8 bar
Ambient temperature min./max.	-5°C / +50°C
Medium temperature min./max.	+0°C / +50°C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Protection class: with plug	IP 65
Number of valve positions	24
Number of solenoid coils	24
Operational voltage electronics	24 V DC
Electronics voltage tolerance	-10% / +10%

Materials:	
End plate	Aluminum
Subbase	Polyamide

An example configuration is illustrated. The delivered product may thus deviate from the illustration.

Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter “Technical information.”
- See the following pages on the series for technical data for individual components.
- For technical data for electronics (link structures), see the Chaper “Control systems/bus connections.”
- Ports 2 and 4 can be ordered mounted only horizontally or mounted only vertically. Combinations can be made individually after delivery.
- For push-in fittings, only use plug accessories made of plastic (polyamide) from our catalog.

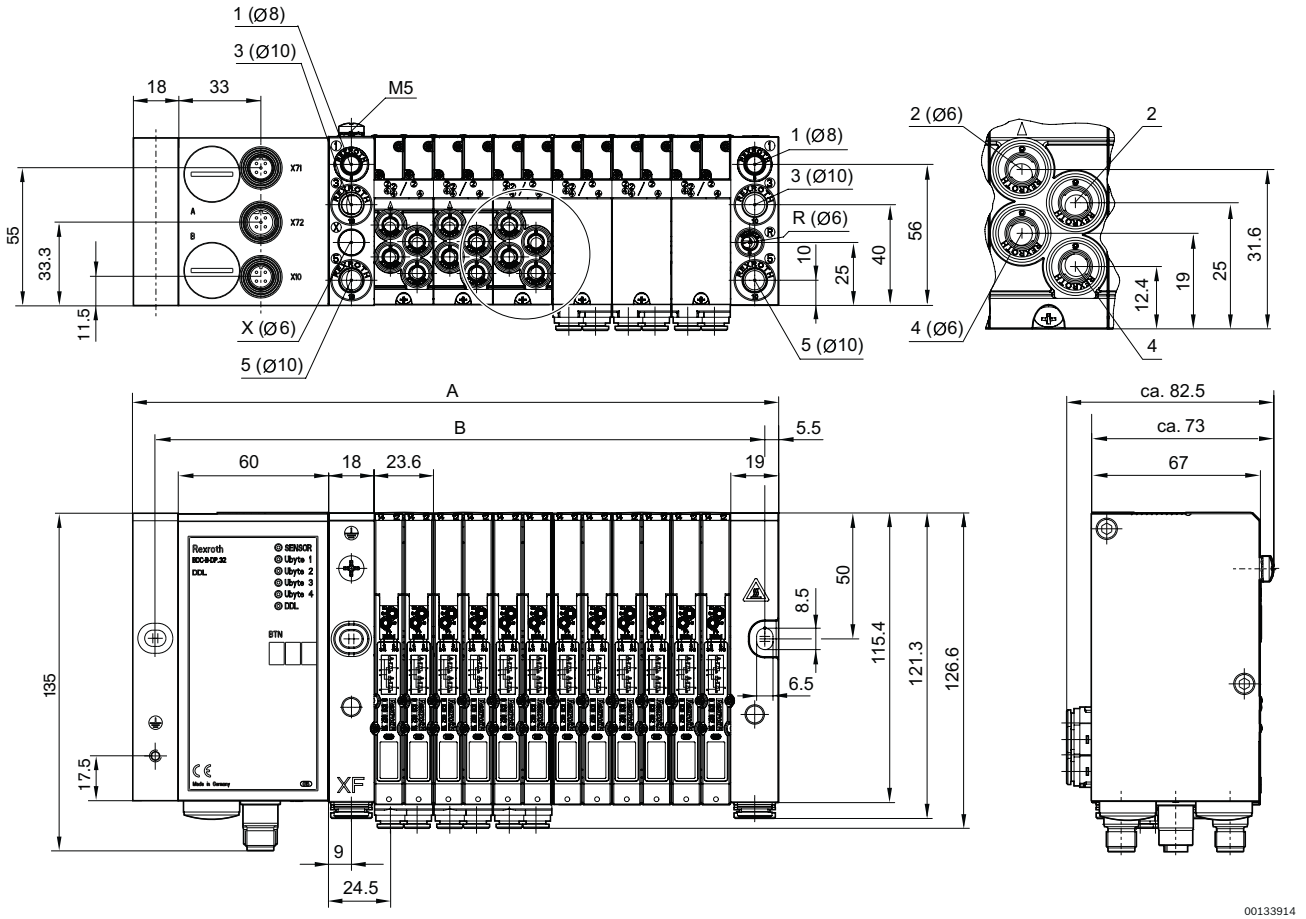
Configurable product

This product is configurable. Please use our Internet configurator at www.boschrexroth-us.com/pneumatics or contact the nearest Bosch Rexroth sales office.

Valve terminal system, Series HF04-XF

▶ Qn Max. = 400 l/min ▶ Connection with diagnostics, optionally with I/O function (DDL) ▶ B-design

Dimensions



1 = plug-in connection Ø 8 mm or plug-in connection 3/8” (inch)
2 and 4 = plug-in connections Ø 6 mm or thread connections M7 (inch)
3 and 5 = plug-in connections Ø 10 mm or plug-in connections 3/8” (inch)
R = collected pilot exhaust, plug-in connection Ø 6 mm or plug-in connection 1/4” (inch)
X = external pilot, plug-in connection Ø 6 mm or plug-in connection 1/4” (inch), connection X plugged with internal pilot control
An example configuration is illustrated. The delivered product may thus deviate from the illustration.

n	1	2	3	4	5	6	7	8	9	10	11	12
A	138.6	162.2	185.8	209.4	233	256.6	280.2	303.8	327.4	351	374.6	398.2
B	124.1	147.7	171.3	194.9	218.5	242.1	265.7	289.3	312.9	336.5	360.1	383.7

n = number of double subplates

Valve terminal system, Series HF04-XF

▶ Qn Max. = 400 l/min ▶ Field bus connection with AS i ▶ B-design

Version	Field bus ASi

Blocking principle	Double base plate principle
Working pressure min./max.	-0.9 bar / 10 bar
Control pressure min./max.	3 bar / 8 bar
Ambient temperature min./max.	-5°C / +50°C
Medium temperature min./max.	+0°C / +50°C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Protection class, with plug	IP 65
Number of valve positions	4, 8
Number of solenoid coils	4, 8
Supported field bus protocols:	AS-i
Operational voltage electronics	24 V DC
Electronics voltage tolerance	-10% / +10%
Power supply connection	Black AS-i flat cable
Communication port	Yellow AS-i flat cable

Materials:	
End plate	Aluminum
Subbase	Polyamide

An example configuration is illustrated. The delivered product may thus deviate from the illustration.

Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter “Technical information.”
- See the following pages on the series for technical data for individual components.
- For technical data for electronics (link structures), see the Chaper “Control systems/bus connections.”
- Ports 2 and 4 can be ordered mounted only horizontally or mounted only vertically. Combinations can be made individually after delivery.
- For push-in fittings, only use plug accessories made of plastic (polyamide) from our catalog.

Configurable product

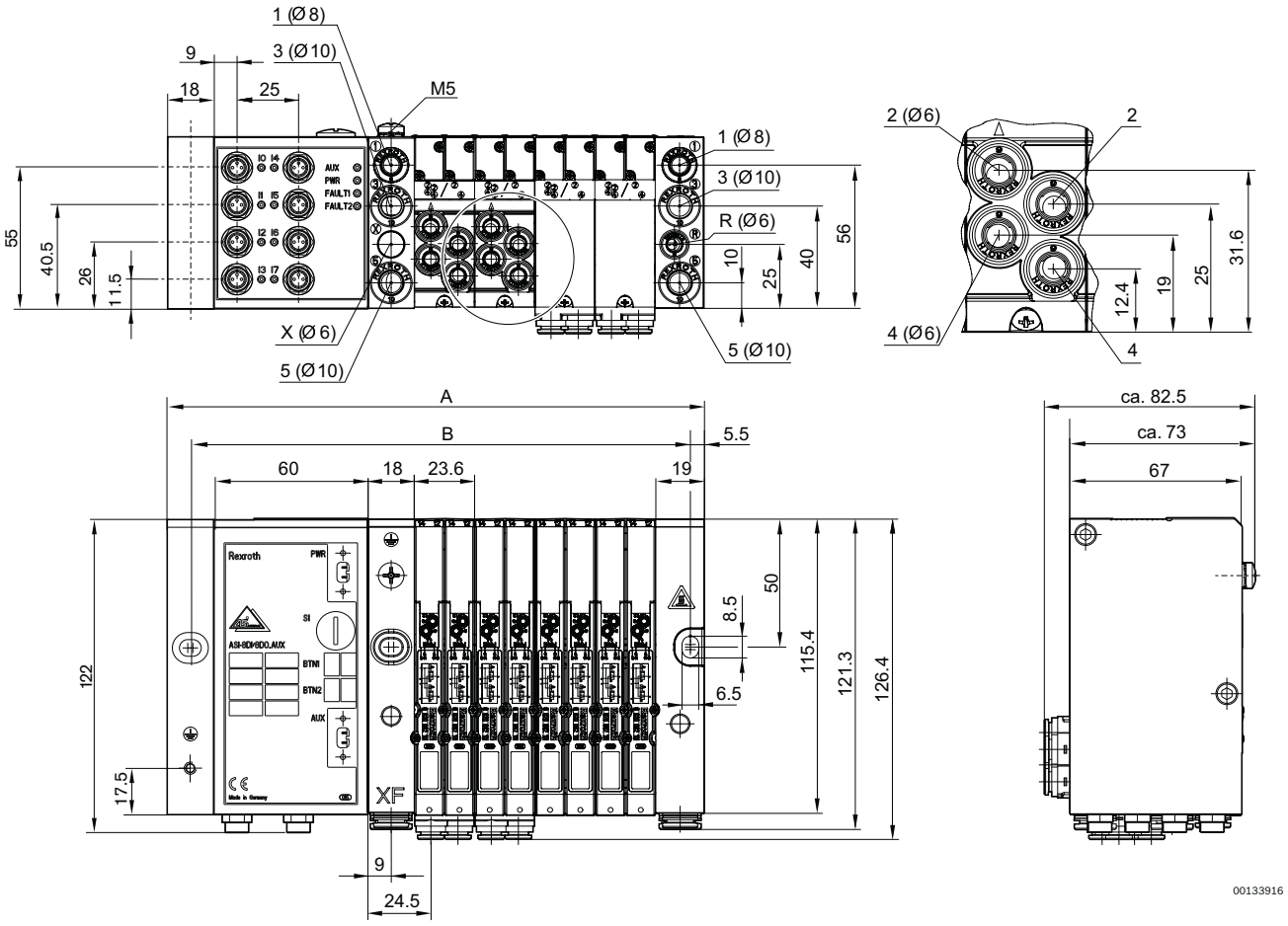
This product is configurable. Please use our Internet configurator at www.boschrexroth-us.com/pneumatics or contact the nearest Bosch Rexroth sales office.

Valve terminal system, Series HF04-XF

▶ Qn Max. = 400 l/min ▶ Field bus connection with AS i ▶ B-design

---

Dimensions, 8DI/8DO-AUX



1 = plug-in connection Ø 8 mm or plug-in connection 3/8” (inch)
2 and 4 = plug-in connections Ø 6 mm or thread connections M7 (inch)
3 and 5 = plug-in connections Ø 10 mm or plug-in connections 3/8” (inch)
R = collected pilot exhaust, plug-in connection Ø 6 mm or plug-in connection 1/4” (inch)
X = external pilot, plug-in connection Ø 6 mm or plug-in connection 1/4” (inch), connection X plugged with internal pilot control
Max. 4 double subbases possible, max. 8 valves, single solenoid
An example configuration is illustrated. The delivered product may thus deviate from the illustration.

n	1	2	3	4
A	138.6	162.2	185.8	209.4
B	124.1	147.7	171.3	194.9

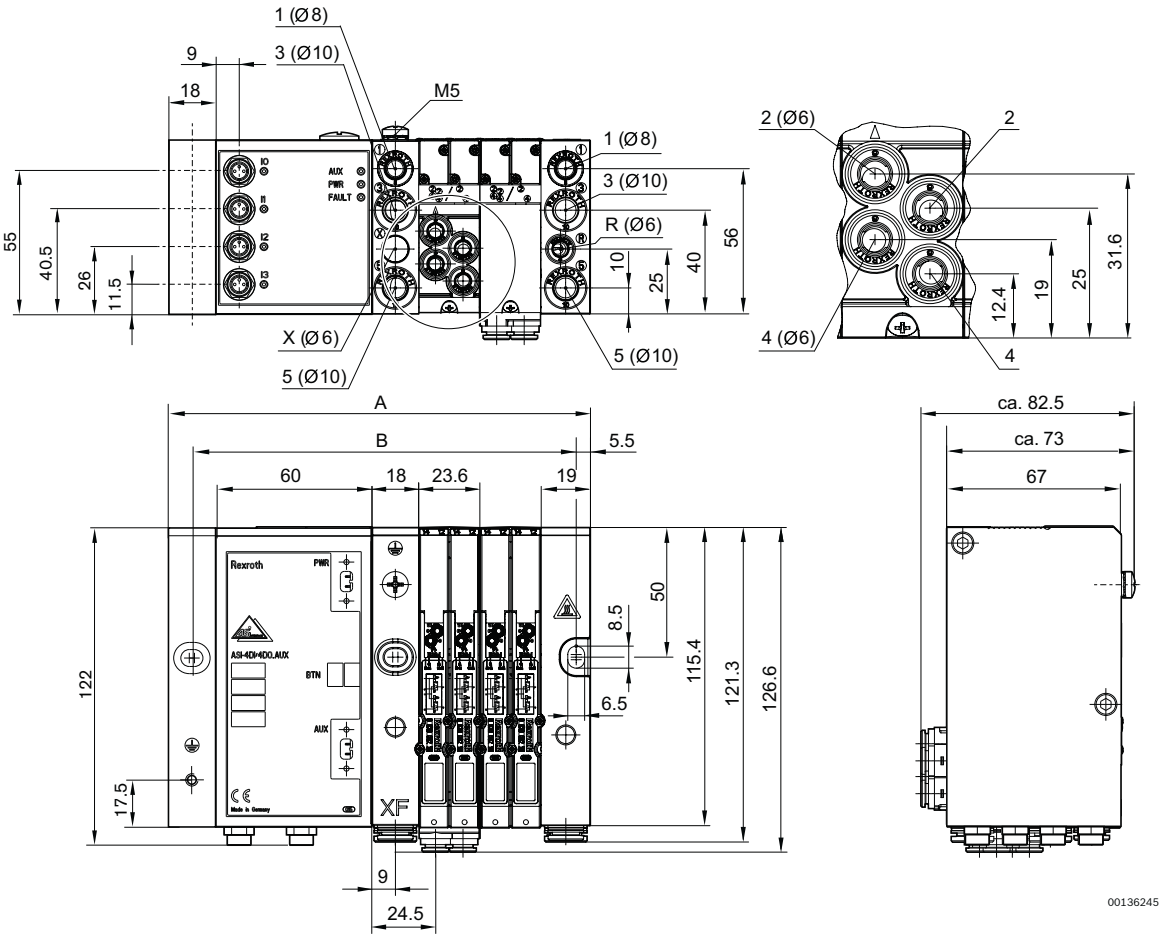
n = number of double subplates

Valve terminal system, Series HF04-XF

▶ Qn Max. = 400 l/min ▶ Field bus connection with AS i ▶ B-design

---

Dimensions, 4DI/4DO-AUX



1 = plug-in connection Ø 8 mm or plug-in connection 3/8” (inch)
2 and 4 = plug-in connections Ø 6 mm or thread connections M7 (inch)
3 and 5 = plug-in connections Ø 10 mm or plug-in connections 3/8” (inch)
R = collected pilot exhaust, plug-in connection Ø 6 mm or plug-in connection 1/4” (inch)
X = external pilot, plug-in connection Ø 6 mm or plug-in connection 1/4” (inch), connection X plugged with internal pilot control
Max. 2 double subbases possible, max. 4 valves, single solenoid
An example configuration is illustrated. The delivered product may thus deviate from the illustration.

n	1	2
A	138.6	162.2
B	124.1	147.7

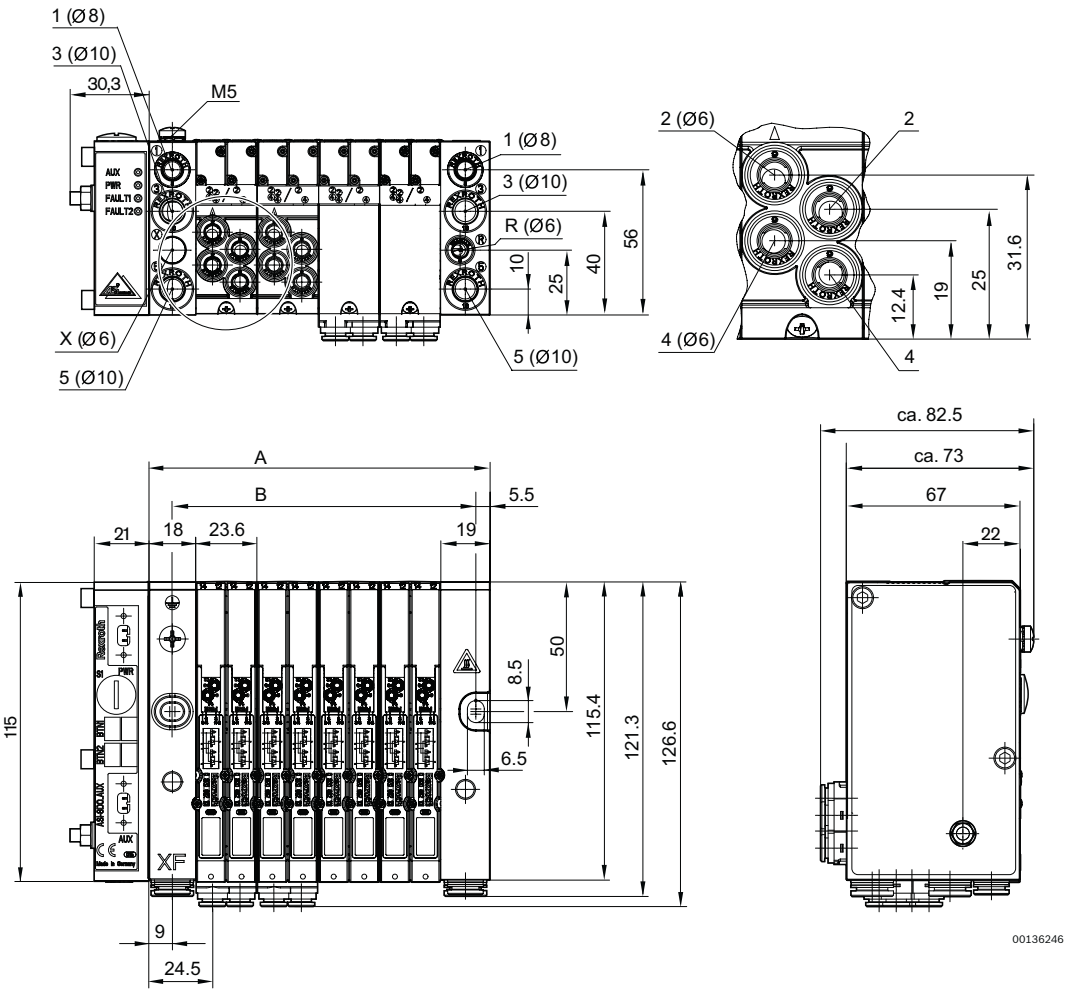
n = number of double subplates

Valve terminal system, Series HF04-XF

▶ Qn Max. = 400 l/min ▶ Field bus connection with AS i ▶ B-design

---

Dimensions, AS-i, 8DO-AUX



1 = plug-in connection Ø 8 mm or plug-in connection 3/8” (inch)
2 and 4 = plug-in connections Ø 6 mm or thread connections M7 (inch)
3 and 5 = plug-in connections Ø 10 mm or plug-in connections 3/8” (inch)
R = collected pilot exhaust, plug-in connection Ø 6 mm or plug-in connection 1/4” (inch)
X = external pilot, plug-in connection Ø 6 mm or plug-in connection 1/4” (inch), connection X plugged with internal pilot control
Max. 4 double subbases possible, max. 8 valves, single solenoid
An example configuration is illustrated. The delivered product may thus deviate from the illustration.

n	1	2	3	4
A	60.6	84.2	107.8	131.4
B	46.1	69.7	93.3	116.9

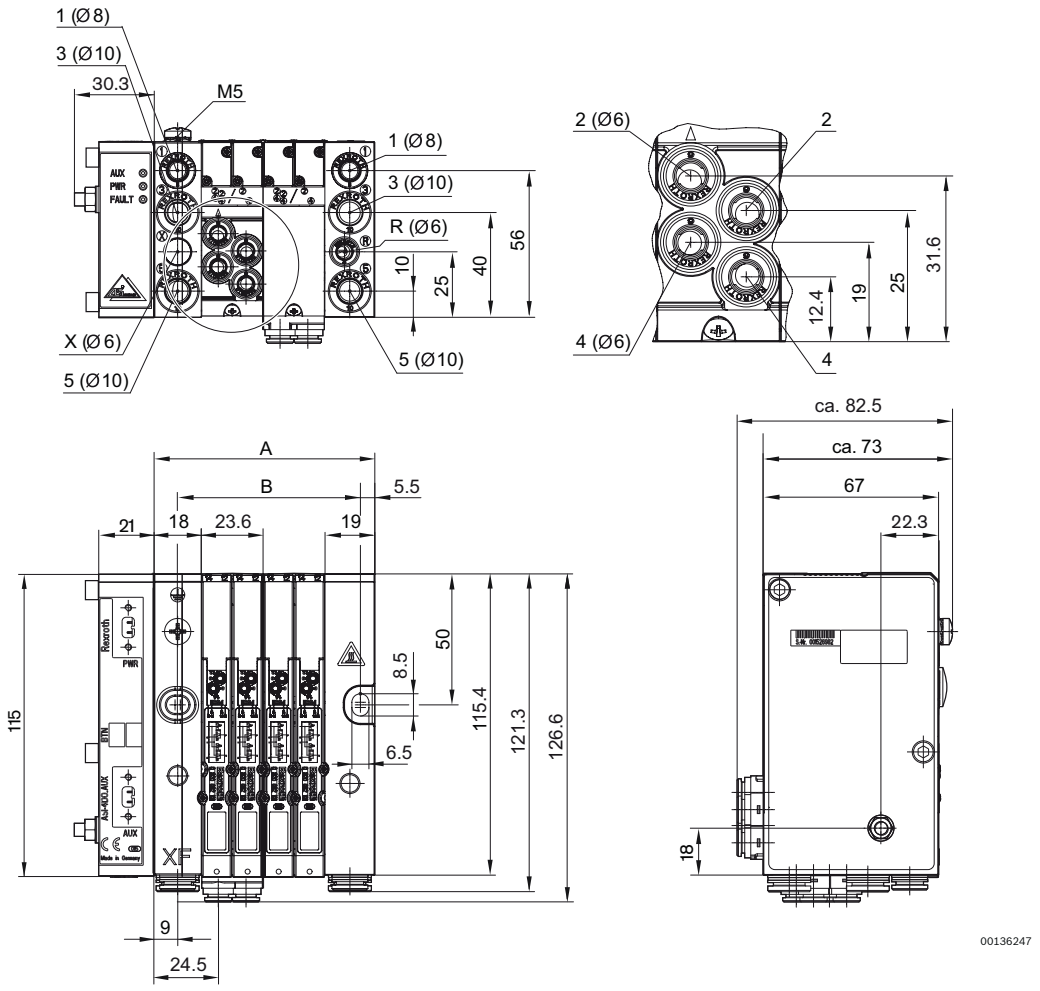
n = number of double subplates

Valve terminal system, Series HF04-XF

▶ Qn Max. = 400 l/min ▶ Field bus connection with AS i ▶ B-design

---

Dimensions, 4DO-AUX



1 = plug-in connection Ø 8 mm or plug-in connection 3/8” (inch)
2 and 4 = plug-in connections Ø 6 mm or thread connections M7 (inch)
3 and 5 = plug-in connections Ø 10 mm or plug-in connections 3/8” (inch)
R = collected pilot exhaust, plug-in connection Ø 6 mm or plug-in connection 1/4” (inch)
X = external pilot, plug-in connection Ø 6 mm or plug-in connection 1/4” (inch), connection X plugged with internal pilot control
Max. 2 double subbases possible, max. 4 valves, single solenoid
An example configuration is illustrated. The delivered product may thus deviate from the illustration.

n	1	2
A	60.6	84.2
B	46.1	69.7

n = number of double subplates

Accessories

Field Bus Modules

Direct field bus connection (BDC), B-design
▶ Bus module with driver ▶ Field bus protocol: Profibus DP / CANopen / CANopen sb / DeviceNet / SERCOS III

120

Optional field bus connection with I/O function (CMS), B-design
▶ Bus module with driver ▶ Field bus protocol: Profibus DP / DeviceNet / CANopen / INTERBUS-S / ETHERNET IP

121

Connection with diagnostics (DDL), B-design
▶ Driver

126

Connection with diagnostics, optionally with I/O function (DDL), B-design
▶ Driver

127

Field bus connection with AS i, B-design
▶ Bus module with driver ▶ direct field bus connection ▶ Field bus protocol: AS-i

129

Field bus connection with AS i, B-design
▶ Bus module with driver ▶ direct field bus connection ▶ Field bus protocol: AS-i with inputs

131

Other accessories

Multiple plug D-Sub (25-pin)
▶ Socket, D-Sub, 25-pin

133

Multiple plug (44-pin)
▶ Socket, D-Sub, 44-pin ▶ high density

135

Multiple plug (44-pin)
▶ high density ▶ Socket, D-Sub, 44-pin ▶ high density

136

CKD kit, for series HF02-LG
▶ compressed air connection output: Ø10 ▶ Can be assembled into blocks
▶ Single base plate principle ▶ With collective pilot air exhaust

138

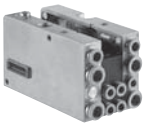
Other accessories, continued

HF03, CKD kit, metric, for series HF03-LG
▶ compressed air connection output: Ø 8 - G 1/8 ▶ Can be assembled into blocks
▶ Single base plate principle ▶ With collective pilot air exhaust

139

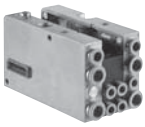
HF03 , CKD kit, inch, for series HF03-LG
▶ compressed air connection output: 1/8-27 NPTF - Ø 8 ▶ Can be assembled into blocks ▶ Single base plate principle ▶ With collective pilot air exhaust

140



HF04, CKD kit metric
▶ compressed air connection output: Ø 6 - M7 ▶ Can be assembled into blocks
▶ Double base plate principle ▶ Reversed pressure supply permissible
▶ Bus module extension possible ▶ I/O extension possible ▶ With collective pilot air exhaust

142



HF04, CKD kit inch
▶ compressed air connection output: M7 ▶ Can be assembled into blocks
▶ Double base plate principle ▶ Reversed pressure supply permissible
▶ Bus module extension possible ▶ I/O extension possible ▶ With collective pilot air exhaust

143

Standard compact injector, Series ECV
▶ For valve terminal system HF03

145

Pressure regulator subplate, Series HF03-LG

152

Pressure regulator subplate, Series HF04 and HF04-XF

154

Accessories, HF02-LG

156

Accessories, for series HF03-LG

157

Accessories, for valve terminal system, series HF04

158

Accessories, for valve terminal system, series HF04-XF

159

Series QR1-S standard
▶ Blanking plug ▶ pin bushing ▶ Ø 6 - Ø10 ▶ QR1-S-RBS

160

Direct field bus connection (BDC), B-design

▶ Bus module with driver ▶ Field bus protocol: Profibus DP / CANopen / CANopen sb / DeviceNet / SERCOS III

Ambient temperature min./max.	+0°C / +50°C

Protection class, with plug	IP 65
Operational voltage electronics	24 V DC
Electronics voltage tolerance	-15% / +20%
Power consumption electronics	0.05 A
Operational voltage valves	24 V DC
Number of outputs for valve coils	32
Total output for valves	3 A
Max. power consumption per coil	0.1 A
VTS connection	Socket 2.0 mm strip 3x13-pin

Materials:	
Housing	Die-cast aluminum

Technical Remarks

- ▶ Max. number of valves: 16 double solenoid or 32 single solenoid
- ▶ You will find assignment schemes for the product in the operating instructions, or contact the nearest Bosch Rexroth sales office.

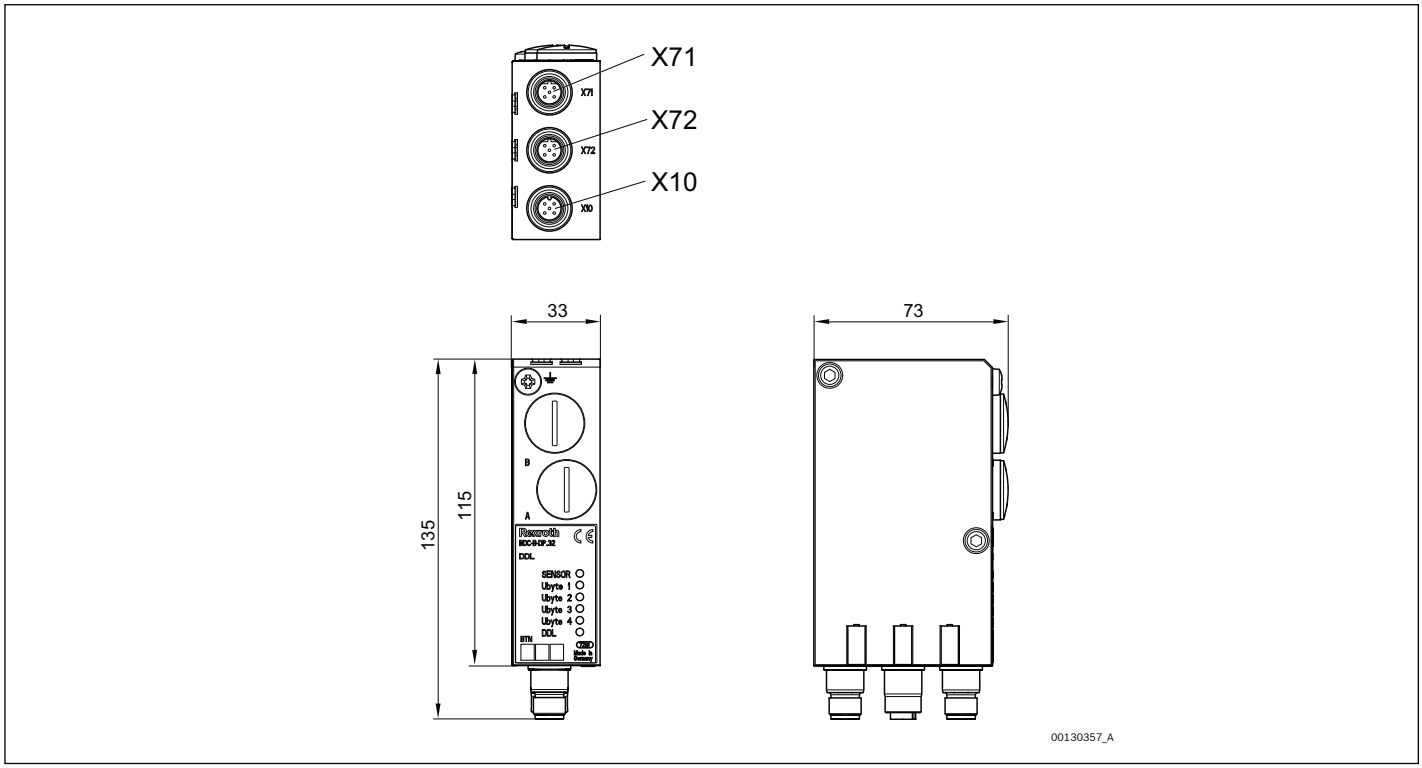
Field bus protocol	Communication port BUS INX71	Communication port BUS OUTX72	Power supply X10 port for second power supply	Operating Instructions	Weight	Part No.
					[kg]	
Profibus DP	Plug (male), M12x1, 5-pin, B-coded	Socket (female), M12x1, 5-pin, B-coded	Plug (male), M12, 4-pin, A-coded	R412009414	0.29	**R412008537**
CANopen	Plug (male), M12x1, 5-pin, A-coded	Socket (female), M12x1, 5-pin, A-coded	Plug (male), M12, 4-pin, A-coded	R412009415	0.29	**R412008538**
CANopen sb	Plug (male), M12x1, 5-pin, A-coded	Socket (female), M12x1, 5-pin, A-coded	Plug (male), M12, 4-pin, A-coded	R412009415	0.29	**R412008990**
DeviceNet	Plug (male), M12x1, 5-pin, A-coded	Socket (female), M12x1, 5-pin, A-coded	Plug (male), M12, 4-pin, A-coded	R412009416	0.29	R412008539
SERCOS III	Socket (female), M12x1, 5-pin, D-coded	Socket (female), M12x1, 5-pin, D-coded	Plug (male), M12, 4-pin, A-coded	R412012610	0.29	**R412009516**
Scope of delivery incl. 2 screws and seal						

Part numbers in bold are more readily available.

Direct field bus connection (BDC), B-design

▶ Bus module with driver ▶ Field bus protocol: Profibus DP / CANopen / CANopen sb / DeviceNet / SERCOS III

Dimensions



Optional field bus connection with I/O function (CMS), B-design

▶ Bus module with driver ▶ Field bus protocol: Profibus DP / DeviceNet / CANopen / INTERBUS-S / ETHERNET IP

Ambient temperature min./max.	+0°C / +50°C

Protection class, with plug	IP 65
Operational voltage electronics	24 V DC
Electronics voltage tolerance	-15% / +20%
Power consumption electronics	0.12 A
Operational voltage valves	24 V DC
Max. power consumption per coil	0.063 A
I/O extension possible, Max.	6

Materials:

Housing	Die-cast aluminum

The delivered product may vary from that in the illustration.

Technical Remarks

▶ You will find assignment schemes for the product in the operating instructions, or contact the nearest Bosch Rexroth sales office.

Optional field bus connection with I/O function (CMS), B-design

▶ Bus module with driver ▶ Field bus protocol: Profibus DP / DeviceNet / CANopen / INTERBUS-S / ETHERNET IP

Field bus protocol	Communication port BUS INX71	Communication port BUS OUTX72	power supply X10 port for second power supply	VTS connection	Number of outputs for valve coils	Part No.
Profibus DP	Plug (male), M12, 5-pin, B-coded	Socket (female), M12, 5-pin, B-coded	Plug (male), M12, 4-pin	Socket 2.0 mm strip 2x13-pin	24	**R412003484**
				Socket 2.0 mm strip 3x13-pin	32	**R412008516**
DeviceNet	Plug (male), M12, 5-pin, A-coded	Socket (female), M12, 5-pin, A-coded	Plug (male), M12, 4-pin	Socket 2.0 mm strip 2x13-pin	24	R412004346
				Socket 2.0 mm strip 3x13-pin	32	R412008517
CANopen	Plug (male), M12, 5-pin, A-coded	Socket (female), M12, 5-pin, A-coded	Plug (male), M12, 4-pin	Socket 2.0 mm strip 2x13-pin	24	R412005747
				Socket 2.0 mm strip 3x13-pin	32	**R412008518**
INTERBUS-S	Plug (male), M12, 5-pin, B-coded	Socket (female), M12, 5-pin, B-coded	Plug (male), M12, 4-pin	Socket 2.0 mm strip 2x13-pin	24	R412005748
				Socket 2.0 mm strip 3x13-pin	32	R412008515
ETHERNET IP	–	Socket (female), M12, 5-pin, D-coded	Plug (male), M12, 4-pin	Socket 2.0 mm strip 3x13-pin	32	**R412012755**

Part No.	Operating Instructions	Weight	Fig.	Note
		[kg]		
R412003484 **R412008516**	R499050016	0.84	Fig. 1	–
R412004346 R412008517	R499050019	1	Fig. 2	–
R412005747 **R412008518**	R412005742	1	Fig. 3	–
R412005748 R412008515	R412005743	0.91	Fig. 4	–
R412012755	R412012728	1	Fig. 5	1)

1) Only star topology
Scope of delivery incl. 2 tie rod extensions and seal

Part numbers in bold are more readily available.

Optional field bus connection with I/O function (CMS), B-design

▶ Bus module with driver ▶ Field bus protocol: Profibus DP / DeviceNet / CANopen / INTERBUS-S / ETHERNET IP

Figure 1

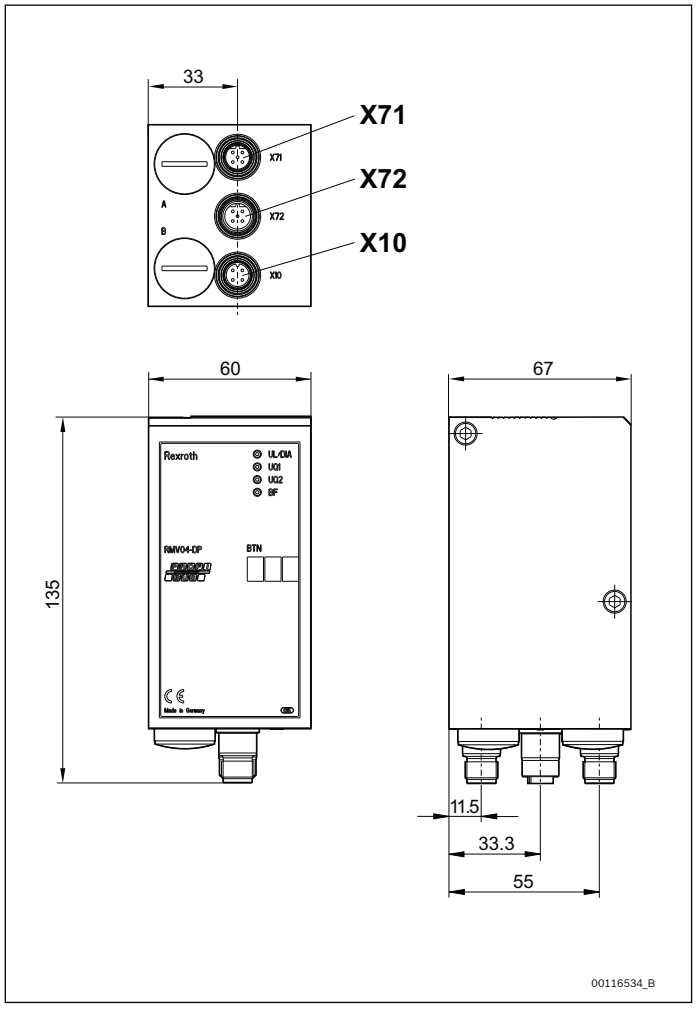
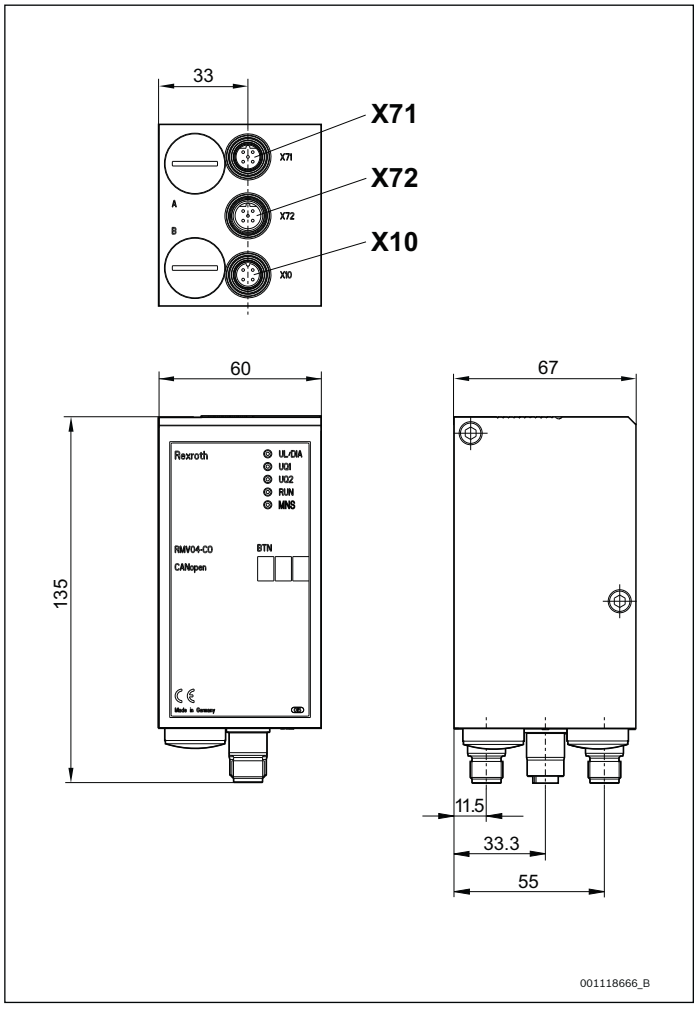


Figure 2



Optional field bus connection with I/O function (CMS), B-design

▶ Bus module with driver ▶ Field bus protocol: Profibus DP / DeviceNet / CANopen / INTERBUS-S / ETHERNET IP

Figure 3

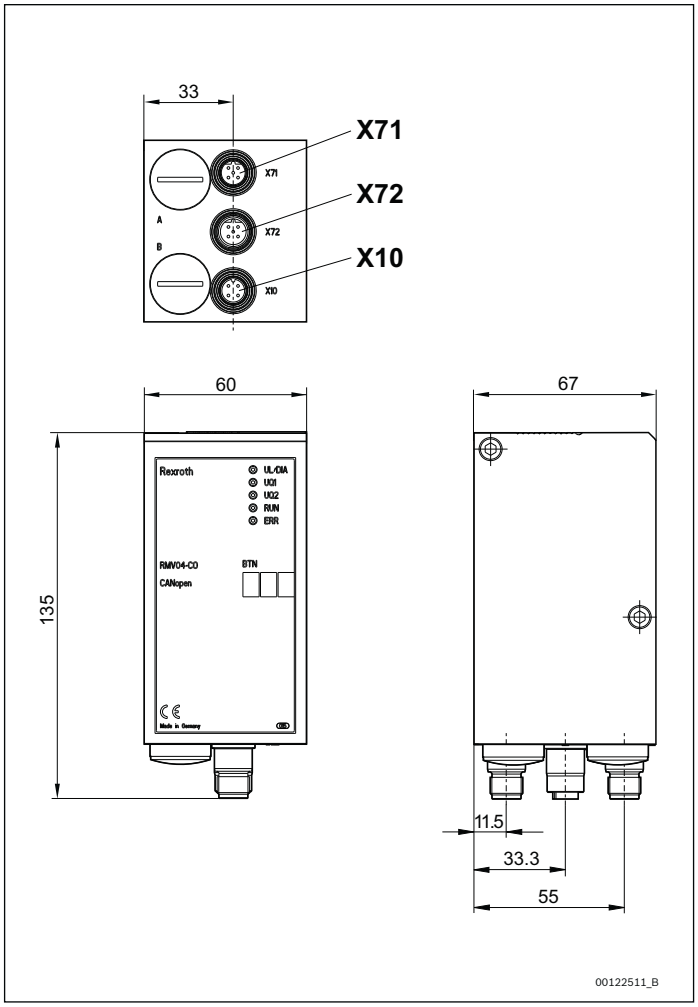
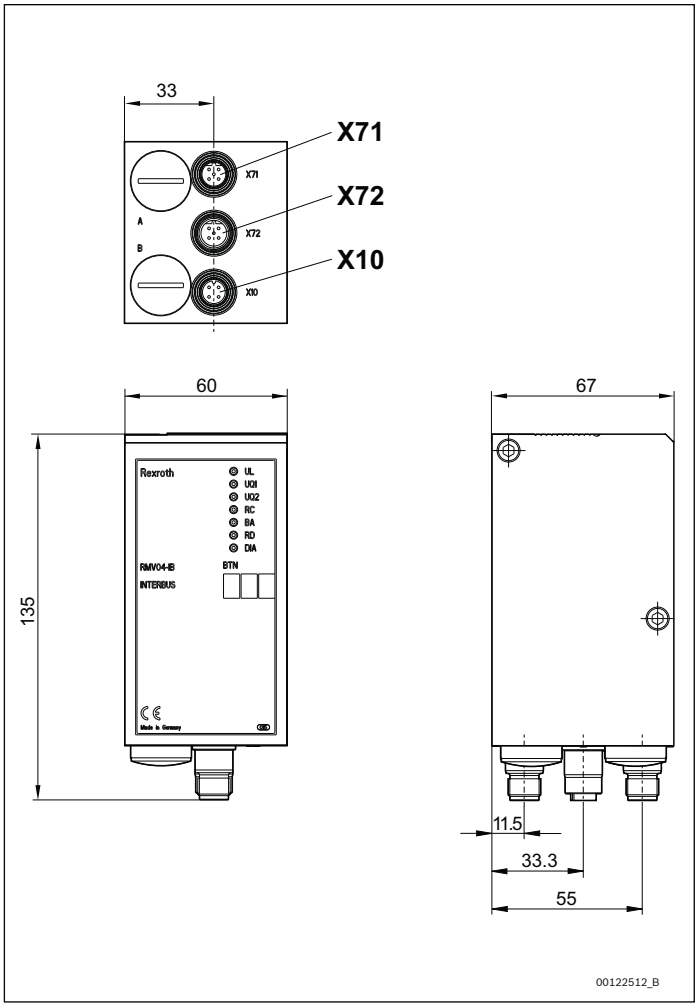


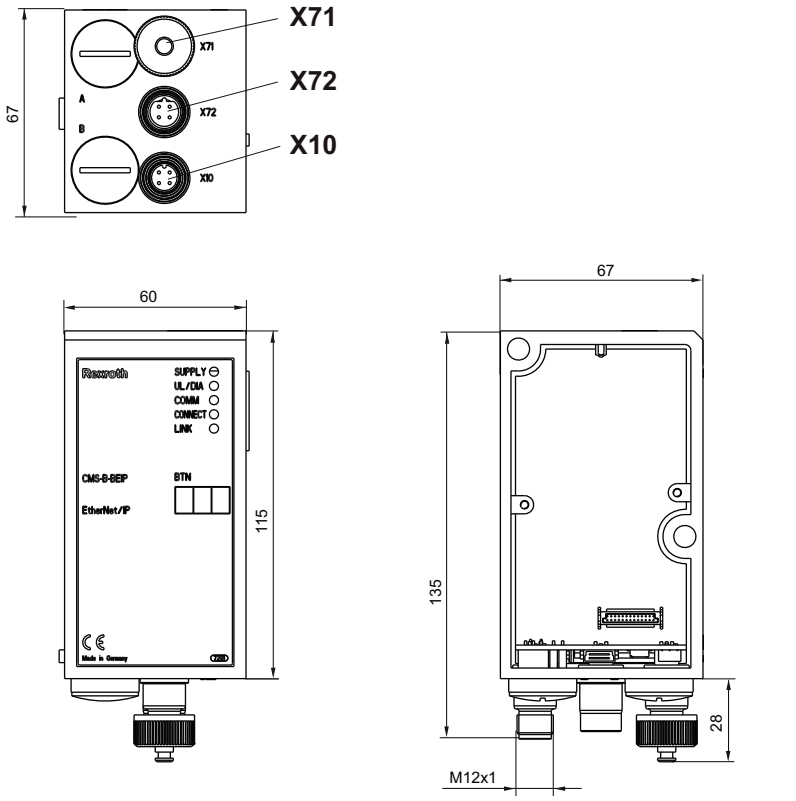
Figure 4



Optional field bus connection with I/O function (CMS), B-design

▶ Bus module with driver ▶ Field bus protocol: Profibus DP / DeviceNet / CANopen / INTERBUS-S / ETHERNET IP

Figure 5



X71 = optional interface
X72 = BUS
X10 = POWER

Connection with diagnostics (DDL), B-design

▶ Driver

Ambient temperature min./max.	+0°C / +50°C

Protection class, with plug	IP 65
Operational voltage electronics	24 V DC
Power consumption electronics	0.05 A
Operational voltage valves	24 V DC
Number of outputs for valve coils	32
Total output for valves	3 A
Max. power consumption per coil	0.1 A
Max. cable length (DDL)	40 m
Max. number of DDL participants	14
VTS connection	Socket (female) 2.0 mm strip 2x13-pin

Materials:	
Housing	Die-cast aluminum

Technical Remarks

- ▶ Max. current in 0 V line: 4 A
- ▶ You will find assignment schemes for the product in the operating instructions, or contact the nearest Bosch Rexroth sales office.

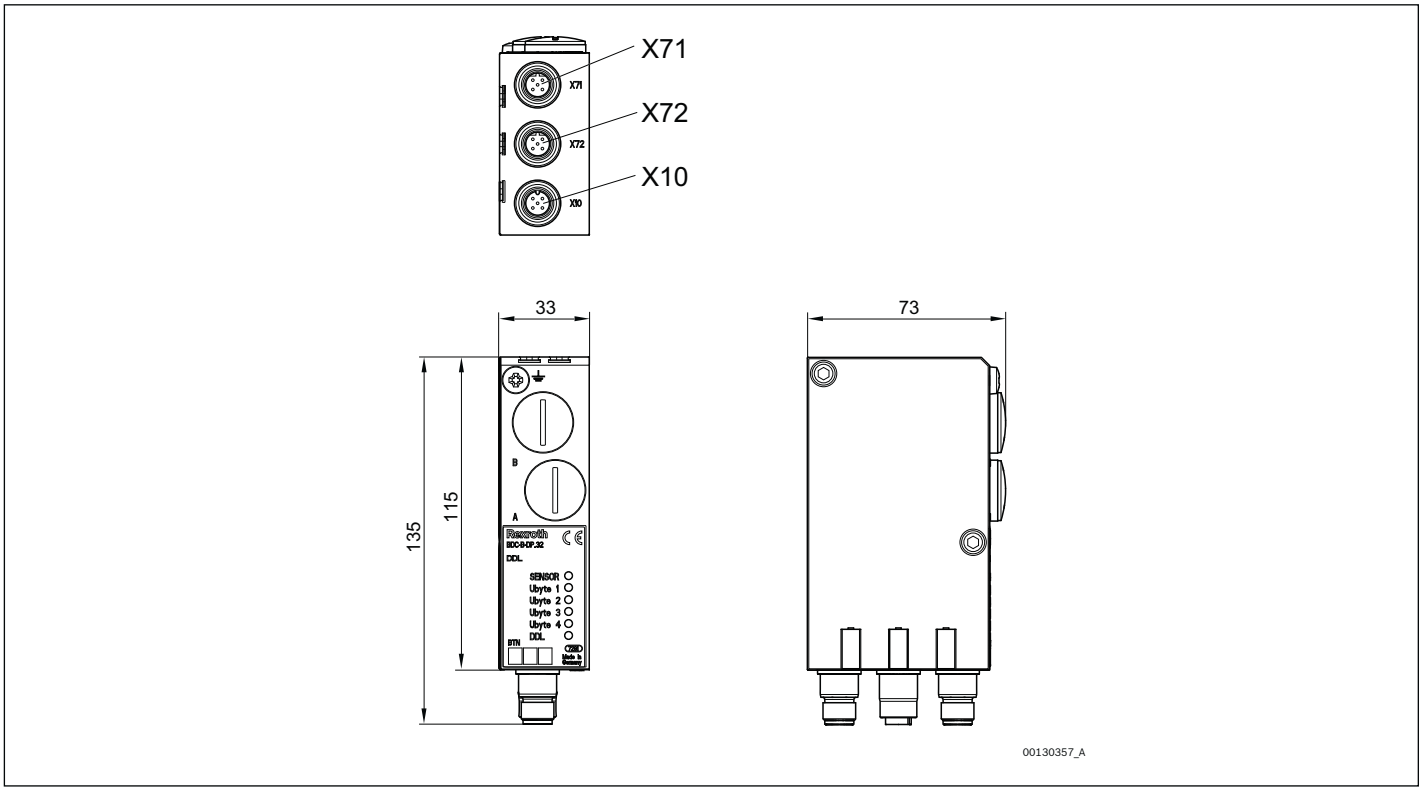
Communication port BUS INX71	Communication port BUS OUTX72	Power supply X10 port for second power supply	Operating Instructions	Weight	Part No.
				[kg]	
Plug (male), M12, 5-pin, A-coded	Socket (female), M12, 5-pin, A-coded	Plug (male), M12, 4-pin, A-coded	R412009417	0.29	**R412008541**
Scope of delivery incl. 2 tie rod extensions and seal					

Part numbers in bold are more readily available.

Connection with diagnostics (DDL), B-design

▶ Driver

Dimensions



Connection with diagnostics, optionally with I/O function (DDL), B-design

▶ Driver

Ambient temperature min./max.	+0°C / +50°C

Protection class, with plug	IP 65
Operational voltage electronics	24 V DC
Power consumption electronics	0.2 A
Operational voltage valves	24 V DC
Number of outputs for valve coils	24
Total output for valves	3 A
Max. power consumption per coil	0.1 A
Max. cable length (DDL)	40 m
Max. number of DDL participants	14
VTS connection	Socket (female) 2.0 mm strip 2x13-pin
I/O extension possible, Max.	6
I/O module extension Input Max.	3
I/O module extension Output Max.	3

Materials:	
Housing	Die-cast aluminum

Connection with diagnostics, optionally with I/O function (DDL), B-design

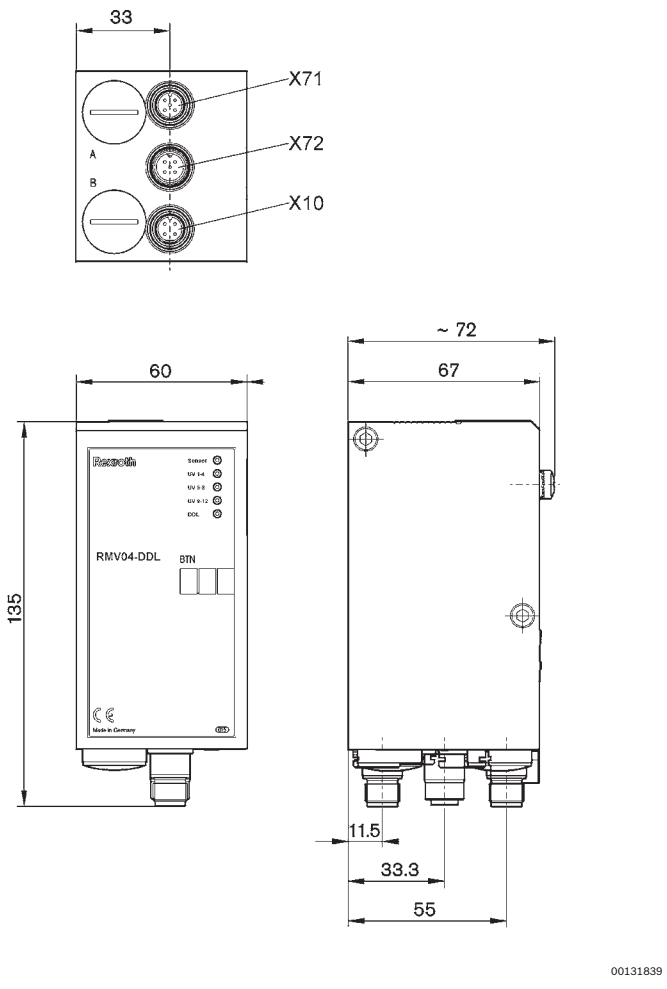
▶ Driver

Technical Remarks

- ▶ Max. current in 0 V line: 4 A
- ▶ You will find assignment schemes for the product in the operating instructions, or contact the nearest Bosch Rexroth sales office.

Communication port BUS INX71	Communication port BUS OUTX72	Power supply X10 port for second power supply	Operating Instructions	Weight	Part No.
				[kg]	
Plug (male), M12, 5-pin, A-coded	Socket (female), M12, 5-pin, A-coded	Plug (male), M12, 4-pin, A-coded	R499050020	1.041	**R412006880**
Scope of delivery incl. 2 tie rod extensions and seal					

Dimensions



Part numbers in bold are more readily available.

Field bus connection with AS i, B-design

▶ Bus module with driver ▶ Direct field bus connection ▶ Field bus protocol: AS-i

Ambient temperature min./max.	+0°C / +50°C
Protection class, with plug	IP 65
Operational voltage electronics	AS-i compatible
Operational voltage valves	24 V DC
Max. power consumption per coil	0.03 A
VTS connection	Socket 2.0 mm strip 2x13-pin
ID Code / ID2 Code	F / E
I/O Code	8

Materials:	
Housing	Aluminum, Die-cast aluminum

The delivered product may vary from that in the illustration.

Technical Remarks

▶ You will find assignment schemes for the product in the operating instructions, or contact the nearest Bosch Rexroth sales office.

Field bus protocol	Communication port BusX71	power supply X10 port for second power supply	Number of outputs for valve coils	Power consumption electronics	Operating Instructions	Weight	Part No.
				[A]		[kg]	
AS-i	Yellow AS-i flat cable	Black AS-i flat cable	4	0.05	R499050017	0.14	**R412003488**
			8	0.08			**R412006761**

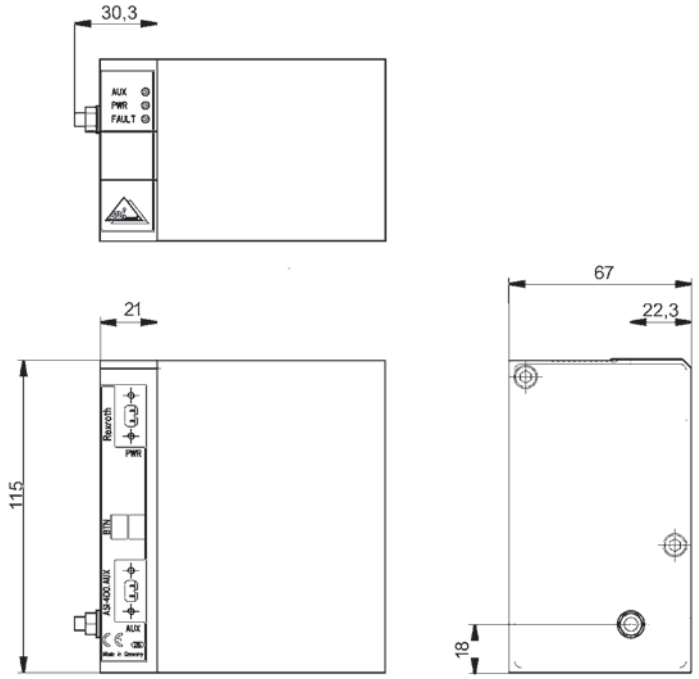
Part No.	Figures
R412003488	Fig. 1
R412006761	Fig. 2
Scope of delivery incl. seal and mounting screws	

Part numbers in bold are more readily available.

Field bus connection with AS i, B-design

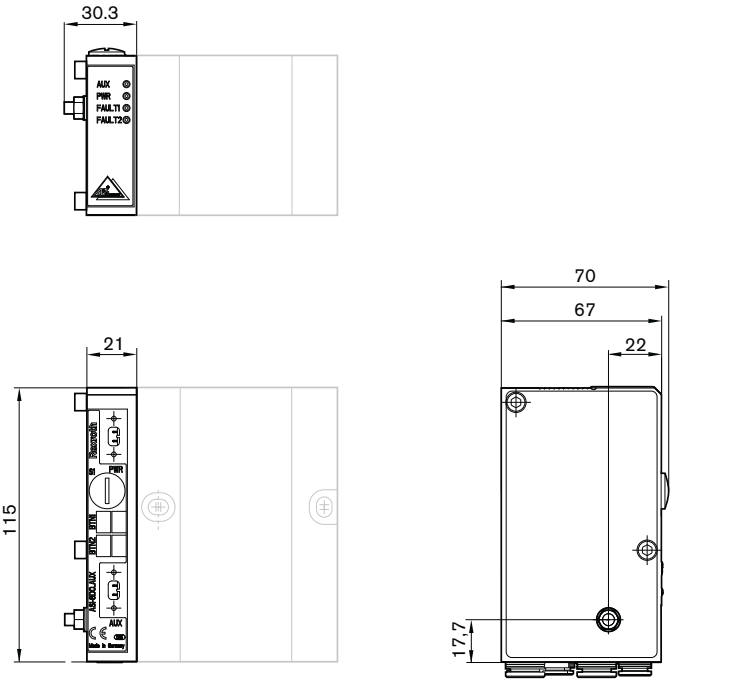
▶ Bus module with driver ▶ Direct field bus connection ▶ Field bus protocol: AS-i

Figure 1



AS-i, 4DO-AUX

Figure 2



AS-i, 8DO-AUX

Field bus connection with AS i, B-design

▶ Bus module with driver ▶ Direct field bus connection ▶ Field bus protocol: AS-i with inputs

Ambient temperature min./max.	+0°C / +50°C

Protection class, with plug	IP 65
Operational voltage electronics	AS-i compatible
Operational voltage valves	24 V DC
Max. power consumption per coil	0.03 A
VTS connection	Socket 2.0 mm strip 2x13-pin
ID Code / ID2 Code	F / E
I/O Code	7

Materials:	
Housing	Aluminum

The delivered product may vary from that in the illustration.

Technical Remarks

▶ You will find assignment schemes for the product in the operating instructions, or contact the nearest Bosch Rexroth sales office.

Field bus protocol	Communication port BusX71	power supply X10 port for second power supply	Number of inputs	Number of outputs for valve coils	I/O connection	Part No.
AS-i with inputs	Yellow AS-i flat cable	Black AS-i flat cable	8	8	input or output, Socket, M8, 8x	**R412003486**
			4	4	input or output, Socket, M8, 4x	R412003487

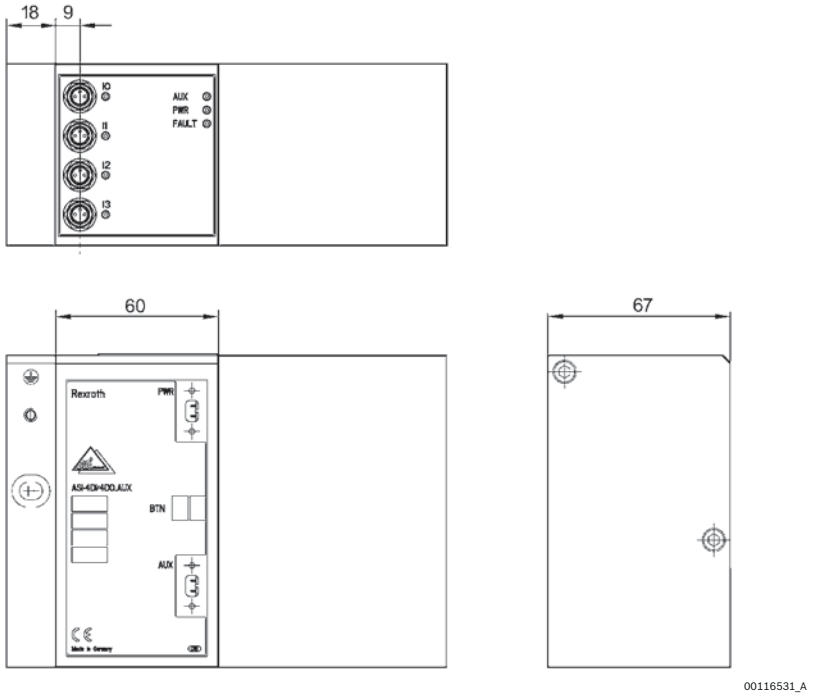
Part No.	Power consumption electronics	Operating instructions	Figures
	[A]		
R412003486	0.1	R499050017	Fig. 2
R412003487	0.05		Fig. 1
Scope of delivery incl. 2 tie rod extensions and seal			

Part numbers in bold are more readily available.

Field bus connection with AS i, B-design

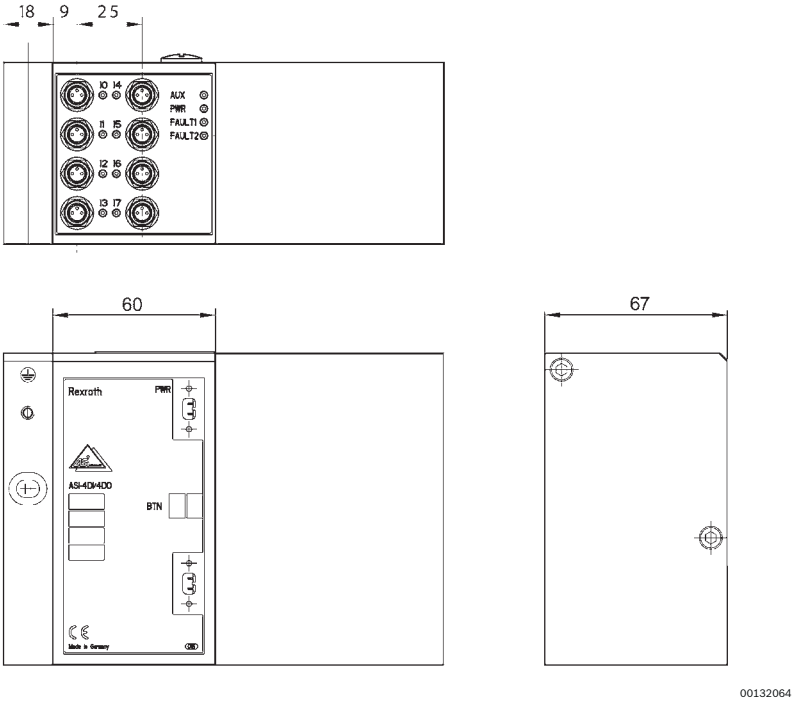
▶ Bus module with driver ▶ Direct field bus connection ▶ Field bus protocol: AS-i with inputs

Figure 1



4DI/4DO-AUX

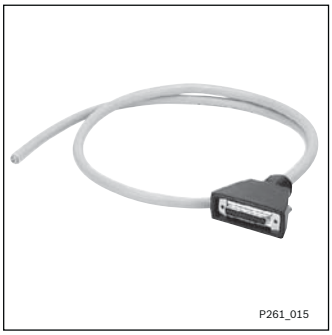
Figure 2



8DI/8DO-AUX

Multiple plug D-Sub (25-pin)

▶ Socket, D-Sub, 25-pin



Ambient temperature min./max.	+0°C / +50°C

Protection class, with plug	IP 65
Operational voltage DC max.	24 V
Operational voltage DC max.	24 V
Max. power consumption per coil	0.03 A

Materials:

Housing	Polyamide

Technical Remarks

▶ The specified protection class is valid only in assembled and tested state.

Electrical interface	Cable exit	Cable sheath	Bending radius min.	Cable length L		Weight	Fig.	Part No.
[Port 1]			[mm]	[m]		[kg]		
Socket, D-Sub, 25-pin	straight	Polyvinyl chloride	168	3	–	0.67	Fig. 1	**R412011244**
Socket, D-Sub, 25-pin	straight	Polyvinyl chloride	168	5	–	1.06	Fig. 1	**R412011245**
Socket, D-Sub, 25-pin	straight	Polyvinyl chloride	168	10	–	2.035	Fig. 1	**R412011246**
Socket, D-Sub, 25-pin	angled 90°	Polyvinyl chloride	168	3	–	0.675	Fig. 2	R412011248
Socket, D-Sub, 25-pin	angled 90°	Polyvinyl chloride	168	5	–	1.065	Fig. 2	R412011249
Socket, D-Sub, 25-pin	angled 90°	Polyvinyl chloride	168	10	–	2.04	Fig. 2	R412011250
Socket, D-Sub, 25-pin	straight	Polyurethane	62	3	suitable for dynamic laying	0.8	Fig. 1	**R412011252**
Socket, D-Sub, 25-pin	straight	Polyurethane	62	5	suitable for dynamic laying	1.28	Fig. 1	**R412011253**
Socket, D-Sub, 25-pin	straight	Polyurethane	62	10	suitable for dynamic laying	2.475	Fig. 1	**R412011254**
Socket, D-Sub, 25-pin	angled 90°	Polyurethane	62	3	suitable for dynamic laying	0.805	Fig. 2	R412011256
Socket, D-Sub, 25-pin	angled 90°	Polyurethane	62	5	suitable for dynamic laying	1.285	Fig. 2	R412011257
Socket, D-Sub, 25-pin	angled 90°	Polyurethane	62	10	suitable for dynamic laying	2.48	Fig. 2	R412011258

Part numbers in bold are more readily available.

Multiple plug D-Sub (25-pin)

▶ Socket, D-Sub, 25-pin

Figure 1

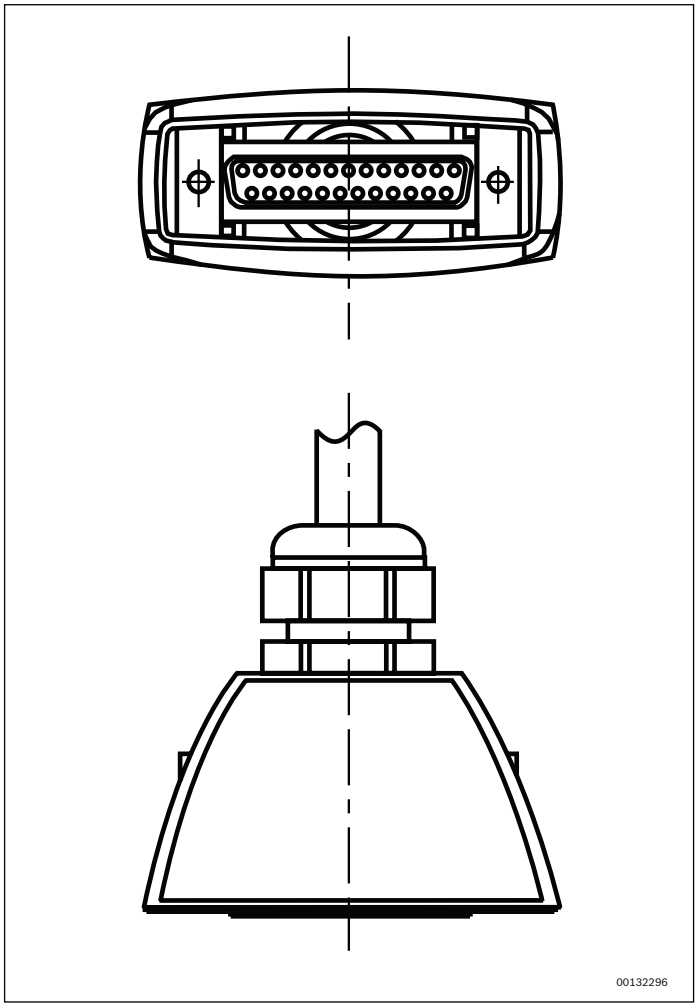
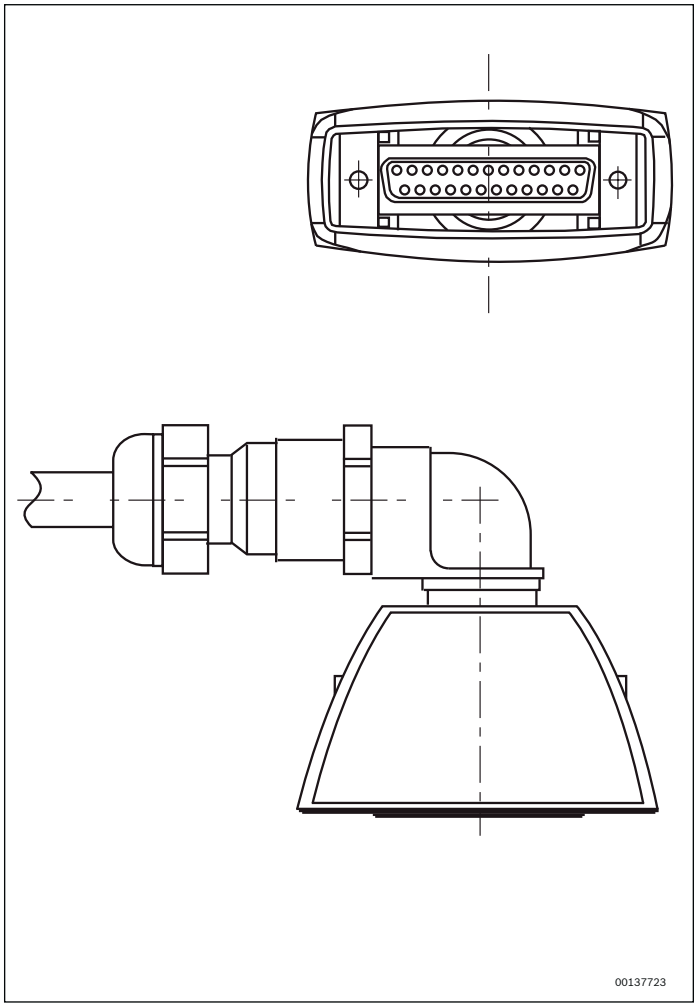
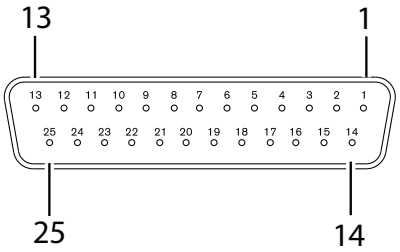


Figure 2



PIN assignment and cable colors



Cable indentification as per DIN 47100

Multiple plug (44-pin)

▶ Socket, D-Sub, 44-pin ▶ High density

Ambient temperature min./max.	+0°C / +50°C
Protection class, with plug	IP 65

Materials:

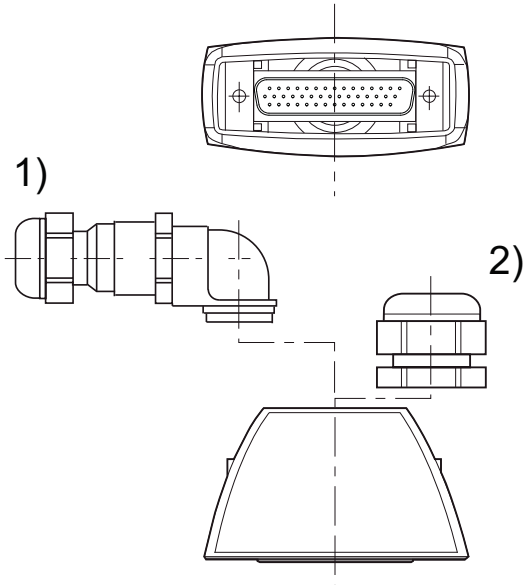
Housing	Polyamide

Technical Remarks

▶ The specified protection class is valid only in assembled and tested state.

Operating voltage	Cable exit	Housing color	Weight	Part No.
DC				
[V]			**[kg]**	
24	straight 180°angled 90°	Black	0.042	**R412011259**
Scope of delivery: multipole plug including 1 tube nut and 1 elbow fitting				

Dimensions



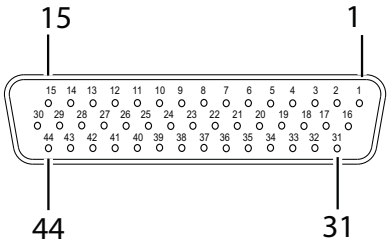
1) Elbow fitting
2) Tube nut

Part numbers in bold are more readily available.

Multiple plug (44-pin)

▶ Socket, D-Sub, 44-pin ▶ High density

PIN assignment and cable colors



Cable indentification as per DIN 47100

Multiple plug (44-pin)

▶ High density ▶ Socket, D-Sub, 44-pin ▶ High density

Ambient temperature min./max.	+0°C / +50°C
Protection class, with plug	IP 65
Operating voltage DC max.	24 V
Materials:	
Housing	Polyamide
Housing color	Black

Technical Remarks

▶ The specified protection class is valid only in assembled and tested state.

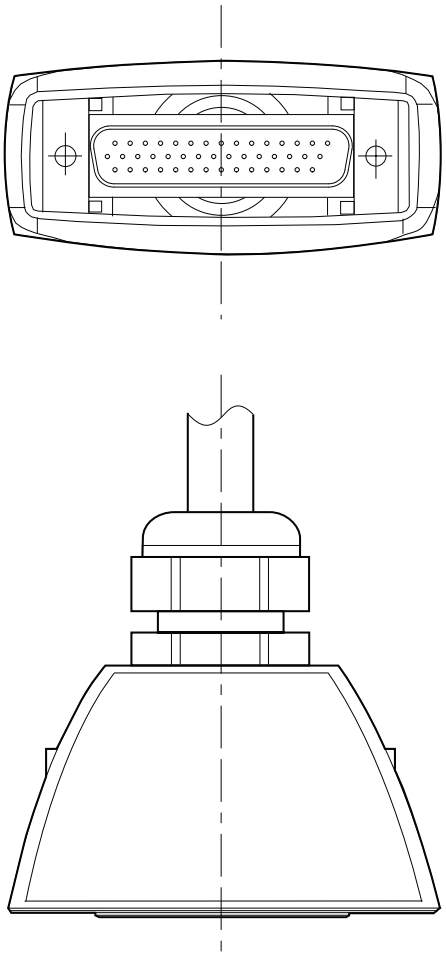
Electrical interface	Cable exit	Cable sheath	Bending radius min.	Cable length L		Weight	Part No.
[Port 1]			[mm]	[m]		[kg]	
Socket, D-Sub, 44-pin	straight	Polyvinyl chloride	166	3	–	0.635	**R412011262**
Socket, D-Sub, 44-pin	straight	Polyvinyl chloride	166	5	–	1.005	**R412011263**
Socket, D-Sub, 44-pin	straight	Polyvinyl chloride	166	10	–	1.93	**R412011264**
Socket, D-Sub, 44-pin	angled 90°	Polyvinyl chloride	166	5	–	1.01	**R412011267**
Socket, D-Sub, 44-pin	angled 90°	Polyvinyl chloride	166	10	–	1.935	**R412011268**
Socket, D-Sub, 44-pin	straight	Polyurethane	62	5	suitable for dynamic laying	1.3	**R412011271**
Socket, D-Sub, 44-pin	straight	Polyurethane	62	10	suitable for dynamic laying	2.52	**R412011272**
Socket, D-Sub, 44-pin	angled 90°	Polyurethane	62	10	suitable for dynamic laying	2.525	**R412011276**

Part numbers in bold are more readily available.

Multiple plug (44-pin)

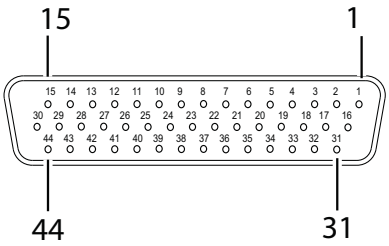
▶ High density ▶ Socket, D-Sub, 44-pin ▶ High density

Dimensions



00133906

PIN assignment and cable colors



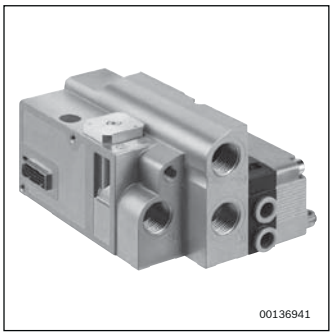
Cable indentification as per DIN 47100

00137727

Part numbers in bold are more readily available.

CKD kit, for series HF02-LG

▶ Compressed air connection output: Ø10 ▶ Can be assembled into blocks ▶ Single base plate principle ▶ With collective pilot air exhaust



Ambient temperature min./max.	+0°C / +50°C

Medium temperature min./max.	+0°C / +50°C
Medium	Compressed air
Working pressure min./max.	-0.9 bar / 10 bar
Control pressure min./max.	2.5 bar / 10 bar
Number of valve positions	1
Grid dimension	19.8 mm
Tightening torque for mounting screws	1.1 Nm+0.2
Exhaust (3,5)	With directional exhaust (3/5) Ports separated

Materials:	
Subbase	Aluminum
Push-in fitting	Brass, nickel-plated
Seals	Nitrile rubber

Technical Remarks

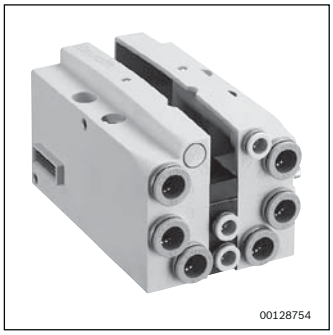
- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter “Technical information.”
- The internal and external pneumatic pilots can be adjusted using the change-over plate on the left end plate. For internal pilot, working pressure is limited to 2.5 bar to 10 bar.

Type	Compressed air connection					Qn	Part No.
	Input	Output	Exhaust	Pilot control exhaust	Pilot connection		
	[1]	[2 / 4]	[3 / 5]	[R]	[X]	[l/min]	
2 x end plates with push-in fittings 1, 3, 5, R, X and 1 x base plate with push-in fittings 2, 4, Ø 10	G 1/2	Ø 10	G 1/2	G 1/8	G 1/8	1400	R412009658
2 x end plates with push-in fittings 1, 3, 5, R, X and 1 x base plate with push-in fittings 2, 4, G1/4	G 1/2	Ø 10	G 1/2	G 1/8	G 1/4	1400	R412009659
1, 3 and 5 = G 1/2, 15 mm deep 2 and 4 = push-in fitting Ø 10 mm or thread connection G 1/4 X and R = G 1/8, 8 mm deep							

Part numbers in bold are more readily available.

CKD kit, metric, for series HF03-LG

▶ Compressed air connection output: Ø 8 - G 1/8 ▶ Can be assembled into blocks ▶ Single base plate principle
▶ With collective pilot air exhaust



Ambient temperature min./max.	+0°C / +50°C

Medium temperature min./max.	+0°C / +50°C
Medium	Compressed air
Working pressure min./max.	See table
Number of valve positions	1
Grid dimension	15.8 mm
Tightening torque for mounting screws	1.1 Nm
Exhaust (3,5)	With directional exhaust (3/5) Ports separated

Materials:	
Subbase	Polyamide
Push-in fitting	Brass, nickel-plated
Seals	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.
- ▶ The oil content of air pressure must remain constant during the life cycle.
- ▶ Use only the approved oils from Bosch Rexroth, see chapter “Technical information.”

Type	Compressed air connection					Qn	Part No.
	Input	Output	Exhaust	Pilot control exhaust	Pilot connection		
	[1]	[2 / 4]	[3 / 5]	[R]	[X]	[l/min]	
2x end plates with push-in fittings 1, 3, 5, R, X and 1x subbase with push-in fittings 2, 4, Ø 8, internal pilot control	Ø 12	Ø 8	Ø 12	Ø 8	without	700	**R412005795**
2x end plates with push-in fittings 1, 3, 5, R, X and 1x subbase with push-in fittings 2, 4, Ø 8, external pilot control	Ø 12	Ø 8	Ø 12	Ø 8	Ø 8	700	**R412005803**
2x end plates with push-in fittings 1, 3, 5, R, X and 1x subbase with push-in fittings 2, 4, G1/8, internal pilot control	Ø 12	G 1/8	Ø 12	Ø 8	without	700	**R412005839**
2x end plates with push-in fittings 1, 3, 5, R, X and 1x subbase with push-in fittings 2, 4, G1/8, external pilot control	Ø 12	G 1/8	Ø 12	Ø 8	Ø 8	700	R412005945

Part numbers in bold are more readily available.

CKD kit, metric, for series HF03-LG

▶ Compressed air connection output: Ø 8 - G 1/8 ▶ Can be assembled into blocks ▶ Single base plate principle

▶ With collective pilot air exhaust

Part No.	Working pressure min./max.	Pilot
R412005795	2.5 / 10	internal
R412005803	-1 / 10	external
R412005839	2.5 / 10	internal
R412005945	-1 / 10	external

1 = plug-in connection Ø 12 mm or 1/2”
2 and 4 = plug-in connection Ø 8 mm or threaded connection G1/8 or 1/8 NPTF
3 and 5 = plug-in connection Ø 12 mm or 1/2”
R = restricted pilot exhaust, plug-in connection Ø 8 mm or 1/4”
X = external pilot control, plug-in connection Ø 8 mm or 1/4”, connection X plugged with internal pilot control

CKD kit, inch, for series HF03-LG

▶ Compressed air connection output: 1/8-27 NPTF - Ø 8 ▶ Can be assembled into blocks ▶ Single base plate principle

▶ With collective pilot air exhaust

Ambient temperature min./max.	+0°C / +50°C
Medium temperature min./max.	+0°C / +50°C
Medium	Compressed air
Working pressure min./max.	See table
Number of valve positions	1
Grid dimension	15.8 mm
Tightening torque for mounting screws	1.1 Nm
Exhaust (3,5)	With directional exhaust (3/5) Ports separated

Materials:	
Subbase	Polyamide
Push-in fitting	Brass, nickel-plated
Seals	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.
- ▶ The oil content of air pressure must remain constant during the life cycle.
- ▶ Use only the approved oils from Bosch Rexroth, see chapter “Technical information.”

Part numbers in bold are more readily available.

CKD kit, inch, for series HF03-LG

▶ Compressed air connection output: 1/8-27 NPTF - Ø 8 ▶ Can be assembled into blocks ▶ Single base plate principle ▶ With collective pilot air exhaust

Type	Compressed air connection					Qn	Part No.
	Input	Output	Exhaust	Pilot control exhaust	Pilot connection		
	[1]	[2 / 4]	[3 / 5]	[R]	[X]	[l/min]	
2x end plates with push-in fittings 1, 3, 5, R, X and 1x subbase with push-in fittings 2, 4, NPTF1/8, internal pilot control	1/2 inch	1/8-27 NPTF	1/2 inch	1/4 inch	without	700	R412005961
2x end plates with push-in fittings 1, 3, 5, R, X and 1x subbase with push-in fittings 2, 4, NPTF1/8, external pilot control	1/2 inch	1/8-27 NPTF	1/2 inch	1/4 inch	1/4 inch	700	R412005976
2x end plates with push-in fittings 1, 3, 5, R, X and 1x subbase with push-in fittings 2, 4, G1/8, internal pilot control	1/2 inch	G 1/8	1/2 inch	1/4 inch	without	700	R412005950
2x end plates with push-in fittings 1, 3, 5, R, X and 1x subbase with push-in fittings 2, 4, G1/8, external pilot control	1/2 inch	G 1/8	1/2 inch	1/4 inch	1/4 inch	700	R412005952
2x end plates with push-in fittings 1, 3, 5, R, X and 1x subbase with push-in fittings 2, 4, Ø8, internal pilot control	1/2 inch	Ø 8	1/2 inch	1/4 inch	without	700	R412006547
2x end plates with push-in fittings 1, 3, 5, R, X and 1x subbase with push-in fittings 2, 4, Ø8, external pilot control	1/2 inch	Ø 8	1/2 inch	1/4 inch	1/4 inch	700	R412006626

Part No.	Working pressure min./max.	Pilot
R412005961	2.5 / 10	internal
R412005976	-1 / 10	external
R412005950	2.5 / 10	internal
R412005952	-1 / 10	external
R412006547	2.5 / 10	internal
R412006626	-1 / 10	external

1 = plug-in connection Ø 12 mm or 1/2”
2 and 4 = plug-in connection Ø 8 mm or threaded connection G1/8 or 1/8 NPTF
3 and 5 = plug-in connection Ø 12 mm or 1/2”
R = restricted pilot exhaust, plug-in connection Ø 8 mm or 1/4”
X = external pilot control, plug-in connection Ø 8 mm or 1/4”, connection X plugged with internal pilot control

Part numbers in bold are more readily available.

HF04, CKD kit metric

▶ Compressed air connection output: Ø 6 - M 7 ▶ Can be assembled into blocks ▶ Double base plate principle

▶ Reversed pressure supply permissible ▶ Bus module extension possible ▶ I/O extension possible ▶ With collective pilot air exhaust

Function	VTS
Version	Multipole
Ambient temperature min./max.	-5°C / +50°C
Medium temperature min./max.	+0°C / +50°C
Medium	Compressed air
Working pressure min./max.	See table
Power supply connection	Plug, D-Sub, 25-pin
Number of valve positions	2
Grid dimension	11.8 mm
Rail mounting DIN EN 60715	TH35 x 15
Mounting screw	cross recessed DIN EN ISO 4757-Z0
Tightening torque for mounting screws	0.2 Nm+0.05
Direction of pneumatic port (1)	On the side
Direction of pneumatic port (3,5)	On the side
Direction of pneumatic port (2,4)	On the side
Direction of pneumatic port (R)	On the side
Direction of pneumatic port (X)	On the side
Exhaust (3,5)	With directional exhaust (3/5) Ports separated

Materials:	
Subbase	Polyamide
Push-in fitting	Brass, nickel-plated
Seals	Acrylonitrile butadiene rubber
Screws	Steel
Tie-rods	Aluminum

Technical Remarks

- ▶ The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- ▶ The oil content of air pressure must remain constant during the life cycle.
- ▶ Use only the approved oils from Bosch Rexroth, see chapter “Technical information.”

Compressed air connection					Working pressure min./max.	Pilot	Part No.
Input	Output	Exhaust	Pilot control exhaust	Pilot connection			
[1]	[2 / 4]	[3 / 5]	[R]	[X]			
	Ø 6			-	3 / 8	internal	**R412008545**
Ø 8		Ø10	Ø 6				
	Ø 6			Ø 6	-0.9 / 10	external	R412008546
	M7			-	3 / 8	internal	R412008547
	M7			Ø 6	-0.9 / 10	external	R412008548

Part numbers in bold are more readily available.

HF04, CKD kit metric

▶ Compressed air connection output: Ø 6 - M 7 ▶ Can be assembled into blocks ▶ Double base plate principle

▶ Reversed pressure supply permissible ▶ Bus module extension possible ▶ I/O extension possible ▶ With collective pilot air exhaust

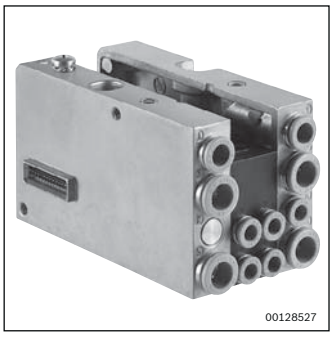
Part No.	DC operating voltage	Voltage tolerance DC
	[V]	
R412008545 R412008546 R412008547 R412008548	24 V	-10% / +10%

1 = plug-in connection Ø 8 mm
2 and 4 = plug-in connection Ø 6 mm or thread connections M7
3 and 5 = plug-in connection Ø 10 mm
R = collected pilot exhaust, plug-in connection Ø 6 mm
X = external pilot, plug-in connection Ø 6 mm, connection X plugged with internal pilot control

HF04, CKD kit inch

▶ Compressed air connection output: M 7 ▶ Can be assembled into blocks ▶ Double base plate principle

▶ Reversed pressure supply permissible ▶ Bus module extension possible ▶ I/O extension possible ▶ With collective pilot air exhaust



Function	VTS
Version	Multipole
Ambient temperature min./max.	-5°C / +50°C
Medium temperature min./max.	+0°C / +50°C
Medium	Compressed air
Working pressure min./max.	See table
Power supply connection	Plug, D-Sub, 25-pin
Number of valve positions	2
Grid dimension	11.8 mm
Rail mounting DIN EN 60715	TH35 x 15
Mounting screw	cross recessed DIN EN ISO 4757-Z0
Tightening torque for mounting screws	0.2 Nm+0.05
Direction of pneumatic port (1)	On the side
Direction of pneumatic port (3,5)	On the side
Direction of pneumatic port (2,4)	On the side
Direction of pneumatic port (R)	On the side
Direction of pneumatic port (X)	On the side
Exhaust (3,5)	With directional exhaust (3/5) Ports separated

Materials:	
Subbase	Polyamide
Push-in fitting	Brass, nickel-plated
Seals	Acrylonitrile butadiene rubber
Screws	Steel
Tie-rods	Aluminum

Part numbers in bold are more readily available.

HF04, CKD kit inch

▶ Compressed air connection output: M 7 ▶ Can be assembled into blocks ▶ Double base plate principle

▶ Reversed pressure supply permissible ▶ Bus module extension possible ▶ I/O extension possible ▶ With collective pilot air exhaust

Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter “Technical information.”

Compressed air connection					Working pressure min./max.	Pilot	Part No.
Input	Output	Exhaust	Pilot control exhaust	Pilot connection			
[1]	[2 / 4]	[3 / 5]	[R]	[X]			
3/8 inch	M7	3/8 inch	1/4 inch	-	3 / 8	internal	R412008549
				1/4 inch	-0.9 / 10	external	R412008550

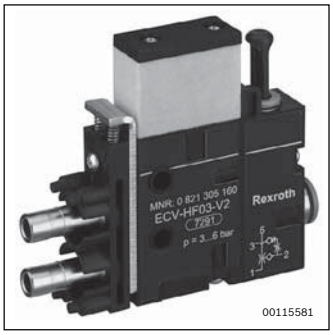
Part No.	DC operating voltage	Voltage tolerance DC
	[V]	
R412008549 R412008550	24 V	-10% / +10%

1 = plug-in connection 3/8” (inch)
2 and 4 = thread connections M7
3 and 5 = plug-in connection 3/8” (inch)
R = collected pilot exhaust, plug-in connection 1/4” (inch)
X = external pilot, plug-in connection 1/4” (inch), connection X plugged with internal pilot control

Part numbers in bold are more readily available.

Standard compact injector, Series ECV

▶ for valve terminal system HF03



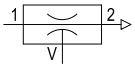
Ambient temperature min./max.	+0°C / +50°C

Medium temperature min./max.	+0°C / +50°C
Working pressure min./max.	3 bar / 6 bar
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 mg/m³ - 1 mg/m³
Nozzle Ø	1.5 mm
Max. vacuum level at p.opt.	76%
Max. suction capacity	63 l/min
Air consumption at p.opt.	116 l/min

Materials:	
Housing	Polyamide, fiber-glass reinforced
Seal	Acrylonitrile butadiene rubber
Nozzle	Brass
Silencers	Polyethylene

Technical Remarks

- ▶ Note: all data refers to an ambient pressure of 1013 mbar and an ambient temperature of 20 °C.
- ▶ The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- ▶ The oil content of air pressure must remain constant during the life cycle.

	Type	Com-pressed air connection	Vacuum connection	Port exhaust	Sound pressure level intake effect	Sound pressure level intake effect	Weight	Note	Part No.
					[dBA]	[dBA]	[kg]		
	ECV-PC-15-NN	Ø 8	Ø 8	Ø 8	-	-	0.11	2)	0821305160
		Ø 8	Ø 8	-	67	73		1)	0821305161
		G 1/8	G 1/8	G 1/8	-	-		2)	0821305164
		G 1/8	G 1/8	-	67	73		1)	**0821305165**

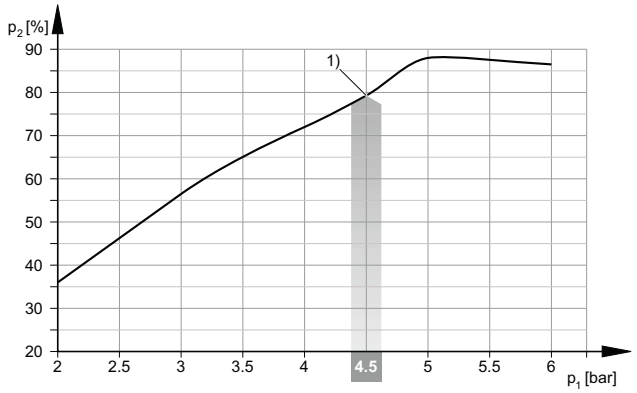
1) with silencer
2) With ventilation port

Part numbers in bold are more readily available.

Standard compact injector, Series ECV

▶ for valve terminal system HF03

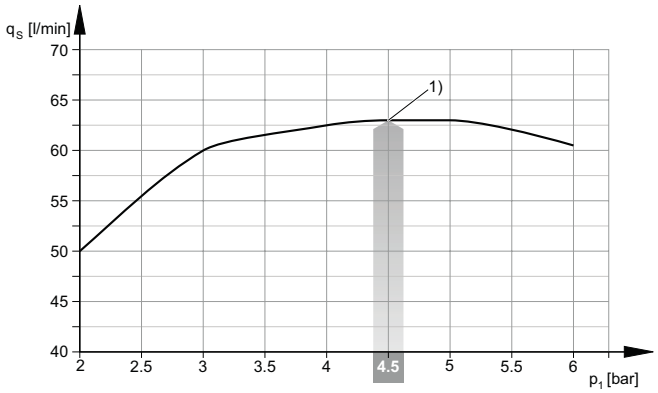
Vacuum p2 depending on working pressure p1



00115828

1) optimum working pressure

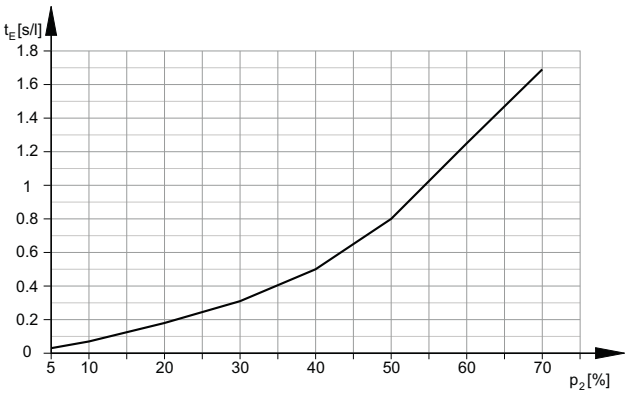
Suction capacity qs depending on working pressure p1



00115827

1) optimum working pressure

Evacuation time tE depending on vacuum p2 for 1 l volume (with optimal operating pressure p1opt)

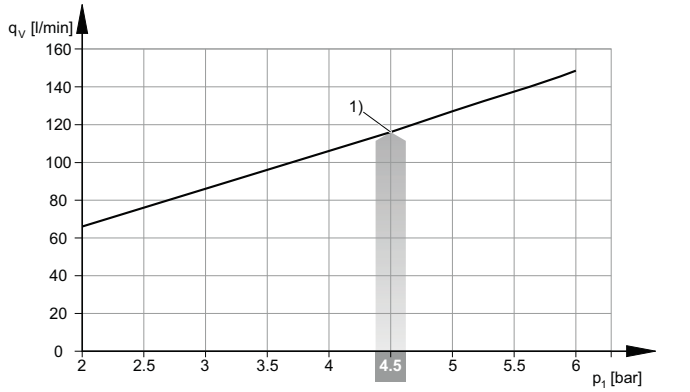


00127803

Standard compact injector, Series ECV

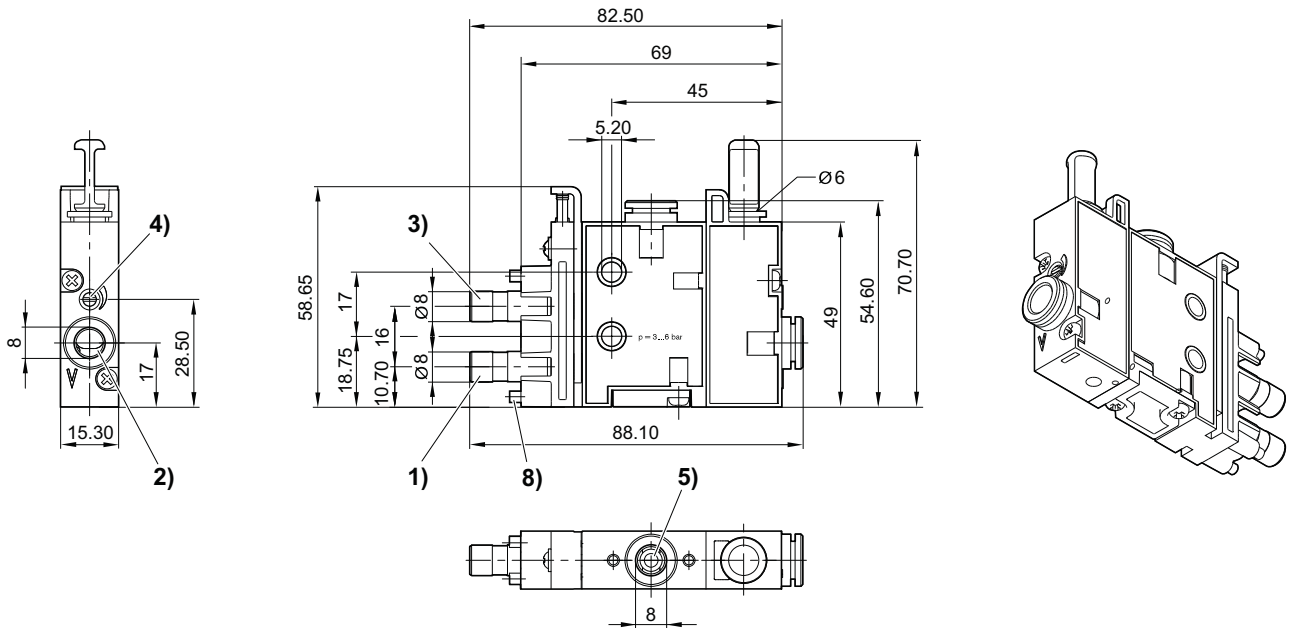
▶ for valve terminal system HF03

Air consumption qv depending on working pressure p1



1) optimum working pressure

ECV-PC-15-A, with ventilation port

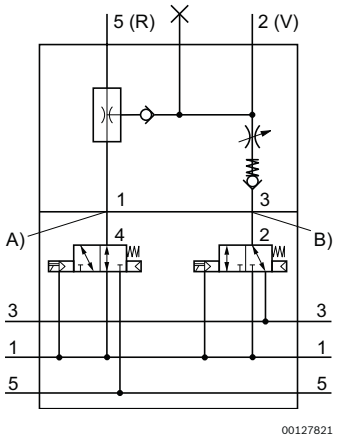


1) air connection (suction)
2) vacuum connection
3) release pulse connection
4) throttle for release pulse
5) ventilation port
8) spacer

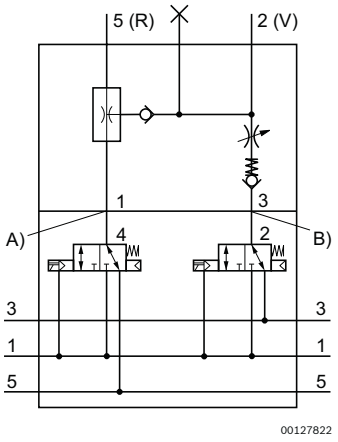
Standard compact injector, Series ECV

▶ for valve terminal system HF03

ECV-HF03-...with NO activation



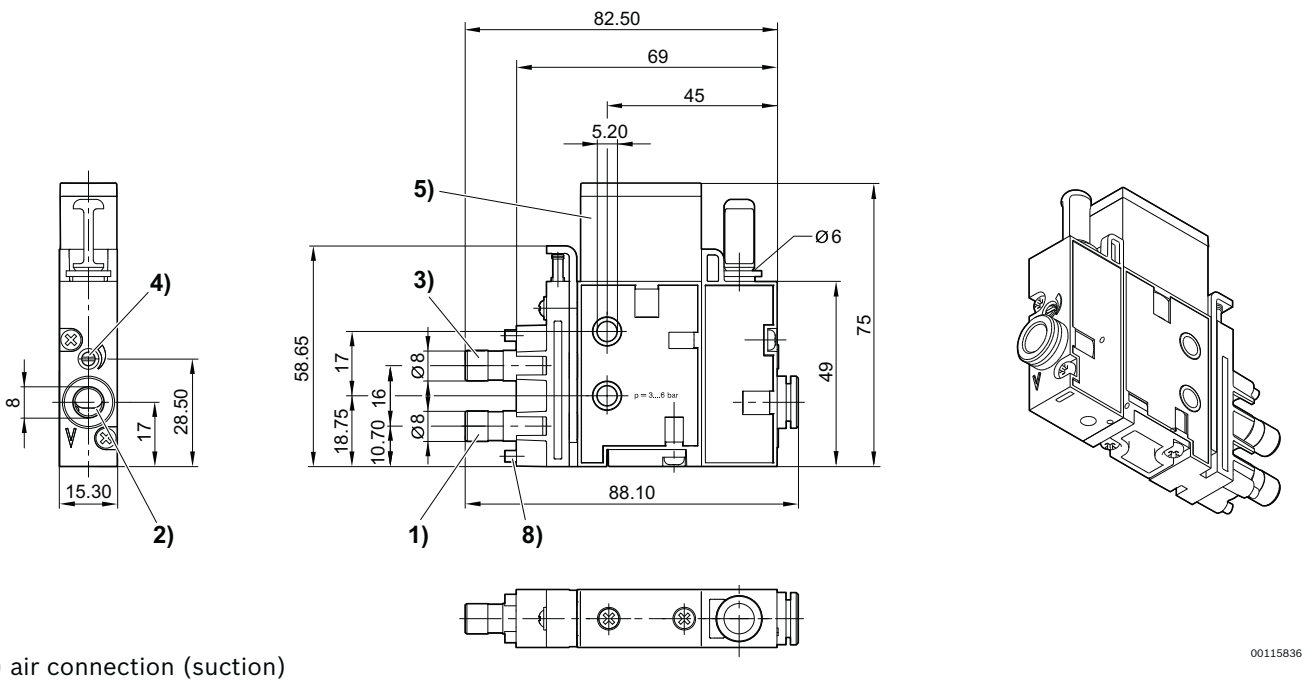
ECV-HF03-...with NC activation



A) air connection suction

B) release pulse air connection

ECV-PC-15-A, with silencer

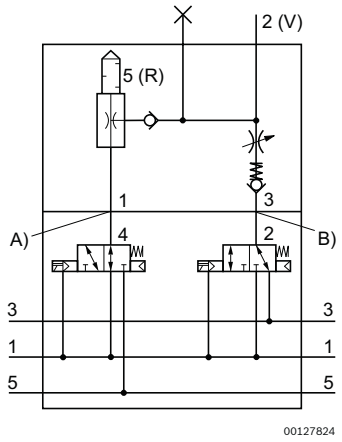


1) air connection (suction)
2) vacuum connection
3) release pulse connection
4) throttle for release pulse
5) silencer
8) spacer

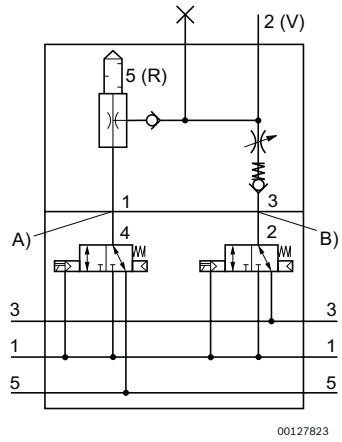
Standard compact injector, Series ECV

▶ for valve terminal system HF03

ECV-HF03-...with NO activation



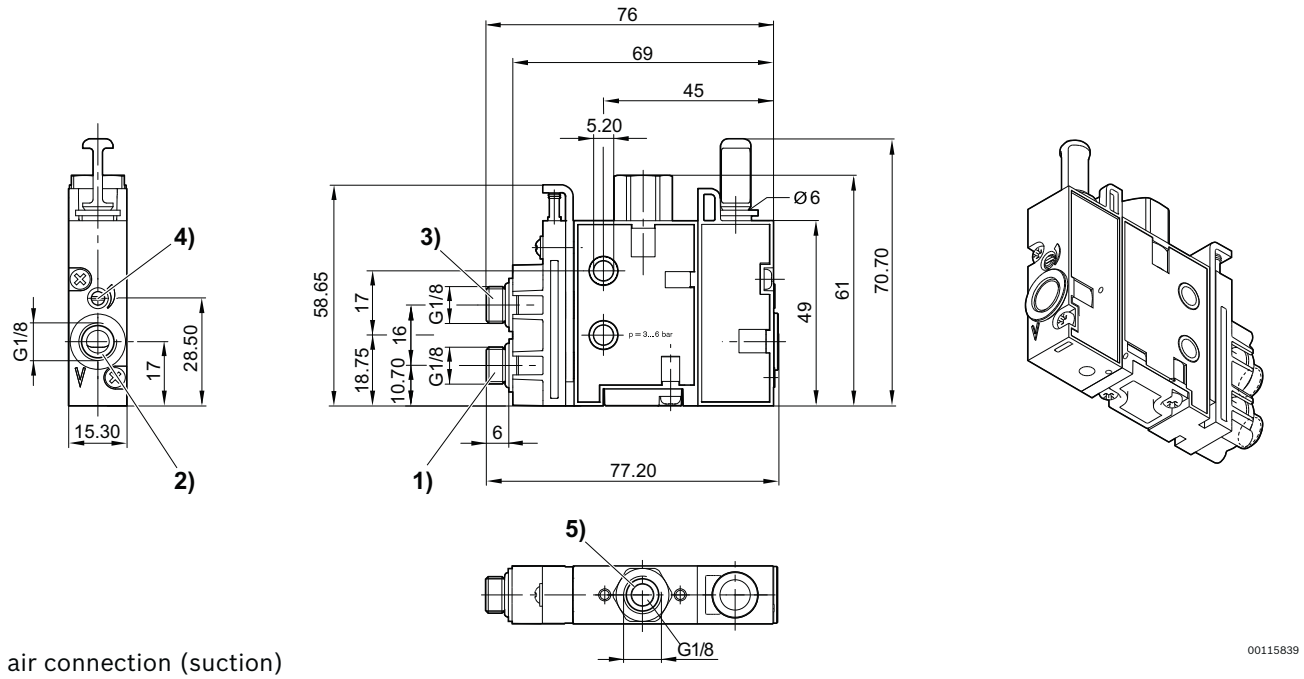
ECV-HF03-...with NC activation



A) air connection suction

B) release pulse air connection

ECV-PC-15-A, with ventilation port

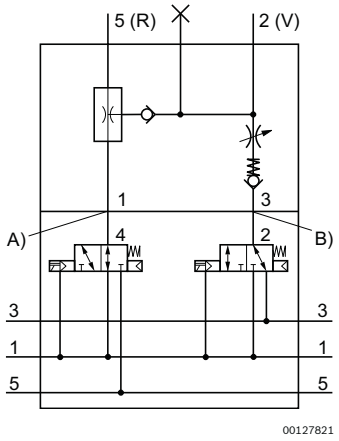


1) air connection (suction)
2) vacuum connection
3) release pulse connection
4) throttle for release pulse
5) ventilation port

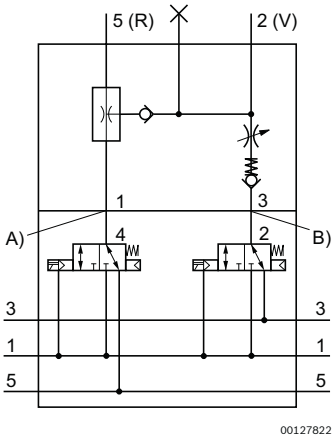
Standard compact injector, Series ECV

▶ for valve terminal system HF03

ECV-HF03-...with NO activation



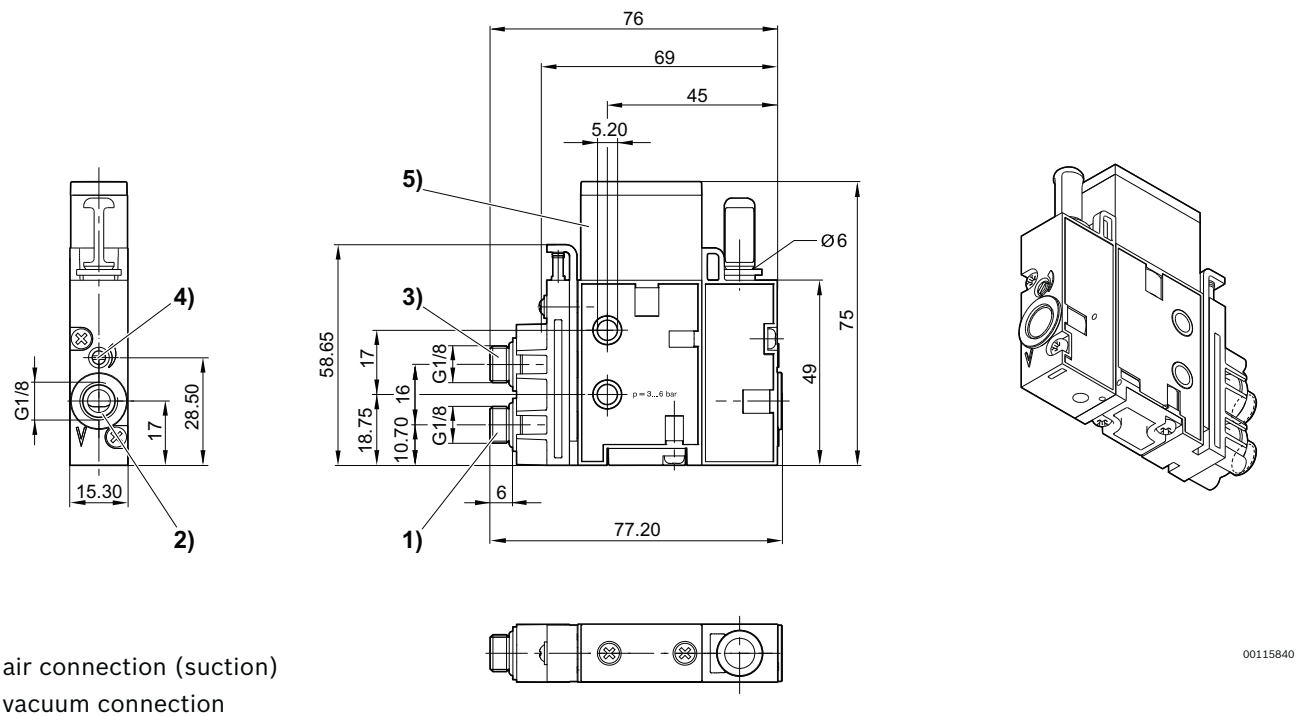
ECV-HF03-...with NC activation



A) air connection suction

B) release pulse air connection

ECV-PC-15-A, with silencer



1) air connection (suction)

2) vacuum connection

3) release pulse connection

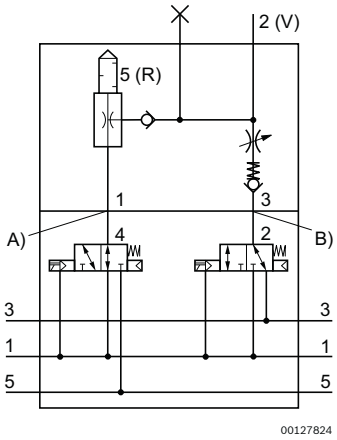
4) throttle for release pulse

5) silencer

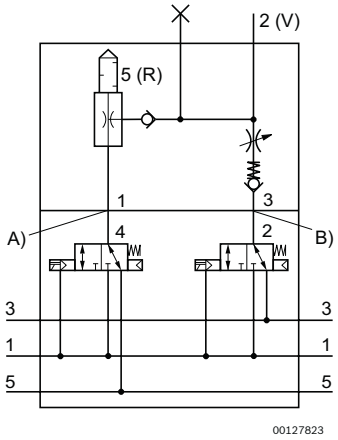
Standard compact injector, Series ECV

▶ for valve terminal system HF03

ECV-HF03-...with NO activation



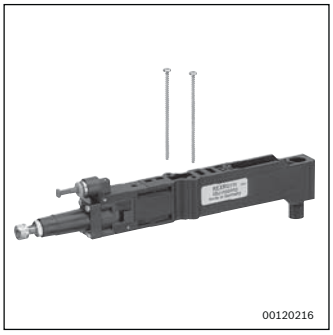
ECV-HF03-...with NC activation



A) air connection suction

B) release pulse air connection

Pressure regulator subplate, Series HF03-LG

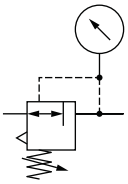


Version	Poppet valve
Ambient temperature min./max.	+0°C / +50°C
Medium temperature min./max.	+0°C / +50°C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³

Materials:	
Housing	Polyamide
Seals	Acrylonitrile butadiene rubber

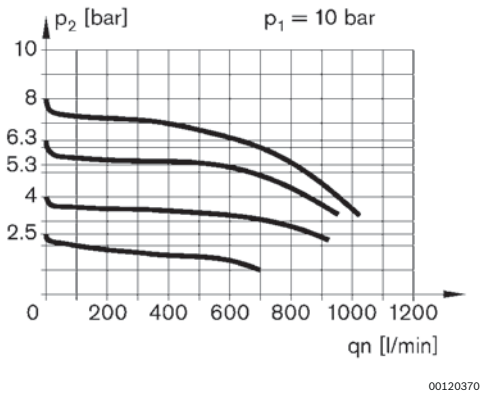
Technical Remarks

- Protection class when mounted: IP65

	Compressed air connection		Working pressure min./max.	Adjustment range min./max.	Weight	Note	Part No.
	Input	**Output**					
			[bar]	**[bar]**	**[kg]**		
	Special base plate	Special base plate	0.5 / 10	0.5 / 10	0.085	-	0821302200
	-	-	-	-	-	- 1)	R412004883 R412009413

1) Pressure gauge, 0-1 MPa, with 4 mm push-in fitting.

Flow diagram

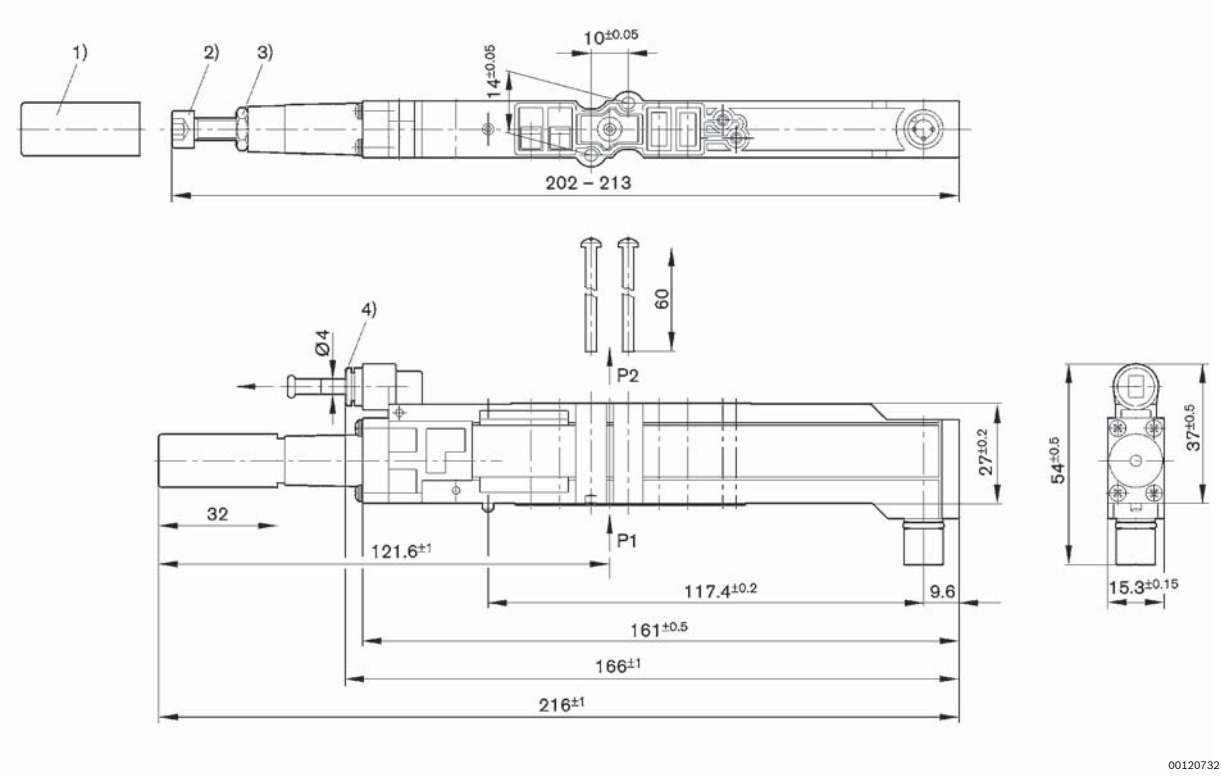


p1 = working pressure; p2 = secondary pressure; qn = nominal flow

Part numbers in bold are more readily available.

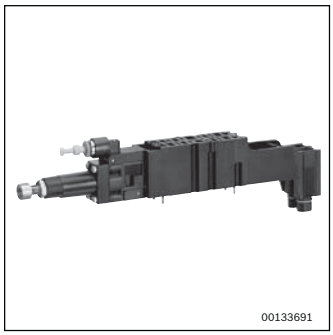
Pressure regulator subplate

Dimensions



1) locking cap
2) regulating screw
3) lock nut
4) push-in fitting
p1 = working pressure
p2 = secondary pressure
5) valve position is controlled by the pressure regulator subplate
6) valve position is directly supplied via channel 1 of the valve terminal system

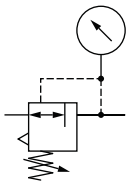
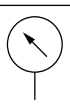
Pressure regulator subplate, Series HF04 and HF04-XF



Version	Poppet valve
Ambient temperature min./max.	-5°C / +50°C
Medium temperature min./max.	+0°C / +50°C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Materials:	
Housing	Polyamide
Seals	Acrylonitrile butadiene rubber

Technical Remarks

- Protection class when mounted: IP65
- Please note that HF04 series valve terminal systems can only be retrofitted without modifications from 05/2008. Older valve terminal systems do not have the required mounting holes in the subbases.

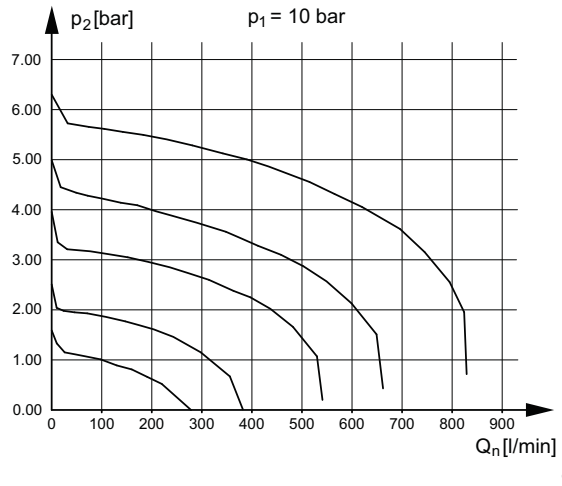
	Compressed air connection		Working pressure min./max.	Adjustment range min./max.	Weight	Fig.	Note	Part No.
	Input	Output						
			[bar]	[bar]	[kg]			
	Special base plate	Special base plate	0.5 / 10	0.5 / 8 0.5 / 4	0.1	Fig. 1 Fig. 2	-	**R412000999** **R412008584**
	-	-	-	-	-	-	1)	R412009413

1) Pressure gauge, 0-1 MPa, with 4 mm push-in fitting.

Part numbers in bold are more readily available.

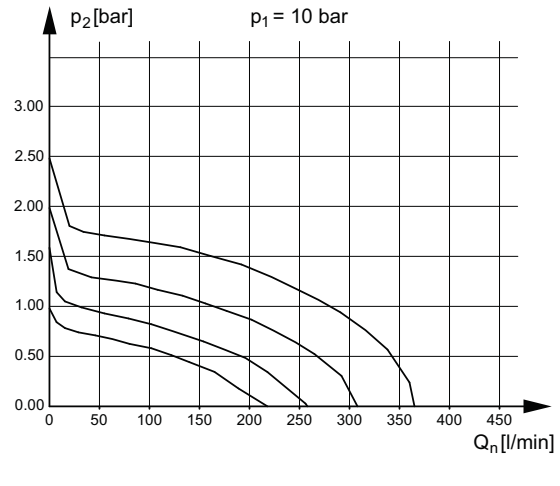
Pressure regulator subplate, Series HF04, HF04-XF, and LP04

Fig. 1



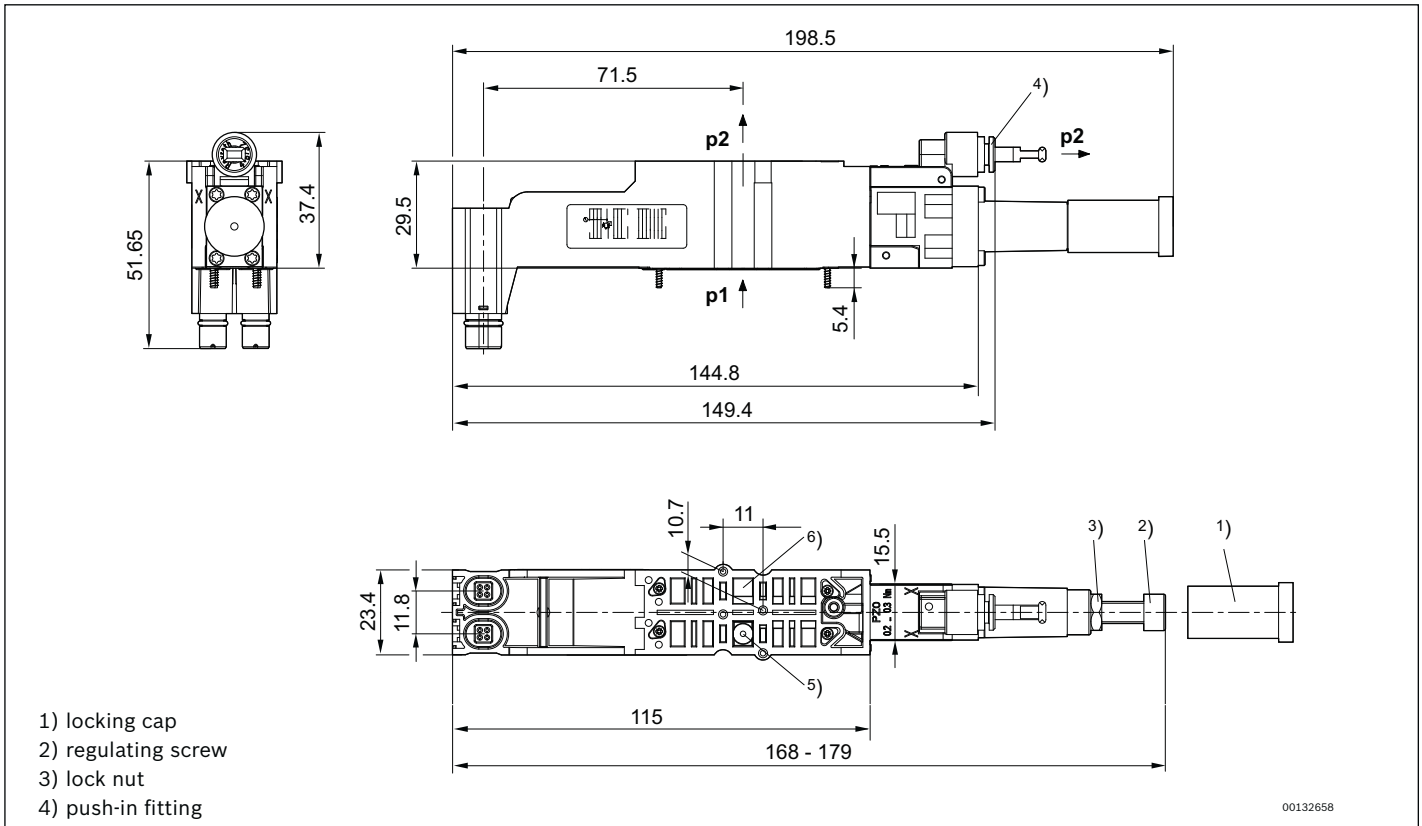
p1 = working pressure; p2 = secondary pressure; qn = nominal flow

Fig. 2



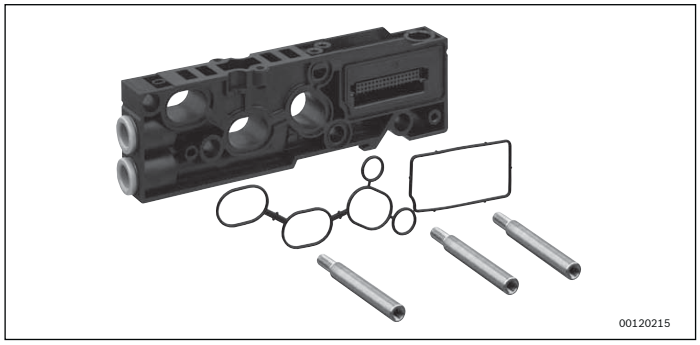
p1 = working pressure; p2 = secondary pressure; qn = nominal flow

Dimensions



1) locking cap
2) regulating screw
3) lock nut
4) push-in fitting
p1 = working pressure
p2 = secondary pressure
5) valve position is controlled by the pressure regulator subplate
6) valve position is directly supplied via channel 1 of the valve terminal system

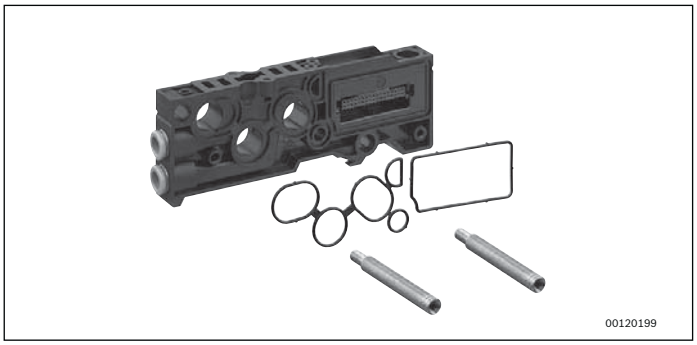
Accessories, Series HF02-LG



Part No.	Type	Weight	Delivery quantity
		[kg]	[Piece]
1827030206	Plug box, 25-pin, complete	0.12	1
R412013379	HD multipole plug box, 44-pin, complete	0.12	1
1827020289	Separator	0.002	1
1825700087	Blanking plate	0.088	1
1821039036	Supply plate	0.269	1
R412004540	subbase gasket, pneumatic part	0.001	10
R412008887	Name plates for intermediate plate	-	10
1821015841	valve/subbase seal	0.005	10
1827010631	Base plate for 1 valve, push-in fitting Ø 10 mm, 3 tie rod extensions and 1 sealing kit	0.001	1
1827010649	Base plate for 3 valves, push-in fitting Ø 10 mm, 3 tie rod extensions and 1 sealing kit	0.39	1
1827010650	Base plate for 5 valves, push-in fitting Ø 10 mm, 3 tie rod extensions and 1 sealing kit	0.644	5
1827010640	Subbase extension, G 1/4	0.142	1

Part numbers in bold are more readily available.

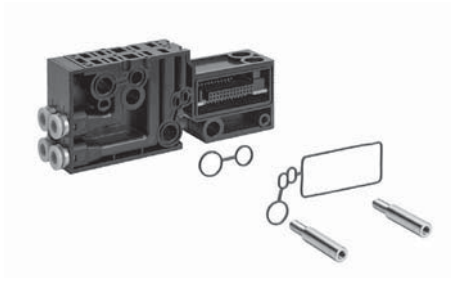
Accessories, Series HF03-LG



Part No.	Type	Weight	Delivery quantity
		[kg]	[Piece]
1827030206	Plug box, 25-pin, complete	0.12	1
R412013379	HD multipole plug box, 44-pin, complete	0.12	1
R402000627	Blanking plate	0.155	1
1827010606	Intermediate plate for 1 valve, push-in fitting Ø8 mm, for double solenoid valves, 2 tie rod extensions and 1 sealing kit	0.104	1
1827010642	Intermediate plate for 3 valves, push-in fitting Ø8 mm, for double solenoid valves, 2 tie rod extensions and 1 sealing kit	0.284	3
1827010643	Intermediate plate for 5 valves, push-in fitting Ø8 mm, for double solenoid valves, 2 tie rod extensions and 1 sealing kit	0.467	5
1827010639	intermediate plate for 1 valve, thread connection G1/8, for double solenoid valves, 2 tie rod extensions and 1 sealing kit	0.108	1
R412005959	Intermediate plate Ø8, for single solenoid valves, comprised of: 1x subbase, 2x tie rod extension, 1x sealing kit	0.108	1
R412005958	Intermediate plate G1/8, for single solenoid valves, comprised of: 1x subbase, 2x tie rod extension, 1x sealing kit	0.108	1
R412005783	Intermediate plate G1/8 NPTF, for double solenoid valves, comprised of: 1x subbase, 2x tie rod extension, 1x sealing kit	0.108	1
1827010709	Mounting kit for hat rail EN 60715, 35x15	0.052	-
1827010707	Base plate for supply plate without valve control	0.108	1

Part numbers in bold are more readily available.

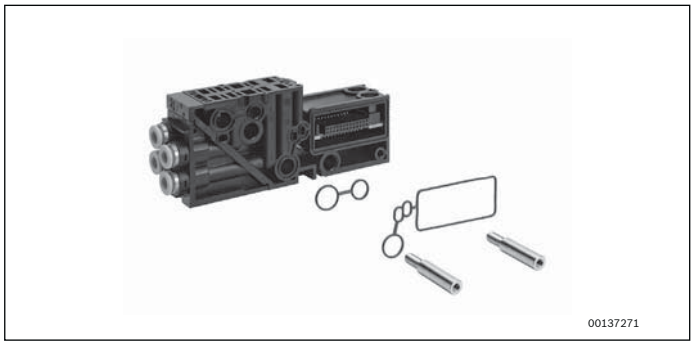
Accessories, Series HF04



Part No.	Type	Weight	Delivery quantity
		[kg]	[Piece]
1827030206	Plug box, 25-pin, complete	0.12	1
1825700104	Blanking plate, incl. sealing kit, 2x mounting screws	0.082	-
1821039039	Supply plate, incl. sealing kit, 2x mounting screws	0.089	-
R412003402	Separators between two double subbases, channel 1	0.025	5
R412000998	Separators: between two double subbases, channels 3 and 5	0.017	10
R412003404	Separators: between two valve positions, channels 1, 3 and 5	0.029	-
1827010708	“Base plate for 2 double solenoid valves, push-in fitting Ø6 mm, 2 tie rod extensions, and 1 sealing kit “	0.123	-
1827010709	Mounting kit for hat rail EN 60715, 35x15	0.052	-
R412004053	“Base plate for 2 double solenoid valves, thread connection M7, 2 tie rod extensions, and 1 sealing kit “	-	-
R412006823	Base plate for 2 single solenoid valves, push-in fitting Ø6 mm, 2 tie rod extensions, and 1 sealing kit	0.122	-
R412006824	Base plate for 2 single solenoid valves, M7 thread connection, 2 tie rod extensions, and 1 sealing kit	-	-

Part numbers in bold are more readily available.

Accessories, Series HF04-XF



Part No.	Type	Weight	Delivery quantity
		[kg]	[Piece]
1827030206	Plug box, 25-pin, complete	0.12	1
R412013379	HD multipole plug box, 44-pin, complete	0.12	1
R412012625	Function base plate for 2 single solenoid valves, push-in fitting Ø6 mm, 2 tie rod extensions, and 1 sealing kit	0.12	1
R412012626	Function base plate for 2 single solenoid valves, M7 thread connection, 2 tie rod extensions, and 1 sealing kit	0.122	1
R412012627	Function base plate for 2 double solenoid valves, push-in fitting Ø6 mm, 2 tie rod extensions, and 1 sealing kit	0.13	1
R412012628	Function base plate for 2 double solenoid valves, M7 thread connection, 2 tie rod extensions, and 1 sealing kit	0.132	1
R412012630	Port 2 and 4 for function base plate with push-in fitting Ø 6 mm and 1 sealing kit	0.055	1
R412012631	Port 2 and 4 for function base plate with M7 thread connection and 1 sealing kit	0.055	1

Part numbers in bold are more readily available.

Series QR1-S standard

▶ Blanking plug ▶ pin bushing ▶ Ø 6 - Ø10 ▶ QR1-S-RBS

Ambient temperature min./max.	+0°C / +50°C
Working pressure min./max.	-0.95 bar / 10 bar

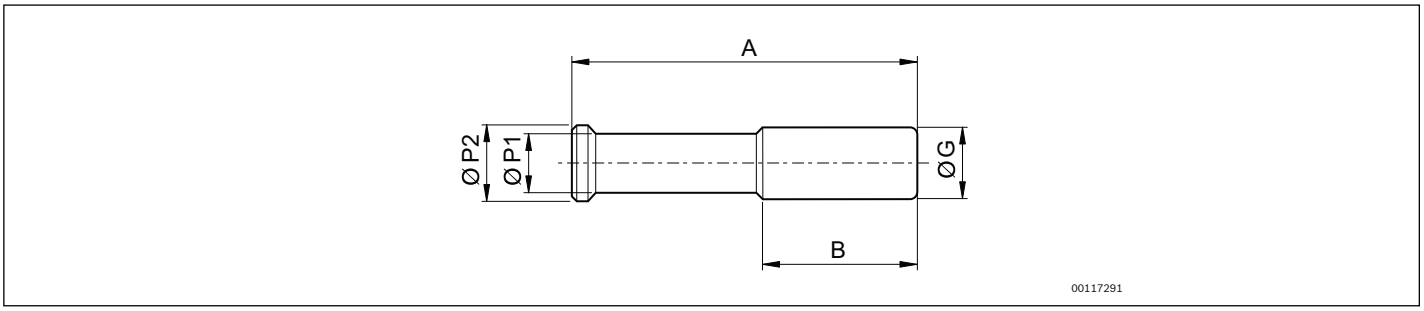
Materials:

Housing	Polybutyleneterephthalate

Technical Remarks

- The series QR1 (plastic) and QR2 (metal) can not be combined
- For further information about assembling and tolerances of adaptable tubing, see the section “Technical information”.

Dimensions



Part No.	Port G	A	B	Ø P1	Ø P2	Delivery quantity	Weight
						[Piece]	[kg]
2123206000	Ø 6	32	17	4	6	20	0.0007
2123208000	Ø 8	39	18.5	5	8	20	0.0014
2123210000	Ø10	42	21	8	10	20	0.002

Part numbers in bold are more readily available.

Bosch Rexroth Online Tools

Bosch Rexroth offers an extensive range of online configurators, calculation programs, and energy saving calculators. Product configurators allow customers to easily customize devices, and receive completely built and tested units. Calculation programs and energy saving calculators make it possible to determine the correct dimensions easily and reliably.

For those customers who prefer the flexibility to build their own manifolds, Rexroth also offers valve series which are purchased as individual components for on-site assembly.

Bosch Rexroth's product CAD drawings and Circuit Diagram Software, all free for download, allow customers to quickly and easily create pneumatic circuit diagrams and application drawings.

Welcome to our Product Configurator

Piston Rod Cylinders

Rodless Cylinders

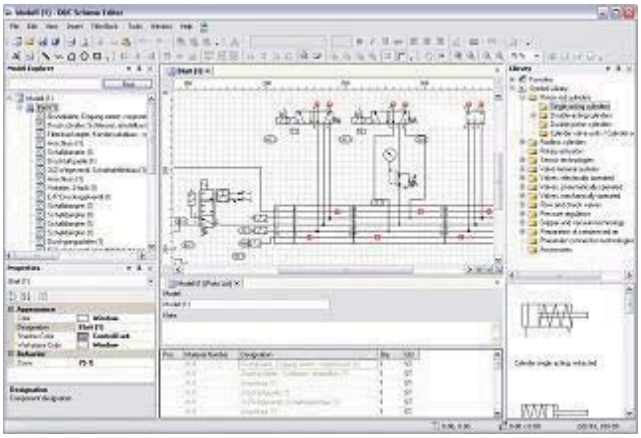
Easy-2-Combine

Cylinder Valve Units

Valve Terminal Systems

Maintenance Units

Circuit Diagram Software



Product Calculation System

Product CAD Drawings

Energy Saving Calculator

NOTICES TO PRODUCT USERS

1. WARNING: FLUID MEDIA

Bosch Rexroth pneumatic devices are designed and tested for use with filtered, clean, dry, chemical free air at pressures and temperatures within the specified limits of the device. For use with media other than air or for human life support systems, Bosch Rexroth must be consulted. Hydraulic cylinders are designed for operation with filtered, clean, petroleum based hydraulic fluid; operation using fire-resistant or other special types of fluids may require special packing and seals. Consult the factory.

2. WARNING: MATERIAL COMPATIBILITY

Damage to product seals or other parts caused by the use of non-compatible lubricants, oil additives or synthetic lubricants in the air system compressor or line lubrication devices voids Bosch Rexroth's warranty and can result in product failure or other malfunction. See lubrication recommendations below.

AIR LINE LUBRICANTS! In service higher than 18 cycles per minute or with continuous flow of air through the device, an air line lubricator is recommended. * (Do not use line lubrication with vacuum products.) However, the lubricator must be maintained since the oil will wash out the grease, and lack of lubrication will greatly shorten the life expectancy. The oils used in the lubricator must be compatible with the elastomers in the device. The elastomers are normally BUNA-N, NEOPRENE, VITON, SILICONE and HYTREL. Bosch Rexroth recommends the use of only petroleum-based oils without synthetic additives, and with an aniline point between 180° and 210° F.

COMPRESSOR LUBRICANTS! All compressors (with the exception of special "oil free" units) pass oil mist or vapor from the internal crankcase lubricating system through to the compressed air. Since even small amounts of non-compatible lubricants can cause severe seal deterioration (which could result in component and system failure) special care should be taken in selecting compatible compressor lubricants. It is recommended that users review the National Fluid Power Association "Recommended Guide Lines For Use Of Synthetic Lubricants In Pneumatic Fluid Power Systems" (NFPA T1-1978).

3. WARNING: INSTALLATION AND MOUNTING

The user of these devices must conform to all applicable electrical, mechanical, piping and other codes in the installation, operation or repair of these devices.

INSTALLATION! Do not attempt to install, operate or repair these devices without proper training in the technique of working on pneumatic or hydraulic systems and devices, unless under trained supervision.

Compressed air and hydraulic systems contain high levels of stored energy. Do not attempt to connect, disconnect or repair these products when system is under pressure. Always exhaust or drain the pressure from system before performing any service work. Failure to do so can result in serious personal injury.

MOUNTING! Devices should be mounted and positioned in such manner that they cannot be accidentally operated.

4. WARNING: APPLICATION AND USE OF PRODUCTS

The possibility does exist for any device or accessory to fail to operate properly through misuse, wear or malfunction. The user must consider these possibilities and should provide appropriate safe guards in the application or system design to prevent personal injury or property damage in the event of malfunction.

5. WARNING: CONVERSION, MAINTENANCE AND REPAIR

When a device is disassembled for conversion to a different configuration, maintenance or repair, the device must be tested for leakage and proper operation after being reassembled and prior to installation.

MAINTENANCE AND REPAIR! Maintenance periods should be scheduled in accordance with frequency of use and working conditions. All Bosch Rexroth products should provide minimum of 1,000,000 cycles of maintenance free service when used and lubricated as recommended. However, these products should be visually inspected for defects and given an "in system" operating performance and leakage test once a year. Where devices require major repair as result of the one million cycles, one year, or routine inspection, the device must be disassembled, cleaned, inspected, parts replaced as required, rebuilt and tested for leakage and proper operation prior to installation. See individual catalogs for specific cycle life estimates.

6. PRODUCT CHANGES

Product changes including specifications, features, designs and availability are subject to change at any time without notice. For critical dimensions or specifications, contact factory.

*Many Bosch Rexroth pneumatic components can operate with or without air line lubrication; see individual sales catalogs for details.

-Refer to the appropriate service manual for parts and service information.

LIMITATIONS OF WARRANTIES & REMEDIES

Bosch Rexroth warrants its products sold by it to be free from defects in material and workmanship to the following:
For twelve months after shipment Bosch Rexroth will repair or replace (F.O.B. our works), at its option, any equipment which under normal conditions of use and service proves to be defective in material or workmanship at no charge to the purchaser. No charge will be made for labor with respect to defects covered by this Warranty, provided that the work is done by Bosch Rexroth or any of its authorized service facilities. However, this Warranty does not cover expenses incurred in the removal and reinstallation of any product, nor any downtime incurred, whether or not proved defective.
All repairs and replacement parts provided under this Warranty policy will assume the identity, for warranty purposes, of the part replaced, and the warranty on such replacement parts will expire when the warranty on the original part would have expired. Claims must be submitted within thirty days of the failure or be subject to rejection.
This Warranty is not transferable beyond the first using purchaser. Specifically, excluded from this Warranty are failures caused by misuse, neglect, abuse, improper operation or filtration, extreme temperatures, or unauthorized service or parts. This Warranty also excludes the use of lubricants, fluids or air line additives that are not compatible with seals or diaphragms used in the products. This Warranty sets out the purchaser's exclusive remedies with respect to products covered by it, whether for negligence or otherwise. Neither, Bosch Rexroth nor any of its affiliates will be liable for consequential or incidental damages or other losses or expenses incurred by reason of the use or sale of such products. Our liability (except as to title) arising out of the sale, use or operation of any product or parts, whether on warranty, contract or negligence (including claims for consequential or incidental damage) shall not in any event exceed the cost of replacing the defective products and, upon expiration of the warranted period as herein provided, all such liability is terminated. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, WHETHER FOR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE. No attempt to alter, amend or extend this Warranty shall be effective unless authorized in writing by an officer of Bosch Rexroth Corporation.
Bosch Rexroth reserves the right to discontinue manufacture of any product, or change product materials, design or specifications without notice.

Pneumatic Directional Control Valve Features Available

DESCRIPTION	PORT SIZE	TYPE	Flow (Cv)	Inline/Tapped Body	Manifold	Plug-in	Single Subbase Available	External Pilot	Maximum Pressure (psi)	Dual Pressure	Vacuum Service	Air Pilot Operated	Solenoid Operated	NEMA 4/6	UL, UR or CSA	Explosion Proof	Brad Harrison® Connector	Intrinsically Safe	3 Position Offered	Dual 3/2 Valve Offered	Non-Lubricated Operation	***GoTo*** Focused Delivery[3]
Ceram™ Size I	1/4", 3/8"NPT; G1/8, G1/4	Slide 4 Way	1.10		•		•	•	150	•	•	•	•	4	•	•	•	•	•		•	•
Ceram™ Size II	3/8", 1/2"NPT; G1/4, G3/8	Slide 4 Way	2.40		•		•	•	150	•	•	•	•	4	•	•	•	•	•		•	•
Ceram™ Size III	1/2", 3/4"NPT; G3/8, G1/2	Slide 4 Way	4.30		•		•	•	150	•	•	•	•	4	•	•	•	•	•		•	•
Ceram™ Size IV	3/4" NPT; G1/2, G3/4	Slide 4 Way	7.50		•		•	•	150	•	•	•	•	4	•	•	•	•	•		•	
Series DO10-MR	M5 (10-32 UNF)	Dir. Acting 2/3 Way	0.014		•		•		101				•								•	
Series DO15-MR	M5 (10-32 UNF)	Dir. Acting 2/3 Way	0.05		•		•		101				•								•	
Series DO10	M5 (10-32UNF)	Poppet 3 way	0.008-0.014		•				105				•								•	
Series 830™	1/8"NPT, 10-32UNF	Poppet 3 Way	0.06		•		•		150				•	4							•	
MiniBlock™	10-32UNF & 1/4" tube	Poppet 3 Way	0.15	•					150												•	
Series AP (mech.)	10-32,1/8",1/4"NPT;M5,G1/8,G1/4	Poppet 2/3/4 Way	0.15-0.60	•					145												•	•
Series 840	Tube (1/4" and 6mm)	Poppet 4 Way	0.20	•	•		•		150			•	•	4							•	•
Series CA44 (AS-i)	M7, 4mm and 6mm tube[2]	Poppet 4 Way	0.20		•	•			116				•	4						•	•	
Series MC	M7, 4mm and 6mm tube	Poppet 4 Way	0.20		•	•			116				•	4/6	•					•	•	
Series ST (mech.)	G1/8	Spool 3 & 4 Way	0.28	•					145		•										•	•
Series 579 / 589	Tube (1/4", 5/16", 6mm, 8mm)	Poppet 3/4 Way	0.52-0.85	•	•			•	150	•	•	•	•	4							•	•
Series 740	Tube (3/8", 5/16", 8mm,10mm)	Poppet 4 Way	0.70-0.95	•	•		•		150			•	•	4	•		•	•			•	•
Rotair® Block	1/8", 1/4", 3/8"NPT	Poppet 4 Way	1.00-1.20	•					150										•		•	
Series WV04	M3, M5 (10-32UNF)	Spool 4 Way	0.07-0.14	•	•		•		101				•						•		•	
Series WV02	1/8"NPT;G1/8	Spool 3 & 4 Way	0.25-0.60	•	•	•	•		145			•	•						•	•	•	
Series LS04	Tube (1/8", 1/4", 4, 6mm)	Spool 3 & 4 Way	0.20-0.32	•	•	•			116		•		•						•	•	•	•
Series LP04	Tube (1/8", 1/4", 4, 6mm)	Spool 3 & 4 Way	0.35		•	•		•	145	•	•		•	4	•				•	•	•	
Series HF04	6mm tube, M7 thread	Spool 3 & 4 Way	0.40		•	•		•	145	•	•		•	4	•				•	•	•	
Series HF03-LG	1/8"NPT,G1/8,8mm(5/16") tube	Spool 3 & 4 Way	0.70		•	•		•	145	•	•		•	4	•				•	•	•	•
Series HF02-LG	G1/4, 10mm tube	Spool 3 & 4 Way	1.40		•	•		•	145	•	•		•	4	•				•	•	•	
Series TC08	1/8" NPT, G1/8	Spool 4 Way	0.70-0.80	•	•			•	145	•	•	•	•	4					•		•	•
Series TC15	1/4" NPT, G1/4	Spool 4 Way	1.30-1.50	•	•			•	145	•	•	•	•	4					•		•	•
Series CL03 Clean Line	G1/4, 8mm (5/16") tube	Spool 3 & 4 Way	0.75-0.85		•	•		•	145	•	•		•	6+[1]	•				•	•	•	
Series CD01-PL Plug-in	1/4"NPT, G1/2, G1/4; 4,6,8mm	Spool 3 & 4 Way	0.65-1.01		•	•	•	•	145	•	•		•	4					•	•	•	
Series CD04	1/8"PTF, G1/8	Spool 3 & 4 Way	0.90	•				•	145	•	•	•	•	4					•		•	•
TaskMaster®	1/4", 3/8"NPT	Spool 4 Way	1.00				•	•	200			•	•		•	•			•			
Series CD07	1/4"NPT, G1/4	Spool 4 Way	1.10	•	•			•	150	•	•	•	•	4		•	•		•		•	
Series 581 Size I	1/4", 3/8"NPT; G1/8, G1/4	Spool 4 Way	1.40		•		•	•	150	•	•	•	•						•		•	•
Series 581 Size II	3/8", 1/2"NPT; G1/4, G3/8	Spool 4 Way	2.70		•		•	•	150	•	•	•	•						•		•	•
Series 581 Size III	1/2", 3/4"NPT; G3/8, G1/2	Spool 4 Way	4.80		•		•	•	150	•	•	•	•						•		•	•
Series 581Size IV	3/4" NPT; G1/2, G3/4	Spool 4 Way	6.00		•		•	•	150	•	•	•	•						•		•	
Series CD10-PI Size I	1/4", 3/8"NPT; G1/4, G3/8	Spool 3 & 4 Way	0.95-1.40		•	•	•	•	150	•	•		•	4					•	•	•	
Series CD20-PI Size II	3/8", 1/2"NPT; G3/8, G1/2	Spool 4 Way	2.70		•	•	•	•	150	•	•		•	4					•		•	
Series CD30-PI Size III	1/2", 3/4"NPT; G1/2, G3/4	Spool 4 Way	4.10-4.80		•	•	•	•	150	•	•		•	4					•		•	
Type D Pilotair®	1/4", 1/2"NPT	Spool 2, 3, 4 Way	2.10-5.10	•				•	250	•	•	•	•			•			•			
PowerMaster®	1/4", 3/8"NPT	Spool 4 Way	3.70	•				•	150	•	•	•	•						•			
PowerMaster®	1/2", 3/4"NPT	Spool 4 Way	7.90	•				•	150	•	•	•	•						•			
PowerMaster®	1", 1-1/4"NPT	Spool 4 Way	15.70	•					150			•	•						•			

• = Available

Notes: [1] CL03 is IP69K wash down rated
[2] Inch supply & exhaust manifold available.
[3] See www.boschrexroth-us.com/GoToPneumatics for details.

Mechanical Operators Available:

		Lever	Rotary Lever	Toggle Lever	Pedal	Treadle	Roller	One-way Trip	Knob	Nose Mounted Knob	Paddle	Plunger	Mushroom Button	Panel Installation
Series ST (stainless steel)	Spool 3, 4 Way	•					•	•				•	•	•
Series CD04	Spool 4 Way	•	•	•			•		•			•		
Series CD07	Spool 4 Way		•	•	•	•	•	•	•		•	•		
TaskMaster®	Spool 4 Way	•												
Type D Pilotair®	Spool 2, 3, 4 Way	•			•	•	•		•	•				
PowerMaster®	Spool 4 Way	•			•	•								
MiniBlock™	Poppet 3 Way						•							
Series AP	Poppet 2, 3, 4 Way	•			•		•	•				•	•	•
Rotair® Block	Poppet 4 Way		•											

Bosch Rexroth Corporation
Pneumatics
1953 Mercer Road, Lexington, KY 40511
Tel 859-254-8031 Fax 859-254-4188/800-489-4188

Catalog PDF downloads are available at: www.boschrexroth-us.com/brp

pneumatics@boschrexroth-us.com

The Drive & Control Company

Rexroth
Bosch Group

Bosch Rexroth Corporation
Pneumatics
1953 Mercer Road
Lexington, KY 40511-1021
Telephone (859) 254-8031
Facsimile (859) 281-3491
www.boschrexroth-us.com

Find your local contact person here:
www.boschrexroth-us.com/addresses

SC-300.15/online version 09.2012